

IN RE: CRANDALL CANYON
MINE INVESTIGATION INTERVIEWS

INTERVIEW
OF
PETE DEL DUCA

INTERVIEWERS:
JOE PAVLOVICH, ERNEST TEASTER

DATE:
DECEMBER 4, 2007

MR. TEASTER:

Pete, before we get into the questioning, we'll tell you a little bit about why we're here. What we're trying to accomplish. During the rescue effort over at Crandall, the Assistant Secretary, Richard Stickler, and Kevin Stricklin, the Administrator for Coal, were both on site. In the past, I don't know, 15 to 20 years following an accident, such as they had at Crandall, the agency has conducted an internal review. And that's been under the direction of the Assistant Secretary. But since he was involved in this rescue effort, the Secretary of Labor wanted to do an independent review. She didn't want anybody conducting it that would have been subordinate to the Assistant Secretary. So Joe and I both worked for MSHA for over 30 years. He retired about three and a half years ago and I retired about five and a half years ago. We both worked as inspectors all the way up through the different managerial positions to the District Manager. We have a lot of background in mine rescue, obviously inspection and policies and procedures. I've spent the last three years of my career over on metal/nonmetal side. So I guess based on that experience, they decided to call us and ask us if we'd come back and conduct this review. And we, we agreed to do that. We're to go out and get all the information we need to draft a report and give it to the Secretary and our deadline was six months. We're going to make every effort to meet that. Well, we have these people you see here and [REDACTED] went out to get us a cup of coffee. But each of these folks have areas of expertise that they're going to help us --- that we need to accomplish this mission. They all work for MSHA and most of them have been involved in one way or another with an internal review conducted it or have been part of it or being interviewed as part of it. So we want to talk to everybody that we can that's got any information about this

1 --- about the mine, about the plant approval process, about the rescue and recovery
2 effort. We're looking at both of them. And we think you got some information that's
3 going to help us fulfill our responsibility in getting this information. We want to keep it
4 as informal as we can. We want to --- if you don't understand the question, just ask us
5 or tell us and we'll clarify it so that you can understand. Do you have any questions?

6 A. Nope.

7 MR. TEASTER:

8 I have a statement that I want to read into the record before
9 we start the questioning.

10 MR. PAVLOVICH:

11 You told Pete we're taping; right?

12 A. I figured as much.

13 MR. PAVLOVICH:

14 Is that okay?

15 A. Yeah.

16 MR. PAVLOVICH:

17 Okay. Thank you.

18 MR. TEASTER:

19 The Secretary has assigned this group the task of evaluating
20 MSHA's performance during the period preceding the August 6th, 2007 coal bounce at
21 the Crandall Canyon Mine and the subsequent rescue effort. We will also be
22 evaluating issues that were raised during the time period regarding Bob Murray and
23 his interaction with MSHA. This is not an investigation or review of any individual
24 person. Its an administrative review of MSHA's actions as an agency. This evaluation
25 will be presented to the Secretary in the near future and it's intended that the results of

1 the evaluation will be made public. This interview is being conducted to gather
2 information for this assignment. We also intend to interview a number of other MSHA
3 employees. So that we may obtain unbiased information from all persons to be
4 interviewed, we ask that you not discuss this interview with anyone until all interviews
5 have been completed.

6 BY MR. TEASTER:

7 Q. And, Pete, are you a bargaining unit employee?

8 A. Yes.

9 Q. Are you aware that you have the right for representation and you obviously
10 declined to do that?

11 A. (Indicates yes).

12 MR. PAVLOVICH:

13 Is that yes or no?

14 A. Yes.

15 MR. PAVLOVICH:

16 Okay.

17 A. Sorry.

18 BY MR. TEASTER:

19 Q. It's hard to record a head nod.

20 A. I'll try to be more audible.

21 Q. Pete, would you tell us what your full name is?

22 A. Peter Anthony Del Duca, II.

23 Q. And what is your current job title?

24 A. Mining Engineer.

25 Q. And who is your current supervisor?

1 A. Billy Owens.

2 Q. And how long have you worked for MSHA?

3 A. Well, that's a tough question. I came on the summer of '04, I believe, as a
4 summer student. I worked from June 28th to October 31st, I think. I'm not exactly
5 sure on all the dates. And then as a temporary and then I came back the following
6 summer, '05. I believe that's when I signed my contract and I've been with them
7 since.

8 Q. And who was your supervisor prior to that?

9 A. Dave Elkins.

10 Q. And what was involved in that job?

11 A. I worked in the coal lab. I prepared equipment and got it ready for the
12 inspectors, kept everything up to date.

13 MR. PAVLOVICH:

14 Was Dave Elkins the Health Supervisor in Denver?

15 A. Yes.

16 MR. PAVLOVICH:

17 Okay.

18 BY MR. TEASTER:

19 Q. Would you tell us a little bit about your engineering background?

20 A. I graduated from the Colorado School of Mines in May 12th of '06 with a
21 degree in engineering, mechanical specialty, mechanical engineering.

22 Q. And are you currently an AR?

23 A. No, I'm not.

24 Q. What training have you received since being with the agency?

25 A. I've gone through all the CMI training at Beckley. Hope I have all that

1 completed. I just haven't got a card yet.

2 Q. Beg your pardon?

3 A. I just haven't got my card yet.

4 Q. And what type of card will you get? Will you get a CMI card?

5 A. Yeah. My AR Card.

6 MR. PAVLOVICH:

7 An AR card.

8 BY MR. TEASTER:

9 Q. As a CMI?

10 A. Yes.

11 Q. Or as right of entry?

12 A. As a CMI. I have my right of entry.

13 Q. Have you traveled with inspectors on inspections?

14 A. Uh-huh (yes).

15 Q. And what mines --- area mines did you visit?

16 A. I'm sorry?

17 Q. What area was the mines in that you visited?

18 A. It's been all over the district. I mean ---.

19 Q. You visited mines in this area?

20 A. Yes.

21 Q. What mines have you visited?

22 A. I visited Crandall, let's see, Dugout --- I'd have to look at my list, I mean I'm
23 not ---.

24 Q. Several mines though through the area?

25 A. Yeah.

1 Q. Okay.

2 A. Yeah. Yeah. Emory. Quite a few of them through here.

3 MR. PAVLOVICH:

4 Would you visit those mines, Pete, mostly with regular
5 inspectors or with specialists or both?

6 A. Well, most of my trips have actually been in the --- out of the Price Office, you
7 mean?

8 MR. PAVLOVICH:

9 Yeah.

10 A. Most of them have been with specialists out of the Price Office.

11 BY MR. TEASTER:

12 Q. With specialists. Anywhere where you've been traveling with inspectors on
13 like EO-1 inspections?

14 A. In Price?

15 Q. Or Delta or anywhere else. Craig?

16 A. Oh, yeah. I've traveled with a lot of inspectors elsewhere to. Just the majority
17 of the ones here in Price have been with the specialists.

18 Q. Okay. And who would that be?

19 A. Well, I traveled quite a bit with the health specialist. Eric Vermullen
20 (phonetic). I've traveled quite a bit with Ron Gurkey (phonetic) on surface stuff for
21 impoundments and that out here. And those are primarily the two for this area.

22 Q. Have you visited any of the mines that are owned by Bob Murray?

23 A. I visited Crandall.

24 Q. That's the only one that you're aware of?

25 A. Uh-huh (yes). I haven't been to West Ridge. I haven't been to Aberdene. I

1 haven't been to Pinacore. Or South Crandall.

2 Q. How did you compare mining conditions and the condition of the mine at
3 Crandall versus some of the other mines that you've visited?

4 A. Well, it was actually a pretty good mine. Conditions wise when we were there.
5 As far as roof conditions go, it looked really good in there. I guess what specifically
6 are you asking about for conditions?

7 Q. Well, if you see the conditions --- was the roof conditions good, was the clean-
8 up seemed to be pretty good?

9 A. Yeah, at the time. They had a trouble prior to when we were there and they
10 had a quite a few tickets issued and so their clean-up program and their rock dust
11 program was great when we were there. Like I said, the roof was great. It had a ---
12 you don't see a roof look that good in most places to be honest.

13 MR. PAVLOVICH:

14 When you were in Crandall Canyon what area of the mine
15 were you in, Pete, do you remember?

16 A. North Barrier.

17 MR. PAVLOVICH:

18 Where were they mining in? Pardon me?

19 A. North Barrier.

20 MR. PAVLOVICH:

21 Okay. You were in there while they were mining the North
22 Barrier?

23 A. Uh-huh (yes).

24 MR. PAVLOVICH:

25 Were they retreating or developing?

1 A. Developing it.

2 MR. PAVLOVICH:

3 Developing? Okay.

4 BY MR. TEASTER:

5 Q. How about describing your duties? Your current duties.

6 A. Conduct plan review primarily for roof and ground control. Review blasting
7 plans, impoundment's, anything pretty much.

8 Q. You reviewed blasting plans, you say?

9 A. Uh-huh (yes).

10 Q. How many blasting plans would you say you've reviewed in the past year?

11 A. Not too many. Probably less than half a dozen.

12 Q. What about ground control plans?

13 A. For surface mines? Quite a few.

14 Q. What's your involvement in the roof control plans for underground mines?
15 What involvement do you have in those?

16 A. Well, we each have certain mines that are assigned to us. And I have my
17 mines that I do the roof control for. Not too many. Most of them --- they're real small
18 mines.

19 Q. Could you speak up a little bit so we could get this on recording?

20 A. I'm sorry. So pretty much all the roof control for particular mines plus since
21 we were kind of short handed the roof control for quite a few of the other mines, too.

22 MR. PAVLOVICH:

23 So when you say we, Pete, who would the specialists be in
24 the work group?

25 A. Kathleen Keleher (phonetic), myself, and Ron Gurkey.

1 MR. PAVLOVICH:

2 Okay. And Ron Gurkey does he primarily deal with any
3 particular area or does he do roof control plans?

4 A. He doesn't do roof control plans. He does ground control plans and
5 impoundment's.

6 MR. PAVLOVICH:

7 Okay. So he does mostly surface work.

8 A. He does surface work ---

9 MR. PAVLOVICH:

10 And you and Kathleen ---.

11 A. --- and blasting.

12 MR. PAVLOVICH:

13 Pardon me?

14 A. And blasting.

15 MR. PAVLOVICH:

16 And blasting. And you and Kathleen ---?

17 A. Underground.

18 MR. PAVLOVICH:

19 Primarily do underground roof control.

20 A. Primarily. Mostly.

21 MR. PAVLOVICH:

22 Okay. And you work out of the Denver office?

23 A. Yes, sir.

24 MR. PAVLOVICH:

25 Kathleen works out of the ---?

1 A. Delta office.

2 MR. PAVLOVICH:

3 Delta office. Okay.

4 BY MR. TEASTER:

5 Q. So how much time --- of those different areas of responsibility that you
6 identified how much do you spend on each of those areas? Roof control plans,
7 blasting plans, ground control plans?

8 A. Well, I'd say the majority of it's underground roof control plans. Then probably
9 would be annual impoundment reports --- impoundments, then ground control and
10 blasting last.

11 Q. You say the majority, would that be 51 or 75% on roof control and 25% ---.

12 A. Well, that's a tuff call, I don't know, I mean --- it changes each week, you
13 know what I mean?

14 Q. I meant the average. I didn't want on a daily basis.

15 A. I know. I know. I just have trouble answering that question. I'd say probably
16 like 60%.

17 Q. Okay.

18 A. But ---.

19 Q. What about ground control plans?

20 A. Probably 15 or 20%. Like I said, it changes a lot though, I mean, it just
21 depends on what's kind of going on. What comes in.

22 Q. What comes in that week.

23 A. Yeah.

24 Q. What training or experience do you have in using ARMPS or the LAMODEL?

25 A. Well, as a matter of fact, I just completed a training this week or last week

1 rather, excuse me. But I also attended some training with it back in August at the
2 International Conference for Ground Control there in Morgantown. But ---.

3 Q. August of this year?

4 A. Yes. Like the end of July, beginning of August.

5 Q. And what about the LAMODEL program?

6 A. Most of that training for --- was at the same time. It was all at the same time.

7 MR. PAVLOVICH:

8 So you had training in both ARMPS and LAMODEL, Pete?

9 A. Yes.

10 MR. PAVLOVICH:

11 Okay. And both of these training's last week and at the
12 International Conference?

13 A. Well, ARMPS wasn't at the International Conference for Ground Control.
14 They had a different set of software. But yes.

15 MR. PAVLOVICH:

16 Okay. Had you ever used ARMPS or LAMODEL before then?

17 A. Yes.

18 MR. PAVLOVICH:

19 Were you somewhat self taught or did you study that at the
20 Colorado School of Mines?

21 A. Self taught.

22 MR. PAVLOVICH:

23 Self taught. And you learned about it through your
24 employment with MSHA?

25 A. Uh-huh (yes).

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MR. PAVLOVICH:

And did you, you know, did you see some of those numbers coming in as plans submittals, so you took it upon yourself to try and learn the programs? I mean how did you know about ARMPS and LAMODEL? Who did you talk to about them to get started?

A. I'm not really sure. I think --- I'm not really sure. I don't remember exactly how ---

MR. PAVLOVICH:

Okay.

A. --- when I started or like how I came about using them, but most of it came from reading through the help files and reading the papers that accompanied it. Each time there was a release of the software a new paper was published for the International Conference or through a NIOSH Circular, Bureau of Mines publication. When it was the Bureau before NIOSH.

MR. PAVLOVICH:

Did you ever talk to any of the tech support people in Pittsburgh about using those?

A. No, I didn't.

MR. PAVLOVICH:

Okay.

BY MR. TEASTER:

Q. Walk us through the steps that are normally taken for plan approval of a roof control plan.

A. Okay. The plan comes in. It gets logged in and assigned. Then the plan is reviewed to make sure for everything from --- to make sure that nothing was changed

1 that we previously had . Make sure it agrees with the plan. Check it for what content
2 is in --- what actually does the plan mean as in what are they doing, what's the
3 sequence that kind of thing. Then if the plan makes sense and it doesn't seem like it's
4 a bad plan, the next thing would be draft an approval and submit it to Billy Owens and
5 then he would go from there.

6 Q. Is there any input from the field office supervisor or the mine inspectors?

7 A. Depends. I mean, some of them yes. Some of them, no.

8 Q. What would cause it to be yes? And what would cause it to be no?

9 A. Well, sometimes we get plan changes for instance if the mine has --- just
10 using an example --- if the mine has had problems with bounces on a longwall, the
11 inspector might either issue a plan is not adequate or they might --- either they could
12 issue a citation that the plan is inadequate or they could write on the plan a Uform that
13 it's inadequate or they could just send an e-mail and at that point, we would review
14 and go from there. And those are usually generated by us then the plan --- we write
15 them a letter saying you know we need to make some changes at Piggins or
16 whatever. Or sometimes if they go to --- if they want to change and do less support.
17 Say they want to go from a five foot bolt to a four foot bolt or increase spacing then
18 we're going to talk to the field office and see what they have to say about it. What
19 their input is on it. Generally like that.

20 Q. Have you personally contacted the supervisors and inspectors here in Price
21 regarding addendum's that were submitted by operators for approval?

