



Royal Commission on the Pike River Coal Mine Tragedy
Te Komihana a te Karauna mōte Parekura Ana Waro o te Awa o Pike

UNDER

THE COMMISSIONS OF INQUIRY ACT 1908

IN THE MATTER OF

**THE ROYAL COMMISSION ON THE PIKE RIVER COAL
MINE TRAGEDY**

Before:

The Honourable Justice G K Panckhurst
Judge of the High Court of New Zealand

Commissioner D R Henry

Commissioner S L Bell

Commissioner for Mine Safety and Health, Queensland

Appearances:

K Beaton, S Mount and J Wilding as Counsel Assisting

S Moore SC, K Anderson and K Lummis for the New Zealand Police

N Davidson QC, R Raymond and J Mills for the Families of the Deceased

S Shortall, D MacKenzie, R Schmidt-McCleave and P Radich for certain
managers, directors and officers of Pike River Coal Limited (in
receivership)

C Stevens and A Holloway for Solid Energy New Zealand

K McDonald QC, C Mander, A Williams and A Boadita-Cormican for the
Department of Labour, Department of Conservation, Ministry of Economic
Development and Ministry for the Environment

G Nicholson and S Stead for McConnell Dowell Constructors

G Gallaway, J Forsey and E Whiteside for NZ Mines Rescue Service

N Hampton QC and R Anderson for Amalgamated Engineering, Printing
and Manufacturing Union Inc

J Haigh QC and B Smith for Douglas White

J Rapley for Neville Rockhouse

T Stephens and N Blomfield for New Zealand Oil and Gas

P Mabey QC for Pieter van Rooyen

**TRANSCRIPT OF PHASE THREE HEARING
HELD ON 17 FEBRUARY 2012 AT GREYMOUTH**

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COMMISSION RESUMES ON FRIDAY 17 FEBRUARY 2012 AT 09.01 AM**PETRUS HENDRIK VAN ROOYEN (RE-SWORN)****LEGAL DISCUSSION - (09:01:07)****5 CROSS-EXAMINATION: MR RAYMOND**

Q. Mr van Rooyen I just want to start generally to discuss with you the issue you've raised in your brief of evidence about the pressures which came to bear upon you arising out of your workload.

A. Yes.

10 Q. Now, you said you came to New Zealand with expectations of a better lifestyle and can I take it that those expectations in that first 18 months or so at Pike were not met because of the very long hours that you were working at Pike River?

0907

15 A. Yes, to a certain extent the, well as became evident in the 21 months, 22 months that I've been there, 21 months, towards probably most of the time, that never realised.

Q. And did you discuss it at management level or amongst your team that issue and whether or not it was impacting on others in your team, that
20 high pressure, that high workload?

A. From recollection there was some discussions about people working hard and people putting in long hours, yes.

Q. Did it draw out of a fatigue factor, if you know what I mean by that? That you became weary on a daily basis dealing day in/day out with so
25 many issues?

A. I don't know if you can make that conclusion that we became weary. I think all I'm saying is we've worked hard and long hours.

Q. And you've discussed the root cause of that effect of fatigue and not meeting your lifestyle expectations and referred to continual changes in
30 the mine design, the regular revising of production schedules and production profiles, is that right?

A. That's correct.

Q. Do you feel now, looking back as objectively as you can, that that pressure which you've described and which you've mentioned others noted as well, impacted in a negative way on the operation of the management team on a day to day basis?

5 A. That's a very difficult question to answer objectively in hindsight. It potentially could have, but all I am aware is that the people that was involved in Pike and management and not only management, also the people working at Pike and my team I know for sure. Everybody tried and did the best they could. I'm not at all suggesting that people
10 became tired or complacent or anything like that. I'm just saying it was hard work.

Q. We've heard about the promises which were made at board level and in particular by the previous CEO, Mr Ward, announcements to the market and so on about production not being met. You'd be familiar with
15 those?

A. Yes I am.

Q. And so as time went on as we move into 2010 and the hydro-monitor production is behind schedule, coal productions are behind schedule, we've got the revolving door of management and so on. The pressure
20 we can understand must have been building. You'd agree with that?

A. Yes I can.

0910

Q. From what source did that pressure come? Was it in an overarching pressure which you just felt or was it actually directed by any one or
25 more individuals?

A. It's probably a combination of a number of factors. In incidences there was mention of the need to produce coal which is understandable. I mean there's contracts in place, there's expectations, where you are aware of any statements in terms of production that was made to the
30 market and shareholders. Some of it might even be self-inflicted pressure by just, my nature is to push myself to do certain things and so it's a combination of a number of factors.

Q. Was there any one individual cracking the whip, I suppose that's what I'm asking?

A. Well from my normal understanding is the person at the top which is Mr Ward and Mr Whittall.

5 Q. When Mr Ellis became statutory mine manager shortly before the explosion on the 19th of November did you discern any noticeable change in the management style of the operation meetings?

A. I'm not sure if Mr Ellis became the statutory mine manager.

10 Q. Well when he started running the operation meetings shortly after he joined?

A. The morning production meetings?

Q. Yes.

A. At that stage I was not attending them sir.

15 Q. Did you have people in your team who were attending them and reported to you?

A. Yes, Mr Borichevsky attended it as well as Mr Jimmy Cory.

Q. And did he tell you, Mr Borichevsky, that those meetings had changed course somewhat, there was a new flavour about them once Mr Ellis took control?

20 A. I can't recall anything specific in that regard but I don't say he did not but I can't recall anything.

Q. Well I'll see if I can refresh your memory. Ms Basher, if you could put up please INV.03.18949?

WITNESS REFERRED TO DOCUMENT INV.03.18949

25 Q. So while that's coming up, Mr van Rooyen this is a summary of the interview with Mr Borichevsky held with the New Zealand Police on the 26th of April last year and summary's been prepared by Detective Boyd. If we could just highlight please the second to last bullet point Ms Basher. So he's talking here about methane monitoring at the main
30 returns and his concern about this. So I'll just read from the second line. "He [that is Mr Borichevsky] was very concerned about this and said until Steve Ellis arrived he would get a printout of the methane. If there were any events he would make a note on the report at the production

meeting. He said Steve Ellis wasn't interested in these meetings at the daily production meetings. Before Steve Ellis took over there were several reports presented at the meetings. After Steve Ellis took over, he said these things changed. The meetings before Steve were very comprehensive but after he started they were just about production and maintenance." And then he says, "Safety, production, technical issues were the agenda." I take that to read "Safety, production, technical issues were the agenda." Does that assist in your recollection of the information conveyed to you by Mr Borichevsky at that time about those meetings?

A. I can't recall anything in that regard being said to me and I think I said yesterday that I was under the impression that Mr Borichevsky was still overview or had oversight of the gas levels in the return based on free venting at the time I left the mine.

Q. So just move away from the specific of the methane monitoring and his concern about that. What I'm putting to you is the general comment, the high level from those who reported to you that there was a change in focus at the production meetings when Mr Ellis was running them away from some of the specifics and more directed and production and maintenance?"

A. Like I said sir, I can't recall anything specifically in that regard.

Q. Was it reported to you that Mr Ellis had a different style of running the meetings?

A. I can't recall that sir, sorry.

Q. Was it reported to you by Mr Borichevsky that Mr Ellis didn't cover off some issues in as much detail and was not rigorous in terms of reporting?

A. I can't recall anything like that being said to me or reported to me, but like I said I don't dispute that happened. I'm just saying I can't recall any specifics on that at all.

0915

Q. That's fine. Just moving on a little to your background and experience, and you've filed a comprehensive brief and Mr Mabey led from you

some of your background yesterday, just to recap on that for some context, you had had many experience in hard rock mining for precious metals in South Africa?

A. Base metals, yes.

5 Q. And was it two years previous experience with coal?

A. Two and a half.

Q. And Mr Cory, a mine geologist in your team, his experience was primarily in South Africa in a similar industry to yours?

A. In hard rock mining, yes.

10 Q. More mineral exploration orientated?

A. And mine geology orientated as well.

Q. Do you accept that your experience with sedimentary geology was more limited coming from hard rock backgrounds?

15 A. Well, that's – I worked in a Sedex type environment, which is a type of sedimentary environment as well. In terms of coal specific to positional environments, yes, I had limited experience, but, I mean it's part of your education in training as a geologist as well.

20 Q. It's just that here on the West Coast, we had you and Mr Cory as the geologist at this time with no previous work on New Zealand geology and hard rock backgrounds and limited experience in sedimentary geology in a mine environment which revolved around sedimentary geology and faulting, a difficult geological background. Do you accept that?

A. I accept that, but I don't see the point.

25 Q. Well, the point is that as you were located on the West Coast, you were I suggest, to a certain degree, professionally isolated and didn't receive the sort of peer mentoring and constructive challenges that would occur in a bigger mining company, or mining centre. Do you accept that?

30 A. Well that can be construed, but we also made use of people with West Coast experience as well. We had Mr Nigel Newman involved in certain aspects. We also had – can't remember his name.

Q. I just want to put up, this might assist you, the name that you're thinking of, is it Hugh Steed?

A. No, Hugh Steed was from New Zealand Oil and Gas. He'd made, from memory, one visit. We contracted a, or consulted a geologist with substantial New Zealand and West Coast experience. He was involved in the first in-seam drilling in Huntly. And we involved him, from memory, he's currently in Christchurch and we involved him to assist us and peer review our interpretations of the geology.

Q. So who was that you're referring to?

A. I can't recall his name, sorry, sir, but it's, if – I would suggest ask Mr Cory, he would definitely know his name.

Q. Okay. We may not need to put it up but you will recall a meeting with Hugh Steed with you at Pike on Thursday the 1st of July 2010?

A. I can't recall the date, but yes, I recall Mr Hugh Steed being on the mine.

Q. And part of the meeting as to discuss your background, Mr Cory's background and discuss geological issues?

A. Well, I wasn't aware it was part of discussing our backgrounds, but yes, from recollection New Zealand Oil and Gas sent over somebody to assist us looking at the geology.

Q. Perhaps Ms Basher, if we could please pull up DAO.007.27998/1?

WITNESS REFERRED TO DOCUMENT DAO.007.27998/1

Q. At the foot of that page there is comment from Mr Steed, you'll see that it's a memorandum to Mr Salisbury, Mr Jones and Mr Wright dated 3 July 2010 and it was a meeting with the Pike River Coal geologists on the 1st of July, you see that?

A. Yes, I do.

Q. And he discusses the geotechnical team there on the first page and on that bottom of the page he outlines what I've just put to you and what you've just accepted, and including the comment that you were, to a certain degree, professionally isolated and he goes on to say on the second page, please Ms Basher, bar 2, top paragraph.

0920

Q. "That whilst New Zealand Oil and Gas continues," if it could be enlarged please top paragraph, "With its active monitoring role as a cornerstone shareholder and lender I recommend that we continue with periodic

technical interchanges between our geological staff and Pike River Coal." Did that interchange happen?

A. No sir. I only became aware of this memorandum during an interview with Mr Stokes. I've never seen it prior to that.

5 Q. That may well be but the question is did you have interactions with New Zealand Oil and Gas geological staff after this meeting?

A. No, we did not.

Q. Ms Basher if you can go to the last page, bar 8, and the first paragraph, "Concluding remarks," he compliments you, Mr van Rooyen, Mr Cory,
10 as being, "Clearly committed to their work and energetically supporting the mining process." I'm sure you'll be pleased to have seen that?

A. Yes.

Q. And the final paragraph there, sorry the final sentence of that paragraph, "Their task is to ensure that there should be no unrecognised geological
15 surprises that impact tunnel boring, coal production or coal policy that requires expensive thinking." Would you agree with that?

A. That's correct.

Q. And then in the third paragraph, please Ms Basher, the second sentence, when he says you've all been willing and interested to discuss
20 your work ready to consider new ideas and so on, "But there is a danger being in such isolated circumstances, a little bit of external interaction and constructive challenges can clearly be supportive." Was that sentiment which he's expressed there conveyed to you at that meeting on the 1st of July?

25 A. I can't recall the detail of what he said. I remember talking about the geology, what we were doing and he made some comments on the geology of pit bottom specifically and that's the part I recall, I can't recall something specific on that comment.

Q. So you can't recall his expression at least in this memorandum of the
30 need for you to engage with others, given your limited experience, your geographical isolated, small mining company, to consult with others and with New Zealand Oil and Gas going forward?

A. I can't recall that being discussed on the day.

Q. If we just move on to another topic the fresh air base. We've heard a lot of evidence about this, as you'll imagine over the 11 weeks or so of hearings, and you have given frank evidence on that and your views through Mr Mabey. We've heard from Mr Reece, I think it was, that in his view the Slimline stub was not a fresh air base it wasn't even a changeover station and it could hardly be described as a refuge. It was really none of those things and he found it hard to categorise. Would you agree with that assessment?

5

A. Well, I've made it clear in my statement that I thought the location of that was not proper and yes there was some issues with that location.

10

Q. Well, let's just take those three things one at a time then, because you haven't really answered the question. It wasn't a changeover station was it?

A. Well, my understanding it was referred to as a FAB, fresh air base, but it was rather set up in something like a changeover station.

