IN RE: CRANDALL CANYON

MINE INVESTIGATION INTERVIEWS

INTERVIEW

OF

BILLY OWENS

INTERVIEWERS:

JOE PAVLOVICH, ERNEST TEASTER

DATE:

November 28, 2007

BY MR. TEASTER:

Q. --- time with all the different people going. But during the rescue effort there at the Crandall Canyon Mine, Richard Stickler, the assistant secretary, and Kevin Stricklin, the administrator were present at the mine for most of the rescue effort. And because of their presence, the secretary determined that she wanted to do an independent review. She didn't want to do one within MSHA because they would have been subordinate to the people we just identified. So she, through channels, got a hold of us and asked Joe and I if we would come out of retirement.

Joe retired about three and a half years ago and I about five and a half years ago. If we would come out and head up an independent review of MSHA's actions prior to the accident on August the 6th as well as during the rescue effort and at the time of the second accident on August the 16th.

As you know, I know you know Joe quite well. Joe's got an extensive background in mining, mine rescue and he worked out here in these western mines quite a bit. And I was with MSHA for 32 years. I never worked in the west, but I worked about everywhere else in the east coast. But we want to talk to all the people that had anything to do with the mine inspections, plant approvals prior to the August 6 accident and interview the people that participated for the most part. There are some that we won't interview that won't have the information that we figure that we need.

But this is all part of that process. We want to try to keep it as informal as we can. There's a lot of technical stuff in here that we just want to try to flesh it out so that we all get a good understanding of it, so when we draft our report we want to look at all this information and draw some conclusions and try to come up with a report that's going to hopefully make this a better agency and provide better protection for the miners.

And we appreciate very much you volunteering to appear here, and as Joe mentioned earlier, we would like to record the interview so that we can have it transcribed and use that for our notes.

A. That would be fine, yes.

Q. Is there any questions about anything?

A. No. No. I'm comfortable with the situation and I'll answer any and all questions to the best of my abilities.

Q. Okay. We appreciate that.

MR. PAVLOVICH:

And we appreciate you driving over here, Bill, because we would have got you in Denver after the first of the year, but I think you'll be on the golf course somewhere, and we won't be able to.

MR. TEASTER:

You've got a lot to look forward to, Billy, I tell you.

A. I'm wearing out.

MR. TEASTER:

I've got a statement I would like to read in before we get started with the questions. The secretary has assigned this group the task of evaluating MSHA's performance during the period preceding the August 6th, 2007 coal bounce at the Crandall Canyon Mine and the subsequent rescue effort. We will also be evaluating issues that were raised during this time period regarding Bob Murray and his interaction with MSHA. This is not an investigation or review of any individual person. It is an administrative review of MSHA's actions as an agency. This evaluation will be presented to the secretary in the near future and it's intended that the results of the evaluation will be made public.

This interview is being conducted to gather information for this assignment. We also intend to interview a number of other MSHA employees so that we may obtain unbiased information from all persons to be interviewed. We ask that you do not discuss this interview with anyone until all the interviews have been completed.

BY MR. TEASTER:

Q. Since you are a roof control supervisor, we assume that you are not a bargaining unit employee?

A. That is correct.

Q. Therefore not entitled to representation. Billy, if you would, state your full name.

A. My full name is Billy Duane, D-U-A-N-E, Owens, O-W-E-N-S.

Q. And Billy, how long have you worked for MSHA?

A. I've worked for MSHA since August 1980, so that would be 27 years.

Q. And who is your immediate supervisor?

A. My immediate supervisor is the assistant district manager for technical services, William P. Naylor.

Q. And how long have you been in the current position as roof control supervisor?

A. I've been roof control supervisor since June 1997.

Q. And what was your position prior to that position as roof control supervisor?

A. Prior to roof control supervisor position in coal mine safety and Health District Nine I was the center chief for the Denver safety and health technology center in Denver, Colorado under the directorate of technical support, MSHA.

Q. And how long were you in that position?

A. I was in that position from 1991 until 1997.

Q. Did you work in the roof control division of tech support at any time?

A. From 1980 until 1980 --- 1980 until 1991 I was in the roof control division and technical support in Denver. From --- I was a mining engineer from 1980 'til --- I think it was about 1985 I was one of the staff engineers. 1985 I became the 13 senior engineer on the staff. 1989 I became chief of the roof control division. From '89 to '91 until I became the chief of the tech support center, that was my position.

Q. Billy, how about describing for us your training and experience for the ARMPS program.

A. My training for the ARMPS program, I've been to workshops. I think we've had workshops in Grand Junction, Colorado. I've been to the other places where Chris Mark has given talks. At the international conferences on ground control in Morgantown, West Virginia. We've had him in for roof control meetings at Beckley. We have an annual meeting for all roof control employees, plus usually an annual meeting where just supervisors are present at Beckley. We've had those people come in. So I have also provided input into for whenever the Bureau of Mines and NIOSH, we were developing programs like ARMPS and ALPS. Initially some of those programs came out and the way they were presented is you apply this program, it gives you the finite answer that any mine can take one of the ALPS or ARMPS programs and use that program and it will guarantee you that this would give you a design that would be perfect for your mine.

And we had meetings in Arlington, Virginia with at that time I think it was the --- they were still Bureau of Mines with Chris Mark, myself, the upper staff management of MSHA and we presented information to Bureau of Mines that they had to present their programs in a factual manner and not overstate their capabilities. I was probably

the primary lead person in that meeting because there were --- we were getting individuals including the UMWA saying if you take this program you can design any --- these programs will guarantee that you can design mines with --- that will, that you can use three or four entries for gate roads. You can retreat mine safely and everything, and that's not true.

The programs, those programs are empirical programs. They're based on age old pillar plans, Benowski (phonetic), Wilson, those type of pillar formulas. Those programs are based on that, and what they've done is take and load just kind of a static program that if you have a certain weight, a certain pressure, you'll be able to design a pillar. Chris Mark has taken that and what NIOSH did real mines, is they said, okay, let's go look at the 150 things and then find out where these equations worked. And then they would plot a graph and say okay, if we use our program we get a stability factor. And a lot of people have confused stability factor with safety factor.

The stability factor is not a safety factor. A safety factor is a value of one means you're out on the cusp of failure and not failure. Below one failure, above one it shouldn't fail. So that's what a safety factor is. Stability factor, you can have stability factors of 0.5 that are perfectly good for your mining conditions. You can have stability factors of 1.5 that are failures in your mine. So it has to be designed for that, so it's not a safety factor.

And so we --- those meetings come out, the Bureau of Mines, NIOSH, we went through and they came out and said that the ARMPS, ALPS and those type of programs are a tool to use in the design. If you have no mine history then you should use the default values in the program. If that mine has an established mining history then what the company or the mine designer or the consultant should do is take the program, go into the mine and find out where mining methods were safely

implemented, whether it's a retreat mining or longwall. Then you use that and then you can establish your stability factor from that from your known values for your parameters that go in the program. And that's the way the program should be used, as a tool. And take this tool, one of many tools that you use in mine design and you take that tool and you say okay, this is a starting point and then base that on what your production people tell you and what you know, experience you've had in your mine, you know, what conditions are, geological features within your mine, strength of your roof, strength of your floors, strength of your coal pillars. The layout with your crossing faults going in --- mining above you, mining adjacent to you, steep elevation changes in terrain and things like that. Those are all part of the design.

Q. So I think it's fair to say that you are well versed in the ARMPS program?

A. I understand it, yes, sir.

Q. And what about your training and experience with the LAMODEL program?

A. LAMODEL is more of a finite element and I haven't used it that much. We don't --- the agency has failed to provide us with the capability of doing that. We requested to model ARMPS --- or LAMODEL, excuse me. LAMODEL is essentially a freeware software put out by NIOSH. So we can download LAMODEL and we have it on our computer. But then if we want to put in the exact values that the company uses then we can do that and run it. But if we want to create our own elements and each element, and you can size your elements different, too. Like a company may submit it and say that the elements are a ten-foot element. So for a 60-foot wide pillar, that would be 6 elements. But if we wanted to do a five foot element then we would need to change that and we would have 12 elements per pillar. And that's the grid and the way that lays it out.

In addition, though, if a company --- if we wanted to change the size of the

pillars and things, essentially we would need an AutoCAD system to do that. We don't have that. We've requested it, but it's not been made available to us.

Q. Have you been given a reason why it was not made available?

A. It's --- no. Well, all our purchases for software have to go through --- the district manager can't decide what tools to give me. He even gives me a performance standard that says I'm supposed to use all my tools to do my planning reviews and all that, but yet I'm not provided the tools because even the district manager has to go through a procurement person in Arlington, Virginia in Coal Mine Safety and Health on the staff of the administrator. And then that person kicks it back over to somebody in the computer group or something and then they come out and they say, well, we'll put --- at one time there was an AutoCAD on our IT person. But if he's using his computer I can't use it. If I send it over to one of my engineers to use it, they don't have access. If he's not in the office we can't log on to his computer, we can't get that program then.

Q. Do you make a lot of attempts to do that and have failed?

A. No. It's useless. It's a pain in the derriere and it's not worth the hassle of --- you know, I've complained about it, I've mentioned it, I've brought it up. You know, essentially the response I get is live with it. And that's what I'm --- and that's the attitude of the agency and there's nothing I can do about it. It's not a fight worth me fighting over and over. It gets frustrating. It's just --- it's beating your head against a wall. And so I have chosen to expend my energies in something where I can get something done and be beneficial.

Q. What, Billy, are your duties as a roof control supervisor?

A. My duties as a roof control supervisor for District Nine is we have all of the states west of the Mississippi. I have mines from Louisiana to Alaska. We deal with

all the states. I've got the Navaho and Hopi Nations also to deal with, which brings its own entertainment into the position.

I'm responsible for all of the roof control plans for --- I think right now we have like 26 underground mines. I'm responsible for all of the ground control plans in the western United States. I think right now we have 88 or 87 surface mines.

We have the top coal producing state in the nation, Wyoming. We --- at times we have some of the mines that --- underground mines that are top producing underground mines, Full Dill (phonetic) Creek in the past has set records. Some of our other mines have set records for that. I'm also responsible for all the impoundments. We have 130 or 140 impoundments. And we are now --- we're doing our own plan reviews. After four years of asking for SAG CAD to assist us in the planning review of impoundments we got it this year. So --- and I think that was a result --- we're getting a lot of software now as a result of this accident we finally received that software I've been asking for for over four years.

In addition, I'm responsible for blasting, explosives, underground photography plans. You know, if it doesn't blow or suck for ventilation or shock you, or you're going to get pneumoconiosis from it, it just about falls in my group.

Q. How much time would you say that you spend on each of those categories? Like, roof control, impoundments, blasting --- and what was that, a photography plan?

A. Photography, and I'd say the majority of my time is on roof control plans. I probably spend 75 percent on roof and ground control. I have an engineer PE named Ron Gurkey (phonetic) who we hired I think three or four, maybe three years ago. I'm not sure the exact date that we hired Ron, but he handles almost all of my impoundment stuff. And I'm pushing more of the surface mining to him too. He's a very competent person, has extensive background with Peabody Energy, so he's able

to handle all that.

Photography, we've got that down until it's pretty --- instead of when a company wants to change a camera, used to they had to submit a whole new plan. But now what we've done is we've got the plans and the plan includes safeguard methane checks, how it will be wired, where they can take the camera, where they can't take the camera, and things. And so the equipment list, the equipment they use is separate from a plan. So if they want to change something on their equipment list all they got to do is send in the equipment list and we just change that out. So we've made that a little more efficient in review of that, so that helps out quite a bit.

So that area, you know, that's five percent or similar so. Seventy-five (75) percent on roof control --- you know, a lot of my time now is essentially administrative. Every Thursday I've got databases I have to update and respond to headquarters. I'm answering questions for the Arlington staff quite a bit. So it seems like more and more of my time is going to answering questions from outside sources. And quite frankly a lot of times it's the same questions or my answer is the same but in a different format. But I spend most of my time on underground because I don't have enough staff to do that work.

Q. You don't have enough staff to do the roof control work?

A. To assign it to. I have for roof control, which is our --- like, that's our greatest problem because our mines are difficult mines to work with. We --- bumps, bounces, deep cover. I have one --- at the present time I have one engineer and her name is Kathleen Kelleher and she's stationed in Delta, Colorado. And that's another thing. That wasn't my choice to assign her to Delta, Colorado. That was another decision made by Arlington. You will put this person out in the field where you have to communicate with her by e-mail, telephone sometimes. If she says she wants to

change out of a 12 in a plan that should be changed then she has to either fax something in, or I have --- I hope I remember the item where she agreed with the operator to change it and then we put it down the way she wanted it changed. Especially if it's an expedited rush or something. So that interplay, like getting a plan in and then logging it into the system, and then turning around and sending it to Delta, Colorado so that she can review it or look at it. And then trying to get the plan back to Denver in a form that she wants it approved in, or has agreed with the operator. And even though she's in Delta, she's assigned to three field offices. So it would be different if she was just in Delta and had one field office. She's got Craig, Aztec and ---.

MR. PAVLOVICH:

Delta.

A. Let's see --- Delta, Craig and Aztec. So she's got the field offices. So even though she's there it would be no different if she's going to communicate with two of the field offices by phone and whatever and those operators the same as if she was in the Denver office where she could come in and discuss issues with me.

So then when she sends a plan in, I have to sit down and go through to make sure, you know, that I'm kind of doing that right. So that's another time consuming ordeal is going with the remote supervision. It would be different if I had a staff engineer --- if she was a staff engineer there and they wanted to give me a specialist to go to the mine and look at it, that would be okay. But you're given an engineer and then put them in the field, it's totally useless. It's not totally useless, but 90 percent useless, 10 percent beneficial. It would be better to have staff engineers in the district office and then if you want somebody to go out and say, hey, are they doing this? Are the bolts facing at this distance? How do the ribs look? Then that person could go do

that from the field office, but they shouldn't be your staff engineer out in the field, or your staff specialist out there. They could be a person that lends assistance, but they --- but reviewing the plans and doing that and trying to type up letters and faxing it back and forth. And especially now we're getting a lot of the things are in color. So you're trying to do that with color and drawings. Like where one seam overlays the other one well, they put it in two different colors. We fax that to her and she can't tell anything about it.

MR. PAVLOVICH:

So she's not only not so much a field specialist, but a plan reviewer?

A. Yes. Yes, definitely. And she's my only one. She's my only engineer I have for underground mine that has any experience. Also on my staff is ---.

BY MR. TEASTER:

Q. Let me ask you before you move on, Billy. You said --- I guess you hired Kathleen; right?

A. Yes.

Q. But it wasn't your decision to put her in Delta?

A. No.

Q. You wanted to put her where?

A. In Denver.

Q. Whose decision was it to put her in Delta?

A. Jack Kuzar was the district manager and my understanding was that the idea came to Jack from Arlington. We could hire somebody but we had to put them in Delta or Price. So we advertised the position as a position in Delta or Price, Utah. And that is --- recently I had two other vacancies in my group and initially the same

thing came out, that we would staff those positions, one of them would be in McAllister, and I think the other one was to be in Craig. And the district manager went back to Arlington and complained about that and then we were told we could staff in Denver for those two positions.

And a lot of those --- because again, it's going to be --- it's just too much work. It's not efficient. It's not efficient. It takes away from --- it takes away --- and the field person too. Instead of doing the planning, they are sitting there getting stuff off the fax machine, trying to communicate over the phone, sending e-mails. When they can walk into my office and we can handle it in 30 seconds. You know, look at this, take care of this. That would be how easy it would be, but this remote stuff is not good for the west. You know, maybe in some of the eastern districts where the field office is an hour away from the district office and a person could drive over to the district office in an hour or something or other, and have the plans.

And that's the other thing. With Kathleen in Delta, and I say well --- if I ask her what do the ventilation people say about is this enough entries for the connections for the bleeder. Well, she doesn't have the ventilation people to talk to. The ventilation staff are in Denver, so that would need --- that communication needs to be there.

We have sponcom mines. How does this affect sponcom. Are we getting long wall caves in a position where we --- is less contributory for the sponcom. If we put more roof to floor support and hold these areas open and then we're going to smoke the mine, that's not good either. But she's stuck out there on an island by herself and doesn't have that.

And then in addition, if I have problems at West Ridge and then I have a problem at San Juan and I have a problem somewhere else, she doesn't know that

these problems could be identical or that there's --- she just knows what's going on in her area. She knows what's going on in San Juan, but she doesn't know what we may be implementing at West Ridge or Sufco or Aberdeen or down in South Central Mine or Sebastian County or any of that stuff. She's not privy to that.

Q. Bill, how would you describe your relationship regarding plans with your assistant district manager?

A. I have 27 years mining experience in the Western United States. I have been to almost all of the mines that are currently open and I've been to most of them that are no longer open, Sunnyside, Castle Gate, Price River, WIllowcreek, Wilbur, Cottonwood. All these mines. I've been --- I have an extensive --- and I don't go to them if they're in good shape. Typically where I've been is if they have problem areas, I've been there because there was difficulties that needed to be straightened out.

I've been to Jim Walter's mines. I've been to Lynch Mine in Kentucky. I've been to VP-5 and 6, vitreous mines. I've been to coal mines in Illinois. Tourist mine and those areas. So I have --- in addition to the Western United States I have an extensive mining background and history. I've worked with --- before coming to District Nine, I worked with the district extensively, you know, making recommendations on what should be done, helping them with plans. So therefore the ADM, for technical services has the utmost confidence in my abilities to make the correct decisions within the district for the safety of the miners that come under our jurisdiction. And our working relationship is excellent. He is confined again, by, you know, certain things that Arlington or somebody wants. And those directives are carried out. I do what's necessary. And they can rely on me to go to the mines that --- where MSHA presence is needed. It's not questioned and I will make the best

decisions available with the information that we have. And like I say, he has the utmost confidence and it's a good working relationship.

Q. What about with the district manager?

A. The same.

Q. Do you have much interaction with the field office supervisors here in Price?

A. Excuse me. Yes, I have quite a bit of interaction. There's two field office supervisors. We have the Price field office and then Group 1 and Group 2. The supervisors are Ted Farmer and Bill Taylor, William Taylor. And I work great with those guys. I talk with their staff and if they have issues, I try to address those issues to the best of my ability. As with all things, sometimes a field office supervisor would like to have something in a plan and --- or an inspector. And sometimes they want things in plans that will enable them to take enforcement action. However, we still have 30 CFR, we have some litigation decisions from the commission and then we have our policy. And if I can't work it into those items to get it into the roof control plan, then sometimes I can't do that. But I explain that to them and they understand. And then what we also try to do is we try to work together to determine if we can get a justification. We just --- you just can't go to an operator and say you have to put item A in the plan. But if I can justify item A in a plan then I will do that. And I think we work well with the field office supervisors in doing that.

Q. How often would you say you talk to the two supervisors here in Price?

A. Probably a couple times a month unless there's an issue that is bearing down and then it will be more often.

Q. Did you ever have any conflicts with them over roof control issues that you can remember?

A. No great --- well, Bill Taylor. We just approved the Aberdeen plan and Bill

Taylor, who that's his mine, thought the plan should not have been approved. But the mine brought in additional items and we went through and we requested the assistance of tech support and we ran what we were doing by Arlington, the administrator. So we did approve the Aberdeen plan to retreat mine. Bill was not in favor of that and some of the inspectors are not in favor of that.

Q. And how is the plan working?

A. They haven't started it yet. They won't be able to start. They have to implement several additional safeguards and it will probably be another --- it will be February or March probably before they have everything that's necessary to implement the new plan.

Q. Billy, going back to your employees, you indicated earlier that you didn't feel you had enough people. How many people do you think you need to do your ---

A. I think I need ---.

Q. --- work that you're responsible for?

A. Right now I have ---. All right. I'll go over my staff with you. Kathleen I mentioned already. Ron Gurkey. And it would be better off if she was in the district office in Denver than Delta. Ron Gurkey is doing an excellent job on impoundments and the serviceman, for us. I have another young man that's on my staff, his name's Pete Del Duca. Pete graduated in, I guess a year ago was --- I'm not sure when now. Anyway, he's a recent graduate from the Colorado school of mines. Pete graduated with a mechanical engineering degree. He worked for us prior to --- work for us, meaning MSHA prior to his graduation in the health group doing some dust sampling, noise sampling and working in the lab.

Once he graduated from the Colorado School of Mines he was assigned to my group as a mining engineer. He had zero underground experience. He's a young man

that it will be some time before he can be turned loose and be what would be called a mining engineer specialist that can go underground and make decisions that need to be done on his own. He does have a mining --- he's good at computers. And he can do the modeling and he understands the finite element models, how the different stresses work. He can do a good job in structures, that kind of area. But he needs a lot of experience. He needs a lot of underground time and that's what we're trying to do. He's completed his CMI training at Beckley. So you know, the first year after school he didn't get much time to go to the field and do work. We're working on that now. He's going to travel with Kathleen as much as we can get him out.

So if he were full speed I'd need one other one to work. So if I had he and Kathleen and one other underground person, I could perform the mission.

Q. What about Gary Jensen? What was his most recent role as an SI?

A. Pardon me? I didn't get that.

Q. As a special investigator?

A. Gary came to us as a CMI and he was stationed in Craig, Colorado. We tried to --- again, I was given a position dictated that it would be established in Price, Utah. I told the staff that I wanted an engineer. It came down between --- you know, there was an engineer in the office named Barry Grosely. And we wanted to see if Barry wanted to do the job as a specialist. Barry said he thought he'd be more useful, after I explained the parameters of the position and the duties, he thought he'd be more useful as an inspector. Then the position was offered to Gary and Gary accepted the position and transferred from Craig to Price. He was ---.

Q. Do you know approximately when that was?

A. I think it was two years.

Q. Okay.

A. Two years ago, I think that he transferred down. And then he was under me. Gary, most of his experience was at Sufco Mine. It's our mine that doesn't have a roof bolt. And so it --- I have a ground control specialist that came from a mine that didn't even use roof bolts. And --- but Gary he's a great person, he's very knowledgeable in mining as far as health and safety goes. But he was a project too. And you know, when to put bolts in, types of bolts, what needed to be done. And he accepted a --- he applied while he was under me as a collateral duty for SI. So he was given SI duties in addition to his specialist duties.

Q. But he still remained under your supervision?

A. Under my supervision until June of this year 2007. And when they advertised the SI's full time position. And I can't remember, they named a new SI supervisor. Dan Bedder (phonetic) became the new SI supervisor and he was in Craig, but I think that's when Gary became the field SI person. And that was in June. Up to that point he was my roof control specialist here.

MR. PAVLOVICH:

So he had collateral duty for a while?

A. Yes, he did.

MR. PAVLOVICH:

As an SIN roof controller?

A. Yes. And in addition to that we've had ---.

MR. PAVLOVICH:

How long did he have that collateral duty, Billy, did you remember?

A. What?

MR. PAVLOVICH:

How long was he collateral duty for both? For the full time he was in Price?

A. No. I think it was --- actually we put a lot of stuff on Gary. Gary had the --- he was collateral duty I think it was about a year for collateral duty SI. In addition to that, Gary is very knowledgeable in mine rescue. And then we came up with the new part of the mine rescue on the pre-shift exam. And since Gary was knowledgeable in that, he was given the design function for the pre-shift exam as part of the mine rescue contest. And so we would pull him in to Denver to do that and then so he was heavily involved in the mine rescue contest and designing the contest and doing that. And then being at the contest he was overseeing that part of the contest to additional functions. And then when MSHA Western United States Coal established their mine rescue team, Gary was also on the MSHA mine rescue team. So my roof control sup --- and then in addition to that, we have mandates from Arlington headquarters stating that the specialists aren't doing enough EO-1 and EO-1 is the old AAA inspection. So that we have to have the specialist out doing --- contributing to EO-1 inspections. So I've got a roof control specialist in Price that came from a mine that never roof bolted, that's a collateral duty SI guy. He has to do EO-1 inspections every opportunity he gets or we're allowed to do it sometimes on the spots. And then he's the mine rescue person that helped design the mine rescue contest. He's on the mine rescue team and he is participatory in all the mine rescue contests.

BY MR. TEASTER:

Q. How much time --- after he assumed the role as the collateral duty between SI and roof control and these other duties was added on, how much time do you think that he contributed towards roof control issues?

A. If he got 50 percent of his time in roof control issues, I'd say we'd be lucky.

And then again because Gary, when I assigned him a plan to do because he didn't have a real background. When he'd sign a plan and he'd write his letter up, I'd have to go through that whole letter, you know, line by line and page by page and what his review was to make sure that he caught everything. And then I'd change the letter and then I'd send him things and tell him look at it. But again, I couldn't call him in my office and sit down and say hey, here's what you missed and here's what you need to do. And you know, here's another plan as an example. You know, where you maybe can bring somebody up to speed faster if you had your hands on them and it's harder to do when they're out there and then, you know, if he's assigned CMI duty, or SI duty, then again, he's going to have his first 40 in and boom, he's out of the office there.

Q. How did that impact your ability to do the roof control work that was required to be done in his assigned areas?

A. It was more time consuming. It was more difficult. It's --- it has impact. It delayed --- everything delayed. Instead of, you know, the operator submits a plan in and we try to turn the plan around in 45 days. So, you know, and sometimes because you've got the other duties that plan, it's toward the end of the 45 days before he even starts looking at it, or it's over. Or the worst scenario is the operator's hollering that, hey, we've got this plan in there, you're not acting on it, what's going on. And so then I'd have to tell Gary to look at it. And there were a lot of times I'd just pick up the slack myself.

Q. But for the most part Gary did what was required in this area for roof control, but it may have been late?

A. Sort of. What I'd end up doing is I'd have him go to the mine, look and see about the conditions. You know, they're stating they have this condition, what's the actual condition. He would go do that and then I would probably do the plan.

MR. PAVLOVICH:

So he was doing more of the field work other than the plan reviews?

A. Right.

MR. PAVLOVICH:

You were doing the plan reviews?

A. Essentially that's correct.

BY MR. TEASTER;

Q. Did you take any steps to replace him in June after he assumed full --- what was that?

A. That was one of the two positions that we were granted. There's still two positions in my war group that are open. And we were granted earlier in the year last year, like we were granted one position as part of the beefing up MSHA. And then when Gary went over to SI full time then that was the second position that came open in my group. Those positions are on hold now. And you know, I understand it, but part of it is continued resolution, we're hiring all the additional inspectors and all that stuff.

In addition, we offered --- on one of the positions I did interviews, I did three interviews. And MSHA is very reluctant to pay the funds that are necessary to get the employees. We tell people we'll hire you. One person I interviewed was in Lexington, Kentucky. That person, we say we'll hire you and ready to move and then she calls me up and says she got a job offer from a mining company in Colorado that will pay her move and has a better offer. She was going to have to move on her own if we brought her in. Move her family and everything from Lexington. I talked to --- offered a guy --- a position to a guy in Illinois. Extensive mining background. A lot of

projects, engineering jobs, slope stability, putting portals into areas where difficulty, mining through faults underground. A great --- it would have been a good background for us, but again, this guy had --- said he had kids in college and he couldn't afford to pay his own move to Denver, relocate his family and then we were offering him $11, I think. PE great credentials and everything, but we were going to offer him $11.

In addition, even if the guy moves, he comes there then I tell him he's got to move his family and bring them to a strange place, but then I'm going to send him away to Beckley for a year so he's not going to be with them. And you know, they're going to have to adapt on their own without him being there.

Q. Which is not his choice --- he don't have to move, does he?

A. From Illinois?

Q. Right. I mean, he doesn't have to move because he's taking the job, obviously he's going to move there to get there to his family. But I mean, he could leave his family in Illinois while he was in Beckley for a year, if he so chose to do; right?

A. Yeah, he could do that.

Q. Okay.

A. And then he'd have to move them on his own after that. I don't know that that's a good option. And then when he comes back to Beckley, you know when he comes back from Beckley, what I'm going to try to do then, you know, if his family is there, then I'm going to say okay, you need field experience so you need to go into the mine. And our mines are not close by. So then he's going to go live in a hotel somewhere in between his traveling to Beckley.

Q. Yeah, I can see where that would be a problem.

A. Billy, Kathleen was detailed away from roof control from March 11th ---.

MR. PAVLOVICH:

January 11th.

BY MR. TEASTER:

Q. From January 11th to March 12th, '07. How did this affect your ability to do your roof control?

A. We're still --- we're sucking hind tit on that still. But it's experience for her. She wants to move up in the agency and it's a good experience for her. But one of her mines is Full Dill Creek (phonetic). We've been working on three years trying to get Full Dill Creek's roof control plan revised. And what happens is you come up with a plan to tell a company they have deficiencies. And then you give them 30 days to come up with a new plan. They send the plan in 30 days. It has the --- they don't address them the way you want to. You want to send them a second letter. We'll go to the Bishop Rule and force them to do things, so the way I supervise is if we gave them 30 days then we should get it back to them in 30 days. But what happened with Full Dill Creek. They respond to us, Kathleen is out doing something else, it's 90 days or longer. I've even forgot why, what the deficiencies were. So now we go --- I tell her to go through the plan again and so instead of sending it to them the next one with deficiencies, instead of saying this is the second letter on the Bishop Rule, I tell her we've got to start all over because I think if we would go to court, the court would throw it --- the company's even calling us up and asking where is our review? We submitted this, we submitted that, what are you doing? You know, we're not doing anything on it because I don't have a person to do it.

Q. And what was her detailed involved?

A. She was the Gillette field office supervisor part of that time. She's been on --- since she's been under me she's been detailed to Denver as an SI supervisor. She's

been detailed to Arlington and then she was Gillette field office supervisor.

Q. Going back to Pete Del Duca, how long did he work for you?

A. Since --- I think it was --- maybe it was June, May of last year. May of last year?

Q. About a year and a half?

A. Yes.

Q. When he's in the office, and we understand he's been back to Beckley a lot training, but is he assigned to roof control only or did he have other areas?

A. No, he's roof control only. And I assign him --- I've been assigning him several plans. We started out like assigning things to help with Ron Gurkey. Each impoundment has to file an annual impoundment report. So I assign him those because he's got to go check and make sure the elevations and the depth of water and all those things. So that gives him familiarity with the plans, our computer system, how to do the letters and all that stuff. Also I've been assigning him roof control plans like South Central in Oklahoma and Sebastian County. Those are small one section mines. So he gets those plans. Bridger Mine from Wyoming has two sections. Bull Mountain up in Montana has one section, and so I've been assigning those. And lately I've been giving him some of the Utah mines too. But I assign them, he goes through them and then again, it's one of those situations where I --- you know, if it's a five page addendum I have to go through every page to make sure that it's done. And then I've got to go explain to him why we do things, what to look for in the plan. So he's coming along and they've taken him underground two or three times, myself and then we send him out as often as we can. We send him with Ron Gurkey. He's gone with --- to Delta. He's been to Price. He goes to other places with --- to go underground. Just if nothing else to walk around and look.

Q. About how much of his time since he started working for you like in May of last year has he been in the office working on roof control as opposed to being away from training?

A. I don't have an estimate of that. Though a lot of the time he was Beckley.

Q. That's what I'm talking about.

A. Yeah.

Q. The Beckley training.

A. They go for like four weeks at a time. I think he's been on three --- I'm not sure.

Q. You're not sure.

A. Yeah.

Q. But you assign all of your people in the field, you assign their work? You're the only one that assigns their work? There's no work assigned for them by the field office or anyone else that you're aware of?

A. No. I get requests for it and like Gary at times, he would get assignments from the field office, but they'd send me a thing at the beginning of the month saying Gary would be assigned --- a letter, a memo saying these were the assignments so I would know what happened. And we'd work around those. But he was the only one in my --- Kathleen because she's an engineer and is doing --- has those assigned reviews, I go through almost I'd say 95 percent of her stuff I assign all her duties to her. There's walk-in things that happen and sometimes the ADM or somebody will give her an assignment that I don't do. She may have to go out and do a spot. People coming into the Delta office for qualifications on methane testing and those type things. She'll do that. I don't --- but she sends me an e-mail and says, you know, methane tests two o'clock on Wednesday or something like that so I know.

Q. So if a district manager wanted to assign Kathleen something, he would not go to you, he would go directly to Kathleen?

A. Yes. Or that's happened in the past with the ADM.

Q. The ADM?

A. Yeah.

MR. TEASTER:

Let's take a short five minute break and then we can continue on.

SHORT BREAK TAKEN

BY MR. TEASTER:

Q. Would you walk us through the steps that are normally taken for plan approval for a roof control plan?

A. The typical roof control plan, there's two things that are done. One, have a base roof control plan, which is roof control plan in its entirety. The other item is amendments to that plan. Roof control plan is sent in by the operating company. It comes into the district office. That plan is logged into the mine approval system and assigned a number. And if it's a base plan that number starts with B. If it's a first ever base plan it would be B-1. If it's where they've redone the base plan and sent it in and maybe we're on the sixth reversion it would be B-6, which is the sixth base plan.

Amendments to that plan then are assigned a number that would be B-6, if it's a first amendment, it would be A-1. If it's the 22nd amendment, it would be A-22. So you could have a --- you could receive a plan amendment that would be B-6-A-22.

That plan is then given to me and I assign that plan to a person to be reviewed. Right now the only two people that I assign plans to are Pete Del Duca or Kathleen Kelleher. Some of them I hold in my in box and work on myself, but typically

all the plans that come into the office in the mine plan approval system are assigned to me unless I tell my secretary or I go in and kick it over to one of the specialists. That's the initial thing.

From then on the plan is --- the reviewer gets to it. I try to --- MPA will let you print out a pending list, so I try to keep a pending list and I mark off. And on the pending list it gives you the plan by mine I.D. number, which naturally puts, it starts with an A first and Wyoming comes last because it's 48.

So put some in and then over on the far right column it will have the days that that plan has been in the Que. And again, we try to roll plans out within 45 days. If we can then I go through and I'll highlight with a pink marker my plans that are older than 45 days. I also try to periodically, every two weeks, send a list of my plans, called a backlog list, that goes out to everyone in my work group. It also goes out to the assistant district manager and I list the plans that are assigned to them.

And if I have to move a plan to somewhere else that will do that. As I mentioned earlier, we're really struggling on the Fort Dill Creek plan so even additional plans that are assigned to Kathleen Kelleher, I've pulled all those from her and just said whatever you work on Fort Dill Creek has to go out. So that's the only thing you work on, plans that were previously assigned to her or assigned typically to Pete Del Duca. And because of Pete's experience that means they're assigned to me.

Q. So far as you know, were the procedures in the SOP followed for the Crandall Canyon Mine?

A. The procedures in the SOP are typically followed by a new reviewer on a new plan. The SOP, every letter in the item isn't followed on every plan. We just don't have the resources and time to do that. In addition, as I mentioned before, if it's a B-1 plan, that's the first time that base plan's ever come in. Then the SOP will be followed

to make sure that it.

But if it's a B-6 plan, and the reason I say B-6, is because the mine, maybe the mine's had this plan now for ten years. So B-6 comes in, what they've done, if we told them you need to go through and clean it up. Before they had B-5 with 33 amendments. And sometimes those amendments, what those amendments do is they're changing pages. Like in that plan is 20 pages. Page one, two and three may be approved in 1990. Page five, six and seven may be approved in 2000. Page four may be approved at a different date. But those are all amendments because those pages were approved.

If they got a new roof bolting machine then they send that in, we pull that page out, that's an amendment to change that one page in the plan. So even when you got 22 amendments, it's not a stack that's a foot and a half high. Sometimes those amendments are additional to the plan and sometimes those amendments are in there. So B-6 or B-7 comes in and they clean it all up and so we don't need to follow a SOP to go through that plan. All we're doing is going through and cleaning it up so that plan will be done that way. And then B-7 will be clean. All the pages in B-7 now will have the same approval date. And that makes it real easy when if you got to do something to change the ending. And then we add new things in plans occasionally, red zones or little items we come up with that we want.

As far as Crandall Canyon goes, I did most of the review on the Crandall Canyon. I am the reviewer for the Crandall Canyon amendments. The base plan, I'm not sure what the date of that was. The current base plan may have not of been followed by the SOP, the original base plan, which would predate the current system, so I'm not even sure when that date was, would have followed the SOP.

Q. The last page of the SOP states that if comments from field or tech support

are required, the reviewer will write a letter to field personnel and/or tech support requesting that they review the plan or amendment and provide written comment. Under what circumstances would this reviewer be required to do this?

A. If it's a condition they didn't understand, a condition that they thought they needed additional assistance with. Or sometimes we have a mine that we start out; say we got them putting roof screen in. And they come in and they say well we've hit a hard sandstone roof, we want to --- and the sandstone in the area now, sandstone's now seven foot thick, we don't think we need screening and we don't think we need the seven-foot bolts. We don't need to drill in seven-foot sandstone; we want to drill five feet, so we want to go no screen, five-foot bolt.

Then the reviewer would say, if the reviewer hasn't been in the mine they'd send a letter to the mine saying that --- or not to the mine, excuse me. To the field office saying here's what the company's saying, what's your take on this, and is this a valid proposal? And so we seek the field offices' input on that.