22 A. I haven't done that much with Price Mine so ---. They weren't assigned to me,
23 so no.

24 Q. What about the area that you work in?

25 A. Yes, I have.

1 MR. PAVLOVICH:

2 What area would that be, Pete?

3 A. I'm responsible for Arkansas, Oklahoma, Montana, and Wyoming.

4 MR. PAVLOVICH:

5 Okay.

6 A. So that would be the Gillette field office and the McAllister field office.

7 MR. PAVLOVICH:

8 And have you contacted the supervisors or inspectors in
9 Gillette or McAllister on numerous occasions?

10 A. More so in McAllister than in Gillette.

11 MR. PAVLOVICH:

12 Okay.

13 A. There's only one --- oh, yeah, and also Craig field office because one of the
14 mines in Wyoming is done by Craig field office. Generally, I have spoken with them
15 on the one in Wyoming --- a quite a bit where Oklahoma and Arkansas are concerned
16 out of McAllister field office cause that one's a little bit harder to get to regularly, those
17 mines, so I keep track.

18 BY MR. TEASTER:

19 Q. Did you have any involvement in the plan approval process for the
20 addendum's that were submitted for ---

21 A. Yes.

22 Q. --- the Crandall? And why were you involved in that if it's not your area?

23 A. Probably because I had more experience with modeling than the person who
24 had the roof control for there. Would be my guess, but, I mean, you'd really have to
25 talk to my boss on that. But I would assume that that's why.

1 Q. And was these procedures that you outlined, were they followed during that
2 process?

3 A. Uh-huh (yes). Would you like me to go through the --- how everything
4 happened with the Crandall plans?

5 Q. Please.

6 A. Okay. I guess they came in at some point into the Denver office and said that
7 they wanted to mine the barriers. I wasn't a part of that meeting. I wasn't aware of
8 that meeting or anything until after the accident. The first I saw anything on it, Billy
9 came with a plan and it was a --- they sent it in as kind of if we were to submit this,
10 would you approve it. It wasn't actually a plan. It would be all the back up material for
11 when the plan was submitted. The Agapito reports --- there were two reports on that
12 one. He said go through all of this and do a cursory review and we'll go from there.

13 Q. Do you know roughly what time frame this was, Pete?

14 A. August '05. I believe August, September somewhere in there.

15 Q. '05 or '06?

16 A. '06 rather, I'm sorry. Excuse me. My mistake.

17 MR. PAVLOVICH:

18 Would this be it, Pete? Do you remember?

19 A. That's one of them.

20 MR. PAVLOVICH:

21 The Agapito August 9th, '06 report?

22 A. That's one of them.

23 **Ex. (b)(6) and Ex. (b)(7)(C)**

24 You got one there to, Joe, the July one?

25 A. Yeah. The July one's here.

1 MR. PAVLOVICH:

2 July 20th. Let's see if that's right.

3 A. I brought my brain with me. Yeah it was this report. The July 20th and the
4 August 9th.

5 MR. PAVLOVICH:

6 Okay.

7 A. Let's see. So I went through those. I guess it would have been, it was in
8 September they did all of this, I believe that I did the review on them. I read through
9 the reports. I kind of highlighted things --- what all the report was saying and then I set
10 up my own analysis and then submitted that to Billy.

11 MR. PAVLOVICH:

12 Would that have been this, Pete?

13 A. That would be that right there. We went through --- I didn't put it as a report.

14 MR. PAVLOVICH:

15 Okay.

16 A. As you can see, I didn't write that until ---

17 MR. PAVLOVICH:

18 Okay.

19 A. --- August 7th.

20 MR. PAVLOVICH:

21 So this would have basically --- would this be your notes?

22 A. Yes.

23 MR. PAVLOVICH:

24 Okay.

25 A. All the appendices and that all the inputs I had done and saved then ----

1 MR. PAVLOVICH:

2 Okay.

3 A. --- it's just that I hadn't generated an actual report on it.

4 MR. PAVLOVICH:

5 Okay.

6 A. We just spoke like we are now about it and went from there. I talked to them
7 about kind of everything we had done and how I did it and drafted a --- drafted a letter
8 to the company and sent it out from there.

9 BY MR. TEASTER:

10 Q. Did you discuss your findings with Billy?

11 A. Yes.

12 Q. Did he agree with them?

13 A. Yes. He said we need more information. See from there we drafted a letter,
14 which I'm sure you're reaching for right now.

15 MR. PAVLOVICH:

16 Yeah. Somewhere.

17 A. Well, with the questions that were raised about the inputs versus my inputs.

18 MR. PAVLOVICH:

19 And this approval maybe would --- maybe would this be it?

20 BY MR. TEASTER:

21 Q. It has five items, I think, that were addressed.

22 A. Yeah. That's it.

23 MR. PAVLOVICH:

24 Did pretty good, huh Pete?

25 A. I'm impressed. I was just curious what everything else behind it was.

1 BY MR. TEASTER:

2 Q. Let's go back. When Billy asked you to do that, what specific instructions
3 were you given?

4 A. I was told to do an independent analysis on it. Come up with what I thought.
5 Check all of the --- theirs from off of mine. Write any discrepancies. And see --- go
6 from there.

7 Q. Okay. Was this the first time that you had done the ARMP5 analysis on a ---?

8 A. Yes.

9 Q. What did you do in regards to LAMODEL program?

10 A. I did not do the LAMODEL program.

11 Q. Is there a reason why you didn't?

12 A. I had a little bit of trouble. The LAMODEL can be --- it can be somewhat
13 temperamental if you input sometimes your computer doesn't run and it crashes and
14 takes a lot of time to do. So I did not do it anymore.

15 Q. Did you attempt to do it?

16 A. Yes.

17 Q. And you couldn't get it to work?

18 A. I had --- no I had a lot of trouble, so I ---.

19 MR. PAVLOVICH:

20 Pete, did you have the software available to do that or do you
21 have to use someone else's or ---?

22 A. Well, I had the software available cause LAMODEL is a public domain
23 software so you can download that.

24 MR. PAVLOVICH:

25 Okay.

1 A. As far as using --- it's really hard to use it without AutoCAD or it takes a lot of
2 time.

3 MR. PAVLOVICH:

4 Okay. Did you have AutoCAD on your computer?

5 A. The only copy that our district currently has of AutoCAD is on the IT person's
6 computer.

7 MR. PAVLOVICH:

8 Just the IT person?

9 A. Yes.

10 MR. PAVLOVICH:

11 Okay. And so ---.

12 A. So I had to arrange time with him to get on the computers.

13 MR. PAVLOVICH:

14 So you had to use his computer?

15 A. Yes.

16 MR. PAVLOVICH:

17 His or her, rather, whoever the IT person is.

18 A. His.

19 MR. PAVLOVICH:

20 Okay. Is that still the case?

21 A. Yes.

22 BY MR. TEASTER:

23 Q. These five items that you identified in that November the 21st ---

24 A. Yes.

25 Q. --- document, was that a request for information or was that more of issues

1 that you had found --- the problems that you had identified with their program?

2 A. Anytime you write a disapproval for a roof control plan you have to write the
3 deficiencies in the disapproval. That's all in the regulations. We handled this pretty
4 much identically. The reason that we can't approve it is because these numbers don't
5 make sense. If you can give us more information and substantiate them, that's a
6 different case. But as it stands now, then no, they don't make sense.

7 MR. PAVLOVICH:

8 Okay. So you basically wrote a disapproval letter, but was
9 there really a plan submitted?

10 A. No.

11 MR. PAVLOVICH:

12 Okay. So there never was a plan submitted ---.

13 A. So it wasn't actually --- see that's why it was worded the way it was. That it
14 was as a cursory review.

15 MR. PAVLOVICH:

16 Okay.

17 A. The plan as currently written would not be approved.

18 MR. PAVLOVICH:

19 Okay. I understand.

20 A. I believe is the exact words right on this. So without the information to
21 substantiate why --- these deficiencies what exactly why they were.

22 BY MR. TEASTER:

23 Q. Is it common to get these unofficial submittals for review?

24 A. I haven't seen too many of them. But I'm not sure.

25 Q. Have you seen any others? Have you ever been asked to review others?

1 A. Not that I can think of off hand. But I'm not sure.

2 Q. We say in our disapproval that this was a cursory review.

3 A. Cursory review.

4 Q. Is it a courtesy or do you just give a pretty good in depth review based on your
5 findings or I would think so?

6 A. It wasn't a courtesy review. It was a cursory review.

7 Q. What's the difference?

8 A. Courtesy is, you know, doing it out of the goodness of your heart. Cursory is
9 before you submit the plan, we're reviewing it. That's it. Prior to, if you will.

10 Ex. (b)(6) and Ex. (b)(7)(C)

11 I just want to know before we get too far down the road if we
12 could go back to when Billy first gave it to you, Pete, and said look at this, did he give
13 you any thoughts on his initial look at it? Did he already look at the Agapito reports,
14 have something in mind and share that with you?

15 A. You know, I'm not really sure. It's been a long time so --- I'm not exactly
16 100% sure on his initial --- if he said ---.

17 Ex. (b)(6) and Ex. (b)(7)(C)

18 So he didn't really express any particular concern. He just
19 was handing it off to you because the modeling aspect?

20 A. I'm not really sure. I don't remember.

21 BY MR. TEASTER:

22 Q. Pete, did Billy know that you had pretty much been self-teaching yourself on
23 ARMPS and LAMODEL?

24 A. I think so.

25 Q. Okay. But I mean, you never went and said Billy I'm learning this. Or did he

1 tell you Pete you need to learn these? Do you remember that?

2 A. I don't remember. I'm sorry, it's been ---.

3 Q. Okay. But he would have come with this Agapito report that had modeling in
4 it and said Pete you evaluate this and review it for me. So he must have somehow
5 thought you knew something about that; right?

6 A. Well, either way you look at it, I mean, no matter how many --- no matter
7 which programs you use on modeling, modeling is always essentially the same. You
8 know, jump in here anytime if you disagree with this, but the steps that you always
9 follow when you model and it doesn't matter if you're modeling a piece of steel or if
10 you're modeling a mine plan or if you're modeling whatever, the steps are as follows.
11 You start by taking and get your inputs and you model something that you already
12 know the answer to. Because before you can --- you have to get a reality check and
13 see it's calibrating the model, if you will. And then from there, the next step you do is
14 you model what you --- what you actually want or you tweak the model until you get
15 the results and if you have to tweak it too much then you do some different stuff.
16 Then you model the area of interest that you're actually talking about if it's a mine plan
17 or whatever. And then from there, you process it. You run a sensitivity study because
18 it's always important to know how much everything changes if you change a number
19 here or there. So you go ahead and next you run a sensitivity study.

20 Q. Okay. So did you do all that?

21 A. Yes.

22 Q. Okay.

23 A. It doesn't --- I mean no matter how what you model with those are the
24 procedures that you should always follow.

25 Q. Okay.

1 Ex. (b)(6) and Ex. (b)(7)(C)

2 And, Pete, you say that and answer that --- I mean I'm just
3 interrupting this a little bit defensively with the implication that I'm hearing that you
4 have experience with other programs and that's why Billy felt confident going to you.
5 That you had maybe experience in school with other modeling programs?

6 A. Well, I just --- I personally feel that I have the experience with modeling to be
7 able to take on another program and learn it. It's ---.

8 Ex. (b)(6) and Ex. (b)(7)(C)

9 Okay. Maybe right now you can fill us in what else you used
10 in the past and ---.

11 A. Well, most of the programs I've used were in mechanical engineering.
12 Nastran, Visual Nastran, SolidWorks, shoot, I can't think of half of them we ---.

13 Ex. (b)(6) and Ex. (b)(7)(C)

14 But Billy knew of this from your school and that's part of why
15 he felt confident. I mean that's kind of where we're going with this, that he had
16 something to base his confidence in you on?

17 A. Yes.

18 Ex. (b)(6) and Ex. (b)(7)(C)

19 Okay.

20 BY MR. TEASTER:

21 Q. Did you and Billy sit down and discuss each one of those individually? Each
22 of those five?

23 A. (Indicates yes).

24 MR. PAVLOVICH:

25 Yes. Is that yes, Pete?

1 A. Yes. I'm sorry. I'm not very good at this interview thing.

2 MR. PAVLOVICH:

3 You're a great big boy. Sit up here and speak up very loudly
4 cause I know none of them back there can hear you, okay?

5 A. Well that's what I was going for --- no I'm just kidding.

6 MR. PAVLOVICH:

7 Yeah. I know. You can do that for them, but I don't want to
8 have to sit there and tonight we'll have to answer the questions again and playback
9 your answers for this group and that's going to be tedious. No I'm just kidding.

10 BY MR. TEASTER:

11 Q. As you and Billy went through them, did Billy question your analysis or
12 findings on each one of those? Each of those five areas that you were to identify
13 where there was concern.

14 A. We talked about them after he had talked with the consultants about what had
15 ---.

16 Q. I'm talking about before the letter was sent out to the company.

17 A. Did we talk about what each one of them meant? I'm sorry I'm confused at
18 what you're asking.

19 Q. The five concerns that you identified in that November 21st disapproval letter
20 to the company, did you and Billy sit down and address each of those five concerns?

21 A. Yes.

22 Q. And did Billy have any questions or concerns about either one of those?

23 A. I don't believe so.

24 Q. But you did discuss them and he was in agreement that these were areas of
25 concern that needed to be identified?

1 A. Yes, that they needed to give some explanation for them.

2 Q. And what feedback did you get back from the company? Is there anything in
3 writing that came back in response to this ---?

4 A. No, I don't believe so.

5 Q. How were they identified or addressed?

6 A. I understand that they spoke with Billy and they kind of went through and
7 explained each of them. And then they kind of pointed us in the --- they showed us in
8 literature that's been published where everything --- where all the answers to our
9 questions came from. For example, the strength coal estimated at 16/40 psi, above
10 the 900 that you start at with coal. And they kind of --- they showed us that the higher
11 wathaseen has been published is considerably higher strengths than 900 psi that's
12 been measured. And that's not just in uniaxial compression tests but also there were
13 tests done by the bureau at the Wilberg Mine where they put bore hole pressure cells
14 in and back calculated the strength of the pillars based off of the pressure. And then
15 back calculated the strength of the coal. And the literature points us to anywhere from
16 1,800 on up to 5,400 psi for the strength. So each thing was addressed through
17 literature that's out there that's been published.

18 Q. So you say we were. Was it you and Billy that the company ---?

19 A. Just Billy.

20 Q. Just Billy.

21 A. And then he spoke with me about everything that was on there.

22 Q. What about the second item in there? What was the concern there?

23 A. Well, elastic modulus always plays a part in to how much deformation per
24 pressure. So what you get is it's a stiffness of the material in essence. So generally
25 you start much lower. Average coal is around 300 ksi for the elastic modulus, if I

1 remember right. And that seems a little bit high. It means it's a little bit stiffer. It
2 doesn't yield as much. But once again, back calculated in the literature and that.

3 Q. So they showed you literature that your 300 ksi or whatever number it was,
4 was not, not right?

5 A. Well, you know, anything that you're looking at, for when you're talking about
6 rock mass or coal, it's not an exact thing, it's a range. Typical coal elastic moduli run
7 from what is it like Ex. (b)(6) and Ex. (b)(7) could probably help me out on this a little bit closer. I think
8 it's one and a half --- or 150 ksi on up to almost 600 ksi, but I could be mistaken on
9 those numbers. But I'm pretty sure that --- see I mean each thing has a range
10 depending on, you know, the make up of the material. How it's actually formed. So --
11 -.

12 Q. Well, what caused you to pick the number that you used and how that differed
13 from what Agapito had used?

14 A. Well, you start with an average, which is 300. And I didn't --- those
15 calculations come up only when you're talking about the LAMODEL program, which I
16 didn't do the LAMODEL calculation --- I did not do the LAMODEL simulation.