15

Q. So a hybrid?

A. Yes, the fact that the Slimline shaft was in that area I think confused the situation. I think the intention, potentially, was as a changeover station but this is, please note I say, "I think," I wasn't part of that decision and I wasn't part of setting it up there so I can't comment on what was the thinking at the time. I did make a statement and I stand by it that I, from late 2009, said to people that we should not be using that as an FAB because of the gas drainage line.

20

Q. Can we just pull up please, Ms Basher, the exhibit 0044/2 to 7 range of photos which were produced, I think, through the police when Mr Rockhouse was giving evidence?

25

WITNESS REFERRED TO EXHIBIT 0044/2 TO 7 PHOTOS

0925

Q. Have these photos been shown to you before, Mr van Rooyen?

30

A. I have seen them. I can't recall where, but yes I have seen this photo.

Q. So that is a photo taken from, as I understand it, the drift side looking into the stub of the Slimline shaft, is that right?

A. It appears that way.

Q. Or was it taken from the inside out?

A. Oh –

Q. Sorry, one of the other counsel is indicating it's taken from inside the stub looking out into the drift, is that right?

5 A. (no audible answer 09:25:39)

Q. Well I'll put this another way. Did you know whether or not the gas riser pipe which we can see in that photo, was on the inside or the outside of the stub, by reference to the brattice?

10 A. From my recollection, the stub or the gas riser was on the inside of that brattice wall at a point and I can't comment if that was changed later on.

Q. So when you were down in the mine and we're going to come back to that later, your visits underground. You've indicated I think in your evidence that you were underground and you commented at least to Mr White that the siting of the fresh air base in the Slimline shaft or stub was inappropriate?

15

A. Not in respect to the Slimline shaft. In respect to the gas drainage line.

Q. Yes, and that gas drainage line was set up like that when you saw it?

A. Yes.

20 Q. And gas drainage line although you didn't have experience in it earlier on in your time at Pike River, it became part of your brief as it were or part of the work the technical services department did as time went on?

A. Yes.

Q. So in a sense, you had some responsibility over that gas drainage line which we can see in that photograph?

25

A. Yes.

Q. At what point is it in an operation like Pike where someone in your position can stand up and say, "This is inappropriate. We cannot have a gas drainage line running in to a fresh air base?"

A. Well when you notice it and that's exactly what I did.

30

Q. When do you make a stand on it though? When do you actually say, "It's unacceptable. We cannot have a fresh air base with a gas riser line running through it?" Were you in a position to really thump the table on this issue and make a stand?

OBJECTION: MR MABEY (09:27:31)

THE COMMISSION ADDRESSES MR RAYMOND

CROSS-EXAMINATION CONTINUES: MR RAYMOND

5 Q. What I'm asking you Mr van Rooyen is where is it in the management structure that you were a part of at Pike, where was the opportunity if you like, in meetings, memoranda, your exchanges with whomever in a senior position, to draw a line and say that this is not acceptable and you to really make that position clear?

10 **OBJECTION: MR MABEY (09:29:14)**

0930

CROSS-EXAMINATION CONTINUES: MR RAYMOND

15 Q. Mr van Rooyen, let's not focus on the gas riser, or the fresh air base for now. Within your responsibilities at the mine, did you have any ability in relation to an issue that was of concern to you to take steps to halt mining?

A. To?

Q. Halt.

A. Halt mining?

20 Q. Mining.

A. There's the opportunity to have discussions and talk about aspects and concerns but those decisions are taken on the underground operations, were, is not my sole responsibility, so it's not, I don't make the final decisions on that. Those are made by the mine manager in his statutory
25 role, under my understanding. Electrical issues for instance are made by the electrical engineers or the engineering department and I work on the geology and the mine design of those aspects.

Q. You are a participant in the permit to mine process, is that right?

A. That's correct.

30 Q. And without a permit to mine, there can be no extraction of coal?

A. That's correct.

Q. So without your signature on the permit to mine, mining can't start for that day?

A. No, that's not necessarily correct. It's –

Q. How does it work? Can you explain that to us please?

5 A. My – well, my signature on there is as a recommendation and the final approval is by the mine manager.

0935

10 Q. So if you didn't sign the permit to mine and therefore endorse it with your recommendation, the mine manager could nonetheless sign it and authorise mining to commence?

A. That's correct.

Q. Would that be a mode by which you could express your personal view, your disapproval, on any issue within the mine in a reasonably forceful way?

15 A. It could be.

Q. Did you ever do that, that is not sign a mining permit to make a stand on any issue?

A. There was times I did not sign a permit to mine but not for that reason as you just suggested.

20 Q. Ms Basher, if we could put up please DOL3000150019?

WITNESS REFERRED TO DOCUMENT DOL3000150019

Q. This has been described by previous witnesses as the convergence of a whole range of services at Spaghetti Junction, be familiar with that?

A. Yes.

25 Q. And one of those pipes which we can see is a gas riser, indicated by the yellow sign on the pipe, to the left of the photograph?

A. That's correct.

Q. Is there any other gas drainage line equipment running through that area which you can identify?

30 A. Not from those photos specifically no.

Q. When a decision to configure, if you like the convergence of so many services or utilities in one location like that, is that particular issue, or

was that particular issue about that site a subject of a risk analysis or management plan?

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

5 Q. Did you have a concern about the arrangement at Spaghetti Junction which we can see in that photo?

A. Well at some instances underground I did comment to some of the people underground as well as, I can't recall exactly who, that that would be, it's required to tidy that up.

10 Q. Was that in place before you arrived at Pike River or did it develop during your period there?

A. There were probably developed during my stay there, my tenure there.

Q. We've heard evidence from experts called by the Department of Labour that the red cables, or at least some of those cables that pass through that area supply electrical current?

15 A. Yes.

Q. Is that right?

A. My understanding, yes.

Q. And what was your view in terms of best practice in having high voltage cable running through that area adjacent to a gas riser?

20 A. Well, I'm not sure on the electrical side but on the gas drainage side that is not ideal.

Q. You have given evidence about the fresh air base and your view on its adequacy or otherwise, I just want to ask you as a reasonably senior employee at Pike about what steps you would've taken had you been underground at the time of a major incident? Firstly, did you engage in induction training at the commencement of your employment, about health and safety measures underground?

25 A. I started my induction on that specific time the shaft failed and I was actually called out of induction. I've caught up on the induction training afterwards but not in the first few days. I've stayed in the office and worked on the Slimline shaft and the shaft.

30 Q. Ms Basher, that can come down, thank you. Did you during, I think it was about 18 months you were there was it, around about?

A. From memory 21 months.

Q. Twenty one months. Did you participate in any evacuation drill?

A. No I did not.

Q. Whilst you were there?

5 A. No I did not.

Q. Was that of concern to you that you didn't participate in such a drill?

A. Not particularly, I am aware of what was the process at that stage, but it's important that the people that's there every day get the opportunity as well as, well, it would be beneficial if everybody could do it.

10 0940

Q. You've just indicated that you were aware of the process in the event of an emergency. Can you tell the Commission please what your understanding of the process would be in the event of an emergency?

A. Well it depends on what emergency.

15 Q. Let's assume that you were expecting the geology in the location of the continuous miner or the ABM, so in the west of the mine, it's furthest reaches, and there was an incident around pit bottom south around the bottom of the fan shaft which prevented access up the main drift. So that scenario. Can you explain to the Commission what your understanding was about what steps you would take to self-rescue?

20

A. What sort of incident?

Q. Fire?

A. Well the understanding was that you would, if required, put on your self-rescuer and move towards the, to an escape route. So if the main drift was not accessible, then it would have been the Slimline shaft.

25

Q. And we've heard –

A. Oh sorry, the Alimak shaft,

Q. The vent shaft?

A. The vent shaft.

30 Q. We've heard evidence that the Slimline shaft would have – sorry the vent shaft, making the same mistake. The vent shaft would have been a very difficult route to use in the event of fire because of the smoke which would naturally vent up there. The fact that you'd be climbing

- with a self-rescuer, the angle of the vent shaft ladder, and the bottleneck effect with so many men congregating at the bottom of it when only I think it was eight maximum could be on it at a time, and also the problem of having lanyards to clip to the wire. So if that presented a
- 5 problem and wasn't practical as a means of egress, what would be your next step, where would you go to?
- A. Well I would take advice from the undermanagers or the person in charge on the ground because they know the area better than what I would probably do.
- 10 Q. And if you were on your own?
- A. I would not be on my own.
- Q. What if you're unable to access an underground manager at that time? You're in the mine, there's a disaster, smoke-filled. Where would you go? We need to understand from someone in your person, senior mine
- 15 manager or a mine manager, sorry, unable to use the vent shaft as a means of egress, self-rescuing. What would you do at the point you realise you can't go out that second egress? Was there a plan?
- A. That's a difficult question to answer in this situation.
- Q. Okay.
- 20 A. It depends on the situation.
- Q. Well you haven't mentioned the fresh air base. Would you proceed to the fresh air base if you could?
- A. Well that would be one of the options considered, yes.
- Q. And was your concern at the time that the fresh air base would not be
- 25 an effective place for the workers to congregate, hence the concerns you expressed?
- A. My concern was that the location of it was not ideal and that there could be a number of issues arising especially with the gas drainage line within it or adjacent to it has been said.
- 30 Q. I think it's self-evident Mr van Rooyen, there's no argument about this generally, that there was a period that there was an inadequate fresh air base and therefore as Mr White has said, the desire on his part and mine management part to construct a second means of egress as soon

as possible given the shortcomings of the vent shaft. You'd agree with that?

A. Yeah, well that was always part of our plan to get a second means or another means of egress developed.

5 Q. Mr Borichevsky in his police interview. Ms Basher, INV.03.18946.

WITNESS REFERRED TO DOCUMENT INV.03.18946

Q. Can you highlight please the fifth bullet point? He says, "There were plans for a proper fresh air base and he showed this on map E and was designed with dual doors and airlock, gas drainage segregated. Slimline shaft segregated from the fresh air chamber and also backup pumps so air could be drawn back in. It was designed to be big enough for everybody in the mine and to be isolated by explosion doors. The priority for the fresh air chamber was well down the list however." Have you got a comment in relation to that?

10
15 A. No, it was – we did the design. At some point Mr Borichevsky did a design and I did another design.

0945

Q. I'm referring to the final sentence of that bullet point, "The priority of the fresh air chamber was well down the list." From your perspective your –

20 A. I accept that comment.

Q. Was that of concern to you?

A. To a certain extent but at that point in time the mine was being developed, I mean, you have, while developing a mine you've got to start somewhere and well put things in place and to find the right areas for things. I've said, well, I think I said in evidence earlier, that when I made the comment on the fresh air base or the FAB as such, I went back and I had a look to see if there's places where we could actually put a second or another gas riser in, in the short-term and that was not possible. We also had a look at trying to locate an FAB or a changeover station in some other place. There was no place available, or no other suitable place available to actually put in.

25
30 Q. Given that, and given that we have a gap between where the second egress might be built, we have a gap in time about when an effective

fresh air chamber or refuge would be built, is this one of those examples where you might've been able to not sign a mine permit and therefore not recommend mining because of those shortcomings?

A. Potentially.

5 Q. If we could go please to the 10th bullet point, it's the fourth one up from the bottom and enlarge that? He's talking about the second egress and we'll come back to the other plans for this, but, "At that stage, the second egress was in a remote steeply sided valley, the only escape from that point was for a helicopter, so there was a plan for a second
10 refuge centre to be at the end of that second egress. Priorities for the second egress either were overtaken by production goals." Do you agree with that statement Mr van Rooyen?

A. The development to the second egress and I think we touched it yesterday as well, was always part of the schedule, so there was always
15 three mechanical miners scheduled to mine and one was always in the direction of that point. But in terms of priorities, I agree that the panel development took priority.

Q. So the manpower and the mechanical resources were diverted away from tunnelling west in order to develop panel 1?

20 A. If it was required to yes, so if we didn't have three machines operation.

Q. Thank you. If we can move on to another topic.

MR RAYMOND ADDRESSES THE COMMISSION – TIMING

CROSS-EXAMINATION CONTINUES: MR RAYMOND

25 Q. Mr van Rooyen strata control in the panel is the topic I want to cover now. You said that you were responsible for the design, panel extraction design and ventilation design, in your brief at paragraph 87. I just want to ask you please, what management strategies were implemented in relation to monitoring goaf stability at the stage where the extraction had gone wider than originally planned and I caveat that
30 comment by noting that Mr Mabey's very carefully gone through with you, the plan and the care that was taken around expanding the goaf, and I'm not intending to criticise that process and the evidence that was

given yesterday helped clarify the size of the goaf and how that was thought through in relation to the adjacent fault, that's not the focus of my topic. But, nonetheless, the goaf size did increase, did it not, than what was at least originally planned?

5 A. That's correct.

Q. So it ended up being 30x40, or put another way, 1200 cubic metres, held up in the end by what we call remnant pillars, is that right?

0950

10 A. Yes, and there was some, it what roof falls or goafing that has taken place. But limited –

Q. And we've heard many times that the objective is to cave the goaf, so when the hydro-monitor operation goes wider or as wide as was planned, do you agree that there's a need to observe carefully, very carefully what happens with the goaf of geology and to be diligent in how you manage that cave and to know exactly what's happening?

15 A. Like I said, yesterday, the geotechnical engineer was underground almost every day and had a look at the goaf and looked at what was happening as at that point in time.