Also if they're proposing to mine in a certain method, if they want to widen out the entries or things like that. Generally changes in the roof control plan that the company is alleging improved conditions or that this will make things better, the reviewer would contact the field office and see, to make sure that the conditions are that they've been stated. And also the field office can enlighten the reviewer or myself on additional things. Sometimes the depth of the cut, if they want to ascend the cut or if the way they're turning cost cuts, different things like that.

Q. Did any of the amendments at the Crandall Canyon Mine rise to the level that required memorandum be written for the field or tech support for assistance?

A. No, the Crandall Canyon amendments were assigned to Gary Jensen. Gary Jensen was in the field office, he was available to go there and look at the conditions.

He works with those people every day. In addition because of the barrier pillar, I myself went and looked at conditions in the mine before the retreat mining of the north barrier or the retreat mining of the south barrier were approved. I made recommendations for changes in both of those amendments and those were implemented by the company.

Q. You made recommendations from their submittal, from what they initially submitted and you got them to change it?

A. Yes, sir.

Q. Are there any informal or normal steps that's not formalized in the SOP that you normally take?

A. As I mentioned earlier, the ventilation people and roof control people, we try to talk. I'm not sure that that's in the SOP. The reviewers have full authority to contact the mining company to make suggestions, work out problems or make changes in the plans that they can do. Matter of fact because of our limited resources we encourage that, to try to get the plan and sometimes that can involve page eight of the amendment. There's items on it that need to be changed.

So if they can talk to the company and the company can change items two and four on page eight and then just e-mail that back to him. Then that speeds up our review process, instead of writing a letter and mailing it, getting it back, logging it in, going through the whole process again. You know, to do something that you can take care of in an afternoon in the office. So I allow the people to do that. They tell me what they're doing, they bring it in, they explain it to me and that's the way ---.

Q. How does the inspector and the inspection supervisor at the field office, how do they fit into the approval of an amendment or a base plan?

A. The field office has questions. They fill out, I think it's called a 204 form, each

inspection. And on that it has roof control plan and they'll either mark, I think there's a thing, a check mark on it if no deficiencies. If there's deficiencies then they write out what they think are problems or sometimes it's not a deficiency in the plan, maybe it's just not addressed and they want something addressed in the plan.

Q. But this is after it's approved? I meant prior to approval what involvement do they have?

A. Well, they do that, and then when we get ready to do the review of the plan then, we pull those forms from our file and then we address their concerns and we'll call them and talk to them. Every plan review that comes in, we don't call up the field offices and say hey we have an amendment for this, that's not done. They don't have the time and we don't have the time to do that. But we'll look at those forms. If there is a --- we think it's a significant issue, then the filed office supervisor will be contacted.

Horizon Mine having outby falls. Field office supervisor sends me an e-mail and he says Horizon Mine having outby falls, please address the issue. And so then I start the process of --- we'll write a letter from our office to the mine and send it to Horizon Mines and we'll pull the data. We don't just, like I explained earlier, we need to have justification. We'll put the data saying over that last certain amount of time you've had X number of roof falls in these areas, you have two weeks to submit a plan amendment to address this issue.

So essentially --- and so when that plan comes in, it's already addressing an issue that a field office supervisor brought up. So there's no use sending that plan to the field office supervisor saying hey, we got this amendment in here, because the amendment was initiated because of the field office supervisor.

And so we work off the 204, they can call me up. I was at West Ridge Mine

yesterday because they had a bounce last Tuesday and the inspector went to the mine and said that they --- not only did they have the bounce there on the longwall face but they were having rib problems in the development and they would like somebody to do it. And I said okay, I will go to the mine and look at that. So their input is always welcome and we try to address their issues.

And a lot of it's not --- there's no memo saying Price field office requested assistance on bounce at West Ridge Mine or Inspector Paletta requested assistance with development. That's a call, I go to the mine, we'll address the issue. Sometimes what we'll do in a plan is we'll --- if an inspector --- we'll cc them on the letter. And with West Ridge I told Mr. Paletta that since they brought up certain issues I decided to go ahead and look at the whole plan and it's taking a little longer to get up to because it's been a while. So we're up to like 22 deficiency and I haven't even got into the longwall stuff yet. So it will be a little while coming out but his issues and the issues of his supervisor will be addressed.

Q. The amendments specifically for Crandall Canyon that dealt with mining in the north barrier and mining in the south barrier, was the inspectors involved and the supervisor in any way?

A. Yes.

Q. What their input would've been on that?

A. What happened there is, the company in 2006, there was comments from Genwal Resources that they were anticipating mining in those barriers. And since those barriers were barrier pillars adjacent to the west mains and longwall panels, we said well they'd have to come in with justification to do that. In September we had a meeting on Aberdeen, I think it was like September 8th or 9th, 2006, we had a meeting on the Aberdeen Mine.

And at the conclusion of that meeting, Mr. Laine Adair presented me with some Agapito reports, and here is the reports that we received from Agapito, and these reports show that it would be feasible to mine in the north and south barrier of the west mains. And I told him, I said we'd look at them and go ahead and submit proposals.

So we started looking at those and I talked to Gary Jensen and I told him, he was in Price, and Gary, I let him know what was going on. So when the proposal come in to do the --- but I told him, you know I said what we'd do is we would do it in phases. They wanted --- I said you know we wouldn't just give you a carte blanche to mine because they already had pillar mining approved in the roof control plan and they were conducting that.

They'd been conducting pillar mining. I think when the initial proposal they were in the south mains, retreat mining there. Room or pillar mining the main, going out into the barrier pillars in between two sets of longwall panels and retreating those mines. So that was done without an amendment. That was under their roof control plan, the pillar already approved in there.

So we told them that we would look at that barrier pillar in phases. Maybe we'd do development and then retreat and then see how each phase worked instead of just approving it. It's more work for us, more work for the company but it gave us, it would give us a handle on it and we could evaluate conditions as they occurred.

So they sent a plan in and I told Gary what was going on so Gary was in the field office, he could get input from people over there, in the field office in Price. We conducted the ---.

Q. Now when you say he could, but is there a process where he would go to them and ask them, just talk and discuss the plan with them?

A. Well, he would do it with the supervisors typically or he'd get --- yeah, he'd get the opinions, he typically did. I'm not saying that he did. There's nothing in place saying he had to but that was typical that he would. But when he and I would discuss it, he'd say, you know, so and so is concerned about this or Mr. Durrant has a question about what's going on or Paletta said they're doing this at the certain mine.

But he would get their --- or he'd call me on the phone and said Mike Simway (phonetic) came to him with an issue at a certain mine and we need to look into it. Or when we'd talk he was going to a mine to look at something that one of the other guys had brought up. So there's nothing concrete saying he had to do that but it was typically that's what he did. Those guys exchanged information regularly.

Q. Okay. What, Billy, is the rule of thumb for updating a base plan? Do you have any formal or informal policy or rule of thumb, or anything that you go by?

A. No, we do not. Like I say, some of them --- you know, we've got plans out there. I start seeing plans with amendments 22 and 25 and I'm thinking Jesus Christ, this is getting to be too many, you know, too many amendments but a lot of times it's just pages, but sometimes it's thick items. A lot of time, even though we put in the size specific amendment is valid for one year or it's valid until this project's completed and that could be splitting pillars or you know, developing a sump or something special. And then once it's done that should come out of a plan.

But when you take things out of a plan, you need a formal thing to do that, so you just don't go into an operator's plan and pull something out and take it. Although it says it expires, you need to take the time to sit down and write them a letter and that should be done fairly often. You know, like when the size specific plan's done then a letter should go back to operator. You know, you've completed the splitting of the pillar in Two-East, therefore that project's complete, this size specific plan is moved

from the plan and then it would go out. But we just don't have the resources and time to go back and do that when we're trying to just ---.

Q. So site specific is just a plan for a particular area as you related to just like splitting the blocks in One East?

A. Right.

Q. A certain section of the mine and that's to be pulled from the plan or no longer applicable at that mine?

A. Correct. And see the Crandall Canyon in the north development, once they develop that, the size specific part of that plan for the development then would be completed and then that would go to a site specific retreat mine plan.

Q. Now, do you know if they normally pull those from the plan themselves?

A. The mine operator?

Q. No. MSHA?

A. Like I said, we do when we write a letter to the company.

Q. But the field office supervisor inspector normally don't pull those?

A. No, not unless they get a letter from us saying --- and whenever we write a letter to an operator, that goes to the field office and then that letter would state on there UMF. And there'd be a --- which is uniform mine file and UMF would go to the field office copy. Well, there's two copies go to the field office, one's for the UMF and one's just for the field office, in case they want to take the plan or something to the mine with them. They don't have to take the plan or make an additional copy.

And so when we get that letter --- now if we do a six month review or we do a review of some other reason, we may put a statement in a letter that comes back, that site specific plan for two weeks is completed and that report's removed from the plan. And at that time that's done, as I said, even though the year's up they won't take it out

of the UMF, we won't take it out of our district file unless there's a document saying it's okay to take that plan out.

Q. You say you normally don't have time to send those documents out?

A. Right, they go back and check everything with a date ---.

Q. So we could end up with a plan that's got a lot of expired site specific plans that no longer apply to the mine?

A. Yes, and like when say we're doing the West Ridge review now. If they've got a lot of site specific plans, then when we send them the letter out stating out the deficiencies, we'll state currently the plan consists of these items. And we'll list a page one approved on a certain dates, what's on the page number and then we'll say --- then there will be another paragraph stating these items, the site specific project's been completed and these items are removed from the plan. And then that would pull them from the plan.

Q. You have a tracking sheet that goes with these plans as they go through the process, where people sign off on them?

A. There's a surname name copy.

Q. Right.

A. The initial reviewer does the review, background data, whatever he needs to do. And then they write the letter, whether it's an approval letter or a deficiency letter. And then in the upper right hand corner the reviewer initials it or signs his last, surname, last name and date. And then that comes to me. Then I do my review. If I send it back to the reviewer it starts over again. If I sign off on it then I'll sign my name and date it, then it goes to the assistant district manager for technical services. He or whoever's acting for him will do the same thing. He'll surname it and sign off on it and then it goes to the district manager or his acting representative. And then the

district manager will stamp at the bottom, where he typically stamps it, the surname copy and then he signs the letterhead, or the original copy.

Q. Is it normal for people to sign for someone? Like someone would sign for you as reviewing the plan?

A. It is if I'm not in the office. I'm out of the office on business. I'm out of the office on vacation or whatever. Then once a plan's ready to go we try to get it out. And so it would be normal.

Some plans are held for me, they won't send them out. A lot of times right now --- and again, if Kathleen were in the district office, she's knowledgeable. She could probably leave her --- Ron Gurkey who's not knowledgeable on underground stuff, he's reluctant to sign off on things for me, although he will, and then that's ---.

Q. When they sign off on that bill, signing off for you, does that mean that they've reviewed it or that you have reviewed it and just not available to sign? What does that mean?

A. Typically that means that they reviewed it and found no issues in it as the roof control supervisor.

Q. I think you mentioned earlier that you were first contacted about mining in the west mains area of the Crandall Canyon Mine in September of '06 during a meeting involving Aberdeen?

A. It was probably first contacted in like April.

Q. April?

A. And that's when we told them they had to provide us with a justification.

Q. Now, how was that notification that you're talking about in April, how did that come about?

A. It was another meeting where we were meeting on another mine, probably

Aberdeen or West Ridge and then at the conclusion of that meeting they said we're running out of ---.

Q. Who's they?

A. Crandall Canyon people. Well, Aberdeen, West Ridge and Crandall Canyon and South Crandall Canyon were all Andalex Resources. So we were meeting on West Ridge or Andalex and it's the same staff, Laine Adair is engineering manager. I think it was Aberdeen because there was a ventilation guy in that meeting. And at the conclusion of that meeting that Laine said they were proposing to do that and we said well, you need to have a justification.

And then it was in September 8th or 9th, it was a Monday I believe, of '06 at the conclusion of an additional Andalex Resources meeting. And at that time they were Utah America and they brought in that they --- Agapito, two Agapito reports. One dated July and then ---.

Q. July of '06?

A. July of '06 and then the other one dated early August of '06. And the early August '06 was more of a memorandum explaining the July report clarification. And then they handed that to us.

Q. And did you review those two Agapito reports?

A. Yes, and that's when I assigned Pete Del Duca to --- there was modeling in that. And I assigned Pete to do the modeling and go through and look to see what Agapito had done. And Agapito, we've worked extensively with Agapito Associates and they even have some people from there that used to be with NSA, which was Joel Striate (phonetic) and Neil Engineering in Denver. They kind of took over that office too. They're based out of Grand Junction.

I've been working with them since the early '80s. Joe Agapito was a Bureau of

Mines person that I think went out in the late '70s and established his own engineering firm in Grand Junction, Colorado. I think 1978 or something like that. And one of the other persons that we work with out in the west is Hamid Maleki. He's now out of I think Haden Lake or somewhere up in Idaho, but in the early '80s he worked for Joe Agapito also. I couldn't understand him then but you can now, kind of.

Q. Going back to those two reports, you said you reviewed them before you gave them to Pete?

A. No, I went through them, I just read through them but then I gave them to ---.

Q. You read through them in their entirety?

A. Yes, then I gave them to Pete and said now look through and look and see what the modelings, what parameters they used and see what you come up with.

Q. Did you identify any issues when you read through them?

A. No, not really, not that. And then Pete ran the models and he came up with some different issues and one was Pete ran the model using 900 psi for the pillar strands, Agapito used I think it was 1640 or 1340. I think it was 1640.

Q. On the LaModel?

A. On the arms.

Q. On the arms?

A. And I think on LaModel, too. Both of them, I think they use the same variant. And also Agapito used the configuration in the model as they would actually try to do the retreat mining. And when Pete ran the model he took the West Mains, as that area had all been retreat mined and also that the bleeder, stability pillar had been mined. So he made that all gob area, which essentially made it that then Genwal would pull two pillars between, right adjacent to, almost adjacent to two gobs. And this wasn't what Agapito did but it was NIOSH documentation showed.

And so I told Pete to check on the pillar strengths to make sure why there's a big variance and said let's go through and do our research and find out because it's a Hiawatha seam. There's a lot of documentation on what coal strength is for the Hiawatha seam. Also I showed him things in the ARMPS literature that states if you have a stable pillar that's not being mined when they're retreating out, ARMPS doesn't know how to handle that so the literature says you add that to the barrier pillar.

Q. What document is that?

A. That's in their literature on ---.

Q. It's in NIOSH's literature?

A. Yes.

Q. Do you know approximately what date or name of that?

A. No, I'm not sure of the --- it's in their early literature. But I'm not sure of the documentation date or name.

Q. Now, when you say they take the size of that block and add it to the barrier, what about the space in between?

A. They don't account for that. You just take that distance and ---.

Q. So you go from this edge, even though there's a 20-foot gap or 18-foot gap, you would still consider that all part of that barrier?

A. Part of that barrier, right. And then you do that same for the four pillars, five pillars that was in the West Mains. You treat that all as barrier because those are considered to be stable pillars.

Q. And how are they considered, because they were not mined?

A. They were mined, to the best knowledge the area is still being held up and solid so that would be considered all barrier.

MR. PAVLOVICH:

Do you consider that in the program as solid coal?

A. Yes.

MR. PAVLOVICH:

Where are you saying this is at, Billy?

A. It's in NIOSH's literature.

MR. PAVLOVICH:

Do you have a copy of that?

A. I think ---.

MR. PAVLOVICH:

Maybe not with you but ---.

A. Yeah, I think we can find that but again that's one of the problems with the program is it doesn't take into account, like leaving a single bleeder entry pillar coming down the side. Either your width of what's going to be your gob is what's looked at and then you have loading conditions. And the loading conditions are either gob or barrier on either side of that. So you go through the loading conditions, I think it's one, two, three and four. They have four loading conditions.

MR. PAVLOVICH:

With your knowledge of roof control and those programs and the depth of cover that you work with here in the west, would you think that was appropriate to do that? To count those entries as solid coal?

A. I don't think it's appropriate to count them like a barrier pillar because they will do that, although that's one of the limitations of the program. I don't think it's appropriate either to count them as mined out pillars as gob because they are carrying load.

MR. PAVLOVICH:

But is that not what Agapito did in this report? They counted it as solid coal?

A. Right, they followed the NIOSH program.

BY MR. TEASTER:

Q. It's not in the ARMPS initial program itself, it's something that followed later or is it ---?

A. No, no it's in the ARMPS initial program.

MR. PAVLOVICH:

Instructions I guess.

A. Yeah, that's where you find it, in like version 40, I'm not sure how it's stated in version 51 but that was back with version 40.

BY MR. TEASTER:

Q. So did you question that in this report then?

A. No, because it's just a tool, looking at, seeing what the loads do and what you're comparing is you're comparing conditions, stresses and what it looks like. It's a comparison; it's a tool. It's not the ultimate answer.

Q. On the 7/20 report, was it basically LaModel?

A. Went in both.

Q. With some analysis from the ARMPS program?

A. Yeah, they had to have both in there.

MR. PAVLOVICH:

I have two reports in here, both of them are dated July 20th.

UNIDENTIFIED SPEAKER:

I think one was just a copy for you, Joe.

MR. PAVLOVICH:

Oh, okay.

MR. TEASTER:

It is also the 8/9/06.

UNIDENTIFIED SPEAKER:

I don't recall any ARMPSin the first one, Billy, that's the only reason I'm asking you to look at it.

A. I don't see ARMPS here, I was thinking it was in both of the reports.

UNIDENTIFIED SPEAKER:

Billy, while you're looking maybe we can kind of revisit the 40 version thing there. I guess what I'm understanding you to say is that the reference to the adding the bleeder pillar to the barrier was something that you're saying was in version 40?

A. I think that might be where the documentation came, but you will not find any documentation that says that if you're leaving a pillar adjacent to the gob, that you treat that pillar as gob. And they don't have a way, is what Joe was saying, if you have five pillars and you're only going to retreat three, what do you do with the other two pillars over to the side. The program has no way of addressing that.

UNIDENTIFIED SPEAKER:

Right. Okay. Now, the version 50, is that what you guys ran, that's what you have?

A. Right.

UNIDENTIFIED SPEAKER:

And that's what Agapito did? So nobody was running version 40, it's just that this documentation that you're referring to might have been associated with 40?

A. Right, the help files, both versions have help files.

UNIDENTIFIED SPEAKER:

Right.

A. And they kind of explain how to do it. Although the help files are kind of difficult, well they're extremely difficult to find your way through the help files, I think, without printing them out. And again, you know, you go to the loading conditions and it's either like a barrier or not. You don't have loading conditions where you say you have 80-foot wide pillars, 20-foot wide entry and things. It's either gob or barrier.

UNIDENTIFIED SPEAKER:

Right. Now, my understanding of it, just looking at it, I think the mains part is a lot easier to understand how ARMPS would treat it because you would just look at the loading condition that treats the side gob to the north and a front gob. And that's a loading condition that you can use in ARMPS to look at this. In essence it's discounting the mains is what you're saying. So that part is a little bit clear. And I agree then, to me it goes back to how you treat that bleeder pillar, okay? You know, adding it or not essentially.

A. Right.

UNIDENTIFIED SPEAKER:

Okay. And again, Agapito added it to the barrier and I guess our question for you is that entry that they also added. And I'm sure you're familiar with the NIOSH report that came out after Crandall?

A. Yeah, we got a --- I wrote a response to that and said I thought the NIOSH report was totally unjustified and had no creditability.

UNIDENTIFIED SPEAKER:

Well, we're not getting into all of that. Could you comment on

their recommendation on how they would treat the bleeder pillar, coming up with an affective width?

A. What NIOSH did is NIOSH essentially went from using their ARMPS program as a tool to using their ARMPS program to try to identify what happened at the mine. So therefore they took that bleeder entry to be unstable and therefore the bleeder pillar to be part of the gob. And in addition the West Mains to be unstable, to have failed and all that area to be gob also.

UNIDENTIFIED SPEAKER:

Let's go back to the --- do you have it up there guys? I guess Billy, what I want to ---. You might not have it, Joe. We might have missed it there. The way that they handled that bleeder pillar, coming up with the effective barrier pillar with, Billy. Do you remember what I'm talking about?

A. Yeah, I think they modeled it as being ---.

UNIDENTIFIED SPEAKER:

They came up with a barrier pillar width ---.

A. They're taking half the distance or something like that.

UNIDENTIFIED SPEAKER:

Instead of 130-foot barrier pillar on the one end or a 210 width barrier pillar, they came up with 160-foot barrier pillar, after accounting for the bleeder pillar. Do you recall that or do you need to spend some time looking at that?

A. I remember they took the distance down, saying a more reasonable approach would be to --- instead of saying adding the total width to the thing would be to reduce the width of the pillar.

MR. TEASTER:

So they credited 30 feet of that pillar toward the barrier?

UNIDENTIFIED SPEAKER:

Yes, and again my take on that, and I guess I'm asking you to comment, Billy, is first of all I'm assuming that they took away the entry width, which I would think that that would be a reasonable first step. That you would not want to give any credit to the barrier pillar by adding 20 feet of entry to it. And then from there, they made some additional compensation for the crosscuts being mined.

A. Yeah, I don't see it there on that page you showed me but I do recall that they did do reductions in the size of the pillar.

BY MR. TEASTER:

Q. And you're saying that that's inconsistent with their program?

MR. PAVLOVICH:

Would you give any credit to the entry being gone as far as crediting that 20 feet toward the barrier?

A. I don't think that that's a valid way of doing it but that's the way their program was. And then what Agapito did was they're comparing what is in one area of the mine where they reached their stability factor, which they used the same type of analysis in the other areas of the mine to the north and south barrier. So they're consistent with the guidelines of what NIOSH had done. There's nowhere in the NIOSH literature that it says that you must subtract entry widths, open widths, you'll reduce the size of the remaining pillar. It's not in the help files, it's not in ---.

BY MR. TEASTER:

Q. It's true, let me go back to what you said earlier. Your opinion of those programs is they're tools?

A. Correct.

Q. And even though it's a tool, to say okay, we're going to use that entry and a

partially crushed pillar and add that distance to the full barrier to give us a wider barrier and probably increase the stability of this. You're taking that as a hard line thing because that's what the guidance said, but on the other hand you're saying it's only a tool. Does that make sense? I mean, do you see what I'm saying?

A. Right.

Q. If it's only a tool and you say well, gee, they're not discrediting the width of the entry, maybe I need to do that in my tool instead of using that whole entry. Because you can't have the best of both worlds. I mean you can't have --- it's only a tool when it doesn't meet my --- but when it meets this then it's hard line because we're adding another 80 feet; right?

A. Right, but what I'm saying is if we're following their --- NIOSH's guidance. And what Agapito did is they used this guidance to determine a stability factor based on another area of the mine. Then you go over to ---.

Q. What area of the mine was it?

A. It's north of the West Mains and ---.

Q. Want to look at the map?

A. Yeah, on this map it's showing as section 36, in that area up there. That's the panels off of, I think it's First North.

Q. So they equated the conditions in section 36 and the history they had there, which appears to be a five entry development section that was pillared, partially pillared, because there are areas that were not pillared.

A. Correct.

Q. With no longwall gob on either side. And they equated that to the barrier pillar in Main West with massive longwalls on both sides?

A. No, what they did is they took the one left area off the North Mains there and

they went in and tested their model and they come up with a stability factor. And they got a stability factor, I think it was around 0.39 for up there. And what they did is they said they successfully pillar mined up to the area where they ran into problems. Then they had to back up and start over again. And where they had to back up and start over, that's below the acceptable stability factor. And that gave them their parameter that they would use in using ARMPS in the other area.

That's also what the guidelines and the NIOSH manuals, help files, state to do, is you go to other areas in the mine, establish your stability factors for your mine. Then they took that acceptable stability factor, then they went into a different configuration in the North and South Mains. But they've got a stability factor based on retreat mining, where stresses from additional, you know, side gobs could affect it.

Q. Isn't that kind of a contradiction in terms, that they successfully pillar mined up to the point where it failed? I mean, does that make any sense? Did you successfully pillar mine or did it fail?

A. It was successful to the point where it failed, yeah.

Q. I mean does that make sense?

A. It works and it doesn't work.

Q. It worked until it failed?

A. Yeah.

Q. But I didn't need ARMPS to tell me that.

A. Right.

Q. I can pillar and then when it falls and fails, then I lost it and I back up. How can you use that as a guideline then, if it failed? Apparently it failed a couple times. I guess we're looking at this panel because it looks like they mined five or six rows and then they had to leave five or six rows.

A. Correct.

Q. Then they mined 20 rows and then they had to leave the last 10 or something because it failed again. And then they decided they'd use that one as the base line?

A. Right.

Q. And we said that's okay?

A. A few things there. The pillar mining there typically failed because they lost the roof and everything. The center entry is mined, is a continuous haulage area so its center entry is mined 23 feet wide. The other entries are 20 feet wide. In their modeling they used all the entries at 20 feet wide, but in the south --- so they used a 20-foot wide pillar in their modeling or 20 foot wide entries in modeling, which built into some conservatism and into the model because the actual conditions were worse than that.

Q. What would they even be close, Billy, because like you say, one's five entry development system with bridges so you're driving the crosscuts on an angle instead of square, which certainly affects stability.

A. Correct.

Q. Plus it also only has a gob to one side.

A. I think they did both of those panels. They did both panels there.

Q. And it appears both of them failed.

A. They did, and that's where they came out and that's how they established the stability factor. If they'd have had no failures ---.

UNIDENTIFIED SPEAKER:

Yes, and I think that's a reasonable approach as far as handling ARMPS a couple points. First of all, you know ARMPS can handle the angle crosscuts and all that. And so that part you can still get a base number that can then

be taken somewhere else and you don't have to have exactly the same conditions. So that part is reasonable.

But the idea of the failure and successful Billy, I guess my questions there is, yeah you want to have failure to know the bottom end. But when I read that report, they use the word generally acceptable, up to 0.37 and then they just kind of, in my opinion, made a leap and said so we'll use 0.40 and they really didn't do any kind of calibration or ground proofing above the 0.37 where they got the failure. They just went slightly above the failure because they were on that cut, if that makes sense. And I'm just kind of curious about your opinion of that?

A. Well, I think that that's no different than what Chris Markenham (phonetic) is doing, drawing their line and saying we've got lines of, here above the line's okay and below the line's not. And that's what Agapito did, below the line was failure and above the line worked. And that was at 37. And so they said you know, 40 is okay. And again that --- when we looked at it, when I looked at it, 40 was okay. They retreated those two panels and the 40 areas, 37 areas were okay. The 40 areas was okay but again there was actually, if you'd have modeled the center entry wider at the actual width then the stability factor would have been changed. They modeled it as 20 when the actual width was 23. So that built in, like I said, that made it to me a conservative program.

UNIDENTIFIED SPEAKER:

Okay. Let's go back to where we started though, before we kind of made another leap here. We were talking about barrier pillar stability factors. And we kind of went from there to the ARMPS stability factor in general. You know, this 37 and 40 aren't barrier pillar stability factors, and that's what I'd like to go back to. You mentioned Agapito, well Agapito doesn't talk about barrier pillar stability factors.

A. Correct. And we didn't look at the barrier pillar stability factor. The barrier pillar would have been an important stability factor to me if you're room pillaring an area and you want to protect that area that's beside it. And they weren't --- one of the proposals is to mine part of the barrier pillar, so they weren't leaving the barrier pillar, they were mining into the barrier pillar. Taking the barrier pillars out, same as they did in the South Mains. They didn't leave barrier pillars.

UNIDENTIFIED SPEAKER:

Okay, you mentioned some stuff about relying on the ARMPS help files that Agapito did what ARMPS says, that they followed the ARMPS procedures. Talking about the bleeder pillar now. So we're kind of saying that we're believing in ARMPS, we're following ARMPS, Agapito followed ARMPS.

A. Well no, what we're saying is Agapito's been consistent.

UNIDENTIFIED SPEAKER:

Okay.

A. That they looked in the north left I think it was, they looked in there and they developed a stability factor. Then when they looked at Main West that they followed the same, essentially the same procedures.

UNIDENTIFIED SPEAKER:

My point though is that I'm perceiving the point to be that they played by the rules that ARMPS laid out. And my question is if they did it there according to the ARMPS stability factor and how to handle that bleeder pillar, what about what ARMPS says with the barrier pillar stability factor? Because ARMPS certainly has the section there and the help files, again that you mentioned, a reliance on help files. Well, the help files in ARMPS discuss the importance of bleeder pillar stability factors. So what's your take on what Agapito did with that?

A. I don't remember reading Agapito's pillar stability factor in there, but if you look at the ARMPS data in the western United States, I think the ARMPS table puts out that if you have --- you should have a 20 stability factor for the bleeder. And then they ---.

UNIDENTIFIED SPEAKER:

For the barrier?

A. For the barrier. Yeah, excuse me, for the barrier. And if you have greater depth to cover they recognize that as depth of cover, especially with later work with Frank Chase, Chris Markenham did and also with Kneasly's (phonetic) work saying that ARMPS is not applicable as well as deep cover. Because it doesn't take into considerations that the gobs and things can carry low and they condense. So therefore ARMPS is missing the boat in deep cover. So Frank Chase and them came out and said well if you go to deep cover the 20 can be I think dropped down to --- it's either 19 or 18. And for stability factor for a barrier pillar.

However, if you go in and look at NIOSH's own data, you can see that they've had several successes with barrier pillars zero, not leaving barrier pillars and barrier pillars well under one.

UNIDENTIFIED SPEAKER:

Again, I recognize that point, but that kind of goes to my point that if you're going to say that barrier pillars can be less than a generalized NIOSH guideline of 19 or 20, did they establish that historical prospective for the barrier pillar stability factor? I think if you're going to make the statement that you have cases above and below and therefore you can have below, you have to do that same historical comparison for bleeder stability factors that you did for the regular stability factors. And to me, I don't see that anywhere in what was presented to you.

A. No, Agapito didn't address barrier pillars. And part of NIOSH's work says that if you don't have the stability in the barrier pillar, then that load is transferred to the pillars in the area you're robbing. So therefore it's compensated in a program there.

UNIDENTIFIED SPEAKER:

Can I ask one question? Billy, you touched on one thing and I don't know that much about roof control, but just to clear something up in my mind. We talked about this line, success line, where 0.37 was a failure. And so if you're below the line it's a failure, if you're above the line it's a success. So if we know 0.37 was a failure, how did we determine where the line was?

A. Well, we said 37's a failure.

UNIDENTIFIED SPEAKER:

Right.

A. Then above that line is okay.

UNIDENTIFIED SPEAKER:

Well, we knew 37 was a failure. We didn't know that was the edge of failure.

UNIDENTIFIED SPEAKER:

And that was kind of my point, Billy.

UNIDENTIFIED SPEAKER:

Yes, how did we know about bumping up .03 if we were safe?

A. What they did is we said that Agapito had did their study and they said okay, what do we get to be the failure. And so they did the calculations of coming up there and that and the stability factors below there or above that, you know. Are you saying did we do calculations all over the mine and did we find other places where ---?

UNIDENTIFIED SPEAKER:

No, it's just a general question. I guess the comment was if you're below the line it's a failure. If you're above the line it's going to be a success in most cases. So we have one known. The known is that 0.37 was a failure. Now, how much of a failure below that line is my question. How did we know that by raising it to 0.40 that that was where the line was? The safety line or you know, 0.37 failed. So how did we know about going to 0.40, that that was okay?

A. The pillars inby where the 37 fell had a very similar stability factor that was above the 37 and that didn't. I'm not sure exactly what that was.

MR. TEASTER:

Are you ready?

UNIDENTIFIED SPEAKER:

Yes, I'm sorry.

MR. TEASTER:

No, don't be sorry. We want to flesh this out so we all get a good understanding of it. This is very technical and I think complex stuff.

MR. PAVLOVICH:

Where are we at, right here?

MR. TEASTER:

Yeah, right here.

MR. PAVLOVICH

Are you still there? Good. I'm glad you kept it.

BY MR. TEASTER:

Q. Billy, we talked a little bit about your training experience with the model, and you've conducted these analysis programs. Most of the submittal from Agapito dealt with the LAMODEL program, the analysis. And you earlier said that because of the

hassle you have to go through with to do that kind of a model, did you ever consider calling in tech support or having someone to do a LAMODEL analysis on that program?

A. No, like I said we have good confidence in what Agapito does. We've been working with them since early '80s. They have an extensive history in Utah mines, in the Book Cliff. They have worked with those staffs, they've done at the Star Point Mine and the Hiawatha seam. I think they were at Trail Mountain, they've done work. They've been in four or five studies, previous to this Crandall Canyon study. They've been at Crandall Canyon Mine so we have an extensive history with the Agapito people, the work that they've done. It's one of our more --- we consider it to be more reliable consultants. We also get reports from them that we look at, review from --- that they've been with high wall mining and other areas.

Q. So you primarily accept what they submit from Agapito?

A. We look at it, we question. Like on the Agapito report I call the company. We question the pillar strength, you know, where did this come from. We questioned a couple other things, the entry configuration, a couple other things that they did and then I talked to I think it was Laine Adair at the company and another engineer there. And they explained where they got the information from, from where Agapito had been, you know, had done the overwork in the mine. The strength that they'd used. They'd done other instrumentation in the mine, that they'd been working on all these studies so we did follow up on it. But we have a high level confidence in Agapito Associates.

Q. When you got the Agapito reports from Laine Adair, you reviewed it and then gave it to Pete Del Duca. Did you review his work?

A. Yes, like I say, he did it different than what Agapito did, so then you know, I

sat down with Pete and went over what the differences were and then had him check. Then we started checking on the strength and we even sent a letter to the company saying here's some differences that Pete came up with and what Agapito came up with.

Q. So you discussed his assumptions and inputs?

A. Right.

Q. And then still sent the letter out disapproving the submittal, or say it would be disapproved if ---?

A. No, we didn't send a --- we sent a letter out to the company saying we would approve the development and the barrier pillar, and the north barrier pillar. So that was four entries, three pillars.

UNIDENTIFIED SPEAKER:

The approval letter, Joe, is in the binder. Sorry, Billy. It's in the binder that you have.

BY MR. TEASTER:

Q. I understood that there was an approval letter, which was also a letter, it may have been incorporated in the same one, where you said that there were five issues that you had.

A. That was a separate letter sent.

Q. It had to be addressed before you could do the pillar.

A. Pillaring, retreat mining, yes.

Q. Right.

A. And I think both those were sent out in November of 2006.

MR. PAVLOVICH:

This is the south block.

BY MR. TEASTER:

Q. November 21st?

A. I believe one of them was like November 17th, one of them might have been the 21st.

MR. PAVLOVICH:

You got it there.

UNIDENTIFIED SPEAKER:

Disapproval one but the approval one is the same date.

MR. PAVLOVICH:

So this Agapito report was something that they just handed to you, Billy, or was it through an actual submittal to develop and retreat the north barrier?

A. At the time they handed the Agapito letters, there was not a submittal.

MR. PAVLOVICH:

There was no submittal?

A. No, if you have the approval letter.

BY MR. TEASTER:

Q. This is the disapproval.

A. Do you have the approval letter?

Q. He's got it over there.

MR. PAVLOVICH:

This one says for the south barrier, Bill? Oh, you have it there.

A. The submittal to mine the north barrier was in a cover letter dated November 11th, 2006.

BY MR. TEASTER:

Q. But you already had the Agapito report in hand, the one that Pete reviewed?

A. Correct, on September 8th or 9th of 2006.

Q. And so Pete did his review and I guess he did a LAMODEL exercise?

A. ARMPS.

Q. He did an ARMPS exercise, okay. And then he gave you five items I think that he said I have concern with?

A. Correct.

Q. And you wrote a letter back to the company saying address these five items?

A. Correct.

Q. But that wasn't part of an approval letter or disapproval letter. It was just a letter to the company identifying there were five issues with what they had somewhere handed you? Is that true?

A. Yes, sir, that's true.

Q. Did you agree with those five?

A. I sent them to the company, I wanted to see what the company would respond to them and after we looked through them, and no, I didn't agree because Pete didn't run the model. He ran the model like it was all gobbed to one side. And he used the default values in --- he used 900 psi also, which wasn't the fault values. Then he also changed some differences, he used a map and scaled the map and got some differences different than what Agapito had used also.

Q. But you stated that you did discuss all these parameters that he used and assumptions that he had made prior to sending this letter out?

A. We did.

Q. But you sent it out but didn't agree with him?

A. I wanted to get the information from the company, too.

Q. Even though you knew it was wrong, you wanted the company to come back and tell you it was wrong?

A. Yeah, I did. I wanted to --- it got me a little concerned about, you know, retreat mining in the barrier pillar.

Q. And was there an official response back to these five allegations or concerns?

A. No, I talked to the company in December and I think they submitted a plan to retreat mine the thing. So I called them in December and we went over the issues and Laine Adair said he had discussed it with Mike Hardy from Agapito and he gave me --- I think it was Laine Adair or they had another engineer there too. But Laine Adair and the other engineer, and discussed with them these items and they explained to me what Agapito had done and Laine said he got that information from Mike Hardy of Agapito.

Q. So Laine never responded back in writing to this letter with these five inconsistencies as listed here? He just talked to you on the phone?

A. Correct.

Q. And from his discussion with you on the phone, then you were satisfied that these five issues were addressed?

A. Yes. Well, that and what we'd done wrong in our own modeling.

Q. Is it a practice that when you send an official document out in writing, signed and addressing concerns that you don't require something back in writing that addresses those?

