

WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 02/11/94

..DAY 11

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THE COURT RESUMED AT 9.28 A.M.

PHILLIP WAYNE SHORTEN, CONTINUING:

WARDEN: Thank you, witness, you are on the former oath you took yesterday; you understand that?-- Yes.

You are still bound by that oath?-----

Thank you, Mr Morrison.

CROSS-EXAMINATION:

MR MORRISON: Mr Shorten, you were a continuous miner driver in the 512 Panel?-- Yes.

Also a shuttle car driver or just continuous miner?-- I was also a shuttle car driver at times.

You alternated one to the other depending upon the complexion of the crew?-- Depending upon how many continuous operators we had.

It was a feature of the extraction method in 512 that the way it was to be done was to ensure that the continuous miner driver who was operating the miner by remote wouldn't be exposed to any high ribs or flaky roof or anything like that?-- That's right.

And, likewise, it was a central feature of the extraction method that the shuttle car driver wouldn't be exposed to high ribs?-- That's right.

So, it was never intended that the shuttle car driver, for instance, would have to go down a ramp in order to get coal?-- No.

That would be a dangerous exercise and no-one would recommend that?-- That's right.

Now, I think I understood you correctly to say that the amount of loose coal left in this panel was really not significantly greater than had been left in other panels you had done?-- No.

Can you just tell us before this time - you might like to have reference to the map on the left over there for layout of the whole mine - which panels have you worked on as a continuous miner driver? Hard to remember? 4 South A?-- Yes, I was in there.

4 South -----?-- I can tell you the panels that I wasn't in.

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All right?-- It was 4 North, 2 South and 3 South.

Okay. Otherwise you were just about in every panel?--  
Pretty close.

And across that line of panels that we can work out there were a number of methods of taking pillars; sometimes there was a two side strip, other times there was just one fender lifted?-- Yes.

And other times there was a variation of take a row, leave a row?-- Yes.

401/402, I think, was one of those panels where there was a mixture of methods as the panel progressed?-- Yes, there was.

And all of those panels would have had obviously quite an amount of loose coal left?-- Yeah, yes, they would have.

I mean, it's inevitable, isn't it, when you extract coal that you are going to leave loose coal?-- Yeah, well, you can't get a broom and clean it up.

It's not like you are working on a tiled floor or anything like that?-- Yeah.

And your assessment at least of 512 is that there wasn't any significantly greater amount of loose coal in that panel than there was in others?-- No.

In fact, I think I understood you correctly to indicate yesterday that in fact in terms of loose coal being left at the bottom of a ramp, that was more where the bottoms were soft?-- Yes.

And that was predominantly down at the bottom of the panel, say 12 and 13 cross-cut, and not as you retreated out of the panel?-- That's right.

So, that phenomenon of loose coal down the bottom of the ramp was a diminishing feature as you came back through the panel, say, from 10, 11 cross-cut outbye?-- Yes.

Now, as a continuous miner driver in the panel, you had been involved in consultations about the method of extraction, hadn't you?-- Yes.

And you had played a part in the formal risk assessment process?-- Yes.

There were quite a number of people involved in that?-- Yes.

Along with you there was another continuous miner driver?--  
Yes.

That was Hinton, I think?-- Yes.

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There was also a couple of deputies, or at least one deputy, Bob Newton?-- Yes.

And fitters and surveyors and so forth?-- That's correct.

And as well some outsiders came in?-- Yeah, there was a couple of other people there.

A fellow called O'Beirne from ACIRL. Do you remember that name?-- Very vaguely.

Sorry?-- Very vaguely.

And management were involved as well?-- Yes, they were.

This was quite a formal sort of arrangement, wasn't it? You took quite some days to perform this task?-- Yes, we did.

At the start there were a number of phases. Firstly, people sat down and they just tried generally to identify all of the possible hazards that you might strike in, say, 512?-- Yes.

And then you got this great list of possible hazards and then people turned their mind to saying, "Well, if we have those sort of hazards, how are we going to deal with them"?-- Yes, that's right.

So then people took that list away and probabilities were assigned, you were asked to give a view about whether it was high risk, low risk, medium risk, that sort of thing?-- That's right.

And also in terms of looking at how you were going to cope with those risks, the views were sought of you as a miner driver as well as the others, the deputies and the surveyors and the fitters and management?-- Yes.

And eventually the document was produced that you were asked to look at yesterday, that Minerisk document, and I think all the members of the team who did the assessment received a copy?-- Yes, we did.

One of the members of that team was the Inspector, Mr Walker, wasn't it?-- He was there, yes.

Now, did you hear back from - I don't mean you individually - but the people hear back from Walker about his view about the risk assessment process, whether it was good, bad or indifferent?-- Oh, only Mike and I myself had a talk after it was finished.

What was discussed then?-- Oh, that he was very happy about the way we conducted it.

Just have a look at this document, would you? This is a memorandum on 10 May 1994 that was to be put on the noticeboard and formed part of the record book from Mr Walker to the manager of the No 2 Mine. Have you seen that document before?-- I can't recall.

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Well, in it the people are listed who participated in the risk assessment facilitated by, I think it says Mr T O'Brien of Minerisk; you see that?-- Yes.

Second paragraph?-- Yeah.

It might actually be T O'Beirne, I am not sure about that. Assessors were you, Mr Shorten, and Mr Hinton, both miner drivers, Mr Smith the tradesman. He is the fitter, I think, isn't he?-- Yes.

Bob Newton, the deputy. Then there is Graham Simpson, a surveyor, Joe Barraclough as well, a fellow called Madden from ACIRL, and he is described as the panel design consultant; do you see that?-- Yes.

You were aware, weren't you, that ACIRL was involved in the design of this panel?-- Only when we went to that risk assessment.

You knew at least at that stage that ACIRL had been quite involved in the panel design?-- Yes.

That fellow Madden was one of those persons?-- Yes.

Also involved were Mr Mason and Mr Schaus?-- Yes.

The memo notes that an inspection was made of the 512 Panel in company with Mr Madden from ACIRL and Mr Squires, the shift undermanager; you see that, the next paragraph?-- Yeah, I can see that.

Were you present when Mr Walker made that inspection of the 512 Panel?-- It was on Michael Squires' shift, no.

Your normal undermanager was, I think, Atkinson?-- Yes.

We are talking about 10 May. The panel had started extraction by 10 May, hadn't it?-- Yeah, it just started.

The end of April, I think 29 April, was when extraction started?-- I can't recall.

All right. Well, we might look at the sequence plans to verify that. Bottoms had been taken -----?-- Yes.

----- by 10 May. So, at the time Mr Walker inspected the 512 Panel it would have been at a time when extraction had started and bottoms had been taken in this area where the soft coal was down at the bottom?-- Well, he could have, but I wasn't there when he did the inspection.

I understand that, but I am just getting by the date. By 10 May certainly you would have been back at the No 1 pillar?-- We could have been.

And bottoms were taken right from the start?-- Yes.

And the area that you would have been back one pillar is in around 12 cross-cut, and bottoms were certainly taken there, and that's the area you identified yesterday as having the coal that spewed out from under the miner as you got towards the stone floor?-- That's right.

All right. Now, the last paragraph of that memorandum, have you had a chance to read that?-- No.

Could you do so now? Don't read it out loud, just read it to yourself. What I want to ask you at the end is whether that memorandum reflects in fact what Mr Walker told you in your own conversation?-- Yeah, that pretty well sums it up.

I tender the memo. It can be described as a memorandum from the Senior Inspector of Coal Mines to the Manager, Mr Schaus, dated 10 May 1994.

WARDEN: Exhibit number 82.

ADMITTED AND MARKED "EXHIBIT 83"

MR MORRISON: Now, in relation to the extraction process - if I can go back to what actually happened in 512 - it would be the case, I am sure, that the shifts did what they reasonably could to get coal out?-- In a safe manner, yes.

I am not suggesting they were unsafe, but whatever could be reasonably done to get the coal out, including loose coal, was done?-- Yes, it was.

And loose coal would only be left basically because it was too dangerous to go and get it?-- That's right.

From what you said yesterday, I took it that the crews were pretty well aware of the benefits of the production bonuses?-- Yes, they were.

And that would lead to them taking as much coal as they possibly could in accordance with the plan and in accordance with safety?-- Yes.

Now, there were in fact approved sequence plans for 512 for each sequence as one moved outbye through the panel?-- Yes, there was.

Those plans were signed or approved by Mr Mason, the undermanager-in-charge?-- Yes.

And copies were kept down at the crib room?-- Yes.

Along with plastic sheets that overlaid and showed you the geological strata?-- Yes.

So that you could lift up the plastic sheet and see the

approved sequence plan for which sequence would be done, which day and so forth?-- Yes.

Then while you were looking at that, you could overlay the clear plastic film to see what geological features there were in relation to the sequence you had been working with?-- Yes, that's right.

So, the system meant that you always had some sort of idea about what feature you might strike, whether you were going to strike a slip or a fault or a piece of bad roof?-- Yes.

And the sequence plans were approved from time to time; you didn't have the entire panel approved in advance?-- No.

They would come down, I think, in roughly fortnightly bursts?-- Oh, I wouldn't know.

And deputies and the miner drivers in particular would have regard to those sequence plans in order to make sure they were cutting in the right place and doing the right sequence?-- That's right.

Because it was a feature of this extraction panel - I am not meaning to say that it wasn't in others, but certainly this one - that the management were pretty tough on making people comply to the extraction sequences?-- Yes, they were.

We heard the example yesterday of everyone getting bawled out for having taken more coal where they shouldn't have down in 13 cross-cut?-- That's right.

Was that bottoms or was that punches into the rear?-- A bit of both, I think.

From that point on all crews were pretty well sensitive to the fact that management had a tight plan that they wished people to adhere to?-- Yes.

Now, you mentioned an occasion where, on one occasion, a deputy stopped production and you put up some segregation stoppings between 2 and 3 roadways?-- Yes, we did.

That was for the purpose of pushing a bit more air down No 2?-- Yes.

Your assessment was at the time that that was successful, it worked?-- To my knowledge, yes.

Well, you started production on that shift?-- Yes, we did.

I would like you to have a look at one document, please. You might be able to get a date and occasion for that. I think you said Eddie Bentham was your normal deputy?-- Yes, he was.

I just want you to have a look at that production deputies report 3438 for 29 June, the Wednesday afternoon shift. You will see under the comments there that there was erected

stopplings at each cut-through between the belt road and the supply road. Is that the occasion you are talking about?-- Yes, it is.

That's 29 June. I tender that production deputies report as a separate exhibit.

WARDEN: Exhibit 83.

ADMITTED AND MARKED "EXHIBIT 83"

MR MORRISON: Now, your assessment at that time and subsequently working in the section was that what had been done was successful and cleared whatever problems there were?-- Yes.

That's the only occasion upon which you were working where you can remember such an event?-- Yes.

I think you said yesterday also that you can't recall any occasion when you heard of anyone else suffering such an event?-- No.

I think we can - yes, I will just ask you to look at a copy of that again. I don't know if you have still got it. I will give you this one. That's Exhibit 83. I think you will see down the bottom in the bottom right-hand corner there is a reference to stopplings - this is a downtime record - "Stopplings 40 minutes"?-- Yeah.

Does that accord with your recollection of how long it took to do this work on the stopplings?-- I don't know, I never timed it.

All right, okay. Well, it wasn't a long time obviously?-- No.

Thank you, you can hand that back. Now, the miners at No 2, to one degree or another, showed quite an interest in what was happening in the section in which they were working, didn't they?-- Yes, they did.

So, there would be quite a degree of exchange of information between oncoming shift members with outgoing shift members?-- Yes.

Certainly at your level, that is to say, miner driver level, there would certainly be an exchange of information?-- Yes, there was.

That was simply because it was quite important for one oncoming crew to understand what the outgoing crew had either done or experienced?-- Yes.

To one degree or another, miners showed an interest in looking

at information from the previous shifts as well?-- Yes.

You, in particular, I think - maybe you weren't an outstanding example in the sense of being unlike the others - but you often went up to the undermanager's office at the start of shift to see how the sections were going?-- Yes.

And others did that too?-- To my knowledge they did.

That was pretty routine for you, before the start of any shift, to be in the undermanager's office to check out the status of 512?-- Yes.

You would do that by reading deputies reports basically?-- Yes.

And also talking to the undermanagers?-- Mmm.

Do I gather correctly that your assessment was that you had a pretty good ongoing information stream about 512?-- Yes, you could say that.

And you didn't want for any knowledge about what had happened on previous shifts, you were always able to get it?-- Yes.

On 5 August, that was the Friday day shift, you were working that day and you mentioned that there was a fall in the goaf?-- Yes.

And you could tell that by the compression of air?-- Yes.

At that point extraction had finished?-- Yes.

And you were in the vicinity of the crib table?-- Yes.

Which, I think, you put as being outbye 512 effectively on an extension of the No 2 road?-- Yes.

Now, was there any other feature about the fall that became apparent, you know, like dust?-- No, it never blew dust out.

Just the compression of air?-- Yes.

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At that time was there any smell associated with that?-- Not to my knowledge.

And did you have any idea of just where that fall might have been?-- Somewhere in the vicinity of the goaf somewhere.

No way by telling just from compression - you had no way of knowing if anyone checked it out?-- At that stage there was no deputy in there. He was away doing other work and we are not allowed in there without him.

In the goaf or into the section?-- Into the goaf.

So, there is no way of knowing at that point where it was - what size the fall was or precisely where it was?-- No.

Or its extent?-- No.

On that day, that's the Friday, you were doing some work for preparing for sealing?-- Yeah, we were shifting machines out of the road.

There are several sequences, aren't there, once you finish extraction? The first thing is you have to move equipment out?-- Yes.

That means not only the continuous miner drivers - well, the continuous miners, and their drivers, but the shuttle cars, the belts, tranny, the whole lot?-- Yes.

On the Friday was the belt out, can you recall?-- Yeah, I think it was already gone.

And basically that shift was taken up with simply that job, moving machinery and equipment out?-- Yes.

On Saturday you were back again on day shift, the next day, and at that stage was essentially all equipment out?-- Yeah, it was out on 510.

We are talking about the No 1 roadway on 510; is that right?-- No. When I come in there Saturday morning the miner and the feeder were stuck in the belt road in 510. The miner was actually broken down.

So, they had been moved some distance outbye, but not as far as would normally be the case because of some breakdown?-- Yes.

Now, on that occasion you were involved with Norm Cross on shifting materials around?-- Yes.

I think you referred to it yesterday as shifting some Tecrete materials over to the seal sites?-- Yes.

One of those seal sites would have been the belt road?-- That was the first one.

And to take the material there, because of the fact that

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bottoms had been taken just outbye the belt road entrance you would have to drive around into the top of 512 and leave the materials on the inbye side of the prep seal?-- Yes.

And that is where you would have expected that sealing to have been started, from the inbye side of the prep seal, not the outbye side?-- Yes.

If you are still on the outbye side you are in danger of falling down the canch into the bottoms?-- No, the canch was a long way back from there.

Was it? All right. On that occasion you said to us yesterday that it wasn't unusually warm during that day?-- No.

Nor was there any other unusual feature about the place?-- No.

No smell?-- No.

All right. You having noticed no smell and having experienced no particular heat, it was just normal temperature, it is most unlikely you would have been going around and commenting on those feature to people, isn't it?-- Yes.

Now, at on Saturday during that day were you there when the monitor points were moved?-- No.

Can you - do you have any memory of whether the monitor points had been shifted in relation to 512 at that point or not?-- I don't know.

It wouldn't normally be your area of work, would it?-- No.

If we can stay with that, that's Saturday day shift, at that point the seal down in the bottom return was already finished, wasn't it?-- Yes.

I think it had been done something like a fortnight before that?-- Could have been.

And we are talking about a final seal, a final Tecrete seal?-- Yes.

The next seal up in what is, in fact, the fourth road along, that also was done at that point?-- Yes.

It had been finished and I think it had been done something like a few days or a week before?-- Could have been.

And that also was a final Tecrete seal?-- Yes.

Now, can you just tell me this: outbye 512, and I think in the No 2 roadway extension, there was a stopping. It might even be reflected on that plan?-- On the belt road there?

Yeah. Perhaps not on the belt road, on the extension of the No 2 for 512, on the man and supply road?-- On the map there is one, yes.

Was there one there on the day you were there on that Saturday?-- I can't remember.

Now, in order to move some of this equipment you had to have access through the door which is situated on the 510 No 1 road. Do you see that door?-- Yeah.

And that's a door which would otherwise, if it was closed, give a very good seal?-- Yes.

It has to be opened in order to let men and equipment through?-- Yes.

And part of the equipment that was being taken through would have been the hoses to attach to Tecrete pumps and things?-- Yes.

And they would be lying through that door, wouldn't they?-- Yes.

So, once the equipment was moved into place that door couldn't, in fact, be closed because of the pumps that were lying through?-- Unless they put bags over the top of it.

That would be the only way to close off that door again, wouldn't it?-- Yes.

And, likewise, am I right in thinking that the regulator just down and outbye 512, again in the No 1 road for 510, that had been - had a hole put in it on the right-hand side as you move inbye in order to get through?-- I don't know that, I never -----

You weren't involved with that?-- No.

Now, I just want you to have a look at another document in a moment. I think - no, I will come back to it. It is a fact during not only the course of extraction in 512, but in other panels too there were regular safety meetings at the No 2 Mine?-- Yes.

And some of those happened on the morning before the start of shift?-- Yes, they did.

And they would vary in length, some would be as short as an hour and a quarter?-- Yes.

Others would be up to three and a quarter, four hours?-- I don't remember one being that long.

We can see them noted on the undermanagers' shift reports?-- Yeah.

They are only noted there as "SOS safety meetings", such and such a time?-- Yeah.

You were on Atkinson's shift mostly, weren't you?-- Yes.



Just on that point let's have a look at one date where I think we might have - yeah. I just want you to have a look at one document here. We might just get an idea about the safety meeting. That's Thursday, 16 June, the afternoon undermanager's - afternoon shift undermanager's shift report and you recognise the signature as being that of Atkinson. At the top?-- Yes.

All right. You see under "Overall Shift Comments" it has got, "Safety meetings SOS", or, "Safety Meeting SOS three and a quarter hours"?-- Yes.

Well, you are noted, I think, on that panel that day, or is it hard to read?-- Very hard to read.

All right. That's all right. We will come back to that, but certainly Mr Atkinson has noted for that day a safety meeting of a duration of three and a quarter hours?-- Yes.

If you go back, say, three pages I think you get to 9 June, day shift, on a Thursday. Atkinson again signing this report. "Overall Shift Comments" at the top, "Meeting start of shift, one hour"?-- Yes.

And I think you will see more clearly on this one than the other one that you are noted in that shift, second name down?-- Yes.

Now, those safety meetings would cover - you can put that down. Those safety meetings would cover a number of topics from time to time?-- Yes, they would.

And they would be things as diverse as first aid or emergency procedures or the mining in 512 or cable flashes, things of that nature?-- Yes.

Can I just ask you to look at Exhibit 40. Exhibit 40 is the training records at No 2 and what I want you to do is - we will identify the line that is for your name and I want you to flick your eyes across the dates and the headings and you can probably confirm for me that it is pretty much accurate as a record of what you attended or underwent, whatever you want to call them, safety meetings, seminars. You will see you are about six from the bottom and had pretty much a better attendance record than just about anyone else in the whole log?-- I see my name there.

Have you got that? Just run across that line to the right. The first one is 1990 "First Aid", 1990 again, "Emergency Procedures", and so forth?-- No, you lost me.

I am sorry. Would you like - the ruler might help. Can you put it under the line then follow. Just put it under the line. We will run across them. April 1990, "First Aid"?-- Yes.

October 1990, "Emergency Procedures"?-- Yes.

April 1990 again, "Fire Fighting"?-- Yes.

March '94, "Traffic Rules"?-- Yes.

17 June '94, "Mine Methods". I think that's in relation to mining in 512?-- Yes.

June '93 - it is a bit indistinct on mine. What is that?-- "Eimco".

"Eimco Hazards", yes, of course it is. June '93, "Isolation Procedures"?-- Yes.

May '93, "Accident Hazard Reports"?-- Yes.

June '94, "Significant Incident Reports"?-- Yes.

June '94 is under the heading, "Spontaneous Combustion Gases Dust, etc". In fact, it was in relation to cable flashes?-- Yes.

May '93, "Defect Reports"?-- Yes.

March '94, one form of "The Self-rescuer" and so forth?-- Yes.

You can hand that document back. Most or some of those occasions would have been the sort of safety meetings that I mentioned to you before?-- Yes.

Where there was some sort of formalised discussion of some particular topic?-- Yes, there would have been.

And during that sort of safety meeting production in the mine would cease?-- Yes.

So, effectively the operation of the mine would stop in order for the safety meetings to be conducted?-- Yes.

All right. There is just one other document I want you to look at for a moment. Yes, this one here. I want you to look at this deputies report. You will see that's a production deputies report 3402. I indicate it is from document 45. It is for Friday afternoon shift, 17 June; is that right?-- Yes.

And Doug Moody was the deputy?-- Yes.

I think you were on that shift?-- Yes, I would have been.

Now, that shows that on that shift some brattice was erected at the face to push air down No 2 and clear some methane before cutting commenced?-- Yes.

We are talking there about brattice around the miner itself, not segregation stoppings? This is just the bag to direct air over the miner?-- Yes, it probably would have been.

No big production about it, it was a simple operation to do?-- Yes.

The other document I have given you, which is the shift undermanager's report, is a little hard to read. It is the one I showed you before. I might just show you the - a clearer copy. You will see that you were on that shift?-- Yes.

For 512 that day?-- Yes.

Now, on that occasion, that's that Friday afternoon shift where you had to put some bag around the miner, can you recall there being any particular difficulties with smell or ventilation other than just putting bag around the miner?-- No.

Can you recall any conversation with anyone on that occasion, that's the afternoon shift on Friday, 17 June, about smells or an occurrence of smells or -----?-- No.

So, apart from putting some bags around the miner there was nothing unusual about that shift?-- No.

Thank you. You can hand all of those documents back, I think -----

Would Your Worship excuse me while I find a document? Could the witness see Exhibit 67, please?

Now, you will see that's an underground shift report by McCamley for 24 June day shift -----?-- Yes.

In relation to 512. You will note that you were on the crew in 512 that day?-- Yes.

Now, can you recall on that occasion anyone saying anything about smells?-- No, I can't recollect.

Anything unusual about the process of work that day?-- No.

It notes there was some stoppings put up across the prep seal in the bottom road in order to push air down the top supply road. Can you recall what that was?-- No, I'm sorry.

Were you involved in actually erecting it or doing anything with it?-- No.

You can't recall. Apart from what might be written there, there was no unusual feature about the ventilation or smells or anything else that day, no comment about that?-- No.

You can hand that document back -----

Yes, I have nothing further, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: Would it be fair to describe you as the sort of person who if you thought there was something wrong in terms of safety you wouldn't be backward in coming forward?-- That's correct.

And there had been times over the years where you have spoken out if there was any concern at all about safety of the men?-- Yes.

Now, on the 6th, Saturday, 6 August, there was nothing that you - nothing in your experience on your shift that day that caused any concerns for the safety of men so far as you were concerned, did they?-- No.

Thank you. I have nothing further, Your Worship.

RE-EXAMINATION:

MR CLAIR: Mr Shorten, just one brief matter. You said in answer to Mr Morrison that when the gear was being moved out of 512 for the purpose of these seals being completed, this is on 5 August?-- Yes.

That then some hoses were put back through and things were set up for the Tecrete sealing to be done?-- I didn't say the hoses were put back through.

I think you agreed with him that some hoses were through that doorway in the 0 cross-cut, 512?-- For them to seal that seal off the hoses would have had to have been put through the door, but at that stage they were not.

Right. Do you know when they were put through the door?-- I would not have a clue.

When the gear was being moved in for the sealing, do you know if it was brought in along that No 1 road of 510?-- Yeah, I dropped - on the Saturday I dropped all the supplies outside that door.

Outside which door, can you just indicate that?-- That door there.

That's inbye of the doorway?-- Yes.

Was the doorway closed then?-- Yes.

What about back on the other side of No 1 roadway in 512, that's coming outbye along that same heading in 510? There was a regulator on the other side, is that right, some louvres and -----?-- To my belief there was.

Do you know if there was any change in that in order to get the gear into 512 for the sealing process?-- They were talking about taking the Eimco up in there. I don't know whether they did or not.

You are not sure yourself?-- No.

You didn't see whether that had been done?-- No.

Thanks, Mr Shorten.

EXAMINATION:

MR PARKIN: Mr Shorten, could we just return to the risk assessment for a few moments? I understand this assessment took four days?-- Yes.

Was this the first risk assessment that you had attended at Moura?-- Yes.

Do you know if this kind of assessment had been used in other areas of the mine at Moura No 2?-- I don't know.

So this was the first instance as far as you are concerned?-- Yes.

Could you tell me what major potential hazards you identified in that risk assessment, just the major ones?-- Would be roof fall or rib fall to maim or injury a person and possibilities of someone getting run over or squashed by the continuous miner.

So you were very happy with that process?-- Yes.

Did you learn a lot from it as well?-- Yeah, I think I did.

So you found it very useful?-- Yes.

Can you tell me if you had any problems at all with the design of the panel 512?-- When we first sat in there I wasn't real keen on the way the method was going to be done, but after doing it for a while it was a lot safer method.

When you say you weren't very happy initially, why was that? Was that because of dangers you might have been exposed to or -----?-- No, just the change, I think.

It was something different?-- Yeah.

Nobody likes change?-- No.

Could you tell me something about the machine getting bogged down at the bottom end of the pillars?-- The machine was bogged one shift that I went in there. We had to dig it out - not actually dig it out, we had to get it back out.

How did you get it out?-- We made a bridge out of stonedust bags and old pallets and chained it up to a shuttle car and the car just give it a hand to come back up.

It would be fairly steep down that end of the panel, wouldn't it?-- In the bottom end it was.

Do you know how steep it was?-- No, I would not have a clue.

You talked about a tendency for the reduced ventilation in the top road and sometimes this caused a reversal of ventilation?-- Yes.

I wonder if you could just indicate - I don't need you to draw anything, just indicate on that plan where that eventuated, please?-- Sorry, I didn't catch that.

Where you had reversal of ventilation in No 2 road, could you indicate where that happened approximately, whereabouts?-- I'm not sure if we were in number 3 heading or number 4 in the

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cross-cuts.

But you did get reversal in No 2 roadway?-- Yes, we did.

What did you do to effect proper ventilation?-- To clear it, you mean?

Yeah?-- Erect those stoppings, segregation stoppings, between 2 and 3.

Would you just indicate where that is on the plan, please?-- The cross-cuts across there, we just put stoppings across 2 and 1 and I think we done across 3 to force the air down the No 2 road.

Did you have any problems with ventilation in the panel at all?-- Not to my knowledge.

So you didn't have any personal problems?-- No.

One final point, how often did you attend safety meetings?-- About as often as I attended work.

I meant the frequency of the safety meetings. How often were they held?-- One a month.

Thank you.

EXAMINATION:

MR NEILSON: Mr Shorten, you were the regular miner driver in 512 Panel, weren't you?-- Yes.

You would be aware then that the sealing process that took place was brought forward?-- Yes.

It was actually a premature sealing?-- Yes.

Are you aware of why that happened?-- No.

Nobody -----?-- I never asked why.

----- explained to you?-- I don't make those decisions.

I'm not asking you whether you made the decisions, I'm asking whether anybody took the time to tell the miner driver - the miner driver is fairly important within the whole structure of mining operation?-- I think everybody in the crew is equal to the miner driver.

Wouldn't the miner driver be a little bit more so? I mean the miner driver has more things under his control than a shuttle car driver does?-- Miner driver only has the continuous miner under his control.

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The continuous miner, I put to you, and the operator, can determine a lot of features including safety as a panel is developing and extracting?-- Yes, you could say that.

So the miner driver is a fairly important person within - I didn't say the most important, I said an important person?-- Just as important as anybody else in there.

Okay. We won't argue about that. Given the fact that there is some importance - and I would suggest some importance that should be placed on the fact that a panel is going to be sealed and sealed quicker than it normally would have been, wouldn't you expect that somebody should have explained to you why?-- Yes, I suppose they should have, but I never asked.

These safety meetings that you've been asked if you've attended, have you ever had any instruction on spontaneous combustion at one of those meetings?-- I can't remember if we did or we didn't.

Have you ever had any instruction on spontaneous combustion at all?-- I don't think so.

Well then, it would be fairly reasonable to assume that you weren't instructed on spontaneous combustion at those safety meetings. Surely you would remember that if you had?-- If I was listening I would have remembered.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Shorten, you were explaining to us that when you were ramping down with the continuous miner the machine was operated by remote control; is that right?-- Yes.

So, what, you had a hand-held radio control system, did you?-- Yeah, it was a little box with a strap that hung around your neck.

How far away would you be from the machine when you were operating it?-- Back in - probably off - just about 5 metres from the top of the ramp.

Were you under supported roof when you were operating it?-- All the time.

Could you see the machine?-- Yes.

Could you see the machine when it went down the ramp?-- Yes.

Could you describe to us very briefly the process involved in causing the machine to ramp down?-- To make the machine ramp, if it was like on flat ground you use a stab jack and then just slowly cut the floor deeper and deeper.



You'd tramped backwards and forwards and gradually get to the gradient that you required to go down the ramp?-- Yes.

What type of machine was it that you were using?-- A HMV Joy Miner.

Would you know off-hand the width of the cutting drum on that machine?-- I think it was three metres.

And about one metre diameter perhaps?-- I think so.

When you are ramping down, is it a one pass operation? In other words, is the ramp only one drum width?-- No, it would be about one and a half.

So you ramp down at one drum width then you flip back, move the machine across and go down again taking about a half drum width?-- Depending on the width of the roadway we'd leave a certain size canch.

So you could expect that the clearing up of the coal on the first pass would be reasonably good?-- Yes.

But on the second pass, because you had a loose end at one side of the drum, there could and probably would have been a lot of spillage; would that be true?-- Yes.

And that spillage from the second run would be difficult to clean up?-- In some cases it was.

Now, the coal itself was fairly easy cutting, was it?-- Yes.

Which meant probably that being a friable coal, I think that would suggest there was a lot of small material cut?-- Yes.

Did anybody ever walk down into the ramp area?-- I'd say a couple of times we had to because the cable was just too heavy to pull back with just one person.

Were you ever in the ramp area?-- Only if me cable boy had to go down in there.

I wonder if you could perhaps describe to us the floor in the ramp area. Was it a flat floor or was it a sort of series of cusps that had been left by the cutting drum?-- It depends on the operator. You can make it flat or you can put dishes in it.

What on balance would you say prevailed in the majority of circumstances? Cusps?-- No, pretty flat.

Pretty flat, okay. Was there water suppressors on the machine?-- We had sprays on there.

Would you say the coal that was left in the ramp would be quite wet?-- Yes.

It's a pretty thick seam, and I'd be surprised if there

weren't a few stone bands in it?-- In places there was a couple.

The machine cut-through the stone bands quite easily?-- Yes.

In the process of so doing did the cutter drum produce sparking?-- Well, you wouldn't see the sparks from the lights that were on the miner.

Thank you.

EXAMINATION:

MR ELLICOTT: Can the witness be given Exhibit 70, please?

That is the document resulting from the 512 Panel risk analysis; is that right?-- Yes.

I'd like to take you through that for the purpose of getting a feel for what of those items described as possible extra controls were implemented in 512. You will see on the top left-hand side of each page there is a descriptor of which says "Face of operation"; is that correct?-- Yes.

The first one is "Extraction of barriers"?-- I don't know what page you are on.

I'm on the first page?-- Mine's got "Brush floor to No 6 heading".

We have a problem?-- Now I'm on the same one.

In the column titled "Possible extra controls", does that start, "The ribs in the panel have to be inspected systematically by an undermanager and deputy at the design stage of the next sequence."?-- Yes.

"This may also involve the persons to install the support"?-- Yes.

Can you tell me if that systematic mapping was done?-- To my knowledge it was.

To your knowledge it was. At the end of that paragraph, the last sentence says, "The undermanager will" - and it says "ten", but I presume it means "then create a rib support plan."; is that correct?-- Yes.

Were you aware of the existence of that plan?-- What they used to do is when they inspected the ribs they used to take a can of paint, and where they wanted extra support they would put a cross. That's where the bolts were to be put.

That, in your mind, was a rib support plan?-- Yes.

Can I ask you to go forward four pages. This should say page 4 down the bottom right-hand corner. We are still in the extraction of barriers phase of operation; is that correct?-- "Sequence and job steps" blank there.

Yes, that's blank, but in the bottom right-hand corner of the page it should say page 4?-- Yes.

The last comment in the "Possible extra controls" column says, "Indicator props can be used at discretion of deputy."?-- Yes.

Can you tell me if those indicator props were used?-- Yes, we used them frequently.

Can I take you forward two more pages, please? In the "Possible extra controls" column I believe it says, "The deputy should always discuss the site geology with the crew at the start of each shift."; is that right?-- Yes.

Did that discussion take place at the start of each shift?-- Only if the blokes were interested.

Can you turn to the next page, please? Again in the "Possible extra controls" column it says, "Personnel must be kept well back by introduction of rules by the manager governing who can be there. These rules have to be followed by all." Were you aware of the introduction of rules by the manager to that effect?-- Yes.

The next paragraph says, "Manager to initiate a review of the introduction of better cable handling procedures/machinery so people don't have to pull excess cables or go into unsupported ground." Are you aware that that review was initiated?-- I don't know.

The next item says, "Connect reversing light on the miner to the 1.25 per cent methane alarm." Do you believe that was done?-- No.

That wasn't done?-- No.

Can you turn to the next page, please? In the second item under "Possible Extra Controls" the first sentence says, "Put cable plug back inside the miner cab."; is that right?-- Yes.

Can you tell me if that was done?-- No, it was never done.

The next item says, "Modify cable receptacle to allow cable to come back through the cabin." Can you tell me if that was done?-- No, it wasn't.

The next item says, "Put a deflection bar over the cable near the cab." Can you tell me if that was done?-- Yes, it was.

That was done. The next page, please? We should be on page 9?-- Yes.

The first item under "Possible extra controls", "Ensure a

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decent tow hitch is available on the shuttle car and appropriate chains are easily obtained and stored in a safe place." Can you tell me if that was done?-- Yes.

I'll miss the next item, but the next one says, "A SOP to be created and used." I presume "SOP" means standard operating procedure?-- Yes.

Can you tell me if that was created and used?-- Yes.

The next item says, "Set up a custom built winch for the remaining pillar extraction." Can you tell me if that was done?-- No.

The next item says, "Restrict the amount of bottoms which are taken." Can you tell me if that restriction was made?-- In some places.

The next item says, "Buy and use a puller."?-- No, we never bought one.

But you did use one?-- We used one.

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The next item, "Use a smaller remote controlled miner for pillar extraction." Was that done?-- No.

The next item, "Investigate a snatch block system as an alternative to a puller." Was that done, to your knowledge?-- Not to my knowledge.

Can I take you forward, I think it's 12 pages, to page 20? We should still be in the extraction of barriers phase; is that correct?-- Yes.

The second item under "Possible Extra Controls" says, "Operators to devise a scheme so that people don't have to go into the intersection to pull back the cable." You were an operator, I understand. Were you involved in devising a scheme?-- No.

Can I step you forward four pages, please? Is the phase of operation mining bottoms in headings?-- Yes.

And the bottom right should say "page 3"?-- Yes.

The first item under "Possible Extra Controls" says, "Pump water into the old workings." Can you tell me if that was done?-- No.

Okay. Now, the second paragraph of the next item says, "Deputy to reinforce the manager's rules when talking to his crew." Can you tell me if that reinforcement was regularly done?-- If someone was out of line or that, yeah, the deputy would pull them back in line.

That would in fact be part of the deputy's job, would it not?-- Yes.

Can I step you forward two more pages, please? I think the phase of operation is now right hand punching and bottoms; is that correct?-- Yes.

The last paragraph under "Possible Extra Controls" says, "Don't brush the full width of the road and leave approximately half metre canch on the topside for extra rib support."?-- Yes.

Was that done?-- Yes.

Can I step you forward one more page? The fourth sentence under "Possible Extra Controls" says, "Operator should stand back as far as practicable whilst maintaining the operation of the miner."; is that correct?-- Yes.

Was that done?-- Yes.

Can you turn to the next page, please? The first item says, "Put the floor jacks on another hydraulic circuit to prevent 'low oil' indicator tripping as a false alarm."; is that right?-- Yes.

Was that done?-- Not to my knowledge.

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The next item says, "Change location of the breather on the tanks."?-- Yes.

Was that done?-- Yes.

Can I step you forward five pages, please? Is the phase of operation now stook extraction?-- Yes.

And the bottom right-hand corner says "page 1"?-- Yes.

The only item under "Possible Extra Controls" says, "Manager to nominate someone to physically mark the minimum width of the stook."?-- Yes.

Can you tell me if that was done?-- Yes.

Go forward two more pages, please. We are still in the phase of stook extraction. The bottom right-hand corner says "page 3"?-- Yes.

And it says, "Operators to be told not to start on the right-hand side, but in the middle."?-- Yes.

Did that occur?-- In some circumstances it did.

Where it mattered?-- Yeah.

Forward two more pages, please. This is in relation to tradespersons shutting off power and the first item says, "Tradespeople must get permission from the deputy and the miner driver before taking action."; is that correct?-- Yes.

Was that permission sought?-- Yes, it was.

Okay, that's all, thank you.

MR CLAIR: I have nothing further, Your Worship.

MR MARTIN: Nor do I.

MR MORRISON: Just a couple of things, Your Worship.

#### FURTHER CROSS-EXAMINATION

MR MORRISON: Mr Shorten, can I ask you to look at another document, please? Is that a folder of the approved sequence plans for 512 extraction?-- I beg your pardon?

Is that a folder of the undermanager-in-charge's approved sequence plans for 512?-- Yes.

Including the plastic film overlays that I asked you about earlier?-- Yes.

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Could you go to the pink tab, please? If I have been told correctly, that should indicate a plan which shows the rib bolting. Perhaps I can have it back and I will get the right -----?-- Yeah, that's better, I have got it.

You have got that plan?-- Yes, that's -----

As part of the sequence plans for the extraction panel were the positions of rib bolting marked on the plan that was kept down in the section?-- Yes.

And that's extra rib bolting?-- Beg your pardon?

That's extra rib bolting?-- Yes.

I have copies of that page and I tender a copy of that page for the moment. I don't have a copy of the entire document, so I won't tender it at this point.

WARDEN: Exhibit number 84.

ADMITTED AND MARKED "EXHIBIT 84"

MR MORRISON: You can just put that document down for a moment?-----

Your Worship, I don't need Mr Shorten for this purpose, but I will take the opportunity to do it now since it's in everyone's minds. I tender a retreat dates and sequence plan for the 512 Panel which shows on it the sequences for extraction together with the date and the shift on which those sequences were extracted. In almost every case there are one or two missing because they cannot be verified with absolute precision from deputies reports, but that plan might be of assistance to the panel in terms of ascertaining just where the miner was on any of these occasions that we have been discussing. Most of the dates that we have already discussed are revealed from the precise location, sequence and shift. I have small copies of the same plan for the panel and for our learned friends.

WARDEN: Thank you. We will mark that Exhibit 85.

ADMITTED AND MARKED "EXHIBIT 85"

MR HARRISON: Your Worship, I have just got a few questions of this witness.

WARDEN: Yes, thank you.

FXXN: MR MORRISON

WIT: SHORTEN P W

FURTHER CROSS-EXAMINATION:

MR HARRISON: Mr Shorten, you were asked some questions by Mr Neilson about whether you, as a miner driver for 512, were given any reasons as to why it was sealed earlier. Was it your understanding it was due to be sealed fairly quickly in any event?-- Oh, I didn't know when it was going to be sealed at all.

Well, the work that you were doing on the Saturday day shift, did you understand that that was work being done in preparation for the sealing of 512?-- Yes.

When were you due back at work again?-- The Monday afternoon shift.

Were you aware that at the commencement of the Saturday afternoon shift the men, including the deputies and the miners, were addressed by Michael Squires in terms of what was happening and why it was happening?-- No.

Had you left at that stage?-- I'd say so.

Thank you, I have nothing further, Your Worship.

WARDEN: Thank you, witness, you may stand down.

WITNESS STOOD DOWN

MR CLAIR: May it please Your Worship, I call John William Thomas Blyton.



JOHN WILLIAM THOMAS BLYTON, SWORN AND EXAMINED:

MR CLAIR: Your full name is John William Thomas Blyton; is that correct?-- Yes, that's correct.

Now, Mr Blyton, you might want to pull your chair in so you can speak comfortably into the microphone. It will help if you can be heard. Now, Mr Blyton, you have been involved in underground mining for some 20 years; is that right?-- That's correct.

Where did you first commence your career?-- I first started at Kianga.

How long did you stay there?-- Until the mine finished, after the explosion in 1975.

Right. Where did you move to then?-- I first went to Moura No 2.

And you became a deputy in October '77?-- That's correct.

Were you still at No 2 then?-- I was at - I was - I got my ticket when I was at No 1 Colliery and then I first used my ticket at No 2, yes.

I see. Well, you went to Moura No 2, then you went to No 1 Colliery?-- Yeah, that's correct.

And then to No 2 again?-- Yes, that's correct.

Where you became a deputy, as I say, in October '77?-- Yes.

Okay. Where have you been since then?-- I then transferred to No 4 Mine.

When was that?-- Not long after it started there. I think it was about '78/'79.

How long did you stay at No 4?-- I stayed there until after - until after the '86 disaster.

Right, and you worked there as a deputy obviously?-- Yes.

Okay. Then after the disaster at No 4 in '86 you moved back to No 2?-- That's correct.

Have you stayed there ever since?-- Yes.

As a deputy?-- Yes.

You had about 20 years in Mines Rescue?-- That's correct.

Okay. Now, during your time as a deputy in No 2 what kind of work have you done? Have you been a production deputy for most of that time?-- Yeah, I have - mainly production. Just in the later part of last year I went onto the work model

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committee.

The work model committee?-- Yes.

For what purpose was that established?-- To set up award restructuring.

How much of your working time did that take? Did it take you out of production for a long block of time or ----?-- Yes.

How long?-- Three or four days a week.

Over what period of time?-- Last 12, 18 months.

The last 12 or 18 months?-- Yeah.

Okay. Well now, during the period up to the explosion at No 2 on 7 August, say from the commencement of this year, have you been spending only then about the one day - one or two days a week on production; is that right?-- Yes.

Have you worked in 512 Panel during that time?-- Yeah, I have put either three or four shifts in there on - with production and some weekends.

Three or four shifts in total?-- Yeah.

Was that during the development of the panel or during the retreat and extraction phase?-- During the retreat.

When you were working there as a deputy, what kind of observations did you or were you able to make about the method of extraction and the ventilation in the panel?-- Could you just ask me that again, please?

Well, what was your view about the method of extraction, first of all, in 512? Did you form any views about that?-- My personal view is I wasn't real happy with the extraction plan, no.

Why was that?-- Because I was concerned with the amount of coal being left behind.

That's loose coal?-- Yes, slack coal, yeah.

How did that come about?-- Because we are only allowed to ramp in until we got to the height of three metres, and nobody was allowed to be exposed to any higher roof than three metres.

And that had the result of loose coal being left on the floor?-- Yes, that's correct.

In what form was it left, in piles, or was it spread about evenly?-- Oh, there was piles left, yeah, from where the miner couldn't go and get it, yeah.

Okay. Now, why did that concern you, having the loose coal there?-- It's not a very good practice for the simple

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reasons of spontaneous combustion.

Okay. Did you discuss those concerns with anyone?-- I had expressed my concern to the ACIRL people who had designed the section, yes.

Right. Well, how many ACIRL people did you have contact with, one or more or -----?-- Mainly only one.

Who was that?-- I can't recall his name.

Did he visit the mine on occasions, is that where you saw him?-- Yeah, I had seen him twice, yes.

What opportunity did you have to discuss with him the aspects of the design?-- Just in general conversation.

All right. Well, what was his response when you mentioned these concerns to him? Did you mention your concerns about the loose coal, is that what you said, or -----?-- Yeah, yeah, I was concerned, you know, because we couldn't go and - couldn't pick up all the loose coal off the floor.

What was his response to that, do you remember?-- No, I can't recall.

Okay. Well now, what about ventilation in the panel, did you have any problems on occasions that you were working there as a deputy in 512?-- Problems as in what?

Well, problems with ventilation, any slowness of ventilation in any areas in the panel, any difficulty arranging things to achieve good ventilation?-- Yeah, it was probably one of the hardest sections that I had to work with with ventilation because of the large blocks of coal.

When you say "large blocks of coal", what are you referring to?-- With the weight bearing pillars.

Now, if you turn to your right you will see a plan of what you should recognise as 512 Panel?-- Yeah, that's correct.

Okay. Pick up the laser pointer there in front of you, that's that black instrument. I believe if you press a button on the side it produces a red spot on the plan if you point it that way. That's it. The modern equivalent of the dancing ball. Now, if you could just indicate those pillars that concerned you, the load bearing pillars you referred to?-- Yeah, these large pillars here and here.

So, there is a line of them between 8 and 9 cut-throughs and 4 and 5 cut-throughs; is that right?-- Yeah, that's correct.

Now, why were those of concern to you in terms of ventilation?-- Because when the ventilation came to them it more or less run into a wall in front of it and then it had to split and then go around the pillars.

Right. Now, just assume that you have got your ventilation coming into this section. You might just indicate, for instance, where that would come in against one of those pillars, just to illustrate what you mean. You are indicating through the No 4 roadway there; is that right?-- Yeah, comes in here and it hits this block here.

Yes?-- It had to split and go both ways and then it had to split again and then come back through and it split, had to keep splitting, and my concern was with the dead areas of ventilation where it had split around the back of it.

Around the back of the pillars, that is inbye of the pillars?-- Yeah.

Describing just what you indicated there in general terms, you are indicating where the air might be coming along a roadway and then being confronted by a pillar and that happens both with the large pillars and then with the smaller ones?-- Yes.

Once it goes through the roadways between the larger pillars it runs into an obstruction with the smaller ones; is that what you were indicating?-- Yes, that's correct.

Just passing a moment on this ventilation aspect because, in effect, what the ventilation fans did was to suck air out of the mine which caused air to come in; is that right?-- Yeah, that's correct.

From your own experience where that occurs and where you talk about dead spots in terms of roadways running straight up against pillars, where would the dead spot occur; on the inbye side of the pillar or on the outbye side?-- You would pick up a dead spot in and around this area here.

That's on the outbye side of the -----?-- No, that's on the inbye side.

I am sorry, the inbye side?-- Yeah.

On the inbye side of those large pillars that you were talking about?-- Yes.

Okay. Righto. Well, you say they were your concerns. Did you actually experience problems with dead spots when you were there working in the panel as a deputy?-- Dead spots as in the ventilation probably wasn't as good in that area, yes.

Again did you express these concerns to anyone or discuss them with other people?-- Probably over the course of time, but I can't really recall when and where.

Apart from those things that you have mentioned, were there any other special features that you recall in respect to 512 Panel when you were working there? Any other difficulties or occurrences on the shifts that you worked there, or anything unusual?-- Only that you couldn't do a proper waste inspection of the area.

And why was that?-- Because of the canches left in front of the ramps.

Where the bottoms had been taken?-- That's correct.

Yes, I see. Now, what kind of inspections did you do in the panel when you were there as a deputy? How far would you go?-- Oh, we would cover all the intakes and then I would just inspect the waste edges.

The waste edges?-- Yeah.

At the outbye end of the goaf?-- Yes.

Would you go down the No 1 roadway and around the back into cross-cut 13?-- Probably the first time that I was in there, yes, I did.

On the later occasions?-- No.

Okay. Well, the time you did go in there did you inspect the stoppings that existed then between No 1 and 2 roadways?-- Yes.

And around the back, short of cross-cut 13, across the roadways just short of cross-cut 13?-- Them ones there?

Yes?-- Yes.

Okay. And were those stoppings all in place?-- Yes, they were.

Now, I want to bring you forward then to the Sunday, 7 August. That was the day of the explosion. You came on shift that afternoon at 2.45 p.m.?-- That's correct.

Prior to that in the morning on that day had you attended a union meeting?-- Yes, I did.

Was there any discussion at the union meeting about 512 Panel?-- Only to the effect that they had had a concern and they had sealed off earlier than expected.

Any discussion about what concerns -----?-- No.

There had been?-- Not that I can recall.

Okay. Now, when you came on duty that afternoon then did you speak with the undermanager in charge of the shift?-- Yes, I did.

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Who was that?-- Michael Squires.

What conversation did you have with him?-- I had asked Michael why they had sealed off earlier than expected.

Mmm?-- And he told me that they had detected a smell and at a later inspection the smell was worse and there was a haze.

Did he say where this was?-- No.

In respect of which panel?-- To the 512 Panel.

512. Did he say where the smell was in the panel?-- No, he did not.

Okay. Now, well, did you learn when the sealing had taken place, when the panel had been finally sealed?-- Yeah, he said it had been sealed at approximately 1 o'clock Sunday morning.

And did you have some discussions with him then about the Ellicott diagram?-- Yes, I did.

What was that discussion?-- I wanted to know where the plottings were in relation to the atmosphere behind the seals.

Why was that?-- Just for my - for my information.

Right. Why was it a matter of significance?-- Because I was going on shift that afternoon and I always liked to know what's down the mine before I go down there.

Well, what would the Ellicott diagram tell you in that connection?-- It would tell me whether there was an explosive or a potentially explosive or a non-explosive.

Well, if it indicated that the atmosphere was still non-explosive would it give you some indication, at least, when it was going to move into the explosive range by looking at the plotting at that time?-- Not really, not at that time, no.

Okay. Now, did you and Michael Squires go around to the Unor room then?-- Yes, we did.

And did he bring up the graphs on the computer? He brought up the Ellicott diagram?-- Yes.

You had a look at it yourself?-- I did.

What was the position at that time?-- It was still in the non-explosive which is the top left-hand quadrant.

Top left-hand quadrant, and in which direction was it heading?-- It was trending towards the explosive quadrant.

Which quadrant is that?-- That's the top right-hand quadrant.

Now, did you have some discussions with Michael Squires about

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his expectations?-- Yeah, Michael said that he was expecting it to go into the explosive range some time during night shift.

What further conversation did you have with him?-- And then I asked him what he was going to do when it went into the explosive range.

Mmm?-- And he said that he would talk to Albert, which is the mine manager, and if there was any problems then he was to get in touch with George Mason - George Mason, he was the undermanager-in-charge.

What was to happen then?-- And then they were going to take it from there.

Okay. Well, when he said to you "if there were any problems", what did you take him to be referring to?-- I assumed that what he meant by "problems" was if the men didn't want to go down the pit.

Well, what would normally have been the position if the men didn't want to go down the pit?-- Well, I suppose they would have a discussion about it and then make a decision. I can't see them forcing the men down.

Right. Well, now, under what circumstances would it be that the men would decide that they didn't want to go down the pit?-- Whether or not behind the sealed area was in an explosive range and whether there was a source of ignition behind the seals, I suppose.

Okay. What can you say yourself as to the system that was in place to ensure that the men were aware of all the information they would need to know for the purpose of deciding whether they wanted to go down the pit? What system was in place for that?-- Well, we had the Unor screen there which was visible to everybody on the on-coming shift and just the explanation from the undermanager.

What explanation from the undermanager?-- Telling them where the range was, I suppose.

Well, now, the Unor screen that you refer to, that's the one that is adjacent to the assembly area in the Unor room?-- Yeah.

Do you recall that?-- Yeah.

And that screen is at least, at times, turned facing out to the assembly area; is that right?-- That's correct.

Is it invariably faced out that way at the beginning of a shift, in your experience?-- Yes.

It is. So, that the men would be able to see what readings were on the Unor screen at the time that they assembled for the night shift?-- That's correct.

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You are familiar with the readings as they appear on that screen yourself?-- Yeah, I would say fairly familiar, yes.

Fairly familiar. What readings appear on there?-- CH4, CO, oxygen, CO2 and Graham's ratio.

And the readings that appear on there at any given time are in respect of what?-- To the atmosphere down the mine.

But what part of the mine?-- Wherever the sample point is.

Is there any way of the men being aware as to just what sample point is being displayed on that screen at any given time?-- Yes, the colour changes on the sample point, which one is being monitored at the time.

Okay. Now, how long does it take for the information on that screen to cover the full range of sampling points within the mine; do you know that?-- No, I don't.

So that if the men were assembling prior to going down underground what they would see on that screen would be - initially when they arrived there and assembled would be in respect to one Unor point; is that right? One Unor sampling point would be shown on the screen when they arrived there?-- No, all the points are shown on the screen.

All the points are shown on the screen?-- Yes.

At any given time?-- Yes.

Now, are the miners familiar with where the Unor points are, the men themselves?-- I don't know.

And what reading would the men look at in particular in order to determine whether there was - whether the 512 Panel, for instance, on this night was in the explosive range?-- I would say they would just be mainly looking at the CH4 levels.

CH4 levels?-- Yes.

One of the other - well, of course, the CH4 levels would be at that stage increasing after the sealing?-- That's correct.

Is that right? What about the CO level, would they have any regard to that? I am just asking you from your experience both as a miner and then as a deputy dealing with the miners. Would they have any regard to that?-- Probably not.

Okay. Does the monitor screen indicate to the men where the position would be on the graph, that's the Ellicott diagram?-- Can you just ask that again, please?

By looking at the monitor screen would the men themselves be able to ascertain what the position was on an Ellicott diagram in respect to the 512 Panel?-- I don't think so, no.

So, they wouldn't have the benefit, for instance, that you would have had earlier in the afternoon by looking at the

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Ellicott diagram?-- Not unless they asked somebody to plot it for them, no.

Okay. Righto. But, anyway, you say they would, at least, be able to look at the screen and see what the level of CH4 was?-- That's correct.

In 512 Panel?-- That's correct.

That would be apparent to them there the whole time?-- Yeah.

I think you also said they had had the benefit of information from the undermanager?-- That's correct.

Because you mentioned that before?-- Yes.

Who might talk about whether it was into the explosive range?-- Yes.

Do you know whether that did occur?-- No, I don't.

At the beginning of the night shift?-- No, no, I don't.

Okay. Well, now, the kind of information you have referred to, that would indicate to the men whether the panel was in the explosive range. That's one of the factors that you said would have a bearing on any decision they would make to go underground; is that so? That is whether the panel was into the explosive range?-- That's correct.

The other factor that you said would have a bearing was this question as to whether there was any source of ignition?-- That's correct.

Or any possible source of ignition -----?-- That's correct.

In the panel. Now, what information would the men have access to in order to form a view as to the existence of any source of ignition in the panel?-- Again only what is being told to them.

By whom?-- By the undermanager again.

And do you know if there was anything told to them about that aspect?-- No, I don't.

What kind of items of information would have a bearing on the men's judgment as to whether there was a possible source of ignition in the panel? What kind of things would they need to know?-- Can you just ask that again, please?

What kind of things would the men need to know in order to assess for themselves whether there was any likely source of ignition or even a possible source of ignition in the 512 Panel at the time that it was going into the explosive range?-- I think there is - they would have to be told that there was a heating down there or a possible heating.

What sort of things would indicate a possible heating?-- CO trends, haze, smoke haze, smells, tarry smells, petroleuy smell.

Do you know if the men were informed about, for instance, the CO make trend within the 512 Panel?-- No, I don't.

Was there any system for them to be informed of that on an up-to-date basis, and when I say "up-to-date" in this context I'm talking about the men who were going down for the night shift on the evening of Sunday, 7 August?-- Not that I'm aware of, no.

Well, of course, you understood from what you had been told earlier that there had been a smell and a haze in the 512 Panel on the Saturday and that's what led to the sealing of 512 being brought forward; is that right?-- That's correct.

Do you know if the men who were going down for the night shift - actually the Monday night shift, but beginning on Sunday night, do you know if those men were informed of the fact that there had been a smell, that's a tarry smell, and a haze on the Saturday?-- No, I don't.

Did you at any time receive information as to the existence of a smell in 512 Panel at points of time earlier than that Saturday? For instance, the Friday afternoon?-- No.

Were you ever told that?-- No.

Do you know if the men who were going down on the Sunday night were told that there had been a smell -----?-- No, I don't.

----- in 512 panel on the Friday afternoon?-- No, I don't.

Did you ever receive information that there had been a smell described as a slight tarry smell in the panel back in the middle of June?-- No, I was not aware of that.

Do you know if that information was disseminated generally amongst the men, and particularly those who ended up going down on the night of Sunday, 7 August?-- No, I don't.