Q. That was my question, who was that, was that Mr?

20 A. Mr Huw Parker.

Q. Mr Huw Parker.

A. I'll re-state that. He was underground regularly. I can't say almost every day. I can't recall exactly how many days, but he was there regularly.

25 Q. I'm going to come back to that in a moment about Mr Reece's evidence about telltale signs, but just before we do that, I just want to be clear on this commencement date of the hydro-mining. Mr Oki Nishioka says that there was a trial operation on the 19th of September. He kept notes of his daily activities and he said that "on that day there was cut for 30 minutes from 1.15 pm, then they checked the progress and then they cut again for another 30 minutes." Does that spark any bells?

30 A. Oh, I can't comment on that, but I accept that.

- Q. Okay. Mr Coll in his evidence says it was operational on or about the 23rd of September. Mr Mason says late September. You've said mid-September in your evidence. Can we agree that with the permit to mine, it was 23 September, that it officially started?
- 5 A. Yes, and I don't disagree with Mr Nishioka in terms of the, or Nishioka, in terms of start commencing commissioning around the 19th, that sounds right.
- Q. You signed the permit on the 22nd of September?
- A. Yes, that's correct.
- 10 Q. So does it make sense that the official mining would have started proper on the 23rd?
- A. Or even the 22nd, it could be that I signed it in the morning and they started the same day.
- Q. Now we know you left the mine on the 3rd of November, are you able to say as at 1 November, just before you left, what the state of the goaf was?
- 15 A. I can't recall the details. There must've been a – we did surveys regularly, underground surveys of the goaf as well to understand the cavity. But no, I can't recall the detail in that.
- 20 Q. Okay. What system did your department have in place for the protection of people and equipment at the time of the cave-in?
- A. My department, nothing specifically.
- Q. Well, any department? Are you aware of what steps were taken to protect, as Mr Reece put it, people and equipment at the time of the
- 25 cave-in?
- A. The panel 1 or the risk assessment that was done had a number of aspects to cover or specifically that.
- Q. Was there any early indication monitoring and measurement in the goaf, as he put it, in the form of telltales?
- 30 A. Yes, I said yesterday there was gel and telltale, or rocket extensometers installed that was monitored daily. These – there was a regime over the whole mine of telltales and extensometers and actually gel, G-E-L extensometers, and they were divided into a number of categories,

some were monitored daily, some weekly, some monthly. The daily ones were done by the operational personnel. They had a trigger action response plan on which they indicated what the movement were and made recordings, the deputies made recordings of the gels. They came
5 back to the geotechnical engineer who entered them into a database and trends in terms of total movement and rate of movement were plotted, so these in the goaf were similar, except it had a different trigger action response plan that was developed especially for the goaf, or for the panel.

10 Q. And these are actually in the roof of the goaf, are they?

A. In the roof of the workings where the – well, in the tunnel. So, in B heading where the monitor was set up, there was telltales installed or gels installed.

0955

15 Q. Mr Reece gave evidence about timber props being actually used, as I understood it, in the goaf to give an early indication of conveyance?

A. I listened to Mr Reece's evidence. From my understanding they would also not be in the goaf really because you won't be able to install them in the goaf. They would in the roadway as well. So that's just another
20 measure to assist with the visual or like he also indicated an audial indication of weight coming onto the tunnel.

Q. He talked about another system where at a couple of different horizons he said typically two, four to six metres indicators are drilled into the roof?

25 A. Well those –

Q. Is that the same system that you're referring to?

A. Those are gels yes.

Q. Those are gels?

A. We used three position gels.

30 Q. So the upshot of that is that you agree with Mr Reece that they are necessary and indeed they were being used at that time?

A. Correct. And not only, like I said not only in the panel, in all development phases and throughout the mine.

- Q. I just want to turn now to your visits into the mine and some of the evidence which referred from Mr Nishioka and Mr Mabey QC has already questioned you about this. We have the mine hydro-monitor set up and the guzzler operating from, as we've just agreed, the 23rd of September or the 22nd of September 2010?
- 5 A. Yes.
- Q. You left the mine on 3rd of November, you've confirmed that?
- A. That's correct.
- Q. And you said that you didn't go underground for your last six weeks before you left?
- 10 A. Approximately, yes.
- Q. I'm sure the coincidence hasn't been lost on you that six weeks before the 3rd of November is the day the hydro-mining started on the 22nd of September?
- 15 A. Yeah, I figured that out.
- Q. Sorry?
- A. I've realised that, yes.
- Q. So, to put it bluntly, the entire time that the hydro-monitor was operating and blasting out that goaf area, you didn't go underground and observe the operation at all?
- 20 A. Not due to a lack of not wanting to.
- Q. Well that wasn't the question. You self-evidently didn't go down there?
- A. I didn't, no I didn't, no I didn't.
- Q. Can I put to you that in your position and given the importance of this panel, its location, the new operation which was underway, that that was a fundamental shortcoming in your duties not to go down and to inspect that area?
- 25 A. I don't necessarily agree with that.
- Q. Not necessarily. So why don't you qualify the answer?
- 30 A. Well I don't agree with that.
- Q. Why?
- A. There was people on the mine that was more qualified on getting that specific area operational than what I was and if you commission these

sort of operations it doesn't help everybody standing around and having a look.

5 Q. Well let's put that into perspective though Mr van Rooyen. We're not suggesting you stand around and have a look sort of on a daily basis, but a visit in six weeks to assess how the extraction of this panel which you've designed in an area adjacent to a fault line which you at least were concerned enough to have consultants report about, that you should be inspecting it?

A. I had people down there every day.

10 Q. Well, talking about people down there every day, Oki was one of those people wasn't he?

A. Yes two.

Q. He worked at the mine from late July to 20 October 2010. That was his evidence?

15 A. I can't dispute that.

Q. He has said in his evidence, and this has been aired already by your counsel, that he feared an explosion and he said he told George Mason in his words, "very straight" that this mine could explode. Are you aware of that evidence?

20 A. Yes I can't recall the exact words but I'm aware of that.

Q. When Mr Mason wasn't in the mine, and I understand he was the coordinator so was generally in the office, did you have daily interaction with Mr Mason?

1000

25 A. No.

Q. Was he in the vicinity of your office?

A. No.

Q. Where was he?

A. His office was in the, around the control room.

30 Q. Did you see him about the site on a daily basis?

A. Not necessarily no.

Q. Well, did you see him at all?

A. On occasions, yes.

Q. Did you discuss things with him about the operation of the hydro-monitor and any concerns he might've had?

A. I can't recall any specific discussions with Mr Mason.

Q. What about Lance McKenzie?

5 A. Lance McKenzie was an undermanager so he was, majority of the time, underground. I saw him on occasions as well.

Q. Mr Nishioka says that he told Lance McKenzie, "The mine could go any time," none of that was passed onto you by Mr McKenzie or Mr Mason?

A. No.

10 Q. Do you know Mr Andy Sanders contractor?

A. Yes.

Q. And he was on the project team for the hydro-panel was he?

A. That's correct.

15 Q. Did he ever pass onto you any concerns Mr Nishioka had discussed with him about going underground?

A. No I hardly ever saw Mr Sanders.

Q. We've heard evidence from Mr Nishioka as you know, would you agree that he is a highly regarded, senior, internationally recognised mining consultant, in particular expertise in hydro-mining?

20 A. I can't comment on that. All I know is what I've got to know Mr Nishioka onsite.

Q. So you didn't make any enquiries about his background or reputation?

A. No.

25 Q. Well, in any event, when he came out of the mine he says that on his evidence he would tell you that the monitor face was getting a tremendous amount of methane gas and that it was quite dangerous. Do you recall that?

30 A. I, like I said, we did have discussions and he mentioned to me that there was gas in the panel and that the monitor was down, he didn't specify specifically how much or used, I think the words you've just used was, "A tremendous amount," I can't recall that being used and I can't recall him saying, well, he definitely did not say there was, the mine was going to explode.

Q. I didn't ask you that, we'll come to that. Can you recall the words, "Quite dangerous"?

A. No.

5 Q. And he went on to say, page 3560 of the transcript Commissioners, that he told you, "Whenever he came out of the mine," and then later on, "Five or six times," about the methane that which was coming off at the monitor face. Putting to side that whether it was five or six times or two or three times, as I understood your evidence yesterday, you accept that he did convey that there was, tremendous, significant, a lot, he did
10 convey words to that general effect that there was a lot of methane gas coming off the face.

A. He tell me that the monitor was down there to methane yes.

Q. And he says he went on to say, "If there was a source of ignition it will go instantaneously." Whether he said that to you or not you would in
15 any event understand that that is a possibility in the circumstances. You didn't need Oki Nishioka to tell you that did you?

A. (no audible answer 10:03:55)

Q. You've very clearly and emphatically said through your counsel yesterday that you didn't have this discussion when Mr Nishioka said
20 that you wouldn't go underground because it was scary. That's your position isn't it?

A. It is.

Q. And as we've already discussed the fact is that the whole time the hydro-mining was happening for the six weeks before you left you didn't
25 go underground and you say that's just a coincidence?

A. It is.

Q. And the reason you say you didn't go underground is because you were doing exploration permits every day?

A. I was busy working on petroleum exploration reporting to Crown
30 Minerals and I had to ensure that everything was up-to-date before I left the company.

1005

Q. Putting aside whether or not you now accept the comment about being scared or afraid, and we understand your evidence, Mr Nishioki has a different recollection and we can't resolve that here, but can I put to you that there were a number of reasons why it might be suggested that it would be reasonable for you to be afraid?

5

A. Sorry, I don't understand the question –

Q. Well, let – can I put, I want to put to you five or six points as indicators at that time, which might have led someone in your position to be concerned about his safety going underground?

10 **OBJECTION: MR MABEY (10:05:42)**

CROSS-EXAMINATION CONTINUES: MR RAYMOND

Q. Thank you, sir. It's not – I'm not intending to put hypothetical's, sir. Mr van Rooyen, firstly we've established you've accepted that there was a release of significant amounts of methane or a lot of methane at the workplace in the goaf?

15

A. Can you please just report that?

Q. You've accepted what Mr Nishioka said, that there was significant amounts of methane being released at the face in the goaf?

A. What Mr Nishioka told me was that the monitor was down due to methane, that does not necessarily indicate significant amounts.

20

Q. Okay.

A. But that there was above the cut-off level, yes, that does.

Q. Secondly, you would accept that as a natural consequence of mining engineering with the creation of a large cavern or goaf, that there can be an accumulation of methane in that goaf?

25

A. It was planned to have accumulation of methane in the goaf.

Q. Thirdly, you would accept that, at some point, there's a inevitability about the collapse of the goaf, that's the whole point?

A. That's correct.

30

Q. And fourthly, you've just accepted regardless of what Mr Nishioka said, there is at least the potential for an explosion if there was an ignition source in that area?

A. Oh, no, I didn't accept that. There's always – well, the probability – the risk of an explosion is always part of coalmining, depends on how you manage that risk. So, I'm not disputing that there's a risk of – I was not ever concerned about an explosion at Pike.

5 Q. Well, as with any mining operation in a gaseous mine, without adequate controls being in place, there's the potential for an explosion. Would you agree with that?

A. I think that's what I just – well, that's what I just tried to say.

10 Q. And you accepted yesterday to Ms Beaton that there was contrary to one of your earlier memos, "no explosion devices installed around electrical plant in pit bottom south and around the fan in the substation."

A. Explosion devices such as?

Q. Protection devices around electrical equipment, were they in place?

A. Protection devices?

15 Q. Yes. Explosion-proof boxes, enclosures if you like, around electrical equipment. You heard Mr Reece's evidence, you said, that's what he talked about?

A. I'm not, no, I can't recall that specific area and I'm not sure I understand what you're referring to.

20 Q. And fifthly, we've already talked about the difficulties with egress and until a second egress or a fresh air base was built, there was effectively a lack of anywhere safe to go or any way to get out in the event of an explosion preventing access to the drift. You were aware of that, weren't you?

25 A. Yes.

Q. So I put to you, Mr van Rooyen, that when you put all of those factors together, none of which hypothetical, they amount to just cause why someone in your position may indeed be afraid to go underground during the period of the hydro-mining?

30 1010

A. I was not afraid to go underground at Pike River, not ever.

Q. Are you aware of any reason why Mr Nishioka would make that clear statement about what he recalls saying to you? Why he would make that up?

5 A. I had a lot of thought about why he would say that and the only possible reason that I could get to which is speculation and just my way of trying to understand it, was shortly before I left and there must have been in the last days that Mr Nishioka was on the mine, I actually took my wife up to the mine on a Saturday morning to assist me with sorting out all my filing before I finish up, and during that time Mr Nishioka also came out from underground while we were busy in the office and like I said previously, he would walk past my office on his way to his, and normal discussions, greeted and how are things going, and he then asked me if I've taken my wife underground and my wife at that point in time said well she doesn't go underground, she's afraid of going underground, 10 and she also made the comment to the fact that she doesn't want me to go underground and she's afraid of me going underground, which she has been since I've started working on mines. I don't know if that has been misconstrued or misunderstood by Mr Nishioka. I can't comment on hearsay but that's the only reason I could find in soul-searching why 15 he would make that comment.

20 Q. Well I'm glad you've told us that because that's potentially helpful in resolving that discrepancy in the evidence. No other personal animosity or anything else between you and Mr Nishioka which might have caused him to say that?