A. No, if we send a disapproval letter stating that company has --- we are disapproving it for this reason, they don't have to respond. Or if we have --- we get concerns, they don't have to respond. Sometimes they don't have to respond in

writing. Sometimes they'll send us something in that doesn't address the issues, they've just made the corrections. And they don't specifically go down and address each issue.

Q. Well, it just seems that you got --- MSHA has raised these five issues to the company. And we've approved a plan and there's nothing other than some oral communications that says these things were addressed or were wrong; is that right?

A. That's correct.

Q. Has Pete been trained in how to run the LAMODEL evaluation?

A. I don't think he's had any formal training, it's been mostly him going through --- at this time he hadn't. He since has been sent to training, but at that time he did not have any formal training.

Q. Has he done any other analysis or had he done any other analysis of the programs, prior to this?

A. No, since he'd just come to work for me in June, assigned to me in June. And this was the first chance I've had to start bringing him in and saying this is what you're going to be doing and what you need to develop knowledge in this area or you need to become familiar with these programs. And so this was part of his training exercise, to bring him up to snuff.

Q. Billy, who prepared the summary of this cursory analysis entitled the Report of September 2006, Cursory Review? And it's dated 8/7 of '07.

A. Pete did that.

Q. And prior to this being typed up, after the August 7th bump there at the mine, you had some handwritten pages. When were those handwritten pages that apparently the other document was made up from, when was that handwritten page developed?

A. That was back when I looked at Pete's stuff and that's probably my notes of what I found the difference between his analysis and what some of the items were that were in the plan. Instead of sending it, no, I didn't do a formal report either. I had my notes of going through what he did and just making notes to go over him with. And sometimes like if he writes a letter, I would write on the letter and stuff.

MR. PAVLOVICH:

So would these be your notes or Pete's notes? And following that is the document that Ernie said is a report of ---.

A. This is Pete's notes, I think.

MR. PAVLOVICH:

So this is Pete's notes?

A. Yeah.

MR. PAVLOVICH:

So these are the notes he used to formulate this report; you think?

A. I think so.

BY MR. TEASTER:

Q. Who directed him to do the September '06 ---?

A. He came to me and asked me. Oh, the September ---?

Q. The one you got your finger on there?

A. He came to me and asked me what's going on and I said well there's going to be questions about everything we've done so you need to go over and make sure you got everything together. And I assume that's when he did the handwritten notes and that's when he went back and did the report.

Q. Are you assuming he did the handwritten notes in August of '07 as well?

A. Yeah, I'm not sure. He may have done --- no, I'd say the handwritten notes was something he already had and I told him to put it into a document.

MR. PAVLOVICH:

When you said that there was going to be questions as to that, what do you mean by that, Billy?

A. Because I'm the one who approved the plans over there. That we'd had a disaster and typically in a disaster every item is looked at and that that would be ---.

BY MR. TEASTER:

Q. Okay, so you told him to do this after the accident?

A. Yes.

Q. Okay.

A. The report of the September 2006 cursory review was written after the accident of August 6th.

Q. Okay, but there was nothing written before, other than those handwritten notes and this letter with these five items, that you know of?

A. There was nothing formal.

Q. Well there's some, looks like when you did an ARMPS program run here, that's with this letter? So this was all sent to Mr. Peacock?

A. No, it wasn't. Just the two-page letter and this was probably attached to --- it goes in our file.

Q. In your file, but you don't think that whole thing was sent with it?

A. No, if it was sent with it, it would have enclosure.

Q. Okay.

A. There would be a thing after Allyn Davis' signature that says enclosure.

Q. Okay. So only thing that went was the two-page letter identifying the five

items?

A. Correct.

Q. Let me just get your thoughts on this cross sectional area here. You got your gob over here. This is where you got your peak stresses. Do you think, and this is right on the very rim of that barrier over there. Do you think that that's accurate or you think some of that stress would have been reflected over on this area?

UNIDENTIFIED SPEAKER:

Just for the record, maybe we could state what Billy's looking at is the LAMODEL analysis that Agapito did that was part of the July report; correct?

MR. TEASTER:

Yes.

A. What I'm looking for, Ernie, is the cross section. Now typically --- and what this is showing is the high stresses are located over on the right edge of the barrier pillar, adjacent to longwall gob. Separating the barrier pillar and the gob is a yield pillar, that's yielded as yield pillar, yields, it reaches a maximum strength, whatever that strength is. Once it gets to that strength it will no longer carry a load. It will maintain essentially that steady load and that load shifts over to the next abutment load.

Typically that is the way it's showing that it addresses the highest stress and then that loading decays off rather rapidly across the panel. In this situation it's a barrier pillar or it would be, you know, if there's another gob over in that area. But it would dissipate along the edge of that.

Q. And then be reflected over to here?

A. It decays rather rapidly.

Q. Right.

A. And then is distributed out.

Q. This is the peak and there's a mean down here somewhere.

A. I don't think there's a mean, this is why we're looking at the load to be on that side of the barrier pillar. If you would turn that around to a longwall face, that'd be the same thing, it would be on the face from the front abutment coming over. You'd have this peak loading would be right at the face and then it would decay back into the barrier. And that's what this is showing. That coming from the side abutment loading, from the longwall panels, it sits right on the edge and that distance could be 100 feet, 120 feet, until you get back to what you call the core of that barrier pillar and then it dissipates. That loading decays rather rapidly and is typically uniform distributed load across the rest of it.

If that barrier pillar were to bounce, this area would bounce, it would be the rib. That's the rib line down through there. So from somewhere, whatever distance is shown by this high peak load, I don't see a scale but that looks --- maybe that's 75-100 feet. So that would be the part of the pillar that would probably blow out. This core area of the pillar would not be affected. And then what would happen, once that bounced and blew out, then you would see this peak loading move 130 feet this way and you'd have the same peak ---.

Q. It always stays on the edge?

A. It always stays out on the edge.

UNIDENTIFIED SPEAKER:

Billy, I guess to just follow up on that a little bit more. My particular question there, I understand what you're saying about how it normally dissipates very quickly. But essentially when you look at that, in less than a hundred feet distance, you have no abutment stress riding over into the proposed entries in

that north barrier? That's the question that I guess I'm --- do you believe that that is realistic, that the abutment stress from the north is going to be solely on that remnant barrier as that cross section is showing?

Again, conceding that it dissipates fairly quickly, you, still in my opinion, would have a component that over in those proposed entries where that cross section shows it dissipating to nothing with no abutment load being carried over to the proposed mining area?

A. Well there's something being carried there but it's a small distributed load. Typically it's on the side. And that's the way the models work. I mean it ---.

UNIDENTIFIED SPEAKER:

Q. Well, I guess it could work that way if they set the model up that way. Is it accurate?

A. I think it's fairly accurate. Typically we don't see --- like I said if it was the longwall mining that way, the abutment load, it wouldn't go down the panel. It wouldn't go down the panel, it wouldn't go across. You're talking about when we have a stable yield pillar. The yield pillar loads it up you know, and they've even done instrumentation and they've done that at Aberdeen Mine, you know, the longwall going by at a hundred feet or so into the pillar. You'll see no load on that side abutment, per 20. It's usually out on the side there. It doesn't carry it on across. The yield pillar you will. And if that were another yield pillar then it would go on across. And this figure 14 is showing where the sample was taken.

MR. PAVLOVICH:

Is it time to break for lunch?

MR. TEASTER

Yeah, we can break.

UNIDENTIFIED SPEAKER:

Not even relevant to this, but going back to what you stated, Billy, about your faith in Agapito, okay, and about how, you know, you've used them for years, did Agapito ever present LAMODEL to you before?

A. You know, I'm not --- right now I can't recall a reference, but I think Agapito has used LAMODEL and some of LAMODEL. But I don't --- I can't quote a time that they have. I know they've used other times. I'm not sure it's LAMODEL or a different type of that finite element.

UNIDENTIFIED SPEAKER:

Okay. My understanding is that most of the work that they've submitted previously was with another boundary element Experia and that this might have been possibly the first time that they've used LAMODEL?

A. Yeah, I'm not sure. Like I said, I'm not sure what, but it was, you know, more of a boundary element, finite element model.

MR. TEASTER:

Okay. Let's go to lunch, get Joe fed and me as well.

LUNCH BREAK TAKEN

BY MR. TEASTER:

Q. I want to go back to one issue. I'd asked you earlier about --- and that was the LAMODEL. Have you conducted LAMODEL evaluations?

A. No. No, I haven't. Just reviewed them, looked at them. I haven't run them.

Q. Okay. Billy, are you aware of NIOSH's work in 2002 to update the initial ARMPS software program for deeper mines, more overburden?

A. Yes, I am. As discussed earlier that's where we stated that that was work that was done by Frank Chase along with Chris, and that that was where they came out

with the charge saying that typically it'd have a varying stability factor, too, but for deeper covers they doored up. I think it was 1.9, but --- and also their stability factor for mines like used to go across at ---. I can't remember for --- they had a chart or table in there that crossed at one via and then at about ---. I can't remember if it was 1,500 feet, 1,800 feet, somewhere in that line. They dropped it down, sharp drop and the stability factor dropped down because they had a lot of additional mines that were shown that deeper cover that more stability factors were adequate. I think in that plan though they referenced deep cover as being greater than 750 feet.

Q. Did it talk quite a bit about this barrier stability factor?

A. They said the barrier stability factor was an important value, and they put a chart in there to use.

Q. And did Agapito use that --- barriers to fill the stability factor in your analysis?

A. I don't recall seeing the Agapito referenced in the barrier as far as stability factor.

Q. Is that part of District Nine or how do you guys use that to factor that into these analyses?

A. If they were mining adjacent to a set of mains that needed to be protected or an area that needed to be protected then we'd look at the barrier pillar or if there's a barrier pillar adjacent to old works and we didn't know what was going on in those old works then --- or the extent of them then they would --- you'd look at the barrier pillar stability factor. Where these --- this area was --- as they would retreat out of the area all the areas by there were considering to be gob. The mains west that was a sealed area, no longer being used. They come in essentially and abandon that area, so that area didn't need to be taken by a barrier pillar.

Q. So according to your understanding that stability factor for the barriers didn't

apply in this particular instance in mining those north and south barriers, west mains?

A. Correct. There was nothing --- you know, and we even ---. There was some places even --- you know, we have pillar mining where as one panel's retreated they leave a barrier pillar for the next one develop up as that next panels --- as the second or third panel is retreated it actually mines through that barrier pillar into the old gob, so it's continuous. In those pillar areas you have --- I believe the entry goes all the way around the back. It goes behind, say, all three panels, so that's --- so as you retreat out, you know, depend on circumstances a barrier pillar is not required.

UNIDENTIFIED SPEAKER:

Billy, I understand your point there about on retreat, but how about on development into that north barrier? You need to protect the areas that you just developed prior to retreating them. Did either Agapito's analysis or the District Nine ARMPS analysis look at the barrier pillar stability factor for that purpose?

A. No, we --- well, we looked at what the conditions were and we thought on development where the stability factor and the pillars and things. We didn't look at the barrier pillar. We thought it was adequate because --- you know, and so is the other developments found. We didn't figure that the barrier pillar would be affected and developments were fine. The barrier pillars were totally affected on development, both sections were developed without any problem.

BY MR. TEASTER:

Q. When west main --- was it developed up to the end prior to the longwalls being mined on the left and right of it or do you recall?

A. I think it was. The west main --- because that was the access to the bleeders that there was some pumping, and that was the way --- the ventilation for those panels.

Q. Was there any problem with bumping at all up there in that west main?

A. No. The west main's area was developed with a continuous haulage, and on those angles they did have considerable problem with the corners caving off. They had problems with some of the immediate roof falling out. They weren't necessarily reportable roof falls because they didn't go above the anchorage zone, but they were --- the area deteriorated so badly, you know, you had to have additional support put in the areas or they had to danger them off and just go around them. We had some initial discussions about pillaring that area back. That area used --- I don't recall if it was wire mesh. They used the shorter bolt, fewer bolts across to provide pillaring in that area and retreat out. There would be extensive pumping. There was water in the area, so that would be a problem. They had to go back in and support the area. Those angles and the way it comes back create problems when you get to the center entry for the continuous haulage that we don't like to see it. It creates pillar points, and in discussing with the company they had to do extensive rehabilitation to be able to go in there. And, again, they would have to maintain a bleeder entry all the way around that, so that --- would consider that --- would take considerable effort, man times and to get to a point where it could be evaluated for pillar, so they chose not to do that.

Q. Okay. I want to back up to this report here on the 21st. We've identified the five issues that Pete Del Duca identified and was included in that memo that was sent to the company. And this notes specifically what was done with each one. Like in number one or A there we talk about coal strength?

A. Agapito uses coal strength of 1640. Based on previous modeling Agapito has done and what they've done in mine instrumentation, pressure cells, bore hole pressure cells, collecting samples, having them tested. They have previously had

Hiawatha seam samples, ranging from 1,700 to 2,000, I think it is. We had --- we looked at references by Maleki, Hamid Maleki. His Hiawatha seam pillar strengths are up around I think in the 3,600 psi range. Chris Mark publications regarding Hiawatha pillar strength around 5,400 psi, so based on --- and I think Utah Geological Survey also had some data that was much higher. So what we arrived at is that the Hiawatha coal seam pillar strengths typically ran somewhere between 1,700 and --- or 1,800 and 5,000 psi so the 1640 was a conservative approach.

Q. I may be wrong, but it was my understanding that Agapito used 900 in the ARMPS and 1640 for the LAMODEL. Is that ---?

A. No, they used 16 ---.

Q. That's not your understanding at all?

A. No, they used 1640 for both of them. 900 is the default value in ARMPS.

Q. Right.

A. And that's the value you would use if you have no knowledge of the ---.

Q. No mine history?

A. No mine history, yes.

Q. What about the second one there, we do elastic modulus of the coal?

A. The elastic modulus was --- it was explained that that came from Agapito's collection of data from those studies that they done in Hiawatha seam from standpoint to additional deals in Crandall Canyon where they actually had collected the data on it.

Q. You say you didn't see this data, you just talked about this information over the phone with ---

A. Yes.

Q. --- someone from the mine?

A. From --- Mr. Adair from the mine, and in addition we were familiar with the

different Agapito reports and knew ---. When I was doing two entry work on Star Point Mine, which at that time --- at that time it may have been owned by an oil company, but I can't remember for sure. But anyway, the Star Point Mine, which is in Hiawatha seam, Agapito did extensive instrumentation in that mine also which is in Hiawatha seam.

Q. Did you have any conversation at all with anyone from Agapito regarding those five issues?

A. No, I did not.

Q. What about the mine geometry there in the third one?

A. This was where the mine geometry employed the computer model. They used 20 foot wide entries. The actual center entry was 23 feet wide. Also off the map that Pete used to measure was --- the map he used had different values on it and, you know, we don't know if it has a copy. I was explaining that Agapito used in their computer model the actual survey data provided by the mine to them, so that's where they got their data.

Q. Was there any discussion about using this with the barrier pillar and the width of the mine entry, plus the barrier, the 210 feet? Was there any discussion at all as to ---?

A. No, there wasn't there. That was --- again, that was where Pete had modeled it that way, and what I consider that Agapito had followed the NIOSH recommendations and what was in the literature that they did it using what was in the looser and explained the loading conditions to Pete how it was invalid to remove a solid pillar and call it gob. You know, we had no justification to do that, so we couldn't do that.

Q. Have you done any ARMPS analysis looking at that information since the

accident?

A. We did some informal stuff, but I don't recall what the --- I think that, you know, if you model it like Agapito did, it came up close to what they did.

Q. I think if we took the --- just the pillar, the width of that bleeder pillar and subtract out the width of the entry and --- or take half of it like 160 feet like NIOSH I think had done, you come up with a stability factor of .29?

A. I think NIOSH decreased the width of the pillar also.

Q. Yes, they did. They basically give you --- I think it was around 60 feet wide. They dropped it down to 30, and I don't know how that came about. But if you take the effective width of the barrier itself and the part of that barrier pillar that NIOSH attributed to the effective width of the barrier of 160 feet, they come up with a safety factor of .29. Does that sound about right?

A. That --- you're saying if you use the barrier pillar width and then 30 feet wide of the pillar?

Q. Right. The 160 foot, I think that's the ---.

MR TEASTER:

Is that not what NIOSH used, 160 feet?

UNIDENTIFIED SPEAKER:

Yeah. They're compensating coming up with the effective barrier pillar width, Billy, from the 130 feet by compensating for that bleeder pillar not being mined. They came up one way. In that NIOSH analysis for Senator Kennedy, so there's two ways you could do it. Number one, the way that Pete did it which ---.

A. Total extraction.

UNIDENTIFIED SPEAKER:

Right. Okay. And then the other way they said is to add an

effective width to the barrier pillar. You're not going to add the full pillar to it, but they came up with a percentage based on, I'm assuming, just looking a plan view area of the pillar, the coal that's left in that area that effectively added 30 feet to the barrier pillar to come up with an overall barrier pillar width 160 feet.

A. And I think that pillar was about 60 feet wide, so that would be inaccurate. I can see taking the 20 foot width of the entry out --- or 18 feet actually as it went to, 18 feet wide. But I don't understand why NIOSH took a 60 feet wide pillar and said it's effective width is 30 feet.

UNIDENTIFIED SPEAKER:

Well, there's some compensation for the crosscuts being mined as well. I mean, when you break up coal into a series of pillars, that's nowhere near that pillar strength.

A. But ARMPS doesn't look at the crosscut. That way when --- it's not looking ---. When you take a slice across ARMPS you're taking one slice. Like if you want to see what the effect is at Crosscut 129, you have model at Crosscut 129. If you want to see what the effect is at the pillar at Crosscut 140, then you have to remodel and put it in at 140, so what the --- the only thing the crosscut would do, the crosscuts do is give you the pillar length, which NIOSH states the pillar --- increasing the pillars length has some effect, but it's not a lot of effect. The main thing is the pillar width, so it's not like a boundary of a model that when you model it, it progresses. No, you're looking at one

--- under ARMPS you're looking at one ---.

UNIDENTIFIED SPEAKER:

Well, you're looking at the AMZ, which is more than one pillar, and I think that's where they came up with --- I mean, an AMZ is typically like a three

pillar area. So ---.

A. Then what they should do is put the barrier pillar length in, change that, not decrease the width of the pillar because of a crosscut. You can't take a crosscut and decrease pillar width. If they want to do that you put the barrier pillar over for that whole AMZ instead of calling it, you know, whatever length they want to. But they have to look --- they would have to model that under the barrier pillar. And, again, it's one of the problems. It's a very elemental, simple computer program that doesn't address mining configurations that may typically be applied, and one of them is --- I believe that the only bleeder entry they can model is at the back of the panel. They cannot model bleeder entries that go down the sides of the panel.

UNIDENTIFIED SPEAKER:

Yeah, but you still find fault or have a problem with what they're doing coming up with this effective barrier pillar?

A. I do. To take a stable pillar and say that its effective stability is half its width, I have a problem with that. I don't have a problem with, you know, adding the width of the barrier pillar and width of the pillar and subtracting out the 18 foot wide entry.

UNIDENTIFIED SPEAKER:

Okay. Did you guys, again, --- okay. If you can see that much, so to speak, did you do that, I mean, ---

A. No.

UNIDENTIFIED SPEAKER:

--- or Agapito?

A. No, I don't think they did. I think they didn't. Again, following --- it's a tool and they followed the instructions from --- or the guidelines put out by Agapito that pillars to the side, stable pillars are included in a barrier pillar for a stable area, which would

be --- the barrier width would be from that bleeder entry pillar across the barrier pillar and include the main list.

UNIDENTIFIED SPEAKER:

And again, you're going back to the '97 documentation to make that statement?

A. Well, that's the only place that that changed.

UNIDENTIFIED SPEAKER:

So which way should it be done, Billy?

A. Which way should it be done?

UNIDENTIFIED SPEAKER:

Should you account for the open entry or not?

A. I think --- yes, I think as Mr. Pavlovich stated earlier, you can't just say, I'm mining out part of this area and not take it into account.

UNIDENTIFIED SPEAKER:

Okay.

A. I think it definitely should be and I think it's a fallacy in the --- problem in the NIOSH program that should be addressed. And they can't --- but I don't think they can come out after the fact and say, you know, we want to change the rules, which they did in what they submitted to Senator Kennedy's committee. You know, it's --- you know, they come out, we make a real simple formula where anybody can use, but you know, if it doesn't work, you did it wrong and you can't go changing the rules. And I don't think that's valid and that's why it's not an answer to everything because, you know, almost all --- well, I shouldn't say that. A large number of pillaring sections have an entry along the side that comes down, has a bleeder entry unless it's a flow through. And that entry has to be traveled to the back of the gob to evaluate the

effectiveness that you're getting ready to gob gases. And any of their model and design, one, two, three and four that they show in ARMPS there's no design for that.

BY MR. TEASTER:

Q. Getting back to the last issue that Pete had identified, the model yielding zones. What discrepancy do you think Agapito is referring to? I think it's number five. This discrepancy referring to the --- using the elastic elements in their analysis or ---?

A. No, no. This is the stability factors back to ARMPS that the 3. --- 0.37 was determined from the ARMPS program, and Agapito said, you know, anything above ARMPS is favorable and we stated there was a higher stability should be employed to ensure that you have ---.

Q. Bill, I'm sorry. I meant number four.

A. Okay. Along some of the pillars went above the strength and we wanted, you know, them to explain what's a failure mechanism if it reaches strength. Is this --- because typically in our coal out here and a lot of these models don't effectively ---. They'll just say it's over and the pillar is yielding. But if we get yielding --- out here in the west we don't yield in a conservative manner, ours are violent pillar bursts, so all we wanted to say is this looks like it could be indicating pillar burst on the outby side of the pillar line, which would put those people right in harm's way. So we wanted an explanation of that.

Q. And what explanation did you get?

A. The explanation that came from Laine Adair was that they --- even though it looked like it was up in the --- that was a range that was there, that it probably wasn't showing that they were going into failure. That we were looking at a range, and it didn't get to the top of that range.

UNIDENTIFIED SPEAKER:

Billy, in that regard did you look at the LAMODEL or did Pete look at it enough to see that Agapito was using elastic grip or elastic properties for coal, which essentially is saying that it'll never yield being elastic? Did you get into it that much?

A. No, we didn't get into it in that except that --- you know, I think in LAMODEL it talks about, you know, it being elastic. Are you saying as versus plastic?

UNIDENTIFIED SPEAKER:

Well, you can pick your level of yielding in LAMODEL as one of the input perimeters, and what they did at least in one of those analyses was use an elastic property for it, you know, non-yielding and --- versus some other degree of yielding. They chose that. That was one of their input perimeters into it, and I was just wondering if you guys ---

A. No, we didn't ---.

UNIDENTIFIED SPEAKER:

--- got into that.

A. No, we didn't get that much into it. Since we couldn't run LAMODEL ourselves we couldn't ---.

BY MR. TEASTER:

Q. Well, Billy, do you think that you have --- you personally or anyone else in the District has experience with LAMODEL to actually evaluate Agapito's submittal on the LAMODEL?

A. We can look at the values and stuff to --- we can't run LAMODEL, no.

Q. Do you think that might be a good reason to get tech support or someone in that has that capability and knowledge?

A. You know, there are times, but quite frankly, you know, in a lot of these

instances we don't have time to send stuff to tech support. You know, we asked tech support to look at Aberdeen Mine in May. They came out and looked at it in May, and we finally get a report three or four months later, so ---.

MR. PAVLOVICH:

But in this instance they actually gave you that report several months in advance?

A. Right.

MR. PAVLOVICH:

I mean, you conceivably could have called them and asked them?

A. We could have, but ---.

MR. PAVLOVICH:

Do you know why you didn't?

A. I didn't see a need to do it.

MR. PAVLOVICH:

Basically just trusted what Agapito said?

A. Well, that and, again, it's just, too, I don't think modeling is the answer. You got to go into mine conditions, look at the accident history, what the mine had done. I looked at the --- you know, the results of what they pillared before, how they set up areas. They done it also at Pinnacle Mine, which Agapito did the modeling for the Pinnacle Mine and so, yeah, I had confidence that Agapito was doing good work.

BY MR. TEASTER:

Q. So are you saying there were --- that you based your decision to recommend approval of this plan based mostly on the Agapito report or on other issues?

A. On other issues.

Q. What other issues?

A. The underground observations, what the mine had done in the history and in addition, you know, that you had a professional engineer with --- consultant engineer with a large extensive history saying that it was okay to do it.

Q. Okay. So you used ---

A. Yeah, I used it.

Q. --- the Agapito report, too, as a ---

A. Right.

Q. --- significant factor in your approval process?

A. Correct. You know, he's a registered professional engineer, Ph.D. that have conducted the modeling. They have extensive knowledge of the west, so, yes, I relied on the Agapito report along with the other stuff.

Q. Okay. And you said earlier Agapito does do a lot of engineering work for several other mines in the area, too, and you're familiar with their work?

A. Yes. And Mike Hardy is a Ph.D., registered professional engineer. He's a principal in the Agapito company. He did the --- he and another person were the two main people that did the work, so I have a high level of confidence in their work.

Q. Did other mines --- any of the other mines that Agapito did work in still continue to have bumps or have bumps afterward?

A. You know, I'm not --- I can't right off recall which mines did, but ---.

Q. What would your general feeling be then?

A. Most definitely.

Q. Okay. So even though Agapito has done a lot of work on modeling, and planning, and design and everything else a lot of the mines that they worked with still continue to have bumps?

A. Most definitely.

Q. Okay.

A. Because most of our mines in the Wasatch and Book Lifts, which they've done a considerable amount of work in, all of them except for one or two continue to experience bumps and bounces and even Sufco Mine here we historically have not had bumps and bounces, but it is also in the Hiawatha seam has recently started experiencing outbursts, bumps, bounces.

Q. Bounces or outbursts, whatever.

A. Yeah.

Q. Well, what have you looked at or what had you done with Agapito or anybody else to try to minimize those bumps or was it just acceptable?

A. No, we've looked at trying to move the bumps or the bounces from the working area. What we have done is looked at pillar height versus, you know, is the controlling factor the height? Ten foot versus eight foot say, they found at Aberdeen that height had a much greater influence on pillar bouncing than decreasing the width. Decreasing the widths is another factor. We've looked at in other mines the alignment of the pillars in conjunction with old works. We've looked at alignment of the coal openings versus the cleat.

Q. Now, when you say we, who do you mean by we?

A. We meaning Agapito was doing the studies and we look and see what they do, the data they submit. And, you know, MSHA is not a research or not a --- we don't have the capabilities to do this. Mostly it's Agapito or the consultants doing the work.

Q. So mostly we, meaning District Nine, is putting most of their trust in what Agapito does?

A. Right. And we, meaning District Nine, in conjunction with the operators and

their consultant.

Q. But Agapito is paid by the operator?

A. Correct.

Q. And the operator wants to mine the coal?

A. Yes. If they're not, they're not an operator.

Q. So there was never a whole lot of work by your staff, which you already explained was very minimal staff and I don't know how long it's been minimal, but even early on, I mean, bumps were --- had been going on in this District since mining started, I guess, when they got into deep cover. MSHA never did, through its roof control group here, a lot of studies on trying to minimize bumps?

A. No, MSHA has not. Even when MSHA had tech support here in the west the tech support didn't look at specifically trying to minimize the bumps. Tech support made recommendations on cutting sequences, running one or two entries ahead of the other entries, you know, and how instead of having the face squared off so all of the pillars lowered at the same time. Looked at them ---.

Q. So even when you were in tech support, the center chief and in roof control you didn't look at a lot of things on minimizing bumps?

A. Doing research on it, no, we did not. We didn't do instrumentation. We applied just existing technology that has typically been ---.

Q. Which was allowing bumps?

A. Which was allowing bumps. We looked at all the distress and methods, you know, whether --- you know, the Chinese talking about size of holes to drill to try to prevent bounces. We looked at volley firing, but we looked at it as it was being implemented typically as had it been implemented what was successful and make recommendations to accompany on existing technology that they could apply and then

explain hazards. Again, Bureau of Mines tried to do some work in that. It wasn't very successful and resources did some volley firing to try to do that on advanced and longwall face. We did do some recommendations. Deer Creek Mine got off sites and made a pillar larger than we thought would be --- that wouldn't yield and so we went back and had them cut notches in the pillar with a continuous miner so that when the longwall retreated and it wasn't bounce. It essentially went back and made a notch --- yield pillar. And that notch filled with coal very readily and they did not have any bounces on the retreat at Deer Creek. But, you know --- and so we mitigated bump potential there, but it's ---. As the reserves in the west are mined the potential for bumps is going to increase more and more greatly. Like I said, Sufco never had bounces, now they're having bounces. Aberdeen Mine, the corner of their approved roof control panel would be 3,200 feet. We've had them go into barrier, dugout mines talking about going to a panel barrier system. West Ridge will probably have to approach that. Deer Creek will have their own issues. As these reserves are going deeper and into more stressful condition we will see a greater potential for bumps and bouncing. As mines try to --- mine adjacent to old works that will increase as they mine from seams that were overlying each other. Again, that will increase, so although we haven't done a lot of research to mitigate bump potential, the potential is going to increase and get worse where they probably a higher incident of bumps and ---.

MR. PAVLOVICH:

After this accident is that acceptable?

A. This type of accident is unacceptable.

MR PAVLOVICH:

No, I mean, after you had --- we had this accident, is the fact

that we know bumps are going to increase, is that acceptable to say, bumps are going to increase?

A. I know bumps are going to increase, so that I have to say ---.

MR. PAVLOVICH:

Really then the only reason with a lot of the bumps you've had that nobody's been hurt or killed on is just happen to be nobody there at the time; right?

A. Exactly.

MR. PAVLOVICH:

Yeah.

A. And most of them have not been as catastrophic as ---.

MR. PAVLOVICH:

As this one.

A. Yeah. Crandall Canyon where it took out the whole area.

MR. PAVLOVICH:

Right.

A. Although we've had --- you know, Balina (phonetic) had a pillar failure. There, again, there was five people that had been at the mouth of the section, they would have all been killed. They happened to be off to the side where the air blast didn't get them, so we've been more lucky than good. In past bounces looking at remote equipment and more things, but that doesn't mitigate that the bump or bounces won't occur. We got a plan where the continuous miner operator has --- he's operating miner, he has webbing and conveyor belts that hangs from the wire mesh on the roof because as he turns the pillar corner the pillar that he's creating, the corner pops off, bounces or bumps that corner. So ---.

MR. PAVLOVICH:

So a lot of the design then is not to stop the bumps or minimize the bumps but it's a protective measure when the bump happens to keep the guy from getting hit like shielding on the longwalls?

A. Shielding, to try to keep the guy from getting hit and then the design is try to lower the magnitude of the bump. Instead of taking out four pillars in a row maybe it only affects one pillar or --- you know, it slides. It doesn't take the whole corner or blow the pillar across the entry that it bumps in two feet of the rib pop off instead of --- and pop off where it can be controlled by jacks and wire mesh instead of --- or the bolting instead of five feet of the pillar going all the way across the entry and filling the entire entry and gassing off the section, which could create additional ---. In addition, you know, Crandall Canyon, there was no gas affected with that. At some of our other mines, Castle Gate, Soldier Canyon, Sunnyside, a bunch of these other mines they also have a gas, high concentrations of methane that were associated with the bumps and bounces. And if that came out, you could have had an explosion in addition. That'd be even --- even our bounces that only affect one or two people in an area. If you have those other concerns it can be very catastrophic, so all those issues need to be addressed.

MR. PAVLOVICH:

Well, with all that said and even in our discussion earlier about this LAMODEL and ARMPS, and the fact that you can plug about any numbers you want in there and you could get about any answer you want in this factor. Anything could be successful or anything can fail. Is it even worthwhile, even useful tools?

A. I think it's a tool that says --- that gives you a ---. I mean, if you ran

LAMODEL and said, okay, at .5 we start having failures then if you do a pillar section and it all comes out to be .3 you say, well, that probably won't work. We'll be continuously having failures, either roof failures or whatever it is, so we need to get above .5.

MR. PAVLOVICH:

But you did say earlier you've had successes at zero ---

A. We ---.

MR. PAVLOVICH:

--- and you've had failures at 4.0?

A. Right. But I think ---.

MR. PAVLOVICH:

So what do we do?

A. Well, then you take --- say, okay, we want to get ---. You know, based on own history .5 in our mine .5 or this mine is at .5, so that gives us a starting point. Then we go look at the mine history and see where you --- that's the starting point and go from there. Maybe you go over and say, well, if we're mining in north south direction then we can have a different layout, but if we're mining east west then it's got to be changed to this. If it's overmining or undermining or if we get tossed --- if it's a mine you know that it's always going to bump when you get close to the Joe's Valley Fault then you change your design based on what you know from the mine history there.

MR. PAVLOVICH:

Okay. Ernie, I'm sorry. I got off track there.

MR. TEASTER:

No, you're on track. All of us is on track.

BY MR. TEASTER:

Q. You had mentioned a little bit earlier, Bill, that Agapito had done an analysis of an area where it was similarly mined as to up in west mains or did I misunderstand you?

A. It was pillar mining. It was --- I think it was off the north left they call it in that area. I think there was two panels that they analyzed up there.

Q. In Crandall Canyon?

A. Yes.

Q. Do you know when that was done? Do you remember?

A. When the Agapito analyzed it or when it was mined?

Q. No, when Agapito done the analysis.

A. That was the analysis part of this to establish --- part of this review to establish the 0.37 factor that they came up with.

Q. Now, the area that they done that is that --- they had a lot of problems in those particular areas. Is that normal where you would get your bottom line number if we had a lot of trouble?

A. They had failure, yeah. Where --- I mean, if you go through and everything was perfectly good then that would be ---. You wouldn't know what your low number would be. I think Allyn brought that up.

Q. Yeah.

A. So they went to an area where --- you know, where they had failed to do the low number.

MR. PAVLOVICH:

Bill, when you said they were successful until failure, did the failure mean or result in a bump?

A. No. What they did up there is --- I don't think they had a bump. They were

leaving top coal and as they were pillaring out of that area that top coal, they couldn't control that and had the top coal and they just started falling outbound. So they had to back up and start mining again, and that ---.

MR. PAVLOVICH:

That was in the area shown as section 36 that you talked about earlier?

A. Yes, in ---.

MR. PAVLOVICH:

So these areas left was because top coal was falling?

A. Right. They haven't --- and they got the extra width center entry, the 25 foot center entry, and the angles for that. So when Agapito made the recommendations for the north barrier they recommended not leaving top coal. If I --- that that was considered ---.

MR. PAVLOVICH:

That wasn't a catastrophic failure there, they said it was top coal falling?

A. Right. Right. The stress is in the roof, and it wasn't pillar bounces, it was ---.

MR. PAVLOVICH:

Okay.

A. It was a roof deteriorating, it couldn't hold intersection.

MR. PAVLOVICH:

Squeeze or anything like that, they ran them out?

A. No. No, they couldn't hold intersections in the top coal, and that was why in the north barrier the recommendation was to leave top --- not to leave top coal.

BY MR. TEASTER:

Q. On January 9th of '07 there was an investigation conducted at Crandall Canyon. Was that --- do you know who conducted that investigation?

A. That was myself. I ---.

Q. You were alone?

A. Pardon me?

Q. You were alone?

A. No. No, I had took Pete Del Duca with me and we went in to the north barrier with Laine Adair, Gary Peacock, somebody else. I don't recall who else. They had --- by that time I think they submitted their retreat mining plan for the north barrier, so before acting on that I wanted to go in and observe the conditions, actual conditions, firsthand myself. I got reports from the company that things were going well, reports from the field office is it looked good in there. So --- but I wanted to get a feel for it for myself, so I told the mine I'd go and look at it before we reviewed their plan. Took Pete Del Duca with me to give him experience. We went into the developing face part four, five crosscuts outby so we could walk in and look around. I talked to the miners in there, especially continuous miner operator and the bolters and people working on the section, see how conditions were. They described the conditions pretty good. About 200, 300 feet outby the face the rib in the crosscut was yielding, and the whole rib would just slough down probably six inches thick and just from the weight as they were mining inby, the outby pillars would slough. And it wasn't a violent release. It was kind of dusty and covered you up with you dust and everything in all this. Pillar is eight foot high and 20 or 30 feet of the crosscut down through there.

MR. PAVLOVICH:

Do you remember about where in the panel that would be, Billy? How far up were they? They were developing the north barrier at the time?

A. Correct. They were. We were ---.

MR. PAVLOVICH:

Do you remember, was it just starting in?

A. No, no. It was about halfway in there.

MR. PAVLOVICH:

About halfway in?

