

STATEMENT UNDER OATH

OF

STEPHEN W. FALK

Taken pursuant to Notice by Richard J. Lipuma, CCR, a Court Reporter and Notary Public in and for the Commonwealth of Pennsylvania, at the Southeastern Utah Association of Governments, 375 South Carbon Avenue, Price, Utah, on Thursday, November 1, 2007 beginning at 1:45 p.m.

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A P P E A R A N C E S

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20 ALSO PRESENT:

21 Kelly C. Kirkwood, Notary Public

22

23

24

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P R O C E E D I N G S

MR. GAUNA:

Good morning. My name is Mike Gauna. I'm an accident investigator with the Mine Safety & Health Administration (MSHA), an agency of the United States Department of Labor. With me is Mr. Richard Gates and Sherrie Hayashi, with the Utah Commission of Labor. We will be conducting the questioning today.

I, together with other government investigators and specialists, have been assigned to investigate the conditions, events and circumstances surrounding the fatalities that occurred at the Crandall Canyon Mine in Utah in August 2007. The investigation is being

1 conducted by MSHA under 103(a)
2 of the Federal Mine Safety &
3 Health Act and the Utah
4 Commission of Labor. We
5 appreciate your assistance in
6 this investigation.

7 After the investigation
8 is complete, MSHA will issue a
9 public report detailing the
10 nature and causes of the
11 fatalities in the hope that
12 greater awareness about the
13 causes of accidents can reduce
14 their occurrence in the
15 future. Information obtained
16 through witness interviews is
17 frequently included in these
18 reports. Your statement may
19 also be used in other
20 proceedings.

21 You may have a personal
22 representative present during
23 the taking of this statement
24 and may consult with your
25 representative at any time.

1 Your statement is completely
2 voluntary. You may refuse to
3 answer any question. And you
4 may terminate your interview
5 at any time and request a
6 break at any time. Your
7 personal representative may
8 ask clarifying questions as
9 appropriate.

10 A court reporter will
11 record your interview. Please
12 speak loudly and clearly. If
13 you do not understand a
14 question asked, please ask me
15 to rephrase it. Please answer
16 each question as fully as you
17 can, including any information
18 you have learned from someone
19 else.

20 I would like to thank
21 you in advance for your
22 appearance here. We
23 appreciate your assistance in
24 this investigation. And your
25 cooperation is critical in

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making the nation's mines
safer.

After we have finished
asking questions, you will
have an opportunity to make a
statement and provide us with
any other information that you
believe to be important. If
at any time after the
interview you recall any
additional information that
you believe might be useful,
please contact Richard Gates
at the telephone number and
email address that's shown on
this card.

Ms. Kirkwood, would you
swear in the witness?

MS. KIRKWOOD:

Yes. Please raise your
right hand.

STEPHEN W. FALK, HAVING FIRST BEEN
DULY SWORN, TESTIFIED AS FOLLOWS:

1 MR. GAUNA:

2 Ms. Kirkwood, are you
3 empowered as a notary in the
4 State of Utah?

5 MS. KIRKWOOD:

6 I am.

7 MR. GAUNA:

8 When does your
9 commission expire?

10 MS. KIRKWOOD:

11 August 15th, 2008.

12 MR. GAUNA:

13 Have you sworn in Mr.
14 Falk?

15 MS. KIRKWOOD:

16 I have.

17 BY MR. GAUNA:

18 Q. Can I call you Steve?

19 A. Yeah.

20 Q. I'm Mike.

21 A. Okay.

22 Q. Steve, do you have any
23 questions about the interview process
24 as I described it?

25 A. No.

1 Q. And could you please state
2 your full name and address for the
3 record?

4 A. Steven Falk, (b)(7)
5 (C)

6 Q. Okay. Steve, do you have a
7 personal representative with you
8 today?

9 A. If this is --- he's a
10 representative for the government
11 here.

12 MR. GAUNA:

13 Okay. Would your
14 representative identify
15 himself by name and address
16 for the record.

17 ATTORNEY STEIGER:

18 Sure. John Steiger.
19 I'm at 125 South State Street,
20 Suite 6201, Salt Lake City,
21 Utah, 84138. I'm Deputy
22 Regional Solicitor for the
23 Department of the Interior
24 Intermountain region, and I'm
25 here representing the Bureau

1 of Land Management, and I'm
2 not representing Mr. Falk in
3 his personal capacity.

4 BY MR. GAUNA:

5 Q. Steve, are you appearing here
6 today voluntarily?

7 A. Yes, sir.

8 MR. GATES:

9 I guess with that
10 understanding, Steve, is this
11 who you would choose to
12 have ---

13 A. Yes.

14 MR. GATES:

15 --- as your personal
16 rep?

17 ATTORNEY STEIGER:

18 The record needs to be
19 clear. I'm not here
20 representing him in his
21 personal capacity.

22 MR. GATES:

23 But you are here
24 with ---?

25 A. With him. I asked him to

1 be - - - .

2 MR. GATES:

3 You asked him to be
4 here?

5 A. I asked him to be here.

6 MR. GATES:

7 Okay.

8 BY MR. GAUNA:

9 Q. How long have you worked for
10 the BLM?

11 A. Since 1984.

12 Q. Okay. And where is your
13 current duty station?

14 A. Price here, Utah.

15 Q. How long have you worked at
16 this location?

17 A. Since 1984.

18 Q. What is your present position?

19 A. Mining engineer.

20 Q. And how long have you been in
21 that position?

22 A. Since 1984.

23 Q. And who is your current
24 supervisor?

25 A. My current supervisor is Mike

1 Steiwig, S-T-E-I-W-I-G. He's a new
2 individual here.

3 Q. Okay. To begin with, why
4 don't you tell us about your mining
5 history and experience then?

6 A. I went to mining school at the
7 University of Utah, graduated with a
8 Bachelor's degree in mining
9 engineering in 1980. That's my
10 formal education. Do you want also
11 other ---

12 Q. Yeah.

13 A. --- job history?

14 Q. Any history and employment and
15 mining background and so forth.

16 A. When I graduated, I went to
17 work directly for the United States
18 Geological Survey, Conservation
19 Division, Salt Lake City. I was
20 stationed there for four years, until
21 there was a merger of that division,
22 the United States Geological Survey,
23 with the Bureau of Land Management,
24 and I was transferred to Price.

25 I have been doing on-shore

1 federal coal leasing administration
2 ever since that time. Pretty well
3 the same type of activity job.

4 Q. And ---? Go ahead.

5 A. And any --- that has included
6 most of the operating federal coal
7 leases here in Utah. That was our
8 jurisdictional boundaries.

9 Q. And do you have any advanced
10 degrees in mining?

11 A. No.

12 Q. What are your primary areas of
13 responsibility?

14 A. Primary responsibilities for
15 the Bureau are the administration of
16 federal coal leases, which include
17 product verification for royalty
18 purposes and also include a
19 conservation --- a general term
20 called conservation of the resource.
21 In other words, when a lease is in
22 operation or somebody is operating on
23 a federal coal lease, protection of
24 the resource as it stands and also
25 conservation of the resource while

1 it's being utilized.

2 Basically we're trying to
3 achieve some term that they came up
4 with in the Mineral Leasing Act
5 called maximum economic recovery. So
6 those are the two main job
7 requirements that come from the law
8 that I administer over --- or the
9 Bureau administers over. And I'm the
10 chief inspector --- not chief
11 inspector, but the inspector for some
12 of the assigned mines in this area.

13 Q. Is this the primary
14 responsibility of BLM or are there
15 other responsibilities?

16 A. The Bureau of Land Management
17 has a myriad of responsibilities,
18 it's managing the public lands and
19 also the public mineral resources.
20 So there's --- my job has been
21 centered on those, on just the
22 federal coal leases and the federal
23 mineral leases. I've helped out with
24 other aspects, but the Bureau has
25 wide responsibilities.

1 Q. But primarily for the coal
2 mining, it's ---?

3 A. It's that aspect, yes.
4 There's some lease administration
5 things that involve the federal coal
6 lease, bonding of it, exploration on
7 the federal coal lease, things like
8 that.

9 Q. Okay. Can you just give me a
10 general brief idea of how you, I
11 guess, determine the coal or the
12 resource on coal mine properties?

13 A. Before a property that is ---
14 is leased out to a lessee of record
15 from the Federal Government, there is
16 a very long process of going through
17 getting --- obtaining a federal coal
18 lease. It was --- many of these
19 areas in this country have been
20 leased out from, I guess, the
21 beginning of the Mineral Leasing Act
22 in 1920. We have some leases
23 actually in this area that have a
24 continuous lease since 1920. But in
25 essence, the new regulations, the new

1 procedures is there's a lease by
2 application, a lessee of --- or an
3 individual or a corporation of the
4 United States can petition the
5 government for a federal coal lease
6 in areas that we have deemed
7 potentially valuable for coal
8 development. Those are, you know,
9 classification and things that were
10 done by the United States Geological
11 Survey years ago, and especially in
12 this area.

13 A lease by application goes
14 through a huge process of getting
15 into a competitive bid. And so, in
16 essence, many of these operations
17 have received a federal coal lease
18 under a bidding process. And once
19 they have that, they have a lease in
20 hand, they have obligations for
21 payments of rents and royalties and
22 also adhere to the general laws of
23 the Mineral Leasing Act.

24 Q. When does your role come in as
25 far as these leases or these

1 operations?

2 A. I participate in the leasing
3 process. It's a joint effort between
4 a number of offices in the Bureau of
5 Land Management. The main one is the
6 Utah State Office in Salt Lake. They
7 have the authority to hold the lease
8 sale, but they get input from us on
9 --- further, if this lease can be
10 leased out and, in our judgment, can
11 be, you know, the possibility of
12 mining it with economic return for
13 the outfit.

14 We also have to make a base
15 judgment on the amount of estimated
16 recoverable reserves in the lease.
17 That's the basis of how we sell it.
18 That's, you know, the estimate ---.
19 There's X amount of recoverable tons,
20 and you have an option to lease it
21 --- or to make a bid based on the
22 amount of recoverable tons in this
23 lease. So we go through some
24 geologic evaluations of how much
25 reserves we think is there and put

1 that out for public notification and
2 hold a lease sale that goes through a
3 --- you know, a pretty arduous
4 process. But it's established in the
5 law and regulations.

6 Q. At what point do you have to
7 or what criteria do you start
8 inspecting or looking at the
9 operations underground?

10 A. Once a lease is in hand to a
11 lessee, a company, they then have to
12 go through a number of other
13 processes to get the right to
14 actually turn --- you know, do work
15 on the lease, mine it or whatever.
16 It goes through a long process that
17 involves a number of different laws,
18 the Surface Mining Control Act Law
19 that --- and also a few others.

20 A lot of these mines up here
21 are on the national forest lands. We
22 coordinate with the National Forest
23 Service to obtain federal mine plan
24 approval for a federal area. And
25 that's deemed --- that is granted by

1 the Undersecretary of the Interior.
2 Once that is in place, then they have
3 the right to mine. And of course,
4 that has all the details of how
5 they're going to mine, plus how
6 they're going to reclaim it when
7 they're done with it. That's one of
8 the overriding things is --- the
9 Surface Mine Control Act, is --- that
10 we're not in charge of its
11 reclamation and protection of the
12 environment while they're mining and
13 after they're mining, what they're
14 going to do with it, how they're
15 cleaning up.

16 But once the authorization to
17 mine is given, then we start
18 inspecting the property for
19 operations. We're required by
20 federal regulations to visit each
21 operating section of an operating
22 federal coal lease quarterly,
23 minimum, for following of the rules
24 and regulations for mine --- the
25 Mineral Leasing Act mine plan and for

1 product verification. In other
2 words, I'm going to go into the mine
3 for product verification and check to
4 see what they report for production.
5 And on their mine maps they submit
6 monthly mine maps of where they have
7 mined. I will go in there and take
8 some spot measurements so I have a
9 handle of the mining dimensions. And
10 later on, using mine maps, I can
11 verify that, yes, they did produce X
12 amount of tons by a volumetric check
13 or something like that.