25 A. Not at all.

Q. Just move on to another topic, and Ms Beaton's largely covered this so we can deal with this quickly. If we could have up please DOL3000.15004/1.

WITNESS REFERRED TO DOCUMENT DOL3000.15004/1

30 Q. This was your memorandum to Mr Whittall dated 18 June 2009 about the return ventilation design options?

A. Yes that's correct.

Q. To Mr Whittall and to Mr Slonker. And you talk on page 2, if we could have the two pages up on the screen please, about an explosion path. Is it the case, just so we understand this, that this was any potential explosion that might have happened in the miners going down the return and the airflow would go down the return up through one of these alternatives, either connection through a second Alimak or a one in six rise into the vent shaft and take the explosion out up that way up the shaft, is that the idea?

A. The idea was to try and divert the energy from an explosion away from the main ventilation or the underground fans and to, all that enables you is to, well the theory is it enables you to re-ventilate or restart the mine after such an event.

Q. And in your conclusions on page 2, the sentence number 2, "Pike River Coal will remain without an explosion path until the second connection to the ventilation shaft is completed." Is that right?

A. That's what's there, yes.

Q. And that remained the position from June 2009 until November 2010?

A. That did but there was also some other changes later.

Q. What are you referring to? What do you mean "some other changes"?

A. When we designed the placement of the second fan inbye and the second intake and return, the decision at that stage was to not construct the explosion path based on information I gained from Mr Rennie and Mr Beikoff and I think I gave evidence to that yesterday, but at that stage, well they were still of the opinion that the theory of an explosion path is not proven.

1015

Q. On this same theme about diverting of explosions, if we could pull up please, MAS001/8?

WITNESS REFERRED TO DOCUMENT MAS001/8

Q. Mr Mason gave evidence about his concern with the return in the A heading into panel 1 hitting the C heading and there being a pocket of turbulence there and the air wouldn't naturally flow out of the return from

the panel and down C header, were you familiar with that concern that Mr Mason had?

A. No, I was not.

5 Q. Well, he gave evidence on that and as a consequence of that turbulence at that juncture, he arranged to be built a diversion door, not a dilution door, a diversion door and you can just see it there at the intersection of the return heading to the C heading, if you get your light please?

A. Are you referring to that little wing?

Q. Yes. Were you aware of the construction of that?

10 A. No, I was not. The – I've got to be clear. The ventilation management and implementation underground, I didn't have oversight or control over that. That was done by the operational department, or the production department.

15 Q. But you did have a hand in explosion path analysis to divert the airflow around the mine?

A. Yes.

Q. Would of that construction which Mr Mason told us about have assisted the flow of air out of the return than A heading into C heading?

20 A. It – once again, not an expert, but based on practical's with your return flowing through that would sort of create a venturi effect almost that would assist.

25 Q. Following, if we move forward to the updated mine plan which Ms Beaton also referred to yesterday, you presented a presentation to the board on or about 24 August 2010 with that new plan design, is that right?

A. That's correct.

Q. If we could just have the board minutes up for a moment Ms Basher, DAO.019.01178/1?

WITNESS REFERRED TO DOCUMENT DAO.019.01178/1

30 Q. And if we could go forward please to page 4? Down the bottom of that page it has, "Updated mine plan". You see that?

A. Yes.

Q. And a reference to you attending the meeting and pointing out that there was a \$10,000,000 saving – if you could enlarge that please, Ms Basher? “There was a \$10,000,000 in the current budget for establishing required ventilation which could be delayed until the mine advances into the common area to the north-west.”

5

A. Yes.

Q. Is that the saving that you referred to yesterday about the extra tunnelling which would not be required –

A. It’s a combination of the deferment of development cost in terms of stone work. It has a component of additional costs in there for installation of the second fan and it has a, let’s call it a net present value of operational costs included in there for operation of the ventilation fan for the life of mine, or for a 10 year period at least. Because of a lower fan duty you’ll have an electrical saving as well.

10

Q. We’ll just try to better understand that by looking at the PowerPoint presentation which you presented which is DOL300015005.

15

WITNESS REFERRED TO DOCUMENT DOL300015005

Q. If we just look at page 2 briefly first. Got that Ms Basher, /1, 15005/1? Ms Beaton had it up yesterday as well. Just while that’s coming Mr van Rooyen it’s as you can see dated 25 August 2010, the bottom right-hand corner?

20

A. That’s correct.

1020

Q. And just going to page 2, under the heading, “Mine design considerations, amongst other things to establish a second egress,” the third bullet point?

25

A. That’s correct.

Q. And then Ms Beaton, yesterday, took us through some of these slides so we don’t need to go back to them about the current ventilation setup. If we can go to /5 please. The area highlighted in brown was the stone development which was no longer going to be required with this plan change?

30

A. That’s correct.

Q. So this is part of the \$10 million saving that you were referring to at the board meeting?

A. That's correct.

5 Q. And the second slide is another \$2 million saving, the next page Ms Basher, with other cross-cuts which were no longer to be required.

A. No they would still be developed.

10 Q. Okay. Now, I just want to try and get a better understanding, if we could please, about where it is in these plans that the second means of egress was planning to be, and I think the best slide is /9, Ms Basher. At least counsel for the families and the families themselves who have been in Court didn't understand from this diagram in the evidence yesterday where the second means of egress was planned at this stage. Can you highlight with your light, I think you made reference to option 6?

15 A. Yes, these were the options or the conceptual design points that were evaluation for the second egress. So from this specific design, option 6 and option 4 were shown to be the most viable options for practical reasons and they had no real, except this one being a vertical shaft, the others were all incline shafts.

20 Q. Well, that was my question. So there was a plan to drill a bore, a tunnel from either 4 or 6 from those north returns to the surface?

A. From this conceptual design?

Q. Yes.

25 A. This got developed into a more detailed plan which was displayed yesterday as well via Mr Borichevsky, in one of the memorandums that he wrote and in there this location moved slightly towards the south and from memory it was sitting somewhere around there.

Q. So, when you say, "Around there," that needs to be recorded. You're indicating between?

A. Well, I think it –

30 Q. Sorry, just pause for the record, you're indicating on that diagram between the number 4 and is it number 2 at the bottom?

A. This is number 5, 2 and 6, okay, 1, 4 and 3.

THE COMMISSION:

Q. So 6 moved to the south?

A. From recollection, Your Honour, it did but it's, I'm indicating a general location, I think. If you want to have the precise location it's better
5 looking at a different plan.

CROSS-EXAMINATION CONTINUES: MR RAYMOND

Q. More generally, what was the plan? Was it to bore a tunnel where the men could've walked out? It wasn't a hoist, it was a walk-out tunnel?

A. This would've, the plan that this evolved to would be two tunnels going
10 up to surface, developed up to surface. One being a return and the second being an intake. The benefit of that is all the other options had a second egress in the return where this option would've given us a second egress in fresh air or in intake.

Q. So when this was under consideration the tunnelling out to the western
15 escarpment as we have had in evidence earlier, that was off the table? To assist in what I'm trying to get at, if you look at the plan /7, same document, /7. Initially we heard from other witnesses that the planned means of second egress was a tunnelling to the western escarpment which, as I understand, it's indicated by the black line at the left of that
20 diagram is that right?

1025

A. I don't think that was ever the plan to actually have a tunnel that would
25 exit on the escarpment. The plan was for a second intake always in this area. So it's not a significant change from what the plan was at that stage. Just more detail and the difference was placing a second return in that location and moving a fan to that location.

Q. Well the misunderstanding might be that witnesses have said towards the western escarpment?

A. That's correct.

30 Q. The exit though would have been at some point before that?

A. It was generally in this area because you had low depth of cover in that area.

Q. And then finally on this topic then, Mr Borichevsky in his memorandum to Mr White of 29 October, and this was on the screen yesterday, we don't need to pull it up, said that it wouldn't be established to June to September 2011. When he made that comment about the proposed second egress, would have been referring to the plan that we've just been looking at?

A. From memory, if you have a look at the plan at the back of that memorandum, that indicates the precise location of the second intake and return.

10 Q. So we'll pull up that, DOL300070172/3.

WITNESS REFERRED TO DOCUMENT DOL300070172/3

Q. Can you indicate please with your light where that was?

A. Those were the second intakes and returns in that area, so –

15 Q. So just pause because when you say something like that we have to type it into the record. If that could be enlarged please Ms Basher, in the centre where the witness indicated just then. So if you could please point again with your light to what you were referring to?

A. The location of the second intake and return would be towards the east of both panels 1 and 2. So if developed from one west and continue on one west until there, it would intersect two north, and develop north from there midway up to north or partly up to northeast of the panels.

20 Q. So the two lines in blue that we can see coming off that main, are they meant to be the egresses that you're referring to or is that something else?

25 A. Those two lines?

Q. Yes.

A. Yes, those are the two lines. Those are from the mains. They are developed towards the surface.

Q. So they are the second egress?

30 A. They are the second egress, second intake and placement of the position of the second fan.

Q. So, when Mr Borichevsky says that on page 2 of that memorandum. Perhaps if we could pull it up please Ms Basher. So we're absolutely

clear when he says at the bottom of that page, if that could be enlarged, "This suggests second egress can be established by June to September 2011 subject to the extent of faulting et cetera." He is referring to the egress you've just marked or indicated on the plan which is /3 to this document?

5

A. It seems like it yes. Yes it does.

Q. So as at 29 October 2010, as soon as mine management could deliver on the second means of egress in the area that we've now had established, was in that period June to September 2011?

10 A. Well that's based on the schedule that he's highlighted out there with development rates and all the components.

Q. Just a final topic –

THE COMMISSION ADDRESSES MR RAYMOND

15

THE COMMISSION:

Q. We have here, Mr van Rooyen, the critical path of a proposal. Had decisions been taken that this proposal would proceed, or what was its status as you understood it?

20 A. I understand that we presented the scenario and I presented it to the board obviously and they were favourable of it. The memorandum to do the work was completed shortly before I finished and that was submitted to Mr White and Mr Whittall from memory but I can't recall exactly, and so from where I'm, from my point of view the decision was taken that
25 this is where we were going and we were working towards that. It fitted into the bigger plan, the medium term plan.

1030

Q. And just one final thing, so you only went to the board on that one occasion, 25 August, or did you go subsequently?

30 A. I, as a rule, did not attend board meetings. I was called in on occasions to explain designs or gave feedback on how the exploration with the in-seam drilling went. Not always did presentations, sometimes just talked over a matter.

Q. Right, so did you go back about option 6?

A. No.

Q. Just the 25th?

A. Yes, from memory, yeah.

5

MR RAYMOND:

Sir, just for the record, it was Wednesday the 24th of August that meeting. That's what I've got here. If we could pull up DAO.019.01178/1?

WITNESS:

10 My presentation states the 25th, so yeah, I don't know.

MR RAYMOND:

Yes, so the date of the presentation sir, on the PowerPoint was 25 August, the meeting was the 24th of August, that's where the confusion comes in.

15 **CROSS-EXAMINATION CONTINUES: MR RAYMOND**

Q. And so just on whether, how it was left, if we could go to /5 please of those minutes Ms Basher and highlight the top four or so paragraphs? And I'll ask you a question about this Mr van Rooyen, it records there what the plan change was and what the budgeted savings might be, you
20 detailed the actual rates of progress for each machine per scheduled day, et cetera, et cetera, and then you were thanked for your presentation and you left the meeting. When, before you left the meeting, was there any indication from the board that it found favour and was something that was going to be implemented?

25 A. At the time we presented that presentation, you have to understand that there were six options being evaluated. They were just got the information back and there was final designs still to be completed, so by the time we wrote the memorandum by Mr Borichevsky, at my request, I think Mr Hamm had a first go and then Mr Borichevsky a second, to
30 complete this information and actually send it through to management.

Q. Okay, so that's the memorandum dated 29 October, from Mr Borichevsky to Doug White that we just referred to a moment ago which had attached to it the mine plan?

5 A. From memory, yeah, there might've been another one. I can't recall. There was a few issues being addressed at that stage in terms of this. That was the design work as well as some information requested by Mr White.

10 Q. And I know you only left a few days after that memorandum on the 29th of October, but to the best of your knowledge and given you're the last witness we have on this for now, what is your understanding as to how Mr Borichevsky's memorandum was left as to what was proposed? Was it on its way to the board for sanction or was it under discussion with Mr White?

15 A. No, I'm not certain. From my point of view, the decisions or the proposals would be looked upon favourably and that's my understanding so it became part of our design in going forward.

MR RAYMOND ADDRESSES THE COMMISSION – ONE MORE TOPIC

CROSS-EXAMINATION CONTINUES: MR RAYMOND

20 Q. The final topic, Mr van Rooyen, relates to management style and attributes and we've had a lot about this in the last few days, and I don't want to dwell on it for too long and I bear in mind the comments of Ms Shortall this morning before we got underway. The reason I put these questions to you, as you'll appreciate is because you're one of the
25 few senior management people which has appeared before the Commission and so therefore can give us some insight into the workings of management in the 20 months or so that you were there.

A. Yes.

30 Q. And you would've seen during your 20 months or so, quite a few managers come and go?

A. Yes.

Q. Did you discuss with those managers when they left in a sort of debriefing type style if you like, or as a friend, the reasons for their departure?

A. Oh, some of them, and some of them no discussion at all.

5 1035

Q. And are you in a position for those that you did discuss it with to say why or are those discussions in confidence or you can't recall or?