A. Yeah. I think it was about crosscut --- probably around crosscut 130A, 140, somewhere in that range. I'm not sure.

BY MR. TEASTER:

Q. When you say they was just sloughing off, was it hour glassing or just sloughing off, was it vertical?

A. There was some hour glassing, but this sloughage was from the roof all the way down like six inches, and then it would --- from the previous hour glass and there was a little debris at the bottom of the pillar and it kind of slid out on that. But it wasn't thrown out into the entry and that they were yielding kind of in a controlled manner, took that to be a good sign. And then we went over to the continuous miner they were having trouble with the roof falling on the miner and they were losing a couple feet of roof rock, which that wouldn't cause the pillars to get higher. And then that would tend to cut back on the stability of the pillar, so we discussed going back to leaving top coal. And so I told the company to submit an amendment to their development plan that would allow them to leave the top coal and they said they would do that. Talked to the miner operator, everything was going good. They weren't having any problems. Then I traveled what would be the next bleeder entry and they didn't have the bleeder entry adequately supporting for the bleeder entry. Personnel --- as they pillar out personnel have to be able to travel inby all the way to the MPL to the very back, and I

told them I wanted additional support in there and I wanted --- along each crosscut in that Number Four entry I wanted a roof for support along the crosscut so --- to effectively extend the rib line, make it a solid rib line down through there. They said they would do that and ---.

Q. Did they submit an amendment or just verbally agree?

A. No, they didn't submit --- for the roof coal they submitted an amendment because that plan was already approved, so we did an amendment to the development. But for the retreat mining plan, they sent me a drawing to replace the drawing they already submitted, and they showed like three timbers in there. So I called them and told them that was totally inadequate, that I wanted a breaker roll in there, essentially a breaker roll. They can either put three cans across there or two rows of timbers as you would on a normal pillar section like a breaker roll. And so then they changed and submitted another drawing or a page, and we took out what was originally submitted. They e-mailed that to me and we put it in there, so we just changed the amendment. We had --- and I think then that was approved on February 2nd or February --- first week of February that was probably approved.

Q. Did you visit any other areas of the mine that day or just went into the ---?

A. No. No, I didn't. Just went in to look at that section. And when I'm in the mine it --- I take time looking around. I talk to people, so it's not just a quick kiss on the cheek and a hi, good bye thing. I spent time, and then I discussed --- like when we went back out we sat down and we discussed things. We also discussed that on the development, they're going back in there if they hit issues, problems then turn around and implement the next amendment to retreat mining --- retreat mine not to push their luck. And we also talked about that if they are retreat mining as they've done up in other areas if you start running into problems with support, pillars or everything, back

up and start a new pillar line and then continue from that next point. Don't run the --- don't do the chance --- run the chance of something adverse happening, and they said that they had --- it has an experienced pillar crew and they would do that if they did ---.

Q. Was there any discussion at all about the ARMPS?

A. During that meeting, no.

Q. When you got outside was there any discussion about the five issues that had been resolved over the phone in December?

A. No, it --- Agapito had been to the mine in December and we did ---. Well, we sort of discussed that because Agapito had been to the mine in December and we discussed what Agapito --- what I saw, what Agapito saw and essentially the discussion was that the models that were run by Agapito Doctor Hardy felt that there was a good correlation between what the model showed and what his actual underground observations indicated and then my observations were that conditions looked good.

In addition, these barriers --- you know, up in the previous areas where they use the 0.3 as a factor or they use five foot bolts four across. In the west barriers they're using six foot bolts. I think it's six across and with wire mesh, too, so the density of the support had also increased in that area, which elevated the confidence level in what was being --- how the mining was being conducted.

Q. Was the six bolts a result of one of your recommendations or was that the initial submittal?

A. That was in their initial submittal.

Q. Did you have any notes from the meeting from your investigation in January?

A. No, I don't.

Q. They had a bump in the north mains ---.

UNIDENTIFIED SPEAKER:

If I can interject one thing.

MR. TEASTER:

Sure.

UNIDENTIFIED SPEAKER:

Billy, District Nine wrote a letter and said, address these five things. Was there any reason why you didn't expect them to answer them in writing?

A. No reason, just once we started discussing it over the telephone and everything then it was --- we didn't ---. They could have answered it in writing, but we discussed it on the telephone, and we were satisfied with that. Sometimes we sent letters out and the company will come in instead of responding in, and we'll have a meeting in the --- it says ---. A lot of times there'll be a statement at the end or you can request a meeting. I'm not sure if this one had it on it or not, but we'll have a meeting so they don't respond in writing.

MR. PAVLOVICH:

I guess, Billy, what kind of documentation do you keep then on those to show that the issues have been addressed?

A. On these there is no documentation.

MR. PAVLOVICH:

No documentation.

BY MR. TEASTER:

Q. Is that a common practice or ---?

A. For?

Q. You sending something out to the company, you know, addressing concerns that you have with some of those information they've given you to evaluate and them

just responding back over the phone?

A. Either --- you know, typically they'll send a letter back or somebody ---. You know, sometimes it's --- since this was addressing concerns not in a plan, this was in another document dated, submitted that wouldn't be unusual. And also it's not unusual for them like --- you know, I think now we've taken it out, but it says if you want to ---. You saw our letter, form letter. Says if you want to have a meeting then contact --- so they ---. Instead of sending a letter back to us they come into a meeting and we have a meeting over the thing. So in those instances there's not a written letter from the company either.

Q. So as a result of these five issues the net changes was zero; ---

A. Correct.

Q. --- is that correct? We had a bump in the north main barrier in March. Did we have any bump history at all up at Crandall Canyon Mine prior to that that you're aware of?

A. They're --- yeah, Crandall Canyon had bumps before. I don't know of them being extensive on the longwalls. Maybe in some of the other pillaring sections, but I don't recall what the definite bump history is, but I know they've had some bumps.

Q. You consider them a bump prone mine?

A. Yes. Any mine that's in the Hiawatha seam under that definitely is a bump prone mine.

Q. Do you have any feel for how often you heard about a bump in Crandall Canyon?

A. Recently I hadn't heard any at all. I think it would have to be on one of their previous longwall panels and they hadn't longwalled them for awhile.

Q. Do you know of any investigations that MSHA's conducted there involving a

bump?

A. Right off I don't recall any.

Q. When did you first become aware of the bump that occurred on March 11th?

A. If I'm correct, March 11th is a Sunday, and --- was a Sunday. I became aware of it on March 12th. During this whole process of mining in the north barrier I would communicate with Laine Adair typically on how conditions were going. He'd either call me or I'd call him maybe every other week or something like that, and reports were positive. And after we had modified the development plan to allow them to have top coal they were positive reports, things were much better. When they got over next to Joe's Valley Fault they had been making water --- that they were having a hard time controlling the water. And they'd call and say they decided to start retreat mining out, so they were retreating out. And during that retreat process things were going well, conditions were good, they were moving along in a --- the report to me was in an excellent manner.

On March 12th Laine called to say that they --- when they got back to where that area was for the top coal and the rock they were having a hard time with that roof. It was all --- that broken ---. That roof was all bagged up and they were having a time with that, so it was kind of --- had problems with it. They decided to back up a couple rolls of pillars and start mining again, but he said that when they started mining again when they were mining and cutting into the pillar to actually take the pillar slices or the lifts off the pillar, that it was bumping and the crew was backing out of there, and they were going to pull out and that the bleeder entry inby, that area was pretty well beaten up. So --- and they considered it hazardous to travel.

Q. What does beaten up mean to you?

A. That they were having roof problems, pillar sloughing out, the stoppings were

being damaged in there.

Q. No mention of a bump?

A. Just that the pillar was bouncing when they were cutting into it and the miner crew decided to pull out of there.

Q. There was no discussion of ceasing mining operations and ---?

A. Yeah, that --- well, he said the mining crew was pulling out, and they were going to pull out of the section there.

Q. Did you consider that a bump in accordance with Part 50?

A. Not the way he explained it to me, that it would --- the pillar was bouncing as they were cutting into it so they decided not to continue to do that. And as mentioned previously that's --- you know, if you start getting into conditions either Mr. Adair or the crew thought were not conducive to safe mining, that they should back up and this was an area where they just backed up from another unsafe area. Now they got the second unsafe area. You know, two strikes, they didn't want to be out with three, so backed on out of there.

Q. Do you know if any of this was communicated to the field office? Did they have any knowledge of what was transpiring up in north mains?

A. I don't know that --- I didn't call the field office. I don't know that, you know, we called, anybody else called. I know the next day the ventilation supervisor had a discussion with Mr. Adair and from that I got the impression that Mr. Adair wanted to move the MPL from the back. Well, the back end was filling up with water, so the MPL was moving out where the water roofed out. So it was --- the MPL was moving out with the water, so --- but Mr. Adair wanted to move the MPL from the edge of the water out to where they were --- their current retreat face was. And the ventilation supervisor told him, no, you can't do that and Laine said, well, you know, the pillars

inby have bounced and it's too hazardous to travel that area and we don't want to do it. And the supervisor told him, he said, well, you can --- you know, you either travel the area or if you can't travel it, it's a violation or you back out of there and seal the area. And Mr. Adair said they didn't have any approved seals, so the ventilation supervisor, William Reitze, contacted Allyn Davis, who was at a meeting in Beckley, West Virginia. And Mr. Davis contacted tech support who's responsible for approving the seals and asked if they could get some kind of expedited approval and --- to get the seals approved. And in the meantime, Mr. Reitze told Mr. Adair until that was sealed they had to travel that way. So Mr. Adair said, well, he wouldn't send any people. He'd go back to the water and conduct the exam as required. They could still --- it was just hazardous. He didn't want to routinely send people in there, but he did conduct the exam.

Q. But they had already informed you the day before that they were moving out?

A. Yeah. And so then I talked to Mr. Reitze and then I wasn't sure if they meant they were moving out, further out of the thing or if they were moving out of the whole panel. The impression I got was that they were moving out, and I got the impression moving out of the north barrier.

Q. Right. That's what you gathered on Monday ---

A. On Monday.

Q. --- from the discussion.

A. And then there was additional discussions on Tuesday.

Q. I know you answered a lot of requests on this information. There was one that you'd sent regarding this issue. It's in an e-mail. This is not the one. You sent --- it was in response to a request. You sent an e-mail document, and then I think Pat Silvey sent back and asked you to clarify what you'd said, and you basically confirmed

what she had sent back.

A. Oh, that was regarding, was this a reportable accident, I think under Part 50. Pat Silvey has contacted me.

Q. This e-mail here, just to refresh your memory, that basically talks about the information that Reitze got. Does that mention your discussion with Laine Adair on the 12th?

A. No, it doesn't.

Q. I don't see it here, but there was an e-mail that Pat Silvey had sent to you and saying basically, this is all that we had, and you just --- like it was one or two words, just confirmed or whatever. I can't remember the exact words, but that ---.

UNIDENTIFIED SPEAKER:

Yeah, your words were, that's correct.

BY MR. TEASTER:

Q. That's correct, something like that.

A. I think at the time I answered this I went back and looked through some more notes, and I found a copy of what I discussed with Mr. Adair.

Q. So you didn't recall that until you went back and found your notes?

A. Right. Right.

UNIDENTIFIED SPEAKER:

Can I ask one question on the tail end of that, Ernie? When you went back and found your notes, Billy, did you send anything on up to Pat Silvey or them to let them know you did find some more information?

A. Not at the time that this was being transcribed. It was later on when those notes were found that they were sent up.

UNIDENTIFIED SPEAKER:

But did you kind of specifically let them know that we do have more information on the bump? Because that was a big issue, I guess, that they were being questioned on.

A. I let a lot of people know. I'm not sure exactly who would let know and sometimes, you know, when you're --- it's very difficult at times communicating with headquarters because you think they're all one big happy family but apparently that's not true. And sometimes when you're giving one person information and you send it to somebody else, then that information was just for me and you're not to be sending this to somebody else. And you try to keep everybody in the loop, and it's like you're stepping on toes if you do that. So you know, I try my best to get what information people wanted through the spots they wanted. I have a lot of respect for Melinda Pon, Pat Silvey, Bob Friend, those people out of those offices, but, you know, things were coming at me hard and fast from a lot of different venues and to determine, you know, who to send to, one, how to keep them ---. I even had phone conversations with Mr. Stickler and naturally with a lot of the solicitor's office personnel, Ed Clair and Heidi Stroussner (phonetic) and --- I don't know ---. To be able to pinpoint to say that, yes, I definitely left Pat Silvey know the time I found this, I can't --- but all that information is out there on a web page or something. And just recently we sent a thing back on a web page, and then we're told to delete it off as soon as we put it out there because they don't want anybody that shouldn't be looking at it, looking at it, you know. I kind of get my hind end kicked no matter which way I go.

BY MR. TEASTER:

Q. Well, we're not trying to kick nobody. We're trying to get ---.

A. It just happens.

Q. Was there any conversation with Mr. Laine Adair on the extent of that bump

on the 11th?

A. No, the ---.

Q. Just the bouncing?

A. Yeah. He said, it's bouncing and when the miner was sumping up and the crew --- he said, I got an experienced crew in there and they don't feel it's safe to continue ---.

Q. Didn't it make you question how severe this thing was or just ---?

A. No. I mean, I've been in a lot of mines where it's bumping as you're, you know, ---.

Q. Well, I know if you're bumping to the extent that you're going to be move out of a section that you really wanted to retreat, I mean, it's --- I think it would be pretty significant to me if they was moving out of a section.

A. Well, to me it was a good decision, you know.

Q. I don't question the decision. I'm just trying to find out --- you know, I mean, obviously it was a good decision because we know the extent of that bump now. But I'm just trying to figure out why we didn't try to maybe pursue a little bit more information to determine the extent because they wanted to --- we knew that they wanted to do some further mining, retreat mining in the south barrier. And that may have had some bearing on it, but do you think it had any bearing on it at all?

A. Well, I took it to mean, you know, that they had ran into a condition and the roof and everything is going to pile on, so they backed up and left pillars. Those pillars are between --- you know, there's a cave gob inbound. It's bridging back over those pillars. It's a heavy sandstone roof. It's loading those outby pillars up. They figure it's --- you know, it's bumping when the continuous miner is cutting in there. There's no mention of any equipment being damaged, you know, they said they're

backing out of the section, that no one's hurt. They have --- they can tram the equipment out. It's not like they --- you know, they didn't say that anything's trapped or anything like that.

Q. Did Mr. Adair share whether or not they was actually mining at the time of the bump?

A. Yeah. He said that when the miner head was cutting --- taking the next lift it was bumping, so that means that the pillar is really stretched up. So they didn't want to try to initiate a large bump.

Q. What is your understanding now? Did that bump occur while they were mining or did it occur after they ceased mining or while they were out of the section?

A. My understanding now is the large bump occurred on that Sunday, and I think no one was there when it occurred.

Q. So they were not mining and then backed out?

A. Correct. And then I think the big bump occurred and then they came in, then we're going to try to mine --- start mining again, but the miner was having bumps, so they backed out of there. But I think the bump that occurred inby the section occurred when nobody was in the mine when it damaged the ventilation stopping. I think that occurred on that Sunday while they weren't there.

Q. That's the bump we're talking --- was there more than one bump in the north mains that you're aware of?

A. Well, no, no. But I mean, I don't know --- I think there was an event and then ---. It sounds to me like there were --- the bump occurred while nobody was there, but then they were mining and cutting into that outby pillar. And I think something happened, so I don't know if that happened after that bump or when, but I got the impression it might have been after this damage inby.

Q. Did you get any --- hear any reports of mining out some of that coal that may have been blown out as a result of the bump?

A. No. No, the only thing was it's bumping when they mine into the pillar, take the pillar lift.

UNIDENTIFIED SPEAKER:

Could we continue on here, just for clarification, Billy? I'm a little confused now, I guess. As far as --- you're aware that there was a fairly significant bump there in March?

A. Yes.

UNIDENTIFIED SPEAKER:

Are you saying that you think they went back in after the fairly large bump and were hit in this outby pillar, and that's when the crew pulled out, or is it the other way around, that the crew had some pillar bouncing, decided to pull out and then the bigger event happened after they had already pulled out?

A. No, I think the bigger event happened first.

UNIDENTIFIED SPEAKER:

Then they went back in ---?

A. And I think that was inby. I think most of that was inby the --- where they had left those pillars and damaged the bleeder entry. And I did get the impression that all that entries outby were damaged and then they started to mine, and it slowed it up and bouncing and they kept mining. And that was on a Sunday also.

UNIDENTIFIED SPEAKER:

Okay. I guess another question just comes to mind. I mean, being that you were talking to Laine Adair all along and you had this seemingly good relationship with him, wouldn't you have expected him to talk about the extent at all? I

mean, do you think he deliberately deceived you or how did this apparent lack of communication come about?

A. No, I don't think he deliberately deceived me, and maybe I didn't ask enough questions. To me --- he said the entry inby is pretty well beaten up. He didn't say --- and I didn't know until the ventilation guys talked that all the stoppings were --- I took it that it's pretty well beaten up inby meaning that they're having difficulty doing --- traveling, and that happens to a lot of our bleeder entries out here. People --- that's why people ask for MPLs and stuff, but that's also why I had them put the double row breakers down through there so it would maintain it open well enough to travel and apparently it did. But then if it's mining into the pillars, starting to initiate --- the pillar's tight enough that it's starting to initiate bouncing when they're mining into it and that they want to pull it out, that was, to me, an excellent reason to pull out of there. And that was in line with our previous conversations, that if you have trouble, back up and leave the trouble behind.

UNIDENTIFIED SPEAKER:

But you wouldn't have expected Laine to tell you somewhere in any of these conversations the extent of it?

A. Yeah, I would --- if it was --- yeah, if it was ---. If the miner was --- they had to mine the coal. They couldn't get in there to get the miner out, the feeder breaker was moved around. It's blowing out the stoppings and they can't ventilate the face, I would expect that to be told to me. And then in that instance it would make it a reportable accident.

UNIDENTIFIED SPEAKER:

Oh, I'm sorry. I didn't mean to cut you off, but when you said that maybe you didn't ask the right questions, you're not saying that it was on you to

ask them the right questions, it's on him to be forthcoming about what he knows that happened there and to tell you, you know, ---

A. Correct.

UNIDENTIFIED SPEAKER:

--- the extent of what happened?

A. Yeah. He's telling me its bouncing, so I've got this rosy picture that --- well, not rosy, but it's --- that the roof bolters is outby somewhere, scoops and shovels, stages --- or the feeder breaker and everything is in good condition. The MRS is --- nothing's mentioned about the MRSs being trapped or difficulty getting to the four MRSs. So I'm assuming you just tram the MRSs out of there and go on out on your merry way. Nothing about how I'm going to clean out, no knowledge of ventilation control devices because if the stopping is blown out, and it takes you over an hour to repair, you're done and that's a reportable accident.

UNIDENTIFIED SPEAKER:

Who did you find out about the stopping being blown out, by Reitze?

A. In a later conversation with the ventilation guys.

UNIDENTIFIED SPEAKER:

Was this like a couple days later or ---?

A. Yes.

UNIDENTIFIED SPEAKER:

So ---?

A. I think it was towards the end of the week.

UNIDENTIFIED SPEAKER:

So then would it not have become a reportable bounce?

A. Well, it depends.

UNIDENTIFIED SPEAKER:

Ventilation controls have been restored; correct?

A. Right. But if they pulled the whole section out and stopped mining ---.

UNIDENTIFIED SPEAKER:

But it would still effect the ventilation, that vent did?

A. Yeah, but I don't know if --- it affected the bleeder entry. I don't know are they still able to travel that. I don't know if it affected the outby ventilation control.

BY MR. TEASTER:

Q. Well, if that was sufficient to cause mining operations to cease --- I mean, that's for an hour or more. I mean, I think that would be the one that you'd be looking at, and if it was --- if it blew the stoppings out whatever reason they moved out and if it had that kind of damage, it would seem to me that would be reportable.

A. If ---.

Q. Just based on that information.

A. Yeah. If they --- if the bounce occurred and they immediately ceased operation it's effective there, they don't have that and they had to pull out of there because it's damaged enough, that's a reportable accident. If it didn't affect ventilation, it still got their quantity that's specified and roof control plan going across the face and out, they started to mine into the pillar again and then decided because it's potentially bouncing and they decided to do continuous mining because of a hazardous condition, then it's not reportable.

UNIDENTIFIED SPEAKER:

Let me ask you a question, Billy. I wanted to just get the thought process on this. You guys had some concerns, you know, looking at this

Agapito report, not as many concerns when they developed --- when they started retreating back, and you went down and actually took a firsthand look at it to check out the conditions and maybe get a bird's eye view of what you thought it looked like now, and then maybe when they started retreat mining back what they might run into, and if you really felt comfortable with them doing that?

A. That's correct.

UNIDENTIFIED SPEAKER:

So that --- you kind of had that thought process, then once you get a report, a phone call, that they've had conditions severe enough they're going to abandon mining in that barrier permanently and the conditions are so hazardous for the examiner that the operator doesn't want to send anybody inby that point to examine the bleeders. Do you think that would warrant someone from MSHA going out and taking a look at it?

A. I think that would and --- I don't know why we didn't have someone there. To me they're pulling out of the system, and they're going to put seals in. So my people are --- they're doing ---. They're moving out of the area, so that's what we wanted --- that took care of it. If they say, we want to go mining, we want to go back in, we want to put additional support in, then we probably would have sent somebody, but, again, none of the equipment is --- they can tram it all out, so everything is in good shape. We didn't send anybody. I think somebody from the field office went up to where they had the area dangered off, and ---.

UNIDENTIFIED SPEAKER:

You don't know who that was?

A. I believe that was Randy Gunderson.

BY MR. TEASTER:

Q. Did you ever consider investigating that bump?

A. No.

Q. Whose responsibility would that have been to cause an investigation to be made?

A. That would probably be either the ADM for enforcement or the --- either one of the three ADMs --- or two ADMs and district manager. If it's a reportable accident, then we send someone out on it. If we think it's a big enough issue then probably they would send someone from the field office to take it. If they think it needed my assistance or my technical knowledge then I would be the person that they send, and that happened quite regularly it seems like.

Q. Did you discuss any of this information with a district manager, assistant district manager ---

A. No.

Q. --- at that time?

A. I think all I told the assistant district manager was they were backing out of that area, the inby.

Q. When you got --- Agapito done another report and sent it in --- I think it was dated August the --- or April the 18th, and they sent that to you in May. And it talked about this bump that had occurred in the north mains. Do you recall?

A. I do.

Q. And did that describe something that was probably reportable to you?

A. That did. The way they described that was that the Agapito report described a condition that sounded to me like the miner was, say, at Crosscut 139 and --- or 140 and the damage was not inby, but was from 140 outby to Crosscut 138. So that would have been the outby areas which --- and if I recall I said that there was a lot of debris

in the entry, so that would have had to of been cleaned up because you can't tram over accumulations essentially. So that --- I mean, you can't be driving equipment over it, so you have to clean it up. And in the way the Agapito report stated that would have taken --- if you're talking cleaning up three or four entries or three entries and then that bleeder line would still have to be down through there. Both stoppings were damaged although I don't remember Agapito talking about the outby stoppings, but that --- the way Agapito described it it did sound like a reportable accident because you wouldn't have access to the face and ---.

Q. Well, I think you can make an investigation as best you can without it going to the site sometime, but we do know that the BLM guy went in there on the 16th of March, I believe was the date that he went in. And he took some photographs.

UNIDENTIFIED SPEAKER:

BLM.

MR. TEASTER:

BLM. I'm sorry. Who did I say?

UNIDENTIFIED SPEAKER:

Those are from Laine Adair. That's from his visit with Agapito.

MR. TEASTER:

Oh, okay. I'm sorry.

UNIDENTIFIED SPEAKER:

And it was on the 16th.

A. No, I haven't seen these photos before.

MR. PAVLOVICH:

Look through them there.

A. Okay. Photo --- the first photo ---. Okay. The first photo --- we go by the last two numbers. Seventy (70). Again, the roof looks good. It looks like it had ---.

MR. PAVLOVICH:

You just need to look at them.

BY MR. TEASTER:

Q. No, just ---.

MR. PAVLOVICH:

You don't need to explain them to us. We just --- you said you hadn't seen them, ---

BY MR. TEASTER:

Q. I'm just showing you the extent of the ---.

MR. PAVLOVICH:

--- just wanted to give you an opportunity to look at them. That's all.

BY MR. TEASTER:

Q. Well, Billy, let me ask you this. Knowing what you know now from the Agapito report, looking at some of those pictures, anything else that you may have learned concerning that bump, had you had that knowledge prior to approving the pillar retreat plan for south barrier what impact might that have had on your approval?

A. The approval of the south barrier --- again, we looked at the recommendations from Agapito that they experienced --- that they lengthened the length of the pillars. So Agapito felt that increasing the length of the pillars would push --- would strengthen up the outby pillars and put more of the strength into the --- the stresses into the gob. In addition, Agapito felt that taking a slice out of the barrier pillar would also help initiate the cave and put more stress, in that way taking away from the face area

where the north barrier bounce had occurred apparently right along the face line. And Agapito's modeling did that, so our experience was that my --- I say ours. And essentially I'm the one that did all the reviews and the approvals. I took it that that ---. I believe that that --- they were addressing the issue, trying to move those stresses in. Agapito also said that the bounce could have been generated by leaving those pillars and creating an outby stress. So Agapito recommended that no pillars be left in the south. When --- I went to the south after they developed that before we approved the barrier, and there was a sump in the south. So to minimize the number of pillars left there and following Agapito's recommendations, Crandall Canyon decided to leave five pillars in that area, which would be three along the bottom and two rights up on the --- three in the second row and two in the third row. And leave those ---.

Q. Is that in their submittal, the company's submittal ---

A. Yes.

Q. --- those ---?

A. Yes, sir. That's the way the company submitted it and that's the way it was approved in the ventilation plan. However, ---.

Q. You're sure the ventilation plan had those blocks left in?

A. Yes, sir. And when I went there and looked at it and I felt that that was creating a pillar point where one of the pillar, the inby pillar, would have gob on two sides and that that would create a pillar point that made that pillar extremely susceptible to bounce. And I told Gary Peacock, Laine Adair and David Hibbs (phonetic) that I felt that was unacceptable and that I thought that was too great a risk and that we still had to have people travel to the far end of the bleeder entry. And we had to provide that examiner whether it was their company people or MSHA person or whoever, equal protection to the outby people. And I wanted them to leave three

additional pillars in there along that bottom row, and that I felt that that would create a clean cave line. And I think that was at Crosscut 142, so they created a clean break and then they was taking that barrier inby there that they get a break and then come back out to Crosscut 139 and start mining again. And this was a big difference in what I recommended and what I approved than what Agapito recommended.

Q. I misunderstood you. I thought you said the company had submitted that those blocks be left in?

A. The five blocks and then I had them resubmit with the eight blocks.

Q. Right. Okay. I'm with you now. Okay.

MR. PAVLOVICH:

So when you say it was a big difference in that Agapito said, don't leave any blocks and you recommend they leave eight blocks, ---

A. Yes, sir.

MR. PAVLOVICH:

--- that's the difference?

A. So I went against what Agapito recommended. Agapito was just looking to getting a good cave and taking the stress from outby pillars, but I'm still responsible for ensuring the safety of those people going inby that area. That inby --- to my knowledge that inby entry didn't cave during the bounce.

BY MR. TEASTER:

Q. So what Agapito said --- and just to reiterate a little bit, and you told us earlier that primarily your knowledge of bump prevention is lessening blocks doesn't help very much, if at all, but the width of the blocks is what's critical. But Agapito says, let's lessen the blocks and that'll help. You already said you didn't think --- you didn't put much merit in that from the earlier submittal ---

A. Nope.

Q. --- or from [redacted] question? And they said, based on the barrier thickness we want to take more barrier instead of less barrier and reduce the size of the barrier even more and that will reduce bumps, which doesn't seem to make much sense to me other than it gives you maybe a better pillar fall, but as far as the bumping factor I don't see where you maintain the support of the barrier that you left there. And then you also said even though Agapito says, don't leave any blocks, I want you to leave eight blocks?

A. You sort of summarized it up, but missed a few points.

Q. Okay.

A. The sandstone roofs and these coal seams are very competent, very strong, and what they do is they have a great ridge in a building. And I've instrumented in Hiawatha seam that as a pillar retreat section pillars back I found the roof actually cantilever into the gob, and as it cantilevers into the gob --- the way I tell this is two or three crosscuts outby have sag stations and there's conversions. From the gob outby the whole roof's coming down. It's putting weight on it. Everything is conversion. Then when that mined out area that hasn't caved yet caves and breaks that sandstone main roof rebounds back up and my sag stations outby actually go back up. Initially when I thought that was happening is --- miners like to screw with you, so I thought they were messing with my data. So I came to Utah and I stayed over here and watched it through the whole cycles and took my readings, and I found that going up. So if the cave is not good enough back there, back in the cave to break that roof he'll continue to apply the stress outby. If that distance comes back too far when it rebounds up sometimes that'll be a very violent rebound, and that's what happens when we get some of the face bounces at times on longwalls or outby pillar bounces is

it breaks inby and then it's a rebound effect by it coming up and slapping it outby and the coal can't handle it. So by taking the inby barrier and making that span greater there hopefully that would take the pressure, make that cave so you wouldn't have --- the cantilever wouldn't be as long putting the fulcrum out on the outby intersections and crosscuts. And by lengthening the pillar you also lengthen --- you eliminated crosscuts coming into that development, so by eliminating the crosscuts in there you also eliminated areas of potential bounce area and then moving --- as that stress moves back it's on the front edge of the pillar that's next to the gob. And potentially away from the back edge. By lengthening --- as we talked earlier about the high point from that gob coming back, the magnitude of that stress. It's real high up close to the gob and then it caves off. Well, by lengthening the pillar you get that away from the back intersections where most of your people are. Hopefully you get --- you can keep that away from the outby pillars.

MR. PAVLOVICH:

So that was your rationale ---

A. Yes, sir.

MR. PAVLOVICH:

--- in looking at that?

A. And, again, that's 27 years of experience here and for all its worth in these coal fields.

UNIDENTIFIED SPEAKER:

I just wanted to go back to Ernie's question, a couple questions ago, I guess. You started out, I think, Ernie, with a hypothetical posed to you, Billy, if you knew what you know now, I mean, that's where you started, Ernie. I don't know that I got the answer out of that, Billy.

A. If I knew that the ---.

UNIDENTIFIED SPEAKER:

How would that affect the decision for retreat in the south after seeing the pictures?

BY MR. TEASTER:

Q. I don't think --- and they don't mean knowing what you know now, the major bump occurred and nine people were ---. But once you see those pictures there, if you had seen those pictures or Laine Adair had emphasized that to you on the 12th ---

UNIDENTIFIED SPEAKER:

Exactly.

BY MR. TEASTER:

Q. --- and you had just received a plan that requested pillaring the south barrier, would it have made a difference or the fact that these pillars were still lengthened out and the barrier was now going to be mined would have swayed you to say, it's still okay?

A. I would have probably said it's still okay based on they made changes, they --- the company was employing what I considered to be safe practices. They hit water that backed up. They hit baggy nasty roof that was difficult to control. The back of it started over. Even if it had the big bounce that destroyed the stoppings and everything they backed out of there, and they kept changing it and doing remedial things to address those issues.

UNIDENTIFIED SPEAKER:

And do you think that what they submitted in support of those changes in lengthening the pillar and all, that was adequate as far as any additional modeling or anything to support the contention that lengthening the pillars would ---?

A. Agapito did do some modeling that went to the gob, and they also had taken the slice out of the barrier to create a better cave is all. I would probably still have approved it.

BY MR. TEASTER:

Q. Typically how close to your acting mining areas does the gob fall, to where you were?

A. If everything is going right it should be right at the --- right on the --- I mean, the MRS. As the MRS --- that's why we only have the MRS move, we can only move a half of an MRS length, when one---. And only one can have it be down and moving, the other one has to be fully deployed against the roof. Then hopefully that roof is caving right there. That's the media roof. The main roof will hide --- will bridge over that a little bit and cave later on. You hope it caves fast enough that you don't get an air blast coming out of there. You can have caves back in the gob that'll blow stoppings outby on, so you don't want that to happen either. But ---.

Q. Did you say that they have not yet experienced a fall in the south barrier?

A. No, no. They were --- the information I got it was coming out of there real good. They had good caving, good solid cave coming out from the word that I received. Now, a good solid cave, remember in the bleeder entry they can't see the gob. You got to stop them all the way down. They can't see the gob, so the only place you can see the gob is looking inby the breaker rows and the MRSs. And to my knowledge they were having a good cave, and that was reported. Everything --- and its conditions were better than they were in the north. When I went there at the end of May --- end of May? Yes, at the end of May. Gary Jensen and I went --- before we approved the retreat mining, as I mentioned earlier, we had the discussion with them, but when we went there we went into the south barrier and the conditions looked

excellent. They were getting the --- there was some popping and bouncing of the pillars as they were developing them. The miner would mine in, he'd cut the pillar out. When the miner backed out even the solid coal was hourglassed. The pillar was already starting to hourglass. Everything around these guys is yielding. That red dust indicates high stress and sometimes we look at it for balance was about one to two inches all the way around the perimeter of the area where the miner backed out before the boulder even ---.

MR. PAVLOVICH:

This is on development?

A. Yes, sir. It's on development, before the boulder even came in there.

BY MR. TEASTER:

Q. Was that a good sign?

A. It's showing its high stressed and --- but that it's yielding, so I took that to be good. Then the top was bolted up, outby, and the other pillars were getting sloughage or anything, so they were around the perimeter of the pillars. It was a heavy load and heavy stress, but they were performing, again, as Agapito had predicted that they would. And talking to the miners they said everything was going much better in the south barrier than it did in the north barrier.

Q. You said in the north barrier that you was mostly getting the hourglassing outby?

A. More --- yeah, much more sloughage, 200 to 300 feet outby it seemed to be than after.

Q. Do you have any explanation for why that might be occurring, such a shorter span?

A. I think it's just the stress on it and then the --- that it was yielding as they were

developing, and it wasn't storing.

MR. TEASTER:

Take a break?

MR. PAVLOVICH:

Yeah. Except I want [redacted] to ask this question number 16 because I'm not sure --- [redacted] do you want to ---? Something about the ARMPS?

UNIDENTIFIED SPEAKER:

Well, I guess basically the question was referring to the damage there in the large bumps that's shown in those photos. Okay? If you were --- your staff or even the field office had been up there in March afterwards and saw that, the extent of it, the number of entries and lateral extent, what would you have done in that consideration of ARMPS as far as --- would you have looked at that as a new failure point in the ARMPS database at that mine, that that would have prompted you to reevaluate ARMPS and even the model as far as Agapito?

A. I think --- yes, I think that would be ---. Look to see and say, hey, this is considered --- what's the ARMPS at this point and then that's a failure.

UNIDENTIFIED SPEAKER:

Okay. So if we have a new failure point then ARMPS say it's a 0.53, and I don't know, I'm just saying. Now, we --- I don't want to say discount, but you have to say my 0.37 or 0.40 that before I was considering okay has now shifted to my new number. Wouldn't you have rerun ARMPS in the District to evaluate the potential impact in the south? I mean, everything is parallel to what's in the north. You have a similar situation around the sump the way that you described the bridging roof in the north, you're going to have a similar situation in the south. It just seems like there's a lot of stuff staring you in the face that you would have said, hey, I need

to reevaluate.

A. And I think in what you're alluding to is exactly what the instructions are for the ARMPS. If you start having failures that at the stability factor, 037 or 051, whatever it was, then that's now --- you've established that to be the minimum for your mine. You have to go above that. So, yes, you --- it should have been rerun for the ---.

UNIDENTIFIED SPEAKER:

And I understand Agapito submitted some stuff. Did you or your staff run any follow up ARMPS to evaluate what Agapito said?

A. No, we did not.

ATTORNEY PAVLOVICH:

Did Agapito change there? Did it change on the resubmittal, longer pillars?

UNIDENTIFIED SPEAKER:

Longer pillar setting.

A. But they didn't rerun ARMPS, they ran LAMODEL.

ATTORNEY PAVLOVICH:

Oh, they ran LAMODEL, not ARMPS. Okay.

UNIDENTIFIED SPEAKER:

While we're still on the March 11 ---. You said Laine Adair called you and then --- or you talked to him and then he talked to Reitze about moving the MPL back and Reitze told him to do it. Did you say was there any discussions between you and Reitze and Davis about whether this was a reportable bump or ---?

A. No, there was not. And Reitze and I --- on that Monday Reitze was out of the office, so he telephoned ---. He received a telephone message and then I think he called Laine Adair back the Tuesday and discussed with Laine Adair about moving it.

And then he contacted Davis who was in Beckley, and then Mr. Davis contacted tech support but there wasn't a full scale discussion on that. Mostly it centered on getting the seals approved.

UNIDENTIFIED SPEAKER:

Okay. And the second question, if you got a bleeder entry that's required to be traveled to get back to point X back here, the deepest point, once the operator discovers that there's a problem in that bleeder entry that's going to be traveled because of some activity where there was a bounce, a disrupted ventilation, don't you have stoppings that need to be in place or disrupted the entry itself? At that point in time does that not become a reportable bounce under Part 50?

A. I'm not sure that we knew for sure --- when I say ---. It was told to me it was beaten up, but then he went and made the exam. So Laine Adair went back and made the exam, so he went back there so it didn't stop him from making the exams. So at that time I didn't know all the stoppings or how he made the exam. Like I say, as far as I know they're tramming equipment out, no equipment is damaged, nobody's hurt. They're still getting all the air on the face, so at that time it does not meet the criteria for reportable accident.

UNIDENTIFIED SPEAKER:

Do you know any reason why Laine would not have shared those pictures with you at that time?