17 MR. PAVLOVICH:

18 Okay. So you just did an ARMPS?

19 A. I did the ARMPS, but I went through the inputs for all the LAMODEL that they
20 used and anything that differed from the basics without ---.

21 MR. PAVLOVICH:

22 So if you thought they had estimated or inserted numbers that
23 were ---?

24 A. That would change the outcome of it.

25 MR. PAVLOVICH:

1 know we're at day 120 since Crandall bounced? It's been exactly 120 days.

2 MR. PAVLOVICH:

3 Is that right?

4 A. That's right. You're going to go home and get a calendar. I can tell.

5 MR. PAVLOVICH:

6 No. It's irrelevant.

7 A. Okay. So see they modeled the barrier pillar by adding on a bleeder line
8 where I did not add on the bleeder line. And the other thing that I did was I modeled
9 --- well it's all in the report. I modeled the other line of pillars. The main west area as
10 yielding. But that's not really a valid model either.

11 **Ex. (b)(6) and Ex. (b)(7)(C)**

12 Well, Pete, when the mine operator came back to Billy and
13 said what they did, why was this particular one just accepted with what they said? I
14 mean, if you look at what they're saying, right off the bat, they're adding in 20 feet of
15 entry that's mined as solid coal to that barrier. So why would we, we being MSHA, buy
16 off on that premise?

17 A. You know, there's some literature out there and what it talks about from the
18 literature that's on ARMPS, it talks about how when you --- when it sees a developed
19 pillars as long as if they're not pulled and you have subsequent panels and that, it
20 sees them as developed. It sees them the same as solid coal. It's not --- see how to
21 say this the best way --- from the literature that's out there ---.

22 MR. PAVLOVICH:

23 Do you have that with you, Pete?

24 A. I do have quite a bit of it with me, yes.

25 MR. PAVLOVICH:

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So am I on board ---?

Ex. (b)(6) and Ex. (b)(7)(C)

I think that what we heard was that somewhere there had been some instruction to ---

A. Yes.

Ex. (b)(6) and Ex. (b)(7)(C)

--- that effect with some of the earlier stuff that came out with ARMPS.

A. Right.

Ex. (b)(6) and Ex. (b)(7)(C)

But wouldn't you agree though that the way that you did it was more conservative?

A. I would agree that it was more conservative, yes.

Ex. (b)(6) and Ex. (b)(7)(C)

And likewise with the mains? Right? I mean, you treated that kind of as an unknown.

A. The only thing though is if you model a production panel, a production panel, a production panel and you pull this one here. Then you count this as solid coal, I mean that's all in the literature, right? So if you pull --- if under that same way you'd have to model the mains as solid coal.

Ex. (b)(6) and Ex. (b)(7)(C)

And I would agree, personally, perhaps you wouldn't want to treat the mains as totally yielded or totally mined, as you did, but I don't think I would go so far as the way that Agapito did because those mains had been sealed for quite some time. There had been various reports floating around about deterioration and

1 you didn't really know. So to just accept ---.

2 A. I mean it kind of runs into a problem where it's, you know, how do you --- what
3 would be the right way to do it?

4 Ex. (b)(6) and Ex. (b)(7)(C)

5 Well, and I guess that goes to my point. Simply being that
6 when the mine operator came back to Billy with these two explanations, was there any
7 discussion at all, Billy and you, first of all, I guess, of whether or not you're going to
8 accept the that premise that they responded with or some way of, I guess,
9 compensating for that by tweaking it. I mean you mentioned tweaking before. There
10 are various things that you can do to get a middle ground. You know, maybe try to
11 simulate maybe one or two of those pillars as being deteriorated in the mains. Or
12 adding something back on to the barrier but not quite as far as Agapito did. And I
13 guess that's all I'm asking. Was there any discussion at all to that effect?

14 A. No. I don't believe there was. We kind of --- from there we said, you know,
15 before we can make any final calls though we have to see what it looks like in the
16 mine. Cause you just can't rely 100% off of modeling or very much on it, I mean.
17 Cause as we talked there's, you know, where would be the middle ground and kind of -
18 --.

19 Ex. (b)(6) and Ex. (b)(7)(C)

20 Okay. Well, I think we're going to ask you some stuff about
21 your visit, but before we leave this, I mean, I'm sure you saw the NIOSH critique that
22 came out ---

23 A. I did.

24 Ex. (b)(6) and Ex. (b)(7)(C)

25 --- after. And in that, they discussed two ways to treat that

1 bleeder pillar. And one of them was the way that you did it.

2 A. Right.

3 Ex. (b)(6) and Ex. (b)(7)(C)

4 I mean, when you saw that what were your thoughts?

5 A. I don't know. It looked a heck of a lot like mine. That's all I know.

6 Ex. (b)(6) and Ex. (b)(7)(C)

7 You guys get back ---.

8 MR. PAVLOVICH:

9 No. You're on a roll. Go on.

10 Ex. (b)(6) and Ex. (b)(7)(C)

11 I don't know where we were with the questioning ---.

12 MR. TEASTER:

13 Well, we don't know. Pete's confused us so much, we're not
14 sure.

15 A. I think I'm the only one.

16 Ex. (b)(6) and Ex. (b)(7)(C)

17 In the five issues that we gave back, I mean that was pretty
18 the geometry; is that correct, Pete?

19 A. Yes.

20 Ex. (b)(6) and Ex. (b)(7)(C)

21 Okay. I think from there we went on to some of the other
22 issues ---.

23 MR. PAVLOVICH:

24 You want me to just go ahead and say something then?

25 BY MR. TEASTER:

1 Yeah. Go ahead if you got something.

2 MR. PAVLOVICH:

3 So, your understanding was then, Pete, that Billy talked to
4 someone from the company who shared with him some information about coal
5 strengths and hywathaseem and some other documents to the ---?

6 A. Inputs, yes.

7 MR. PAVLOVICH:

8 And then Billy came to you and said, Pete, --- well, what did
9 he say to you? Did he say ---?

10 A. He said well it seems that, you know, these concerns have been addressed.
11 Here's the literature and that. Kind of went through a lot of that stuff. And he said, he
12 said but your model and theirs both agree the development was okay; correct? I said
13 yes. So I don't know, we kind of --- it was still let's make sure everything looks good
14 and still goes with the model and we don't have any problems. So we went ahead and
15 approved development only in the North side only.

16 MR. PAVLOVICH:

17 Okay.

18 A. One thing at a time, you know, give them a ---.

19 MR. PAVLOVICH:

20 Okay.

21 A. --- and so we can go and get on site and see what it's actually doing in the
22 mine before we make any final.

23 MR. PAVLOVICH:

24 So you and Billy were both still hesitant about approving the
25 pillaring?

1 A. I can't speak for Billy.

2 MR. PAVLOVICH:

3 Okay. But you were?

4 A. Yeah.

5 MR. PAVLOVICH:

6 Or were you not?

7 A. Well, it looked like it made sense with the modeling with the documentation
8 that was out there.

9 MR. PAVLOVICH:

10 So the documentation that Billy showed you that was provided
11 by the company made sense to you that these issues were addressed?

12 A. Yes.

13 MR. PAVLOVICH:

14 Is that true?

15 A. Yes.

16 MR. PAVLOVICH:

17 And you agreed, then, with Billy that okay all five of my issues
18 are addressed? Is that true?

19 A. (Indicates yes).

20 MR. PAVLOVICH:

21 Is that yes or no, Pete?

22 A. Yes. I'm sorry.

23 MR. PAVLOVICH:

24 Yes. Okay. Okay.

25 A. I keep nodding.

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MR. PAVLOVICH:

That's all right.

Ex. (b)(6) and Ex. (b)(7)(C)

At that time, when Billy said we think we've resolved these five issues or at least they did to his satisfaction, did he ask you or instruct you to rerun any ARMPS analysis to further verify or compare to Agapito?

A. I didn't run anymore ARMPS analysis.

Ex. (b)(6) and Ex. (b)(7)(C)

So there was no discussion about that. He just said we've resolved it and we're going to move on to a mine visit?

A. No. I didn't do anymore ARMPS analysis on it.

MR. PAVLOVICH:

What documentation did Billy have that the company or Agapito give you?

A. Well, it was papers presented --- here's a few of them.

Ex. (b)(6) and Ex. (b)(7)(C)

Which ones ---?

MR. TEASTER:

Ex. (b)(6) and Ex. (b)(7)(C) would you read those within the next few minutes and comment on them, please?

Ex. (b)(6) and Ex. (b)(7)(C)

I mean I know you went through them by now, but what specifically ---? It should be highlighted, I would think.

A. They are. That's why I was going to hand it to you.

Ex. (b)(6) and Ex. (b)(7)(C)

1 Are these copies, Pete, because yes, I mean, I would want
2 them if they're copies.

3 A. Well, they're mine. I didn't want to give them up permanently.

4 Ex. (b)(6) and Ex. (b)(7)(C)

5 Okay.

6 A. I would be happy to loan them, but, you know ---.

7 Ex. (b)(6) and Ex. (b)(7)(C)

8 Well, I would like to look at what you've highlighted, but I don't
9 want to necessarily take the time to do that now. But, I guess, the question, are you
10 somewhere in there specifically about this bleeder pillar?

11 A. Yeah. And this isn't everything, but this is where it was. This is a lot of the
12 information. I can't find everything again afterwards, but I reprinted a lot of it. Or
13 gone through.

14 MR. PAVLOVICH:

15 But you didn't have that before and that came after the
16 November 21st letter? All that information there.

17 A. Yeah. I mean ---.

18 MR. PAVLOVICH:

19 Or it was brought to your attention after the November 21st
20 letter went out?

21 A. Is that the ---?

22 Ex. (b)(6) and Ex. (b)(7)(C)

23 Did this so called ---?

24 A. Okay. Yes. Okay. I wanted to make sure I was on the right letter and didn't
25 tell you the wrong thing. I don't --- yeah that was all after the November 21st letter.

1 We got through that stuff.

2 BY MR. TEASTER:

3 Q. Pete, going back now. What's --- what you know now. Or what Agapito
4 submitted based on your analysis and based on the analysis that NIOSH done, which
5 basically said that Agapito didn't get it right.

6 A. No. I don't agree with the NIOSH report that they sent to Senator Kennedy.
7 Billy and I went through and we drafted a letter and I don't know if you guys got that
8 from him or not or ----.

9 Ex. (b)(6) and Ex. (b)(7)(C)

10 That's what Richard Gates provided to us, hard copy. We still
11 didn't get anything electronic.

12 MR. TEASTER:

13 Okay. So we have it?

14 Ex. (b)(6) and Ex. (b)(7)(C)

15 Yes.

16 BY MR. TEASTER:

17 Q. And what was your disagreement with NIOSH?

18 A. Well, there's quite a few of them. Several pages of them between Billy and
19 myself. Six pages based off of the literature that's out there.

20 Ex. (b)(6) and Ex. (b)(7)(C)

21 Pete, I think, again, one of those you guys kind of responded
22 to NIOSH's take on this bleeder pillar.

23 A. Right.

24 Ex. (b)(6) and Ex. (b)(7)(C)

25 And as we've discussed, I mean, the way that you did it

1 originally, is one of the ways that NIOSH said would be proper. But yet, you and Billy
2 disagree with what NIOSH said about your original work?

3 A. Yes. I told you at the Academy when we had spoken that I didn't do the
4 analysis correctly.

5 Ex. (b)(6) and Ex. (b)(7)(C)

6 Well, and I understand what you said, but I'm still not sure that
7 that's a proper assessment that you did it incorrectly.

8 A. I don't know that it's --- I don't know what the right way would be to do it to be
9 honest with you.

10 Ex. (b)(6) and Ex. (b)(7)(C)

11 Okay.

12 A. How to do that.

13 Ex. (b)(6) and Ex. (b)(7)(C)

14 Well, I just --- that one in particular ---.

15 A. All I can tell you is the literature that's been out there and then after the
16 training that I received last week and that. I'm kind of at a point where I'm not exactly
17 sure what --- because it seems that there's just a lot out there right now that's
18 contradictory both ways so I can't tell you what the right way would be to do it.

19 Ex. (b)(6) and Ex. (b)(7)(C)

20 Well, I guess one of the things that I would ask is that the
21 context of this situation here where they are mining in a barrier pillar such as what
22 they proposed to do there to me that would --- the circumstances of this layout here I
23 would want to air on the side of being conservative. So that's why I can't really see
24 that what you proposed originally would be that far off the mark. I mean, I think you
25 would want to be conservative and that's why I still --- I'm kind of a little bit surprised at

1 the answers that you guys prepared to respond to NIOSH that that one in particular
2 would have remained. I mean, I would think that everything being said and digested
3 that you would recognize that that was a pretty reasonable approach to be
4 conservative in this particular case.

5 A. Yes. I agree with that. It could be noted though that the --- that if you do
6 model it as being fully extracted or as yielding, however you want to call it, how about
7 it being fully extracted well that differed quite a bit. I mean even when they drilled it,
8 that entry was about the only place that looked good still. That still had sustainable
9 height as I recall from the coralog and that --- or from the holes that were drilled, was
10 that bleeder entry. So I guess what I'm trying to say is that it still wouldn't be right to
11 model it completely extracted. There's probably --- the middle ground would probably
12 be the best way to do it, but I think that you'd have to use --- it might be better to use a
13 better program than ARMPS or something. Either Boundary Element or Finite
14 Element Analysis.

15 BY MR. TEASTER:

16 Q. Pete, when you say that there's a lot of information out there right now that's
17 contradictory and you're really not sure how much confidence you have in this, would
18 it be a safe bet to say that anybody that knows these programs can kind of plug
19 information in to get the end result of anything they want?

20 A. You can do that with any model. But that's why there's a --- that's why you
21 have the approach that you have that you ---

22 Q. That's why you have what?

23 A. That's why you have to --- see no matter what you model, you can always get
24 any answer you want. You can tweak numbers and that. So, yeah. I guess yes to
25 your answer.

1 Q. So how much level of confidence, then, would that give you as a plan
2 reviewer to ---?

3 A. Well, that's why we run an independent analysis.

4 Q. Yeah, but if you run an independent analysis and then someone says my
5 numbers are better than your numbers what does that tell you? Did it really help? I
6 mean you can argue about numbers all day long and what perimeters you put into the
7 model; right?

8 A. Right.

9 Q. So what good is it? I mean if you say and you explained early on --- I
10 certainly by no means even much understand what the hell you all are talking about,
11 but you said you start out with the end result you want kind of when you're modeling.

12 A. Something that you already know the answer to.

13 Q. Yeah. You already know the answer to. Now you start putting things in there
14 that give you that answer and say uh-huh, I'm right. No?

15 A. That's about right.

16 Q. That's about right? Now is that really what we want to do? When it comes to
17 this?

18 A. Well, that's exactly what you want to do cause you're taking it out of context
19 ---.

20 Q. Okay, maybe I am. You put it into context for me.

21 A. Okay. For instance, if you know the answer to something say you have pillar
22 panels that have already been pulled at a mine.

23 Q. Okay.

24 A. And you know they were successful. You know they failed. You know --- any
25 mine, not Crandall, say that you're reviewing ---

1 Q. Okay.

2 A. --- then you would model those first because you already know the outcome.

3 Ex. (b)(6) and Ex. (b)(7)(C)

4 Which is what you did here, Pete, as far as --- or what Agapito
5 did as far as their ---

6 A. I did too. Yes.

7 Ex. (b)(6) and Ex. (b)(7)(C)

8 --- the ground truthing, so to speak.

