

No. 09-56331

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

ANDREW W. SHALABY, SONIA
DUNN-RUIZ,

Plaintiffs - Appellants,

v.

NEWELL RUBBERMAID, INC.; THE
HOME DEPOT, INC.; IRWIN
INDUSTRIAL TOOL COMPANY, INC.;
BERNZOMATIC,

Defendants-cross-claimants - Appellees,

and

WESTERN INDUSTRIES, INC.;
WORTHINGTON INDUSTRIES,

Cross-defendants - Appellees.

D.C. No. 3:07-cv-2107-MMA-
BLM

Southern District of California,
San Diego

Appeal from the United States District Court
for the Southern District of California
Michael M. Anello, District Judge, Presiding

**EXCERPTS OF RECORD
VOLUME III**

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UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA - SAN DIEGO

ANDREW SHALABY, an individual,
and SONIA DUNN-RUIZ, an
individual,

Plaintiffs,

vs.

No. 07-CV-2107 W POR

IRWIN INDUSTRIAL TOOL COMPANY,
THE HOME DEPOT, INC., and
DOES 2 through 100, inclusive,

Defendants.

BERNZOMATI C,

Third-Party Plaintiff,

vs.

WESTERN INDUSTRIES, INC.,
WORTHINGTON INDUSTRIES, AND
ROES 2 through 100, inclusive,

Third-Party Defendants.

DEPOSITION OF ROBERT N. ANDERSON, Ph. D.

Walnut Creek, California

Wednesday, September 3, 2008

Reported by:
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♀

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1 Walnut Creek, Cal i forni a, Wednesday, September 3, 2008
2 11: 04 a. m. - 6: 08 p. m.

3
4 ROBERT A. ANDERSON,
5 havi ng been fi rst duly sworn, was exami ned and
6 testi fi ed as fol l ows:

7
8 EXAMI NATION

9 BY MR. ERGO:

11: 04: 44 10 Q Cou ld you state your full name, please.
11 A Robert Neil Anderson.
12 Q And do you go by professor, doctor, Mr. or
13 what?
14 A Or what? I've never used "or what."
11: 05: 27 15 Since this is a very formal and can be used in

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16 court, I presume "doctor" would be appropriate.

17 Q Okay. What is your date of birth?

18 A November 8th 1933.

19 Q Do you understand you're under oath today?

11:05:45 20 A I do.

21 Q How many depositions have you given over the
22 course of your career?

23 A Less than a thousand. Several hundred. I'm
24 not sure exactly.

11:05:55 25 Q Any reason you can't give accurate testimony

♀

8

1 today?

2 A Not that I'm aware of.

3 Q Who were you retained by in this case?

4 A Mark Epstein, who represents the plaintiffs.

11:06:08 5 Q Have you ever been retained by Mr. Epstein or
6 his firm in the past?

7 A Not that I know of.

8 Q Have you completed all your work for which you
9 were retained in this matter?

11:06:26 10 MR. EPSTEIN: Objection. Vague and ambiguous.

11 THE WITNESS: I'm not sure. There are
12 documents that may be provided from depositions yet to
13 be taken, so I certainly would react to those. I think
14 I'm prepared to give a deposition at this time, but I
11:06:46 15 may get new information.

16 BY MR. ERGO:

17 Q Other than reviewing depositions that may be
18 taken after this, any other work that you anticipate

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19 doing in this case?

11:06:55 20 A Yes. I anticipate if this is going to trial
21 that I would prepare trial exhibits.

22 Q And do you have in mind any trial exhibits
23 you'd be preparing?

24 A No. I haven't focused on that yet.

11:07:15 25 Q Do you intend to do further testing?

♀

9

1 A Other than what you have seen in my reports,
2 other documents, I have not.

3 Q From this point forward, do you intend to do
4 any testing?

11:07:27 5 A I think that totally depends on the
6 depositions and new information I receive.

7 Q Any current plans to do further testing?

8 A No.

9 Q How are you currently employed?

11:07:46 10 A Retired university professor who does
11 consulting both in litigation areas and in industrial
12 areas.

13 Q How long have you been retired as a university
14 professor?

11:08:02 15 A '92.

16 Q And since '92 have you done consulting?

17 A Yes.

18 Q Were you doing consulting before you retired
19 as a professor?

11:08:14 20 A Yes.

21 Q When did you first start doing consulting?

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22 A '68 or '69.

23 Q And while you were a professor, how much time

24 percentage-wise did you devote to consulting work

11:08:35 25 versus your job as a professor?

♀

10

1 A I can't answer that because there are

2 sabbaticals in there. So the time may have increased

3 during the sabbatical when I had no teaching

4 obligation, and it may have decreased during the time

11:08:50 5 that I was teaching.

6 Q While you were teaching for the, let's say,

7 ten years prior to retirement, how much of your time

8 was devoted to consulting versus teaching?

9 A Perhaps one to two days a week.

11:09:11 10 Q Consulting?

11 A Consulting either for NASA Ames, which I was

12 doing research for, or industrial or litigation.

13 Q How many days a week were you teaching?

14 A Pardon?

11:09:25 15 Q How many days a week were you teaching?

16 A Three.

17 Q Do you have a name of the company?

18 A A name of a company? Could you clarify that?

19 Q Sure. I see the heading on your report that

11:09:48 20 says RNA Consulting, Incorporated.

21 Is that the company you work for?

22 A Yes. After I retired, I incorporated.

23 Q Did you do that in '92?

24 A Might have been a year or two later.

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11: 10: 04 25 Q Do you currently work full-time?

♀

11

1 A Some days. Since I'm in charge, I can
2 schedule myself the way I want.

3 Q Are there any -- strike that.

4 Are you an employee of RNA Consulting?

11: 10: 26 5 A Yes.

6 Q Are there any other employees?

7 A My wife handles all the business issues,
8 billing and so forth. And then I have a couple of
9 consultants.

11: 10: 39 10 Q Are they employees or independent contractors?

11 A Independent.

12 Q What does RNA Consulting do?

13 A Well, I'm associated with looking at issues
14 involving materials, failure materials, selection of
15 materials, design of materials, behavior of materials.

11: 11: 01 16 This could include high temperature effects, corrosion,
17 all issues on materials.

18 Q How much of your work is related to litigation
19 or potential litigation?

11: 11: 27 20 A Averaged over a period of time, let's say a
21 year or daily. Or how should I average that?

22 Q Daily probably wouldn't be too useful. So
23 let's say the last five years.

24 A Probably 80 percent litigation.

11: 11: 48 25 Q How about in the last year?

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1 A Probably 70 percent litigation.

2 Q And what other type of work do you do other
3 than matters involving litigation?

4 A Industrial consulting.

11:12:08 5 Q And what type of projects do you engage in for
6 industrial consulting?

7 A Well, let's see. Currently I'm calculating
8 the vent relief capability of SO2 and chlorine systems
9 for a company in Sacramento.

11:12:32 10 Q The vent relief capability of what?

11 A Chlorine and sulfur dioxide.

12 Q Within a cylinder?

13 A Well, there are a number of cylinders. There
14 are these large cylinders ganged together, and if
11:12:51 15 something goes wrong, there's a relief system which
16 will dump it into a relief vat.

17 Q And what's the name of the company you do that
18 work for?

19 A Sacramento Regional Wastewater District.

11:13:11 20 Q Any other industrial consulting that you're
21 currently engaged in?

22 A I think that's the focus for this year.

23 Q How about in the last several years, last
24 three years, what other industrial consulting have you
11:13:23 25 done?

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13

1 A I just don't have a recollection. I have to
2 go back to my files.

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3 Q Do you have an approximation as to how many
4 different companies you've done industrial consulting
11:13:37 5 for in the last three years?

6 A Six or seven. And that's an estimate without
7 looking at my files.

8 Q Do you own any type of torch?

9 A Do I?

11:14:00 10 Q Yes.

11 A Yes.

12 Q And the torch you own, is that related to this
13 case? In other words, did you acquire a torch for the
14 specific purpose of working on this matter?

11:14:16 15 A I misinterpreted your question. I thought it
16 was did I have a torch before this case ever started.

17 Yes, I have had torches, generally propane
18 torches. The ones that have been obtained for this
19 case have been provided to me.

11:14:33 20 Q Before this case, had you ever owned a MAPP
21 gas torch?

22 A I don't think so.

23 Q Before this case, did you ever own a MAPP gas
24 cylinder?

11:14:49 25 A I don't think so.

♀

14

1 Q What type of propane torches did you own
2 before this assignment?

3 A What type?

4 Q Yes.

11:15:04 5 A I think they are probably the one-pound type,
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6 small torch. I really haven't looked at it in several
7 years.

8 Q And what did you use your propane torches for?

9 A Well, it was a heat source, obviously. And I
11: 15: 21 10 had a case where I needed to simulate a fire, and it
11 was appropriate to heat some materials up with that.

12 Q Any other uses that you did with your propane
13 torches?

14 A I'm sure there are. I just don't recall.

11: 15: 41 15 Q Have you ever owned any torches other than
16 propane torches?

17 A Settling torch. I'm not sure I owned it, but
18 I had access to it.

19 Q Have you used a settling torch?

11: 15: 56 20 A Yes.

21 Q With oxygen?

22 A Yes.

23 Q The propane torches that you used, did you use
24 them on a cylinder that is similar in dimensions as the
11: 16: 10 25 MAPP gas cylinder involved in this case?

♀

15

1 A Yes.

2 Q Have you ever done any work professionally,
3 either in litigation or industrial consulting,
4 involving any type of torch?

11: 16: 29 5 A Well, let's see. I think the answer is yes.

6 Q What type of matters have you been involved
7 with torches?

8 A There was an issue of metal spray torch, using
Page 13

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9 a torch to spray metal to resurface an object, and that
11:17:04 10 was in litigation. Of course, I taught welding at the
11 university. I may think of more as I go through this.

12 Q Okay.

13 A I did some research -- one of my students when
14 I was at Stanford had research going on using a torch
11:17:31 15 to see what kind of separation you got in the torch.
16 In other words, suppose you had a torch and you ran
17 materials through it and what kind of separation could
18 you make by doing that.

19 Q And I don't understand "separation" in the
11:17:46 20 context you're using it in?

21 A Say I have fly ash, for example, which has
22 very little value. Can you run it through a torch and
23 separate out some of the components so that the more
24 valuable components can be separated after it comes out
11:18:01 25 of the torch. You've heated it up, you've got almost a

♀

16

1 plasma going, and can you make separations downstream
2 from that.

3 Q Of the material?

4 A Right.

11:18:11 5 Q Not of the torch components?

6 A No.

7 Q Okay. Have you ever had any type of
8 litigation matter or industrial consulting matter
9 involving a propane torch?

11:18:30 10 A I don't remember the torch part. I had a
11 number of cases involving tire inflators. It was in a

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12 can that was driven by propane that was in a car and
13 caught fire. I don't remember torches, per se.

14 Q Have you ever had any type of matter you
11: 18: 55 15 worked on involving a DOT Section 39 cylinder?

16 A I think they all were.

17 Q On what size cylinders?

18 A Again, the same size as the MAPP gas.

19 Q One-pound cylinders?

11: 19: 14 20 A Yes.

21 Q Did you follow the guidelines of NFPA 921 in
22 your investigation of this matter?

23 MR. EPSTEIN: Objection. Overly broad. Vague
24 and ambiguous.

11: 19: 42 25 THE WITNESS: Well, I have a number of their

♀

17

1 volumes. This is a consensus study for fire
2 investigators. And as is appropriate in some cases, I
3 would probably follow it.

4 BY MR. ERGO:

11: 20: 00 5 Q Did you follow it in this case?

6 MR. EPSTEIN: Objection. Vague and ambiguous.
7 Overly broad.

8 THE WITNESS: I don't think it's appropriate.

9 BY MR. ERGO:

11: 20: 11 10 Q Just so I understand what you're saying, it's
11 your belief that NFPA 921 guidelines would not be
12 applicable to this matter?

13 MR. EPSTEIN: Again, overly broad.

14 THE WITNESS: It's a design, which they don't
Page 15

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11: 20: 25 15 go into, and a metallurgical problem, which they don't
16 go into. So from that standpoint, it doesn't have
17 application. That's correct.

18 BY MR. ERGO:

19 Q You're familiar with the term "scientific
11: 20: 47 20 method"?

21 A Of course.

22 Q And what's your understanding of what
23 scientific method is?

24 A Basically you propose a hypothesis. You test
11: 21: 00 25 that hypothesis. You document the results and alter

♀

18

1 your test procedures until you finally come up with a
2 hypothesis that is validated.

3 Q And in this matter, did you involve the
4 scientific method?

11: 21: 21 5 A Absolutely. I mean, if you read my report,
6 you would see that.

7 Q Anything you did in your investigation that
8 was -- that you believe was inconsistent with the
9 scientific method?

11: 21: 40 10 A Starting with an open opinion to examine the
11 cylinders and using a protocol, which you'll find in my
12 files which were prepared, no, I didn't find anything
13 inconsistent.

14 Q Have you brought your entire file today?

11: 22: 07 15 A Everything I've looked at is here.

16 Q Is there anything that you removed from your
17 file?

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18 A No.

19 Q Is there anything that you reviewed related to
11: 22: 16 20 this investigation that's not here today?

21 A No.

22 I should say the support that was used during
23 the testing is not here. Everything else is.

24 Q The support apparatus?

11: 22: 36 25 A Right.

♀

19

1 Q Including the socket wrench?

2 A Correct.

3 Q But all of the cylinders you used in your
4 testing are here today?

11: 22: 49 5 A Yes. I have inventoried them. They're in the
6 box. And all of the metallographics, the samples are
7 there too.

8 Q Are there any cylinders or torches that you
9 used in your testing that aren't here today?

11: 23: 02 10 A In my personal testing?

11 Q Yes.

12 A No.

13 Q Your personal testing, was there some other
14 testing that you participated in or considered?

11: 23: 11 15 A There was a colleague down south that used my
16 test rig, and I haven't seen his samples. I just have
17 some data from him.

18 Q Is that data here?

19 A Yes.

11: 23: 29 20 Q Who is the colleague down south?

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21 A The name is Dr. Carr.

22 Q He's been retained in the Glen matter?

23 A I don't have any details.

24 Q Where do you have Dr. Carr's test data?

11: 23: 46 25 A Should be in the list of cylinders that was on

♀

20

1 the top of the box when I brought it in.

2 Q Currently Dr. Carr has your test apparatus?

3 A I don't know that he has it, but he used it.

4 Q You don't have it right now?

11: 24: 10 5 A No.

6 Q You gave it to him, and it hasn't come back to
7 you?

8 A Let me try and correct. The test was done in
9 a gun range up in Mount Shasta. The equipment was left
11: 24: 24 10 there. My person that set it up for me kept it. And I
11 suggested to Dr. Carr that he could contact this
12 person, use that equipment. And as far as I know, it's
13 still there in Mount Shasta.

14 Q So you gave Dr. Carr permission to go up to
11: 24: 45 15 the area in Mount Shasta to use the apparatus?

16 A Yes. I guess you could say permission.

17 Q I'm going to refer to the deposition list that
18 you attached to your report, actually the deposition
19 list and the court appearance list that you attached to
11: 25: 25 20 your June 25th 2008 report.

21 Do you know if any of the cases listed in
22 either of those lists involved any type of torch?

23 A Could I look at that?

81709TS

24 Q Certainly.

11: 25: 38 25 A Thank you.

♀

21

1 Q While you're looking, is your report somewhere
2 here in the file?

3 A I put all my files out there.

4 I only see three fire cases. None of them
11: 27: 19 5 involve cylinders.

6 Q Or torches?

7 A Correct.

8 Did you want me to identify those three?

9 Q Sure.

11: 27: 31 10 A Campbell versus Polyguard, Ponte versus some
11 people, and White versus Back.

12 Q In the last five years, what percentage of
13 your litigation work is for plaintiffs as opposed to
14 defendants?

11: 28: 11 15 A Initially it's even. I don't make a
16 distinction. By the time it gets to a deposition like
17 this, normally slightly askew for the plaintiff. By
18 the time it goes to court, I'd say it's at least 60/40
19 for the plaintiff.

11: 28: 33 20 Q When you say slightly askew for the plaintiffs
21 for depositions --

22 A I mean, probably more plaintiffs when I'm
23 being deposed than there are defendants.

24 Q Is it more or less than 60 percent that you
11: 28: 50 25 estimated that you testified for plaintiffs when you

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♀

22

1 are in trial?

2 A Initial contact, even. Then maybe 55/45 and
3 then 60/40.

4 Q The 55 is 55 percent for plaintiffs, correct?

11: 29: 10 5 A Correct. It's always askew for the
6 plaintiffs.

7 Q Has your testimony or proffered testimony ever
8 been excluded by a court?

9 A No.

11: 29: 42 10 Q Has the court ever made a ruling prior to a
11 trial that it would not allow you to offer opinions
12 that have been proffered in a particular matter?

13 A I guess I don't understand that question.
14 Could I have it again?

11: 29: 57 15 Q Sure.

16 Are you aware of any situation where you were
17 retained by somebody to render opinions in a matter,
18 you rendered your opinions, you gave a deposition, and
19 prior to the trial, motion was brought by the other
11: 30: 17 20 side seeking to exclude your testimony? Do you recall
21 any such situation where a court did, in fact, issue a
22 ruling that you would not be permitted to offer any
23 particular opinions in that matter at trial?

24 A I have no recollection of that, but I have a
11: 30: 35 25 recollection that in some ballistic matter that that

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1 may have happened. I just don't have any record of
2 that.

3 Q What were you asked to do in this matter?

4 A In this matter?

11: 30: 57 5 Q Yes.

6 A Review some documents, depositions of park
7 rangers, depositions of plaintiffs, and see if it's
8 possible to understand what happened, what caused the
9 injury in the absence of having the physical evidence.

11: 31: 30 10 Q Just very generally, what have you done in
11 this matter?

12 A Looked at other issues where there's been
13 alleged failure of cylinders for some reason, looked at
14 the design of the cylinder, did some testing on the
11: 31: 53 15 critical high-stress area of the main valve attached to
16 the cylinder, did metallography and did some
17 flame-and-pull test, very generally.

18 Q When you say "flame-and-pull test," was that
19 just one test?

11: 32: 18 20 A No. In each case, we worked at disturbing the
21 main valve and the result of the flame afterwards so
22 they're co-joined.

23 Q And those tests or at least one of those tests
24 is documented in a video that was produced?

11: 32: 42 25 A Yes.

♀

24

1 Q That's what you're referring to as
2 flame-and-pull test?

3 A Yes.

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4 Q Any other testing?

11: 32: 59 5 A Yes.

6 Q What else?

7 A We did a very short corrosion test. Since the
8 brazing material has a different metal composition than
9 the canister, I was just kind of curious as to how
11: 33: 18 10 susceptible it was to corrosion at the interface. In
11 other words, if you had a humid condition or moist
12 condition, is there some possibility that there might
13 be a degradation of the brazing. And so there is a
14 report of a two-day water test of the braze material.

11: 33: 42 15 Q It was a two-day test?

16 A It only lasted two days.

17 Q That's where you submerged the cylinder in
18 seawater?

19 A No. I don't think you'll find seawater at
11: 33: 54 20 three percent. Much less salt than you'd find at
21 seawater.

22 Q So you submerged a section cylinder in a
23 three-percent water salt solution for two days?

24 A Correct.

11: 34: 09 25 Q 48 hours?

♀

25

1 A Yes.

2 Q Any other tests?

3 A Other than what I have talked about, I don't
4 believe so.

11: 34: 24 5 Q So the flame-and-pull test and the corrosion
6 test?

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7 A And the metallography.

8 Q What opinions have you reached in this case?

9 A Bottom line opinions are that the brazing of
11: 34: 46 10 the main valve on the top is inadequate and dangerous
11 and that it can fail and release the MAPP contents
12 causing injury. And this is based upon metallography,
13 testing how strong that braze is, and examples of what
14 happens when it releases.

11: 35: 17 15 Q Okay. Any other opinions you reached in this
16 matter?

17 A Let me ponder that question.

18 Well, there are subsets. Do you want subsets?

19 Q Sure.

11: 35: 41 20 A Having analyzed what the brazing material is,
21 I'm not sure that the deposition that told me what the
22 brazing furnaces were were appropriate.

23 Q The temperature?

24 A The temperature.

11: 35: 57 25 And I don't recall that there was any

♀

26

1 information on the time in the course of both of them.

2 Q Any other subsets?

3 MR. EPSTEIN: Do you want to review your
4 report?

11: 36: 13 5 THE WITNESS: Yeah. Can I look at my report
6 for a minute?

7 BY MR. ERGO:

8 Q Sure.

9 And, Dr. Anderson, I intend to go over your

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11: 36: 39 10 report in the course of the day.

11 A I'm trying to help you generally.

12 This is helpful. I did microhardness. We

13 haven't mentioned that.

14 Q Microhardness testing?

11: 36: 59 15 A Right. That gave me the values for the braze

16 material in the canister and the main valve. Of

17 course, the EDS.

18 I think that's what I did.

19 Q Your opinion that the brazing of the main

11: 37: 35 20 valve is inadequate, is it your opinion that there's a

21 design defect or that there is a manufacturing defect?

22 A Good question. They are different, and a lot

23 of people don't understand that.

24 First of all, it's manufactured wrong.

11: 37: 58 25 Because when you look at my metallography and there are

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27

1 a number of pictures out there -- and, of course, it's

2 in the disk that you were provided with -- it's full of

3 holes. There's a poor adhesion between the canister

4 and the bonding agent, the brazing. So manufacturing,

11: 38: 21 5 for sure.

6 The second, design. Yes, I believe there is a

7 design error. I believe the critical nature of this

8 valve that's gonna take most of the stress because it's

9 the connector between the torch and the cylinder. So

11: 38: 39 10 that's the main stress area, and I believe that's

11 poorly designed.

12 Q Do you have an opinion as to what failure, if

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13 any, occurred in this matter that resulted in

14 Mr. Shalaby's accident?

11: 39: 43 15 A Yes, I do.

16 Q And what's that opinion?

17 A I believe that the brazed joint of the main
18 valve failed, dislodged, and allowed the MAPP gas to
19 evaporate, and it was ignited by some fire in the area.

11: 40: 02 20 Q It's your opinion that it was the brazed
21 joint, rather than the parent metal, that failed?

22 A I think I showed you both in my exhibits here.
23 Yes, reading the deposition of Warren Ratliff and
24 Stephens and looking at the other examples that I've

11: 40: 37 25 listed in my report of people complaining about

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1 failure, that this is a critical area, most likely the
2 area that failed.

3 Q Well, my question is, is it your opinion -- so
4 it's your opinion that the brazed joint, not the parent
11: 40: 57 5 metal, failed in Mr. Shalaby's cylinder?

6 A Yes, it is my opinion.

7 Q Just to make sure I'm not misusing terms,
8 what's your understanding of the term "parent metal"?

9 A That would be something that you have melted
11: 41: 25 10 metal against. So it's parent metal, and then I have
11 my brazing material.

12 Q So in this case, parent metal would be the
13 shell of the cylinder?

14 A Or the valve itself.

11: 41: 46 15 Q Did you bring your billing records today?

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16 A No. I saw no notice of my depo that asked for
17 it. I'm happy to supply that afterward.

18 Q I'd appreciate it if you would supply that to
19 Mr. Epstein.

11: 42: 01 20 THE WITNESS: You have that in your office?

21 MR. EPSTEIN: Yes.

22 THE WITNESS: He'll take care of it.

23 BY MR. ERGO:

24 Q As you sit here, do you know how much you have
11: 42: 11 25 charged Mr. Epstein thus far?

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1 A No. As I said, that's not my area. Maybe I
2 could estimate \$15,000, but I think more than half of
3 it may be lab fees for the metallography testing.

4 Q Let's go over your file now.

11: 42: 48 5 MR. ERGO: Let me go off the record for a
6 second.

7 (Recess taken from 11:42 a.m. to 11:44 a.m.)

8 MR. ERGO: Let's go back on the record.

9 Q I'm just going to identify everything that you
11: 44: 36 10 brought here today.

11 The first document I see is a supplemental
12 response to request for production of documents by
13 Irwin Industrial Tool Company in this case.

14 A Yes. I might point out to you that some of
11: 45: 00 15 these are highlighted in the depositions and so forth.
16 I'm not sure that that one was, but I can point out
17 what was of interest to me.

18 Q We will figure that out during the course of

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19 the day.

11: 45: 13 20 Did you review the materials in this
21 supplemental response?

22 A Yes.

23 Q And there's Defendant Newel Rubbermaid's
24 initial response in this case.

11: 45: 27 25 A I read that. To make it simple, everything in

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1 that file I looked at.

2 Q Let me just continue to identify them.

3 Then there's, again in this case, disclosure
4 of experts by Defendant Bernzomatic, correct?

11: 45: 43 5 A Correct.

6 Q And you got Worthington Industries expert
7 witness disclosures, correct?

8 A Correct.

9 Q And you got a list of experts by Western
11: 45: 58 10 Industries, correct?

11 A Correct.

12 Q You got a material safety data sheet on MAPP
13 gas?

14 A Yes.

11: 46: 07 15 Q Is that something you got on your own?

16 A No. I think it came to me.

17 Q By counsel? From counsel?

18 A Approximatel y.

19 Q Then you got the 2006 Health and Safety
11: 46: 25 20 Laboratory report entitled "the Behavior of Bernzomatic
21 MAPP and Propane Cartilages When Exposed to Heat and

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22 Flame, " correct?

23 A Correct.

24 Q Is that something you obtained from counsel?

11: 46: 39 25 A I believe so. You can verify that by looking

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1 at the cover letters.

2 Q Okay. It looks like you have the rough draft
3 of the deposition of Dallas Schwalenberg taken in this
4 case.

11: 47: 04 5 A Yes, I do.

6 MR. ERGO: Is it not the rough draft?

7 MR. EPSTEIN: If it's a short one, it probably
8 is.

9 MR. ERGO: That's what it says on here.

11: 47: 17 10 MR. EPSTEIN: Okay.

11 BY MR. ERGO:

12 Q And then you have a condensed copy of Warren
13 Ratliff's deposition taken in this case?

14 A Yes.

11: 47: 26 15 Q Did you ever have notes -- did you ever put
16 notes in any of these documents?

17 A No. Highlighting worked for me.

18 Q On this one, there is a note just on the front
19 page indicating "supervising park rangers."

11: 47: 41 20 Is that your handwriting?

21 A Yes, it is.

22 Q That's just a note telling you who this guy
23 is?

24 A Right.

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11: 47: 46 25 Q Then you have the deposition of Joe Russo

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1 taken in this case?

2 A Yes.

3 Q Deposition of Randy Stephens in this case?

4 A Yes.

11: 47: 53 5 Q Volume I of Mr. Shalaby's deposition taken in
6 this case?

7 A Yes.

8 Q Volume II of Mr. Shalaby's deposition taken in
9 this case?

11: 48: 02 10 A Correct.

11 Q Then you have the deposition of Mr. Steven
12 Gentry taken in this case, correct?

13 A Correct.

14 Q Then you have a document entitled "Gas Type
11: 48: 38 15 Comparisons, Bernzomatic." Is that something you got
16 off the Internet?

17 A I think so, yes.

18 Q It says Page 1 of 2. Do you have the Page 2?

19 A No. Normally Page 2 just tells me something
11: 48: 57 20 of no value, and I toss that.

21 Q You look at it first, though?

22 A Sometimes. It's like when you go to MapQuest
23 and they print out all these pages and the last page
24 has no value.

11: 49: 14 25 Q I'm going to just set aside the things that

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1 weren't actually produced in this case.

2 And then you've got a document No. BZO 000014,
3 correct?

4 A Yes.

11: 49: 40 5 Q What's your understanding of what this is?

6 A The actual size of the label of the torch, and
7 then it's been blown up so you can actually read it.

8 Q Then you have a document entitled "Bernzomatic
9 Torches, Fuel, Patio, Heaters and More."

11: 50: 03 10 Is this the document that you got off the
11 Internet?

12 A Either I got it off the Internet, or I
13 received it from counsel.

14 MR. ERGO: Mark, do you know if you gave him
11: 50: 13 15 anything that wouldn't have been Bates stamped?

16 MR. EPSTEIN: I don't recall, to tell you the
17 truth.

18 BY MR. ERGO:

19 Q You have a document marked BZO 13, correct?

11: 51: 36 20 A Yes.

21 Q MAPP gas cylinder label?

22 A Yes.

23 Q Is that your highlighting?

24 A Yes.

11: 51: 44 25 Q Why did you do the highlighting that you did

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1 on that document?

2 A Well, the case involved fire and explosion, so
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3 I wanted to be able to come back and look at that.

4 Also, "check for leak" is interesting. Obviously, the

11: 52: 20 5 Joules-Thomson effect, if the gas is going out, the

6 cylinder is going to get cold. The expansion of gas

7 will do that. Also the rotten egg smell, that's

8 mercaptan, and I wasn't aware from the MSDS that

9 mercaptans were part of the MAPP gas.

11: 52: 46 10 Q Specifically one of the things highlighted is

11 No. 6 in the label, "check for leaks."

12 A Right.

13 Q Why did you mark or highlight that?

14 MR. EPSTEIN: Objection. Asked and answered.

11: 53: 00 15 THE WITNESS: I just answered that. The

16 Joules-Thomson effect explained that if there's a leak,

17 the cylinder is cold when you touch it. Apparently

18 there's an issue of mercaptan being added to it to

19 detect the odor of a leak.

11: 53: 17 20 BY MR. ERGO:

21 Q That's your understanding, that there's an

22 odorant added to MAPP gas?

23 A Not until I saw that.

24 Q Are you familiar with the odor of MAPP gas?

11: 53: 29 25 MR. EPSTEIN: Objection. Undefined. Vague

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1 and ambiguous.

2 THE WITNESS: In the testing, yes. And I did

3 not detect mercaptan.

4 BY MR. ERGO:

11: 53: 40 5 Q But you could smell it?

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6 A I'm not sure. I could see it.

7 Q Is one of the reasons you checked for leaks
8 because you thought that may have been an issue in this
9 case as to whether Mr. Shalaby had checked for leaks?

11:53:57 10 A I think that's an issue of the manufacturing
11 of the cylinder and the valve. You'll see one of the
12 cylinders that was purchased has a leak in it that was
13 never, ever used or tested. So it seems that they're
14 kind of putting the request for leak check on you, the
11:54:22 15 person that's buying it, rather than the manufacturer.

16 Q Do you think it's irresponsible for the
17 manufacturer to suggest that the consumer check for
18 leaks?

19 MR. EPSTEIN: Objection. Argumentative.

11:54:32 20 THE WITNESS: No. I think that's appropriate,
21 and it indicates that the manufacturer realizes there
22 can be leaks.

23 BY MR. ERGO:

24 Q There can be leaks for any number of reasons,
11:54:43 25 correct?

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1 MR. EPSTEIN: Same objection. Vague and
2 ambiguous.

3 THE WITNESS: Any number of reasons could
4 include poor brazing or could include some abuse,
11:54:54 5 certainly. I think that's a limited number.

6 BY MR. ERGO:

7 Q Back to my question, is one of the reasons you
8 highlighted "check for leaks" because you felt it may

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9 have been an issue as to whether Mr. Shalaby had
11: 55: 09 10 complied with this instruction?

11 MR. EPSTEIN: Objection. Asked and answered.

12 THE WITNESS: No. The reason I did that was
13 because, obviously, they are aware there can be leaks,
14 and they're informing the user that there can be leaks.

11: 55: 27 15 BY MR. ERGO:

16 Q All right. Next document is a document marked
17 BZO 105 and 106, correct?

18 A Yes.

19 Q I guess it's a catalogue or brochure or some
11: 55: 44 20 sort of document for a self-igniting outdoor utility
21 torch, correct?

22 A Correct.

23 Q And then there's an unmarked document that has
24 to do with a Bernzomatic TS99 trigger start swivel head
11: 56: 00 25 torch, correct?

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1 A Correct.

2 Q And it's four pages in length?

3 A I don't remember the length, but you've
4 demonstrated that it's four pages.

11: 56: 15 5 Q Is that something you printed off the
6 Internet?

7 A I don't recall.

8 Q Do you know where you would have gotten it?

9 A I either would have printed it off when I got
11: 56: 28 10 on the web, or I would have received it from counsel.

11 Q Then there's a paper clipped group of
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12 documents relating to Bernzomatic torches and labeled
13 cylinders; is that correct?

14 A Yes.

11: 56: 57 15 Q That doesn't have a Bates stamp number on it,
16 does it?

17 A No.

18 Q Do you know where you got that?

19 A No.

11: 57: 19 20 MR. ERGO: I may as well start marking some of
21 these documents that I'm not necessarily familiar with.

22 Off the record.

23 (Discussion off the record.)

24 BY MR. ERGO:

11: 57: 41 25 Q Dr. Anderson, the exhibit I just identified is

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1 going to be Exhibit 1.

2 (Deposition Exhibit 1 was marked for
3 identification by the court reporter.)

4 BY MR. ERGO:

11: 57: 45 5 Q And then we'll mark as Exhibit 2 the document
6 on the TS99 trigger start swivel head torch. Okay?

7 (Deposition Exhibit 2 was marked for
8 identification by the court reporter.)

9 BY MR. ERGO:

11: 58: 02 10 Q That's been marked Exhibit 2, correct?

11 A I'm sorry. I wasn't listening.

12 Q We've now marked as Exhibit 2 the document you
13 have in your file regarding the TS99 trigger start
14 swivel head torch?

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11: 58: 19 15 A Yes.
16 (Deposition Exhibit 3 was marked for
17 identification by the court reporter.)
18 BY MR. ERGO:
19 Q We've marked as Exhibit 3 the document
11: 58: 25 20 entitled "Bernzomatic Torches, Fuels, Patio Heaters,
21 and More," correct?
22 A Correct.
23 (Deposition Exhibit 4 was marked for
24 identification by the court reporter.)
11: 58: 35 25 BY MR. ERGO:

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1 Q And we've marked as Exhibit 4 the document
2 entitled "Gas Type Comparisons, Bernzomatic." It says
3 Page 1 of 2, but there's only one page, the first page,
4 correct?
11: 58: 46 5 A Correct.
6 Q And we've marked that as Exhibit 4, correct?
7 A Okay.
8 (Deposition Exhibit 5 was marked for
9 identification by the court reporter.)
11: 59: 00 10 BY MR. ERGO:
11 Q Exhibit 5 is a document, Bernzomatic document,
12 "Twin MAPP Trigger Start Torch Kit," and it is two
13 pages, correct?
14 A Yes.
11: 59: 13 15 Q Do you know where you got this?
16 A No, I don't.
17 Q Oh, I'm sorry. That's actually marked. That
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18 is Bates stamped BZO 94 and 95.
19 And then you've got a document BZO 100, 101,
11: 59: 50 20 102, and 103, correct?
21 A Yes.
22 Q And we have a document marked BZO 90 through
23 93, correct?
24 A You are correct.
12: 00: 27 25 Q A document marked BZO 82 and 83, correct?

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1 A Yes.
2 Q And we have a document marked 93 through 96
3 BZO?
4 A Through 99.
12: 01: 00 5 Q Through 99.
6 And a document marked BZO 84 through 89?
7 A Correct.
8 Q BZO 1 through 12?
9 A Correct.
12: 01: 59 10 Q BZO 73 through 81?
11 A Correct.
12 Q BZO 72 through 72?
13 A Yes.
14 Q BZO 31?
12: 02: 49 15 A Yes.
16 Q BZO 22?
17 A Yes.
18 Q BZO 52 through 58?
19 A Yes.
12: 03: 59 20 Q BZO 35?

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21 A Yup.
 22 Q BZ0 36 through 39?
 23 A Yes.
 24 Q BZ0 59 through 65?
 12: 05: 02 25 A Yes.

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1 Q BZ0 21?
 2 A Yes.
 3 Q BZ0 29?
 4 A Correct.
 12: 05: 18 5 Q BZ0 30?
 6 A Yup.
 7 Q BZ0 32?
 8 A Yes.
 9 Q BZ0 33?
 12: 05: 34 10 A Yes.
 11 Q BZ0 34?
 12 A Yes.
 13 Q BZ0 20?
 14 A Yes.
 12: 05: 57 15 Q BZ0 40 through 51?
 16 A Starts at 40 and ends at 51.
 17 Q BZ0 28?
 18 A Yes.
 19 Q BZ0 26?
 12: 07: 03 20 A 26, agreed.
 21 Q BZ0 27?
 22 A Yup.
 23 Q BZ0 25?

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24 A Yes.
12: 07: 23 25 Q BZ0 24?

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1 A Yes.
2 Q BZ0 23?
3 A Yes.
4 Q BZ0 16?
12: 07: 50 5 A Yes.
6 Q BZ0 19?
7 A Got i t. Yes.
8 Q BZ0 17?
9 A Yes.
12: 08: 15 10 Q BZ0 18?
11 A Yes.
12 Q June 1st 2006 transcribed statement of Andrew
13 Shal aby taken by Joe Tancredy?
14 A Yes.
12: 08: 37 15 Q The deposi ti on of Mi chael Ri dle y taken in thi s
16 case?
17 A Yes.
18 MR. ERGO: Let me take a quick break here,
19 figure out what I want to do with the rest of thi s
12: 09: 22 20 stuff.
21 (Recess taken from 12: 09 p.m. to 12: 18 p.m.)
22 BY MR. ERGO:
23 Q The next document I found in your file is BZ0
24 15.
12: 18: 16 25 A Correct.

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1 Q And then BZ0 66.

2 A Correct.

3 Q And then you have a document entitled
4 "Protective Order" in this case.

12: 18: 24 5 A Yes. And I think I signed the last page.

6 Q And then you got a document entitled "Irwin
7 Industrial Tool Company Expert Reports."

8 A Yes. It's a cover letter for a report.

9 Q Cover pleading?

12: 18: 55 10 A Correct.

11 Q The reports are not attached there?

12 A They are not.

13 Q You did review Irwin's expert report, didn't
14 you?

12: 19: 03 15 A I believe I did, yes.

16 Q There's a document WII-1.

17 A Yes.

18 Q Now I'm going to just mark as a group exhibit
19 what I think is the bulk of your paper file anyway,
12: 19: 22 20 other than paper that may be in the boxes over there
21 with your physical evidence.

22 We'll mark as Exhibit 6 this big stack of
23 documents, which appear to include mainly

24 correspondence between you and Mr. Epstein's office,

12: 19: 55 25 some e-mails, your reports, some of your photos, some

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1 photos from other matters.

2 Is that generally descriptive of what's in
3 this big pile that's about two, three inches thick?

4 A Yes.

12: 20: 10 5 (Deposition Exhibit 6 was marked for
6 identification by the court reporter.)

7 BY MR. ERGO:

8 Q The only other things you brought with you
9 today are these several boxes which contain intact
12: 20: 48 10 cylinders, section cylinders, empty cylinders, full
11 cylinders, damaged cylinders, and metallography,
12 correct?