A. No, I don't. Unless Agapito took the pictures.

UNIDENTIFIED SPEAKER:

I think Laine actually took them.

A. What was that?

UNIDENTIFIED SPEAKER:

During the visit with Agapito, but I believe he can say something, Billy, that they were taken by Laine.

A. But he has mentioned that there was pictures taken, but at one time he told me he didn't have the pictures. I don't know if he took them and shipped them to Agapito or what happened, but it was later on, much later on. It wasn't in March or April or anything like that. I never ---.

UNIDENTIFIED SPEAKER:

When do you think it might have been that he might have mentioned the pictures?

A. I think it might have been after August 6th, and this is the first time I'm seeing them. When we take a break I'll look at them a little better.

MR. TEASTER:

Well, it's time to break.

SHORT BREAK TAKEN

BY MR. TEASTER:

Q. Billy, just to clear up, what is your understanding --- what was your understanding of why they left the north barrier, left mining in the north barrier?

A. That they had roughly right around Crosscut 139 or somewhere in there, they'd run into problems with the roof. I think the transition between the top coal and the roof rock, and they had trouble holding that roof on development, so they backed up, left a couple rows of pillars and then started mining again. And when they started mining, the pillar was tending to bounce and bump as they were mining and the mining crew didn't feel safe with that. The company had allowed the mining crew to make their determination. The mining crew said they wanted to pull out of there, the company concurred with it, and the retreat mining crew made the decision to leave

that, and that was my understanding of ---.

Q. So the miners felt unsafe in that environment mining and it's your understanding that's why they left it.

A. Correct.

Q. And how did the bleeder barrier maybe factor into that?

A. The bleeder entry that was my understanding from March 12th conversation with Mr. Adair. Later the bleeder came into that when discussion with Bill Reitze, the supervisor of the ventilation group, that they couldn't travel the bleeder and he wouldn't give them a MPL correctly, wouldn't let them just arbitrarily choose an outby point so that has to be travel, and since --- and then Laine Adair felt like it's not too safe to travel them inby there, they wanted a seal and so that was my ---.

Q. So they were still going to be required to examine that bleeder even though they had ceased mining?

A. Correct.

Q. So the bleeder sealing of the area --- that was all bleeder related, nothing --- the bleeder had no bearing on them pulling out?

A. At that time but then when Reitze says, you know, they want to move the MPL out, I'm assuming they move the MPL out and then they want to start mining outby somewhere so I thought maybe I misunderstood at that time that they were totally pulling out.

Q. Well, even if they totally pulled out, they still got to examine that bleeder.

A. Correct.

Q. So I mean, that had no bearing whatsoever how far they pulled out. They still would have to go back to the back ends.

A. Until it's sealed.

Q. Yeah.

UNIDENTIFIED SPEAKER:

I guess my question, Bill, was that all that's immediately after the March 12th, 13th time frame; right?

A. Well, March 12th is when I was told to pull out. The discussion on the ventilation could have been later that week or the next week.

UNIDENTIFIED SPEAKER:

Okay. But where I'm going with the question is after you saw the Agapito report from April that described the March bump, and in that that description used the term large bump, heavy damage.

A. Right.

UNIDENTIFIED SPEAKER:

And I'm just --- my question is did that description change your impression at all on why they might have pulled out there, did you think hey maybe it wasn't all of this bleeder evaluation point, this bounce might have been something?

A. Not really because what I did, we got the Agapito at the end of May, so what I did was I scheduled a visit to the mine to look at conditions in the south barrier. I probably would have done that but the Agapito report confirmed that I needed to go to the mine again and look and see what conditions are. So I scheduled, it was somewhere around the end of May that I received the Agapito report. May I think 22nd I was at the mine conducting actual underground observations of the conditions.

BY MR. TEASTER:

Q. And did you discuss with Laine Adair or anyone at the mine about the bump on March the 11th? Because you now have got new information in the Agapito report

about that bump.

A. No, I didn't per se discuss the north bump. Mainly looked at the conditions in the south and then discussed what, you know, leaving the additional pillars and we discussed the Agapito report in some that this should mitigate those conditions that were contributory toward that, and also that they didn't have the top issues that they've had in the north.

Q. Did that deepest cover --- I mean, was that bump occurring in the deepest cover that you had in that area I think around 2,200 feet.

A. In the north?

Q. In the north.

A. Right off I don't recall. No, I don't think it was the deepest because, you know, the crosscuts in the north and the crosscuts in the south do not line up.

Q. Right. I think if you looked at that at the map they're in close proximity in a straight across line even though the crosscuts are different. Maybe it's because of the size of the blocks because you went to the longer blocks ---

A. Right.

Q. --- I don't know exactly why it is but it's offset in numbers. But if you look at it it's not in a direct straight line but it's not too far off.

A. In the contour --- and you mean the two bumps were ---?

Q. Yes.

A. I thought the north barrier was outby where the south barrier occurred.

UNIDENTIFIED SPEAKER:

It is, but if you look here, Bill, it was right on the contour line.

BY MR. TEASTER:

Q. Apparently this is where the bump in north barrier occurs where the pillars,

the pillaring stopped and they left two rows and then there's another three pillars taken.

A. Right, so they're ---.

Q. That would have been right here, and this bump initiated here.

MR. PAVLOVICH:

No it was way up here, 133.

A. 139.

MR PAVLOVICH:

I think this was 133, wasn't it, on the north barrier?

A. Oh, am I looking at the --- I'm looking at the south barrier, I got it upside down. Okay.

BY MR. TEASTER:

Q. This is where it started at the north barrier, this is where it bumped at the north barrier when they pulled out the seal; right?

UNIDENTIFIED SPEAKER:

I was just going by the sump position in the south.

BY MR. TEASTER:

Q. That's what I'm going by. The north barrier is by the thousand foot outby where it bumped as opposed to where the sump was in the south barrier. Here's the sump, here's where you had to leave the ---.

A, Okay. Yeah, so that's ---.

Q. Okay. Somewhere here is when the initial bump occurred in the south barrier right here. They already left the eight blocks.

A. Right and it --- Crosscut 139.

MR. PAVLOVICH:

So it was quite a ways inby.

A. Yeah, so they were right there, they were mining --- my information is they were mining in the barrier at Crosscut 139 which would be as you state, Joe, directly outby the eight pillars and the third one. And they'd come up good conditions mining out and then started and that's on cover line --- that's coal line numbers.

MR. PAVLOVICH:

Yeah, we can't tell on that one because that doesn't have the cover line on it. The cover line may run the same, I don't know if any of these have a --- so that's 1,500 feet outby ---.

MR. PAVLOVICH:

Okay. I was thinking it was closer.

A. So the north barrier was 1,500 feet outby where the south barrier and I'm not sure ---.

MR. TEASTER:

Which way the contour runs. You've been holding out on us, Joe. You got a map the whole time.

BY MR. TEASTER:

Q. This bump in the south barrier occurred and here's the cut through the sump, so it occurred right here.

A. So that's just inside the 1,500 and this one's at the 133.

MR. PAVLOVICH:

133 to 139.

MR. TEASTER:

It's around the 2,000 --- between the 2,000 lines.

A. Right, so in under 2,000 feet of cover.

BY MR. TEASTER:

Q. Where that one occurred, and this one may be 1,700 feet 1,800 feet, something like that.

A. Yeah.

Q. And going back on your May 22nd visit, you said you did discuss, or did not discuss the bump in the north barrier?

A. No, I don't recall discussing the bump other than the pillar lengths were increased and if I recall correctly, the development mining plan did not include the development of the longer pillars and that that would have had to be included on the retreat mining plan. Because --- and that was to address the bump, and my insistence on leaving additional pillars although that was stated to be contributory to the north barrier bump. Again we discuss that if conditions deteriorated that the prudent thing would be to make decisions to back out of areas and leave areas or back out of the section as they had in the north.

Q. The roof control plan that was submitted on May 16th and approved on June 15th for south barrier has got a statement in it that says consultant reports indicate that development will avoid the majority of the side abutment stresses transferred from the adjacent longwall panels. These assessments have been validated by conditions experienced in the mine. And of course this was submitted after the bounce that occurred in north barrier. How did the operator justify this statement in light of the bounce in the north barrier?

A. That by --- that was part of their, they're either about taking the modeling and making the pillars longer and taking the barrier pillar that would mitigate what had happened in the north barrier.

Q. So your idea is that taking the cut out of the barrier pillar and mining the

longer pillar was affixed to what occurred in the north?

A. Yes.

UNIDENTIFIED SPEAKER:

How does that avoid the abutment stress, Bill, I mean ---?

MR. PAVLOVICH:

Side of abutment stress.

A. By taking the barrier pillar that that would --- you don't transfer more of the weight into the gob to longwall the gob and that would put it over on that and distribute the stresses out farther, instead of taking them out and also help induce the cave that would keep the frontal abutment load from coming out. And also the front of the pillars would carry part loads instead of putting it back on the high stressed or potentially where high stress could --- on the outby areas where the people were mining in the crosscuts.

UNIDENTIFIED SPEAKER:

The wider mining aspect though is only from where you're mining inby into the gob. How does that affect any side abutment load being transferred outby to the area where the men are working?

A. Side abutment from the previous panels?

UNIDENTIFIED SPEAKER:

Yeah.

A. I don't think that affects that and I think what they were stating in the north barrier happened it was abridging over the left pillars and that, you know, maybe the cave hadn't developed good enough so it wasn't the side abutment load, it was bringing the abutment load from the front.

UNIDENTIFIED SPEAKER:

From the front, and do you believe that? I mean do you think that that's a valid assessment that it wasn't ---?

A. Based on the experience, I think that's a huge part of it the way the sandstone members cantilever into the gob, and if you can get that to break better it does take the outby stress off.

UNIDENTIFIED SPEAKER:

But yet you --- I mean don't you still believe that there's a portion of loading that's coming from the side abutment?

A. Yes, from the longwall panel, but the outby barrier isn't reduced from the outby area at that point where they're reducing the barriers inby so that should take --- the outby abutments won't be there. From the barrier pillar --- or from the longwall gob to the south, that side abutment ---.

UNIDENTIFIED SPEAKER:

The remnant barrier is there but you've already reduced that barrier from the development itself?

A. Correct, but not it's --- and that's why you go look. Did it look like it was --- was it carrying the loads, were the remnant barriers, the pillars carrying the load. You've increased by the length of the crib you've cut out the number of crosscuts so you've increased that amount that the panel, that barrier --- the original south barrier's still carrying. You've increased what they can carry there from the side abutment.

BY MR. TEASTER:

Q. Bill, when you go --- I guess that answer you need to explain for me because I don't understand. From talking to a lot of the people so far and talking to you, I think that probably a good portion of the bumps that you have occur somewhere on retreat or long wall retreat mine. Either on longwall face or tailgate or headgate, or

somewhere on a pillar line. How do you go and look at a development section and determine that it's safe to retreat it and it's not going to bump, or how do you look at a longwall headgate and tailgate development, two entries and look at it on a development and say this looks good, it's not going to bump on the way back when it does? I don't understand that, so I guess I'm asking you to explain that to me. Because what signs would you look for?

A. I go into Crandall Canyon and I look to see if the on development --- are the pillars blowing coal, are they storing energy and blowing coal out and are they developed sufficient not to do that. I look at how they're yielding.

Q. But wouldn't you see pillars that look good but still have bumps on retreat?

A. You can, you can, and --- but what you hope is you see them yielding enough that you know that they're not storing massive amounts. And say if these pillars are 120 by 120 or 140 by 140 and you've got to split them through the middle before you can even start or if you --- there were pillars that you had to --- the way the mine would be to split them and you had to leave a 40 or 50 by 50 stump or something like that in them, then that would be more than likely very conducive to having bumps in that pillar section. So you look at how it's yielding. Same way with longwall. I go into Aberdeen mine and I look at the pillars and if they're --- you look at ways to try and soften them up to prevent them bouncing on the way out, and you look at how they're filling the wire mesh that you're putting up because they're yielding enough that you've got to contain that yield with some of them but as you contain it, it let's them store more energy. So it's a trade off. You just try to do your best effort based on again, mostly on experience. There are no guarantees. I'd be a rich man --- I would have quit a long time ago and be a rich man if I could tell you where it was going to bump and where it wasn't.

Q. And I think you said these looked to you like they were already loading up and then you had the red dust along the top edges of it.

A. Correct, and even before the bolter got in there when the miner ---.

Q. As soon as it was being mined?

A. Yes.

Q. Which kind of could indicate to you almost that it could bump on the advance.

A. That's very close to doing that and if it were to do that, then you would have to stop development of this bump and be blowing it out even before you know --- say before the bolter, you know, when he makes that crosscut I mean ---.

Q. It could blow out on the miner while he's cutting the face.

A. Yeah. And in Aberdeen, you know, it's bouncing and like as I mentioned earlier they got a protective device up for the miner operator because it's blowing out on development.

Q. Someone has indicated that when you see that red color around the edge that that was an indication of an impending bump or bounce.

A. You know a lot of times you see it after a bump and it's an indication of extremely high stress. What it is, is the roof and the coal interface are so highly stressed that it's actually oxidizing that coal in that area and what it tends to do is, you know, the stress will spit it out along that area two or three inches sometimes so it can be an indication that a bounce is impending. You see that a lot of times after a bounce and not only will the coal dust be on the roof but much of it blows out. It'll be -- the reddish stuff will be halfway, down the side of the debris that's blowing out of the bounce and it'll be there. You can catch it on longwall faces, but to say that it's going to bounce or a precursor to a bounce --- you can't say that definitely but it's definitely an indication of high stress or maybe that that's the area that it's relieved itself

somewhat. Like I said it was yielding hourglass on development but what it indicates, it's relieving under extremely high pressures.

UNIDENTIFIED SPEAKER:

I think you mentioned something along those lines already. If you see those indicators to you that tell you it's got extremely high stress on development, what does that make you think when you know they're going to retreat there?

A. That hopefully we can --- they can keep the cave in by strengthening pillars and taking a barrier to the cave ends inby and the outby area will be relieved as it caves.

UNIDENTIFIED SPEAKER:

Would it be fair to say, Billy, that you may not stop them from mining an area until a bounce occurred, because there's no way to predict it? I mean, I'm not sure what you would look at and say it's too dangerous to retreat mine. What would you see?

A. That thing is kind of like --- if they're mining in there and it's bouncing out and covering the miner if it's --- you would have to, I think you would have to retreat back them out of there and ---.

BY MR. TEASTER:

Q. So basically, though, you're saying after a bounce occurs?

A. Yes, I think, well ---.

Q. You wouldn't stop them before a bounce occurs saying these signs look like you may have a bounce?

A. Yeah, I don't think I could.

Q. You wouldn't justify that?

A. I don't think I could justify that.

Q. But after a bounce occurs, Bill, it may be too late.

A. And usually it is, I mean it's --- you're giving it up then. But there are different levels of bounces, too, you know. You get bounces and it throws the material out and then you just pull the miner in and mine that out and you don't even have to --- just turn the water sprays on and load it out, and sometimes that --- you know, it's inby, the miner or the bolter hadn't got in there because it's pretty good on longwall, it bounces on the face and it doesn't throw it out into the spill plate or anything, and it just --- the suredrum (phonetic) just kicks it over in the pan and out it comes. But to go --- you know, we call it bumps but big bounces are violent and yeah, it's too late after it occurs typically and especially when it's floor and everything --- Sufco, the latest bounce they had there, they were just lucky nobody was traveling in the tailgate entry.

If somebody had been traveling in the tailgate entry, that's conceivably a fatal ---. Bowie had a bounce where the guys stopped the shuttle car to go up and talk to the miner operator, it bounced and threw the shuttle car up against the roof and the bolts that hold the canopy sheared three bolt holes down as it pushed the canopy down. So if he'd have been sitting in a cab, good chance that he could have been severely injured or fatally injured. You know we closed the section off then.

Q. Well, Billy, has there been any retreat plans disapproved based on an evaluation of the conditions on development that you're aware of?

A. Not recently.

Q. Ever?

A. I think Sanborn Creek had a plan that was --- that, you know, they said you can't mine here. It had some bumps and bounces and they didn't come up with any changes that felt was reasonable ---.

Q. So they had bumps and bounces on the development then?

A. On development yeah.

Q. So then their retreat mining was rejected.

A. But that's been some time back where that happened, I don't recall of a --- oh, Soldier Creek again had some issues where they were told they couldn't mine in an area.

Q. Was it associated with bumps?

A. Bumps and bounces.

Q. Bumps and bounces occurring but none just based on an evaluation of conditions that you had observed in there, the hour glassing, the discoloration and whatever else you could evaluate.

A. I don't recall any being disapproved or disallowed for that reason.

UNIDENTIFIED SPEAKER:

Could I interject, Ernie? Billy, you were saying that these investigations that you did like in January and then May you went to, I guess, get a comfort level on your own about the retreat mine. So like in May you're feeling better because you're seeing some of the pillar yielding that you're describing before. Is that correct that that's part of what's making you feel better about them retreating is that you're seeing some controlled yielding I think you described it as?

A. Yes, that's correct.

UNIDENTIFIED SPEAKER:

Well, if I turn that around would you have felt uncomfortable if you didn't see any of that yielding. If you had seen good pillars would you have felt more uncomfortable seeing that?

A. If I would have went in and saw the pillars standing straight and no sloughage,

no hour glass, I think I would have felt uncomfortable because we --- that's typically, you know, what's going to bounce or blow out that's not --- knowing the same characteristics ---.

UNIDENTIFIED SPEAKER:

So seeing some of this deterioration is actually making you feel better because you are believing the controlled yielding aspect of it. The controlled yielding then would you say that that is actually yielding and that load is being shed to your barrier pillars in part?

A. I'd say it's the scan yielding and part of that load is being distributed out more toward the core, the core is kind of hard, and part of it may go into the barrier pillar. Although the barrier pillar was yielding in the same manner of the ribs, along the barrier pillar were yielding also, hour glassing.

UNIDENTIFIED SPEAKER:

Okay. But I guess my question goes back to the barrier pillar in that case that if you have your pillars yielding, shedding load to the barrier pillars that's kind of emphasizing that the barrier pillar's stability is important?

A. I don't think the size of those pillars that if they're shedding loads over to the barriers on development. I think it's the skin of the pillars are yielding, and as that yields it will --- maybe if it got to --- I don't think you're going to have load going over to the barrier pillars until you start getting some more of the core yielding.

UNIDENTIFIED SPEAKER:

Okay. But you just said something about the barrier sloughing in the same manner?

A. Yeah, it's yielding also, so that means that along the rib line it's taking load and that's going back to the core, back toward the core of the barrier pillar.

BY MR. TEASTER:

Q. You say you would feel uncomfortable, what does that mean in terms of approval of a plan?

A. If I feel uncomfortable then that typically means that the operator is going to have to do additional items whether it's some kind of additional support or, you know, they may have to look at their pillar cutting sequence. That would have been effective in it --- but when I'm uncomfortable they have to do additional items, and that depends on what I'm uncomfortable about. And in this situation, if the pillars are standing straight up and it looks like they're bumping and, you know, bump potential then, you know, we may have to discuss some kind of stress relief or not being able to mine them on retreat.

Q. Let me switch on you for a second, the ventilation plan says that your MPL can move out to the edge of the water where the water is roofed, and the roof control plan states that it shall be maintained free. It can be so deep that you can't safely travel through that, and then how does that comply with section 75334 C3 and 75371?

A. I have no clue what 75 ---.

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

Your entries will be maintained free of standing water.

A. Okay. Ex. (b)(6) and Ex. (b)(7)(C) gave me a short synopsis there. What that --- how they means is that most our mines out here in the west were wet, and you wouldn't believe it by looking at the desert up here on the surface but you walk underground and sometimes you've got to be knee deep. What happens is a lot of faults and things and mine operators will not pump the water, they will not maintain drainage or whatever, and this would be low spots or low areas in the bleeder entry, and they'll say they want some excuse to establish an MPL outby that.

However inby that three or four crosscuts the area is high and dry and we don't know what the gasses are doing in there. So therefore when that situation exists they have to pump that, they have to maintain it clear, they have to maintain it travelable regardless of what's causing the condition. In other areas most of our mines are also on a slight dip or whatever. The down dip side of the bleeder entry will have the --- will be wet. The water will fill up in the gob and back up from the gob to the bleeder entry so that when it shows up in the gob --- or in the bleeder entry, excuse me, when the water shows up in the bleeder entry then because of the dip, we know that from that point back to the back of what was the bleeder and down into the gob is full of water.

So therefore you can't have accumulation of gasses because the water's dripping and the gas is out. So in those areas we allow as the water fills the gob and the bleeder entry we allow the MPL to travel out with that reservoir of water.

BY MR. TEASTER:

Q. I understand what you're saying but how would that comply with the roof control plan or comply with the standard that says it's got to be maintained free of water?

A. Well up until --- it's no longer a bleeder entry because there's no gasses to bleed so where that water is, is at the end of the bleeder entry. Essentially that area back there is an underwater reservoir so the gob gasses come over and come out into the bleeder entry that's outby where the tow of that water is.

Q. Well, since the operator had some means of pumping that water out, then that wouldn't accumulate back there; right? But you say they don't pump?

A. They'll pump the outby if it does, but back there they'd be pumping out of the gob because if you keep creating back out then you'd be pumping from the gob out

and it's actually better to have the gob filled up with water than it is harmful gasses. So say the water drives the gasses that you know water ---.

Q. So you say once and entry fills up with water it's no longer a bleeder? Then this law, regulations don't apply.

A. Correct.

MR. PAVLOVICH:

I guess I mean you've got a lot of mines here that are ten foot high.

A. More than. Eight to ten foot is probably more the ones that we have not that high.

BY MR. TEASTER:

Q. And so you down dip, if it drops ten feet into 1,000 feet and then you pull back a thousand feet, it's roofed at the back end but you're only examining to the tow of the water so you got basically a thousand foot of entry that's not being examined because you only have to go the tow according to what this says, not to where it's roofed. Obviously you don't go to where it's roofed so you just go to the tow, which I mean, conceivably you can be a long way and that's acceptable here?

A. I think by the time it comes up into that entry then it's filled that gob area up. As far as I know, we accept that.

Q. Well, I mean it's kind of started.

A. Yeah.

Q. That to somewhere depending on the dip, it should be roofed way back.

A. Yeah, and you're checking what's coming out there.

Q. Well, okay, let's use that philosophy then. If you're checking what's coming out there, what's the difference in floating bleeder point they ask for in the north

barrier, you could have been checking what's coming down there.

A. Yeah but we also know that there's water from that point there all down through the gob when the floating point ---.

Q. I realize but when you said they made them pull out of the north barrier because the bleeder's deteriorating and we will not give you a point back here.

A. Right.

Q. But yet you've got a floating point all the way out, but we can't give you one back here.

A. Yeah, but the floating point has been created by water filling the gob and the other area you have this big area that we don't know what's going on at.

UNIDENTIFIED SPEAKER:

But the root control plan doesn't address that.

MR. TEASTER:

The root control plan says that you can't leave it there.

UNIDENTIFIED SPEAKER:

Free of standing water, and if you have a gradual change in elevation you could theoretically have a 2,000 foot length from the tow of the water to where it's roofed, it's technically not ventilated.

MR. TEASTER:

It may be ventilated but it's not examined.

A. Well more than likely you've got the water coming in the other area and you're right --- it dips down.

UNIDENTIFIED SPEAKER:

But it all depends on the severity of this slope.

BY MR. TEASTER:

Q. And I would assume that you're knocking stoppings out at the tow of the water to ventilate; right?

A. I don't know.

Q. Because you don't knock them out where it's roofing at because you're not going up there anymore?

A. Yeah. I'm not sure where the ---.

Q. You'd have to be knocking them out where it was safe to travel so it'd be near the tow of the water.

A. Where they put the --- how they do on a stop, and ---.

Q. Okay. Well, we just wondered how that compared between roof control and vent playing because they are somewhat contradictory in that manner. You don't allow it, but Reitze does?

A. Yeah, but when they want to move the MPL usually it's a roof control issue and I'm the person that has to go in and determine if it's too bad to go inby there.

Q. So you're the one who wouldn't move it.

MR. PAVLOVICH:

Well, Reitze's the one that made a decision to seal it and deal with water on that north barrier; correct?

A. Correct, but he told them it had to travel and they said they'd want to move it out based on roof control conditions and they had another way of monitoring it or something like that.

MR. PAVLOVICH:

That's what I'm saying though, this dealt with roof conditions and then we said it was beat up. I assumed he meant it was beat up with roof conditions.

A. So if they'd have wanted somebody to go to evaluate to see if they had a factual case for moving it out that would have been me but they didn't ask for an evaluation.

MR. PAVLOVICH:

They did from Reitze.

A. Right, but Reitze didn't ask me to go look at it.

MR. PAVLOVICH:

No, but I'm saying he basically said that had to go all of the way back?

A. Correct.

UNIDENTIFIED SPEAKER:

And Bill, while we're still on the subject, you made the statement about the roof control plans about not permitting standing water in the ---.

A. Yes.

UNIDENTIFIED SPEAKER:

That's been several times.

A. Yes, because we've had them that you go in and it's two or three feet of water or some place, and you know a bleeder entry --- and they say well, they'll take care of it as long as they pump it by the next weekly exam that it's okay, but they say well, they'll take care of it on their --- as long as they pump it by the next weekly exam that it's okay but we don't know we're not there all of the time.

So if our inspector goes in there under the ventilation plan, all he'd be able to cite them for, or make them correct anything is if they couldn't make the exams we'd have to wait for the next week, whereas with that in the roof control plan we go in there, it has to be addressed while we're there. We don't have to wait, they said they

did the last exam two days before then, we don't have to wait five more days before we can tell them to go in there and address the water because in a roof control plan, they'll address it while we're there.

UNIDENTIFIED SPEAKER:

Doesn't that then present a conflict when you've got the ventilation plan that doesn't have no floating point because of water, then you get a roof control plan that says can't have the water to start with?

A. Like I mentioned, we consider the bleeder entry when the floating point comes out because of water then that's our underground reservoir back there that's no longer part of the bleeder, and the bleeder's coming around --- coming out and ---.

UNIDENTIFIED SPEAKER:

You can just --- that's no longer a bleeder back there.

A. Right. So to the MPL, that's where the bleeder entry stops.

BY MR. TEASTER:

Q. Do you see that as being in conflict with the regs which says there shall be no standing water in the bleeders? Now I know after you let it build up then it's no longer a bleeder because it's blocked up but at some point, you know, you get water in there before it does that.

UNIDENTIFIED SPEAKER:

That roof's automatic.

MR. TEASTER:

Right. It's not instantaneous.

MR. PAVLOVICH:

It's just a wall. You walk right into it.

A. I lost a court case because I said you couldn't danger off gas, and the judge

said you put up an orange little thing and says it's dangerous going this side. The gas will stay on the other side of the orange little barrier, and we lost in court because the judge agreed with the operator that the gas will only stay on that other side. So therefore I don't see that as a conflict because removing the bleeder entry out to that point it wouldn't bother us no more than the bleeder entry.

BY MR. TEASTER:

Q. All right. That's good. You talked earlier about the Agapito report recommending that you increase those blocks by 37 feet up to 129 feet, and when you approved the plan to do that, the pillar dimensions that were approved in that plan were still 80 by 90 even though the company may have been mining the dimensions that we're talking about, the roof control plan specified 80 by 90.

A. The development.

Q. Yes.

A. That's what I said. See, that was approved before I saw the Agapito report. I looked at the Agapito report at the end of May, I scheduled a trip to Agapito, or excuse me, to Crandall Canyon Mine. I went underground at Crandall Canyon, looked at the conditions, then to retrieve mine they had to submit a different pillar dimension for retreat mining that was approved in retreat mining. It was the Agapito recommended pillar lengths.

Q. Yeah, but that section hadn't been developed up very far when you approved the retreat plan, had it?

A. It'd been developed up quite a ways, probably half way or so. I'm not sure.

Q. So you saw no need to revise the plan and have it updated to require those additional ---.

A. They were developing them on those lengths.

Q. I know they were developing them on that length, but this plan would have allowed them to do less.

A. Yes, it would have allowed them to do less.

Q. So you're saying ---.

A. But then they wouldn't have been able to retreat mine them, because the retreat mining plan had the minimum lengths longer.

Q. Okay.

UNIDENTIFIED SPEAKER:

What plan was it approving because I don't think we have a copy where the retreat mine plan increased the pillar size?

A. That's the plan that was approved on June 14th or 15th.

UNIDENTIFIED SPEAKER:

That one might be in the binder, Joe. I don't know that we had all of the plans in.

UNIDENTIFIED SPEAKER:

Let's see this, Bill. Are you looking at pictures?

A. Yeah, I got to look at them real good. So this is the map showing the longer pillars?

UNIDENTIFIED SPEAKER:

It points the dimensions out.

UNIDENTIFIED SPEAKER:

There are dimensions on there, Bill?

A. No, but it's to scale.

UNIDENTIFIED SPEAKER:

Why would the inspector enforce that, Bill, scale it off?

A. Yeah, that would be the, you know, if they weren't developing it that way, wouldn't be showing it on drawings in the roof control plan amendment, drawn and improve such and such date.

UNIDENTIFIED SPEAKER:

How accurate could he get on scale, if at all?

A. Well, the difference between 80 and 130 would be pretty easy.

UNIDENTIFIED SPEAKER:

How about 120 to 130?

A. That'd be more difficult. Barry Grosely wouldn't have a problem at all, he'd had it down to 130 and one half foot or 129 and one half.

UNIDENTIFIED SPEAKER:

I wasn't trying to be funny. I was just, you know, I was looking at it from ---.

BY MR. TEASTER:

Q. It's just that there's no written statement that says pillar size should be maintained or increased to 129 foot centers or something like that?

MR. PAVLOVICH:

Right, and that number is normally what the inspectors enforce whatever size is specified?

BY MR. TEASTER:

Q. Usually we don't enforce projections on the map, per se.

A. Well, this is the ventilation plan you're looking at here --- but it probably doesn't say roof control plan either. And again the original letter was submitted on May 16th by Genwal Resources and this map is not the map that was with the original submittal. We thought it had the --- didn't have those barriers. I'm not sure about the

length of the pillars, so it may have --- so they submitted this after I went to the mine, the drawing and we threw the original drawing out and put this drawing in.

Q. Agapito also stated in their July 20th, '06 report that increasing crosscut spacing is not expected to significantly improve the ground conditions. Then in the April 18th, '07 at the evaluating the bump in the north barrier, they stated that the additional 37 foot pillar length would increase the coal strength of the pillars. Confined cores which helped to isolate bumps to the face and reduce the risk of larger bumps occurring overrunning crews in the outby location. How did this justify their apparent contradictions? We can get that report out if you need to see it.

A. No. As we mentioned before, I think pillar width has much more greater bearing on pillar strength than length and even NIOSH will state that pillar --- increasing the pillar length will help but it's not a significant increase. I think that's in one of their ARMPS publications, but they state it helps. Looking --- when we're reviewing that what we're looking at is it increases it somewhat, it's not a significant increase but by lengthening the crosscuts out, it moves it more, that stress envelope more into the front of the pillar and farther away so it's putting --- the core of the pillar is back away from the cave line a little farther and then it moves that next crosscut, that outby crosscut where you have most of the area outby. So we always try to decrease the number of crosscuts as we can because we think that adds to stability.

Q. But you see the contradiction in the north. They said it wouldn't help at all, and then they use that as a fix over in the south.

A. And again that's typical mining, it doesn't help much but I think the thing is moving the location. It doesn't help so much from the balance of the pillar or the strength of the pillar, the pillar is going to have strength. I think you're just looking at fewer pillars. You're looking at the location of where the stress is going to be in that

pillar.

Q. Good. With that said, Bill, and the way this is even worded, it says it would increase the coal strength of the pillar's confined cores which helps to isolate bumps to the face, which is where your guys are, and reduce the risks larger bumps overriding crews outby, which is where they're not.

A. Now I think ---.

Q. I mean do you want to bump it to face where the guys are at?

A. Well ---.

Q. I mean you don't really want it to bump anywhere.

A. Right.

Q. This says the longer pillar keeps it isolated to the face where your men are.

A. And I think what they're referring to is the face right where the MRSs are and the miners there so it's outby the crosscut where your people typically are. We have our MRS operators, our outby, the miner operator and the miner operator is outby. The only person going to the face area there is actually the miner operator and the shuttle car drivers.

Q. They count.

A. Yeah, yeah they do.

UNIDENTIFIED SPEAKER:

I guess what I don't understand is that whole scenario is as you mine the pillar back at some point you get to the same dimension that bumped in the north. I mean that's starting at the point with this premise that you're promoting it to move inby but as you mine and reduce the length of that pillar, you're back to that dimension.

A. Well, you're reducing the width of the pillar greatly. Reducing the width of the

pillar by the 30 foot slice, you're taking off some.

BY MR. TEASTER:

Q. Reducing the width or the length?

A. Well, the pillar's what, 60 feet wide?

Q. How are you reducing the width?

A. Because you're taking a slice of 30 feet off of the side and then you come around the pillar on the other side. And you go in and then you take the pillar out on the other side.

Q. That's basically reducing the length unless you're open end slabbing, which I don't think you're doing out here.

A. I'll draw you a picture.

Q. Okay.

A. So the pillar is roughly, I think, 60 feet wide.

Q. Okay.

A. And it's 129 feet long.

Q. Okay.

A. So as they mine back they take slices off the side.

Q. Okay.

A. So now you have 129 long by 30 wide.

Q. Okay. I see what you're saying.

A. And then they come around on the other side and now they're mining back. They now have an 80 by 60 foot wide pillar that bounced in the north.

Q. Okay.

A. You understand?

UNIDENTIFIED SPEAKER:

I understand but it didn't --- it bounced in the north after they mined it also. I mean it wasn't bouncing as a whatever, an 80 by 80.

BY MR. TEASTER:

Q. Eighty (80) by 80 wasn't bouncing --- or 60 by 60 wasn't bouncing until they retreat it.

A. Right but you don't --- so what you're asking is why wouldn't this configuration bounce at 30 foot wide. It could, I mean, you don't know if they --- that may have been.

UNIDENTIFIED SPEAKER:

As you approach the same amount of cubic feet, it's going to have to amount of ---.

A. Not really if you got a 30 by 90 pillar and a 40 by 40 pillar that's close to each about 160 by 180. The 40 by 40 pillar will bounce before the 30 by 90 pillar will. As a matter of fact, the 40 by 40 pillar would have a much greater potential of bouncing before a 30 by 60 pillar will bounce.

UNIDENTIFIED SPEAKER:

Because of the confined core aspect?

A. Yes.

UNIDENTIFIED SPEAKER:

Okay.

UNIDENTIFIED SPEAKER:

So the smallest size of the pillars is not the ruling dimension? I mean typically for roof control ---.

A. Yeah, that's what I'm saying.

UNIDENTIFIED SPEAKER:

You could go 20 by 100 or 20 by 150, the 20 is the ruling --- the smallest dimension is the ruling number compared to if it's a 60 by 60.

A. The length has a little bit of a core strength to it, and that's why I'm saying that I don't think that the 20 foot wide pillar typically will not bounce.

BY MR. TEASTER:

Q. So are you saying then that in reality when Agapito said in the first report lessening the pillars doesn't really mean anything, you took that for fact. Now when it came back as a fix to the problem for the bump in the north, we're going to lengthen the pillars, and you accepted that as fact.

A. That transfers the stresses to the gob but I don't take --- and hopefully it keeps it out there and because it got to go a longer length, you got a longer core to help that that it might keep those outby people from the stresses coming outby. Will it keep the --- will the length ---?

Q. It's not designed to stop a bounce, it's just the only bounce on the people at the face.

A. It'll load up more.

Q. Which is still not a good thing, Bill.

A. It's not a good thing, but you're mining and if you can reduce it in a manner that causes those on the face to yield or start to yield instead of bouncing because you're cutting them down, you're distressing them, then that would be good.

Q. Do you think those two statements conflict?

A. That you're distressing them?

Q. No, the two statements that says length of pillar is insignificant but we fixed the problem by lengthening the pillar. Would they be contradictory?

A. I think they would because I don't think ---.

Q. You said you think they would. You already answered it, you said you think they would be contradictory.

A. Yeah, I don't think it adds --- I don't think it adds enough strength to the pillar. All it does is move the zone.

UNIDENTIFIED SPEAKER:

Okay. Well, that goes back to my point then, Bill. Removing the zone, you know, what's magic that's keeping it to the face or to the inby side? It has to go in all directions and part of that directional aspect is to the barrier pillars that we still haven't analyzed.

A. Well, I think, too, if I've got pillar row number one is the face and that's loaded up on the old system. Pillar row number two is right up behind the face and that's loaded up. Now because I've got this on now I've got a slightly longer pillar, maybe it only stays in row number one, it doesn't get back to row number two. Now I've got this highly loaded pillar but I'm going to distress it by cutting into it.

Now when I cut this first pillar and when I get it, that first 30 foot slab down there then that next 30 foot slab is a yield pillar now. So that has to go somewhere. As you are alluding to, that has to go somewhere. That goes to the barrier and that goes over to the next two. Well, it probably doesn't go over to the other adjacent but then the next pillar I'm going to miner out adjacent to that is even more loaded than it was before and the barrier is well --- and that barrier has already got a big slice out of it.