9 A. Right.

10 BY MR. TEASTER:

11 Q. So this is the one that was the pillaring was successful, until it failed. Is that
12 right?

13 A. The pillar was successful until it failed.

14 Q. Is that kind of how that works?

15 A. That's correct. I just like the way you said that.

16 Ex. (b)(6) and Ex. (b)(7)(C)

17 That's not an original quote. He copied that off of somebody
18 else.

19 BY MR. TEASTER:

20 Q. Yeah, but I brought it to their attention when they said it.

21 A. Isn't that always the case?

22 Q. Yeah, so I mean, that to me, you know it's like I had a safe trip from Los
23 Vegas to New York City until I wrecked in Kansas City. Right?

24 A. That's right.

25 Q. Which really is contradictory of the safe trip part.

1 A. Yep.

2 Q. Cause I didn't make it to New York. And that's kind of like saying I mined this
3 successfully 'til I failed. I don't understand that. Can you explain it to me?

4 A. Let's see how to best do this. Now the reason I picked that panel --- I can go
5 through this and we'll just go through it that way.

6 Q. Did you pick this or did Agapito pick this?

7 A. Agapito said that they did this and I did the ninth one because it had several
8 sections where they had left remnant pillars, which like everyone knows ---.

9 Q. Usually failed before it successfully retreated.

10 A. Well, I don't know why they left those so I wouldn't do this one.

11 Q. Okay. You know why they left these; right?

12 A. They left remnant pillars, so I don't know why --- yeah, and these two they
13 mined successfully with no failures.

14 Q. Okay.

15 A. And these, they had some localized --- usually if you leave remnant pillars,
16 there's only one reason, you had problems with the roof, so you skipped right?

17 Q. Yes.

18 A. Or a sump, you know? Or if you leave a bleeder line or something if they're
19 down the side, but this had several points where they had pulled pillars for a while
20 then they --- were you can look at it and make the assumption is that then they had
21 some problems with the roof and they ---

22 Q. And we'd know what the failure was ---

23 A. --- skipped the roof.

24 Q. --- was it above, was it a roof fall, was it heaving? Was it squeeze? Was it ---

25 A. I don't know.

1 Q. --- we don't know. Nobody knows.

2 A. No.

3 Q. They didn't know either. Agapito didn't know either. They just knew there's
4 some failure there?

5 A. Yes.

6 Q. Is that true?

7 A. I don't know ---

8 Q. I mean, they didn't identify ---

9 A. They didn't identify the ---

10 Q. ---the failure here was above, the failure here was a squeeze, the failure here
11 was ---.

12 A. They didn't identify the failure. Okay.

13 Q. Okay.

14 A. ARMPS handles all failure modes the same. It's a success or it's a failure. So
15 it really wouldn't be of concern if you're using ARMPS.

16 Q. Oh. Okay.

17 A. So, it's a one or a zero, you know. It worked or it didn't. So then what you can
18 do is you can run it and figure out your stability to hear and see where --- and run
19 these localized patterns and you can get a general idea of what they're doing. At least
20 that's how I did mine.

21 Q. Okay. Was the cover in this area pretty much similar to this?

22 A. I forget. Let me look at my notes here. I don't want to tell you the wrong
23 thing. I had a big map that I did everything off of and went from there. They had a ---.

24 Ex. (b)(6) and Ex. (b)(7)(C)

25 I think that max there maybe was 1,800?

1 A. Yeah. It was. 1,800 feet.

2 BY MR. TEASTER:

3 Q. Okay.

4 A. Which is only a few hundred feet less cover than the sustained cover over the
5 sections. Now see you had generally the same thing. You have a gob on one side, a
6 small barrier pillar, you got mains on the other side. It pretty much --- it's about a
7 similar a loading condition as you're going to find in the mine.

8 Q. In this mine?

9 A. In this mine.

10 Q. It was the closest you could find in this mine?

11 A. Yes.

12 Q. Okay.

13 A. At the time.

14 Q. Okay.

15 A. The mine didn't have a big history of bumps. When you look at the roof fall
16 history and that and the bump history. It --- I mean even though they ---.

17 Q. At least of reporting bumps that we know of.

18 A. Right. It didn't have a lot of reportables. I think only one or two in their whole
19 deal ---. So I guess to answer your question about getting the answer --- whatever
20 answer you want out of it ---

21 Q. Okay.

22 A. --- that's how you --- you have to tie every model that you make to the real
23 world. I'll use the example of modeling with a steel for instance.

24 Q. Okay.

25 A. That's pretty easy to tie to the real world, because steel is manufactured in this

1 tight spec. It's within plus or minus 10% or whatever. So if you have a safety factor of
2 one and a half or two then you're already tied into reality cause you know your
3 properties pretty well.

4 Q. Okay.

5 A. With rock mass, tunneling, or if you're talking about retreat mining or long wall
6 or anything like that it differs so much from seam to seam and location to location that
7 you have to tie it somehow to reality. So then you're calibrating the model, then
8 modeling something you already know the answer to several times in the same panel.
9 The way I understand it, though, is that actually Agapito, I think, modeled the whole
10 section, but I'm not 100% on that. I only modeled that ninth panel there.

11 Q. Now see the way I would look at that --- if I'm tying it to something I already
12 know within the same mine, okay, then I'm --- just me, I'm going to look at this and say
13 this was successful. Then it failed. Then it was successful for a little bit. Then it
14 failed. Then it was successful and then it failed. And so if I model it to that same thing
15 and I say this is a similar area with similar conditions, similar area, why would I not
16 think it's going to fail three times again? Explain that to me.

17 A. What you're going to get when you model is you're going to get some kind of
18 number. Some stability factors.

19 Q. Okay.

20 A. These stability factors are going to differ as you go --- I made a graph of them,
21 in fact, because it's a lot easier for me to graph and see it afterwards than anything
22 else. And that's what that was there.

23 Q. Okay.

24 A. So as you go further and further. And you can see as you pull out the stability
25 factor drops and that's going to be your minimum stability factor.

1 Ex. (b)(6) and Ex. (b)(7)(C)

2 And, Pete, just to clarify, I mean, what you're looking at there
3 is the extent of the front gob ---

4 A. Yes.

5 Ex. (b)(6) and Ex. (b)(7)(C)

6 --- as you pull out and how that affects it. So your front gob
7 throwing load on it is expanding and that's why your stability factor is dropping as you
8 look at ---

9 BY MR. TEASTER:

10 Q. Okay.

11 Ex. (b)(6) and Ex. (b)(7)(C)

12 --- different points along the panel.

13 A. Appreciate the help. I'm not very articulate so --- I ---.

14 BY MR. TEASTER:

15 Q. Pete, when they took --- Agapito took that barrier over there in the north mains
16 they added the width of that bleeder block plus the width of that entry plus the width of
17 the barrier come up with 210 foot barrier. And they based that .53 or .54 whatever it
18 was stability factor of that barrier pillar on those numbers. When NIOSH done it they
19 took that 130 foot width of the barrier added half the width of that bleeder block and
20 came up with 160 foot barrier and that translated to .29 stability factor, which equals
21 failure, which is what we had up there. Now why would they use that 160 feet as
22 opposed to the 210?

23 A. I'm not sure. I mean, I read through the report as well as you did. I didn't
24 write that report so I can't speak for that report.

25 Q. Well, I mean, we're trying to find out --- we know we had a failure. We know

1 what you done --- your initial analysis equaled failure and then ---.

2 A. What you're looking at still is that there's really a --- not necessarily a right
3 answer to how to model this. The program wasn't set up to model a bleeder line in
4 any particular way. The literature out there said that you could add it in. It kind of --- it
5 led to that too from other stuff saying that --- so if you added in then where do you ---
6 how much do you add in? Do you add in half the block? Do you add in the whole
7 block? Do you add in the block in the entry? If the programs sees developed pillars
8 as the same as solid coal then if you have a developed pillar line that you leave, do
9 you count that as solid coal as being left? There's ---.

10 Q. Well, that's what I don't know. I know that what Agapito come up with come
11 up with numbers that would indicate it was safe to mine that area.

12 A. Right.

13 Q. And the --- based on your reviews, we figured that it wasn't adequate so we
14 needed some additional information or changes or whatever. And then we had a
15 failure and then NIOSH, who is the one that developed that program, as I understand
16 it, they do a review of it and their analysis equates to failure.

17 A. But their analysis didn't follow their own published literature out there.

18 MR. PAVLOVICH:

19 So they extrapolated numbers to put in there that really didn't
20 follow the way you do the program, but ---.

21 A. Not the way that their past literature says. I mean that's why we wrote a letter
22 there.

23 **Ex. (b)(6) and Ex. (b)(7)(C)**

24 Well, Pete, and I guess, you know, I kind of asked Billy the
25 same question. If you want to look at that, you know, what's published in the current

1 version now they have a pretty extensive discussion of ---

2 A. Barrier pillar.

3 Ex. (b)(6) and Ex. (b)(7)(C)

4 --- areas of stability factors also. Which Agapito didn't look at
5 at all. So, you know, I guess what my point there is you can't have it both ways. If
6 you go back to an older version, which, I think, you know, the stuff that you guys found
7 saying that you just add it in, you know, that's in some of the old stuff. I don't see that
8 anywhere in the current version. The current version, on the other hand, does discuss
9 barrier pillar stability factor, which Agapito didn't touch at all.

10 A. Didn't touch.

11 Ex. (b)(6) and Ex. (b)(7)(C)

12 So ---

13 A. Right.

14 Ex. (b)(6) and Ex. (b)(7)(C)

15 --- I guess right now, for me, this would be a good point to ask
16 the question, you know, you're discussing some of these things that ARMPS can't
17 handle right now with the bleeder pillar. They also submitted LAMODEL analysis,
18 which you couldn't really begin to analyze with the situation in the district with
19 AutoCAD and all of that. Did you guys ever discuss calling tech support? I mean you
20 got LAMODEL, which you can't do and ARMPS which you have these things that
21 you're not really sure how to handle, you guys, you and Billy ever say maybe we ought
22 to see what tech support has to say?

23 A. I didn't say any of that. So I guess not. I mean we didn't talk about that, no.

24 Ex. (b)(6) and Ex. (b)(7)(C)

25 Okay. And that's my question.

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MR. PAVLOVICH:

Had you had any dealings with Pittsburgh tech support prior to this Pete?

A. Huh-uh.

MR. PAVLOVICH:

None whatsoever?

A. No.

MR. PAVLOVICH:

Had you ever met anybody in Pittsburgh tech support in the roof control division? Never have?

A. Uh-uh (no).

MR. PAVLOVICH:

So you wouldn't even know to call tech support. You don't know who they are; right?

A. Well, I guess I had talked to Ray Bazoney (phonetic) about roof bolts, but that's about it, yeah.

MR. PAVLOVICH:

Okay.

BY MR. TEASTER:

Q. Was you aware that there's SOP if you had any questions, or comments, or concerns that you'd write a letter requesting assistance from tech support?

A. No.

Q. It's SOP.

MR. PAVLOVICH:

Billy never said anything about that, did he?

1 A. No.

2 MR. PAVLOVICH:

3 No?

4 A. I'm not aware of that SOP. Or I was unaware, I guess. I'm aware of it now
5 since you said that.

6 BY MR. TEASTER:

7 Q. And, again, we're not trying to place no blame. What we're trying to figure out
8 here is --- we know we had a failure and we're trying to figure out what went wrong and
9 how we can come up with something and ---

10 A. I understand that. I'm ---.

11 Q. --- if you look at the different numbers, I mean, if you take this ---.

12 A. I just don't necessarily have answers for some of your questions, I guess. Is
13 what it comes down to.

14 Q. Well ---

15 MR. PAVLOVICH:

16 That's fine. I mean, if you don't know, you don't know.

17 BY MR. TEASTER:

18 Q. --- based on your knowledge, and understanding now, do you have any idea
19 why NIOSH would only accredit 160 feet to that barrier block as opposed to the 210
20 feet that Agapito added?

21 A. I guess it would be because it failed. I don't know. I can see why you'd want
22 to bring down the amount of the affected barrier pillar because you have lost a lot of
23 load bearing area, you lost a lot of confinement, coal strength is on its confinement.
24 But as far as how they arrived at that exact --- how they decided 160, I can't answer
25 that. I don't know what --- how they ---.

1 MR. TEASTER:

2 Do you know how they come about that **Ex. (b)(6) and Ex. (b)(7)(C)**

3 **Ex. (b)(6) and Ex. (b)(7)(C)**

4 Well, I think, my understanding of it is that they just made
5 some plan view percentage basis of the coal that was left in that area taken out coal
6 certainly for the entry itself, but also for the cross cuts and then taken a percentage.

7 A. Is that how they did it?

8 **Ex. (b)(6) and Ex. (b)(7)(C)**

9 That's my understanding and I don't know that for a fact, but I
10 tried to duplicate that and I don't know if I had the proper pillar centers or not. I came
11 close so that's why I was assuming that that's what they did.

12 MR. TEASTER:

13 I didn't mean to question you, **Ex. (b)(6)** but you setting on that side,
14 I forgot you're ---.

15 **Ex. (b)(6) and Ex. (b)(7)(C)**

16 I should move over there.

17 MR. PAVLOVICH:

18 Do you have some questions about that **Ex. (b)(6) and Ex. (b)(7)(C)**

19 **Ex. (b)(6) and Ex. (b)(7)(C)**

20 Well, I guess this line of questioning, Pete, referring to this
21 deep pillar --- deep cover pillar extraction paper that, you know you mentioned some
22 publications that came out with ARMPS versions.

23 A. Right.

24 **Ex. (b)(6) and Ex. (b)(7)(C)**

25 This one came out with the update when ---.

1 A. In 2001 or whatever.

2 [REDACTED]

3 2002. Right. Whenever NIOSH updated ARMPS to include
4 many more case studies with deep cover.

5 A. Deep cover.

6 [REDACTED]

7 And this is the one that I was kind of referring to earlier where
8 they kind of repeatedly referred to ---.

9 A. Barrier pillar stability factor ---

10 [REDACTED]

11 Right.

12 A. --- being greater than two in bump prone areas.

13 [REDACTED]

14 Right. And kind of just the overall importance of the barrier
15 pillar as you go into deep cover. And I guess we just, you know, wanted to know how
16 familiar you were with this, again, before Crandall happened. I think everybody's
17 familiar with a lot of this stuff now.

18 A. I'm a lot more familiar now than I was before.

19 [REDACTED]

20 Right. But before when you did your initial ARMPS analysis?

21 A. Well, as you can read barrier pillar stability factor never comes up in my
22 report. I'll be honest with you, I had seen the paper. I read through the fact that they
23 had increased the database to cover --- and that's about all I kind of really read on it.

24 [REDACTED]

25 Okay. And Billy never, I mean, Billy never discussed barrier

1 pillar stability factor with you either?

2 A. No. We didn't talk about it.

3 Ex. (b)(6) and Ex. (b)(7)(C)

4 Okay. That's really all.

5 A. Oh. Okay.

6 Ex. (b)(6) and Ex. (b)(7)(C)

7 I didn't mean to dwell, I was just curious about that.

8 BY MR. TEASTER:

9 Q. Do we have any more questions on that area of our questioning?

10 Ex. (b)(6) and Ex. (b)(7)(C)

11 I just have a question on those first five issues. And I guess
12 my question is, he said that the mine operator submitted some literature to ---.