13 A Yes.

14 MR. EPSTEIN: We've also got DVDs or CD-ROMs
12: 21: 00 15 here.

16 BY MR. ERGO:

17 Q And are those the DVDs produced with your
18 initial report and the supplemental report?

19 A There was a person doing still photography
12: 21: 10 20 that's on this. I don't think you've seen that before.
21 This is the one that my camera was covering, not the
22 professional. And then there's the Anamet pictures
23 that I think you've seen, everything that was done at
24 the laboratory.

12: 21: 38 25 Q So there is a CD that's entitled "Epstein CD

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1 file, Shalaby, RNA report, RNA Consulting, Inc." Is
2 that correct?

3 A Yes.

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12: 21: 53 4 Q Is that the CD that was produced along with
5 your initial report?

6 A I'm not sure. I think it's more likely it's
7 this one that was produced.

8 Q The one that is entitled "Anamet Job
9 No. 5004.1537," correct?

12: 22: 11 10 A Right. That's all the laboratory work on
11 that.

12 Q What's the first CD identified here then?

13 A That should be other work that has been done.
14 In other words, I think EVAPro is on there. I think
12: 22: 26 15 there may be some hardness tests that were done later.

16 MR. ERGO: Mark, do you know if that was
17 produced?

18 MR. EPSTEIN: If we got it from him, we
19 produced it to you. I'd have to see it, but I'm pretty
12: 22: 39 20 certain it was.

21 BY MR. ERGO:

22 Q Then there's a case that has a yellow DVD and
23 a small purple or blue DVD, correct?

24 A Yes.

12: 22: 55 25 Q What are those?

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1 A The small one was actually in the video camera
2 that I was doing, and it's been transferred over to the
3 larger one. And so it is copies of what's going on by
4 my video camera. I don't believe you've seen that.

12: 23: 13 5 Q Okay. So this is different than the videos
6 that were produced in the supplemental report?

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7 A Those are professional. Professional
8 videographer.

9 MR. EPSTEIN: The ones they saw?

12: 23: 25 10 THE WITNESS: The ones they saw and the ones I
11 gave you.

12 MR. EPSTEIN: I have not seen this one either,
13 the one you have in your hand.

14 BY MR. ERGO:

12: 23: 33 15 Q Do these DVDs contain anything, other than the
16 DVDs that were produced?

17 A Well, from a different viewpoint. It wasn't
18 there at the location. I mean, he's over here, and I'm
19 here.

12: 23: 50 20 Q The DVD that was produced that I have, there's
21 a very short one that shows a cylinder falling and
22 igniting and then one that's a little longer.

23 A They should both be on there.

24 Q My question is, what's on these DVDs? Are
12: 24: 08 25 they just the same tests or something additional on

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1 those DVDs?

2 A I believe there are some things additional.
3 And then there are pictures.

4 Q Can I take that DVD and have someone burn it?

12: 24: 29 5 A That's a great idea.

6 Q Okay. Then you have one more CD, "Epstein -
7 Shalaby, cylinder test, RNA Consulting, Inc." That has
8 more pictures --

9 A Yes.

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12: 24: 50 10 Q -- of the flame-and-pull test?

11 A Yes. Understand there was a professional
12 photographer. There's mine with a video camera. And
13 there's one other person there that has a still camera,
14 and those are the still camera.

12: 25: 04 15 Q Who is that other person?

16 A My wife, Dru Anderson.

17 MR. EPSTEIN: Do you want to go and burn those
18 now?

19 MR. ERGO: Hopefully we can burn DVDs. I know

12: 25: 18 20 we can burn CDs.

21 Let me go ahead and get that going right now.

22 (Recess taken from 12: 25 p.m. to 12: 28 p.m.)

23 BY MR. ERGO:

24 Q You say you have Dr. Carr's data, and that's

12: 27: 58 25 in one of these boxes right here?

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1 A Should be. Should be a list of all the
2 cylinders.

3 Q Okay. I've got a box here, and there's a
4 paper that says "cylinder Testing and Analysis."

12: 28: 25 5 A Right.

6 Q And that's from Dr. Carr?

7 A Subsequent tests. This is verbal from
8 Dr. Carr's test.

9 Q Okay. This document, does that reflect some
12: 28: 36 10 of your testing and some of Dr. Carr's testing?

11 A This is all mine up to here, and then the last
12 line, subsequent tests.

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13 Q Are there any other documents in the boxes
14 other than this one and not including torch packaging
12: 29: 02 15 or instructions?

16 A There's a document in the other box, which is
17 the transfer. In other words, evidence you want to
18 have a record of transfer. There's a transfer of
19 evidence paper in the other box.

12: 29: 16 20 MR. ERGO: We'll mark this one Exhibit 7, the
21 one that's entitled "Cylinder Testing and Analysis."

22 (Deposition Exhibit 7 was marked for
23 identification by the court reporter.)

24 BY MR. ERGO:

12: 29: 33 25 Q Just so I'm clear, everything in Exhibit 7

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1 relates to testing you did except the very last line
2 that reads "subsequent tests - 12, 16 and 31 to 32
3 foot-pounds."

4 A You're correct.

12: 29: 46 5 Q And that line I just read, that is data that
6 Dr. Carrs (sic) gave to you over the phone?

7 A I got that over the phone.

8 Q From Dr. Carr?

9 A I got it from the person who was working with
12: 30: 01 10 Dr. Carrs.

11 MR. EPSTEIN: I think it's Dr. Carr, with no
12 "S."

13 BY MR. ERGO:

14 Q The document that you were referring to that
12: 30: 45 15 was in the other box, it's this one-page document on

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16 the stationery of Anamet, Inc., "Evidence Change of
17 Custody Record"?

18 A And there's one MAPP gas cylinder. That
19 should be MAPP Pro and 15 mounts.

12: 31: 03 20 Q And then they were transferred from whom to
21 whom?

22 A From Anamet -- from Ryan Wood to me.

23 Q And who's Anamet?

24 A It's a metallurgical laboratory in Hayward.

12: 31: 23 25 Q Is that one of the laboratories you used for

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1 testing?

2 A Yes, it was.

3 Q What kind of testing did you do at Anamet?

4 A Metallography. You cut them up and polish
12: 31: 32 5 them up and look at them and take pictures. And
6 hardness density and also EDS.

7 MR. ERGO: We'll mark the evidence chain of
8 custody record as Exhibit 8.

9 (Deposition Exhibit 8 was marked for
12: 32: 11 10 identification by the court reporter.)

11 BY MR. ERGO:

12 Q I think I'm going to delay identifying the
13 physical evidence you brought today until a later point
14 in the deposition.

12: 33: 03 15 You didn't have a chance to examine

16 Mr. Shalaby's accident cylinder, did you?

17 A No.

18 Q And would you agree that in order to determine

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19 the cause of a failed product it's critical to examine
12: 33: 19 20 the product?

21 A No, I don't agree. You can do testing of
22 exemplars and come to a conclusion. I've done that in
23 other matters.

24 MR. EPSTEIN: Belated objection. Calling for
12: 33: 34 25 a legal conclusion.

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1 BY MR. ERGO:

2 Q I take it if the accident cylinder had been
3 available, you certainly would have wanted to examine
4 it.

12: 33: 41 5 A Of course.

6 There's somebody waiting outside for you.

7 Q And why would you have wanted to examine the
8 product if the subject accident cylinder had been
9 available?

12: 34: 14 10 A Why?

11 Q Yes.

12 A Well, it would have allowed me to have more
13 information than taking it secondhand from depositions.
14 It would allow me to consider testing the actual

12: 34: 30 15 cylinder and torch. I think it just has a lot of merit
16 to actually see what failed.

17 Q It's your opinion in this case that
18 Mr. Shalaby's cylinder failed in the brazed joint, not
19 the parent metal, correct?

12: 34: 53 20 A Correct.

21 Q Of course you can't determine that

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22 conclusively without seeing the accident cylinder,
23 correct?

24 MR. EPSTEIN: Objection. Calls for a legal

12: 35: 03 25 conclusion. Argumentative.

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1 MR. ERGO: Let me rephrase.

2 BY MR. ERGO:

3 Q Are you able to rule out the possibility that
4 Mr. Shalaby's cylinder failed in the parent metal as
12: 35: 17 5 opposed to the brazed joint?

6 MR. EPSTEIN: Objection. Vague and ambiguous.

7 THE WITNESS: I believe that the weakest
8 component is the brazed joint; and therefore, I believe
9 that's where it failed.

12: 35: 32 10 BY MR. ERGO:

11 Q Okay. My question is a little different,
12 though. Are you able to rule out the possibility that
13 the failure in Mr. Shalaby's accident cylinder was in
14 the parent metal as opposed to the brazed joint?

12: 35: 44 15 MR. EPSTEIN: Objection. Vague and ambiguous
16 as to the phrase "rule out", which is undefined.

17 THE WITNESS: Yes. And I'm comfortable doing
18 so.

19 BY MR. ERGO:

12: 35: 56 20 Q You're able to rule out that Mr. -- the
21 failure in Mr. Shalaby's accident cylinder was in the
22 parent metal?

23 A Yes.

24 MR. EPSTEIN: Same objection.

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12: 36: 03 25 THE WITNESS: Because of all the testing,

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1 experimenting that I did, yes, I am comfortably able to
2 rule it out.

3 BY MR. ERGO:

4 Q Have you seen photographs of cylinders or
12: 36: 46 5 actual cylinders where there was a failure in the
6 parent metal adjacent to the joint between the top of
7 the cylinder and the center valve housing?

8 A Yes.

9 Q So you have seen photos of that?

12: 37: 11 10 A No. If you remember what you said, you said
11 have I seen actual photos or actual.

12 Q Right.

13 A Right.

14 Q So you haven't seen photos of that, correct?

12: 37: 21 15 A I don't remember taking photos of it. If I
16 have it, it's in the box.

17 Q You also have a cylinder in your possession
18 here today where the failure was in the brazed joint?

19 A Yes.

12: 37: 37 20 Q Yes?

21 A Yes.

22 MR. EPSTEIN: Yes.

23 THE WITNESS: Twice. Yes.

24 BY MR. ERGO:

12: 37: 52 25 Q And those cylinders that you have here today,

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1 did the failures occur during the pull test that you
2 have video'd?

3 A In part, yes.

4 Q All right. The pull test you video'd, which
12: 38: 09 5 cylinder -- which type of failure did that involve?

6 A Both. There were two tests. One was in the
7 canister portion, one was in the brazed portion, and
8 then there's another one that's failed in the brazed
9 portion which was never tested.

12: 38: 35 10 Q Which one is that? Is that Mr. Shalaby's old
11 cylinder that has a leak?

12 A No.

13 Q Why don't you show me the cylinders we're
14 talking about? Are they in the boxes near you?

12: 38: 59 15 A This has never been tested. It was bought
16 that way.

17 These are No. 1 and No. 2 on the test. No. 1,
18 I believe, is the canister failure, and No. 2 is the
19 brazing.

12: 40: 20 20 The numbers on the bottom are on that sheet,
21 so you would be able to verify it.

22 Q The cylinder that you see has a brazed failure
23 that wasn't tested by you. It has a serial number of
24 W5E98W?

12: 40: 50 25 A Yes. It's on the sheet.

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1 Q And is this a cylinder that you purchased?

2 A No. My associate up there that did the test,
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3 built the test rig, purchased it up there at one of the
4 stores.

12: 41: 05 5 Q And he informed you that he purchased it in
6 the condition we see it here today?

7 A I checked with him, and that is correct.

8 Q Now, is there any gas in this cylinder?

9 A You got a match?

12: 41: 20 10 Q No, I don't.

11 A No. I let it bleed off for a long period of
12 time. In other words, used the valves and let it bleed
13 off, so I think it's empty now.

14 MR. ERGO: We'll mark as Exhibit 9 W5E98W.

12: 41: 52 15 (Deposition Exhibit 9 was marked for
16 identification by the court reporter.)

17 BY MR. ERGO:

18 Q By the way, what's the name of the person that
19 gave you this cylinder, Exhibit No. 9?

12: 42: 08 20 A That worked with me and built the test rig,
21 his name is Chris Schneider.

22 Q When Mr. Schneider gave you Exhibit 9, to your
23 understanding, was it full of MAPP gas?

24 A Yes. It was leaking.

12: 42: 26 25 Q It was leaking.

♀

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1 And how did you determine it was leaking?

2 A Visually and hearing it. You could hear it.
3 It looked like -- we had a little spray bottle, which
4 is in the video. If you put a little water on it,

12: 42: 43 5 you'd see --

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6 Q That's in the video?

7 A You'll see the spray bottle. I don't think
8 you'll see us do anything with that.

9 Q Did you ever document a leak photographically?

12:42:58 10 A No.

11 Q Why not?

12 A I didn't see any value in doing that. What I
13 might consider is cutting this and looking at the
14 brazing, but right now I haven't touched anything.

12:43:20 15 MR. ERGO: We'll mark as Exhibit 10 the MAPP
16 gas cylinder W1G57E.

17 (Deposition Exhibit 10 was marked for
18 identification by the court reporter.)

19 BY MR. ERGO:

12:43:27 20 Q And this is a cylinder that you used in one of
21 your pull tests?

22 A Yes.

23 Q All right.

24 A The first one.

12:43:41 25 Q In your opinion, where is the failure in this

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1 cylinder?

2 A I think it's the canister.

3 Q The joint brazing didn't fail?

4 A No.

12:43:59 5 MR. ERGO: We'll mark as Exhibit 11 cylinder
6 W11G18E.

7 (Deposition Exhibit 11 was marked for
8 identification by the court reporter.)

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9 BY MR. ERGO:

12: 44: 14 10 Q This is also a MAPP gas cylinder, correct?

11 A Yes.

12 Q And, in your opinion, where is the failure in
13 this cylinder?

14 A I believe the brazing.

12: 44: 38 15 Q The failures you had in Exhibits 10 and 11,
16 was the failure mode the same?

17 Bad question.

18 Did you do the same type of test on each
19 cylinder?

12: 44: 56 20 A No.

21 Q How did the test differ?

22 A We put a wrench on it and twisted it, and
23 you'll see that on the video. Twisted it before
24 putting the other wrench on it and then pulling it

12: 45: 20 25 over.

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1 Q Is that displayed in the video?

2 A Yes, should be.

3 Q And then Exhibit 11, how was that tested
4 differently?

12: 45: 29 5 A Exhibit 11, we let off some of the MAPP gas,
6 and then it was just a pull test to see how much force
7 it took to upset the main valve.

8 Q So Exhibit 11 was just a pull test, and
9 Exhibit 10 involved a pull-and-twist test?

12: 45: 50 10 A Twist firsts. Pull second.

11 Q When did it fail?

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12 A On the final test where we pulled the top
13 over.

14 Q So Exhibit 10, the failure in the metal
12: 46: 00 15 occurred during a pull test?

16 A Yes.

17 Q What was the twist test? What did you do when
18 you twisted it?

19 A Again, I refer to the video. But we put a
12: 46: 16 20 torque wrench on it and pulled it to the side holding
21 the cylinder and then just twisted it. We had a nut on
22 the top that we could attach the torque wrench to and
23 then just pulled to the side.

24 Q And were you able to move the orientation of
12: 46: 35 25 the center valve housing by doing that?

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1 A Not that I could see, no.

2 Q After you twisted Exhibit 10 and before you
3 entered the pull test segment --

4 A Which is from with a wrench on the nut, yes.

12: 46: 57 5 Q After you twisted the center valve housing on
6 Exhibit 10 and before you administered the pull test,
7 did you do any type of leak check on the cylinder?

8 A I don't recall doing that, no.

9 Q Did it appear to you after you did the
12: 47: 11 10 twisting test that there was any leak in the cylinder?

11 A Not that I could hear.

12 Q Were you looking for a leak?

13 A Oh, yes.

14 Q Did you -- did you put the cylinder up to your
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12: 47: 25 15 ear after the twist test?

16 A Or my ear down to the cylinder, yes.

17 Q And you didn't hear a leak?

18 A I did not hear a leak.

19 Q And did you try to smell anything associated

12: 47: 34 20 with the cylinder?

21 A I'm really not adept at smelling mercaptan so,
22 no, I listened for it.

23 Q So did you do any type of a soapy solution or
24 a snoop test?

12: 47: 47 25 A Just a spray bottle we had with water.

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1 Q You did the spray bottle on Exhibit 10 after
2 you did the twist test?

3 A Yes.

4 Q And before you did the pull test?

12: 47: 56 5 A Yes.

6 Q And you saw no evidence of a leak?

7 A I saw no evidence of a leak.

8 Q How much torque did you put on it in twisting
9 it?

12: 48: 10 10 A Well, torque wrench, I believe, was reading
11 about 15 pounds. So at that distance, 15 pounds.

12 Q At what distance?

13 A About a foot.

14 Q And what significance did you -- any

12: 48: 29 15 significance that you attribute to your twisting test
16 done on Exhibit 10?

17 A No. I think it's a way of documenting abuse

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18 to the cylinder so that more likely it's going to fail
19 slightly different than the one that's not been abused.

12: 48: 45 20 I wanted to have an example of the canister failure,
21 and I wanted to have an example of the brazing failure.

22 Q On the video, there's a short test and a long
23 test. Which goes with which?

24 A I think I told you this is the first test.

12: 49: 03 25 Q Is that the short test? I don't know which

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1 order you did them in.

2 A The video should have the order.

3 Q You know what? It very well may, but I just
4 would like you to tell me.

12: 49: 18 5 Which one was the short test, and which one
6 was the long test?

7 A I don't think I used those terms because I
8 think they both took time to develop. And I'd say the
9 one where the canister broke may have taken a little
12: 49: 32 10 bit longer because we torqued it. We pulled it down
11 with a torch until the torch collapsed, and then we put
12 the wrench on it and then pulled it to failure.

13 Q Did you show the twisting test on the video?

14 A Yes.

12: 49: 50 15 Q The DVD I have has two video clips. One's a
16 very short clip, and one is substantially longer.

17 Does that comport with your recollection of
18 what's on the DVD?

19 A That would be the professional DVD. I think
12: 50: 13 20 you would be better served by the one I took, which was

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21 on the entire time.

22 Q I haven't seen that one yet.

23 A But you're copying it.

24 Q Yes, I am.

12: 50: 28 25 On the professional DVD, did we see the

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1 twisting test that you did to Exhibit 10?

2 A With a torque wrench, I don't believe so.

3 Q Why not?

4 A I don't have an answer to that. I'd have to

12: 50: 44 5 talk to the videographer. I think he was focused on

6 the release, and we weren't torquing it to the

7 amount -- the extent that we thought there would be a

8 release.

9 Pretty easy not to confuse the two. This was

12: 51: 00 10 a really short blast and this one was a long-term burn

11 and you could see the effect on the cylinder.

12 Q Exhibit 11 was the long-term burn, correct?

13 A Yes.

14 Q And Exhibit 10 was a short blast?

12: 51: 16 15 A Impressive. Yes.

16 Q How full was Exhibit 10 when the failure

17 occurred?

18 A Full. Dropped it off for -- maybe a third of

19 it dropped off.

12: 51: 28 20 Q Exhibit 10 was full?

21 A Yes.

22 Q When it failed?

23 A Yes.

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24 Q That was the short blast?

12: 51: 35 25 A Yes.

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1 Q Exhibit 11 -- I'm sorry -- how full was that?

2 A We ran it for maybe 15, 20 minutes, to remove
3 some of the material and then tested it. So it was not
4 full.

12: 51: 54 5 Q What was the purpose of running it for the 10
6 to 15 minutes?

7 A I wanted to reduce the size of the flame. It
8 was an impressive flame on the first one, and I wanted
9 to reduce that size.

12: 52: 10 10 Q Did you measure what force it took to initiate
11 the failure resulting in leaks in both Exhibits 10 and
12 11?

13 A Yes. Did not document it in the first one,
14 which is I think you're calling it 10.

12: 52: 35 15 Q Yes.

16 A And 11, it was documented at 30 foot-pounds.
17 It was similar, but I didn't get the documentation.

18 Q For Exhibit 10?

19 A Right. Subsequent tests by Dr. Carr came out
12: 52: 50 20 with -- again, these are foot pounds -- exactly the
21 same way, 12 pounds, 16 pounds, and something between
22 31 and 32, which comports to what I found.

23 Q Any reason you didn't document the force that
24 it took to initiate the leak causing failure in

12: 53: 14 25 Exhibit 10?

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1 A No. We were doing a lot of things setting it
2 up. I just didn't get to it in time to document that.
3 When it blasted off, which would be the precise time
4 that you'd want to know what it was, nobody was
12: 53: 28 5 comfortable looking at it.

6 Q The data you got from Dr. Carr, have you seen
7 photographs of the cylinders that he tested?

8 A No. I've requested them. I haven't seen it
9 yet.

12: 53: 50 10 Q And is it your understanding that he tested
11 three cylinders to determine the foot-pounds of force
12 it took to initiate a failure?

13 A Yes.

14 Q And is it your understanding that the data he
12: 54: 05 15 gave you, the 12, 16, and 31 to 32 foot-pounds, was
16 that to initiate a failure resulting in a leak or a
17 failure that didn't yet result in a leak?

18 A All I know is that's when the brazing failed.
19 I'm not sure the word "leak" is appropriate until I see
12: 54: 27 20 the videos to see how it was ignited and what the
21 quality of the leak was.

22 Q You don't know for any of the three cylinders
23 that Dr. Carr tested whether these values, 12, 16, 31
24 to 32, are the values at which these cylinders actually
12: 54: 51 25 started to leak, do you?

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1 A That is my belief. Until I see the video, I
2 won't know the result. That is -- in other words, when
3 this thing is going to fail, it's going to peak, and
4 then the pressure will back off. So these are the
12: 55: 08 5 amounts that were peaked at, and the pressure went down
6 because the valve is failing.

7 Q It's your understanding that those values are
8 peak values?

9 A Yes.

12: 55: 25 10 Q Has anyone told you that those values -- at
11 those values that's when leaks began?

12 A Has anybody told me? Not directly. That was
13 my understanding when I got those valves.

14 Q Based on what?

12: 55: 43 15 A Because my question is, what values did it
16 fail at?

17 Q And it's your understanding you're getting a
18 video of those tests?

19 A Yes. And whatever other documentation he had.

12: 55: 57 20 Q And when did those tests take place?

21 A I want to say August 4th, but I'd have to
22 check that.

23 Q Is that up in the Shasta area?

24 A Mount Shasta.

12: 56: 19 25 Q Were you told whether any of the failures that

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1 Dr. Carr experienced for which he gave you the values
2 were failures in the braze as opposed to failures in
3 the parent metal?

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4 A I wasn't given that detail.

12:56:34 5 Q Did you ask him?

6 A No.

7 Q Why not?

8 A I wanted to know what the forces were that

9 required the failure. I didn't have an opportunity to

12:56:45 10 go into more detail.

11 MR. ERGO: Let's go off the record.

12 (Lunch recess was taken from 12:56 p.m. to

13 1:22 p.m.)

14 BY MR. ERGO:

01:21:44 15 Q Dr. Anderson, I want you to focus on Exhibit 7

16 again.

17 Referring to the data that Dr. Carr's office

18 gave to you --

19 A No. You're misstating it. I got it from the

01:22:13 20 person who was working on his case. It wasn't his

21 office. It was the actual investigator that set

22 these -- set up the tests.

23 Q What's the name of that investigator?

24 A Chris Schneider.

01:22:30 25 Q All right. Has Chris Schneider worked with

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1 you in Shalaby?

2 A Yes.

3 Q And it's your understanding that he also

4 worked with Dr. Carr in the Glen case?

01:22:42 5 A Yes, that is my understanding.

6 Q All right. It's Mr. Schneider that gave you

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7 the values of 12, 16, and 31 to 22 pounds that's on
8 Exhibit 7?

9 A Yes.

01:22:59 10 Q Did he tell you how he conducted those tests?

11 A Other than it was done the same way I did it,
12 no.

13 Q Did he tell you that those were MAPP gas
14 cylinders?

01:23:11 15 A Yes, he did.

16 Q Did he tell you whether he did any twisting
17 test in addition to the pull test?

18 A He did not.

19 Q He didn't tell you?

01:23:20 20 A He did not tell me that.

21 Q You don't know whether Mr. Schneider did any
22 twisting test to any of those three cylinders?

23 A Abusing them beforehand, no, I do not know
24 that.

01:23:33 25 Q Is it your understanding that the values on

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1 Exhibit 7 that Mr. Schneider gave you were values for a
2 pull test?

3 A Yes.

4 Q Do you know whether any of the three tests --
01:23:52 5 excuse me -- any of the three cylinders that
6 Mr. Schneider tested in the Glen matter had any
7 preexisting abuse to them?

8 A I don't know.

9 Q Do you know if -- how new or -- strike that.

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01: 24: 20 10 Do you know the date of any of the three
11 cylinders that Mr. Schneider tested in the Glen matter?
12 Do you know the dates on any of them?

13 A I don't have the date on those cylinders, no.
14 I assume I'll get that with the video and so forth.

01: 24: 44 15 Q You've done just two pull tests; is that
16 correct?

17 A Correct.

18 Q One on the cylinder marked Exhibit 10 and one
19 on the cylinder marked Exhibit 11?

01: 25: 12 20 A Correct.

21 Q Exhibit 10 is the one that failed in the
22 parent metal?

23 A I believe that's correct.

24 Q And Exhibit 11 is the one that you believe
01: 25: 23 25 failed in the brazed joint, correct?

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1 A Correct.

2 Q Based on the fact that one of the two tests
3 that you conducted, pull tests you conducted, there was
4 a failure in the parent metal, how is it that you're
01: 25: 39 5 able to rule out the possibility that Mr. Shalaby's
6 cylinder failed in the parent metal as opposed to the
7 brazed joint?

8 A I thought we talked about that. I've put in
9 abuse before with the torque wrench, and so I don't
01: 25: 56 10 believe that there's been anything indicated that
11 Mr. Shalaby used a torque wrench to twist the valve.
12 So I believe that I gave it as much abuse as is

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13 possible, and it failed in the canister.

14 I also believe that looking at the

01:26:17 15 metallography from three individual cylinders that the
16 brazing is poorly done. It's weaker than it could be.

17 Q It's your opinion that the failure in the
18 parent metal on Exhibit 10 -- strike that.

19 It's your opinion that Exhibit 10 failed in
01:26:44 20 the parent metal because you first subjected it to the
21 lateral abuse?

22 MR. EPSTEIN: Objection. Misstates his
23 testimony.

24 THE WITNESS: I don't think I can say that. I
01:26:54 25 did abuse it, but I haven't cut it open to look at the

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1 brazing to see if it was unusually well done. I'd have
2 to do a metallurgical inspection of the failure in
3 order to see that that's the case, that it was just
4 abuse that did it. But I can tell you the difference
01:27:14 5 between the two, is that one was abused and one was
6 not.

7 BY MR. ERGO:

8 Q All right. Then at this point you don't know
9 that the failure that occurred in the parent metal in
01:27:29 10 Exhibit 10 is due to the twisting test you performed on
11 it?

12 A I don't know that, not without doing a
13 metallurgical examination to see the quality of the
14 brazing.

01:27:42 15 Q So, in other words, as you sit here right now,

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16 you can't rule out the possibility that Exhibit 10
17 would have failed in the parent metal if you had only
18 done the pull test and not done the twisting test?

19 A If they had not abused it prior to that?

01:28:00 20 Q Yes.

21 A Correct. I could not say that. I could not
22 say how damaging the twisting test was.

23 Q And just so the record is clear, you agree, do
24 you not, that it's possible that the failure in the

01:28:20 25 parent metal that occurred in Exhibit 10 would have

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1 occurred during the pull test, even if you had not
2 performed the twisting test?

3 MR. EPSTEIN: Objection. Lacks foundation.
4 Argumentative.

01:28:31 5 THE WITNESS: I don't know how I could answer
6 that. I did the twisting test with a torque wrench, so
7 I don't know how I could say what would happen if I
8 didn't do that and just did the pull test.

9 BY MR. ERGO:

01:28:44 10 Q Maybe we're saying the same things.

11 Based on that, you agree that it is possible
12 that if you had not done the twisting test on
13 Exhibit 10 you still would have experienced a failure
14 in the parent metal when you did the pull test?

01:29:06 15 A Is it possible? Yes, it's possible.

16 Q And you can't rule that possibility out, can
17 you?

18 MR. EPSTEIN: Objection. Argumentative.

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19 THE WITNESS: Without further work, I don't
01: 29: 16 20 feel comfortable saying that it's impossible or
21 possible. What I observed here is, if you abuse it --
22 and this is a general observation -- if you abuse it,
23 it's going to fail in the canister. If you don't abuse
24 it, then it's going to fail in the braze. I cannot
01: 29: 37 25 affirm that totally unless I do a metallography of

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1 those samples.

2 BY MR. ERGO:

3 Q You're basing those observations on the test
4 population of two?

01: 29: 47 5 A Correct.

6 Q Were you able to document any damage to the
7 cylinder, to the braze joint, to the center valve
8 housing in Exhibit 10 after you did the twisting test?

9 MR. EPSTEIN: Objection. The question is
01: 30: 06 10 compound.

11 THE WITNESS: No. I decided not to do any
12 further cutting and examination until I had a chance
13 for everybody to look at them, and then I may possibly
14 go on and do the analysis.

01: 30: 25 15 BY MR. ERGO:

16 Q At this moment would you be able to -- would
17 you be able to segregate what damage was caused by the
18 twisting test versus what damage was caused by the pull
19 test in Exhibit 10?

01: 30: 36 20 A At this point sitting here now at this moment?

21 Q No. No. Going forward.

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22 A If I do the metallography, I should see if
23 there is any effect of the twisting, and I should see
24 any effect of the pull.

01:30:50 25 Q What effect of twisting do you think it's

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1 possible that you could observe?

2 A It could be fractures. I'd be able to look at
3 the fractured surface and see if there is a direction
4 of the fractured surface which would tell me that it
01:31:08 5 occurred or was starting to occur at the time of the
6 twisting as opposed to the pull test.

7 Q And what type of direction would you be
8 looking for in the fracture of the braze that would
9 tell you that that fracture occurred during the
01:31:23 10 twisting test as opposed to the pulling test?

11 A Let's see. How do I explain that?

12 To me it's obvious that if you see something
13 that is failing in shear, being twisted around, that
14 that fracture surface is going to look different than
01:31:40 15 the one failing in tension. So I would be looking at
16 the difference between a tension failure or just
17 splitting open at that point and one that is a shear or
18 a twist.

19 Q You haven't tested that premise that you just
01:32:03 20 stated, have you?

21 MR. EPSTEIN: Objection. Overbroad.

22 THE WITNESS: No. I kept it this way so that
23 they could be available in deposition, and any further
24 testing would be up to Mr. Epstein.

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01: 32: 13 25 BY MR. ERGO:

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1 Q What I mean is, you haven't done any other
2 type of testing to determine whether the premise you
3 just stated is correct, have you?

4 A I'm not sure what premise you're referring to.
01: 32: 27 5 The difference between tensile failures and shear
6 failures?

7 Q Yes.

8 A I don't think I have to do any testing for
9 that.

01: 32: 34 10 Q Why not?

11 A All I have to do is examine the fracture
12 surfaces.

13 Q Whether you think you have to do testing or
14 not, am I correct that you have not done any other

01: 32: 45 15 testing to test that premise?

16 A Correct.

17 Q Could you?

18 A Obviously, yes.

19 Q Why haven't you?

01: 32: 59 20 MR. EPSTEIN: Objection. Asked and answered.

21 THE WITNESS: I think I mentioned before that
22 I wanted to keep them in this matter, which represents
23 the testing that was done up in Mount Shasta, before I
24 do anything more destructive.

01: 33: 12 25 BY MR. ERGO:

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1 Q Well, you could test that premise using
2 different cylinders, couldn't you?

3 MR. EPSTEIN: Objection. Vague and ambiguous.

4 THE WITNESS: I can't test to premise on these
01: 33: 25 5 two without examining these two.

6 BY MR. ERGO:

7 Q But you could test it on other cylinders?

8 A Well, I think that goes back to the fact that
9 we talked about whether it would be good to have
01: 33: 35 10 Shalaby's cylinder. Yes, it could be good, but you
11 could do a lot with exemplars. I think we're talking
12 about two specific cylinders, and those are the ones
13 I'd look at.

14 Q My question is, though, you could test that
01: 33: 48 15 premise on other exemplar cylinders, couldn't you?

16 MR. EPSTEIN: Objection. Vague and ambiguous.
17 It lacks foundation.

18 THE WITNESS: I could repeat the tests and cut
19 them up, yes.

01: 34: 01 20 BY MR. ERGO:

21 Q With different cylinders?

22 A With different cylinders.

23 Q Why haven't you?

24 A I saw no need.

01: 34: 08 25 Q Okay. A foundational question. I know I've

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1 asked this before, but I'll keep it from being too
2 compound.

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3 You agree that until you cut open Exhibit 10
4 and do metallography that you will not be able to rule
01: 34: 49 5 out the possibility that the failure in the parent
6 metal occurred -- would have occurred simply with a
7 pull test even if you hadn't done the twisting test,
8 correct?

9 A I think there is further work that could be
01: 35: 05 10 done that would show that one way or the other, yes.

11 Q And until you have actually done that work,
12 how is it that you are able to rule out that
13 Mr. Shalaby's cylinder failed in the parent metal
14 versus the brazed joint?

01: 35: 19 15 A I think I already mentioned that there are a
16 number of other failures that I had an opportunity to
17 examine photos of, and they failed in the braze
18 material. Also the deposition of the ranger, the head
19 ranger, to me was clear that the fail there was the
01: 35: 44 20 main valve that goes into the cylinder.

21 So my opinion is that that's where it failed,
22 and the examination that I did of the brazing material
23 shows that it's defective. It is not as strong as it
24 could be. It's full of voids. It certainly does not
01: 36: 01 25 have connection to the walls of what you're calling

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1 your base material.

2 Q What is it that the ranger said that caused
3 you to conclude that they're describing a failure in
4 the brazed joint as opposed to the parent metal?

01: 36: 17 5 A I think if you look at Page 73, 74, his
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6 statement there -- and I may have copied it on my
7 report.

8 Q Which one? Which ranger?

9 A Ratliff.

01:36:43 10 Q Page 73, 74?

11 A Yes. Did I highlight anything there?

12 Q I don't know. This is my copy.

13 I'll hand you Mr. Ratliff's deposition, your

14 copy of it. And why don't you find the reference that

01:37:12 15 you are referring to that you believe supports the

16 conclusion that the failure was in the brazed joint?

17 A This is mine? I didn't put all these things

18 in there.

19 MS. HUANG: This is my copy.

01:38:01 20 THE WITNESS: This can't be mine.

21 BY MR. ERGO:

22 Q I understand that.

23 A 73, at the bottom, Line 23, "...you described

24 up on the neck of the bottle, did you see any other

01:39:27 25 breaches in the metal bottle cylinder or anywhere

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1 else."

2 Q I'm sorry. What page is that?

3 A That was on 73. I think that's what I

4 referenced earlier.

01:39:40 5 Q What line?

6 A 23.

7 Q Okay. Go ahead, then.

8 A "Did you see any other breaches in the metal

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9 bottle of this cylinder or anywhere else?"

01:40:14 10 And he says "no."

11 And previous to that he discussed the fact
12 that it failed at the neck.

13 Q Let me just read the question and answer.

14 On Page 73, Line 23, I'll read this verbatim.

01:40:34 15 "Other than the one crack -- I'm going to use
16 the term 'crack' -- you described up on the neck of the
17 bottle, did you see any other breaches in the metal
18 bottle of the cylinder or anywhere else?"

19 Answer: "No, sir."

01:40:52 20 That is -- that's at least some of the tests
21 of Mr. Ratliff that you are relying on to opine that
22 the failure in Mr. Shalaby's cylinder was in the brazed
23 joint as opposed to the parent metal, right?

24 A Yes. He didn't see any other destruction of
01:41:16 25 the cylinder.

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1 Q Have you ever spoken with Mr. Ratliff?

2 A Have I spoken with him? No.

3 Q Any other testimony by Mr. Ratliff that
4 supports your opinion that the failure was in the
01:41:30 5 brazed joint as opposed to the parent metal?

6 A Yes. I think we should read Page 70, 71 and
7 72.

8 Q Point out his testimony in those pages which
9 you believe supports your opinion.

01:41:57 10 A On the threaded part, we're reading 70, and it
11 starts on Line 24.

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12 "Oh, the threaded part was this -- from the
13 crack itself, was forced at a right angle of the
14 cylinder itself."

01:42:13 15 Well, the right angle has got to be the main
16 valve.

17 "Yes, the right angle. Not the torch nozzle,
18 but the cylinder and the torch nozzle. The cylinder is
19 here. The torch nozzle is on top, straight, and there
01:42:27 20 is a natural bend by manufacture at the connection of
21 the threaded area and the torch nozzle itself, at a
22 right angle. And on the other side or the side that
23 was -- I don't know how to say this -- on the --

24 "Opposite --

01:42:39 25 "Opposite of the bend of the side -- on the

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1 side where the crack was, the angle went to the right;
2 right-side angle of that crack."

3 Q Okay. You believe that supports your opinion?

4 A I think he's trying his best to indicate that
01:42:56 5 it's a failure of the valve.

6 Q Of the valve?

7 A Yeah, of the main valve, separate from the
8 cylinder.

9 Q If that's what you think he's trying to say.

01:43:09 10 MR. EPSTEIN: Objection. Argumentative.

11 BY MR. ERGO:

12 Q How about Page 70, Line 14?

13 "It appeared to me that the torch was -- might
14 have been banged against something that might have

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01: 43: 23 15 adjusted the thread area of where the torch nozzle and
16 the canister would connect and had -- may have weakened
17 that area in the process of being banged, I guess you
18 would say. "

19 Did you rely on that testimony at all in
01: 43: 38 20 coming to your opinion?

21 A Yes, I did.

22 Q What significance did you attribute to that
23 testimony?

24 A I think he's trying to internalize why the
01: 43: 46 25 main valve would have been bent at an angle.

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1 Q Rather than what he's trying to say, what is
2 it about that statement that I just read that you
3 believe supports your opinion that the failure was in
4 the brazed joint?

01: 44: 03 5 MR. EPSTEIN: Objection. Asked and answered
6 and argumentative.

7 THE WITNESS: Yeah. As I say, I think he's
8 trying to figure out why the main valve twisted like
9 that.

01: 44: 20 10 BY MR. ERGO:

11 Q Well, his belief that the torch may have been
12 banged against something, if you were correct about
13 that, do you believe that supports your opinion that
14 the failure was in the brazed joint as opposed to the
01: 44: 37 15 parent metal?

16 A That's a neutral. He's just trying to
17 indicate why this torch failed. It doesn't go one way

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18 or the other.

19 Q So that doesn't support your opinion, nor does
01:44:50 20 it detract from your opinion?

21 A Right.

22 Q So to the extent that statement supports your
23 opinion, it's based on your belief what he was trying
24 to say?

01:45:02 25 A Yes. And then of course on 72, Line 23, where

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1 he says, "At the end, the bottom of the last thread" --

2 Well, that's the only thing that's threaded.

3 -- "between the last thread and the cylinder

4 itself is where the bend took place and the explosion

01:45:25 5 or the crack was in the same area."