A. I would prefer if it could stay in confidence, that's just friends talking to friends unless it is seen to be valuable but I don't necessarily think it would be valuable.

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Q. Well, perhaps the Commissioners will pick that up if they think it is valuable. I won't ask you that for now, because in any event it's what we call hearsay, but I'll stick with what you know for now directly. We've heard evidence about Mr Whittall in particular and what is described as a micro-management style. Was that something that you experienced with him?

15

A. Yes I did.

Q. Are you able to give any examples which illustrate that?

A. Yes I think it was touched on at some stage during Mr White's evidence.

20

The fact that Mr Whittall signed-off on all purchases and that was one of them and the fact that he had a good understanding or he understood everything that was happening on the mine and wanted to know everything. But doesn't necessarily make it bad.

Q. And so you personally didn't have a problem.

25

A. Sorry it's doesn't always? It depends on from person to person, it doesn't always make it bad but yes, Mr Whittall was pretty detailed in terms of knowing everything and managing things to a very detail.

Q. And I think you were going to say what I was going to say, is that you personally didn't have an issue with that yourself?

30

A. At times it's frustrating as a manager being micro-managed but sometimes you have to accept that people have certain responsibilities.

Q. Just to be open about this, you and I have briefly discussed these points in the presence of your counsel a couple of days ago, the word

“megalomaniac” isn't something in your vocabulary that you would normally use so we don't need to talk about that?

A. No I wouldn't use it and I would never describe someone no.

Q. Dictatorial in style, Mr Whittall?

5 A. Mr Whittall did on occasion make clear that his decision is final and which is sometimes accepted, or which probably is accepted with taking on, well, understanding his position in the company, so, yes.

10 Q. And we've heard evidence from Mr Rockhouse about a particular meeting, Mr White's commented on it as well, and Ms Shortall's acknowledged that Mr Whittall recalls the meeting and what happened at it. Were you at that meeting where it seems to have been particularly bad in terms of Mr Whittall's treatment of Mr Rockhouse?

A. Yes.

15 Q. And would you concur with the description that the behaviour was somewhat belittling and demeaning?

A. It was definitely belittling and demeaning.

Q. Did you witness that on any other occasion?

20 A. I can't recall a specific event, well, definitely not to that magnitude, that was a once-off event to that severity, yes. There was other occasions where Mr Whittall would make a comment to people and think often it was Mr Rockhouse, at management meetings, that was, could have been seen as belittling or backing on him as a person.

Q. So he was often the recipient of some of those remarks, is that what you're saying?

25 A. Yes, Mr Rockhouse did take a fair bit of that.

Q. And what about yourself, did you fall victim into that?

A. No I don't think so. I don't think Mr, well, I can't recall specific events where Mr Whittall took me on like that.

30 Q. Mr White talked about something of a blame culture at Pike. What's your comment on that?

A. Yes there were a blame culture at Pike.

Q. And he characterised that in one of his emails that, that is one of Mr White's emails to a colleague, that Mr Whittall blamed his decisions

as, "Stuff-ups by others." Would that be something that you would feel you are in a position to comment on or not?

5 A. The only comment I can raise on that is in terms of the equipment and that the continuous miners, it's my perception, at least, was that Mr Whittall was part of that decision in the early stages but it seemed like that decision was always somebody else's fault. But that's just my perception.

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CROSS-EXAMINATION: MR HAMPTON

10 Q. Mr van Rooyen, just three areas and two quite brief. The three are underground fan, George Mason, and methane drainage. First, underground fan. And you comment, it's in your brief, paras 186 to 188. You comment in that, amongst other things, about Mr Rennie's concerns about the placement of the main fan underground. Just first, 15 Mr Rennie's concerns were what, do you recall?

A. Mr Rennie. Earlier on in my tenure I had telephone conversations with Mr Rennie while constructing the Slimline shaft and Mr Rennie indicated to me that he was not convinced that placement of the underground fan was appropriate and that it had some risk. I can't recall the exact words 20 he used or the exact detail on that, but looking back at it it's just having a fan underground which has the potential of ignition source and has the potential of damage in an event.

Q. And they were the sort of risks that you recall Mr Rennie talking about?

A. Like I said I can't recall that specifically looking back at it. That's – it's 25 very difficult three years down the line to recall that specifics.

Q. Leaving aside Mr Rennie's views, did you have some personal view about the placement about this fan underground?

A. Initially, no. Based on my hydro background underground fans were quite common actually and initially didn't think about it in that respect, 30 but after talking to Mr Rennie had started realising that there's other issues to consider.

Q. And is that why you took Mr Rennie's concerns, as you say in your brief, to Mr Whittall?

5 A. I had to understand why or what the decision was and shortly after I arrived I have a consultant that made some comments and I just had to verify if those had been considered.

Q. And did Mr Whittall, his response to that was what?

A. I've got it in my brief, but it's –

Q. Well have a look at it if you want to?

10 A. Yeah, I can recall. It was pretty much the decision has been made at that point in time and that was investigated and the fans have been, well they have been commissioned. From my understanding at that point in time, one has already been constructed. Parts of it or all of it may have been in New Zealand at that point in time, and that the other one, the second fan has started but has been halted.

15 Q. So am I fair in saying he was dismissive of your concerns or Mr Rennie's concerns as to safety aspects?

20 A. Well at that point in time I didn't make that conclusion. I made the conclusion that I've taken a concern to my supervisor or my manager and he told me that those have been considered and he gave me the reasons why.

Q. Did you, this is I think dated to February-March of '09 that you said the discussions you had with Mr Rennie, that's in the brief?

A. Yeah, somewhere around there.

25 Q. From there on through to when you left, so the next 18 months or so, did you raise those concerns at all again?

A. Not specifically in that sense. We had numerous discussions on the explosion paths and looking at ways we can change mine design to improve things.

Q. And when you say "we," is that largely you and Mr Borichevsky?

30 A. Well, Mr Borichevsky towards the end of my tenure. Mr Borichevsky had distinct views on that and which I think were good and reasonable views, and but throughout my tenure there was discussions with numerous people. There was a number of mine managers that I've

discussed with in that time. I think there was about seven and there was a Mr Moynihan and various people we've had the discussions with some of the consultants as well.

1045

5 Q. And Mr Borichevsky, and I think it's touched on in paragraph 153 of your brief, was he of the view that the fan should be out of ground?

A. Yes he was pretty, well, he was working towards the placement of the second fan potentially being on surface. At that point in time I said to him, "Well, we'll have to prove it," and he was pretty adamant that he was working towards that.

10

Q. Again, because he, as expressed to you anyhow, had safety concerns about the underground fan?

A. I can't recall him making those specific, that specific statement but he would prefer the fan to be on surface yes.

15

Q. And the other discussions you've had with other managers were they to the same effect. Was there a commonality of view amongst the people you spoke to that you would rather not have this fan underground?

A. I think the, "Rather not have the fan underground," was not really part of it. The matter of the fact was we had the fan underground and what are we going to do to work with that.

20

Q. Just of a sub-issue of that. The VSD, variable speed drive for that main fan underground was some distance away from the fan itself and the motor for the fan itself. You'd be aware of that?

A. Yes I am.

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Q. Have you heard some of the evidence given in the last couple of weeks before this Commission, or read it, about the desirability of VSD being up alongside the machine its driving?

A. I listened to the majority of the evidence over this sitting but not all of Mr Reczek, so I can't recall that specifically.

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Q. Was that ever raised as an issue in talking about the main fan, the proximity of the VSD to the main fan?

A. Not that I'm aware of but I've got to qualify that as well, that I was not involved in a lot of the talk about the installation itself. I was more

involved in creating the excavation cavity and design in strata control for those placements of those components.

5 Q. The second topic, Mr Mason, what role did he play in the sign-off of the permits to mine? I ask that because I saw on one of the ones that went up yesterday, at least one of them, he had his signature on it and a comment on it?

10 A. Well, as the hydro co-ordinator he had some sort of, he had some overview, or oversight of the operation in that area and it was so that he could comment on anything. It's got to say that in technical services we sometimes only look at the technical side and we sometimes do make the mistake of not getting everything practically correct, so having the people working underground having oversight of a permit before you sign it off usually adds to ensure the practicality of whatever you are designing as well.

15 Q. So do I take it from that that in relation to the hydro-panels permits to mine, generally would be run by Mr Mason?

20 A. Yes I think, well, all the permits were usually discussed in, well, once again, when I was part of the morning production meeting, these permits were discussed in the meeting. Towards the time Mr Mason and Mr Ellis, and at that stage Mr Borichevsky was attending that meeting, I don't know if it still was but I assumed it still was. So, generally speaking Mr Mason would've seen the permits.

Q. Did you have an understanding of Mr Mason's status in terms of certificates of competency?

25 A. Not at all.

Q. Not at all. Sorry, go on.

A. I, no I didn't, but I didn't pursue it at all.

30 Q. Have you been, or what is your reaction hearing through the sittings of this Commission that in fact Mr Mason didn't have certificates of competency?

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A. I don't have a specific view on that.

Q. Would it have been your expectation that the person in charge of coordinating hydro-mining would have certificates of competency?

5 A. Depends on his specific role. If he was the statutory person or the person with statutory oversight of the area, yes then I would. But if it was a coordination role of ensuring that everything was working, then I don't think it's necessary. His experience should speak for itself, the fact that he's had many years of underground experience. But that's just my view.

10 Q. The role that factually he was performing, did that indicate that he was in charge of that hydro-panel?

A. It could yes,

Q. In which case you'd have had an expectation that he had the necessary certificates of competence wouldn't it?

15 A. Well if you put it that way, yes, but it depends who is put in the team. If there's somebody with statutory oversight over the area, then it's not necessarily in my opinion that he is needed as well, but like I said that's my opinion.

Q. And do you know if there was such a person have statutory oversight over that?

20 A. Well there was an undermanager which was in charge of the underground or I think they changed the undermanager name to call them shift managers or shift coordinators or something like that, and they had oversight over the underground workings as well as the deputies and there was, to my understanding, a deputy on the hydro-panel.

25 Q. That's an undermanager in charge of the entire workings?

A. Of the shift, yes.

Q. The third topic, methane drainage. I wonder, Ms Basher, could I have up please DAO.025.32975 please.

30 **WITNESS REFERRED TO DOCUMENT DAO.025.32875**

Q. Now, this is an email that you've commented on in paragraph 259 of your evidence and you may like to go to that section of the evidence so that it's in front of you when we come to it please. It's at PVR001/44. I

don't need it up Ms Basher, thank you. Now this is an email of the 11th of April 2010, some six months and three weeks before you left the mine. Some seven months and one week before the mine exploded, right?

5 A. Yes.

Q. And it's from Mr Wishart an experienced interviewer?

A. That's correct.

Q. He'd been there the whole time that you were there?

A. He left before I left, from memory, but and I can't recall exactly when he started no but he was there for a period.

10

Q. And I wonder if Ms Basher, could you go to the last four paragraphs of that email for a start please. Strongly expressed views in this isn't there, Mr van Rooyen. "It is my opinion that the VLW drill programme should be suspended until the line is renewed with larger pipes installed out of the intake. I'm well aware of the pressure we're under as a company but this should not be the pressure that possibly one day causes us a serious incident. Last night the surges in the system was so violent that I was concerned it could blow off the rubber pipe which connects to the trap and the 3B intake position which would be very dangerous if this happened with nobody in the vicinity to close the valve at McDowell crib which is not easily accessible. We'd have full flow of methane directly into the intake and in turn across the McDowell headings and I'm sure that flow of the methane would be in the 5 to 15 range with plenty of oxy not a nice scenario. Just to bring your attention. The suspected findings of the American pit recently exploded were centred around an inadequate methane drain system. History has shown us in the mining industry if methane when given the right environment will show us no mercy. It's my opinion at which time we took our methane drainage here at PRCL more seriously and redesign the entire system." Strong words?

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A. Yes.

Q. And those words followed him listing some, his list has got 10 points to it, go back to the full document thank you Ms Basher, but, highlight the text itself thank you. Some 10 numbers he's got there, but it's one to nine that he gives a list of problems that he sees. Yes?

5 A. Yes.

Q. Looking at your brief of evidence from paragraph 260 on, there seems to have resulted in a flurry of, something of a flurry of activity in terms of methane drainage?

10 A. We were, at that point, like I said it yesterday, we were busy talking to Mr Brown to get him onsite prior to receiving this email, but we just expedited it immediately and on that, the day that we received it on the 12th of April, there was a number of actions taken, yes.

Q. Which were to suspend for a while the Valley Longwall drilling?

15 A. For a short period, I can't recall if it was a day or two or, but they – we used Valley Longwall to assist with the installation of water traps and clearing the line and making some improvements to the line to improve that high pressure.

Q. And did you – what were the other immediate steps you took then?

20 A. Well we, the immediate steps from memory was we got Mr Brown onsite to start off with, get somebody onsite with adequate experience in that specific area and we suspended Valley Longwall Valley Longwall personnel were used to install more water traps and we cleared the line of any water in the lock to encourage flow.

25 Q. Did this and the, this email from Mr Wishart, and the extent of the problems he spelt out in one to nine, would that come as something of a surprise to you?