14 But that's --- we would start
15 inspecting a federal coal lease when
16 operations begin. We do not have the
17 final say of when they can actually
18 begin operations. We're just part of
19 a number of agencies that have to
20 okay that.

21 Q. Is there inspection in
22 primarily extraction verification or
23 any other things done with that, as
24 far as verifying the amount of coal
25 extracted?

1 A. There's some other things we
2 could possibly do. We also track the
3 coal product trail to a point of
4 sale. And normally those are scales,
5 whether it be a truck scale or a rail
6 scale. And we would have, you know,
7 to track that coal down to that point
8 of sale. There's another agency in
9 the Department of Interior that
10 actually collects the money, Minerals
11 Management Service, and they are in
12 charge of auditing monies that come
13 for the royalties.

14 We are just to verify
15 production, and what they report ---
16 the company reports production to
17 Minerals Management Service. We'll
18 verify that. They report that to us,
19 too.

20 MR. GATES:

21 Does this involve, just
22 for the record, any safety of
23 production, method,
24 assessments or analysis?

25 A. No.

1 BY MR. GAUNA:

2 Q. How many underground coal
3 mines do you inspect?

4 A. I have six operating right
5 now.

6 Q. And you mentioned that you go
7 on a quarterly inspection schedule to
8 these six mines?

9 A. Yes.

10 Q. Is there any other reason you
11 deviate from that schedule or go more
12 often?

13 A. Yes. If the company is making
14 a change or runs into different
15 conditions, making a change to what
16 we call the Resource Recovery
17 Protection Plan, that's the Mineral
18 Leasing Act mining plan, if you want
19 to call it, that's the detailed plan
20 we have of where they want to mine
21 and, you know, their estimates of how
22 much they can mine. If they deviate
23 from that for some conditions, they
24 often let me know that. I will make
25 an inspection to verify the

1 conditions.

2 In essence, if they --- for
3 example, if they run into a geologic
4 condition that wasn't anticipated, a
5 sandstone channel scour or something
6 that, you know, forces them to mine
7 lower than they can or a fault or
8 something that wasn't expected.
9 That's just an example. I would try
10 to make an inspection for that area
11 to verify that that, indeed, is the
12 case. And they would then submit a
13 mining plan change to us for
14 approval.

15 Q. Okay.

16 MR. GATES:

17 They submit the plan to
18 you prior to you going out or
19 after?

20 A. Prior, if possible. But if
21 they run into an unexpected
22 condition, they can --- they're
23 supposed to let us know of a change
24 coming. Now, we try to make best
25 efforts to accomm --- not

1 accommodate, that's not a proper
2 word, but to deal with the condition.
3 If this is an unexpected thing that
4 they weren't ready for, certainly we
5 would look at it, if they want us to.
6 We would ask them to follow it up
7 with writing for --- with a change to
8 the plan in writing. Now, if they
9 see that they need to change their
10 plan in future attempts, yeah, they
11 come in with a change in the plan in
12 writing to us.

13 BY MR. GAUNA:

14 Q. You mentioned you inspect six
15 mines. Are they all locally in Utah?
16 Are any ---?

17 A. Yes.

18 Q. Okay.

19 A. All in Utah.

20 Q. Can you give me a sense of the
21 mining methods, how many of these
22 mines are conducting longwalling?

23 A. Yeah. Let me --- if you give
24 me just one minute on that, I'll have
25 to start counting here in my head. I

1 can run down through them, I guess is
2 the best way. I go to West Ridge.
3 It is a longwall operation. I go to
4 Aberdeen, Tower. It's called the
5 Tower Complex. It is now a longwall
6 operation. It used to be a joint,
7 had both longwall and continuous
8 miner sections there. I go to
9 Horizon Mine, which is a strict room
10 and pillar operation.

11 I go to Co-Op Mine. It's
12 called Bear Canyon Mine, operated by
13 Co-Op Mining. They are going to
14 longwall, as we speak, as I
15 understand, but had been a room-and-
16 pillar operation. Crandall Canyon
17 --- this included --- we counted
18 Crandall Canyon and South Crandall
19 --- although they're two different
20 portals, we counted them as pretty
21 well one operation. And I was the
22 inspector for that. And that was a
23 joint --- that was a mixed operation.
24 It had been longwall and room and
25 pillar for quite a while, and then

1 just recently the longwall was pulled
2 out of there.

3 And let's see. I lost count.
4 West Ridge, Aberdeen, Horizon, Co-Op,
5 Genwal, Southern Utah Fuel Company,
6 SUFCO Mine, ---

7 Q. Okay.

8 A. --- Arch Coal. That's
9 strictly a --- well, it's a longwall
10 operation. They do, on occasion,
11 have a continuous miner section for
12 production, not just development.

13 Q. When most mining companies
14 have mining projections that they
15 work up, are you involved in
16 evaluating the projected mining
17 plans?

18 A. Yes. The Resource and
19 Recovery Protection Plan has a
20 requirement for life of the lease
21 mining, so they will --- I think a
22 requirement is a yearly, for the
23 first five years, projection and then
24 five-year increments after that.

25 Q. And are these plans subject to

1 approval? You have to approve them
2 before they can go into the projected
3 areas?

4 A. Yes.

5 Q. When you received mining
6 plans, do you receive any engineering
7 analysis with any of these plans,
8 these projected plans?

9 A. If necessary.

10 Q. Can you give me examples of
11 when you've had analysis submitted?

12 A. The requirements of the
13 Resource Recovery and Protection Plan
14 is that they show mining in all areas
15 where we project there is recoverable
16 coal. And we have some, you know,
17 general area-wide guidance --- not
18 guidance, but standard operating
19 practices. That's one of the
20 definitions in the regulations that
21 deal with maximum economic recovery.

22 We're supposed to view that with
23 regards to the standard operating
24 practices in the region.

25 This country --- for example,

1 this country out here, there's very
2 few operations that will mine coal
3 that's less than five-feet thick.
4 And with longwall, it's probably more
5 along on the order of less than six-
6 feet thick. So in essence, when we
7 evaluate those plans, they may have
8 some engineering reports there or
9 geologic reports that will state, we
10 do think there is thinning coal in
11 this region, or we think there is
12 burn coal in this region, therefore
13 we --- our isopach maps indicate that
14 you can't mine it. We would evaluate
15 that on the basis of those reports,
16 yes, there is no reason to believe
17 that they can recover that area
18 because the coal is too thin or some
19 other conditions.

20 They also would include
21 possibilities of multi-seam
22 restrictions. If there's two seams
23 that are too close together, you have
24 to pick and choose which seam you're
25 going to mine in. So there's some

1 necessary or not or ---

2 A. Yeah.

3 MR. GATES:

4 --- the mine operator?

5 A. If we're not satisfied with
6 their justification, we can ask for
7 additional information.

8 BY MR. GAUNA:

9 Q. The consulting companies that
10 you get these reports linked to your
11 program, who are the typical
12 consultants you've seen, or is there
13 a typical consultant? Who have you
14 seen the most frequently in those
15 analyses?

16 A. That's --- I don't know if I
17 can generalize that. A lot of them
18 are mostly, I would say, a
19 geotechnical type of consultants.
20 And I would daresay that what we've
21 seen in the past, at least my
22 experience here, reasons that can't
23 mine it are related mostly to
24 geologic conditions.

25 Q. These are more of a geologic

1 assessment rather than ---

2 A. Possibly, yeah.

3 Q. --- a rock mechanic
4 assessment?

5 A. We've had --- one example,
6 we've had --- we were hoping that an
7 outfit could mine a little less --- a
8 thinner seam. We had the consultant
9 report from the manufacturer of the
10 longwall that said that, you know,
11 basically our machines can only
12 operate in these kind of conditions.
13 So that's one I have seen an example
14 of that's not maybe a geotechnical.
15 It was an actual manufacturer's
16 report or, you know, consultant ---.

17 Q. Have you seen any just design
18 reports or were they dealing with
19 pillaring plans, multi-seam plans?
20 Is that ---?

21 A. Yes, we have seen some.

22 Q. Okay. But is that normally
23 the type?

24 A. Not normal. No. I'd have to
25 say that's the exception.

1 Q. What about when you do get the
2 geotechnical pillar design type
3 things, do you recall what kind of
4 analysis they might have run? Would
5 they have run ARMPS or LAMODEL or
6 some other software?

7 A. We've seen some finite element
8 models, especially with multi-seam
9 --- especially with, you know, multi-
10 seam interactions.

11 Q. Okay.

12 A. Offhand, I haven't seen an
13 ALPS report or know about it.

14 Q. Okay.

15 A. I never, myself, looked at one
16 of those.

17 Q. How about LAMODEL? Have you
18 seen any LAMODEL analyses?

19 A. No. No, I haven't.

20 Q. When you get these analyses
21 from the operators, do you do your
22 own to confirm it or how do you ---
23 do you do a similar analysis? How do
24 you ---?

25 A. No. We don't go into very

1 detailed --- if they're an
2 established consultant or --- and
3 just general mining practice, we
4 pretty well accept their ---.

5 Q. Let me change the questions to
6 be more specific to the Crandall
7 Canyon Mine.

8 A. Okay.

9 Q. Can you give me --- how would
10 you characterize overall, just
11 generally the ground condition at the
12 mine, and particularly how it would
13 contrast or compare to other
14 surrounding mines?

15 A. That --- my opinion of it, it
16 was --- Crandall Canyon had very good
17 conditions. The floor of the coal
18 seam, the Hiawatha seam, was sitting
19 most of the time on a very competent
20 sandstone --- Starpoint sandstone.
21 The immediate roof in most areas was
22 good. I have been inspecting this
23 mine off and on for a number of
24 years.

25 We change assignments over

1 time, but --- and I don't recall
2 exactly my time periods. I could go
3 back and look, but that's neither
4 here nor there. In general, very
5 good conditions.

6 Q. What about the neighboring
7 operations at the Hiawatha seam, how
8 would they compare? Would you have
9 any experience or any way to make
10 comparisons there?

11 A. Yes. The Hiawatha seam is a
12 very area-wide seam, but it does have
13 variations through the area. Just
14 south of the Crandall Canyon Mine is
15 the Deer Creek Mine, and Hiawatha
16 down there is normally about the
17 same. It had a large channel scour
18 that wiped out part of it through the
19 area of the mine to the south. They
20 have a little bit more --- in
21 general, they had --- the mine to the
22 south in the Hiawatha seam had a
23 little bit more --- clay between the
24 immediate coal seam and the floor
25 rock that caused muddy conditions.

1 Other than that, it's comparable to
2 the other places in the Hiawatha seam
3 that Crandall was operating.

4 Q. Okay. Early in the mine's
5 history they did pillar recovery work
6 in that Section 36 for that
7 continuous haulage.

8 A. Yes.

9 Q. Did you have an opportunity to
10 ever go visit that section?

11 A. I visited it --- I can
12 remember that I visited there maybe
13 once or twice. They were using a
14 continuous haulage machine that was
15 kind of new to the system, so we
16 wanted to see it. But in essence,
17 that Section 36 is a state section
18 that we had no jurisdiction in.

19 Q. Okay. Can you recall, what
20 was your impression of the ground
21 condition --- well, first of all,
22 were they on development when you
23 visited or pillaring, or can you
24 recall?

25 A. I can't recall. Well, take

1 that back. I do recall because I was
2 watching the continuous haulage
3 machine develop it, and it wasn't on
4 pillaring.

5 Q. Okay. Any sense for the
6 conditions being different there
7 those years back? Where you visited
8 more recently, is it similar,
9 different? Any way you can contrast
10 or compare?

11 A. I would have to say the same.
12 But that's only very --- on
13 recollected knowledge. I mean,
14 that's ---.

15 Q. I can understand.

16 A. But I don't recall anything
17 terrible with it, that's the thing.
18 It looked like very good conditions
19 for most of my experience up there,
20 whether it was on the continuous
21 haulage machine or the longwall
22 machine.