6 I interpret that as supporting my opinion that
7 that's a failure of the braze material.

8 Q Looking at Exhibits 10 and 11, would it be

9 fair to say that both those failures are below the last

01:45:51 10 thread or the bottom thread in the center valve

11 housing?

12 A Yes.

13 Q So both the failure in the braze and failure

14 in the parent metal?

01:46:00 15 A Yes. The one that you can really identify is
16 the canister has separated, and in the other case you
17 could clearly say it has not.

18 Q You didn't see anywhere in Mr. Ratliff's

19 deposition where he said it's a failure in the brazed

01:46:15 20 joint?

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21 MR. EPSTEIN: Objection. Argumentative.

22 THE WITNESS: I don't think he knows if it's
23 brazed or how it's put in.

24 BY MR. ERGO:

01:46:22 25 Q And you don't see anywhere in his deposition,

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1 do you, that indicates that the failure wasn't in the
2 parent metal?

3 MR. EPSTEIN: Objection. Argumentative.
4 Lacks foundation.

01:46:31 5 THE WITNESS: Wasn't in the parent metal? I
6 don't think he knows what's parent metal.

7 BY MR. ERGO:

8 Q Regardless of what you think he knows, you
9 didn't see anything to that effect in his testimony,
01:46:40 10 did you?

11 MR. EPSTEIN: Same objections.

12 THE WITNESS: No. My interpretation of
13 reading what he said and the understanding that there's
14 nothing else he saw anywhere else that we're talking
01:46:51 15 about failure in the brazed joint. And, again, that's
16 consistent with a number of other cases that I have
17 looked at and the pictures I have seen and my testing.

18 BY MR. ERGO:

19 Q Okay. What other cases have you seen?

01:47:04 20 A Could I have a copy of my report?

21 Q Certainly.

22 A Okay. On Page 2, I refer to torch failures
23 involving lawsuits filed since 2002, and there are

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24 seven of them.

01: 47: 44 25 Q Okay. Let's go over them one by one.

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1 Segrest versus Bernzomatic. What's your
2 understanding of how that accident occurred?

3 A Somewhere in my files, I should have the
4 information of all these cases.

01: 48: 00 5 Q And the information you're referring to --

6 A Would be pictures or some documents describing
7 it.

8 Q Okay. Find for me what information you have
9 regarding Segrest. I know I can help out a little bit

01: 48: 21 10 because -- there were some complaints. Here's a
11 Segrest complaint. See if there is anything else other
12 than the complaint in your file regarding Segrest.

13 A So this is taken from a document. It should
14 have the full complaints of these, which has got to be
01: 52: 33 15 somewhere in there.

16 Q Have you been able to find anything in your
17 file regarding the Segrest matter? Any photos? Any
18 test data? Any interviews? Any depositions?
19 Anything?

01: 52: 53 20 A Other than what I have read in that document.

21 Q What's that document you're referring to? The
22 complaint? You just said other than "that document."

23 MR. EPSTEIN: Let him look at the document.

24 MR. ERGO: Mark, he just said "that document."

01: 53: 12 25 I just want him to identify what that document is.

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1 MR. EPSTEIN: He's looking.

2 MR. ERGO: I don't know that that's "that

3 document."

4 MR. EPSTEIN: Rich, just take a chill pill,

01: 53: 25 5 will you? You're peppering him with compound

6 questions. He wants to tell you. Let him look at that

7 document.

8 MR. ERGO: I want to simply establish what

9 "that document" is. I don't think that's out of line

01: 53: 52 10 or I'm in need of a chill pill.

11 THE WITNESS: The question is -- could you

12 repeat it?

13 BY MR. ERGO:

14 Q Sure.

01: 54: 28 15 Is there anything in your file, in your entire

16 file, about the Segrest matter other than the

17 complaint?

18 A I don't find anything else.

19 Q Okay. Have you spoken to anybody about the

01: 54: 44 20 Segrest incident?

21 A I don't recall.

22 Q Do you know how the Segrest incident occurred?

23 A I don't have enough details to answer that.

24 Q Do you know whether the Segrest matter

01: 54: 58 25 involved a failure in the parent metal, a failure in

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1 the brazed joint, or something else?

2 A The document doesn't say.

3 Q Okay. Let's move then to the next one that
4 you referred to, and that's Glen. Find all documents

01:55:17 5 in your file relating to the Glen matter.

6 I would like you to set aside all the
7 documents relating to the Glen file, if you will.

8 MS. NAYLOR: Should we go ahead and mark them
9 separately? Because they're part of that big chunk

01:56:19 10 that you marked.

11 MR. ERGO: I very well may do that.

12 MR. EPSTEIN: He wants any documents you have
13 relating to the Glen matter in the file.

14 THE WITNESS: I think that's it.

01:57:25 15 BY MR. ERGO:

16 Q I think we'll mark as 6A the group of
17 documents that you have identified as relating to the
18 Glen case that you have in your file.

19 (Deposition Exhibit 6A was marked for

01:57:51 20 identification by the court reporter.)

21 BY MR. ERGO:

22 Q And these are all the documents you have
23 regarding Glen?

24 A I believe so. Whatever documents are in this.

01:58:01 25 Q Let's just see if the complaint is listed

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1 there.

2 Okay. So it would be the Glen complaint and
3 the documents we've marked as 6A, those are all the

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01: 58: 33 4 documents relating to Glen that you have in your file,
5 correct?

6 A Yes.

7 Q And those are all the documents you have ever
8 seen related to the Glen matter, correct?

9 A Other than the discussions with Dr. Carr?

01: 58: 44 10 Q Well, right now I'm just referring to
11 documents.

12 A Yes.

13 Q So the complaint and 6A are all the documents
14 you ever had relating to the Glen matter, correct?

01: 58: 57 15 A Correct.

16 Q And what discussions have you had with
17 Dr. Carr?

18 A Well, that he wanted to use my testing
19 procedures, that he had done some tests himself on pull
01: 59: 11 20 tests. And he was going to provide me with his
21 information, and I was going to give him my report.

22 Q The pull test, are you referring to the pull
23 test that Mr. Schneider did?

24 A No. I think he did another one before that.

01: 59: 29 25 Q Okay. Did he ever give you those pull test

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1 results?

2 A I have not seen anything from him.

3 Q Did you discuss with Dr. Carr how the Glen
4 accident occurred?

01: 59: 51 5 A If I did, I don't recall.

6 Q Did Dr. Carr tell you whether that was a

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7 failure in the parent metal or a failure in the brazed
8 joint or some other type of failure?

9 A I don't recall. The photos indicate that it
02:00:04 10 was a brazed failure.

11 Q I'm going to show you what we're going to mark
12 as Exhibit 12.

13 (Deposition Exhibit 12 was marked for
14 identification by the court reporter.)

02:01:23 15 BY MR. ERGO:

16 Q Dr. Anderson, this is -- does this appear to
17 be a drawing of a cutaway of the top section of the
18 MAPP gas cylinder?

19 A Yes.

02:01:33 20 Q And you understand or is it your impression
21 that the blue area appears to be the center valve
22 housing?

23 A Yes.

24 Q And the green area appears to be the sheet
02:01:43 25 metal of the housing itself?

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1 A Yes. And let me guess. The red is the
2 brazing material.

3 Q Let's stick with the green first.

4 You understand the green to be representing
02:01:53 5 the parent metal, the sheet metal of the cylinder?

6 A Yes.

7 Q And the red represents the braze?

8 A Yes.

9 Q And the red in Exhibit 12, does that

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02:02:03 10 accurately depict the surface of the brazed joint, as
11 you understand it, in the MAPP gas cylinder?

12 MR. EPSTEIN: The exhibit lacks foundation,
13 but go ahead.

14 THE WITNESS: There are some problems that I
02:02:19 15 see there. You want me to point those out?

16 BY MR. ERGO:

17 Q Sure.

18 A First of all, it necks down a little bit more.
19 You've got a fairly thick piece going down. It shows
02:02:34 20 that it's a little bit thinner than that, so
21 dimensionally it's not accurate.

22 Secondly, the brazing material has a wonderful
23 meniscus where it comes to the outside of the canister
24 and the valve. And in all the examples that I looked,
02:02:52 25 the three plus others that I have looked at here, they

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1 never have the meniscus like that. It's always
2 undercut.

3 Q I have seen the photos that you say depict the
4 lack of meniscus, and I've certainly seen photos
02:03:34 5 depicting the width at any given points of the brazed
6 joint.

7 What I'm asking, though, does Exhibit 12
8 accurately reflect where a proper brazed joint should
9 be?

02:03:46 10 A Yes. And I might say that the meniscus is
11 present on that MAPP Pro.

12 Q To have a leak through the brazed joint, you

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13 would have to have a continuous crack or a void through
14 the entire length of the braze, correct?

02: 04: 20 15 A Yes.

16 MR. EPSTEIN: Objecti on. Lacks foundati on.

17 THE WITNESS: I'II be slower.

18 BY MR. ERGO:

19 Q I'm going to show you what we are marking as
02: 05: 45 20 13, Exhi bi t 13 and 13A.

21 (Deposi ti on Exhi bi ts 13 and 13A were marked
22 for i denti fi cation by the court reporter.)

23 MS. NAYLOR: Whi ch i s whi ch?

24 MR. ERGO: The one wi th a red box i s 13A, and
02: 05: 59 25 the other i s 13.

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1 THE WITNESS: They seem to be the same, just a
2 di fferent magni fi cation.

3 BY MR. ERGO:

4 Q Actual ly I think it is the same photo, just
02: 06: 12 5 wi th the addi ti on of the red box in 13A. I don't
6 thi nk the magni fi cation i s any di fferent, al though I'm
7 not a metal lurgi st.

8 I'II represent to you that Exhi bi t 13 and 13A
9 are photographs of the Glen cyl i nder or at least the
02: 06: 30 10 top of the Glen cyl i nder near the center valve housi ng.

11 In 13A, do you have an opi ni on as to what
12 materi al i s i nside the red box? Is that the parent
13 metal , i s that the braze, i s that the center valve
14 housi ng matter, or what else?

02: 06: 57 15 MR. EPSTEIN: Obje cti on. Cal l s for

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16 speculati on. Lacks foundati on.

17 THE WITNESS: I see the braze material above
18 and below. The characteristics look like it's the
19 valve.

02: 07: 37 20 BY MR. ERGO:

21 Q So if we're looking at Exhibit 12, it's your
22 belief that the material in the red box on Exhibit 13A
23 would be depicted as the blue material on Exhibit 12?

24 A Yes.

02: 07: 50 25 Q Now, have you examined the Glen cylinder?

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1 A No.

2 Q What is it that tells you that the material in
3 the red box in 13A is the -- is the center valve
4 housing matter?

02: 09: 08 5 A This seems to be coherent as if it's a piece
6 of metal. It does not have the characteristics of the
7 braze. There's a color difference. There's a
8 morphology difference.

9 Q Are you able to rule out the possibility that
02: 09: 28 10 the material in the red box in Exhibit 13A is the edge
11 of the parent metal of the cylinder?

12 MR. EPSTEIN: Objecti on. Vague and ambi guous.
13 Lacks foundati on.

14 THE WITNESS: I don't know -- I think I
02: 09: 45 15 understand what you're saying, that this is the
16 cylinder that I'm looking at and not the valve. I
17 don't think I can tell from a two-dimensional
18 photograph. Mainly I don't think it is because if it

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19 was taken from the cylinder, I think I would see some
02:10:09 20 shear lines on the fracture that I just don't see on
21 the surface. So I'd really have to look at three
22 dimensions to feel comfortable.
23 BY MR. ERGO:
24 Q Okay. For you to say whether this was the
02:10:28 25 sheet metal on the cylinder wall versus metal in the

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1 center valve housing, you need to physically examine
2 the cylinder itself?
3 A Yes.
4 Q Probably easier to see it in 13. But is it
02:10:51 5 your belief that you can -- if you got real close to
6 this crack, you could see somewhat into the interior of
7 the cylinder through this crack?

8 MR. EPSTEIN: Again, lacks foundation. Calls
9 for speculation.

02:11:05 10 THE WITNESS: Into the interior? I see a dark
11 cavernous area which could represent the pathway to the
12 interior.

13 BY MR. ERGO:

14 Q So Exhibit 10, that's the failure in the
02:11:28 15 parent metal, correct?

16 A Yes.

17 Q And you can see into the interior of the
18 cylinder through that failure, correct?

19 A Yes.

02:11:38 20 Q Exhibit 11 is a cylinder that failed in the
21 brazed joint, correct?

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22 A Yes.

23 Q And are you able to see into the interior of
24 the cylinder marked Exhibit 11?

02: 11: 51 25 A No.

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1 Q If in the Glen cylinder through the crack you
2 could see the interior of the cylinder, would that lead
3 you to conclude that more likely than not that the Glen
4 involved in the parent metal as opposed to the brazed
02: 12: 19 5 joint?

6 A No.

7 Q Why not?

8 A Because it depends on how far the valve has
9 been moved. So if I just kept on moving it, then I
02: 12: 31 10 would have the ability to look into the interior of the
11 cylinder. So it kind of depends on how much the angle
12 is.

13 Q I'm going to draw a line on Exhibit 12 with my
14 pencil. It's a vertical line through the top of the
02: 13: 02 15 cylinder wall, correct?

16 A Okay. If you were able to physically examine
17 the Glen cylinder and you saw the void we see in
18 Exhibit 13, the fact is -- withdraw that. I better
19 think about that one a little bit.

02: 13: 43 20 Q Exhibit 12, if there were a failure in the
21 braze simply where I have drawn the pencil line
22 through, would that result in a leak through the brazed
23 joint itself?

24 MR. EPSTEIN: Objection. Incomplete

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02: 13: 56 25 hypotheti cal . Calls for specul ati on.

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1 THE WITNESS: At that one locati on, no,
2 because we have braze going in and around. So it would
3 still be a brazed pocket.

4 BY MR. ERGO:

02: 14: 11 5 Q Is there any reason that you haven' t asked
6 Dr. Carr whether his belief is that the failure in the
7 Glen cylinder was a failure in the parent metal versus
8 a brazed joint versus some other area?

9 MR. EPSTEIN: That misstates his prior
02: 14: 29 10 testimony.

11 THE WITNESS: Well, I' ve never seen these
12 pictures before, and I' ve never seen his cylinders. So
13 I wouldn' t be able to compound the questions that I
14 need to ask him about it.

02: 14: 42 15 BY MR. ERGO:

16 Q So as you sit here today, you don' t know
17 whether the Glen cylinder involved a failure in the
18 parent metal versus the brazed joint, correct?

19 A As I sit here today, I have not seen the
02: 14: 56 20 cylinder or seen these pictures before. I see brazing
21 material is pulled apart here, but more than that, I
22 can' t answer. I have not seen it.

23 Q Just so that I' m clear as to what you' re
24 saying, at this point in time, you don' t have an
02: 15: 12 25 opini on one way or the other whether the failure in the

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1 Glen cylinder was in the brazed joint or the parent
2 metal, correct?

3 A My opinion looking at this is it's in the
4 brazed metal. I cannot verify that unless I see a
02: 15: 33 5 three-dimensional object.

6 Q And your opinion is based on looking at
7 Exhibit 13?

8 A That I've had a chance to look at for about
9 three minutes.

02: 16: 02 10 Oh, it wasn't limited to that because I
11 previously said that looking at what I would consider a
12 fractured surface of the canister of the cylinder, I
13 don't believe that's the fractured pattern that I would
14 see.

02: 16: 16 15 Q What's that based on?

16 A I guess fracturing a lot of metal and looking
17 at the fracture patterns, that if I'm going to fail it
18 because of an overload, tensile pressure, I would
19 expect to see on the fractured surface the

02: 16: 32 20 characteristics of that. I don't see that.

21 Q But the only --

22 A But I said that previously.

23 Q But the only fractured surface that you've
24 looked at personally in the parent metal of MAPP gas
02: 16: 48 25 cylinder is Exhibit 10, correct?

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1 A Yes.

2 Q Are you able to tell me what's different about
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3 the fractured surface in the parent metal on Exhibit 10
4 as opposed to the surface -- fractured surface of what
02:17:11 5 we see in the red box of Exhibit 13A?

6 A No, I can't. We've already talked about
7 Exhibit 10, and I said there is work that would be done
8 to show the fractured patterns on the surface. And
9 from these two dimensional photographs, I can't do it
02:17:27 10 on the Glen matter.

11 Q I know we talked about work to be done about
12 the fractured surface on the brazed joint itself. Is
13 there more work you need to do to analyze the fractured
14 surface of the parent metal on Exhibit 10?

02:17:44 15 A Sure.

16 Q What?

17 A Remember I told you that there's something
18 called a tensile failure and there's something called a
19 shear failure and that one would look at the failure
02:17:51 20 there and see if there are any components of shear,
21 which would have been the twisting action?

22 Q Let's look at 13A.

23 Does there appear to be braze material in 13A
24 just above the red box?

02:18:53 25 A Above and below, yes.

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1 Q By the way, looking at Exhibit 6A, the third
2 and fourth pages, you have some photographs of the Glen
3 cylinder, correct, and torch?

4 A That is correct.

02:19:27 5 Q And are you able to see any deformation at the
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6 top of the cylinder 180 degrees away from the fractured
7 surface?

8 A No. It's always been -- all these pictures
9 are showing the fractured side. That's the dark side
02:19:46 10 of the moon.

11 Q On the third page of Exhibit 6A on the upper
12 top of the corner, that shows both the fractured
13 surface and the portion of the center valve housing 180
14 degrees away from the fractured surface, doesn't it?

02:20:12 15 A Yes.

16 Q Are you able to see any deformation in that
17 area?

18 A Not with that picture, no.

19 (Deposition Exhibit 14 was marked for
02:20:17 20 identification by the court reporter.)

21 BY MR. ERGO:

22 Q I'll give you what I've marked as Exhibit 14.
23 Then I'll represent to you that this is a photograph of
24 the top of the Glen cylinder.

02:21:00 25 In Exhibit 13, are you able to see any

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1 deformation at the top of the cylinder?

2 A Well, the most exciting part is fuzzed out and
3 out of focus, so shame on the person who took that
4 picture. I do see that the paint, which is a really
02:21:19 5 good paint job, started to crack. So there is some
6 movement of the canister metal in order for the paint
7 to start to crack.

8 Q Does that appear to be deformation?

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9 A That would be a result of deformation.

02: 21: 33 10 Q What does the presence of deformation in the
11 cylinder 180 degrees from the fractured surface tell
12 you, if anything?

13 A If I had the valve and it rotated over so it
14 breaks free on one side, then I have got to somehow
02: 21: 52 15 compensate the side away from where it's broken free,
16 so that would probably be by pushing down or deforming
17 the canister.

18 Q And the presence of deformation, does that
19 tell you that the metal is ductile?

02: 22: 07 20 A Well, we knew that because you would form a
21 cylinder if it wasn't. Yes, it's a very good grade of
22 ductile metal.

23 Q The presence of deformation confirms that the
24 metal is ductile, correct?

02: 22: 23 25 MR. EPSTEIN: Objection. Argumentative.

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1 THE WITNESS: Correct.

2 BY MR. ERGO:

3 Q And to get the deformation, such as we see in
4 Exhibit 14, would there have to be force applied to the
02: 22: 44 5 center valve housing?

6 A Yes.

7 Q Okay. Let's go to the next case you've
8 referred to and that's Andrew Gelzer.

9 Please find all documents you have regarding
02: 23: 13 10 the Andrew Gelzer matter.

11 A I don't find anything. I think they're in the
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12 document that listed the --

13 MR. EPSTEIN: The complaint?

14 THE WITNESS: Yes, the complaint.

02: 23: 28 15 BY MR. ERGO:

16 Q Let's see if that's the case.

17 Okay. So in the supplemental production by

18 Bernzomatic, there is a copy of the Gelzer complaint,

19 correct?

02: 24: 20 20 A Correct. And that's where I got the

21 information.

22 Q And you have no other documents in your

23 file regarding Gelzer other than the complaint?

24 A Correct.

02: 24: 31 25 Q Do you know what happened in the Gelzer

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1 matter?

2 A Other than what the document says, no.

3 Q Do you know whether the failure, the alleged

4 failure in that case involved a failure in the brazed

02: 24: 47 5 joint or the parent metal of the cylinder?

6 A My recollection without reading it is not

7 enough detail.

8 Q So you don't know?

9 A No detail.

02: 24: 56 10 Q Which means you don't know, correct?

11 A I don't know from reading the document.

12 Q Do you know whether there was a failure in the

13 parent metal versus the brazed joint from anything

14 else?

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02: 25: 09 15 A No.

16 Q The only thing you've seen is the complaint,
17 correct?

18 A Correct.

19 Q Have you spoken to anything about the Gelzer
02: 25: 15 20 matter?

21 A Not on that matter.

22 Q Have you ever seen any photographs that
23 weren't given to you that you understood involved the
24 Gelzer matter?

02: 25: 27 25 A No.

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1 Q I'm sorry to beat a dead horse, but the only
2 thing you've ever seen regarding the Gelzer matter is
3 the complaint?

4 A Yes.

02: 25: 45 5 Q Let's go to Carranza.

6 A I believe it's also the complaint.

7 Q So the only thing you have in your file
8 regarding Carranza is the complaint?

9 A Yes.

02: 25: 55 10 Q Do you have an understanding whether the
11 failure in the Carranza matter involved a failure in
12 the parent metal of the cylinder or a failure in the
13 brazed joint?

14 A No.

02: 26: 16 15 Q Have you ever spoken to anybody about the
16 Carranza matter?

17 A No.

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18 Q The only document you've ever seen that
19 relates to the Carranza matter is the complaint?

02: 26: 26 20 A Correct.

21 Q Let's talk about Pelz.

22 A Complaint only.

23 Q So the Pelz matter you only have the
24 complaint?

02: 26: 38 25 A Yes.

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1 Q That's the only document you've ever seen
2 regarding the Pelz matter?

3 A Correct.

4 Q Have you spoken to anybody regarding the Pelz
02: 26: 46 5 incident?

6 A No.

7 Q Do you know what failure was alleged in that
8 matter?

9 A Other than what the complaint is, no. No
02: 26: 53 10 detail.

11 Q Does the complaint tell you?

12 A No.

13 Q So on Pelz, I take it you don't know one way
14 or the other whether there was a failure in the parent
02: 27: 04 15 metal or in the brazed joint or somewhere else?

16 A There is no information.

17 Q Okay. Let's talk about Loewes.

18 Do you have any documents in your file
19 regarding the Loewes matter, other than the complaint?

02: 27: 24 20 A No.

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21 Q Have you seen any documents regarding the
22 Loewes other than the complaint?

23 A No.

24 Q Have you ever spoken to anybody about the
02: 27: 31 25 Loewes matter?

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1 A No.

2 Q Do you know what type of failure was alleged
3 in the Loewes matter?

4 A No.

02: 27: 37 5 Q Let's talk about Welch. Do you have any
6 documents in your file regarding Welch?

7 A Yes. Here.

8 Q You have the complaint in Welch in your file,
9 correct?

02: 28: 01 10 A Yes.

11 Q And you have some documents which you've just
12 handed to me?

13 A Yes.

14 Q And I'll mark that as 6B.

02: 28: 05 15 (Deposition Exhibit 6B was marked for
16 identification by the court reporter.)

17 BY MR. ERGO:

18 Q And the materials we've marked as 6B are the
19 materials that Mr. Epstein sent to you?

02: 28: 36 20 A Yes.

21 Q Do you know what is alleged in the Welch
22 action as to where the failure was?

23 A Only based on the photos. It appears to be in
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24 the brazing.

02: 29: 21 25 Q Dr. Anderson, I'm going to give you your CD

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1 you gave me earlier and the DVDs.

2 A Thank you.

3 Q And I made copies for everybody.

4 All right. What is it about the photos in 6B

02: 29: 48 5 that tell you that the failure was in the brazed joint
6 as opposed to the parent metal?

7 A Because that's the area where the brazing is.

8 That's the area of the greatest stress. Remember

9 earlier on in my deposition today I mentioned there's a

02: 30: 04 10 design issue, and the design issue is that it's a

11 high-stress area. Whether it fails in the cylinder or

12 whether it fails in the brazing, that's an area that

13 should have been considered in the design. This

14 appears to be a brazing failure, just because of the

02: 30: 20 15 way it's pulled apart. Same as in this one.

16 Q I know these photos are kind of fuzzy, but

17 does it appear that you can see into the interior of

18 the cylinder through this crack.

19 A Possibly. I can't tell. There's a dark area.

02: 30: 41 20 No, I can't tell from these photos.

21 Q Now, for the failure in the brazed joint to

22 result in a leak, you need a continuous fracture across

23 the entire length of the braze, correct?

24 A If -- could I have that again? The length of

02: 31: 10 25 the braze or the depth of the braze?

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1 Q Looking at a cutaway -- well, let's find
2 Exhibit 12.

3 A Let's find the exhibit.

4 MR. EPSTEIN: The illustrative exhibit?

02: 31: 25 5 MR. ERGO: Yes.

6 THE WITNESS: This one doesn't have your mark
7 on it.

8 BY MR. ERGO:

9 Q Looking at Exhibit 12, how would you describe
02: 31: 33 10 what I'm calling the length of the red brazed joint?

11 A The depth of the brazing and the valves to the
12 cylinder.

13 Q The depth would be the entire surface of the
14 brazed joint starting from the exterior of the cylinder
02: 31: 51 15 going all the way into the interior of the cylinder,
16 correct?

17 A Yes.

18 Q So in order for there to be a leak of gas as a
19 result of a failure in the brazed joint, the failure
02: 32: 02 20 would have to be across the entire depth of the joint,
21 correct?

22 MR. EPSTEIN: Objection. Misstates his
23 testimony.

24 THE WITNESS: It would have to somehow vent
02: 32: 12 25 through that area, yes.

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1 BY MR. ERGO:

2 Q And looking at Exhibit 6B -- if what we're
3 looking at in the photos of Exhibit 6B is a failure in
4 the brazed joint, we see a complete separation of the
02: 33: 24 5 braze from the cylinder wall and the center valve
6 housing, correct?

7 A I agree.

8 Q And are you able to see the bottom -- well --

9 A Not from that photo. I'm sorry.

02: 33: 38 10 Q Let me point to Exhibit 12.

11 This portion of the center valve housing that
12 sits on top of the cylinder on the exterior to the
13 cylinder, what would you call that portion or that
14 region?

02: 33: 54 15 A I'm not sure what you're searching for. This
16 is the main valve to the cylinder. You want to know
17 what the components are, the threaded area?

18 Q No.

19 A Well, I don't understand the question.

02: 34: 05 20 Q Okay. There's a portion of the valve that
21 sits on top of the cylinder, correct?

22 A I agree.

23 Q That actually comes in contact with the braze
24 that comes in contact with the top of the cylinder

02: 34: 16 25 wall, correct?

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1 A Yeah.

2 Q What would you call the surface of that center
3 valve housing?

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02: 34: 27 4 A I don't know. Foot or flat. I'm not sure
5 what you would call it.

6 Q Now, if there were a complete separation of
7 the braze from the foot or flat of the center valve
8 housing, you should be able to see the foot or flat if
9 you examined the accident cylinder personally, correct?

02: 34: 47 10 A If you do it personally, I presume you would
11 if illuminated properly. Also test for leaks to see if
12 it's continuous.

13 Q Well, in the Welch case, in order to know
14 whether that is a failure in the parent metal or the
02: 35: 03 15 brazed joint, you'd have to examine it personally,
16 correct?

17 A Yes.

18 Q And you haven't done that, have you?

19 A No.

02: 35: 24 20 There's two others that are not in that
21 report.

22 Q Well, there's another one you referenced in
23 the report, and that's Venderlinde or Venderlinde?
24 Venderlinde?

02: 35: 35 25 A It looks like Venderlinde.

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1 Q What do you have in your file on Venderlinde?

2 A I talked to Tom Crane, who's the engineer that
3 looked at it, who believes that it failed in the
4 brass-nickel brazing. And he has provided me some
02: 36: 07 5 photos.

6 Q So Mr. Crane has told you that the failure in

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7 the Venderlinde case was a failure in the brazed joint?

8 A Yes.

9 Q And what materials do you have on Venderlinde?

02: 36: 41 10 Do you have the complaint in Venderlinde?

11 A I believe it's in the document, yes.

12 Q I don't think it's in this one.

13 I don't believe that was --

14 A Now that I think about it, I think you're

02: 37: 07 15 right. That came separately.

16 Q Have you seen the complaint in the Venderlinde
17 case?

18 A Not that I recall.

19 Q And who does Mr. Crane represent in the

02: 37: 24 20 Venderlinde case, do you know?

21 A There's the name of the attorney that he works
22 for.

23 Q Mark Stageberg (phonetic)?

24 A That's what he said.

02: 37: 38 25 MR. EPSTEIN: I believe it's Staggerberg.

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1 BY MR. ERGO:

2 Q Has Mr. Crane been deposed in that case?

3 A I don't know.

4 Q How long did you speak with Mr. Crane about

02: 37: 57 5 the Venderlinde case?

6 A How long? You mean time-wise?

7 Q Yes.

8 A I would say just a few minutes several times.

9 Q And what did you discuss with him on those

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02: 38: 11 10 several occasions?

11 A The testing that he had done, which made him
12 think that it was a failure of the brazing material,
13 whether it was worth while for me to come back and look
14 at it.

02: 38: 47 15 Q We're going to mark the Venderlinde material
16 6C.

17 (Deposition Exhibit 6C was marked for
18 identification by the court reporter.)

19 BY MR. ERGO:

02: 39: 02 20 Q I'm going to show you the second page of 6C.
21 What about this photo tells you that this was a failure
22 in the brazed joint?

23 A That's the brazing material that's been split.

24 Q Okay. You're pointing to the photograph on
02: 39: 19 25 Page 3 of Exhibit 6C?

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1 A Correct.

2 Again, the brazing material.

3 Q Okay. You're flipping through all the
4 photographs in 6C now, and it's your belief that these
02: 39: 39 5 photos show a failure or a tear or a separation or a
6 crack in the brazed joint as opposed to the parent
7 metal?

8 A Yes.

9 Q Have you examined the Venderlinde cylinder?

02: 39: 57 10 A No, I have not.

11 Q Would you need to examine the cylinder to know
12 for certain whether the Venderlinde cylinder involved a

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13 fracture in the parent metal versus the brazed joint?

14 A To know for sure?

02: 40: 21 15 Q Yes.

16 A Otherwise I could maybe accept a report that
17 was done by an engineer that had examined it. I'd feel
18 more comfortable examining it.

19 Q You haven't gotten a report from Mr. Crane or
02: 40: 35 20 anybody else, have you?

21 A No.

22 Q First page of Exhibit 6C is a February 15th
23 2008 e-mail from Mr. Epstein to yourself, correct?

24 A Yes.

02: 41: 24 25 Q And Mr. Epstein refers to the fact that he has

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1 about 23 digital photos and he's going to send you
2 about four or five e-mails of those photos.

3 A Yes.

4 Q Did you get more than these e-mails?

02: 41: 34 5 A I don't believe so. I think that's all that I
6 have got.

7 Q And you looked through your whole file to see
8 what else you might have on Venderlinde?

9 A Yes, I have. That's why I have combined it
02: 41: 51 10 when I tried to organize the file for the deposition.

11 Q Okay. And you say there was one other case or
12 incident that you have materials on. What's that?

13 A Apparently my report was released to an
14 attorney and an expert in Florida. So I got a call
02: 42: 32 15 from the expert and the attorney. And I do have some

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16 pictures of their cylinder. I was interrogated to see
17 whether I could do testing on it. And this is the file
18 I have on that.

19 Q Let's see what you are referring to?

02: 42: 53 20 A I'm organizing it. Give me a second.

21 Q Looking across from the table there, it
22 appears that you have named that case "Barrett"?

23 A Orlando, Florida case is the other name for
24 it.

02: 43: 14 25 Q Are you retained in that case?

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1 A No. I have not received any retaining letter,
2 which is required for a professional engineer, or
3 anything else.

4 Q Do you recall the name of the attorney you
02: 43: 33 5 spoke with in Barrett or the Orlando matter?

6 A I don't. There may be in some note in my
7 office. I don't recall.

8 Q You don't have anything in here that tells you
9 the name?

02: 43: 49 10 A I don't think so. I don't remember. There
11 may be. Makes me think that I should have copyrighted
12 my report if it's going to be given out across the
13 country.

14 Q Have you spoken to anybody about Barrett other
02: 44: 15 15 than the attorney -- excuse me.

16 Have you spoken to anybody about this Orlando
17 matter other than the attorney in Orlando?

18 A Yes.

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19 Q Who?

02: 44: 23 20 A I said the expert.

21 Q Oh, the expert.

22 What's his name?

23 A It will come to me. He's a member of the
24 group that I'm a member of, so I guess we know each
02: 44: 39 25 other. National Academy of Forensic Engineers. It

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1 will come to me.

2 Q Regardless of his name, has that expert told
3 you what type of failure was involved in the Orlando
4 matter?

02: 44: 59 5 A He did not go into any details which would
6 make me say yes on that. He did ask if I could do the
7 testing on it. That's about as far as we got. And
8 then the attorney asked for a list of questions because
9 he was going to depose Worthington's expert.

02: 45: 26 10 Q Okay. So the expert in the Orlando case did
11 not tell you the type of failure involved in that
12 matter, correct?

13 A We didn't go into any detail. I had the
14 photos, so I just assumed that he hadn't gone any
02: 45: 45 15 further than that.

16 Q Have you given me all the materials that you
17 have on this Orlando matter?

18 A I believe I have.

19 MR. ERGO: Okay. We'll mark that as 6D.
02: 45: 54 20 (Deposition Exhibit 6D was marked for
21 identification by the court reporter.)

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22 BY MR. ERGO:

23 Q I take it you haven't seen the cylinders
24 involved in the Orlando matter, have you?

02:46:02 25 A No, I have not.

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1 Q All right. At this point you don't know what
2 type of failure --

3 A Well, and there is something missing. I did
4 send him some questions that he could use in his
02:46:12 5 deposition. They didn't get into this file because
6 they had nothing to do with it.

7 Q So, as you sit here today, you don't know what
8 type of failure was involved in the Orlando matter,
9 correct?

02:46:21 10 A Other than what the photos appeared to
11 indicate.

12 Q And what did the photos appear to indicate to
13 you?

14 A The weakest area is the main valve, and it
02:46:30 15 appears that it split at that point.

16 Q But you don't know if the split is in the
17 parent metal or in the brazed joint, correct?

18 A Correct.

19 Q You've got some of these documents clipped
02:46:51 20 together. I'm going to take the clip off and clip them
21 all together for 6D.

22 A Could we take a two-minute break?

23 MR. ERGO: Let's take a break.

24 (Recess taken from 2:27 p.m. to 2:56 p.m.)

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02: 56: 14 25 BY MR. ERGO:

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1 Q Dr. Anderson, what's your opinion as to what
2 caused the failure in the Shalaby cylinder?

3 A More likely than not, based upon my testing,
4 the failure of the brazed material.

02: 56: 34 5 Q Actually my question was, what was the cause
6 of the failure of the brazed material?

7 A Some force applied to the torch tip in the
8 order of 12 to 30 pounds.

9 Q 12 to 30 foot pounds of force?

02: 56: 58 10 A Well, if it's applied to the tip, then I can
11 take the foot out.

12 Q Why?

13 A Because it's applied about a foot away from
14 the stress, high-stress area that's been designed into
02: 57: 15 15 the cylinder.

16 Q 20 to 30 pounds of force to the tip of the
17 torch?

18 A Right. But that's not what I said. I said 12
19 to 30.

02: 57: 25 20 Q Oh, I'm sorry. What did I say?

21 A You said 20 to 30.

22 Q What do you base your opinion on that there
23 was 12 to 30 pounds of force applied to the tip of
24 Mr. Shalaby's torch?

02: 57: 46 25 A That for the exemplars that I looked at,

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1 that's the amount of force that -- one, I have been
2 told by the Carr experiment and my own experiment -- is
3 required to cause the separation of the valve from the
4 cylinder.

02: 58: 06 5 Q Okay. So that -- now, you're referring to
6 four tests that you're aware of that measure the amount
7 of force sufficient to cause a failure, correct?

8 A Well, there was actually five, but as I told
9 you, there were more concerns of getting the heck out
02: 58: 23 10 of the fire ball than recording the number.

11 Q Well, you recorded the number -- numbers were
12 recorded on four tests, that you're aware of?

13 A Correct. Yes.

14 Q One that was conducted by you, correct?

02: 58: 36 15 A Yes.

16 Q And three that were conducted by
17 Mr. Schneider?

18 A Right.

19 Q On behalf of Dr. Carr?

02: 58: 43 20 A Correct.

21 Q In layman's term, what does 12 to 30 pounds of
22 force mean?

23 A Those are foot-pounds so that if you wanted to
24 bring the force closer to the nozzle to the valve, you
02: 59: 12 25 would multiply it by 12 and say inch-pounds. Basically

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1 it is the kind of action that you would use to upset
2 the valve from the cylinder.

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3 Q So 30 foot-pounds is the equivalent of 360
4 inch-pounds?

02:59:36 5 A Very good. Perfect, in fact.

6 Q Thank you.

7 And what is the length of the Bernzomatic
8 TS4000 torch?

9 A I'd have to check. I think it's approximately
02:59:49 10 around a foot total.

11 Q Assume for a moment that it's ten inches. I
12 just want you to assume that for a moment.

13 A Okay.

14 Q Would that mean that in order -- if you needed
03:00:00 15 30 foot-pounds of force to cause a failure in the
16 cylinder, does that mean on the tip of a ten-inch
17 torch, you would have to hang a 36-pound weight?

18 A If you do the math, it should be 12 --
19 10/12ths of it, so that's about right, yes.

03:00:34 20 Q It's an empty cylinder. I'm connecting,
21 actually, a torch that was marked in this case
22 previously as Exhibit 3 on September 24th 2007.

23 I have connected that torch to a MAPP gas
24 cylinder. So if the weight required to fracture caused
03:01:01 25 this cylinder in the brazed joint or the parent

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1 metal --

2 A Either/or.

3 Q Either/or?

4 -- was 30 foot-pounds and assume for the

03:01:12 5 moment that the torch is ten inches, I would have to
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6 hang from the tip of this torch a 36-pound weight,
7 correct.

8 A Yes. Or make a strike, or push something that
9 weighed approximately that, to a new location.

03:01:27 10 Q If the force were applied five inches from the
11 base of the torch, I would need a 72-pound weight to
12 hang?

13 A Double it, yes, for five inches.

14 Q And is it your opinion that Mr. Shalaby's
03:01:57 15 cylinder was subjected to 12 to 30-foot pounds of force
16 on the tip of his torch at the time he suffered his
17 accident?