30 A. We – initially the four inch line did not give us any hassles. We were connected to a number of drillholes and I explained it yesterday, point to the map that everything drilled in and around pit bottom, pit bottom south were connected up and did not give any issues. So, when we drilled some holes into the western side of the graben that started giving us some gas drainage issues which we tried to resolve by installing water traps. But, it wasn't like the first indication and that's why I say we

were busy trying to get people onboard with the necessary expertise to assist us. There was also other people contacted before Mr Brown which was not available to come and assist us.

5 Q. The extent of the problem though, they are as characterised by Mr Wishart was that no realised up until the time you received that email?

A. Some of them were noted, I mean the point number 3 were noted before then, most probably. I can't recall, once again, it's a fair time ago, I can't recall the exact sequence of events, but the fact that the fresh air base and the FAB and the methane riser was, to my recollection, known at that point in time.

10 Q. Right. But the extent of the blockages of the system leading to what Mr Wishart described in the second of those paragraphs that I read out to you, were you not aware of the extent of the blockages that were occurring in this methane drainage system?

15 A. There was, at some point there was no water traps installed and that caused some issues and then there was more water traps installed. So, these issues started progressively becoming worse.

1100

20 Q. So the result of this email as I read your evidence in that six months or so, six months three weeks, before you left, the seven months or so before the explosion, you get Mr Brown in and he makes is reports?

A. That's correct.

Q. You put in extra water traps?

25 A. Yes.

Q. You implement some free venting?

A. Yes.

Q. You separate the drilling activities from the methane drainage?

A. That's correct.

30 Q. And you cleaned the flame arresters?

A. That's correct.

Q. That's it?

A. Well, no, that's not the only bits we did. We also at the same time did an investigation on ensuring that we install the correct and proper drainage line, so we got Mr Mamm on board to do the specifications on those.

Q. Yes.

5 A. We instituted a regime of inspections and there was multiple regimes eventually because the system, so the system failed us. Initially the request was that the underground personnel took responsibility to ensure that the water traps were emptied regularly. That, on occasion, didn't happen and we ended up blocking up the system again and
10 draining off the water traps. It went as far as where we got Valley Longwall, our contractors, to walk the line daily and inspect the lines and ensure that they are drained and clear. On top of that we instituted a monitoring programme of the gas flows where Mr Cory, the geologist, and Mr Campbell from Valley Longwall walked the line once a week,
15 took measurements and ensured that the line was operational. It was busy developing into getting Mr Jamieson on board with his ventilation surveys and doing all that on the same time.

Q. Right, but the big things that were required, re-design of the system, do you agree that was required?

20 A. That and we were busy doing it.

Q. Had you put in a bigger diameter pipe?

A. By that time, no.

Q. Had you put in a new riser?

A. It was not possible.

25 Q. But they were the two fundamental things required, weren't they?

A. But to put the –

Q. Answer my question first, and then you can explain. They were the two fundamental things required, weren't they?

A. To the fundamental issue required was to reduce the pressure in the
30 gas drainage line –

Q. Yes, and to achieve that –

A. – and those were two measure that was suggested by Mr Brown that could do that.

Q. And you agreed that that had to be done?

A. Yes, I do.

5 Q. In the meantime you go along using a methane drainage system which you're having, had had and continued to have problems with, as you've just told us and at that same time there is commissioned a new fan with its problems, that's correct?

A. Correct.

10 Q. And there is brought into production the hydro-mining panel with the potential and actual release from it of large further amounts of methane, correct?

A. Correct.

15 Q. How was an over-stressed methane drainage system going to cope with the new methane emerging from the hydro-panel which went into, indeed, 24 hour development? How was it going to cope, in actuality, Mr van Rooyen?

A. From – and I don't have the figures in front of me, but the, when the main ventilation fan was started and the report that I had as last survey done by Mr Rowland, indicated somewhere in the region of 120 m³ flow in the, cubic metres per second flow – ventilation. The –

20 Q. I'm talking about the methane drainage, not the ventilation, the methane drainage.

THE COMMISSION:

Well you did include the fan, Mr Hampton, the three in combination.

CROSS-EXAMINATION CONTINUES: MR HAMPTON

25 Q. Yes, sir.

A. And the whole system was to manage the methane make of the mine so I've got to consider all the facts and the gas make from the free venting at that point in time, from memory, dropped – we, our initial free venting campaign had a limit of 1% methane in the return.

30 1105

A. From memory this dropped to in the vicinity of .3 to .4% methane when we started the main fan. So the free venting as Mr Brown says in his file

report, "Remove the pressure from the gas drainage system," and we were successful. That enabled us to design a decent gas drainage system which required a monitor riser to be fully efficient. We've identified a position to place that which was relatively close to where the mine workings were at that stage and I think I said it yesterday, it seemed like a fair proposition to develop to that area and all the design methane system that was required.

5

Q. Can I go then to Mr Wishart's list number 1. As at the time you left, looking at number 1, "The running of the gas drainage system and intake airways is of concern to me as any trouble we have with water traps which is very regularly, causes methane to veer into our intake roadways." Had that been corrected by the time you left?

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A. The, I can't recall what the mine looked like exactly when Mr Wishart wrote this email, but at the time when I left the length of methane drainage line running in the intake was as a minimum as a curve vent at that point in time. But, was it totally removed, no sir.

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Q. Why not?

A. To remove it from the intake you need a riser to put it up and to find a riser you need access to surface to actually drill a hole that is feasible for longer term as well.

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Q. Number 2, "The position of the system in three cross-cut, also leaves it vulnerable to damage from juggernauts et cetera." Had that been remedied?

A. I can't recall the exact position of three cross-cut he's referring to at that stage. I know the naming convention of the mine changed between then and the current system that's being described. If we can put up a map I can try and work out where that was.

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Q. I wonder if you can Ms Basher, thank you. Is that helpful? It's plan, for the record, DOL3000130008.

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WITNESS REFERRED TO DOCUMENT DOL3000130008

A. From memory I think Mr Wishart is referring to a location in that vicinity which is pit bottom north which would be one cut-through between A, B and C headings.

Q. And if that's the area, had that been remedied as at the time you left?

A. The gas drainage line was still running up there. I know there was work done on the positioning of it and ensuring its up high against the roof and the rib. So it was not removed out of there, but there was some work done in placing it more appropriately.

5

Q. Can we go back to the list then please Mr Basher thank you. Number 3 you've already commented on. Fresh air base with a methane riser in the middle of it, that was still there?

A. Yes.

10 Q. Four, we won't worry about. Five, "On numerous occasions I found methane free venting the old drill stub, while we were drilling there was so much pressure in the line that the stub doesn't actually discharge any methane into the system." I rather gather from your paragraph 297 that that was still a problem?

15 A. Sorry, can I refer to 297?

1110

Q. Yes please do. I'll just make sure I'm on the same lines as you. Last sentence on that paragraph.

A. No I'm not entirely sure that that's referring to the same drill stub because there was numerous drill stubs and as they developed over time the ventilation of these drill stubs in the return seems like it, sometimes were issues where they weren't, because you had a drill stub in the return roadway, you had the potential for methane build-up in that stub. But in my opinion it's the underviewer in charge, like

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Q. Number 6, "Water traps are continuously filling with water at a rate faster than they can be drained," did that remain a problem still even with the extra traps in?

30 A. There was more traps but also more regimented inspection of those and it did definitely improved like Mr Brown commented in his last reports, I think September report.

Q. But it still remained a problem?

A. I wouldn't say it was still a problem sir.

Q. Just go to then please your paragraph 299, just so I understand what you say in that paragraph. Just read there at page 13 of the same report, "Mr Brown noted that prior to 20 August 2010, there were no individual hole measurements." You pointed out the reasons for this as, and it's the second bullet point on PVR001/51, "The pressurised four inch pipeline to the riser was not allowing holes to be easily," sorry, the third bullet point, "Water capture had been underestimated in gas holes resulting in flooding of the four inch pipeline regularly." Had that been solved?

A. Between his first, second and third report there was a progressive improvement and I admit to, by the time of his second report in August, that there was still issues and more regimented and controls were implemented that's why I said, well, I was talking over the whole period when you asked me the initial question. By the time I left the mine there was more than one system in place to ensure that gas drainage lines or water traps were checked. On occasions when I went underground I checked them myself as well and I know that Mr White, on occasions that I went underground with him, he would check them as well because we were all aware of it and everybody knew that it had to be checked regularly.

Q. Number 7 on that list, "The first trap on the line that's inundated with water while drilling that trap tube is by bull hose draining straight into the flumes which also surges gas into the return." Had that been solved?

A. That was on that specific drill setup location and with the drill rig moving from there I'm sure it's solved.

Q. Eight, "Definite problem when we're pushing water up the riser," that had been solved?

A. By ensuring that we keep the water traps clear of water as well as keeping the flame arrestor serviced that was addressed.

Q. And then 9, "All due to the line being too small for the sheer volume of the methane that we're trying to push up." That was the bigger diameter pipe that we've spoken of?

A. That's, well, like I said, bigger diameter pipe was one of the suggestions, the other was free-venting.

Q. Paragraph 293 of your brief, so it's PVR001/49 1 to 50, you say in that, you found it?

5 A. Paragraph 293?

Q. 293.

A. Yes I've found it.

Q. "I appreciate the need for the larger diameter pipeline and that Miles Brown had recommended in May that it be done, 'now'. We could've installed the pipeline in three or four weeks. This could've been done by erecting the new line before deconstructing the four inch line. The improvement in the drainage line was improved in the budget for that financial year, FY10/11, so there was not a financial restriction. I would have had to submit a written proposal to Peter Whittall seeking approval to release the budgeted funds." Did you submit such a proposal?

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A. No I did not.

Q. Why not?

20 A. We were still working on a design to ensure that we look at the problem as the overarching design and try, well by the time I left we decided on that location which was position 5 as indicated earlier, and we did not install a 10 inch or a 12 inch line for that matter before we did the bigger riser.

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THE COMMISSION ADDRESSES MR HAMPTON - TIMING

COMMISSION ADJOURNS: 11.16 AM

COMMISSION RESUMES: 11.32 AM**CROSS-EXAMINATION CONTINUES: MR HAMPTON**

5 Q. We're with paragraph 293 of your brief, Mr van Rooyen. Mr Brown had said "now" in terms of the need for the larger diameter pipeline. Had you emphasised that immediacy that he was talking of to others above you in management?

A. Yes that was discussed that it could be done immediately.

10 Q. You've mentioned also in your brief that even if you'd put the bigger diameter pipeline in and hadn't then changed the diameter of the riser, it would have still had a beneficial effect?

A. Yes it works on the principle that you reduce friction in the pipe so therefore you would have higher flows in the gas drainage line.

15 Q. Given the problems you were having and the availability of finance and so on to do it within three or four weeks, didn't this really require need this to happen then, that the bigger drainage pipe go in even though the riser stayed small?

20 A. Initially we had to understand exactly what entails the bigger pipe. It's not just from stringing together a number of 10 inch pipes. So we did the Chris Mamm feasibility and during that time Mr Miles Brown suggested free venting as an option. Recommendation by him to take some of the pressure off. We implemented that and in his final report he is showing that that is working as well as another method of taking the pressure from this gas drainage line.

1135

25 Q. So did – just so I get it right though, did you ever push for the larger diameter pipe going in at an early stage?

30 A. There was discussions on putting it in and the practicalities and ensuring it can be a decent installation was discussed as well. One example, if to put another 12 inch line through what is termed Spaghetti Junction, could potentially have other consequences, so there were some practical issues to consider as well than just the statement of installing it now.

Q. So it was seen that the larger diameter pipe would go hand-in-hand with the development of the larger diameter riser?

A. Yes, that's the position we were at, at that stage.

5 Q. All right, well now let's go then to the riser please. Paragraph 295 of your brief please and it's PVR001/50.

WITNESS REFERRED TO DOCUMENT PVR001/50

10 Q. And where you say, "As it turned out ongoing development delays in the mine delayed progress towards the new riser location. At the time I left the mine I envisaged that the new riser and 12 inch gas drainage line would've been installed and functioning towards the end of 2010, or certainly very early the next year." Towards the end of 2010, was it going to happen?

15 A. We were busy developing in that direction so it is. Dependable on development rates in that direction, as well as geological anomalies that was unknown but at that stage we have drilled in that direction, so, yes, there was a good probability of it happening towards that time. It's very difficult giving an exact time, obviously.

Q. Was there a timeline developed for that as there was, as we saw that Mr Raymond went through with you earlier on, for the second egress?

20 A. I can't recall writing down a specific timeline. I might have, but I can't recall recording it in an official document.

Q. Just then interested, "As it turned out ongoing development delays in the mine delayed progress towards the new riser location." What are we talking about there, please?

25 A. Development delays in terms of equipment breakdown. That delays, the obvious, the development as such, so time was, well, development to a point is dependent on time as well as development rates and the availability of equipment to actually develop in that direction.

30 Q. So am I right then that the delay in driving towards the new riser position was caused by breakdown of equipment in the heading that was going that way?

A. I can't be specific on that sir, but that could be a reason. If there was breakdown – I'm not sure I understand your question correctly, but if

there was breakdown of that piece of equipment developing in that direction that would obviously delay the time in terms of getting to that specific location.

5 Q. Should not equipment if needs be have come away from production into developing this roadway to where the new riser was going to be, so that the new methane drainage pipeline and the new riser could be developed and be in action as soon as possible.