BY MR. TEASTER:

Q. So it's more loaded.

A. It is a remnant pillar that's even more loaded.

UNIDENTIFIED SPEAKER:

And I guess my point to here with the barrier aspect is, you know, as you mine out this row, you're dumping to the barrier. As you slab out of the barrier ---.

A. You do the barrier first.

UNIDENTIFIED SPEAKER:

Okay. The barrier still is being loaded and load on the barrier is being transferred outby on the barrier. I mean that load that's on the barrier as you're taking away the row of pillars and you've already taken away the barrier, the load has to come outby.

A. Okay. And this is where we get into Agapito's theory with remodeling, is when you transfer it to the rim in the barrier, it's also in a yielding state and it won't carry so then that row goes over to the other gob adjacent to it in outby.

UNIDENTIFIED SPEAKER:

Okay.

A. That theory didn't work apparently. Did that explain it though?

UNIDENTIFIED SPEAKER:

Yeah, I think you explained it.

A. You just don't buy it.

UNIDENTIFIED SPEAKER:

Well, I think it's like there's four legs on that chair and you keep taking them away and when you take the fourth one away, the chair's not hanging in midair, that's the easiest way I can ---.

A. And I agree that's --- when you take that slab down that pillar it's 60 feet wide, you take 30 feet off, that is now a yield pillar and that load that it was carrying is shipped to whatever. Some of it will go inby the gob, not much because the gob is not

going to carry very little.

Most of it's going to go to the side abutment to the very next part that you're going to go mining, which is going to increase your potential for bouncing over there and it's going to go to your remnant barrier pillar. Now the remnant barrier pillar is either going to yield or can load up to bounce. But if those conditions are on that gob line, hopefully that's where --- if any event occurs it'll be on that gob line, but what you're talking about may have occurred at Crandall Canyon is for some reason this load went outby and the outby areas fell. Why didn't it go inby, the inby areas didn't fall to our knowledge.

BY MR. TEASTER:

Q. That seems to have cleared it up so we'll move on. You know we talked a little bit earlier, Billy, about the Agapito report recommended you should not leave no blocks up in the south barrier on retreat.

A. Correct.

Q. And the ventilation plan required for five blocks basically to protect the bleeder entry so they could get back and examine, and then you required an additional set of blocks from five to eight.

A. Five to eight, that's correct.

Q. Does that conflict and the two plans create a problem, you think, for our inspectors?

A. Yes, and when I did the other approval, if I'd have been doing due diligence, I would have notified the ventilation people and they would have required them to submit a revision to the ventilation plan. I could have done that in the letter I wrote to the company approving the roof control amendment and that was an error on my part, and not practicing the due diligence that's required in that situation on my behalf.

Q. And how do you factor that it, with this being one of the fixes for the bump in north barrier so that it wouldn't occur in the south, to get all of those blocks out and take that additional mining in the barrier to the left so it would induce better falls so you would try to avoid a bounce?

A. You know that could be what caused the failure at --- that catastrophic failure at Crandall Canyon, I don't know. But I still have my duty to provide to the best of my abilities a safe environment for each and every miner, and people had to travel that entry back there and I knew that one pillar sitting out there with gob on two sides, it's a pillar point. It's things we try to avoid in all pillar plans. You try to get away from overloading a pillar and just letting it sit there, and then as the mining retreated back you'd have side abutment loads, frontal abutment loads, back abutment loads coming on that pillar; sharp corners in the entries that had to be supported and maintained and it was a --- you had to go on feelings and a lot of times in plans. I was uncomfortable with the risk even though I have PhDs telling me to leave things. Sometimes PhDs doing ground control don't look at ventilation. They don't look at all of the travel ways so I --- based on my experience and knowledge, the best way that I could protect that entry was to make a clean break in the two pillar that they were caving and a slice out of the barrier.

Q. Was there any ARMPS or anything done as a result to see what impact that might have on that area that you're aware of?

A. No, it was strictly me basing it on my experience. And the company that was the only way they could get a plan through me. They could've requested a meeting with the district manager but the district manager and the ADM for technical services both have a high level in confidence in my abilities to make the right decision. And typically in a situation like this, they would have not contradicted me and the company

knew that so they ---.

Q. Did the company put up any resistance to the change?

A. No, no. I just stated --- I'm pretty persuasive sometimes and say this is the way it is, take it or leave it, and they didn't argue.

MR. PAVLOVICH:

Excuse me, Ernie. While we're on that same line, was there any consideration given to the fact that since Agapito stressed that point pretty vehemently in the report, as we emphasize under deep cover, do not leave any pillars. Is there any consideration given to just saying just stop your development right here where that sump has you screwed up, and you don't have to get these 14 blocks up here. Pull back to here, because first of all, this is going to create a hazard with what Agapito says. And secondly, you can't examine it and it's going to create pillar points which you're already saying was your major concern. Did anybody ever suggest that?

A. No, sir. No. That didn't enter in the conversation.

MR. PAVLOVICH:

Were they adamant that they were going to get this no matter what?

A. Well, they weren't adamant. I mean they --- you know, we'll develop up here and get what we can do and if we have a problem we'll back out of there, and these conditions were good.

BY MR. TEASTER:

Q. So that was never given any consideration, let's just cut it off here, boys, and pull back from there ---

A. No, sir ---.

Q. --- because we're leaving these, okay.

MR. PAVLOVICH:

Did you consider tech support coming in and helping you with that decision?

A. No, I did not.

MR. PAVLOVICH:

The roof control plan specifies that those blocks sizes got to be a nominal size, 80 by 90. What does nominal mean?

A. Nominal means as close as you can get to it. That's based on 20 foot wide entry, the mine entry is 18 feet wide.

MR. PAVLOVICH:

Is nominal a word that you use in most of your roof control plans?

A. No. We usually use maximum and minimum.

MR. PAVLOVICH:

Because we've looked up this nominal and we've, you know it's truly ambiguous, it's --- some of it you can mine, have a great variation and be in compliance with that and we just see that as being very difficult to enforce, and if you found it to be 60 by 80 is that within range?

A. We're saying it should be 60 by 100 and ---.

MR. PAVLOVICH:

No, you're saying 80 by 90.

A. If it was 60 by 80 then it'd be off sides.

MR. PAVLOVICH:

How low could I go before you'd say I was violating that nominal?

A. Two things I'd look at what you mine --- how you mined the pillar. So if you mined the pillar, when I go in I'll look at the teeth marks and the roof and I have a way of whatever I find out you're mining, and if you're mining that eight or five --- you're allowed five feet over a certain distance but if you're consistently eight or nine off and you're mining it too wide or too narrow or something or other, then you're in violation of your plan.

BY MR. TEASTER:

Q. So you're saying your intent in this is you want to see these pillars 80 by 90?

A. Eighty (80) by 90 based on 20 foot centers.

Q. Let's not forget about centers. It says a pillar size nominal 80 by a nominal 90.

A. Yeah.

Q. If I went in there and cut pillars that were 20 by 20, okay, they would fit the description in the dictionary of nominal 80 by 90.

A. They wouldn't fit my description.

Q. Okay. So you're saying you have a different interpretation and your interpretation is 80 by 90; right, is that what you're saying?

A. Right.

Q. If it's a couple of feet off you wouldn't ---.

A. Right. Because, you know, if they mine it 18 feet then it's going to give me an 82 foot pillar. But then if it sloughs two feet, then I'm back to the 80, so I'm in good shape. If they mine it 22 feet wide and it sloughs another two feet, now I'm at 75 or 72 or whatever it turns out to be, then they're in violation.

Q. You wouldn't be counting sloughage if you say you can drive your entries on an 80 foot center to center spacing. Sloughage wouldn't have anything to do with that,

would it? It'd still be centered.

A. Are we talking about centered? I thought you were just talking about pillar size.

Q. Well, it says being driven on a nominal 80 foot center to center spacing and crosscut spacing will be on a nominal 90 foot center to center.

A. Yeah, then we were just talking about ---. So then you're looking at just, you know, trying to keep them within a couple of feet of that.

UNIDENTIFIED SPEAKER:

Does everybody have the same understanding of what's required?

A. Yes.

UNIDENTIFIED SPEAKER:

So what would be a violation, if I mined a pillar based on this plan, when would I be in violation? Just give me not the circumstances but if we just measure it, just the dimensions.

A. Well, you couldn't measure on this, you couldn't measure the dimensions of the filler, you'd have to measure the dimensions of the centers.

UNIDENTIFIED SPEAKER:

So when would I be in violation?

A. Over five feet off.

UNIDENTIFIED SPEAKER:

Does everybody understand that?

A. Pretty much, yeah.

BY MR. TEASTER:

Q. Where'd you get the five feet from?

A. Because they're allowed to be off a certain distance. If they're consistently doing it over five feet then, you know, they would be cited for being off sides.

Q. Is that a District Nine rule of thumb?

A. No, I think that's in the policy.

UNIDENTIFIED SPEAKER:

What if it said a nominal 5,000 cubic feet per minute behind the curtain? I guess what we're looking at, Billy, is do we need minimum?

A. Yeah, we need minimum/maximum in the plants.

BY MR. TEASTER:

Q. So you agree nominal is probably not the best ---.

A. Yeah, and that was put in there by Hibbs. He's a Kentucky guy. These damn Kentuckians come out here and they try to get away with everything.

Q. But aren't you from Kentucky?

A. I am. And sometimes we even had one had nominal bolt spacing in the roof control plan, a nominal of five feet.

MR. PAVLOVICH:

Well, when your SOP says you try to avoid those ambiguous things and be very specific as to those dimensions.

A. Right. And we do.

MR. PAVLOVICH:

This one just slipped through?

A. Yeah, and like I say we're, you know, we're under the gun in a lot of areas. And it's like I wouldn't normally not approve a nominal if it's maximum and minimum, and we try to even tighten that up in some areas. Like we'll have a maximum center of dimensions and then they'll put in a maximum entry widths and crosscut, and then

when you look and subtract that away, you end up with a pillar that's 20 feet wide and then we have to go back in and change them on our maximum/minimums to get them back up to where we want it. And bolt spacing --- we try to go with everything maximum and minimum. So a nominal is an anomalous condition on my part.

UNIDENTIFIED SPEAKER:

Before we leave this topic, let me ask you something. Is there any other District Nine mine that you know of that have applied to or been granted permission approved plans to mine barrier pillars such as the one at Crandall Canyon?

A. We did it over at the Pinnacle Mine. The south mains in Crandall Canyon they didn't develop the barrier but when they retreated the mains out between two longwall panels they mined the barrier pillars on both sides coming out as they retreated. I think at one place they mined the barrier pillar down to about 60 feet in width.

MR. PAVLOVICH:

What controlled how much they could take of that barrier, anything?

A. No, you know, not --- not there to protect anything. It's all going to be in the gob when they come outby it so we didn't have anything. I think King Mine, we also have them as a mine up, and then retreat one panel out, there's a barrier and then they leave an entry. And as they mine out they have a flow through ventilation system that they can mine the barrier over into the next gob. If they're not developing in the barrier, unless you consider the whole big thing, the adjacent barrier was just developing inside of it, they can mine into the gob.

MR. PAVLOVICH:

Do you have any mines that you know of that have went in

and split that barrier in similar conditions that you had there in the west mains of Crandall Canyon mine?

A. No, I don't know any similar conditions. And in addition to that it is very --- it's not ---- it's as similar that I would have a mine submit a mining plan in a phase where the development or mining plan is to do a development. Then I go on side, conduct an investigation, evaluation before the next phase is approved, and then again them come in and do the third phase and then I go do another examination. So this interior process of mining the barriers was a typical for District Nine and for ourselves.

MR. PAVLOVICH:

We talked earlier about that Laine Adair call to you saying we're pulling out of this north barrier, we had a bump and whatever he told you. Then you got the plan from Agapito. Now apparently you and Laine know each other because you said you got conversations about every week.

A. Yeah. Every week or every other week. Somewhere in there, yeah.

MR. PAVLOVICH:

At some point along there when you went to the mine that day, did you not think to ask Laine, hey Laine, why didn't you tell me the size of the bump you had in the north? Because it's kind of like he hid it from you, you know. I mean if you and I are pretty good friends, Billy, and I tell you well, you know I saw a mouse run through your room here in the hotel and it was an elephant, you might say, Joe, why didn't you tell me that. I mean did you ever think about ---?

A. You know that was --- I didn't question him on it.

MR. PAVLOVICH:

Okay. You didn't think to question him on it.

A. I was at Castle Gate mine back before it was --- or back at Price River before

it was Castle Gate. And I'm underground with Laine Adair and he's saying we're using these big Johns along the entry next to the longwall panel, and said these big Johns as we retreat out --- and big John's are big huge timbers, must be 18 inches in diameter or something and eight feet tall. It takes three men and a small boy to lift one in place.

They put about three of them across the entry and that was to control the gas sweeping inby. And he says, this stays all the way to bleeder in the back and so we can control the gaseous situation at this mine. So we go walking in by the head gate and Laine says, look over at that crosscut, and he says see that big Johns are holding it all open. We walk about ten or 15 more breaks and there's a big yellow curtain open and I said, Laine, let's look behind the curtain. There's no need to look behind the curtain, it's okay. I said, Laine, why don't we look behind the curtain, I want to see how well the big Johns --- it was caved all the way out behind the curtain and I says I don't think the big Johns are working so well. Yeah, Laine, I've known him for a long time.

BY MR. TEASTER:

Q. So you know you can't always believe everything Laine tells you?

A. Yeah, exactly. And we get back in the bleeder and they got a dang bolt to get across this water place.

UNIDENTIFIED SPEAKER:

Well, Billy, having said that though, doesn't that make you wonder when he told you in March that he had a bounce?

A. Well, he didn't say he had a bounce. He said it was bumping when the miner was ---.

UNIDENTIFIED SPEAKER:

Okay. so he's telling you something doesn't that make you

think back to your experience and say ---.

MR. TEASTER:

It's bumping where we're mining and we're pulling all the way out and leaving all of the coal in there. Now you know Laine better than that. He doesn't leave a pound of coal, does he?

A. No.

MR. PAVLOVICH:

I mean, it had to be something pretty serious for him to leave that much coal in there.

A. So I know to take --- but I don't have any reports from the field office or anything about anything bad going on, and when --- even in the south barrier when the retreat mining inby reports --- in addition to Laine reports from the field office is everything looks good in there, conditions are great we're not having any problems. So it still comes down to me forcing them to leave the thing in the south barrier.

MR. PAVLOVICH:

Do you think the roof control plan restricts the mining height at Crandall Canyon in any manner?

A. No, I don't think it ---.

MR. PAVLOVICH:

In other words, if the ARMPS and LAMODEL all that use at like an eight foot height which is one of the factors that you have to put in. If they use an eight foot and they mined the ten foot. You don't think that that would have an impact or would it?

A. It decreases the strength of the pillars.

MR. PAVLOVICH:

But is it a violation of the roof control plan?

A. If the mine from eight foot to ten foot?

BY MR. TEASTER:

Q. Yeah, bottom coal, Billy, I guess it's ---.

A. Okay. If they took bottom coal developing in and made it from eight foot to ten foot, I don't think that ---.

Q. As long as they evaluated ten foot in the ARMPS program, or put that number in. But if they put eight foot in, they mine ten foot, that'd be a problem.

A. Yeah, I'm still not sure, because we approved the plan. I'm not sure of the evaluation of them because we didn't tie it down to the eight foot mining height in the plan.

Q. On the retreat mining if they were taken bottom coal.

A. We considered taking bottom coal in retreat mining to be second mining. And it should be stipulated in the pillaring sequence, lift sequence because depending on where you take the bottom coal, we can have effects so that would be a violation of the roof control.

Q. So they --- did they have in their retreat mining plan permission to take bottom coal?

A. As far as I know they did not.

Q. Do you know were they taking bottom coal here?

A. To the information I've received when --- from our inspector that when they were on site and saw them retreat mining, they were not taking bottom coal. There have been anonymous phone calls to the District that stated that they were taking bottom coal. In addition, they also stated that where I had them leave the pillar and which also skipped mining in the barrier, that they were slabbing the barrier, taking

bottom coal and slabbing the barrier all the way down through there.

Q. In both?

A. Both.

Q. I mean that's conjecture --- someone's made that statement to the District people.

A. And the information that we received was that they from the --- there was a mechanic or electrician on the section that night and an outby person needed a ride to a different location. He called the mechanic to get a ride and that mechanic left the section at either 2:20 or 2:30, somewhere in that area, and he stated that they were at Crosscut 139 getting ready to start mining in the barrier pillar. We took that to mean that they had backed up from Crosscut 142, re-established everything and was ready to start mining when the event occurred, I think it was at 2:50.

Another anonymous caller called in and said we're looking for the people, the miner equipment and --- because it's inby Crosscut 131, they were inby there mining, and I don't know if they meant in the barrier or in these pillars in here, but his insinuation was that the drill holes were looking for them in the wrong place. That's what we're putting down.

Q. So they could have very well been taking bottom coal, they could have been taking the barrier and they even could have been taking this first row of blocks because the vent plan said you need to take those blocks?

A. Right.

UNIDENTIFIED SPEAKER:

Were all of those anonymous calls after the accident?

A. Yes.

MR. PAVLOVICH:

Did you ever get any reports prior to August the 6th of seconding mining, of mining bottom?

A. No.

MR. PAVLOVICH:

What is the definition of second mining?

A. The definition that we tend to apply to second mining is that you have a primary development configuration, pillar barrier coal, whatever it is, and then when you reduce those dimensions, or in the event of we'd be reducing the pillar dimensions, or in the event of bottom coal you're increasing the pillar height or you're increasing the pillar to the entry widths or whatever by taking addition, a second cut or second mining of that after you've already permanently developed, and that's second mining.

MR. PAVLOVICH:

What about doing an ARMPS evaluation, if you've done an ARMPS and you determine everything was based on a height of eight feet and then let's say that you reduced that or increased that height from eight feet to 11 feet. Would just that number there significantly change the stability factor?

A. It would. I think the --- I have to raise you a list. I can't remember these numbers exactly but if you're down around four, you're in good shape. But if you had an eight foot high and you took three feet of bottom coal and made that eleven, and that pushes you somewhere up around seven.

MR. PAVLOVICH:

So it would significantly affect it.

A. Right. And then that --- there's somewhere in the number there, but anyway, if they were taking bottom coal it definitely decreases the stability of those pillars in

there.

MR. PAVLOVICH:

Do you know if ---?

A. So if they were taking slices out of the barrier, mining that slice, taking two or three feet of bottom coal out of that area, and you know, we'll have them back the MRSs up if they're doing that. But then turn around and slabbing the pillar and then you have a bigger, wider width with this height that would have a --- you know, it would be, create a stability issue I would --- I know it would.

MR. PAVLOVICH:

Do you know if Agapito ever done either an ARMPS or a LAMODEL analysis on mining heights on heights greater than eight feet?

A. For this area?

MR. PAVLOVICH:

Anywhere in the mine.

A. No, I do not. I know at the Aberdeen Mine, the mining height in the development entries has a great effect on the bouncing of the pillars in there.

UNIDENTIFIED SPEAKER:

Billy, getting to mining the bottom coal again, as far as how you were saying it wouldn't be allowed. At another mine, for instance, it is allowed to take bottom coal. Is that spelled out in the plan and to what extent is it?

A. Right, it is spelled out like especially high effects, you know, when they take the bottom coal. And then even in some areas because we're talking about the ratio of the pillar height and things so we may have them come in. Let's say the entry is 18 feet wide, well where they take bottom coal they can only take 16 feet wide so you increase the base width of that pillar.

In addition, since it's second mining, once they take the bottom coal that's the second mining cut that's like a lift. Then you have to have breaker roles, radius post or something so that nobody can travel into that area of where the bottom coal has been mined.

UNIDENTIFIED SPEAKER:

And you do have a mine somewhere else in the District that is spelled out that way in the plan?

A. We did when we had White Oak that was spelled out that way. I don't know that we've currently taken bottom coal. But when they do we --- and also, you know, since they're taking bottom coal you don't want them --- you know, cables and trailing cables and things like that to be going back there so you have to spell out what sequence and especially if it's where you're ramp down. You know, if you ramp down, you can go one way or where you ramp up or you had to do a different ramp. So there's all sorts of configurations, but you get sick of --- so you can't go back into those ---.

BY MR. TEASTER:

Q. So you give them a cut sequence on it, too, right?

A. Yes.

UNIDENTIFIED SPEAKER:

So I mean, do you feel that it's understood in the District, by our people, by the industry, that if they want a mine bottom coal in that manner, it has to be in the plan?

A. We think it's understood because that's the way that we do it. And like I said, I think our inspector understands that because they said, you know, they never saw it occurring at Crandall Canyon. And I'm sure that if they had observed that, you know,

that would have been brought to someone's attention.

UNIDENTIFIED SPEAKER:

What would you cite specifically?

A. We'd cite a violation of the roof control plan just the same way --- out of cut sequence, not following the cut sequence or not following the second mining plan. The same way, you know, we tell them to leave a 12 foot by 12 foot stump and if we go in there and it's, you know, they didn't leave the stump, then it's a violation of the plan.

UNIDENTIFIED SPEAKER:

Where would they --- I'm not following you, I'm not following the cut sequence. If they take a slab to the left and they mine at eight foot and they mine at ten foot, but they still took the number one cut to the left or number two to the right but there's not enough ten foot instead of eight, but they still fall under cut sequence.

A. I think what we'd have to cite is that they took the --- that'd be cut sequence one. Cut sequence two would be back on the next pillar or the next cut outby and we'd say then they took that would be a cut sequence one A, that wasn't approved in the plan.

UNIDENTIFIED SPEAKER:

You ever wrote that?

A. Pardon me?

UNIDENTIFIED SPEAKER:

Anybody ever write that?

A. No, I don't think. Typically when they're doing the mining we --- you know, taking additional that we concluded in the plan.

UNIDENTIFIED SPEAKER:

Did they bottom mine --- bottom coal at the south mains, all that area that they pulled up? I mean was it typical to bottom coal or not?

A. Well when the --- again when the inspector was in there in the south mines they never saw him take any bottom coal.

UNIDENTIFIED SPEAKER:

That whole area.

A. The whole way. I mean they're not there every day, but when they were on site, they said they never observed them taking bottom coal.

MR. PAVLOVICH :

Let's talk a little bit about the south mains. I've got a map here if we need it. Did they --- was they given a site specific plan for mining in that area in the south mains?

A. No, I don't think so. I think that was done --- was conducted under their base roof control plan.

MR. PAVLOVICH:

How did that differ from retreating up in the west mains?

A. Not a lot. I mean just mainly that I think the maximum cover --- or the cover there was like 800 feet to 1,400 feet where the cover in the west mains was under a much deeper cover. And they didn't have to drive to develop them, the --- what they had retreated out there were the mains that were already developed. Those mains were between two sets of longwall districts, and they mined it out except where they had to leave pillars within that region to protect surface streams. And they slabbed that and take part of the barrier pillar as they retreated out of that area also.

MR. PAVLOVICH:

So they could have went up and retreated to west mains if conditions had permitted?

A. Yes.

MR. PAVLOVICH:

Not the north and south barrier but they could have went up there and started retreating if the conditions permit based on the existing plan.

A. Correct.

MR. PAVLOVICH:

Was there anything that restricted the amount of coal or the depth that those barriers could be mined into?

A. No --- in the south mains?

MR. PAVLOVICH:

South mains.

A. There was not.

MR. PAVLOVICH:

Did District Nine do an evaluation of the retreat mining in the barriers on either side of the south mains?

A. We didn't look at the evaluation of the barriers prior to or afterwards. But we never looked, we never did an evaluation of the barriers, we did --- before they retreated into west mains, we looked at their accident history in there and they had pulled the area without any problems. Toward the end of the panel I think one gentleman had an ankle injury from a rib roll, it could have been a fracture.

MR. PAVLOVICH:

So you looked at the injury history but did you do any other evaluations of what transpired up there as far as the roof concern or any ---?

A. No, we did not.

MR. PAVLOVICH:

Was a barrier pillar stability factor ever determined for the south mains area?

A. No.

MR. PAVLOVICH:

When you visited --- switching again now, but when you visited Aberdeen mine with tech support on May 23rd of last year 2006. When you requested them for this visit, why not also have a look at the Crandall Canyon mine on May 22nd?

A. They had logistical problems with travel and stuff, with getting here or something --- anyway, it was they were available on the 23rd and they weren't available on the 22nd.

MR. PAVLOVICH:

When you were with tech support personnel like John Cook and Jim Vital (phonetic) on May 23rd, did you discuss Crandall Canyon at all?

A. No, we had our hands full with Aberdeen.

MR. PAVLOVICH:

Our team requested a list of all requests from District Nine that had been submitted to tech support, and when we got this back, there didn't seem to be anything from roof control. Why is this? You never requested help from tech support on roof control?

A. I'm sure we have, I just --- and there may not be any formal memorandum, reading --- Aberdeen wasn't there?

MR. PAVLOVICH:

The only thing we saw was --- mostly did with seals.

A. And what period was your request, 2006?

MR. PAVLOVICH:

I think it was two years, two or three years.

BY MR. TEASTER:

Q. Did Cook and Vital just come on their own?

A. No, no.

Q. So you did request help at Aberdeen?

A. Yes.

Q. But was that --- how would you have done that, by phone, by memo?

A. It could be phone or e-mail.

Q. And you wouldn't keep a record of it if you ---.

A. If we sent a memorandum we'd have that, e-mail maybe, maybe not. And all of my e-mails, I was told I didn't have to do anything with e-mails because they got some kind of contract that's going through and doing a search of the e-mails to pull all of that data and I was told that I don't need to delve into that.

Q. Okay.

A. I'll tell you what, I'm saving a heck of a lot more stuff now and will for the next 37 days.

Q. And then how long will you save it?

A. It's gone, baby. Burn, baby, burn.

MR. PAVLOVICH:

Do you have any SOP for dealing with tech support?

A. No.

MR. PAVLOVICH:

Do you feel that you get good response in a timely manner from tech support?

A. No, it's improving lately but it's --- and I think it's --- I mean all we're doing is running those guys ragged also but again if --- May 23rd they came there, they made a reasonable effort to get there. They have limited resources of people that can travel, too. Then they sent out probably two months or so after that they send a draft report out, and then I'll review that which may take me another month in addition to reviewing plans and all of the other stuff, and then I get it back to them and I think just recently we received the final report from tech support on May 23rd.

That tech support staff and roof control group in Pittsburgh has to respond to 11 coal districts, 6 metal/non-metal districts. For them to respond to us here in the west, it's a full day. You know, a day flying and getting somewhere. You've got to provide them self contained self rescuers, you know, because they can't ship them and all of the other logistical problems. It's just a burden on their location and staff and there's, I mean --- they'd have to be Superman and all of the other Marvel Mag guys tied together to be able to respond in what I would consider to be a prudent manner.

MR. PAVLOVICH:

With all that being said, do you consider them helpful?

A. Yes. I disagree with them sometimes but I do consider them to be helpful.

MR. PAVLOVICH:

Do you think that District Nine would benefit from the western tech support?

A. Yes, and that's the other thing. When tech support was in Denver before when the operator come in to discuss modeling or something like that. Then the tech

support staff would sit in the meeting with the District Nine staff or a proposed mining method. Now if we have a meeting with the operator, we have to gather the items and then send it to tech support if we want them to look at it. And then they have to get by us and then they have to contact the operator.

In addition, we tried conference calling, you know, where they were sitting in the room with a speaker phone and they were pointing at the map. The people in Pittsburgh don't have a damn clue where we're pointing because you forget to say I'm pointing at two left, Crosscut 32, second pillar or third pillar entry. You forget to say that and then all of a sudden they're a lost ball in the high weeds because they don't have a clue what we're talking about there.

Recently we did have a meeting where the western mine operator and myself and the district manager went to Pittsburgh to do the meeting with them, but that's a hardship on everybody. But sometimes we can't tell those guys --- you know, I walk in Monday morning, sometimes I got a mine operator that shows up saying hey, we got this problem, we got this, we have a plan here, here's what we'd like to do. If tech support were in Denver, we'd call them right into the meeting and it'd be available but that convenience has been --- was eliminated by Mr. McAteer and it's not good for western mining, it's not good for District Nine.

BY MR. TEASTER:

Q. We'll take that as a yes, you think it would ---.

A. Yeah.

MR. PAVLOVICH:

Do you think the quality of the reports you get from tech support's pretty consistent?

A. I think that sometimes they're too consistent in that some of the reports. We'll

be at the mine with the tech support person or persons and we'll go over, they'll bring up issues with the mine and then, you know, they'll say well we're looking at this, this and they'll have suggestions. And then it goes back and they go through and two months later we get the report. Well, there's two or three recommendations in that report that are vanilla, very, very vanilla.

I mean it doesn't matter whether it's an Alabama, Pittsburgh seam or whatever, it looks like that somebody goes through and said in the review process that when the two guys I was talking to and the mine was talking to sent a report up, all of a sudden somebody else is putting in, well, we ought to state this in the report and we can't state it this way, so you need to tone this down and you could probably go back and pull these same recommendations.

So I think whether we --- sometimes the reports tend to try to be too politically correct instead of, you know, if it's a valid --- make the pertinent, hard recommendation and skip the vanilla stuff and get a very useful document, and something that if we had to go to court with a mine operator that that thing could stand up in there and would be valid.

MR. PAVLOVICH:

Are you familiar with the BLM reports that address mining up in the west mains?

A. I am after August 6th.

MR. PAVLOVICH:

When did you first learn of it?

A. After August 6th.

MR. PAVLOVICH:

August 7th then?

A. Probably about two weeks after that, somewhere in that next ten days, I would say.

MR. PAVLOVICH:

What was your opinion of Mr. Falk's statement in the January 24th report, the situation in the main west is untenable for future pillar recovery. No mining company in this area has ever poured pillars in main entries with mined outsides and under 1,500 plus feet of cover.

A. Mr. Falk --- and I told Mr. Falk that when I get out of jail, he's going to be one of the first people I'll look up. But I --- Mr. Falk is responsible for resource recovery. Their mission is to ensure that the taxpayer's natural resources are taken care of in a proper manner and that the maximum amount of resource can be recovered while protecting safety and the environment. The company came to Mr. Falk and said that they want him to change their reserve RPL2 plan or whatever RP2G, I don't know. But anyway they wanted to change their percent of recoveries by sealing off the west mains. So Mr. Falk has to go look and he agrees with the company but he has to write a report to justify that. So he writes a report that will pass muster when it goes on up that it is justified to doing that. Again that west mains would be difficult for retreat mining. His statement about pulling pillars over 1,500 feet. You know it's been done at 1,500 feet but he justified his statement of allowing them to abandon those reserves.

MR. PAVLOVICH:

Do you think that if you'd have been aware of these reports that they would have had any impact on the plan approval for mining in those barriers --- west mains?

A. I don't think so because of the --- because I know the reason behind why he's

writing his reports the way he is. Also when he talked about the balance in the north barrier, his report says that he observed all of these conditions, that's the way it sounds. When I talked to the mining people they said he didn't go inby the danger tape. So he apparently wrote or it was reported to him rather than actually observing it himself.

MR. PAVLOVICH:

Some of those reports indicated that if you mined, and it's not exact, but if you do mine that area this will probably happen and some of that did happen as far as the bumps and the bounces occurring, not specific to any way of mining them but just you're right, that's what he was justifying. But it seems like that he had fairly good knowledge of what would happen if he did mine under those areas. But you're right, he was in there to determine whether or not they could get that coal out and that report was to ---.

A. And some of those reports I think are offered --- the date on the report is after August 6th.

MR. PAVLOVICH:

That's correct. He done the evaluation back in March and I think the report came out August the 14th or sometime mid-August.

UNIDENTIFIED SPEAKER:

Billy, just the fact that your comment about you wouldn't necessarily change your mind based on his reports because you know why he's writing them. But if his mission is to make sure that the coal is mined, and he's saying it's not safe to mine it, wouldn't you think that that would make you sit up and take notice? I mean it's kind of like he's trying to get the coal mined but yet he's saying it's not safe to.

A. But the company asked him not to do that so he has to write his report in a manner --- if he's going to agree with the company he has to write it in a manner to justify what the company's proposing.

BY MR. TEASTER:

Q. But if he don't agree, then the company's got to get the coal; right?

A. No, not if we, you know, if we did --- but if he ---.

Q. I'm talking about if it's just now, this is just between him and the company.

A. Right. If he doesn't --- well, they don't have to get it but they have to pay for it.

UNIDENTIFIED SPEAKER:

Isn't he supposed to be objective?

A. Pardon me?

UNIDENTIFIED SPEAKER:

His job would require him to be objective, to make his own analysis based on his own experience.

A. Right. But again, looking at --- his job is resource recovery. So if you're contingent, if he says you're to abandon this, if that was in violation of the recovery plan and the company wanted to go ahead and not mine that, then they would still have to pay whatever the royalty fee is on that because he wouldn't let them abandon it. And a lot of times, you know, in his reports what he's looking at his he's taking measurements to put in what the recovery, you know, he's trying to calculate tonnages and reserves and areas of that.

BY MR. TEASTER:

Q. Well, with what you're saying though, Billy, is his main influence then is not to appease the company on what they want do, his main influence is to try and make

them mine as much coal as possible?

A. Correct. So therefore if he agrees not to mine an area, he has to write a very valid justification for that.

Q. That's right, but he would not agree to let them not to mine an area if he truly felt they could mine it.

A. Yeah.

Q. Because he's wanting them to mine it to get as much coal and royalty as possible; right? I mean if Genwal calls him out there and says come on out here and take a look at this, we think it's too bad to mine, he's not going to say oh, yeah, I agree with you, it's too bad to mine. It looks okay because he wants the royalty.

A. Correct.

Q. So the only reason he's going to say it's really bad is probably because he thinks it's really bad; right? Doesn't that make sense?

A. Yeah.

Q. You would do the same if it was your job; right? I mean I would. If I thought it looked really bad I would say that it looked very bad, but if I thought they were just trying to get out of mining it I'd say no, you've got mine it or pay the royalty. It doesn't look that bad to me; right?

A. Right.

Q. You wouldn't just agree with him.

A. No. No, I wouldn't. But then I don't, you know, know that I would do --- well, if I'm required to do a write-up and a report on everything, like I said, I wouldn't write up that this damage occurred inby this if I didn't go in there and see it. So I'd report that it was reported that it was this way.

Q. Well, we don't know that. But from what he's written, he says I went in there

and saw it.

A. Exactly.

UNIDENTIFIED SPEAKER:

Billy, do you think the fact that this accident in Crandall Canyon happened at all undercuts any argument that maybe that wasn't a --- that his statement that it was dangerous to mine those west mains wasn't a meritorious statement.

A. No. We agreed that it would be very difficult to mine the west mains because three or four feet of the roof is breaking up, the width of the intersection was extremely difficult, the corners for the angle of the pillars were already yielding, so it would take considerable rehabilitation in that area. So he was correct in the west mains that it would be difficult and then he'd have to --- well, at that time they probably didn't have water, they probably looked at it before they sealed it.

UNIDENTIFIED SPEAKER:

So you think maybe he had a dual motive in writing that one that, you know, the company didn't want in mine it, and two, he really didn't mean that it included everything and the guys are the ding dings because they didn't want to mine in that area?

A. A dual motive on ---?

UNIDENTIFIED SPEAKER:

On that statement, maybe I'm not --- do you understand what I'm saying?

UNIDENTIFIED SPEAKER:

I understand what you're saying. And I think, no, that's not the case, that Billy's saying that Falk was right as far as the west mains, okay.

UNIDENTIFIED SPEAKER:

Right.

UNIDENTIFIED SPEAKER:

So to me that makes that a moot point and then I think that part is okay. But doesn't Falk also make statements about mining the barriers that they ultimately tried to mine? And I think that your question goes to that as well.

UNIDENTIFIED SPEAKER:

Right. Okay.

A. Okay. And then in the barriers he said he never been tried and, you know, typically that might be true on the development. You know, all of the barriers but the barriers --- we have barrier problems at other places. Soldier Canyon had a mine that had some deeper covers so --- but generally his statements are true that under 1,500 feet of cover is a hazardous situation, it can be difficult, it's difficult conditions. You have to have a good plan, you have to come up with a good way of doing it. And so his concerns are there, we had concerns, that's why it was --- you know, the plans were approved in four faces.

UNIDENTIFIED SPEAKER:

Well, going off of that Billy and once you go back to the question. If you had that information, you wouldn't have discounted it then, I mean you would put some merit on it.

A. Yeah, we'd look at it and evaluate. We wouldn't totally say that Steve doesn't know what he's talking about. But we also have to consider why Steve is writing the reports also.

UNIDENTIFIED SPEAKER:

Do you deal with this guy much?

A. No. I've never met him before until --- I met him at Sufco a few weeks ago.

UNIDENTIFIED SPEAKER:

So there was no correspondence at any time between BLM and MSHA?

A. Between Steve and us, no, there wasn't. Sometimes there's --- if they want to have discussions on leaving barrier pillars or something like that or mining --- like I said, mining to leave streams or barrier pillars or how entries should be leveled out. Sometimes there is discussion on that but typically there is no correspondence between our district and their offices.