18 A No. That's going a little bit further than
19 I'd like to go. My understanding is that this cylinder
03:02:18 20 and torch were several years old. I don't know how
21 much degrading it had occurred from corrosion or
22 whatever else could have happened. So I think the
23 maximum amounts would be somewhere in the 12 to 30-foot
24 pounds. It may be significantly less for an older
03:02:41 25 torch.

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1 Remember, I only looked at three torches or
2 cylinders and looked at the brazing material and found
3 it unacceptable. I don't know if they got better or
4 they got worse in the manufacturing. So I don't even
03:03:00 5 know if the brazing back then was not as poor as it is
6 now or was much poorer. So I can't tell you how much
7 foot-pounds it took for his torch, other than that's
8 the stress area, and anything that puts stress on it is

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9 going to cause a failure that resulted in his injury.
03: 03: 18 10 That's a long way to say it.

11 Q Okay. Let me ask it this way:

12 It's your opinion that a certain amount of
13 force was applied to Mr. Shalaby's torch; is that
14 correct?

03: 03: 33 15 A Yes.

16 Q At the time of the accident?

17 A Yes.

18 Q And the force occurred -- strike that.

19 The failure in the cylinder occurred upon
03: 03: 46 20 being subjected to that force, the torch being
21 subjected to that force?

22 A So far we're in agreement.

23 Q Really what I'm trying to nail down here is,
24 are you saying this force could have happened days
03: 04: 00 25 before the accident, or did it happen right at the

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1 instant of the accident, in your opinion?

2 A I don't think I can store that force and not
3 have it cause a failure. So I think it has to be
4 fairly close to the time of the venting. Now, remember
03: 04: 22 5 the force we're talking about is a quasi-stable force.

6 There's also things called "dynamic forces."

7 Q What's that mean?

8 A Newton's second law.

9 Q I don't even know his first law so...

03: 04: 34 10 A Force equals mass times acceleration. So if
11 you have something moving, it can generate a force when

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12 it comes to a stop.

13 Q In other words, if someone were striking the
14 torch against something?

03:04:50 15 A Or just when you took it off the table, it
16 dropped down and you grabbed it and it struck the
17 table. That's a force. And that can be fairly dynamic
18 depending on how fast you drop.

19 Q So what you're saying is, you can generate the
03:05:10 20 30 foot-pounds of force not just with a 30-pound
21 weight, but also with less weight, but accelerating it
22 faster?

23 A Right. And it's not the acceleration, but the
24 deceleration. You accelerate it, and then how fast
03:05:28 25 does it stop.

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1 Q So it's your opinion that at the time the
2 accident happened that is when the torch was subjected
3 to a certain amount of force sufficient to cause this
4 failure?

03:05:54 5 A Don't limit my opinion there. My opinion is
6 this is an extremely fragile area, and that any forces
7 that are produced on it are going to produce a failure
8 more or less immediately. We're not gonna store it.
9 We're gonna do it immediately.

03:06:12 10 Q Okay. I understand. I'm not trying to recite
11 your entire opinion here. I just -- the timing is all
12 I'm interested in right now.

13 It's your opinion that immediately before
14 Mr. Shalaby sustained his burns, there was some certain

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03:06:33 15 amount of force subjected to his torch?

16 A As I said, you can't store the force. You can
17 have some bending of the valve which doesn't cause a
18 failure, but it's bent, okay? That makes it more
19 susceptible to less forces applied later which will

03:06:55 20 cause it to fail. But at the time of failure, I think
21 there was some force produced to it.

22 Q And the failure occurred immediately before
23 Mr. Shalaby sustained his burns, correct?

24 A I think they were connected, yes. The failure
03:07:14 25 being the venting of the MAPP gas from the cylinder.

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1 Q Is it your opinion that the force that caused
2 the failure in the cylinder was a force applied to the
3 tip of Mr. Shalaby's TS4000 torch?

4 A I don't know. I don't know where it was
03:07:32 5 applied, how it was applied, what the situation was at
6 the time that some force caused it to finally vent.

7 Q Is it your opinion that the force that caused
8 the failure in the cylinder was applied to the torch or
9 the cylinder?

03:07:57 10 A Well, a separation -- the effect was the valve
11 on the cylinder. So the force difference between the
12 cylinder and the torch would be the forces that we're
13 looking at. There's some weight on the torch. So just
14 moving it, just shaking it, you're putting some force
03:08:21 15 on that area of the valve.

16 Q Do you believe that's how the failure
17 occurred, with Mr. Shalaby just moving the torch

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18 without contacting anything?

19 A Remember, I said that this is several years
03:08:35 20 old and I don't know about strength loss? Has there
21 been any corrosion? Has there been any prior damage,
22 abuse? Whatever. So I don't know. If it's been
23 corroded, then certainly just moving it back and forth
24 would be enough.

03:08:58 25 Q How many foot-pounds of force do you generate

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1 just moving the torch back and forth?

2 A Could I have the torch a minute and see the
3 weight?

4 Q I will hand you the torch in an empty
03:09:16 5 cylinder.

6 A So the torch -- center gravity looks about the
7 same on both sides so the torch -- of course this is an
8 empty cylinder -- so the torch weighs about as much as
9 an empty cylinder. You could generate maybe -- I'd
03:09:52 10 have to do the measurement. Five to ten comes to mind,
11 but I'd really have to do measurements on that.

12 Q Five or ten foot-pounds of force you could
13 generate simply by moving it with your hand?

14 A Yes.

03:10:07 15 Q Without contacting anything?

16 A Without contacting anything.

17 Q In your opinion, the force that resulted in
18 the failure in the Shalaby cylinder, was that force
19 caused by the torch coming in contact with something?

03:10:25 20 A I have no idea. I don't think that it's clear

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21 or been documented to my satisfaction.

22 Q You've mentioned a couple of times that the

23 torch and cylinder were several years old. I'll

24 represent to you that Mr. Shalaby testified that he

03:10:46 25 purchased, certainly, the torch in the spring of 2005,

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1 March 2005.

2 A And April 21st of '06 was the accident.

3 Q Right. Yes.

4 Have you done any testing to determine whether

03:11:12 5 simply moving a torch connected to its cylinder back

6 and forth without contacting anything could cause a

7 failure in the cylinder brazed joint?

8 MR. EPSTEIN: Objection. Vague and ambiguous.

9 THE WITNESS: No, I have not done any testing.

03:11:30 10 I'm merely stating that there are forces developed on

11 this critical area of the valve by such movement. Now,

12 to document them, I'm not sure that I recommend doing

13 that.

14 BY MR. ERGO:

03:11:45 15 Q Why not?

16 A But it's possible.

17 Q Why not?

18 A Well, I'd put a strain gauge on the connection

19 between the valve and the cylinder and then do various

03:11:56 20 things to it to measure how much stress is being

21 produced by these motions. I don't think this case

22 deserves it, but I guess we could do that.

23 Q You could test to determine whether simply the

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24 force generated by moving the torch and cylinder by
03: 12: 17 25 hand without contacting any object would be sufficient

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1 to cause a failure in the brazed joint, correct?

2 A No. What I could determine is the forces that
3 are generated. Whether they cause a failure or not
4 kind of depends on the quality of the cylinder and of
03: 12: 40 5 the copper-nickel brazing.

6 Q Well, you've done some testing to determine
7 the force necessary to cause a failure in -- at least
8 in one cylinder, correct?

9 A Yes.

03: 12: 50 10 Q And is there any reason you couldn't do
11 further testing on other cylinders to determine if you
12 could get a failure in the brazed joint simply by
13 moving the torch and cylinder by hand without striking
14 anything?

03: 13: 05 15 MR. EPSTEIN: Objection. It's an incomplete
16 hypothetical. Vague and ambiguous and overly broad.

17 THE WITNESS: Is there any reason why I
18 couldn't? No.

19 BY MR. ERGO:

03: 13: 30 20 Q Do you have an opinion as to whether it's more
21 likely than not that the force which caused the failure
22 in Mr. Shalaby's cylinder was a result of the torch
23 coming in contact with something?

24 A I have no basis for an opinion in that matter.
03: 13: 52 25 I don't have a clear understanding of what contacts

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1 would be made.

2 Q Okay. Are you aware of any testimony
3 indicating that the torch came into contact with some
4 object prior to the accident?

03: 14: 13 5 A Yes, I believe there was some testimony.

6 Q What testimony are you referring to?

7 A I think some witnesses suggest that he was
8 pushing things around in the fire pit or had thrown or
9 dropped the torch.

03: 14: 31 10 Q All right. And do you discount that
11 testimony?

12 A I don't know what to do with it. I'm not
13 counting or discounting it.

14 Q Are you aware of any testimony that someone at
03: 14: 51 15 the scene said that Mr. Shalaby was banging the torch
16 on a cement fire ring?

17 A Yes, I recall reading that.

18 Q Could one generate sufficient force by banging
19 a TS4000 on a fire ring to cause a failure in the
03: 15: 14 20 cylinder braze joint?

21 A Fire ring being a concrete barrier, yes.

22 Q Have you been able to eliminate that as a
23 possible cause of this accident?

24 A Neither accept nor eliminate.

03: 15: 39 25 Q And, in your opinion, that's a possible cause

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1 of this accident?

2 A I think the possible cause -- I think the
3 cause is the fact that a high-stress area, a critical
4 area, has been under-designed and poorly manufactured.

03: 15: 57 5 Q You agree that the force that caused this
6 failure could have been the force -- could have been
7 force that was generated by Mr. Shalaby banging the
8 TS4000 torch while connected to his cylinder against
9 the cement fire ring?

03: 16: 23 10 MR. EPSTEIN: Objection. That was asked and
11 answered. And it's vague and ambiguous and overly
12 broad.

13 THE WITNESS: I think the force levels are
14 somewhat commensurate of what would be required to
03: 16: 34 15 cause a failure. Of course we don't know how much
16 force is generated by banging or striking. So it's
17 really something you can't work with.

18 BY MR. ERGO:

19 Q Well, you could test that, couldn't you?

03: 16: 50 20 MR. EPSTEIN: Objection. Argumentative.
21 Lacks foundation.

22 THE WITNESS: Not with a live cylinder.

23 BY MR. ERGO:

24 Q You could test this using an empty cylinder or
03: 17: 02 25 cylinder filled with an inert product, correct?

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1 MR. EPSTEIN: Objection. Lacks foundation.

2 THE WITNESS: Correct.

3 BY MR. ERGO:

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03: 17: 41 4 Q Have you considered the possibility that this
5 accident was caused by Mr. Shalaby either intentionally
6 or unintentionally throwing or somehow placing the
7 torch and cylinder into the fire pit?

8 A No, I haven't.

9 Q And why not?

03: 18: 05 10 A Well, if you put it in the fire pit, you would
11 never pick it up again because it would be too hot.
12 There is some cooling of the vapors inside, but if I
13 got that so close or in the fire pit where it got to
14 temperatures, like say 130, which is what the testing
03: 18: 28 15 temperature is for 30 seconds, I couldn't touch it. I
16 couldn't pick it up. I couldn't have it in my hand.
17 And therefore, the injuries that I understand he had
18 wouldn't make any sense. So we know it had to be --
19 for him to hold it, it had to be cool.

03: 18: 48 20 Q Could one remove a cylinder from the fire by
21 using something other than one's hand?

22 MR. EPSTEIN: Vague and ambiguous.

23 THE WITNESS: Yes, I guess there are ways of
24 doing that. A shovel, asbestos glove, get a neighbor
03: 19: 08 25 to do it. There are various ways that can be done.

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1 But it's still at that time going to be too hot for you
2 to touch.

3 BY MR. ERGO:

4 Q With your bare hand?

03: 19: 18 5 A Right.

6 Q Have you seen the testimony by the paramedics

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7 that Mr. Shalaby made the statement that, "I kicked the
8 torch into the fire ring"?

9 A Was that Russo?

03: 19: 37 10 Q Mr. Russo and Mr. Price, I believe.

11 A I've only seen Mr. Russo.

12 Q You haven't seen Mr. Price's deposition?

13 A I don't believe so.

14 I don't recall that at the moment.

03: 19: 51 15 Q You have seen Mr. Russo's deposition?

16 A Yes.

17 Q Do you recall Mr. Russo saying anything to the
18 effect that Mr. Shalaby stated in his presence that he
19 had kicked the torch into the fire ring?

03: 20: 03 20 A I don't recall that at the moment. But we
21 have the depo here, and if I marked it, we'd find it.

22 Q But you've eliminated that as a possible cause
23 of this accident, correct?

24 A A person kicking it, throwing it, tossing it
03: 20: 20 25 into the fire, and then somehow extracting it and

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1 holding it to their body at which time it releases?

2 Yes, I've eliminated that as a possibility.

3 Q Okay. Have you eliminated as a possibility
4 that Mr. Shalaby in some manner intentionally or

03: 20: 39 5 unintentionally caused the cylinder to go into the fire
6 pit, there was a vent as a result which ignited, causes
7 injuries, and that he was able to extricate the
8 cylinder from the fire pit without touching it with his
9 hand?

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03: 20: 55 10 MR. EPSTEIN: Objection. Compound.

11 THE WITNESS: No. It's an interesting
12 scenario, but I guess I haven't considered that.

13 BY MR. ERGO:

14 Q Why not?

03: 21: 03 15 A Because it didn't make any sense. It just
16 doesn't make any sense.

17 Q So that testimony by a witness at the scene of
18 the accident wasn't meaningful to you?

19 MR. EPSTEIN: Objection. Misstates the
03: 21: 20 20 testimony of the witness.

21 THE WITNESS: This is not an eyewitness. This
22 is a verbal witness. Mr. Shalaby has been injured.
23 What he says may be very difficult to understand. No,
24 I did not give any credence to that. If it had been an
03: 21: 41 25 eyewitness, then I would have had to consider it.

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1 BY MR. ERGO:

2 Q So if an eyewitness said that he saw
3 Mr. Shalaby cause a cylinder to go into the fire ring,
4 you would have to consider that?

03: 22: 05 5 A I would consider it, but I would first ask the
6 question, is that before or after the ignition and the
7 injury? I understand that he threw it. Where it
8 landed may be what we're talking about.

9 Q Let's say this eyewitness said he saw
03: 22: 27 10 Mr. Shalaby cause a cylinder to go into the fire ring,
11 at which time a fire occurred causing Mr. Shalaby's
12 injuries. Would you have to consider that as

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13 a possible cause?

14 A As an eyewitness, I would consider it. It
03: 22: 44 15 doesn't make any sense to me, mainly because it would
16 have to be there quite a while before the pressure
17 built up enough to cause the failure. And also, the
18 failures that you normally get on this, unless you're
19 stressing this area -- and the area is where the valve
03: 23: 03 20 meets the cylinder -- what happens when the pressure
21 builds up is I'm going to probably tear open and vent
22 the cylinder, not this particular area. Because the
23 piece that you see there, by your glasses, there's a
24 valve, I believe.

03: 23: 21 25 Q Oh. The cylinder valve housing, yes.

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1 A Right. Okay. See the only pressure that's
2 going to be pushing up on that if I heat up the
3 cylinder is the bottom. The other pressures are
4 neutralized by pulling on the side. So it's only the
03: 23: 35 5 bottom area. And, if you see, the bottom area is
6 pretty small.

7 So the testing that they do at 130 degrees
8 Fahrenheit, I think it's 319 gauge pressure per square
9 inch, that's a lot. That's about a tenth of a square
03: 23: 52 10 inch. And, therefore, there's very little pressure
11 pushing up on it. So if I push this into a fire and
12 there's pressure increase in here, I don't see how it's
13 going to have anything to do with the failure of the
14 valve. I see it's going to have a failure with a
03: 24: 10 15 canister.

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16 Q Have you eliminated the possibility that the
17 failure that occurred in the cylinder which the park
18 rangers observed and testified about occurred after
19 Mr. Shalaby's accident?

03:24:24 20 MR. EPSTEIN: Objection. Vague and ambiguous.

21 THE WITNESS: I don't understand. Would you
22 clear that up for me?

23 BY MR. ERGO:

24 Q Certainly.

03:24:30 25 A It sounds like a good question, but I just

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1 don't understand it.

2 Q If enough heat -- if the cylinder is subjected
3 to enough heat, you're going to have a vent through the
4 pressure relief valve, correct?

03:24:45 5 A That's correct.

6 Q And that vent could become ignited?

7 A Oh, yeah. Sure.

8 Q And that ignition could cause burns?

9 A Absolutely, if you're in the area.

03:24:56 10 Q And then if one, after that event, were able
11 to extricate the cylinder from the fire and throw it a
12 certain distance, could the force that the cylinder is
13 subjected to when the torch hits the ground be
14 sufficient to cause a failure in the brazed joint?

03:25:17 15 MR. EPSTEIN: Objection. Incomplete
16 hypothetical.

17 THE WITNESS: No. That's an interesting
18 question because it's a different sequence of there's a

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19 failure at the joint and he's injured. In this case,
03: 25: 28 20 we have undue heating. We have the pressure relief
21 valve operating, and that burns him. And then for some
22 reason, being burned, he picks this up and throws it
23 creating an injury. Well, that certainly would give
24 enough force by throwing it to vent that area and the
03: 25: 48 25 valve.

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1 BY MR. ERGO:

2 Q To cause a failure in the area?

3 A Yeah. It would create a failure in that area.

4 Q All right. And have you eliminated that as a
03: 25: 55 5 possible cause of this accident?

6 A Yes. It's an interesting sequence that I
7 can't give any validity to.

8 Q Why not?

9 A It doesn't make sense. If that vents, it's
03: 26: 05 10 going to vent fairly slowly to moderate the pressure.
11 All it's trying to do is keep the pressure below a
12 certain level, so the venting is going to be pretty
13 limited. A small stream, small fire, very limited
14 burns, even if you are really close to it, and you'd
03: 26: 22 15 have enough time to get the heck out of there. And
16 then if you are burned in some manner that you decide
17 you're gonna take it out on the torch and throw it, it
18 just doesn't make sense to me.

19 Q Have you ever seen a MAPP gas cylinder vent?

03: 26: 39 20 A Have I seen it vent?

21 Q Yes. Through the pressure relief valve?

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22 A No.

23 Q Are you aware of any studies regarding the

24 volume of gas that comes out of the pressure relief

03: 26: 50 25 valve in a vent situation?

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1 A No. I remember the setting, but, no, I don't

2 remember any study.

3 Q Have you done any research about the volume of

4 gas that comes out of a pressure relief valve in a vent

03: 27: 12 5 situation in a MAPP gas cylinder?

6 A No. Again, it's incredible to me. It would

7 vent because the cylinder is hot, too hot to touch.

8 Q I'm not asking you about whether the scenario

9 is incredible or not. I'm simply asking you have you

03: 27: 30 10 done any research regarding the amount of MAPP gas that

11 comes out of the pressure relief valve in a vent

12 situation.

13 A No. I presume I could calculate that since I

14 know what the setting is.

03: 27: 42 15 Q But you haven't done that, correct?

16 A I haven't done that. It's gonna be a function

17 of the heat flux.

18 Q Have you considered the possibility that there

19 may have been a leak at the connection between the

03: 28: 12 20 torch and the cylinder which ignited; and thereafter,

21 Mr. Shalaby threw the cylinder after being burned

22 resulting in sufficient force to cause a failure in the

23 brazed joint?

24 MR. EPSTEIN: Vague and ambiguous. Incomplete

03: 28: 30 25 81709TS
hypothetical and it's compound.

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1 THE WITNESS: Where the TS4000 is not put on
2 properly, not tight, maybe there's dirt in the threads
3 or something, and so there's some leak there. As a
4 result, the burn happens before he throws it. No, I
03: 28: 54 5 haven't considered that.

6 BY MR. ERGO:

7 Q Why not?

8 A It doesn't seem reasonable.

9 Q Why not?

03: 28: 58 10 A Because it's too farfetched and it's not -- I
11 think the easiest thing is to understand that there's
12 been a failure that's been reported by the rangers and
13 that that could explain his injury. These other things
14 seem far afield and do not -- do not seem to be a
03: 29: 20 15 first-principal failure. So I'm looking for the
16 simplest explanation. Maybe these others should be
17 considered, but I give them no credibility.

18 Q So you discount the statements, which the
19 paramedics have testified, that Mr. Shalaby made at the
03: 29: 45 20 scene of the accident that he kicked the cylinder into
21 the fire?

22 A Yes, I discount that for reasons previously
23 given.

24 Q In your evaluation of this matter, did you
03: 30: 06 25 develop a list of potential causes of this accident?

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1 A Not a formal list. You won't find it in
2 there. But that was the basis for my looking at the
3 quality of the brazed joint and doing the testing of
4 that area because I feel that's the critical design
03: 30: 33 5 area that any engineer would focus on as being most
6 likely to fail.

7 Q Have you developed, whether the list is formal
8 or informal, a list of potential causes other than this
9 accident occurring as a result of a failure in the
03: 30: 50 10 brazed joint?

11 A No.

12 Q You've said in your opinion that there is a
13 design flaw in the MAPP gas cylinder, correct?

14 A Yes.

03: 31: 39 15 Q And that design flaw is what? Tell me that
16 again.

17 A The fact that the valve is a high-stress area
18 where it meets the cylinder. And so one should
19 consider that high stress, consider what effect it
03: 31: 58 20 would have if there's any forces applied to it and
21 redesign it to make it stronger. And also to increase
22 the manufacturing quality of the brazing.

23 Q Okay. Have you ever designed a MAPP gas
24 cylinder to make the high-stress areas stronger?

03: 32: 24 25 A No.

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1 Q Do you have an opinion as to how one could
2 design or redesign the cylinder or the valve area to
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3 make the high-stress area stronger?

4 A Well, yes. I think there are two approaches.

03: 32: 42 5 One approach is to look at other compressed gas
6 cylinders, and you'll notice that they normally have
7 some shield around the valve area, which protects it
8 from being struck or hit or something like that.

9 That's probably less necessary here because I'm not
03: 33: 03 10 going to attach a whole Christmas tree full of stuff
11 above it. So I would look at more contact, maybe
12 flaring it, better --

13 Q I'm sorry. Flaring what?

14 A In other words, it basically sits in.

03: 33: 16 15 Q The valve?

16 A Right. And if there was a way of riveting it
17 back or flaring it so that I had more contact surface.
18 Understand, if I make the brazing materials really
19 strong, then what I'm going to do is fail the cylinder.

03: 33: 38 20 So I want to spread out the forces on the
21 cylinder wall, the top part, and so the forces that I'm
22 putting on it aren't going to be just in that area. If
23 I can spread them out, maybe put a -- in that part of
24 the cylinder put a shield, a doughnut in there which
03: 33: 59 25 makes that wall very strong and then the valve connect

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1 to it, I've got a really strong, really safe system
2 that's going to take most of the abuse that would be
3 given to it.

4 Q Have you ever seen any --

03: 34: 14 5 A Would you like me to patent that idea?

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6 Q Have you ever seen that design in a MAPP gas
7 cylinder?

8 A No, I haven't.

9 Q Have you seen that design in any one-pound
03: 34: 25 10 cylinder?

11 A Not that I recall.

12 Q Have you seen that design in any flammable gas
13 cylinder?

14 A No.

03: 34: 37 15 Q I take it you've never tested that proposed
16 design, correct?

17 A No.

18 Q You don't know of anybody else testing that
19 proposed design, do you?

03: 34: 47 20 A No.

21 Q I take it that this proposed redesign has
22 never been subjected to peer review, has it, to your
23 knowledge?

24 A Well, I haven't brought it out until you asked
03: 34: 58 25 the question, but no, it has not.

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1 Q And this redesign has never been the subject
2 of any article in a professionally-recognized
3 publication, has it?

4 MR. EPSTEIN: Objection. Calls for
03: 35: 11 5 speculation.

6 BY MR. ERGO:

7 Q To your knowledge, correct?

8 A Correct.

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9 Q And is there a known or a potential failure
03: 35: 18 10 rate for this redesign that you proposed?

11 MR. EPSTEIN: Objecti on. Incomplete
12 hypothetical. Lacks foundation.

13 BY MR. ERGO:

14 Q To your knowl edge?

03: 35: 27 15 A No. What we're trying to do is strengthen the
16 weakest area of the cylinder. What the failure rate
17 would be would have to be tested afterward. It
18 certainly would n' t be much more di ffi cul t to cause a
19 failure in that area.

03: 35: 49 20 Q This proposed redesign, to your knowl edge, has
21 never actual ly been put to use, has it?

22 A Not that I'm aware of.

23 Q And I take it there are no standards that have
24 been established that apply to your proposed redesign;
03: 36: 03 25 is there?

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1 MR. EPSTEIN: Obj ecti on. Cal ls for
2 specul ati on. Lacks foundati on.

3 BY MR. ERGO:

4 Q Let me rephrase.

03: 36: 07 5 I take it you're not aware of any standards
6 that would apply to this proposed redesign.

7 A Well, I think all the standards are the
8 Federal standards for cylinders that have combustib le
9 material that are going to go in transportation. I
03: 36: 24 10 don't see that that would be in violation of any of
11 standards I understand.

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12 Q Do you know of any standards that would
13 specifically apply to the redesign that you've
14 proposed?

03: 36: 36 15 MR. EPSTEIN: Vague and ambiguous.

16 THE WITNESS: No, I don't. I think making
17 that -- the weakest area of the cylinder strongest
18 would certainly not violate any standard.

19 BY MR. ERGO:

03: 36: 48 20 Q Is your proposed alternate design generally
21 accepted within the scientific community, to your
22 knowledge?

23 A I don't know.

24 Q And is your proposed alternative design
03: 37: 00 25 generally accepted within the manufacturing community,

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1 to your knowledge?

2 MR. EPSTEIN: Objection. Vague and ambiguous.

3 THE WITNESS: Still don't know.

4 BY MR. ERGO:

03: 37: 15 5 Q Do you have any other suggestions as to how
6 this cylinder could be redesigned?

7 A I think if I did, I'd keep it to myself and
8 patent it.

9 No. I gave you the procedures that would work
03: 37: 33 10 to make this the strongest part of the cylinder and
11 would prevent any type of the failures that we see in
12 these pictures that we've gone through.

13 Q Let me to show you Exhibit 13 again. That is
14 a photo of the failure area in the Glen cylinder.

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03: 38: 07 15 Based on your review of the evidence in this
16 case, is it your opinion that the failure that occurred
17 in Mr. Shalaby's cylinder is similar to the failure
18 that is depicted in Exhibit 13?

19 MR. EPSTEIN: Vague and ambiguous as to the
03: 38: 22 20 term "similar." Overly broad.

21 THE WITNESS: I would believe that that's the
22 area that failed, yes.

23 BY MR. ERGO:

24 Q All right. So your opinion is the area of
03: 38: 34 25 failure shown in Exhibit 13 is the area of failure that

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1 occurred to Mr. Shalaby's cylinder?

2 A Yes.

3 Q And do you have an opinion as to whether --
4 let's do it this way.

03: 38: 55 5 If we had a -- if you could draw a picture of
6 the Shalaby cylinder, based on your belief as to how
7 and where it failed and you drew that picture, would
8 the picture be similar to the crack that we see in
9 Exhibit 13?

03: 39: 11 10 MR. EPSTEIN: Objection. Vague and ambiguous.

11 THE WITNESS: I believe that it would be in
12 that area. I can't say it's similar to the picture,
13 but it would be in that area.

14 BY MR. ERGO:

03: 41: 05 15 Q Did you review any testimony by Mr. Ratliff or
16 Mr. Stephens describing the failure in the cylinders
17 having edges curled outward?

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18 A Yes, I saw that, which would suggest that
19 there was some explosion on the inside consistent with
03:41:26 20 perhaps dropping it in the fire leading the pressure to
21 build up. The pressure does not vent properly, and it
22 builds up and it opens up. Yes, I saw that.

23 Q You kind of beat me to my next question.
24 That curling out is indicative of a failure
03:41:42 25 caused by internal pressure?

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1 A Yes.

2 Q And you ruled out a failure caused by internal
3 pressure in this -- the Shalaby matter --

4 A Well, we have a vent release. So the only way
03:41:56 5 I could get internal pressure, that I can imagine, is
6 by heating up the cylinder. That's when the pressure
7 release valve is going to operate. So it doesn't seem
8 like there is anyway I can get that kind of explosive
9 pressure, as long as the valve is working.

03:42:14 10 Q Have you ever heard of any of these cylinders
11 blebbing?

12 A The cylinder doesn't do it. It's the
13 components in the cylinder that blebby.

14 Q You've read the U.K. report, the health and
03:42:30 15 safety report?

16 A Right.

17 Q And they documented some blebbing, correct?

18 A That's correct.

19 Q After subjecting the cylinders to heat?

03:42:39 20 A Through torches heating them up, specifically.

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21 Q And those cylinders had pressure relief
22 valves, correct?

23 A Yes. I presume so. I'm saying that I think
24 so. Unless they somehow tied them down or

03: 42: 55 25 incapacitated them.

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1 Q That report actually talked about venting
2 occurring through the pressure relief valves, didn't
3 it?

4 A Yes.

03: 43: 02 5 Q That would lead you to believe that the
6 cylinder had pressure relief valves then, correct?

7 A Pressure relief valves. And remember earlier
8 you asked did I know how fast it would fit? And I said
9 something about it kind of depends on how much heat --

03: 43: 18 10 the heat flux you're putting in. They were putting in
11 a lot of heat flux. Now if we put in a lot of heat
12 flux in the Shalaby matter, then it could overcome the
13 vent.

14 Q Would placing a MAPP gas cylinder in a fire or
03: 43: 40 15 a fire pit with embers, could that result in enough
16 heat input to cause both a vent and a failure in the
17 cylinder wall?

18 A Maybe. I mean, there's some questions there.
19 How hot are the embers? What's its placement? It's
03: 44: 01 20 not standing. It's laying down in there. It's good
21 contact. How much gas is left inside? There's some
22 questions that I don't have the answers to. But can
23 the heat flux be enough to cause a wall to evolve like

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24 that? Yes.

03: 44: 17 25 Q Now, is Mr. Stephens' and Mr. Ratliff's

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1 description of the cylinder -- the crack in the
2 cylinder curling outward, is that consistent with your
3 opinion that the failure was in the brazed joint?

4 A No.

03: 44: 36 5 Q And have you then discounted their testimony
6 as to the metal curling outward?

7 A Yes, I have.

8 Q Why?

9 A I believe their deposition was taken the
03: 44: 52 10 following April, about a year later. I think the
11 recollection of Stephens' -- Randy Stephens' was rough.
12 And I think that I put more weight on Warren Ratliff,
13 mainly because he seemed to have worked with the
14 material before. And I got a different opinion reading
03: 45: 17 15 the Ratliff depo. And so I felt that the idea of
16 putting it in a fire pit would be far enough away from
17 me that if it did vent like that, had to vent while it
18 was in the fire pit, there is no reason to take it out
19 afterwards.

03: 45: 33 20 Besides, there would be a tremendous amount of
21 smoke issues on it. The outer surface would be burned.
22 It just didn't seem reasonable to me. So giving it the
23 reasonability check, I wasn't comfortable to accept
24 that.

03: 45: 53 25 Q Did you accept Mr. Stephens' testimony as to

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1 the location of the failure?

2 A I don't recall what that was.

3 Q Anything else that you recall about

4 Mr. Stephens' testimony that you reject?

03: 46: 08 5 A I'd have to go through it again and see.

6 Q You put -- you relied more heavily on

7 Mr. Ratliff's testimony than Mr. Stephens'?

8 A Because of his background, the way he spoke,
9 yes.

03: 47: 06 10 Q I'm going to read to you Mr. Ratliff's
11 deposition, Page 68, Line 1.

12 "Question: Was it in fact a hole that you saw
13 and was there?

14 "Answer: It appeared to be a crack forced
03: 47: 23 15 open outward.

16 "Question: It was forced open outward?

17 "Answer: Like an explosion outward."

18 Did you interpret that testimony by

19 Mr. Ratliff to be a description that the fracture he
03: 47: 37 20 saw had metal curled outward?

21 A I'm looking. The U-shaped crack -- U-shaped,
22 no, it appeared to be a straight line. Just the one
23 side of the crack appeared to be more outward than the
24 other side of the crack.

03: 48: 08 25 Can't really tell what he's talking about, but

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1 if I bend over the valve, it will look something like
2 that. We had those examples here, and maybe that was
3 what he was referring to.

03: 48: 30 4 Q Referring to when he said, "It appeared to be
5 a crack forced open outward. Like an explosion
6 outward"?

7 A Uh-huh.

8 Q That's your interpretation?

03: 48: 39 9 MR. EPSTEIN: I'm sorry. Was there a
10 question? I didn't get the question.

11 Can you read it back?

12 (Record read.)

13 Objection. Vague and ambiguous.

03: 49: 02 14 THE WITNESS: I think that's what the document
15 indicates.

16 BY MR. ERGO:

03: 49: 16 17 Q All right. So based on your interpretation of
18 Mr. Ratliff's testimony, it's your belief that he was
19 not describing a fracture in the cylinder that curled
20 outward?

21 A I believe he was talking about a fracture in
22 the cylinder at the cylinder -- at the base of the
23 valve and for his appearance that it may look like it
24 had curled out.

03: 49: 32 25 Q So you didn't think he was meaning to describe

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1 a fractured surface that was curled outward?

2 A No. That wouldn't make sense.

3 THE WITNESS: Do we have my other cylinders

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4 here?

03: 49: 44 5 MR. EPSTEIN: I hope so.

6 BY MR. ERGO:

7 Q Exhibi ts 9, 10 and 11?

8 A Yes.

9 Q They're being photographed right now.

03: 49: 51 10 A I think we can look at those and see how that
11 descri pti on woul d fi t.

12 Q So you discounted Mr. Stephens' testimony
13 about the fracture being curled outward, correct?

14 A Yes. Because that would be the result of an
03: 50: 09 15 explosi on and not a mechanical fai lure of a poorly
16 desi gned joi nt.

17 Q And it's your belief that Mr. Ratliff is not
18 descri bi ng, or not meani ng to descri be, a fractured
19 surfa ce that is curled outward?

03: 50: 20 20 A Correct. I think it's rather pathetic that
21 they di dn' t gi ve hi m some exampl es li ke we ha ve he re
22 and say "poi nt to the one that you saw."

23 Q From Mr. Shalaby's cylinder, you don't have an
24 opi ni on as to the l en gth of the crack, do you?

03: 51: 11 25 A There was some statement by Stephens, Randy

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1 Stephens, about how long he thought it was. Other than
2 that, no.

3 Q Do you accept that part of Mr. Stephens'
4 testi mony?

03: 51: 28 5 A No, I don't.

6 Q I take it you have no opinion as to the length

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7 of the crack, then.

8 A No.

9 Q The question wasn't clear.

03:51:36 10 Do you have an opinion as to the length of the
11 crack in Mr. Shalaby's cylinder?

12 A From Mr. Stephens, no, I do not.

13 Q Do you have an opinion, based on anything, as
14 to the length of the crack in Mr. Shalaby's cylinder?

03:51:50 15 A The "anything" would be looking at other
16 examples that have failed, and that would give me the
17 length of that.

18 Q What's your opinion then?

19 A My opinion is it failed at the valve.

03:52:01 20 Q What's your opinion as to the length of the
21 crack in Mr. Shalaby's cylinder?

22 MR. EPSTEIN: Objection. Misstates testimony.

23 THE WITNESS: Something less than the outer
24 diameter of the valve.

03:52:17 25 BY MR. ERGO:

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1 Q How about the width of the crack, do you have
2 any opinion on that?

3 A No information.

4 Q Do you discount Mr. Stephens' testimony about
03:52:29 5 the width of the crack?

6 A I don't recall.

7 Q Will you find your supplemental report,
8 please.

9 I'd like you to look at the second page of

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03: 54: 06 10 your July 9th, 2008 report.

11 A Yes.

12 Q The first paragraph under test observation
13 reads, "I performed testing of the MAPP gas cylinders
14 and determined that the center valve fitting would fail

03: 54: 28 15 at approximately 30 foot-pounds of force. The failures
16 can happen in the cylinder wall or the brazed joint."

17 A Yes.

18 Q "This amount of force appears to be above the
19 normal abuse level."

03: 54: 44 20 What did you mean by "above the normal abuse
21 level"?

22 A I thought it was self-evident. Abuse would be
23 normal -- just a normal use. You have normal use,
24 you're storing it, you're taking it out, you're using
03: 55: 03 25 it, you're heating up pipes and soldering brazing

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1 material, and you're doing it normally.

2 If you drop it, throw it, I think that would
3 be above that level. So under normal conditions, I
4 think that you wouldn't see 30 foot-pounds.

03: 55: 29 5 Q Now, your sentence doesn't say this amount of
6 force appears to be above the normal level or normal
7 use level. Your sentence says, "This amount of force
8 appears to be above the normal abuse level."

9 What did you mean by "normal abuse"?

03: 55: 45 10 A Maybe I should have changed the wording, but
11 under normal application of what the torch is designed
12 for.

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13 Q Such as soldering pipes?

14 A Plumber going out, doing some soldering on the
03:55:59 15 pipe. He may have to set it down. He may have to push
16 the solder a little with a tip.

17 Q So setting the torch down or using it to
18 solder is what you meant -- is encompassed by what you
19 meant by "normal abuse"?

03:56:18 20 A Right. If I'm going to pick it up, I'm
21 abusing it. I'm taking it out of its pristine
22 condition and doing some abuse. If I use it under a
23 normal circumstance, then this is -- 30 pounds is more
24 than I believe I would experience.

03:56:32 25 Q Just so I understand this, what you're saying

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1 is by simply picking up the cylinder -- torch and
2 cylinder, you're abusing the torch and cylinder?

3 A Yes, I'm putting some forces on it. Yes.

4 Q So then by depressing the igniter button on
03:56:56 5 the TS4000 --

6 A You're putting force on it.

7 Q By depressing the igniter button on the TS4000
8 torch, is that abuse?

9 A Probably. If I'm just holding it up at the
03:57:10 10 top and I'm not holding the bottom, I'm putting some
11 stress on it.

12 Q If you pick up the cylinder by the cylinder
13 and not by the torch, is that abuse?

14 A By the cylinder, if I keep it vertical so
03:57:20 15 there is no weight of the torch in any way. Any way

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16 that I apply force to the weakest area, there would be
17 some exceptional abuse.

18 Q So if I picked up the cylinder with the torch
19 on it and I leaned it forward five degrees, would that
03: 57: 37 20 be abuse?

21 A If you put a small amount of force on it,
22 which would probably not be under the level of abuse.
23 In other words, they allow 60 degrees, according to the
24 literature, and that certainly would be enough to put
03: 57: 56 25 considerable force on it.

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1 Q According to the literature, you're allowed to
2 press the igniter button. And you considered that to
3 be abuse?

4 A You're holding a full tank which has its
03: 58: 07 5 weight and you're just holding it by what's up above in
6 the torch, the TS4000. In that case, all the stress is
7 going to be on our valve, and that would be abuse of
8 the valve.

9 MR. ERGO: Let's go off the record a second.
03: 59: 00 10 (Discussion off the record.)

11 (Recess taken from 3:58 p.m. to 4:15 p.m.)