10 A. Well, potentially, but there was – there's the need to develop the panels as well as the development in the, toward – sorry, the main development area, so one-west and there were equipment schedule to manage or to develop both of those.

15 Q. But if some priority had been given to developing towards the west as you say, which would've taken you to where the new riser was going to be, some priority had been given to that at the cost of production if needs be, this new drainage line and the new riser could've been in and working long before you left and indeed long before the hydro-panel came into operation, couldn't it?

A. No, I can't make that statement. I can't agree with that.

Q. What part don't you agree with?

20 1140

A. That before I left its dependent, like I said time is dependent or the time of installation is dependent on development distance as well as development rates and the availability of equipment. So if from the time or whichever time you decide that to be where you start, if development rates are such that it's slow progress to that area I can't confirm that it would have been in by the time I left.

25 Q. How many metres would have to have been developed to get to where the new riser is going to be?

A. From when?

30 Q. From when it was first proposed by Mr Brown that a new riser was needed?

A. I can't, I don't have the distance in my head. I can point to you on a map on that.

- Q. The map that we had up before, would that be helpful?
- A. Yeah that potentially will be if there's - I can try and use that one yes.
- Q. So the general map or would you rather have Mr Borichevsky's?
- A. Mr Borichevsky's map gives some indication of time because that is a
5 progress period, but that was at the time, that's at a different time with
different development rates as well so that plays the role.
- Q. So we'll go back to the general one.
- A. I can use this one as well.
- Q. All right.
- 10 A. If it's possible just to zoom in, in that area, it makes it easier for me.
- Q. Thank you Ms Basher, if you could. In the central part there, thank you.
The new riser was going to go where please?
- A. The new riser was to be there, which is one west mains, moving
towards, well past panel 2, approximately I think 100, 120 metres from
15 the position of development at the date of the explosion.
- Q. So 100 to 120 metres?
- A. Yes, based on a rough estimation from what I can see here.
- Q. And that's driving through coal I take it?
- A. There's coal in, from memory there was one geological structure
20 running from there, which is to the west of panel 1, which might have
required some stone development.
- Q. One hundred to 120 metres mainly through coal. Normal things being
going well or going normally, how long would you expect would be
needed to develop a roadway that length?
- 25 A. So 120 metres linear, that would equate to almost let's say 300 metres
total development. If everything is in coal, depends on the equipment.
There was mention of the ABM achieving shifts of around 20 metres, but
there was also a lot of shifts where other equipment achieved one or
two metres or zero metres. So it's a difficult question to answer and
30 give you a date. What this is indicating from this time, these colours
represent periods which is quarters, and based on this the first quarter is
orange or, sorry, yellow, so that's the extraction of that and development

of these areas. And this would be the second quarter from that date. So if Ms Basher shows us the legend that could possibly indicate a time.

Q. Bottom right-hand corner?

5 A. The colour there was quarter 3, financial year 10/11. So that was January to end of March 2011. So what I'm saying is between the end of December or the end of 2010 to early, from this progress period that's what I base my statement on as well.

10 Q. And that's on the basis, of course isn't it, of production carrying on and without any added impetus being given to development of this, what I suggest is an essential safety feature that was needed in this mine, the implementation of a bigger methane drainage pipe and a bigger riser?

1145

15 A. This indicates that there is development happening in there at the time so this, like seam 02, and I can't be specific because I wasn't there for the last three weeks, but from what I've seen on maps is that one of the seams was in that area and developing in that direction. It wasn't operational on that specific day, from what I've heard, but, that's all I know. The schedule would typically have machines developing in this direction and in that direction at the same time because there's three
20 mining equipment, pieces of mining equipment and it's also dependent on the rates. So these development rates, and I can't recall exactly which rates were used in this schedule because there was a 10, or we started becoming more conservative towards the time that I left in terms of the rates used. For instance, the AMBs rates of 20 metres was much
25 higher than the rates used in this so if that continued that would've pulled it forward and increased, or made the availability of this location earlier than my, this estimate indicates, or this schedule indicates. So there's factors that could've delayed it in terms of breakdowns, geological features and these factors that could've sped it up which is
30 improved production rates from equipment.

Q. From your point of view was any effort made to prioritise the development of that heading towards the west so that the new drainage line and the new riser could go in?

A. The development to the west was important to the whole mine. Not only for the riser which was very important, not only for the second egress but to ensure medium to long-term continuity of production. In the presentation that was on earlier in evidence today, the one that I did to the board on 24th, 25th August, indicated that the extraction for the medium term was to the west at the escarpment. So for the mine to actually get there was important for production reasons as well. So there was a fair drive to develop in that direction, yes.

Q. Did you put any extra emphasis on the need for safety, the need to make that heading, the drive into that heading, a priority?

A. That was one of the priorities to drive in that direction, and like I said for the purpose of the gas drainage line for the second egress and other reasons.

Q. Do you know when it was that Mr Wishart left the mine?

A. No I don't know specifically. It must've been, it was before I left. No I can't be specific.

THE COMMISSION ADDRESSES MR RAPLEY – CROSS-EXAMINATION

CROSS-EXAMINATION: MR RAPLEY

Q. Mr van Rooyen, I've only got a few questions. Paragraph 24, 207 and 208 of your brief you talk about approaching Mr Whittall and requesting sending Gregor Hamm on a ventilation officer's course?

A. That is correct.

Q. Mr Rockhouse had talked to you about that hadn't he?

A. Yes Mr Rockhouse indicated that he had funds available for training and that was part of the discussion.

Q. And told you that there was \$20,000 in his training budget allocated for a ventilation officer and that could be used to facilitate what you wanted to achieve?

1150

A. I can't recall if he told me specifically it was for a ventilation officer, but he made it clear that there was funds available in the training budget and that that could be used for that purpose, yes.

Q. And after that discussion which you thought was a good idea, that's when you went and approached Mr Whittall and suggested that you send Mr Hamm off for this course?

5 A. We – well, I realised the need for a ventilation officer and, oh well, Mr Rockhouse and I had very frequent conversation because we drove to and from the mine together and I can't recall where and when this happened, but in talking about a ventilation engineer, he indicated that he had some funds available and yes, that was part of my proposal to Mr Whittall that there's funds available and that we could send
10 somebody off.

Q. Because it's your position that it was important to have a ventilation officer?

A. Well that's – yes.

Q. And critical to a mine to have someone dedicated to that task?

15 A. Well, I'm used to that.

Q. Yes, and that's why suggested it to Mr Whittall?

A. Yes, and the fact that I acknowledged the fact that I don't have expertise in that field.

Q. Thank you. On a different topic, the Miles Brown report, the drive
20 mining reports, we've talked a lot about, which you obtained, did you give those to Mr Whittall?

A. From memory I, there was discussions with Mr Whittall, I'm certain he does have copies of those. I also know that on occasion while Miles Brown, Mr Brown was on site, him and Mr Whittall would go out
25 for dinner, because they apparently went to school together.

Q. So given that association and that you'd provided a copy to him, you're assuming he's familiar with the reports that we've been discussing during your evidence?

A. Well, I make that assumption, yes.

30 Q. Just lastly, on Mr Rockhouse, I won't go into the meeting and things because I don't need to now, but you spent a lot of time in his company, indeed travelling to work and back for many months, didn't you?

A. Yes.

Q. And no doubt spoke and shared confidences and concerns during the time together?

A. Yes.

5 Q. And it was very clear to you that Mr Rockhouse was under considerable pressure?

A. Yes, Mr Rockhouse, Neville, did take, was under pressure, he admitted to that.

Q. And told you so?

A. Yes.

10 Q. And talked to you indeed about the pressure getting so much that he wanted to resign?

A. I'm aware of Neville talking about and from my recollection actually resigning twice in the time that I was there.

15 Q. And you offered your support and indeed talked him out of resigning and told him to stick at it, basically?

A. Yes, I told Neville, or that was my advice to him was to leave on his own terms and not just throw it in, to actually find himself, if he wants to leave, find another job and leave on his own terms.

CROSS-EXAMINATION: MR MANDER

20 Q. Mr van Rooyen I just want to ask you some questions relating to the issue which my learned friend Ms Beaton asked you about yesterday, relating to the collection of data, geotechnic data before extraction commenced at panel 1.

A. Yes.

25 Q. I wonder Ms Basher if we could have up please, DAO.019.00782/8, please?

WITNESS REFERRED TO DOCUMENT DAO.019.00782/8

1155

30 Q. Now this is a page from the operation's report to the board of 13 September 2010, and specifically 6.2, under the heading of, "Highland drilling," we have referenced to the Highlander Drill breaking down about which you gave evidence yesterday?

A. Yes.

Q. Just reading through it, it reads, "Due to a lack of air pressure a the face, the Highlander Drill Rig could not do any of the planned core drilling in panel 1 to evaluate geological structures, geotechnical properties in the roof and coal qualities. The roof conditions have been evaluated by bore scoping," and you referred to that yesterday, "But core drilling would be valuable to confirm the results and give comfort in terms of a recommended and installed roof support in the panel. The fact that this information has not been gathered does increase the risk in this panel." Now, you would agree with that report to the board?

A. Yes.

Q. And the risk that's referred to there, do I take it that that's a risk that includes the risk of a large plate-like collapse of strata?

A. No, no, with the information at hand at that time we were confident that a windblast event or a plate-like failure was not a probability or at a much lower probability, with all the information at hand, the reports by Strata and I can't recall the exact date of this report, but the information, local knowledge of the geology as well and what we've seen has happened, the knowledge of the rock, most properties of the rock between the coal roof and the island sandstone, so no, I won't say that.

Q. Well the risk that's referred to there relates to the risk of controlled fall of roof in the goaf?

A. It's not only that it's also the risk in terms of ensuring the adequacy of roof support in the panel, so I think, got to understand that in context it does not, and I don't think my intention in this report was to say the risk is unacceptable or at a level where we shouldn't continue. It indicates that there is an increased risk.

Q. The risk that you refer to there includes, as you've said it, not only, but it includes the risk of uncontrolled fall of roof, the collapse of roof support?

A. In the development panels, yes, or in the roadways, yes.

Q. And you've referred earlier this morning to the plan relating to methane control involved deliberately accumulating methane in the goaf area?

A. That's correct.

Q. Now, that report to the board is dated the 13th of September and its consistent isn't it with an email that you sent to your superiors of 10 September. I wonder if we could have up please, DOL3000150016?

WITNESS REFERRED TO DOCUMENT DOL3000150016

5 Q. Sorry, that doesn't seem to be the right reference. Just 06, sorry. DOL3000150006 try that one. If you haven't got it I can just read it out, it's not very long.

1200

WITNESS REFERRED TO DOCUMENT DOL3000150006

10 Q. This is an email from you of the 10th of September addressed to Doug White, Rob Ridl and others. Subject: Highlander Drilling. And it reads, "Gents, After two weeks of attempting to get the Highlander Drill operational we have not made any progress. There is still not enough air pressure for the drill rig to operate with the current air over hydraulic
15 setup. Reasons for this has been multiple but at the end of the day technical services requires information from this drilling to ensure the assumptions and strata control designs, windblast and caving characteristics is correct (or at least acceptable)," and you then go on to refer that the information would also be useful in terms of assessing coal
20 quality?

A. Correct.

Q. So you would confirm that from your point of view and that of your dept, the information from that drilling was necessary to ensure that the assumptions made by the experts in their geotechnical reports was
25 correct or as you have described it, at least acceptable. Is that correct?

A. Yes it was down to always trying to understand fully what information or the assumptions and confirming that they are correct.

Q. And you then at the end of the email have put in capitals, "CAN THIS ISSUE PLEASE BE ADDRESSED ASAP." That was your position
30 wasn't it?

A. It was, yes.

Q. And it wasn't done was it?

A. Not to my recollection, no. Not by the time I left.

Q. And in the, I can take you through it, but in the geotechnical reports, the one from Dr Lawrence, the one from Strata Engineering, and even going back as far as July of 2010 from Hawcroft Consulting in terms of their risk survey. They all presented on the basis that that type of core drilling would be undertaken, didn't they?

5

A. I can't confirm that. It was mentioned to Hawcroft. I know of discussing that with Strata Engineering. I'm not certain that that was a discussion with Dr Lawrence from GeoWorks, from memory I can't recall discussing that or having that discussion with him.

10 Q. Well perhaps if we can put up DAO.005.04284/51 please.

WITNESS REFERRED TO DOCUMENT DAO.005.04284/51

Q. Now this is a page from the risk survey underground CPP and surface operations, final report of Hawcroft Consulting International of July 2010, and what I have referred you to there is section 8.6 strata control monitor panel. And beneath the diagram the report reads, "Upon completion of development of the first extraction panel exploration coring of the coal seam, immediate roof, main roof and floor will be undertaken. This will support a full geotechnical assessment of the panel to develop panel ground support requirements and evaluation of windblast potential. Secondary support will then be designed and installed prior to extraction of the panel commencing." Now that coring of the coal seam, the immediate roof, main roof and floor was never undertaken was it?

15

20

A. No it wasn't.

25 1205

Q. Although that appears to have been what was represented to these particular consultants?

A. That was represented to Hawcroft and it was the plan at that stage.

30

Q. And perhaps if I just go to the other end of the timescale to October 2010, 25 October 2010, and the report of Dr Lawrence – if we could have up please Ms Basher, the correct reference, DAO.001.10780? Thank you.