13 A. They pointed us in the direction. They said, you know, there's papers out
14 there that say this, this, and this and we kind of --- we looked them up and ---

15 Ex. (b)(6) and Ex. (b)(7)(C) -----

16 You did?

17 A. Yeah. Well, Billy did and showed me so ---

18 Ex. (b)(6) and Ex. (b)(7)(C) -----

19 Okay. Because, I mean, I think you kind of saw where I was
20 going with this. I think you could find literature to support almost any premise that you
21 want it to. So those papers that they submitted, are they pretty main stream? Are
22 they ---

23 A. Yes.

24 Ex. (b)(6) and Ex. (b)(7)(C)

25 --- they were decisions with the weight of the authority out

1 there?

2 A. Yeah. Like for instance, the coal strength and that. These were calculated by
3 the Bureau of Mines. Like I said before, when Wilberg was still open from bore hole
4 pressure cells and in the Wilberg mine on gate roads and on the chain pillars --- on the
5 old pillars and I mean it's not just --- you don't Google it and find the right answer. It
6 was actually information that was considered reliable. Stuff that's been presented to
7 Ground Control Conferences, symposium on rock mechanics ---.

8 Ex. (b)(6) and Ex. (b)(7)(C)

9 But, Pete, at least, and try not to belabor this too much, but a
10 couple of those things that they got back to you on related directly more to the
11 LAMODEL, I mean the coal strength ---

12 A. Yeah.

13 Ex. (b)(6) and Ex. (b)(7)(C)

14 --- the modulus and even some of the other fourth or fifth
15 issue relating to LAMODEL, which even when they gave that to you, you didn't have
16 the capability to say oh, okay, well now that these are okay numbers, I'm going to
17 double check everything further. It kind of ended right there because of the inability in
18 the district to do anything further with it. Is that fair?

19 A. That's fair.

20 Ex. (b)(6) and Ex. (b)(7)(C)

21 Okay.

22 MR. TEASTER:

23 Where we at?

24 MR. PAVLOVICH:

25 Didn't you say the only person in the district that had

1 AutoCAD was IT specialist, that's Dario, right?

2 A. Yeah.

3 MR. PAVLOVICH:

4 What does Dario do with AutoCAD?

5 A. Well, there's a good question.

6 MR. PAVLOVICH:

7 I mean, seriously, why does he need it?

8 A. I guess the reason is if any maps come in he'll print them or something to that
9 matter. I'm not really sure. I've been on a long road of requesting AutoCAD so it's a
10 ---.

11 MR. PAVLOVICH:

12 Like that, like that --- we're licensed for it evidently.

13 A. Yes.

14 MR. PAVLOVICH:

15 Why can't Dario take it off his machine and put it on the
16 machine for you all where it would be more beneficial?

17 A. That's a good question. I can't answer that for you. That's a question I asked
18 too so.

19 **Ex. (b)(6) and Ex. (b)(7)(C)**

20 I mean, you guys, you guys knew that you needed AutoCAD
21 for LAMODEL before this one came up. It's not like this request came in and you said
22 oh ---.

23 A. You can do LAMODEL without it, but ---

24 **Ex. (b)(6) and Ex. (b)(7)(C)**

25 Well, I understand that.

1 A. ---yeah, you don't want to though.

2 Ex. (b)(6) and Ex. (b)(7)(C)

3 Manually constructing a grid. I mean that was never really
4 considered. Is that ---?

5 A. No. I --- no --- takes forever. But yeah, you're right. I don't know why we
6 don't have --- it's \$150 program to get AutoCAD Light. I don't see why we don't have it
7 on every computer in there, but that's ---.

8 UNIDENTIFIED SPEAKER:

9 Even the full version.

10 A. We don't even need the full version though. If we got the light version on ---
11 would be nice, but --- sorry, it's just a ---.

12 MR. TEASTER:

13 That's perfectly all right, Pete.

14 Ex. (b)(6) and Ex. (b)(7)(C)

15 Can I just ask one more question ---

16 MR. TEASTER:

17 Sure.

18 Ex. (b)(6) and Ex. (b)(7)(C)

19 --- before you move on?

20 Ex. (b)(6) and Ex. (b)(7)(C)

21 The meeting that initiated this whole plan in Denver, do you
22 know who all was present at that meeting? You said you weren't.

23 A. I --- no. I can't answer that. I don't ---.

24 Ex. (b)(6) and Ex. (b)(7)(C)

25 Do you have any idea why they couldn't just go through the

1 regular plan and approval process? I mean they felt like they needed to go to Denver
2 and have a meeting before they even submitted a plan.

3 A. Cause they're mining barrier pillars. I mean --- I mean anybody who looks at
4 that says why did they mine barrier pillars? I mean, it's not something that's
5 commonly practiced.

6 MR. PAVLOVICH:

7 Did you know that, Pete?

8 A. Mining barriers wasn't commonly practiced?

9 MR. PAVLOVICH:

10 Yes. Did you know that prior to this?

11 A. Yeah.

12 MR. PAVLOVICH:

13 So you knew that people here didn't normally mine barrier
14 pillars.

15 A. Yeah.

16 MR. PAVLOVICH:

17 What did you think when you first looked at that map?

18 A. When I first looked at the map?

19 MR. PAVLOVICH:

20 Yeah.

21 A. I said that's the craziest thing I've ever seen.

22 MR. PAVLOVICH:

23 Okay. Well, that's honest. I mean, you looked this and said
24 it's the craziest thing I've ever seen to try to mine that barrier out?

25 A. Yep.

1 MR. PAVLOVICH:

2 With the longwall gobs here and the longwall gobs here and
3 the amount of cover you had?

4 A. Yeah.

5 MR. PAVLOVICH:

6 Is that kind of why you questioned some of these things like
7 this? Cause you just didn't think it was right?

8 A. Well, yeah, like I said ---.

9 MR. PAVLOVICH:

10 Okay. Okay. And, you know, I guess, and I'm just asking for
11 your opinion, but I know if you first looked at that and said that's the craziest thing I've
12 ever seen, why would somebody want to do that? And you went through the trouble to
13 do all this here and then somebody comes in and says well really that's wrong, that's
14 wrong, that's wrong, that's wrong, here's stuff to prove it. Did all of the sudden it
15 convince you it wasn't crazy anymore?

16 A. No.

17 MR. PAVLOVICH:

18 You still believed it.

19 A. Well, that's why we went on site.

20 MR. PAVLOVICH:

21 Okay. And when you went on site, did it convince you then it
22 was okay?

23 A. The conditions were great for development, how it was the opening ---.

24 MR. PAVLOVICH:

25 Where were they at when you got there? Do you remember?

1 A. They were in the North --- I forget exactly. But I thought they were --- I'm not
2 sure exactly where they were at. I thought they were in pretty far. They developed
3 quite a bit. And we walked most of it.

4 MR. PAVLOVICH:

5 You walked most of the entries.

6 A. Yeah. We were walking them to see ---.

7 MR. PAVLOVICH:

8 Okay. What did you see when you walked them?

9 A. Well the pillars, they were hour glasses as they tend to do in Utah.

10 MR. PAVLOVICH:

11 Okay.

12 A. What we noticed is that about two breaks out by the face, the pillars were
13 yielding. That's about where they were taking load.

14 MR. PAVLOVICH:

15 Taking load? And what indicated to you they were taking
16 load?

17 A. The fact that they were in there. We were standing in front of one and you go
18 from the pillars being hour glassed into them still being square ---

19 MR. PAVLOVICH:

20 Okay.

21 A. --- and we were two breaks up by the face and there was a --- it kind of made
22 a loud pop and then the coal just kind of sluff off from it. I jumped back pretty bad. I
23 mean that --- I thought that as it. It was scary in there.

24 MR. PAVLOVICH:

25 Are those good signs on development?

1 A. Yeah. It looks like it's taking load. It's shedding a lot of it's load. It's yielding.

2 So ---.

3 MR. PAVLOVICH:

4 See any red burn along the top edge?

5 A. No.

6 MR. PAVLOVICH:

7 None? Billy never pointed any out to you?

8 A. I don't remember any.

9 MR. PAVLOVICH:

10 Okay.

11 A. I don't think there was any red burn across the top.

12 MR. PAVLOVICH:

13 Did see any along the very top edge where the coal meets the
14 roof?

15 A. I don't think so.

16 MR. PAVLOVICH:

17 Okay.

18 A. What would indicate ---?

19 BY MR. TEASTER:

20 Q Pete, what indication ---?

21 MR. PAVLOVICH:

22 What would that indicate, Pete?

23 A. Well, usually you don't get red burn unless you're talking about it bouncing or
24 the ---.

25 MR. PAVLOVICH:

1 Or preparing to bounce?

2 A. Yeah.

3 MR. PAVLOVICH:

4 That's what you've heard before or seen?

5 A. Well, that's what I've heard.

6 MR. PAVLOVICH:

7 Okay. People have told you that before?

8 A. Yeah.

9 BY MR. TEASTER:

10 Q. What was you looking for in there to say that it was not safe to pillar mine that
11 area? What would have been a good indication of that?

12 A. Well, just look at the roof to see that there weren't too many stresses to where
13 the roof was starting to break up, you know. Make sure that there wasn't the burn line
14 across the top. I mean, just generally what ---.

15 Q. So what ---?

16 A. See that the pillars weren't loading with too much and cracking that they were
17 actually shedding their load some.

18 Q. So if the pillars were standing very solid with no sloughing and nice square
19 rim, would that concern you more than the hour glass?

20 A. Well, it depends, I mean if they're showing signs that they're taking load, you
21 know, starting to get some cracking in them and that ---.

22 Q. Well, you have to kind of admit, they all look broke up when they're hour
23 glass; right?

24 A. Yeah. To an extent. I mean ---.

25 Q. You can't really tell how --- how deep they're cracked or stressed or anything

1 else, can you?

2 A. No.

3 Q. So ---

4 A. But if they are ---.

5 Q. --- what can you tell on the development that indicates that you're going to fail
6 on the retreat? Do you know?

7 A. I guess not, I mean, more than what I just told you. I mean ---

8 Q. Okay. I mean, I don't --- I wouldn't have any idea.

9

Ex. (b)(6) and Ex. (b)(7)(C)

10 So going into this, Pete, I mean before you got up on the
11 section, did Billy tell you what you're looking for? Say if we see this and this it's good
12 or this and this is bad? I mean, did he give you any clue what he was looking for?

13 A. We kind of talked about it when we were walking through what we were
14 looking at, what each thing meant, what it --- if it was a good thing or bad thing.

15

Ex. (b)(6) and Ex. (b)(7)(C)

16 Okay. So some yielding was good?

17 A. Yeah.

18

Ex. (b)(6) and Ex. (b)(7)(C)

19 But if you saw too much more it would have been bad? I
20 mean I'm ---?

21 A. Well, no, I mean if you're talking where it's not actually yielding at all. If
22 they're standing real firm but you're getting some cracks and showing that they're
23 taking load but they're not shedding it, they're just storing that energy, that's a bad
24 deal. Then you're talking about --- then you have more of a potential for an outburst
25 or a bounce, if you will. If they're yielding too much, that's not a good thing either.

1 They're not holding any of the immediate roof cause then you're in trouble too so ---.

2 BY MR. TEASTER:

3 Q. Have you been in other developing sections with deep cover, Pete?

4 A. Yeah.

5 Q. And how did that look compared to what you saw up there that day on January
6 at North Barrier?

7 A. Well, I've definitely been in a lot worse sections than that. Primarily
8 everything's longwall out here when they're developing so the pillars are longer. But
9 I'm in a different situation there. But as far as stability, the entries and that it looked
10 like one of the better places I've been to to be honest.

11 Q. The hour glassing was better in this section than it was in some of those
12 longwall development sections?

13 A. Well, hour glassing and, I mean, just the general stability entry. I mean it ---
14 you don't see the roof cracking or pieces coming off when they're developing. I mean
15 it wasn't bad top like that. I mean it was solid obviously. Otherwise they wouldn't
16 have had a bounce.

17 Q. Okay.

18 A. I don't know if I'm answering your question right.

19 Q. Take a break.

20 A. Sounds good to me.

21 Q. Want to take a break, Pete?

22 A. I would love to take a break.

23 Q. All right. Very good.

24 SHORT BREAK TAKEN

25 BY MR. TEASTER:

1 Q. Pete, were you aware of any conversations concerning a bump that occurred
2 up there in the North Barrier on March 11th of this year?

3 A. I wasn't --- I didn't know anything about that. My involvement had been ---
4 already my involvement had ended after the North Barrier. I had nothing more to do
5 with Crandall until after August 6th.

6 MR. PAVLOVICH:

7 So after you reviewed this plan for the North Barrier, then you
8 didn't have anything more to do with this?

9 A. No, I started ---.

10 MR. PAVLOVICH:

11 Other than the visit you and Billy took?

12 A. Right. I started Beckley in October where this was in September, the cursory
13 review.

14 MR. PAVLOVICH:

15 Okay.

16 A. And since it's not my mine, too, I suppose my involvement from it pretty much
17 was done.

18 MR. TEASTER:

19 When did you become aware that there was a bump?

20 A. August 6th.

21 MR. PAVLOVICH:

22 Then you found out there was a bump also in the North
23 Barrier?

24 A. Yes.

25 MR. PAVLOVICH:

1 get an idea was it --- was it a piece of coal come flying or was it a Crandall Canyon, I
2 mean, you know what I mean?

3 MR. TEASTER:

4 This is the North Barrier. They had some problems up here --
5 -

6 A. Right.

7 MR. TEASTER:

8 --- which are not well defined. But they pulled out and left a
9 couple of rows, started retreating and when they had this bump, and this is the extent
10 of the bump of the areas that was affected by it. And you can just flip through there
11 and get a some of the pictures.

12 MR. PAVLOVICH:

13 Have you seen those, Pete?

14 A. No, I haven't.

15 MR. PAVLOVICH:

16 Okay. What you'll see there is there is a ---.

17 A. It was taken by Laine Adair on March 16th.

18 MR. TEASTER:

19 Right.

20 A. Leo Gilbert (phonetic), Michael Hardy ---.

21 MR. PAVLOVICH:

22 And you'll see there's a --- the picture and then you see the
23 arrow ---

24 A. Where it's at.

25 MR. PAVLOVICH:

1 --- shows the rib line or the pillar or whatever you're looking
2 at.

3 A. Knocked timbers out. Right there. Is that a Kennedy?

4 MR. PAVLOVICH:

5 That's a Kennedy stop.

6 A. It torn off. Man.

7 MR. PAVLOVICH:

8 It's looking right over top of a ---

9 A. Pillar.

10 MR. PAVLOVICH:

11 --- pillar.

12 A. Wow.

13 MR. TEASTER:

14 Would you characterize that as a significant bump?

15 A. I would categorize this as a very significant bump. That's very extensive. It
16 tore up a lot of entries. It looks like to me. I can't see any on that one. Drop the ---
17 man.

18 MR. TEASTER:

19 What would be your thoughts on retreat mining in the South
20 Barrier based on your knowledge of all the parameters that have been involved in the
21 Agapito report and what you see there and ---?

22 A. I can tell you that the North had higher stability factors. If it bounced like that,
23 I don't know why --- why did they ever even ask to mine the South? Man, it's terrible.

24 UNIDENTIFIED SPEAKER:

25 Pete, would it surprise you if the only change that Agapito had

1 recommended was that longer pillar in the South? I mean, based on what you know
2 and what you're seeing?

3 A. Yeah.

4 UNIDENTIFIED SPEAKER:

5 You think it would have taken something other than just a
6 longer pillar to ---

7 A. Yeah.

8 UNIDENTIFIED SPEAKER:

9 --- make the situation a little better?