12 BY MR. ERGO:

13 Q Dr. Anderson, I'm going to ask you some
14 questions about your June 25th 2008 report.

04: 15: 26 15 A 24th.

16 Q Well, my copy says 25th.

17 MS. NAYLOR: So does mine.

18 MR. EPSTEIN: Yours says 24th.

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19 THE WITNESS: Could we compare and make sure?

04: 15: 49 20 MR. ERGO: Yeah. Let's do that.

21 (Discussion off the record.)

22 BY MR. ERGO:

23 Q Do you have a signed copy of your report in
24 the file? This one is not signed.

04: 16: 42 25 A No, I don't think I've signed it.

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1 Q The one that I have --

2 A Then that was the one that was Fed-Ex'd the
3 next day.

4 Q We'll compare it later. But by my quick
04: 17: 12 5 little check, first word, last word on each page,
6 they're the same.

7 (Deposition Exhibit 15 was marked for
8 identification by the court reporter.)

9 BY MR. ERGO:

04: 17: 19 10 Q We've marked the copy of your report -- your
11 report that's dated June 24, 2008, as Exhibit 15.

12 Under the section "Materials Reviewed," are
13 all the materials that you've listed in this section
14 here today?

04: 17: 36 15 A I believe the answer is yes. Nothing has been
16 taken from my file, and so they should all be here.

17 Q One of the things that you referenced is
18 the -- is Item No. 8, Health and Safety Laboratory
19 Report 2006/121.

04: 18: 29 20 A Right. That's the British Lab.

21 Q And what significance does that report have to

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22 your opinions here today?

23 A Well, it was temperature testing of cylinders.

24 I think we've already described that the idea of

04:18:49 25 somebody throwing the cylinder torch in the fire ring,

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1 it doesn't make sense to me. One, because you couldn't

2 touch it afterward. And, two, how it would vent. So

3 it would be heated more uniformly than what they were

4 doing. And probably a different amount of radiant

04:19:12 5 energy going in, so the thermal flux would be

6 different.

7 So I was curious about what happened to those

8 cylinders, the same type MAPP cylinders that were

9 vented because of thermal insult. And the ones that

04:19:27 10 exploded indicated to me that they got hot quick and

11 that probably the vents didn't operate. Or if they

12 did, they were not adequate because the heat flux was

13 too great. So I thought it was good background

14 information. I had reviewed it. I wanted to include

04:19:46 15 it.

16 Q All right. Does it support your opinions as

17 to the cause of this accident in any way?

18 A I don't think that it relates to the accident

19 because what it relates to the accident is looking at

04:20:03 20 the weakest part of the cylinder and testing the

21 quality of it. I think it may relate to it because it

22 indicates what happens if you toss it in the fire.

23 MR. ERGO: Item No. 12 is Consumer Products

24 Safety Commission Release No. 78-088. I've marked as

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04: 20: 41 25 Exhibit 16 a copy of that release that I have found.

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1 (Deposition Exhibit 16 was marked for
2 identification by the court reporter.)

3 BY MR. ERGO:

4 Q This isn't one from your file, but does this
04: 20: 51 5 appear to be the same release that you reviewed?

6 A Yes.

7 Q And what's the relevance to this case of
8 Exhibit 16, this 1978 CPSC news release?

9 A This case is associated with the weakest point
04: 21: 15 10 of the design of the torch and cylinder. And it says,
11 "The separation at the point where the threaded
12 connector meets the cylinder may cause a fuel leak."
13 That seems to be consistent with my evaluation that
14 that's the weakest point.

04: 21: 31 15 Q Okay. Do you -- have you ever seen a
16 Cleanweld cylinder?

17 A No. I think I've listed all the cylinders
18 that I have looked at.

19 Q Do you know how the Cleanweld cylinder is
04: 21: 45 20 constructed?

21 A No, I don't. I have no more details besides
22 this.

23 Q Do you have any understanding as to the design
24 of the Cleanweld cylinder?

04: 21: 56 25 A No, I don't.

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1 Q Do you know how the center valve housing in
2 the Cleanweld cylinder is attached to the cylinder?

3 A No.

4 Q Do you know if it's brazed in?

04: 22: 16 5 A No.

6 Q Do you know if this release refers to a
7 failure in the brazed joint, a failure in the parent
8 metal of the cylinder, or something else?

9 A Can't tell from the document.

04: 22: 54 10 Q Have you made any attempt to learn anything
11 more about the Cleanweld cylinder referred to in
12 Exhibit 16?

13 A No.

14 Q Do you know who manufactured the Cleanweld
04: 23: 16 15 cylinder?

16 A Well, it says "Cleanweld Products." More than
17 that -- and "Los Angeles" -- I don't know.

18 Q Do you know where the Cleanweld cylinders were
19 manufactured?

04: 23: 35 20 A It says "Los Angeles."

21 Q It says they were manufactured in Los Angeles?

22 A No. It says that's where Cleanweld is.

23 Q Okay. On Page 2 of your report, Item 22, MAPP
24 gas cylinder specifications, are you referring to the
04: 24: 14 25 DOT 39 Specifications?

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1 A No. I'm referring to a drawing that was
2 supplied to me, I guess, by Worthington.

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3 Q Okay. Going under the analysis section on
4 Page 2, you indicate that -- I'll just read this
04: 24: 51 5 paragraph -- "Mr. Shalaby was using the torch to ignite
6 firewood in a fire pit and his torch would have been
7 partially inverted in that situation. Health and
8 Safety Laboratory Report 2006/121 (report included in
9 test results CD) determined that the torch orientation
04: 25: 15 10 was important and confirmed that when the cylinder was
11 inverted, explosion could occur. The directions do
12 indicate 'Use upright to prevent flare-ups or flashes'
13 caused by the liquid entering the torch. However, this
14 orientation is impossible in some situations."

04: 25: 36 15 All right. Is it your opinion in this case
16 that the orientation in which Mr. Shalaby was
17 attempting to use his torch played any role in the
18 occurrence of this accident?

19 A No.

04: 25: 55 20 Q What's the purpose for including this
21 information?

22 A I think, looking at this, if I'm going to
23 light the table on fire, or something in a fire pit,
24 that I have to have an orientation that's more than 90
04: 26: 08 25 degrees. And the idea of the literature is that 60

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1 degrees is the maximum they want to allow. Certainly,
2 that orientation could have something to do with
3 release of material, and it could have been liquid at
4 that point. So when the valve separated, it could have
04: 26: 34 5 come out as a liquid being forced out as opposed to

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6 vapor. So it could have been a little more exacerbated
7 than if it was vertical like it was on a table.

8 Q Based on liquid coming out as opposed to
9 vapor?

04: 26: 53 10 A Right. Assuming there's liquid in there, if I
11 invert it, the liquid is going to flow to that area.

12 Q Moving on to Page 3 -- for the moment I'm
13 going to skip the test conducted. I may get back to
14 that today; I may not. I want to go down to the
04: 27: 49 15 paragraph that starts, "the brazed material is a
16 copper-nickel alloy."

17 Is that your opinion, that this is a binary
18 alloy of copper and nickel?

19 A Yes.

04: 28: 03 20 Q And what do you base that on?

21 A Well, it was measured. We, at the lab, cut
22 and produced a number of samples that showed the alloy,
23 the brazing alloy. It was easy to put one of those in
24 the electron microscope, and by using energy-dispersive
04: 28: 37 25 X-ray, provided a spectrum that gave the composition of

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1 the alloy. And that is the composition that showed
2 that it's a copper-nickel alloy.

3 Q And who performed the EDS?

4 A The laboratory.

04: 28: 51 5 Q Anamet?

6 A The operator that runs the SEM.

7 Q Who is that?

8 A Ryan Wood.

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9 Q Is this the lab in Hayward?
04: 29: 00 10 A Anamet.
11 Q Yes. That's the lab?
12 A Yes.
13 Q Were you there when Mr. Wood ran the EDS?
14 A No.
04: 29: 12 15 Q You indicate in the same paragraph that by
16 weight the alloy is 63 percent copper; is that correct?
17 A Yes.
18 Q And you indicate that the specifications call
19 for a maximum of 60 percent copper by weight, correct?
04: 29: 43 20 A I later found in one of the depositions that
21 they said 65.
22 Q Who said?
23 A My understanding is -- I think it was Gentry.
24 My understanding is 65 is acceptable.
04: 29: 57 25 Q It's your belief that Mr. Gentry said 65

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1 percent?
2 A I don't recall. I know I read it somewhere as
3 acceptable for methyl settling.
4 Q So the last sentence in that paragraph is, "It
04: 30: 18 5 is possible that the brazing material is off
6 specifications."
7 Is that your belief at this point?
8 A Well, my belief would be that if that's the
9 specification, then perhaps the brazing furnace is off
04: 30: 32 10 specs. So one or the other, I don't think, is
11 operating properly.

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12 Q You reference Mr. Gentry's testimony in the
13 next paragraph that the brazing temperature of the
14 furnace is between 2000 and 2100 degrees Fahrenheit,
04: 30: 56 15 correct?

16 A That's what he said.

17 Q You converted that to 1093 to 149 centigrade,
18 correct?

19 A Yes.

04: 31: 06 20 MR. CARRUTH: That's 1149.

21 MR. ERGO: 1149. Yeah. What did I say?

22 MR. CARRUTH: You said "149."

23 THE WITNESS: And, of course, I did that by
24 subtracting 32 and dividing by 1.8.

04: 31: 27 25 BY MR. ERGO:

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1 Q It's your belief that that temperature is not
2 sufficient to melt the brazing alloy?

3 A Well, I've given you the diagram for that
4 alloy. It would kind of depend on how long it's going
04: 31: 43 5 to be in there, but I think I would want a higher
6 temperature. And the results that I saw in the
7 metallography of those three cylinders would suggest
8 that there is some problem in melting.

9 Q How long would the alloy have to be exposed to
04: 32: 02 10 the temperatures referenced by Mr. Gentry in order to
11 melt?

12 A I don't know. I haven't calculated that.

13 Q But you went to a reference source, the Hansen
14 Constitution of Binary Alloys?

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04: 32: 24 15 A Yes.

16 Q And what does that reference reflect that this
17 copper-nickel alloy will melt at?

18 A I think if you look on Page 7, you'll see that
19 for -- if we want a weight percent, we'll go up to the
04: 32: 33 20 top. Since it's 60 percent copper, that would be 40
21 percent nickel. So we go to the line, and we see that
22 we need about 1200 degrees centigrade at the minimum
23 before melting.

24 Now, there is an issue that you can get if
04: 33: 03 25 there's enough pressure. I might be able to get some

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1 liquids at a lower temperature than that. But unless
2 I'm doing something unusual, I would think that this is
3 not adequate furnace temperature for what he's
4 reporting.

04: 33: 21 5 Q I don't understand what you meant by if
6 there's enough pressure you could melt the alloy at a
7 lower temperature.

8 A There's something called the diffusion welding
9 where basically I raise the temperature but not enough
04: 33: 34 10 to melt everything. And then I push it together and
11 the combination of elevated temperature and pressure
12 basically diffuses everything together as if it was
13 welded at a higher temperature.

14 Q In that scenario, something physically would
04: 33: 51 15 have to press against the alloy?

16 A Or some force, physical. I could imagine that
17 if the temperature was enough to cause expansion of the

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18 center valve against the cylinder walls, that could be
19 the pressure that I need.

04: 34: 08 20 Q And is it your belief that the temperature of
21 the furnace that Worthington uses to cause the braze
22 joint, that contributes to this braze joint being weak?

23 A I think in part that's a concern. I didn't
24 find any foreign material that could explain the
04: 34: 44 25 problems I see. But the lack of fusion to the walls of

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1 the valve and to the cylinder walls, that would
2 indicate that the temperature wasn't sufficient or the
3 time wasn't sufficient or the pressure wasn't
4 sufficient.

04: 35: 08 5 Q So the lack of fusion indicates that the
6 temperature, time, or pressure was not sufficient?

7 A Correct.

8 Q How about the presence of porosity? Do you
9 think that's also a function of insufficient
04: 35: 42 10 temperature, time, or pressure?

11 A Well, it comes in as a paste. So they didn't
12 give enough information to say if the paste has some
13 material that evaporates and causes porosity, say a
14 moist paste, some solvent paste. So I really need more
04: 36: 03 15 information to solve their problem so they don't have
16 this again.

17 Q And let's go back to my question.

18 Do you believe that the presence of porosity
19 in the MAPP gas brazed joint is in part caused by
04: 36: 23 20 inadequate temperature, time, or pressure?

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21 A In part.

22 Q In your opinion, is there a more significant
23 factor to the presence of porosity than the MAPP gas
24 brazed joint than inadequate temperature, time, or
04: 36: 59 25 pressure in the brazed furnace?

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1 A Well, I also mentioned, since it's a paste,
2 what the pasting components are that it started out
3 with. Then they volatilize and cause the porosity.

4 Q You don't know, though, right?

04: 37: 14 5 A Nobody asked, and nobody said.

6 Q And you don't know -- you're talking about
7 Mr. Gentry's deposition, I assume.

8 A Yes.

9 Q You haven't done any investigation to find out
04: 37: 24 10 how the brazed paste is put together, have you?

11 A No. You can't do it after the fact. It's
12 been through a furnace, so any volatiles would have
13 been lost. But volatiles could certainly explain what
14 I saw in the porosity.

04: 37: 43 15 Q You just don't know if there's volatiles in
16 the paste?

17 A No. It may be just bad production/processing.

18 Q Any other factors contributing to the
19 porosity, in your opinion, other than the temperature,
04: 38: 03 20 time, and pressure in the furnace and the possible
21 presence of volatile matter in the brazed paste?

22 MR. EPSTEIN: Calls for speculation.

23 THE WITNESS: That's pretty complete.
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24 BY MR. ERGO:

04: 38: 28 25 Q Have you done anything to verify the EDS

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1 results you have indicating that the brazed paste is,
2 in fact, a copper-nickel alloy?

3 A I have not.

4 Q In the last paragraph on Page 3, just above
04: 39: 20 5 the conclusions and findings section, you reflect that
6 the brazing material on the MAPP-Pro cylinders is all
7 copper.

8 And how did you determine that?

9 A Again, by the energy dispersive X-ray analysis
04: 39: 35 10 of the MAPP-Pro cylinder that was cut open and
11 examined. And also metallography was performed on it.

12 Q Anything significant, in your mind, as to the
13 MAPP-Pro cylinder using an all copper braze?

14 A No. And it was very well done and adhered to
04: 39: 57 15 both sides of the metal. And it had a good meniscus.

16 Q Do you know if the DOT regulations permit the
17 use of all copper-alloy brazed paste in MAPP gas
18 cylinders?

19 A I believe they do not, because you could form
04: 40: 22 20 an acetylene reaction with copper.

21 Q First paragraph on Page 3 under "Conclusions
22 and Findings," you relate microhardness testing results
23 for three cylinders, correct?

24 A Yes.

04: 40: 48 25 Q And are all these values reflected here

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1 results for the brazed joint?

2 A Yes.

3 Q As opposed to the parent metal or the valve?

4 A Yes. Parent metal is pretty consistent for
04: 41: 20 5 the cylinder and for the valve. There's some
6 differences in the braze, but because the braze has so
7 much porosity, that would explain the differences.

8 Q Do you have your microhardness test results?

9 A Somewhere.

04: 42: 45 10 Q You have them?

11 A I believe I do.

12 Q Let's make sure we're looking at the same
13 documents there.

14 A Three cylinders, three data points.

04: 43: 00 15 Q Okay. Let's go to your table.

16 And this table, the braze refers to which
17 portion of the braze?

18 A As it's marked, where you see the arrow,
19 that's where the testing has been done. And if you
04: 43: 26 20 look at the particular sample, you should be able to
21 see the micro indentation of the samples that are here.

22 Q So the braze area that you were -- that you
23 did the microhardness testing was --

24 A Where the arrow is.

04: 43: 47 25 Q Where the arrow is, yes, which is on the top

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1 of the sheet metal and under one of the indented
2 portions of the center valve housing?

3 A I think that's correct.

4 Q That's where a portion of the center valve
04: 44: 07 5 housing rests on the top of the sheet metal?

6 A Correct.

7 Q And for the first cylinder, you have an
8 average microhardness converted of 23 HRC?

9 A Right.

04: 44: 28 10 Q What does "HRC" stand for?

11 A Rockwell hardness on the C scale. And the
12 others are Rockwell hardness on the B scale.

13 Q And what does a 23 HRC tell us?

14 A Fairly hard.

04: 44: 47 15 Q Fairly hard, okay. The higher the number, the
16 harder it is?

17 A C is higher than B. And the higher the
18 number, the harder it is.

19 Q Going to the Table 2, you have for the braze
04: 45: 12 20 97 HRB.

21 A Right. Softer.

22 Q C is harder than B?

23 A Right.

24 Q All right. And what's the significance of
04: 45: 22 25 this 97 HRB?

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1 A If there's any voids, any discontinuities,
2 then I would expect that when the indenter goes into
3 the brazing material that it's gonna go in much more

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4 easily; and therefore, it would be considered softer.

04: 45: 40 5 Q And is that good or bad or neutral?

6 A Or none of the above. Basically, I would like
7 it as hard and strong as possible within reason. I say
8 "within reason," because if I make a perfect braze,
9 then all I'm doing is putting the can -- the cylinder

04: 46: 05 10 at risk at that area. So I'd like them somewhat
11 balanced. Similar numbers would be nice.

12 Q The microhardness numbers that you have on
13 your Tables 1, 2, and 3, do you believe that these
14 levels played any role in this accident?

04: 46: 29 15 A I think they played a role in my
16 understanding. The issue -- this is a critical area --
17 there's tremendous variance in the hardness which is
18 related to the strength of the brazing material, and I
19 find a lot less critical changes between Area 1 and
04: 46: 58 20 Area 2. Area 1, of course, being the valve; and Area 2
21 being your cylinder.

22 Q Are you critical of any of these microhardness
23 values for the braze?

24 A I think I said that I'd like them to be closer
04: 47: 17 25 together. I think that rather than tear the cylinder

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1 or tear the braze, I'd like the two to be very similar.

2 Q All right. What do you think ideally the
3 microhardness level should be at the braze?

4 A I don't know. I haven't tried to decide that
04: 47: 35 5 yet. What I'm trying to decide is how failures occur
6 at this high-stress point, and are there any reasons

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7 for the failure to occur there besides obvious design.
8 And I see that the difference between the quality, the
9 hardness, the strength of the brazing is enough to say
04: 47: 57 10 it's gonna go in the can that's gonna fail, which we've
11 talked about, or it's gonna be in the brazing because
12 there's a variance there.

13 Q Are you saying the microhardness levels
14 between the parent steel and the braze should be
04: 48: 16 15 similar?

16 A I'd like them to be similar. I think that's
17 what I've said several times.

18 Q Bear with me.

19 A I'll bear with you, sir.

04: 48: 26 20 Q I'm not a metallurgist.

21 A Remember what I said? If one is stronger than
22 the other, then you're gonna get the failure in the
23 weaker one. I'd like them sort of balanced out so then
24 it's the strongest possible joint.

04: 48: 45 25 Q Are there any industry standards for the

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1 microhardness levels or the relationship between the
2 microhardness levels between the brazed joint and the
3 parent steel?

4 A Not that I'm aware of. I think those are
04: 48: 57 5 things that were alluded to for disclosure from
6 Worthington. I don't think anything was provided. So
7 I'm not aware of any standards.

8 Q Are you aware of any studies that indicate
9 that the variance in the microhardness levels between

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04: 49: 24 10 the braze and the parent steel, parent metal, create a
11 dangerous condition?

12 A I don't understand your question.

13 Q I'll try to rephrase it, but I'll probably
14 just wind up repeating it.

04: 49: 45 15 Are you aware of any studies --

16 A No, I'm not aware of any studies on that
17 issue.

18 Q You're answering my previous question?

19 A Well, your previous question had a tail on it,
04: 49: 58 20 which I didn't understand.

21 Q Okay. Well, let me make sure I'm asking a
22 question that you understand.

23 Are you aware of any studies that indicate
24 that variance between the microhardness levels of a
04: 50: 11 25 brazed joint and the parent metal created any type of

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1 dangerous condition?

2 A No. That's a design issue, that you want to
3 balance this material. For example, if we made our
4 cylinder out of titanium, well, then we know it's not
04: 50: 28 5 going to fail. The cylinder will never fail so it's
6 gonna be the next weakest point. What I'm saying is we
7 have two points, the cylinder made out of ductile wire
8 and we have a valve that's held by -- a small amount of
9 copper-nickel material. And you'd like them, for
04: 50: 54 10 maximum strength and resistance, you'd like them to be
11 somewhat equal in strength.

12 Q And do you know of any studies that support

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13 what you just said, that you would like the brazed
14 materials and the parent metal to be similar in
04: 51: 09 15 microhardness levels?

16 A No. I think that that study would come from
17 what the manufacturer of the cylinder, that in order to
18 do a good design analysis, would look at. And, no, it
19 hasn't been provided to us.

04: 51: 26 20 Q Do you know of any literature that supports
21 that the microhardness levels of a brazed joint and the
22 parent steel in a cylinder should be similar?

23 A No, I don't.

24 And I didn't use the word "similar." I think
04: 51: 48 25 "close." They should be designed so they are both

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1 close to one another.

2 Q Do you know of any literature that suggests
3 that the microhardness levels of the brazed joint and
4 the parent steel in a cylinder should be close to each
04: 52: 04 5 other?

6 A No.

7 Q Just to make sure I do understand this,
8 looking at your microhardness surveys, your Tables 1, 2
9 and 3, you're not critical of any of the values, per
04: 52: 27 10 se. What you're saying is that the values between the
11 braze and the parent metal should be close to each
12 other?

13 A That's what I'm saying. So if we look at
14 Table 1, the braze is very hard, strong, I presume.
04: 52: 41 15 You can't have many defects in it if I can make it that

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16 hard. So I would assume that the canister is going to
17 be the failure point.

18 The next one, the braze in Area 2 is closer,
19 and it's hard to say. In Table 3, definitely the
04: 53: 03 20 strength goes to the braze, and I would expect it's
21 going to be our cylinder that fails.

22 Q So the cylinder reflected in Table 1 and
23 Table 3, you would expect the cylinder metal to fail
24 before the braze?

04: 53: 24 25 A That would be expected from just that.

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1 Remember, we're looking at one section of the cylinder,
2 okay? And in that case, that's what the values are.
3 There could be defects elsewhere as we go around --
4 circle around it. Or there may be other areas where
04: 53: 44 5 the braze is less and therefore I would expect the
6 braze to fail. But in those cases at those points with
7 those specimens that you have in the box, I would vote
8 for the braze not failing.

9 Q All right. Table 2, is the braze harder than
04: 54: 02 10 the parent metal and the metal in the center valve
11 housing?

12 A Slightly. It's probably closer to a toss-up.

13 Q All right. Area 2 references the cylinder
14 metal, correct?

04: 54: 25 15 A Yes.

16 Q Area 1 is the center valve housing metal,
17 correct?

18 A Yes.

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19 Q So the braze in Table 2 and the cylinder
04: 54: 36 20 reflected in Table 2 has 97 HRB, and the cylinder metal
21 has a 77 HRB?

22 A Correct. So the braze is harder; therefore,
23 it's stronger. Therefore, less defects where you would
24 expect. However, they're still on the same scale and
04: 54: 52 25 they're pretty close, so it might be a toss-up

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1 depending on the situation of whether it's the cylinder
2 that fails or the brazing that fails.

3 Q All things being equal, wouldn't you expect
4 the cylinder metal to fail before the braze in the
04: 55: 11 5 cylinder reflected in Table 2?

6 A Well, again, it's direction and amount of
7 material. So the braze is a fairly thin piece even
8 though it's stronger. And this is the hardness of the
9 braze, which says it's stronger.

04: 55: 25 10 But remember, in the three that I looked at,
11 there is not a good connection to the -- to the valve.
12 In other words, it hasn't defused in. There's a poor
13 connection there. And, therefore, you can't really say
14 for sure.

04: 55: 39 15 Q And it's a toss-up?

16 A I'm afraid so.

17 Q Now, the photos we're looking at reflecting
18 your microhardness test, that's metallography, correct?

19 A They have been prepared for metallography.

04: 56: 00 20 Q Are they encased in plastic?

21 A They're encased in plastic in the box we've

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22 brought.

23 Q And what makes the cylinder metal and the

24 center valve housing metal in the metallography appear

04: 56: 17 25 to be brown?

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1 A I think that's the digital camera light effect

2 as opposed to bright.

3 Q So the color isn't brown?

4 A No. It should look like metal.

04: 56: 39 5 Q It's just brown in your photos?

6 A Right.

7 Q Do you know how the braze is applied to

8 Worthington MAPP gas cylinders?

9 A Only from Mr. Gentry's description. It's

04: 57: 07 10 applied -- I think he said it's jetted in, shot in, and

11 then it goes in through the furnace. I'd love to have

12 a tour of the facility.

13 Q Do you -- you haven't done any independent

14 study to find out how Worthington applies its brazed

04: 57: 30 15 paste to MAPP gas cylinders?

16 A No. I don't know how they do it

17 independently.

18 Q Okay. I'd like you to look at Page 8 in your

19 report. Page 8 depicts Photo 3 of cylinder W10G57E,

04: 58: 39 20 correct?

21 A Correct.

22 Q And this photo shows some porosity in the

23 brazed joint?

24 A Well, it shows voids. I would say that's more

04: 58: 49 25 than porosity. I'd say that's void. So there's three

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1 things in the photo, two fairly large extensive voids
2 and then the undercut where we would expect the
3 meniscus to be present. It's actually undercut in
4 there.

04: 59: 10 5 Q In your opinion, does the presence of the
6 voids in this photograph in the brazed joint make this
7 brazed joint unreasonably weak?

8 A Yes.

9 Q What do you base that on?

04: 59: 20 10 A Well, you have -- you have an area that you're
11 trying to fill with braze material, and you have some
12 areas that aren't, that don't have any braze material
13 present. So the net result is that this is not an
14 adequate complete brazing. It looks like something,
04: 59: 42 15 like maybe 30 percent of the potential contact, has
16 been eliminated by these voids.

17 And then if you go to the next page, which is
18 a close-up, you'll see in the small -- you'll see the
19 braze material, and then you'll see above it we have
05: 00: 03 20 our valve. Below it we have our cylinder. And look at
21 the connection that is -- the braze is supposed to have
22 with the valve. You could see there's a whole bunch of
23 little holes, that it hasn't really met the conditions
24 of wetting the surface and fusing to the valve. And so
05: 00: 30 25 I consider that really bad and really not appropriate.

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1 Q Have you done any testing to determine the
2 level of porosity or voids that would make a brazed
3 joint unreasonably weak?

4 MR. EPSTEIN: Objection. That lacks
05:00:47 5 foundation and assumes facts.

6 THE WITNESS: In other words, how many voids
7 are possible before they become significant? And then
8 as they increase how they decrease the strength; is
9 that your question? Because I haven't done that.

05:01:13 10 BY MR. ERGO:

11 Q No. My question was broader than that.

12 I just want to know if you have done any
13 testing to determine at what point, what amount of
14 porosity, what amount of voids, by volume or any other
05:01:28 15 measure, makes a brazed joint in a MAPP gas cylinder
16 unreasonably weak?

17 MR. EPSTEIN: Objection. Lacks foundation
18 that there's any acceptable level.

19 Go ahead.

05:01:41 20 THE WITNESS: I want to answer no. But the
21 fact that there is any voids at all, any porosity at
22 all, I believe is unacceptable. I never saw a standard
23 that Worthington had that said that they allowed it or
24 didn't allow it.

05:01:57 25 And I assume that when you're doing a brazing

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1 job that you try to eliminate the void. But what their
2 effects are physically, I haven't done any testing of
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3 that. Maybe we should.

4 BY MR. ERGO:

05:02:13 5 Q And you need to know that? You need to do
6 that kind of testing to determine what effect the
7 presence of any level of porosity would have on the
8 strength of the braze joint?

9 MR. EPSTEIN: Objection. Lacks foundation.
05:02:26 10 Misstates prior testimony.

11 THE WITNESS: Absolutely do not need to do
12 that. That's basically saying is it satisfactory. Is
13 this something that you'd put into an airplane or
14 something that's going to risk people's lives, injure
05:02:42 15 them? This kind of porosity that you see is totally
16 unacceptable. I've never seen anything in all the
17 samples I've ever looked from across the spectrum that
18 somebody would say, oh, this is acceptable. The idea
19 of knowing the number of how bad this is I think is
05:03:02 20 ludicrous. I think it's just not acceptable to have
21 this kind of porosity in a brazed system.

22 BY MR. ERGO:

23 Q Are you aware of any standards regarding
24 acceptable amounts of porosity in a brazed joint?

05:03:16 25 MR. EPSTEIN: Objection. Lacks foundation as

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1 to the existence of any acceptable level of porosity.

2 THE WITNESS: No.

3 BY MR. ERGO:

4 Q Are you aware of any literature or studies or
05:03:31 5 testing that's been done that supports your opinion

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6 that the level of porosity depicted in Photos 3, 4, 5,
7 6, 7, 8 in your report make the strength of this joint,
8 this brazed joint, insufficient from a safety
9 standpoint?

05:04:03 10 MR. EPSTEIN: Objection. Compound. Lacks
11 foundation.

12 Go ahead.

13 THE WITNESS: I guess I don't understand the
14 question.

05:04:10 15 When I see that there's no fusion, bonding of
16 the braze to the base metals, and I see that there is
17 tremendous amount of voids and porosity in between, I
18 wouldn't normally go to the literature and see if
19 that's bad. I can look at it and tell you that if I
05:04:32 20 was hired as your consultant and I look at this, I'd
21 say you have to do something about it. Change the
22 design. Change the manufacturing procedures. It's not
23 acceptable.

24 MS. NAYLOR: Could we take a break?

05:04:44 25 MR. EPSTEIN: Sure.

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1 (Recess.)

2 MR. ERGO: Dr. Anderson, I'm not finished with
3 my examination, but we're getting toward the end of the
4 day. And Ms. Naylor, in particular, came all the way
05:08:56 5 from Cincinnati and would like some time. And,
6 actually, I promised her more time, for which I
7 apologize.

8 So I'm going to let Ms. Naylor and Mr. Carruth
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9 take us to the end here and then we'll resume at some
05: 09: 07 10 mutually convenient date later.

11 EXAMINATION

12 BY MS. NAYLOR:

13 Q Dr. Anderson, my name is Beth Naylor. I'm
14 representing Bernzomatic in this case.

05: 09: 15 15 I'm just going to be following up on a couple
16 areas of testimony that we have gone over today.

17 I apologize in advance if I jump around a lot,
18 but I'm trying to expedite things so we don't have to
19 rehash a lot of what we have already done.

05: 09: 29 20 As I understand it, your opinion in this
21 case -- and I tried to write it down verbatim -- is
22 brazing of the main valve on top of the cylinder is
23 inadequate; is that correct?

24 A Correct.

05: 09: 40 25 Q And it's your opinion that inadequate braze

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1 failed causing Mr. Shalaby's injury?

2 A More likely than not, yes.

3 Q More likely than not?

4 A Yes.

05: 09: 47 5 Q Would you state that to a degree of
6 engineering certainty?

7 A Well, there's only two failures that can
8 happen in that area. That's either the cylinder or the
9 brazing. And the examples that I looked at, the

05: 10: 00 10 brazing is really bad and defective. So based upon the
11 work I've done, that is engineering certainty.

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12 Q That it would be a failure in the braze?

13 A Yes.

14 Q As opposed to a failure in the parent

05: 10: 13 15 material?

16 A Right. I'm not ruling that out. Everything I
17 see says brazing.

18 Q And the work that you've done has been on
19 exemplar cylinders, correct?

05: 10: 24 20 A Yes. The year is G.

21 Q The year is G. Do you know the manufacturing
22 year of Mr. Shalaby's cylinder?

23 A No, I don't. I haven't seen that cylinder.

24 Q Okay. So you're not sure whether your

05: 10: 36 25 exemplar cylinders are close or far to Mr. Shalaby's

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1 cylinder or manufacturing date, correct?

2 MR. EPSTEIN: Objection. Vague and ambiguous
3 as to the time frame.

4 THE WITNESS: That's correct. But understand,
05: 10: 45 5 my belief is that this is a process, and I saw no signs
6 that they say they changed it. I didn't think there
7 was a request for any changes in the process, any
8 design or processing change. I didn't see any of that.
9 So I assume one made one year is the same as one made
05: 11: 02 10 in another year.

11 BY MS. NAYLOR:

12 Q Well, in fact, I think you testified earlier
13 when talking about the exemplar cylinders that you
14 really didn't know whether Mr. Shalaby's cylinder was

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05: 11: 12 15 good, bad, or the same as your exemplar cylinders when
16 you were talking about the degree of porosity in the
17 braze. Do you recall that testimony?

18 A That's right. But my testimony also was -- my
19 opinion generally in experience is that things get
05: 11: 27 20 better as the process goes on. They learn something,
21 they see a failure, and they go back and fix it. So I
22 would assume that the process of making these cylinders
23 more recently would be perhaps better than the earlier
24 ones.

05: 11: 42 25 So when I see porosity in fairly recent

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1 cylinders, I believe they're probably better than what
2 was done before.

3 Q And that's just based on your assumption,
4 correct?

05: 11: 53 5 A That's an assumption that most processes work
6 that way. They get better with time.

7 Q Okay. But you've not seen anything in the
8 record, getting back to your statement two questions
9 ago, that indicated any change in the process?

05: 12: 04 10 A I've seen no change in process.

11 Q So back to my question about your exemplar
12 cylinders, you really have no set evidence that
13 indicates whether your exemplars were the same,
14 different, better or worse than Mr. Shalaby's
05: 12: 21 15 cylinders; is that correct?

16 MR. EPSTEIN: Objection. Compound. Lacks
17 foundation.

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18 THE WITNESS: Other than they were
19 manufactured by the same people, assuming the same
05: 12: 31 20 process line, they followed the same design, all I
21 could say is that they're exemplars. How close they
22 are, I think that's impossible to say, unless I had
23 some from a whole series of times.

24 BY MS. NAYLOR:

05: 12: 44 25 Q We talked earlier about the two types of

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1 failures we could see in that area; one would be the
2 failure in the braze, and one would be a failure in the
3 parent metal. Do you recall that?

4 A It really doesn't matter. One or the other is
05: 13: 00 5 going to go because that's the weakest point by design
6 on the cylinder-torch combination.

7 Q Now, in the process of you evaluating this
8 case, did you consider any other causes other than the
9 failure of the braze or the failure in the parent metal
05: 13: 11 10 in that area?

11 A No. I think we had a discussion of some
12 bizarre possibilities. Throwing it into the fire pit,
13 picking it up. I consider those very bizarre and not
14 credible.

05: 13: 28 15 Q Okay. And you might personally consider those
16 bizarre, but those are found in the testimony in the
17 record in this case; aren't they?

18 MR. EPSTEIN: Objection. Misstates testimony.
19 Misstates evidence.

05: 13: 41 20 THE WITNESS: Yes. There are documents that
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21 show bizarre activity.

22 BY MS. NAYLOR:

23 Q Well, not just documents. I'm talking about

24 testimony from first responders, the paramedics, the

05:13:54 25 rangers, the fire department, the folks that first

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1 arrived at the scene. There's deposition testimony; is

2 that correct?

3 A Yes.

4 MR. EPSTEIN: Objection. It mischaracterizes

05:14:03 5 the deposition testimony.

6 BY MS. NAYLOR:

7 Q And, indeed, during your testimony earlier

8 today, you said you relied more heavily on Ranger

9 Ratliff regarding his description of the events and his

05:14:20 10 description of the cylinder; is that correct?

11 A Right. And I read some of the high points
12 that led me to believe that the weakest point in the
13 design is where it failed.

14 Q And do you recall Ranger Ratliff's testimony
05:14:32 15 regarding abuse?

16 A Yes.

17 Q Okay. And how did you factor that into your
18 opinion in this case?

19 A I think I put in it the -- I labeled it one of
05:14:42 20 the bizarre issues.

21 Q Okay. And why did you characterize that as
22 bizarre as opposed to some of his other testimony?

23 A Because I've seen other failures, pictures

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24 that we've just passed out today from other situations,
05: 14: 56 25 that this is a critical area, that it tends to fail in

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1 that area, and that understanding that he was just
2 trying to light a fire and that he probably didn't have
3 bizarre activities going on, I felt that this is the
4 area I wanted to look at. The valve connecting to the
05: 15: 16 5 cylinder, I think that's critical. That's a design
6 error. And that's why I focused on that.

7 Now, from the standpoint of, say, the
8 paramedics, the man is injured very badly. I don't
9 think I'd want to get a statement from him that I would
05: 15: 33 10 have much reliability assigned to because of his
11 condition.

12 So if you have more information than what I
13 have read, then maybe I could get one of those out of
14 bizarre issues. Right now, they're bizarre to me.

05: 15: 50 15 Q And that information could be gathered during
16 a typical fire and explosion investigation; is that
17 correct?

18 MR. EPSTEIN: Objection. Lacks foundation.
19 Calls for speculation. Vague and ambiguous.

05: 16: 00 20 THE WITNESS: Typical fire and explosion --
21 BY MS. NAYLOR:

22 Q Well, you're familiar -- and I understand you
23 testified a little bit earlier before I arrived -- with
24 the NFPA 921 process; is that correct?

05: 16: 10 25 A Yes. It's very helpful for firemen and fire

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1 i nvesti gators.

2 Q And really that -- the purpose of that is to
3 arrive at an accurate determination related to the
4 origin, cause, fire spread, and responsibility for the
05: 16: 27 5 incident. Would you agree?

6 A Oh, yes. I've got a number -- about six
7 different versions of 921 because it comes out about
8 every other year. And I've looked at it very closely.
9 I find no information on metallurgical aspects or on
05: 16: 45 10 design aspects. If you have something on that, on one
11 of those issues, I'd be surprised to know about it.

12 Q Well, really it just sets out the methodology
13 for investigating an incident such as Mr. Shalaby's;
14 does it not?

05: 17: 00 15 MR. EPSTEIN: Objection. Misstates the import
16 of the standard.

17 THE WITNESS: It's a consensus view for fire
18 investigators.

19 BY MS. NAYLOR:

05: 17: 08 20 Q And do you accept this as a consensus view for
21 fire investigators?

22 A No. I think I work as a failure analyst. I
23 was looking at a failure -- cause of failure. And I
24 haven't really focused on the fire except that I made
05: 17: 22 25 two fires at the test site, which was kind of

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1 interesting.

2 Q Do you believe that the methodology set forth
3 in the NFPA 921 is a scientifically valid methodology?

4 MR. EPSTEIN: Objection. Vague and ambiguous
05:17:37 5 as to the scope of applicability of the standard.

6 THE WITNESS: And what year are you speaking
7 of?

8 BY MS. NAYLOR:

9 Q Well, I have the 2008 edition.

05:17:43 10 A So do I. I think it's a decent methodology
11 for firemen that don't have scientific experiments to
12 do. I think it works -- it works depending upon your
13 background. If you understand combustion and the
14 theory of combustion and all those other aspects of
05:18:06 15 combustion and how it applies, I don't think you need
16 it. I think that it's a general document of consensus.