Did you ever receive information that there had been a smell described as a benzene-type smell -----?-- No.

----- detected in 512 Panel on 24 June?-- No, no.

Again do you know if that was information that was disseminated to the miners, particularly those who had to decide whether they would go down the mine on 17 August?-- No.

So can I come back again to this question: what can you say then about any system in existence to ensure that the miners were fully informed of all the factors that they needed to know in order to decide whether they should go down the mine whilst 512 Panel went through its explosive range. Was there any system to make them aware of the relevant factors?-- No.

Now, you were telling us about the conversations that you were having with Mr Squires on the afternoon of the Sunday, shortly after you commenced your shift, and you said that he told you if there was any problem that he was to get in touch with George Mason and they would take it from there. You told me that by "problem", you understood that to mean if the men didn't want to go underground?-- That's what I assumed, yes.

That is whilst the panel was in the explosive range?-- That's correct.

Was there any further conversation about what might happen if the men didn't go underground or didn't want to go underground as between yourself and Mr Squires?-- He would - Michael just said that he hoped that he didn't have to do safety meetings for nine hours.

That's what he said to you?-- Yeah.

What was he referring to there - or what did you take him to be referring to there?-- Well, probably he was hoping that production would go on instead of going over to the training room and doing safety meetings and that for the shift.

So if the men didn't go underground for that shift the normal course would be that there would be safety meetings to keep them occupied?-- Yeah.

Is that what you are saying?-- Yeah.

That's what you understood him to be referring to. Okay. Now, your areas of responsibility during that shift were what?-- 512 sealed area, 1 North West, 6 South sump and the 4 South Level sump area.

What did that mean in practical terms? What things did you actually do during your shift?-- Check for gas, roof and sides, ventilation, and general safety of those areas.

There were three miners and a fitter in 1 North West?-- That's correct.

What were they doing?-- There was a fitter and his TA working on the continuous miner to get it ready for the night shift production and there was two miners reanchoring shuttle cars.

You went about your business during your shift; did your mind turn again to the position with the atmosphere behind the 512 seals?-- Yes, on several occasions, yes.

What did you do?-- Whenever I got a chance I'd replot an Ellicott diagram just to keep an eye on it, to see what the trend was doing.

How many times did you do that during your shift?-- As far as I can recall about six or seven times.

What did you find when you looked at that Ellicott diagram?-- That towards the end of the shift it was trending quicker

towards the explosive quadrant.

From your own experience were you able to make an estimate as to when you would expect it to go into the explosive range?-- At the rate it was going I predicted that it would go into the explosive range at approximately between 11.30 and midnight.

And about what time of night was it when you were able to make that prediction?-- That was towards the end of the shift on my last plotting.

In real time?-- Don't know.

Towards the end of your shift?-- Yeah.

When did your shift end?-- Somewhere around about nine, 9.30.

Did you go to the showers before you finished your shift?-- Yes, I did.

And did a Michael Shaw come and speak with you there?-- Yes, he did.

What about?-- Michael was concerned that there was a flashing light on the Unor screen and asked me was it okay, and I told him it was an alarm and that I had accepted it.

Can you explain what you mean by that?-- Well, when the gas levels go over the alarm setting there is an alarm comes up and you go into the computer and you accept that alarm, you acknowledge that alarm.

You acknowledge the alarm?-- Yes.

Had you done that earlier?-- Yes.

At some point?-- Yep.

You were authorised to accept an alarm?-- I don't know whether I was authorised or not.

Does it require any specific authority to accept it or can anybody do that? You are not aware?-- Not that I'm aware of, no.

You did whatever was necessary to stop the alarm noises; is that so? When the alarm comes does that ring a bell or blow a horn or do something like that?-- It normally has a siren on, but I never heard the siren during that afternoon shift.

You didn't?-- No.

How did you become aware of the fact the alarm had been tripped?-- Because there is a light. When the light is flashing it's been accepted, yeah.

Did it start flashing when you were there at some stage or did you come into the room and find that it was flashing?-- I can't recall.

That's asking a bit much at this point, is it?-- Yes.

Anyway, you didn't hear any siren?-- No.

You saw the flashing, you did what was necessary to, in effect, accept it, but the light continues to flash?-- As far as I'm aware, yes.

On the screen?-- Yep.

The levels at which the alarm goes off are fixed somehow within the computer system; is that right?-- Sorry, can you ask me that again?

The levels at which the alarm goes off are fixed within the computer system, are they?-- Yeah, but they can be changed, yes.

And at the beginning of your shift that afternoon had you in fact asked the shift electrician, Brian French, to make some adjustment to the levels for that 512 sealed area?-- Yes, I did.

Was that on the basis that since it had been sealed you would expect there to be an increase in methane concentration?-- That's correct.

As far as you knew he did that, he adjusted it?-- Yes.

After you had that conversation with Michael Shaw when you were in the showers at the end of your shift, did Michael Squires then come into the shower room?-- Yes, he did.

Did you have a conversation with him about the events of your shift?-- Yes, I did.

What conversation did you have, do you remember now?-- Michael had asked had the cars been anchored properly in the 1 North West, and I had said that they had been. I then expressed my concern about the trend going to the explosive range and he said that he was aware of it because he had just come from that area, from the Unor room, and I also mentioned to him about a 3 per cent of CH<sub>4</sub> against the belt road seal.

Just before I come to that, Michael Squires had been there when you arrived in the afternoon?-- Yes.

Did he stay throughout your shift or did he go away?-- He went home.

He was just finishing a shift when you arrived, was he?-- Yes.

Who was the senior official in charge after he left? Were you -----?-- It was the deputy's responsibility for the afternoon shift.

You were there as deputy on the afternoon shift and Michael

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Squires was coming back for the night shift?-- That's correct.

During your shift had you done some measurements of methane at the seals, the new seals in 512?-- That's correct.

What had you found?-- I found that the belt road seal was leaking up on the top left-hand corner.

Just indicate up there, if you would?-- Up in this corner up here, if I can stop shaking. Up in here.

You had measured methane there?-- Yeah, at 3 per cent.

Were you able to see what the problem might have been?-- I thought that the seal hadn't been plastered off properly because the ribs hasn't been plastered. I had expressed this concern to Michael and he said that he had thought the same, but prior to sealing the section right off he had gone inside and checked it and it had been plastered off from the inside.

The 3 per cent methane was more than you would expect to detect, of course, in that area; is that right?-- Yeah, it was only right up against the seal face, right up in the top left-hand corner.

Just the one corner?-- Yeah, and I had asked Michael could he get wind bags running to each of the seals to disperse this problem.

Did he say anything else about that?-- He said he'd get somebody on night shift to do it.

What time did you leave the mine?-- It was probably about 10 to 10.

At that time had the night shift deputies arrived?-- No, they hadn't.

Was that normal on the end of an afternoon shift, beginning of a night shift, that there wouldn't be a cross over of deputies, an overlap of the deputies?-- On Sunday afternoon, yes.

Did you do a deputies report?-- Yes.

For your shift?-- Yes, I did.

Who would you have given that to that night?-- Michael.

THE COURT ADJOURNED AT 11.25 A.M.

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THE COURT RESUMED AT 11.44 A.M.

JOHN WILLIAM THOMAS BLYTON, CONTINUING:

MR CLAIR: Thank you, Your Worship.

Now, Mr Blyton, the position was that in the course of your shift you were keen to check on the position of the Ellicott diagram so that you would know whether or not that 512 Panel was moving into the explosive range; is that right?-- That's correct.

That's what you have told us. Your concern was that you yourself were underground and, of course, there were other men underground too; is that right?-- That's correct.

And you were underground on and off various times through your shift, were you?-- Mmm.

Now, you told us there were the two aspects that were relevant to danger, that is, when the panel went into the explosive range and, secondly, this question of source of ignition. The first of those you - the information in relation to the first of those, I should say, you sought from the Ellicott diagram?-- That is correct.

That, in turn, was based on the samplings at the Unor points throughout the mine; is that right? The Ellicott diagram was plotted within the computer system on the basis of the samplings that were coming from the Unor tube bundle system?-- Yeah, from 512 area.

From 512 area?-- Yes.

Now, in relation to that, what information did you have as to the accuracy at any given time of the readings that were being used within the system for the production of that Ellicott diagram?-- I had no information on the accuracy of it.

Did you know, for instance, what time delays there were between the relevant sampling point behind the 512 seals and the receipt of the sample back at the Unor system on the surface?-- Times varied from different points, but what they were exactly, I couldn't say.

Perhaps the witness could see Exhibit 11, Your Worship.

While that is being obtained, on that Sunday there were some span gas tests done. Was that mentioned to you?-- No, it wasn't.

Well, we have been told that that document in front of you, Exhibit 11, records the results of span gas testing designed to produce some information as to the delays between receiving the sample at the Unor sampling point and the analysis of that

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sample on the surface. Now, for instance, if you have a look at that you will see in respect of the various points, monitor points, listed over on the left the delays that were found. The delays occur in the column over on the right. Now, point 16, for instance, you will see it recorded there as 85 minutes, although it's subsequently been adjusted to 73 minutes, it appears, from what's on the graph; do you see that?-- Yes, I do.

So that in fact there was over an hour's delay in the case of the sample taken from point 16 on the system to when it was analysed at the surface. Were you aware of that kind of delay?-- Not that long, no.

Well, you wouldn't have known yourself just how long the delay was then between the sampling point behind the seals and the results that were being plotted on the surface to produce the Ellicott diagram?-- No.

If you had known there was a lengthy delay like that, would that have been a matter of some concern to you?-- Yes.

Well, given that you tell us that at the end of your shift the Ellicott diagram was showing that the panel was just moving into the explosive range, or on the brink of moving into the explosive range; is that right?-- Yeah, yeah, it was on the edge, yep.

On the edge?-- Yeah.

Did you yourself advert to the fact that at that time the sample that was being used to produce that graph was perhaps in the order of an hour old?-- No, no, I didn't.

Okay. Now, another factor, of course, would be the position of the sampling point behind the seals in 512; is that right?-- Yep.

I mean, 512 was a big panel, not as big as some others, but, nevertheless, in terms of distance it might be, what, 400 metres long?-- Yeah, it was probably approximately 400 metres.

Okay. Well, would it be the case that the mixture of gases down the bottom of the panel might be quite different to the mixture of gases up the top of the panel?-- Possibly, yes.

So, to that extent when you are talking about knowledge as to when the panel is moving into the explosive range, would it be relevant to know just where the sample is being taken from?-- Yes, it would be.

Did you know where the sampling point was?-- No, I did not.

If, for instance, you had known that the sampling point was, I think we have been told, some 20 metres or thereabouts inbye of the seal at the top of the panel, would that have been a matter that would have had some bearing on your assessment of the reliability of the Ellicott diagram that you were looking



at on the Unor screen?-- Possibly.

Now, have you, in the course of your lengthy experience, had involvement with the sealing of panels, other panels?-- Yes, I have.

Extensive experience or limited experience?-- No, I've done a fair bit of it, yes.

Well, how many times perhaps is the only way to deal with it. I mean, hard to count now, or does that mean four or five times that you have been involved?-- Oh, I couldn't rightly say.

Fewer than 10, more than 10?-- Probably somewhere around about 10.

Okay. Drawing on your experience then in that area, what would you do yourself in order to determine - I mean, you have already told us what you did here in relation to trying to ascertain whether the mixture of gases in 512 was moving into the explosive range. You have told us that in that connection you looked at the Unor screen and the Ellicott diagram that was plotted there?-- Mmm.

Put that to one side. What would you do yourself to address the other aspect, that is, the existence, or likely existence, or possible existence of some source of ignition in the panel? What sort of things would you look for?-- Well, the main thing you are looking for is your - is the CO make of the panel.

In addition to that, what other things would you look for? I think you mentioned earlier in your evidence matters such as smell or a haze or -----?-- Yeah.

That sort of thing?-- Yeah.

Okay. Well now, I want to come to your reference then to the CO make. In that connection, at what point, in terms of the level of CO make, would you yourself begin to suspect that there is a heating in the panel?-- Yeah, well, first you have to know what the normal section CO make is and then you watch the trend of it, and from just reading experience, nought to 10 litres a minute there's no concern, from 10 to 20 litres a minute there is concern, and over 20 you have got problems.

Right. Well, now, in that range of 10 to 20, I take it, that any degree of concern would increase the further it was above 10 and the closer it was to 20?-- That's correct.

Is that right? In turn that might depend on what the natural CO make in the panel is?-- That's correct.

So, the trend is still important; is that so?-- That is so.

But independently of the trend is it the case that once you get up to an area somewhere closer to 20 that there would seem to be cause for concern anyway?-- Oh, yes.

Is that what you say?-- That is correct.

Okay. Well, how would you yourself go about monitoring the CO? Under 10 I suppose you wouldn't have too many problems?-- No.

You would do it with hand-held instruments?-- Hand-held instruments, yes.

Above 10 what would you do there?-- Still use hand-held - hand-held instruments because that's where you get your readings from and me personally, I would then take bag samples for the chromatograph.

Now, there was a chromatograph at Moura No 2?-- That's correct.

Were you trained in the use of the gas chromatograph?-- A few years ago I had some training, yes.

What was the extent of that?-- I was trained to start the chromatograph up and do fresh air span through it and have it ready for bag samples.

Right. And do you - are you still proficient at that?-- No, I am not.

You received some training in it. Did you ever get to improve that training or to use it?-- No, I did not.

So, you have lost the benefit of your training at this point or what is the position?-- Just recently, probably four weeks ago, I had the opportunity to hop back on the chromatograph for two days.

Right. Well, prior to that?-- No.

You wouldn't have been able to do it or you would have had some difficulty?-- I probably would have had a lot of difficulty.

A lot of difficulty. Okay. Well, now, why do you say that you would take bag samples and put them through the chromatograph?-- Because the chromatograph is more sensitive and can pick up the other gases that you can't detect with the hand-held - hand-held instruments.

What would you be looking for?-- The producing gases hydrogen and ethylene and propylene.

What would that indicate to you?-- That would indicate stages of heating.

Okay. Now, the position on the Sunday when you were there was that there had been, what, a CO graph - CO make graph that had been posted in the mine in relation to the 512 Panel on a weekly basis over the weeks leading up to this weekend, 7 August?-- Probably would have been, yes.

Did you take any notice of those make graphs on the wall?-- I hadn't seen one, no.

Did - had there been any information given to you, apart from the posting of graphs on the wall, in relation to the CO make level in 512?-- There was only on one instance where a concern was expressed over the CO make, but I think that was just a misreading of the air quantity which made the CO make higher.

A misreading of the air quantity?-- Yeah, they had to rectify it.

You weren't directly involved in that?-- No, I was not.

What about on Saturday, 6 August? Well, let me go back a bit. Were you aware of any practice that had been established whereby the CO make or, at least, all the measurements necessary to calculate the CO make in 512 were to be taken on every shift?-- No, I was not.

You weren't aware of that?-- No.

Now, on the Saturday, 6 August, there had been some calculations of CO make. Was there any discussion of those with you?-- No.

Could the witness see Exhibit 21, please, Your Worship?

You will see the document on the front of that exhibit is headed, "CO make, 512, Friday, 5 August '94 to 7 August '94." Do you see that one?-- Yes.

Now, I just want to take you to the third entry there which was at 12.45 a.m. on 6 August '94; do you see that?-- Yes.

Now, this was well before the panel was sealed; is that right? You understood the panel was sealed at about 1 a.m. on the 7th?-- Yes.

Mr Newton was the deputy?-- That's correct.

And if you read along that line you will see that the total make in litres per minute calculated on the basis of readings at that time was 18.94 litres per minute?-- Yes, that's correct.

Okay. Then the next reading there, 10.15 a.m., 6 August '94, that was the Saturday morning still?-- Yeah.

The reading taken by Mr Klease, and you will see that that was a reading of 21.04; do you see that?-- Yes, I do.

Now, they would appear to be what might be called spot readings as opposed to readings that were averaged back over a week?-- Yeah.

That is they represented the CO make at those times that they were taken?-- That's right.

Now, if you were made aware of those - well, first of all, were you made aware of those readings on CO make?-- No.

In 512 Panel?-- No, that's the first time I have seen this.

If you had been aware of those readings at those times on the Saturday, that's well before the actual commencement of the building of the seals in the remaining three roads on 512, would that have had any bearing on your assessment of things on the Sunday?-- Easy to say in hindsight.

I appreciate that?-- Yes, most definitely.

Well, you did mention before that - before you were aware of those readings, that you would be concerned and most concerned, I think you said, as a CO make level approached 20?-- Yes.

I think you answered quite enthusiastically that you would be most concerned at that level?-- Yes, that's right.

What do you say about these readings here against that background?-- I would be very concerned.

Okay. Now, do you know if that sort of information was made available to the miners who had to make that decision as to whether they went underground on that Sunday evening?-- I don't know.

Okay. Pardon me a moment, Your Worship. Thank you, Your Worship, I have no further questions. Thank you, Mr Blyton.

CROSS-EXAMINATION:

MR MacSPORRAN: You had experience at Kianga and Moura No 4 as well; is that so?-- That's correct.

And on those occasions after Kianga and after Moura No 4 had you smelt the products of combustion on those occasions?-- Only at No 4.

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And did that have a very distinct smell?-- The smell - it is a smell once you smelt it that you will never forget.

And apart from that experience have you had training in the effects of spontaneous combustion?-- A small amount.

Where did you get that?-- From the Mines Rescue Brigade.

Roughly how long ago was that?-- It is not a set course. It is something that is touched on all the time, where it just comes up in conversation or, "This is a refresher." It just - you talk about it all the time.

Have you had any training though as part of your position as a deputy at Moura No 2 in spontaneous combustion?-- No, I haven't.

I think you have mentioned the CO make is itself a factor you would take into account in determining whether or not there was combustion?-- That's correct.

Another factor would be a smell?-- That's correct.

And why is a smell a relevant factor to take into account when you are thinking about whether there is a spontaneous combustion?-- Well, a smell is one of your - is another one of your early warning signs.

Why is it, on your understanding, an early warning sign of spontaneous combustion?-- Because of the oxidation of coal. The coal is heating up which then gives off this tarry smell.

And, as you understand it, at about what temperature does the coal have to be to give off products that have this smell?-- Around about - I don't know, about 100 degrees C.

That information has come to you via your Mines Rescue training and general talks, hasn't it?-- Yes.

But no formal training as part of your deputy's role at No 2?-- No.

I may have missed it, but did you say you were aware of the fact that there were graphs of the CO make posted at No 2?-- There probably was, but I can't recall viewing one.

As a deputy going underground at No 2 would it have been relevant for you to have been told of the extent of the reportings of smells and other signs inside this panel?-- I think so, yes.

Did it surprise you that you didn't learn of any such reportings prior to that Sunday, 7 August, when you came on shift?-- Yes.

You now know, of course, there had been reportings back in June of a smell?-- So I have been told, yes.

But you knew nothing of that?-- I knew nothing of that.

XXN: MR MacSPORRAN

WIT: BLYTON J W T

And, of course, it is probably the case, isn't it, that a smell would be one of the more significant signs of a heating taking place?-- Yes.

And it would be fair to say that following the detection of such a smell you would expect there to be a very thorough and detailed investigation to established the source of such a smell?-- That is correct.

Because if it was a heating it could lead to a dangerous situation?-- That is correct.

Now, when a panel is sealed you always expect there to be a period where the coal continues to oxidise; is that so?-- That's right.

Because it is consuming the oxygen inside the panel which has been sealed?-- Yes.

And until all of that oxygen is consumed the oxidation process continues?-- That's right.

If there is a heating inside the panel at the time it is sealed it will continue to feed off the oxygen to keep the heating progressing?-- That is correct.

And if that is going on at the time the gases, being the methane, goes through the explosive range you have a dangerous situation?-- That is correct.

Now, it would be a sensible practice, would it not, to very closely monitor the CO make emitting from a panel leading up to its being sealed?-- Yes.

Again it's one of the factors you could look to to give you some early warning of a serious situation coming from within the panel?-- Yes.

One way you could do that, that is closely monitor the situation, would be to ask the deputies to, on every shift, take velocity readings, that's air velocity readings, CO parts per million readings and temperature readings?-- Yes, you could.

And if those readings were taken at a pre-determined position such as a ventilation station you would be able to very quickly, for every shift, calculate the CO make?-- Yes.

And having done that you could assess the trend of the CO make to see whether it was rising, falling, remaining stable or whatever?-- Yeah.

So it would be a sensible precaution, if you were concerned about what was going on inside 512 Panel, to take shift by shift readings in the process leading up to sealing?-- Yeah.

But they wouldn't be very useful, would they, those readings, unless you did the calculation to show you what the CO make was?-- That's right.

I take it from your responses to Mr Clair you weren't aware of any such procedure where there was a more closely monitored system of taking readings leading up to sealing?-- Not that I'm aware of, no.

Nothing was said to you on that Sunday you came on shift to indicate that practice had been in place for some time, that is increased vigilance with taking readings?-- That's correct.

Now, once you discovered why it was that the panel was being sealed a little earlier that weekend, you immediately wanted to look at the screen on the Unor system to look at the Ellicott diagram?-- That's correct.

That was going to tell you very quickly how the gasses inside the sealed panel were trending and whether or not they were approaching the explosive range?-- That's right.

You approached the undermanager on shift, Mr Squires, and asked him to go with you and bring up the screen?-- That's right.

Did he say anything or do anything to indicate to you that he had been aware of the state of that diagram prior to bringing it up on that occasion?-- Yeah, well, Michael had told me that it was still in the non-explosive range and at a slow trend.

So he led you to understand that he had been bringing up on the Unor screen the Ellicott plot?-- I assumed so, yes.

He then went with you and you both looked at it?-- That's correct.

You confirmed that that's exactly what was happening, that it was trending upwards although not at that stage inside the explosive range?-- That is correct.

Then you took the trouble during the course of your afternoon - was it afternoon shift?-- Afternoon shift, yes.

To bring that same diagram up, I think you said six or seven times?-- That's correct.

And again the trend was the same, although towards the end of your shift it was proceeding more quickly towards that explosive range?-- That's correct.

You queried Mr Squires as to what was going to happen when the position arose that it was in the explosive range and men were due to come on shift and go underground; is that so?-- Yeah, I asked Michael what was going to - what he was going to do, yes.

You were told that there had been a conversation between the undermanager, Mr Squires, and the superintendent, Mr Schaus, and that if a problem arose there was going to be a reporting to Mr Mason who would take it from there?-- That's correct.

In your experience was that the way these situations were normally handled? That is, if a problem arose it would be dealt with at that stage?-- I haven't been in the situation where it has occurred at the start of my shift.

Are you aware of any other situations where it has arisen in that context, at the start of a shift?-- Well, it's occurred somewhere along the line and the people haven't gone down the pit or they have been withdrawn from the mine or ----

There is no doubt, is there, that if concerns were raised by the men they wouldn't be forced underground?-- As far as I'm aware, yes.

But do you know whether it was left to the men to raise their concerns before the situation was dealt with?-- I really don't know.

Do you know, for instance, whether in a situation like this, that is that Sunday night, whether the practice would have been for the undermanager in charge of that shift to assemble the crew and tell them exactly what the position was, that the gases were expected to go through the explosive range on their shift?-- I assume that he would have, yes.

Why would you assume that that would be done?-- Because he's the undermanager in charge. That's his duty.



Why would it be his duty to tell the men that that was the situation before they went underground?-- Because he's in charge of those men.

Why would it be relevant to tell the men that that was the position? He knew about it, presumably he knew that was the situation, but why would he need to tell the men that?-- It would be to his advantage to tell the men in case there were any concerns that the men had.

So if he was to tell them, the men could then decide for themselves whether they had concerns about going underground?-- I assume that that's the way that it should happen, yes.

And perhaps unless they were told they might not have known?-- That's correct.

Now, as well as being able to tell when the mixture inside the sealed panel enters the explosive range you can do a rough calculation, can't you, to determine when it's going to come out of the explosive range?-- Can you just ask me that question again, please?

The gases within the sealed panel go through an explosive range, don't they?-- Yes.

The methane, that's about 5 to 15 per cent roughly?-- Yes.

You can tell by the plotting of the Ellicott diagram when it's going to enter the explosive range?-- Yeah, by its trend.

Can you tell by the same diagram by continual monitoring when it comes out of the explosive range?-- Yes.

But can you also do a calculation in advance to estimate roughly how long a panel will be in the explosive range?-- Not that I'm aware of.

With this panel, 512, there were ventilation surveys carried out, weren't there?-- I assume there was, yes.

And that determines, apart from CO make, it also determines methane make, doesn't it, that is the rate at which the panel is producing methane?-- Yes.

If you knew that rate and you had monitored that rate for some time and it was steady and you knew the size of the waste area behind the seals in the panel, you could roughly calculate perhaps how long the mixture may remain in the explosive range?-- I don't know.

Of course if you were able to calculate that you would have some way of knowing the period over which there may be a dangerous situation existing. In other words, how far it extended?-- Yeah, that's a bit hard to try and calculate because once you seal the area strange things can happen in behind a sealed area.

I think your evidence was that your practice would be and has been to continue to use the hand-held instrument to take CO readings?-- That's correct.

It's the case though, isn't it, that hand-held or Drager tubes were only ever intended to give a trend in terms of CO percentage?-- Yep.

They are not an instrument that you would rely upon for pinpoint accuracy as to a CO concentration?-- That's correct.

Do such other instruments exist that can give you an accurate read out of a CO concentration?-- Yes, they do.

What such instruments are they?-- There is a Sifor 2 which is not really a portable machine, and there is the -----

Multiwarn?-- Yeah, that's it, Multiwarn.

That an electronic instrument that has a digital print-out that you simply read out to determine the CO concentration?-- That's correct.

That's, as you understand it, a very accurate way of determining the CO level?-- Yes.

Now, Exhibit 21 which is still in front of you, I think, gives those readings for the early hours of Saturday morning, 6 August?-- Yep.

Those readings are 18.94 litres per minute and I think 21.02 -----?-- 21.04.

You have already told us that those readings, in your opinion, would have been cause for concern?-- That's correct.

And those readings appear to have been taken prior to the panel sealing commencing, is that so, or weren't you aware of when that started?-- I don't know when the sealing actually took place.

Just a couple of other matters, you were telling us about a concern you had at some stage with the design of the 512 Panel?-- That's correct.

One concern you had was the air entering, for instance, number 4 roadway would strike a large pillar and the airflow would be split and go either side of that pillar?-- That's correct.

Creating what I think you said were potential dead spots?-- That's correct.

You indicated on the map by pointing to it the area where you thought, I think, the dead spot or spots may be, and I think you pointed - or you said in evidence that the dead spot would be on the inbye side of the pillar, but I think you pointed to the outbye side. Can you just do that again for us so we can be clear about what you were pointing to?-- This area here which is the inbye side of the panel, there. This is the

outbye end, that's the inbye end of the section.

So the dead spots as you would perceive them would be on the inbye side of the pillars?-- That's correct.

As the other side where the air was initially caused to split its direction of travel?-- Yep.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: I take it, Mr Blyton, that you didn't work at all that weekend but for the Sunday afternoon shift?-- That is correct.

Are you aware that there was a practice or there seems to have been a practice whereby there was no undermanager on duty constantly over the weekend?-- Could you ask me that again, please?

Yes. Were you aware that there appears to have been a practice at No 2 Moura whereby there was no undermanager constantly on duty over the weekend?-- Yes, the undermanager was only on shift on Saturday day shift and Sunday day shift.

So then you have blank spots, for the afternoon shift?-- And the night shift, yes.

And then the undermanager comes back on duty late Sunday night for the Sunday night shift/Monday morning shift?-- That's correct.

Who is in charge in the absence of the undermanager?-- The people in charge are the deputies that are on shift.

Where is the manager, the underground mine superintendent, for instance, and the undermanager in charge on weekends?-- Where are they?

Yes?-- I don't know.

Where?-- I don't know.

Mr Mason and Mr Schaus, do they take the weekends off?-- Probably at home, I suppose.

I want to deal with your Mines Rescue experience briefly at the moment. You told, I think Mr Macsporrán or Mr Clair, that there was talk all the time at Mines Rescue about spontaneous combustion. Do you remember saying that?-- Yes, I do say it.

What did you talk about?-- Just talk about different things, different scenarios, how you deal with them problems.

Well, that just tells us nothing. Be a bit more specific at least in relation to a couple of occasions of discussion. Can you be no more specific than that?-- Well, we will - especially with team training you'll put a scenario on the table and then talk about what problems you could have with that scenario and how you could overcome them.

That's fine, but I want to know a couple of examples of the scenario that's put on the table?-- Couldn't tell you.

Who is in charge of all of this?-- Dave Kerr.

Will he be able to tell us about the scenarios?-- I don't know whether he could or not.

Are you able to give an explanation why you wouldn't have seen any graph, say in the deputies cabin, of CO make?-- No.

The only instance, I think you've told probably Mr Clair, of relevance in the 512 Panel was an instance of misreading an anemometer?-- That's correct.

That's what you were told, that there was a misreading of the instrument?-- That is correct.

Do you remember telling, I think probably Mr Clair, about your training - limited training some years ago on the gas chromatograph?-- Yes.

What were you actually trained up to do on the gas chromatograph at that time?-- As I said before, I was - just to start the machine up, put a fresh air span through ready for a bag sample.

Ready for a bag sample?-- That's correct.

But not beyond that?-- No.

So you had no knowledge, even when trained, how to perform any gas analyses?-- That is correct.

But recently you had four - some four weeks ago you had two days of training?-- That's correct.

Who arranged that? Who initiated that?-- Because -----

No, who?-- It just happened.

Things just don't happen?-- Things do just happen.

Did Mr Mason say, "Have some training on the gas chromatograph"?-- Not that I recall.

Did Mr Schaus?-- Not that I recall.

Did Mr Squires?-- Not that I recall.

Or any of the undermanagers?-- Not that I recall.

How did you come to get the two days' training?-- Because the people that were doing the training had to be called away for some reason, and because I had had a little knowledge of it earlier they said, "Well, you can come over and you can put the spans through.", and they showed me what to do, and if I was to run into any - if I had any problems I was then to ring SIMTARS in Ipswich and they would help me.

You've told us about some people, who were the people?-- Probably - I think it may have been Neil Tuffs and Mr Pattison, Des -----

The electrician?-- The electrician, yes.

Is what you are telling the Court that the deputies had to arrange this for themselves and the electrician?-- On this particular instance, yes.

011194 D.11 Turn 10 mkg (Warden's Crt)

Well, there is no other instance, is there?-- Not as far as I am aware.

And who arranged it when you had it in the first instance? Who told you to do it?-- The safety and training officer, Mr Bruce Danvers.

At the time?-- That's correct.

Would you just go to the board and turn one of those maps up, please, and there is a black Pentel pen. Just use the space underneath that, please. Down the other end there is a black Pentel-type pen?-- There is a what?

There is a pen. What I want you to do is to draw the four quadrants of Ellicott's diagram, please, and just put "E" for explosive and "NE" for not explosive. All right. When you first saw Ellicott's diagram on the screen on Sunday, 7 August, where, as best you can fix it now, was the point, the explosive point, where was it trending?-- Somewhere around here.

Just put a cross. Well, how many times during the day and before - about the time you were having your shower that night after that first time did you see Ellicott's diagram on the screen?-- How many times did I see it on the screen?

After the first time and before the last time?-- I don't know.

Well -----?-- Five or six.

Just please do your best and put an "X" where you saw it on the varying occasions after the first time?-- It was coming down something like this, trending down, and then towards the end of the shift the last two plots had straightened up more towards the explosive quadrant.

And the last occasion you saw it was around about the time you finished your shift, where was it then?-- Around - these are out of context here.

Well, try and put them into context, if you would. There is a rubber - down the bottom there is an eraser?-- The last one was probably over there.

All right. Just on the verge - please sit down again - of the explosive quadrant?-- Yep.

And some delay attached to that sample, which you don't know about the length of time?-- That is correct.

And the first cross, the one you first made, was that the one you observed with Mr Squires?-- Yes. That is as close as possible, yeah.

Yes, I am not holding you to that?-- Thank you.

Did you see Ellicott's diagram with Mr Squires before you left

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that shift that night?-- No, I did not.

But whilst you were showering he came in, as I understand your evidence?-- Yes.

And said that he knew where it was, the point on the Ellicott's diagram. Did you say that or not?-- That he knew?

Yes, that he knew for himself?-- Yeah, that's right.

There is something I don't understand about the Unor system. It's set to alarm; is that right?-- That's right.

At a certain reading?-- That's correct.

And when an alarm is accepted some button is pushed, is that right, or something is done to accept the alarm?-- That's correct.

What is done?-- You go through the procedures on the computer screen step by step.

All right. So that accepts the alarm, acknowledges the alarm?-- That's correct.

Before that is done, is there a red blip or dot coming up on the screen or some kind of thing?-- Yeah, in the column that the alarm is going off on, that reading is also flashing red.

Flashing red. So, when you accept the alarm, is it the case that the flashing red stops?-- Yeah, it then just stays as a - I think it just stays as a single red number.

But not flashing?-- But not flashing.

Does it give off a beep as well, a beeping sound?-- Yes.

The Maihak Unor system is fitted with another alarm, isn't it?-- Yeah, it sends off a siren when the alarm goes off, yes.

On any occasion have you heard that alarm go off? Say, in the period of four years before 7 August 1994, have you ever heard the siren go off?-- Yes, I have.

Was that fairly frequent?-- The only time I had heard it was when they were doing a gas span on the Unor itself.

On Sunday afternoon, 7 August, on any occasion did you hear the siren go off?-- No, I did not.

That simply means, does it not, that it was disconnected, turned off?-- Possibly.

It can mean nothing else, can it? If you weren't there, if you are underground, there was no-one to accept the alarm, the siren would go off?-- That's correct.

011194 D.11 Turn 10 mkg (Warden's Crt)

So, it must mean that the alarm siren -----?-- I think if the siren had have went off whilst I was underground, I think there was an electrician over in the workshop who could have came over and switched it off.

If it was on to start with?-- That's right.

Where was the switch to turn the siren off?-- I wouldn't have a clue.

The undermanager's office?-- I don't know.

At any time on your shift, Sunday 7 August, did you see either of Mr Mason or Mr Schaus at No 2 Moura?-- Not that I recall.

Excuse me for one moment.

I am looking at a document which is - you know an organisation called SIMTARS?-- Yes.

I am looking at a document which talks about alarm times when the Unor machine alarmed on the evening of 7 August, quarter past 8, 9 minutes past 10 and 28 minutes past 10. Page 32 of 80.



Just don't look at it for the moment. Mr Blyton, don't look at it at the moment. When did you come upstairs from being underground? You were underground on varying occasions, I take it?-- That's correct.

Throughout the afternoon?-- That's correct.

Can you give us an idea on how many occasions and for what approximate durations?-- Probably three occasions I would have been down the mine and the duration of the time I really - really can't tell.

Could it have been hours on each occasion or a couple of hours on each occasion?-- Yes, it could have been, yes.

And is it the case that you came upstairs underground - from underground in the mine towards the end of your shift?-- That's correct.

Because, you see, I ask you now to look at that document and you will see that there was an alarm not acknowledged at 8.15 p.m.?-- Where am I looking?

Well, there are several columns, look, "Location", "512 seal"?-- Yeah.

"Point 5"?-- Yeah.

That's the monitor point, obviously. "Alarm Time", "7th" - that's 7 August - and the time "8" - well, "20:15:39"; all right? And not acknowledged, next column, until 23 minutes past midnight, if that document is correct?-- So it appears.

So, you already said you probably were underground anyway, but if that document is correct the alarm is not acknowledged?-- That's correct.

And similarly underneath the 510 North return, which is monitoring point 18, it alarmed at 10 past - sorry, 9 minutes past 10, if that document is correct?-- Correct.

By which time you had gone home; is that right?-- That's correct.

And Mr Squires was on duty?-- That's correct.

And not acknowledged until 11 minutes past 12 - is it "12"? I am sorry, 12.23?-- That's right.

Similarly, point 5 again, it seems to have alarmed, if the document is correct, at 10.28?-- That's correct.

Long after you have gone?-- That's correct.

And whilst Mr Squires is undermanager?-- That's correct.

And not acknowledged until 23 minutes past midnight?-- That's correct.

And similarly the final one, point 5 again, alarms at 10.55?-- That's correct.

And not acknowledged until 23 minutes past midnight?-- That's correct.

All right. Do you know how to read a graph, a trend on a graph?-- Yeah, I probably do, yes.

All right. It is not an examination. I would just like you to look at this document. Before you do -----

I only have one copy, it has come to us very recently, I am sorry.

On the left-hand side there is the litres per minute make of carbon monoxide, CO. Across the bottom are varying - a daily interval axis commencing on 28 July, 29, 30, through to 6 August and then from 6 August to a time which I will tell you about. Just hold it up for me, which is a reverse. I only ask you to look at the top line. There are two graphs - sorry, there are two trends on the bottom?-- Yeah.

Two lines?-- Yeah.

I am asking you to look at the higher of the two?-- Okay.

Now, what does that indicate to you over the period of time involved, assuming that the document is correct?-- Looking at this trend here you have a slight increase in - of a general trend until you get to 6 - probably 5/8, but along that trend you have the ups and downs. Sometimes it peaks and drops back down. Yeah.

Then it peaks?-- Yeah.

Now, I will ask you to assume as well that the peak - the peak of the peak is 8.30 p.m. on Saturday night, 6 August?-- Yeah.

Now, if that document is correct and adding that to information that Mr Clair and Mr MacSporran have asked you about, what does that tell you in terms of the situation within the sealed area - I am sorry, within the 512 panel?-- You have got big problems.

And it is not sealed by then. Assume it is not sealed until some hours later; finally sealed, that is?-- That's correct.

What do you call big problems?-- Very advanced stages of heating and with those litres a minute you could even have a small fire.

I will tender that, I think, for identification at the moment, and have copies made over lunchtime.

Was there some form of argument between you and Mr Squires in the concluding stage of your shift - I don't know mean a vitriolic or bitter dispute - as to whether the men should go underground?-- Definitely not.

In any case, you did raise the question with him and he had seen for himself throughout the day the situation on Ellicott's diagram?-- As far as I assumed, yes.

Not as far as you assumed, you were there with him when one was taken?-- Yes.

And he told you words to the effect, as I understand you, that, well, if the men didn't want to go underground they would have a discussion - that's Mr Mason and Mr Squires would have a discussion - as to what was then to be done; is that the way I understand your evidence?-- No, what - he said if there was any problem he was to get in touch with George Mason and they would take it from there.

And the occasion of your last look at the Ellicott's diagram was, what, 9.30 p.m., around about?-- Around about, yeah, somewhere.

When you had that conversation with Mr Squires was that in the shower room at the end of your shift? Where was the conversation?-- Which conversation?

The last conversation - well, the conversation you had with him when he said that he knew about the position on the diagram?-- Yes, I was in the shower at the time.

021194 D.11 Turn 12 dfc (Warden's Crt)

Did you as well tell him the readings on the machine, the Unor?-- I can't recall whether I did or not.

Do you recall the readings yourself?-- I don't - I recall some readings, but I don't know whether they would be accurate or whether they are the actual readings or -----

Just don't guess?-- Pardon?

I said don't guess. Do you not now remember what they were?-- I recall some readings, but I don't know whether they were actually the last readings or -----

What are the readings you recall?-- About 130 ppm -----

Of CO?-- Of CO. Around about 4.3, 4.5 CH4 and somewhere around 18.2 oxygen.

Well, you can't say that that was your last observation. It might have been before 9.30 or so that you saw those?-- Well, I can't really recall when those readings - because for the next fortnight all I did was take gas readings of the mine, and -----

When did you detect the 3 per cent methane leaking from the seal?-- In the top left-hand corner.

But when during the afternoon shift?-- On my first and second inspections of that area.

What did you do in terms of determining where it was coming from or how it was leaking?-- You determine where it's coming from with the instrument.

So you just run the instrument around like that, do you, and you pick it up from -----?-- Yeah.

Did you have a view as to where it was coming from, where approximately in or around that seal?-- Yeah, somewhere on the left-hand side, probably about half-way up.

Not at the top?-- Not right at the top, no.

If I just might go back to when you first came on, your statement says, "Michael Squires said they had a smell in 512 top return on Friday and at a later inspection the smell was stronger and he could see a haze."?-- That's correct.

Did you understand from him that he had both smelled and saw a haze?-- That's correct.

Did he tell you that that was the reason why the decision was made to seal as quickly as possible?-- As far as I know, yes.

Your Worship, would it be a convenient time? I want to turn to some other matters.

WARDEN: If that's convenient, yes.

021194 D.11 Turn 12 dfc (Warden's Crt)

MR MARTIN: Thank you.

WARDEN: We will take the lunch adjournment and resume at 2.15, please.

THE COURT ADJOURNED AT 12.54 P.M. UNTIL 2.15 P.M.

021194 D.11 Turn 13 mkg (Warden's Crt)

THE COURT RESUMED AT 2.16 P.M.

JOHN WILLIAM THOMAS BLYTON, CONTINUING:

WARDEN: Before you start, Mr Martin, that last graph wasn't formally put in. We will mark that Exhibit G for identification.

MARKED "G" FOR IDENTIFICATION

MR MARTIN: Thank you. Mr Blyton has prepared a pictorial of what appears on the board. I tender that.

WARDEN: I will make that Exhibit 86.

ADMITTED AND MARKED "EXHIBIT 86"

MR MARTIN: Mr Blyton, do you know of a CO, CO2 ratio?--  
Yes.

If I showed you some graphs of the CO, CO2 ratio would it mean anything to you? I don't want to waste time doing it if it if you don't -----?-- No, not really.

You told either Mr MacSporran or Mr Clair that you inspected down at cut-through 13 on one occasion at least and perhaps more; do you recall that?-- Yes, I do remember.

And the stoppings at the end of the panel between the pillars, you said you observed them. Did you observe them to be open or closed when you were there?-- Closed.

Was that on one or more than one occasion?-- On the one occasion that I can remember.

And you told one of the gentlemen I have mentioned that loose coal was left, in essence, at the bottom of a ramp; is that what you were saying?-- Yes.

And, of course, the miner, continuous miner, has a spray apparatus to keep down dust?-- That's correct.

So, is it the case then that the loose coal left would be wet?-- Not necessarily.

But some probably wet?-- Probably a little bit on the surface of it, yes.

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Could I just show you a production deputies certificate - sorry, report - 3959 dated 3 June 1994 for Friday night shift and bearing your signature? Would you identify it, please?-- Yes, that's my report.

In your remarks section or the comments section you say something about productivity, you were supposed to better productivity, not slow it down, with reference to the mining technique that was operating at the time?-- That's correct.

What did you intend to convey by that, not in terms of the mining technique, but in relation to productivity?-- Well, what I was saying there was that the - it was slowing us down by the wheeling of where the cars had to wheel so that we could get that coal on that one sequence, and I felt that we were spending too much time in that one sequence.

What I am really putting to you is: the words you chose were that you were supposed to better productivity, improve it. Is that what you were conveying?-- Yeah.

Well, what I want to know is there was pressure on all of the time, wasn't there, for production from management?-- I don't know about pressure all the time.

Pressure then, pressure for production?-- Yeah, I suppose so.

Did you ever see a probeye used at No 2 Moura?-- No.

Do you know whether a probeye was ever used for detection of heating at No 2 Moura?-- Yes, there was.

Do you know when?-- I don't know the year, but I know the area that it was used in.

Was that 5 North?-- It was in the 5 North sealed area, yes.

By the way, the crew that you had on duty on the afternoon of 7 August, did they come to the surface with you finally at about 9.30 or so that night?-- No, none of the crew travelled with me because I had so many sections to do. They had their own transport. They came to the surface prior to me finishing.

Prior to you coming up?-- Yes.

Is it the case when you had that conversation with Mr Squires on the evening of 7 August that he wasn't prepared to make a decision about whether the men should go underground or not and that was to be left to Mr Mason? Is that the effect of - was that discussed? Did he say anything like that to you?-- No, all he said was that if there was a problem, he was to get in touch with George Mason and they would take it from there.

What do you understand sweating to be a sign of in an underground mine, coal mine?-- Sweating of the coal?

021194 D.11 Turn 13 mkg (Warden's Crt)

Sweating generally?-- Sweating is the early stages of spontaneous combustion.

Where does one observe that usually?-- Wherever the spontaneous combustion is.

All right, but on what?-- On the sides or the roof.

Roof bolts, straps?-- Yeah, and on the roof, yep.

Do you recall an occasion when there was a meeting between yourself, Mr Ziebell and Mr Mason in relation to the seals?-- Yes, I do.

Are they the Tecrete seals?-- Pardon?

Are we talking about the Tecrete seals?-- Yes, we are.

When was that?-- That was at the start of the extraction of 512.

All right. What was raised? Who raised what? Did you raise a concern?-- No, George Ziebell had raised a concern and asked me would I accompany him to see George Mason.

What took place? What was discussed? What was the concern?-- The concern was that the - that there was no equipment available at the seals for fast sealing and the time span that it would take to do the final sealing.

All right. Was anything done in consequence of that?-- There was a few ideas brandished around, but, to my knowledge, I don't think any of them were trialled.

What do you understand Graham's Ratio to do? Was it a measure of a heating or was it a measure of the intensity of the fire, can you tell us?-- Graham's Ratio determines whether there is a heating or a fire.

Or a fire?-- Yeah.

I would ask you to assume that when you came on shift on Sunday, 7 August at 2.45 p.m. or thereabouts, from sample point 5 behind the seals that Graham's ratio was 62.6. Would you assume that? That's when you came on shift. I also ask you to assume that approximately six hours earlier it was 47.6. Are you following me?-- Mmm.

And at 9.40 p.m. that night, at the approximate time you were in the shower room, it was in the order of 78.2. What does that tell you?-- If my memory is correct, I'd say that there was a fire there.

All right. What would it tell you in relation to the Ellicott diagram?-- It would - in relation to Ellicott's - where it was plotted?

At about the same time that evening, about 9.30 or so?-- That there was grave concern.

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Particularly if the trend on the Ellicott diagram continued, within an hour or two, on your calculation, it would be in the explosive range?-- That's correct.

Is it the case you left school in about 1969 in grade 10?-- That's correct.

What did you do after leaving school? Dozens of things?-- Several jobs, yes.

All of a manual kind or what?-- At one stage I was a bar manager at the local hotel.

When you first went underground what induction, if any, did you get as a miner, when you first went underground?-- "This is a cap lamp, this is how you turn it off and on.", helmet, safety boots and went down the mine with an experienced miner.

Then you did a deputies' course subsequently, and was that a period of about 20 weeks with two sessions per week of three hours each?-- No.

What was it then?-- I was tutored by Dave Kerr for two hours a week for - I think it run for about approximately 13 weeks.

Did you ever have any formal training on the Unor?-- No.

Who taught you what you knew about that?-- I was just shown on several occasions by the leading-hand electrician when I was on night shift.

What did that training - what did it impart to you? What knowledge did it give you? Was it anything other than the most basic of knowledge?-- It was only the basic knowledge how to bring up the graphs.

Since your deputy course what, if any, courses of instruction have you ever been given, particularly in relation to spontaneous combustion?-- Only with what I had learnt at Mines Rescue.

I beg your pardon?-- Only with what I had learnt at Mines Rescue.

All right, but not by your employer?-- No.

In relation to any other course of training do you remember any, from your employer?-- Any training course?

Mmm?-- Yes, I went away on a train-the-trainer course.

Train-the-trainer course?-- Yes, and I had also done, I think it was a three day interpersonal relationship course as well.

Have you ever seen a spontaneous combustion book called - which is red in colour? Have you ever seen a red book on spontaneous combustion?-- The little handbook?

Yes?-- Yes.

When did you see that? Were you given one or did you just see it some time?-- No, I was given one.

When? Your best guess?-- '78.

And what about a blue book on the same subject?-- Yes, I have seen one of those.

Were you given one of those?-- Yes, I was given one of those.

When?-- I can't say when I was given one of those.

Before or after you got the red book?-- Pardon?

Before or after you got the red book?-- After I got the red book.

But many years ago?-- Yes.

Did you have any occasion to refer to either of those books since you received them?-- Yes, I have.

When? When was the last time before 7 August?-- Probably just prior to the Mines Rescue competition last year.

Have you ever seen a book by Mr Strang and Mr Mackenzie-Wood? I will show it to you, both of them. Have you ever seen either of those anywhere?-- Yes, I have.

Where?-- This one I -----

The glossy cover?-- I refer to it a lot.

Where? Do you have one?-- I have my own personal one, yes.

Did you buy it?-- I did not.

Was it given to you?-- It was given to me by the Mines Rescue Station at Moura.

Not given to you, however, by your employer?-- No.

What about the other one?-- I have seen it on the table, yes.

Sorry, what table?-- At the Mines Rescue Station.

What about in any office of Mr Mason or Schaus?-- Not that I can recall.

Do you know the organisation SIMTARS?-- Yes.

Do you know basically what it's set up to do, or do you not know?-- My understanding of SIMTARS is that they break down the gas readings and - I am just trying to think of the words here.

Perhaps I can help you a little. Do you know that if there is any kind of problem at all in interpreting an analysis on the gas chromatograph, that that can be instantaneously transmitted, the sample or the sample results, to a 24-hour-a-day scientist at SIMTARS?-- That is correct.

Who can immediately advise. Do you know that or not?-- I didn't know that they would advise, but yes.

021194 D.11 Turn 14 gc (Warden's Crt)

And the present - I am sorry, the gas chromatograph present by 7 August, was that a newer machine than the one that was first there?-- Yes.

Can you tell us when the new machine arrived?-- No, I couldn't.

Do you know of any occasion when the gas chromatograph was used at Moura No 2 other than for the span gas testing?-- No, I don't.

You have told us about the probeye so I won't bother with that. I think, if I remember your evidence correctly, in relation to an incubation period for coal - I withdraw that and I will start again. Is it the case that comparison of one panel with another panel in relation to the incubation period is quite useful because of the host of variables involved?-- It could be, yes.

Could I suggest to you that the principal feature of spontaneous combustion is that it has that capacity to do it? That's the principal factor that must be borne in mind, if it has happened once it certainly has the capacity to do it again?-- That is correct.

And the only safe way and fail-safe system of detecting what is happening in a mine atmosphere is by instrumentation?-- Yes.

And, more particularly, by gas analysis either on the Unor or chromatograph?-- That's right.

On the occasions, which were limited, of course, when you were in 512 did you notice much roof fall?-- There was one fall - there was one fall in there that I hadn't seen, but - had seen when it was on the ground, yeah.

Where approximately within the panel was that? You will have to read it out because my vision doesn't quite travel that far. Use the pointer by all means so everybody can see you?-- It was somewhere in this area here.

Can you just identify that for us, please?-- Around about 10 cross-cut No 5 heading.

Where were you, remind me, please, in about April 1986? Were you at Moura No 4 or No 2?-- April '86?

About then?-- I was at No 4.

Was Mr Kramer the overall manager then or not?-- Of No 4?

Does each of No 2 and No 4 have separate men?-- Yes, they did.

Mr Kramer was obviously the manager at No 2, was he, at that time?-- I think he was over at No 2, not at No 4.

Who makes a decision, do you know, in a mine - more

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particularly at No 2 - as to the location of the final inbye monitor point after an area is sealed? Who makes that decision?-- I presume the management.

You don't - do you know for certain?-- No, I don't.

Have you ever been instructed by anybody to place a final seal in a panel - sorry, a final monitoring point behind a seal in a panel?-- No.

Have you observed a situation where an undermanager might be on duty from afternoon shift Friday through until 6 a.m. or so on Monday morning with the occasional odd break when he leaves the mine?-- When we used to produce on a Friday night an undermanager used to be present, yes.

What if there was no production?-- Pardon?

What if there was no production?-- The shift used to be run by the shift deputies.

What was your practice in relation to reading a Drager for CO? Where in relation to the end of the stain did you take your readings?-- To the furthest part of the stain down the tube, which was a recommended practice.

Recommended by whom?-- By Drager.

Have you ever seen a panel inertisized with nitrogen?-- Only during the '86 disaster.

Only during or after it?-- After the '86, yes.

Do you know anything about what oxides of nitrogen, if tested, tell you?-- What do you mean "if tested"?

Well, if determined by analysis, what it would tell you?-- No.

Do you know that oxides of nitrogen do not come from coal?-- Yes.

But can come from diesel?-- That's correct.

So, if one were concerned about a diesel - about a haze and whether it was diesel or not, that would be readily determinable by gas analysis?-- That's right.

I will just tender as a separate document, Your Worship, that page of SIMTARS report which was page 32.

WARDEN: That will be Exhibit 87.

ADMITTED AND MARKED "EXHIBIT 87"

MR MARTIN: Thank you, Your Worship. Before Mr Morrison starts can I tender this certificate, number 3959? It is probably the 14th time it has gone in, but I will tender it.

WARDEN: Exhibit 88.

ADMITTED AND MARKED "EXHIBIT 88"

CROSS-EXAMINATION:

MR MORRISON: You had been spending a considerable amount of time doing the Work Model in recent years?-- That's correct.

Upwards of 18 months, thereabouts, mostly on the Work Model?-- That's correct.

Which naturally limited your time down below?-- That is correct.

With the result that whilst you tried to keep up with your occasions below they were much more limited than they would have been had you been a normal production deputy?-- Just ask that again, please?

Even though you tried to keep up your time down below, down in the pit, even though you tried to keep that up, you were able to only do that on a limited basis compared to what you would have done if you had been a normal production deputy?-- That's correct.

The result of all that is that your occasions to really view 512 were pretty limited too?-- That's correct.

In fact, I might just ask you to have a look at some documents, please, and we will go through them together. I think if you pull them out and have a quick look at the signature on each of them you will be able to confirm for me that each one consists of a report by you in relation to 512. I think there might be one split report?-- Yes, they are mine.

Can we just have a look at them? I will read out, as I read them to you, the report number which is in the top right-hand. I am also going to read another number which is simply a document reference for the Inquiry. I need you to verify only the report number and things of that nature. The first is 1796 for 10 April Sunday day shift; is that correct?-- That's correct.

Document 174H. Now, on that occasion it is pre-extraction. Extraction didn't start until about 29 April so this is pre-extraction?-- Yeah.

021194 D.11 Turn 14 gc (Warden's Crt)

And on each occasion of the inspection your comment on the ventilation was that it was adequate?-- That's correct.

Could you turn the page, please. The next one in time is 3028 for 21 April, Thursday night shift. Again still pre-extraction; is that right?-- Yes.

It is document 174I. Again the description of ventilation on each occasion of the inspection was adequate?-- That's correct.

The next in time is 10 May 1994, 3086, a Tuesday night shift and at this stage it is in extraction; it was a production shift; is that right?-- That's correct.

And it is document 174J. On each occasion of inspection at that date, that being a week or so into extraction, the description by you of the ventilation on each occasion was good?-- That's correct.

The next in time when you were next in 512 as a deputy is 12 May 1994, report 3092, document 174J. That's a Thursday night shift. Non-production, section was down for maintenance?-- That's correct.

But on the occasion of your two inspections on that day the ventilation was described by you as good?-- That is correct.

Then 23 May 1994 is the next one, 3926, document 174K, a Monday night shift, non-production, the fitters were working on the miner?-- By the looks of this report I had filled out the report and then I had been relieved by Bob Newton.

This is the split report?-- Yeah.

So, yours is the first -----?-- No, neither of those are mine.

I see. None of that report is yours?-- No.

I see. Some part of it must be though because you have certainly put your signature on it. Are the headings at the top in your writing, perhaps?-- Yes.

Then inspection commenced 10.30 p.m., that's yours too?-- Yes. I started going down the section and -----

Then Bob Newton headed you off?-- Yeah.

We will leave that one to one side. The next one then in time is 25 May '94, 3932, document 174J. It is a Wednesday night shift. This was a production shift, as we can see?-- Yes.

And on the first occasion of inspection you described the ventilation as good and on the second adequate?-- Yes.

The next in time, if you turn the page, is 2 June, 3956. I think this has a dual reference, document 8B and document 45. I am sorry, I am told one is the original and one is the

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carbon, that explains that. It is the Thursday night shift, production again?-- Yes.

And the description on each occasion of inspection by you on that date of the ventilation was that it was adequate throughout the section?-- That's correct.

Then the next day, 3 June, you were back on the Friday night shift. That is now Exhibit 88, this document. It was the one you were asked to look at a minute ago, document 3959, part of document 45. That also was a production shift?-- That's correct.

Ventilation described on each occasion of inspection as adequate?-- That's correct.

And in the general comments on the first inspection is the one that Mr Martin took you to, about your comments on productivity?-- That's right, yes.

Your complaint, or at least the point you were bringing out at that stage, was the way the mining sequence was set up. You were doing the four pillar wheel?-- That's right.