BY MR. TEASTER:

Q. Billy, let's go back to, he did a report or an examination November 4th, 2004, okay, which was --- the mine was still owned and controlled by Genwal Resources a subsidiary of Andalex. So this is before Murray.

A. In 2004?

Q. Yes.

A. Okay.

Q. Before Murray, right. He says the reserves left in the pillars which would be the west mains and the two barriers were never included in the recoverable reserve base as far as I can determine, and Genwal's not required for further coal recovery in the area. That's when Genwal said we don't want to mine this. So he goes in and talks about how bad the conditions were in the west mains and he also says that in the original recoverable resources plan that Genwal has to submit apparently to BLM saying here's what we're going to get. That they said we're not going to get this, okay?

A. Okay.

Q. I mean that's what I interpreted. Now sometime later, Murray buys out the

mine; right? And Murray decides or his people there, whoever, now all of a sudden --- and it's kind of the same guys working there; right? All of a sudden now they want to mine it.

A. No, they --- Murray took over in August 2006.

Q. Okay.

A. The proposal to mine those reserves were broached with us in May or April or May of 2006. Now I don't know, maybe ---.

Q. Do you think there was any influence there because of the fact that it's the reason that Murray was buying that mine is to get those reserves?

A. No.

Q. He wouldn't buy a mine that had no reserves, would he?

A. Well, the West Ridge Mine coal quality is not that good. They have to blend to sell West Ridge coal. They have to blend it with Aberdeen or Crandall to keep a steady source of blendable material and Aberdeen was mining slow in January. They had had a fatal --- their stockpiles are low so they're trying to get all of the reserves they can to blend, to keep West Ridge operating.

Q. Okay.

A. So they're looking and they had gone and ---.

Q. That was their reason, that was Laine Adair's reason or whoever was running that operation to continue to do some pillar mining, or robbing mining or retreat mining of some kind to get that coal to blend, not any influence by Murray.

A. Right. That's what I think, because it'd also gone into South Crandall Canyon and they thought they were going to be able to develop that.

Q. Well, why would Murray buy that?

A. He also has Lila Canyon.

Q. I didn't ask you that, I didn't ask you what else he had.

A. He bought all of the Andalex properties.

Q. Okay. And it just went in with part of it.

A. Right, that's the --- Andalex properties were Tower properties which were Pinnacle Mine and Aberdeen Mine, West Ridge Mine, and the Crandall Canyon and South Crandall Canyon properties.

Q. Okay.

A. So that was a purchase of the whole deal.

Q. So this mine primarily --- when Andalex reached there it was primarily mined out in their opinion?

A. Yes, and they started South Crandall Canyon --- to back up two steps back behind that, the initial reserves adjacent to them, they had these reserves and they go in and put their close bid in to BLM or whoever, Minerals Management or whoever that goes into. Well, they probably just put in what they were paying currently royalties. Well, Utah Power and Energy West went over and submitted a bid for that that overbid more per ton or whatever and they just chopped the legs out from under Crandall Canyon because now they had nowhere to go where they planned on mining to.

Deer Creek Mine now had those reserves and was going that way so they had to draw back and punt. On one side of the mine it was too low to mine, even got some little bitty short longwall panels where they were just like you said trying to hit and miss and hunt around just any place they could to mine because they're on oxygen and the plug is going to be pulled anytime. Then they tried the South Crandall Mine and it was too low in there to mine, so that South Crandall, they didn't do enough drill hole or find out where they went. They thought the coal was there, they even had

an entry they couldn't get all of their equipment though, they couldn't get enough air back in there. So that again petered out so this was what they were trying to find coal to blend with West Ridge.

Q. Okay. So you didn't --- did you see any change in anything after Murray took over?

A. No. I never dealt with Mr. Murray in our plan approval process. The only difference was is they brought David Hibbs out from Kentucky to work with the plans and some of the other engineers that we worked with were real good in the plan review process left, John Lewis and oh, I know the young engineer that worked at Crandall, those guys left Mr. Murray's ---. Mr. Hibbs took over that came out from Kentucky and he wasn't seasoned with the way we do things and that's how we end up with nominal pillar lengths, I think. Because of a lot of things, but we was still training him and working on him there. So personnel changes were some changes. At the Aberdeen Mine, the Green Family said they had them they started at the far back and they mined us up on a rock and then they came down a slope and that's where they had the bounce that killed Shane over at Aberdeen Mine. And so I know Mr. Murray, they said he didn't have to go up and get that hard coal, it's hard on the equipment and they could cut the panel length off, and they credited Mr. Murray with making this great decision. I think it was mainly because they couldn't get their gate developed back there far enough and they need a place to take their longwall, you know?

Q. But you hadn't seen any --- or have you seen any change, any pressures or any difference like that since Murray took over the approved plans at these mines?

A. No, and the only deal I've actually had with the Murray hierarchy was going --- after we rescinded the Aberdeen was getting that plan back approved.

Q. That's where you went to tech support in Pittsburgh.

A. We went to tech support, we had meetings in Denver with Murray people, we had --- and then we went, tech support had whole bunches of Murray people.

Q. Okay.

MR. PAVLOVICH:

Let's take a short five minute break. Try to limit to five minutes and then we'll come back and wrap this thing up.

SHORT BREAK TAKEN

MR. PAVLOVICH :

Billy, do you know why you were not present at the Crandall Mine during the rescue effort?

A. I do not. The district manager, Allyn Davis, took with him Bob Cornett and Don Gibson that morning. I was on leave August 7th and I got a call at home stating that we had trapped miners and come to work. I reported to the office that Monday morning and they were taking those people, Bill Knepp and myself. Bill Knepp's the ADM for technical services and myself were left in the office. The only justification for not having a person with my experience and knowledge out on site would be that they knew there would be a tremendous amount of questions coming from outside and they wanted somebody knowledgeable in the district office to answer those questions.

BY MR. TEASTER:

Q. What were you doing during this time?

A. I answered questions from all fronts, including if the people at the mines had had a question. Mainly it was questions from the administrators office, the Coal Mine Health and Safety in Arlington, and providing them with the information and as much details about plans or whatever. But I was not participatory in the recovery in any manner.

Q. Do you know why neither Pete Del Duca or Kathleen Kelleher were not picked to go to the mine?

A. Pete Del Duca has no experience and would absolutely have nothing advantageous to add to the situation. Ms. Kelleher had previously been having some Ex. (b)(6) and Ex. (b)(7)(C) [redacted] And in addition with the other people in that environment, that would probably be an improper choice of a person to take to that, however, myself I've been in --- I have no problem, I mean no more problems than anyone else dealing with Ex. (b)(6) and Ex so I could have functioned in that environment.

Q. Were you consulted or was any of your roof control people consulted regarding the support plan for the rescue efforts?

A. No.

Q. What experience have you had with these rock props?

A. We have a rock props installed in several of our mines. They're installed with a load, it becomes a static load they do not have a dynamic way of saying that if something were to happen that took their static load away that they could support, they're dynamic meaning that once you pressurize them at a certain amount then the way they --- they resist the thing, they don't push back. One of the things that happens in a lot of our bounces is, you mentioned earlier the roof is kind of elastic it moves. When we have some of these pillar bounces in addition if it's a large bounce it goes --- not only does it go out it goes down and up that's why, you know, pillar bounce you'll get the floor, put pressure on the floor you'll blow the floor up. It'll also actually push the roof up somewhat before it blows out, so when that happens, unless that rock prop is tied in to something, there's a few microseconds or however long until

that roof comes back that that rock prop is essentially free standing.

MR. PAVLOVICH:

So in essence what you're saying is they may not have --- it may have a lot of vertical support but not much lateral support?

A. At that time they have zero lateral support.

BY MR. TEASTER:

Q. And zero vertical because they separate ---.

A. But the roof will come in --- if a roof --- it's almost an instantaneous thing, it's up and down.

Q. Do you have any actual experience where that's occurred?

A. You can see it in a land --- a pillar bounces before, you know, where the rock props --- you know, they're put in with enough --- just two or three feet of the pillar blow out, you know, the rock prop will hold it, it will be in a mesh but if it's a big enough bounce that it pops up the roof then they'll tilt out.

Q. So you've seen them blown out before?

A. Yeah.

Q. So what did you think when you heard that's what they were using for support?

A. I was wondering how they were tying them in because, you know, what they do at Crandall Canyon Mine --- or not Crandall Canyon, at the Aberdeen Mines, they'd run cables and they go around and bolt them back into the side pillar, or now I think they're bolting them into the roof. So you know, Crandall had a coal floor so that probably wouldn't be good. The pillar that is already --- you can't bolt them into that so I wondered --- they said they were tying them together but I wonder what they were tying them to, and maybe what would have been the best thing to do is move them some way and bolt them into the roof. And from ---.

Q. And they may still blow out but --- or get knocked out but they're not going to fly across the ---.

A. Right. They're not going to go all the way across and then if you got the mesh with them, hopefully that mesh --- and depending on how much slack you have in the cable that was there. And I don't know, they may have been doing that. I don't know if they were bolting them in or they were just --- the impression I got is they were just tying them together with cables.

MR. PAVLOVICH:

Right. Have you given any thought to a different type of support system or some protection that you would utilize different from what they were using?

A. No, I haven't. I wasn't there. My impression of what could be done, it was based on essentially the TV cameras showing the conditions, the roof looked excellent, I could see the wire mesh, I could see part of the rib line where the initial bounce is, it bounced it out, but I could see wire mesh, I could see the bolts in there, they weren't affected. So the roof looked good, I assumed the floor had come up, you know, it looked like, you know, maybe they're losing part of the floor but without being there and actually observing and looking at it, you know, 400 miles away, you can't second guess what the people inside are doing.

MR. PAVLOVICH:

Did you feel, Billy, like you should have been directed to go to the mine?

A. I think I should have been part of the first team sent to the mine, yes.

MR. PAVLOVICH:

Because of your knowledge and experience?

A. Because of my knowledge and experience. Again you have --- and my employee, which now he's SI, but he's --- Gary Jensen's there and Gary came, you know, he doesn't have experience in those kind of conditions.

MR. PAVLOVICH:

He's more there as a rescue team member.

A. He's a rescue team member but still, you know, you got to have --- you should have --- you know, yes, I think I should have been there. You should have the knowledge, the expert, we're lacking --- MSHA every year is losing knowledge. Why not use what knowledge you have. They brought tech support in, those gentlemen's main experience is back east, they're not experienced in the Wasatch, blue cliffs, bounces and areas like that. They did the best of their abilities. Could I have done anything better I don't know. Would I have done anything better, you know, at least I know that you got to anchor the rock props someway. I mean, you know, again to have the company people that are there that are very knowledgeable and I understand that they probably had some additional people. I don't know who those people were, but ---.

BY MR. TEASTER:

Q. Did you discuss with Al or Billy or Bill Knepp as to why you were not sent to the mine?

A. I asked Bill Knepp and he said it was Allyn's decision. I said one of us should be there and he said it's Al's decision. And I don't know, you know, maybe Al knew that Kevin Stricklin and Mr. Stickler's coming and that he --- you know, with those and himself, Al's knowledgeable and that that was enough expertise. Also I'm not the best person at keeping my mouth shut when I think things are not going the way they should. And regardless of whether it was Kevin Strickland or Mr. Stickler, I would

voice my opinion and sometimes that's not good in an emergency stressful situation.

Q. I would think you'd want everybody's opinion.

A. Some people don't.

Q. So were you ever told we didn't want your opinion, Bill?

A. Yes. I've been told to, you know ---.

Q. In particular over at Crandall Canyon?

A. No, not over at Crandall Canyon.

MR. PAVLOVICH:

Do you ever get any pressures from Bob Murray or anybody to expedite one of their plans through?

A. No. The plans submitted by Genwal and Aberdeen usually are done in a timely manner. And when we are late or that we end up having to rush, whether it was because they had been in our queue a long enough period of time that it's become a rush situation because of our not being able to get to the plan, but I've never got a plan saying, you know, we've got to have this tomorrow that I can recall right now. Sometimes on a K Order or something like that maybe, you know, at the Aberdeen Mine or something we've had to rush some plans through, but that's MSHA's function, not Mr. Murray or his staff's function.

MR. PAVLOVICH:

Do you ever get any pressure from outside sources to approve a plan that you disagreed with?

A. No.

MR. PAVLOVICH:

Anybody from inside the agency?

A. If I disagree with plans within District Nine, I voice my concerns. And if that

plan is still decided to be approved, then that is the district manager or the ADM, that's their decision and that's their position and they have different criteria they have to go by than I. They have to look at enforcement, they have to look at political, they have to look at policy. They have different things and once the decision is made by the district manager to approve a plan that I've voiced concerns about or whatever, then that becomes a District Nine plan that is my plan and I support that decision.

MR. PAVLOVICH:

You said earlier that they pretty much accepted your expertise and experience and went along pretty much with what you recommended. Have you had an occasion where that's happened, where they've approved a plan that you disagreed with?

A. Yes.

MR. PAVLOVICH:

Has that happened frequently?

A. No. No. Three.

MR. PAVLOVICH:

Has it happened recently?

A. I don't recall recently. I know in one of them Mr. Davis --- they approved a plan and Mr. Davis came in and he said I don't approve of it he tried to explain why it had to be approved and I told him, I said, you know, it's --- that's a decision you have to make, it is now my plant because, you know, it's the roof control plan and that's the way it is.

MR. PAVLOVICH:

Sure.

A. And that's ---.

MR. PAVLOVICH:

But he explained to you why his reason was?

A. Yes.

BY MR. TEASTER:

Q. Okay. Billy, you've been out here 27 years or whatever and basically involved in roof your whole career and are very knowledgeable. Have you investigated and observed a lot of bumps?

A. Yes.

Q. I mean going inside and looking at them afterward?

A. Yes.

Q. Have you ever seen a bump of this magnitude before where it covered this big of an area?

A. No, I have not. Soldier Canyon had a pretty big bump but I don't recall it taking as a big of an area. Balina had an air bounce, Castle Gate had, I think, three of the big --- that a 200 hundred system with three of the big stable pillars that turned out not to be stable when three of them blew and ---.

Q. Okay. So you've seen them where three or four pillars blow out?

A. Yes.

Q. But not 50 pillars or whatever?

A. Not from Crosscut 139 to 100 and --- you know, 20 rows of pillars or 30 rows.

Q. You never saw that before? And entries totally filled with coal, have you ever seen that before?

A. No, totally clogged up. No. In total it's just when --- Gary, you know, they usually try to go in there. Gary Christiansen went in they had the fresh airbase established and Gary Christiansen and another person went inby to try to see how far,

and I think they were back at Crosscut 119 and he got to Crosscut 126 essentially where the ---.

Q. Crawling overtop.

A. Yeah, crawling overtop to where the second event occurred. And when he got to Crosscut 126, he said it was solid coal all across there.

Q. And you'd never seen that before?

A. I've never.

Q. Had you ever seen anybody try and clean up a bounce like this?

A. Mine through --- no, not ---.

Q. I mean usually when you have one you just ---

A. Back up.

Q. --- leave it or back up, get away from it; right?

A. Right.

Q. You never saw anybody try and load going out before?

A. No. Typically what you do is you danger that off, you mine around it and mine by it if it's --- you know, at Castle Gate it's, you know, when the pillars blew you try to mine by there, you don't allow anybody to go into that area.

Q. So it's not a common thing is when you have one bounce that you go in and load the coal out?

A. No, it's not.

MR. PAVLOVICH:

Billy, are you familiar with the bouncing that occurred between August the 6th and August the 16th, the ten day period between the two accidents?

A. I am. And it's surprising because it sounded as if, you know, that these pillars are balanced and then they're going in you'd think that they'd yield and, you know, and

at the extent of the damage that was described to me that the cores would be gone but --- and that they wouldn't be able to bounce again and then they went in. It was troublesome with, you know, as they're mining it came all the way back out I think to Crosscut 90 or something and started back in again. And that bouncing --- but when they got up to Crosscut 126 again now, they're to the area that from the initial bounce had been combined so that one pillar wasn't yielding and it was solid. And then in the subsequent bounces, there was no way that could relieve itself in there because it was already solid before they'd had areas for some of that to relieve, and the subsequent bounces filled those areas in and they were still getting some air across some of that because they bring the ventilation up one entry, and I think they were mining in every so often into the crosscut. But at pillar 126, then you're going into an area that from the get go has been solid so that would be --- if you don't have bouncing outby then you know you're going to have bouncing, pretty good bouncing inby from there. And they told me they were putting the rock props in at some phenomenally high strength so they think that that's going to hold that.

MR. PAVLOVICH:

Is 1,100 psi high strength?

A. I think that's pretty high. I mean usually you got to think they're put in around 400 to 800.

BY MR. TEASTER:

Q. When you heard about the extent of the bounce and obviously you heard that pretty quick, I mean did you think there was much of a chance for survival of anybody that was on that section with your known experience about bounces?

A. The only chance of survival I thought is if it occurred outby, you know, like it started at Crosscut 126 so that would leave them enough room and if they could get

into that bleeder entry that we --- you know, if it was inby and was okay and they could get into the bleeder entry that it would ---. They could put a curtain up because no air was going in so they wouldn't sweep the gob around on them but they --- that would be a chamber that they could get to, that would be their only chance if it was a total outby bounce and it didn't get them. When they put the first drill hole down and came back with less than eight percent oxygen and that was what was in main west, I think it was instantaneous they never had a chance. If even the concussion didn't smother them and kill them, initially something breached that barrier on that side and that in its exhausting system and the return was over there so the air would have come up, I mean just initially and I guess it went on for a while, so initially you would have had air coming up and so ---.

Q. So the concussion both outby and inby wherever it bounced would have been tremendous; right?

A. It would have been tremendous. And talking with people that are in bounces, you know, I've asked them, I said, did you try to put your rescuer on and they all said no, it never occurred to me to try to put my --- to don my rescuer. The initial bounce, you're disoriented, either you're knocked down or you feel it or you're thrown over or coal's thrown up against you and then it's so dusty. And if you rotate around, they have no idea where their orientation is and then the ventilation's choked off so that would never clear. I mean those guys wouldn't even know which way to go to go back into the other entry.

Q. Because of the dust?

A. Because of the dust and everything. They wouldn't know left from right and that, so even if they weren't instantaneous over, you know, from concussion kill, then it was still giving time for the black down before they realized they needed to put

their ---.

Q. And where did you think the low oxygen came from?

A. One of the gobs.

Q. Okay. So you felt it breached the barrier somewhere into the gob?

A. Yes.

Q. Okay.

A. And I don't know if it was the --- and I'm assuming both gobs had eight, slightly less then eight percent. We know when the mine rescue team went into main west that that's what they had there. My assumption is that the gob on the other side had the same atmosphere, so that came ---.

Q. From another gob.

A. And it may have, you know --- if it came on and if the pillars in the main west failed and some it would have pushed --- a big air blast would have pushed that in too with the failure of the original amount. One of the drill holes did go down into the back bleeder and the oxygen content was around 17 percent back there.

Q. But weren't they already blowing oxygen into some of the holes when that happened?

A. No. No, I think --- well, they were in the --- where the working area where they thought they might be.

MR. PAVLOVICH:

It was blowing down number one borehole.

A. Right, in the working area, you know, but I don't know if that's enough to carry it back in there. It could be.

BY MR. TEASTER:

Q. It's a pretty confined area.

A. Yeah, but quite a ways back there.

Q. Okay.

A. But I don't think they --- probably not within two steps of wherever they were at the time of the event.

Q. Well, somewhere along the line it said the guy that was driving that pickup truck it blew that pickup truck totally sideways.

A. From the air blast?

Q. The mechanic that was coming out ---

A. Yeah.

Q. --- was like at 105 or something and where'd I see that. It blew the whole truck totally sideways.

A. So they would have been killed in that initial concussion because it would have went both ways.

Q. Yeah, even if it was isolated around 126 to 130 or something.

A. Yeah, it would have ---.

MR. PAVLOVICH:

Yeah, well, of course they know that now but they drilled that one borehole down up at 139 ---

A. Right.

MR. PAVLOVICH:

--- and it was no void at all there at 139 zone.

A. Right. At the kitchen, there was no void and over where they thought the miner was, and in addition to that, one of the boreholes that went through the coal seam by the time they got the camera in there to start looking the mud was coming back up the

--- so whatever was in there was coming up.

BY MR. TEASTER:

Q. We got some questions that's directly related to the roof control plan which you referred to. The roof control plan addendum dated February 2nd of this year and June 15th of this year stated that the pillar recovery will be done in accordance with the approved roof control plan. Which pillar sequence was utilized?

A. Under the south barrier it would essentially be similar to what was on page 88.

Q. Okay. But they would have had the option to use any of those?

A. Correct. Correct.

Q. And they could have used either Timbers or the MRS or did you specify MRS?

A. I'm not sure that we specified MRS, it was understood they were going to be using MRS.

Q. Okay.

A. We have Timber approved in the plan.

Q. Timber approved in the plan?

A. Yes, sir.

Q, Okay.

A. But I don't think with Timber it's left and right; is it?

Q. I don't know.

A. Typically it's not.

Q. Yeah, but it was hit in one side.

A. Right, and if they want a Christmas tree then they have to use MRSs.

Q. Okay.

A. Or left and right, we call it left and right.

MR. PAVLOVICH:

So they had an option to use any of those plans that was in there, they could have used a Christmas tree?

A. Right. And that's what they were doing, they were Christmas treeing, making their way taking left and right out of the middle of the barrier and the next pillar, and then coming around and then after they totaled that pillar, and half the other one's on the last pillar.

BY MR. TEASTER:

Q. It's really the only one they could use, Billy, because the pillar lengths of 139 feet, I mean you got one in there that shows taking a couple of slabs and then hitting them from the crosscut but you couldn't do that with a pillar that low, so ---

A. Correct.

Q. --- it was like these. Okay.

A. Yeah, that was up when ---.

Q. These show a pillar 63 feet and you see where you took these. Well, that wouldn't be functional on a --- you almost had to do the long pillars.

A. Right.

Q. Okay.

A. Right.

Q. And you expect that's what they were doing; right?

A. Yeah. Like say the one on page, yeah, page 14, no splits ---.

Q. What number is that now so I ---?

A. This is page ---.

Q. No, the one Ex. (b)(6) and Ex. (b)(7)(--- he's showing me one back there that he's disagreeing with me, I think. So what number page is that, Ex. (b)(6) and Ex. (b)(7)(C

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

Ten.

MR. TEASTER:

Page ten.

A. Page ten.

BY MR. TEASTER:

Q. No, you're in addendums there, I think. Let's see I looked at that one earlier. Here it is, Billy, right here.

A. Okay. This is a pillar mining?

Q. Uh-huh (yes).

A. So they go and mine from one side.

Q. Okay. So but they weren't doing that one?

A. No.

Q. This is with timbers.

A. Right. And that's why I say they can't ---.

Q. And they were using MRSs up there to the best of your knowledge; right?

A. Correct. See, they started on the barrier.

Q. Right.

A. Went through there and then they had to come around in between the two pillars, cut from one side and then come around.

Q. And cut them all the way across basically?

A. Right.

Q. Okay. All right.

MR. PAVLOVICH:

Okay. The Agapito report dated August the 9th said that a constant and relatively rapid rate of pillaring is beneficial for controlling the risk of

excessive squeezing and bumping. What was the mining history during retreat? Were there delays, breakdowns or any other circumstances that cause a pillar line to be set or to set for extended periods?

A. No. As far as I know, there were not. And again, we're back to me making them leave the extra pillars that was --- to my knowledge, that was the only break in the rapid retreat of that pillar. So it's me again disagreeing or making recommendations that are different than Agapito.

BY MR. TEASTER:

Q. Billy, I guess I've been told different somewhere along my career, but isn't it true the faster you mine say a longwall face, the more chance you have of an outburst as opposed to taking slow cuts on the face?

A. Well, as we looked at that big sharp thing ---.

Q. Yes.

A. If that's really high stress, then what you'll have to do is reduce the speed of the ---.

Q. You slow down.

A. You slow down and maybe even cut the depth of the web to let that migrate down the face and move that peak down, so typically ---.

Q. So the statement then is not really true?

A. Well, in that on the pillar mining, what you want to do is try to get that to get under the back of the stress and try to keep that going back toward the gob, and then still letting it build outby.

Q. Okay. So it may be different on pillar mining than longwall mining?

A. Yeah.

Q. Okay.

A. But I think, too, if you just --- when hell bent and you didn't have to do pillar moves, you could run into the same situation where you mine through that pillar too fast and before it had a chance to dissipate the load and you could create a bounce and then recent, over at the Bowie Mine, recent --- they were having floor bounces and when I went over there on development, I cut them down to one shift a day mining so that it would ---.

Q. Slow it down.

A. And then when they went back to two shifts mining, they had a bounce again, so ---.

Q. So the slower rate was more beneficial?

A. I think slow, not having breaks, you know, breaking down and waiting but consistent. I think there's a lot to be said, just not go fast and then stop or not going too slow but, you know, just like a consistent rate but sometimes that stress has to work out.

Q. Redistribute itself.

A. Redistribute itself, yes, sir.

Q. The roof control addendum dated the 21st of November `06 specifies six roof bolts per row as an increase from the normal four a row, roof bolts per row. What was the reasoning for this increase in the width wise spacing while the length wise spacing remains the same?

A. Just as the width has tried to compensate somewhat, we know the ribs are going to slough, they're getting high stress so that pillar on those two bolts on the rib line are going --- the distance from there to the pillar are going to increase, plus we're seeing that the pillars are yielding. So now even with the increase that you get a little bit of sloughing, so if it started out at two feet from the rib and the rib sloughs a foot

that's three feet but now that makes a foot or two of the skin's going to yield, so you're going to have that extra distance. And so this, you know, it was to do a span and then also along the --- when you're retrieve mining back, it just helps with the intersection support there. Although, you know, I just added additional support to the roof and --- typically the roof in these mines are pretty good. They run into conditions occasionally.

Q. The January 18th, `07 roof control addendum required that six foot bolts be utilized when roof coal was left during development of the main west north barrier panel. On March the 8th, 2007 addendum for development of the main west south barrier, the panel did not require six foot roof bolts, but allowed the roof coal could be left. Roof coal may be left where areas of weak immediate roof exist. Why was a six foot bolt not needed in the south barrier?

A. They were using six foot bolts. I don't know anything other than when I went in, they specifically stated in the plan but they used six foot bolts.

Q. You don't know why the plan would have allowed them to use a lesser roof bolt?

A. That's just an oversight on my part.

Q. The roof control plan page five material list specifying installed bolts and resin grouted mechanical anchor bolts, the installed bolt requires a test hole, one per place will be drilled while the resin grouted mechanical anchor bolt doesn't and both are the same type of bolts. There is no way specified in the plan to check tension or the torque which is specified as 100 to 300 pounds and 150 to 350 pounds.

A. On which bolts that?

MR. PAVLOVICH:

The install bolt. Name install.

A. I think it's a ---. Install three or ---.

BY MR. TEASTER:

Q. Look at page five on that roof control plan, it's a material list. It's your list the mine operator tries to cover everything in the book. If they can find it on the property, then they can install it.

A. This thing is not organized very well or something here.

Q. Well, I think all the addendums are in the front and then you get to the ---.

A. To the good stuff. Which page is it in?

Q. Page five.

A. Page five. We're closing in on it. Okay. The install bolt is test hole one per place, is test hole and then since it's a resin grouted anchor ---

Q. Right.

A. --- then we typically only have to have them do the click it test at 150.

UNIDENTIFIED SPEAKER:

What was the difference if the install bolt did it or the test hole in place or the resin grouted anchor bolt be ---?

A. The install bolt doesn't have as long of an anchor.

UNIDENTIFIED SPEAKER:

What's the difference when they're both the same bolt; right?

A. Well, the resin grouted mechanical anchor, essentially they're the same thing.

BY MR. TEASTER:

Q. So I guess what the question is, is one says drill a test hole and the other one says you don't have to, or it doesn't require a test hole?

A. Yeah.

UNIDENTIFIED SPEAKER:

So did they ever drill one or ---?

A. The same width, same diameter. They just changed the name of it, they don't have a draw and --- they don't call it an install book, they don't have to do a test hole. They can call it Fred or James or whatever they want to they don't have to do a test hole.

UNIDENTIFIED SPEAKER:

How do they check the tension on those?

A. We use the 150. When we go to check it or they do it since it's presently sprouted in and typically they just have to do a click test on it.

UNIDENTIFIED SPEAKER:

You don't have them put a dry bolt and check the actual cord?

A. Uh-uh (no). Nope.

BY MR. TEASTER:

Q. Roof control plan on page seven option two under twin bolting, roof bolting sequence, typical crosscuts, inboard controls, bottom right on the page indicates the roof bolting sequence from outby to inby across the mouths of the crosscut using only the right side drill bolt. How can this bolting sequence be used and still comply with 75209D?

A. With the option two?

Q. Yeah, it says people should work or travel between the support device and the ATR system.

A. And that's outboard controls?

Q. Yes, inboard.

A. That would work with inboard controls but it wouldn't work for the outboard controls.

UNIDENTIFIED SPEAKER:

I mean the operator is in a lot better position with inboard, how do you have the ATRS within five feet of another bolt or --- to use that same, do you bolt straight up the ---?

A. Yeah. And it wouldn't work with that bore because he'd have his back to the unsupported area. On the right side that wouldn't work. Not good.

BY MR. TEASTER:

Q. Okay. The roof control plan on pages 37 and 38 indicates a cut taken to the right and then a cut taken to the left. Which side is the miner cable on and what exposure to the mine operator to the unsupported cut number one when taking cut number two? Most of the sequence is drawing cuts to the right first and then adjacent cut to the left.

A. On page 38?

Q. Thirty-seven (37), 38.

MR. PAVLOVICH:

Do you want to explain it there, [redacted] what you're talking about? Just come up and show Billy on the --- it's easier because ---.

A. It shows the cut to the right.

BY MR. TEASTER:

Q. Yes.

A. And then left?

Q. Yeah.

A. And you say it should be to the left?

Q. What side is the miner cable on?

UNIDENTIFIED SPEAKER:

If the miner cable is on the right, you always took the cut to the left first and then took a cut to the right all the way out with the Christmas tree. Is there a reason why you take the one to the right first and then take one to the left?

A. Typically what we try to do is, here it probably wouldn't matter as much but when they get out and then are backing out, they're backing back into the crosscut that they're going to do, so they take the cut on this side first and then like if they were doing another cut on this side that they would take a cut to the right. And then the last cut would be to the left and then the miner would back up instead of having to back toward, you know, like it was over on say on the pillar here instead of having to back into the area, so that's typically ---.

UNIDENTIFIED SPEAKER:

Any of these?

UNIDENTIFIED SPEAKER:

I guess in terms of here, you got an open cut and the cables on this side if it's --- I've always seen left cut taken first and then the right because the miner cable's on the right and somebody has to deal with the miner cable. And then if you take this one first, then you've got an open space while you're mining this and somebody has to still mess with this cable even if you got MRSs.

A. Well, once this one's cut, then the MRSs can move up past that cut. And you know, it's like instead of being in this position you would move on more up to closer to this --- this would be half so the V would actually be across that cut mostly.

UNIDENTIFIED SPEAKER:

You still get the motor in by the time you get that miner in there. I just --- that looked different than anything I've ever seen before. I thought maybe there was a reason the cable was on the left hand side, it would make more

sense then. We have miners with cables on the left, cable and the water hose. I mean normally they're on the right hand side but they can put them on either side.

A. Yeah, I'm trying to remember where --- I don't remember what side it's on.

MR. PAVLOVICH:

There wasn't any particular reason though that you remember why that was done?

A. No. Like I said, typically the reason is that when they finish a pillar and have a pillar on the left and a pillar on the right, if you take the last cut in the pillar on the right then the miner's backing out towards the gob area. If you take the last cut on the left then the miner's backing around to the bottom of the solid pillar, the pillar on the left would be totally mined, the pillar on the right would be partially still there so that they can back toward that. So we typically start on that side and flip flop them back and forth. As Ex. (b)(6) and Ex. (b) brought up, sometimes in some plans that causes problems of being able to see to take that cut because, you know, where the bent tubing is or what everything is, so in those instances if we go there and we see that it's an issue, then we'll change the sequence to start the cut on the other side depending on how the ventilation or cable or operational problem is.

BY MR. TEASTER:

Q. Okay. Roof control plan pages 10 and 11 indicate the mining of a push up without the requirements of 75207. The drawing shows that the final stump is being left in place. Cuts 9 and 13 serve the purpose of being a pushup cut for the final stump without the requirements of one of the roadway --- one roadway and narrow down to 16 foot for the double roll of post.

A. Since we're having them leave eight foot wide stumps we consider that not to be the --- you know, if they were mining that stump, then that would be the final push

out. But they're leaving, you know, eight foot wide stumps in there so it isn't the final push out, it's just the last lift in that pillar. And if they wanted to take that final stump then that would be the final push out.

Q. How much could you leave there and still call it --- not call it a push out, call it a final lift?

A. A lot of times it depends on the mine. Some of them are done to like 6 or 7 feet, other ones are 12 feet. So it depends on that mine and that condition.

Q. So you can go down as much as six or seven feet and leaving that much on either side and call that a lift and not a final push out?

A. Right. But then some people want to do the --- they don't want to leave that stump down on that side for some odd reason then they have to, you know ---.

Q. They'll mine and then they treat it as a push out?

A. Right.

UNIDENTIFIED SPEAKER:

So the other one's not a push out?

MR. PAVLOVICH:

Even though you take that corner off.

BY MR. TEASTER:

Q. You're not calling that a push out?

A. No, because we're leaving this stump here to do it, here's 12 foot.

Q. But here we're calling this a push out but you still got a stump here?

A. Yeah, but they're coming in. Yeah, they came in and mined that one right into the intersection.

Q. I always thought push out was considered any time you make this intersection bigger because you took the bottom of the pillar out. It was the way I was raised.

A. Yeah. Well, pretty soon you'll hear they've come in and they've got and this is --- we consider that to be the final stump and then --- but they're mining it.

Q. So you can take this all the way down to here and as long as you didn't take the very corner, it wouldn't be a push out then?

A. Well, yeah. We'd stated this since like, you know, 10 feet or 8 feet, 12 feet like it was on that other one, 12 feet that they ---.

Q. Always just considered if you make this intersection and took this corner out --

-

A. Uh-huh (yes).

Q. --- then this was a push out but you guys don't look at it that way.

A. Yeah.

Q. Well, we got stumps over here but it's not affecting this. It's different.

A. Yeah.

Q. Okay. On page 15 of the roof control plan concerning tailgate support, when does the support have to be installed for proposed tailgates 75 222GII, systematic supplemental supports should be installed throughout the proposed tailgate entry for each subsequent panel in advance of the final abutment stresses of the panel being mined?

A. What page is that?

Q. It's on page 15.

A. Boy, you guys are looking at everything, huh? Geez. Okay.

MR. PAVLOVICH:

I guess that question is, when does the roof support have to be installed for the proposed tailgate.

A. Okay. That varies. What was the regulation you read that ---?

BY MR. TEASTER:

Q. 222G.

A. 222G is a fracture area, so it's not a standard, right. So it's a recommendation that be in the plan, it's just a criteria on what should be in the plan not must be in the plan.

UNIDENTIFIED SPEAKER:

That's why it says should?

A. Pardon me.

UNIDENTIFIED SPEAKER:

It said should and not shall.

A. Right. And it's criteria right and so it's not ---.

BY MR. TEASTER:

Q. So they don't have any requirement in the plan though that says when it should be?

A. Well, typically we try to say that the first tailgate of --- there's nowhere in there that states that?

Q. Well, that's what [redacted] said.

A. Well, it says --- okay, it's 250 feet outby the face in the active tailgate so the current tailgate has to be 250 feet outby the face.

Q. And maintain to that point?

A. Right. So it has to be 250 outby or maintained adjacent to the face on the head gate side you're going to retreat, which means then the next tailgate, it would be installed in its entirety for the length of the tailgate prior to starting the next panel. That ore is typically removed from the plan and what we try to do is get in most of our plans so that the first panel will be installed at its entirety before it starts. And now on

each subsequent, it will be installed adjacent to the longwall face and the head gate of what will be the next tailgate, so therefore each subsequent panel has that in there.

UNIDENTIFIED SPEAKER:

You say typically, Billy, is that a function of this base plan date that this is older?

A. Yeah.

UNIDENTIFIED SPEAKER:

Is that something that you were doing over the last several years and this is just ---?

A. Right. This is 2004, you know, if a review of this --- and this plan probably wasn't reviewed because they haven't been longwall mining in forever, you know, for a long time so this was ---. Our plan is now, the ore would be taken out of there, it would have to be installed in the head gate entries of what would be the future panel either adjacent to the face --- and that depends on type of configuration. A two-entry mine has to use that entry for the haulage way to get stuff, materials to the longwall face and people and all that so that entry --- so it's almost impossible to get that outby the longwall face. In a three-entry system that the longwall center entry is a haulage entry and that number three entry will be the next tailgate then we'd probably have something about being --- install 250 feet outby or a certain distance outby so that you keep those people out of the abutment that the pressure is going in and you keep them away from all the other congestion that's going up there around the head gate. And that's in most of our plans now. This is a lamed up plan.

Q. Well, I mean we're not going to get a chance to review all the roof control plans, so we looked at this one because it was involved ---.