WITNESS REFERRED TO DOCUMENT DAO.001.10780

Q. And could we go please to the last page of that document? And having carried out the modelling, Dr Lawrence concludes his report with this statement. "The veracity of future geotechnical design is dependent on having appropriate geotechnical and geomechanical data. Due to lack of data, critical parameters have been assumed, which does result in some uncertainty. Required geotechnical and geomechanical data would include" – and then he goes on to list, including core boring.

A. Yeah, but it's not referring to the same core logging and core drilling, it's referring to something else.

Q. What's it referring to here?

A. What he's referring to in point number 1 is a detailed logging of a core hole through the (inaudible 12:07:18) at distance away from faulting would be beneficial, so that is not necessary something that, it's drilling in a new drillhole at a surface drillhole at a different location, or at a location which was planned but not something that you would expedite in a week or three, it's a longer term process and then the continued logging of all surface holes in point number 3, he's referring to all drillholes drilled from surface to be recorded or logged in terms of from a geotechnical perspective and that there's also some geophysical logging required on those holes.

Q. The fact remains though, isn't it, that the report carried out by Dr Lawrence is premised on the basis that there would be further core logging of the roof and the floor after the development of the roads?

A. I'm not – that's not the way I understand it, no. I did not read this information in a way that presents itself to say that needs to happen before this report can be accepted.

Q. Can I take you to another report then, INV.03.17538/1, Ms Basher?

WITNESS REFERRED TO DOCUMENT INV.03.17538/1

Q. This is the Strata Engineering report of 29 August 2010. And can I take you again to this time to towards the end of the report, it's /5, please? Now I want to draw your attention to the last paragraph above references, but for completeness, I should include the second paragraph which reads, "In the case of wider 50 metre panels, given the

prevalence of geological structure across the area and experience from elsewhere, progressive structurally controlled goaf formation is considered likely.

1210

5 Q. Therefore, actual experiences from earlier narrow panels should be used to assess likely caving behaviour at the ultimate planned width of 50 metres.” So just pausing there, the expert opinion was that control goaf formation was considered likely?

A. That is correct.

10 Q. And that's as high as it was put in this report?

A. I'll have to read the rest of it to confirm that, but in that sentence yes.

Q. The report continues, “Although there is no known precedent for windblasts and sandstone roof types, a residual risk would relate to the potential for persistent mid to low angled structure which would destroy the continuity of the sandstone beam and could have the potential to lead to the large plate-like goaf falls typical of conglomerate roofs and associated with windblast. This places an emphasis on the ongoing collection of structural data, ie via mapping and core logging to assess the structural environment on, initially at least, a panel by panel basis.”
15 So again that's a reference to the need to collect further information to get greater knowledge of the strata and the structure. You'd agree with that?
20

A. Yes.

CROSS-EXAMINATION: MR HAIGH – NIL

25 **CROSS-EXAMINATION: MS SHORTALL**

Q. Mr van Rooyen, you were asked yesterday about pressure to produce coal. Do you recall that?

A. Yes.

Q. And my question is simply to you, you referred to Mr Whittall and Mr Ward and that may actually be in your written brief regarding that. I just want to ask you, Mr Whittall never said to you that Pike needed to produce coal at the expense of safety did he?
30

A. No never. He never, never ever said that.

QUESTIONS FROM COMMISSIONER HENRY:

Q. You started on the 2nd of February '09 at Pike River and you finished on the 3rd of November. When did you give Pike River your notice to
5 leave?

A. 3rd of October.

Q. 3rd of October.

A. I worked my one month's notice.

Q. And when did you first start taking steps to find another job?

10 A. I can't recall exactly. I was contemplating it for a significant amount of time. It might have been late 2009 I started contemplating it. I relocated my family from South Africa to the west coast and we enjoyed staying here. Didn't want to relocate them again so that was a deterrent not to do that, so somewhere mid 2010 I was contacted by somebody from
15 Oceana who said that there was a position available and proceeded from there.

Q. And you've told us, I think, that the reasons were family reasons, excessive hours and so on?

A. That was it. I've got two young boys and want to spend time with them.

20 Q. You mentioned I think yesterday about planning, the overall planning for the mine and at paragraph 242 of your brief you say that you're talking about the placement of the fresh air base and the problems there and you say that mine design was being "effected on the run"?

A. Correct.

25 Q. And you go on to say, "with little in the way of co-ordinated overall planning," and you, as I remember you yesterday you were talking about the problems of when you do that of unintended consequences or difficulties of ascertaining what the effects of particular measures you take because you don't have a strategic overall view. Now, when you
30 left in November had you got a signed off three to five year plan?

1215

- 5 A. We had an accepted three to five year production profile, that included a number of aspects. For the profile you need a design, there was more confidence in the geology by that time. The design is in, what is represented by Mr Borichevsky's report and that also indicates the development sequence of that plan at that stage. There was a broad planning that I did within the geological software of the three-dimensional software that included the flanking drill holes next to all the main development as well as between the different panels, so the gas drainage line design and specifications were completed, so the components were there. Was it written up in a final document and presented as a, this is your life of mine document? No it was not.
- 10 Q. How long would it have been from the stage you left at to producing a final sign-off, something that could be signed-off if the board approved?
- 15 A. That's a difficult question. It depends on resourcing. If you would put somebody on the job I would imagine that could be done in two weeks, three weeks, maybe a month. Difficult to say. Couple of days maybe?
- 20 Q. What I'm trying to ascertain really is whether some of this ad hoc decision making, that's my expression not yours, given the lack of an overall plan, was continuing at the time you've left?
- 25 A. Some of the information is captured in my handover notes as well and the plan was discussed in detail with Mr White and Mr Whittall at the time as well as with Mr Borichevsky who acted in my position and my team. So I'm conscious of the fact that it was not completed to a final product but I think the concept of where we were moving to, the specific detail design was not carried across, but the concept of we are developing out to the west, establishing the gas drainage line then developing towards the second egress and then towards the west. I've got to say the initial plan was to develop north and south from pit bottom when I arrived and I've changed that to mine towards the west because
- 30 of various reasons and that concept has been accepted and as continuing.
- Q. I wanted to ask you whether if the mine design being effected on the run, the issue you talked about in regard to the FAB. Would I be right in

thinking that if it had not been effected on the run, for example, the main fan would've been installed before hydro-mining started?

5 A. That's another difficult question. From the onset I worked at Pike the plan was to install the main fan first and then commission a hydro. That changed at a later point. I'm not sure if that can be attributed to mine design if being effected on the run, my words, but rather to project delays and project sequencing.

10 Q. And final question is about petroleum exploration. You were working on petroleum exploration and I read a report that you did, a very good report about boreholes and drainage and it was under the letterhead of the Ministry of Economic Development. What were you actually aiming to do with the, I'll put it round another way. Were you aiming to drain gas for commercial purposes?

1220

15 A. The area being investigated was two-fold. The one was obviously for, was for draining gas and investigating the possibility of generating electricity or co-generation as such, but that obviously had along with that there was looking at the implications of emission trading and the effect of that as well on the business.

20 Q. The gas drainage as I read it, the boreholes, from what I've heard, would initially be the drilling in-seam was geological exploration and then was used for drainage, is that correct?

25 A. That is correct. The, until we started with drillhole, I think, 15 and 16 next to the panel 1, their sole purpose were exploration after Mr Brown's advice of drilling flanking holes to obtain some form of gas drainage. That's when we started drilling the flanking holes and drillhole 18 and 19 towards the west were both placed at locations for exploration purposes but also serving the role as a flanking hole for gas drainage.

30 Q. And, finally, as head of technical services you were responsible as I understand for the design of where those boreholes were going to go?

A. That's correct.

Q. Were you responsible for, can you confirm were you or were you not responsible for monitoring the emission of gas from those?

5 A. We did instate a – well, we were, to answer you shortly, and we did instate a flow measurement regime, not, it was not there initially, but by the time I left there was a regime in place where these flows of drillholes were measured on a weekly basis by Mr Cory, the geologist. He was assisted by the site manager of Valley Longwall, and at the same time they did the inspection of the gas drainage line as well.

QUESTIONS FROM COMMISSIONER BELL:

10 Q. Mr van Rooyen, just a few questions, Mr Borichevsky reported to you, but he seemed to be attending most of the routine meetings than you, is that correct?

A. At that stage, well, the morning production meetings was a daily activity which he attended because he had the other side of the gas drainage on his side. I was working on different things at that stage, so he was attending that. In terms of, I on occasion attended it, but not always, and there was times when I looked after the more, let's say, strategic matters where he was the hands-on person.

15 Q. Was Mr Borichevsky taking most of the decisions with regard to the activities in the hydro-panel? Was that something you were involved in as well, or just mostly Mr Borichevsky?

20 A. I didn't have any experience in hydro and from my understanding Mr Borichevsky did, so he made some suggestions in terms of cutting sequences from memory, and he was underground with the people working on the hydro a lot, regularly I would say.

25 Q. But those decisions would've been run through you though, wouldn't they?

A. Not always, sometimes he would make a decision which I would hear of at a later stage.

30 Q. And when you left Pike, you provided a 26 page report, handover notes, which is highly commendable. Did you get a similar briefing when you took the job on in the first place, when you came into Pike to start with?

A. No, I did not. I, the person that was in the position before me, Mr Renk, left some time before I arrived and I don't know, between him and

Mr Moynihan was acting in that role when I arrived, but no, I did not. But Mr Moynihan was still onsite for a while so I could ask him questions. He was still on site by the time I left, actually.

5 Q. I just wonder, do you think that that may have created problem with corporate memory, a lack of corporate memory at Pike, with people coming and going so often as we've heard, do you think there could've been a problem with information not being passed on?

10 A. Continuity is always a problem. If you don't have continuity, it creates a lot of issues, and corporate memory is definitely an issue. Mr Whittall was one of the few people that remained part of it for a while, which he had a lot of knowledge on certain aspects. The fact that there was a number of mine managers made it difficult as well.

1225

QUESTIONS FROM THE COMMISSION:

15 Q. Mr van Rooyen, you've spoken this morning about monitoring of the hydro work area and you referred to what I thought you described as three positional gels as well as telltales. I at least, I don't what you were describing there. Can you just tell us at a basic level what had been installed too monitor the area?

20 A. So the gels or tell-tales are an extensometer. It consists of three cables with clips on them so you would drill a hole into the roof and place these clips on different elevations, two, four six metres for instance, and they would have cables connected to them that runs to a piece that is mounted to the roof. Now the gel is an electronic measuring device so
25 as your roof relaxes it will actually pull on these wires and there's a measuring set available that you connect to the gel and it can actually tell you by how many millimetres you've had extension in that roof and at the three different locations so you can see where your separation or relaxation occurs. The telltale is similar except it's a mechanical device,
30 or a rocket is another one. It's also referred to as a rocket. They sometimes only, well usually only have two measuring points and they

mechanically pull on an indicator that moves either from side to side or a clock dial, which you can then read to understand the relaxation.

5 Q. You've spoken about the superiors to whom you went about various issues. You've not mentioned Mr Ward's name. Was he on site during your time there regularly, and did you have contact with him?

10 A. Mr Ward was present at a number of management meetings. There would be, well we had these meetings once a week and Mr Ward would usually be flying in from Wellington and he would usually miss a portion of the meeting and start, and then at the end of the meeting he would carry on working on obviously his work and you won't, we wouldn't have regular access to Mr Ward but he was on site and he was present at the meetings.

Q. So on site, how often in a typical week?

15 A. The plan was typically to have him there, well my understanding of the plan was that he was there once a week on the day of the management meeting, but there was occasions when he wasn't there for two or three weeks.

Q. And did you have much contact with him? Go to him about technical issues?

20 A. No, not at all.

Q. Just a small detail. On the map that we're grateful for you having prepared and we won't get it up, but you show a dotted line coming from the Slimline shaft and joining to a stub south of it. What's that dotted line there for?

25 A. Yeah I contemplated if I had to put that on there. The purpose of that line was primarily to try and indicate that that is a heading that will be given a number like A heading. Initially there was the plan to connect in that direction but that got removed from the plan. The stub down the bottom is actually part of a water sump. So we would never develop in that direction and development of that area could have extended. It's probably confusing I've got to admit, but it was there to indicate that that is A heading and not just A stub, and to try and explain why that has the number A associated with it.

30

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Q. Thank you. Finally, you're aware, I take it, that the expert report in relation to the probable cause of the explosion has as a favoured option that there was an event in the goaf which caused an expulsion of methane in such quantities as to cause the explosion that was observed at the portal. Have you got any reaction or comment upon that scenario?

5

A. The information at hand indicated, well, we've always planned that the goaf would collapse. The information at hand indicated that that collapse would be unravelling or progressive failure and based on that I'm still confident on the decisions made regarding the goaf.

10

Q. It wasn't so much my interest. Have you a reaction, nonetheless, to the preference of the panel of experts for that scenario or it is not something which you're able to comment on?

15

A. I've read the report and understand how they got to that conclusion as a probable cause and for that reason I don't have any information or any knowledge why I would contest that.

RE-EXAMINATION: MR MABEY – NIL

THE COMMISSION:

20 Thank you Mr van Rooyen, we're well aware of the co-operation you extended to the Commission and being briefed by Mr Stokes and we're also grateful for the care with which you've given evidence over the last couple of days. Thank you very much. You may leave the witness box.

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