Which seemed an unnecessary distance involving unnecessary time, could have been done better in your view?-- Yes, that's correct.

That's the only complaint you had about that aspect?-- That's right.

They were, in fact, taking too much distance and too much time for the wheel to be at the boot end?-- That's correct.

Now, if you turn the page you will come to the next in time when you were in that section, 5 June, report 3964, from document 45, a Sunday night shift. This is non-production?-- That's correct.

Only one occasion of inspecting because there was stone dusting going on on the other occasion?-- That's correct.

On that one occasion the ventilation was described as good by you?-- That is correct.

And the next and last is for 7 August '94, 3780, from document 24. That's a Sunday afternoon shift, as we have been hearing, and at that point in time extraction had been completed and you did not investigate down into the section by way of inspection?-- No, you couldn't.

No. I am simply establishing that you didn't. The appellation at that stage was ventilation, so far as you could see, was good?-- That's correct.

Now, they are all your deputies reports for 512?-- That is correct.

I tender that bundle. Perhaps I should - just let me think.



021194 D.11 Turn 14 gc (Warden's Crt)

I will leave in the split report. We know what the position with that one was. I tender the bundle.

WARDEN: I will make it Exhibit 89.

ADMITTED AND MARKED "EXHIBIT 89"

MR MORRISON: I might just indicate the reason I am leaving it in is it does bear some of the man's writing and his signature.

Now, having seen that run through, there were, in fact, only a couple of occasions when you were a deputy in 512 on production?-- That's right.

In none of those reports have you noted the fact of or any concern about dead spots behind the large pillars; is that right?-- That's correct.

Now, you hadn't been, from those reports, in the 512 Panel between 5 June and August. Were you on outbye duties in that time? The last two reports span 5 June to 7 August?-- I was -----

I think you might have been on roadways, perhaps? To the extent you went down you might have been on roadways in the period between 5 June and 7 August?-- Roadways or Work Models or other sections.

Now, the practice at Moura No 2, in your experience at least, and probably at other mines as well such as number 4 was that there would be quite a deal of exchange of information from shift to shift, deputy to deputy, undermanager to undermanager, even men to men?-- Yes.

That was a usual and routine thing?-- Yes.

Particularly as a production deputy coming on to relieve a production deputy going off it was an expected thing in the sense that you as a deputy coming on would expect to get a rundown on the section from the guy going out?-- That is correct.

And likewise as an outgoing deputy at the end of your shift you would be expecting to give a rundown to the next guy coming on?-- That is correct.

And so from shift to shift there was, as a matter of routine and a matter of practise, quite an exchange of information about the status of the section, features that had been occurring and that sort of thing?-- During the production cycle when you had your change over at the face, yes.

Particularly with a hot seat change because you are down there effectively at the crib room?-- That's correct.

This exchange would be going on while one deputy probably finished his report at the book at the crib room and then took it up?-- No, you didn't take it up, you just took your report up.

The outgoing deputy would finish his report and take it up?-- Yep.

You mentioned early on in relation to this panel that you had a conversation with a chap from ACIRL about some concerns you had for the design of the panel?-- That's correct.

Was this after the design had been developed or before or during development perhaps?-- This was during the time when we had an assessment on the panel, on the extraction assessment.

Were you involved in the risk assessment yourself?-- No, I was not.

But it was during that time?-- Yes.

Do you recall the man's name as O'Beirne or perhaps Madden? You can't recall the name?-- No.

Nor can you recall the response ACIRL gave you when you raised such concerns as you had?-- That's correct.

I presume your concerns were in relation to the feature that you mentioned earlier, perceived dead spots and spontaneous combustion?-- That's correct.

You specifically raised them with the ACIRL person?-- Yes.

At the time the risk assessment was either under way or being worked out?-- Yeah.

Can you recall approximately when that was?-- No, I can't.

You mentioned a union meeting that Sunday, 7 August; that was a regular thing, the union meeting, wasn't it?-- It was a monthly thing, yes.

Well attended? Somewhere between 70 and 100 people there?-- Yes.

At that meeting George Ziebell was the person who gave a report in relation to 512 and the sealing?-- Yes.

And I think you said that what he had revealed to the assembled meeting was that 512 had been sealed that morning?-- That's right.

And it had been sealed because there was a concern about the panel?-- That's right.

And it had been sealed off earlier than anticipated?-- That's correct.

You don't recall that he was identifying what those concerns were?-- No.

He could, but it may simply be the case that you can't remember it?-- I don't think that he did say that other than what I've said.

Now, there were people at the meeting who had in fact been on the sealing process, weren't there?-- I don't know.

Did anyone speak up at the meeting and voice any view about whether the men should be working down the pit?-- No.

Did Ziebell raise it?-- No.

There were persons at the meeting who were check inspectors?-- I don't know.

Quite apart from people not speaking up and voicing any concern about the men working down the pit it would seem, from what you say, equally no-one spoke up and said, "Hang on a second, tell me about these concerns. Give me some more information." No-one sought that?-- No.

Michael Squires, when you went to the mine on Sunday, was going off shift; is that right?-- That's correct.

And you and he spoke and exchanged some information about the status of the mine?-- That's correct.

Can you recall when it was you arrived? I know you've said something in the statement, but have you got a memory of the

time at which you arrived at the mine?-- Probably between 20 and 25 to three.

Is that your normal time of arrival?-- Yes.

When you arrived at the mine that day did you follow your usual routine?-- Yes.

Can you just tell me what that routine would entail you doing on arrival at the mine?-- Does this include getting undressed and getting dressed?

I don't wish to know those details particularly, but you can just describe it. You get out of your car -----?-- Yeah, go into the clean side, get undressed, go to the dirty side, put your work clothes on, go down to the lamp room, put on me cap lamp and self-rescuer. I personally usually check the Unor screen and that's where Michael was standing, just outside the Unor screen, and that's when I was talking to him.

Let's just pause there for a moment. That routine of arriving, getting dressed and so forth wouldn't take very long normally?-- Not normally.

And then you met him at the Unor screen. Did you look at the Unor screen yourself?-- Yes, I - no, because I talked straight to Michael because he was standing there.

You were in the Unor room though?-- No, we were outside.

At the start point?-- Yep.

Now, can you recall what the screen was showing at that point?-- No, I can't.

Can you recall whether he made any comment about what the screen was showing at that point in time?-- No, I can't.

If your usual routine was to look at the screen do you think you may have done that and just can't recall precisely now doing it?-- I don't know. I probably glanced at it, but I asked Michael straight away why they had sealed off earlier.

You were interested in hearing the answer to that question because you had been given so little information at the union meeting about why?-- That's correct.

He gave you an answer about that. Was there any conversation after he gave you that answer? Did you talk about other things, status of section, where men were being deployed, that sort of thing?-- Yeah, Michael had told me where the men were going, what they were going to do.

And which section he wanted you to look after?-- He said, "The men are going to the 1 North West and when they finish there they will go over the 512 section and start tidying up and moving the equipment over to the 4 South Level prep seal sites."

So at that point you knew that you would certainly be going down at some stage to 512?-- That's correct.

And that other men would be working down at 512 as well?-- That's correct.

Even if it was only to remove equipment and so forth?-- That's right.

You weren't the only deputy on shift at that point, were you?-- That is correct.

Who was the other one?-- Rod Helander.

Which sections was he detailed to look after? Is it effectively the balance of the mine from yours?-- That's right. 510 and 5 South I think Rod was going to look after.

There wasn't a third deputy, there were only the two?-- Only the two of us.

Was Helander there when you were speaking to Squires?-- Not that I can recall.

Were you speaking to Helander before the shift started?-- No, I was not.

So the conversation with Squires, that was a conversation confined to a time when you were standing around the start point near the Unor screen?-- That's correct.

Which in its usual fashion was facing out so people could see it?-- That is correct.

And you can't recall - I don't mean the figures, but you can't recall whether it was showing lines of figures as opposed to graphs or an Ellicott diagram?-- It was lines of figures because when we went around to the Unor room those lines of figures were still up.

When did you go around to the Unor room?-- As soon as we finished talking.

And what did you do that for?-- To bring up the Ellicott diagram.

You asked Squires to bring it up, and went around for that purpose?-- That is correct.

He swung the screen inwards?-- That's correct.

And brought up the Ellicott diagram?-- Yes.

And you certainly looked at it yourself then?-- Yes.

To make your own assessment?-- That is correct.

Do I understand you correctly to indicate that effectively your assessment of the screen coincided with what he had said

about it, Squires?-- That's correct, yes.

Now, in the process of bringing up the Ellicott diagram did you notice what was on the screen before that?-- No, I did not.

There were lines of figures certainly?-- Yeah.

You didn't pause to look at the lines of figures?-- No, I did not.

Or whether any of those were red?-- Can't recall.

Having had your view of the Ellicott diagram you then had a conversation about what Squires' view was as to when it might go into the explosive range, or was that earlier?-- That was before we went to the room, yes.

Squires gave you some idea of his expectation and gave you a response to your question about, "What are you going to do at that point?", that is to say, when it went into the explosive range?-- That is correct.

You didn't proffer any view to Mr Squires yourself about what should happen?-- No, I did not.

You were quite content with the arrangements that he outlined to you, that is to say there were instructions already given from the manager that if a problem arose the undermanager on site was to contact the undermanager in charge and the problem would be dealt with?-- That is correct.

That wasn't an unusual arrangement in your view?-- Probably not, no.

In fact on past occasions, particularly on weekends when deputies had been left in charge, it's been on the basis that they knew undermanagers were contactable?-- That is correct.

And just as with this occasion so with those occasions, if a problem arose you would be on the phone to an undermanager and you would get one of them to give you a response or come out?-- That is correct.

That's a system which in the past has worked perfectly well?-- Yes.

Now, at that time, that's up to the point when you were inside and looked at the Ellicott diagram, were the men getting ready at the start point?-- They could have been, yes.

Once you had a look at the Ellicott diagram was that then switched off back to the screen of figures?-- Yes.

And the screen moved around?-- Yes.

Back so that it faced the men at the start point?-- Wait a minute, before that was done the CH4 was over the alarm setting and I requested Brian French to lift the CH4 settings

up.

Can we just pause for a moment? Was Squires still there when that happened?-- No, Michael was in the undermanagers office.

So effectively an alarm went off, is that the way to describe it, the CH4 alarm went off?-- Well, it was either - no, the alarm didn't go off, so the CH4 figures would have been in the red zone.

Let me get it straight. When you switched back to the screen of figures was it already in the red zone?-- It must have been because I didn't hear an alarm go off.

You certainly didn't hear an alarm go off?-- That is correct.

Now, you saw that the CH4 was in what I would call alarm mode?-- That's right.

Where the figure of the actual reading that exceeds its limit goes red?-- Yes.

There was a red flashing button on the screen?-- Yes.

You saw that, that situation?-- Yes.

And you realised that it was 4.5, the 512 seals point?-- Yes.

It's easy to tell, I think, because .5 was at that time designated on the face of the screen as 512 seals?-- That is correct.

So one couldn't be in any doubt about what one was reading. Each point is given its designation on the screen itself?-- That is correct.

And you responded to that not by pushing any - doing anything yourself on the computer?-- No, I did not.

Or doing anything else in relation to buttons, switches or anything else?-- No.

You called French?-- Brian French, yes.

He is an electrical person?-- That is correct.

Was he at the office or in some other place when you -----?-- He had just walked into the Unor room.

Coincidentally? You didn't have to call him across?-- No.

Upon his arrival you asked him to deal with that alarm and reset the levels?-- That is correct.

How did you determine to what level it should be reset, or did you leave that up to Mr French?-- I usually just take them - what the reading is on the screen, you take them a little bit higher.

021194 D.11 Turn 15 dfc (Warden's Crt)

Just a fraction, not much?-- Probably .5 of a per cent.

And did you stay there while Mr French did that?-- Yes, I did.

Can you recall what it was he did with the machine, and can you just tell me sort of step by step, if you can recall?-- No, I can't.

You can't recall?-- No.

When he did what he did was he sitting at the Unor screen?-- I think he was standing.

Did he then leave?-- No, I left.

You left Mr French in there?-- That is correct.

So he was in there, Squires in the undermanagers room?-- That's right.

Which immediately adjoins the analysing room and the Unor screen?-- That is correct.

You then left to go around and join the men?-- I firstly told Michael that I got Brian to adjust the alarm levels.

Did you tell him which alarm levels?-- The CH4 and the oxygen, yes.

And the oxygen? Was oxygen alarming as well?-- Yes, because it was dropping.

I don't mean alarming in the sense of exciting someone, but it was in alarm mode?-- Yes.

So Mr French would have adjusted both of those alarm levels at that point?-- That is correct.

Assuming he followed what you had asked him to do?-- Yes.

You then went around to the start point?-- I went around then into the deputies cabin.

What function did you perform there?-- Read the water gauge, barometer and temperature and then start filling out the reports.

The reports you are filling out are the sort of things I've shown you before, production deputy reports?-- That is correct.

Did you go down with the men, down the mine, when they first left to start their shift?-- No, I did not.

You went down at some subsequent time?-- Shortly afterwards, yes.

Only a short period of time after -----?-- That is correct.

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----- I think you said earlier. I had forgotten that you had your own PJB?-- That's correct.

You were down the mine quite a time when you first went down because you had to do a number of inspections?-- That is correct.

It could easily have been anything up to a couple of hours?-- That is correct.

Then back up for crib?-- Smoko, yes.

Smoko?-- Yep.

Which you have in the deputies cabin?-- That is correct.

Did you take that occasion to go back to the Unor screen?-- Yes, I checked the Unor screen as soon as I came to the surface.

Did you do that by going into the Unor room itself?-- Yes.

Moved the screen around so you could see it?-- Yes.

And can you recall what it was you saw?-- No, I can't.

Was it rows of figures?-- Rows of figures, yes.

Were any of them red?-- I can't recall.

You looked at the screen?-- Yes.

No doubt you were looking solely at 512 seals?-- That is correct.

And looking across the line of figures?-- That is correct.

You saw nothing that caused you any particular concern obviously, it was just a routine reading of the Unor screen?-- It was a routine reading and I also brought up the Ellicott diagram.

Sorry, I accept that you did that as well. You were interested to see just how far the plotting was progressing on the Ellicott diagram?-- Yes, I wanted to see what the trending was.

021194 D.11 Turn 16 mkg (Warden's Crt)

And it had changed somewhat?-- Yes.

You didn't do anything with the computer, though?-- No.

And you then went where, back to the deputies' cabin?-- That is correct.

And sometime shortly after that back down the mine again?-- Yes.

And that was - going back down was the occasion of your second set of inspections?-- No, it was just an inspection, just to check up on the men to see how they were going, and just a general observation, check the pumps.

Okay. At the end of that you were back out of the mine again?-- That is correct.

This time for crib?-- It would have been before crib, yes.

And this is another occasion when you went into the Unor room?-- That is correct.

Brought up both the screen full of figures and the Ellicott diagram?-- That is correct.

Or had you left it before?-- No, I always put it back to the figures.

And always back facing out?-- That is correct.

When you look - this is you have come up again the second time?-- Yep.

When you looked at the screen on that occasion can you recall what you saw about the figures?-- No, I can't.

Smoko would be approximately when in your normal routine on that afternoon shift?-- Whenever you get up to have it.

Sorry, do you have any memory of when it was?-- No, I have not.

Okay. If we make some sort of assessment, talk to Squires when you arrive, go and talk to French?-- No idea.

A bit of work down the mine a couple of hours later, we are talking 6 o'clock, no later than 6 probably?-- It would not have been any later than 6 o'clock, no.

And then back down the mine for routine inspection, back up again no later than 7?-- Yes.

Okay. Brought up the figures and the Ellicott diagram again?-- Yes.

Again simply noting the trend?-- That is correct.

And nothing in what you saw made you alter your course of

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conduct for that day?-- No.

Screen back to the figures facing out and outside again?--  
That's correct.

Was Mr French back there at any of those subsequent occasions to the first?-- Not that I can recall, no.

Do you know if Mr French was down the mine? Was there some job he had to do down the mine?-- Yes, there was.

Do you remember where?-- He was going to all the sections and putting span gases through the methane detectors on the miners.

Right, okay. That would be something that's confined to the trip monitors on the miners themselves?-- That is correct.

All right. Now, there was, what, two miners down there that he had to do that on?-- Correct.

One in North-west, one in 5 South?-- That's correct.

When you left the Unor screen then on that occasion, that is having come up again after the short inspection, do you recall where you went and what you did? You may recall it from your normal routine. It may be that you are simply following your normal routine?-- I don't know, probably I went around the deputies' cabin, had a cup of coffee, a bit of a talk to Rod.

Helander was up?-- Yes.

Was Helander going into the Unor screen too?-- No.

You don't recall seeing him in there?-- No.

But it may be he was there when you weren't around, that's possible?-- Could have been.

Your activities weren't completely synchronised or anything that day; no pre-arranged time to meet Helander in the deputies' cabin?-- No.

Then at some stage after that you must have gone back down?-- Yes.

Did you look at the Unor screen again before you went down?-- Yes, I did.

Same procedure as we have discussed?-- Same procedure every time before I went down.

And same effect, nothing you saw altered your conduct for that day?-- No.

Then down the mine for the next major inspection?-- That's correct.

Embarking on that second inspection, can we tell the time of

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that from - no, we can't tell the time from the report, can we? The first inspection was completed by 5, the second inspection completed by 9. Is that time completed when you actually finished the inspection or when you sign off the report?-- That would have been pretty close to the time of last inspection, yes.

So that second inspection would take about as long as the first?-- Probably, yes.

So we are talking in excess of an hour?-- Yes.

And closer perhaps to two?-- Possibly, yes.

All right. So this would indicate the time when you had finished that and come to the surface?-- Yes.

You went back to the Unor screen?-- Yes.

What was it showing?-- A line of figures again.

Anything about them that stood out to you?-- No.

Any of them red?-- I really can't recall.

All right. Brought up the Ellicott's again?-- Yes.

This perhaps for the last time?-- I don't know whether it was the last or the second last.

All right, okay. Having done that, you went about your other duties, filling out your report in the deputies' cabin?-- Yes.

And then shortly after that the men were up?-- The men were finished before I came out on my last inspection.

All right, okay. Let's just go back to that point then. The men had actually come out of the mine before you came out at the end of your last inspection?-- That is correct.

Now, do you know anything of the routine in general terms of the men coming out on such an inspection, that is post-sealing? Is it likely, in your view, that the men would have had a look at the Unor screen themselves on the way past the start point?-- Well, they could have, I don't know, I wasn't there.

Is it the sort of thing you would have expected of them, though, given that you know something about the miners at this mine?-- Probably did, yes.

I think I am right in saying that post-sealing on almost every occasion of a sealing, the sealed panel was a topic of conversation amongst miners generally, "How's it doing? What's it doing? Where's it at?", that sort of thing?-- Yes.

All right. So the men were up and either showered or

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showering, but certainly up completing their shift by the time you came out?-- Yes.

And you went back to the Unor screen again?-- Yes.

Once or maybe twice?-- That's correct.

Same routine as before?-- Same routine, yes.

Notice anything about the figures on the screen?-- Probably that they were getting higher.

But nothing more than that?-- No.

Any of them red?-- I can't recall whether they were red or not.

You went then to the showers and that's where Squires came to talk to you?-- That's correct.

Effectively what you told Squires was that the last plot on the trend on the Ellicott diagram was that it was on the margin of entering explosive?-- That is correct.

Not on the line but approaching?-- Yes.

Now, you didn't give him to understand that there was any problem in the mine?-- No.

There was nothing you said to him that would have suggested there was any difficulty in the mine at all, isn't that right?-- That is correct, except for the seal with the CH<sub>4</sub> against it on the belt road.

I am sorry, yes, I understand. This was like a little layer that you had discovered at the roof on the top left corner of the belt road seal?-- That is correct.

And that you determined, in your own mind, was coming from some slight leak there on that seal?-- That is right.

Going straight to the roof and pocketing there. That was of no great concern to you, was it?-- No.

And you wouldn't have imparted to Michael Squires any concern about that either beyond notifying him of the event?-- And get wind bag put in there.

Yes. There may have been - I think you said there was a conversation about whether it had been properly plastered or not?-- That's correct, yes.

And he gave you a response about that?-- Yes.

All right. Now, at that point on all those occasions when you were on the surface from the start of the shift, before you went down, when you came up around smoko, you came up before crib, then later, on each of those occasions you say that there was no sound of a siren?-- I can't recall a siren

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going off, no.

Not the sort of thing you could miss, is it?-- No.

Very, very loud?-- Yes, they are.

And the sort of thing you couldn't possibly tolerate leaving going while you were in close vicinity?-- No, you can't.

And that siren is connected to not just the Unor, there is a number of alarms will set that siren off, the BM1, for instance, isn't that right?-- I don't know anything about the BM1, no.

You understand that the siren is not set off just by the Unor, it is set off by other alarm settings in the mine?-- Each alarm setting has its own siren, yes.

Okay. Now, on each of those occasions when you were up and checked the Unor screen, there was - on none of those occasions did you perform any acceptance activity on the computer itself?-- No.

You know what I am talking about in terms of acknowledging and accepting?-- Yeah.

You have to go through a procedure using the mouse, hitting certain buttons?-- Yeah.

And you can follow a step-by-step sequence because the screen tells you what to do?-- That's correct.

Can you tell me if you can remember what your cap lamp number was?-- 142.

Had you ever followed that acceptance procedure on the Unor before?-- No.

So, had you been present when Mr French adjusted the levels, or did you leave him to it on that earlier occasion?-- No, I was there.

Right. Did you see what he did on the screen? I mean, he did something - I think you said before you couldn't remember what it was he had done?-- What procedure he went through, I don't know.

Now, when Shaw came to speak to you in the showers, it was about an alarm on the screen, wasn't it?-- Yes.

There was a red light flashing?-- That is correct.

At least that's what he told you?-- Yeah.

Either he said or you assumed it was the 512 seals?-- That's correct, yeah.

That's the only one that it could be really?-- That's the one that I assumed it was, yes.

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You said to him or he asked you, you know, was it okay or what to do about it?-- Yeah.

And you said to him that you knew about it, it was an alarm that you had accepted?-- Yeah.

Now, what did you mean by that? Can you tell me how it was you accepted that alarm?-- Well, I didn't personally accept the alarm. The alarm had been accepted.

By?-- Well, I presume that when - that was done by Brian.

Is this the one from early in shift?-- Yes.

You assumed it was still the same one?-- That is correct, yes.

Had you noticed anything on the screen throughout the shift that was consistent with that, a red light flashing?-- I can't really recall, no.

But it was not in fact an alarm that you had performed any acceptance procedure in respect of?-- No, I didn't go through any acceptance procedure, no.

All right. You made the assumption at that point that it was the previous alarm from earlier in the shift?-- That's correct.

From 2.45?-- That's correct.

Did you discuss with Shaw just what alarm it was and what he had seen?-- No.

You simply took him at face value, "There is an alarm on the screen" - no, he didn't say, "There is an alarm." "There is a red light flashing." You said, "That's all right, it's an alarm, I have accepted it."?-- Yeah, that's right.

He then left?-- Yes.

Did you mention that to Squires?-- No, I didn't.

That there had been an alarm or that it had been accepted?-- No, I did not.

All right. I think you said earlier in evidence that it's your belief that when an alarm is accepted the light continues to flash?-- That's what I believe, yes.

Now, in your statement you mention a time for when Shaw came to speak to you in the showers. Just without reference to your statement, do you have a memory of when that was?-- Could be around about 9.40.

Roughly around then?-- Yes.

And you left the mine around 10?-- 9.50.

Shortly after this?-- Yes.

So, Squires must have come straight in almost to have a conversation with you?-- He did.

Now, you were asked some questions about the delay on some of the Unor tubes. I think you were directed to point 16 in particular which had a long delay. You said you weren't aware of that particular delay time. Is that how I understood you right?-- That's correct, yes.

You did know there were delays on the Unor system?-- I knew there were delays, but the exact times of them, no.

And you knew there that there was a sheet with the delay times posted in the Unor room?-- I knew that there was one in there somewhere, yes.

Now, if I can just keep you on this question for the moment. On the occasions when you looked at the Unor screen, either the data - we will stay with the data. On any of those occasions were you looking at any particular figures? Obviously 512 seals, but which of them? Looking mainly at CO?-- CO and CH4.

You weren't paying attention to the Graham's ratio, were you?-- No, I was not.

Can I suggest to you a reason for that, which I think is generally accepted by miners at Moura, that is, that after the sealing the Graham's ratio loses its veracity as an indicator?-- It loses its what?

I will try another word. The Graham's ratio might be an indicator at some point, but once you seal a panel, it's no longer regarded as a good indicator because it's inside a sealed area, the monitor point is inside the sealed area. Do you know that that's an accepted or at least -----?-- No, I didn't know that at all, no.

You don't hold that view yourself?-- I don't think I know enough about it.

All right. That explains, does it, why you weren't bothering to look at the Graham's ratio?-- Probably, yes.

All right. Now, you were asked some questions about Exhibit 21. Do you recall being asked to look at this document?-- Yes, I do.

And referred to two figures that were described as readings, 18.94 and 21.04. Do you see those there?-- Yes, I do.

You haven't seen that document until today, have you?-- That is correct.

You aren't suggesting that that document was in existence at the time of this incident?-- I beg your pardon?



You aren't suggesting that this was in existence at the mine at the time of the incident?-- No, I am not saying that at all, no.

You weren't told, but it's the case that this document was produced after the event at the request of the Inspectorate. Were you aware of that?-- No, I'm not aware of that.

In terms of the compilation of total CO in litres per minute, this compilation, were you aware, has only been done since the event and at the request of the Inspectors? Were you aware of that?-- No.

And you were being asked questions about what the figures signified to you. If all you had was the 14.27 figure at the top - can you see the figure at the top?-- Yes, I do.

If that's the one you had, it's an entirely different picture, isn't it, than if you have the 18 or 20 litre figure?-- Just one figure by itself doesn't tell you anything. You have got to know what the rest of them are preceding it.

That's correct, it's the trend that's important, isn't it?-- That's correct.

And that's what you would look for in terms of looking either at CO make or in terms of looking at, say, the data on the Unor in relation to CO parts?-- That is correct.

You are looking to see if there is a change in the trend and, in particular, you are looking to see if there is a sudden and rapid take-off?-- That is correct.

That's what in your view, and others no doubt, signifies the onset of a problem, that rapid and sudden take-off?-- That is correct.

If you have got a general linear gradual rise, that wouldn't suggest to you a problem, would it?-- Not necessarily.

It depends upon the other factors?-- That is correct.

Looking at the CO litres figure, that is CO make, I just asked you about a 14.27 figure. That, of course, has to be seen against other factors such as the natural CO make of the panel, the circumstances, the trend, all of those features?-- That is correct.

It is the fact, I think, from what I understand of your evidence, that nothing you saw on the Unor screen on that Sunday caused you any particular concern; there was nothing that you saw that alarmed you?-- No.

Had there been so there is no doubt in the world that you would have raised that, certainly with Squires and maybe beforehand by ringing up someone like Mason?-- More than likely.

You said in answer to some questions that one of the things you would expect to happen if there was a smell detected was that if that is all you knew, that someone had smelt a smell, that would lead to an investigation?-- That's correct.

And that's with a view to seeing if you can confirm that the smell does exist and where it is and so forth?-- That's right.

And if the smell is not repeated then that eases the initial concerns?-- It could do, yes.

That sort of investigation has to take into account a lot of things, position of the smell, the nature of it, the inherent likelihood that it is as described by the person and so forth?-- Yep.

It is not unknown for people to describe smells and then it transpires that it was, in fact, roof bolt chemicals?-- It depends on what type of smell you are talking about.

It is not unknown for people to describe smells one way and it transpires it was, perhaps, the toilet?-- That's correct.

Now, just discussing that question of trend as we were a minute ago, I think I am right in saying, notwithstanding that the Drager tube readings can vary person to person, experienced persons such as yourself, nonetheless, would find them a useful tool for discerning trends?-- That's correct.

That's their main value. It is not so much the particular veracity of a spot reading - I used that word again, sorry. It is not so much the particular accuracy of a spot reading, it is more what it can tell you as a trend?-- That's right.

You were asked some questions about when the night shift arrived. You weren't present when that was the case, were you?-- No, I was not.

You had already gone?-- That's correct.

And you said, I think, in answer to some questions that you would have expected the undermanager on site to have spoken to the men before they went down?-- That's correct.

You explored that in a few answers. You don't know for a fact whether or not that happened simply because you weren't there?-- That is correct.

And it would matter, wouldn't it, in terms of what information you might want to convey, just what the make up of the shift was. If I can just - I will just explain what I mean to you so you can understand it. If, for instance, you had men who had been working on the seals or who had worked on shifts after the seals and, therefore, had knowledge of their own, that would make a difference?-- Perhaps, yeah.

If you had men on the shift who were themselves interested in and did look at the Unor screen and the Ellicott diagram, that would make a difference too?-- Yes.

To take a prosaic example, you have enough experience to know what you want to look for on an Ellicott diagram and you don't really need people like Squires to tell you what you are seeing, do you?-- That's right, yes.

So, it depends on the experience of the men, what they know already and various other factors?-- Yes.

You were asked by Mr Martin some questions about whether there was a practice of having no undermanager on duty and you answered that by saying there was, it was in relation to weekends?-- Yeah.

Two particular shifts on weekends, and on which occasion deputies would be in charge?-- That is correct.

there is nothing unusual about that practice, is there?-- No.

That's one that has been followed and successfully at Moura - Moura No 2, at least?-- Yes.

And one of the main reasons for it is that the two shifts we are talking about are non-production shifts?-- That is correct.

Nonetheless, in respect of those shifts there has always been an undermanager designated to be the one to be called if there was some need to call them?-- That is correct, yes.

That system has never really let you down?-- No.

Now, there was one thing that I think Mr Martin might have asked you about, that there was pressure on miners to keep up productivity or production and I think you sort of paused a bit before answering that question and indicated, yes, there is pressure on miners to keep production up. Is that really the case?-- Depends what you mean by "pressure".

Yes, that is what I would have thought. I mean, crews, in fact, compete shift to shift, don't they, as to who can cut the most coal?-- Small amount of rivalry, yes.

And crews keep in mind the fact that they get a production bonus?-- That's correct, yes.

And a production bonus is something that has been secured for them by the union in consultation with the owners?-- That's correct.

No-one is going to suggest that the union imposed feature is the thing that leads to excessive activity on production, are they?-- Could you repeat that, please?

It is more a comment, I suppose, than a question. I will withdraw it and start again. Now, you mentioned an occasion also when you and Ziebell went to see Mason about having equipment on site for the Tecrete seals?-- That's correct.

That's a particular bugbear of George Ziebell's, isn't it, having equipment on site ready for prep seals to be done?-- Yeah. It is not just a bugbear by George.

I don't mean to say other people don't have it too, but that's a particular thing he has as something that he raises?-- It is something - it is something I think everybody raises.

And Mason himself was quite receptive to what was being said, he was a little angry himself that the equipment wasn't on site?-- That's correct.

In fact, that was rectified almost immediately, wasn't it, equipment was put there?-- Yes.

I am going to read out a few thing. The mesh baskets were taken there? If you would like to respond?-- Yes.

Tecrete grout was kept in various places, but mostly in the surface compound to prevent it from deteriorating?-- Yes.

And mesh sheets were put on the site?-- Yes, as far as I know, yes.

Those mesh sheets are the ones which you can erect, then quickly spray with Tecrete and have a very fast stopping, even though it is not a final seal?-- I wouldn't say "fast", no.

Well, in a matter of hours. We are not talking about pumping

the grout into the baskets, we are talking about pumping grout onto the mesh sheet?-- Yes.

And grout pumps and so forth were put in place all very quickly after this question was raised?-- That is correct.

Mr MacSporran was asking you a question about whether shift - whether, firstly, you were aware that shift-by-shift readings had been done by deputies for the purpose of calculating CO make; do you recall those questions?-- Yes, I do recall the questions.

In fact, it happened on this occasion even though you weren't aware of it. Have you since become aware of that?-- Probably. Yes, I have.

And the simple reason why you didn't know about it at the time was because you were off doing other things?-- That's correct.

Now, you know that there is a power in the Inspectorate under the general rules to requisition the taking of particular readings at particular points?-- That's correct.

And in your experience have the Inspectorate ever exercised that power to compel the taking of readings other than are normally taken?-- I couldn't say, I don't know.

Have you ever known them to exercise their power under the rules to compel the positioning of a monitor point other than, say, was the position in this case; that is, slightly inbye or about as far as you can get it inbye?-- Not that I can recall, no.

It is just not a thing that the Inspectorate bothers with, that sort of stuff, is it; not in your experience?-- No, that's right, yeah.

I doubt you can recall ever an occasion where the Inspectorate came around and said, "We think the circumstances are such that it is appropriate that you do a CO make calculation shift-by-shift or day-by-day.", as opposed to what you might do normally?-- Not that I can recall, no.

I have nothing further, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: Thank you, Your Worship.

Mr Blyton, you have told us how when you got to work on the Sunday afternoon you spoke to Michael Squires about why the sealing of 512 had been brought forward. Do you recall that?-- That is correct.

Was it your understanding that there had been what sometimes is referred to as an emergency sealing procedure with 512?-- I never took that understanding at all.

Do you know what I am talking about there; that something would be done - treated as an emergency and done in an expedited way using Tecrete sheets as opposed to the normal method of constructing the seals?-- I don't know how the sealing was done at all.

All right. But your understanding merely was that it had been brought forward?-- That's correct.

Not in an emergency situation?-- Not as far as I know, no.

And he told you then about a smell in the top return on Friday and you say he told you that it was stronger at a later inspection and he could see a haze?-- That's correct.

Are you sure he used the word "stronger" or did he merely say to you that there was a smell present again at a later inspection?-- As far as I can recall he said the word "stronger".

Now, with Michael that particular day, how many times did you see him?-- Probably three.

The first time was shortly after your arrival?-- That's correct.

The last time, I take it, was at the shower?-- No, when I had left and went around to the - to the deputies cabin and then when I was coming back from the deputies cabin to go down the mine Michael was walking back across towards the deputies cabin and we met.

That was the last time?-- That was the second time.

The second time?-- Then the last time was when I was in the shower.

All right. Now, the second time was roughly when in the course of your day's work?-- Just after start time.

Now, was it your understanding that on that Sunday Michael would be present to meet with those involved in the day shift at the end of the day shift and to meet with those about to start on the afternoon shift at the commencement of the afternoon shift? Did you understand that he would be there available for that?-- Yes, I knew there would be an undermanager there, but I didn't know that Michael was on shift until I got there.

Certainly that's what you understood, that the undermanager would be there for those times?-- Yes.

That he would leave again and basically be back in the same position at the start of the night shift?-- That's correct.

Although on this occasion with the night shift being the production shift you would expect him to be there for the duration of that shift?-- Which he would be, yes.

That was the normal way things were done?-- That is correct.

Now, when you arrived did you see whether or not Michael was involved in conversations with other people?-- Not that I can recall, no.

Did you see, for instance, any of the people who had left at the end of the day shift or had they gone?-- I wasn't talking to anyone, no.

Not only talking, did you see anyone?-- No.

Before you went down into the mine yourself did you see any of them?-- No.

Did you see any of the people who were due to commence on the afternoon shift before you went down the mine?-- Yeah, I probably did, yes.

Did you see Michael talking to any of them?-- No.

Did you see Rod Helander shortly after you arrived?-- Yes, I did.

Did you have a talk to him about what was happening?-- I probably had a bit of a talk to Rod as to what section that I was covering and where the men were going to work, yes.

Now, how long was it after you had first been talking to Michael that you gave Brian French these instructions in terms of resetting the machine?-- Probably only a minute.

Are you authorised to reset the machine yourself?-- No, I am not.

Do you know how to do it?-- No.

That was the only time that you gave any instructions to reset the machine on that particular shift?-- That is correct.

You were not aware, I take it, that there were any further alarms on that shift other than the one for methane which you told us about at the start of the shift?-- Could you just repeat that, please?

Well, you have told us about an alarm in relation to the CH<sub>4</sub>, I presume, at 512; is that right?-- Yes.

That was the one that led to your giving Brian French certain instructions as to what to do?-- That's correct.

Were you aware of any other alarms at all throughout the course of that shift?-- No, I'm not.

Yet you would have had a look at the screen itself some time

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shortly before you left to have your shower?-- Yes.

And there didn't appear to be anything abnormal on the machine at that stage in terms of any alarms?-- No, just the trends were going just the way they should be.

The way you expected them to go?-- That's correct.

From your own experience?-- Yes.

You are a very experienced miner yourself, aren't you, and deputy?-- Yeah.

And I take it that if you had any concerns at all in relation to the safety of the men you would have passed those concerns on?-- That's correct.

In your statement at page 2, if I can just refer you to that - have you got it there? You talk about a conversation with Michael at the top of page 2. I won't go into the detail. Just see if you can find that part?-- Yeah.



And you say in the fourth paragraph - it's just a one line paragraph - "It was expected that men would continue working underground on the night shift." Do you see that?-- Yeah.

Now, would I be correct in saying that if you had any concerns at all about the safety of those men you would have said something?-- That is correct.

Yet, am I also correct in saying that nothing you were told that day by Michael or anyone else or nothing you observed either on inspection or from the Unor machine caused you to have any such concerns?-- I was concerned with the way the Ellicott trend was going towards the end of the shift.

Would I be correct in saying that you never had any concerns for the safety of the men from what you saw and what you heard that day?-- Could you just ask that question again, please?

Would I be correct in saying that you never had any concerns for the safety of the men from what you were told and what you saw that particular day?-- That's correct.

Because if you did have any you would have expressed those concerns to someone in authority, wouldn't you?-- That is correct.

Thank you. I have nothing further, Your Worship.

RE-EXAMINATION:

MR CLAIR: Mr Blyton, just some short questions. You did say in the course of your questioning by Mr Morrison that you didn't pay a great deal of attention to the Graham's ratio on the Unor screen?-- That's right, yes.

Is that right? Do you know or did you know at that time the significance of the Graham's ratio?-- What do you mean by "the significance"?

The significance?-- Yeah.

Well, what the Graham's ratio measured and what the Graham's ratio indicated as to what was happening at the particular monitor point, in this case let's talk about the 512 seals?-- No, I didn't.

Have you ever had any training in relation to what the Graham's ratio means?-- Only with what I've read.

Only what you've read yourself?-- That's correct.

In the course of Mines Rescue?-- That is correct.

What is your understanding of it?-- Do you want the figures?

I'm not trying to embarrass you now, I'm simply asking you so that we could better understand the evidence you've given, just asking you to give the Inquiry your understanding of what the Graham's ratio is and what its significance is?-- Graham's ratio is the CO/O2 deficiency ratio and there is a certain set of figures in relation to new and old coal and those figures can then tell you when they get to certain levels or they are between such levels as to whether they are a heating or a fire.

Are you aware of the levels at which the Graham's ratio would indicate that there is a heating taking place?-- I just can't recall them off the top of me head.

Well, back on 7 August would you have, at that stage, been aware of what you should be looking for in terms of any figure on the Graham's ratio?-- I should have been, yes.

You should have been, but were you?-- No, I wasn't.

So in the circumstances there really wasn't much point you looking at the Graham's ratio; is that right?-- That's correct.

I understood from your answer to Mr Morrison that you yourself certainly weren't aware of any understanding at the Moura mine that once a panel was sealed that the Graham's ratio lost its significance. That kind of consideration played no part in your thinking?-- No.

It was simply really for you the Graham's ratio had no real significance because you didn't know what it should indicate to you?-- That is correct.

What about the other miners who would look at that Unor screen? From your assessment of things would they have had any understanding as to what the Graham's ratio was indicating to them?-- No.

When they looked at the figure there?-- No.

Well, if I can just move to another point, you were asked some questions about your knowledge - or should I say your lack of knowledge of those CO make figures that I drew to your attention on the first page of that Exhibit 21. I think that's the document you still have in front of you there?-- Yep.

That is the CO make readings on the Saturday during the morning?-- Yep.

Now, I think that your attention was drawn to the fact that that document there was not produced until some time after the explosion; do you recall?-- Yes, I was told, yes.

Now, I think you were also asked if you had been aware of CO make levels of the nature that appear on that document would you have done something about it. Were you asked a question along those lines?-- I can't remember whether I was.

Well, let me ask you: if you were aware of CO make levels of the nature indicated on the document there, the two that I drew to your attention earlier, one around 19 and the other over 20, 21, would you have been concerned? Would that have indicated anything to you as to what was happening in the area where those samples came from, namely 512?-- If I was just given two readings like that ----

That is spot readings, I think they have been referred to as spot readings?-- Yes.

What would be your assessment?-- If you are just given two readings out of the blue like that you would want to know the rest of the trend for a start, and if the trend was going in the right way and then all of a sudden jumped up to those readings you would be -----?-- You would have grave concerns.

Grave concerns?-- Very.

While you said that the important thing is not the figures itself or themselves, but rather more the trend that's indicated from the figures, if you were looking at figures that were moving down in the range of 14 or 15 and even 16 and then moved up to 18 or 19 and then over 20, say up to 21, what would you say about that? Is that the kind of increase that would cause you alarm?-- Very - very much so, yes.

Just one final matter, you were asked about the alarm which you discussed when you were in the shower that night and the one that you said you had accepted?-- Yes.

I think you've explained to us that in fact you didn't personally accept it, but you understood that Brian French had accepted it; is that right?-- Yep.

I will just ask you to have a look at this document?-- ----

I have some copies for the panel also, Your Worship.

I'll just explain, Mr Blyton, that's the first page of a document which arrived by fax today. It is to be an appendix to the final SIMTARS report and it's the full - at least the appendix is the full Moura No 2 alarm log for that period, 27 July to 9 August, and this is the first page of that appendix. Now, I'll draw your attention to the line which deals with an alarm at 2.31, 14:31:33, on 7 August. The best way to find it is if you work from the bottom up in the last column you will see a whole series of ones and then you will come to the figure 5 in the last column?-- Yeah, that's correct.

See the one I mean?-- Yep.

That final column, authority number or authorised number, that would be the cap lamp number, is that right, of the person who has accepted the alarm?-- That's correct.

Now, that would appear to be an alarm shortly after 2.30 that

afternoon, 512 seals, in relation to, it seems, a low level of oxygen. If you read the middle column, "Alarm description", do you see that?-- That's correct.

That was acknowledged at about two minutes to three that afternoon, that's the fourth column, "Time acknowledged" column, do you see that there?-- Yep.

By somebody with the number 5?-- That's correct.

You don't know off-hand who that would be?-- No, I wouldn't have a clue.

But it's certainly not you?-- No.

And then the next alarm is that one which occurred at quarter past eight, shortly after quarter past eight that night, 512 seals, a methane alarm, and that's one that was not accepted until 23 minutes and 12 seconds after midnight, do you see that one there?-- Yep.

That seems to have been accepted by somebody with the number 1 -----?-- That's correct.

So there doesn't actually appear to be any record of an acknowledgment of an alarm between those two times?-- That's correct.

So from the actual dealings you had that night you weren't there when Brian French actually accepted any alarm; is that right? You weren't physically present when he accepted any alarm?-- No.

It was something that he subsequently told you that he had accepted; is that right? Sorry, I'm just trying to remember what you said in your evidence?-- I had asked Brian to adjust the values of the alarms, yes.

You asked him to adjust the values, right. What about the alarm that you referred to as having a conversation in the showers? You initially said that you told Shaw, I think it was, that you had accepted it?-- Yeah, that was the alarm at the start of the shift and then he adjusted the values up.

French adjusted the values up?-- Yep.

Did I understand you to say that the alarm that you said that you had accepted was in fact not accepted by you but you were told by French that he had accepted it?-- Yeah, I was there when he did it, yeah.

But you were there when he accepted it?-- Yeah.

And that was at the beginning of the shift?-- Of the shift, yes.

Could that have been the one at two minutes to three?-- Most definitely.

021194 D.11 Turn 18 dfc (Warden's Crt)

Does that fit the timing?-- Yeah.

That's number 5, that's the one accepted by whoever bore the number 5?-- That's right.

When it was raised with you by Michael Shaw that there was an alarm that was flashing on the screen, that's at 9.40 when you were in the showers, which alarm did you think was flashing on the screen at that stage?-- Yeah, I thought it was the alarm that had been accepted because there hadn't been any sirens go off.

At the beginning of the shift?-- That's correct.

Your Worship, I'll tender that photocopy page. There will be a copy of the full document with the final SIMTARS report. Thank you, Your Worship.

WARDEN: Thank you. That will be marked Exhibit 90.

ADMITTED AND MARKED "EXHIBIT 90"

WARDEN: The panel have a few questions but we will have a short adjournment first.

THE COURT ADJOURNED AT 4.10 P.M.

021194 D.11 Turn 19 mkg (Warden's Crt)

THE COURT RESUMED AT 4.17 P.M.

WILLIAM JOHN THOMAS BLYTON, CONTINUING:

WARDEN: Before we start on the panel's questions, is there anything arising out of that last document that counsel want to go on with now? No, okay. Mr Parkin?

EXAMINATION:

MR PARKIN: Mr Blyton, you have been in the mining industry 20 years?-- That's correct.

Some 16 or 17 years as a mine deputy?-- Correct.

And I think you said 20 years in Mines Rescue?-- Yes.

I just want to spend a little time talking about the method of extraction in 512. You talked about, you know, loose coal being a major concern. Would you like to elaborate on if you communicated those concerns to anyone at the mine?-- Probably talked about them with the other deputies and different personnel on shifts at various times, but I couldn't put names or places or times to it.

But general conversation?-- Yes.

I think it was mentioned earlier that you had some discussions with someone from ACIRL about the panel layout?-- That's correct.

Were you impressed with the panel layout yourself?-- It was something different that I hadn't seen before, and it didn't overly impress me, no.

What about the ventilation aspects of 512 in terms of the layout, have you any comments in that regard?-- I didn't think it was a very efficient way to design a mine for your ventilation.

What, because, I guess, you have said on numerous occasions that the ventilation is adequate, but what do you mean by that? Is that adequate or was it slow moving ventilation in the panel usually?-- Most of those comments in the deputies report were in the mining area and not of a full general section area, because during the extraction cycle I was mainly involved where the men were working.

Could you elaborate on the problems you had when you were examining the waste areas? I think you mentioned that in your discussions today?-- Well, you couldn't do them - you couldn't do a waste inspection.

XN: PANEL

WIT: BLYTON J W T



Is that a problem?-- It is a problem, yes.

So, I guess that's another problem that can be attributed to the design of the panel, is it?-- Yes, that's correct.

On the afternoon shift of 7/8 you stated that Michael Squires, or Michael Squires stated that the panel went through the explosive range; do you remember that?-- Michael said that he expected it to go into the explosive range sometime on night shift.

Sometime on night shift?-- Yeah.

You asked Michael Squires what he was going to do when 512 went through the explosive range?-- Yes.

You discussed that. Were there any witnesses to that discussion?-- Not as far as I am aware, no.

And this matter was discussed with the manager, Albert Schaus?-- That's what Michael had said, yes.

And if you got any further problems you have got to get in touch with George Mason?-- That's correct.

It was definitely stated that the 512 would go through the explosive range that night?-- Michael had expected it to go through, yes.

Now, there was some inference made at some stage to Michael Squires saying that, "I don't want to have to do a safety meeting for nine hours." Would you like to elaborate on what the inference means, please?-- What it probably meant was he probably didn't want to have to run safety meetings for nine hours instead of production.

I don't want to put words into your mouth, but what you are saying is that if there was - the 512 was going through an explosive range and the men were out of the mine at that time, he wouldn't want to do a nine hour safety talk; is that what was intended, or -----?-- That's what I think that he was intending, yeah.

That's your impression?-- Yeah, that's my impression.

I just want to return to these graphs briefly. I know Mr Clair and Mr MacSporran reiterated it. I want to reiterate a few things. Have you seen - I think you have seen Exhibit 25, that's the CO make up to 5/8. I think you said that you have not seen that graph at all?-- No, I haven't.

When you came on shift on the Sunday, nobody communicated to you any concerns about the rise in CO make?-- No.

Just for the purposes of clarification, if you look at the 16/6 and you look at the 15/7, you will see that that's - would you consider that a fairly sharp rise in CO make? It goes up to 14.27 litres per minute?-- Yes.



021194 D.11 Turn 20 gc (Warden's Crt)

I think you said to Mr Clair that had you been aware of the CO make at that time you would have had some serious concerns?-- That's correct.

You didn't know that the CO make on Saturday, 6/8, was 16.6 litres per minute?-- No, I did not.

I wonder why that is? Why wasn't that communicated to you?-- I don't know.

You stated that you had not been told about a smell of benzene or a tarry smell?-- That's correct.

So, I guess the question I have got is if you had known about the smell or the CO make on that Sunday, what would your actions have been? What I am saying to you is that if somebody had told you the CO make was over 16 litres per minute and that people had had a smell of tar or a benzene type smell, what would you have done as a deputy in that panel or with responsibilities for 512?-- Probably wouldn't have went down the mine.

You said that no-one told you at the mine that 512 had been sealed; is that correct? I think you were told at the union meeting?-- That's right, yes.

Can you tell me why that would be? I mean, if a panel is sealed surely someone is going to tell you it is sealed, aren't they?-- I wasn't rostered on to work that weekend.

I see?-- I had had an RDO on the Friday and I was only asked to go into work on the Sunday afternoon whilst I was at the union meeting because they were going to be short.

Well, did you speak to the offgoing deputy?-- No, I did not.

Why not?-- I can't recall seeing him.

But isn't that part of one of your responsibilities, that you speak to the offgoing deputy about what he's seen or whatever, about information regarding the panel or safety or any other matters? Isn't that an important part of the duties of a deputy?-- It was done during the week on the production cycles, but not on weekends.

So, I can deduce by that that nobody had got any real concerns about anything at that time?-- That is what I make out of it, yeah.

Now, you expected that 512 would go through the explosive range between 11.30 and midnight?-- That's correct.

Can you explain to me or to the people here today how you came to that conclusion?-- Just by the way - it was only my personal opinion, on the way that the trend was going with the Ellicott plotting, the way that it straightened out.

I think you stated here or at some stage that there was 130 ppm of CO, you had got 4.5 per cent of CH4 and you got

XN: PANEL

WIT: BLYTON J W T

021194 D.11 Turn 20 gc (Warden's Crt)

18.2 per cent oxygen. Was that a concern to you?-- It was a concern, yes.

Did you have any concerns about 512 before you left the mine?-- Only that it was getting close to going into the explosive range, yes.

So, you had got considerable concerns about that - about those figures?-- Yes, I did have some concern about them, yes.

Well, when you left the mine at 9.50 did you communicate those concerns to anyone, like the oncoming deputy?-- Not to the oncoming deputy, no.

Who did you communicate those concerns to?-- To Michael Squires.

What was the practice at Moura, in fact, on a weekend when one deputy comes on and another deputy goes off? Don't they talk to each other?-- We never overlapped on the weekends.

But you have said that you had some major concerns with those readings you have got? I mean, you have got 130 ppm CO, you've got 4.5 per cent methane, which is practically on the explosive limit, and you have got 18.2 per cent oxygen. Somebody should have been raising some concerns, don't you think? I mean, you are the deputy, you are the man with the responsibility?-- That's correct.

But you communicated all those concerns to Michael Squires?-- That is correct.

Thank you. I have no further questions.

#### EXAMINATION:

MR NEILSON: Can I take you to your statement? If you go to the questions that you were asked by the people interviewing you at the time of making the statement? You were asked the question on page 4 and the question is; "How would you determine whether or not you have a source of ignition and heating?"; okay?-- Yes.

Then you go on to give an answer about the use of hand-held instrument, etc, to determine the CO make and then you mention looking for hydrogen and using the gas chromatograph?-- That's correct.

If we can just go back to the question, whether or not you have a source of ignition. I mean, is a heating the only source of ignition that you can come across in a coal mine?-- Definitely not.

What others would you be aware of?-- Cable flash, frictional sparking.

Frictional sparking. When would you be likely to see or for that to happen, frictional sparking, or frictional ignition, that's another -----?-- Yes.

Term. When would that be likely to happen?-- In falls in your goaf area.

Falls in the goaf area. Okay. Well, if we go to the next page, in fact, the very last question and answer that is contained in your statement. The question is: "Was the mine evacuated after that sealing?", and that question related to the question before, talking about - and you were talking about 4 South B when it was sealed in about February of this year; okay?-- That's right.

Your answer to that was, "No, I think the last time was the 5 North West sealing." Now, what you mean by that is - and tell me if I am wrong - that that was the last time that the mine was evacuated after sealing?-- That is correct.

That is what you mean there?-- Yes.

You then go onto say, "As I recall, this was not due to a concern that there was heating, but because of the possibility of frictional ignition from roof falls."?-- That's right.

Okay. Can you tell the Inquiry what type of extraction or what method of extraction was used in 5 North West?-- 5 North West was -----

I mean, I am concerned about why there would be roof falls?-- The concern with the roof fall at the time was they were rib stripping or rib punching around a pillar and there was a fault just inbye of them and the fault area itself really started to work.

So, that method of extraction really is conducive to more localised type falls where you might get intersections falling in, something like that?-- Yes, that's correct.

Very similar to 512?-- Yes.

In fact, we did have some falls in 512. I think you found one or two yourself?-- Yeah, I know of one, yes.

Now, this concern of frictional ignition, where did that originate from? How long have people held a concern because of this phenomena called frictional ignition, can you tell me that?-- Since the '86 disaster.

I think frictional ignition was mentioned as one of the possible causes at that stage; is that correct?-- That is correct.

So after 1986 it became a grave concern for people at Moura that frictional ignition was a possible ignition source and there would be a concern if you had an area that was liable to go through the explosive range, and at the same time have roof conditions that were conducive to these type of falls?-- Yes.

Now, in 5 North West after that was sealed, did that atmosphere go through the explosive range or was it expected to?-- Yes.

So we have a very similar set of circumstances in 512, don't we, that we really had in 5 North West?-- Yes.

I mean we have a goaf area that's been sealed and you yourself expected it to go through the explosive range, and you even nominate a time or approximate times, and we had your discussion with Mr Squires where he told you that he believed that the 512 sealed area would go through the explosive range on the night shift?-- That's correct.

There was no doubt that that area was going to go through the explosive range?-- That's right.

Well, can you tell me why if we had a situation in 5 North West where we had almost exactly the same circumstances and the same fears that men were evacuated from the mine at that time but weren't evacuated on this occasion?-- I think where the fear came from in the 5 North West sealing was that the roof chased us out of the section. We couldn't mine in there due to the roof conditions working and it was still working right up and after the sealing.

Yes, I accept that, but I'll put it to you that it would be highly unlikely that there would not be further roof falls in 512 after the area was sealed because of the type of mining?-- That's correct, yes.

I mean one could expect that there would be further roof falls at some stage?-- That's right.

If we are concerned about roof falls causing frictional ignition and we know that we have an area that's going through the explosive range, why did we not do what we did in 5 North West? Don't you think that it should have been of a major concern?-- It probably should have been, yes.

Was there any discussion about it to your knowledge?-- As far as I'm aware of, no.

Mr Morrison asked you some questions about different people

experiencing different smells in a coal mine and he mentioned smells such as roof bolt chemicals and toilets?-- That's correct.

You agreed with him. What was it you were agreeing -----?-- That you could smell these different smells.

That these smells were present in the mine?-- On different occasions, yes.

I think you've answered this question before, but you have smelled a heating in a coal mine, have you?-- Heating as to the -----

Spontaneous combustion?-- Not in the early stages. I've had the smell of - after the '86 disaster.

Is there an area you pass by when you drive to the mine that has some coal burning?-- Yes, there certainly is.

You've smelled that?-- I certainly have.

Would you accept that that's a smell similar to spontaneous combustion?-- It's exactly the same to what I had smelled after the '86 disaster.

How would you describe that smell? If you had to put a word to it, what would you say?-- Tarry smell.

A tarry smell?-- Yes.

It's a very distinct smell, isn't it?-- It certainly is.

Could you confuse that smell with roof bolt chemicals?-- Definitely not.

Could you confuse it with toilet smell?-- Definitely not.

Mr Harrison asked you a question as to whether or not when you left the mine on the Sunday whether you had seen or heard anything during the course of that day that caused you concern and you answered no. You have now got me a little bit confused because I understood you to say prior to that question, and even subsequent to it to a question answer that Mr Parkin asked you, that you did have concerns?-- I had concern at those readings, yes.

Because your understanding was that that atmosphere behind the seals in 512 was going to go through the explosive range?-- Yes.

So you did have concern?-- I certainly did, yes.

Can I just ask you another question in relation to heatings? Mr Squires indicated to you that on one occasion he had a smell. Did he describe that smell to you at all?-- No, he did not.