A. We can use all the assistance we can --- you're willing to give us.

Q. Okay. We're here to help.

A. Yeah.

Q. Roof control plan pages 23 and 24 did not stipulate that MRSs should be ---.

MR. PAVLOVICH:

Let him find 23 and 24 because it's --- I think it's easier to look at when he's ---.

A. Okay.

BY MR. TEASTER:

Q. Okay. I'll start back over. That they do not stipulate the MRSs should be moved one at a time and no further than one half the length wise distance before repressurizing. The best practices and recommendations from technical support on mining with MRS during pillar extraction specifies that adjacent MRS units should be walked, moved no more than one half the canopy distance and then reset.

A. Well, typically that's in our plans, but again I don't know ---. If it's not in here, that's a deficiency in a plan.

Q. But you normally require that in your plans?

A. Yeah. Did you look to see if it was on any of the other? Yeah, it's a deficiency in the plan. You need to send somebody over and help me do reviews.

Q. We'll do what we can to get you some help.

A. But as you noticed in like some of the lists it shows the MRSs being positioned by half of the other one or, you know, that they --- there's no one full length ahead of the other one and typically they're marched out in groups and that's stated on page 25 that they'll be, you know, in those positions.

Q. Billy, here at Crandall they've got two petitions for modifications for driving two entries and they state a reason for doing that is primarily to reduce the bumps.

And yet if you look at the mine, there's a lot of areas of the mines where they've driven four or five entries for retreat mining. And so what is the difference in the bump potential for head gate entries and just driving regular room for room and pillars?

A. Typically it's when the --- it's the bouncing occurs when the --- under the deeper cover on the gate roads when it's between the two longwalls. As we mentioned in earlier discussion, the first panel is pretty cheery regardless of whether you have two entries or three entries on either side of that gob. The second panel comes by that subjects those interior gate roads to a considerable amount of stress and then sometimes the third panel's even worse because you can get more loads distributed over on that. After that, it seems to even out in the fourth or fifth panel, our conditions are very similar. In the ---.

Q. Is it more likely to bump if you had four entries than two gate roads?

A. Yes. Typically it is, unless you have those four entries that were a super large pillar and the new pillars it would be. At Sufco, now they're getting into bumping with two large pillars, could they go to two small pillars and not yield, they're afraid that they yield too quickly on that. Castle Gate yielded with the big pillar, one big pillar. They tried the smaller pillars earlier and they yielded too fast at --- when it was Price River and Castle Gate, so they had too much conversions. At Aberdeen they're down to a two entry pillar that's less than 30 feet wide. I think it's somewhere around 26 feet wide. That pillar's still bumping on development and on retrieve slighting bumping and the floor is getting to bumping. And that's a barrier pillar and that's a panel and on the other side of that. There's not a longwall gob but there's a barrier panel on either side of that pillar, 600 foot wide barrier pillar, 400 foot wide in some areas under shallower cover and still having conditions.

At Sunnyside, they had a 350 foot barrier pillar from the setup room between that and water canyon mains. When that panel retreated about the width of the longwall, 500 or 600 feet, that barrier pillar, the panels went over the barrier pillar and bounced the four entry mains and that was going down them to kind of finish them off. Those pillars, I think, were in the 80 by 60, or 100 by 80 range. So it even stresses when over the barrier pillar and everything bounced the whole set of mains. The development the mains were developing down, so it's the pillar mining in between gobs again can be difficult. Typically pillar mining runs from a gob to one set with gob only on one side and a barrier or an unmined area on the other side. And when we're approving pillar plans, we don't approve the cut sequence to go from the barrier to the gob because that puts gob on either side, then essentially even if there's a little barrier pillar in between those two pillars. If you --- so that is typically mined from gob to solid and in those plans where it says mirror image may apply, we try to take that out because we don't want them to mine in back to the gob. Sometimes you'll end up with two gobs where you got an awkward configuration coming into mains and things and that has to be looked at very closely, where you're changing directions on pillar. And then that's in development and pillar and both you can get into some difficult situations and it's hard to picture, you know, when you're looking at just parts of a thing without looking at a mine. And even there getting that sequence down, and also it's very difficult because the panel may be developed on one side of this pillar. Now you're converging to another area that has a different size and different shaped pillars and that pulls your hair out, too, what can be approved. And then once you get it figured out on ground control and then you got to figure out if you can ventilate it, so just then you say no, you can't ventilate this because the air's going the wrong way or something you have to --- it's hard.

Q. Billy, who's responsible for pulling petitions for modifications that are no longer needed at a mine?

A. You have to have the mine agree --- or you don't really have to have the mine. If we determine that it's no longer done, then we in the district have to send a letter and justification and everything to Arlington and I think it's the office and variances that are in --- but I think we send our subdivision safety and they go ---.

Q. And who would initiate that action when you say we?

A. We in the district, we someone in the district that looks and determines that they don't need it. Although some of the mines do have input into it, you know, I guess they send the mine and they say no, we don't do it. Trail Mountain Mine which is closed or sealed, or it's temporarily abandoned I think is the term that they use, it has a two entry petition. They do not want their petition pulled because they keep saying we may go back someday and we want to implement our petition and somehow or another I don't think we've pulled that petition. We've tried but somehow they --- Energy West then comes through and says no, we don't want to give up our petition, and once it's been granted and then it's to that ID number. Apparently the mine does and I don't know all that ramifications, I know that --- but we initiate it in the district.

Q. Was there anything initiated to your knowledge on these two entries at Crandall?

A. No, I don't know that that's been initiated.

Q. Okay.

A. Like I said, I know the one at Trail Mountain was and it ran into some kind of problem.

Q. Do the mine operators in District Nine plot on the mine map each coal bump or outburst, bounce that's reportable under Part 50?

A. You know I'm not sure. I know they, you know, they're supposed to do it on a mine map at their facility and we don't necessarily have a copy that's made available to us for roof falls but I don't --- and you know we've issued citations for not plotting that but I'm not sure bumps go on that.

Q. You're not sure that they're required to go on there or they're putting them in there?

A. Well I'm not sure of either. I'd say ---.

Q. Well here's what it states, it states that ---.

MR. PAVLOVICH:

223B.

BY MR. TEASTER:

Q. Yeah, it says one, is above the anchorage zone of the roof bolts, impairs ventilation, impedes passage of persons, causes miners to be withdrawn from the exit area, affected area or disrupts regular mining activities for one hour. And this is for a coal burst.

A. That would be reported.

Q. It's reportable under Part 15?

A. Right.

MR. PAVLOVICH:

On the mine map.

A. But I don't know that it's required to be on the mine map.

UNIDENTIFIED SPEAKER:

Well this is what we're talking about, Billy, 223B ---

BY MR. TEASTER:

Q. Says ---.

UNIDENTIFIED SPEAKER:

--- is talking about what's to be recorded on the mine map.

BY MR. TEASTER:

Q. It's the same place where it says you have to plot roof --- and then it says coal bursts. None of us ever read past the word roof falls either, Billy.

A. I'm not sure if they're doing it or not.

MR. PAVLOVICH:

So you're obviously not reviewing that when you're approving plans to see if we've had any ---.

BY MR. TEASTER:

Q. You typically would on roof falls; right?

A. I don't have that map made available to us. What we do is we pull the accident injury data and then we look at this, so we're getting the bump and reportable, all the reportable accidents and even the ones that doesn't --- and you know this one does it says reportable or just --- I mean if they have a bump and it cuts a guy's ear, you got to plot it on the map.

Q. If it impedes his passage.

A. But if it cuts him on the ear it's a reportable accident because he's ---.

UNIDENTIFIED SPEAKER:

But this isn't talking about reportable, this is --- there's five criteria there ---.

UNIDENTIFIED SPEAKER:

To record it on the mine map.

A. Yeah.

UNIDENTIFIED SPEAKER:

It's different than the Part 50.

A. Okay. See, so we've been looking at more stuff than what would be on a mine map because we --- you know and that's what we did with looking at the Aberdeen mine to justify that. When we rescinded their plan, they had bumps that, you know, hurt guys' knees and they lost a day of work but ---.

UNIDENTIFIED SPEAKER:

But the difference here, Billy, is that you'd be able to go in to look at a map and see where you're not going to be able to pull that from what you're getting out of the Part 50.

A. Right. We would have to say, where did this happen and the same thing if we went to --- we'd have to have --- we've have to go the mine to get the map, too, because the map ---.

UNIDENTIFIED SPEAKER:

But it still doesn't seem to me that it's the same. I mean you wouldn't be able to duplicate what this map would be able to show. I mean you're not going to be able to say where it was.

A. Yeah, but typically I don't have that map I have to go to the mine.

UNIDENTIFIED SPEAKER:

I understand that. But if you're at the mine and you're asking about their bump history like we've been doing recently and it was recorded on a map, you'd be able to see well, it happened here on the gate road or it happened at this face position of the longwall; isn't that true?

A. And we can look at that and we see where the, you know, the accident occurred and that's like --- say that's how we did the old --- the 18 or 19 accidents that happened at Aberdeen. And then the final one, you know, when I sent them the letter

saying okay, you've had these events, send me a map with these on it then that's what we get.

UNIDENTIFIED SPEAKER:

Well, again, I agree. But that map was somewhat generic in that when you're talking about analyzing where they would say, okay, it happened on the head gate side here, but it didn't talk about relative position where you could correlate it to cover if you wanted to, and the position in the mine say relative to an adjacent panel that might have had bumps also.

A. Well, if they put it on a map like the one that Joe has, it has the coal contours but it doesn't have cover, either. I would have to have another map.

UNIDENTIFIED SPEAKER:

But all that you could get, I mean the map that they supply like for the Aberdeen analysis.

BY MR. TEASTER:

Q. But regardless of why the law says it says it's got to be on there, do you make them do it?

A. No.

Q. Okay.

A. No, I don't.

Q. That's all.

A. I haven't issued ---.

Q. No sense arguing why.

A. I haven't issued any violations for not putting ---.

Q. And you haven't really looked at it and asked them, well, let me see your map that shows bumps?

A. Right. When I want that, I request them out to be sent to me, you know, with the locations and they do it.

MR. PAVLOVICH:

Okay. Do you do it for roof falls?

A. Yes.

BY MR. TEASTER:

Q. So they do plot roof falls on the map at the mine but not necessarily bumps?

A. Right. We've issued citations for that ---.

Q. Okay.

A. And I'm not sure. I mean, I wasn't looking, because when I'm interested in the bumps, I tell them to send me something and they send it to me.

Q. Okay.

A. On a map.

Q. Okay.

MR. PAVLOVICH:

The mine map indicates 24 crosscuts and one entry in main west area of the mine between breaks 134 and 150 that are darkened in. What impact would this have to mining the adjacent barrier? And my legend indicates posted and not maintained. It needs some explanation.

A. These are areas we asked them about them and we look to see if they were reportable roof falls and they weren't. That's where the top coal ravel, they were losing pillar areas and, you know, most of them were just dangered off. It didn't fall above the anchorage zone. We also attributed that to part of the problem with the continuous haulage in areas in --- so we didn't, you know, it was a roof, it wasn't a pillar. The pillars still looked like they were stable in the area.

BY MR. TEASTER:

Q. It wasn't unusual looking to you to see a zone like this, knowing this bump happened here and all this was here?

A. Well, I think the bump was outby ---.

UNIDENTIFIED SPEAKER:

There's a break in that map.

BY MR. TEASTER:

Q. Oh, there's a break in the map it doesn't show where the bump was.

A. Yeah.

Q. Yeah, it's ---.

A. But we take that to be that there could be a condition going through there and in the north barrier there was roll in the coal that they had had problems with some of the roof and areas and a little bit of floor even there.

MR. PAVLOVICH:

Okay. Check this place over here, Billy, that indicates that that was driven over in there. It was adjacent to the bump area, the south barrier what was the reason for this place being --- one place being driven on?

A. The main west they were having water problems in there and that was a sump. And we discussed them mining the entry along adjacent to that and told them that they would have to do the advanced drilling and all that. And they didn't want to have to do the advanced drilling, plus they were afraid that if they dig at all sites or something happened and they broke into that old pillar, if that broke into that area then it would release all that water out into the ---.

BY MR. TEASTER:

Q. So that was a --- what was that, a sump?

A. A sump, yes.

Q. Okay.

A. And since this main west had water in it, you know, if you broke into that it could release cause an indentation in the south barrier.

MR. TEASTER:

Joe.

MR. PAVLOVICH:

Billy, when you first looked at this plan supplemental to mine either one of these barriers, north barrier would have been your first one you looked at. Did you have any concern based on the fact that you had a massive longwall zone to the north, a massive longwall zone to the south, the entries were driven here that already had shown some signs of deterioration and now they want to come in and mine, not only mine entries in the barrier but pull the pillars in that barrier?

A. That was our initial concern when we told them that they needed to provide an adequate justification to do that mine.

MR. PAVLOVICH:

Q. Okay. So that spurred the Agapito report?

A. Yes.

MR. PAVLOVICH:

But yet when you got the Agapito report, you basically accepted it just as is?

A. Yes. We looked at some of the data, clarified some of the issues and accepted the Agapito data.

MR. PAVLOVICH:

And didn't have any more concern about mining through that

barrier with all those massive gobs on either side?

A. No. We had concerns and that's why I personally went to look at conditions in the mines and why it was approved in phases rather than carte blanche block approval. The Agapito report addressed mining in both the south barrier and north barrier ---

MR. PAVLOVICH:

All at once.

A. --- all at one time and we said we will evaluate this and approve it in phases so it was looked at in a certain manner.

MR. PAVLOVICH:

And most of the experience I've had is an operator submits a plan and then may submit accompanying information or engineering surveys or --- usually they don't submit an engineering survey and say, what do you think of this before they ever submit a plan; does that happen out here quite commonly?

A. We were approached with proposals and essentially --- well, what do they need to do, to what's required to get a plan approved. Or there's meetings on the plan that not necessarily will they submit the Agapito or a consultant report prior to it, but they will approach us with ideas prior to submittal, and if we say absolutely no, then I assume they wouldn't submit it anyway.

MR. PAVLOVICH:

All right. So they'd just feel you out to begin with and see if there's a chance then, I guess?

A. Correct. So we tell them, you know, what they have to do. We had a meeting recently with Dugout Mine, they brought in mine maps and they're looking at their proposal to go to a sponcom prevention, essentially a bleeder less system. There was

no plan proposal with that but they brought in their map and spread it out and we told them what we would expect to see in a plan submittal including sealing of previous longwall roads and areas. And what would be anticipated to be in that sponcom plan both in ventilation and ground control plan or roof control plan, so that occurred without any kind of meeting or plan being submitted by the company. That happened with San Juan Mine. If they have a proposal and then sometimes it's a proposal if a company has difficulty with a geological condition in the mains and they want to go to a tie for support, or how they're going to get into it whether it's pumping grout from the surface or they'll come in and discuss that, we'll go over what we expect to see.

MR. PAVLOVICH:

Okay. So it's not uncommon, then?

A. It's not uncommon.

MR. PAVLOVICH:

Okay. Anybody else?

UNIDENTIFIED SPEAKER:

I got two for you, Billy. Just one I guess on your reference when you're describing the tech support visit in May. I believe you alluded to some logistical problems as the reason why our guys didn't go with you to Crandall.

A. Correct.

UNIDENTIFIED SPEAKER:

Did you request them to go to Crandall prior to, you know, the Aberdeen visit? I mean, was that part of your request to Aberdeen? I'm not clear on that.

A. It was brought up that I and Gary Jensen were going to Crandall on the day before and that, you know --- but they couldn't accompany me so it was brought up, it

was mentioned. I don't know if it's part of the formal request or not.

UNIDENTIFIED SPEAKER:

Brought up with who, though? With Hoch or Cybulski, or whoever you talk to?

A. Whoever I talked to at that time, yeah.

UNIDENTIFIED SPEAKER:

Okay. So you discussed Crandall and it was just this logistical travel thing?

A. Right. And I said well, we'll --- I'll go ahead and go over to there and we'll --- because we were talking about which way to do it, you know, Tuesday at Crandall or Tuesday at Aberdeen and the other one. But they couldn't be there on that Tuesday so I went Tuesday to the Crandall and we went Wednesday to Aberdeen.

UNIDENTIFIED SPEAKER:

Okay. Well, in that was there any discussion about Wednesday, Thursday if they couldn't get out for the first day, I mean ---?

A. I don't remember what happened. I think one of them it was Tuesday, you know, Tuesday was the problem and the other one was the end of the week.

UNIDENTIFIED SPEAKER:

Okay.

A. I don't recall the whole specifics.

UNIDENTIFIED SPEAKER:

I was just curious if you actually requested it because I didn't know if I understood you properly with that reference to the logistical problems. I guess my other question just goes back to what you've stated as far as you had concerns here overall when you first looked at it, and that was evidenced by your

personal visits to this, you know, to check these out. But yet I don't know that I understand what it would have taken for you when you were there to do something differently short of actually seeing it bounce. I'm not sure that I understand, you know. I understand the concern but what would it have taken for you to have done something differently?

A. I think if say it was bouncing in a manner that I thought was bad at the time I was there, that they were having roof problems or it looked like the support wasn't good, if there was floor heave occurring, if there was stability issues while I was there, then, you know, it wouldn't have been approved.

UNIDENTIFIED SPEAKER:

Billy, when Kathleen or Gary did a six month review of the roof control plan in the mine was there any --- how did they document the review of --- how did District Nine document that Kathleen did a six month review?

A. Okay. When one of the specialists does a six month review, that is put in the MPA as specialist. We log into the MPA, it's either inspector or a specialist, so when the specialist does the --- and it goes in there, if there's deficiencies in the plan or if items are pulled out of the plan, then that would entail a letter to the operator that goes in the six month review file.

UNIDENTIFIED SPEAKER:

So there was no memo or document that they did a review, an internal memo or ---?

A. No, no. If there's no problem there's not. They'd go in and assist and sometimes the memo would go to file but most of our --- when a specialist does a six month review, terms like nominally pillar width that would be picked up that both MRSs can be moved at the same time. And I don't know, did you see a red zone

drawing in this plan?

UNIDENTIFIED SPEAKER:

I didn't see one, no.

A. If you didn't see a red zone drawing that would be picked up, so typically a specialist does a review, there are numerous deficiencies that are picked up in a plan either based on things we in the district have changed, things that have been sent down to us from Arlington and we try to document, we have tech support put out a list of things best the way --- be practices for turning crosscut, so if that plan --- if that has never been sent to a mine, then that would go out with a six month interview to tell them to review, tell them to document or to adopt the plan that are suitable to their mining conditions and go out, so we'd have a document that would go in the review file also.

UNIDENTIFIED SPEAKER:

So if nothing changes in this --- somebody enters an MPA the review was conducted by a specialist or ---?

A. Correct.

UNIDENTIFIED SPEAKER:

There's no form or nothing?

A. The two --- you know, the specialist goes in the mine and that 2004 form will need filled out.

UNIDENTIFIED SPEAKER:

But we've got a copy of the SOPs. Do you know what an effective date on the old --- or I don't see a date on it?

A. It's a work in progress and it's probably just being updated as whenever I get a chance.

UNIDENTIFIED SPEAKER:

You only got 37 days.

UNIDENTIFIED SPEAKER:

It might be down to 36 now.

UNIDENTIFIED SPEAKER:

And I was looking at some of the pictures of those and the size of being six bolts across and one inch where the bolts would be big heavy volcano plates. First thing, the volcano plates couldn't figure out why using the --- it seemed that they were one inch width and the bolt was --- is there a reason why they was putting ---. The top looks good and everybody says that the roof looks good and they put extensive support in it, is there a reason for that or ---?

A. Just typically to ensure the support of the top is good, but if a pillar bounces or something happens, you know, you don't want the roof breaking up and falling down, too. In a bump prone mine sometimes they'll put additional support in, and like I said they run into anomalous, you know, geological conditions where they'll have little rolls or things will come through that will make it hard to haul. It's not consistent but instead of having the bolted canyon, they just put the whole system through there they found out that it works better.

UNIDENTIFIED SPEAKER:

Was that the normal bump for that mine? Would that have been what was in the south mains when there was bolts everywhere?

A. No. I think they changed to the six bolt the south mains that may have been in the old bolting system.

UNIDENTIFIED SPEAKER:

What would that have been diameter wise?

A. Probably number six.

UNIDENTIFIED SPEAKER:

Number six.

A. Yeah. I'm not sure, and the gate bolts for the longwalls are probably the bigger bolts.

UNIDENTIFIED SPEAKER:

Okay. Do you have any idea what the working range on the MRS would be?

A. I don't. I don't know right off.

UNIDENTIFIED SPEAKER:

Was it ever an issue that they wouldn't reach if they mine ten foot, which would be say maybe ten foot with coal and MRSs always reach or was that an issue?

A. I don't think that was ever an issue. I don't recall that being brought up but I didn't see any. I mean, I wasn't there on pillar inspections.

UNIDENTIFIED SPEAKER:

I think you could kind of answer this a little bit, but have you ever seen any kind of roof or floor support that you could put in that could withstand a bump?

A. Just by itself, no. We had a bump in a mine and they used 24 inch diameter cans and it split them right in half. I've seen three by three cribs chewed up in bumps at Deer Creek and Trail Mountain.

UNIDENTIFIED SPEAKER:

Split the cans in half?

A. It's just like you take a straw and break it in half and then you just pop the

cans, one half's laying on one side and the bottom half's still sticking up there with the seam material. Other ones were bent at 90 degrees but some of them just popped totally in half, 24 inch cans.

UNIDENTIFIED SPEAKER:

Have you ever seen arches that experienced a bump in an area with arch support?

A. I don't recall seeing arches that have been bumped. I know that Bowie put some arches in but they had wood lagging and it blew right through the wood lag in there. But I don't know that that was necessarily a bump. That's why if we use arches and there's a void above it, that'd have a back pillar above the arches for support.

UNIDENTIFIED SPEAKER:

Did it take the steel out or just the lagging?

A. Just the lagging, and it was wood it wouldn't --- in between. I've seen steel sets like a square set made out of steel and bounce hit those and it's just like we'd take paper and rip the paper where the vertical legs were bolted in at the bottom, and just like you would tear around the bolts and where the square set was bolted in at the top. The bolts, it didn't tear the bolts but it just tore the steel around it and then they were bent over and twisted just like you take a piece of paper and tear it.

UNIDENTIFIED SPEAKER:

Wouldn't the crossbar on the right side blow it all the way to the left side?

A. No. It just kind of bent them in on those because they had the steel member going across and the vertical legs down, but it didn't blow them all in. It just gnarled all around them, and where the bolt is where it ripped them and it twisted them but it didn't blow them in.

UNIDENTIFIED SPEAKER:

Have you ever known of using convergence readings to predict a bounce, like rip the floors and get any relation that if nothing's moving it's not going to bounce or to monitor this or ---?

A. No, I haven't heard of that. At Midconna (phonetic) Resources, they tried to use geophones and microsiemens and different rates to try to predict where the stress build up would be. And they could occasionally tell where maybe the epicenter of a bounce occurred after the bounce, but looking at their data, they can never predict where it occurred before. Same at Willow Creek Mine. They had geophysicists on staff that tried to, and they instrumented the shield legs and tried to instrument --- then they had beautiful, colorful plots of all of the stress changes but they couldn't get it down to say that --- you know, at some stress levels they receive bounces, at other stress levels equal to that they mine through those areas with beautiful conditions. At Willow Creek Mine though they redid --- were mining like 12 or 13 feet high pillars and reducing them down, eliminated a lot of the down dip pillar corner bounces in the pillars by reducing the mining height down around nine feet. So again the pillar height and at Aberdeen they reduced the pillar height has helped them. So again the Pillar height ---

MR. PAVLOVICH:

The pillar height is critical.

A. --- seems to have a big effect on that but if precursors --- or a definitive prediction tool is unknown at the present time. And research as been done in that area since Wilson and Duvall and all of those guys back in, starting in the '40s and up, you know. Wilson out of Haden Lake and the gentleman that died by getting bit the fly in Africa I can't remember --- he was a ---. Anyway, he went to Africa and the flies bit

them and he come back and died or something. But they did a lot of extensive research and were never able to get predictive tools.

UNIDENTIFIED SPEAKER:

I've just got one question, Billy, on the routing process for your plans. I noticed on your improvement letters and your denial letters that the original page and then you have a surname copy where up in the top right hand corner you'll initial who it's kind of been routed to it. Do you have a --- when you receive a plan, is that the only method that you have for tracking who's looked at it or do you have a tracking sheet on, like a coversheet that you put on those plans to show who it's been routed through?

A. No. Again, it goes back to MPA. The plan comes in, it's assigned to me as roof control supervisor. If I choose to assign it to someone else, then either I or my secretary will put in there the specialist it's assigned to. So that's the only routing it goes to. Then it goes to that specialist. When they finish with the review, they're the first one to initial off and its surname and then it goes up the chain of command.

UNIDENTIFIED SPEAKER:

Do you have any area for comments through that routing process, if anybody has any comments, is there any?

A. There's a --- if somebody wants to add additional stuff or if they pull the accident data or looked at other things on the CC list that would say RC Mine History file. So that's the mine history file for that mine and there will be a thing that says backup material. So file name, backup material, if a person had phone conversations or something if they wanted to put it in there, that would go in with a surname copy of the letter with that backup data. That would go in my history file and that's kept for three years.

UNIDENTIFIED SPEAKER:

In a normal --- say everybody was in their positions, no one was on travel, so Bill Knepp would have been over technical, and Bob Cornett would have been over enforcement.

A. Correct.

UNIDENTIFIED SPEAKER:

And then Al Davis would have been at the end. So if you've got this Crandall Canyon plan if the specialist reviewed it, you're saying they'd forward it up to you and you initial it off on that surname box. Then it would go to Bill Knepp?

A. Correct.

UNIDENTIFIED SPEAKER:

Now would Bill --- at any time during this review process, does Bob Cornett look at it?

A. No.

UNIDENTIFIED SPEAKER:

So these plans are not coordinated with the enforcement side?

A. Correct.

UNIDENTIFIED SPEAKER:

Now with, how would the --- on this Crandall Canyon plan would Ted Farmer or Bill Taylor have any input?

A. If we would have wanted to call them and ask them if they'd have had questions or if we were reviewing as we're looking at it.

UNIDENTIFIED SPEAKER:

But if you felt comfortable with it and Ted Farmer or Bill

Taylor may not even know it was submitted?

A. That's correct. There's a possibility that they don't know. But when I go to a mine to do a visit, they're notified that I'm going into their field office. Do they want to send somebody with me to help, you know --- do they want to go themselves? So they would know I was going to the mine to look at a --- to evaluate a plan.

UNIDENTIFIED SPEAKER:

That's all I have.

MR. PAVLOVICH:

Billy, I just ---.

UNIDENTIFIED SPEAKER:

I have a couple of quick questions, and I don't mean to beat a dead horse, especially after nine hours. Has your opinion of Agapito's credibility changed since this accident, and do you think that maybe you and others in District Nine placed too much confidence in your work?

A. I'll wait until I receive the final results of what happened. I don't want to pass judgment on Agapito until they come out with what may have happened after the interviews are conducted with the people that were there. I don't think that's fair to place blame on Agapito without knowing details, and many of those details I don't think I'm privy to at the present time.

UNIDENTIFIED SPEAKER:

The question wasn't intended to place blame on them, it was just merely an opinion question.

A. That's my opinion at the present time.

UNIDENTIFIED SPEAKER:

Okay. Would you be surprised to know or to hear that when

Ernie and Joe interviewed an individual a couple of weeks ago, that person stated that Agapito would essentially --- I can't remember exactly how he stated it, but essentially you could get whatever you wanted from them if you're willing to pay for it. Would that statement surprise you?

A. It would in that Agapito --- again, they're professional engineers, they have a business that has to run on our credibility of maintaining that credibility. Once that, if that credibility's destroyed, you know, we call them hookers for hire. And essentially if that's what they have turned into, then there would be no credibility, and we wouldn't --- essentially that's what they are and we don't --- you know, we put no confidence in what they do.

UNIDENTIFIED SPEAKER:

And one last quick question. You have not spoken to Laine Adair through this whole thing; is that correct?

A. Pardon me?

UNIDENTIFIED SPEAKER:

Laine Adair, you haven't had any contact with him or he hasn't tired to call you since this accident happened?

A. I talk to him constantly.

UNIDENTIFIED SPEAKER:

With respect to Crandall Canyon.

A. I've talked to him with respect to Crandall Canyon, Aberdeen, West Ridge, numerous times.

UNIDENTIFIED SPEAKER:

And the relationship seems to be about the same as it was prior to the accident?

A. Essentially I am a professional, I maintain that professional level with the mine operators. I may, you know, jokingly say something about a thing --- I inquire personally with some of them how their families are doing, if I know something about them. But I still have a high level of integrity and I expect to be treated with respect from the mine operators, whomever it is that I'm dealing with through that company, and I in turn try to treat all of those people with a high level of respect as I would want to be treated. So no, our relationship which is 20 some years --- he's a mining professional in Utah and I'm a mining professional from MSHA and that exists as it is.

UNIDENTIFIED SPEAKER:

That's all I have.

MR. PAVLOVICH:

Billy, you mentioned earlier --- like 11 hours ago so you won't remember saying this, that we asked if anyone ever disagreed with plans, and you mentioned that Bill Taylor and some of the inspectors disagreed with the plan that you recently approved at Aberdeen. Do you remember back when the plan approvals for any mining at all in the north barrier/south barrier were approved? Did anybody from the field office express any concerns or anybody else in the district express any concerns, either Ted or Bill or any of the inspectors?

A. I don't remember Ted or Bill expressing concerns. Gary Jensen was over there soliciting comments from those people. And my conversations with Gary was, you know, no one has expressed great concerns about it. There was some concern in our own district office about retreat mining in those areas.

MR. PAVLOVICH:

Who was that from?

A. That was from Bill Knepp, Bill Reitze, some of the --- mainly the supervision.

MR. PAVLOVICH:

What were their concerns?

A. That we're mining in a barrier pillar and that this is, you know, something that's not typically done and did we think it could be done in a safe manner.

MR. PAVLOVICH:

And so obviously --- did you convince them it could be done safely or did you just kind of overrule their concerns?

A. I did a --- you know, I looked at where we did mine barrier pillars in the south mains. I looked at where we mined barrier pillars in Pinnacle and said, you know, we've done this before, we have PhD professional engineers consultant reports and that they can do it. I didn't see anything that could do --- I presented, you know, what we had come up with and our findings and that we had approved it in phases and nobody voiced a huge level of concern after that.

MR. PAVLOVICH:

Okay. So Knepp agreed to sign off on it?

A. Knepp agreed to it, but I'm not sure that Knepp signed off on it.

MR. PAVLOVICH:

Okay, but agreed to it?

A. Yes, he ---.

MR. PAVLOVICH:

You didn't wait until Knepp was gone to sneak it on through, did you?

A. Sneak it in behind him? No, no I didn't. Although the only person that probably didn't --- that signed off on it by me telling them that it's okay, you don't have to worry about it, is Bill Denning.

MR. PAVLOVICH:

Bill disagreed with it also?

A. Well, no. Bill didn't know anything. He said what's going on? I explained to him that the south --- between the south that we had our concerns and we talked to him that they was extending the pillar, he was acting for Al Davis so I told him to sign off on it, that I had done all of the work and Bill signed off on it. And so to answer your question, I didn't intentionally go around behind anybody to try to approve things. I worked at it diligently but I am the person that did all four approvals whether the other people --- I am responsible for these plans in their entirety. It was, you know, my decisions, my decision what to look at, what to review, what extra day to pull up, how extensive to go into the modeling plans. That was all me. Essentially I'm the person that approved them. And the final south barrier plan, I did that all and just told Bill Denning to sign it. So I am the person that is responsible for these plans.

MR. PAVLOVICH:

Billy, are you characterizing retreat mining over in south mains where they punched into those barriers over there comparable to what was being done up in west mains and splitting those barriers and driving entries up?

A. In the south mains and the west mains --- or the north and the west?

BY MR. TEASTER:

Q. Are you saying --- this is mining what they mined here?

MR. PAVLOVICH:

Right in the south mains.

BY MR. TEASTER:

Q. Are you feeling similar to, you know, driving the entries ---

MR. PAVLOVICH:

Splitting the north and south barriers.

BY MR. TEASTER:

Q. --- in the barriers and then pulling the barriers back?

A. It's similar in that in the south mains the entries were already driven. And what they did as they retreated is they mined the developed rooms out into the barrier pillars and then robbed those rooms as they were coming out. So the area mined in the south mains was initially four or five entries wide, whatever that was, and then as they mined out they developed rooms out into the barrier pillars.

MR. PAVLOVICH:

Yeah, but when they mined the south mains, there wasn't any concerns raised such as you raised up when you were first advised from them that they wanted to mine the west mains.

A. Right.

MR. PAVLOVICH:

The north and south barrier there when you say we've got to have some data that supports mining in there. But you didn't do that for the south mains.

A. Right. And what they did in the south mains, they just retreat mined that under the regular plans so we didn't really look at the --- I didn't see any projections for the south mains and it, but the west mains had a --- the maximum cover under the south mains is 1,400 feet at the end panel. The cover in the west area starts out at almost that and goes to 2,200 feet. That's a big difference.

BY MR. TEASTER:

Q. So they're really not similar; right?

A. Right. The only similarity is reducing the size of the barrier to cover vastly

different ---. Even though it's only four or five hundred feet, there's a huge difference between 1,400 feet of cover and 1,800 feet of cover even if it's less than 30 percent, but that is a --- it's much more --- it seems like more than 30 percent increase in stress levels and things that happen.

MR. PAVLOVICH:

Bill, that's all the questions we have. Is there something that we have not asked that you'd like to share with us regarding this issue?

A. Overall, you know we approved the plan. We had a catastrophic failure and we lost nine people, which I'm the person that approved the plan, I'm responsible for that. MSHA, at the same time that we're doing this, there's a lot of things going on what MSHA did and now I'm being asked why I didn't do a multitude of things from getting more information on the pillaring to doing more modeling, and all these things that I'm being asked why it wasn't done or how you didn't do this or six month reviews.

I'm lucky to get --- with the diminishing staffing that I've been having over the recent years, I'm lucky just to get plans out in some sort of timely manner without even considering a six month review of a plan, and then go to out to a mine on different phases of it. You know it would have been back to South Crandall Canyon during the pillaring phases, but I wasn't there. I don't have that luxury and no one in my staff does. And until someone at the national level can say that they want the specialist to review these plans to have a full proof plan, which will never happen, but even to try to attempt to do that, they're going to have to come up with a staff and the tools, the modeling.

But instead I get memos everyday telling me take your specialist out and do EO-1s, take your specialist out and do initiatives, take your specialist out and fill out

some dated sheet that has nothing to do with this. The agency cannot keep beating this horse if they're not feeding any oats to it. It's going to flop over dead and we're getting close to that. And unless somebody wakes up in the headquarters level and figures out that there's more to miner safety than a spreadsheet with squares checked and boxes filled in, then the health and safety of the nation's miner is going to decrease.

And hopefully --- this is a poor thing but hopefully that there will be, you know, a wake up call and they're talking about going out and giving a specialist training. What good is it doing to give him training on how to run LAMODEL, ARMPS and new software if when a guy gets back to the office, he's told to go out for a month on EO-1 because EO-1s have to be closed out by the end of the quarter. And, you know, if you don't use that training, it goes away. The next time you get ready to implement it, the knowledge won't be there, the tools won't be there, you'll have forgotten what you learned in the training class so that's --- I did my best. I did what I thought was dual diligence. Was it good enough? No, it wasn't. It was a catastrophic failure. Is that my fault? You know, that's my conscience and for me to deal with and regardless of what you say in your report that's --- I lost a friend there and still I have to deal with that. There was other families, those other eight families were very adversely affected also and that's like I said in your report findings, Richard Gates' report findings, the IG I have talked to, none of those reports will change that.

MR. PAVLOVICH:

But we're not looking to place blame and I don't think you should blame yourself for anything. I mean, this is --- what we're looking for here is to come up with something that we can help better perform the responsibilities that is assigned to MSHA and if we can identify something that's going to help this situation

from ever occurring again, that's--- we'd be successful and that's what we're attempting to do, and as we said in our statement, we' re not looking to place no blame on anyone.

A. I think that starts at --- you know, we at the field level, at the field office level and the specialist level and the district's --- we can't do that without the adequate support from the top. And being assigned another initiative and another spreadsheet to fill out, it does no good to the miners' safety. It helps the IG to see if a box is checked but it in no way helps the miner.

MR. PAVLOVICH:

Right. And as far as the cause of that accident, you know, that's not been determined and there's been some rumors that they were mining the bottom, mining up that bottom coal which can change the picture completely on what may have triggered some of that action up there. So ---.

A. Yeah. I wish you guys looked, too, because no matter what you come up with, people are not going to say you looked at the right thing or asked the right questions or ---.

MR. PAVLOVICH:

Well, we certainly appreciate you coming up. You've been quite candid with us and we do appreciate that. It's going to go a long way in helping us accomplish our mission and coming up with all of the facts that we can, putting them together and trying to come up with some recommendations to prevent this from occurring.

A. Well, I'll be available for 36 more days to answer any questions you have.

MR. PAVLOVICH:

Well, I was going to tell you that was my next statement.