23 Q. Okay. Well, in 1995, they
24 began their longwall operations.

25 A. Yes.

1 Q. Did you visit any longwalls
2 while they were operating?

3 A. Yes. The first panel, panel
4 one there, is on federal coal lease,

5 Q. Okay.

6 A. And I was the inspector for
7 that.

8 MR. GATES:

9 Would you also visit
10 the active sections if they
11 weren't on BLM or weren't on
12 federal lease?

13 A. No requirement to. I would,
14 once in a while, do that because I
15 knew that they were going to be
16 mining off and on, back and forth,
17 from federal to state.

18 BY MR. GAUNA:

19 Q. Can you recall what other
20 longwalls you might have visited or
21 the history of the longwall
22 operations?

23 A. One and Two I do recall. Then
24 they went down to Three, Four, Five,
25 Six on this east side. I do recall

1 there was another inspector for that.
2 Six, I think I came back to it,
3 because if you notice on the south
4 end of Six, the very south one,
5 southeast, there's some dikes that
6 went across there. I do recall
7 seeing the dikes that interrupted
8 that panel on that kind of angle
9 there.

10 Q. We noticed there are dikes
11 along the southern edge of the
12 reserve.

13 A. Yes.

14 Q. What about with the longwall
15 panel to the north?

16 A. Yes. Then in Panel 8, 9, 10,
17 11 and 12, I was the inspector for
18 all those.

19 Q. Okay.

20 A. And that I do recall because
21 they were butting up against the west
22 end of the big fault, and you noticed
23 on Panel 8 and 9 they didn't --- they
24 were shorter than 10 and 11. There
25 was some sympathetic faulting going

1 on there.

2 Q. Yeah. There was another panel
3 that's cut off on that map, Seven.

4 A. Seven.

5 Q. Seven also. But I just want
6 to make you aware that it's been
7 trimmed off.

8 A. All right.

9 Q. Well, can you give me a sense
10 of what the ground conditions were in
11 the longwall, as far as weight,
12 pressures, general stability that you
13 can recall in the mines?

14 A. Very well. They, to me --- in
15 contrasting this with maybe some
16 other operations, this mine had much
17 --- better conditions. There was a
18 little bit more manifestations of
19 weight in the middle of the panel.
20 Simply the fact of the matter is that
21 the top of the ridge runs right down
22 through the middle of the longwall
23 block.

24 Q. Okay.

25 A. And it did seem that there was

1 --- they would get a little bit more
2 weight on the wall, whether in the
3 form of you get a little bit more of
4 the rib --- of the face sloughing off
5 in front of the wall. But that's ---
6 and maybe some of the --- I do recall
7 that they put a little extra pillar
8 support at the head gate, you know,
9 to keep the rib sloughage down.

10 Q. Would this be in the form of
11 roof-to-floor standing support
12 or ---?

13 A. More on the order of mesh.

14 Q. Mesh on the ribs?

15 A. Yes.

16 Q. What about bounce activity?
17 Can you recall how significant that
18 was, whether it was more than ---?

19 A. No. They had reported some
20 bounces, and I think we had some ---
21 the seismograph station at the
22 University of Utah has always been
23 recording bounces along the whole
24 Wasatch Plateau here. And they
25 corresponded with some of these mines

1 and some of the smaller bounces,
2 smaller seismic events.

3 I, myself, did not witness ---
4 I mean, I guess I felt a bounce. But
5 this one, to me or --- a few of these
6 were very minor to me. I don't know
7 what to compare it to, the size of
8 the bounce. Most of the things that
9 I've witnessed are these bounces that
10 you hear, boom, and that's it.

11 MR. GATES:

12 You mentioned that they
13 reported some bounces, is
14 that ---?

15 A. No, I don't know if they
16 reported it, but it was recorded.
17 I'm sorry if I made a mistake on
18 that. Recorded on the seismic
19 station. And then they were --- we
20 can access those on the websites.
21 And we have been dealing with the
22 University of Utah seismic station
23 for years because there are other
24 mines that receive these same type of
25 seismic activities and relate to

1 other differing conditions or actions
2 that may ---.

3 Well, for example, there is a
4 dam near a mine to the south, that's
5 close to a mine, and they were
6 receiving some bounces there. The
7 Bureau of Reclamation was a little
8 concerned that these bounces may ---
9 make our dam unstable. But nothing
10 up in this country.

11 BY MR. GAUNA:

12 Q. Okay. What about Panels 13
13 through 18, the southern portion of
14 the reserve, or did you have ---?

15 A. I went there occasionally.
16 That, again, is state lands. That is
17 section what, 36?

18 Q. I can't read it, but it is a
19 state section?

20 A. It is a state section, yes.

21 Q. It is a state section.

22 A. I inspected this area off and
23 on, we were more concerned when ---
24 down at the very back end of the
25 panel, the lease line actually was --

1 - tried --- the lease line was ---
2 tried to match up with the Joe's
3 Valley Fault, and it kind of never
4 did. That fault wasn't like a
5 straight fault. So actually they did
6 have to get some federal --- it's
7 kind of called a coal lease
8 modification. They would tie it into
9 the coal lease by a point in common
10 up at the top there. So we granted
11 them a small area of acreage so they
12 could extend their longwall panels
13 because they were coming up to the
14 edge of their state coal land but
15 hadn't hit the fault yet.

16 So it was an opportunity for
17 us to at least maximize reserves.
18 And it would have been bypassed,
19 obviously, if they didn't mine
20 that ---.

21 So we did inspect the back
22 ends, the bleeder back ends of some
23 of those panels that did go over the
24 lease line. That map probably
25 doesn't show that boundary line of

1 that lease modification.

2 Q. That's probably later trimmed
3 off on the CAD file.

4 A. And then we did witness the
5 dikes on the southern panel. They
6 notified us of those things, because
7 we were concerned that that may
8 happen to the area to the south. The
9 area to the south was looked at by
10 this company to lease out. They did
11 not receive this lease. Another
12 company outbid 'em.

13 Q. When you did the inspection on
14 the back end of that, did you notice
15 anything that would be considered
16 bumped or any adverse ground due to
17 stresses?

18 A. No. It was quite normal,
19 especially it was up against, I
20 guess, a fault. And maybe we were
21 thinking that the stress was relieved
22 back there.

23 Q. All right. The Main West in
24 that far ---

25 A. Yes.

1 Q. --- in that farthest extent
2 right there, between longwall Panels
3 12 and 13, it was developed, I think,
4 in 1995. When it was --- prior to
5 the longwall mining in '99, did you
6 ever get an opportunity to look at
7 the early ground conditions there?

8 A. Yes.

9 Q. Can you describe what it was
10 like in the early years, prior to the
11 longwall?

12 A. It was good conditions, except
13 they did have some cap rock in
14 varying locations that they had a
15 hard time keeping up in the roof.
16 And it was very localized. I don't
17 recall exactly where it was, but
18 there was some cap rock, I remember.
19 Other than that, the development out
20 to the fault was good. The cap rock
21 was a problem. It was so flaky that
22 the mining machine --- it was falling
23 on them before the bolter got there.

24 Q. Okay. Did you get an
25 opportunity to look at the ground

1 conditions over time after it was
2 developed? Because it sat for a
3 while there.

4 A. No. After it was developed,
5 we were concerned mostly with the
6 longwall operations on both sides.
7 And we didn't visit that when it was
8 not producing and only used for
9 ventilation purposes.

10 MR. GATES:

11 Was it your
12 understanding that the marks
13 that I guess one would ---
14 maybe some would immediately
15 think where roof falls that
16 are plotted there in the old
17 Main West, is that --- were
18 some of that cap rock that you
19 referred to?

20 A. Possibly, yeah. We noted ---
21 there was one inspection that I did
22 when they wanted to seal the area,
23 and we went back in there, and they
24 were --- basically the entries are
25 filled with gob or extra rock,

1 whether it was from roof falls or
2 cleaning up the roadways, but they
3 gobbed some of those areas.

4 BY MR. GAUNA:

5 Q. When you went in to inspect
6 for the --- I guess for ceiling,
7 could you tell me what you saw in as
8 best details you can or ---? I have
9 a map of the area. Would that help?
10 It's a layout.

11 A. I have my own.

12 Q. Okay.

13 A. I'll pull one inspection out.
14 Pardon me. Right here. November 4
15 of 2004.

16 Q. Okay.

17 A. Both the North Block and the
18 South Block had been mined out at
19 this time. They had approached the
20 Bureau of Land Management to seal at
21 116, 117 Crosscut, the proposed
22 seals.

23 Q. Okay.

24 A. Reason being, they weren't
25 being used anymore, reduce their

1 maintenance through that area. Why
2 they asked us to visit for ceiling is
3 that we have an obligation under
4 regulations to assure that all
5 recoverable coal can be got and/or
6 verify reasons that it can't be. And
7 so we have regulations that state
8 that an authorized officer can
9 authorize areas to be left unmined.
10 That includes pillaring. And that's
11 a normal condition. I mean ---
12 pillars in the mains, barriers, that
13 kind of stuff.

14 So what I went back there for
15 is to verify that the conditions ---
16 is there a possibility they could
17 mine this again. Well, I don't know.
18 They just showed us conditions that
19 precluded, to us, that it would be
20 probably uneconomical and very
21 difficult to mine any extra coal in
22 those pillars, simply due to the fact
23 that they would have to rehabilitate
24 a lot of the areas to make them ready
25 for mining. That was the main

1 reasons that they --- that I
2 indicated. There was roof falls that
3 I indicated. There was --- one of
4 the problems that I did note, if you
5 note, that there was some curved or
6 angled crosscuts.

7 MR. GAUNA:

8 Can we go off the
9 record for a moment?

10 OFF RECORD DISCUSSION

11 MR. GAUNA:

12 I'd like to introduce,
13 I guess, this report here as
14 Exhibit One, which is a report
15 by Mr. Falk in November of
16 2004, and also this as Exhibit
17 Two, the map.

18 MR. GATES:

19 You can just make that
20 --- it's all one.

21 MR. GAUNA:

22 Oh, it's all part of
23 Exhibit One? Okay. This is
24 also part of Exhibit One,
25 going to be a map that

1 accompanies ---

2 MR. GATES:

3 Isn't that part of the
4 report?

5 MR. GAUNA:

6 --- the report that was
7 not attached to the original
8 report file furnished to us
9 previously.

10 (Falk Exhibit One
11 marked for
12 identification.)

13 BY MR. GAUNA:

14 Q. If you could go on and just
15 give us, Steve, an outline or --- and
16 any notes you want to make on the map
17 or any comments. You can use a
18 highlighter, whatever, of the
19 conditions you saw.

20 A. Well, what --- the notes I
21 made here --- you see some lines on
22 the Number One entry, left entry.
23 Noted that's kind of a handwritten
24 note of some rib sloughage. I have a
25 fall, a large fall, at 121 in the

1 belt. And as I noted in my
2 inspection report, when this was
3 mined, developed, they used the
4 continuous haulage machine for that.
5 And that machine could not make a
6 very good 90-degree turn. And in
7 essence, we had an odd intersection.
8 So a lot of the intersections were
9 probably not a square, and we did see
10 some roof falls in that country. But
11 the conditions were, in my mind, that
12 they would have to do a lot of
13 rehabilitation if they ever decided
14 they wanted to recover any of that
15 extra coal.

16 And that was my inspection,
17 therefore, is to verify the
18 conditions for justification of not
19 mining the rest of the coal. This is
20 standard procedure that BLM does
21 before they seal, before they seal an
22 area and make it inaccessible. And
23 that's all that I was up there for is
24 to verify those conditions.

25 Now, I did not make judgmental

1 calls on if it's safe or not. I just
2 saw the conditions that looked to me
3 that there was --- they would have to
4 do a far amount of rehabilitation if
5 they even wanted to try to pull any
6 pillars there at all at some future
7 time.

8 MR. GAUNA:

9 For the record, I'd
10 just like to mention that the
11 marks that Steve saw in the
12 Number One entry are
13 positioned between Crosscut
14 120 --- well, actually as far
15 back as Crosscut 121,
16 extending inby to Crosscut
17 131.

18 MR. GATES:

19 Are there any kind of
20 guidelines that you follow
21 when you make your inspection
22 of this area or is it
23 primarily a judgment call on
24 your end as to whether mining
25 --- if there's any mining to

1 be done?