He just said he had a smell?-- Just said he had a smell.

What did you take it that he was meaning? I mean if somebody says down a coal mine, "Look, I've had a smell.", and they are not talking about the toilet -----?-- I presumed that it wasn't a heating smell otherwise I thought that Michael would have said.

I mean why would he tell you that he had a smell?-- Don't know.

You'd been a deputy for almost 20 years?-- That is correct.

You've had 20 years in the Mines Rescue Brigade. You are a fairly experienced underground coal miner, Mr Blyton. You've had the misfortune to experience the Kiangra disaster in '75, you've experienced the Moura 1986 disaster and you didn't know at the time, but you were about to experience another one. Surely - and just think about this, if you can't answer it don't, but please give it some thought - I mean it's not uncommon in an underground situation, particularly in mines where you do experience spontaneous combustion and heating, for people to simply refer to a smell. It's not the first time I've heard it. People say, "I had a smell." Wouldn't you automatically take it that it would be related to a heating?-- I had a gut feeling at the time, yes.

Okay. I mean he didn't definitely say it was a heating smell, I appreciate that, and you said he didn't describe it. You then went on to say that at a later date the smell was stronger and that he could see a haze. Now, with all of your experience - and I won't go through it again - if first of all he described that he had a smell and then said, "And at a later stage that smell was stronger and it was accompanied by a haze", doesn't that tell you something?-- It does tell me something, yes.

What does it tell you?-- It tells me that there was a heating there.

So that tells you that there was a heating, there, and Mr Squires went on to say that even though he didn't mention that there was a heating he then said that that's why the decision was made to seal the area as quickly as possible, because you had an obvious concern as to why that panel was sealed prematurely?-- Yes, that's correct.

And that's why you asked him the question?-- That is right.

And that's how he answered it?-- Mmm.

You then obviously were concerned then - well, you probably asked yourself, "Well, I better find out what the hell is happening there, so we will go and plot the Ellicott diagram.", okay?-- That is right.

When did you then - I am not sure whether it's - you say, "During my shift" - on page 2, halfway down you say, "During my shift I was concerned what the atmosphere was like behind the seals in 512." This is after you had already taken one or two plots on the Ellicott diagram, isn't it?-- Yeah.

So you made a point of bringing up the Ellicott diagram probably six or seven times, and it was then that you saw the trend towards the explosive range?-- That is correct.

And yet after you became aware and certain yourself that it was trending towards the explosive range, Mr Squires indicated that it would go through the explosive range on the night shift, there was a heating, and yet you didn't convey that message on to anybody other than Mr Squires?-- That is correct.

What did you expect Mr Squires to do with the information that you passed to him, or the concerns that you passed to him?-- I thought Michael would have told the oncoming deputies on the night shift and probably assembled the men and had a bit of a yarn to them about it.

Did you see any of the oncoming deputies?-- No, I did not.

So you had actually left the mine before they got there, or they had gone down -----?-- No, I left the mine prior to them arriving.

So it's not as though you left there without wanting that concern passed on to the other deputies, it's just that you weren't going to be there to do it yourself, so you advised the undermanager who you thought would pass that information on?-- That is correct.

Why would you think he would pass that information on? I mean, is it important information?-----

MR HARRISON: Your Worship, can it be clarified what information?

MR PARKIN: The concern then, I will change that, Mr Harrison.

Okay, your concern. I mean, why would you think he would pass your concern on to an oncoming deputy?-- Because it was part of the - part of the status of the mine and he should pass on all the relevant information to the oncoming - to his deputies that are going to come on shift that are going to work there for the night.

021194 D.11 Turn 22 mkg (Warden's Crt)

Particularly if it was important information?-- That is correct.

Particularly if it could affect the safety of the people going down the mine on the next shift?-- That is correct.

Do you know for sure whether or not Mr Squires in fact did pass that information on or not?-- No, I do not.

You don't know that?-- No, I do not.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Blyton, like Mr Neilson, I am interested in the comparison between 5 North-west and 512 after sealing, but in the former case men were withdrawn from the mine and in the other case they were not. I think you have indicated in your answer to Mr Neilson that there was no heating in the 5 North-west panel so that it was a routine sealing effectively at the end of the life of a panel, would that be correct?-- As far as I can recall, the section was sealed off. We had lost several pillars of coal we didn't mine due to the roof conditions working. I think that the management made the decision that it wasn't worth the risk to carry on and so we might as well pull the machines out and seal it off.

So there were, what, larger expanses of open waste in 5 North-west than there were in 512, was that the case?-- What do you mean by "larger"?

Well, larger spans, larger areas of unsupported roof in the goaf?-- It would have been quite similar.

Quite similar?-- Yeah.

And similar support density, similar numbers of roof bolts?-- Yes.

In both panels?-- Yes.

Any difference that you are aware of in the roof strata - type of roof strata in 5 North-west as compared to 512 Panel?-- Not that I am aware of.

What was the nature of the roof? Was it a thick bed of sandstone?-- Yeah, we had sandstone roof probably about three metres up, I think.

Three metres up?-- Yeah.

Would you remember the length of the roof bolts that were being used in that?-- 1.8.

XN: PANEL

WIT: BLYTON J W T



021194 D.11 Turn 22 mkg (Warden's Crt)

1.8 metres?-- Yeah.

Were they performing any useful support function, do you think, if they are 1.8 metres long in a three metre bed of rock?-- The sandstone was above the type of shale roof that we had.

The immediate roof was shale, was it?-- Yeah.

I see, I understand. How thick was that shale?-- It varied throughout the mine, but I'd think it was about three metres thick, I think.

So the immediate roof was shale of three metres thick?-- Yeah.

And then into?-- Into sandstone.

Into sandstone?-- Yeah.

So the roof bolts didn't penetrate through the shale into the sandstone?-- Not that I am aware of, no.

Now, what sort of scenario was painted as to how a frictional ignition could occur under those circumstances, do you know?-- No, I don't.

Has anyone ever told you or explained to you the types of rocks that might lead to frictional ignition in the goaf area?-- No, they haven't.

So we have a situation geologically and in terms of support that are very similar in 5 North-west to 512?-- As far as I am aware, yeah.

So, really what we are saying is in 512 we have really two potential sources of ignition compared to one potential source of ignition in 5 North-west?-- When you think about it, yes.

And in 5 North-west it was seen fit to withdraw the men but not in 512?-- That's correct.

Thank you.

EXAMINATION:

MR ELLICOTT: Would Sunday day shift normally be considered an overtime shift?-- Yes, it is.

So, there is normally no production, it is used for maintenance and for setting up?-- That's correct.

Would Sunday afternoon shift normally be considered an overtime shift?-- That is correct.

And the normal shift pattern for the week, that was those shifts that weren't considered overtime, really started on Sunday night shift?-- Sorry, I just missed that?

The normal shift pattern for the week, would that have started after Sunday afternoon shift, on the next shift?-- Yeah.

So, that was Sunday night shift?-- That's right.

And that's when production would have normally commenced for the week?-- That's correct.

Can the witness be shown this document, please?

The document you have just been handed is titled "BHP Australia Coal Pty Ltd, Moura No 2 Mine, No 2 Underground Mine Ventilation Survey"; is that correct?-- That's correct.

And that bears a date of 12/7/94; is that correct?-- That's correct.

If you look to the bottom left-hand extremity of that document do you see a number that may be a document identifier?-- That's correct.

That identifier is FB 700 008; is that correct?-- That is correct.

Do you recognise that form of identifier as having any significance?-- This form or this number?

That form of number or that particular number?-- That's a Quality Assurance document.

Do you see that that document contains the words, "Issued by A G Morieson"?-- Yes, I do.

Do you also see that the document bears neither a signature nor date of issue?-- No, it does not.

So, it doesn't bear a signature?-- Yeah.

It doesn't bear a date of issue?-- That's correct.

On examining the document can you see down the left-hand side there is a column headed "District Location"?-- Yes.

And if you go down that column one of the locations is the 512 top return?-- Yes.

Can you see that across the top there are a number of column headings, but the one fourth from the right says, "CO Litres per Minute"?-- Yes.

Can I ask you to go down that column to the position corresponding to the 512 top return, please? You may need the aid of a ruler?-- Yes, I have that.

Can you indicate to me the measured CO litres per minute for 512 top return on 12/7/94?-- 15.07.

Thanks very much. On the afternoon shift of 6 August - sorry, I will start that again. You have indicated that during weekend shifts where an undermanager was not on shift then some arrangement was made so that an undermanager could be contacted?-- That's right.

If you wanted to contact an undermanager on the afternoon shift of Sunday, 6 August, who would you have attempted to contact?-- On 6 August?

On 6 August?-- That's a Saturday.

Sorry, can you make that 7 August?-- I would have contacted Michael, Michael Squires.

He was the undermanager who was on duty on the day shift on the 7th?-- That's correct.

And he was also the undermanager who was scheduled to come on duty on the night shift of that day?-- That is correct.

And he was also the undermanager who was effectively on roster for contact for the afternoon shift of that day?-- That is correct.

Okay. Can the witness be shown Exhibit 12, please?

Can you see that Exhibit 12 has the title, "Underground Position Descriptions, BHP Australia Coal Limited, Moura Mine"?-- Yes.

Can I ask you to turn to approximately the seventh page from the rear of that document to the position description for underground mine deputy. Do you see on that page there is a heading "Responsibilities"?-- Yes.

Can I ask you to read the responsibility denoted No 3?-- "He shall suspend any operation that is likely to cause danger to any person until he has received special instructions from the manager."

Who in that context do you understand to be "the manager"?-- The manager of the mine.

021194 D.11 Turn 23 gc (Warden's Crt)

The mine manager?-- That's correct.

Not the underground superintendent?-- I think in this case it is the same person.

So, in the context of that responsibility you would contact, in effect, the underground superintendent?-- According to this, yes.

Can I ask you to turn to responsibility 6? Can you read that to me, please?-- "To liaise with oncoming deputies and shift undermanager as to the status of their district."

You agree that says only "oncoming"?-- That is correct.

I have no further questions, thank you, except I would like to tender that document that I had the witness look at. That is document 87 of Exhibit 9 and it is a copy thereof and I have copies for the Bar table. The panel already has copies.

WARDEN: It will be marked Exhibit 91.

ADMITTED AND MARKED "EXHIBIT 91"

WARDEN: Right, gentlemen? Nobody got anything else?

MR MORRISON: Yes, I have sat here long enough.

FURTHER CROSS-EXAMINATION:

MR MORRISON: In 5 North West you mentioned there was a big fault in the roof, didn't you?-- Yes, I did.

Show me where the fault is in 512. Is there one? There isn't, is there?-- No, there is not.

No. That's a substantial difference between the geology of 512 and 5 North, isn't it?-- There is a geology difference in that zone, yes.

Of course there is. It was that fault that, when you answered the questions of the panel, you mentioned in the context of raising the concerns about the roof working; in the sense that the roof chased you out of the section, that's what you said?-- That is what I said, yes.

Now, the roof didn't chase you out of 512, did it?-- No.

No. In 512 there was an orderly extraction right to the end and the only falls that occurred were localised falls at

FXXN: MR MORRISON

WIT: BLYTON J W T

intersections; isn't that right?-- I don't know about other falls. I only know of one fall.

And right to the end it was still possible to walk the top return down to cut-through 13 and across the back to roadway 6; isn't that right?-- I don't know.

You know or were you aware that one of the undermanagers, in fact, walked the goaf on many occasions in 512? Were you aware of that? McCamley did? Did you know that?-- No, I did not.

Well, there weren't too many people walking the goaf in 5 North, were there?-- I don't know.

People couldn't go in because of the roof working; isn't that right?-- That was only right at the end, yes.

They couldn't get in to make any sort of inspection at all. That's another difference between 512 and 5 North, isn't it?-- Could be, yes.

And 5 North was mined to five metres on development, wasn't it? Five metres?-- Five metres what?

Height?-- In some areas, yes.

512 never was, it was mined to three, wasn't it? Three on development and then bottoms taken on extraction; isn't that right?-- That's correct.

So - I don't think I will bother with that. Now, when we come to the night that you were talking to Mr Squires you were in the showers, you were leaving. You didn't actually list for him those readings you have put in your statement, did you?-- No, I did not list them.

Nor did you tell him anything about readings, did you? Not individual readings you didn't?-- When I expressed my concern to Michael about them he said, "I know, I have just come from there."

What you said to him was that the Ellicott diagram indicated it was about to go into the explosive range, that is what you said?-- That is right.

And in response to that he said, "Yes, I know."?-- That is correct.

That's your evidence?-- Yes.

You don't mean to suggest that you indicated any of the individual readings to him, do you?-- No.

Nor did you say anything about your concerns for that night beyond, "It's about to go into the explosive range."; isn't that right?-- Probably, yes.

Now, after 1986 when the inquiry was held there and frictional ignition was raised, do you really mean to indicate - I know it was Mr Neilson's words and not yours - the people had grave concerns from that year on about frictional ignition as a possibility, grave concerns?-- There were concerns at No 2 underground, yes.

You weren't willing to adopt Mr Neilson's words, were you? He said "grave concerns". That's just not true, is it?-- Could have been grave concerns, yes.

Did you have grave concerns for roof falls in 512? You didn't, did you?-- No, I didn't have -----

No, and do you know of anybody who had such grave concerns about roof falls in 512 that they either stopped production or stopped the panel or stopped the work or put it in their deputies reports? Do you know of any?-- Not that I'm aware of.

None, thank you. Now, you are in fact the captain or have been the captain of the Moura team in Mines Rescue?-- That is correct.

And that team has recently won the E K Healey Cup; isn't that right?-- Last year.

That's a State trophy?-- That is correct.

And won it for the third successive year in a row?-- That is correct.

That's a record?-- That is correct.

You've been involved for many years in running the Moura Mines Rescue Station, haven't you, many years?-- I don't run the Moura Mine Rescue Station.

I don't mean to say you are running it yourself, but you've been involved for many years in the running of the Moura Mines Rescue -----?-- I've been involved for many years with the Moura Mines Rescue Brigade, yes.

FURTHER CROSS-EXAMINATION:

MR HARRISON: Mr Blyton, earlier I asked you some questions, right at the end of my questions, whether or not you had any concerns for the safety of the men that evening before you left; do you remember that?-- Yes.

Mr Neilson asked you some questions about concerns earlier and he said that he was somewhat confused about it. Now, just to clear up that confusion, was it your recollection that what I asked you about was concerns for safety of the men before you left that night? Is that your recollection of what I asked you about?-- I didn't have any concerns for the safety of the men that I was in charge of on the afternoon shift.

It was the safety of the men that I asked you about earlier; was that the case?-- That is correct.

Thank you.

FURTHER EXAMINATION:

MR NEILSON: Mr Blyton, a mine deputy is supposed to have a fair idea of the nature and state of the roof in a section that he is working in, isn't he?-- Yes.

If another deputy was to describe to you that an area that he was working in he would not go into in relation to a goaf, and he said to you that the reason he wouldn't was because it was tiger country, what would you understand him to mean by that?-- What I understand by going into tiger country or - if you went in there it's just like walking into the jaws of a tiger. There is probably no chance of coming back out.

Why would that be, in the main, I mean. What would your first thoughts be that might be going to happen or possibly happen?-- The roof may have been working and just settle down and could have been just hanging there.

So if a deputy was to describe an area as tiger country then we are pretty sure that we could have some very bad roof?-- That is correct.

WARDEN: Thank you for working on this afternoon. I did want to finish this witness so he can go. Can we have a resumption at 9.30 tomorrow morning?

THE COURT ADJOURNED AT 5.10 P.M. UNTIL 9.30 MANY THE FOLLOWING DAY







WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 03/11/94

..DAY 12

THE COURT RESUMED AT 9.39 A.M.

JEFFREY JOHN TAYLOR, SWORN AND EXAMINED:

MR CLAIR: Your full name is Jeffrey John Taylor; is that correct?-- That's correct.

You are employed as a fitter at the Moura No 2 Mine?-- That's correct.

You started in the coal mining industry in England in 1962 as an apprentice fitter?-- That's correct.

You came to Australia in 1968 and you worked at Munmorah State Coal Mine from '69 through to '74?-- That's correct.

And then did you work for Anglo American Coal Mines in South Africa and Rhodesia for a period?-- That's correct.

You returned to Cook Colliery in Queensland in 1976 and stayed there till '78?-- That's correct.

Then in British Columbia in Canada until December '79?-- That's correct.

When you returned to Cook Colliery?-- That's correct.

Since then you have worked at Cook, Harrow Creek, Laleham No 1 Collieries and then you came to Moura No 2 Mine in November '93 having left Cook Colliery in '92; is that right?-- That's correct.

Now, your duties at the mine as a fitter involved the maintenance, service and repairs to both the surface and underground machinery; is that so?-- That's correct.

I want to draw your attention particularly to Sunday, 7 August. You were working the shift that commenced late Sunday night, that's the Monday night shift; is that right?-- That's correct.

What time did you go to the mine?-- I had to start work at quarter past 10.

And where did you go when you arrived there?-- After changing in the change house I go up straight to the workshop and I commenced duties from the workshop and we had - Rod Buckton, who had been working previous to me, who had instructions to tell me what jobs were to be performed that night.

Righto. Were you told then what you were doing?-- Well, I arrived at the workshop where Rod Buckton had been working the previous shift to me and he explained to me that we would have to go to the 512 as there was a miner and a broken chain on the feeder breaker, but he said we will have to wait because

we will see - to see if we could get a couple of TA's to assist us and in that period of waiting the undermanager - Rod had contacted the undermanager -----

Who was that?-- Mr Squires.

Yes?-- And the undermanager, I believe, it was informed to me by Rod, that he was chasing up to see if he had enough men to supply a TA for both myself and Rod Buckton.

You both needed to have a TA with you; is that right?-- Well, that's usually the procedure. You get more work done that way because we could both split up, Rod could go to one machine and I could go to another machine, which - you get the job performed a lot quicker that way. So, a period of time went by. As I said, I arrived at quarter past 10. It must have been in or around 11 o'clock, we were still waiting for information from the undermanager to tell us if we could have a TA when Gene Johnson arrived.

Just pause a moment there?-- Yeah, sure.

Did you - you say you went to the crib room - workshop crib room?-- Yes.

Had you stayed there throughout that period of about three quarters of an hour?-- Yeah, we stayed in the crib room waiting for instructions from the undermanager as to whether we could have a TA each.

Now, had you been to any union meeting earlier that day?-- No.

When you spoke with Rod Buckton did you have any discussion with him about the situation underground in the mine?-- None whatsoever, but as far as I was aware, Rod and myself were totally unaware of what the situation was underground.

512 Panel, did you know anything particular about 512 Panel?-- I knew that they were sealing the section and that only from the mechanical point of view there were two machines that had to be fixed because it was informed to me that they were to be flitted to another panel where they were to proceed with another installation.

Did you know whether the sealing of 512 had been completed?-- I was totally unaware of any information whatsoever as to the advancements of sealing in the 512, no information whatsoever.

Did you at any time consult the monitor screen which indicates gas levels at various points throughout the mine?-- No. As a fitter we don't normally involve ourselves in that area. Our duties are usually performed from the workshop and it is only generally when we are required for a breakdown that we go down to the underground.

Would that involve you going underground every shift on an average or more than once per shift?-- You could probably go down to different panels maybe three times in a shift, maybe

just once, but you never had a particular panel and there was usually three fitters on and we usually shared the underground between us. Say, one night I would go down and another night another fitter would go down.

What was the structure of authority for the fitters? Who did you report to?-- On night shift at that period when we were working we were all fitters, there was no - there was no supervisor as over the mechanical. We would - probably would have been answerable to the undermanager.

What were the lines of communication normally for the fitters? That is, what system was there to keep you up to date with what was happening underground?-- To keep me -----

That is about panels being sealed and about gas levels in various areas of the mine, the existence of any dangers underground?-- Well, as far as I am concerned for myself there was no direct communication to let me know, nor as far as I am aware, Rod or any other fitter, of the situation that would have been down that mine.

Now, you say that Rod Buckton had worked the previous shift and he was staying on then to work the night shift; is that right?-- Yes.

Ordinarily was there some practice of the fitter who was finishing his shift crossing over - that's overlapping - with the fitter coming on and telling him what was going on?-- Yeah, but you would get - you would usually have - you would usually have information and being fitters we didn't really involve ourselves with the underground situation, we were always concerned with the performance and how the machines were going more than what the mine was.

When you were told you would be working in 512 that night whereabouts did you understand that to be, outbye the seals or -----?-- Outside the seals, I believe, yes.

Okay. Well, now, you mentioned something about Gene Johnson and around about 11 p.m. What occurred then?-- Well, Gene Johnson, who is the boilermaker, and he does rotating shifts where we were permanent night shift - as we were still waiting - well, it was me by myself, as I remember, I don't know where Rod was at that time. Gene came into the crib room and he was looking, I thought, pretty sad and I just had a joke at him. I said, "What are you looking so miserable about?", and -----

Just take your time, Mr Taylor?-- And he said, "You want to hope you're not going down the 512 tonight.", and I said, "Why?", and he said, "Well, I'll tell you now, Turbo" - that's my nickname - the 512 was going through its explosive range, the gas, the sealed area, and I was quite startled when - that was the first time I was aware of what was happening underground and after a few minutes I thought, well, probably there is people down there working because I knew that people were down there, that maybe Shorty, as we called him, Gene Johnson, was probably over-exaggerating the situation. So, I

dismissed it from my mind as best I could.

What happened after that?-- After that, as I recall, Rod and - as I say, I am trying to remember events. Rod came back and I think he got information either from the phone or he had seen the undermanager that there were no TA's available so that we would have to go back-to-back fitters down to the 512, but in this period of time, which I can't remember entirely, there was a phone call from the 1 North West panel and they required a fitter down there, they had a very bad water leak on the continuous miner in that panel. So, we had no supervisors, we decided that the continuous miner, which is the main coal getting machine, would have to be attended to and we could come back to the 512 later. So, we decided that we would go down to the 512 and fix - sorry, to the 1 North West miner and fix that particular water leak together.

I see. What did you do then?-- We - Rod, that is, he had a ticket - he had recently got a ticket to drive the PJB and he went over and got the PJB, which he brought into the workshop and we proceeded to load up tools into that PJB vehicle and we were preparing ourselves to go down to the 1 North West miner. Rod then - how he quite got his information - he said to me that - this is - that he had a message from Greg Bennedick via the lamp room from the electrician down in the 5 South, that at that time he thought - and I listened to him - that the shuttle car in the 5 South had a noisy pump, but subsequently I found out that that was the wrong message, but we were under the impression that was a message that had come via the lamp room from the electrician down at the 5 South from Greg Bennedick who passed the information on to Rod Buckton and Rod passed the information onto me.

So we decided that we had a water leak on the 1 North West miner. We were under the impression that there was a shuttle car with a noisy pump in the 5 South and we had to make a decision which was most important to us, the most important machine to fix. So we decided the 1 North West miner was the most important machine to fix and we proceeded to go into the 1 North West.

Where did you go to then?-- We entered the 1 North West panel. There was a PJB parked, as I remember, one side of the crib room, that was the outbye side of the crib room, and we parked our vehicle on the inbye side of the crib room at the 1 North West panel.

What time would you have gone underground?-- We would have been underground in the 1 North West panel at approximately 11.30.

How long would it have taken you to get from where you set out in the PJB down to there?-- A matter of a minute or two. Maybe a minute, two minutes, to actually walk from the PJB to the continuous miner.

While you were on the surface did you hear any alarm at any time?-- I never heard any alarm that I can recall, no.

You are familiar with the hooter?-- Yeah.

You didn't hear that at any stage?-- I couldn't recall it, no.

What happened when you reached 1 North West then?-- Rod and myself - I took my bag of tools and proceeded down to the continuous miner, and Rod got on top of the miner and I stood by the side of the miner, that's the off-driver side, and Greg Young, China as we call him, was on top with Rod and we were trying to find out where this water leak was. We found the water leak and it must have been - heck, five, 10 minutes when there was a loud noise which to me with my experience sounded like a very heavy roof fall. It was a number of - like explosions. That's what it was, of course, but at that time I didn't realise. I thought it was heavy roof fall.

You say a number of them, how many?-- I'm trying to recall. It just seemed like about - it happened that fast it would be maybe four - four, five in a row, boom, boom. It was - yeah, I would say about four or five explosions in a row.

Did you feel anything at the time that you heard that?-- Yeah, it's the same as a roof fall but - a displacement of air, the compression on the ears, and the first thing I said - I said, "Flaming heck, that must be a heck of a roof fall.", but it became - one of the boys on the other side, I think was Johnny Owens said, "That's not a roof fall, that's an explosion.", and -----

Just pausing a moment, this pressure that you felt on your ears, how would you describe the degree of that pressure?-- Well, on my ears it was like - how would you describe it?

It's like when you are going down a hill fast, different levels in a car. I don't know if you've been down a hill and you feel that compression, it's a same thing but a lot more exaggerated.

Any pain associated with it?-- Very uncomfortable as far as I was concerned, but no pain, no.

Go on?-- When Johnny - I think it was Johnny said it was an explosion - or he thought it was an explosion, within minutes, a very short time, the panel started filling up with a very white stonedust fog and it became obvious that we were in trouble. We then proceeded back to the crib room where the deputy was, and a lot of events were happening then, a bit confused about it, but we decided to get into the vehicles and start proceeding out. Rod and myself got into the inbye vehicle that we brought down and the miners got into the outbye vehicle which they brought down. We started the vehicles up. At this time the panel was still filling up very quickly with all this smoke and stonedust fog and we started proceeding out for about one pillar when the vehicles came to a halt and Johnny Owens, under instructions from Lenny Graham, the deputy, got in our vehicle and advised us to put our self-rescuers on straight away which we did. We were contemplating doing that anyhow, but that confirmed it when we got that message, and the three of us stayed together, that's Rod, myself and Johnny Owens. We proceeded to follow the front vehicle where the miners were and all the time the smoke and everything was getting thicker and it became very, very, very hard to see. There was very much of a stinging sensation on the eyes, but we proceeded out very, very slowly, and as I recall, the vehicle in front must have hit a lump of timber or a prop and we nearly run up the back of it, and through all the smoke and everything that was in the panel I could barely see who I think was Jimmy Parsons get out and try to direct the front vehicle because of the - trying to work our way out of the panel. Coming out of the 1 North West there was a couple of right-hand turns to go around before you could get to the main heading to get out of the mine. So we proceeded very slowly until we got into the main heading to go out the mine, and once we got into the main heading, the main roadway out of the mine, it was still very thick, the smoke and everything, but it was a lot better than it actually was in the panel.

After you got to the surface then what did you do?-- Well, we came out of the mine, and actually, for the first eight or nine metres it wasn't distinguishable whether you were in the mine or out of the mine there was that much smoke coming out of the tunnel, but once we got to the lamp room we took our self-rescuers off and reported to the lamp room and give them our names.

Okay. At some point when you reached the surface or near the portals of the mine did you see a deputy, George McCrohon then?-- Yes, that's right. Because of the confusion and - you know, I was a bit stunned with everything what was happening around me, I thought the deputy had got into our particular vehicle in the mine, but I subsequently found out



that - it was actually outside the mine, that George had gone into our vehicle and we carried on out to the lamp room.

Thank you very much, Mr Taylor.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Taylor, was most of your work carried out on the surface ordinarily?-- That's correct.

That was in the workshop at the mine, was it?-- That's correct.

Only on the occasions when there had been a breakdown underground would you be required to go down?-- That's correct.

What was the approximate frequency of those occurrences when you went underground?-- They varied from night to night. You could be - it was very unlikely that you wouldn't go down at least once a night, at least once a night, but probably two or three times a night, and I did vary between panels.

Had you had any training at all as to spotting trouble underground?-- Well, when I started at Moura, because I had lost my job at Cook Colliery when they retrenched us, they decided that they would give me an induction course for two weeks and they did tell us all about self-rescuers and everything that comes with an induction course on the safety side.

That was in late 1993?-- That's correct, November.

A two week course, and was that the extent of your training in terms of potential hazards underground?-- At the mine they had safety meetings once a month which we were asked to attend.

You attended those?-- Initially I didn't because - I attended - I was on an eight hour shift initially at the mine and the safety meetings catered for the eight and three quarter hour boys, and I didn't always attend them being on an eight hour shift.

As part of your induction course at No 2 were you ever told the significance of the Unor screen and the information displayed there?-- Not in great detail as I can remember, no.

I think you've told us it wasn't your practice to pay much attention to the screen in any event?-- That's correct.

Of this night, the Sunday night, 7 August, I take it from your evidence no-one other than Gene Johnson mentioned to you anything about the conditions in the 512 Panel where you were going?-- That's correct. After talking to Gene Johnson, Rod



Buckton - I can't remember when we brought the subject up, but I did mention it to Rod, and he was quite surprised because he wasn't aware of it and he had been there all afternoon shift on the Sunday prior to me coming in on night shift, and he wasn't aware of it.

Did you hear any other parties at the mine that night talking about conditions in 512?-- None whatsoever.

Did you associate with other miners and parties before going underground?-- No, the only people I associated with was Rod Buckton and Gene Johnson and then we proceeded down the mine where the miners were already there.

When the event happened underground you were in the 1 North West panel?-- That's correct.

From what you've told us you had some difficulty getting out?-- That's correct.

Because of lack of visibility?-- That's correct.

Stinging eyes?-- Correct.

Had you taken part in any training procedures for the event of something happening whilst you were underground?-- It was always pointed out, every mine, including Moura, that - they made sure that you were very conversant with using the self-rescuer. They explained to us, and clearly, very clearly, why we had to use a self-rescuer should we get into any trouble, whether it's smoke or anything, because of the carbon monoxide, and through that training probably saved our lives.

In the sense that you were able to get the self-rescuer on fairly quickly, were you?-- Very quickly. They made sure of that. Moura mine made sure that you were very conversant with using the self-rescuer.

That night did you have any difficulty at all -----?-- None whatsoever.

----- putting on the self-rescuer?-- None whatsoever.

Did anyone else to your knowledge have trouble putting it on in those circumstances?-- I'm trying to think if Rod Buckton - I'm trying to recollect if - one of the boys could not actually pull the canisters off, but we were always told - I don't know if it was Rod so I could be stood corrected here, but anyhow, we were fully aware in a situation like that there would be no problem, that it would still work, just leave it on and get it - don the equipment as quickly as possible.

Prior to that night had you been given any instruction as to a procedure to follow if something happened like that underground?-- We were given - we were always given a procedure to follow. It was well known, the training side of Moura for any new employee whatsoever, how to and why you should use that self-rescuer. It was, in situations where

there was smoke or an explosion, very important to don it straight away.

Was there ever any trials to simulate a situation such as that to put the procedure into effect?-- Yes, when I first started on the induction we were taken to the Mines Rescue station where they simulated smoke under very hot conditions, very, very similar to what was happening down there and they asked us to - and timed us the amount of time to take the self-rescuer and put it on, and they left us in a hazardous situation so that we could be - familiarise ourselves so we would be fully aware of everything.

Did you find such an experience in a training experience to have been of benefit to you on this night when you had to get out during the emergency?-- Absolutely.

Thank you, Your Worship.

MR MARTIN: I have no questions, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Mr Taylor, do I understand correctly to say when you got there on the Sunday you didn't at any stage go over to the start point?-- The starting point for fitters is usually - is always at the workshop where we are informed of our job duties.

So I do understand you correctly to say you didn't go over to the start point where the miners leave from?-- No, that's never been a practice.

That's as I understand it too, that fitters wouldn't normally go there?-- No.

I think I understand you correctly to say that in the same way fitters are concerned with their job, that is to say doing machinery work, and for that reason fitters don't involve themselves in the whys and wherefores of what's going on underground?-- Not as a general - no. We are usually very concerned with the performance of the machines.

The fitters rely on other people to deal with the underground situation and let them get on with their job?-- That's correct.

When Mr Johnson came over to speak to you, he was a boiler maker and was he starting the shift also?-- He was starting the shift on an eight hour shift. I was on an eight and three quarter. I started at quarter past 10, he started at 11 o'clock.

I understand. So you must have been there for a little while before Johnson came in?-- That's correct.



It must have been close to 11 when he arrived?-- That's correct.

Did he say to you anything about what was going on below beyond what you've told us in the words? Did he say that he had been to the Unor screen, for instance, or he had been talking to the undermanager?-- He had been talking to someone. He got his information on the shift prior. He must have worked over the weekend and that's where he obtained his information, but I cannot recollect exactly how he got it.

Your understanding at the time was that what he was conveying to you he had derived from having worked the previous shift?-- That's the way I seen it, yeah.

His response to you was basically about going down the mine, not - he didn't mention 512 specifically, did he?-- He did, yes. He did mention about the 512 being sealed and the explosion range that it was going through.

Did you know what he was talking about?-- I had a good idea, yes.

From your own previous experience in England and out here?-- Yes, yes.

Did you then think to go and check that information with anyone?-- As I said earlier on, I thought - well, my mind - I was startled and I thought, well, there is miners down there. I knew the miners were down there and everyone was in the mine, so I thought that probably Gene was over exaggerating the situation and being a bit dramatised - like, I've only worked in that mine eight months at the time and I thought, well, surely if they are all down there it's a little bit exaggerated and I tried to dismiss it.

Is Gene a bit like that, is he? He has a tendency for dramatising things?-- He comes over to me sometimes that way, you know.

You mentioned this to Buckton?-- I can't recall exactly when I mentioned it to Buckton or what period of time because there was a lot going on then and we had get down and fix the machine and everything, but I did mention it to him and he was definitely not aware of - and he had already worked the previous shift and he was not aware of the explosive range of them gases.

Did you tell Buckton about your reaction to Johnson, that is

to say, "Look, I think Gene's going over the top a bit."-- My recollection of talking to Rod Buckton was after the explosion, because as soon as it happened the first thing I was thinking about was Gene explaining to me, you know, "I hope you don't go down there.", and when it happened obviously his words rung in my ears, and I mentioned it to Rod after and he was quite taken back.

Well, can I understand this correctly, the conversation you had with Buckton was after the event, not before the event?-- In my recollection I believe it was after the event.

When the phone call came through to fix the 1 North-west miner, was that the one that was relayed - no, I am sorry, I will start again. When the phone call came through to fix the 1 North-west miner, did Rod Buckton take that call?-- Rod Buckton, yes.

Do you know who conveyed that information to him? Was it Michael Squires?-- I think - and I could stand corrected on this - no, it came directly from the panel and I believe it could have been -----

Lenny Graham perhaps?-- Lenny Graham, one of the boys in the panel.

I have nothing further, Your Worship. Sorry, just a moment. Oh, yes, I see.

Now, you can clear up a matter of interest for me, if you would. You mentioned eight hour shift people and eight and three quarter hour shift people, and you were an eight hour person?-- Initially I was on days and afternoons. I was on eight hours. Then I was required to go on night shift, and they wanted me to work eight hours for a period of time on night shift, and then they put me on eight and three quarters hours.

The eight hour people, when they attended the safety meetings, are paid overtime in order to come in and attend them, aren't they?-- Yeah.

Thank you.

MR HARRISON: I have no questions, Your Worship.

EXAMINATION:

MR PARKIN: Mr Taylor, just a few small points. Can you tell me what the management structure at Moura No 2 is for people like yourself?-- Can you repeat that, sir? I didn't hear you, sorry.

Can you tell me what the management structure for people like

XN: PANEL

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yourself is at Moura No 2?-- Structure?

Yes, who do you report to?-- Myself, as a fitter on night shift, I had no-one to report to other than - there was three fitters and we sort of had messages passed on from the previous shift or from the engineer of what jobs to perform, and if there was anything to do with production, usually the undermanager, deputy or even one of the boys operating the machine underground would phone up the workshop or the lamp room to ask us to go in there and fix that particular machine.

But did you have a mechanical supervisor?-- Initially we did have a leading-hand but he was required - I think it was to do - because they are doing these levels and he was required to train the miners up on the mechanical side of that, that's what we were led to believe, and that's why I had to go on night shift, to cover for him.

Who did you report to then? At the end of the shift what communication was carried out?-- The communications were we was usually left a series of servicing jobs to do, different machines we had to service.

Who left those instructions?-- They were instructions. We would have instructions to service X amount of machines and all the time we would be on standby to the production machines, but we had a continuous amount of work that was left for us to perform. Maybe a broken machine that would be left in the workshop, we would have to carry on performing on that job.

So, the normal procedure when you came to work, particularly if it's a weekend, where did you get the information from, from the offgoing fitter?-- From the - the work would be passed on from the previous shifts on what we had to do.

What about rosters? Have you got different rosters at Moura No 2? You say you were working an eight hour shift?-- Well, we had rosters - what we had for the fitters - the electricians were different - but the fitters and miners had a permanent night shift and there was a day and afternoon rotating. That was the roster system at Moura No 2.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Thank you, Mr Taylor. You said that you heard a series of fairly loud noises. Were these noises in very quick succession?-- Within a second of each other, I would say.

Within a second of each other. Were they of similar size, similar loudness?-- Varying - varying noises. You know, little bit different in sound, yeah.

I think you said at precisely the same time you could feel the compression of air in your ears causing -----?-- That's right, causing an uncomfortable feeling in your ears, yeah.

Did your ears return to normal fairly quickly? Did they pop and go back to normal fairly quickly?-- Fairly quickly, yeah.

You said that it was a similar experience to roof falls you had had or been exposed to previously?-- That's right.

Would you know, on those occasions, the sort of size of the roof falls that caused that experience that you had had? Were they small roof falls or very large roof falls?-- It would be a very large roof fall because I would imagine the displacement of air with the roof coming in was compressing, it would be equivalent to a very large roof fall.

What I am trying to get at: was it a known situation, let's say, where goaf was hanging up and collapsed suddenly, for example, in longwall mining?-- Well, I have worked in bord and pillar and we have had in Munmorah State Coal Mine where the roof held for large periods of exposed area, and when the roof comes down it was very, very similar to -----

Very similar to that?-- Very similar.

You said that some little time later the place where you were working filled up with a whitish stone dust fog?-- Right.

And I think you said smoke. Were you able to discriminate between fog and smoke, or is that just an overall impression?-- That was an overall impression, but as the minutes rolled by, then you could detect that it was smoke in there as well, but initially it was just suspended stone dust fog.

Was there any rush of air that accompanied that? Was there a rush of air into the area where you were?-- There was a rush of air, but where we were positioned, the miner being up at the face and the cut-through behind us, the rush of air was mainly experienced across that cut-through and we only got it partially coming down towards the miner; it seemed to rush straight across.

Not enough to sort of knock you off your feet or -----?-- Not where I was, but it was explained to me that the boys that were on top of the miner had seen - I think it could have been Quasi they call him, I forget his proper name - roll over, so it must have been a fair blast of air.

You mentioned also that you experienced stinging to your eyes?-- Very much so, yes. About, say, about three or four minutes into the explosion there was very much of a burning sensation in the eyes, and I had to hold my eyes on my eyelids to protect myself from the stinging, and it was very difficult for the boys to drive because, like, Rod Buckton, who was driving the machine, was rubbing his one eye and then opening

it and then rubbing the other eye.

When you got to the surface, I would guess one of the first things you would do would be to wash your eyes?-- That's correct.

Did the stinging disappear when you washed your eyes?-- The stinging disappeared, yeah.

And there was no long-term subsequent effect?-- No, we were advised to see the doctor the next day to check it, which we did, and he gave us a checkup and found that we were okay.

Thank you.

EXAMINATION:

MR ELLICOTT: While you were getting out of the mine, can you tell me if your self-rescuer got very hot?-- The self-rescuer after about a few pillars, I can't remember, but we were still in the 1 North-west area, we hadn't entered the main, it was getting quite warm, yeah.

It was getting quite warm. You weren't tempted to pull it out or to try and side breathe?-- No, we were always taught in training never to panic because it tends to - you tend to breathe a lot quicker, which would enhance the heating, so all that was in our minds - well, in my mind anyhow - just breathe steady and keep calm, and we were fortunate enough that we were in a sitting position and we had a vehicle to take us out because I felt the rescuer getting warmer, and we were always informed in a situation like that you were in a dangerous atmosphere.

Can you give me a feel for how warm the rescuer got? Can you possibly describe the level of discomfort?-- It wasn't so much that it got to a level of discomfort. I was holding the self-rescuer in my right hand and I could feel it warming up, but it hadn't got that warm where it was making it very uncomfortable, my breathing, but I was fully aware that by just sitting there, wasn't breathing very heavy, that I was in a dangerous atmosphere, so I was hanging onto the self-rescuer pretty well.

As far as you are aware, did everybody else keep their self-rescuers on?-- Everybody, as far as I was aware.

Thank you very much.

MR CLAIR: No questions, Your Worship.

WARDEN: Thank you, witness, you may stand down.

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WITNESS STOOD DOWN

MR CLAIR: Your Worship, I call Terry John Atkinson.

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TERRY JOHN ATKINSON, SWORN AND EXAMINED:

MR CLAIR: Your full name is Terry John Atkinson; is that correct?-- Yes.

Mr Atkinson, you might like to pull that chair in so you don't have to lean forward to the microphone all the time. If you can just make yourself comfortable there. Mr Atkinson, you are a shift undermanager at the Moura No 2 Mine?-- Yes.

You started in the mining industry in 1979 at Stockton Borehole Colliery in New South Wales; is that so?-- Yeah, that's right.

From 1980 to 1982 you worked at Wyee State Mine as a miner?-- Yes, that's right.

And from '82 to '90 at Myuna Colliery in New South Wales?-- Yes.

Four of those years as a miner and four years as a fire officer?-- Yeah, that's correct.

They were all bord and pillar mines; is that right?-- Yes.

You gained your deputy's certificate in New South Wales in 1985?-- Yeah.

And your undermanager's certificate in New South Wales in 1988?-- Yes.

In 1990 you joined Moura No 2 as an undermanager, shift undermanager?-- Yes, that's right.

And you did some oral examinations to get your New South Wales certificates recognised in Queensland?-- Yes.

And you have worked at No 2 ever since then?-- Yes.

You joined Mines Rescue in New South Wales in 1988?-- Yes, that's right.

Are you still a member of Mines Rescue now?-- No.

Your membership lapsed at some stage?-- No, I never done Mines Rescue in Queensland.

You have never done it in Queensland?-- No.

But you remained a member in New South Wales whilst you were there?-- Yes.

Perhaps if the witness could see Exhibit 12, please, Your Worship.

That is a bundle of pages, Mr Atkinson. I will ask you to go to the page which is about halfway through, probably about



10 pages from the back, if my quick count is correct. It is a page which is headed "Position Description Undermanager". Can you see that one?-- Not yet. I am finding it.

I will just count these more accurately. Yes, 10 pages from the back?-- Yes, I found it.

Got that one? Now, you have seen that document before; is that right?-- Yes.

That's a document which sets out various aspects of the position of undermanager, including the responsibilities of undermanager, commencing on the first page going over to page 2; is that so?-- Yes, that's right.

Then the third page of the document has your name and your signature on as having read and understood the document, and a date, 21 January '94; is that right?-- Yes.

Do you have a memory of reading through that document when you signed it?-- Yes, I do.

Okay. That was part of the implementation of a quality assurance program at the mine, was it, that those position descriptions came into effect?-- Yes.

Okay. Well now, if you had to sum up your duties as an undermanager, how would you sum them up yourself?-- Look after the safety on your shift, efficiency of production and maintenance, and liaison between shifts, between your preceding shift and your following shift; look after as far as giving directions to your deputies and the men; generally any work that was actually happening on the shift.

You became aware of the situation in the various panels of production in the mine?-- Yes.

In the course of your duties as an undermanager?-- Yes.

In respect of the 512 Panel, in particular, what sort of general observations would you make?-- 512? Ventilation, roof and sides, method of mining, general housekeeping.

Well, what particular observations then would you make about those aspects of 512? The ventilation, first of all?-- The ventilation? We ventilated up the top return, down through the waste. The top return is Tecrete stoppings, across the bottom were brattice stoppings and the bottom return was Holywell stoppings, tin stoppings.

That's adjacent to the cut-throughs adjacent to the bottom return, you mean, are you saying?-- I don't understand.

Sorry, the bottom return you were saying Holywell stoppings?-- Yes.

That was during the production phase?-- Yeah, that's right.

Righto. Now, were you aware of any problems with ventilation in 512?-- Not really, no.

Can I ask you about the design of the panel? What sort of observations can you make about the design of the panel?-- Design? It was basically designed similar to other panels we have extracted except for the load bearing pillars were bigger size and split the air.

Did that cause any difficulties in respect of ventilation?-- Made it harder to ventilate, yes.

In what way?-- Because of the splitting of the air.

And when you say it made it harder to ventilate, did it create any dead spots for ventilation?-- Oh, I can't recall. It was just off-hand, you know?

Or spots then where it was slower than elsewhere?-- At times, yes, we had to - yeah, ventilate it to suit where you were working, yeah.

Well, you said before when I asked you about any problems in ventilation you said, "Well, not really." You seem to be qualifying it a bit. Can you just enlarge on that? What do you mean when you say "not really"?-- Well, the set-up, like, when you was mining, you set the ventilation to ventilate where you was working, yeah.

Okay. Now, if you turn to your right there you will see a plan which you might well recognise as the plan of 512 Panel. Do you see that there?-- Yeah.

Can you explain - perhaps using the laser pointer there that is on the desk in front of you, just explain from where you are there, unless you want to go closer and have a look at it, what the - what you mean when you refer to the splitting of the air to ventilate. You can sit down if you like?-- Right.

So we can hear what you are saying?-- Well, the air had to



split to go around the pillars, these bigger pillars.

I am sorry, we can't really hear what you are saying. If you can manage it from the chair it makes it a bit easier for everybody to hear?-- The air had to split to go around the big pillars.

Around the big pillars?-- Yeah.

Can you just indicate where you mean?-- Had to split around to go around there and around there and the same down here.

Does that create - well, let me ask you: how does the splitting of the air effect the ventilation? Does it slow it down in some areas?-- Yes, it does slow it down, yeah.

Well, in what areas does it slow it down then, inbye the pillar, outbye the pillar?-- Inbye the pillar.

Inbye. So, behind the pillar, as it were?-- I beg your pardon?

In terms of the direction of the flow of air behind the pillar, is that what you are saying?-- Yes.

Righto. Well, now, what about the method of extraction then during the retreat? There was a procedure referred to as short ramping; is that right. Yeah, that's correct.

Did that produce any difficulties at all?-- Oh, yes.

Or anything that you saw as a difficulty?-- Oh, you could get the miner bogged every now and again and didn't get as clear a run to pick up the coal because, you know, to protect the car drivers you can only ramp for 15 metres. Made it harder on machinery and you couldn't pick up all the coal.

So, there was an amount of loose coal left -----?-- That's correct.

On the floor. More than you had with some other or with other methods of extraction?-- Yes.

Now, I want to ask you about the system of communication between the undermanagers, and between undermanagers and deputies in one direction and the undermanagers and higher level managers in the other direction. What did you understand to be the system in that regard?-- The system? When you came in or - I always come in early, you would read their reports and talk to the preceding undermanager.

Sorry, whose reports would you read?-- The preceding undermanager's reports.

Right. When you say "reports", that would be a report from the previous shift?-- Yes, that's correct.

Done by the undermanager on that shift?-- Yes, and -----

And read?-- And you would read the deputies reports when they come out. That was a hot seat change, they didn't come up straight away.

So, you would read the deputies report from the previous shift?-- Yes, that's correct.

Apart from the shift report then for the previous shift would you read any other earlier shift reports yourself?-- No, only the preceding shift unless there was something you wanted done, pipes put somewhere on another shift or whatever.

So, unless you had specifically requested something be done on an earlier shift?-- That's correct.

In which case you would go back and see whether that work had been completed?-- Yes.

Is that what you mean? Okay. Now, would you speak with the outgoing undermanager?-- Yes.

And what sort of exchange of information would there be there?-- Well, you would find out where we were up to, any problems, supplies, anything like that, and I would write it down so that I could - when I ticked me men off and eventually went around to the deputies to tell them what was going on with the panel. I could tell them what was going on with their panels.

Where would you write that down?-- Get a piece of paper off the computer and write it down on that.

Was that a record that you kept?-- No, it was just for the starting of the shift.

The information that was imparted to you orally by the outgoing undermanager, was that more comprehensive as a general rule or less comprehensive than what you would read in his shift report?-- Oh, no, I think the message given to you by the undermanager would be more comprehensive.

He would give you more information than he would write down in the shift report, are you saying?-- At times, not all the time.

Not all the time. Well, you say then that you would wait until the outgoing deputy came up top and then you would get his deputy's report?-- That's correct.

Is that so? Did you generally find that deputy's report contained more information than what you had been given by the outgoing undermanager?-- Sometimes.

Sometimes, but not always?-- Not always, no.

Would you speak with the outgoing deputy as a matter of practice, I mean?-- No, most times they just hand me their reports. If they had something to talk about they might talk to you, yeah.

Now, what about communication between undermanagers and managers? What did you understand to be the system there or if you didn't observe any system, as such, what was your own practice?-- No, well, if George wanted to see you he would see you and he would let me know if he wanted anything done, actually.

So, that happened, as it were, on an ad hoc basis? If he needed to talk to you about something he would talk to you, but there wasn't any practice?-- Most of the time he would be in the undermanagers' cabin.

So, you would see him, what, every shift? When you say "George", that's George Mason?-- George Mason, the undermanager-in-charge.

He was the undermanager?-- In-charge.

Who was in charge of the shift that you generally worked?-- No, I was rotating day/afternoon. He would be in charge of the whole mine.

Yes?-- He would be there of a morning to start a shift and most always be there of an afternoon when you started afternoon shift.

Okay. Right. So, go on, what was your own practice then, that you would see him virtually every shift?-- No, I wouldn't go and talk to George just for the sake of talking to him, no.

Would you, as a matter of fact, see him most shifts or what?-- Most shifts he would be in the undermanagers' cabin.

And you would talk to him?-- Yeah, that's correct, yeah.

Now, I want to ask you particularly about 17 June. I will just show you the shift report relating to the shift that you worked that day. That is the carbon copy that remains in the book that you have got there in front of you, Mr Atkinson?-- Yes.

It is Exhibit 66, Your Worship. A photocopy of that is Exhibit 66. This book forms part of the big exhibit, Exhibit 9.

Now, that shows that you worked the afternoon shift, did you say?-- Yeah, that's correct.

And if you go back to the previous shift do you see which undermanager worked on that shift?-- Mark McCamley.

So, Mark McCamley, yes -----

I should correct that, Your Worship. It is the one for the previous shift, Mr McCamley's report, that is Exhibit 66.

Does that indicate that you were the undermanager then that

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followed Mr McCamley?-- Yes, I was the undermanager.

On that day on the afternoon shift?-- I was on the afternoon, yes.

If you look at his, would you have read his shift report when you came on?-- Yes.

Exhibit 66?-- Yes.

And you will see some notations there about 512 Panel?-- Yep.

Can you read those?-- "Start of shift, mining sequence 14, tail wouldn't go up on c/m, shuttle car U/S steering, goaf build-up, ceased mining and reventilated goaf, put up stopping across prep seal No 6 road, greased c/m, mining at 1 p.m."

Now, do you recall at this stage the actual event of - or the circumstances under which you read that report of Mr McCamley's?-- No.

You don't?-- No.

Are you able to say that, in fact, you did read that report of Mr McCamley's?-- Yeah, I would have read it, but I can't recall.

You say you would have read it?-- Yes, that's correct.

Because it was your practice always to read the outgoing undermanager's report?-- That's right, yes.

But you don't have a specific memory of reading it?-- No.

Well, then, do you recall having any conversation with Mr McCamley at that particular shift changeover?-- No, I can't recall.

Okay. Do you remember having a conversation with Mr McCamley at any time on a shift changeover when he mentioned difficulties with ventilation in 512 Panel and the fact that he had smelt a slight tarry smell in 512 Panel?-- No.

You have no memory of that?-- No.

Are you able to say that that conversation didn't occur or are you just saying that you have no memory of it?-- I have got no memory of it, but you would remember if somebody had said they had smelt a tarry smell.

Okay. Well, now, do you remember then having a conversation with Mr McCamley on a change of shift in terms of the matters mentioned in that shift report which you just read out a moment ago?-- No, I can't recall.

You can't recall that?-- No, no.

Do you remember whether, when you read that shift report, you sought any further information from Mr McCamley?-- I can't

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recall.

About the difficulties in 512?-- No, there is no use making it up, I can't recall the actual day, actually.

Let me ask you: what was the sequence generally? Did you get the shift report at the same time as you had your oral discussions with the outgoing undermanager or would you have the discussions with the outgoing undermanager and then some time after that actually read his shift report?-- No, normally you would be talking to him while you was reading the report.

You would be talking to him while you would be reading the report?-- Yeah, that's correct.

So, if you were reading a report and it had some note in it along the lines of that note that you have just read from Mr McCamley's report there, would you ask for some elucidation about it, some further information about what was noted there?-- Yes.

You would?-- Yeah.

Okay. Now, were you ever aware of any reports of a smell, either a slight tarry smell or a strong benzene smell or a strong tarry smell, in 512 Panel at any time?-- Not till after the incident.

Not until after the explosion?-- That's right.

On 7 August?-- Yes.

No-one ever - no-one ever mentioned to you anything about any smells in 512 Panel -----?-- No.

Prior to the incident. Okay. Did you take any leave at all during the period from, say, 17 June through until the incident on 7 August?-- Yes, I was on holidays from the 18th to, I think it was, the 11th of July - 18 June to 11 July.

18 June, 11 July?-- Yes, that's correct.

Okay. And after you returned from holidays on 11 July did you - first of all, did you adopt your normal practice of having a look at the previous undermanager's shift report?-- Yes, I would have, yes.

Did you take any other steps to find out what might have occurred in respect of the various panels in the mine during your absence on leave?-- They let you know where you was up to. You would ask - like if you put in a belt somewhere, "How are we going with getting the belt installed?", things about the mine, where we were up to, where it was going, you'd have to - you'd have to find out before you started.

What about the progress with the extraction panels in 512? Would you have any general discussion with anyone about how things were going in 512, say?-- Yeah, you have to find out where you are going before the start of the shift so you can let your own people know where we are up to.

Any discussions about any concerns with ventilation? Would you have that kind of discussion?-- Any concerns?

Yes, when you came back from leave would you say, "How are things going?"? Would you say to anybody, "How are things going in 512 Panel? Have we had any problems there?", anything like that?-- I wouldn't have said if we had any problems, no.

Would you have any discussion with anyone about how the CO make might be going in 512 Panel?-- No, the start of my shift I always just check the Miahak.

And the Miahak - just the Miahak readings?-- Yeah, that's correct.

On the Unor screen?-- On the Unor screen, yeah.

What about the graph of CO make in 512, for instance? Would you have looked at that graph?-- No, I wasn't aware of the graph of 512 until the 22nd.

Until the 22nd?-- That's correct.

There was a graph posted from week to week; were you aware of that?-- No, I really only noticed it after 22 July.

I'm really asking you about prior to 22 July were you aware of the fact that a graph was being done from week to week?-- No.

As the undermanager in charge of a shift would you have ever had occasion to talk, for instance, with the ventilation officer, Mr Morieson at one stage and then Mr Bryon as acting ventilation at a later point? Would you have ever had occasion to talk to them about ventilation problems in 512?-- I would have talked to them. I can't remember them saying to me about ventilation problems in 512.

Any discussions with them generally, this is prior to 22 July? Any discussions with the ventilation officer about how the CO make might be going in 512?-- No.

It wasn't a matter that really exercised your mind?-- No, I used to check the Unor, that's all, Miahak.

Well, what you see on the Unor screen would be simply a reading; is that right?-- That's right.

It wouldn't actually show you the trend? Wouldn't show you the trend of CO make in 512?-- It didn't show you a graph, just tell you what the CO was for that day.

Just the one reading?-- Yeah, that's right, yeah.

You wouldn't bring up a graph or anything on that screen, that's what I'm asking you really?-- No, no.

You wouldn't operate the system to bring up a graph on the screen or anything like that?-- No.

Now, you have mentioned 22 July - perhaps I should ask you this first: when you came back from leave on 11 July, if you had wanted to find out what had been happening in 512 Panel while you were away, was there anywhere where all that information was written down?-- There would have been back reports from the undermanagers' book.

The undermanagers' book?-- Yep.

You would look in there to get information; is that right?-- Yeah, if you wanted to go more - go back, yeah.

You are familiar with those reports, you've read the one from the shift preceding, and you've done plenty of them yourself. They don't really seem to contain a lot of information about matters such as ventilation changes or about any reports of difficulties with ventilation; is that a fair comment, would you say?-- That's a fair comment, yeah.

Would you look at the deputies reports?-- Yes.