17 Q Is there something, then, that takes the place
18 methodology-wise to guarantee the scientific validity
19 of the conclusions that you're reaching on a fire and
05:18:26 20 explosion if you don't use the NFPA 921?

21 A I don't think that 921 is a scientific
22 document. I think it has decent procedures in it, but
23 it's not a scientific document.

24 Q Do you have an opinion about the TS4000 Torch
05:18:47 25 as it relates to this case?

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1 MR. EPSTEIN: Objection. Vague and ambiguous.
2 Overly broad.

3 THE WITNESS: Can you give me more information

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4 on what you're looking for?

05: 18: 54 5 BY MS. NAYLOR:

6 Q You gave us the opinion that brazing of the
7 main valve on top of the cylinder is inadequate. And
8 you have been asked -- I could ask again, but you have
9 been asked multiple times. Do you have any other
05: 19: 06 10 opinions in this case? Do you have any other opinions
11 as they relate to the TS4000 Torch?

12 A Okay. The torch is TS4000. There's nothing
13 wrong with it. It's a very pretty torch. What I'm
14 saying is, the cylinder has a valve which connects to
05: 19: 22 15 that torch to the cylinder. And that connection
16 between that valve and that cylinder is inadequate, is
17 poorly designed, and poorly manufactured.

18 Q And I apologize. I was using terminology
19 without explaining myself.

05: 19: 36 20 When I speak and ask questions, I'll try and
21 be very conscientious about referring to the cylinder
22 as the cylinder, and the torch is just the top torch
23 head. The model that we believe Mr. Shalaby was using
24 was the Bernzomatic TS4000. Is that acceptable?

05: 19: 52 25 A That's very fine.

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1 Q Do you have an opinion about the TS4000 as it
2 relates to this case?

3 A Other than what I have already said, that it
4 has enough weight, that it's a possibility with a heavy
05: 20: 13 5 cylinder full of MAPP gas and the torch and just
6 holding onto the torch, it's putting an unusual strain

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7 on the valve assembly. But, no, I think it's
8 well-designed and looks adequate to me other than that
9 point.

05: 20: 28 10 Q And holding onto the torch with the cylinder
11 attached is an intended use of the torch and cylinder
12 combination; is that correct?

13 A Yes. That's why we can get into the design
14 issue. That's how it's intended -- there's a design
05: 20: 48 15 issue of the strength of the fitting.

16 Q Is it your opinion that when used as intended,
17 simply hold it in your hand like you just demonstrated,
18 that there would be enough force on that brazed joint
19 for a failure?

05: 21: 01 20 MR. EPSTEIN: Objection. An overly broad
21 question in scope.

22 THE WITNESS: Remember, we don't know what a
23 brazed joint looks like. There may be some better than
24 what I've presented. There may be some worse than what
05: 21: 16 25 I've presented. But, yes, that would be enough force

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1 that could be -- that's where all the stress is going.
2 That's the only way we're connecting the torch head to
3 the cylinder. And so all the forces are in between
4 there. And depending on the quality of that junction,
05: 21: 34 5 that's gotta resist or fail.

6 BY MS. NAYLOR:

7 Q And by that junction, are you referring to the
8 brazed joint?

9 A Yes, I am. Or the cylinder right next to it.

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05: 21: 43 10 The cylinder wall right next to it.

11 Q What we have been referring to earlier today
12 as the parent metal?

13 A Right.

14 Q And I just found an interesting e-mail here to
05: 22: 12 15 you from Counsel Mark Epstein. We'll mark it as
16 Exhibit 17.

17 (Deposition Exhibit 17 was marked for
18 identification by the court reporter.)

19 BY MS. NAYLOR:

05: 22: 22 20 Q Referring you to someone named John M.
21 Nelson?

22 A Oh, yes. I remember that. I have not called
23 him or talked to him.

24 Q Well, that was my question.

05: 22: 30 25 Have you followed up at all on that?

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1 A No. I'm remiss. And he'll probably be upset
2 that I didn't do it, but I either didn't have the time
3 or the interest.

4 Q Okay. Do you intend to follow up with
05: 22: 42 5 Mr. Nelson as part of your work?

6 A I still accept assignments from Mr. Epstein.
7 If he wanted me to do further testing or call this
8 gentleman, I guess I would. But I haven't been asked
9 to.

05: 22: 55 10 Q So as far as you're concerned, your opinions,
11 as they stand today, are final or conclusive?

12 A Other than what I said, that there may be

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13 depositions taken of other experts that will get me
14 excited and want to do something, but otherwise my
05: 23: 14 15 opinions, with no new information, are all here in
16 front of you.

17 Q We talked briefly about one of the scenarios
18 that is in the record from paramedic Price about the
19 cylinder being kicked into the fire. How long would
05: 23: 37 20 that cylinder have to be in a fire for, in your
21 opinion, for it to release or blebby?

22 A Wow. That depends on heat flux. I'm sure I
23 used the word "heat flux." And it depends on the
24 orientation and the temperatures of the fire. It's
05: 23: 56 25 kind of like asking how long is a piece of string.

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1 There's a lot of things I don't know.

2 I would say to be in there before it would
3 release, just burning coals, I think it would almost be
4 a minute. I would have to do work on that, but that's
05: 24: 15 5 what comes to mind.

6 Q And then if, in fact, the cylinder was in a
7 campfire and it either released or blebbed, would the
8 escape of gas be forceful enough to propel the
9 cylinder?

05: 24: 31 10 A Good point. MythBusters did something like
11 that, cutting off the heads of compressed areas to see
12 what would happen. If it failed on the side, if it
13 totally came off, then, yes, I would get propulsion.
14 If it failed on the side like every picture I've seen,
05: 24: 57 15 all I'm going to do is get a spinning action. So I'm

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16 not going to move anywhere. I'm just going to spin
17 around. And the gas that I saw wasn't very vigorous in
18 the tests I did where it cracked the top valve --

19 Q Can I refer you to Exhibit 16, which is the
05: 25: 13 20 30-year old CPSC release that you put in your report?

21 A Yes, the Chem Guard or something.

22 Q Cleanweld Products. I refer you to the second
23 paragraph, last sentence, that says, "Fuel leakage
24 could also depressurize the cylinder quickly enough to
05: 25: 33 25 propel it."

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1 A Yes.

2 Q Okay. Does that alter your opinion at all as
3 to whether or not a cylinder in a campfire that would
4 release or blebby could be propelled?

05: 25: 45 5 A No. If I have a crack on this side it's going
6 to cause reaction forces. Every action has a reaction.
7 It's gonna essentially spin. If I get it totally off,
8 totally vented, then, yes, I could propel it in a
9 linear direction.

05: 26: 00 10 Q What if you have a failure in the brazed joint
11 area, like there appears to be have been at
12 Mr. Shalaby's cylinder?

13 A It would just vent. And I do know that from
14 testing.

05: 26: 22 15 Q I'd like to try and briefly go over some
16 points on your primary report, the June 24th/25th
17 report which we've marked as Exhibit 15.

18 And I do want to just confirm for the record

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19 that you have not reviewed the deposition of paramedic
05:26:46 20 Price; is that correct?

21 A I don't have it. It's not in my file. I have
22 no recollection of having seen it.

23 Q Do you have any recollection of having any
24 conversation with Mr. Epstein or any of the other
05:26:59 25 attorneys in his office about that deposition?

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1 A No. I think I have heard the name, but that
2 may have been in one of the other depositions.

3 Q And I do notice in the materials reviewed, you
4 do not list the materials that you have gathered from
05:27:17 5 some other cases and experts around the country. Is
6 there a reason for that?

7 A Other experts? I do list the issues of review
8 of failures. I have a list on Page 2.

9 Q I see that. And it's in the analysis section.
05:27:36 10 I'm just wondering if there's a reason why you didn't
11 list those materials in the totality of the materials
12 you've reviewed in this case.

13 A I think it's an organizational consideration.
14 I felt that -- I felt it was a little bit different.

05:27:50 15 Q I'm moving on to Page 2, the analysis section,
16 and the paragraph under your three bullets that talk
17 about the Health and Safety Laboratory Report 2006 --

18 A Three bullets.

19 Q Under the three bullets. First paragraph.

05:28:10 20 A On Page 2? I've got it. Thank you.

21 Q All right. And we've already had some

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22 conversati on. In fact, you demonstrated for us what
23 you think the orientation of the cylinder and torch
24 would have been to light a campfire.

05: 28: 25 25 A Yes.

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1 Q And that was with the torch slightly lower
2 than the cylinder; is that correct?

3 A Yes.

4 Q Do you recall Mr. Shalaby's deposition
05: 28: 32 5 testimony in that regard?

6 A No. Not at the moment in that regard, no.

7 Q On Page 117 of Mr. Shalaby's deposition -- why
8 don't I go ahead and read it to you and I'll hand it
9 over to you so we don't have to dig through everything.
05: 28: 57 10 Starting on Page 117, Line 23.

11 "Question: And to ignite the logs, you would
12 have to bend over?

13 "Answer: Yes.

14 "Question: Would you simply bend over at the
05: 29: 07 15 waist or would you get down on a knee?

16 "Answer: On the waist.

17 "Question: On the waist. Would the cylinder
18 ever be parallel with the ground when you are igniting
19 the log cylinder and torch?

05: 29: 18 20 "Answer: The tip is in a raised position.

21 "Question: What do you mean by raised?

22 "Answer: Hand higher. About like that.

23 "Question: So somewhat like a 45-degree
24 angle?

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05: 29: 28 25 "Answer: Yes.

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1 "Question: Ever more than 45-degree angle?

2 "Answer: No.

3 "Question: Ever upside down?

4 "Answer: No.

05: 29: 37 5 "Question: And you said that 'never' fairly
6 emphatically."

7 Do you want to review that?

8 And my question is going to be, so you can
9 think about it while you are reading it, whether that

05: 29: 49 10 changes your opinion as to whether that report has any
11 relevance.

12 A No. I'm sure you read it correctly.

13 When I met Mr. Shalaby and gave him a torch
14 and asked him to take the position of which he was
05: 30: 04 15 using it, that's what I based my opinion on.

16 Q When did you meet Mr. Shalaby?

17 A Well, it would be in my billing statement that
18 you're going to get. I have some pictures in my file
19 that he provided.

05: 30: 21 20 Q About a year ago?

21 A Approximately, yes.

22 Q Do you know if it was before or after his
23 deposition?

24 A I'm sure it was after.

05: 30: 27 25 Q It was after his deposition?

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1 A Well, let me check. His deposition was in
2 April of '07; is that correct?

3 Q His deposition was in September of '07.

4 A Okay. I'm trying to think when I was first
05:30:45 5 contacted by Mr. Epstein. I think that would have
6 probably been November '07, sometime in that area.

7 Q And how many times have you met with
8 Mr. Shalaby?

9 A Only one that I could recall.

05:30:57 10 Q And have you talked to him other than --

11 A But we have a record here somewhere because in
12 the e-mails -- it's set up in the e-mails.

13 Q And have you talked with him other than
14 meeting him in person?

05:31:09 15 A You mean by phone or some other source?

16 Q Yes.

17 A No.

18 Q Have you?

19 MR. EPSTEIN: His answer is no.

05:31:17 20 BY MS. NAYLOR:

21 Q If his deposition testimony is correct,
22 without the orientation of the torch and cylinder,
23 would that affect the relevance of this Health and
24 Safety Laboratory Report?

05:31:28 25 A Well, the relevance of that report is that if

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1 you invert it, it becomes dangerous because of the
2 liquid. I think that Bernzomatic knows that, because

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3 they put a warning about don't go over 60 degrees. I
4 don't think it changes anything.

05: 31: 49 5 Q It doesn't change if Mr. Shalaby said that he
6 never inverted the cylinder and torch?

7 MR. EPSTEIN: Objecti on. It's a di fferent
8 questi on.

9 THE WITNESS: I'm not sure that's there's a
05: 32: 00 10 disti ncti on between what he visually showed me and what
11 you read in the deposi ti on.

12 BY MS. NAYLOR:

13 Q All right. I'm going to move on -- the same
14 page, Page 2 of your report -- to the other claims that
05: 32: 14 15 you are citing here as a basis for your opi ni on.

16 First, I want to try and get down the number
17 that we have here. No. 2, you have "Ri chard Gleen,"
18 and then right under the numberi ng you have "Glen."

19 Can we agree that that's the same case?

05: 32: 37 20 A Yes. It ought to be a mi spri nt.

21 Q So, really you have a total, it looks to me,
22 of nine other claims that you're looking at. Does that
23 comport wi th your recol lecti on?

24 A That is correct.

05: 32: 47 25 Q And when you were respondi ng to Mr. Ergo's

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1 questi oning, you said in fi ve of those you knew nothing
2 more about the case other than you had a copy of the
3 compl ai nt.

4 A That's all I have.

05: 33: 03 5 Q And I think you also said that in that
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6 complaint you did not have enough information to
7 understand the circumstances of the failure; is that
8 correct?

9 A Right. You see, what I'm looking for is,
05: 33: 13 10 these kinds of complaints coming into a company should
11 have caused the company to interview, to determine what
12 was wrong, talk to production, and see if they could
13 change something. So not only am I looking at is this
14 consistent with the Shalaby injury, is this consistent
05: 33: 31 15 with the company that is trying to correct problems
16 rather than just say, well, it's abuse.

17 Q Well, you have nine claims here over a period
18 of, let's see, from '02 to current. Six years; is that
19 correct?

05: 33: 45 20 A Yes.

21 Q And do you have any idea what -- how many
22 cylinders were sold in that period?

23 A I bet a bunch.

24 Q And do you have any idea whether these claims
05: 33: 58 25 involve failures in -- failures in the brazed joint

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1 area or, for example, a failure in the side wall that
2 you described that would spin around?

3 MR. EPSTEIN: Objection. Asked and answered.
4 And overly broad.

05: 34: 12 5 THE WITNESS: No, I don't.

6 BY MS. NAYLOR:

7 Q So your testimony is that the relevance you're
8 finding in these cases now is just to see how the

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9 company reacts, not that it's particularly relevant to
05: 34: 26 10 the failure mode in Mr. Shalaby's situation?

11 A In some cases I've got failure pictures which
12 are consistent. In other cases, I have not enough
13 information to determine that. And so the idea is, the
14 company has even one injury, one problem, even if they
05: 34: 43 15 make a million of these a day, there should be some
16 feedback, some documentation that says we've looked at
17 this, here's a problem, it's a design error, let's do
18 something about it, let's hire Dr. Anderson to fix it
19 and make it perfect, something like that. I saw no
05: 35: 00 20 signs of that.

21 Q That would be a nice job for you too; wouldn't
22 it?

23 A I don't know. Whereabouts are they located?

24 Q You can strike that.

05: 35: 14 25 The ones that you do have pictures for, that's

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1 four out of the nine; is that correct?

2 A Yes.

3 Q And from a scientific perspective, this notion
4 that five of these claims you're just looking at to see
05: 35: 31 5 how the company reacts, is that really a scientifically
6 reliable principle?

7 A I don't think science has anything to do with
8 it. I think that's a management decision. And so in
9 many cases I've worked on, immediately management
05: 35: 50 10 wanted to know what happened. They wanted to cooperate
11 to find out what the problems are and how they can make

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12 it better. That's a management decision, so it's not a
13 scientific decision.

14 Q So this is not a scientific finding that
05:36:04 15 supports your opinion; is that correct?

16 MR. EPSTEIN: Objecti on. Vague and ambi guous
17 as to what the finding is.

18 THE WITNESS: Well, there are two things
19 there. There are the pictures that support my opi ni on
05:36:13 20 and then there is my belief of the management
21 procedures in the -- in the -- not creating a design
22 group to look at these probl ems.

23 BY MS. NAYLOR:

24 Q Okay. And, again, I'm splitting it out
05:36:25 25 between the four cases that you have pictures in and

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1 the other five, more than half, that you don't have
2 pictures or any information about the failure or the
3 circumstances of the failure.

4 A That's for me. The company, of course, has
05:36:38 5 all nine. And so they have a little more
6 responsibility to look at the management procedures
7 that they're gonna follow.

8 Q And so for the five -- I understand what
9 you've told me, what your belief is as to what the
05:36:52 10 company's management should do -- but for those five,
11 are those scientifi cally valid findi ngs that you can
12 rely on in rendering an engi neeri ng opi ni on?

13 MR. EPSTEIN: For what purpose?

14 THE WITNESS: For what purpose?
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05: 37: 05 15 BY MS. NAYLOR:

16 Q For testi fying in thi s case.

17 MR. EPSTEIN: Vague and ambi guous questi on.

18 THE WITNESS: To a li mited extent, I can say
19 that I'm aware of ni ne issues and that I'm not aware --

05: 37: 18 20 it may exist -- but I'm not aware of anything that

21 management has done to change the design of the
22 parti cular MAPP cyl inder s that we're loo king at.

23 BY MS. NAYLOR:

24 Q But ni ne issues that may or may not be si mi lar

05: 37: 29 25 to Mr. Sha laby' s issues; is that correct?

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1 MR. EPSTEIN: Obje cti on. Overly broad to the
2 scope.

3 THE WITNESS: May or may not? Well, I think
4 four of them are. Five of them may be. I think I made
05: 37: 43 5 mysel f clear, if you want me to go over it again.

6 BY MS. NAYLOR:

7 Q No. I'm good. Thank you.

8 A Thank you.

9 Q Cou ld you tel l me whether you agree or

05: 37: 52 10 di sagree wi th thi s sci enti fi c pri nci ple: When rely ing
11 on experi ments or resea rch of others, the i nvesti gator
12 must ensure that the condi ti ons and ci rcumstances are
13 suffi ci ently si mi lar.

14 A Cou ld I have that again, please?

05: 38: 08 15 Q When rely ing on experi ments or resea rch of
16 others, the i nvesti gator must ensure that the
17 condi ti ons and ci rcumstances are suffi ci ently si mi lar.

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18 MR. EPSTEIN: The question lacks foundation as
19 to the source of the statement.

05: 38: 20 20 BY MS. NAYLOR:

21 Q And I'll give that to you. It's NFPA 921.

22 A It sounds like it.

23 I didn't see it connect. It says if I'm

24 relying on it, let's make sure that the conditions are

05: 38: 37 25 similar. There's some issue, and if I'm going to rely

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1 on that, I need to make sure that they represent what
2 I'm interested in, what I'm working on. I don't see
3 connection with anything that we're talking about in
4 this case.

05: 38: 54 5 Q The fact that you have no idea whether five of
6 these nine claims that you reference in your report are
7 even the same failure or failure circumstances is not
8 relevant to this case?

9 MR. EPSTEIN: Objection. Overly broad as to
05: 39: 13 10 scope.

11 THE WITNESS: Thanks for bringing it home.
12 Their failures. They haven't been described. I would
13 imagine, again, this goes to the company's side of
14 management procedures, that if they had a failure they
05: 39: 24 15 should be well documented in so many ways that they'll
16 never have that one again. I didn't see that. So the
17 negative aspects of that is, yeah, somebody says that
18 they're going to sue us. We don't have any information
19 on it.

05: 39: 44 20 BY MS. NAYLOR:

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21 Q How does that -- strike that.

22 In these nine cases, do you know whether or
23 not the same products were involved that Mr. Shalaby
24 supposedly was using at the time of his accident?

05: 40: 02 25 MR. EPSTEIN: Objecti on. Overly broad in

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1 referencing nine cases in one questi on.

2 THE WITNESS: No. The ones I have pictures
3 seem to indicate just by labeling that they're similar.
4 A different torch head was used in the one. But, no, I
05: 40: 17 5 don't have any more information other than the photos.

6 BY MS. NAYLOR:

7 Q The one where there was a picture of a
8 different torch head, that was the Welch case which we
9 marked as Exhi bi t 6B?

05: 40: 31 10 A Yes.

11 Q And did the fact that there was a different
12 torch head on that cylinder make any difference in your
13 analysis?

14 A That it appeared to fail at the weakest point,
05: 40: 42 15 the weakest design point? Not really, no.

16 Q And are you familiar with whether or not any
17 of these cases involved cylinders other than the
18 Bernzomatic labeled cylinders?

19 A I have no more information, no.

05: 41: 05 20 Q You also testified earlier that you believe
21 there was force applied to the torch which caused the
22 braze to fail.

23 A Or the cylinder. Yes.

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24 Q The braze or the cylinder?

05: 41: 34 25 A Yes.

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1 Q And do you have any opinion as to what that
2 force was?

3 A I think we went over that in some detail. Did
4 he throw it? Did he kick it? Did he drop it?

05: 41: 52 5 Manhandle it in some way? No, I do not know what the
6 force was.

7 Q And as far as you're concerned, could it have
8 been any of those scenarios?

9 A Even the bizarre ones, I suppose.

05: 42: 05 10 Q Are any of them more likely than the others?

11 A I think the most likely --

12 MR. EPSTEIN: Asked and answered.

13 THE WITNESS: -- based upon my work is that
14 the braze was not strong enough and that at some low

05: 42: 19 15 level there was some force put on the tip, maybe by
16 moving it or shaking it or something like that or
17 striking something that would have caused the
18 separation. That's, I think, more likely than not.

19 MS. NAYLOR: I'm going to pass it on to

05: 42: 53 20 Mr. Carruth.

21 EXAMINATION

22 BY MR. CARRUTH:

23 Q Dr. Anderson, my name is Lowell Carruth, and
24 I'm one of the attorneys from Western Industries, Inc.

05: 43: 02 25 in this case. If I ask any question you don't

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1 understand, ask me to repeat it or explain it.

2 First of all, when were you first retained in
3 this case?

4 A That's one of the documents here, which is my
05: 43: 12 5 first contact. Let's see if I can find it.

6 Q Can you please?

7 A It's gonna be a list of these. Service
8 agreement was sent to me along with a retainer and that
9 was November 2nd 2006.

05: 44: 15 10 Q But at that time do you know whether a
11 complaint had been filed in this case?

12 A I don't.

13 Q Were you ever given a copy of the complaint
14 that was filed?

05: 44: 24 15 A If it's in my files, I have. If not, I
16 haven't.

17 Q Well, you've got a list of the things here
18 that were -- of the materials reviewed and I don't see
19 where the complaint was listed.

05: 44: 40 20 A I don't remember reading one, but it would be
21 in my list.

22 Q Do you have any recollection of recalling what
23 the theory of the complaint was as originally filed by
24 the attorney for the Plaintiff?

05: 44: 54 25 A No, I don't.

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1 Q Now, it's not your opinion in this case that a
2 blebby occurred, right?

3 A Boiling liquid?

4 Q Right.

05: 45: 06 5 A Right. No, it's not.

6 Q And so, if in the original complaint there was
7 a contention that it was a blebby, that would be
8 inconsistent with your opinion, right?

9 A I think that whenever that complaint was filed
05: 45: 19 10 at that time that might have been consistent. I think
11 that my own tests that were done last month show that
12 that's unlikely.

13 Q You understand that Mr. Shalaby is an
14 attorney, correct?

05: 45: 33 15 A Yes.

16 Q And you gathered that information from looking
17 at his deposition, right?

18 A Correct. And meeting him.

19 Q And you would think that, as an attorney, he
05: 45: 45 20 would know what's in his original complaint that's been
21 filed?

22 MR. EPSTEIN: Objection. That's
23 argumentative. And it's vague and ambiguous.

24 THE WITNESS: Now you're asking me as a
05: 45: 58 25 material metallurgist engineer what an attorney would

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1 know or not know? I'm totally ignorant on that. I
2 can't answer that.

3 MR. EPSTEIN: I'm also going to object. It

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05: 46: 10 4 mi srepresents the evidence as to what the complaint
5 contains.

6 BY MR. CARRUTH:

7 Q Now, in the -- what you have done is, you
8 have -- you were given three exemplar cylinders, right?

05: 46: 32 9 A No. I was given seven, and I decided that
10 three would be enough to get an understanding of the
11 quality of the brazing.

12 Q What happened to the other four?

13 A You have them here.

14 Q Do you have -- where are they?

05: 46: 46 15 A Wherever the box is. Over here.

16 Q Would you get them? I'm sorry. I didn't
17 realize.

18 MS. NAYLOR: Does your paralegal have them?

05: 47: 04 19 MR. EPSTEIN: No. They're here. Here's two
20 of them. I'll get the other two. Two at a time.

21 MR. CARRUTH: Do we have the other two?

22 MR. EPSTEIN: I'm not sure.

23 MR. ERGO: We have several sections of ones in
24 there.

05: 47: 45 25 THE WITNESS: There's three that have been cut

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1 in half.

2 BY MR. CARRUTH:

05: 47: 55 3 Q Well, on the record, what I have been handed
4 are two cylinders that appear to be full, and they have
5 identification marks on the bottom of them.

6 Why don't you tell us what they are? I'll

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7 give them to you.

8 A W9G35W. W8G230E.

9 Q Is it your recollection that there are two
05: 48: 24 10 others someplace, two other cylinders that you were
11 delivered?

12 A Okay. The total started out with seven. You
13 have two that are untouched, you have three that we've
14 cut, and then two that were tested in Mount Shasta.

05: 48: 44 15 And in addition, in the other boxes, there are MAPP-Pro
16 cylinders.

17 Q Okay. Now, from whom did you receive these
18 cylinders?

19 A From whom?

05: 48: 56 20 Q Yes.

21 A The "whom" was Mr. Epstein.

22 Q Was every one of the cylinders -- what was the
23 year of manufacture of each of the cylinders that you
24 were delivered?

05: 49: 08 25 MR. EPSTEIN: Calls for speculation.

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1 THE WITNESS: Apparently the year is coded by
2 the alphabet and these were G. The one that is
3 defective as without testing was an E.

4 BY MR. CARRUTH:

05: 49: 21 5 Q So the E, as you understand it, would have
6 been manufactured in 2005; is that right?

7 A I have never been given the code, but that
8 makes sense that it would be several years before 2007,
9 yes.

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05: 49: 34 10 Q And the others are G's?

11 A I think --

12 Q 2007, is that right?

13 A Yes.

14 Q And from a scientific standpoint --

05: 49: 48 15 A And I say that because MAPP-Pro, I believe, is

16 an H.

17 Q And the MAPP-Pro is an H, so that would be

18 2008?

19 A Yes.

05: 49: 54 20 MR. EPSTEIN: Objection. Calls for

21 speculation. Lacks foundation he knows what the codes

22 mean.

23 BY MR. CARRUTH:

24 Q Well, that's your understanding based upon

05: 50: 02 25 what you've read?

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1 A Not what I've read. What I have observed.

2 Q Now, what you are doing -- strike that.

3 Did you ever ask for a cylinder manufactured

4 in 2004 or 2005 to do any testing?

05: 50: 27 5 A No, I did not.

6 Q Now, the -- you concluded that there are both

7 a design defect and a manufacturing defect with respect

8 to the subject cylinder and torch, right?

9 A For the basis that we've explained, yes.

05: 50: 50 10 Q So your solution to the design defect would be

11 to make larger the central valve housing or the

12 connection?

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13 A Well, I want to, first of all, strengthen the
14 cylinder itself by putting in a sheet that's something
05: 51: 07 15 like a doughnut which would give more strength in that
16 area. And then by having a fault-free brazing going
17 all the way down to that piece would certainly
18 strengthen the whole issue. Yes, that would -- that
19 would be a design change.

05: 51: 24 20 Q You could also spread out the torch, the area
21 where the torch connects?

22 A The fitting.

23 Q The fitting.

24 A The valve fitting. Yes. Because the stresses
05: 51: 39 25 are less because they have a greater area.

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1 Q If -- just, for instance, if the torch were
2 shorter, it would require more forces on the end of the
3 tip of the torch to cause any kind of fracture?

4 A That is correct. But there's an interesting
05: 51: 57 5 design in the one I tested. If you see here, if you
6 put enough force on it, it collapses. In other words,
7 there's a safety design built into it. Very clever.
8 You'll see that tip is collapsed.

9 Q I don't understand. You'll have to explain
05: 52: 14 10 it.

11 A Well, suppose that I'm -- say, you're gonna
12 put a force on this tip. Let me assume that I'm going
13 to put some weak area somewhere in here that the worst
14 thing it could happen is not that it's gonna fail and
05: 52: 28 15 vent but that this tip would break off, and the one

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16 that I tested, that tip truly did collapse.

17 Q And which unit was that?

18 A One that I tested in Mount Shasta. That's in
19 the box.

05: 52: 42 20 Q Now, you say you tested. Did you test that,
21 or did they test that up in Mount Shasta?

22 A I'm the one that tested it at Mount Shasta.

23 Q And you say that the tip collapsed on that?
24 Show me what happened.

05: 53: 12 25 A This is a different tip. It's not the

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1 expensive one. You notice how it failed right here
2 when the force was put on it? Very clever design.

3 Q How much force was put on that to cause it to
4 collapse?

05: 53: 27 5 A Probably -- I'm trying to think -- it's on the
6 video. I'd have to look at the video again. Perhaps
7 20 pounds.

8 Q But it's your opinion that this is not what
9 happened with respect to Mr. Shalaby's case?

05: 53: 43 10 A I believe there was a torch tip of the TS4000.

11 Q Pardon me?

12 A This tip is referred to as the TS4000. It's a
13 little bit stronger than that one.

14 Q So the tip -- with respect to Mr. Shalaby's
05: 53: 58 15 accident, the TS4000, you don't believe it collapsed
16 as --

17 A I think it has the capability in this area,
18 but, no, I don't believe it did collapse.

81709TS

19 Q Now, if in fact the trier of fact believes
05:54:19 20 that the canister or the cylinder failed, the body of
21 the cylinder failed and that caused Mr. Shalaby's
22 accident, then your opinions about there being a design
23 problem didn't have anything to do with this accident,
24 does it?

05:54:41 25 A Can I have that again?

♀

219

1 MR. EPSTEIN: Objection. Unintelligible.

2 BY MR. CARRUTH:

3 Q I want you to assume that instead of a failure
4 at the central valve housing, but rather there was a
05:54:56 5 failure in the wall of the canister.

6 A Okay. So there was another defect.

7 Q At the time of Mr. Shalaby's accident.

8 A Right.

9 Q Your opinions concerning a defect or a
05:55:10 10 manufacturing defect or a design defect at the central
11 valve housing wouldn't have anything to do with
12 this accident?

13 MR. EPSTEIN: Objection. Lacks foundation.

14 Incomplete hypothetical. Go ahead.

05:55:22 15 THE WITNESS: That's not true. That's clever,
16 but not true. Because it's still the area of highest
17 stress, and if it failed somewhere else in the body of
18 the cylinder, then there is some problem going on in
19 the cylinder that we don't know about.

05:55:34 20 But from the design standpoint, from the work
21 I've done, from the tests I've done, this particular

2007-10-16 soni a dunnruiz dts

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UNITED STATE DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

---o0o---

ANDREW SHALABY,

Plaintiff,

vs.

No. C06-07026 CW

NEWELL RUBBERMAID, INC.,

Defendants.

_____ /

SONIA DUNN-RUIZ

Taken before TIFFANY D. DEUSEBIO
A Certified Shorthand Reporter
In and for the State of California
CSR No. 9086, RPR, CRR
October 16, 2007

DIABLO VALLEY REPORTING SERVICES
Certified Shorthand Reporters
2121 N. California Blvd., Suite 310
Walnut Creek, CA 94596
(925) 930-7388

Deposition of SONIA DUNN-RUIZ - October 16, 2007

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2007-10-16 sonia dunnruiz dts

13 A. Well, the torch too. The whole mechanism.

14 Q. How long did it take him to light the campfire?

15 A. Just a few seconds.

16 Q. And describe the campfire for me.

17 MR. EPSTEIN: Objection. Vague and ambiguous.

18 THE WITNESS: Well, it's in a cement ring, and

19 he stacks it up, he says, Boy Scout style, which is kind

20 of staggered.

21 BY MS. HUANG:

22 Q. Describe the size of the flame for me.

23 MR. EPSTEIN: Objection. Overly broad as to

24 time frame.

25 THE WITNESS: It was, I'd say, six to eight

Deposition of SONIA DUNN-RUIZ - October 16, 2007

32

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1 inches.

2 BY MS. HUANG:

3 Q. And how long did the campfire last?

4 A. It started going out around, I'd say, 9:15, and

5 it was just down to embers.

6 Q. And did your husband decide to use the torch and

7 cylinder again?

8 A. We decided to light a new campfire, yes.

9 Q. And when did you make that decision?

10 A. That was real close to 10 o'clock.

11 Q. Was there a discussion about it?

12 A. Yes, there was.

13 Q. Describe for me what sort of discussion took

2007-10-16 sonia dunnruiz dts

14 place between you and your husband about the campfire.

15 A. Well, we talked about should we go into the RV
16 and call it a night, or being that it was so nice,
17 should we just stay out until quiet time, which was
18 11 o'clock. And we decided to stay outside and relight
19 the fire.

20 Q. Okay.

21 After the decision was made, then what did your
22 husband do?

23 A. He went to the pile of logs and picked up about
24 three or four logs and placed them in the pit. And then
25 he walked to the table and picked up the torch. And he

Deposition of SONIA DUNN-RUIZ - October 16, 2007

33

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1 lit the fire.

2 Q. And then what happened?

3 A. Then that's when the accident happened.

4 Q. Okay.

5 When he lit the fire how were you positioned?

6 MR. EPSTEIN: I'm sorry. And you mean at the
7 moment that he ignited the torch? Or it's kind of
8 overbroad.

9 BY MS. HUANG:

10 Q. Let me clarify.

11 Based on your husband's deposition last time, we
12 understand that at the moment that he ignited the
13 accident torch and cylinder at approximately 10:00 p.m.

2007-10-16 sonia dunnruiz dts
14 your back was turned towards him, and you were walking
15 towards the RV. Is that your understanding?

16 A. Yes, I was walking towards the RV.

17 Q. Therefore you did not see how the accident
18 happened. Is that correct?

19 MR. EPSTEIN: Objection. Argumentative.
20 Misstates testimony.

21 THE WITNESS: I did not see the exact moment
22 that it happened.

23 BY MS. HUANG:

24 Q. Before turning your back towards your husband
25 and walking towards the RV, can you tell me what you did

Deposition of SONIA DUNN-RUIZ - October 16, 2007

34

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1 observe?

2 A. I observed him standing over the fire ring bent
3 over like he was about to light it.

4 Q. Okay.

5 When was the first moment that you became aware
6 of the accident?

7 A. When I heard a loud hissing sound and saw
8 flames, just a ball of flame in the air.

9 Q. And this is while you still had your back turned
10 towards your husband and walking towards the RV?

11 A. Right. The flames reflected off the RV.

12 Q. And then what did you do?

13 A. I turned. I saw he was engulfed in fire, and he
14 was stumbling and running. And I ran after him and

2007-10-16 sonia dunnruiz dts

15 screamed for him to stop running.

16 Q. Mr. Shalaby described in his deposition that he
17 threw the accident torch and cylinder. Did you see
18 that?

19 A. Yes.

20 Q. Describe for me what you observed as far as his
21 throwing of the accident torch and cylinder.

22 A. Well, when he was stumbling back away from the
23 pit and toward the RV, he stopped for a moment, and he
24 took the torch and he tossed it away several feet.

25 Q. Was he tossing it into the fire ring?

35

Deposition of SONIA DUNN-RUIZ - October 16, 2007

♀

1 A. No.

2 Q. Which direction was he tossing?

3 A. He was tossing it toward the fence.

4 Q. Did you see where the torch and cylinder landed?

5 A. Yes.

6 Q. Where did it land?

7 A. It landed, from where he was, probably ten feet
8 away in the dirt.

9 Q. I'd like to use the diagram that is marked as
10 Exhibit 12 to your husband's deposition to get a better
11 sense of where each of you was positioned, where
12 ultimately the accident torch ended up.

13 Going off the record.

14 (Brief recess taken from 02:05 p.m. to

15 2007-10-16 sonia dunnruiz dts
02:13 p.m.)

16 BY MS. HUANG:

17 Q. Ms. Dunn-Ruiz, back on the record. Let me show
18 you what's been marked as Exhibit 12 to your husband's
19 deposition.

20 Please identify for me, and I'll lend you my
21 pen, where you were at the moment of the accident when
22 you were walking towards the RV.

23 A. I was about here.

24 Q. Can you just put your initials next to that red
25 dot. Okay.

Deposition of SONIA DUNN-RUIZ - October 16, 2007

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1 And where was your husband?

2 A. He was about here.

3 Q. Can you put his initials next to that red dot.

4 At the moment that you turned away from your
5 husband and walked towards the RV, the red dot showing
6 letters AS indicates where you last saw your husband
7 before turning away?

8 A. No. Last time -- when I saw him before walking,
9 he was right here, somewhere along here. When he was on
10 fire, he was here.

11 Q. Okay. Could you go ahead and put for me --
12 label where you marked X AS and maybe put one.

13 So let the record reflect the document that we
14 will be marking Exhibit 4 to Ms. Dunn-Ruiz's deposition,
15 that she has marked an X on the diagram with initials

2007-10-16 sonia dunnruiz dts

16 AS1. That is the location of Mr. Shalaby when she
17 turned away from him.

18 MR. EPSTEIN: Is that correct?

19 THE WITNESS: Yes.

20 (Document marked as Defendant's Exhibit 4
21 for identification.)

22 BY MS. HUANG:

23 Q. And after becoming aware that an accident had
24 taken place, you turned towards your husband. Correct?

25 A. Yes.

37

Deposition of SONIA DUNN-RUIZ - October 16, 2007

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1 Q. And then where did you see him at that moment in
2 time?

3 A. I saw that he was on fire.

4 Q. And in terms of location, where was your
5 husband?

6 A. He was stumbling, and he was about here.

7 Q. Okay. Let the record reflect that Ms. Dunn-Ruiz
8 has shown Mr. Shalaby was running from the place marked
9 X towards the circle. Let's identify as AS2.

10 A. Well, he was stumbling backwards.

11 Q. Okay. But he was stumbling towards that red
12 circle marked as AS2. Is that correct?

13 A. Correct.

14 Q. Now, when you saw Mr. Shalaby throwing the
15 accident torch and cylinder, where did the accident

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

ANDREW SHALABY and SONIA DUNN-RUIZ,)
)
Plaintiffs,)
)
vs.) No. C06-07026CW
)
NEWELL RUBBERMAID, INC., RUBBERMAID,)
INCORPORATED, and THE HOME DEPOT,)
INC.,)
)
Defendants.)
_____)

DEPOSITION OF WARREN L. RATLIFF, JR.

Taken at San Diego, California

April 17, 2007

Reported by Catherine Gautereaux, CSR
Certificate No. 3122

□

1 Appearances:

17 2006?

18 A Approximately, yes.

19 Q And they work over a 24-hour period, I assume,
20 in, like, maybe three different shifts?

21 A Yes.

22 Q Typically, on a shift that would include the
23 hours of, say, nine o'clock p.m. to midnight, how many
24 of those ten or so rangers would be on duty at Campland?