10 A. Yeah.

11 BY MR. TEASTER:

12 Q. Do you know if the ARMPS analysis conducted by District or Agapito
13 considered on mining heights greater than eight feet for that Crandall Canyon period
14 of mine?

15 A. No. I didn't.

16 Q. Do you know if the LAMODEL and analysis considered a height greater than
17 eight feet?

18 A. The LAMODEL? I don't believe it did. I believe it was eight feet.

19 Q. How significant is the height ---

20 A. Pretty significant.

21 Q. --- in conducting those analyses?

22 A. It changes everything.

23 MR. PAVLOVICH:

24 So the height changes everything, Pete?

25 A. Yeah. Your models aren't valid if you change an input. Well, how much

1 difference are we talking?

2 BY MR. TEASTER:

3 Q. Two or three feet.

4 A. Two or three feet? Well, that's a 25, 30, 40% increase. If you got two or three
5 feet, that's 37 and a half. So that's a substantial difference in ---.

6 Q. Was they leaving coal floor in the North Barrier, or do you know?

7 A. I don't know.

8 Q. Have you ever heard of a mining that mined floor there at Crandall Canyon?

9 A. At Crandall? They shouldn't have been mining coal floor. They didn't have a
10 plan to mine coal floor.

11 MR. PAVLOVICH:

12 So you would expect to have a plan ---

13 A. Yeah.

14 MR. PAVLOVICH:

15 --- if they were going to mine bottom coal?

16 A. Oh, yeah.

17 MR. PAVLOVICH:

18 Okay.

19 UNIDENTIFIED SPEAKER:

20 But on the same line of questioning, Pete, if just because
21 ARMPS was run by you and Agapito at eight feet, if they had run, you know, mine nine
22 foot as they developed it, there's nothing in the plan that is restricting them to that
23 eight foot that everything was modeled on?

24 A. Right. But that's not coming back and taking a second cut.

25 UNIDENTIFIED SPEAKER:

1 I understand. There's two different questions there. I mean,
2 we're asking about the bottom coal, but just going back to the fact that eight feet
3 seemed to be the number that everybody was comfortable with as far as all the
4 models, but yet, we know they had more than eight feet of coal. Why did we feel
5 comfortable with eight feet as what everybody was running?

6 A. I don't know. That's just what they mined there. I don't know. I can't answer
7 that.

8 Ex. (b)(6) and Ex. (b)(7)(C)

9 Hey, Joe.

10 MR. PAVOLVICH:

11 Yeah, go ahead, Ex. (b)(6) and Ex. (b)(7)(C)

12 Ex. (b)(6) and Ex. (b)(7)(C)

13 Along the lines of the photos that Ernie presented a minute
14 ago, on that question number five. Agapito submitted that second report from April. I
15 don't know if Pete seen the verbiage that was in their report?

16 A. I'm familiar with that report now.

17 UNIDENTIFIED SPEAKER:

18 So where it says you're going through the large bump and ---

19 Ex. (b)(6) and Ex. (b)(7)(C)

20 A large bump with heavy damage. That was included in
21 Agapito's report.

22 A. Right.

23 MR. PAVLOVICH:

24 But you never saw that report, did you, Pete? Before the
25 approval for the South Barrier?

1 A. I didn't have anything to do with it. So I mean ---.

2 Ex. (b)(6) and Ex. (b)(7)(C)

3 Yeah. I realize that. But if you had been in the office, Pete, I
4 know we can speculate all day, but what would that have said to you based on your
5 experience?

6 A. Well, I definitely would have needed a lot more information than just large
7 bump before doing anything else. I think --- I don't know if --- had been sealed by
8 then. If the mine had been sealed. I know they were kind of quick to seal it because
9 they had an evaluation point way back in the back on the bleeder, and I know that they
10 wanted to get it sealed cause they didn't want to walk it anymore. And I was kind of
11 under the impression, but I'm not sure, that when they requested the sealing that they
12 had had a bump but it was kind of among other things. Like they had had a bump but
13 they had had a lot of problems with the roof and a bunch of other stuff and it was just
14 time to --- they wanted to seal it 'cause they couldn't --- they wanted to move the
15 bleeder point outby and they said no to that. Keep it in the back. And so they said
16 okay we need to seal it. But I ---.

17 UNIDENTIFIED SPEAKER:

18 Yeah. I think there's some question as to, you know, how ---
19 what MSHA knew as far as the extent of the bump. At least early on. But then this
20 report that we're referring to, the April dated report, was presented to the District in
21 May ---

22 A. Right.

23 UNIDENTIFIED SPEAKER:

24 --- with this verbiage in it. And I guess my question to you is if
25 ---.

1 A. A phone call, what is a substantial plan? I mean, what ---?

2 Ex. (b)(6) and Ex. (b)(7)(C)

3 I guess the final result is it was substantial enough that they
4 pulled out.

5 A. For sure. I can see those pictures and know that for sure. But I don't know
6 that we --- I don't know anything on that. Man. They should have never been in there.

7

8 UNIDENTIFIED SPEAKER:

9 Would that bump there in the North, would that have become
10 the new failure points? Should that had been the new history baseline for that mine?

11 A. That would have been a good place to get a good number for what they were
12 doing.

13 UNIDENTIFIED SPEAKER:

14 If MSHA would have known that, would we have done a little
15 bit more modeling? I mean, obviously you said you needed to find out more
16 information?

17 A. I don't know. But looking at and what my opinion would be, and that's all I can
18 speak for is my opinion, but looking at that, if I had seen --- if I had been sent to look
19 at that and then asked on the South it would have been a --- I would have said no. I
20 mean, that's terrible. That's a big bounce there. I mean that's several pillars knocking
21 out. That's Kennedy's and tearing the timbers, you know. They don't need to be in the
22 South. That's not enough coal to go for. Now, I don't care if they change their pillars
23 to make them longer by 39 feet, if that's --- 40 feet or whatever it was. They shouldn't
24 have been in there.

25 MR. TEASTER:

1 A. You mean from the company or from my boss? I guess I might have
2 misunderstood you.

3 MR. PAVLOVICH:

4 All right. Were you ever told from Billy that your evaluation
5 was wrong?

6 A. No.

7 MR. PAVLOVICH:

8 Were you ever told from the companies that your evaluation
9 was wrong?

10 A. Well, they'll argue back and forth.

11 MR. PAVLOVICH:

12 Okay. Would they provide substantial information that would
13 subsequently convince you one way or the other?

14 A. Yeah. Most of the time, though when we write ---.

15 MR. PAVLOVICH:

16 Or would it just be Billy said I'm convinced Pete you're wrong,
17 let's approve this plan?

18 A. I don't think that's ---.

19 MR. PAVLOVICH:

20 Has that ever happened?

21 A. I don't think so.

22 MR. PAVLOVICH:

23 You don't think so, you don't remember, or it didn't happen?

24 A. Well, I don't remember of any particular times that happening.

25 MR. PAVLOVICH:

1 A. Yes.

2 MR. PAVLOVICH:

3 --- that justifies that? I mean, you may still say no, but you
4 are getting something back in writing?

5 A. Right.

6 MR. PAVLOVICH:

7 That's the common thing. You don't do it over a phone call?

8 A. Generally not.

9 MR. PAVLOVICH:

10 Okay. So I mean if you send a letter out ---?

11 A. We generally give something back in writing.

12 MR. PAVLOVICH:

13 If you send a letter out, you expect to get something back in
14 writing. Not a phone call from an operator that says hey, Pete, this is the way it is?

15 A. Right.

16 MR. PAVLOVICH:

17 Okay. So you would expect to see that?

18 A. Yes. I would.

19 MR. PAVLOVICH:

20 And that's pretty much how it is done?

21 A. Yes.

22 MR. PAVLOVICH:

23 Okay. So you then have a document file that goes with that
24 plan that shows where every item you discussed is properly addressed?

25 A. Yes.

1 MR. PAVLOVICH:

2 At least in your mind it was properly addressed, okay?

3 A. Right.

4 MR. PAVLOVICH:

5 Okay.

6 A. That's probably a better way to say it.

7 MR. PAVLOVICH:

8 Okay. No. That's the best you can ask for is, you know, if
9 you think that it's been addressed, then you agree with that.

10 A. That's generally, I mean, that's right what the mine history file is for to keep
11 history of all that stuff.

12 MR. PAVLOVICH:

13 Okay.

14 A. I don't know why there's not anything in writing in response to this.

15 MR. PAVLOVICH:

16 Okay. Well, I guess that's my next question. Is why in this
17 one is there not a document of some kind?

18 A. The only thing I can conjecture is the fact that it wasn't actually a plan
19 submittal. It came in as a cursory review. So it didn't come in as a plan. So that
20 would be the only reason I could think why it wouldn't be. But generally, yeah, we try
21 to have it incase something, you know, we had something on file.

22 MR. TEASTER:

23 Would you get in District Nine a lot of these --- I don't really
24 know what the hell you call them, but ---.

25 MR. PAVLOVICH:

1 MR. PAVLOVICH:

2 --- these mines? You'd never seen one of these before?

3 A. Uh-uh (no).

4 MR. PAVLOVICH:

5 That's the first time you'd ever seen one like that?

6 A. Yes.

7 MR. PAVLOVICH:

8 Did you ask Billy about it when you got it? What is this?

9 A. I mean, he just --- no, I ---.

10 MR. PAVLOVICH:

11 Okay. And he didn't explain this is ---?

12 A. He just said that this is a --- that they've come in and they've talked to him
13 before in meetings about it. They've had a meetings with Denver or whatever and this
14 is what they're going to propose to do. Look it over. It's not an actual plan submittal,
15 but go ahead and look at it.

16 MR. PAVLOVICH:

17 Did it seem like Andalex or any of these other people did this
18 more than other mines?

19 A. I don't know.

20 MR. PAVLOVICH:

21 Don't know. Okay.

22 BY MR. TEASTER:

23 Q. Pete, going back to that --- based on that bump he had in the North, Agapito
24 came out with a with this longer pillar ---

25 A. Yeah.

1 Q. --- to prevent this bump --- a bump from occurring in the South Barrier. What
2 would be the logic of that longer barrier if it didn't increase the stability factor very
3 much? What's the logic of that preventing a bump from occurring in the South?

4 A. Stronger pillars. It doesn't make them that much stronger, but it does add
5 some load bearing capacity on them. I don't know what --- I don't think that it's a very
6 good to add 40 feet to the end of a pillar and call it substantially changed. So ---.

7 Q. It wouldn't change your factor numbers much. It might make it ---?

8 A. I mean, the pillars are going to be --- overall each pillar's going to hold me
9 weight, it has more load bearing capacity, but it's still based off of your least
10 dimension. So it's still based off of this because of the confinement where your
11 corridor's in the center .

12 Q. Right.

13 A. It lengthens of course so you are going to get some more area, but it's not a
14 substantial as making it wider and longer.

15 Q. I just don't know, when you have a bump as extensive as what you had on the
16 North Barrier, to think that increasing that pillar length is going to prevent that. Plus it
17 did also say that, you know, you need to mine those pillars as clean as you can and
18 mine part of that barrier to the left ---

19 A. To get better caves.

20 Q. --- to get better caves, which ultimately come out with the roof control plan
21 that required more blocks to be left around that one area here.

22 A. Some.

23 Q. Yeah. Some. And there's an inconsistency in the roof control plan and the
24 ventilation plan. In that the roof control plan requires those blocks to be left in and the
25 ventilation plan just leaves the one row of blocks all the way out. Is there any effort to

1 ensure that we don't have inconsistencies in the plan?

2 A. Yeah.

3 Q. Do we coordinate any efforts with the ventilation department?

4 A. Yeah. We generally --- it's part of the SOPs is to pull the ventilation plan and
5 make sure it coincides. Whenever I do a pillar plan, I usually make sure that the
6 diagrams all match theirs and ---.

7 MR. PAVLOVICH:

8 Do you know what Ernie's referring to, Pete?

9 A. No.

10 MR. PAVLOVICH:

11 Well, let me show you.

12 A. I mean, I got an idea of what he's referring to, but I don't know.

13 MR. PAVLOVICH:

14 Well, where they at here?

15 A. That's projections there. It looks like to me. Well, we try to keep it --- we do
16 try to make sure that they're the same.

17 MR. PAVLOVICH:

18 Basically, these five blocks here is required by the ventilation
19 plans. And we require these original three within a roof control plan.

20 A. I believe that whole block there. I don't know.

21 MR. PAVLOVICH:

22 Here's the vent control plans here.

23 A. Leave all those in there?

24 MR. PAVLOVICH:

25 Leaving these to protect the bleeder.

1 A. Right.

2 MR. PAVLOVICH:

3 And then leaving these eight blocks right here without pulling
4 the barrier.

5 A. Like I said, I don't know. I didn't have any involvement at this point. I can't
6 really tell you what I don't know.

7 MR. PAVLOVICH:

8 Here's what the vent plan required.

9 A. Yeah. It's a pretty big difference.

10 MR. PAVLOVICH:

11 Leaving only those five blocks. Allowing these three to be
12 mined and the barrier.

13 A. That's a really bad deal because if you do that, then if the mine mines them,
14 you can't really write a --- even though it differs 'cause you have district manager
15 signature said you could take them. We try to make sure that that doesn't happen.

16 MR. PAVLOVICH:

17 Okay.

18 A. I don't know why they didn't there. Normally what the procedure is is to take
19 and, like I said, you take the submittal from the ventilation department and you verify
20 that they match. Or you pull the ventilation plan and you make sure if its ---.

21 MR. PAVLOVICH:

22 So normally you would try to do that?

23 A. Yes.

24 MR. PAVLOVICH:

25 But in this case it was overlooked or ---?

1 A. I guess.

2 MR. PAVLOVICH:

3 Okay.

4 BY MR. TEASTER:

5 Q. When you're reviewing a roof control plan for approval, do you ever look at
6 the history of roof falls? And that's considered and factored in as whether or not it's
7 approved or what additional support's ---?

8 A. Of course.

9 Q. Is there any effort to look at bumps that occurred?

10 A. That all counts. Ground failure is ground failure. We pull it all. You can run
11 queries --- when I do them, I run them on a BI query and I run them with all the actions
12 that apply for roof, which is --- and that way, cause otherwise, if you print them off of I
13 power or you print them off of Mines Access database, which are the two systems that
14 normally are used, you get non-injury roof falls data, and then you'd have to pull all
15 the accidents for the mine and go through them and that takes a long time.

16 So if you just go into BI query where all the information that OEIEO whatever
17 those people put together for that database, you can go ahead and classify them by
18 roof fall, outburst, rib roll, face burst. Everything that counts as ground control and
19 then classify them from injuries, from a zero injury all the way up to fatal. So it has
20 everything in there and gets you a printout and then you have it. And then you can
21 import that to Excel.

22 Q. Okay.

23 A. So ---.

24 Q. Did you ever see a map of any of the mines that you looked at that have
25 bumps that document those bumps on the mine map?

1 A. I don't think they document bumps on the mine map.

2 MR. PAVLOVICH:

3 Do you think they have to?

4 A. No. They have to document roof falls.

5 MR. PAVLOVICH:

6 How about outbursts?

7 A. Roof fall and roof fall and coal rock burst that occurs in the after working shall
8 ---. I stand corrected.

9 UNIDENTIFIED SPEAKER:

10 You and about another 15 people. No one really knew that.

11 A. Better spend some more time with that book.

12 MR. PAVLOVICH:

13 There's a whole lot of people that's been reading that book a
14 lot longer than you have that didn't know that either. So would it be beneficial, Pete, if
15 you went to a mine and looked at a mine map and saw not only roof falls plotted, but
16 outbursts plotted. Would that ---?