If you wanted to find out what was happening in a panel?-- From a preceding shift, yeah.

But if you wanted a history of what had gone on while you were on leave would you find those of assistance?-- No, I thought - like if there was any problem somebody would let me know when I first come back because - actually George normally gave me a bit of a picture what was going on when I come back to work.

When you did come back did he give you any picture about what might have happened while you were away?-- Only just let us know where we were up to and what was going on, yeah.

Any discussion about any reports of smells in 512 Panel, for instance?-- No.

While you were away?-- No.

Apart from those reports there was no other area where there would be some written history or a history of recent events in respect of any particular panel in written form?-- Beg your pardon?

Apart from those reports that you've mentioned, the shift reports and perhaps the deputies reports, there was no place where you might find collated in one place any history of recent events with, say in this case, 512 Panel?-- No.

Now, you returned on 11 July, and you've mentioned 22 July. Were there any significant events between 11 July when you resumed and 22 July?-- Not that I can remember.

Now, 22 July was a Friday. You were on the afternoon shift; is that so?-- That's correct.

I might just retrieve that book from you, if you would. Now, can you tell the Inquiry as best you can remember what did happen on that afternoon shift, 22 July?-- I think I was ready to go down the pit and Jacques Abrahamse come up to see me and asked me would I go down to 512 top return with him to do some readings, to check up on the readings, because apparently that day they had done some incorrect readings and Dave Kerr turned up just as we were about to go down.

Dave Kerr is the Mines Rescue superintendent?-- That's correct, yeah.

Just pause a moment before you proceed in the narrative. You say that you understood that that day there had been some incorrect readings?-- Yes, that's what Jacques informed me, yeah.

What did Jacques tell you about that?-- That the CO reading they got was - didn't collate with the Unor and they mucked up the velocity reading.

Did he mention what the CO reading was?-- If I can recall I think it was 8 ppm they got and the Unor was reading six.

Was there any discussion about how that 8 ppm compared with previous readings?-- Yeah, it was higher.

So you went down the mine with Jacques Abrahamse?-- Yes.

And Dave Kerr?-- Dave Kerr, yeah.

Where did you go?-- To the monitoring station, 512 top return.

Just turn around with your pointer and you might indicate where you went to?-- Just there.

That's just inbye of where that seal is shown in the top return?-- Yeah, that's where the monitoring station is, yeah.

What did you do there?-- Took several readings of the CO and velocity.

CH4?-- Yeah, I checked the CH4. I can't remember what it was. It was either .32 or .23.

What sort of instruments were used to do the CO readings?--



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Drager, Drager tube detector, and our normal 5C tubes, and Dave Kerr had brought some lower scale tubes down.

So the ones you were using were the high range tubes or what?-- Beg your pardon - yeah, the scale -----

You were using the high range?-- Yeah, the scale on the other ones are spread more further apart, on the lower ones.

How did you go about doing the readings? Did you use the high range tubes and Jacques use the low range tubes or what?-- No, Jacques and Dave done the CO readings.

They did the CO readings, you didn't do any -----?-- No.

You did the methane?-- Yeah.

Did you have an opportunity to observe the readings on the CO tubes?-- Yeah, we all had a look at the tubes, yeah.

What reading was shown?-- Below 6 ppm.

Now, I suppose the low range tubes were a bit easier to read; is that right?-- No.

The high range tubes were better, were they?-- No, both -----

Both much the same?-- Yeah.

Was there general agreement that both tubes were showing slightly lower than 6 ppm?-- That's correct.

How was it recorded?-- Beg your pardon?

How was it recorded then? How was the reading recorded?-- Jacques - we took the readings back up to the surface and they figured it out.

Yeah, but what reading did you proceed on?-- Beg your pardon?

What reading did you proceed on?-- On 6 ppm.

The velocity, do you remember what that was?-- Yeah, it was 1.78 or 1.781, something like that.

Where did you go to after you had taken those readings at the monitoring station?-- Down to about 4 or 5 cut-through and we done another check on the CO readings, but we didn't do the velocity because the bottoms were taken out down there and it's impossible to do the velocity down there.

You did those readings actually into the cross-cuts from No 1 road, did you, or in No 1 road itself?-- In 1 heading.

Okay. Do you recall what the readings were there?-- They were still below 6 ppm.

Just under?-- Yeah, just under six, yeah.

Where did you go from there?-- We went into the panel and talked with the crew and the deputy in the panel.

What did you do then?-- Went back up to the surface and they figured out the litres per minute.

Who figured that out?-- Jacques.

Could the witness see Exhibit 21, please, Your Worship?

If you can turn to the page which is five pages from the back of that document, have you got that, Mr Atkinson? It should be a document headed "CO make - 512"?-- Yes.

Page 2 up in the top right-hand corner?-- Yep.

That's the one. You will see that the first reading there down in the body of the document is 22 July 1994, Friday a.m., and then you will see 22 July 1994 Friday p.m. follows that?-- Yes.

Now, this document sets out the results at least - the readings and then the results of the calculations; have you seen that document before?-- This document here?

Yes?-- No.

This is the first time you've seen it?-- Yes.

When Jacques Abrahamse was doing that calculation were you, in effect, doing it with him or was he talking to you about it as he did it or -----?-- Me and Dave and Jacques were talking to each other, yeah.

Now, if you run across that one you will see that the wind velocity which was used was 1.78 as you mentioned. If you come across to the CO parts per million you see 5.5 there. See that one?-- Yes.

Do you know how the calculation came to be done on the 5.5?-- No.

There was no discussion about that with you in any event?-- No, not really, no.

Now, did you either at the time that you were with Jacques and Dave Kerr that afternoon when you came up and those calculations were made, or at any time that afternoon were you party to discussions about this CO make in 512 and whether or not it was a problem and what ought to be done about it?-- Dave actually suggested that we do the readings every shift from then on and then the deputies put it on the reports.

Was there any discussion about why that should be done?-- I thought - as far as I could see it was - you know, it was running fairly high, that was all, yeah.

The calculation at that vent station 46 indicated, that's the second one on 22 July, indicated 13.34. Do you see that one

there? It's the second last column?-- Yes.

Then there is .36 from the other vent station 59 giving a total for the panel of 13.7. How did you regard that figure, 13.7 litres per minute?-- Well, I've only - above 10 I thought you had to keep an eye on things and 20 you had trouble.

Now, you say that it was decided there should be measurements done every shift?-- That's correct.

That's by the deputies?-- Yes.

What arrangement was put in place for those readings to be recorded?-- Well, I worked the weekend and I seen that the deputies done it all weekend, and then there was a notice put up on the Monday, as far as I can recall, for them to be carried out.

When you say the deputies did it, what did they do?-- They took the readings in the return, CO, CO<sub>2</sub>, velocity and put it on their reports.

And the wet and dry?-- Wet and dry, yeah.

And it was on the reports?-- Yeah.

What was to be done with those results under this new arrangement that was put into place?-- Well, all I could think was Jacques was going to collate what we had.

In what way?-- And keep a graph so we could see how the CO was going.

Calculate the CO make as a result of the readings each shift; is that what you mean?-- Yeah, I thought - it was on a daily basis I thought he was going to calculate that.

And then a graph kept showing the increase in CO make on a daily basis?-- Yes.

Did you ever see a graph like that setting out the increase in CO on a daily basis?-- Yeah, after - I did notice them after the 22nd, yeah.

How long after the 22nd did you see a graph calculated on a daily basis?-- I think it was there on the Monday. I would only be surmising there.

Could the witness see Exhibit 25, please, Your Worship?

You will see that that's a graph of the CO make in 512 and it runs through to 5 August in fact. Do you see that?-- Yep.

Now, the date that you mention, in fact 22 July - is there as a date on that graph?-- Yes.

And then the next point on the graph is a point for 23 July?-- Yes.

Is that what you are talking about, that sort of graph,  
22 July then 23 July?-- Yes.

23 July, of course, would have been the Saturday?-- That's  
correct.

Now, you say you saw such a graph, you thought, on the  
Monday?-- I said I was only surmising.

You were only surmising?-- Yeah, I'm not positive when I seen  
the graph on the wall. I know I seen it there after the 22nd.

Some time after the 22nd, but you are talking about a daily  
graph that you saw after the 22nd?-- Beg your pardon?

My question to you was whether you had seen a graph that  
registered the increase in CO make on a daily basis and you  
said that you thought you saw one there on the Monday, the  
Monday following the 22nd, that would be the 25th?-- Yeah, I  
said I thought, yeah.

Whereabouts did you see it?-- There used to be a graph on the  
wall in the undermanagers - and I'm nearly sure that's one of  
the deputies.

Did you have a look at the graph yourself that day, the  
25th?-- The 25th -----

Or whenever it was. You thought it was the Monday?-- Yeah,  
25th. I actually still had the - I did a graph on the weekend  
for Jacques.

You had done the graph on the weekend?-- Yeah.

Showing the 23rd?-- That's correct, yeah.

So the graph was still there and that showed these other dates  
that - did it show the other dates that are on that document  
there or was it a separate graph all together showing the 22nd  
and then the 23rd?-- I can't remember how many dates were on  
it, but I did a graph for the weekend for Jacques.

Well, how many dates were on it?-- Would have been 23rd, 24th  
and 25th, I think.

23rd, the Saturday, 24th the Sunday?-- Yes.

And the 25th, the Monday?-- Yes, as far as I can recall,  
yeah.

And that's the graph that you are talking about having seen,  
is that so, having seen it some time on the Monday or at least  
you think the Monday?-- Yeah, I think I seen it on the  
Monday, yeah, yeah.

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Whereabouts did you see it?-- I had a graph - I had it in a folder on my desk.

Okay. Was that ever posted anywhere, that graph?-- Jacques did post a graph on the undermanager's wall there, yeah.

A graph?-- Yeah.

But that graph that you have referred to, the one that had these daily readings on that you did on that weekend, was that ever posted up anywhere?-- No, it would have been an overall graph that Jacques posted up, not just my weekend graph.

Did you read the graph that Jacques had posted up at any time?-- Yes, yeah.

You did. Well, when approximately did you read that?-- I can't recall. I used to - the monitor inside, I used to look at the Unor.

You have told us that?-- Yeah.

But I am asking you about the graph. I am asking you about the graph?-- No, I couldn't specifically say what day.

Was it within a week of the weekend, 23rd and 24th, that you saw such a graph on the wall?-- I don't know.

Well, when you saw a graph on the wall, was it a graph that showed the CO make readings on a daily basis?-- I think so.

Over some period of time?-- I think so.

You think so, but you are not sure?-- No, I'm not sure, no.

Okay. Well, this graph that you saw, just so we can be clear about this, is this a graph that was on the wall somewhere or on a desk somewhere, or where did you see it?-- On the wall in the undermanager's cabin.

Okay, and you can't say when you saw that?-- No, no.

Okay. Well now, after you did this graph yourself on the weekend, that's 23rd, 24th, 25th you have told us, did you play any part in continuing that practice of taking CO make points on a daily basis?-- No.

Not at all?-- No.

Even when you were undermanager in charge of a shift there, you didn't have anything to do with that?-- No.

Okay. When this system was established on the 22nd that there were to be measurements every shift from there on and that those would be calculated into CO make, what was the arrangement as to who was to coordinate that and ensure that that process was carried out?-- What, the actual - the deputies doing the reports on the -----



The deputies doing the measurements?-- Yeah.

The calculation of CO make being made from the various measurements and then the translation of that onto a graph, whose responsibility was it to be to ensure that that was done?-- Well, as far as I know of, it was Jacques. Actually, that week following I think - I thought he was going to be away a couple of days and I did write the deputies - what was on the deputies reports on my shift report to save him chasing around through the deputies reports to pick it up.

Right. You wrote it on your shift report?-- Yeah, a couple of my shift reports. I thought he was going to be away those days.

Okay. Well now, I was about to ask you to have a look in fact at your shift report for that afternoon shift of 22 July. Just have a look up the top and confirm, first of all, that that's what it is, your shift report for your afternoon shift 22 July?-- Yes.

Can you just read to the Court the comments that you have in the box provided for 512 Panel?-- "512 mine sequence 33 start of shift."

That's it?-- That's it, yeah.

Nothing there at all about this event where you went down to check the reading of CO?-- No, there's not.

Anything in there about this new system that was established to ensure the deputies took all the requisite readings and CO make calculated on a - that's deputies every shift and CO make calculated on a daily basis, nothing there about that?-- No, we carried that - that started - I made sure the readings were done over the weekend and it started - as far as I know, it started officially on the Monday. There was a notice put up on the Monday.

Okay. Did you discuss that with the undermanager who was to relieve you after that shift on 22 July?-- I was the undermanager.

You were the undermanager for the weekend?-- Yes.

Then right through. Then you were relieved on the Monday; is that right?-- I would have been day shift on the Monday.

Day shift on the Monday, and you handed over then to whom? Just turn through the reports if you would. The next report there, what's that next report?-- The next report would be -----

Just go back to your afternoon shift on Friday the 22nd?-- Yeah.

The next report in the book?-- Friday 22nd, Saturday the 23rd.

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Whose report is that, yours?-- That's mine, yeah.

Okay. Anything of significance noted in respect of 512 Panel?-- 512? We were doing a belt retraction in 512.

Go to the next one, if you would. What's the next report?-- Sunday.

Anything of significance noted for 512?-- No.

And the next report? Again, the next one is yours?-- No, the next one's -----

What's up the top of the next one?-- I can't tell whose writing it is. There is no signature at the top.

What shift does it relate to?-- It's Monday night shift.

The Monday night shift which commenced late Sunday night?-- That's right, yeah.

There is no signature on it to indicate whose report it is?-- No.

And you don't recognise the writing then?-- No, I don't.

There would have been an undermanager on that shift as a matter of course, a production shift?-- It wasn't a production shift. It's got "schedule maintenance shift" on the top.

Would there have been an undermanager?-- I don't think so. There might have been. I doubt it.

Do you know then who would have filled that out?-- I would only be guessing. Either John Blyton or George McCrohon.

Go over to the next one, which is the Monday day shift?-- Yeah, that's George Mason.

George Mason?-- Yes.

Now, did you say that you thought you were undermanager on that day shift?-- Yeah, only because I was - I was afternoon shift, so I could have had a rostered day off.

I see. So George Mason has filled out that -----?-- That's correct.

----- one for the day shift. Did you have any conversations with him about these events on the Friday and the decisions that were made yourself to establish this system that we have spoken of?-- Jacques would have seen it before I got back to work actually.

Okay. So you would have left that to Jacques?-- Yes, Jacques.

Then the next shift is the Monday afternoon shift; is that



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right?-- Yes.

And that was yours?-- That's correct.

What do you have there in respect of 512, any significant comments?-- No.

Just turn over to the next two reports that are made there of yours, if you would. There is one report of yours. What date is that?-- That's the 26th.

Righto. Is that one where you have put those measurements in?-- Yes.

Then the next one that is flagged - you will see the flag over on the right - that's another report of yours?-- Yes, that's right.

And that's which shift?-- Afternoon.

On which day?-- Wednesday.

The?-- 27th.

27th, okay. Again, is that one where you have put the measurements in?-- That's correct.

Okay. Apart from putting the measurements in, you haven't actually mentioned in your shift reports there, though, anything about the establishment of a new system; is that right?-- That's correct.

Okay, you can put that book to one side. Tell me, Mr Atkinson, if there was an alteration to ventilation in the course of a shift on which you were undermanager, is that something that you would ordinarily put into your shift report?-- Yes.

It is?-- Yes.

As a matter of course?-- Yes.

Where would you get that information from?-- What do you mean by where would I get -----

Who would take up with you the need for any change in ventilation?-- A deputy.

Would the deputies do that as a matter of course?-- Yeah, they'd ring me, or if I was down there they would ask me.

If they rang you and spoke about ventilation having to be changed, what would you do? Did you have any invariable practice of going down to the panel yourself, or what was your general practice?-- My general practice was to change the regulator myself.

To change it yourself?-- Yes.

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If it was a regulator change?-- Yeah.

What about other changes to ventilation?-- What do you mean by "other changes"?

Well, movement of stoppings in the panel?-- I don't see what you mean by the movement of stoppings.

Well, if there was some concern, for instance, about ventilation in, say, the No 2 supply road, the top supply road, in 512 and there was some alteration to the ventilation stoppings to, say, direct more air down that roadway, is that something that you would be involved in yourself if that happened during a shift that you were on, or is that something that a deputy might do and subsequently report to you?-- Just brattice stoppings a deputy would probably do himself and report to me, yes.

Would you put that sort of thing into your shift report?-- No, I don't think so.

Okay. Thank you, Your Worship.

WARDEN: We will have a short break, thank you, five minutes.

THE COURT ADJOURNED AT 11.25 A.M.

THE COURT RESUMED AT 11.41 A.M.

TERRY JOHN ATKINSON, CONTINUING:

CROSS-EXAMINATION:

MR MacSPORRAN: You mentioned that you saw a problem in the ventilation of 512 in the sense that the air would have to split around the larger pillars?-- Yes, that's correct.

Did you understand that that may create dead spots behind those pillars inbye?-- Yeah.

Dead spots in terms of ventilation?-- Yes, that was an afterthought after the incident, actually.

Of course, any problem like that though could be watched by closely monitoring the gases inside the panel, couldn't it?-- What do you mean by "closely"?

If you monitored the atmosphere inside the panel you would have a better idea if the ventilation was adequate or not, things like that?-- Yeah. I don't get what you are getting at whether - whether placement of monitors ----

Yes, the placement of monitors inside the panel would give you some idea of what was happening inside that panel in terms of the gases, wouldn't it?-- Yes.

If they were kept closely under observation you would have a good idea what was going on inside the panel?-- They were kept what?

Closely under observation? They were watched closely?-- Yes, yes.

Monitored regularly?-- Yes.

Now, you were shown some documents relating to 17 June and, in particular, you were asked about whether or not you had spoken to Mr McCamley who was the undermanager going off as you came on?-- Yeah, that's correct, yeah.

You confirmed for us that as far as you can recall there was no notation in Mr McCamley's report about any smell or unusual smell in the panel?-- That's correct.

And, furthermore, there was no conversation between you and McCamley about there having been detected in 512 an unusual smell?-- That's correct, yes.

If I took the note correctly you made the comment, "I would remember if someone reported a tarry smell."?-- Yeah, that's

right, yeah.

Why would you remember if someone reported to you a tarry smell?-- It would stick out. You would think you had a heating, that's all.

Would a tarry smell indicate to you some form of a heating, would it?-- Yes, that's correct.

Why was a tarry smell related to a heating in your knowledge?-- Just from when I went to Tech doing the undermanager's course.

During that course were you told that at a certain temperature coal gives off certain products that have a tarry or benzene type smell?-- Yeah. When I got my ticket I would have been told that, yeah.

Do you agree a smell such as that is an important signal in terms of whether or not there is a heating?-- Yes.

What, for instance, would you do if someone told you that they detected a heating in the panel where you were the undermanager on shift?-- You would try and find out where the smell was coming from.

How would you do that?-- By investigating.

And how would you investigate?-- How would we investigate? Well, first of all if you had something of that significance probably the undermanager-in-charge would actually be down there with you as well and a deputy and whatever.

Would they be down there with you because you would have informed them of the detection of a smell?-- Yes, yeah, yeah.

Why would you inform them of such an event?-- Well, you think you had a start of a heating. It would be major panic, actually.

"A major panic, actually"?-- Yes, yes.

But to deal with that you would have or would inform your superiors of the fact that a smell had been detected?-- That's correct.

Then there would be some sort of joint approach to find out where it was coming from?-- Yes.

To deal with it?-- Yeah, that's right.

As quickly as possible?-- Yeah.

Had you known there was a smell reported on 17 June, if you had known about it that day, you would have done something about it, would you?-- Yeah.

You didn't find out about any reports of smells or unusual smells inside the panel until after the explosion on

7 August?-- That's correct, yeah.

You went on holidays the next day, 18 June?-- I beg your pardon?

You were on holidays from 18 June to 11 July?-- Yeah, that's correct.

You came back, I think you said, and you didn't inquire as to whether there had been any problems inside the panel?-- No, you expect people to inform you if you had - so far as any problems.

As an undermanager?-- Yeah.

You were prepared to sit back and wait for someone to tell you as to whether or not there had been a problem inside the panel in your absence?-- Well, you wouldn't expect to - just any panel. It is more than just 512.

I am just talking about 512 for the moment. You wouldn't make any inquiries yourself as undermanager to see what the status of 512, for instance, had been whilst you were away?-- You would ask about all the panels, you know.

But you wouldn't ask whether there had been any problem inside any of the panels while you had been away?-- You would ask what's transpired while you were away, you wouldn't actually try and make a problem out of something.

You would want to know about it if there had been one?-- Yeah, yeah.

In particular, if there had been detection of unusual smells inside one of the panels in your absence you would want to know about it when you came back?-- Yeah, that's correct, yeah.

No-one told you?-- No, no.

You would you said, I think, read the undermanagers reports that related to the period you were away?-- Relate three weeks undermanagers reports? No.

You wouldn't do that?-- No.

In the same vein you wouldn't look at the deputies reports for that same period?-- No, no.

Again you would rely upon people approaching you to tell you the status of those panels?-- Yeah, that's correct. I would only read the preceding shift reports, preceding deputies reports and rely on the superiors to supply me with any other information. Otherwise I would never get to work.

You would be spending all your time reading reports?-- Well, I would spend - probably take a day to read three weeks of reports and the final.

You came back off leave. The only reports you would have read were the weekend reports or some of them the weekend before you started back?-- No, I would have read the preceding shifts reports.

Just the shift - the one shift before?-- Yeah, that's right.

You have already told us that a smell - an unusual tarry type smell can be an indication of a heating?-- Yep.

Did you understand that an upward trend in CO make can also be an indication for a heating?-- Yes.

Did you know that as at July this year?-- I beg your pardon?

Were you aware of that fact as at July this year; that is, that a CO make trend going upwards can be an indication of a heating?-- Yeah.

But you didn't know that there was a CO make graph posted at the mine until that Friday, 22 July?-- That's correct, yeah.

Why is it you didn't know about that until that date?-- I suppose I was never informed or pointed out to me or, you know?

How long had you been an undermanager at No 2?-- Four and a half years, approximately.

And for that - for what part of that period had you been an undermanager with some responsibility - I will withdraw that. For that whole period you had been in charge of shifts?-- Yeah, that's correct.

At various panels inside the No 2 Mine?-- Yes, that's correct.

For what period of that time had you been in charge of shifts relative to the 512 Panel?-- I beg your pardon?

For what part of your four year time as an undermanager had you been responsible for shifts inside 512?-- Oh, I couldn't give you exact months or whatever.

For the whole period of its -----?-- Yeah, yeah.

Extraction?-- Yeah. Yeah, I was in charge of the shift, yeah.

And for whatever that period was you didn't know in relation to the 512 Panel there was a CO make graph done until 22 July?-- Yeah, that's correct.

How did you come to find out about it?-- Well, we - as I said, before we - on the Friday - that Friday the ventilation officer and one of the deputies made a bit of a mess-up with their readings in the 512 and Jacques come and fronted me to go down with him and we would do a double check and actually Dave Kerr came with us.

Before that day you had no idea that there was a graph being done weekly to reflect the CO make trend in 512?-- No.

Well, that day you went underground with Dave Kerr and Jacques; is that so?-- Yeah, Friday, the 22nd, yeah.

And it wasn't planned initially for Dave Kerr to go with you, he just turned up just before you went underground?-- That's correct.

Do you know why he was there otherwise?-- Yeah, one of the deputies must have shown concern on the way home and called in and seen Dave at the Rescue station.

So, he came over from the Rescue station to go underground with you and Jacques?-- Yeah, he come to see us about it and then he decided he would come with us.

So, you went down to try and verify the readings that had been taken by two other deputies, Steve Bryon and Mr Rose?-- Yes, that's correct.

Did you know where they had taken their readings?-- At the monitoring station.

When you say "monitoring station", do you know the difference between a monitoring point and a ventilation station?-- Well, where the readings were taken there was a mark just on the rib, just inbye the top prep seal in 1 heading 512.

What's marked on there? On the rib you say there is a mark, was there?-- There was a mark with MS, I think. I'm not sure. M something on the rib, just inbye of the ----

Anyway, you are sure that the readings you took and were taken by the others were taken in the 512 top return inbye the prep seal?-- The ones - the readings we took were there and Jacques said this was the monitoring station for taking those readings.

Sorry, I didn't catch that. What did you say?-- Jacques said this is where the monitoring station was when we went down there, yeah.

Have you ever heard the term "ventilation station"?-- Yes.

Did you know where ventilation station 46 was in relation to 512 Panel?-- Yeah, at the monitoring station on the top return.

You think that's where you took these readings?-- Yes.

Inside the top return of 512?-- We took the readings inside the top return of 512, yeah.

As opposed to in the No 1 heading of 510 just outbye of the 512 top return?-- I don't get what you mean.

You were inside the top return in 512 to take these readings?-- That's correct.

At what you thought was a monitoring station?-- Yes.

I take it that was where you took your velocity readings as well?-- Yes, that's right.

Is there any procedure for taking velocity readings at a special point in a roadway?-- Is there any special proceedings?

Yes, is there any procedure as to where you are supposed to take your velocity readings?-- Well, the area would be known where you are taking the velocity.

Because the area has been measured; is that right?-- Yeah, that's correct, yeah.

The idea of taking your velocity readings there is so you can calculate your quantity of air that is going past a point?-- Yeah, that's correct.



Where you took your velocity readings, do you think that was at such a point or somewhere else?-- Well, it's marked on the rib where we were supposed to take them.

This is the mark "MS" or "M" something, you think?-- Yes.

Again that was inside the 512 top return, No 1 heading?-- Yeah, that's correct.

Are you sure of that?-- Yep.

How did you take your velocity readings on that occasion?-- With the anemometer.

What procedure did you follow to take them? Did you have a set procedure to follow -----?-- They done several readings to take the velocity.

How were they done? How did you hold the instrument?-- How did I hold the instrument?

Yes?-- I didn't.

How did those who did hold the instrument as you saw it?-- Away from them and the - done the readings across the whole bord from one rib to the other, up and down.

Up and down from one rib to the other?-- Yep.

Was that done once on each occasion or how was it done?-- It was done several times. We done several readings, yeah.

All this is in the top return?-- In the top return, yeah.

You ultimately went down as far as 4 or 5 cross-cut?-- Yep.

And you couldn't do readings there because the bottoms had been taken, you said?-- Yeah, that's correct, yeah.

This is again in the top return?-- Yep.

Bottoms were taken?-- Yeah.

You remember that?-- Yep.

When had they been taken, in the top return?-- On the way in the panel.

The readings were less than six, you think?-- Yes.

As I understand what you told Mr Clair, that very day, 22 July, you did a graph for Jacques yourself?-- For the weekend.

A graph though?-- Yeah, I carried on the graph on the weekend, yeah.

What did you do? How did you do a graph?-- Just plotted the points, the litres per minute, off the readings that were

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given to me from the deputies reports.

When did you plot that graph?-- Over the weekend.

You were working that weekend?-- Yes.

So you did it some time whilst on shift that weekend?-- Yes, that's correct.

And whereabouts did you do it?-- In the undermanagers cabin.

Was anyone there with you?-- There could have been somebody walked in there, I don't know.

Did you show anyone this graph you did?-- Yeah, Jacques got me to keep - leave it there for him on the desk.

Was he there at any stage when you were doing it?-- On the weekend?

Yes?-- No, no.

So you didn't give it to him, you simply left it on his desk in a folder?-- No, on my desk.

On your desk. Did you tell him about it, that you had done the graph?-- Yes, I - I couldn't recall, but I would have talked to him, yeah.

How many points did you have on this graph?-- I was only carrying on - there was a graph on there and I was only carrying on from there.

When you say "there was a graph on there", are we talking about a piece of paper now?-- Yes, that's correct, yeah.

So you plotted some more points on an already existing piece of paper containing other points that had been plotted?-- Yes, that's correct.

Who had plotted those; do you know?-- I do not know.

Again we are talking about the weekend of 23, 24 July, Saturday, Sunday?-- 23rd, 24th, yeah.

The day after you had been underground with Jacques and David Kerr?-- Yeah, yeah.

That's the weekend we are talking about?-- Yeah, 23rd, 24th, yeah, I was on, yeah.

As I understand it you didn't ever see that graph again?-- Not the actual graph I did, no.

But you saw other graphs?-- Yeah, yeah.

Who had told you, if anyone, how to plot the graph you did that weekend?-- Who told me? Jacques showed me how to do the calculations.

Was that on the Friday the 22nd?-- Yes.

What did he tell you?-- Just to plot the points for the litres per minute.

Did he tell you anything about the scales on both sides of the graph?-- They were - scales were on the graph, yeah.

So you had to put a point that you were plotting on an already existing scale on the graph?-- Yeah, that's correct, yeah.

The reason you were doing that is because the system was changing that weekend. The deputies were reporting or taking readings on every shift?-- Yeah, that's correct.

And as you worked that weekend you made sure they did?-- Yes.

Because it was important information to be gathered, wasn't it?-- Yes.

The whole idea of it was so the CO make trend could be observed from that point on?-- Yeah.

You did your calculation on that weekend?-- Yes.

And had nothing further to do with it after that weekend?-- That's correct, yes.

Although on occasions you remained on shift after that date? You worked after that date, didn't you?-- Yes.

You were still there up until 7 August?-- No.

How long did you remain there between 22 July and 7 August?-- The 5th. I think it was the 5th.

So you were there from 22 July until 5 August?-- Yes, that's correct.

At no stage after the weekend of 23/24 did you ever have anything to do with the CO make graphs?-- That's correct.

You had nothing further to do with checking whether the readings were still being taken?-- No, we used to still do the readings - the deputies used to do the readings and put them on their reports.

Were you checking on that, were you?-- On my shift, yeah.

Were you checking as to whether the trend was being calculated from those readings?-- No.

So you know nothing about that?-- No.

Those readings, you say, were being recorded in deputies reports?-- Yeah, that's correct.

Was there any other book used for the purpose -----?-- I do

not know what -----

You know nothing about what has been called a log book that was kept on the crib table underground where these readings were recorded?-- No.

You had no discussions about keeping such a book?-- No.

Apart from the deputies reports you know nothing about pieces of paper being brought to the surface containing details of these readings other than the deputies reports?-- No, not other than the deputies reports.

So far as you understand it, if you wanted to find out what these readings were and calculate the CO make you'd have to go to the deputies reports?-- That's correct. That's why I put them - those on my own shift report because I thought it might save Jacques a bit of mucking around trying to find the readings.

As far as you knew Jacques Abrahamse was the one who was co-ordinating this new procedure for calculating the CO make after 22 July?-- As far as I knew, yeah.

Do you know that from discussions you had with him on that Friday, the 22nd, or from some other means, that is that he was to co-ordinate this? Where did you find that out from?-- Where did I find it out from?

Yeah. What makes you think it was Jacques who was going to co-ordinate this new information? Did someone tell you that?-- Jacques was the one who got me to do the weekend's, and I thought he must be going to carry it on from there.

So you thought he must have been going to?-- Yes, that's correct.

But he didn't ever tell you that he was?-- He told me he wanted the information from the weekend, so -----

He didn't say, for instance, "I'll look after all of these figures from here on."?-- No, he didn't actually say that, no.

As far as Mr Mason is concerned, you left it up to Jacques to tell him that this new procedure was in place?-- Actually there was a notice put up in the deputies cabin by George, and I think it was on the undermanagers wall.

I think you said that was on the Monday, the 25th?-- Yeah, I'm not sure what day it was on there, but I know there was a notice put up.

Was it soon after the Friday that the system had come into place -----?-- Yes.

----- that the notice went up?-- Yeah.

Where did the notice come from, do you know?-- George Mason.

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George Mason, you think, produced the notice?-- Yes.

And it was put up at the mine at various sites?-- Yes.

Did you ever hear any discussion from other people about the new procedure that was indicated on the notice?-- No.

Just in relation to the question of bottoms taken in the top return in 512, you remember seeing areas where bottoms had been taken in that top return, do you?-- Yes.

Can you just indicate on the map, if you wouldn't mind, where you saw areas where the bottoms had been taken? You can use the laser pointer and remain seated if you could. As you point something out can you please describe what it is you are referring to?-- The bottoms were taken from 3 to about 11 cut-through.

3 to 11 cut-through in the No 1 heading on top return?-- In the No 1 heading, yeah.

You remember seeing that?-- Yeah, we took them on the way in because you couldn't get them on the way back, because they were leaving coal behind.

How were they taken; do you know?-- Shuttle car, miner.

That's how they were taken out, but how was the coal extracted on the way in in those areas?-- How was it extracted?

Was there a ramping system or -----?-- No, it was mostly level through there.

But to take the bottoms what procedure was used?-- Left a canch on either side.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MARTIN: Just a few questions about your background, Mr Atkinson, if you would, please. You went to school in New South Wales, did you?-- Yes.

To what age?-- 15.

Roughly the equivalent of what grade in Queensland?-- Nine, I think it was, year nine.

You left school at 15 and you must have had a variety of other jobs before you got into the mining industry because you didn't enter that until you were 30 years of age approximately?-- That's correct. Yeah, I started off as a shipwright at the State dockyard, shipwright apprentice.

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Did you finish your apprenticeship?-- Yes.

Did you work as a shipwright?-- Yes.

For how long?-- I went to sea for a while with ANL, BHP as a ship's carpenter. I worked in New Zealand as a - cottage work and construction, worked in Darwin, cottage work and construction, Townsville, cottage work and construction, worked for Townsville Council.

And then after a number of years of that you then went into the mining industry?-- That's correct, yeah.

How long in the mining industry were you before you started to get your deputies qualifications?-- Sorry, I'll have to do a calculation.

Just roughly?-- I think it was five.

In connection with your deputies qualifications, what study or instruction were you given in relation to spontaneous combustion?-- With the deputies - I done a deputies along with the coal mining certificate.

Was that undermanager?-- Yeah, that's correct.

Tell us about the spontaneous combustion instruction you got at that time?-- It's a long while ago. Basically it was smell, CO make, haze, mist, condensing on the rib.

Very, very basic instruction, was it?-- Yes, that's correct, yes.

In connection with your deputies course in New South Wales, how long did that extend in terms of formal instruction? I mean formal instruction as opposed to work experience underground?-- The deputies course, how long was the deputies course?

Yes, but in terms of formal instruction as in a class?-- The deputies class - I think I only went to deputies class for - I'd only be hazarding a guess - about three or four weeks, the deputies class, because I was actually doing my coal mining certificate at the same time.

Well, in relation to the coal mining certificate, how much class-type experience did you have?-- It was a four year course. One day a week.

And did you get any experience or instruction in terms of spontaneous combustion while you were doing that certificate?-- Yeah, it would have covered spontaneous combustion, yeah, in the certificate.

To the extent that you told us about?-- Yes.

Now, at Moura No 2 there was a Unor computer and screen?-- Yes.

Did you get trained on that? Were you ever trained to operate it?-- Ever trained to operate it, no.

You have heard about - you may not have heard - but was there a quality assurance program at No 2?-- Yeah, it was in its development stage at the finish there, yeah.

As I understand some evidence here, various people were authorised under that quality assurance program to do particular jobs?-- Yes, that's correct.

Well, what were your authorised positions under that quality assurance program?-- I was authorised as undermanager.

And that's all? And that is all?-- Yes, that's correct, yeah.

I take it from that that you are telling us that you weren't authorised in ventilation?-- Beg your pardon?

I take it from that that you are telling us that you were not an authorised person to perform ventilation tasks?-- I look after ventilation for my shift.

I know you do, but I am asking you whether, under the quality assurance program, you were authorised to do that?-- Yeah, I was authorised to look after ventilation for my shift, yeah.

Under the quality assurance program, or don't you know?-- I don't know, because naturally you are in charge of ventilation on your shift as far as the safety goes as well.

I am talking about your duties as prescribed by the position description of ventilation?-- I would have to read it.

All right. What was your duty in the position description as undermanager in relation to ventilation, any?-- I wasn't in charge of the whole ventilation for the whole deal. I was in charge of ventilation for my shift.

I just want to straighten this out. Do you or do you not know whether, under the quality control or assurance program, whether you were an authorised person to perform that task in relation to ventilation?-- Perform what task?





Your ventilation duties that you have told us about in your statement?-- Not now without re-reading it.

Where do we find such an authorisation, the personnel who have authorisation under that quality assurance? Is it a document?-- I beg your pardon?

Is it a document? Is the quality assurance control or program, or whatever you like to call it, a written document?-- I don't really get what you mean.

All right. Have you ever seen such a document?-- The quality assurance?

Yes?-- Yes.

You have seen it?-- Yes.

What I am asking you is whether that document contains the personnel authorised to perform certain tasks?-- Yes.

It does. Did it authorise you to perform ventilation duties?-- Yes.

Who has that document by name with the names of the people authorised?-- It's kept at the colliery.

I take it that you weren't authorised to perform any task in relation to the Unor?-- No.

And, of course, there was a gas chromatograph at No 2?-- That's correct.

And you weren't authorised, I take it, to perform any tasks in relation to that?-- No.

Indeed, I suggest you had no knowledge whatever of its function, or did you?-- Knowledge of its function?

Yes. What did you understand it to do?-- For doing gas readings to tell you what was in a sample.

Did you have any real understanding of how it functioned or what it could do?-- No.

You have told us that you got your undermanager's certificate in Queensland by oral examination?-- That's correct.

Who performed that examination?-- Biggams I think the inspector was. I cannot remember the other fellows' names. One was a manager from Central Colliery, I think, and the other one was a manager from Newlands Colliery.

Was any part of that examination related to spontaneous combustion?-- No.

So, when was the last time then that you had any training or education in relation to spontaneous combustion?-- That would have been when I was doing my exams for my ticket.

In New South Wales?-- Yes.

Since you came to work in Queensland have you - more recently, that is, since you re-entered Queensland in the coal mining industry - have you ever been given a course of instruction of any kind, whether short or long, in the subject of spontaneous combustion?-- No.

And since you have been at Moura No 2, I take it that's the same situation?-- That's correct.

Have you ever seen a red book and/or a blue book on the subject of spontaneous combustion, and would you look at these and identify them or not identify them?-- No, I have seen them about a week ago.

Did you?-- Yeah.

For the first time?-- Yes.

Where did you see them?-- One of the deputies had them.

Nobody at Moura No 2, in terms of undermanager or anybody superior to him, showed you any such documents at any time?-- No.

All right. Did you read those books when you were shown them?-- I had a bit of a skim through, yeah.

I just want to get something absolutely straight with you, and that is the chain of command comes down from management through the underground superintendent, thence downwards to undermanager-in-charge; is that right so far?-- Yeah.

And thence downwards to the undermanagers and thence to the deputy?-- That's correct.

And then to the men?-- Yeah.

That's the order of things, isn't it?-- Yes.

A deputy is never in charge of any more than a particular area in a mine, is he?-- He is in charge of a panel.

Yes, his designated area of work with his crew?-- Yeah, that's correct.

Are you familiar, or were you by 7 August 1994 familiar with the organisation called SIMTARS?-- By when?

By the time of the tragic event on 7 August?-- SIMTARS, I knew they used to come in and actually do the checks on the gas readings.

What, both Unor and the gas chromatograph or what?-- I'm not sure.

Have you ever heard of SIMTARS CAM gas SEA gas systems for

analysing the content of mine atmosphere?-- No.

What do you understand, say, the gas chromatograph to be capable of in terms of analysis of gases?-- I really knew very little about the chromatograph.

What did you understand the Unor to be capable of?-- Unor used to give us a read-out for the CO, the CO<sub>2</sub>, the methane and the oxygen.

When you say CO, CO<sub>2</sub>, are you talking about a particular formula?-- No, carbon monoxide, carbon dioxide, methane and oxygen.

Is it the case that the only precise and accurate way of measuring the content of mine atmosphere in terms of gases is sophisticated instrumentation such as the Unor and/or the gas chromatograph; is that your understanding?-- What do you mean, for a constant read-out?

No, just the only really accurate way of determining it. I am not talking about read-out. I am just talking about the analysis of the mine atmosphere?-- Yeah, they would be more accurate than your handheld instruments, yes.

Do you understand that either of those two machines, that is the Unor or the gas chromatograph, are capable of determining the temperature of a heating?-- No.

Do you understand the alarm light system on the Unor system?-- Yes.

Just tell me about that briefly, if you would. What do you understand? What happens to trigger an alarm? What triggers an alarm?-- If it goes over a set limit -----

Are you saying a pre-set limit?-- Pre-set limit, yeah.

And what happens?-- A siren goes off outside and a white light comes up on the board in the room where the monitors are.

So a siren goes off outside?-- Yeah.

Have you heard that siren?-- Yes.

Before 7 August?-- Yes.

How many times?-- Oh, I wouldn't know.

So, do I understand you correctly, there is a pre-set limit on the Unor for a particular percentage of gas?-- That's correct.

Or - yeah, percentage will do. If that's reached by the sensory processes of the machine, a siren goes off?-- Yes.

A loud siren?-- Yes.

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Located outside the building?-- Yes.

Can that be interrupted by any way?-- There is a accept button in the undermanager's cabin.

Yes, that's what I was asking. So that siren process can be interrupted so that the siren will not sound at all by somebody pressing a switch of some kind in the undermanager's office?-- That's correct, yeah.

Have you ever known that siren to be switched off?-- What do you mean by "switched off"?

By the switch that you have told us about?-- The pre-set button not being reset?

No, I am talking about the switch you have told us about which is located in the undermanager's office?-- After the incident?

No, I am talking about before the incident?-- No, I can't recall, no.

Do you know about the non-acceptance of alarms by the Unor machine on the evening of 7 August 1994?-- No.

Well, I ask you to assume that it alarmed at about 8.15, again at 10.09 p.m. - 8.15 p.m., 10.09 p.m., 10.28 and 10.55. Is there any reason that you know of why the siren wouldn't have gone off?-- No, no.

Unless it was switched off in the undermanager's office; that's the case, isn't it? If the system was functioning, it would alarm, the siren would go off unless it was interrupted by the switching device in the undermanager's office?-- Yes, that's right, yeah.

In your many years in the coal mining industry have you learnt about a probeye?-- No.

Did you know that one existed at No 2 Moura?-- Yes, I knew there was one there sitting in the instrument room.

Did you know its function or what its purpose was?-- Yeah, it was for picking up a heat source.

Did you ever receive any instructions about it from management on how it is be used or should be used?-- No.

You weren't trained to use it?-- No.

Did you ever see anybody use it?-- No.

Do you know of any laid down work procedure about its usage?-- No.

Have you ever read a book - two books - have you ever seen either of those in the course of your travels?-- Yes, I have seen the one on the right.

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All right. Where did you see that?-- Mines Rescue at  
Newcastle.

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What about Moura No 2 in the office of Mr Mason and Mr Schaus, or anybody else for that matter?-- I think I have seen the books sitting on the shelf in one of the rooms there.

Let's be more precise about that. "One of the rooms"? We are talking about one of the rooms of Mr Mason or Mr Schaus, one of those two rooms?-- Yes, in one of those two rooms.

Could Mr Atkinson please see an exhibit which I have forgotten. It is 86, I am sorry.

Do you know anything about Ellicott's diagram?-- Yes.

Now, just for the record that is a screen - computer screen diagram, is it not, of the Ellicott's diagram, that is obvious. You punch it up on the screen?-- Yes.

Have you ever seen it punched up on the screen at No 2?-- Yeah.

How frequently?-- I beg your pardon?

How frequently?-- Oh, not real often.

Sorry?-- Not very often.

But in terms of time, timing, when?-- I can't recall actually.

All right. Had you read in Mr MacKenzie's book the necessity to evacuate the men whilst a sealed panel goes through the explosive range?-- I could have, I can't recall.

Well, if you were the undermanager in charge on 7 August at about - in the evening, say about 9.30, and you saw the approach - or the last point on the diagram approaching the explosive range as is shown there, what would you, as undermanager, have done?-- You are actually asking me to judge other people?

I am not asking you to judge anyone else, I am asking you to say what you would do if there are men either going underground or underground? If you saw it there at that last point, what would you do?-- What would you do?

What would you do?-- You wouldn't like anybody to be exposed to that.

No. What would you have done in terms of the safety of the men?-- Kept them out.

Yes. Returning for a moment - not about that, don't worry about that. Were there a number of books in the offices of Mr Mason and Mr Schaus at the mine?-- Yes.

What, shelves of them?-- There was a lot - yeah, there were shelves of books and records and all sorts of gear, files.

I take it that you were well aware before 7 August of the

gassy nature of the coal seams out around Moura?-- Yes.

And as well that they had a capacity to spontaneously combust?-- Yes.

In terms of spontaneous combustion, are you able to tell us anything reliable - I am not being offensive - anything reliable as to an incubation period?-- Well, actually in 512 I didn't think we would have a problem with the length of time we were going to be in and out of the place, compared with other panels we have worked at the mine.

But isn't it the case that there are just a host of variables in relation to an incubation period for coal?-- Yes.

A host of variables?-- Yeah.

Did you ever read - I will come back to that. I suggest to you it was quite fallacious to try to compare the incubation period of one panel with another or one experience with another? It is a fallacy? Can't you answer that?-- Well, I have missed the first part of the question.

I am sorry. I am suggesting to you that comparison between one panel with another in terms of incubation time is just a fallacy, it is just wrong?-- Yeah. I don't know what else you could use to make a judgment on that.

Isn't the most important factor the fact that it has the capacity to ignite itself? Isn't that the most telling feature?-- That it is prone to spontaneous combustion?

Mmm?-- You mean it is prone to spontaneous combustion?

Isn't the most telling or most important factor in relation to incubation period the fact that it can happen at all?-- It can happen, yeah.

What do you know about the CO/CO2 ratio? Be careful, CO/CO2?-- CO - I would have to get a book out now actually. We done it ages ago in the - about second year or something of the coal mining certificate.

That's in New South Wales?-- Yes.

You have not paid any regard to it since you have been an undermanager at Moura?-- No.

I suggest to you that whilst important sensory detection is the least satisfactory method of determining what is happening in a panel?-- I beg your pardon? Was that another question then?

Yes, it was. I suggest to you that one's senses of sight and smell are the least satisfactory methods of determining what is happening in - by way of heating in a panel?-- Oh, you mean -----

You know what I mean?-- Monitoring?



Determining what is happening in terms of a heating?-- Yeah.

It is the least satisfactory means, is it not? There are far better means of precisely determining, aren't there, what is happening in that panel?-- Well, electrical sort of analysis machine would be more accurate than a human being, yeah.

So too the Unor and so too the gas chromatograph, if used or used properly?-- Yeah, yeah.

And the most telling - another most telling feature of spontaneous combustion is, I suggest to you, that it can be quite stable for a while and then rapidly escalate out of control?-- Yes.

In 512 panel were roof falls fairly common?-- Yes.

And the result of that was that any loose coal was covered by what came from the roof?-- Yes.

Did you ever learn that that is a dangerous or potentially dangerous situation for spontaneous combustion to occur?-- Yes, because you wouldn't be getting much oxygen to the coal.

In fact there was a lot of loose coal in that panel, wasn't there, a lot?-- Yeah, yeah.

At the bottom of the ramps?-- Yes.

Right, really, from the back of the panel, say cross-cut 13, right down to where it ended at number 1 cross-cut?-- Yeah, there was a lot of loose coal in the panel.

There was a lot of loose coal, I suggest, on the canches from rib spall?-- Yes, there would have been.

You've told us about some dissatisfaction you had with the panel design in relation to air meeting big pillars, so I won't take you through that again. What do you understand by the term "shortcircuiting of air"?-- The air's not going where you want it to go.

Or you can make it go where it is not designed to go?-- Yeah, basically, yeah.

Would you just stand up for a moment, if you wouldn't mind, and just flick those two plans over? Just have a look for a little moment. That's my very rough, non-artistic attempt to understand a ventilation system. On the far side of the first diagram, on the top side of the first diagram, air coming down one of the intake roads and then running across the back at, say, cross-cut 13, am I right in that?-- That one over there you are talking about?

Yes?-- Yes.

Are you following?-- Yes.

Then the mess at the bottom with the squiggles and what not is a pile of loose coal, perhaps even covered by something from a roof fall?-- Yes.

So the purpose of the ventilation is to come down cross-cut return, thence into No 1 return and to pick up whatever gases are coming out of that pile on the floor?-- Yes.

And thence outbye to the monitor?-- Yes.

Or ventilation station, whatever you like to call it. Now, the next diagram is, I suggest to you, an example of what happens when shortcircuiting occurs either by accident or deliberately?-- Yes.

So that the heap of coal inbye the shortcircuit is not ventilated or not properly ventilated?-- Yes.

Are you aware that in about 17 September 1991, 5 North West panel was sealed off at about 12 litres per minute?-- I have got the figures somewhere. It was after the incident. I have got the figures.

I don't want you to waste any time on it. Was it some figure like that, as low as that?-- Yeah, I've got the figures somewhere in me bag somewhere.

Do you have any comment to make about Tecrete seals? This was the first full final seal used in 512, wasn't it, the one that was erected around about 6, 7 August. Do you know that or not?-- Yeah, yeah.

Can you give us your opinion as an undermanager about the effectiveness of that seal, that type of seal?-- I didn't like them as far as our men themselves were - not all of them could construct them. We had to have the contractors there to help them along with actually doing their job. As far as the brick seals were concerned, they had been using them for years and they were used to using the brick seals.

But in relation to their strength or resistance to an explosion inbye are you able to say anything about that?-- No, I wouldn't have the figures as far as strength-wise.

Because the general rules for underground coal mines prescribe a resistance of 345 kilopascals of pressure, doesn't it?-- Yes.

Do you know that or have I just told you that?-- I would have had to look up the book to find it for you. I wouldn't know exactly off-hand.

If one in management had seen signs - early signs that is, back in June, what would have prevented retiring one pillar and sealing and then evacuate the men while it went through the explosive range and then safely recommence mining? Nothing is the answer to that, isn't it?-- What did you say? I didn't get the whole -----

If management had ascertained that there was a source of problem in panel 512 at an early time, say in June or thereabouts, it could have been sealed then, wouldn't it, at that point of extraction?-- Yes, yes.

Then evacuate the men. Am I right so far?-- Yeah, yeah.

Then wait for the explosive range to disappear when it became inert; is that right?-- Yeah.

Then restart quite safely?-- Yeah, that's if you had a heating, yeah.

Good sense, good practice requires that if there is anything suspect in relation to safety that's what should have been done, I suggest?-- Yes.

Did you ever see a written procedure for sealing?-- No.

Did you ever know of the final .5 monitor point inbye the seal in panel 512?-- Did I ever know -----

Where it was placed?-- Only after the explosion.

Yes, but now you know where it was placed?-- Yes.

What do you say about the appropriateness of that -----?--  
What do I say about the -----

Whether it was placed in the right or the wrong place?-- I'm not in charge of placing the monitoring points.

Do you have an opinion about it, and if you do, I want to hear it?-- Most of the time when we did seal we had them in the top, very top road.

And that was the appropriate place for this final monitor point, wasn't it, because it's the highest part of the panel?-- Yeah, it is the highest part of the panel.

That's where you would have put it if you had anything to say about it?-- I would have put it where I was told to put it.

Who would have told you where to put it?-- Probably George or Albert or whoever.

And there was no reason at all, at least on the occasion of your last traverse down the No 1 return to the face, why it couldn't be placed anywhere down there or indeed have several monitoring points down No 1 return?-- No.

Nothing to prevent that?-- No, there was nothing to prevent that.

Had that been the case, a fair, proper representative sample would have been obtained of what was - of the mine atmosphere within the seals, I suggest?-- Yes, you'd get more of an idea, yes.

Indeed seals breathe, do they not?-- Yes.

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With the final monitoring point 5 where it was, it was receiving dilution, was it not, because of that process from outside, fresh air in other words?-- It depends on the barometer.

Yes, all right, but if the barometer changed, that would be one of the results?-- Yeah, it could be dilution, yeah.

Are you aware of previous sealings in No 2?-- Yes.

Do you know whether on those occasions there was more than one monitor point or not?-- I think we had two monitor points sometimes, I think.

Why would there be two sometimes, one some other time?-- I do not know.

I beg your pardon?-- I do not know.

Was it a shortage of equipment or something?-- I don't think so, no. I think we have had a monitor in the top side of the panel and the bottom side before.

All right. Do you know where ventilation point 16 ended up after sealing?-- Outbye the seal.

Yes, and in 510 No 1 road?-- Yeah, it would be 510 bottom heading, yeah.

And some many metres from the inbye to the No 1 road in 512?-- Yes, I am only guessing there.

All right. So that what it picks up after sealing of 512 is not at all helpful, I suggest to you, in determining what's happening or what's coming out of the seals?-- It would be picking up the air from the return, anything that's bleeding into the return.

That's the 510 - I am sorry, are you talking about No 1 512 return? I just want to make it plain so I understand. You said it would be picking up the air from the return. I just want to know what return you are referring to?-- Well, the return air that would be going past the seals.

In your mining experience, either in Queensland or elsewhere, have you ever seen a gas chromatograph in usage?-- No. Have I ever seen a chromatograph in usage?

That's my fault, I didn't make it plain enough. Have they been at other mines that you have worked at?-- No.

Do you know anything about a risk analysis -----?-- Yeah.

----- undertaken at No 2 in about May 1994?-- For 512?

Yes?-- Yes.

One of the risks assessed - did you ever read the document?-- I must have. I was - I didn't actually do the -----

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WIT: ATKINSON T J



No, I didn't ask whether you did it. I asked whether you know about it?-- I was over in the training room when they put us through the risk analysis for the ramping. There was a risk analysis done for the - you know, for the - keep the shuttle car driver out of trouble with the rib.

It also included, did it not, the subject of spontaneous combustion?-- I beg your pardon?

It also included the subject of spontaneous combustion as a risk, or don't you know?-- No, I have never seen that, no.

Is that a convenient time, Your Worship?

WARDEN: If you are going to be a while longer.

MR MARTIN: Yes, I will be.

WARDEN: Yes, thank you. Can we adjourn and resume at about 2.15?

THE COURT ADJOURNED AT 12.55 P.M. TILL 2.15 P.M.

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THE COURT RESUMED AT 2.15 P.M.

TERRY JOHN ATKINSON, CONTINUING:

MR MARTIN: On 22 July when you, with Mr Abrahamse and Mr Kerr, took Drager tube measurements of CO in 512 Panel how many Drager tubes were used?-- As far as I can remember we did a couple of readings at the monitoring station and a couple of readings inbye.

How many did you - how many measurements did you yourself take?-- None. I only had a look at the tubes.

Who actually took the Drager tube readings?-- Dave and Jacques.

Did they both take readings?-- Yes.

Who measured the air velocity?-- Jacques.

Where were the openings in the cross-cuts between No 1 return and No 2 entry as you went down No 1 return?-- Yes.

Where were any openings in the cross-cuts between No 1 return and No 2 entry?-- Where were?

Where were they?-- You mean the man doors?

Do you understand what I am talking about?-- Are you after the man doors in the stoppings?

Were there openings in the cross-cuts between No 1 return and No 2 entry in the cross-cuts?-- No, that's where the stoppings were, there.

Yes, all right. Were they all closed or were they all open?-- Were they all open or all closed?

Yes?-- Closed.

You understand that?-- Yeah, closed, yeah.

What were they, open or closed?-- Closed, yeah.

Were there any holes in them?-- Not as far as I can remember.

Why did wet bulb and dry bulb temperature measurements begin on 23 July?-- Probably because they were after the temperature in the return.

For what purpose?-- To see if it was any hotter than the other parts of the mine.

I hesitate to do this, Your Worship, but I just want, as quickly as I can, for Mr Atkinson to look at the underground

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shift report - the undermanagers' shift reports.

I want you to assume, Mr Atkinson, that there are a number of deputies production reports unsigned by manager or undermanager on various days; do you understand what I have said?-- Yeah, yeah.

I will give you the dates and the shift and I want you to identify who was the undermanager on those occasions, all right?-- Righto.

Now, 18 June - you can't do that unless you look at the book?-- 18 June?

It was a Saturday, the afternoon shift?-- You were after Saturday afternoon shift?

On 18 June. We are talking about 18 June, I want to establish that?-- 18/6?

Yes, all right. Who was the undermanager?-- There would have been no undermanager on on 18/6.

I beg your pardon?-- There would have been no undermanager.

No-one there? What did you say?-- There would have been no undermanager on on the afternoon shift.

Righto. All right. Sunday, 19 June, afternoon shift again?-- Sunday.

Afternoon?-- There would have been no undermanager.

What about Tuesday, 21 June, afternoon shift? 21 June, if that helps?-- Yeah, afternoon shift? The 21 June afternoon shift was Michael Squires.

All right. 24 June, please, again the afternoon shift?-- 24/6/94 afternoon was Michael Squires.