25 A On that particular evening, I believe there

12

□

1 was two.

2 Q And that's in addition to you, or including
3 you?

4 A Including me.

5 Q Okay. What other ranger, if you can recall,
6 was on duty that night?

7 A Would have been Randy Stephens.

8 Q Do you know how he spells his last name?

9 A S-t-e-p-h-e-n-s.

10 Q In addition to the security staff, which would
11 have involved you and Mr. Stephens or "Steffen," or
12 however he pronounces it, would there have been other
13 Campland employees on duty at that time of night?

14 A I am not quite understanding you.

15 Q Your duties, as I understand it, as park
16 ranger, would have been overall supervision of what was
17 going on and anybody who would have been, for the sake
18 of example, working at a snack bar, at a laundry

19 facility, or anybody else that was employed by Campland
20 at that time of night?

21 A Yes.

22 Q Okay. Who else would have been employed at
23 that time of night?

24 A We do have janitorial staff.

25 Q Okay. Do you remember any of them that were

13

□

1 on duty that particular evening?

2 A No, sir, I do not.

3 Q Okay. Other than rangers and janitorial
4 staff, any other Campland employees that likely would
5 have been on duty at or about the time this incident was
6 recorded?

7 A I don't recall, but there was a possibility.

8 Q If there was somebody else, what in your mind
9 might have been their function for Campland?

10 A We do have a game room attendant, usually,
11 till eleven o'clock.

12 Q Do you know who that would have been in April
13 of 2006?

14 A No, sir.

15 Q Is there anybody that would perform the
16 function, say, of dispatcher or clerk or something so
17 that if you guys were out patrolling the Campland area
18 and an event was recorded, they could get on the radio
19 or a cell phone, or however you communicate, and say,

20 "We need you over at Campsite G112" or whatever?

21 A That would have been myself.

22 Q That would have been you, okay. Once you
23 learned about this incident from the campers who came to
24 the gate, did you go to the incident site?

25 A I told my employee, Randy Stephens, to

14

□

1 dispatch himself immediately to the site.

2 Q And how was that done, Mr. Ratliff? By phone?
3 By radio?

4 A I believe, by radio. And I could have called
5 out. He might have been in the proximity where I was
6 able to yell at him.

7 Q I went out there yesterday. It's not far from
8 the guard shack to where what I call "the main building"
9 is. Is it conceivable that he might have been in the
10 main building? Is that what you mean by earshot?

11 A In or around that area.

12 Q In any event, you dispatched Randy to go to
13 the incident site?

14 A Yes, sir.

15 Q Do you know how he traveled there? I mean by
16 foot, in a car or --

17 A By golf cart. Or I should say a golf car.

18 Q In addition to dispatching Randy to the scene,
19 did you do anything else at that point in connection
20 with dealing with this incident? By that I would
21 include maybe yourself calling 911, calling your

22 supervisor or anything like that.

23 A At that particular moment I heard the sirens
24 that was on their way. I then had the -- oh, may I back
25 up a little bit?

15

□

1 Q Sure.

2 A Other staff that was working at that
3 particular time would have been our registration. We
4 had a registration staff there -- that was there.

5 Q Okay.

6 A So I did call him to come and relieve me at
7 the gate and I proceeded to the incident myself by truck
8 and waited as the fire personnel arrived on the scene.
9 Then I escorted them, with them behind me, to the site.

10 Q So if we back up a little bit, in addition to
11 the potential janitorial staff, the game room attendant,
12 there would have been someone in charge of registering
13 guests?

14 A He was normally off at that time, but he
15 happened to be a little bit late that day.

16 Q Do you remember what his name was?

17 A I believe on that particular night it was
18 Alexander, and I do not know the last name.

19 Q Would he have been normally located in what I
20 called the main building, just beyond the guard shack?

21 A Yes.

22 Q Okay. So you asked Alexander to come over and

23 relieve you at the gate?

24 A To monitor the gate for me, yes.

25 Q All right. And then you waited for the fire

16

□

1 department personnel to arrive so that you could take
2 them to the incident scene?

3 A Yes, sir.

4 Q And did you ride with them? Did you take one
5 of the golf cars or carts? Did you take your Toyota?
6 How did you get to the incident scene?

7 A The ranger truck.

8 Q And you knew where the incident occurred
9 because the campers that reported it to you told you
10 what campsite they were at or what --

11 A The campsite where they were at.

12 Q Great. Give me your best estimate in feet,
13 yards, miles, or whatever, how far it would have been
14 from the gate, where you were working, over to the
15 incident site by way of travel. Not the way the crow
16 flies, but how far did you have to drive to get there,
17 roughly?

18 A I would estimate anywhere from 300 to
19 400 yards.

20 Q So it would have only taken you probably a
21 minute or less to get there?

22 A Yes, sir.

23 Q Mr. Ratliff, when you arrived at the campsite
24 where the incident had occurred, who else was already

25 there?

17

□

1 A Several campers and guests that were in other
2 sites; my ranger staff, Randy; I believe, the
3 gentleman's wife or girlfriend -- I'm not sure of that.
4 I recall one child, and the fire truck with its crew,
5 and the paramedics and their crew.

6 Q And they were basically traveling with you?

7 A Yes. They were behind me.

8 Q While you were there at the campsite where the
9 incident had happened, did anyone else arrive? And by
10 that I would include, did any police respond or
11 ambulance or anything else?

12 A The ambulance did come behind the fire staff.

13 Q Were they in the same --

14 A Yes.

15 Q -- caravan, basically? Did any police
16 agencies respond at all?

17 A No, sir.

18 Q I realize there were a lot of different people
19 there doing a lot of different things, and right now
20 this question pertains to you specifically, Mr. Ratliff.

21 Did you make a list anywhere of the names of
22 the fellow campers that came to the site, that were
23 milling about, that might have information?

24 A I did not make a list of names.

25 Q Whether or not you know any of their names,

□

1 did you speak with any of them about what happened?

2 A Yes, I did.

3 Q Do you have any recollection, as you sit here
4 today, of what any of these people told you?

5 A Well, I have different stories from each
6 individual.

7 Q All right. I know it would be difficult to
8 put a name with a story, but maybe you could do it
9 chronologically or in your mind, "This person that
10 looked like this said 'X'." Can you kind of tell us the
11 various stories that you heard?

12 MR. STEPHAN: I'll just object. Vague as to
13 time. I guess, talking about that night?

14 MR. MOORHEAD: Yes.

15 BY MR. MOORHEAD:

16 Q I'm just talking about there, at the site
17 things that were told to you.

18 A Well, when I arrived on the site, I secured
19 the site, observed the individual. We tried to help the
20 fire department take care of that individual, first.

21 At that time I had Randy continue to do --
22 stay with him and monitor him and the campsite itself.
23 I then went to the first campsite to the left of that
24 campsite -- those were the individuals that also made
25 the original call, I guess, for 911 -- and spoke to

□

1 them.

2 The one female in that group gave me a story
3 of -- that the guest in that site was trying to light
4 the campfire with the torch and it would not light, and
5 was banging the torch on the side of the fire ring.

6 Q Okay.

7 A Another guest --

8 Q Now, I don't want to go further because I want
9 to make sure I understood the question. A lady from the
10 campsite to the left of Mr. Shalaby's campsite --
11 Mr. Shalaby being the individual that was injured -- to
12 the left as you're facing --

13 A Facing his campsite.

14 Q His campsite. A woman in that group told you
15 that she had observed him trying to light the campfire
16 unsuccessfully and banging the torch on -- what did you
17 say? On the campfire ring?

18 A On the campfire ring.

19 Q Then, did somebody else give you a story?

20 A Another individual in that same campsite said
21 that he heard the gentleman was frustrated at not being
22 able to fight -- or to light the campfire. And that was
23 it in that group.

24 Q Okay. Before we move on, 'cause there may be
25 others, when you arrived, was there a campfire burning

20

□

1 in Mr. Shalaby's fire ring?

2 A There was a small campfire that was -- that
3 was lit.

4 Q All right. We talked about the group that was
5 in the campsite immediately to the left of the Shalaby
6 campsite. Did you speak with any other individual?

7 A I spoke with the other campsite to the right
8 of them.

9 Q Okay.

10 A They had a blanket partition, a man-made
11 blanket partition between them.

12 Q Sort of a privacy thing?

13 A Right. Yes, sir.

14 Q Okay.

15 A Then the individual there said they heard a
16 explosion, a large flame. Actually, all of them
17 explained that to me. So there was a large ball of
18 flame and explosion. And that was pretty much it from
19 them.

20 Q Okay. Was that a male or female that gave you
21 that story, if you remember?

22 A I believe it was a male and -- a husband and
23 wife.

24 Q All right. That's all from the campsite
25 immediately to the right of the Shalaby campsite. Did

21

□

1 you talk to any other campers?

2 A No. I cannot recall.

3 Q Okay. When you arrived at the campsite where
4 the incident happened, was Mr. Shalaby still there?

5 A Yes.

6 Q Where, physically, was he located in
7 relationship to the physical items that were there?

8 A As I arrived, he was placed, I believe, by
9 other campers in a lounge chair and his feet placed in
10 another lounge chair within three feet from the campfire
11 ring.

12 Q To prop his feet up, you mean?

13 A Yes.

14 Q And, I assume, someplace away from the fire
15 ring?

16 A He was about three feet.

17 Q Okay. All right. What about his girlfriend,
18 or wife? Where was she when you arrived, if you
19 remember?

20 A I don't recall.

21 Q Okay. You made reference to a child. Where
22 was that child located, if you remember?

23 A I believe the child was standing in the wind
24 break. We have a wind break there in the corner, kind
25 of out of the way.

22

□

1 Q And by "wind break," you're talking about,
2 like, a wooden fence?

3 A Yes.

4 Q Do you remember whether the child was male or
5 female?

6 A No, I do not.

7 Q Okay. When you arrived at the scene, what is
8 your best recollection of where the cylinder and/or
9 torch were located?

10 A From where Mr. Shalaby was sitting in the
11 chair, where he was placed by other guests, after that,
12 the cylinder was to his rear, facing the campsite.
13 Mr. Shalaby would be to the right, in the chair. The
14 cylinder was behind Mr. Shalaby, in the dirt,
15 approximately four feet.

16 Q Four feet from him. How far from the fire
17 ring?

18 A Circular, three feet, probably. The same
19 distance as he was.

20 Q Okay. At that time, when you first noticed
21 the cylinder and the torch, were they attached to each
22 other?

23 A They were still attached.

24 Q Was there any flame coming from the cylinder
25 and torch at that point?

23

□

1 A No, sir.

2 Q As part of your duties that evening, did you
3 do anything specifically to inspect that equipment?

4 A Yes, sir.

5 Q What is it that you did, that you can recall?

6 A First of all, I secured the site, picked the
7 cylinder up -- well, I inspected the cylinder to make
8 sure that it wasn't still in the explosive state, then
9 picked it up to remove it from being a potential hazard
10 from anybody else, held it in my possession the entire
11 time, and went to the fire department's engineer, who
12 was standing there, asked him if they needed this for
13 anything.

14 His reply to me was, he was going to speak to
15 his captain -- he was making a report in the
16 ambulance -- and he would get back to me.

17 Q We'll get to that conversation in a minute.
18 Back to your observations: What observations can you
19 recall making about the cylinder and the torch when you
20 first came into contact with them?

21 A At that particular moment, the only
22 observation that I observed, that it was MAPP; MAPP gas.

23 Q So you're familiar with the type of gas that
24 was in the cylinder?

25 A Yes, sir.

24

□

1 Q Okay. When you first came in contact with the
2 cylinder and the torch, were they still hot?

3 A I picked the cylinder up, and it was not hot
4 at that time.

5 Q Okay. How about the torch? Was it hot?

6 A I did not -- I don't recall, myself, touching

7 the torch end of it.

8 Q Okay. Did you observe any signs as if the
9 cylinder had exploded; by that I mean any holes in it,
10 any cracks, any fissures, anything like that, in the
11 sidewall or bottom or neck or anything else on the
12 cylinder?

13 A At that particular time, the cylinder was not
14 an issue. I did all my observation after the --
15 Mr. Shalaby was taken care of.

16 Q Okay. Well, let's move on in time, then, to
17 that point in time when you made your observations. At
18 that point, after he had been taken care of, what
19 observations do you recall making about the cylinder or
20 torch at that point in time?

21 A As I took the cylinder back to the gate, I
22 observed the cylinder had a right-angle bend to it at
23 the torch, where the connection to the cylinder is, and
24 appeared to be a crack in the cylinder at the bottom
25 thread level of the cylinder.

25

□

1 Q Okay. If we -- you're familiar with what they
2 look like when they are disassembled, the torch from
3 the --

4 A Yes, sir.

5 Q All right. If you were to look at a MAPP gas
6 cylinder from the store before it goes through any type
7 of event like this one may have, it's shaped somewhat

8 like my soda bottle, maybe not as tapered, but it comes
9 basically straight up and then it tapers, and then it's
10 got a neck on the top, that's threaded, right?

11 A Yes, sir.

12 Q Okay. And what color is it?

13 A It is yellow.

14 Q A MAPP gas cylinder is always yellow, right?

15 A Yes, sir.

16 Q And what you've just described for me is that
17 the neck of the cylinder that you observed at the gate
18 following taking care of Mr. Shalaby, was bent?

19 A Not the neck.

20 Q Okay. What part was bent?

21 A Well, I don't know if the neck -- 'cause I
22 never did disconnect the torch head from the cylinder.

23 Q Then, I misunderstood you.

24 A It just appeared to be a split along the very
25 bottom, the last thread of the neck.

26

□

1 Q The lowest thread --

2 A The lowest thread.

3 Q -- as it's sitting on its bottom?

4 A The main cylinder -- body of the cylinder, to
5 the first thread up on the neck.

6 Q Now, this crack, or whatever you're
7 describing, is that going -- if the cylinder is sitting
8 on its bottom, is the crack going vertically or
9 horizontally, that you saw?

10 A I believe it was kind of in both directions.

11 Q And then you said something about something
12 being bent. Maybe I misunderstood you.

13 A The top torch nozzle itself was at a right
14 angle from that position, from the crack itself.

15 Q Okay. So let's stop a minute. The torch --
16 you've seen these torches as they come from the store?

17 A Yes, sir.

18 Q And they have a bend in them when they're in
19 their correct format, right? They just don't go
20 straight up?

21 A Yes. The nozzle itself has a normal operating
22 bend.

23 Q You're talking about a bend different than the
24 one that would normally be there?

25 A Yes.

27

□

1 Q And where, along the course of the torch from
2 where it screws onto the neck of the cylinder to the
3 tip, where the fire comes out -- where did you observe
4 the bend that you're talking about, that didn't belong
5 there, so to speak?

6 A Observed the bend pretty much at the base of
7 the nozzle and the torch -- the cylinder itself.

8 Q Okay. So --

9 A At the explosion part, or whatever the break
10 in the cylinder was, is where it was actually bent.

11 Q So what you are describing for me, if I
12 understand it -- and correct me if I'm wrong -- is that
13 the unusual bend that you saw was at or near the place
14 that the torch attaches to the cylinder?

15 A That is correct, yes.

16 Q Okay. And did you make any observations of
17 the torch to determine -- and I don't know if you have
18 the expertise to do this or not, but, if you do, let us
19 know -- whether that appeared to be something that was
20 caused by the event or, for the sake of example, one of
21 those people said that Mr. Shalaby was banging it.

22 In other words, did it look more like damage
23 that somebody did to it before the event, or was it
24 melted and bent as a result of the event? What did you
25 see?

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□

1 A I made my personal observation, and based on
2 what witnesses said to me, it could have been a number
3 of things.

4 Q So you didn't come to a conclusion as to what
5 you thought it was?

6 A No, sir.

7 Q Was it inconsistent with having been melted
8 into that position from the fire ball you described?

9 MR. EPSTEIN: Objection. Vague and ambiguous.
10 Go ahead.

11 THE WITNESS: Yes, it was inconsistent.

12 BY MR. MOORHEAD:

13 Q Was it inconsistent with the story that the
14 camper to the left of Mr. Shalaby had said, that it had
15 been banged on the campfire ring?

16 A No.

17 Q So that was one possibility that was in your
18 mind?

19 A Yes, sir.

20 Q Can you remember any other thoughts that came
21 to your mind as to what might have caused the bend that
22 you saw in the torch?

23 A Just the natural explosion itself could
24 have -- or a faulty -- you know, my personal experience
25 with these cylinders is faulty materials, manufactured

29

□

1 materials.

2 Q Okay. What observations did you make that
3 made you believe that it might be that as opposed to any
4 of the other things?

5 A Just my past experience from other previous
6 places working with the stuff.

7 Q So you did not do any type of a qualitative
8 analysis of the metals involved or anything like that to
9 determine if it was --

10 A Negative. No, sir.

11 Q Okay. Did you have discussions with
12 Mr. Shalaby at the scene?

13 A No, sir.

14 Q Did you overhear any discussions Mr. Shalaby
15 had at the scene with other people?

16 A No, sir.

17 Q Did you have -- if I already asked you this, I
18 apologize. Did you have any conversations with his wife
19 or his girlfriend?

20 A Yes, sir.

21 Q Okay. And what, if anything, did you learn
22 from her?

23 A She was very frantic. I couldn't get pretty
24 much any statements from her per se, as she was more
25 worried about his -- his well-being and that, which we

30

□

1 all were. And the only conversation that took place was
2 trying to initially get their address and name, all my
3 original statements. And I couldn't get that out of
4 her.

5 Q Okay. Before we get too far away from it,
6 back to the torch: In addition to this bend, did you
7 see anything else that appeared to be wrong with the
8 torch?

9 A Just that I thought that it could have been
10 put on wrong or not all the way in the on position.

11 Q Okay. You mean when it was attached to the
12 cylinder, it might not have been attached all the way?

13 A Right.

14 Q Okay. How about missing paint, scratches,
15 dents, anything like that?

16 A It appeared to me to be normal wear and tear.

17 Q I don't think I asked you this. About what
18 time was it that you learned of this incident, roughly?

19 A That I learned of the incident?

20 Q Yes.

21 A Approximate times were between 10:15 p.m. and
22 10:30.

23 Q P.m.?

24 A Yes, sir.

25 Q Were you able to determine from any source at

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□

1 the scene of the incident how long before you learned of
2 it, it had happened?

3 A I did not understand that question.

4 Q Sure. You learned of it, you said, somewhere
5 around 10:15 to 10:30, by your conversations with
6 Ms. Ruiz, the wife/girlfriend of Mr. Shalaby, and the
7 other campers.

8 Do you know how long, before that 10:15 or
9 10:30 time frame that you learned of it, that it had
10 actually happened? Like a minute before or ten minutes
11 before or --

12 A I do not know.

13 Q Okay. But, in any event, when they reported
14 it to you, they told you that they had called 911 and --

15 A And it had already happened, yes.

16 Q -- and the sirens were on their way?

17 A Yes, sir.

18 Q You indicated that when you arrived at the
19 scene, Mr. Shalaby was still there. Was he conscious?

20 A Yes, sir.

21 Q Whether or not you heard anything he said, did
22 you observe that he was having conversations with
23 paramedics and ambulance personnel?

24 A Yes.

25 Q Did you observe that he had suffered burns?

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□

1 A Yes, sir.

2 Q Where do you remember on his body seeing
3 burns?

4 A I remember his legs, from his ankles up his --
5 would be above his knees, his hands and arms.

6 Q How about his face?

7 A I did not recall any on his face.

8 Q How about his clothing? Was it burned?

9 A I don't recall the clothing to be burned.

10 Q Did you take any photographs of the incident
11 scene, the victim, the equipment that we talked about or
12 anything else?

13 A No, sir.

14 Q Did you direct Randy to?

15 A No, sir.

16 Q So as far as you know, Campland on the Bay has
17 never had any photographs relevant to this incident?

18 A No, sir.

19 Q The cylinder that you observed when you got to
20 the scene, was it in a condition where it still had its
21 labels?

22 A Yes, sir.

23 Q Okay. Do you remember whether the label was
24 damaged in any way, either burned or scratched off or
25 anything like that?

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□

1 A Appeared to be normal wear and tear.

2 Q Did you make any observations, during the time
3 that the cylinder was in your care, custody, and
4 control, as to whether it still contained any gas?

5 A No, sir, no more gas.

6 Q It was all gone?

7 A It was empty.

8 Q Did you make any determinations, either
9 through your visual observations or the discussions you
10 had, as to whether there were any additional cylinders
11 on site?

12 A No, sir.

13 Q Did you make any determinations as to whether
14 there were any additional torches on site?

15 A No, sir.

16 Q Was there any soot or burn residue anywhere on
17 the exterior of the cylinder?

18 A No, sir.

19 Q You didn't see any anywhere?

20 A No, sir, meaning soot. There was some dust
21 from the ground, if that's what you are referring to.
22 That type of soot.

23 Q I was specifically asking about -- let me
24 rephrase the question so we make sure we are
25 communicating -- any what I would call by-products of

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□

1 combustion?

2 A Any --

3 Q Any soot?

4 A No, sir.

5 Q Okay. All right. Then, going back to
6 something you told us earlier, you gathered up the torch
7 and the cylinder and at some point in the process, I
8 believe, before you went back to the gate, you had a
9 first conversation with fire department personnel about
10 what to do with the cylinder and the torch?

11 A Yes.

12 Q And that was with an engineer?

13 A Was the engineer that I talked to at the --
14 was the first person I brought it to his attention.

15 Q Okay. And he told you he would have to check
16 with his captain?

17 A He said, "Let me check with my captain, and I
18 will get back to you." He was making a report in the
19 ambulance with Mr. Shalaby at that time.

20 Q Okay. And then, at some later point in time,
21 did he answer your question as to whether you needed to

22 keep it or not?
23 A Yes, sir.
24 Q How much later was that answer?
25 A I'd estimate four to five minutes.

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□

1 Q Okay. So you were still at the incident
2 scene?
3 A Yes, sir.
4 Q Okay. And at that point in time the engineer
5 came to you and said, "We don't need you to keep it"?
6 A Yes, sir. And he said to dispose of it
7 however we dispose of them.
8 Q Did he say why he didn't want you to keep it?
9 A No, sir.
10 Q Did anybody connected with the fire
11 department -- captain, engineer, paramedics or anybody
12 else -- indicate to you what information they had
13 gathered about how the incident occurred?
14 A No, sir.
15 Q All right. Then, after the engineer told you
16 he had checked with his captain and you didn't need to
17 keep the cylinder or the torch, what became of them?
18 A Well, that's when I had made my initial -- or
19 my thorough investigation of the cylinder and then took
20 it to -- back to our ranger station, and it was to be in
21 our possession for about two to three days.
22 Q That was the last time you saw it, anyway?

23 A Yes, sir.

24 Q Okay. And by the "ranger station," are we
25 talking about that large building just beyond the guard

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1 gate, or is there a different spot?

2 A No. The ranger gate itself.

3 Q Were you the one who transported the equipment
4 from the incident site to the gate shack?

5 A Yes, sir.

6 MR. EPSTEIN: I don't mean to interrupt you.
7 We have about five minutes before we need to call in.

8 MR. MOORHEAD: Aren't they supposed to call
9 us?

10 MR. EPSTEIN: Oh, I apologize.

11 MR. MOORHEAD: We can go off the record for a
12 second.

13 (Discussion off record.)

14 BY MR. MOORHEAD:

15 Q Did you personally dispose of the cylinder and
16 torch, or did somebody else do that?

17 A I believe another staff did during the day.

18 Q Did you submit the torch or the cylinder to
19 anyone else for examination, evaluation, and testing
20 before telling somebody else to get rid of it?

21 A No, sir.

22 Q So as far as you know, you're the only one who
23 took a look at it?

24 A Yes, sir. I believe Randy was also there with

25 me at the time, and we were discussing it.

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□

1 Q Based upon anything that was told to you or
2 anything you observed while you were at the scene, did
3 any of the adjacent campers take any photographs?

4 A I'm not aware of that.

5 Q As far as you are aware from what you observed
6 or what you were told, did the fire department take any
7 photographs?

8 A No, sir, I'm not aware.

9 Q Give me your best estimate of the total number
10 of fire department personnel that showed up. More or
11 less than ten, maybe, start with.

12 A Approximately eight to ten.

13 Q And they were all from the San Diego Fire
14 Department?

15 A Yes, sir.

16 Q Did they interview you at all?

17 A No, sir.

18 Q Whether it be the evening of the incident or
19 on subsequent occasions, did the fire department ever
20 tell you that they had determined the cause of the
21 incident?

22 A No, sir.

23 Q Were you present when any fire department
24 personnel interviewed or spoke with anyone else at the
25 campsite?

□

1 A I was present, yes.

2 Q Okay. Did you hear any additional stories
3 above and beyond the ones you've told us that were
4 related to you by the campers on both sites?

5 A I've heard additional stories from my staff
6 Randy and -- it was very vague, because I could hear
7 Mr. Shalaby having conversation with the fire personnel.
8 And I do not recall everything that was said.

9 Q So you don't have any recollection of what
10 Mr. Shalaby said to the fire department?

11 A Right. Correct. Yes.

12 Q Do you have any recollection of any stories
13 given by anyone at the scene to fire department
14 personnel, other than the stories that you've told us
15 about that they told you; in other words, a new or
16 different story than the two that you told us about?

17 A No.

18 Q Okay. Did you overhear, while you were at the
19 scene, anybody, whether it be Mr. Shalaby or the people
20 in his group, or adjacent campers, fire department
21 personnel or anyone, say anything about the incident
22 occurring as a result of the cylinder being kicked or
23 dropped into the campfire?

24 A No.

25 Q As a result of this incident, were any reports

□

1 prepared by Campland personnel?

2 A One by myself, and one by my ranger, Randy
3 Stephens.

4 MR. MOORHEAD: All right. The crack staff
5 here at the hotel, that made copies for me, shorted me
6 on staples. So I just kind of dog-eared them. We'll
7 mark that as "1." We'll mark this as Exhibit 1. And
8 even though I understand that you may have the original
9 with you, I think this is an accurate photocopy. So we
10 can work off of it until you find something in here
11 that's visibly unclear.

12 And I will represent to you that what I've got
13 here appears to be the sum and substance of the
14 information that would have been prepared at or about
15 the time of this incident. And I'll go through it. It
16 may not actually be one exhibit, but we're kind of
17 turning it into one --

18 MR. EPSTEIN: A group exhibit?

19 MR. MOORHEAD: -- a group exhibit.

20 (Exhibit 1 marked.)

21 BY MR. MOORHEAD:

22 Q The first page is all typewritten, and on the
23 top it says "Inquire on Non-Active History." Do you see
24 that, Mr. Ratliff?

25 A Yes, sir.

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1 Q That's part of the documentation that Campland
2 has in connection with this incident?

3 A Yes.

4 Q Tell me what this is, how this would have been
5 generated, where it would be kept, things like that.

6 A This was generated after the incident, to
7 receive information on the guest as far as address,
8 personal information that we needed to complete the
9 reports.

10 Q Okay. I am looking near the top. I see "Room
11 D19." Is that the space number where it happened?

12 A Yes, sir.

13 Q What does "Type L" mean to the right of that?

14 A Would be, I believe, left-hand hookups in
15 our -- what they would call site category, so that they
16 know which way the RV is to be going into the campsite.

17 Q Which way it should be oriented?

18 A Yes.

19 Q And then it looks like they've identified
20 Mr. Shalaby here with last name and first name. They
21 indicate that in his group there were the two adults,
22 two children and a dog, basically?

23 A I believe, no dogs.

24 Q It looks like -- well, maybe I'm reading this
25 wrong. It looks like adults, 2; 2 tots; dogs 01.

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1 A Well, it could be on the reservation form. I

2 don't recall a dog.

3 Q And then this address on Leviston Avenue is
4 Mr. Shalaby's address, as you understand it?

5 A The address that he registered under.

6 Q Okay. All right. Then, going to what is the
7 second page of what is -- has been marked as group
8 Exhibit 1 to this deposition, there is something with
9 the heading "Incident Report" at the top, and in
10 handwriting -- in typewriting it says "Report Taken By:"
11 and in handwriting it says "#3 R. Stephens."

12 That's Randy Stephens we've been talking
13 about?

14 A That is correct.

15 Q So this would have been something he prepared?

16 A Yes, sir.

17 Q All right. Then, going to -- going to Page --
18 I'm going to say 3 and 4, because at the bottom of those
19 last two pages it says "Page 1 of 2" and "Page 2 or
20 2" -- this has "WL Ratliff" as the report taken by. So
21 this would have been something you prepared?

22 A Yes, sir.

23 Q And that's your handwriting?

24 A That is correct.

25 Q Give me your best estimate of when this

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□

1 document was prepared.

2 A This particular document was rewritten on
3 7- -- July 12, 2006.

4 Q That's what it indicates at the bottom of the
5 second of two pages?

6 A Yes, sir.

7 Q Okay. Do you know why it was rewritten at
8 that time?

9 A The original statement that I turned in for
10 this was not found.

11 Q Okay. So this was your account of what
12 happened as you recalled it on July 12, 2006?

13 A Yes. I always kept my own personal
14 documentation of incidents.

15 Q Okay. So let's back up. You prepared one at
16 or about the time of the incident?

17 A Yes, sir.

18 Q And they couldn't find that one?

19 A It was, yes, misplaced.

20 Q Okay. Did you have a duplicate of the one
21 that you prepared at or about the time of the incident?

22 A Not a duplicate, but my notes as per se.

23 Q Do you still have those notes?

24 A I don't believe so.

25 Q Okay.

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□

1 A I hand everything at the end of every year,
2 and then it is put in a file.

3 Q So you prepared a handwritten report at or
4 about the time of the incident, and you had some

5 personal notes that you kept?

6 A Yes.

7 Q You found out from some source that the
8 incident report that you had submitted to Campland
9 couldn't be found, so you created Pages 3 and 4 of
10 Exhibit 1 from those notes?

11 A Yes, sir.

12 Q Did you write down verbatim what was in your
13 notes?

14 A Yes, word for word.

15 Q Okay. So if we could find your old notes,
16 they would say just what I'm looking at?

17 A Exactly. Yes, sir.

18 Q All right. Then, looking down near the bottom
19 of Page 1 of your handwritten statement, it makes
20 reference to what you told us about speaking with the
21 fire department about keeping the stuff and they told
22 you that you didn't need to. Is that basically correct?

23 A That is correct.

24 Q But they never told you why they did not want
25 you to keep it?

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□

1 A No, sir.

2 Q Do you know from any source when Randy
3 Stephens' handwritten account was prepared?

4 A The same evening.

5 Q Okay. So this is not another incident where
6 he had to duplicate his later on?

7 A No, sir.

8 Q Looking over the portion of Exhibit 1 that's
9 in your handwriting, do you see anything in it that, as
10 you sit here today, Mr. Ratliff, now looks to be
11 inaccurate? Take a few moments to look at it if you
12 want.

13 A I didn't understand you. Inaccurate in which
14 way?

15 Q Well, maybe you learned things since the day
16 of the incident that, when you look back on it, you say,
17 "Oh, that's what I thought at that time, but, in fact,
18 it was snowing that day," or whatever the case may be.

19 Is there anything in there that, as you look
20 at it now, you say, "I was wrong. That's not what
21 happened"?

22 A No, sir.

23 MR. MOORHEAD: Okay. We are going to mark
24 this as Exhibit 2. But before I give it to the court
25 reporter, I'm going to give it to you. I don't think I

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□

1 have any extras, but it's just the deposition subpoena.
2 It's the subpoena for you to be here today, probably
3 ruining your Tuesday.

4 (Exhibit 2 marked.)

5 BY MR. MOORHEAD:

6 Q If you would, turn to the second page of that
7 document. And there is a list there of what we asked be

8 brought along. All right. Do you see that?

9 A Yes, sir.

10 Q All right. And for the record, could you read
11 what the first category was.

12 A "All reports and witness statements taken in
13 connection with the incident involving Andrew Shalaby on
14 April 21, 2007 at Campland."

15 Q Is Exhibit 1 everything that would meet that
16 description?

17 A I believe, yes, sir.

18 Q Okay. What's the second category?

19 A "All correspondence generated and received in
20 connection with the incident involving Andrew Shalaby on
21 April 21, 2007 at Campland."

22 Q Do you have anything that meets that
23 description at Campland, any letters to anybody, any
24 letters from the fire department, things like that?

25 A I have the one letter.

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□

1 Q Okay. You are holding up something?

2 A I don't -- I never really reviewed it, myself.

3 MR. MOORHEAD: Okay. For the record, what
4 Mr. Ratliff has handed to us -- and I have additional
5 copies of this we can mark as the next exhibit -- is a
6 July 12, 2006, letter from Gary Gunther, adjuster for
7 Crawford, to Therese Kiel at Campland. All right.

8 And it indicates that Mr. Gunther is
9 associated with Crawford & Company and that they were

10 assigned to look into this by Lexington Insurance
11 Company, "which insures BG Western/Western Industries,
12 the manufacturers of gas cylinders."

13 BY MR. MOORHEAD:

14 Q This was something that was in Campland's file
15 when you went to look to find out what documents they
16 have?

17 A Yes, sir. It's from -- my manager at the time
18 received that.

19 MR. MOORHEAD: I'm sure I've got extra copies
20 of this someplace. Let me hand this back to you. We'll
21 mark this as Exhibit 3.

22 (Discussion off record.)

23 BY MR. MOORHEAD:

24 Q Other than this letter dated July 12 from Gary
25 Gunther, at Crawford & Company, to Therese Kiel, who, I

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□

1 understand, was your supervisor at the time this
2 incident happened, any other correspondence that you are
3 aware of that Campland has in connection with this
4 incident?

5 A Just the fax cover sheet that was with this,
6 to our company risk manager at the home office.

7 Q Okay. So this facsimile cover sheet would
8 have transmitted what we've marked as Exhibit 3 to
9 your -- who did you say Mr. Yu was?

10 A Is the company risk manager.

11 Q Okay. So these would have come together?

12 A I believe so.

13 MR. MOORHEAD: Well, let's mark it as a
14 two-page exhibit, then; that being the July 12 letter
15 from Mr. Gunther and the facsimile cover sheet, which
16 bears the date "7-13-06" and the subject "4/21/06 Fire
17 Accident."

18 (Exhibit 3 marked.)

19 BY MR. MOORHEAD:

20 Q Other than that, does Campland have anything,
21 in the form of correspondence or otherwise, that would
22 be responsive to category No. 2 there?

23 A (Witness shakes head.)

24 Q All right. What's category No. 3?

25 A Category No. 3. "All photographs taken in

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1 connection with the incident involving Andrew Shalaby on
2 April 21st, 2007 at Campland."

3 Q I believe, based upon your previous testimony,
4 your testimony now would be that you don't have any
5 photographs?

6 A Yes, that is correct.

7 Q All right. Category 4?

8 A "The canister" or canisters "recovered in the
9 incident involving Andrew Shalaby on April 21, 2007 at
10 Campland."

11 Q And do you still have that?

12 A No, sir.

13 Q All right. Category No. 5?

14 A "The torch recovered in the incident involving
15 Andrew Shalaby on April 21, 2007 at Campland."

16 Q Do you still have that?

17 A No, sir.

18 Q As far as you are aware, does anybody know
19 where either the canister -- or the cylinder, I call
20 it -- or the torch are at this time?

21 A No, sir.

22 Q Other than meeting with us here today to talk
23 about this and meeting with your attorney, have you met
24 with anybody else in connection with this incident,
25 since the date it happened, in the months that have

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□

1 intervened?

2 A I don't understand that question. What do you
3 mean by meeting?

4 Q Well, has anyone approached you -- I guess I
5 should make it broader -- has anyone called you, come to
6 Campland, called you to their office or anything else to
7 talk to you about this incident, the facts of this
8 incident, since everybody parted ways on April 21 of
9 2006?

10 A Yes.

11 Q How many times has that occurred?

12 A One time.

13 Q Okay. And how long ago was that?

14 A Six, eight months ago.

15 Q If you know, is that Mr. Gunther?

16 A I don't know.

17 Q Was that something that was done by a
18 telephone, face-to-face, or what?

19 A First, by telephone correspondence. Then, in
20 person.

21 Q Okay. Telephone call, written correspondence,
22 and then face-to-face?

23 A I'm not aware of any written correspondence.

24 Q Telephone call, then face-to-face?

25 A Yes, sir.

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□

1 Q Where did the face-to-face meeting take place?

2 A At Campland.

3 Q Let's back up to the telephone call. Someone
4 called you, six to eight months ago, to talk about this
5 incident?

6 A They were -- yes. Initially talked about the
7 incident, then wanted to have a meeting face-to-face to
8 review our records.

9 Q Okay. But you don't know the identity of this
10 individual?

11 A No, not -- I don't recall, let's put it that
12 way.

13 Q Okay. And in the telephone conversation they
14 asked you some questions about the incident itself?

15 A Yes.

16 Q Do you remember anything that was talked about
17 in that telephone conversation, separate or different
18 from what we've talked about here today?

19 A No, sir.

20 Q And then in the course of that conversation,
21 he requested that he have an opportunity to meet with
22 you?

23 A Yes.

24 Q And that was at Campland?

25 A Yes.

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1 Q And the stated reason for meeting with you was
2 to look at whatever documents you had?

3 A Right.

4 Q Okay. And did that person come out?

5 A Yes, he did.

6 Q And it was a male?

7 A Yes.

8 Q Did that --

9 A He identified himself as an investigator for,
10 I believe, the insurance company.

11 Q So somebody that would not have been
12 inconsistent with Mr. Gunther, as far as same sort of
13 thing, investigating this incident, and a male?

14 A Well, I do have his business card. I just
15 don't have it with me. And I believe my general manager
16 has -- I think it was left on his desk, but -- at the

17 time.

18 Q Okay. So there might be a way for us to find
19 out who it was that came out and talked to you?

20 A Yes, sir.

21 Q Okay. In any event, when he came out, did he
22 ask you more questions about the incident, separate and
23 different from the ones that he had talked to you about
24 over the phone?

25 A No, sir.

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□

1 Q Did he look at what we've marked as Exhibit 1?

2 A No, sir.

3 Q Did he look at any document?

4 A No, sir.

5 Q What, if anything, did he do when he came out?

6 A Interviewed me.

7 Q Okay. So he asked more questions?

8 A Yes.

9 Q Were they the same questions he had asked over
10 the phone, essentially?

11 A Basically, yes.

12 Q Was he recording that interview in any way?

13 A Not to my knowledge at all.

14 Q So he wasn't writing anything down?

15 A Yes, he was.

16 Q As far as you know, he wasn't tape-recording
17 it?

18 A As far as I know, he was not tape-recording.

19 Q But he was taking notes during the
20 conversation?

21 A Yes.

22 Q Did he ever give you a copy of whatever notes
23 he took?

24 A No, sir.

25 Q Okay. Did he ever tell you that he was going

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1 to get back in touch with you and send you a copy of
2 those notes?