2 A. Mostly judgment call. When
3 you operate under this regulation,
4 and I would love to read it, because
5 that --- we have a --- it is very
6 interesting to interpret. I
7 shouldn't say that. I shouldn't say
8 interesting to interpret, but it
9 leaves a lot of areas for judgment on
10 this. We are to assure the maximum
11 economic recovery of the federal coal
12 leases in the definition of federal
13 regulations. I'll give you the quote
14 if you need it. I don't know --- but
15 I'm getting to the point here.
16 Maximum economic recovery means that
17 based on standard industry operating
18 practices, all profitable portions of
19 a leased federal coal deposit must be
20 mined. At the times of maximum
21 economic recovery determinations,
22 consideration will be given to, and
23 then a whole list, existing proven
24 technology, commercial availability,
25 economically-feasible equipment, coal

1 quality, quantity and marketability,
2 safety, exploration, operating,
3 processing and transportation costs
4 in compliance with all applicable
5 laws and regulations.

6 In a nutshell, under standard
7 operating practices, if the place is
8 starting to show some wear and tear,
9 future recovery is not an option.
10 And that was my justification in
11 there. It says that they wanted to
12 seal it. Well, if standard operating
13 practice is you're going to seal the
14 area, the chances of you ever going
15 back there are probably nil. And
16 therefore, a lot of conditions I
17 noted in that inspection report would
18 warrant then that we could authorize
19 them to seal it up and it would not
20 be accessible for --- in essence,
21 this is not recoverable federal coal
22 anymore.

23 MR. GATES:

24 Steve, what part in the
25 section is that that you just

1 read from?

2 A. 43 CFR, 3480. --- oh, my gosh,
3 it's a definition, .0-5, number 21.
4 You can probably take it off. Here's
5 the beginning of it. Maximum
6 recovery, right there.

7 MR. GATES:

8 Thank you. I guess
9 some of that --- the way some
10 of your regs are written
11 probably makes for a lot of
12 work for John and his office,
13 just as ours.

14 BY MR. GAUNA:

15 Q. Can you recall whether there
16 was ever evidence of pillar stress,
17 where the pillars were taking
18 unusual, abnormal stress?

19 A. These rib brattices to me
20 looked like they were taking stress.
21 To what degree, I did not make a
22 determination. But in essence, coal
23 falling from the rib, starting to
24 fill up probably a third of the entry
25 was --- I'm trying to --- that's an

1 estimation. I couldn't recall if
2 that's set clear to the entry. But
3 my marks on there to me indicated
4 there was --- the ribs were, to some
5 degree, failing.

6 Q. Did you travel any other entry
7 other than the Number One?

8 A. The Number One entry, and then
9 we also went into --- that's where I
10 noticed this cave here into the belt
11 line. And I'm not sure where we
12 entered that, but I did make a note
13 that we had that fall back at the
14 belt line in Number Three entry, in
15 Crosscut 121.

16 Q. You didn't have any
17 opportunity to go into the Four or
18 Five entry?

19 A. No.

20 MR. GAUNA:

21 Okay.

22 MR. GATES:

23 You mentioned that they
24 had mined up to the cap rock.
25 Was there any floor coal left,

1 any bottom coal left in this
2 section?

3 A. I don't recall. Let me look
4 at my inspection report, if it did
5 say anything there.

6 WITNESS REVIEWS REPORT

7 A. I don't recall. The seam
8 thickness in this area, to my
9 recollection is on the order of ten
10 feet. They were mining eight to
11 nine, normally. So there is some ---
12 whether that was left on the floor of
13 the rib or in the roof, I don't ---.

14 MR. GATES:

15 But I thought you
16 mentioned the cap rock?

17 A. Yeah, I did recall some cap
18 rock. So my guess is they were
19 cutting the floor.

20 BY MR. GAUNA:

21 Q. You made mention in that
22 report about a pillar split somewhere
23 --- what break was that?

24 A. Yes, here it is. Further
25 back. This one is off at --- that's

1 why I have three maps. Maybe you
2 need these, too. I don't know if you
3 need to go off the record. But this
4 is such a long area.

5 Q. Okay. Roughly what crosscut?

6 A. 146.

7 Q. Crosscut 146, you had a ---.

8 A. A pillar split. Attempted
9 pillar split, even up here. And
10 another cave in the belt line.

11 Q. Okay. Crosscut 146 would be
12 where they attempted to split. And
13 you made mention of a roof fall in
14 the area.

15 A. Yes.

16 Q. After the longwall production,
17 they went and started to pull pillars
18 in the --- I guess in the area that
19 they call Six East. Were you
20 involved with any inspections in that
21 area of Six East? Six East would
22 have been --- I'll point to the map.

23 A. Six East was here when they
24 went back and forth around stream
25 channel. And they called these areas

1 some various numbering systems,
2 three-and-a-half. But basically
3 they're back in the 60s crosscut
4 area, yes.

5 Q. Can you give me a description
6 of what you --- you were there during
7 the pillaring operations, pillar
8 extraction?

9 A. Yes.

10 Q. Well, could you give me your
11 sense of what the pillaring
12 conditions were and what --- and how
13 it was progressing, from your
14 observations?

15 A. This was quite normal and very
16 --- if you could call it good
17 conditions. To me, I didn't see any
18 abnormal problems. I note that it is
19 under shallow cover.

20 Q. Okay.

21 A. And if you note also, just for
22 the record, they did not pillar
23 underneath a zone there. There's a
24 stream above there, and we were
25 concerned with the subsidence to the

1 stream, the depths of --- some places
2 it was less than 400 feet. We
3 decided early on that to approve the
4 mine plan that would allow protection
5 of the stream from subsidence.

6 MR. GATES:

7 Was it always on the
8 mine projections for the
9 operator to pull those pillars
10 after the development or was
11 this ---?

12 A. At the first --- no. At the
13 first go around of this mining
14 operation, they were expecting to go
15 south and get the other lease, and so
16 sixth --- if I can point out, this
17 is ---.

18 BY MR. GAUNA:

19 Q. I've got a map here you can
20 mark.

21 A. Six East had planned to be
22 some sub-mains to go all the way into
23 this new lease and then extend down
24 here. When they did not receive this
25 lease, they had some alternative

1 plans to get into this country.

2 MR. GAUNA:

3 Okay. For the record,
4 Steve pointed out that Six
5 East was to project eastwards
6 towards the mine portal, and
7 that was the area that they
8 didn't get leased.
9 Consequently, they moved
10 development more towards the
11 northeast.

12 MR. GATES:

13 And that would have
14 been something that would have
15 required a plan submitted to
16 your office for review?

17 A. Yes.

18 BY MR. GAUNA:

19 Q. They pulled the pillars
20 through the mains. Is that
21 considered part of the BLM lease
22 agreement, to extract your mains, or
23 how is that --- what is that
24 protocol?

25 A. There is no protocol on

1 extracting mains. It's as conditions
2 warrant.

3 MR. GATES:

4 Would that have been
5 something --- if the mine
6 operator had not proposed to
7 pull those pillars, would that
8 have been something that, as
9 far as maximum recovery, that
10 you would have proposed or
11 required?

12 BRIEF INTERRUPTION

13 MR. GATES:

14 I guess I was asking,
15 if the mine operator had not
16 proposed to pull those pillars
17 in the Six East and the three-
18 and-a-half, the area that you
19 just described, would that
20 have been something that the
21 BLM would have suggested or
22 proposed to the mine operator?

23 A. If they left the areas that
24 maybe we considered that could be
25 mined, we would ask, yeah, for

1 justification as to why they
2 wouldn't. We had --- I think we had
3 plans ---. I can't remember at this
4 stage, at what stage we offered a
5 plan. But normal practice is if
6 there is areas that have mineable
7 coal or we projected, we will ask
8 questions why they're not mining it.

9 MR. GATES:

10 Even if that includes
11 second mining?

12 A. Yeah.

13 BY MR. GAUNA:

14 Q. The mains, south mains, were
15 then extracted after the Six East
16 area.

17 A. Correct.

18 Q. Did you get a chance to see
19 any of the pillaring conditions from
20 the extract of the south mains?

21 A. Yes. Here again,
22 three-quarters of it is on state
23 land.

24 Q. Okay.

25 A. It doesn't show it on this

1 map. The boundary is right about
2 here, if I'm not mistaken.

3 MR. GAUNA:

4 So Steve pointed out,
5 for the record, that the
6 boundary between the state
7 land to the west and the
8 federal land to the east is
9 roughly the western edge of
10 the barrier pillar for the
11 panels three through six.

12 A. Would you like a map with ---
13 this is just a spare map that I had.

14 BY MR. GAUNA:

15 Q. We have --- that's just a
16 layer that was turned off on the CAD
17 file. It exists, but it's turned off
18 on that when they printed that map.
19 At what point did you get an
20 opportunity to see the pillaring
21 operations?

22 A. A number of times.

23 Q. A number of times. Could you
24 give me a description of what the
25 conditions were like?

1 A. In general, they were good. I
2 don't know what else to say, just
3 that it was a normal --- to me, it
4 was almost like a normal pillar
5 panel, a planned pillar panel. They
6 have to adjust --- since the size of
7 the pillars in the mains were a
8 little bit different to match up with
9 the --- they had to adjust some
10 things.

11 Q. And was there any evidence
12 from the times you were there of any
13 abnormal stresses around the ---?

14 A. No, I did not see that.

15 Q. Well, after recovery of the
16 south mains, the operator moved
17 towards the Main West, and I guess
18 you described that. Did they have
19 plans to just, I guess, operate and
20 pull pillars in the Main West without
21 the barriers, initially? Do you have
22 any information of original pillar
23 plans that might have been submitted?

24 A. We had some varying plans that
25 were submitted to us. There was an

1 interim plan that changed in mid
2 course to actually mine in the
3 barrier, the south barrier at least.
4 And there was some --- often in an
5 R2P2 they will state --- put some
6 verbiage down, we will attempt ---
7 not attempt, but we will recover
8 remnant coal, if conditions warrant.
9 And that's a general statement that
10 often they put in an R2P2. And that
11 would include barrier pillars, mains.

12 MR. GATES:

13 Do you recall when they
14 would have submitted this
15 proposal to you?

16 A. Yeah. We have the records.
17 Offhand, I'd have to look at the
18 record, the actual dates.

19 MR. GATES:

20 So you have the record
21 with you?

22 A. It might be in here. Do you
23 want me to try to thumb through it?

24 MR. GAUNA:

25 Yes. Go ahead, please.

1 WITNESS REVIEWS RECORDS

2 A. This map is dated --- it got
3 cut off, but it has a received date
4 of May of 2004.

5 BY MR. GAUNA:

6 Q. May of 2004, you had a
7 plan ---?

8 A. We had a, yes, a proposal for
9 us for --- most of it was for this
10 area up in this country, and also to
11 pull these south mains, as far as
12 federal lands was, and to continue
13 pulling the mains out of here. And
14 you see the shaded areas that they
15 had thoughts to mine.

16 MR. GAUNA:

17 For the record, Steve
18 pointed out that the pillaring
19 extraction was projected to be
20 in the areas to the east and
21 the federal lands.

22 BY MR. GAUNA:

23 Q. What would you consider this
24 part of the mine? It would be to the
25 south of the Third North and to the

1 northeast of the Third North?

2 A. Yes.

3 Q. And it also shows the
4 pillaring was actually accomplished
5 in the south mains, up to where they
6 did pull the pillars. But it also
7 shows projections where they are
8 pulling the south barrier of old west
9 mains west of crosscut 118, no mining
10 in the north barrier, except when
11 they show mining against the Joe's
12 Valley Fault.

13 A. There's a caveat noted in the
14 pillar and barrier part of the map,
15 and recovery will vary depending on
16 coal thickness, quality, geologic
17 conditions, MSHA stipulations and
18 economics.

19 MR. GATES:

20 I guess maybe instead
21 of trying to describe all of
22 that, would it be possible to
23 get a copy of this map from
24 you?