28 June, a Tuesday, a day shift?-- 28/6/94, day shift?

Yes, day?-- Mark McCamley.

Who, McCamley?-- Yeah.

29th, a Wednesday, the afternoon shift?-- 29/6/94 was M Squires.

2 July, a Saturday, a day shift?-- 2 July.

Day shift?-- Saturday day shift, it would be M Squires.

2 July, again the afternoon shift?-- There wouldn't have been an undermanager on.

All right. Well, 2 July, the night shift, again Saturday, the immediately following shift?-- There wouldn't have been an undermanager on night shift.

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Okay. 3 July, Sunday, the afternoon shift?-- There wouldn't have been an undermanager on afternoon shift.

4 July, a Monday, the afternoon shift?-- 4/7/94, afternoon, M Squires.

16 July, a Saturday afternoon shift? You will probably tell me there was nobody on, but tell me anyway. 16 July is a Saturday afternoon shift?-- 16th -----

July?-- July, there wouldn't have been an undermanager on.

Turn, please, to 20 July, a Wednesday, the afternoon shift?-- 20 July.

Wednesday the afternoon shift?-- Wednesday, M Squires.

24 July, Sunday, the afternoon?-- There wouldn't have been an undermanager on Sunday arvo.

The next day then - sorry, not the next day - yes, it is the next day, but the afternoon shift?-- Afternoon shift on the Monday?

25 July?-- Monday afternoon, 25/7/94 was me, T Atkinson.

Just pause there for a moment. If, as I suggested, it wasn't signed by you, what was the reason? Not that document, but the corresponding production deputies report?-- It was a maintenance day.

I beg your pardon?-- Maintenance day.

All right. Isn't there a deputy on?-- Yeah, I thought you said "production report".

I did say "production report". I have asked you to assume that the production deputies report for that shift is unsigned by you as undermanager and I am asking what possible reason there could be?-- No, there would be no reason.

There must be a reason. Weren't you there?-- Yes, I was there.

Why didn't you receive and sign the deputies report?-- I don't know.

Pardon?-- I don't know.

What about 30 July, Saturday, the afternoon shift?-- You said 30 July, did you?

I did say "30 July" and I have a number of questions about then to 7 August?-- Yeah.

Do you not have that book?-- 10/5 to 21/6 and 1/8 to 7/8. Here we go.

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30 July, the Saturday afternoon. No-one on again?-- No, there wouldn't be anyone, but I am just trying to see.

Just make sure?-- No, there wouldn't have been an undermanager on shift on the 30th.

The following day, again the afternoon shift, that's Sunday, 31 July?-- Yes, there wouldn't have been an undermanager on.

1 August, the Monday, the day shift?-- 1 August, day shift, that's me, T Atkinson.

Pausing there, how do you account for that, if, as I am suggesting to you, the corresponding production deputies report was unsigned by you?-- I don't know, actually.

Mmm?-- I don't know. Usually the deputies hand me the reports when they get out of there.

Didn't you chase them up if they didn't?-- Yes, usually I used to chase them to the shower, yeah.

You didn't on the two occasions so far we have discussed, obviously?-- I can't explain it, actually, no.

All right. The following day, Tuesday, 2 August, the day shift, is that you again?-- Tuesday -----

2 August?-- Tuesday day shift, 2 August, that's T Atkinson, me.

If, as I have asked you to assume, the deputies report is not signed, how do you account for that? The same explanation, that you didn't chase up the deputy?-- No, I normally chase up the deputy to the shower, yeah.

Well, you couldn't have on this occasion, could you, if, as I have suggested to you, it is unsigned?-- I can't explain it actually, no.

5 August, a Friday, the day shift?-- 5 August, Friday day shift is - be George Mason.

The afternoon shift on that same day?-- 5/8/94, M Squires.

Saturday night shift, 6 August - I am sorry, yes, the Saturday night shift, 6 August?-- I wouldn't be sure if there was an undermanager on or not, I don't know.

You are not sure. I think I may have written that wrongly and I apologise. What about the Friday night shift, 5 August?-- Friday night shift, Danny Sim.

Sim, is it?-- Sim, yeah.

And the Saturday day shift?-- M Squires.

Saturday afternoon shift on the 6th?-- I'm not sure whether there was an undermanager on or not.

And the Saturday afternoon shift, the Saturday afternoon shift on 6 August?-- That's what I thought you asked me about just before.

I just asked you before about the day shift?-- Saturday day shift, but you asked me afternoon shift twice as far as I can recall.

I'm sorry. I can't read my own writing. Saturday afternoon shift?-- That's the same one again. I can't recall if there was an undermanager on.

Saturday night shift?-- That would be the same again. I'm not sure who was in.

If anybody?-- Yeah, I wasn't on that weekend.

No, I'm not suggesting you were on, we all know you weren't on, but what does the document tell you?-- Saturday night shift M Caddell and R Newton down for the deputies, and it's got Michael Squires at the heading of the page.

Are there any entries made by an undermanager?-- Yeah, he signed the top of the page.

Righto. So it's Mr Squires. Sunday day shift, 7 August?-- Sunday day shift -----

Michael Squires again?-- Yeah, it would be Michael, yeah.

Is it, from the document?-- I can't see any signature. It looks like his writing on the document.

I will turn to something else now, thank you, very much. I would like you to look at Exhibit G for identification, if you would, and I ask you to assume that there is an accurate plotting by way of graph of the CO litres per minute make for panel 512 commencing on 28 July and thence to 6 August and - where it takes an upward or a sharp upward trend, if I ask you to assume that the top of the point on the right-hand side is about 8.30 p.m. on Saturday night, 6 August - have you understood that. Do you see the heavy black line?-- Yeah, on the right-hand side, yeah. That's the 6th or the 7th.

It doesn't say the 7th at all?-- No.

Do you see where it has 6 August?-- Yes.

Then right over on the right-hand side, the extreme edge, it rises?-- Yeah.

I ask you to assume that that is an accurate plotting of the CO per litre make for panel 512 between those dates and to that time, at about 8.30 p.m., on Saturday, 6 August?-- Yes.

Do you understand what you are looking at?-- Yep.

On the left-hand side you have the litres per minute make?-- Yes.

Now, if that is an accurate plotting, and I ask you to assume that it is, what does that tell you as a responsible undermanager?-- It tells you it took off on the right-hand side.

Just be more precise about "took off"; what does that mean?-- It means it's heating up rapidly.

Can you just clear something up for me? References in deputy production reports to ventilation, say, being adequate or fair or poor, is that a reference to the area being mined at the time?-- Yes, yeah.

You were on holidays, you've told us, between 18 June and 11 July?-- Yes, yeah.

Who undertook in your absence your ventilation duties and responsibilities?-- All depends who was on me shift. Mark McCamley if he was on my shift.

Do you know whether they were Quality Assurance program approved to do that?-- Yes.

You were telling one of Mr MacSporran or Mr Clair about the events on 22 July when you commenced to plot, I think on the Saturday, or perhaps the Friday, the day-by-day -----?-- Yes.

You received the sheet to do that, did you, from Mr Abrahamse?-- Yes.

And am I to take it from what you've said this morning that what you did on that sheet was a continuance of what was already there by way of a pre-existing graph?-- Yes.

On a daily basis?-- On a daily basis, yeah.

If I just might return very briefly to 22 July, did one of the people present, that is yourself, Abrahamse or Mr Kerr telephone Mr MacKenzie-Wood that afternoon or that morning?-- Not that I'm aware of.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Mr Atkinson, you were asked some questions about what you did on 22 July, the readings that day. Do you recall the day, the day you went down with Abrahamse and Dave Kerr and took some readings -----?-- Yes.

----- of velocity and CO?-- That's correct, yeah.

The readings were taken by Abrahamse and Kerr, weren't they, not by you?-- That's correct, yeah.

You know Dave Kerr to be a very highly experienced operator?-- Yes, he's been in the district a long while.

And likewise Abrahamse?-- Yes, Dave has been in the Moura district longer than Jacques, yeah.

You understood on that day the reason for going down was that there had been a couple of errors, one in the velocity reading and one in the CO parts reading?-- We were double checking on the - actually the CO, because it didn't - the Unor being very accurate, and it didn't coincide with the Unor.

It was two parts out; the Unor was showing closer to six than eight?-- That's right.

In fact when all those readings were taken by Mr Kerr and Mr Abrahamse it showed the eight parts was in fact false, wasn't it? It was a false reading?-- Well, we got six, that's why we went down there to check, check out that the Unor was reading okay, yeah.

In fact you got it just under six?-- That's right.

When the readings were taken you then went down to the face and spoke to Reece Robertson, the deputy?-- Yeah, we spoke to the crew and the deputy, yeah.

And in fact there was some discussion about the readings that Reece had been getting?-- No, I can't recall what was said, no.

Can you recall that Reece indicated that he was getting six too?-- No, no. Actually Dave talked to Reece longer than what I did.

There was more than one set of readings taken by Kerr and Abrahamse that day. There were a number of readings taken?-- Yeah, when we were there. We didn't go back in again that same shift.

And nothing said by anybody that day to you or in your presence indicated that there was any cause for concern?-- That's correct.

On the inspection, so far as you did it at 512 that day, there



was nothing you saw or experienced that was abnormal?--  
That's correct, yeah.

Nor did anyone in your presence on that day indicate to you that they had seen or experienced anything abnormal?-- Yeah, that's correct.

Am I right in saying that the decision to take daily or shift measurements had in fact been reached before you went down to take the readings?-- No, it was talking afterwards with Dave, and Jacques decided on - as far as I know anyway - they recommended -----

And the readings were going to serve two purposes, that is to say, the readings that were then taken from that point on, (1) you could calculate CO make from them, and (2) you could keep a check on whether the Unor was in fact accurate?-- That's correct, yeah.

After that day for the next couple of days over the weekend you did a daily graph yourself?-- Yeah, over the weekend, yeah.

On a document that Abrahamse had given you?-- Yes, that's correct.

And that document was a graph itself, a CO make graph?-- Yep.

It already had some points plotted on it joined up?-- Yes.

And you simply plotted your daily ones for the next few days?-- Yep.

And that was because you wanted to give them to Abrahamse, he was interested in what the figures were over the weekend?-- Yes, he wanted me to keep a record over the weekend.

Having done that you didn't follow it up after that in terms of doing your own CO make calculations day by day?-- No.

Because basically you had done what you had been asked, you had done the weekend and that was that?-- Yeah, that's right.

And the results that people got from the daily readings over, say, the next week, confirmed what you had thought anyway, namely that the Unor was in fact very accurate?-- Yes, it was, yeah.

And there was no CO make calculations deriving from any of those figures over the next few days that showed that the CO make otherwise was inaccurate; they verified it as being accurate?-- The Unor, yeah, they were the same as the Unor.

You knew that Cocky was doing a CO make graph from time to time?-- Not really, no.

The daily readings, or rather the plotting of the daily plots was discontinued in the following ones, wasn't it, once the Unor had been verified as being absolutely accurate?-- I



don't know about that.

When you came to do that work over the weekend Abrahamse gave you that CO make graph that you used?-- Yep.

And there was some extra space on it to plot the points?-- Yes.

And he gave you a table to collate the shift by shift information?-- Yes.

And it had a CO make formula written on the top of the sheet?-- Yes.

And he asked you to collate that data and plot the points and check for any sharp rise?-- Yes.

You also got told by Abrahamse there was a calculator at the end office that you could use?-- Yeah.

In fact in the time you were looking at it there was certainly no sharp rise indicated, was there?-- No.

To your knowledge the deputies who were going to take these readings were going to record their readings in their deputies reports?-- Yes.

And you would expect them to do so?-- Yes.

You certainly followed up for a while checking that they did do so?-- Yes.

And they did?-- Yeah.

For some of them you transferred that information to the undermanagers shift report just to make it easier to find for Jacques Abrahamse?-- Yes, I thought he was going to be off for them couple of days.

But it wasn't hard to find the deputies reports, was it?-- No.

They are all in one spot after they are taken off the noticeboard?-- Yeah.

It's easy enough to flip through them to find the information for a week or two weeks?-- Yes.

I can well understand you wouldn't sit there and read through three weeks of three shifts a day of deputies reports. If you wanted to get that info it would be easy enough to get?-- Yes, if he was correlating the information.

Once the deputies reports are taken down from the noticeboard after they have been posted, the information is in fact situated in one spot in one file?-- Yes.

You were asked some questions about the ventilation of the 512 Panel, and in particular in relation to the two rows of what might be called compartment pillars or - barrier pillars, not

compartment pillars - barrier pillars/compartment pillars - which you identify there as around 5 cross-cut and about 9 cross-cut?-- Yes.

I take it when you were asked those questions about what the effective ventilation would be through there you are really just giving us your surmise, as it were. You've never tested it?-- That's correct.

Your best guess as to what the effective ventilation would be down through such a configuration of pillars and roadways?-- Yes.

You are not suggesting to us that your assessment is necessarily accurate, are you?-- No.

It would be the case, I suppose, that when you've got ventilation going down past such a pillar - if you just look at the map while I talk to you - and as the air goes down past there and splits again you wouldn't actually get any spots behind pillars that were completely devoid of ventilation. It might be slow, but it certainly wouldn't be dead, would it? What you are going to get is air cutting across -----?-- Yeah, it would be pretty slowed down.

You were using the words "dead spots"; that's really a misrepresentation. There won't be any spots there that are truly non-ventilated, what you are going to get is slow moving turbulent air?-- Yes.

That certainly would be your expectation?-- Yes.

I think I'm right in saying that when you were down in the section from time to time it's true to say, I think, that you can't ever recall an occasion where you were behind such a pillar and found a dead spot?-- No.

Now, you were asked some questions about not only those undermanagers shift reports but deputies reports as well. There was an exchange of information that went on at shift changeover, wasn't there?-- Yes.

Routinely undermanagers would talk to undermanager. That is, the oncoming would talk to the outgoing one?-- Yes.

And usually undermanagers would talk to the outgoing deputies as to what had happened?-- Yeah, to your deputies that were coming on, yeah.

If you were the undermanager on shift and your deputies came up getting organised to go off home after the end of their shift you would certainly be interested in knowing what the status of the sections were?-- Yes.

And usually you would get that sort of exchange to one degree or another?-- Yeah, off the deputies, yeah.

The deputies, in your experience I would have thought, at No 2 would come to you if they had anything unusual or any concerns

about their sections or what had happened?-- Yes.

You would be confident in expecting that that's exactly what they would do?-- Yeah, they would come and talk to you.

Your experience would tell you at No 2 that that is exactly what they do do?-- Yeah.

And likewise undermanagers, if they have got anything to say to you they will come and say it as well?-- Yes.

That system has worked pretty well, hasn't it, one way or the other?-- Yeah.

Certainly if somebody had experienced what they thought was a tar smell, that's certainly something you would expect to have passed on to you as an oncoming undermanager?-- Yes.

It's not the sort of thing that one would leave out of account, is it?-- No.

If you experienced it yourself there is no question you'd put it in your report, wouldn't you?-- Yeah, actually you'd go further. I'd be chasing up the undermanager in charge at least.

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Yes, and you would find it surprising if someone actually

smelt a tar smell - an undermanager smelt a tar smell and then didn't bother to put it in his report?-- Yes.

Now, there is no question, is there - McCamley never told you he smelt a tar smell down the pit?-- No, I would have remembered that.

Can you recall any time when McCamley came and gave you some long detailed conversation about precise steps of ventilation he had done down in the pit, done this and done that and done this and done that and you weren't to change it or no-one was to move it? You don't remember an occasion like that?-- No.

Not like McCamley to do that sort of thing, is it?-- Beg your pardon?

It's not like him to do that sort of thing, is it? It's not really his style, is it?-- To do what?

To come and lecture people at the end of a shift about all the things he has done over the shift?-- He normally would come and see you, yeah.

All right. Now, do you think - I won't bother with that. Now, you mentioned that you hadn't heard from anyone else. Leave aside Mr McCamley for a moment. No-one else had ever mentioned to you anything about the smells being experienced either?-- No.

Again, that's the sort of thing, had that been said to you, that would stick in your mind, wouldn't it?-- Yes.

There is no question if someone had said that to you, you would be taking action on it?-- Yes, yeah.

Follow it up and you would investigate it?-- Yeah.

You would try and locate the source of the smell if you could?-- Yes.

And you would in fact try and verify whether it was that smell or not, wouldn't you?-- Yes, yeah.

It's been known for people to think that they smelled one thing and it turned out to be another, isn't it?-- It has been, but you would still check it out.

If people, at one stage, thought they smelled a benzene smell and it turned out to be roof bolt chemical?-- Yes.

In one case, I think I am right in saying, back in 5 North Mr Robertson reported a benzene smell and when it was investigated it turned out to be a toilet; is that right?-- Yeah, that was a long while ago, yeah.

So, it has been known for people to confuse those sort of smells, hasn't it?-- Yes.



One of the things you would be doing, if you had received such a report, is you would be trying to verify (1) where it was; is that right?-- Yes.

(2) whether in fact it was what the bloke said to you it was?-- Yes.

And then (3) whether it was going to be continued?-- Yeah.

If it wasn't continued, then whatever your concerns were raised by it happening in the first place would be eased somewhat, if it was just only one occasion and then not repeated?-- Oh, yeah, but you still follow it up, yeah.

You would still closely monitor?-- Yeah.

Now, you would regard, in those circumstances, the correct procedure to be followed would be just that: to investigate, try and locate it, try and identify it, but, nonetheless, monitor from that point on?-- Can you go through that again, please?

Sorry. If someone reported the smell, say, to you, you would regard the correct procedure to be that you would go and investigate it, try and identify it, try and verify it, try and locate it and then monitor from that point?-- Yes.

Unless something else changed, that would be the correct thing to do?-- Yes.

Now, you mentioned in relation to these daily readings that we talked about after 22 July, I think I understood you correctly to say at one point that a notice was posted up by George Mason?-- Yes.

That was a notice advising the deputies what they had to do and what they had to do with the information?-- Yes, that's correct.

That was posted up, and I think I made the note correctly, you said it was officially to start on the Monday and that's when the notice went up?-- I remember seeing the notice on the wall. It was there either Monday or Tuesday. I seen the notice on the wall when I came back after the weekend on the first day back.

I am pretty sure you said in your evidence it was to officially commence on the Monday?-- Yeah.

Now, you were mentioning at one stage - I think someone gave you a mock Ellicott diagram with some points plotted on it and asked you what your reaction would be to seeing that, and I think you indicated that you wouldn't send men down the mine if you saw that. Do you remember those questions?-- Yes.

It's a fact, isn't it, that there have been a lot of panels sealed at No 2?-- Yes, yes.

And they have been sealed while you have been there?-- Yes.

All of those panels go through the explosive range afterwards, don't they?-- Yes.

That's a feature of a sealing, at some stage or another it goes through the explosive range?-- Yes.

And out the other side?-- Yes.

I am right in saying, aren't I, that before this, the only time that men did not go down the mine was 5 North?-- Yeah, in 5 North, yeah, it was working a fair bit - the roof was working and there was a lot of fault strata.

That suggests, doesn't it, that in respect of those panels where they went through the explosive range, on any of those occasions the Ellicott diagram for that panel would show it going into the explosive range?-- Yeah, that's correct.

Nonetheless, men were down the mine?-- That's right.

There is no doubt there were occasions when that happened when you were on shift?-- Yes, but it was put to me slightly different than that, yeah.

Yes, I know it was. Just let me ask you this: you were asked some questions about your examiners when you had to get your ticket verified up here?-- Yes.

And you mentioned Inspector Biggams, I think was it?-- Yes.

And then a couple of other managers of various mines?-- Yes.

Were you asked any questions about spontaneous combustion in those exams?-- No.

Did those examiners know - had you indicated to them that you were in fact coming to work in the Bowen Basin?-- They would have known.

Your only place of work in Queensland has been Moura No 2, hasn't it?-- That's correct.

So even though those fellows knew you were going to Moura No 2, they did not see fit to ask you any questions about your knowledge of spontaneous combustion, it seems?-- Yeah, that's correct.

I think you will confirm something for me. In relation to CO make and CO production, it's a natural feature of mining that as you cut coal, you expose what might be called raw coal to the air, you get oxidation and you get CO produced; is that right?-- Can you go through that whole lot again, please, from the start? I missed a bit in the middle there.

When you are mining and you cut raw coal, what I call raw coal, virgin coal, you expose it to the air, it starts to oxidise and you get CO produced, don't you?-- Yeah, once it's exposed to the air, yes, it starts oxidising.

There is a general correlation, isn't there, between the amount of carbon monoxide and the number of tons you produce. If you have a very high tonnage, your CO make goes up?-- I have never noticed it to that extent.

Never done that correlation?-- No.

It would be what you would expect, though, wouldn't it? The more tons you produce, the more coal you are exposing, your CO make is probably going up?-- You mean as you come back out of a panel?

Yes?-- Yes.

That's what you would expect to see in relation to this panel or any panel. As you are pulling out in retreat, you are expecting your CO make to rise?-- Yes.

The thing you would look for, if you were looking for a trend that indicated a difficulty to you, would be a sudden and sharp rise in the trend, isn't that right?-- Yeah, that's correct.

That's what Abrahamse was indicating you should look for on that weekend when you were doing the plots?-- Yes.

And that's the sort of thing - the graph takes off, that's the point that you get the alarm bells?-- That's right.

You have never seen that indicated for this panel, have you?-- No, no.

In relation to another point, you were asked about the position of monitor points. Now, I think I am right in saying you really have no idea where the monitor points were put in relation to this panel when it was sealed?-- No, I wasn't working when they moved the monitor points.

And you weren't involved in a decision-making process as to where they should be placed?-- No.

You would expect mostly that decision -making process would involve a few people?-- Yes, that's correct.

There would be deputies, electricians, undermanagers, whatever?-- I don't know about the deputies.

All right, but it's not sort of one person's decision, is it, it's a consultative process?-- It would be, yeah.

All right. You were mentioning, I think, in answer to one question that there is no particular reason why you couldn't put more points down the top return. You know where the top return is?-- Yeah.

Of course, that would depend upon whether there were available points on the Unor system at all. If you didn't have any available points to put down there, you couldn't put it down



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there, could you?-- No, not without taking away from other panels.

That's right. It would also depend on the amount of tubes you had and the workforce you had to erect them, that sort of thing?-- Yes.

It would also depend a bit on what equipment you had to deal with the height of the top return because where the bottoms were taken you are talking about, what, five metres, close to five metres?-- Yes.

So you have got to have people up at height to put those things in?-- That's correct.

I have nothing further, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: Mr Atkinson, you were questioned earlier about occasions when there were apparently situations whereby the deputies reports were not signed by the undermanager on shift. You recall going through that exercise just before with Mr Martin?-- Yes, yes.

Now, from your experience, have there been occasions where, for various reasons, the deputies reports have not got to the undermanager on shift?-- Yes, there has, when people have taken them home.

Can you give any other examples?-- Left them down the pit, they have lost them.

From your experience, is it the case that there may be occasions when the undermanager reads the report but, for some reason, doesn't sign it?-- It is possible, yeah, you could be reading through the report and a machine breaks down, somebody is chasing a fitter and that or whatever, you get tied up.

Would that depend perhaps on just how busy you were at the particular time?-- Yeah, it could happen, yeah.

From your experience, would the mere fact that something wasn't signed of itself necessarily mean that it wasn't read by the undermanager?-- Yeah, that's correct.

Thank you, I have nothing further, Your Worship.

MR MORRISON: Your Worship, I have reconsidered that point that I paused to think about. Can I just deal with that now?

WARDEN: Yes, by leave.

XXN: MR HARRISON

WIT: ATKINSON T J



FURTHER CROSS-EXAMINATION:

MR MORRISON: Can you just have a look at these two documents, please? You were asked some questions about whether a deputy had responsibilities only in relation to his own district or his own crew and so forth. I have just handed you a couple of pages from the Special Rules for Underground Coal Mines. I want you to have a look at those in just a moment. You were also asked to look at the responsibilities of undermanagers and, I think, deputies in the position description, that is the internal document that you sign off. You remember that?-- Beg your pardon?

Do you remember those questions on this area? Do you remember people asking you about whether -----?-- Yes.

----- deputies had responsibilities and so forth?-- Yes.

Now, rule 5.8 deals with something in this area, doesn't it?-- Yes.

Would you like to read it out for us, please?-- "A deputy shall immediately stop the work in any place which for want of roof support, defective ventilation, or an issue of gas is in an unfit state. He shall report such an occurrence to the undermanager or the manager."

"A deputy shall immediately stop the work in any place which for want of roof support, defective ventilation, or an issue of gas is in an unfit state." That's what it says, doesn't it?-- Yes.

It goes on to say the deputy shall report that occurrence to the undermanager or the manager?-- Yes.

Would you agree that rule goes beyond an ordinary district? It says "any place" where the defective ventilation makes it unfit. Not just his district, is it?-- Yeah, that's correct.

And the ventilation being talked about there is different from what's in the next section. I think 5.9 - read 5.9 to us, if you wouldn't mind?-- "A deputy shall ensure that all necessary arrangements are made to keep the air current up to within four metres of the working faces."

That's the section that deals with keeping air over the miner. The previous one deals with ventilation generally?-- Yeah, that's correct.

If you have a look over the page. 5.14 deals with the deputy's power, and you were asked questions about whether his power extended only to his own district. 5.14 reads - let me read it for you: "A deputy shall suspend any work at the coal face or other operation that in his opinion is likely to cause danger to any person until he has received special



instructions from the manager." That's not confined to the deputy's own district, is it? He has power to suspend any operation?-- Yeah, that's correct.

That's what you would have understood about a deputy's power. In reality, deputies do have power to stop any operation that they think is the source of danger?-- That is a source of danger, yeah.

And that's what miners regularly do. If they think there is a source of danger, they can effectively stop all production until that source of danger is dealt with, isn't that right?-- That's correct.

They have done it in the past?-- Yes, yeah.

We can see the difference between that general provision, 5.14 and what's in 5.15 which is confined to his own district: "A deputy shall report to the manager any accident, danger or defect which may occur in his district of the mine." That is certainly confined to his own district. It's not like the other one, is it?-- Yes, that's right.

I tender those two pages from the special rules. That's all I have.

WARDEN: Exhibit 92.

ADMITTED AND MARKED "EXHIBIT 92"

RE-EXAMINATION:

MR CLAIR: Mr Atkinson, there is just one area of your evidence that has me troubled -----

Could the witness see Exhibit 86, please, Your Worship?

Do you recall being shown that when you were being questioned earlier? It was, as I recall, by Mr Martin?-- Yes.

He asked you, as I remember it, if you had seen an Ellicott diagram like that at 9.30 on 7 August what would you have done in relation to the men that were to go underground that night. Do you remember being asked that question?-- Yes.

You appeared to think for a time and then you said, "I would have kept them out."; do you remember saying that?-- Yeah, this is - it is all right - I am not trying to be wise - after the incident. I am not actually prejudging the people, that's all.

Did you think about your answer before you gave it?-- Yeah, what I said was if you thought you had a heating you wouldn't be -----

Well, I don't recall you saying if you thought you had a heating. Your answer - I think the transcript will bear it out - was, "I would have kept them out." Now, are you able to say why you gave that answer, "I would have kept them out?" It is a very important question?-- Yeah, probably it is afterthought from the incident, actually, yeah.

I see. Well, in fact, as Mr Morrison has quite rightly pointed out to you in his questioning, there have been many sealings of panels in No 2 Mine when the men haven't been kept out?-- Yeah, that's correct, yeah.

You have been on shift, I think you suggested, when some of those took place?-- Yes.

And, of course, there was no question of the men being kept out on those occasions?-- No.

Because, as you would say, there was no suggestion of a heating?-- That's correct.

Okay. On this occasion, on what you have told us, there was really nothing that you were aware of that was suggestive of a heating, having regard to all that you have told us today?-- No.

Isn't that so?-- He was actually saying to me on the 7th. This was the graph on the 7th.

But you are not really answering my question. On all of what you have told us today, having regard to everything you have said about what you had been told and what you did in relation

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to 512, there was nothing that you were aware of that would have suggested to you that there was a heating in 512 at 9.30 p.m. on 7 August; is that so?-- That's before the incident, yes.

Righto. Well, why did you say that you would have kept the men out?-- Why did I say?

Yes, why did you say in answer to that question from Mr Martin earlier that if you had seen that diagram at 9.30 p.m. on 7 August that you would have kept the men out?-- Because of the dates he told me and some of the things I have heard since, actually.

Well, some of the things you have heard since. Since when?-- Since the incident.

Well, how could they possibly have borne on your mind at 9.30 p.m. on 7 August, if they are things that you have heard since?-- I don't actually see what you are getting at.

You are looking puzzled. Don't worry about what I am getting at. If we take it one question at a time we will be able to deal with things. The question you were asked by Mr Martin was if you had seen an Ellicott diagram like that one there, Exhibit 86, at 9.30 p.m. on 7 August what would you have done? Your answer, given after what appeared to be some thought, was unequivocal, you said, "I would have kept them out." Now, I am asking you why is it that you said that?-- Why I said that? Because he said it was from the dates, actually, it was from the dates.

What do you mean, "It was from the dates."?-- Just thoughts of what has happened from the incident, that's why.

Now we are back to where we were about a minute and a half ago. How could anything that has happened since the incident, that's the explosion, have had any bearing on your mind at 9.30 p.m. on 7 August?-- I read some of the reports.

You have read them when?-- Since the incident.

Okay, come back to my question again. As I say, take it one question at a time. How could anything that you have read since the incident, which was after the period we are speaking of, that is much later than 7 August, how could anything you have read since then have a bearing on what your decision might have been at 9.30 p.m. on 7 August?-- Oh, I read where somebody seen a haze.

I am sorry?-- I read where somebody said they have seen a haze.

When did you read that?-- Since the incident.

Okay. If you have read that since the incident how could that fact have had a bearing on your thinking at 9.30 p.m. on 7 August? Listen to my question?-- Yeah, I know. It had a bearing on me, what I said to the man before, that was all.

Well, can you explain that, please? ?-- Can I explain that?

Can you explain that answer? That it had a bearing on your thinking about what you said to the man before is what you have just said in answer to my question now?-- Yeah.

Can you explain what you mean by that?-- Yeah, I think the incident is actually on everybody's mind, so, yeah.

I appreciate it is on the minds of all of us. You realise you are giving evidence in relation to the incident?-- Yes, that's right.

Do you realise when you answer questions in that witness box there that you have to apply your mind to the questions that are asked?-- Yes.

Okay. Can you apply your mind to this question: how is it that something that you read since the incident could possibly have had any bearing on your thinking at 9.30 p.m. on 7 August? Think about the question if you need to, but, please, apply yourself to it and give me an answer?-- I can't actually get what you are trying to say.

Listen to my question again?-- Yeah.

How is it that something that you have read since the incident could have had any bearing on your mind at 9.30 p.m. on 7 August?-- You are saying there is no worries beforehand on - before 7 August and we had this graph? We sealed it before, we had no worries with the panels and nothing wrong with the panel. We have sealed them before, yes.

Yes?-- Men have stayed down the pit, yes.

That's right?-- Yeah.

You said that in answer to Mr Morrison, but what you said in your earlier answer when you were being questioned by Mr Martin was that if you had seen that diagram, that Ellicott diagram, at 9.30 p.m. on 7 August you would have kept the men out. Now, it is a simple question: why did you give that answer to Mr Martin?-- Excuse me, I am nearly sure that I said if there was a heating or something like that to - the girl probably would have took it down.

Well, we can check the transcript later. Is that what you are saying, that you qualified your answer in that way?-- Yes, yes.

Now, have you really thought carefully about every question that you have been asked while you have been giving evidence today?-- I have been trying hard, yeah.

It hasn't been the case that you have just been ready to agree with the matters that have been put to you?-- No, not really. I have been trying to think, yes. It is pretty nervous up here.



I appreciate that it is a position in which you can get nervous, but have you, for instance, applied yourself to the questions that I have been asking you since I got on my feet again?-- Yes, I have been trying.

Okay. Did you really apply your mind to that question that you were asked by myself and then questions about it from other people as to whether you did have a conversation with Mr McCamley about whether there had been - whether he had smelt a slight tar smell in the section?-- Yes.

You really applied your mind to that?-- Yes.

Do you know a Mr Edelman?-- Yes.

Have you ever spoken to him about the events in the section on 17 June in 512 Panel?-- No.

He has never suggested to you that he could smell a slight tarry smell -----?-- No.

In the section? Okay. Yes, thank you, Your Worship.

MR MARTIN: Before anything else happens could I just tell the Inquiry that I am, in my spare time, working on relevant sections of the Act and rules and we will present that in due course rather than select a part of it. Secondly, I ask Your Worship to order the immediate production of all graphs plotted on a daily axis in relation to carbon monoxide make from the commencement of extraction of Panel 512 to the time of the explosion, including that daily graph handed by Abrahamse by Atkinson on 22 July 1994 and plotted by Atkinson over the three consecutive days and then handed back to Abrahamse.

MR CLAIR: As far as I am aware, Your Worship, in the material that we have had an opportunity to peruse there is no graph of that kind which I am in a position to produce. I might say that would need to be subject to my ensuring that a check has been made sufficiently through the material that has been taken into possession.

MR MORRISON: Your -----

MR MARTIN: I wish to say something further, Mr Morrison. I ask Your Worship to order -----

MR MORRISON: I am entitled to respond to your application and I ask I be given the chance to respond to your application. Please do not commence another one until I have responded to the first.

MR MARTIN: I am still on the first.

MR MORRISON: I am sorry, I thought you had completed it.

MR MARTIN: I am asking the order to be made against BHP Australia Coal and its servants.

MR MORRISON: Now I may be able to respond. If that's the order that is identified, in the first place there are two curious aspects about it. Firstly, our learned friend does not identify any basis at all nor proffer any evidence at all in any form, whether it is by witness or affidavit or otherwise, to suggest that there is any daily graph beyond the one referred to by this witness. So, on the face of it, if one characterises this as an application for further discovery, which, of course, it is not, but if one has that characterisation, he proffers absolutely no basis for his application. So, that is merely a fishing expedition of the worst possible kind. Secondly, in so far as the graph referred to by this witness is concerned, on my instructions it no longer exists. Now, I will give an undertaking to the Inquiry now that we will make further investigations of that, but I know what my instructions are and I have already had them checked and I have got no doubt what they will be once we make the further investigation, but if there is any doubt about it, and our learned friend puts that hint in his mind, if there is in doubt about it, let me undertake here and now we will make that further investigation, but I will not put up with the sort of suggestion that is coming now that in some way BHP has held back documents. It is untrue to say, it is a headline grabbing sort of statement, it is baseless and I will not give it any further width than this: no basis is offered for it. The Inspectorate have had full access to our documents from the day this Inquiry was first commenced and long before we arrived at this venue for this exercise. My instructions are as I have indicated to you. I give the undertaking that we will make further investigations about that document, but I put this caveat on it, and I don't do it in a defiant way, I know what the result of those investigations will be in my own confident way. So, I will do them, but I expect the answer to be as I have indicated. As to the first, there is no basis for the application.

MR MARTIN: May I respond? I rely on the evidence of Mr Atkinson, the unequivocal evidence.

WARDEN: Yes, thank you. I will accept the undertaking of Mr Morrison to check and we will hear back from him tomorrow morning. In the interim Mr Clair can conduct inquiries in relation to other documents that have been taken and are held and we will also hear back from him tomorrow morning.

MR CLAIR: Yes. Your Worship, I made that reservation, that the documentation that has been taken into possession may need to be checked. My mind is somewhat put at rest in that regard by what Mr Morrison has said. I might also indicate that, of course, as counsel assisting I have been somewhat dependent on the investigation carried out by the Inspectorate and my instructions in that regard are that the Inspectorate has, indeed, been given full access to the documentation which was available at the mine. I think Mr MacSporran is in a position to confirm that.

MR MacSPORRAN: That's so, Your Worship, the Inspectorate has had full access to documentation available and the checks that

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we have done indicate no such material. That can be rechecked, but there is certainly no suggestion that we haven't had full access to the documents.

WARDEN: Thank you then for clearing that up. We will go back to Mr Parkin, I believe?

EXAMINATION:

MR PARKIN: Just a few points, basically for clarification. Hot seat changes have been mentioned. Is that - that's normally on production, is it, hot seat changes that take place?-- Yeah, that's correct.

That's on a regular basis?-- Yes.

Is that - that's on a seven day roster system?-- No, a five day roster, at the moment.

Five day roster. What about yourself, are you on a five day roster also?-- Yes.

No-one at Moura No 2 spoke to you at any time regarding a tarry smell, that is what you said, before the incident?-- That's correct, yeah.

So, you have not heard anything about a tarry smell until after the incident?-- Yes, that's correct, yeah.

What shift did you last work before the incident?-- The 17th of the 6th.

No, the last shift that you worked prior to the incident?-- Oh, prior to the incident. It would have been the Thursday.

Which was?-- Thursday, is it, the 4th?

Okay. The Thursday before the incident?-- Yeah, that's correct.

Did you make any ventilation changes in the 512 Panel yourself?-- No.

So, as an undermanager no changes were made to ventilation that you know of?-- That I know of?

Yeah?-- Not really, no. Not that I can recall.

What is your opinion of the ventilation of 512 Panel?-- What's my opinion?

Yeah, your opinion of the ventilation of this system compared to other panels that you worked previously in?-- Well, it was basically the same except for the large pillars in that panel there.

XN: PANEL

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You said you never encountered any dead spots in the ventilation of the panel?-- Not that ever got around as far as - the only time I can remember or think of is if the brattice ventilation stoppings were down.

Tell me what you think about the layout of the panel and the methods of work? In other words, when you were working the panel were you happy with the way that it was worked and?-- No, I would have rather took all the coal.

You would have rather took all the coal than the method you used?-- Than the ramping, yes.

So, was it the ramping that you had difficulty with, from a personal point of view?-- Yeah, yes.

Why was that? Could you tell me why that was?-- It gave you a lot more machinery problems, left a lot of coal behind.

So, mainly because you left a fair bit of coal behind, loose coal?-- Yes, yeah.

I think you stated that no-one told you about the CO make graph until 22/7; is that correct?-- Yeah, that's correct.

Can you now look at Exhibit 25, which is the CO make graph, please?-- Yes, I have got it here.

Can you see that on the 15/7 the CO make in that panel is 14.27 litres per minute?-- Yes.

And if you go back a bit further, look at 16/6/94, you will see that it reads, I'd say, around about seven to eight litres per minute?-- Yeah, that's correct, yeah.

Would that increase in CO make cause you any concern?-- Yeah, it has jumped up fairly steep, yeah.

That fact had not been communicated to you at all about the CO make increasing from 16/6?-- No.

So as undermanager you weren't aware of that fact?-- No, I used to check the Unor when I come in at the start of the shift, and I mainly monitored the CO from the Unor.

If I may, Your Worship, I would like to return to that question that Mr Clair raised earlier about the business of 512 going through the explosive range. I think you understood that that Ellicott diagram in front of you, I think that was on the afternoon shift of 7 August, the Ellicott diagram?-- Yeah, the Ellicott, yeah.

I think it represents about 4.5 per cent CH4. You probably can't read that on that -----?-- No, you can only see a cross on it.

That's what it represents. I think you also said to Mr Clair that quite a few other panels had been sealed off at Moura and it's gone through the explosive range and men have not been withdrawn from the panel?-- Yeah, that's correct.

However, this is a different circumstance, and if we now look at Exhibit 21, I think it's 5 pages from the back - that will help you - you'll soon know this off by heart. Have you got that? Five pages from the back it says "CO make - 512", page 2 on the right-hand side, can you see that?-- Page 2, yes, I've got it, yeah.

Then at the bottom of the page on 6 August 1994 you will see that on the Saturday there is a reading of 16.6 litres per minute CO?-- Yes, that's correct.

Now then, perhaps we can rearrange that question again. If you plot that 16.6 on this graph here, and we are not talking about the SIMTARS graph, but this is before the event, this is Exhibit 25, if you put that 16.6 litres per minute on this graph, that represents a fairly significant rise from 6/6?-- Yes.

I think you mentioned before that if you get - from your Mines Rescue information, if you get 10 litres per minute you need to start and look at things, but if you get to 20 you've got a problem?-- That's correct, yeah.

So perhaps we might rearrange that question that's been moved around a little and say this: if you look at the Ellicott diagram in front of you, and we know because we have got these

figures here - I mean they weren't plotted obviously, but we know the figures are here for the Saturday, and that you've got 4.5 per cent CH<sub>4</sub> and that's known on the Ellicott diagram and you've got 16.66 litres per minute of CO, what does that suggest to you?-- That it's heating up.

Well, what would you do in those circumstances if you were on the night shift of the 7th?-- You wouldn't have any men down the hole.

You have to clearly understand what Mr Clair said to you before you answer that question. What I'm saying to you now, and I will repeat it so that you clearly understand it, you've got that 4.5 per cent methane which is represented on the Ellicott diagram in front of you and you know, and if you don't know you should know, that you've got 16.66 litres per minute of CO, what would you do?-- You wouldn't send anybody down the pit.

Thank you.

MR NEILSON: That's answered my question, thanks.

EXAMINATION:

PROF ROXBOROUGH: Mr Atkinson, clearly an important part of your responsibilities was to do with the maintenance and control of ventilation for the whole mine?-- Yes, on my shift, yeah.

And you visited underground on 22 July to check measurements with Abrahamse and Kerr?-- Yes.

Now, if you look at that diagram that you've just been looking at with Mr Parkin and that is the CO make for 512, page 2 - have you got it? The one that you were looking at previously, the one that was five pages from the back?-- Is that the one?

No, it's -----?-- Page 2.

The "CO make - 512", have you got that?-- Yeah, yeah.

If you look at the entry for 23/7/94, that's the Saturday?-- Yes.

For ventilation station 59 there is no entry of any data in that -----?-- That's correct. They were told to do the top return which is vent station 46.

We have heard evidence previously that that suggested, or in fact confirmed, that the bottom return which was VS59 had in fact been closed off; are you saying it hadn't been closed off?-- No, it had been closed off, yes.

So that was a change that was made in that panel that you were

aware of?-- Yes.

Did you inspect the stopping? You saw it was in place in the bottom return?-- Yes, there was a stopping in the bottom return, yes.

What was the purpose of erecting that stopping in the bottom return?-- To put a positive pressure against the goaf, the waste.

To increase the flow of ventilation into the goaf?-- Yes, yeah.

Do you think that was successful?-- Yes.

Because there are no indications, if you look at the following figures for the 29th or the 5th, that in fact the ventilation quantity had increased at all as a consequence of doing that?-- Whereabouts the ventilation -----

Friday 29/7?-- Yes.

Or Friday 5/8 or indeed Saturday 6/8, the ventilation quantity hasn't increased at all?-- That's correct, yeah.

Can you account for that in any way?-- No, not really, no.

Thank you.

MR ELLICOTT: No questions.

MR CLAIR: I have nothing further, Your Worship.

WARDEN: Thank you, witness. You may stand down. You may leave.

WITNESS EXCUSED

MR CLAIR: I call Rodney Francis Helander. While the witness is coming, did Your Worship want to indicate sitting times for tomorrow? We are around to Friday again, I suspect.

WARDEN: That's correct. I'm just not up to date on the latest air departures, so I will check on that later and tell you tomorrow morning. Can I indicate to counsel and their solicitors I would like a meeting tomorrow morning at 9.15 in the witnesses room to discuss a few things, and particularly a start date in 1995. Please bring your diaries, and, if possible, an estimate of the length that your expert witnesses may be and how long your submissions may take. I realise I am talking future events here and I won't hold you to them, but we would like to know something.



RODNEY FRANCIS HELANDER, SWORN AND EXAMINED:

MR CLAIR: Your full name is Rodney Francis Helander; is that correct?-- Yes, that's correct.

That pronunciation, is that correct, is it?-- That is correct.

Mr Helander, you are a deputy at Moura No 2 Mine?-- That's correct.

You started in the industry at Collinsville in 1972?-- That's correct.

You moved to Moura number 4 in 1980?-- That's correct.

And you transferred to Moura No 2 in 1986; is that right?-- No, that is not right. 1987. I was still off work in 1986 with my injury.

I see. You were injured in a serious accident, a roof fall at Moura number 4, in 1984; is that so?-- That's correct.

Now, you gained your deputies certificate in 1983?-- That's correct.

And you were in fact appointed as a deputy in that same year, 1983; is that right?-- Yes, that's correct.

Now, have you ever been a member of Mines Rescue?-- No, I haven't.

Now, you've been a deputy then at No 2 for some considerable time?-- Yes, I have.

In recent times have your normal deputies duties there been in relation to methane drainage operations?-- That is correct.

Did you occasionally work as a deputy on a production shift?-- On the very odd occasions.

And on one of those odd occasions did you work in 512 Panel on a weekend shift?-- Yeah, I don't know if it's one shift or two. One weekend that I can recall.

Are you able to say approximately when that was?-- No, I could not.

Was the panel into its extraction phase at the time you did that weekend work there?-- Yes, it was.

On Saturday, 6 August, you worked the day shift on deputies duties which didn't include 512?-- That is correct.

There was nothing that you observed at the mine that day that caused you any concern?-- Not in the areas I was covering.



Sunday, 7 August, you worked an afternoon shift?-- That is correct.

Had you been to a union meeting earlier in that day?-- I was there - yeah, I went in the morning, yeah.

At the union meeting did you become aware of what had occurred in respect of 512?-- No, I did not.

You didn't? You weren't aware of any discussion of 512 at the union meeting?-- When George Ziebell stood up, all the words I heard was he addressed the meeting to tell the members that he authorised extra overtime to be worked, and where I was sitting a couple of people beside me started talking and it was drowning out his voice. I did not hear the rest of his conversation.

Then when you went to take up your afternoon shift at three o'clock on that Sunday, 7 August, what knowledge did you have of the position in respect to 512?-- Really very little.

You didn't know that it had been sealed?-- Yes, I did know it had been sealed.

You did know that?-- Yep.

When did you learn that?-- After day shift Saturday I knew they were sealing.

Then, when you arrived at the mine did you have any discussions with anybody about the position underground?-- Not that I can recall.

What would be normal when you go there on a Sunday afternoon shift? Would there be some point at which you would meet with the other people that were coming on to that shift?-- No, it's not a cross-over shift.

It's not a cross-over shift. How many people would work the afternoon shift ordinarily on the Sunday?-- Generally it's two deputies and maybe half a dozen - up to half a dozen people stonedusting.

Was it the practice in those circumstances for people to gather together in one spot?-- No, not really.

Was there an undermanager on duty for that afternoon shift?-- On Sunday afternoon, no, there was not.

So you don't recall any discussions when you arrived there. Did you take up with the other deputy who was coming on?-- Will you repeat that, please?

Did you take up with the other deputy that was coming on shift?-- With John Blyton I worked with, you mean?

Yes. Did you meet with him?-- Only when we started work, yes.

When you started work?-- Yeah.

When you went there did you know what areas you would be covering or did you work that out after you got there, you and John Blyton worked that out together?-- We worked that out together.

After you arrived?-- That is correct.

You weren't assigned previously to look after certain areas, that's something you would plan when you got there?-- Yeah, I believe that would be so, yeah.

Did you have any discussion with John Blyton?-- Only to what areas we were going to.

Nothing about the position with 512?-- Not that I can recall.

Did you have a look at the Unor screen adjacent to the assembly area there?-- When we started, no.

You did?-- No, not when we first started, no.

Not when you first started?-- No.

Okay. Well, you looked at that at some time later?-- That is correct.

Was it your practice generally at the beginning of a shift to look at the Unor screen and see what the position was?-- Not really, only when we were doing pre-shifts we normally carry out that practice.

When you were doing -----?-- Pre-shifts.

Pre-shifts? Can you tell me what that means?-- That means starting a shift when no-one has worked for a previous shift before it.

Where did you go then after you and John Blyton had worked out who was to look after what?-- We were already prepared to go underground by that time.

What duties did you take on?-- Deputies duties covering 510 section and 5 South.

Did you go down then, underground?-- We went down, yeah. I forget what the actual time was. It must be somewhere between - around about four o'clock.

Did you go down by yourself?-- That is correct.

You went to 510?-- That is correct.

And there you carried out certain duties in respect of 510; is that right?-- That is correct.

Where did that take you actually? You had to go to 17 cross-cut; is that right?-- No, I started my inspections from

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12 cross-cut. There is a man door in the top return.

In 510?-- In the 510 section.

Then did you go inbye to 17 cross-cut?-- First went in the man door in 512, walked up one pillar to the main horse they call it, water collection tank, drained it first, then each hole inbye.

031194 D.12 Turn 18 mkg (Warden's Crt)

Now, to carry out your duties in 510 then you would have gone past the - at least further inbye than where 512 Panel comes off 510; is that so?-- That's correct.

Did you have occasion to come past the seals there at all?-- No, I did not.

Okay. Now, did you then go down to 5 South?-- That is correct.

And you carried out some inspections there; is that so?-- Yes.

Then did you go to the surface again?-- That is correct.

What time would it have been when you got back up to the surface?-- I am not absolutely sure.

Can you say in relation to crib or smoko?-- I would say it must have been around about 5 o'clock, somewhere around there, a bit after.

And you stayed on the surface for a while then?-- Yes, I did.

You mentioned earlier that at some point you did consult the Unor screen?-- Yes, I think that was around about 7.30 when John Blyton asked his present regard about the rise of the - on the Ellicott.

I am sorry, what did John Blyton ask?-- A concern about the rise on the Ellicott.

Well, was John Blyton also at the screen at that point?-- No, he was not.

I see. Well, where did you see him?-- I think it was in the deputies' cabin or near the - no, it was outside the lamp room, I am pretty sure it was.

What did he say to you?-- He said he had some concern with the - where the point of the - of it going towards the explosive limit.

That's 512?-- 512 section.

Was this before you went to the screen yourself that you had this conversation with John Blyton?-- That is correct.

Well, did you go to the screen yourself then?-- No. He said, "I will go and put it up for you so you can have a look."

He said that to you?-- Yeah.

So he took you into the monitor room?-- No, he did not.

All right. Where did you go?-- He went into the monitor room and I stayed outside.

XN: MR CLAIR

WIT: HELANDER R F



In the assembly area?-- Yes, that is correct.

What did John Blyton do then?-- He, well, used the mouse, whatever you call it, the computer and came up with the Ellicott -----

Diagram?-- Diagram, whatever they call it.

He brought that up onto the screen?-- That's correct.

So you could have a look at it?-- Yeah.

Did you have some conversation with him about it then?-- I seen - what I observed was - first of all, what I observed was a dot with something of a long thin hair line protruding from it.

Were you able to understand just what an Ellicott diagram indicated?-- No, I wasn't - hang on, I will rephrase that. That was the first time I have ever seen an Ellicott diagram displayed.

Right. First time ever?-- That is correct.

Did you understand what it was that you were seeing, or did John Blyton explain to you what you were seeing?-- No, he was inside. What I was looking at was the left-hand side of it was green - it was done up in four quadrants. The left-hand side was green, the right-hand top quarter was red and there was a lighter shade, either orange or yellow, down below.

This line that you saw, or dot that you saw, where was that in relation to the green and the red?-- It was in the top left-hand quadrant about two-thirds of the way up and very - about a quarter of an inch off between the green and the red.

Quarter inch off. Was there a vertical axis between the green and the red?-- That is correct.

And you say the dot was about a quarter inch off that axis?-- That I could see, yes.

Okay. Well, after you had seen that, any further conversation then between yourself and John Blyton?-- There was some conversation. I think it was in regards to, "Why is it so close?", or, "What is it doing?"

Right?-- And he didn't really understand why it was there and I had no idea why it was there.

Did anybody else join the conversation, or were any steps taken then?-- No, no-one else joined the conversation at all, no.

Okay. Well, was there any contact then with anyone else?-- Not that I know of.



Not that you are aware of, okay. Well, what effect did it have on your mind? Did that produce any concerns or allay any concerns or have any effect on you?-- Not dangerous to me because I was not aware of 512 circumstances and it is not the first time I have ever been underground when the - a section - sealed section is going through an explosive range.

You said you didn't know anything particularly about 512?-- No, I did not.

Had you ever been present for any discussion with anyone about whether there were any signs of a heating in 512?-- Not that I can recall.

Okay. Had you ever had an opportunity to look at any graph that indicated the CO make in respect of 512 Panel?-- Oh, I think they had a graph, there was one in the deputies' cabin. I don't really understand it.

That wouldn't have meant anything to you?-- No, not really.

On the Unor screen there is one column that sets out what is referred to as a Graham ratio. Are you familiar with that?-- I seen the Graham ratio but I do not know - at the time I didn't know what it actually represented.

The figure on that wouldn't have meant anything to you at all?-- Nothing at all.

I see. Okay. Well now, having done that, that is looked at the Unor screen with John Blyton inside bringing it up for you, what did you do then?-- It was getting very close to the time to go down and do the second inspection. It wasn't long after that I went down and done the second inspection.

And that second inspection took you to what parts of the mine?-- Back again to 12 cross-cut in 510 where I started my second inspection at the same point as the first.

12 cross-cut, is that further inbye from where 512 intersects with 510?-- That is correct.

After that you went to 5 South again?-- That is correct.

Then did you go to 520 section?-- That was my last inspection, yeah.

That 520 section is one that in fact intersects with 5 South; is that so?-- Yes, it does.

At the inbye end of 5 South, is that right, or towards the inbye end of 5 South?-- Yes, that's right.

You did, according to your statement, make some observation in respect of some display windows on a pump load centre in 520. What did you notice about those?-- That there was no lighting on the display windows and the centrifugal pump wasn't working. That indicated there was no power to the section.

Was that a normal situation or an abnormal one?-- I would say it's normal because 520 section is not -----

Wasn't really developed very far?-- No, it's not got its own intake airway. In reality it is just the return of 5 South.

Right. It was only developed to 1 cut-through; is that right, or thereabouts?-- Yeah, it was.

You say that was being used as a return for 5 South?-- That is correct.

Okay. Well, then you returned to the surface after that, did you?-- Yes, I did.

What time did you arrive back at the surface?-- I think it was approximately 9.15 p.m.

Whilst you were at the mine there during that shift did you hear the hooter alarm go?-- No, I did not.

At any time?-- No, I did not.

Now, one further question I have for you: have you ever had any training yourself in relation to spontaneous combustion?-- Only what I have learnt in the deputy's course.

In that connection were you taught anything about the relevance of the CO make?-- Basically, yeah.

Basically?-- That's right.

What was your understanding about that?-- Well, the understanding was that the CO make is tending towards a heating or improperly kept vehicles.

In?-- Improperly kept vehicles, scrubber tanks as such.

Improperly kept vehicles?-- Maintained and scrubber tanks.

Yes, I see. Well now, what about the actual levels of CO make? Did that mean anything to you? At what levels does the CO make, for instance, indicate there might be some problem with spontaneous combustion in a panel?-- That is right.

Did you learn anything about that?-- Yes, I did.

What was your understanding of that?-- Well, the understanding of that was that when CO make started to increase, it indicated there was a heating somewhere in that panel or part of the mine.

What sort of figures are you talking about when you talk about an increase, or what kind of increase?-- I would say if it jumped from, say, 5 ppm up to about 10, 15, you know there is some sort of problem coming.

All right. What is the important thing about it, the actual

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parts per million or the CO make itself in litres per minute?-- I do not understand litres per minute.

You don't understand litres per minute?-- No, I do not.

Would you know how to calculate a CO make from litres per minute and the velocity, the wind velocity - I am sorry, from parts per million and the wind velocity? You have done those sorts of readings?-- No, I have not.

You haven't?-- No.

Okay. Well then, just let me ask you: on this Sunday when you were doing your shift and going underground, did you at any time yourself take any positive steps to ascertain whether there had been signs of a heating in 512?-- No, I did not.

Was that a matter that played on your mind? Given that you had, later in your shift, an Ellicott diagram that indicated that the panel was moving towards the explosive range, was that question as to whether there might have been some source of ignition, for example, a heating in 512 - was that a question that played on your mind at all?-- In some respects it always does. Like, you wonder if there was or was not, yeah.

Well then, if it was something that you wondered about, what did you do about it, anything?-- I wasn't really worried about wondering about it that much. In respect of - like I say, I had nothing to do with 512, so I didn't really understand.

Thank you very much, Your Worship.

#### CROSS-EXAMINATION:

MR MacSPORRAN: Mr Helander, you became a deputy in 1983; is that so?-- That's correct.

You were working at No 4 at the time at Moura?-- That is correct.

You worked at Moura until after the incident there and then you transferred to No 2 in 1987; is that so?-- Yes, that's true.

Your only training in relation to spontaneous combustion was in your deputy's course in 1983?-- That is correct.