17 A. That would be great. I mean that ---.

18 MR. PAVLOVICH:

19 You think maybe in District Nine from now on there'll be
20 outbursts plotted on the mine maps?

21 A. I bet they will. It doesn't say floor heave, though?

22 MR. PAVLOVICH:

23 No. It really doesn't say floor heave. It ---.

24 A. See, we get rapid floor heave too that's still a bounce. Or instantaneous floor
25 heave as they like to call it 'cause they don't like to say bounce cause then they're

1 afraid they have ---.

2 MR. PAVLOVICH:

3 Instantaneous floor heave?

4 A. Yeah.

5 Ex. (b)(6) and Ex. (b)(7)(C)

6 Is it pretty valid?

7 A. Yeah.

8 Ex. (b)(6) and Ex. (b)(7)(C)

9 I mean, coal actually heaves up out of the floor?

10 A. It's instant. I mean, when you change three feet of height in a second, then
11 that's quite a bit of ---.

12 Ex. (b)(6) and Ex. (b)(7)(C)

13 Could you not classify that as an outburst?

14 A. Well, what's the plain definition of an outburst? I'm not sure. I just --- I was
15 asking the question.

16 MR. PAVLOVICH:

17 We don't know.

18 MR. TEASTER:

19 We try to avoid from having questions coming from that side
20 of the table.

21 MR. PAVLOVICH:

22 Yeah, we don't answer your questions. We're asking the
23 questions.

24 A. We try to classify a floor --- an instantaneous floor heave, we still classify that
25 as a bounce.

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MR. PAVLOVICH:

Well, I would say --- it says a roof fall, a rib fall, and a coal or rock outburst. It doesn't say from the ribs, from the roof, or from the bottom, so if you had an outburst from the bottom, I would think it's just as plottable as --- especially if it meets --- it has to meet ---.

Ex. (b)(6) and Ex. (b)(7)(C)

Yeah. It has to meet the criteria.

MR. PAVLOVICH:

You know, passage of persons, miners to be withdrawn ---.

MR. TEASTER:

Don't this say roof face or ribs?

A. Roof face or ribs doesn't count for floor though.

MR. TEASTER:

Well, that's what I'm asking. I don't know.

MR. PAVLOVICH:

It says each unplanned roof fall and rib fall and coal or rock burst that occurs in the active working, shall be plotted on a mine map if it --- one of these five things. Disrupts regular activities, causes miners to be withdrawn, impeach passage, impairs ventilation. So if it knocked out a stopping like that ---.

A. They had impeached passage looks like to me. That would cause a withdraw miners, it looks like to me.

MR. PAVLOVICH:

Okay.

A. It stopped mining for more than an hour. If it didn't, then they're crazy.

MR. PAVLOVICH:

1 Well, they had to load out 60 cars and material to get their
2 scoop out, so ---.

3 A. Sixty (60) cars?

4 MR. PAVLOVICH:

5 That's what someone told us.

6 A. Golly.

7 MR. PAVLOVICH:

8 In one entry to get the scoop out.

9 A. Sounds like a reportable bounce to me.

10 MR. PAVLOVICH:

11 One would of thought so, too. You're right. You would have
12 expected that to be reported, right? Absolutely. I'll answer that for you. You've
13 already said you had.

14 MR. TEASTER:

15 Pete, are you aware or familiar with any BLM reports that was
16 written by Steve Falk concerning ---?

17 A. No.

18 MR. TEASTER:

19 You've not read any reports that ---?

20 A. I haven't seen any BLM reports. I'm familiar that they have to report to BLM
21 since it's a federal lease, but beyond that ---.

22 MR. PAVLOVICH:

23 BLM doesn't share any of their information or reports with the
24 district that you know of?

25 A. Not that I know of.

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MR. PAVLOVICH:

Okay. You've never seen them come in?

A. No. Had you guys ever seen one in your districts?

MR. PAVLOVICH:

Never.

MR. TEASTER:

We don't have coal leased ---.

MR. PAVLOVICH:

We don't have much BLM lease, so ---.

A. It's all private?

MR. PAVLOVICH:

Most of it, yeah. I mean, there might be some --- I don't even think on national forest, I don't think they even let them buy on the national forest. There might be some around maybe.

Ex. (b)(6) and Ex. (b)(7)(C)

What happened back in --- they always traded. They had the mine and ---.

MR. PAVLOVICH:

Oh, that's right. They got to swap land.

MR. TEASTER:

That's all I have, Joe. Do you have anything?

MR. PAVLOVICH:

Ex. (b)(6) and Ex. (b)(7)(C)
I think we've pretty much exhausted our list of questions. In addition unless he has one.

UNIDENTIFIED SPEAKER:

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UNIDENTIFIED SPEAKER:

Really?

A. --- you get a lot of calls, where's it at, how's it going, what's the word on it and stuff. Especially if it's one that they're --- well, I guess it really depends on where it's at. If it's we're about to stop mining next week, we want to --- and it's Friday, you know ---.

MR. PAVLOVICH:

When they send in these addendum's for things, it's usually like we need it yesterday?

A. Well, that's what they --- a lot of them think that, but they get it when it's done.

MR. PAVLOVICH:

Would that be because they're trying to make you do a rush decision?

A. I figured they just don't plan ahead. I'm joking. I'm joking.

MR. PAVLOVICH:

That's an honest thing. They don't plan ahead very well.

A. No. A lot of it, I mean, we get our share of rushes, but most plans don't come in as a rush. Most of them don't.

MR. PAVLOVICH:

Okay.

A. They still do call and ask what the word is. Touch base just to see where it's at in the process.

MR. PAVLOVICH:

Okay Ex. (b)(6) and Ex. (b)(7)(C)

UNIDENTIFIED SPEAKER:

1 Would you categorize them in getting more plans approved
2 that kind of seem --- well, you just wonder how they got that approved than anybody
3 else?

4 A. No. So you're asking me is there any particular operator that gets more plans
5 that are kind of ---?

6 UNIDENTIFIED SPEAKER:

7 Yeah. Something like that. Does anybody ---?

8 A. No. I wouldn't say that.

9 UNIDENTIFIED SPEAKER:

10 What about Agapito? Do you have much dealings with them?
11 How are their, when they submit plans or ---?

12 A. I haven't had much dealings with Agapito. I can tell you that they --- that
13 Agapito is a renowned ground control firm. They've been doing it for --- in the west for
14 25 years and they've done pretty much --- at some point or another, they've had to
15 work with almost all the mines or mining companies. And they submit and they
16 publish half a dozen papers a year between the International Conference of Ground
17 Control and the Symposium on Rock Mechanics and everything else. They're a pretty
18 big firm, I guess. Or pretty renowned firm, I guess would be the proper words. Beyond
19 that, I haven't had any dealings with them personally. Other than just this stuff here.
20 Is the only thing I've seen.

21 UNIDENTIFIED SPEAKER:

22 Well, as such, and I'm just going to ask your opinion. If they
23 submit a report, would people tend to believe them based on what they say better than
24 --- I mean, you going through some of the calculations?

25 A. I think that they have a little bit more experience and clout than other

1 consultants do as far as it goes because of how much how long they've been around.
2 Between them and Malecky (phonetic) they've had, like I said, they have --- they
3 pretty much done more than anything. So I think their opinion is more readily
4 accepted than maybe some of the other than maybe if it was a different consultant
5 that hadn't been heard of. That's my opinion, I don't know.

6 MR. PAVLOVICH:

7 **Ex. (b)(6) and Ex. (b)(7)(C)**

8 UNIDENTIFIED SPEAKER:

9 Hey, Pete, I just got one question. If I'm an operator in your
10 district and you're inspecting me and I list in my roof control plan that I'm going to be
11 mining this Hyawatha coal seam and I listed four foot six inches to ten foot. And I
12 start mining and I cut it 18 foot wide and if it's narrower than what shows in the plan, I
13 put the bolts in sequence just like it shows in the plan and I decide to cut it ten feet to
14 make sure it was going to cover the plan, what are you going to cite me for?

15 A. I'm not going to cite you unless you went back and mined it second. It's the
16 same because it's still within the thing. If you say --- that's the same goes if you mine
17 it 18 feet wide versus 20 foot wide on the entry when the maximum is 20 and the
18 maximum is 10 feet high that they're mining. There's nothing they can be cited on.

19 UNIDENTIFIED SPEAKER:

20 It's ten foot. If I mine all ten foot how you --- what are you
21 going to write me for? What can you cite me for?

22 A. I'm not.

23 UNIDENTIFIED SPEAKER:

24 So if I want to mine ten feet, I can mine ten feet any time I
25 want.

1 A. Pretty much.

2 UNIDENTIFIED SPEAKER:

3 Even on the second mining? I mean ---.

4 A. No.

5 UNIDENTIFIED SPEAKER:

6 What makes the difference?

7 A. That second mining. The law's pretty clear about second mining. If you mine
8 a --- let me answer your question.

9 UNIDENTIFIED SPEAKER:

10 What's the definition of second mining?

11 A. Let me ask you a question in response.

12 UNIDENTIFIED SPEAKER:

13 No. Wait a minute. I'm asking questions.

14 A. Just to give you an idea. If you mine an entry 18 feet wide, that's okay; right?
15 Now, if you want it to be 20 feet wide and go back and slab it, is that legal?

16 UNIDENTIFIED SPEAKER:

17 If you got plans 20 foot wide.

18 A. No. You got to put in a slab plan if you're gonna reduce that pillar size from
19 the way it was originally mined.

20 UNIDENTIFIED SPEAKER:

21 Pillaring is defined as intentional retreat mining; right? So if
22 I'm mining the floor, how did that reduce my pillars size? So how's that second
23 mining? It's defined in the register. It's intentional reduction of a pillar is second
24 mining.

25 A. That's right.

1 UNIDENTIFIED SPEAKER:

2 So I'm not touching the pillar.

3 MR. PAVLOVICH:

4 That's what he just asked you.

5 UNIDENTIFIED SPEAKER:

6 And I'm mining the floor, that's apples and oranges. I'm
7 mining the floor not the two foot --- I'm not touching no pillars so why do I need a
8 plan? Do I need a plan if I want to cut a sump anywhere?

9 A. No, you don't.

10 UNIDENTIFIED SPEAKER:

11 I'm just wondering what in my plans say I can't do that?

12 A. I guess it doesn't.

13 UNIDENTIFIED SPEAKER:

14 Okay.

15 MR. PAVLOVICH:

16 But you do consider that; right, Pete?

17 A. We've always taken the stance that ---

18 MR. PAVLOVICH:

19 Considering if you mined out of coal ---.

20 A. --- that was retreat mining if you come back and mine the bottom. Now that's
21 not development of a sump for water. That's extracting --- it's part of the retreat.
22 'Cause it use to be pretty common to mine it, bolt it, come back and push it out here to
23 go ahead and mine floor coal. But that always had to have another plan in. So I
24 guess I can't answer your question there.

25 MR. PAVLOVICH:

1 Well, you just answered it. District Nine makes them do that.

2

3 A. Right.

4 MR. PAVLOVICH:

5 And your guidance and instruction is in District Nine, we make
6 them have separate plans?

7 A. That's considered --- we consider it retreat mining.

8 MR. PAVLOVICH:

9 Okay.

10 A. Same as you'd have to have a plan in for longwall. Same as you'd have to
11 have a plan in for bolt pillars.

12 MR. PAVLOVICH:

13 Ex. (b)(6) and Ex. (b)(7)(C)

14 UNIDENTIFIED SPEAKER:

15 Yeah. I got one question, Pete? I guess in my experience in
16 plan approval, which isn't as long as some people's, but when somebody comes in and
17 says, what do you guys think about us doing this? And I'm talking in general terms,
18 cursory review, whatever you want to call it. When an operator comes in and says
19 what do you think about us mining over top of this old panel? Mining in between these
20 areas? In their mind, that usually means they think we're going to say no so that's why
21 they haven't even submitted anything. When they say what do you guys think about
22 us doing this? The reason they're doing that is they think we're probably going to say
23 no and they're trying to feel us out. So with that being said, why do you think they
24 submitted this plan since you said it was unusual? Why would they submit a plan to
25 mine those barriers and just say can you guys just take a look at this and see what you

1 think?

2 A. My honest opinion?

3 UNIDENTIFIED SPEAKER:

4 Yes.

5 A. 'Cause they're mining barriers. It doesn't look like a good idea. I mean ---.

6 UNIDENTIFIED SPEAKER:

7 So you think they thought that too, but just said hey --- do you
8 think they wanted to get some feedback from you guys before they went forward with
9 a lot of the formalities?

10 A. Probably. I mean, that's what I would guess.

11 UNIDENTIFIED SPEAKER:

12 Would you say that was their motive for just doing the cursory
13 review? Let's see what MSHA's --- let's get our finger on their paws before we do
14 anything further and just see if we think they'll even let us do it?

15 A. Yeah. I don't know any other reason why they'd come in.

16 UNIDENTIFIED SPEAKER:

17 'Cause it's not usual to do that?

18 A. Nope. I mean barrier splitting hasn't been done for several years because of
19 the problems that are always encounter or that are generally encountered, not always,
20 but generally encounter. So ---.

21 UNIDENTIFIED SPEAKER:

22 With that being said, why do you think it was allowed there?
23 Is it because of the report that you made and the analysis that said it was okay?

24 A. That's what I would guess. That it was because they came in with information
25 that --- to show what it was, that we went against all common sense that maybe it'd be

1 a good idea, or that it could be acceptable. I mean, it's not the only mine in the
2 country that's ever mined barriers.

3 UNIDENTIFIED SPEAKER:

4 When you couple that with the thought of doing it, let's take a
5 look at this off the record is basically what it amounted to 'cause they didn't officially
6 submit anything?

7 A. Exactly.

8 MR. PAVLOVICH:

9 Although they paid Agapito to do that stuff.

10 UNIDENTIFIED SPEAKER:

11 Correct.

12 MR. PAVLOVICH:

13 Probably a pretty good sum of money.

14 MR. TEASTER:

15 Well, the initial contact was what do you think about us mining
16 that? You'd have to get us some analysis and some data.

17 A. Substantial data.

18 MR. TEASTER:

19 What's that?

20 A. Substantial data.

21 UNIDENTIFIED SPEAKER:

22 I guess my point was, Ernie, usually when somebody's saying
23 that, they don't think you're going to approve it.

24 MR. TEASTER:

25 Right. No. But I'm saying that was the initial.

1 A. I don't disagree with you on that. I don't.

2 MR. PAVLOVICH:

3 Ex. (b)(6) and Ex. (b)(7)(C)

4 Ex. (b)(6) and Ex. (b)(7)(C)

Ex. (b)(6) and Ex.

5 I just have one remaining question [REDACTED] hit a couple of mine
6 and we hit a couple of mine along the way, but I just have one remaining and that is,
7 you know, you're still a relatively new employee to MSHA, and I'm just curious because
8 you said when you looked at that map it looked like a crazy idea to mine those
9 barriers. Are you comfortable talking to Billy if you had a --- you'd be comfortable
10 saying to him, you know, this is a crazy idea ---.

11 A. Oh, no I ---.

12 Ex. (b)(6) and Ex. (b)(7)(C)

13 I'm sorry?

14 A. I talk to him anytime I have questions or concerns. Even if they seem bad
15 'cause one thing is he's been really good to me about trying to make sure that I'm
16 learning. So even if it seems like a maybe a dumb concern, I talk to him. I say this is
17 what I was wondering, am I on the right track? Am I off? I mean, I guess what I'm
18 trying to say is beyond that even, I don't have a problem talking with him at all.