3 A I don't recall the note aspect, but I do
4 recall he was probably going to be in future contact
5 with us.

6 Q Did he ever get in contact with you again?

7 A I don't believe so. I believe it was somebody
8 else at that time.

9 Q Do you think you got in touch with somebody
10 else?

11 A Yes. I was under the impression that he was
12 an investigator for the company and he was referring
13 information to them, so --

14 Q Okay.

15 A Then, they were going to correspond with us.

16 Q Did your superiors ask you to come in so that
17 they could interview you about what had happened?

18 A No, sir.

19 Q Other than Mr. Gunther and the guy we've

20 talked about, who spoke with you over the phone and then
21 came out and asked you some questions, have you spoken
22 with anybody, for the sake of example, that they said
23 that they were with an insurance company investigating
24 the incident? Any people other than what we've talked
25 about?

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□

1 A No.

2 Q Not over the phone? Not in person? Not in
3 writing?

4 A No, sir.

5 Q Great. I don't believe I have --

6 A I believe, a Debbie. But who is Debbie? I
7 think she is with you guys.

8 Q Oh. Deirdre?

9 A Deirdre.

10 Q To set up the deposition?

11 A That's it.

12 Q Other than the conversation setting up today's
13 deposition --

14 A That's it.

15 MR. MOORHEAD: All right. I don't think I
16 have any more questions. Mr. Epstein probably does.

17 (Recess.)

18 MR. EPSTEIN: Back on.

19

20 EXAMINATION

21 BY MR. EPSTEIN:

22 Q Mr. Ratliff, we met off the record. I'm Mark
23 Epstein. I represent plaintiffs in this case,
24 Mr. Shalaby and his wife.

25 You testified a little earlier about your --

55

□

1 it sounded like you have some experience with welding or
2 torches, some background that precedes your work at
3 Campland; is that correct?

4 A That is correct, yes.

5 Q Can you tell me: What is the nature of your
6 prior experience with welding?

7 A I was a certified welder for the Navy.

8 Q Okay.

9 A And in the civil service -- or civil world.

10 Q Is that part of the Navy, or you were a
11 welder --

12 A I was a Seabee, which is steelworker.

13 Q When did you join the Navy?

14 A That was 1979.

15 Q Other than the Navy, is the Seabee -- is that
16 part of the Navy?

17 A Yes.

18 Q Have you served in any other branch of the
19 service?

20 A No.

21 Q And were you stationed here in San Diego?

22 A No.

23 Q Where were you stationed?
24 A Gulfport, Mississippi.
25 Q How long were you in the Navy before you --

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□

1 did you start some sort of apprentice welding program
2 while you were --

3 A Yes.

4 Q How long had you been in the Navy when you
5 started that?

6 A I was in the reserve program, so I was --
7 like, a year, a year and a half, something like that.

8 Q And then you became involved in a welding
9 certification program?

10 A Yes.

11 Q And how long did that program last; the
12 certification?

13 A Nine months, I think it was.

14 Q And was there a name to the -- or a title to
15 the certification you received at the end of that?

16 A Welding certification.

17 Q It came in a nice little plaque?

18 A Oh, yeah. Yes.

19 Q How long did you remain in the Navy?

20 A Till March 23rd, 1982 -- '83. I don't
21 remember.

22 Q Early eighties sometime?

23 A Yes.

24 MR. MOORHEAD: Four-year tour?

25 THE WITNESS: Well, I was in the reserve

57

□

1 program.

2 BY MR. EPSTEIN:

3 Q While you were in the Navy, what applications
4 did you apply your welding skills to?

5 A Oxyacetylene weld, mig weld, tig weld, arc
6 weld, brazing.

7 Q Can you describe the types of projects you
8 worked on, or did you work on ships in dry dock repair?

9 A Mainly, heavy structural steel.

10 Q While you were a member of the Seabees, where
11 were you stationed then?

12 A Gulfport, Mississippi.

13 Q And did you work on projects, for example,
14 with the US -- the Army Corps of Engineers?

15 A I'm not for sure. I know there was Navy --
16 Army Corps of Engineer projects for girl scouts,
17 national forests, you know, that kind of stuff.

18 Q You mentioned various types of -- it sounds
19 like welding gases or fuels you used. Acetylene was one
20 of them?

21 A Yes.

22 Q Are you familiar with MAPP gas?

23 A Yes, I am.

24 Q While you were in the Navy, did you have
25 occasion to use MAPP gas torches?

□

1 A Yes.

2 Q Can you tell me what -- to the best of your
3 knowledge, what MAPP gas is, what its components are?

4 A Well, no, not actually, I guess, but -- I know
5 about it, but --

6 Q All right. In your experience, what did you
7 use MAPP gas torches for?

8 A Mainly for plumbing projects, when a lot of
9 condensation in the water was present.

10 Q To your knowledge, is MAPP gas typically used
11 in the plumbing industry?

12 A Yes.

13 Q After you were discharged or got out of the
14 Navy, what was the next job you took?

15 A I don't remember the place. It was --

16 Q What type of work?

17 A It was a contractor doing water tanks for the
18 fire engines -- for fire trucks.

19 Q Fabricating them or --

20 A Fabricating them, yes. Welding.

21 Q So if I understand correctly, you were -- you
22 worked for a company that fabricated water tanks for
23 fire trucks?

24 A Yes.

25 Q And you would help weld the tanks together?

□

1 A Yes. Pressure-weld the tanks, yes.

2 Q And that was part of the manufacturing
3 process?

4 A Yes.

5 Q Where was the -- where was your employer at
6 that time?

7 A Rock Island, Illinois.

8 Q What type of welding gas did you typically use
9 at that job?

10 A It was -- it would have been acetylene.

11 Q Acetylene?

12 A Yes. And oxygen.

13 Q Can you tell me approximately how long you
14 remained at that job.

15 A I think the contract ended, like, two years --
16 or it lasted two years.

17 Q Sometime in the mid 1980's?

18 A Yeah. I think it was '80- -- I was still in
19 the Navy at the time. I was in the reserve program. So
20 it was around '81, '82.

21 Q And you don't remember the name of that -- the
22 company you worked for?

23 A No.

24 Q I don't remember what I did yesterday, so it's
25 okay.

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□

1 A I know where it's at.

2 Q After you left that job, where did you go to

3 work next?

4 A I went into law enforcement.

5 Q Okay. Police?

6 A Police, yes.

7 Q Where?

8 A Mercer County Sheriff's Department.

9 Q In which state is that?

10 A Illinois.

11 Q Approximately how long were you with the

12 Mercer County Sheriff's Department?

13 A Till election. It was about two years.

14 Q And were you a sheriff's deputy?

15 A Yes.

16 Q Did you have an occasion to do any welding on

17 the job?

18 A No, sir.

19 Q All right. Any more jobs after you left --

20 after the Mercer County Sheriff's Department, did you

21 have any other jobs where you served as a welder?

22 A Campland, right here.

23 Q Okay. All right. Skipping forward in -- I

24 believe you said you've been in Campland for about five

25 years?

61

□

1 A Yes.

2 Q Between the time you left Mercer County
3 Sheriff' Department and came to work in Campland, did
4 you have any jobs where part of your official duties was
5 to weld?

6 A Yes.

7 Q Okay. Where else would that have been?

8 A I worked for myself.

9 Q In what capacity?

10 A Plumbing, electrical construction.

11 Q Basically, self-employed contractor?

12 A Yes. Yeah.

13 Q And where did you -- was that here in
14 California?

15 A Yes.

16 Q Approximately how many years did you do that?
17 Were you in business for yourself?

18 A Probably two or three years, I think it was.

19 Q Is this before you came to Campland?

20 A Yes.

21 Q And you did some plumbing during that time?

22 A Yes.

23 Q And while you did the plumbing work, did you
24 have occasion to weld or solder pipes together?

25 A Yes.

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□

1 Q And when you did that, did you ever use MAPP
2 gas torches?

3 A Yes, all the time.

4 Q All right. Do you remember the brand name of
5 the MAPP gas torches you used, that you tended to use?

6 A Mainly, Benzomatic (sic).

7 Q Does Burnzomatic sound right?

8 A Burnzomatic.

9 Q Is that the one with the yellow tank?

10 A Yes. Home Depot.

11 Q You would buy it at Home Depot or other
12 hardware stores?

13 A Yes.

14 Q Is it accurate to say that you have some
15 working knowledge and familiarity with MAPP gas torches?

16 A Yes.

17 Q And with the Burnzomatic brand in particular?

18 A Yes.

19 Q Have you ever been able to -- strike that.
20 While you were self-employed as a plumber/fix-it guy --

21 A Yeah, here you go.

22 Q -- did you ever have occasion to purchase or
23 come upon MAPP gas torches manufactured by another
24 company other than -- strike that.

25 Let me rephrase my question. Did you ever

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□

1 have occasion to purchase another brand of torch, other
2 than Burnzomatic?

3 A I don't recall.

4 Q All right. And I believe you mentioned

5 earlier that you've done some welding while you've been
6 at Campland?

7 A Yes. Soldering with MAPP gas, yes.

8 Q Is part of your duties there to help maintain
9 the place?

10 A That was my previous job before the park
11 ranger position I hold now.

12 Q You were hired as a maintenance person?

13 A Yes.

14 Q And part of what you did at that time was to
15 fix -- or repair the plumbing?

16 A Yes.

17 Q And part of -- when you did plumbing work
18 there, part of what you did was to weld or solder pipes?

19 A Yes.

20 Q Do you still have occasion to do that at
21 Campland?

22 A Not at Campland, no.

23 Q I imagine you probably fix some things around
24 your home?

25 A And other people's homes.

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□

1 Q Okay. Do you happen to own -- at the present,
2 do you own a MAPP gas torch?

3 A I just ran out and threw it away the other
4 day.

5 Q Is there a reason that you did that?

6 A I was done with it. I was going to go buy a

7 new one.

8 Q So is it accurate to say to this day you still
9 have occasion to use MAPP gas torches from time to time?

10 A Yes.

11 Q Can you give me an estimate of how many times
12 a year you might use one?

13 A Whenever my friends call or somebody needs a
14 plumber.

15 Q It's usually the most inopportune time?

16 A Yes.

17 Q So on the -- going back, then, for a moment to
18 the night of the incident in April of 2006, involving
19 Mr. Shalaby, when you -- I believe you testified that
20 you -- when you came upon the scene and did a survey,
21 you saw the torch on the ground some three feet behind
22 Mr. Shalaby; is that correct?

23 A Yes.

24 Q And at some point after you saw it, you went
25 and picked it up?

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□

1 A Yes.

2 Q Okay. When you did that, were you familiar
3 with the torch that you saw?

4 A Yes.

5 Q Was that the same type of torch that you had
6 used in the past?

7 A Yes.

8 Q And was there any -- was there any doubt in
9 your mind that it was a Burnzomatic brand torch?

10 A No, I don't believe so.

11 Q When you -- skipping a little bit ahead in
12 your testimony, when you spent some time observing the
13 torch, I believe you testified that that was after you
14 had spoken with the fire department personnel about
15 whether or not they wanted you to keep it or not?

16 A Yes. I secured the -- pretty much secured the
17 torch; in the meantime, was worried about Mr. Shalaby's
18 well-being, first. I just did not want the torch to end
19 up in the wrong hands.

20 Q Okay. And when you -- can you tell me
21 approximately how long you spent examining the torch?

22 A Oh, probably, I'd say an hour. During my
23 entire report writing.

24 Q And was that back at the -- I forget what you
25 call that -- the front gate? Was that back at the

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□

1 station?

2 A In my -- in the office. In my office.

3 Q You call it the ranger station?

4 A Well, the ranger station and my office are two
5 different places.

6 Q Are they in the same general vicinity?

7 A It's the next building behind it.

8 Q I actually haven't had the benefit of seeing
9 the location. But, basically, you spent an hour or so

10 examining the torch back at your office?

11 A Yes.

12 Q And I believe you testified that the labels
13 had not been destroyed on the torch, they had not been
14 burned off?

15 A No, sir. It appeared normal wear and tear to
16 me.

17 Q To the best of your recollection, did the
18 front label say "Burnzomatic" on it?

19 A I don't recall the -- the "MAPP" is what
20 catches -- caught my eye.

21 Q Getting back to the breach or the hole you
22 described at the point where the nipple or the thread
23 joins the neck of the bottle, is that about roughly the
24 area of the tank where you saw the hole?

25 A Yes.

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□

1 Q Was it, in fact, a hole that you saw, and was
2 there --

3 A It appeared to be a crack forced open,
4 outward.

5 Q It was forced open, outward?

6 A Like an explosion outward.

7 Q From inside the bottle towards the outside?

8 A From inside the container, yes. It was a
9 crack, and just one side of the crack appeared to be a
10 U-shape form.

11 Q I apologize to the court reporter. I think I
12 was jumping in and speaking over you, which is something
13 I always tell the witness not to do. But in this case,
14 I was doing it, so --

15 And just so the record is clear, because I do
16 think I was speaking over you, you were saying that the
17 crack appeared to have been forced outward from inside
18 the neck of the tank?

19 A Yes.

20 Q And you believe that it was roughly a U-shaped
21 crack or hole?

22 A No. It appeared to be a straight line. Just
23 the one side of the crack appeared to be more outward
24 than the other side of the crack.

25 Q Okay. Based on your experience working with

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□

1 torches and the like, what did that indicate to you,
2 that hole, if anything?

3 A Personally?

4 Q Yes.

5 A Abuse.

6 Q In what -- why did it indicate abuse?

7 A Appeared to me that the container was used
8 other than what it was for.

9 Q Can you be any more specific? In other words,
10 did it strike you that there had been some sort of force
11 applied, or what is it you're describing?

12 A Just my personal opinion, you're asking me,

13 or --

14 Q Yes. That's all I can ask for.

15 A Okay. It appears to me that it was banged
16 against -- the top of the nozzle was banged against
17 something of a hard surface and not created the crack,
18 but maybe, in my experience, that weakened the
19 connection between the torch nozzle and the cylinder
20 itself.

21 I have experienced other employees, when
22 they -- in my presence, when they were not able to light
23 that torch, do several other abusive things to get it to
24 light.

25 Q Have you ever -- in your experience, have you

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□

1 seen a crack like that before?

2 A Not that particular type of crack, no.

3 Q Did the -- getting back to your testimony, you
4 described -- I'm going to roughly paraphrase it -- but
5 the crack appeared to have been forced outward. Did
6 that give any indication to you of what had transpired
7 or caused the crack?

8 A I was under the impression that was from the
9 explosion.

10 Q Was there anything in particular about the
11 crack or otherwise about the tank you saw that suggested
12 to you that it had been -- may have been banged on a
13 hard surface?

14 A It appeared to me that the torch was -- might
15 have been banged against something that might have
16 adjusted the thread area of where the torch nozzle and
17 the canister would connect and had -- may have weakened
18 that area in the process of being banged, I guess you
19 would say.

20 Q Okay. But was there anything -- other than
21 the existence of the hole or the crack itself, was there
22 anything else; for example, scratches in the paint,
23 blunt --

24 A Oh, the threaded part was this -- from the
25 crack itself, was forced at a right angle of the

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□

1 cylinder itself.

2 Q Is that what you were testifying about
3 earlier, that right angle?

4 A Yes, the right angle. Not the torch nozzle,
5 but the cylinder and the torch nozzle. The cylinder is
6 here. The torch nozzle is on top, straight, and there
7 is a natural bend by manufacture at the connection of
8 the threaded area and the torch nozzle itself, at a
9 right angle. And on the right side or the side that
10 was -- I don't know how to say this -- on the --

11 MR. STEPHAN: Opposite.

12 THE WITNESS: Opposite of the bend of the
13 side -- on the side of where the crack was, the angle
14 went to the right; right-side angle of that crack.

15 BY MR. EPSTEIN:

16 Q When you say, "The angle went to the right," I
17 understand, or at least I think I do, that the torch
18 nozzle you saw, or the torch tip, was at a bend. But
19 are you saying that the actual threaded portion of the
20 cylinder was bent off from the yellow painted --

21 A The base of the threads.

22 Q Right. In other words, if I'm describing
23 correctly, you've got your yellow painted cylinder, if
24 you will?

25 A Cylinder, yes, sir.

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□

1 Q It comes to a neck, kind of like

2 Mr. Moorhead's bottle here?

3 MR. MOORHEAD: They call this portion
4 "threaded," which attaches to the top of the neck. That
5 will help in the terminology when you are discussing it.

6 MR. EPSTEIN: Sure.

7 BY MR. EPSTEIN:

8 Q At the neck of this tank there is, then, a
9 threaded tip, if you want -- maybe made of copper. Or
10 can you tell me what the metal is at the top?

11 A I would assume, aluminum.

12 Q Aluminum?

13 A Aluminum. Pressed aluminum.

14 Q But, in any event, it's not painted yellow,
15 right, the part with the threads?

16 A I don't recall.

17 Q But at the point where the threaded metal
18 meets the neck of the tank that is not threaded, it
19 becomes bent? If I understand you correctly, you saw
20 that bend, that right-angle bend you were talking about,
21 start at that point, where the threaded portion of the
22 bottle meets the neck?

23 A Yeah. At the end, the bottom of the last
24 thread, between the last thread and the cylinder itself
25 is where the bend took place, and the explosion -- or

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□

1 the crack was in that same area.

2 Q Got it. Was it an actual 90-degree angle that
3 you saw?

4 A No. It was a slight-angle bend.

5 Q Slight angle. And the torch tip was still
6 attached to the threads? It was still screwed on when
7 you picked it up?

8 A When I picked it up, it was -- appeared to be
9 loose at the -- it didn't appear to be all the way
10 attached, or all the way screwed on.

11 Q Got it. And could you tell at that time
12 whether that was because -- and when I say that, I mean
13 the fact that the torch tip was not screwed all the way
14 on -- because it was not screwed all the way on
15 initially, or the force of whatever had happened had
16 forced --

17 A I would not be able to tell you. I don't have
18 that knowledge to answer that.

19 Q Just bear with me. I'm going to scan through
20 my notes. I think Mr. Moorhead covered most of what I
21 was going to ask you, so I'm just going to condense
22 whatever remaining questions I do have.

23 Other than the one crack -- I'm going to use
24 the term "crack" -- you described up on the neck of the
25 bottle, did you see any other breaches in the metal

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□

1 bottle of the cylinder or anywhere else?

2 A No, sir.

3 Q I believe you testified, in response to
4 Mr. Moorhead's question, you did not see any signs of
5 combustion residue anywhere on the bottle.

6 A No, sir.

7 (Discussion off record.)

8 BY MR. EPSTEIN:

9 Q As I am going down my list, I know you
10 answered most of these. And did you -- was it your
11 testimony that Mr. Stephens or -- yes, Mr. Stephens, was
12 present with you at least for part of the time when you
13 examined the torch?

14 A Pretty much all the time, I believe.

15 Q All the time?

16 A Yes.

17 Q As you sit here now, can you remember --
18 strike that. Let me back up. To your knowledge, does
19 Mr. Stephens have any experience with welding?

20 A He says he does. I don't have any knowledge
21 that he does.

22 Q We'll have the opportunity to ask him, of
23 course. Do you remember him making any comments about
24 the torch, his observations, while you were examining
25 it?

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□

1 A We had had a discussion. Experience versus
2 experience.

3 Q I see. All right. Can you describe for me
4 what the nature of that -- was it a disagreement?

5 A Yes.

6 Q What was the nature of your disagreement with
7 him?

8 A I disagreed with some of his observations
9 and -- and his idea of the torch.

10 Q And this is not meant to compare you to him.
11 I just sort of would like to find out what it was
12 that -- not who was right and who was wrong, but what
13 was it that you guys disagreed about?

14 MR. MOORHEAD: Could we get a time frame as to
15 when this happened?

16 MR. EPSTEIN: Yes. Sure.

17 BY MR. EPSTEIN:

18 Q Let me back up. I assume the discussion
19 you're talking about, with Mr. Stephens, where you had a
20 heated discussion, as you put it -- did this take place
21 during the roughly hour or so that you examined the

22 torch the evening of the incident?

23 A Yes. It was after the incident.

24 Q I'm sorry, after the incident but after the
25 fire department --

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□

1 A Yes.

2 Q And this was back at your office?

3 A Yes. And the following day, I believe.

4 Q So later that evening of the incident and/or
5 sometime the following day, can you tell me to the best
6 of your recollection what it was that you and
7 Mr. Stephens had a disagreement about or the things you
8 disagreed about with regard to the torch?

9 A He made the statement to me that he thought
10 that it was the wrong nozzle that was placed on the
11 cylinder itself. And I disagreed with that.

12 Q When you say "the wrong nozzle," you mean the
13 wrong type of torch tip?

14 A Yes. The torch nozzle.

15 Q You happen to talk to a guy that doesn't know
16 half about torches as you do. So he thought it was the
17 wrong kind of nozzle. What do you recall him saying
18 about that? Was it for a different type of canister, in
19 his opinion, or --

20 A I believe, in his opinion, he thought there
21 should have been a different type that was on there for
22 the type of gas that we were talking about, for the MAPP

23 gas, so --

24 Q And you did not share that opinion?

25 A No, I did not.

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□

1 Q Was it your opinion that the type of torch tip
2 that was attached, as it were, to the tank, was designed
3 or meant for MAPP gas?

4 A Yes. It's been my experience. I've used that
5 same torch and nozzle with MAPP gas all the time. Still
6 do today.

7 Q I've taken enough depositions to know I never
8 disagree with a witness about what they are talking
9 about, because they usually know far more than I ever
10 do. All right.

11 Do you remember any other issues that you and
12 Mr. Stephens had a disagreement about with regard to the
13 torch?

14 A It wasn't so much a disagreement. We had a
15 discussion of our opinion.

16 Q Okay.

17 A We opinionized (sic) the -- from what we heard
18 and --

19 Q Let me ask it differently. Did you have, not
20 necessarily a disagreement, but a difference of opinion
21 about what you believed you thought might have caused
22 the incident or anything along those lines?

23 A Well, he said to me he recalled what somebody
24 else had said -- and I don't know who he said stated

25 that, but -- and based on what people had told me, I

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□

1 kind of went with what I had heard.

2 Q So you had both heard different accounts of
3 what had happened?

4 A I was interviewing other people that he didn't
5 interview, and he was interviewing other people that --
6 I had put him basically with Mr. Shalaby and his family
7 to talk to them.

8 Q That's what we call, basically, double or
9 triple hearsay, but --

10 A Right.

11 Q -- for purposes of our discovery and our
12 trying to figure out what happened, looking back, can
13 you relay to me as best as you can what Mr. Stephens --
14 or what Randy said he had heard happened versus what you
15 had heard happened?

16 A Well, he said that Mr. Shalaby had said that
17 he -- "I made a stupid mistake," you know, I guess,
18 while the fire department and all was there. He made
19 the statement that he dropped it in the fire or
20 something like that.

21 Q And this is what Mr. Stephens said he heard
22 Mr. Shalaby say?

23 A Yes. In our conversation between Randy and
24 myself -- or Mr. Stephens.

25 Q Okay. Do you remember Randy saying anything

□

1 else about what somebody else said about the occurrence
2 of the incident that was different from what you had
3 heard had happened?

4 A That was pretty much all that I --

5 Q Okay. I estimate another ten minutes of
6 questions.

7 A I thought you were going to be all day.

8 Q I don't want to do that to you. When you were
9 observing the tank with Randy Stephens after the
10 incident, at that time, did you feel that the tank posed
11 any immediate danger of explosion or fire?

12 A Oh, no. You mean after?

13 Q After the fact.

14 A No.

15 Q I should have been more specific, because if
16 somebody hit somebody over the head with it, that would
17 be a danger.

18 A Yeah, here you go.

19 Q Earlier, you testified that in your experience
20 MAPP gas is typically used, and you typically use it,
21 for such uses as soldering and welding pipes and the
22 like. Are you familiar with other intended use of MAPP
23 gas torches?

24 A That's pretty much its primary use that I've
25 always experienced with it. And my experience is from

□

1 forefathers before me.

2 Q Okay. Got it. I'm definitely not doubting
3 your experience here. I can't recall if you testified
4 about this or not, but to the best of your recollection,
5 what was the weather condition like on the evening of
6 the incident?

7 A Clear. Dark.

8 Q Windy?

9 A No, I don't believe, no wind. Maybe a slight
10 breeze.

11 Q Do you recall it being humid at all?

12 A No.

13 Q I was going to ask if it was, to the best of
14 your recollection, a warm evening, but I come from
15 Northern California, so every evening down here is warm
16 to me. Was it a particularly warm or cool evening to
17 you?

18 A It was a nice, cool evening.

19 Q Have you, in your experience being in the Navy
20 or after, ever heard of another incident similar to the
21 one that Mr. Shalaby experienced, with a MAPP gas torch?

22 A Exploding or --

23 Q Yes.

24 A Yeah.

25 Q You have. Have you actually witnessed it

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□

1 before?

2 A I have witnessed containers exploding, yes.

3 Q MAPP gas in particular?

4 A I -- I wouldn't say yes or no, because I know
5 we have that, so -- it's been a long time since I
6 recall.

7 Q Can you give me -- tell me approximately how
8 many times. Was it more than once that this happened?

9 A I've seen it twice in my life.

10 Q Was that while you were in the Navy or in
11 other --

12 A Outside of the Navy.

13 Q Can you describe the first such incident to
14 me?

15 A The first incident was an acetylene tank that
16 exploded and went through the rooftop of the building.

17 Q Did you ever find out why that occurred? Or
18 did anybody figure it out?

19 A Again, we figured it was -- the tank was old.
20 We know that much, so -- outdated, I think, at that
21 time.

22 Q Was there anything in particular about the
23 conditions or the use of that acetylene tank that caused
24 that to happen?

25 A Just that it was aged.

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□

1 Q Better to replace those tanks early?

2 A Yeah. There is a format to kind of go through
3 any kind of tank, to inspect it.

4 Q What about the second such incident?

5 A The second such incident was a -- I believe,
6 was just -- it was a propane cylinder and it was due to
7 a rusted -- a rusted bottom, that somebody had left in
8 a -- a lot of plumbers, you know, they work around water
9 and stuff like that.

10 Then, a lot of plumbers carry their tools and
11 supplies in a five-gallon bucket. And he had some
12 moisture in the bottom of his bucket and, I believe, his
13 container, when we examined it, sat in that water a
14 little too long and rusted the bottom.

15 Q In your experience doing plumbing work and
16 other handy work, have you had occasion to use propane
17 torches before?

18 A Oh, yes.

19 Q Are those also commonly used in plumbing
20 applications?

21 A Yes.

22 Q Can they be used to solder pipes, as well?

23 A Yes.

24 Q Okay. Does propane burn at a different
25 temperature than MAPP gas?

82

□

1 A Very much so, yes.

2 Q Hotter or cooler?

3 A Cooler.

4 Q Cooler. Okay. Getting back for a moment to
5 the earlier testimony about Mr. Stephens' opinion that
6 there may have been the wrong torch tip on the MAPP gas
7 torch that was involved in the incident with
8 Mr. Shalaby, have you -- do you have any knowledge as to
9 whether or not a -- strike that.

10 To your knowledge, do MAPP gas torches and
11 propane torches have different -- differently designed
12 tips, say, with different threading or different --

13 A No.

14 Q To your knowledge, will a tip that is designed
15 for a propane torch -- will that fit on a MAPP gas
16 torch?

17 A Well, there is a propane torch nozzle
18 that's -- that's only strictly for the propane torches,
19 so -- but it will not fit on the MAPP gas container.

20 Q Is that because the threading is designed
21 differently?

22 A I believe it's the whole dimension.

23 Q I see. It just will not fasten to a MAPP gas
24 torch?

25 A Right. Right.

83

□

1 Q So in your opinion, could the torch tip that
2 was attached to the MAPP gas cylinder that was involved
3 in the incident with Mr. Shalaby -- could that have been
4 a propane torch tip on there?

5 A I believe that you can use the same torch that
6 was on a torch bottle -- I mean on a propane bottle, I'm
7 sorry -- as well as the MAPP gas, but the torch nozzle
8 was designed for either/or.

9 Q I'm sorry. The nozzle -- maybe I'm
10 misunderstanding. I thought you testified a moment ago
11 that the -- at least part of the torch tip -- the torch
12 for MAPP gas -- I'm sorry. Strike that again.

13 I thought you testified that part of the torch
14 nozzle for propane will not fit on a MAPP gas tank neck.
15 And I realize this is somebody who doesn't understand
16 how these things work, but I'm trying to understand.

17 A I wish I had my stuff here.

18 MR. MOORHEAD: If you don't know or you don't
19 remember --

20 THE WITNESS: Yeah. I don't know. I don't
21 know. I understand, but I'm not -- you know, without
22 actually showing you what I'm talking about --

23 MR. EPSTEIN: Okay. That's fine.

24 BY MR. EPSTEIN:

25 Q I'm sorry, I don't mean to put you in a

84

□

1 squeeze here. This is for me learning.

2 A Right.

3 Q All right. Getting back to the one question,
4 I'm not sure if I got a clear answer to that or not, but
5 in your opinion, was the torch tip that was attached to
6 the MAPP gas cylinder involved in the incident -- was

7 that one that was designed for a MAPP gas torch as
8 opposed to a propane torch?

9 A In my opinion, yes.

10 Q Then, we'll leave it at that.

11 A I use that same torch.

12 Q Have you spoken with any of the fire
13 department personnel who responded to the scene since
14 the evening of the incident?

15 A No, sir.

16 Q Okay. What about any of the paramedics or
17 ambulance personnel?

18 A No, sir.

19 Q Any of the doctors that treated Mr. Shalaby?

20 A No, sir.

21 MR. EPSTEIN: Thank you.

22 THE WITNESS: Okay.

23 MR. MOORHEAD: I want to follow up on a few
24 things, because he asked questions I didn't even think
25 of. See, he is a lot smarter than me.

85

□

1 FURTHER EXAMINATION

2 BY MR. MOORHEAD:

3 Q All right. There is something that I want to
4 follow up on. You said that when you picked up the
5 torch -- and I'm going to use "torch" instead of
6 "nozzle." I'm talking about the apparatus that you
7 ignite and it makes the fire come out at the end. I'm

8 going to call that "the torch." And I'm going to call
9 the bottle that has the gas in it "the cylinder."

10 A Okay.

11 Q When you picked up the cylinder and the torch,
12 it didn't appear to you that the torch was all the way
13 on the cylinder; is that correct?

14 A The -- yes.

15 Q Now, I'm trying to figure out what gave you
16 that impression. Was it not all the way down on the
17 threads or was it wobbling or a combination of those
18 things?

19 A It appeared to be loose in nature as if you
20 took a soda bottle cap and you loosened it up.

21 Q So it was not all the way down on the threads?

22 A Yes.

23 Q That's correct?

24 A That would be correct, yes.

25 Q And if you played with it, did it wobble some,

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□

1 like a cap would?

2 A No, sir.

3 Q You've talked about your experience with other
4 people that probably shouldn't be handling these types
5 of products, using them in strange ways. Did you ever
6 see anybody use a torch as a lever?

7 A Yes.

8 Q Bad plan, isn't it? Do you know whether
9 Mr. Shalaby had done that with this particular --

10 A No, sir.

11 Q You don't know either way. You mentioned
12 having plenty of experience buying torches and cylinders
13 with MAPP gas from Home Depot, correct?

14 A Yes, sir.

15 Q And you've also used propane. Did you buy the
16 propane cylinders from Home Depot, too?

17 A Yes, sir.

18 Q Okay. Any other types of gas -- I don't even
19 know what they sell at Home Depot. Besides MAPP and
20 propane, are there other types of gases that they sell
21 in these little cylinders at Home Depot?

22 A No, I don't believe so.

23 Q So if you were going to go to the store
24 looking for gas for a torch, you'd either be looking for
25 propane or MAPP at Home Depot?

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□

1 A Yes.

2 Q From your experience, do the cylinders come
3 sometimes matched with the torch and sometimes on their
4 own?

5 A Yes.

6 Q And are these cylinders a thing that -- they
7 can be refilled, can't they?

8 A No, sir.

9 Q Did you make any observations as to whether
10 the threads that were visible on the cylinder in the

11 Shalaby incident had any signs of rust or dirt or things
12 like that that would indicate perhaps it was not a good
13 cylinder to be using with a torch at that time?

14 A The threads appeared normal.

15 Q Okay. You indicated, in answer to
16 Mr. Epstein's questions, that MAPP gas is typically used
17 in plumbing type applications and not in very much more.
18 Is that the type of product that you would think was
19 appropriate for lighting campfires?

20 A No, sir.

21 Q You mentioned a couple of incidents that I
22 believe you said you were actually an eyewitness to,
23 when tanks exploded. And the first one you talked to
24 was acetylene.

25 When I think of acetylene -- was it one of

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□

1 these great big tanks that welders use --

2 A Yes, sir.

3 Q -- not the little bitty one?

4 MR. MOORHEAD: I think that's everything.

5 Well, let me look real quick here. No, that's all I
6 have. Thank you, Mr. Ratliff.

7 MR. EPSTEIN: Be aware whenever a lawyer says
8 that. Thank you.

9 MR. MOORHEAD: Let me propose a stipulation,
10 then, with respect to how we're going to deal with this.
11 I propose that we relieve this nice court reporter of
12 her obligations under the California Code of Civil

13 Procedure, although I'm not sure they are applicable in
14 federal cases.

15 When she has completed the transcription of
16 today's proceedings, she will send them to Mr. Sessler,
17 at Campland on the Bay, which address is 2211 Pacific
18 Beach Drive, San Diego, California 92109. The folks at
19 Campland, I guess, will be instructed to make it known
20 to you that it's come in, will make it available to you
21 to review it, make corrections, if necessary, in order
22 to make it accurate. And then there will be a signature
23 line for you to date and sign your review. And then I
24 will have the court reporter send to you a
25 postage-prepaid envelope so that you can send the

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□

1 transcript to me.

2 And whatever corrections you make, if you make
3 them on the transcript, that's okay with me. If you
4 want to make them on a separate sheet of paper, make
5 sure you enclose the separate sheet of paper, so we know
6 what changes were made.

7 If we give you 30 days, will that be enough
8 time? You said you were going to go to Costa Rica. But
9 it's not in the near future, right?

10 THE WITNESS: Not in the fear future.

11 MR. MOORHEAD: You'll have 30 days to do that.
12 You'll send it to me. Within 10 days thereafter, I'll
13 let opposing counsel know whether or not it's been

14 corrected and signed and, if so, what corrections have
15 been made. I'll make it available, if necessary, for
16 trial or other proceedings without the need for formal
17 request.

18 If the original transcript is lost, misplaced,
19 or otherwise unavailable, or if it's not corrected
20 and/or signed in accordance with the stipulation, then
21 we can use a certified copy as though it was a signed
22 original.

23 MR. STEPHAN: That's fine.

24 MR. EPSTEIN: So stipulated.

25 (Deposition concluded at 11:50 a.m.)

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INCIDENT REPORT

Campland
on the Bay

2211 Pacific Beach Dr.
San Diego, CA 92109

DATE: 4/21/06

TIME OF INCIDENT 10:30 (AM) (X) (PM)

REPORT TAKEN BY: WL RATLIFF #1

I.D.# _____

COPIES TO:

HQH
GM
REQ

PERSONS AND SITES INVOLVED

#1 NAME SHALABY ANDREW
ADDRESS 1525 LEVISON AVE
CITY EL CERRILLO CA ZIP 94530
PHONE # (510) 544-2573 SITE # D19
DATE: IN 4/21/06 OUT 4/22/06

#2 NAME _____
ADDRESS _____
CITY _____ ZIP _____
PHONE # () _____ SITE # _____
DATE: IN ___/___/___ OUT ___/___/___

WHO WAS CONTACTED SDFD / PARAMEDIC'S

DETAILS (BE SPECIFIC) GUEST STATED TO RANGER #1 THAT HE WAS
2. TRYING TO START CAMPFIRE W/ TORCH AND THE TORCH
3. JUST EXPLODED. SDFD WAS DISPATCHED. MYSELF AND
4. RANGER 3 SECURED THE SITE. GUEST WAS SITTING IN
5. LAWN CHAIR W/ FEET UP IN ANOTHER LAWN CHAIR AND
6. OTHER GUESTS RUSHED TOWELS AND TACKETS TO KEEP
7. COMFORTABLE & FROM GOING INTO SHOCK. I OBSERVED
8. BURNS ON GUEST COVERING HIS LEGS, HIS HANDS AND
9. ARMS. GUEST'S WIFE/GIRLFRIEND STATED HE WAS
10. LIGHTING CAMPFIRE W/ TORCH WHEN IT JUST EXPLODED
11. IN HIS HAND. SDFD TREATED AND PREPARED FOR TRANS
12. PORT. #1 ASKED SDFD IF THEY NEEDED TORCH /
13. FIRE FIGHTER SAID LET ME CHECK W/ MY CHIEF AFTER
14. HE IS DONE W/ REPORT. FIRE FIGHTER CAME BACK SAID
15. NO. THEY DIDNT NEED IT AND TO GO AHEAD AND DISPOSE

IF MORE SPACE IS NEEDED, USE ANOTHER REPORT FORM.

PAGE 1 OF 2

CERTIFICATE OF SERVICE

I, Geraldine Sutkowski, declare as follows:

I am a citizen of the United States, over the age of eighteen years and not a party to the within entitled action. I am employed at 737 Avila Place, CA, 94608. On October 21, 2009 I served the attached:

[APPELLANTS'] EXCERPTS OF RECORD, VOLUME 1
[APPELLANTS'] EXCERPTS OF RECORD, VOLUME 2
[APPELLANTS'] EXCERPTS OF RECORD, VOLUME 3
[APPELLANTS'] EXCERPTS OF RECORD, VOLUME 4

on the interested parties in said action, by placing a true copy thereof in sealed envelope(s) addressed as follows:

(Attorney for Newell Operating Company, Irwin Industrial Tool, Home Depot, and Bernzomatic -)

Shelley Gershon Hurwitz
HOLLAND & KNIGHT, LLP
633 W. Fifth St., 21st Floor
Los Angeles, CA 90071-2040

(Attorney for Worthington Industries)

Richard Allen Ergo
Bowles & Verna (for both)
2121 N. California Blvd, Suite 875
Walnut Creek , CA 94596

(Attorney for Western Industries, Inc.)
Lowell T. Carruth

McCormic, Barstow, Sheppard, Wayte
& Carruth LLP
P.O. Box 28912
5 River Park Place East
Fresno, CA 93720-1501

and served the named document in the manner indicated below:

BY MAIL: I am familiar with the practices of the U.S. Postal Service, and I caused true and correct copies of the above documents, by following ordinary business

practices, to be placed and sealed in envelopes(s) addressed to the addressees, at an office of the U.S. Postal Service in El Cerrito, California, for collection and mailing by first class mail with the United States Postal Service.

The copies of the documents served on Western Industries were in electronic format, in Adobe PDF, on a compact disc, pursuant to stipulation between Appellants and Western Industries.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed October 21, 2009, at El Cerrito, California.

Geraldine Sutkowski