You have had no further training or retraining since the Moura No 4 incident?-- Not that I can recall.

Now, the weekend shift you worked at No 2 was Saturday the 6th and Sunday the 7th of August this year; is that so?-- That is correct.

XXN: MR MacSPORRAN

WIT: HELANDER R F



When you came on shift on Saturday the 6th in the afternoon, what was the procedure? Did you meet with the undermanager on shift at the start of the shift?-- I think I did see him. I can't remember having any conversation with him, though.

Was that the normal procedure, that when you would come on shift as a deputy you would meet with the undermanager on shift and be allocated duties?-- That's normal, yes.

Would you normally also be told by the undermanager on shift at that time the status of various sections of the mine? By "status" I mean anything significant that had been happening underground?-- You probably should, yeah.

Have you had occasions like that where the undermanager has informed you at the start of a shift of significant events that have occurred prior to your shift?-- Yes.

On the 6th then, you can't remember, but you think you would have been spoken to by the undermanager on shift at the commencement?-- Yes, I would say so, yes.

That shift didn't involve you working in 512?-- No.

But did it involve you working at 510 and 5 South gas drainage programs?-- I would say it definitely would have been 510 because nearly every time I work I cover the gas drainage.

Of course, that was the situation on the Sunday afternoon shift, you worked in 510 and 5 South gas drainage?-- I worked in 510 gas drainage and 520 was the other one.

520, I am sorry. Again, on the Sunday can you remember whether or not you were spoken to by the undermanager on shift at the start of your Sunday shift?-- I can't recall having a conversation with him.

You did mention that you became aware that the 512 section had been sealed, I think you said sometime after the Saturday afternoon shift?-- That is correct.

When did you become aware?-- Sunday afternoon.

Is that when you came on shift at about 3 o'clock?-- From mine personnel.

From mine personnel?-- I would say it would have been, yeah, from mine personnel, I believe, or people at the mine.

People at the mine you believe?-- That is right.

Do you mean by that that you can't recall whether it was the undermanager on the Sunday afternoon shift who told you that the 512 Panel had been sealed sometime prior to that shift?-- No, I do not.

Do you recall whether you were told anything else other than the fact that 512 had been sealed prior to that shift?-- No,

I don't recall anything else at all.

I take it, though, you are aware what happens when a panel is sealed, a panel like 512. You know what happens when it's sealed?-- What relation would you -----

You would know that a panel like that would go through an explosive range?-- At some stage, yes.

That was an inevitable consequence of the panel being sealed?-- That's usually the case, yeah.

It would remain in the explosive range for some time and then ultimately come out of the explosive range?-- That is correct.

I think you have acknowledged knowing that one of the dangers in such a situation is if there is a potential ignition source, you may have an explosion?-- That is correct.

Now, you heard nothing about any reports of unusual occurrences in the 512 Panel in the shifts leading up to the Sunday afternoon shift?-- Not that I can recall.

Had you been told something of any unusual occurrences, you would have remembered, wouldn't you?-- I think I would have, yeah.

As the deputy on the Sunday afternoon shift, you had a crew as your responsibility?-- No, I did not.

You were working on your own, were you?-- That is correct.

And going initially into 510 to do your inspections?-- That is correct.

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Now, I think you said you weren't particularly worried about 512 being in the explosive range because you had nothing to do with 512?-- That's correct.

If you were in 510 and something happened in 512 it could well have caused you some difficulties?-- That's correct.

Did you realise that on the afternoon shift of 7 August?-- It was always a chance when a section goes through the explosive range, but it was not in the explosives range at the time.

Did it occur to you that if something happened in 512 whilst you were underground in 510 it could cause you some difficulties?-- Could you repeat that again, please?

Did it occur to you on the Sunday afternoon that if something happened inside 512 whilst you were underground in 510 it could cause you some difficulties?-- It occurred to me, but I didn't have it on my mind.

Was it your practice generally on shift to make yourself aware of what was happening in other panels other than the one where you were working?-- No.

Why was that?-- Because I just mainly look after the sections - worry about the sections I have got to look after and I rely on the other deputies to do the other sections.

Was that the position whether or not you had a crew as part of your responsibility; that is, if you had a crew underground?-- It would make a bit of difference then.

What difference would that mean?-- Well, you would have been responsible for the personnel you have got.

Would that mean you take greater care if you had a crew to be for?-- That's right.

Obviously no-one has ever particularly explained to you the significance of a CO make graph; is that the case? These graphs were posted in the deputies cabin, you saw them from time to time?-- Yeah, on the wall.

Did you really understand much about what they were depicting?-- No, I did not.

Did you ever ask anyone?-- Not that I can recall, no.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: Just very briefly: did you leave school about 15 years of age in Grade 10?-- That is correct.

XXN: MR MARTIN

WIT: HELANDER R F





What year approximately was that? It seems you would have had about seven years before you got into the mining industry. After leaving school did you have about seven years or so before getting into the mining industry?-- That's correct.

In those several years what did you do, in very broad and brief terms?-- I started off as an apprentice panel beater, but the place of my employment closed down first up before I finished my trade and then from there I worked in sugar mills for most of the time.

When you entered into the mining industry did you have any induction, training, before you went underground?-- Not really, no.

Did you ever receive what is known as a red book or a blue book entitled "Spontaneous Combustion"?-- No, I did not.

In terms of your deputies course did you receive any instruction on that subject?-- Yes, I did.

How elevated or how detailed was it or was it just basic?-- Well, to me it was basic.

Was it any more than, well, certain types of coals can spontaneously combust?-- I don't really understand that.

I beg your pardon?-- I don't really understand your question there.

Was it any more than just being told that, well, coal can self-combust?-- Oh, yes, it was more detailed than that, yeah.

What was the - how detailed was it?-- Well, first of all you are looking at types of coals. It was explained about certain impurities such as pyrites and that sort of stuff, and the actual training was spontaneous combustion is caused by oxidation of coal.

Is that about the extent of what you were taught?-- And just going to certain - explaining what oxidation was.

And was that about the totality of what you were taught on that?-- That is right.

On a weekend shift when your undermanager is not present on your shift, what happens when you are underground if something of an alarm was occurring on the surface?-- When I am underground?

Yes, how is that coped with? You wouldn't know about it if you were underground; that is what I am saying?-- That's right.

Who would attend to an alarm of some kind or any kind on the surface when you are underground?-- Well, if there is another deputy there he would have to attend to it.

What if he is underground?-- Very difficult question to answer that one. I don't know.

And vice versa, if you are on the surface and something is happening underground, how is that coped with in the absence of an undermanager? It is not, is it? It can't be. There is just not enough men?-- I don't really understand you.

All right. I will leave it. You said on the afternoon of 7 August you think you might have seen Michael Squires. Can you be more positive than that? You weren't talking to him?-- Not that I can recall at the start of the shift, no.

Do you recall actually seeing him or not?-- Yes, I do.

On any occasion when you were there on 7 August did you see either of Mr Mason or Mr Schaus?-- No, I did not. During my shift I did not, no.

Just taking you to your statement, if you would, please, go to it, page 4. I see about two thirds of the way down the page you say, "I think John mentioned this to Michael Squires." That's immediately after you were talking about the non-explosive/explosive range?-- Yeah.

Later on that evening when you were in the shower room - or were you in the shower room to start with later on in the evening at the end of your shift?-- No, I was not in No 2 shower room.

Did you hear any conversation between Mr Blyton and Mr Squires before you finished the shift?-- Only when I - like, when I finished right on the end of the shift. I would say towards the end, about quarter to 10, around that area.

Where was that?-- That was near the tool boxes in front of the lamp room.

What did you hear of that conversation?-- Well, I walked up to - up near where they was talking and I interrupted because he was half-way through a sentence. I know he was interrupted and I had said to Michael myself personally, "Do you know about the monitor?", and he nodded me in a firm response and John Blyton said, "Yeah, it is going into the explosive range.", and then he turned and then he started, more or less, using his hands and he is saying to Michael, "Don't forget the bag.", and I don't know whether he was talking about the bag. That is all I know.

"Don't forget the bag"?-- That's right.

From Mr Blyton to Mr Squires?-- Mr Squires.

Thank you.

WARDEN: If that would be a convenient time, unless you are going to be very, very brief? Thank you, gentlemen. Adjourn till tomorrow morning, 9.30, and there is a meeting at 9.15, please.

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THE COURT ADJOURNED AT 4.25 P.M. TILL 9.30 A.M. THE FOLLOWING  
DAY

XXN: MR MARTIN

1259

WIT: HELANDER R F



WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 04/11/94

..DAY 13

THE COURT RESUMED AT 9.51 A.M.

RODNEY FRANCIS HELANDER, CONTINUING:

CROSS-EXAMINATION:

MR MORRISON: Mr Helander, your main work was in relation to gas drainage programs?-- That's correct.

You had been on that for some considerable time, hadn't you?-- Yes, that's right.

Part of the reason you were doing that gas drainage work was it was easier on you with your disability?-- Mostly, yeah.

You were part of the continuous improvement team, I think, involved with gas drainage, weren't you?-- Yeah, that's right.

And you had some particular work on the introduction of a new continuous survey tool in relation to gas drainage drills?-- That's right.

That's a tool that's used to make sure you know where you are going to drill the holes?-- That's right.

Those holes were drilled quite some considerable distance in some places, I think, points up to and upwards of 400 metres?-- Yes, and further.

Now, when you went to do your work on the Sunday, 7 August, afternoon shift, you went down to 510 and went to the main drainage range?-- That is correct.

And you there drained out water out of the range and out of some of the inseam holes?-- That's right.

Now, did you close up all the holes when you finished? Did you close off the valves?-- There is about three valves on each hole.

Yeah?-- Which one do you mean?

What I want to know is after having drained out some of the pipes, either the range or the holes, did you then shut off the valves so that the pipes or range weren't leaking?-- That's right.

Are you sure about all of that?-- Yes.

And you turned off the Forrers pump?-- That's right.

In order to do that obviously it was powered up?-- That's

XXN: MR MORRISON

WIT: HELANDER R F

right.

Can you remember at what time that was on your inspection? I think it's the first inspection?-- I'd say somewhere between four - around about the four o'clock mark, somewhere around there.

Power wasn't cut to that machine?-- When I left there - it was the last point on me inspection, first inspection. I walked from there back out to the pump load centre which is just around the corner and I depowered it there as well.

Now, in order to repower that pump would it have to be repowered from that point?-- From the pump centre, yeah.

How many functions would one have to go through to repower?-- You would have to start power to the pump and then switch the pump on.

You definitely cut off power back from the pump?-- Yes. The reason I know it was depowered is because the lights of the crib table were still on. They are powered from there too.

The lights to the crib table were -----?-- Powered from the same box.

And they were on?-- That's correct. There are only two outlets. One's at the pump and the other is at the crib table.

You cut off the pump at the same point that you could have cut off the lights at the crib table, but you left the lights on?-- Lights were on which indicated power is off at the pump.

On that day you were one of the deputies along with John Blyton?-- That is correct.

Now, did you speak to Mr Squires before you went down the pit?-- I did so with the knowledge - speaking to me some time about that, but I can't remember having a conversation with him.

Normally undermanagers would speak to deputies in relation to which section they wanted the deputy to look after?-- That is correct.

I suppose in your case though, since you always did gas drainage, you knew where you were going?-- I would say when we worked out between John Blyton and I which section he was going to do, knowing that John was going to the others where the main work would have been, he would have told him most of the details and I think - knowing Michael Squires he would have probably said to me, if there was nothing, "Go and do the section", or something like that. I just can't recall.

Squires was an undermanager who made a point of talking to the deputies, wasn't he?-- That's right.

He's one of the undermanagers who in fact is very happy to talk to people and does talk to people, particularly deputies, regularly?-- That's right.

And regularly, due to shift changes, talk to the deputies coming on and talk to the deputies going off?-- Well, I can't really confirm that because I'm on an eight hour shift where the others are on an eight and three quarter.

To the extent of your own experience that's the case, isn't it?-- Yeah.

He was and probably still is a very receptive person; no difficulties about going and talking to Squires, is there?-- No, I have not.

That's generally the case. He is seen by the men generally as a very approachable undermanager?-- That's right.

Now, at one point you said you looked at the Unor screen; did you look at the screen only in company with Blyton?-- That is correct.



There was no occasion you looked at it by yourself?-- Not that I recall.

And the occasion when you looked at it with Blyton, he specifically brought up the Ellicott diagram for you to look at?-- That is right.

Now, whilst you didn't know all the technical details of how you get an Ellicott diagram, you knew what it was about generally?-- Generally I could fathom what it was.

If you could speak up a little. Even with the microphone I am finding it hard to hear you. You knew generally that it was a diagram to indicate whether or not a particular atmosphere was non-explosive or potentially explosive or explosive?-- Looking at it, yes.

And you could tell it easily because you look at where the cross is, which quadrant it's in?-- Yeah.

So when Blyton said he would bring up the Ellicott diagram for you, what you knew at that point, that this was going to be some indicator of whether the sealed area was going into or had gone into the explosive range?-- Yes, I believe that to be the case, yes.

And your knowledge at that time would have been also that there was a range in which an atmosphere could be explosive, largely due to the methane content?-- Yes, that would be right, yes.

So, it's not really the case that you didn't know what the Ellicott diagram was about, you knew generally what it was about, you might just not have known its technical aspects?-- That is correct.

But it was easy enough to see from the dot just what is happening in general terms, either non-explosive, potentially explosive or explosive?-- From the dot where I could see it was still in the non-explosive, close to explosive.

What I mean to say is just looking at it, any Ellicott diagram when you look at it you can see where the dot is and you can tell whether it's in one quadrant or another?-- That is correct.

John Blyton was inside when you were looking at that?-- Yes, that's right.

Did you see any other screen on the Unor at that time, any other data?-- No, I did not.

Just the Ellicott diagram?-- That is right.

Did Blyton switch the Ellicott diagram off and back to the main screen before he came out?-- I think he was in the process of doing that, yeah. I went and got a drink of water.

Was he working at the computer or was he doing things at the

computer when you were there looking at the Ellicott diagram? Was he punching keys and things?-- No, he was not. He was just -----

Using the mouse?-- He was using the mouse to bring the diagram up and I think he just used it to take it away again. When I left there - he was bringing it back to the normal screen, I left there and I went and got a drink of water.

At the point you went off, John Blyton was still doing something at the computer screen?-- Yeah, bringing it back to normal, I believe.

You didn't see precisely what it was he did?-- No, I did not.

Now, there was a conversation you said you had with John Blyton about that time, you asking something like, you know, "What's it doing?", or, "Why is it so close to the line"?-- It was a concern of both of us.

And Blyton offered you some sort of explanation about it, not detailed but some sort of explanation?-- What he explained, that it's getting very close to explosive range. That's all I can remember that conversation being about.

And you knew what that basically meant. You knew he was indicating that the atmosphere in behind the 512 seals was approaching the explosive range of gases?-- Yes.

There were no predictions about when it would occur, were there?-- Not then there wasn't, no. He didn't say anything about it.

There was no discussion at all between you and Blyton, or particularly by Blyton to you, of what was happening in the panel beyond what you saw on the Ellicott screen?-- No, not that I can remember, no.

So, no discussions of heatings or spontaneous combustion or smells or anything like that?-- No, not that I can recall.

Now, notwithstanding it was getting very close to entering the explosive range, you went back down the pit, didn't you?-- Yes, that's right.

That's because you yourself had no particular concerns about being down the pit while the panel went through the explosive range; you had done it before?-- I had done it before, yeah, in other panels while the panel was going through the explosive range.

So, notwithstanding that you checked the Unor screen and it was doing that, you saw no reason why not to go down the pit?-- No, not knowing what was happening in 512 personally, I just didn't worry about going down there, no.

Well, that wasn't something active in your mind at the time. You didn't stand there and say, "Hang on a second, I don't

know anything about 512, so it's okay for me to go down." You didn't go through that thought process, did you?-- Well, I never really thought about it.

No, that's right. It didn't enter your head not to go down, did it?-- No, it did not.

Now, you had been told at some stage earlier than that obviously that 512 had been sealed?-- That's correct.

You would have seen that as you went into 510 anyway?-- No, I would not have.

You went in one of the intake roadways?-- That is correct.

And out one of the intake roadways?-- That is correct.

But, nonetheless, you knew it had been sealed and that was the whole purpose of your discussion with Blyton and bringing up the Ellicott diagram and so forth?-- I would say yes.

All right. Now, while you were on the surface you were saying that you had heard no siren going off?-- That is correct.

Were there other people working on the surface on that shift, electricians, fitters, so forth?-- I guess - I think there was an electrician on, I think. I'm pretty sure there was.

Can you recall who that person was? Might it have been Mr French?-- I think it was now that you mention it.

Now, you don't know yourself how to reset alarm levels on the Unor system, do you?-- No, I do not.

You know, though, that that's a job that electricians do?-- I am not too sure about that, but I don't reset them, no.

I have nothing further, Your Worship. I am sorry, yes, I do have something else. I beg your pardon. It's just like yesterday, I am sorry.

I meant to ask you this, Mr Helander: you were working on the Friday afternoon shift, weren't you?-- That's correct.

That's on 5 August?-- Yes.

Now, you were working with Steve Bryon on that day?-- I would have been on the same shift as him, but I can't remember working with him.

Well, just have a look at this document for a moment, would you? I will show you the underground shift report for the 5 August afternoon shift. I think you will see in the third last panel on that page under the heading "Personnel" your name, "Helander", and under that "Steve Bryon", together doing "spare sections/roadways"?-- Yeah, I would have been doing the spare sections.

Does that bring back to your mind that you were working with

Byron that day?-- Byron - Steven Byron would have been doing the roadways and I would have been doing the spare sections.

You will see up in relation to 512 that on that day Mick Caddell was the deputy in 512?-- Yes.

Now, can you recall whether on that day you heard from - direct from Mick Caddell about anything to do with a smell?-- No, not that I can recall, no.

If a deputy working in the pit on the same day you were working in the pit experienced a smell, would you normally expect to hear about that?-- Yeah, I would, yeah.

You would normally expect a deputy who experienced a smell to disseminate that information to his co-deputies; that's right, isn't it?-- I would expect that he would take it to a higher person than myself.

You would expect to hear about it yourself?-- I would expect to hear.

There is plenty of opportunity for that to happen because the deputies come and go and pass each other at crib and smoko up in the deputies' cabin?-- Oh, there would be only the outbye and myself, and Steve Byron would have been at the top, I'd say, for crib and that sort of thing. I wouldn't say he would have been in the section. He would have been still doing his belt shift.

Do you recall being in the deputies' cabin that day with Mick Caddell at one point talking to him?-- No, I cannot.

Can you recall being in the deputies' cabin with Mick Caddell during that day when Michael Squires came in?-- No, I do not.

Did you meet Caddell down in the pit at any stage in the crib room?-- No, I did not.

You had no contact with Caddell that day?-- Not that I can recall, no.

It could have happened but you have no memory of it?-- Not down the pit, that's for sure. Maybe on the surface I might have seen him, but I can't recall going down the mine to see him.

I wonder if there might have been an occasion when you were with Mick Caddell in the deputies' cabin, he sitting at the table and he is having an orange, and Michael Squires came in while Caddell was telling you something?-- Not that I can recall, no.

You can't recall that?-- No.

Thank you. Now, you can hand that document back, thanks. You also worked on 3 August, didn't you? Friday was the 5th. We are talking about Wednesday the 3rd. You will have to try and

speak up a bit. Can you recall working on Wednesday the 3rd?-- I can't remember the events, but I would have been on that shift, I should imagine, yeah.

I will just ask you to have a look at this document, afternoon shift of 3 August. I think you will confirm, if you look down the bottom, that you were working there that day?-- Yeah.

You see down the bottom, drilling in 510?-- Drilling in 510, yeah.

You can recall that day also because that's the day that the BHP board came down?-- That is correct, that was the day, I remember that, yeah.

Not BHP Limited, the big BHP, but the BHP board that governs the coal operations?-- Yeah, there were some people down there, yeah.

Sorry, you will have to speak up a little bit. On 3 August in fact the members of that BHP board were in fact taken down the mine for an inspection at 512 and 510, weren't they?-- I do not know about 512, but I do recall them coming into 510.

They were brought right down into 510 on 3 August, weren't they?-- Yes, that is correct.

And the people who brought them down on that occasion were Michael Squires and George Mason; is that right?-- I can't remember exactly who was there, but I know the BHP mob was there, yes. Whether Michael Squires and George were there or not, I am not too sure about that.

I am sorry, have you still got that document for 3 August with you? You will see that Michael Squires was the undermanager that day?-- Yes, he would have been the undermanager on shift, yes, that's correct.

I might have said to you Mr Mason as well as him. I think it was Mr Schaus, the manager, Albert Schaus came down with Michael Squires at one stage and they brought the BHP board down to look at 510?-- Personally I can't remember the full personnel was there, but I do remember the time when the BHP board were down there, yeah.

Did you participate in any discussions with those who brought the members of the board down?-- I can't recall any big discussions about it or anything.

041194 D.13 Turn 3 gc (Warden's Crt)

You don't recall anyone expressing any concern at all over 512 or what was happening, do you?-- No, that's right.

Thank you. I have nothing further.

CROSS-EXAMINATION:

MR HARRISON: For how long had you been involved in the methane drainage operations at No 2?-- Since they first started.

Going back how far?-- I just could not tell you the actual date, when it first started. The first methane drainage was initially in 5 South.

In any event, you would be familiar, I take it, with the methane drainage operations that were undertaken at 5 South before the further development of 5 South continued?-- That's correct, yeah.

And you are familiar with the - where the drainage holes were drilled in relation to the progress of future development of 5 South?-- That's correct.

Was it your understanding that as at that night shift, which would have been the Monday night shift, the Sunday night, 7 August, that the crew in 5 South were approaching a situation where they would have been intersecting one of the drainage holes?-- Yes, they would have.

That was your understanding of what was due to happen that night?-- That is correct.

Now, has it been your experience at No 2 that there can be occasions from time to time when a drainage hole can be blocked or maybe even partially blocked causing a build-up of pressure of methane in the drainage hole?-- I have never seen one - that case yet when we have mined.

You haven't seen it?-- Not while we were mining coal, no.

Are you familiar with anything having happened at all even in any other panel at No 2 along those lines?-- While mining or not?

While mining?-- No, I cannot.

Are you aware of blockages in situations other than mining, perhaps prior to mining?-- There was one blocked hole in that section. It was No 2 - hang on - it was the second top hole upwards. They were already passed that one when they broke to the right going down to the third hole from the top.

From your experience could it be possible that there could be a blockage or a partial blockage in a hole such as the

XXN: MR HARRISON

WIT: HELANDER R F

drainage holes in 5 South?-- I think the time that it had been drained I couldn't imagine there being enough volume of gas to cause a build-up of - even if there was a blockage.

When you talk of time they have been drained, are you able to tell us for how long they had been drained?-- I would say it had to be close to 15 months.

Was the flow from the drainage holes in 5 South monitored on a regular basis?-- They were for a fair while, yeah.

For how long?-- Probably close to 12 months, I should imagine.

I see. When the further development continued what happened with those holes? Is it the case that they were basically just left open and then intersected each time you reached a cross-cut?-- I believe that is so, yeah.

For how long prior to what I call the further production of 5 South had the monitoring stopped?-- I am not too sure. I would say it probably would be a month, something like that.

Would there be records of that?-- I guess there would be, yeah.

Now, when I talk about monitoring, is some record kept along the lines of comparing, say, the flow in the various parallel drainage holes from that panel?-- Yes, I believe that would be right. They would have used a U-tube to measure the pressure of the holes, yeah.

Now, in your experience if it were the case there was some blockage in a drainage hole in the area of where it was in the process of being intersected, is it not possible that there could be a build-up of methane in that area?-- I would say it would be a very minute chance because the only time that section had been drained would have been the area they had mined. If they intersected a blockage there I couldn't see it causing much of a problem at all.

You wouldn't expect there to be sufficient build-up of pressure, methane, behind the blockage; is that what you are saying?-- That is correct, yeah.

I have nothing further, Your Worship.

MR CLAIR: No re-examination, Your Worship

EXAMINATION:

MR PARKIN: Just a few questions on methane drainage. In your statement you state that the 6 inch ranges and boreholes were not adequate to drain the areas quickly enough. What do you mean by that?-- Well, from the time we first started the

methane operation we used the 6 inch borehole and that was only introduced because the first hole we ever drilled produced too much methane for it to be able to freely flow in the return. So, they introduced a borehole so we could take it to the surface and that was initially a 6 inch borehole and I believed at the time we were in - the methane content of the seam at the time was somewhere around about 6 cubic metres per - hang on - yeah, 6 cubic metres of methane per metre of coal, I believe, at the time, but the further we advanced the more methane we achieved inside the seam and I think it rose from there somewhere up to around about 8 to 14 cubic metres of methane per metre of coal.

So, what you are trying to suggest is, perhaps, an 8 inch diameter pipe would have been better?-- Well, given that we have got twice as much content of methane, you look at an 8 inch pipe, I think I calculated it was roughly 44 per cent more cross-sectional area and have twice as much methane. If you look at a 10 inch - 6 to a 10 inch, that gives you 75 per cent more cross-sectional area and - 6 inch to a 10 inch would approximately give you 75 per cent more cross-sectional area. What I was meaning was having twice the content of methane in the seam that sounds like a more appropriate size than an 8 inch.

What you are saying is it would - you would have been able to drain the methane more quickly?-- I believe so, with less pressure, yeah.

Can I just return to a point Mr Harrison discussed with you, it is a matter of some interest, and that is the methane range being blocked on, I think you said, one occasion. When you say "blocked", was it blocked with water?-- No, it was - I believe it was blocked with fines.

With fines?-- Yeah. I think at the time, if my memory serves me correctly, it was Jacques Abrahamse and myself and we made up a substitute pipe for the front of it and we unblocked it with water.

So, when you drain the water out you drain the fines at the same time?-- It becomes a problem if you - if the fines stay there and don't get washed out.

Did you have much problems with water in the ranges at all?-- Yes, we did now and again, yeah.

What, did you get any water hammer?-- Yes, sometimes you do.

Did that create any problems on the range itself?-- It would cause a restriction in the flow, but when I find it I generally dewater the operation.

How often would you have to dewater?-- Depending how much water you are getting from the drill holes itself.

Yeah?-- It varies. If there is a great build-up of water and they are not drained on a regular basis at the drain taps it will - the drain lines fill up and naturally it will go into



041194 D.13 Turn 3 gc (Warden's Crt)

the 6 inch line instead of the drain line.

How do you know when you have got to drain the water off?--  
From the 6 inch range?

Yeah?-- You will hear it.

So, it is just what you hear on the pipe range?-- That's right.

Thank you.

EXAMINATION:

MR NEILSON: Just following on with the same subject, did I understand you to say that the drainage holes in 5 South were done 15 months prior to the mining in them?-- I think it was somewhere approximately that, yeah.

Is there an overall programme for the mine or a designated time between when those holes are bored and when mining actually commences? Is there a recognised time frame, I am asking you?-- I don't think there is a recognised time period. The engineer and the geologist, who are mostly in charge of that part, do readings and see if it is down sufficient enough to mine ----

Okay?-- The operation.

So, they rely on the tests that they do prior to mining to be satisfied that the drainage has been effective?-- That's correct, yeah.

Okay. I think you have answered these questions, but just for my benefit: do I understand that you have said that at no stage were you aware that a smell was detected in 512?-- Not that I can recall.

Were you aware that a haze had been discovered at some time?-- No way, no, I wasn't.

If you were aware that either a smell or a haze or both a smell and a haze had been detected, what would that have meant to you?-- That would have meant that I would not have been down the mine, simple as that.

Why wouldn't you have been down the mine?-- Because it is an indication of a heating.

Okay. Thank you.

EXAMINATION:

XN: PANEL

WIT: HELANDER R F

PROFESSOR ROXBOROUGH: In your inspection of 17 cross-cut in 510, 17 cross-cut is the furthest inbye cross-cut?-- I think it is, yeah.

And how many methane drainage holes were there in that cross-cut; do you remember?-- Two, I think.

Two?-- Two.

One at each end?-- We were - there were two in - the top one was going parallel with 510 and the other one was going towards 1 North West.

Then there were a number of drainage holes down the return?-- Above -----

Drilled to the right-hand side?-- The drainage holes was - first on the top return coming down to the face, which would be No 4 heading, and we transferred from No 4 heading over to No 1 heading where we were drilling at the time, presently drilling.

All of those holes were draining, right?-- That is correct.

I think you said, if I understand you correctly - if I understood you correctly, that the electrical power into 510 had been shut off; is that right?-- Been closed down to the pump load centre which is outside of the area.

I see. Your visit was made subsequent to the sealing of 512 when you inspected 510? 512 had already been sealed?-- On Sunday, yes.

On the Sunday?-- Yeah, that's correct.

Did you take any air velocity measurements in 510 during your visit?-- No, I did not.

Are you able to say just from your experience of that part of the mine whether the amount of air travelling into 510 had increased subsequent to the sealing of 512?-- Not that I noticed, no.

Not that you noticed. Good, thank you. I am sure I am right when I am presuming there was no-one working in 510?-- That is correct.

Right. Were there any reasons on that day for persons to visit 510 other than officials making inspections?-- No, there was not.

There were no tasks that had to be done that would require people to go in?-- Not in the 510, no.

We have discussed the prospect of damaged methane drainage pipes. Is another possible source of damage being seals that rupture or seals that fail?-- I don't really understand that

question.

Well, I am imagining that in the ventilation range it is a series of pipes that are connected together?-- That's correct.

At those connections, I presume, there are seals that ensure that leakage doesn't occur?-- That's correct, yeah, each pipe is joined together by Victraulic couplings.

Has it been known for those couplings to produce leakage?-- Yes, it has.

And if such leakage occurs does the leakage continue until the next inspection or is there some way of detecting it?-- You would have mine - I have known cases where we had minute leakages and it would not give off any great volume into an area.

Again, if we could look at 5 South for a moment, you are saying that the holes - the drainage holes in 5 South going immediately ahead of that panel had already been drained?-- Yes, that's correct, that's right.

Now, the holes in 520, were they actively draining or had they been drained?-- They were actively draining at the time.

Now, can we just have a look at the ventilation in that particular panel? Did the ventilation going into 5 South - obviously it would ventilate both 5 South and 520?-- 520 is ventilated by the return.

Is ventilated by the return from 5 South?-- That's correct.

So, the air doesn't split?-- No, that's correct.

So, it goes around 5 South and then it goes to the -----?-- That's correct.

It goes to 520. 520 was being activity drained at that time?-- That's right.

Thank you.

EXAMINATION:

MR ELLICOTT: Can you indicate the position of the 510 crib room, please?-- One pillar outbye the face area - well - and it is in No 2 heading.

Thank you.

MR CLAIR: I have no questions, Your Worship.

MR MARTIN: Neither do I.

XN: PANEL

WIT: HELANDER R F

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MR MORRISON: No, Your Worship.

WARDEN: Thank you, witness, you may stand down.

WITNESS STOOD DOWN

MR CLAIR: Your Worship, I propose at this stage to recall Mr Atkinson who was here yesterday, the reason being that I was handed this morning by Mr Morrison some documents which I would wish to question Mr Atkinson about further. Perhaps before Mr Atkinson returns it may be best if Mr Morrison placed on the record the circumstances under which he came into possession of the documents which he gave me this morning.

MR MORRISON: Your Worship, yesterday you will recall that when the question arose of the hand-plotted graph for two or three days that Mr Atkinson had performed I gave an undertaking to the Inquiry that I would have investigations made in relation to that document. That undertaking was given by me personally rather than on behalf of my client, and after we adjourned last evening I involved myself personally in the investigations to be made in relation to that document. The result is that the document, that is to say the hand-plotted graph, was located. It was in a folder which was not in its usual folder and that's, I think, simply the reason why it was not located before, and so this morning as early as I could I provided Mr Clair with the original of that document and with some copies of that, and I have provided copies to all parties at the Inquiry.

I should indicate also for the record that in addition and as a result of that search in which I was involved we also managed to locate the document which I suspect is probably called "the log" which deputies kept in relation to their individual readings taken on a shift by shift basis from 23 July, and I think the document takes it through until 26 July. That document also was found in a folder which was not its usual folder and therefore that's probably the reason why it was missed before. That document also I provided in its original format with copies to Mr Clair first thing this morning when I could and I have distributed copies to all parties at the Inquiry as well.

This morning we managed to intercept Mr Atkinson before he left because we anticipated Mr Clair may wish to have him recalled to deal with that document and we were successful in persuading him to stay.

May I also just place on the record two further things which I have made the parties to the Inquiry aware of and Mr Clair as well. We have also conducted a search of the computer data contained on one of the old disks for the previous computer that ran the Miahak system. The computers were changed, as I think the Inquiry has heard, on 27 July 1994. The old computer was a Hewlett-Packard. There was a knew one brought in. The consequence is that data has changed simply because a different computer has recorded it. The data on the Hewlett-Packard disk was available to the Inspectorate at all times. In fact I think they took the computer with them at one stage, but they certainly had it operating. We have looked at that data with a view to seeing whether there is anything there, notwithstanding the Inspectorate didn't take it, whether there was anything there that anyone may consider relevant and therefore we should bring to their attention, and

we have done that.

We have provided all parties at the Inquiry with three print-outs and I should perhaps identify them. We have selected them only because they relate to points 5 and 16 for the period that they were in 512. The first is point 5 daily averages, 27 April 1994 through to 29 July 1994. The second is point 5 hourly averages, 27 April 1994 through to 29 July 1994, and the third is point 16 hourly averages from 27 October 1993 through to 27 July 1994. We anticipate there is nothing in those print-outs that is any different to the print-outs that were taken by the Inspectorate and have been used by SIMTARS in their material. The dates are a little different, that's all. We doubt that there is anything particularly relevant in them, but we have taken the course consistent with the attitude I expressed to you yesterday, that we would provide those documents and if any party considers them relevant they can make such use of them as they desire.

Lastly may I place on record what I have conveyed to the parties also in further performance of the obligation I took on myself yesterday in front of the Inquiry: if any party considers there is any other document or category of document that they think is relevant in some way we invite them to correspond with us directly and when they do we will institute immediate investigations in relation to that document.

WARDEN: Thank you, Mr Morrison.

TERRY JOHN ATKINSON, RECALLED AND FURTHER EXAMINED:

WARDEN: Mr Atkinson, you took the oath yesterday, do you remember that?-- Yes.

You are still bound by that oath, do you understand that?-- Yes.

You have been recalled to clarify some matters?-- Righto.

MR CLAIR: Mr Atkinson, yesterday when you were giving your evidence you referred to discussions that took place on 22 July which led to an arrangement whereby there were to be appropriate readings taken during each shift in respect of 512 to enable the CO make to be calculated?-- That's correct.

You told the Court, as I recall, that in fact you yourself over that weekend took such readings because you were the undermanager in charge over the weekend?-- Yes.

That's the weekend following the 22nd?-- Yeah, Jacques asked me could I do it for Saturday and Sunday.

That would be Saturday, 23 July, and Sunday, 24 July?-- Yeah, that's correct.

FXN: MR CLAIR

WIT: ATKINSON T J

And you told us also that you plotted the two points for the weekend on to a graph?-- Yes, that's correct.

Have a look at this, please?-- Yes, that'd be the graph.

That's the graph that you have referred to? Now, you did yesterday have a look at that graph, Exhibit 25?-- -----

I would ask that the witness see that.

While that's being obtained, Mr Atkinson, up to the point of 15 July there or even 22 July on the document that I've just handed to you, there are a series of dates along the bottom axis; is that right?-- Yes.

Do those dates along the bottom axis there correspond with the dates on that graph, Exhibit 25? Just have a quick look at them. I'll run through them. The first date mentioned, 28 February, then 25 March, 27 April, 9 May, 13 May, 20 May, 27 May, 3 June, 10 June, 11 June, 16 June, 24 June, 1 July, 8 July and then 15 July and then 22 July; is that right?-- I'm still going across the graphs. Yes.

So up to 22 July at least the dates mentioned on the graph would appear to indicate that the document that I have handed you this morning reflects the graph that had been kept up to that point?-- Yes.

In some cases a time lapse of a month on the bottom axis. Other cases, for instance, 10 June, 11 June, a time lapse of one day?-- I'd have to have a good look at it.

Just check those dates?-- What were they again, please?

On the document I handed you this morning?-- That one, yep.

No, the one I handed you this morning, that's the one on your right-hand side there?-- Yep.

First of all the dates along the bottom line correspond, you've ascertained, with the dates on Exhibit 25?-- Yes.

And the observation I would make about the dates is that the first three dates are a month apart approximately?-- Yes.

And in one case at least up to 22 July the dates were a day apart, 10 June and 11 June?-- Yeah, the 10th and the 11th.

It might be less confusing for you now if you put that Exhibit 25 to one side and concentrate on the document I handed to you this morning. Exhibit 25 is the one on the left. Push that out of the way and concentrate on the other one. Now, the new graph, the one you are looking at there now, appears to have been prepared for the entry of daily points as from the 22nd; is that right?-- Yes.

It runs up, at least the provision for the plotting of those daily points on that document runs up to 2 August. Just have

a look at the last date?-- 2/8.

Do you recall who it was who produced that document for the points to be marked on it?-- Yes, Jacques Abrahamse gave it to me.

And when did he give it to you?-- Friday - would have been Friday the 22nd.

And that was to correspond with the new practice that the points in 512 - the CO make in 512 was to be calculated on a daily basis and entered on to that graph?-- Yeah, he just asked me could I do the graph for him for two days, yeah, on the Friday.

Are you agreeing with what I have put to you or not? You see, my question was it was produced in that fashion and handed to you by Jacques Abrahamse; is that right?-- Yes, and he said could I do the graph for the next two days.

Right, but just listen to me further because that wasn't really the question I asked you. Was it prepared in that way to correspond with this new practice that you told us yesterday was established as at the 22nd, that there would be a calculation of the CO make daily for 512 and that the points would be plotted on this graph?-- As far as I know I thought that's what they wanted it for.

You see, if you can just listen to my questions carefully we will be able to proceed more quickly?-- Yeah.

At the time that you were handed that graph by Mr Abrahamse were you handed any other document?-- A form with a calculation on the top for the CO make.

Okay. Have a look at this document here?-- Yes.

Is that the other document you were handed?-- Yes, I think so.

That is a document which is headed up "CO make 512"; is that right?-- Yes.

It's similar in its set-out to a document which you saw yesterday as part of Exhibit 21; is that right? Would you like to look at that again?-- Could I see it again, please?

Could the witness see Exhibit 21, please, Your Worship?

Now, can you turn to the page which is five pages from the end of that document? It should be the page that you looked at yesterday headed up "CO make 512" and up on the top right-hand corner "page 2"?-- Yes.

Now, that particular page in Exhibit 21 sets out a number of columns for information to be recorded; is that right?-- Yes.

The final column is headed "Total CO litres per minute"; is that right?-- Yeah, that's correct.



Now, my question to you was that that document which I have most recently handed to you, "CO make 512", and the one that you said was given to you by Jacques Abrahamse at the same time that he handed to you the graph, is set up in the same way as that page in Exhibit 21?-- Yes.

And in fact to some extent the date entries are the same. The first date on the document that Jacques Abrahamse gave to you is 22 July 1994; is that right?-- Yes.

And it sets out the same figures as appear on the page in Exhibit 21, same figures across the first line?-- Yes.

Then the next entry on that document has 22 July 1994, that's the second reading for 22 July 1994; is that right?-- Yes.

And it sets out the same figures as appear on the page in Exhibit 21 once again; is that right?-- Yes.

The only difference as far as those two lines are concerned, if you ignore the handwriting that's been placed on there, is that on the page I've handed to you now it simply reads "22 July 1994, Friday" and under that "22 July 1994, Friday" whereas the page in Exhibit 21 distinguishes between Friday a.m. and Friday p.m.; is that right?-- Yes.

Now, looking at the page I've handed to you it then - the page in Exhibit 21 then goes on to deal with Saturday, 23 July, as the next entry; is that so?-- That's the one on me right hand?

Yes?-- Saturday the 24th - 23/7/94.

Yes, that's right, and that has against that entry - and going across the page that has a number of figures that are actually printed in there; is that right? That is, printed as part of the document, not handwritten. Do you see those?-- Opposite Friday, straight across printed -----

Opposite Saturday, 23 July 1994, Saturday?-- Yes.

Vent station 46, vent station 59; do you see that?-- Yes.

And then there is a figure for the area in square metres which is constant for vent station 46, 21.92; is that right?-- Yeah.

Then there is a printed figure for air velocity, 1.7; is that right?-- On the one on me right here it's written.

Yes, okay. You are looking at the one on your right, the page I've just handed to you?-- This one here?

031194 D.13 Turn 5 mkg (Warden's Crt)

Yes, okay. Well, you can look at the page in Exhibit 21 which is the one that I was directing your attention to for the moment. Exhibit 21, the one on your left here, the bundle of documents?-- Right.

What I was saying to you is against 23 July '94, Saturday, going across the page in that document you will see that there are figures which have been printed in as part of the document, not handwritten?-- Yes, that's correct.

Okay. In the velocity column, for instance, 1.7?-- Yes, that's correct.

The wet and dry temperature, 21 and 25 respectively?-- Yes.

Relative humidity 70?-- Yes.

CH4 .4?-- Yes.

Oxygen 20.7, do you see that?-- Yes.

CO parts per million 6?-- Yes.

CO Maihak 6?-- Yeah.

CO litres per minute 13.42?-- Yes.

Do you see that?-- Yes.

That's all printed in?-- Yes.

And then that document goes on, the next entry is for 29 July, a Friday?-- 29/7/94.

Friday?-- Yes.

And it's got readings for vent station 46 and vent station 59?-- Yes.

And then 5 August, Friday?-- Yes.

And then 6 August, Saturday?-- Yes, on the bottom.

So it goes on then to what would appear to be weekly readings in that document?-- Yes, that's correct.

Okay. Now, turn your attention to the page which I have handed you and which you said was given to you by Jacques Abrahamse bLack on 22 July?-- Yes.

That's different in that against 23 July '94, Saturday, there are figures that have been written in; is that right?-- Yes, that's correct.

There appear to be two sets of readings, one for Saturday, vent station 46, and then a wind velocity of 1.79?-- Yes.

Okay. Then across there in the CO parts per million 6, CO Maihak 5.9?-- Yes.

FXN: MR CLAIR

WIT: ATKINSON T J

The CO litres per minute 13.88, do you see that?-- Yes.

Then there seems to be under that, where it had in the printed form "vent station 59", "59" has been crossed out and "46" has been put in?-- That's correct.

Okay. Then there would appear to be a second series of readings for that Saturday entered in there?-- Yes.

You see those?-- Yes.

I won't read them all out. Then against 24 July, a Sunday, which is the next entry there?-- Yes.

Two sets of readings again, both for vent station 46?-- That's correct.

Then for Monday there would appear to be two sets of readings for vent station 46?-- Yes.

Then Tuesday, two sets of readings for vent station 46?-- Yes.

Okay. Now, those Saturday readings right through to the Tuesday readings are all written in by hand; is that so?-- Yes.

And would appear to be all different handwriting?-- That's correct.

Okay. I will come back to the authorship of those in a moment, but after Tuesday it then goes to Wednesday, Thursday, Friday, Saturday, Sunday, Monday, Tuesday?-- Yes.

Down the page?-- Yes.

Provision for daily readings to be entered in on this document in respect of that 512 Panel; is that so?-- Yes.

Again, was this document one which was prepared then to give effect to this arrangement that you told us about yesterday made on 22 July that there would be readings recorded for 512 Panel on at least a daily and it would even seem a shift by shift basis?-- No, this document was given to me on the Friday night to do the readings for the weekend, Saturday, Sunday.

Yes, okay, listen to my question, if you would. Of course, it goes beyond Saturday, Sunday, doesn't it? It has Monday the 25th, Tuesday the 26th, Wednesday the 27th, as you have agreed, right to the bottom of the page, Tuesday the 2nd?-- Yes.

Was this document one which was prepared in accordance with the arrangement you told us about yesterday that there were to be readings taken shift by shift in respect of 512 Panel for the purpose of calculating the CO make?-- Yeah, there were - the deputies were told to do the readings shift by shift, but

this document was given to me to do the readings for the Saturday and the Sunday.

Okay. It was given to you for that purpose, but it was prepared for the purpose of giving effect to the arrangement, isn't that so, the arrangement you have told us about?-- Yeah, as far as I know, they were going to carry on with the readings themselves. This was just a copy given to me to do Saturday, Sunday.

Well, let me get it clear. You told us about that arrangement, didn't you?-- Yes.

That it would be taken on a shift by shift basis for the purpose of calculating CO make and then completing a graph on a daily basis?-- Yeah, that's what I thought.

That's what you told us yesterday?-- That's what I thought.

Or was I dreaming yesterday?-- No.

Now, are you able to say whether your writing appears on that CO make document?-- Yes.

MR MORRISON: Excuse me, Mr Clair, I am not objecting, but we have taken the trouble this morning to assemble for each of those entries all the deputies reports that go with that entry and as well the data that you are about to refer to, Mr Clair, and we have a copy for everybody. It may be convenient if we distribute those, and they may be of some assistance, but I am obviously in Mr Clair's hands.

MR CLAIR: It may well be of some assistance, Your Worship. It may not have any bearing on the questioning that I will make of the witness, but if that's available, I would like to see it now, and I thank Mr Morrison for that.

MR MORRISON: Could I just indicate for those who receive it, we have put some colour coding on some entries which we think will be identified, but we have not done anything more than put the colour coding on for the moment. I will say no more about that in front of the witness at this point.

WARDEN: That may be quicker than taking the witness through each individual writing on it.

MR CLAIR: Well, it may be, Your Worship. I am really interested in the writing that this witness can identify as his own.

MR MORRISON: I am sorry, could I just make clear what we have added to this document so people can understand it? Down the left-hand side we have numbered entries down to, I think, 13, so you can follow it by reference to a number on the left as in entry number 4, entry number 5, etc.

MR CLAIR: Now, Your Worship, can I continue with the witness?

WARDEN: Yes.

FXN: MR CLAIR

WIT: ATKINSON T J

WITNESS: Yes?

MR CLAIR: Now, Mr Atkinson, your writing appears on that CO make 512 document; is that right?-- Yes.

And the entries that you made there are the entries that you have previously - at least the information you have previously spoken about for Saturday and Sunday; is that right?-- Yes, that's correct.

The entries you made - perhaps I can shorten it in light of the document. Rather than asking you to identify it, I will just quickly identify it for you. You tell me if I am correct. On the Saturday, 23 July, in the velocity column 1.79?-- Yes.

Something you wrote in; is that right?-- That's correct.

Was that a measurement you took?-- No, it was off a deputies report.

Which deputies report?-- I couldn't say now.

Well, when did you receive it?-- I collated all the deputies reports for the weekend actually to get the information off it. It would probably be day shift.

Were you there at the mine on the Saturday day shift?-- Yes.

Did you get a deputies report?-- Yes.

When you were there on Saturday day shift?-- Yes.

Did you enter the information onto this document?-- Yes.

Did you enter it on the Saturday or did you enter it at some later time?-- No, the Saturday.

On the Saturday, okay then. Did you write that in from a deputies report?-- Yeah, I did.

1.79. Going across that line, you wrote in a measurement of 6 ppm CO?-- Yes.

And you wrote in 5.9 CO off the Maihak; is that right?-- Yes, yes.

And then you did the calculation yourself?-- Yes.

To calculate the make?-- Yeah.

And that came to 13.88?-- Yes.

Now, for the later shift that day you didn't write those figures in; is that right?-- No.

The second entry for the Saturday?-- No.

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You didn't write those in?-- No.

Do you know how they came to be written in there?-- One of the deputies would have wrote them in there.

Well, do you recognise that writing?-- No.

Would it be Reece Robertson's writing?-- Oh, could be, I don't know.

You don't know?-- No.

What I am interested in, in any event, is how that came to be written in. When you finished your shift on that day, did you leave this document somewhere for a deputy to write in the information?-- No.

Or what did you do?-- I just left it on the undermanager's desk.

You left it on the undermanager's desk?-- That's correct, yeah.

Did you request any deputy to fill it out?-- No.

Do you know how it came to be filled out?-- They must have took it to their own mine to fill it out.

You certainly didn't have any conversation; is that what you are saying, any conversation with anyone to say, "Look, you have got to fill this out."?-- No, I never told deputies to fill this out, no. I just told them to put it on their deputies report.

Okay, go to the next day, Sunday, 24 July?-- Yes.

You will see that again there is a first set of figures written in there which appears to be in the same handwriting as the second set on the Saturday?-- Yes.

Towards the end of that line, though, the Maihak CO make, is that in your writing, 6?-- Yes.

And the 13.57 calculation, that was a calculation you made?-- Yes, it would have been, yes.

When did you do that?-- On the Sunday.

On the Sunday. So, by that time somebody had written in that set of figures from which you calculated that CO make; is that right?-- Beg your pardon? I would have calculated the CO make, I think.

At the time you calculated the CO make on the Sunday you have told us it was, that's 13.57?-- Yes.

Those figures from which you calculated it had been written in onto this document; is that right?-- From which I calculated, yes.

FXN: MR CLAIR

WIT: ATKINSON T J

Do you know where it was that you found the document when you saw the figures on there and calculated the CO make?-- It would have been on my desk.

On your desk?-- The undermanager's desk.

With the figures already in there?-- Yes.

Did you speak with the deputy that had written that in? Did you just find the document there and the figures were there and you thought, "Well, that's good, somebody has put them in."?-- I checked with the deputies reports as far as other - I can't remember if I talked to the deputy or not, but I would have checked with the deputies reports as far as the figures.

Well, hold on. Didn't you say that you calculated the make from the figures already written in by the deputy, the ones that appear on the line there?-- Yes, but I would have checked them against the figures on the deputies reports.

You would have checked these figures written by the deputy against the figures that he had entered on his report to make sure he had put them in the same way in both places; is that what you are saying? Is that so?-- Just for reference check.

Just for reference check?-- Yeah.

It would be the same deputy, wouldn't it, who made out the report and also wrote these figures in?-- Yes, probably, yeah.

Why would you need to check these figures against the ones in his report?-- I can't actually remember now.

Thank you. If you can't remember something, Mr Atkinson, just say so. There is no embarrassment about that. Just say, "I can't recall." Don't feel compelled to give an answer, a positive answer, or informative answer to every question I ask you. If you say, "Look, I can't remember" - if you can't remember, just say, "Look, I can't remember that.", please?-- Right.

Because it can be very misleading -----?-- Right.

----- if you say something which you are simply saying for convenience sake, you see? Now, go to the second reading for the Sunday. Do you know whether you saw those readings in there, written in there on that day?-- I can't recall.

You can't recall. There is no CO make calculated for those; is that so?-- That's correct.

The readings for the Monday, did you have anything to do with those, the ones written in?-- No.

Do you recall where you last saw this document?-- It would

have been sitting on my desk on the Monday.

That's the very last time you ever saw that document there; is that so? Think very carefully about it?-- Actually, I can't recall.

You can't recall, okay. Are you saying that you could have seen it later than the Monday but you just don't remember?-- That's correct.

Okay, righto. Now, by the way, on the bottom of that document, that's the CO make 512, there appears to be a set of initials. It seems to read "JFA". You see those?-- Yeah, I can see it, yeah.

Bottom right-hand side?-- Yeah, that's correct.

Are they Mr Abrahamse' initials?-- I don't know.

You don't know, okay, righto. Now, to the extent that you were concerned over that weekend then, you did go ahead and do what you were told and you plotted the points representing the CO make reading onto the graph which Mr Abrahamse had also handed you on the Friday; is that so?-- That's correct.

Okay. Now, can you look at that graph? That's the first document I gave you this morning?-- Yes.

First of all, let me ask you this: when was the last time you saw that document?-- I can't recall because he asked me to do it on the weekend, it was in the folder, I did it for the weekend and I left the folder on my desk.

At the time you last saw that document was it together with the other one, the CO make 512 document?-- I think so.

Were they both in the folder that you have spoken of?-- Yeah, there was documents in the folder.

And where was the folder?-- Sitting on the undermanager's report room desk.

Do you know how the other figures, that is the ones for the Monday and the Tuesday, come to be written in there? Were any of those written in in your presence? Are you able to say that?-- No, not really, no.

Okay. Well now, I want to keep your attention with the graph. Which lines did you put onto that graph?-- The lines I put on would have been the 23rd and the 24th.

Okay. So that's the line which runs up from the 22nd, the line representing the 22nd to the line representing the 23rd; is that right?-- Yes, yes.

And that point that you have plotted on there was to correspond with the make that you calculated on the Saturday of 13.88; is that right?-- Yes.



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Then there is a line that runs down from the 23rd to the 24th;  
is that right? That's a line that you put on there also?--  
Yes.

That point on the 24th was to correspond with the calculation  
you had done on the 24th of 13.57?-- Yes.

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Just to be clear for the record, they are the last two lines on that graph; is that right?-- Yes.

There are no further points plotted on the graph -----?-- No.

Which would represent the CO makes that appear to have been calculated on the other document, the CO make 512 document, for Monday or Tuesday; is that right?-- That's correct.

In fact, one of the CO makes calculated for Tuesday, 26 July, was 16.25; is that right? The first of those, 16.25?-- Yes, that's correct, yeah.

Was there ever any discussion with you about a CO make calculation at vent station 46 of 16.25 on that Tuesday, 26 July?-- No, I can't recall.

You can't say?-- No.

Do you think you would recall that if the CO make had - in 512 had been advised to you as being at the level of 16.25 after you had plotted a point of 13.57 on the Sunday? Do you think you would remember that?-- Yes, but all I can remember is there was - the fans were off one day there, we did have one fan running. I don't know if it was that day or not.

I see. Well, I see that opposite the 9.2 on the Monday on that handwritten document - well, first of all, for the Monday there is actually a CO make calculated of 9.2; do you see that?-- Yes.

Written beside that in the margin are the words, "One fan operation"?-- Yes, that's correct.

Okay. Is that the date then you are referring to as when the - only one fan was operative?-- I don't know. I can't recall.

Okay. Well, now, I want to ask you some more questions about the graph. Just have a look at that?-- Yes.

There is the point plotted for 15 July. I think I have pointed out that that is a point that was plotted on the document you saw yesterday, part of Exhibit 21; is that right? That page in the bundle of documents. You have already looked at it earlier today, is that right, and also on Exhibit 25. It is the point that is plotted on Exhibit 25 which is the one you have just looked at there?-- 15/7?

15/7, yes, that's right?-- Yes.

Okay. Then from that point there is one line which is drawn on a steep increase up to 22 July; do you see that?-- That's the one with the question mark?

Yes, that's right?-- Yes.

At the top?-- Yes.

There is a question mark; is that so?-- Yes.

And the point to which that line is drawn would appear to correspond with the total CO make of 18.98 which is the first entry on the CO make document, both in Exhibit 21 and on the CO make document which I have handed you this morning?-- Yes.

Okay. Now, were you there when that line was put on the graph?-- No.

You weren't there on the Friday?-- That was on the graph when it was given to me.

Yes, but obviously, you see, it was placed on the graph at some time. What I am asking you is were you there when that line was placed on the graph?-- Yeah, this graph was given to me with that line on it.

That line was on it?-- Yeah, I know that. It was given to me.

I will just ask the question again, if you listen to me carefully. Were you there when that line was put onto the graph?-- Put on the graph, no.

You weren't, okay. Now, the - taking the point calculated or plotted for 5 July, there is also a line that runs down to 22 July; do you see that?-- Yes.

Okay. That line runs down to a point that would appear to correspond with the 13.7 entry which is the second entry for Friday on both of those CO make documents that you looked at, the one in Exhibit 21 and the other one with the handwritten entries on it?-- Yes.

Okay. Now, when you were handed the graph by Mr Abrahamse did he say anything to you about the line running up the page with the question mark against it?-- Oh, I would have asked him because that's why we went down and done a reading of the - at that point, that night on the Friday.

Okay. Which produced the lower point that was calculated?-- Yes, that's correct.

Okay. Well, were you there when that line was put on the graph running down to the lower point?-- No. It could have been there, but the graph was given to me with already the lines on it. The only lines I put on it - the graph was given to me with these lines on it. The only lines I put on were the ink lines from the biro.

Okay. Now, you say you could have been there when the line was put on it running down to that 13.7 reading? You could have been there then?-- What do you mean? Could have been at work?

Could you have been there present when -----?-- No, no.

The document -----?-- No, I just got handed the document.

Was done in that way. Okay. Now, when you calculated your CO make and put the handwritten lines onto the graph, the ones you have drawn in yourself?-- Yes.

You drew it from the bottom point, the 13.7 point?-- Yes.

You continued the graph on from that lower point?-- Yes, that's correct.