25 ATTORNEY STEIGER:

1 This map was not
2 approved.

3 A. This is a --- yeah. I'm
4 sorry. Go ahead.

5 ATTORNEY STEIGER:

6 No, you're giving
7 testimony here.

8 A. This map was submitted.

9 BY MR. GAUNA:

10 Q. Submitted.

11 A. It was not approved. And
12 after the submission, they sent us
13 another submission. I guess maybe
14 --- what's the word I'm looking for,
15 to elaborate on this, I guess.

16 ATTORNEY STEIGER:

17 Richard, short answer
18 to your question is, yes, we
19 can provide this.

20 MR. GATES:

21 That's good.

22 A. This is what was approved.

23 BY MR. GAUNA:

24 Q. And what is the date on this
25 map?

1 A. 10/12/04. And we approved it
2 the first of '05.

3 Q. And can you show for the
4 record where it shows the Main West
5 pillaring is approved?

6 A. For this country right here.

7 MR. GAUNA:

8 Okay. Steve points out
9 it's an area that looks like
10 east of Crosscut, roughly,
11 118, 119?

12 A. Yes.

13 MR. GAUNA:

14 And then it shows no
15 extraction to the west of that
16 point in the old Main West.

17 BY MR. GAUNA:

18 Q. Can we get a copy of this map?

19 A. Yes. Do you want --- the
20 original maps may be up in Salt Lake
21 right now, because we sent them to a
22 copy center for the FOIA people.

23 MR. GATES:

24 I mean, if it would be
25 possible on your end, we could

1 run by our office after we
2 leave and we could scan the
3 map, and we'd have an
4 electronic copy, and you could
5 take that ---.

6 A. It would be a scan of a scan.
7 This is a scan. This is the
8 original.

9 ATTORNEY STEIGER:

10 Well, at least one of
11 these maps I've marked up, and
12 so this is client/attorney
13 work product, notations on
14 here. So I can't let you have
15 the 10/12/04 map. We'll have
16 to make a provision to get you
17 a copy that I haven't notated.

18 MR. GATES:

19 That's fine.

20 A. This map is reduced to an
21 eight-and-a-half-11 in an actual
22 approval letter back to the company,
23 and that I have a copy of.

24 ATTORNEY STEIGER:

25 And I'll commit to

1 working with the state office
2 to get you the May 2004 R2P2
3 that was not approved, as well
4 as the October 2004 R2P2 that
5 was approved.

6 MR. GAUNA:

7 Okay.

8 MR. GATES:

9 Okay.

10 BY MR. GAUNA:

11 Q. The mining then projected a
12 plan for the north barrier of old
13 Main West just south of Panel 12.
14 When were those plans submitted?

15 A. They weren't.

16 Q. Okay.

17 A. In essence, they went from
18 here up into the north barrier, when
19 they finished south mains. There was
20 no official submission from them to
21 mine that north barrier.

22 MR. GATES:

23 Is that normal protocol
24 to ---?

25 A. Normal protocol is that when

1 the --- there's nothing normal in
2 this, is the fact that they were
3 going to mine something that is above
4 and beyond, I guess, our thoughts
5 that they couldn't mine it. So now
6 they were going to make an attempt.
7 I was the inspector for the area ---
8 I'll offer this. I was under the
9 impression that they could go ahead
10 there, and I was mistaken.

11 But in essence, they were
12 going to recover some extra coal.
13 And we did have previous maps showing
14 that they, you know, had thoughts and
15 processes to try that at times.

16 MR. GATES:

17 To try the north
18 barrier?

19 A. Yeah.

20 MR. GATES:

21 So that wouldn't have
22 required an additional
23 submittal for a variation of
24 the plans?

25 A. It should. It should have had

1 a submission there to have the exact
2 plan in front of us. But we do
3 operate with a lot of
4 generalizations.

5 BY MR. GAUNA:

6 Q. Did you have any --- I think
7 --- I don't know ---. Did you have
8 any opportunity to look at any
9 reports or design work associated
10 with the development plans,
11 projections in the north barrier?

12 A. No.

13 Q. Did you have an opportunity to
14 evaluate the mining conditions in the
15 north barrier?

16 A. Yes, sir.

17 Q. Okay. Can you tell me what
18 you observed and how that came about?

19 A. On my next quarterly
20 inspection, December of '05 --- '06,
21 yes. December 14, '06, they had
22 connected up off of --- just in front
23 of 116 Crosscut and necked off from
24 these existing main entries and
25 started driving four separate entries

1 in the north barrier and were not
2 connecting up with Main West past the
3 seals. And those conditions, as they
4 were developing, were very good. I
5 didn't see any abnormal thing on
6 development. Later on there were
7 some inspections coming up, too, as
8 they were pulling out.

9 MR. GATES:

10 Did that surprise you?

11 A. After seeing --- my opinion,
12 after seeing --- after they pulled
13 the south mains, developing in that
14 barrier was a little surprising, but
15 yet it made sense that first mining
16 in this barrier maybe will be okay.

17 BY MR. GAUNA:

18 Q. At the time were you under the
19 impression that that was just going
20 to be development mining only in the
21 north barrier?

22 A. Yes. But I did ask --- and
23 it's recorded on the inspection
24 report, and I do recall asking the
25 engineer that I went with, from the

1 company, what plans have you for ---
2 do you want to retreat east. And
3 they said they were working on it and
4 trying to get ---. And they did say
5 trying to get an MSHA approval for
6 pillar recovery in the north barrier.

7 Q. The conditions then would be
8 considered --- you consider typical
9 for that mine?

10 A. Yeah. It did surprise me
11 somewhat that the --- knowing that
12 you're in a barrier with mined-out
13 areas to the north and to the south,
14 that on development it looked pretty
15 good. You know, I haven't seen what
16 --- mining barriers against longwalls
17 in the south mains. Maybe I was
18 thinking it was, you know, going
19 against maybe experience that
20 normally in barriers it's a little
21 more adverse conditions.

22 Q. Were there any reports of any
23 bounces or anything that happened on
24 development?

25 A. No, not that I know of.

1 Q. And how about evidence of any
2 --- well, do you recall why the north
3 development stopped prior to hitting
4 the Joe's Valley Fault?

5 A. Water coming in back in 158,
6 I've got that in the report.

7 Q. Do you recall what type of ---
8 what was bringing in the water, where
9 it was coming from, the type of ---?

10 A. I did not know that. The
11 company told me about it, and that's
12 when they started pulling pillars
13 back. And I did not get down to see
14 where the water was coming in. The
15 water wasn't up to the point that far
16 back. The engineer had mentioned to
17 me that he could --- he was observing
18 coming from the floor and the ribs.
19 He thought it was possibly some
20 fractures, and maybe coming from ---
21 the dip is somewhat to this angle,
22 coming from the north gob.

23 Q. Did he report any water from
24 any roof fractures?

25 A. Nothing at all, no.

1 Q. Did you have an opportunity
2 then to observe the pillaring
3 conditions in the north barrier?

4 A. Yes.

5 Q. Okay. Could you describe what
6 you observed?

7 A. The first instance of noting
8 pillaring in the north barrier
9 occurred on February 27th, '07. They
10 were --- at the time, had pillared,
11 let's see --- I want to make sure I
12 got the right one here. They were at
13 Crosscut 149 and had pulled --- as I
14 mentioned in the report, had pulled
15 nine rows. I had it in here some
16 place. I can't find it now.

17 MR. GAUNA:

18 We have a copy of that
19 report with a map attached.
20 I'd like to submit it as an
21 exhibit. And if you have any
22 of the notes, you can write on
23 this, and you can move it with
24 this.

25 (Falk Exhibit Two

1 marked for
2 identification.)

3 A. I'm sorry, you have that
4 report?

5 BY MR. GAUNA:

6 Q. Yeah, this report, and it does
7 have a map. Maybe we can ---.

8 A. It's probably the same map.

9 Q. You can check it over and
10 verify that, it's the same map.

11 WITNESS REVIEWS MAP

12 A. Yeah, the same map. They were
13 mining 148. I'm sure I mentioned it
14 here in this report. I just got to
15 find it. I'm sorry. I'm looking at
16 the wrong one. It would help if I
17 looked at the right one. There we
18 go. Excuse me. I was looking at the
19 December one.

20 Here. So far the crews had
21 pulled 18 pillars or nine rows.
22 These are --- this row is only a two-
23 pillar row of the three pillars. And
24 currently pulling pillars. And this
25 is February 27th, Crosscuts 149 on to

1 50.

2 Conditions. Conditions were
3 good. And as I had mentioned, it was
4 interesting that it was so good. And
5 I did mention that I did feel that as
6 they got into the deeper part of the
7 ridge top that it may get
8 interesting. And that I even put in
9 my report. Interesting as an
10 interesting comment. But understand
11 that I was referring to the ridge top
12 entered at 2,000 foot. I was
13 concerned that you would get some ---
14 the normal bounces you do get when
15 you're --- pressures are getting too
16 big. But at this stage, February
17 27th, at Crosscut 149, no abnormal
18 conditions are noted.

19 BY MR. GAUNA:

20 Q. And interesting, elaborate.
21 Is it based on your experience?

22 A. The experience that we had in
23 this area that seems like if they
24 mined, getting close to the 1,800 to
25 2,000 foot range in any place, it

1 gets a little --- with room-and-
2 pillar operations, pulling pillars
3 under depths of greater than, I don't
4 know ---. I don't want to limit that
5 range ---. But when we get up
6 between the ranges of 1,500 and 2,000
7 feet, we have seen areas that people
8 have tried and it causes abnormal
9 stresses. And in their mining terms
10 they use, they get run out of the
11 area.

12 MR. GATES:

13 Is this an area that
14 you would have determined to
15 be a recoverable resource or
16 mineable coal? I'm not sure
17 what the terminology is that
18 you used earlier.

19 A. That's up to the company to
20 determine or show us. Normally, we
21 --- barrier pillars, we would just
22 ask them, do you have plans for it.
23 And we don't have any set guidance.
24 Some companies will offer to mine
25 them, some won't.

1 MR. GATES:

2 But I think you
3 mentioned earlier that before
4 a mine operator seals an area,
5 that you're required to come
6 look at it and make a
7 determination as to whether
8 there's any mineable reserves
9 there.

10 A. Right. Exactly. What I was
11 referring to, though, in that report
12 when I mentioned that was truly just
13 the pillars in west mains. I did not
14 make any determinations about the
15 barrier at that time.

16 MR. GATES:

17 But I guess if they had
18 --- if the company had said,
19 we're not going to pull those
20 pillars ---?

21 A. We're not going to mine it, we
22 --- then they would give us some
23 justification.

24 MR. GATES:

25 And then you'd go look

1 at it?

2 A. Yeah, if you could go look at
3 it. I mean, a barrier pillar would
4 be pretty tough. I mean, you could
5 look around it and see the conditions
6 around it.

7 MR. GATES:

8 But no, I mean, you
9 would have went into the area
10 after development had
11 stopped ---

12 A. Yes.

13 MR. GATES:

14 --- and then ---?

15 A. And maybe the ribs or
16 something on the development side to
17 the barrier pillar. If they were
18 having maybe some indication of
19 taking weight, then that would be
20 fine. If the company then would say,
21 we don't want to try it, that's fine.

22 BY MR. GAUNA:

23 Q. Did the company make you ---
24 report any bounces in the north
25 barrier pillar to you?

1 A. They reported that they were
2 going to stop mining, pillar
3 recovery, at a certain crosscut in
4 March. They notified me they were
5 having adverse conditions, including
6 --- and I don't recall if he said
7 bounce or bounces, one or more, but
8 there were adverse conditions. And
9 then I went up there and inspected in
10 March and noted those conditions in a
11 report.

12 The company then followed up
13 with --- in writing that they weren't
14 going to continue pulling pillars,
15 and this is the justification for it.
16 And in their submission they said
17 bounce, had some bounces that had
18 caused damage to the ventilation
19 system, some of the stoppings and
20 stuff.

21 Q. You went underground to
22 investigate or check out the area?

23 A. Yeah.

24 Q. And can you describe what the
25 conditions were that you encountered

1 and what you observed?