19 Ex. (b)(6) and Ex. (b)(7)(C)

20 Okay.

21 A. It's --- does that answer your question?

22 Ex. (b)(6) and Ex. (b)(7)(C)

23 Yeah. I just wanted to know what your relationship was. I
24 mean whether or not it was open and how comfortable you felt going to him.

25 A. Well, it's definitely open.

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MR. TEASTER:

Ex. (b)(6) and Ex. (b)(7)(C) do you have anymore?

UNIDENTIFIED SPEAKER:

Yeah. I got just one more follow up, Pete, on kind of in my mind at least, your abrupt end to the involvement here. And I realize, you know, you started going to the academy. But you were back in the district different periods of time ---

A. Right.

UNIDENTIFIED SPEAKER:

--- as this thing progressed.

A. I think part of it, too, is the fact that I still have my mines to do, you know. And though I don't have as many mines as say Kathleen has or as complex of mines, they still have constant submittals. So if I'm gone four weeks to Beckley, when I come back, I have four weeks of work plus what's coming in and at that point it's playing --- you just ---.

UNIDENTIFIED SPEAKER:

You're playing catch up with your own stuff.

A. Yeah. I'm pretty much swamped and I think that --- honestly, I think the reason my involvement was out of it was because of that. Because of going to Beckley. Because just so much time, then beyond that too you're trying to schedule OJT and get out to get the AR stuff done. So you get all that and you end up being gone eight out of ten months or eight out of ten weeks and then you got just barely any time to get your stuff caught up.

UNIDENTIFIED SPEAKER:

Yeah. And I guess I can certainly understand that. It just

1 seemed like there was a couple things that came up along the way that would still rise
2 to the level that prompted your original involvement, you know, your expertise with the
3 modeling and you being able to handle ARMPS and all that, that it seemed like it got
4 to that level certainly after the March bump or when Billy saw the report in May
5 describing the March bump that he would have went to you at that time and said, hey,
6 why don't we look at this again with ARMPS? And that never happened; right?

7 A. Right.

8 UNIDENTIFIED SPEAKER:

9 And you know just roughly when you were back, were you
10 back in the district in March, April, May any of those months?

11 A. Let's see I was gone in May, had my short change, hold on. Was gone in
12 October. I was gone somewhere in that time. I'd have to look at my schedule exactly.
13 It's the same schedule as --- I mean I could probably get from one of the guys here in
14 Price. I had a couple of those guys in my group so --- Dewayne, in fact, who you just
15 interviewed.

16 UNIDENTIFIED SPEAKER:

17 Okay.

18 A. But ---.

19 MR. PAVLOVICH:

20 Well, I mean if you didn't do any involvement, you didn't do it.
21 That's ---.

22 UNIDENTIFIED SPEAKER:

23 Right. And I guess I was just curious. You were available but
24 somewhere along the line if that had been the choice?

25 A. Yeah. Mostly --- somewhere in there though I had like --- I just want to

1 through out that I had my short change where I went from --- I was there four weeks
2 and then I was back for one week and then went back for three weeks. And in that
3 time, we had, you know --- so you end up being gone two months out of ---. Then
4 there's ---.

5 MR. PAVLOVICH:

6 Well, you know, you were gone most of the year, Pete.

7 A. I really was.

8 MR. PAVLOVICH:

9 Kathleen was on some alternative duties there as field office
10 supervisor and other jobs for a pretty extended period of time. Who was reviewing
11 roof plans?

12 A. Billy.

13 MR. PAVLOVICH:

14 So they weren't just sitting there piled up when you got back?

15 A. Well, a lot of them were. I wish they would have been reviewed, but --- and
16 then recently we had Fleishman (phonetic) got moved from ventilation to roof control,
17 but that's kind of a weird issue. I don't really know if he's in roof control or ventilation.
18 I don't think anybody's told right, so he moves so ---. And somewhere in there too, we
19 lost Gibb. He moved from roof control to SI. So we lost all that ---.

20 MR. PAVLOVICH:

21 So you know, Billy primarily didn't have any help.

22 A. No.

23 UNIDENTIFIED SPEAKER:

24 That's all I had.

25 A. We still need help, by the way. I'm not going to lie to you.

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UNIDENTIFIED SPEAKER:

A little take off of ^{(b)(7)(C)} which I had this question written down.

Would it have been very useful, hypothetically, to have been able to model the North Barrier compared to the South Barrier, is what he's basically getting at? If you would have been there and been able to run the numbers on the North Barrier compared to what happened in the South Barrier, which you would --- would you think that that would pretty much be identical models?

A. You'd have very similar loading conditions. I mean, honestly, your best model for the South would be the North. It's --- I don't know it would have been good to model --- honestly though, seeing those pictures, shouldn't even had been a question of modeling, it should have --- the fact that they even --- well, I'm pretty sure we didn't have an idea that it was that extensive. And even after --- I don't know why they ever even submitted or asked. But I guess they figured they had sealed it up fast enough.

UNIDENTIFIED SPEAKER:

Well, after --- you know, once the North failed, that made the load in the South that much more extensive; correct?

A. I'm sorry.

UNIDENTIFIED SPEAKER:

Once the North Barrier had failed, that would have made the load in the South ---.

A. It would had transferred a lot more --- well, it had the potential to transfer more side-abutment loading. Depends on what happens as it goes through the mains. But it's ---.

BY MR. TEASTER:

Q. Pete, go on back to that initial analysis that you done. In your discussions with

1 Billy after you had identified those five issues, was Billy aware that you had used a
2 900 coal strength factor?

3 A. I believe so.

4 Q. And he didn't mention anything about the 16/40 coal strength or for the
5 Hiawatha coal seam?

6 A. Not at that time, no. Well, getting much higher than that, I mean, we'd want
7 the data to make sure that they didn't pull it from Uniaxial compression strength test or
8 something like that. 'Cause if you do it then, then you don't account for the size effect
9 that you're sampling. 'Cause you know a three-inch square sample is considered way
10 stronger than a three foot by three foot sample. And you know as you go up, because
11 localized features that run through the seam, that you --- by taking the smaller piece
12 you have ---. So that's, you know, ---.

13 Q. Does the district have criteria as to when a roof control plan has got to many
14 addendum's and site-specific plans that needs to be redone back into another base
15 plan?

16 A. Well, I don't know for sure when it is. I know if there's quite a few, it's time to
17 do a --- I don't have --- I'm not sure what the number, if there's an exact number. And
18 to be honest with you, it's really an issue of when we have the time to get a whole new
19 plan in to go ahead.

20 Q. Have you looked in of this time since this accident at Crandall Canyon on
21 August 6th, have you seen the roof control plan for Crandall?

22 A. Yes. I've looked through it.

23 Q. In it's entirety? Did that seem likes it's an excessive number of addendum's
24 and site-specific plans?

25 A. Yeah. I mean it has a lot in it.

1 Q What procedure ---?

2 A. Normally what you do is then you take and do a six-month review and make
3 sure --- I mean, you're usually taking care of it on six month interval for each of the
4 mines to make sure that you've gone on site, checked the conditions, and then written
5 a letter, done all the accident data --- you know, filled out the six month review sheet.
6 Basically go through and make sure that there's no deficiencies in the plan. But it's ---.

7 Q. What causes a site-specific plan to be removed from a plan?

8 A. When it's been completed or it's time has expired if there's a time limit.

9 Q. So the inspector can go through a uniformed mine file to see a site-specific
10 plan and they don't need that no more, he can just pull it out?

11 A. Well, usually they're removed through a letter to the operator, the following or
12 which are not --- no longer valid cause of ---.

13 MR. PAVLOVICH:

14 Is that generated by the district office?

15 A. Yeah.

16 MR. PAVLOVICH:

17 Not by the inspectors?

18 A. No, I don't believe so.

19 MR. PAVLOVICH:

20 Okay. So it would be coming out of Billy's ---?

21 A. Yes. I mean, we take care of cleaning that up.

22 BY MR. TEASTER:

23 Q. How much attention is paid to the inspectors when they do their review of the
24 roof control plan as part of a regular inspection? They submit that to the district?

25 A. If I get an inadequate plan sheet, that's number one priority. It doesn't matter

1 what else is there. It's top of the priority list.

2 Q. So you systematically review them as they come in from mines? It's assigned
3 to your --- in your area?

4 A. I only get the ones that say deficient.

5 MR. PAVLOVICH:

6 How many do you get, Pete?

7 A. I've only had a couple come in deficient. The best way to handle it, I mean if
8 they --- some of the inspectors will e-mail you directly or call. If that happens, well, it's
9 usually to Billy directly, then that also is the same deal, we take care of it immediately.

10 MR. PAVLOVICH:

11 That's all I have.

12 UNIDENTIFIED SPEAKER:

13 How do you answer them, Pete? If you get one from --- say
14 you get one from Price field office and it's marked deficiency, and it's page three,
15 paragraph four and I got a problem with it. How do you respond to it?

16 A. Well, usually when a deficiency comes in, it's not page three, paragraph four.
17 It usually comes back from the field office the mine is doing such and such --- the
18 mine has had a lot of bounces on --- or the mine has removed all the pigpens from the
19 face and they're getting ready to move into deep recovery. We say, oh, okay well. So
20 right away we go ahead and we generate it. And I don't know if there's a formal
21 response. I have never --- I've not done a formal response more than taking and
22 revising the roof control plan accordingly. If there is suppose to be one, then I've
23 messed up enough to send one.

24 UNIDENTIFIED SPEAKER:

25 But you've never wrote a letter back to that ---?

1 A. No, but I've also never had negative findings on what their deficiencies were.

2 UNIDENTIFIED SPEAKER:

3 How does the inspector know that you've taken care of it?

4 A. When the plan comes through changed and then you e-mail them and say ---.

5 UNIDENTIFIED SPEAKER:

6 You do e-mail them?

7 A. Yeah. To say these are --- we're making some changes or talk to them on the
8 phone. Am I suppose to generate a letter?

9 UNIDENTIFIED SPEAKER:

10 Would there be anything in the file like in a main file that
11 would document when you've done that?

12 A. Usually when the plan comes in and we have to change it, you know, for that,
13 we send a letter out to the mine. It says that --- from the deficiency form. We'll print
14 the e-mail off and put it in the history file.

15 UNIDENTIFIED SPEAKER:

16 You got any examples you can think of in the last couple
17 years?

18 A. I think that there should be some with RedBand (phonetic) Creek. 'Cause
19 that's one that came back on some deficiencies.

20 UNIDENTIFIED SPEAKER:

21 Okay. It'd be good if we could get a copy of that.

22 A. All right. I'll make a note. I'll find it.

23 BY MR. TEASTER:

24 Q. Pete, one other question. When a plan or an addendum is approved, is the
25 operator given a copy before our field office is given a copy?

1 A. No. It should be faxed the same --- if it needs to be, if there's a reason why it
2 would be a rush as in it's been too long that we've had it, for instance, is a good
3 example of a rush. And then they say, you know, hey we got idle miners. We say
4 okay we'll get what we can, and then we'll fax a copy to the field office and fax a copy
5 to the mine. The procedure is to make sure if you fax a copy to the mine --- I'm pretty
6 sure that they fax a copy to the field office, too.

7 Q. What makes you sure?

8 A. 'Cause that's procedure that --- I'm just sure that's how Ann does it, our
9 secretary. How else would they be able to ---?

10 Q. Well, that's my question to you --- next question to you. Are you aware of any
11 times where the inspector has cited something at the mine or raised question about a
12 roof control plan and get ready to cite it and then the operator pulls out a plan that was
13 approved two weeks ago?

14 A. I don't know of any.

15 Q. You've got no complaints to that effect?

16 A. No. If there are, it'd be very good to know so we can make sure it doesn't
17 happen. Is that been something that's come up or something?

18 Q. Well, that's something that's been come --- that has been discussed.

19 A. Yeah. I'm not aware of that happening. But that's something that if it is the
20 case is a serious problem.

21 Q. Pete, that's all the questions we have. Is there anything that we haven't asked
22 that you like to share with us?

23 A. No.

24 Q. Can't think of a thing?

25 A. No.

1 Q. Okay.

2 A. You asked me everything I could imagine.

3 Q. Well ---.

4 A. Some things I couldn't imagine.

5 MR. TEASTER:

6 We try to be thorough and I think that probably through this
7 realm of questions that we do get into the things. And again, the whole purpose of this
8 is to try to make this a better agency. Try to make it safer for a miner. You've got a
9 long career with the agency. Just got your AR card or ---

10 A. Sometime I will.

11 MR. TEASTER:

12 --- sometime about ready to get it, but it's an awesome
13 responsibility but you --- when you think about what can --- what's involved in a lot of
14 our decisions. A lot of our actions as we go to the mines. It's important that we keep
15 our miners in the front of all of our decisions and their health and safety. Good luck
16 on your career.

17 A. Thank you.

18 MR. TEASTER:

19 That's all the questions we have, and if we have any more,
20 we'll get back in touch with you. And if you think of something you'd like to share with
21 us that we've not addressed today, well, we'd appreciate you getting back in touch with
22 us. And again, we'd ask that you not discuss the interview with anyone until we've
23 completed all of our interviews. And we thank you for coming and sharing your
24 information and your opinion.

25 A. Can I discuss the idea that maybe the field office isn't getting their faxes

1 properly or it's not being faxed to them right? Make sure that we take care of that?

2 So it's ---.

3 MR. PAVLOVICH:

4 Pardon me? That what now?

5 A. The plans coming ---.

6 MR. PAVLOVICH:

7 Oh, sure, yeah. Anything that was brought up here whether it
8 be the plotting on the maps or field offices --- making sure the field office get the plans
9 at least when the operator does, yeah, if you want to take care of those issues, that's
10 no problem.

11 A. I mean I thought --- I really thought that we always handled it and it was hurry
12 up and fax a copy ---.

13 MR. PAVLOVICH:

14 Well, one thing you might always think about is an inspector
15 spends his time at the mine ---

16 A. That's true.

17 MR. PAVLOVICH:

18 --- okay. So you've approved an addendum. The operator
19 needs it right now, okay. You fax it to the operator. You fax it to the field office. The
20 field office secretary gets it, she makes copies of it, she puts in the uniform mine file,
21 maybe gives a copy to the supervisor, maybe gives it to the inspector, lays it on his
22 desk or whatever. Now that doesn't mean he's going to see it again before the
23 operator hands it to him and says hey here it is. Okay? So you almost have to
24 understand the chain of how things happen. If a guy goes out Monday and the only
25 time he comes in the office for the rest of that week until Friday morning to do his

1 paperwork is at four o'clock in the afternoon, he's probably not going to ---

2 A. See that.

3 MR. PAVLOVICH:

4 --- yeah. He might not even see the secretary. He might not
5 see the supervisor and so somewhere down the week. I mean, that happens, okay.
6 And it's not to say you're doing it intentionally sending it to the operator first and the
7 field office gets it through pony express, I mean.

8 A. No. I just --- it sounds like --- I mean, I feel that that would be a serious
9 problem.

10 MR. PAVLOVICH:

11 Well, it's been identified that it has happened in the past.
12 Now as far as, you know, how many times and how often, but it has been identified.

13 A. I understand. Just make sure that it gets fixed.

14 MR. PAVLOVICH:

15 Yeah. Then maybe there needs to be some adjustment in the
16 mail distribution in the field office, I don't know. I don't know what the remedy to that
17 is, but ---.

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