2 A. The stoppings along the
3 right-hand entry, Number Four, on the
4 north side, that pillar was left.
5 And they reported to me that was
6 their approved pillar plan. They
7 were going to leave the top pillar
8 and only mine two of the three. And
9 I had every reason to believe that
10 was fine.

11 I noted up there when I went
12 --- I was able to travel back in that
13 Number Four entry. Stoppings to the
14 area had --- many of them had been
15 damaged or at least, you know, broken
16 along the rib. There was some rib
17 sloughage, as I noted, back outby one
18 or two rows from the face, the
19 current face. I did --- it was
20 dangered off at the actual face, so I
21 did not see where they left off the
22 actual pillar. It was one --- I
23 think it was one crosscut before
24 that. And the pillars there were
25 showing some sloughage. And that's

1 the conditions I noted.

2 Q. I have a map of that. See if
3 it's --- is there a map attached? Is
4 there a map attached to a report?

5 A. Yes. March 15th.

6 Q. March 15th?

7 A. Yes.

8 MR. GAUNA:

9 I'd like to submit this
10 as an exhibit and see if you
11 have anything you want to add
12 or any notes you want to make
13 onto the map. I have a
14 blow-up of that. Maybe it
15 might be --- it's about the
16 same size as that map. So
17 maybe we can attach this as an
18 exhibit, this map.

19 (Falk Exhibit Three
20 marked for
21 identification.)

22 BY MR. GAUNA:

23 Q. And is this the same map blown
24 up, ---

25 A. Yes.

1 Q. --- near to the same scale?

2 A. Yes.

3 MR. GAUNA:

4 Okay. I'd like to
5 attach this to this last
6 exhibit, Three.

7 BY MR. GAUNA:

8 Q. I'm curious about if you would
9 make any marks on this map.

10 A. You can tell which ones are
11 company marks and which ones are
12 mine.

13 Q. Okay.

14 A. I put a line here.

15 Q. Why don't you use a
16 highlighter to show us the marks you
17 made. We had several highlighters
18 down here to indicate which is your
19 notes.

20 MR. GAUNA:

21 For the record,
22 Steve is using orange to
23 highlight ---.

24 A. You can see it better on mine.

25 BY MR. GAUNA:

1 Q. Take your time.

2 A. I traveled, let's see ---.

3 Q. We'll use a different
4 highlighter for your route. I just
5 want to make a mark which ones ---.

6 A. These are mine. These are
7 mine. This is mine.

8 Q. And for the record, you're
9 recording the direction that you
10 saw ---?

11 A. Direction of rib sloughage ---

12 Q. Rib sloughage?

13 A. --- into the entries and said
14 I said the rib off --- doesn't look
15 like it off this, but it looks like
16 there's an arrow. That was mine.
17 And this one was up here, this one up
18 here. And I noted that what they
19 called the rest of these, D, damaged
20 stoppings, I noted it. I didn't mark
21 it. I just said, yeah, they looked
22 as reported.

23 Q. Okay. So the Ds were marks
24 made by the company?

25 A. Yes.

1 Q. Okay. And you just noted that
2 they were damaged?

3 A. Yes.

4 Q. And O signifies ---

5 A. Out.

6 Q. --- out that were marked by
7 the company. Do you recall what
8 individuals from the company who made
9 those marks?

10 A. I don't know who made the
11 marks. I went with a mine engineer
12 and he gave me this map.

13 Q. Okay. That map was furnished
14 before you went underground?

15 A. Yes, before I went
16 underground. Yeah, because I took it
17 with me. You can tell, it was all
18 smudged up.

19 Q. There's a lack of marks
20 showing bounces roughly between
21 Crosscut 136 and Crosscut 142. Do
22 you recall --- is that because the
23 conditions were better there or just
24 that marks weren't made?

25 A. I don't know. I wouldn't

1 know. Like I say, I was in there
2 February, and then I saw this when
3 they were here. So what had
4 transpired in the March area, I don't
5 know.

6 Q. Maybe for clarification, could
7 you show us where you were on that
8 day? I guess that was March ---.
9 What date was that?

10 A. March 15th.

11 Q. On March 15th --- with a
12 different colored highlighter?

13 A. Yes.

14 Q. With a magenta highlighter.

15 A. It was right in this country
16 right here. I noted that, I'm pretty
17 sure, on the inspection report. I
18 was able to get between Crosscuts 132
19 and 133.

20 Q. Okay.

21 A. That's correct.

22 Q. Were you able to travel to
23 this mark?

24 A. Yeah. I was able to travel
25 down as --- I traveled down the north

1 bleeder entry well inby the dangered
2 off area and verified the items on
3 the map. So, yeah, I didn't say
4 exactly where I went or how far down
5 I did, and I don't recall, but I do
6 remember seeing some of these
7 damaged ---.

8 Q. So you did travel down ---

9 A. I did travel down an
10 undetermined distance.

11 Q. --- an undetermined distance?

12 A. Yes.

13 Q. Okay. But you did go at least
14 to this break here, 137? As best you
15 can recall, that's your map?

16 A. Yep.

17 Q. I have some photographs of
18 that area that were taken in that
19 time frame I'd like to show you and
20 see if you can confirm. I'll bring
21 them to you here.

22 A. Okay.

23 MR. GAUNA:

24 This map is --- should
25 be exhibit --- also entered as

1 an exhibit, Number Four.
2 (Falk Exhibit Four
3 marked for
4 identification.)

5 BY MR. GAUNA:

6 Q. And if you'll see, these
7 photos are indexed to certain
8 locations and with a green arrow on
9 the map, showing the direction the
10 photo is looking. I'd just like you
11 to study that and see if you think
12 it's representative of the conditions
13 you saw ---

14 A. Yeah.

15 Q. --- when you went underground
16 on the 15th.

17 A. Very much so. What I recall
18 is that the roof was quite intact.
19 And what you saw of the contact of
20 the rib and the roof at the rib ---
21 at these intersections, you had what
22 we call, you know, the eating of the
23 coal back into the roof. Very ---
24 yeah, these are very representative
25 of what I saw.

1 Q. Do you recall any particular
2 pillars where you could see over the
3 top of the pillars, where you could
4 tell that the pillar had detached
5 itself from the mine roof?

6 A. No, I don't recall that or
7 remember seeing an actual separation.
8 At the areas where you could see, I
9 mean, were quite a ways back, at the
10 top of the roof to the rib, at those
11 intersections, varying at different
12 locations.

13 MR. GATES:

14 Had you ever seen it at
15 this mine or any of your other
16 mines where that pillar had
17 detached from the roof, as
18 Mike described?

19 A. Not offhand, no.

20 MR. GAUNA:

21 This is getting a lot
22 of ---. We'll keep these more
23 in a simple stack here in case
24 more exhibits come forward.

25 MR. GATES:

1 Are there any of these
2 pictures that don't look
3 familiar or that you would say
4 don't look similar or
5 representative of what you
6 observed?

7 A. No.

8 BY MR. GAUNA:

9 Q. During this time frame, when
10 they were pillaring, there was a
11 regular communication between
12 yourself and the operator?

13 A. What do you ---?

14 Q. In other words, any monthly
15 progress, notes, calls, other than
16 your normal quarterly inspection?

17 A. Well, this 15th inspection was
18 a result of a call.

19 Q. Okay.

20 A. And they submit monthly mining
21 progress maps to us.

22 Q. So you know where the mine ---
23 based on those maps, you know what
24 they've done on a month-by-month
25 basis?

1 A. Yes.

2 Q. Okay. And would you respond
3 to these maps --- what situation
4 would you see on a monthly map would
5 cause you to respond back to the
6 company?

7 A. Those are just general --- to
8 show location. If there are adverse
9 conditions, they're usually not
10 marked on the map. And if --- you
11 know, we get those --- what you're
12 seeing, though, is a full month of
13 progress, mine progress, but they
14 submit these maps at the end of that
15 month. And they usually come within
16 a week or two after the end of the
17 month, so, you know, that's the
18 regularity of these submissions.

19 Q. After they moved out of the
20 north barrier, the company moved into
21 the south barrier to mine. Was a
22 plan submitted or any approval
23 submitted to do the mining on the
24 south barrier?

25 A. At the same time I visited

1 this --- on March 15th, when I
2 visited at a request of the company
3 to verify the conditions up there, a
4 day later they sent in written auth
5 --- or a written request to leave the
6 rest of the north barrier. In the
7 same request they would want --- and
8 also they wanted --- when I was up
9 there, they wanted the okay right
10 away to say, can we pull the
11 machinery off here or do we need to
12 sit until this ---. No, we gave them
13 verbal approval to stop what they
14 were doing in the north barrier and
15 pull the machinery out.

16 At the same time they
17 submitted this, a day or two later,
18 in writing, they had on their plans
19 for the south barrier. We gave them
20 an okay pretty well because there was
21 only one entry on that that was on
22 federal lands.

23 Q. Okay.

24 A. The top entry of the south
25 barrier is on that federal coal

1 lease. And I got a better map of
2 that.

3 Q. And I think, again, it's a
4 layer that we can turn on later. It
5 was just taken off for simplicity.

6 A. So in essence, we had no ---
7 didn't really have a say one way or
8 the other whether they could go and
9 head down there in the south or not.
10 Because in essence, it was not --- it
11 was state lands, not federal.

12 Q. So it wouldn't really require
13 your approval for that?

14 A. We gave them, in our approval
15 letter back to stop the north
16 barrier, to continue in the south
17 barrier as far as our jurisdictional
18 boundaries gave us, the one entry.

19 Q. Were there any concerns about
20 them mining in the south barrier?

21 A. Personally, I mentioned to the
22 engineer, and I think I noted that in
23 the report, that are you going to try
24 this in the south barrier. And they
25 said, well, we're going to try to

1 work on it. And I mentioned, you'll
2 probably find the same conditions of
3 what you saw in the north barrier in
4 the south barrier. So those were
5 personal communications between
6 myself and the representative of the
7 company that was with me. But that
8 was not --- nothing of that was in
9 writing back to the company on
10 approval of leaving the north barrier
11 and giving them the approval of the
12 one entry on the south barrier.

13 Q. Did BLM at all get an
14 opportunity to look at any of the
15 engineering analysis reports for any
16 of the mining in the south barrier?

17 A. No.

18 MR. GATES:

19 In a situation where
20 mining is going to take place
21 like that, where it's affected
22 the one section and part of
23 the mining is on state and
24 part is on federal, is there
25 any kind of coordination that

1 takes place?

2 A. In this case, no, because the
3 state does not have operating
4 regulations on a state lease as we do
5 for a federal lease, so it's --- we
6 are a jurisdictional boundary. We
7 can't tell them what to do on state
8 lands. And there is --- the state
9 does not have the same operating
10 regulations on the state leases that
11 the feds do.

12 BY MR. GAUNA:

13 Q. They don't have --- the State
14 of Utah doesn't have a review process
15 like the BLM does for ---?

16 A. Not at all, no.

17 Q. Did you have an opportunity to
18 inspect the south barrier?

19 A. Yes, I did.

20 Q. Okay. Could you describe what
21 your conditions were there?

22 A. The only inspection I did
23 there was on development. It was
24 probably about halfway through. And
25 this was the June 13, '07.

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MR. GAUNA:

Let me also submit this
as an exhibit.

(Falk Exhibit Five
marked for
identification.)

BY MR. GAUNA:

Q. Let's see if there's maps on
this. If there's anything you care
to add, we can add it to the map
that's on this exhibit.

A. That's the one.

Q. Could you describe the
conditions you encountered and your
observations related to the ground
conditions?

A. What I put down there ---
let's see. I mentioned conditions
are not too bad considering the depth
--- the mine depth of the south and
the Main West entries to the north.
That's all I put. And what I
recollect is it looked very similar
to what --- on development of the
north barrier. It was almost the

1 same design. You're driving four
2 entries in a 450-foot wide barrier
3 pillar.

4 Q. Had you noticed or made note
5 about the changes in the pillar
6 dimensions or what the pillar
7 dimensions were in the south?

8 A. No, I didn't. And I noted
9 that. That I told you right now,
10 after the fact. When I went in there
11 on this one, here again, I was
12 inspecting only a small portion of
13 federal lands, and I didn't know ---
14 the pillar dimensions had changed a
15 small amount. I think they made them
16 a little longer. Crosscut centers
17 were the same. But that was after
18 the fact. And as I went in here, the
19 conditions I noted were just the
20 conditions of the entries.

21 Q. And floor and rib conditions
22 were ---?

23 A. Similar.

24 Q. What about the entry widths
25 and mining heights?

1 A. They were about the same.
2 They were trying to keep the mining
3 height down to eight feet.

4 Q. Okay.

5 A. Coal thicknesses, I think,
6 were a little --- somewhat thicker in
7 that range, nine, ten. At least the
8 longwall to the south was that much.

9 Q. Well, did you see evidence of
10 stresses that would have --- in the
11 pillars?

12 A. No, other than normal --- what
13 I would say --- normal depths. What
14 I've seen in my experience, on
15 development, when they do get into
16 the 1,500, 2,000-foot range --- this
17 is a generalization, not all mines
18 are created equal but --- what I
19 notice is you do see more ---. The
20 ribs do not stand up straight as you
21 would see maybe under 500, 600, 700-
22 foot depths. You do see some
23 sloughage pretty quickly after
24 development.

25 Q. Was there any bounce activity

1 that was reported to you or that you
2 noted while you were in that
3 inspection, inspecting the area?

4 A. No.

5 Q. What about reports of any
6 bounce activity in development?

7 A. No, they did not report to me
8 anything.

9 Q. Okay. You stated that was
10 your last inspection?

11 A. Yes.

12 Q. What about any reports while
13 they were pillar extracting, any
14 bounce activity?

15 A. No, did not report to me.
16 Here again, state lands. They did
17 not report conditions. I went up
18 there just as a normal quarterly that
19 June, and here again, one entry was
20 our country.

21 Q. Okay. How about just general
22 mining and pillaring, have you had an
23 opportunity to watch them take ---
24 pillar this and other parts of the
25 mine? Do you know what their

1 standard operating procedure would
2 have been or should be when they've
3 actually pillared ---?

4 A. I witnessed it, but I would
5 not say that I was completely
6 familiar of the exact pillar cuts
7 they were doing. I could have gotten
8 access to their pillar plans, but in
9 an inspection that I do, I don't get
10 down to really nitty-gritty details
11 of exactly how they're pulling
12 pillars, those conditions.

13 Q. Did you have an opportunity to
14 ever watch them take the floor coal
15 out while they're pulling pillars?

16 A. No, I didn't. I don't recall
17 them ever pulling floor coal or
18 seeing that at the times I was there.

19 MR. GATES:

20 Is that something that
21 would be a part of a plan that
22 they would submit to you?

23 A. If --- we would base their
24 pillaring, the exact --- how much
25 they'd pull of the pillar and floor

1 and/or roof coal, we would base that
2 on what they would submit to you
3 guys, the Mine Safety & Health
4 Administration, in their roof control
5 and ventilation plan. And if ---
6 yeah, we would defer basically to
7 what they had submitted to you.
8 Because that --- floor and roof coal
9 is just --- to us is an option that
10 they have to deal with, with --- I
11 guess what I'm saying is that we
12 don't put a microscope look on
13 recovery of that. If they do it,
14 that's fine. Now, if there is very
15 thick coal and they do, you know,
16 present a dual lift type of --- then
17 we'd look at that plan. But the
18 normal --- you know, a couple of
19 feet, if there is an extra foot or
20 two of roof coal or floor coal, you
21 know ---.

22 MR. GATES:

23 When you're determining
24 the recoverable tonnages, do
25 you use the coal seam --- the

1 water, whatever.

2 SHORT BREAK TAKEN

3 BY MR. GAUNA:

4 Q. I have some clarifying
5 questions from previous testimony.
6 It appears that BLM allows the
7 operators to decide when a barrier is
8 recoverable. Do you do any
9 investigation to determine if you
10 agree with that or is there any
11 calculations done or visual
12 observations?

13 A. When an operator comes in with
14 the original plan to mine an area,
15 and, you, for example, a longwall
16 operation, and they have barrier
17 pillars to the mains, we will look
18 at, you know, what size they are to a
19 rough degree. There are certain
20 parameters or things that have worked
21 for other operators here that we base
22 it. I mean, when we get --- when we
23 talk of depths of the 1,500 to
24 2,000-foot range, a normal --- I
25 shouldn't say normal, but often a

1 barrier pillar to any main entries
2 --- to any mined-out area is in the
3 order of 400 feet, 500 feet,
4 something like that.

5 We have, in the past, used
6 some rough calculations using some
7 standard, you know, formulas from
8 some of the rock mechanic books just
9 to see if they're in the ballpark,
10 that's all.

11 Q. That's with the initial
12 barrier. How about a barrier that's
13 recovered or barrier that's about to
14 be ---?

15 A. No. If they --- in the past,
16 and this is --- this is a new
17 experience. This one up here is an
18 abnormal --- this is the first time
19 somebody has tried --- in my
20 recollection, tried to mine a barrier
21 pillar. And so our attitude was,
22 well, if you can get this okayed by
23 the other regulatory officials, then
24 I guess that's extra recovery for us.

25 Q. When you've been mining a

1 barrier, you're referring to the
2 south mains where they mined outward
3 into the existing barrier?

4 A. Uh-huh (yes).

5 Q. And also to the west mains,
6 north and south, where they're
7 actually in the barrier. That was a
8 unique experience, is that what
9 you're saying?

10 A. Yes. This company is --- in
11 my opinion, has been to the forefront
12 of mining some extra remnant coals,
13 where some of the companies have not
14 tried that yet.

15 Q. So your evaluations for
16 barriers are primarily evaluations on
17 the initial barriers for development
18 mining, longwalls or development
19 mining, but not for normal recovery?

20 A. Yes. That's a true statement.
21 Normally we recognize the fact the
22 barriers are left there to protect
23 access in the main entries and stuff
24 like that.

25 Q. In your personal experience,

1 have you observed --- if this is a
2 new plan, have you observed barriers
3 elsewhere actually being mined into
4 at other operations?

5 A. I'm trying to think. Not at
6 this stage, I can't remember. I'd
7 have to think for a while. Other
8 people have tried. I have seen
9 pulling pillars in the mains with
10 mined-out areas on the sides. At
11 certain times certain companies have
12 tried that. Normally, not very
13 successful.

14 Q. Okay. If a company decides
15 not to mine an area you deem
16 recoverable, how is that conflict
17 resolved?

18 A. Okay. If there is a conflict,
19 we say that you --- our position is
20 that we think you can mine it. And
21 they say --- or say they --- they
22 would come in and say, we can't mine
23 it. We would ask for justification.
24 Now, if we disagreed with the
25 justification or, you know, had some

1 questions, I think we would work it
2 out back and forth.

3 End result, we never got to
4 the stage of, you know, loggerheads.
5 That's never happened really here. I
6 mean, I guess if we could go to that
7 extreme and say, no, we don't believe
8 you, you can appeal us.

9 Q. Are there consequences, if it
10 ever gets to that stage, through the
11 --- whatever regulations or laws that
12 you have?

13 A. No. I take that ---. I
14 should quantify that. There are ---
15 we can put in lease terms into the
16 lease that state if you do not mine
17 recoverable coal, that --- and I
18 think we have some, that is deemed
19 recoverable or you cannot show
20 justification for it, we can charge
21 you the royalty that you should have
22 gotten. But there you'd have to
23 prove one way or the other on both
24 sides. You'd probably have to go to
25 some sort of court of --- not an

1 administrative court, a
2 jurisdictional court, I guess.

3 Q. Okay.

4 A. We haven't got to that ---
5 we've had one --- a couple of
6 occasions where we had gotten close
7 to that, but nothing has gone to a
8 true determination.

9 Q. I noticed on your reports that
10 you have inspection days specified in
11 them, but there's a different
12 finalization date. Can you explain
13 the differences?

14 A. Computer. We have a software
15 system, an ACCESS software system
16 that somebody had set up that allowed
17 us to put in input into the computer,
18 this report. But it allowed us to
19 add to the report or, you know,
20 complete it until you hit this
21 finalize button. And often we were
22 kind of running behind schedule. You
23 know, we're kind of --- can I say I'm
24 overworked, that that is, I guess ---
25 when we push the finalize button,

1 then you can't change it without
2 putting in an addendum to it with an
3 actual date.

4 So in this case, that
5 finalized button has been put in
6 there for the software, and we're
7 trying to work around it. It's a
8 quirk of the software that they put
9 in.

10 Q. But in other words, the time
11 lag is people reviewing and so forth?

12 A. Or writing it up in stages, by
13 the inspector. That could be the
14 case. And that's the case for some
15 of the mines. I know just getting
16 time to finish it up ---. There are
17 some aspects of it. There are some
18 questionnaires. We have pull-down
19 things on the report, pull-down icons
20 or what do they call it, where you
21 can ask questions. You can add
22 images to this. I don't do that very
23 often. I usually put a hard copy
24 attached to it. But there are
25 aspects of it so you can add things

1 to the report as you go along. And
2 then when you finally like it, then
3 you push that finalize button. And
4 it's a quirk of myself and the
5 software that I usually don't push
6 that finalize button until quite a
7 ways down the road.

8 MR. GATES:

9 But it is you that
10 pushes it?

11 A. Yes, I am the one --- I push
12 the button that is final and nobody
13 else can.

14 BY MR. GAUNA:

15 Q. Do these reports go to a
16 review process with other
17 individuals?

18 A. It can be accessed by other
19 individuals, the report. They cannot
20 gerrymand it, or add something or
21 subtract it, but they can look at it.

22 Q. You've mentioned that south of
23 the --- I guess, the state lease,
24 where Panel 13 through 18 was mined,
25 was BLM land, and the mine had plans

1 to go in there and they didn't.

2 A. I'm sorry?

3 Q. Panel 13 to 18, south of the
4 mine ---.

5 A. Oh, south of that?

6 Q. South of that. That's BLM
7 property?

8 A. That is federal lands.

9 Q. Okay. And Crandall had plans
10 of mining in that area?

11 A. And applied for a lease there.
12 And all leasing is competitive, and
13 lost out to the entity to the south.

14 Q. When was that award given to
15 the other mining company?

16 A. I don't know offhand. I'm
17 trying to think. Somewhere on the
18 order of 2002.

19 Q. Okay.

20 A. I believe it was around there.

21 Q. You made mention in your
22 report in November 2004, in the
23 report itself, for the Main West that
24 the conditions would be too expensive
25 and too dangerous in order for them

1 to extract. Can you elaborate on
2 expensive and dangerous?

3 A. Well, dangerous, I would have
4 to refer to maybe the ribs that I saw
5 and those roof falls in those big
6 intersections. That was the only ---
7 that's my recollection of putting
8 dangerous down there.

9 Q. And about the expensive?

10 A. Expensive, that they would
11 have to rehabilitate all that stuff
12 before they could pull pillars. And
13 our regulations state it has to be
14 economic, and that would be part of
15 their mining process.

16 Q. What would have been the
17 consequences if the company had just
18 decided to mine according to this
19 approved plan and just pull the
20 pillars east of 118, east of the
21 seals and continue eastward in the
22 Main West?

23 A. I'm sorry?

24 Q. I mean, is there any reason
25 that they'd be out of compliance for

1 not going into those barriers to the
2 west of 118?

3 A. Not according to this plan.
4 If they had followed us --- we
5 approved this plan. So if they
6 didn't do anything in here, they
7 would have been compliant with us.

8 MR. GAUNA:

9 Let me see if there's
10 any other questions.

11 BY MR. GATES:

12 Q. You made mention a little
13 earlier about the bump was not ---
14 bumps or bounces were not reported or
15 recorded, I guess. And I think when
16 you talked about recorded, you were
17 referring to the University of Utah
18 or ---

19 A. Seismograph station.

20 Q. --- seismic bunch.

21 A. They can pick up mine bumps.
22 Their experts seem to see on their
23 seismograph station what are true
24 earthquakes and what are bumps, I
25 guess.

1 Q. Is there anything in your Part
2 43 that would require the mine
3 operator to report anything directly
4 to you?

5 A. No, other --- if it ---
6 quantify that. If it would
7 jeopardize the recovery of federal
8 coal, any incident they should report
9 to us that would, in their minds,
10 jeopardize the recovery of federal
11 coal. And they would have to make
12 that determination, was this --- did
13 we deem this coal recoverable, and in
14 some incident, impossible to recover.
15 I don't know. Did I answer that
16 question?

17 Q. Yeah. Did that ever happen
18 at ---

19 A. At this mine?

20 Q. --- this mine?

21 A. Not that I can recollect, no,
22 except for this incident in the
23 north. The north barrier, this March
24 date, the conditions --- they told me
25 of conditions that warrant them to

1 stop recovery. Part of it was, as
2 they reported to me, some bounces.
3 And I did see, to me anyway, some
4 evidences of, you know, something
5 that went on there that damaged some
6 of the stoppings.

7 Q. But I guess since that north
8 barrier had never really been deemed
9 recoverable coal, then that may or
10 may not have?

11 A. True. And here again, when I
12 was up there and seeing their mining
13 up there, I was under the mistaken
14 thought that they had plans for it.

15 BY MR. GAUNA:

16 Q. That's more --- I guess the
17 questions that I had forgotten about.
18 I noticed that on the reports there's
19 a line item about contacting MSHA.
20 Is that done in other instances or
21 what's the frequency of that
22 interaction?

23 A. It's rare. We will take on
24 face value operators talking to us
25 about their dealings with you. So in

1 essence, if they say that they have
2 an approved roof control and
3 ventilation plan for the section, we
4 have no reason not to believe that.
5 If we did, I guess we could, you
6 know, verify that.

7 Q. In your duties, do you
8 interact with any other federal or
9 state agencies?

10 A. Oh, yeah. Most of the other
11 agencies are dealing with permitting,
12 reclamation-type things, Forest
13 Service. There's a state agency,
14 Utah Division of Oil, Gas & Mining,
15 that does the business for Office of
16 Surface Mining. I'm not sure if you
17 understand the ---. The Surface
18 Mining Control Act, under the
19 Interior Department, was deemed ---
20 or is managed by the Office of
21 Surface Mining. They, in turn, have
22 a cooperative agreement with
23 individual states for a state agency
24 to do their bidding. That's --- they
25 have one here, the Utah Division of

1 Oil, Gas & Mining. They are in
2 charge of reclamation and
3 environmental concerns while
4 operating. And they are the true
5 agency that gives the final okey-
6 dokey to start mining. We're only
7 part of it.

8 Q. And you made mention earlier
9 about the existence of the State of
10 Utah seismological records. Do you
11 monitor their output on a regular
12 basis?

13 A. No. We've seen so many of
14 these small seismic events around
15 there. Only the big ones we get
16 notified of --- or not notified of, I
17 guess some people look at it, I don't
18 myself, I do not go on line and check
19 out each of the seismic bumps, but
20 they are recorded and you can go see
21 them. And if we do --- if we do have
22 a very large event, it's most of the
23 time the mine will contact us
24 themselves. If they deem that it's -
25 -- could affect how they do business

1 with us, they are to report to us.

2 Q. Okay. You made mention that
3 you're inspecting six mines yourself
4 right now.

5 A. Yes.

6 Q. I need to clarify, how many of
7 those are in the Hiawatha seam?

8 A. Horizon, Co-op is multiple
9 seam. They're in --- they have
10 Hiawatha there. They're currently
11 mining in an upper seam. Genwal is
12 in the Hiawatha. The ones that I
13 inspect. Sufco is in Hiawatha, too,
14 for the 6th.

15 Q. Sufco for the 6th. You don't
16 inspect the adjoining mine, Deer
17 Creek Mine?

18 A. No. Another engineer does
19 that, Steve Rigby.

20 Q. Steve Rigby is --- okay.

21 A. I have in the past at that
22 mine.

23 Q. You have? You made mention of
24 the Hiawatha seam conditions at Deer
25 Creek.

1 A. Yeah.

2 Q. Has there been any other
3 Hiawatha mines that you've looked at
4 in the past?

5 A. The Trail Mountain Mine. It's
6 currently idle.

7 Q. And were these mines part of
8 the --- you made a comparison with
9 Crandall and other Hiawatha mines.
10 Were these the mines you were
11 referring to ---

12 A. Yes.

13 Q. --- with those comparisons?

14 A. Yes.

15 Q. The older mines, which one of
16 them actually recovered extracted
17 pillars that you don't inspect now?

18 A. That I don't inspect now?

19 Q. Yeah, because you told me what
20 you were pillaring from the 6th.

21 A. Trail Mountain and Deer Creek
22 --- Deer Creek used to mine --- I'm
23 sorry. Deer Creek is a mix. They
24 used to --- they mined both --- two
25 seams down there, Hiawatha and an

1 upper seam. And they've gone between
2 the seams off and on into various
3 places. Most of --- much of the
4 reserves is in the upper Blind Canyon
5 Seam at Deer Creek. They, years
6 past, did room and pillar, but
7 probably for the last 15 have been
8 strictly longwall. Trail Mountain
9 was --- earlier owners, did room and
10 pillar, then they went to straight
11 longwall.

12 Q. Okay. And I just want to be
13 sure I got this on the record. I
14 think you mentioned this, but I need
15 to clarify it. You don't recall
16 anywhere in Utah where there's been
17 successful --- well, a place --- how
18 many places successfully have been
19 able to pull barriers or extract
20 barriers between gob areas?

21 A. This operation and a sister
22 operation. There was --- the Tower
23 Mine had mined --- just previous to
24 the south, they mined some barrier
25 pillars. So basically the same

1 outfit. Yeah, they were the same
2 outfit.

3 Q. This would be at Tower?

4 A. Tower Corporation.

5 Q. And you're referring to where
6 they did it in the south mains here
7 at Crandall?

8 A. Yes.

9 Q. Those were the two situations?

10 A. Those were the two situations
11 I've seen where they actually mined a
12 barrier pillar to mined-out areas.

13 Q. And successfully mined it?

14 A. Yes.

15 Q. And other than Crandall
16 Canyon, how about any unsuccessful
17 case histories where they've done ---
18 tried to ---?

19 A. Not that I have inspected.
20 I've heard stories that the Old
21 Kaiser Sunnyside Mine tried it, but
22 that's only stories.

23 MR. GAUNA:

24 Anything else?

25 BY MR. GATES:

1 Q. I think you mentioned earlier
2 that there have been occasions when
3 you have suggested to a mine operator
4 that they attempt to increase their
5 recoverable tonnages and that you've
6 got into some negotiations, if you
7 will, and it's always been resolved?

8 A. Yes.

9 Q. Have you or, to your
10 knowledge, has BLM ever suggested to
11 a mine operator that they not mine a
12 particular area in the mine?

13 A. Not to my recollection. As
14 far as I --- no, not me.

15 MR. GAUNA:

16 Any more questions,
17 Richard?

18 MR. GATES:

19 No.

20 MR. GAUNA:

21 Do you have any,
22 Sherrie?

23 MS. HAYASHI:

24 No.

25 BY MR. GAUNA:

1 Q. Do you have anything you'd
2 like to add that may be relevant to
3 either the 6th or 16th accidents we
4 had at Crandall Canyon?

5 A. Truly, just one thing I would
6 like to --- because it was reported
7 in the newspaper, the Tribune, that I
8 think they got ahold of --- and this
9 is for my own benefit, got ahold of
10 this March 15th report. And the
11 newspaper indicated that since I saw
12 some adverse conditions up in the
13 north barrier that I had maybe some
14 inclination of something happening
15 down in the south barrier. And I
16 would like to go on the record to say
17 that what I saw in the north barrier,
18 the conditions, I don't really equate
19 it to the same conditions in the
20 south barrier, not to some larger
21 event that happened in the south
22 barrier.

23 And that's really the only
24 thing I had to say for that. I just
25 --- it bothered me when I saw that in

1 the newspaper.

2 BY MR. GATES:

3 Q. Have you been back to the
4 Crandall Canyon Mine after the
5 accident?

6 A. Yes. I went up to the --- in
7 fact, I was up on the mountain when
8 the first drilling crews came up
9 there for the drill holes and helped,
10 I guess, convoy the guys up there.
11 They were unsure of the area. I also
12 went back after the --- all the
13 incidents were happening, when they
14 were pulling out of the area and
15 sealing up the mine.

16 Q. Did you ever go back in the
17 mine?

18 A. Yes, when they were --- just
19 recently. This was after the rescue
20 efforts were terminated. They have
21 now since pulled the belt and turned
22 off the fan. We were in there in the
23 very eastern end just to witness that
24 --- we have a responsibility when
25 abandonment of areas that they don't

1 leave --- under the CERCLA Law, it's
2 the hazardous waste things. We just
3 --- a quick verification that they
4 haven't left any hazardous materials
5 under there. And we get a certified
6 report from them that shows when they
7 are abandoning an area that they
8 wouldn't leave any hazardous --- or a
9 list of what they've left, if there's
10 equipment or stuff left in there.

11 Q. Given --- I guess given what
12 you saw in the mine on that day and
13 what you have heard or read, given
14 your experience in Utah mines, do you
15 have a feel for what might have
16 happened at Crandall Canyon on the
17 6th of August?

18 A. No, I really don't. The size
19 of event is something that I have
20 never anticipated or seen. And I'm
21 only --- obviously I did not see what
22 the results of any of the August 6th
23 events were on the south barrier, the
24 pillars and stuff. But from what
25 I've heard, it smashed out pillars

1 far --- in greater number than I've
2 ever witnessed here. We've seen some
3 bounces that maybe have knocked out
4 normal --- or not normal, localized
5 pillars, you know, two or three rows
6 at the most. That's the only thing
7 I've ever seen. So as far as seeing
8 similar --- something similar to what
9 happened to the August 6th event, no.

10 Q. On the occasions that you
11 mentioned where you've seen two or
12 maybe three rows of pillars that
13 have ---?

14 A. Received damage or something
15 on that order, yeah.

16 Q. Do you know what caused those
17 events or do you have a feel for
18 what ---?

19 A. Only a generalized fact that
20 there's probable weight on them that
21 is exceeding the strength of the
22 coal. That's the only thing you can
23 probably surmise from it. And what's
24 the root cause of that, you
25 know ---.

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MR. GAUNA:

On behalf of MSHA, I want to thank you for appearing and answering questions today. Your cooperation is very important to the investigation as we work to determine the cause of the accident.

We ask that you not discuss your testimony with any person who may have already been interviewed or may be interviewed in the future. This will ensure that we obtain everyone's independent recollection of the events surrounding the accident.

After questioning other witnesses, we may call you if we have any follow-up questions that we feel we may need to ask you. If at any time you have any additional

1 information regarding the
2 accident that you would like
3 to provide to us, please
4 contact us at the contact
5 information I gave you
6 previously.

7 Now, if you wish, you
8 may now go back over any
9 answer you've given during the
10 interview or you may also make
11 any other statement you would
12 like to make at this time.

13 A. I'm okay. Do you want to add
14 any clarification yourself or ---?

15 ATTORNEY STEIGER:

16 Will Mr. Falk be
17 provided the transcript of his
18 statement?

19 MR. GATES:

20 Yes, he will be. At a
21 later date one will be
22 available.

23 ATTORNEY STEIGER:

24 When will that be?

25 MR. GATES:

1 I can't give you a time
2 frame. We'll let you know.

3 ATTORNEY STEIGER:

4 And will he have an
5 opportunity to correct any
6 misstatements he may have made
7 on that transcript?

8 MR. GATES:

9 At that time he will,
10 yes.

11 ATTORNEY STEIGER:

12 That's fine.

13 MR. GAUNA:

14 Again, I'd like to
15 thank you for your cooperation
16 in this matter.

17

18 * * * * *

19 STATEMENT CONCLUDED AT 4:10 P.M.

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