What discussions did you have about that, that you should continue it from the lower point on the graph, you see?-- Because the lower one was from the readings we done on the 22nd.

Later on the 22nd, but what discussions did you have about that? Was there any discussion which led you to do that or were you just handed the document, nothing said and you chose to do it from the lower point?-- From the lower point is from when we done the readings.

I appreciate that. Listen to my question, though: did you just choose yourself to continue it from the lower point on the document or were there some discussions about it, that the graph should be continued from the lower point? Do you understand what I am asking you? How did it come about that you continued the graph from the lower point? What discussions, if any, took place about that?-- Well, I would have been told where to start the graph from.

By whom?-- Jacques.

Right?-- Yeah.

Okay, when was that?-- Would have been on the 22nd.

At what stage on the 22nd? When he handed you the graph or some earlier time? When?-- No, when he handed me the graph, yeah.

Okay. Now, did you discuss with Mr Abrahamse how the continued plotting of this graph was to be managed? I think you said that the documents were in a folder on the undermanager's desk when you last saw it?-- Yeah, that's correct, yeah.

As you recall?-- Yeah.

So, it appears from that that the folder containing these documents was to be left on the undermanager's desk; is that so?-- Yeah, on the Friday Jacques asked could I just plot the points for Saturday and Sunday and he gave me the folder. He said he'd pick it up on the Monday.

He said he would pick it up on the Monday?-- That's what I understood.

No, don't say what you understood, say what you recall. Did he say he would pick it up on the Monday or not? It is

important to be accurate?-- Yeah.

You see?-- All I can remember is, "Can you do them for Saturday and Sunday?", and that was it.

Was there any discussion as to what system was to be in place for deputies to come and fill out the figures on the CO make document and then for a CO make to be calculated? Who was to do that?-- Not with me there wasn't. As far as the deputies filling out the - the deputies, as far as I knew, were wanted to fill out on their reports - put on their reports the readings they had at the top return.

Yes?-- That's all I was asked to do.

Right, but somehow - somehow - it came about that at least one deputy, and it would appear more, came and actually filled out these figures on this document when it was on your desk, the undermanager's desk, at least during the weekend?-- Yeah, that's correct.

I mean, that must have happened otherwise you couldn't calculate the CO make from somebody else's figures on the Sunday, could you?-- Yeah, that's correct. They weren't asked to do it, no.

That just happened?-- Yeah.

They weren't asked to do it?-- Yeah, that's correct.

On the Monday deputies appeared to have filled out some figures there or somebody, at least, has filled out figures there from which a CO make has been calculated?-- Yeah, that's correct.

Again on the Tuesday somebody has filled out figures there from which a CO make has been calculated?-- Yes.

And the last time you saw the documents they were in a folder on the undermanager's desk, as you recall?-- Yes.

Now, what was the system, Mr Atkinson? Was it a system whereby these were to be kept there and supervised by undermanagers or not?-- I was never informed to do that, no.

Well, you see, the last entries - although you have agreed that the system was quite obviously set up for daily readings and for daily points to be plotted on the graph, the last entries on the handwritten document - on the CO make document with handwritten entries is for Tuesday, 26 July and the last point that is plotted on the graph is the point that you plotted on 24 July, Sunday?-- That's correct, yeah.

Are you able to say how that came about?-- Because I was asked to do the plotting for Saturday/Sundays.

Are you available to say how it came about that they were the last entries plotted; that is, that nothing further was done in relation to this system which had been so carefully

established? Are you able to say why that was the case?--  
No.

No idea at all? No idea at all; is that what you are saying?-- No, as far as - well, as far as I thought was happening I thought I just had to do the points from - well, I was asked to do Saturday and Sunday and it was going to be carried on from there.

Mr Atkinson, you were the undermanager that was involved in the discussions on the Friday, you have told us, which led to the setting up of this arrangement. In fact, you told us yesterday it was formally to be established as from the Monday, that is the way you put it: "formally established from the Monday" - Monday?-- No, that was the deputies putting their readings in the deputies - on their reports, I was involved in.

Right, and the reason they were to put those reading on the report was so the CO make could be calculated; isn't that so?-- Yes, that's correct.

You told us yourself the purpose of doing that was so that a daily graph could be kept?-- As far as I thought, yes.

Listen to me. You were the undermanager that was involved in those discussions on the Friday?-- On the Friday.

Involved in the discussions that led to setting up those arrangements?-- On the Friday I was talking to Dave and Jacques and all that I can come out of the Friday was that we wanted the deputies to do the readings every shift for that return and I assumed that that's what they wanted it for, so they could plot it daily, yes.

So the CO make could be calculated and it could be plotted daily onto a graph?-- That's what I assumed, yeah.

We can see plainly from these documents that, in fact, a system was carefully established, carefully established, making provision on one document, the CO make document, for the entry of figures every day; right?-- Yes.

And making provision on the graph document for the plotting of the CO make point every day?-- Yes.

The graph -----?-- Yes, yes.

Has got lines there that run right through for 2 August for the plotting of daily points?-- Yes.

Isn't that right?-- Yes.

Now, did you take any interest at all in whether this arrangement that was established on that Friday was put into place?-- Yes, I ensured the deputies done their reports and made the calculations - put their calculations on the reports.

They didn't calculations on the reports, all they did was to

take the readings. They didn't calculate the litre make, did they?-- No.

So, what do you mean when you say you made sure that they put their calculations on the deputies reports?-- Well, that is what I was asked to do.

Did you take any further step to make sure that from the readings that were entered on the deputies reports that that was some how translated across to this carefully prepared graph?-- No.

Is there any reason why you didn't do that?-- Well, actually, I thought Jacques was looking after that area, after the graph. That's why I thought he asked me to do it on the weekend, for the Saturday/Sunday, and that was it, that's all.

Did you have any discussions with him over the following weeks about whether this graph was coming into existence?-- No.

Plotting daily points?-- No.

I mean, you had started it. You had put the first two handwritten lines on it?-- Yes, yes.

Were you ever interested to see what happened after you put your two handwritten lines onto it, to see what direction it was taking?-- No, I used to always look at the Maihak, actually, for CO.

Did anybody - did anybody - ever plot to your knowledge onto a graph this point of 16.25 that appears against Tuesday, 26 July '94?-- Not to my knowledge.

Did you ever have discussions with a ventilation officer in relation to this graph coming into existence and being faithfully completed?-- No, no.

So, of course, the ventilation officer, the regular ventilation officer, the appointed ventilation officer, wasn't at the mine at this stage. was he, Mr Morieson? He was on leave from 15 July; did you know that?-- I know he has been on holidays. I can't exactly say the dates to you.

Did you know it at the time? Did anybody ever tell you when the ventilation officer was going on leave?-- No.

They didn't tell the undermanagers; is that what you are saying, really?-- That's correct.

At the time that this system was established for the careful supervision of the CO make in 512 did you ever apply your mind to the need to involve a ventilation officer?-- No.

Who was the acting ventilation officer at the time?-- I think it would have been Steve Bryon, actually.

Did you ever have any discussions with Steve Bryon about the position in 512?-- Not that I can recall, no.

This document on which you put your two handwritten lines?--  
Yes.

The graph, it has on the bottom of it, "Issued by  
A G Morieson"; do you see that?-- Yes.

That is just simply not so, is it? That document wasn't  
issued by A G Morieson at all?-- No, it was issued by  
Jacques.

Do you know why that appears there?-- No, not really. I just  
thought it was a photocopy of a graph.

A photocopy of a graph? I mean, the information that was on  
it at the time that you received it, with those ambivalent  
lines, one going up to a question mark and one going down to  
another point on the graph, that document couldn't have been  
issued by Mr Morieson, could it?-- No, this was given to me  
by Jacques Abrahamse, that's correct.

Certainly by the time you put your two handwritten lines on it  
it couldn't be called Mr Morieson's document, could it?-- No,  
no.

Okay. I have no further questions. Before I sit down I will  
tender, first of all, the graph which I have handed to the  
witness this morning as one exhibit.

WARDEN: Exhibit 93.

ADMITTED AND MARKED "EXHIBIT 93"

MR CLAIR: I will tender then the other document, the CO make,  
512, with the handwritten entries on it as another.

WARDEN: Exhibit 94.

ADMITTED AND MARKED "EXHIBIT 94"

MR CLAIR: Thank you, Your Worship.

WARDEN: How long might you be?

MR MacSPORRAN: I will be 10 minutes, Your Worship, if that.

WARDEN: Okay.



FURTHER CROSS-EXAMINATION:

MR MacSPORRAN: Mr Atkinson, on that table that you were shown which is now Exhibit 94, that's the CO make for 512, there is provision or a column for recording the Miahak CO reading, isn't there?-- Yes.

And that comes from the Unor sampling tubes?-- Yes.

And they are sampling gases inside the mine at various points 24 hours a day, aren't they?-- Yes.

So when you come to place a figure from the Unor system on that form, how do you choose a particular reading to place on the form?-- I look up the corresponding sampling point.

Now, if you look at the chart, I think you entered the figures on Saturday, 23 July; is that so?-- That's correct.

And you have entered in the CO columns firstly CO parts per million 6 CO, Miahak 5.9?-- Yes.

Where would you get 5.9 in particular from? That's from a particular sampling point, is it?-- I could have got an average -----

That's what I'm asking, you see. The Miahak at that point is sampling all the time throughout the shift, isn't it?-- Yes, that's correct.

So you would have many Unor CO readings for that shift?-- Yes.

For that point?-- That's correct, yes.

How would you choose one to place on this form out of all of the ones that were available?-- I don't know. I just used a figure off the Miahak.

It's all very well to say you got a figure off the Miahak, but which one? How did you choose which one to put on this form? Did you add them all up and average them or did you just pick one at random or what did you do?-- I can't recall now.

You can't recall?-- No.

Do you know whether there was a procedure as to how you would choose a Unor reading to put on this form?-- No.

Did anyone explain to you how you would do that?-- No.

The other CO reading is the Drager instrument reading, isn't it?-- Yes, yes.

So you have both the Drager and the Unor readings side by side?-- Yes.

The velocity readings purport to have been taken from the ventilation station 46; is that so?-- Yes.

Do you know whether that's where that 1.79 figure came from on 23 July, that's the one taken by a deputy, isn't it?-- Saturday the - what was that?

23 July, velocity 1.79?-- Yes.

That's what you have written on there?-- Beg your pardon?

That's what you have written on there?-- Yes.

And that came from a deputies report?-- That's correct.

Do you know whether that 1.79 was in fact recorded at vent station 46 as opposed to somewhere else?-- They were asked to do the readings just inbye the seal at the monitoring station which is marked on the rib.

Again does this relate to inside the top return in 512?-- Yes.

As opposed to outside the top return, outbye of that in the No 1 heading of 510?-- No, it was supposed to be taken in 512 just inbye the prep seal site where it was marked on the rib.

So did you think that vent station 46 was in the top return of 512?-- I thought the monitoring point was there, yeah.

What about the vent station?-- Yes, yes, that's correct.

These readings on this form, "CO make 512", all purport to relate to velocity at vent station 46, don't they?-- That's correct.

And that's where they should have been taken, the readings, the velocity readings?-- Would have been taken at the monitoring station.

Which is inside the top return?-- Yes.

So your evidence is vent station 46 was inside the top return at 512?-- Yeah, that's correct, yeah.

Now, the graph, Exhibit 93, you have agreed that the plotting of that starts off monthly; is that so?-- Yes.

The dates on the bottom axis?-- Yes.

And then goes to weekly; is that so?-- You must be right, I'd say you are.

I think you've confirmed it before, the dates on the bottom axis. The whole idea of a CO make graph is to observe and watch the trend of the CO make, isn't it?-- Yes.

And if you look at that CO make trend it's going steadily upwards?-- Yes.

Anyway, it goes steadily upwards and then as from 15 July there is the high points leading up to the 22nd which is in doubt; is that so?-- Yes, yes.

And then it's proposed under this new system to plot it daily; is that right?-- That's what I -----

The bottom axis of the graph, that's the horizontal one, has daily marks to enable a daily reading to be taken?-- That's correct.

So you go from months to weeks to days on the bottom axis of the graph?-- Yes, that's true.

The whole idea being again to watch the trend of the CO make?-- Yes.

Do you have any idea of the effect of mixing the dates on the bottom axis of a graph such as this?-- Not really, no.

Do you know whether you could in fact compare the rise in the CO make when it's plotted monthly, weekly and then daily?-- Could you tell me that again, please?

Do you think it's possible to compare plottings made monthly with those plotted on the same axis weekly and then those plotted finally on a daily basis on the same axis?-- I don't think so.

Do you know why?-- Beg your pardon?

Do you know why?-- Not really, no.

Thank you. Thank you, Your Worship.

WARDEN: Thank you, gentlemen. We might have a five minute break.

THE COURT ADJOURNED AT 11.37 A.M.

031194 D.13 Turn 8 mkg (Warden's Crt)

THE COURT RESUMED AT 11.58 A.M.

TERRY JOHN ATKINSON, CONTINUING:

MR MARTIN: Thank you, Your Worship.

FURTHER CROSS-EXAMINATION:

MR MARTIN: The meeting which occurred on 22 July at which you were present, Mr Abrahamse and I think Mr Dave Kerr?-- Yes.

Where did that occur?-- In Jacques Abrahamse's room.

Did he have a separate room, his own room?-- His room and Cocky Morieson's, Allan Morieson's room.

Did they share a room?-- Yes.

The document that was shown to you a little while ago which was given to you by Mr Abrahamse, Exhibit 93 it is. Oh, you still have it there. And the other document, the CO make 512, both of those documents were given to you by Mr Abrahamse you said, didn't you?-- That one there?

The one that you plotted on?-- Yes.

Those two days?-- Yes.

Where did he take those from?-- I don't know.

Well, did he take them out of a folder?-- I don't know.

You don't remember?-- No.

I will just give you this document which is a clean copy of Exhibit 93. I would ask you to plot onto that the 13.57 litres per minute of carbon monoxide which appears from Exhibit 94 on the correct date - 13.73, I should say. I am asking you to plot 13.73 CO Lpm from Exhibit 94 on the correct day, the Monday, 25 July, onto Exhibit 93. Don't put it on the exhibit, put it on the clean copy?-- On the 25th, you want it put on there?

I beg your pardon, 13.73, I apologise. It's been calculated to be 13.73 litres per minute and I ask you to assume that is a calculation on 25 July?-- Yeah. You want it put on this graph here?

Yes, on the clean copy?-- Yes.

All right, thank you. Could I just see that to see where it

FXXN: MR MARTIN

WIT: ATKINSON T J

is? Take it back, please, and I will give you a highlighter and just mark with a yellow dot the top of that point. Thank you. Now, if you look at Exhibit 94 again you will see 16.25 litres per minute of carbon monoxide; you see that? On 26 July this is?-- Yes.

I do suggest that 16.25 is a little low on the calculation, that it should be 16.66. I am not asking you to do the calculation in your head, so don't worry about that. Plot the figure 16.25?-- Whereabouts do you want it put?

I want you to plot on the clean copy the 16.25 litres on Tuesday, 26 July. Have you done that and you are satisfied with that?-- Yes. Do you want me to dot it?

Yes, please. Could I just see it again? Now, take that back, thank you, and this document as well. Is that production deputies report 3748?-- Beg your pardon?

For 28 July, the Thursday?-- This is 28 July, Thursday, night shift.

And you see a number of readings there, do you not?-- Yes.

And you have wet bulb, dry bulb, velocity, CO?-- Yes.

Now, I ask you to assume that proper calculation of those figures on that deputies report produces 19.35 litres per minute of carbon monoxide, 19.35, and I ask you to plot that on the clean copy?-- And you want it put on the ----

Just accept for the moment that those figures on that deputies report produces 19.35 litres per minute of carbon monoxide?-- Yes.

And I want you to plot, as you have done, 19.35 litres - 19.35 - just extend what you have done to 19.35, and mark it again, if you would. Satisfied?-- Yes.

All right. That, I suggest to you, represents an exponential rise of the CO make?-- Yes.

Thank you. I tender that document, Your Worship, and I suppose the accompanying production deputies report.

WARDEN: That's Exhibit 95. My clerk will arrange for copies to be made and be distributed.

ADMITTED AND MARKED "EXHIBIT 95"

MR MARTIN: I suggest to you that, if anything, it is slightly higher than the upward graph with the question mark a few days beforehand, the 22 July one which was said to be wrong in some way. It almost corresponds?-- Yes.

031194 D.13 Turn 8 mkg (Warden's Crt)

Thank you.

WARDEN: Mr Morrison?

MR MORRISON: Thank you, Your Worship.

FURTHER CROSS-EXAMINATION:

MR MORRISON: Have you been given a copy of all the deputies reports that go with that schedule? I don't think you have, have you?-- No.

Now, could I just ask you to take the colour coded table. You have got that?-- Yes.

I want you to tell me some things about this now, if you could. Let's take the first line. It's designated item 5. You will see the "5" written on the left-hand side and it's the line of 23 July '94?-- I have got 1, 2, 3, 4, 5, 6, 7 down the -----

Number 5 is 23 July '94?-- That's correct.

And it's where you have the first-hand written entry, 1.79?-- That's correct.

Now, that 1.79 is in your writing, isn't it?-- Yes, that was the weekend I worked.

Likewise, the other entries on that line are in your writing?-- Yes.

Now, just go over to the right where you have done a CO make calculation, 13.88?-- Yes.

The figure immediately above that is printed, isn't it?-- Yes.

And it says 13.70?-- Yes, that's correct.

That's the last point shown on the graph that Mr Abrahamse gave you, the graph that he gave you to work from. 13.7 is the last point before you were required to put your bits on?-- Yes.

And that's, no doubt, why you started from 13.7, because that was the last point indicated on the schedule and on the graph itself?-- That's correct.

Now, the information in so far as you have written it in this document was derived from deputies?-- Yes, this is from the deputies reports.

And could it be that on occasions you have received verbal information from a deputy about a particular figure?-- You could have received it verbally, but the deputies were asked to put it on their reports.

If we go to the next line, line 6 - I am sorry, just - I will have to get you now - could you turn to the first of the deputies reports, day shift for 23 July 1994?-- Yeah.

No 3734; is that right?-- Yes.

That's Mr Klease's report?-- Yes.

Now, we can see there the CO ppm reading that he did?-- Yes.

That was 6 and that is what was recorded in that line that we are discussing, item 5 under "CO ppm"?-- Yes.

By the Drager, and the other CO reading is taken from the Maihak system, isn't it?-- Yes.

Okay. And it is not unusual for the Maihak system to show a CO reading that is different from a Drager reading?-- Oh, no, you can get variations, yeah.

It seems so in this case. In fact, the Maihak was showing 5.9 for that day?-- Yes.

Now, when you went to the Maihak to get that figure did you do that yourself or did you ask someone to do it for you?-- Off the Maihak?

Yeah?-- That was at the Saturday?

That's the first reading on the Saturday?-- No, I would have done it.

So, you went to the screen and do you punch up some particular screen or do you just look at the screen shown?-- There is a screen that's shown with all the points.

You just go off that one?-- Yes.

You don't punch up a particular daily average screen?-- No, I can't recall, but I don't think I did.

You know you can get a daily average out and even have that printed on the printer?-- Yes.

Can you recall if you did that for this figure or just took the one on the screen?-- I think I would have only taken the one on the screen. I can't recall.

Okay. Then the calculated figure of 13.88 is yours?-- Yes.

041194 D.13 Turn 9 gc (Warden's Crt)

Now, you will notice on the deputies report that the - Mr Klease's report, the velocity is given as 1.78, in fact. Do you see on the first deputies report?-- Yes.

But recorded as 1.79 on your line. Might that have been an occasion where Klease rang the figure through to you and that might account for why there is a discrepancy there?-- I don't know.

You can't specifically recall?-- I can't recall that.

You will see on the deputies report you have, in fact, countersigned the report, I think?-- Yes.

Now, let's go to the next line, item 6. This is the second reading for 23 July. Now, I want you to look at the second deputies report, 3735, a report by Mr Robertson?-- Yes.

Do we see when we look at that, that is 1.72?-- Yes.

20.5, 26, .3, 20.9 and 6 ppm CO all are directly from or, at least, are the same as those figures in Mr Robertson's report for that day?-- Yes.

Are you familiar with Mr Robertson's writing at all?-- Reasonably familiar, yeah.

If you look at that line and compare it to the same figures that are written in Mr Robertson's report does that look to you like Mr Robertson's writing?-- I think so.

All right. Now, if one did a CO make calculation - can you just take this calculator? Can we do the calculation for that CO make? It will be 21.92 - could you commence that: 21.92 multiplied by velocity, 1.72, by 6 parts, by .06; is that right?-- I will start again.

Okay?-- 21.92.

21.92 by 1.72?-- 1.72.

By 6?-- Times 6.

By .06 equals?-- I got 13.57.

13.57, all right. So, if one had done the calculation for that Saturday, second reading, that's line 6, would you get 13.57?-- Yes.

Now, let's go to the next line, item 7, that's the first line for 24 July?-- Yes.

I want you to turn over to the next deputies report as well, that will be report No 3736, and when we look at that can we see that some of the figures are the same in the deputies report as they are in the - in line 6 - sorry, line 7?-- Yes.

So, all the figures, I think, are the same, certainly down to the 6 parts CO, 24.5 dry bulb, 20 wet bulb; do you see that?--

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WIT: ATKINSON T J



Yes.

And if one calculated that out you wouldn't get 13.57, is that right, because we have just done the calculation for the previous one?-- Yes.

With the same velocity - with a different velocity and 6 parts?-- Yes.

The same area, and we got 13.57 for that. So, 13.57 is, in fact, the figure for 6 parts at 1.72 velocity, isn't it?-- Yeah, that's correct.

So, if one did the calculation for 1.68 velocity and the same number of parts you would get a lower figure, wouldn't you?-- Yeah, that's correct.

Now, perhaps we ought to do that and see what the result is. So, we are going to have 21.92 multiplied by 1.68 multiplied by 6 by .06 and the result is?-- 13.25.

13.25. That would be the make for that line 7?-- That's correct.

Now, if we go down to the next line, the next entry that is for line 8, can we turn over to the next deputies report, please, which is 3738 for 24 July?-- Yes.

We can see that Mr Bryon has done that deputies report?-- Yes.

And if we look at the figures for line 8 you can see 1.72 is the velocity?-- Yes.

21 and 26 are from his report?-- Yes.

And so are the other figures except the 6 parts; do you see that?-- Yes.

Now, if one looks at the figures in Mr Bryon's report does it appear to you like he has written some of these figures into this sheet? The "21" and "26", for instance, perhaps, even the "1.72", they look very similar, don't they?-- Yes.

If we look at - you don't need to look at it, but if we look at Exhibit 36, which is the Maihak monitor point for that day - you don't have it, I do - you will see that during that day the parts of CO were around 6, a little under at times, and then on 6. If we do that calculation based on 6 then we should get the same result as we had two lines back, the 1.72 figure and 6 ppm?-- Yes.

That would give - I think we calculated the previous one to 13.57. So, in fact, that figure appears on the line for line 7 and 8, 24 July, doesn't it, 13.57?-- Yes.

So, in fact, it would seem that that 13.57 relates to a calculation from line 8, doesn't it, not line 7?-- Yes.

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Okay. Now, can you tell me, if we look at those two lines, 7 and 8, together. we go over to the section that starts with CO Maihak readings, on line 7 is the CO Maihak reading written by you, that's "6.00"?-- I think so.

And the 13.57 in the litres per minute figure, that's your writing?-- I think so.

And likewise the 13.57 just to the right of that?-- Yes.

So, that 13.57 figure, in fact, relates to line 8, doesn't it?-- Yeah, by the calculations.

Okay. Let's go to the next one then, line 9, and turn over to the next deputies report. Line 9 is the first for 25 July. I think you will have deputies report 3739 there?-- Yes.

Which is Mr McCrohon's report?-- That's correct.

Let's have a look at the figures for Mr McCrohon. 21 and 26 are the same for wet and dry bulb?-- Yes.

And 20.9 for the oxygen and .3 for the methane, they are the same?-- Yes.

And the velocity figure is 1.7 something in the deputies report. It is a bit hard to read, isn't it?-- Yes.

I will just see if I can get the original. While that is coming we will just continue. It was written down as 1.74 in the sheet for line 9; is that right?-- Yes.

Now, is any of the writing in that line, that's line 9, yours?-- I don't think so.

Okay. When we come down to the ppm of CO, neither of those is in your writing?-- I don't think so.

You don't recognise the writing as being that of any particular person, do you?-- No, not really.

All right. Now, line 10 for the second one for 25 July - better have a look at this, the original of 3739. You see when you look at the original of that the velocity was, in fact, I think you will see, recorded at 1.74 on the original deputies report?-- That's for the night shift, 25/7?

Just hand it back to me? Is it the same report? Yes, it is the same report. The velocity reading on that one is shown as 1.74, isn't it, that's 3739 - deputies report 3739? That's in your hand - in your left hand?-- Yes.

Shows a velocity of 1.74?-- Yes.

And then all the figures on that report, that deputies report, correspond with the figures in line 9 except that the 6 parts doesn't appear; is that right?-- That's correct.

Now, on that day Exhibit 36 shows us the Maihak was recording

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6, and slightly under, ppm. If we do the calculation for line 9 - can we just do that?-- Righto.

21.92 by 1.74 by 6 by .06 equals?-- 13.73.

13.?-- 73.

73. So, that's the reading for line 9. All right. If we go to line 10 then and, perhaps, turn over to the next deputies report, that's a report by Mr Bryon, I think, No 3740. Have you got that deputies report?-- Yes.

Is that Steve Bryon's signature?-- Yes.

Now, if we look at line 10 and compare the figures we see, 1 metre per second for velocity, 21 and 25 correspond with the deputies report, as do .3 - sorry, am I going too fast?-- Yeah, I have lost -----

I beg your pardon. Have you got the sheet of figures back with line 10 on it? It is the colour -----?-- Yeah, it is the front sheet.

Yeah, that's right. You will be able to flick from one to the other. Line 10 then?-- Yes.

1 metre velocity is correct; 21 and 25 are the same as in the report?-- Yes.

As are the other figures?-- Yes.

041194 D.13 Turn 10 dfc (Warden's Crt)

Seven parts shown as the CO?-- Yes.

Is any of the writing in that line your writing?-- No, no.

Is the calculation of 9.2 your writing?-- No.

What about the words "one fan operation"?-- No.

You do recall an occasion when you had only one fan going?-- That's correct, yeah.

Now, if we go to line 11 for the next day, that's 26 July?-- Yes.

And I want you to turn to the next deputies report. Line 11 gives us a 1.81 velocity reading as entered on the sheet that I've been asking you to look at, the front sheet?-- Which deputies report?

On the front sheet of the whole thing. Line 11 has 1.81 as the velocity, doesn't it?-- Yes.

Let's go back to the deputies reports for that day. The first one is 3742?-- Yes.

That's Mr Bob Newton's report?-- That's correct.

He doesn't have a 1.81 velocity, does he?-- No, 1.78.

What's more he records the parts at six?-- That's correct.

Now if you turn back to the front sheet, that line shows, and in line 11, seven, doesn't it, for parts per million?-- Yes, that's correct.

So neither of those readings in line 11 correspond with the first deputies report. Let's look at the next one. Turn back to the next deputies report, that of Eddie Bentham, 3744?-- Yes.

He recorded a 1.81 velocity?-- Yes.

So that matches point 11, but he only has five parts for CO, hasn't he?-- Yes, that's correct.

So we have got a velocity reading but the parts per million for CO doesn't match what's written in the front sheet?-- That's correct.

Turn over to the next deputies document, please, that's 3743 by Reece Robertson?-- Yes.

And he's got, you'll see on the left-hand side of this second inspection panel, five parts CO?-- Yes.

And a velocity of 1.72?-- That's correct.

So in fact having looked at the three deputies reports for that day, when one looks at line 11 on the front sheet that

7 ppm is not verified by any deputies report, is it?-- That's correct.

Let's just see if we look at Exhibit 36, for 26 July - I can tell you for the moment that there is no reading of seven on 26 July for that point, in fact it's six and below, down to five. So it would seem, wouldn't it not, that for line 11, whilst we can verify a velocity reading we can't in fact verify that the 7 ppm is accurate in any way, can we?-- That's correct.

Neither from any deputies report nor from the Miahak readings for the day?-- That's correct.

So the result of that surely must be that the 16.25 figure is quite incorrect?-- Yes, that's correct.

I don't mean to say it's not a correct calculation in one multiplies out 1.81 and seven parts and so forth, but the one - the 16.25 doesn't reflect a make for that day, does it?-- That's correct.

If we go back to those deputies reports for that day, two of the deputies that day recorded five, so let's just adopt that for the moment as being on balance the right figure and let's do the CO make calculation. Could you do that for us on the calculator, please? It will be 21.92 by 1.81 by 5 by .06 equals?-- 11.9.

11.9? So if one took the velocity reading as being correct and actually the correct CO parts for that day, one has a CO make for that day of 11. -----?-- 9.

Not 16.25?-- Yeah, that's correct.

Now just pausing on that, is any of the writing on line 11 your writing? Let's look at the 1.81. Do you think that might be yours?-- It looks like my writing.

But you are not sure?-- No.

It looks like it?-- Yes.

What about the seven for the parts?-- Yes, that looks like my writing.

Does the 16.25 look like yours?-- Yes, it does, yeah.

Do you have any memory now of where you got the seven parts from? It obviously wasn't from any deputies report?-- No, that's correct.

It obviously wasn't from the Miahak either?-- No.

Now, just to make sure that you understand what I'm talking about, when I asked you which was the 16.25 in your writing I'm talking about the one under the heading "CO Lpm", the larger of the two figures. There is one highlighted in front of you in yellow?-- Yeah, I think so, I'm not sure.

The one to the right of that, there is a smaller 16.25 under the total column; what about that figure? Is that in your writing?-- No, I don't think so, no.

Let's go to line 12, again for 26 July, and let's turn over, let's have a look at the figures for that. Are any of the figures in line 12 your writing? 1.77?-- I don't think so.

What about down to the CO litres per minute of 11.63?-- No, I I'd only be guessing. I couldn't say.

You don't recognise any of that as being yours?-- No, actually I'd only be guessing.

As Mr Clair said, we'd prefer you not to guess. Now, if we look at the three deputies reports for 26 July, in fact I see an entry on line 12 that says that the second reading is day shift. Do you see that entry on the left?-- Yes.

Is that in your writing at all?-- I don't know.

When we looked at the three deputies reports for that day, none of them had a velocity of 1.77, did they? The three velocities recorded by the deputies were 1.78, 1.81 and 1.72. Do you remember seeing that as we went through the three reports?-- I was just - yeah, righto.

So the three deputies reports that I took you to before?-- Righto.

So that figure of 1.77 doesn't come from any deputies report unless someone has miswritten it, I suppose?-- Yeah, that would be correct, yeah.

Maybe it was an average of the three readings, I'm not sure. You haven't written on that document that I've given you, have you, the highlighted one?-- No.

041194 D.13 Turn 11 mkg (Warden's Crt)

All right. You have in front of you not only the one I have been asking you to look at but all the deputies reports attached. That's that bundle I have given you?-- Yes.

I tender that bundle. It can probably be described as CO make 512 with attached deputies reports and the original as part of that bundle, the original of report number 3739.

Now, do you have still with you - sorry, I will pause there.

WARDEN: Exhibit 96.

ADMITTED AND MARKED "EXHIBIT 96"

MR MORRISON: Do you still have the original graph with you, Exhibit 93? You can slip it out of that plastic folder if you want a closer look at it. Now, you mentioned earlier that you had been given a photocopy of a graph; is that right?-- Yes.

Now, apart from what you have added to it for the two lines, that is in fact a photocopy, isn't it?-- Yes.

And the only original entries on that document are the two lines you drew in?-- Yes.

Now, I notice that document, and the same applies to the other one, the CO make table that I asked you to look at, you have just handed that back, the colour coded table?-- Yes.

Each of those is stamped in big letters "INFORMATION ONLY". I think I am right in saying that the documents are merely working documents, not final documents?-- That's correct, yeah.

I have nothing further, thank you, Your Worship.

MR HARRISON: I have no questions, Your Worship.

MR CLAIR: Your Worship, I wonder if I might just clear up some matters.

FURTHER RE-EXAMINATION:

MR CLAIR: Mr Atkinson, I understood you to say earlier in your evidence that what you did in relation to that document, Exhibit 94, that's the CO make document, was to do the weekend calculations; is that right?-- Yeah, plot the graph for the Saturday and Sunday.

And then plot the graph for Saturday and Sunday, and that as far as you could recall you didn't see the document again

FRXN: MR CLAIR

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after the Monday morning?-- No, I said - yeah, as far as I recall, it was on my desk for a few days. I don't know.

Well, I think you told us earlier that it was in a folder on your desk, and as far as you could recall you didn't have anything more to do with it after the Monday; that was your best recollection?-- Yeah, that was my best recollection, yeah.

Well, was that so or not?-- I can't recall.

You see, I am just a bit interested in these figures on 26 July that have been written in, wind velocity 1.81 and the CO make 7 with a calculation of 16.25; do you see that?-- Yes.

Now, what do you say about those figure?-- That's for Monday?

Tuesday?-- For Tuesday?

Yes, Tuesday 26 July?-- Yes.

Line 11?-- Yeah, line 11.

What do you say about those figures?-- What do I say about them? I'd say they do look like my writing, yes.

Can you say how they got on the document? You say it looks like your writing. Are you saying it is your writing or not?-- No, I'm not sure.

You are not sure whether it's your writing?-- That's correct.

You see, you have got to be terribly careful about your answers, Mr Atkinson, terribly careful about your answers. Is it your writing or isn't it your writing?-- I'm not sure.

Well, if it is your writing, how did those figures get onto that document?-- Beg your pardon?

The question is simple, Mr Atkinson. If it is your writing, how did those figures get onto that document? I can't make the question any simpler than that?-- I would have had to write them there.

Okay. Well, can you say anything about the circumstances under which you could have written those figures onto the document?-- No, not really, no.

If in fact you wrote those figures onto the document, then what you wrote onto the document was that there was a CO make of 16.25 litres per minute in that section, in 512 Panel, isn't that so?-- Yeah, that's correct.

Do you have any independent recollection of writing down on that document that there was a CO make of 16.25 litres per minute in 512 Panel?-- Not really, no.



Well, if you had written that down, is it something that might have struck a chord with you, 16.25 against a reading the previous day of 9.2 and a reading the day before that - I am just going on the document there which I am not in any way relying on as accurate, but at least on the document there in front of you a reading the previous day of 9.2 litres per minute, a reading the day before that of 13.57 litres per minute. If you had written 16.25 litres per minute on that document, would that increase have struck any chord anywhere in your being?-- Yeah, I can't really recall.

Well, would it? This is a hypothetical question now. Would it have struck a chord with you that there was a very significant increase in the litre per minute make?-- Yeah, yes.

It would have?-- Yes.

Well, do you have any independent recollection now of such a chord being struck with you?-- No, like I said, one day the fan was off and we did -----

If you look the day before you will see that, one fan operational. In fact, if you look at the deputies reports, the same point is made about that, so that was the reading the previous day, okay, so we can put that to one side. Put the fan problem to one side?-- Yeah.

Okay? No, keep the document, just put aside the suggestion that the one fan operational might have made a difference to you. What do you say about whether the 16.25 was a very considerable increase over the previous readings?-- Yeah, it is a considerable increase.

Okay. Now, if you had written it there, you say it would have struck a chord with you; is that what you are saying?-- Yeah. The only thing I could think of, there was a time when the CO did come up a bit on the monitor but it was because one fan was off, but when they had both fans going it went back down to normal again. That's the only thing I can think of.

We are not talking about the monitor here. Have a look at the figures that led to that calculation of 16.25. There is a wind velocity of 1.81 -----?-- Yes.

----- metres per second. There is a parts per million CO of 7?-- Yes.

It's not in the Maihak column, is it?-- No.

It's in the column that relates to the Drager tube readings?-- That's correct.

Isn't that so? Okay. Now, if you wrote those figures in there and you did your calculation for 16.25, it couldn't be a calculation that somehow was based on a Maihak reading, could it?-- No, no.

Okay. Well, we have got that far. So, what do you say - putting aside any difficulties with the fan because that just doesn't seem to be practical, does it, that you can rely on that? What do you say about that increase of 16.25 over the previous readings recorded there?-- That's high, yeah.

Very high, isn't it?-- Yes.

An extraordinary increase in litre per minute make?-- Yep.

You have got no recollection at all of noting that or doing something about it at the time?-- No, only thing I can recall is the fan - if it was that day, we - they had one fan operating for a while and the CO did go up while one fan was operating.

You see, the calculation the previous day, you see, has gone down, hasn't it, the 9.2?-- Yes.

Do you see the reading "9.2" and it is against that one that you will see, "One fan operation" -----?-- Yes.

In the column, and if you need to we can go back to the relevant deputies report, that's 3740. Turn it over and have a look at it. 3740, day shift, 25 July?-- I don't think I have any longer got that.

Have they gone back to Mr Morrison or have they been tendered? Can the witness see that recent exhibit, it will be 96, Your Worship?

Go over to 3740. The fourth one from the back. It might be the fifth. The fifth one from the back. It has got a number up in the top right-hand corner, 3740?-- 3740, I have got, Stevey Bryon.

Yes, and under "Action Taken" in respect of the second inspection there is a set of figures there; is that right?-- Yes, yes.

What you are saying so far as relevant figures are concerned is 1 metre per second, velocity, 7 ppm CO?-- Yes.

It has got a reference to vent 46 and under that opposite the 1 metre per second velocity you see the notation in brackets "(one fan only)"?-- That's correct.

So, the one fan has led to a lower velocity which in turn it appears has led to a lower calculation on the CO make?-- Yes.

When you go back and you find it has got 9 - find it has got 9.2?-- Yes.

That's in relation to that reading, that there is this difficulty with one fan -----?-- That's correct.

Only being operative. Right, now, if you go back to the page on the front - go back to the front page with the totals set out, you will see that that note about one fan operational as

041194 D.13 Turn 12 gc (Warden's Crt)

against the 9.2; do you see that?-- Yes.

It is the next line I am drawing your attention to which is the 16.25?-- Yes.

Okay. Now, if you put aside the 9.2 because of the difficulty with one fan being operative?-- Yes.

What you have got in terms of a previous calculation even shown on that sheet - you see "13.57"?-- Yes.

Put aside the 9.2 and then you have got your calculation or one that you say could have been your calculation, you are not sure, of 16.25?-- Yes.

You have agreed that was a very considerable increase?-- Yes, I have, yes.

Right. Now, this whole exercise of daily readings -----?-- Yes.

Was set up against the background of concern about the CO make in the 512 Panel; isn't that right?-- That's correct.

So, you would have been on the look-out, wouldn't you, for any problems, any significant increase?-- Yes, yes.

This is not only a significant increase, but if you look at that 16.25 figure it is an enormous increase, isn't it, over 13.57 only two days before?-- Yes, and it is an incorrect calculation.

Did you know that at the time?-- I don't know, don't know.

You are not saying that you were aware at the time that - if you wrote those figures there, at the time you wrote them there, that the calculation was incorrect, are you?-- I don't know, I can't recall.

Okay. Well, now, it has been suggested that if, in fact, you do the calculation for 26 July on the basis of the figures that appear in the deputies report for that day, that, in fact, it comes to a calculation of 11.9; do you remember doing that with Mr Morrison?-- Yes, yes.

That was from Bentham's report on 26 July, 11.9?-- Yes.

There is also a figure entered there for the second reading that day of 11.63; is that right?-- Yes.

Now, tell me, on that bundle of documents that Mr Morrison handed to you and which is now Exhibit 96, what's the number of the last report, because I was handed a bundle of documents at the same time and I just want to check that mine corresponds with yours?-- 3745.

Well, that's the one I want you to look at. That's, in fact, a deputies report for 27 July '94; is that right?-- Yes.

041194 D.13 Turn 12 gc (Warden's Crt)

That's the Wednesday night shift?-- That's correct.

In fact, commenced Tuesday night. Now, that has got a set of readings on it, hasn't it?-- Yes.

Just before we proceed to those, those readings haven't been transferred onto this sheet that's on the front, have they?-- That's correct.

Now, just have a look at the report and, in particular, the readings that are recorded under "Action Taken" against the second inspection; do you see that there, yes.

What you will see is CO 6 ppm?-- Yes.

And you will see a velocity of 1.85 cubic metres per second?-- Yes.

Do you want to calculate that out to litres per minute CO make. See how good my mathematics are?-- 14.59.

That's right, 14.59. So if in fact that had been calculated, what you would have had then is an increase from 11.63, previous reading?-- Yes.

On 26 July, through to 14.59 on the 27th; is that right?-- Yes.

Approximately 3 litres per minute in terms of an increase between one day and the next in the CO make?-- Yeah, that's right, yeah.

Is that so?-- Yes.

What would you say about an increase of 3 litres per minute in the CO make over the course of a day?-- It seems fairly high.

It would be ringing alarm bells, wouldn't it, very loud alarm bells; isn't that so?-- Yes, yeah.

I will take you one day further because you have told us that this system was set up against the background of concern?--  
-----

Could the witness see Exhibit 95, please, Your Worship?

If we go a day into the future, then from your increase from 11.6 to 14.6 approximately, and go to the night shift on Thursday, 28th, you have there against the second inspection action taken a CO reading of 8 ppm; is that right?-- What number sheet is that one?

Exhibit 95. It should be 3748. There is just one sheet. Have you got Exhibit 95 there? It's on the back of the graph. I'm sorry, you may not have realised what was being handed to you, the document in your right hand?-- That's 3748.

You have CO of 8 ppm?-- Yes.

And you've got a velocity of 1.84 metres per second?-- That's correct.

That in fact calculates out to 19.36 litres per minute. Do you want to check that or are you -----?-- You got me to do that before.

Yes, that's one you did earlier when you were being asked a question by Mr Martin 19.36?-- Yes.

An increase from 14.6 on the 27th through to 19.36 on the 28th, is that right, or 14.6 - you did the calculation on that for me a moment ago?-- Yes.

14.59 then through to this 19.36 the following day. What would you say about an increase like that?-- It seems rather high.

It's not just rather high, it would be ringing loud alarm bells, wouldn't it?-- Yes.

You did plot a point on the first page of that Exhibit 95, is that right, at 19.36?-- Yes.

I just want to clear this up. I thought you plotted that 19.36 in fact on the 28th of July; is that so?-- No, I've put it on the 27th.

You have put it on the 27th, haven't you?-- Yes.

In fact it should be on the 28th?-- Yes.

Do you want to correct that in a different coloured pen? Here, use a different coloured pen just so that at least we end up with one accurate - or one graph that has an accurate element to it. Put it over where it should be on the 28th?--  
-----

I have no further questions, Your Worship.

MR MORRISON: Your Worship, I'd like leave to ask a question or two because I think, with respect, it's a little unfair the way Mr Clair has left it.

WARDEN: Yes, leave granted.

MR MORRISON: Thank you.

FURTHER CROSS-EXAMINATION:

MR MORRISON: Mr Atkinson, probably what you haven't been told about the 28th is that on that day, the 8 ppm is not reflected by any reading on the Miahak at all, in fact it's low sixes and high fives. If it's in fact 2 ppm out, that's going to seriously affect the CO make, isn't it?-- Yes, that's correct.

And it's not going to be a 19 litre figure, is it, it's going to be much, much lower?-- Yes, that's correct.

And did you know - perhaps you are not aware - that if you followed the CO make done from deputies reports, say over the next - let's just take half a dozen days, they are 11.3, 11.2, 14.2, 13.5, 11.2, 11.4 and 11.5, were you aware of that?-- Beg your pardon?

Were you aware that that's what the deputies reports calculate out on a CO make basis over the next half dozen days from the one that Mr Clair has left you with?-- No, not really, no.

But if what I tell you is true, that over the next half dozen days they are all around 11 through to a maximum of 14, it's vastly different from a 19 figure, isn't it?-- Yes, that's correct.

Nothing further, thanks.

MR MARTIN: There is one thing I would like to point out, that I am looking at a document which purports to be a print-out on the Miahak which shows that it went off line at midnight on 28 July.

MR MORRISON: If you look at the SIMTARS report you will see the correct readings for that date. They are in the SIMTARS report.

WARDEN: Thank you, witness. You may stand down.

WITNESS EXCUSED

WARDEN: Shall we take a lunch adjournment, gentlemen? We will try and get an hour's work in this afternoon. 2.15 resumption.

THE COURT ADJOURNED AT 1.07 P.M. UNTIL 2.15 P.M.

THE COURT RESUMED AT 2.19 P.M.

WARDEN: Before you start, Mr Clair, just a couple of matters. Some of the press were inquiring - sitting times for next Monday will be 10.15 start because of the arrival of some personnel on flights into Gladstone, and on Thursday of that week we have arranged to conduct the Inquiry in the Wistari Room in the lower ground floor of the main building. I hope that clears up any queries that are outstanding.

MR CLAIR: Thank. I call Peter Gilbert Rose.

PETER GILBERT ROSE, SWORN AND EXAMINED:

MR CLAIR: Your full name is Peter Gilbert Rose; is that correct?-- It is.

Mr Rose, you might like to just move your chair forward a bit and if possible speak into the microphone so everybody can hear you. You are a deputy employed at Moura No 2 Mine; is that right?-- It is.

You started in the mining industry at Moura No 1 in 1976?-- I did.

Transferred to No 2 Mine at the end of 1977?-- Yeah, about then.

Then to No 4 Mine in about 1980?-- Yes.

And you transferred back to No 2 in 1986 and you've been there ever since; is that right?-- Yeah, late '86 or early '87. I'm not too sure.

You've been a deputy since 1982?-- That's correct.

And a member of Mines Rescue since early 1994; is that right?-- That's correct.

Now, you were a production deputy earlier this year in No 2 Mine; is that right?-- That's true.

And were you basically involved in duties in the 5 South Panel?-- That's correct.

Now, did you have occasion to work on production in the 512 Panel?-- Probably a couple of times. I can't really recall. Most of mine was on weekends.

Right, and on weekends that would be not as a production deputy, but doing inspections; is that so?-- Yeah, just ordinary coverage.

The times you did work in 512 on production, was that during development or during extraction phase?-- I probably done a few shifts in there on development and some half shifts and odds and ends on extraction.

Did you form any views about the panel design?-- I wasn't happy with the big pillars being put down the bottom side.

why was that?-- Because there is no real continuity of airflow. It had to come and hit - and split both ways, you know, to go around a pillar.

So the roadways tended to run into T junctions as it were?-- Yeah.

And the air had to split, and did that tend to slow down the ventilation to some extent?-- Well, I never had much to do with it down there, with the big pillars on extraction or anything, so I couldn't really tell on that. It was all right mining on the way in because you used your brattice line all the way in and all your stoppings up.

The concerns you had about the big pillars, they were ventilation concerns; what was the effect of what you saw as splitting the airflow?-- Well, I saw it as on extraction that you wouldn't get a nice even flow of air over your waste area.

Okay. Well, now I want to ask you about events on 22 July of this year, and that was an occasion that we have been told about that you assisted Steve Bryon with the weekly ventilation survey?-- That's true.



Now, can you just recount what you can remember about that day?-- I found 8 ppm CO, as I recall, checked it with Stephen and we put - placed the Drager tube on me notebook so we could get a reasonable reading, and we both checked it. We got - first two readings with the anemometer we got 1.73 or something like that, you know, and then the second one was 1.7 something as well, and Stephen just read out the third one which was 3.7 something, and we didn't realise until we got up top that it was in fact incorrect and we had read the instrument wrong.

And you were able to look at the instrument again?-- We hadn't clicked it off or cancelled it and it was still reading 1.74 or something.

I would like you to just turn to your right and have a look at that plan that's closest to you. You might be able to recognise that as a plan of 512 Panel?-- Yes.

And if you pick up that black instrument there and click the button you will see there is a red light that appears up on the plan. That's it. Can you indicate where it was that you took the reading, where you read 8 ppm?-- At the vent station there.

And the one you are indicating is the one in the No 1 -----?-- Heading -----

----- in 510?-- Yeah.

Just around the corner from the top roadway - the top return in 512 Panel?-- That's true.

You say that you took the reading as 8 ppm; you were the one that was holding the Drager tube at the time?-- Yes.

While the reading was taken?-- While Steven was doing anemometer reading.

What is your practice in relation to reading the Drager tube? What do you look for in terms of the point in the colour at which you do your reading?-- Well, I don't take it right to the edge of the tip of it. I come back just probably, you know, to where the main colour is. You've got just about a full colour across the tube.

So you don't go to the very bottom extremity where it fades right out?-- No.

You look for a reasonable amount of solid colour?-- That's true.

And when you looked at it that way you got 8 ppm?-- That's true.

Did that reading in itself cause you any concern, the 8 ppm?-- A little bit when we got up the top and it was calculated against the weekly average.

I will come to that in a moment, but I am really wanting to direct your attention to what happened down below. You say it caused you a little bit of concern. You got Steve Bryon to look at it too, did you?-- Yes.

Against your notepad?-- Yes.

That's a white background, is it, the page of your notepad?-- That's true.

Did he agree with the 8 ppm?-- He agreed with the 8 ppm.

Now the anemometer readings were taken by Steve Bryon and recounted to you, you wrote them down at the time?-- That's true.

In your notebook?-- Yes.

Did he appear to do those anemometer readings the way that they would normally be done?-- He did.

Nothing unusual in the way that he took them?-- No.

Could the witness see Exhibit 21, please, Your Worship?

Just while that's being obtained, after you did those readings there, what did you and Steve Bryon do? Did you go straight up top or go somewhere else first?-- We went straight up top to calculate it and all the rest.

Did you see anybody up there?-- We went to Jacques Abrahamse.

Whereabouts was he?-- In the end office, his office.

His normal office?-- Yes.

Was it there that you calculated the CO make?-- That's where Jacques calculated the CO make.

Jacques calculated it, okay. Did you know yourself how to go about calculating that?-- Not really. I know how it's done, but I don't know the formula.

But in any event it was Jacques that calculated it, and he calculated it on the basis of the correct anemometer readings; is that right?-- That's true.

I mean you discovered pretty quickly that you had -----?-- Before we had made any calculations or anything.

Before you had made any calculations, that your third anemometer reading was simply not correct, that's so, isn't it?-- That's true.

Now, I'd like you to go in that document you have in front of you, to the fifth last page. It should be a document that's headed "CO make 512", "page 2" up in the top right-hand corner?-- Signed by Allan Morieson?

Yes, that's right, 8/8/94. Now, I don't know whether you've seen that document before. I'm using it really to just direct your attention towards the calculation that appears there. 22 July 1994, do you see that?-- Yes.

Friday a.m.?-- Yeah, Friday a.m., yeah.

Against vent station 46 you will see the area there, 21.92; that's just a standard fixed figure, isn't it?-- Yes, it's standard spot we take all our -----

The velocity there, 1.77 metres per second?-- Yeah.

Do you remember who it was that calculated the velocity from the figures that you and Steve provided, you and Steve Bryon provided?-- I don't know.

You didn't do it anyhow?-- No, I didn't do it.

There are the wet and dry temperatures, they would be figures that you provided?-- Yeah, we took those.

Relative humidity is the next column, and then you go over to the CO in parts per million, 8 ppm; do you see that one?-- Yes, I see that.

Those figures then that you see along that line were essentially the figures that were provided by yourself and Steve Bryon?-- That's true.

Now, that calculated to a CO make of 18.62 litres per minute according to that column there?-- Yeah.

You were there when that was calculated?-- Yes, I was there.

And what discussion took place about that? First of all, who was present? Yourself, Steve Bryon and Jacques Abrahamse?-- Jacques - I think that was it, I'm not too sure.

What discussion took place about that?-- Well, we were concerned about it being - the amount of litres per minute, and we realised - we asked how they normally took the weekly reading and they said they take it over the weekly average over the Miahak, not off the actual spot one. We thought the spot one could have been from change - they were mining in there while we took it and they could have been changing ventilation or something around and it just come up, or diesel or whatever in the section. We did check into it.

was there discussion about whether or not you and Steve Bryon had correctly read the Drager tube?-- Yes.

Did you have any doubts about whether you had read it correctly?-- Had no doubt at all.

Did you say that at the time?-- Yes.

That you had no doubt about your reading of 8 ppm?-- Steven

and I both agreed with it.

The end result then, the 18.62, what discussion was there about that as to whether that would be used or what the significance of that might be?-- I can't really recall exactly what we discussed about it. I know there was some discussion about checking it out and just seeing what was going on, and we done a - we went to the Miahak - to the Unor and got the weekly average and then recalculated it as well with that.

Do you remember what the weekly average was?-- Don't know. It was on seven when I went - when we went down the pit, or six and a half or something - six it might have been, before we went down and done our vent survey.

It was on what, sorry?-- Reading six.

Before you went down and did your vent survey?-- That's correct. I'm pretty sure of that.

In effect then that calculation of 18.62 that was there and appears on that document, that was based on the velocity readings which you and Steve had taken, and as far as you could see they had been taken correctly subject to that 3.7 being replaced with the 1.7 as you mentioned?-- Yeah.

But they were taken correctly and the CO and parts per million, as far as you and Steve were concerned, was also a reading that had been correctly done and correctly read?-- That's true.

You said there was some suggestion that someone go down and check it. Did you subsequently learn that in fact a further inspection was done that afternoon?-- Yes, I did.

And that in fact Dave Kerr was involved in that?-- Yes.

Did you as a deputy working underground have the practice of keeping a bit of an eye on the CO make in the panels you were working in?-- I checked the Unor every day before we go down the pit most times.

What would you look for?-- Look for high CH4 readings or high CO readings through the place.

In terms of the CO readings you would look for the reading on the Unor screen in ppm?-- That's true.

You weren't able yourself to convert that to litres per minute?-- No.

031194 D.13 Turn 14 mkg (Warden's Crt)

What about the Graham ratio on the Unor screen, would you look at that?-- Didn't know how to get it up. You mean the ratio?

Yes, the ratio that appears on the Unor screen in one of the columns?-- I don't really understand it.

You don't understand that?-- Not really.

Never been told anything about the significance of that Graham ratio?-- I don't know what the figures actually mean, you know what I mean?

Yes?-- Whether it's potentially -----

You didn't bother to look at it because even if you had read the figures on the Graham ratio, it wouldn't have meant anything to you?-- No, that's right.

What about the other miners that you had talked to about figures on the Unor screen, did they say anything about a Graham ratio level or appear to attach any significance to it?-- Not that I know of.

Mr Rose, I want to take you now to Saturday, 6 August. That's the day before the first explosion at No 2. You worked the day shift that day; is that right?-- That's true.

Rod Helander and yourself went underground together?-- Yeah, there was only one Rover available to do outbye sections.

You were on the inspection shift effectively that day?-- That's right, there was no men working in the other sections.

And between yourself and Rod Helander you inspected 1 North-west?-- Yes.

510 fan drainage?-- No, that should have been gas drainage there.

Gas drainage?-- I never got it corrected properly. I missed it.

That's okay, I was reading it from your statement. Gas drainage, of course. 5 South?-- Yes.

And 520 gas drainage?-- That's correct.

Now, the only panel in which there was any work being done that day was 512; that so?-- Yes.

Do you remember what was being done there?-- They were carting in gear for the prep seals and working on the continuous miner and ratio feeder that were broken down.

When you say they were working on the prep seals, what did you understand was happening in respect of 512?-- No, they were just taking gear down for the prep seals.

Taking gear down for the prep seals?-- Yeah.

What, to complete the seals or to do prep seals, what did you understand?-- Well, it was scheduled to be closed on Sunday, so they were just getting the gear on site ready to do that.

Right. Ready to actually put in the seals?-- Yeah.

There were prep seals already there; is that right?-- That's true, to complete the prep seals.

To complete the seals. Now, did you have a conversation with anyone that you can recall about what was happening in 512?-- Cole Klease had sort of concern about the - a smell that he smelt in the return and the high readings of - higher readings of CO that he got.

Right. What did he say? Well, first of all, who was present during this discussion?-- Michael Squires, I don't know whether Rod was there. I just - Rod was on that day but I don't know whether he was there or not. I did say in my statement that he was, but I am not too sure of that.

Cole Klease?-- Cole Klease, yeah. I'm not too sure who else was there. There might have been a few others standing around.

Okay. Now, about what time was it?-- Lunchtime or after.

Do you remember what was said, or can you give us an account of your best recollection of what was said?-- That's getting a bit hard.

Just do your best. I am not expecting any super-human effort?-- Cole was concerned about it and he raised his concerns with Michael, and because everything was ready to roll practically to complete the sealing, he suggested that we go ahead with the sealing before any more rise in CO or any other thing.

Okay. What was said about the smell?-- Well, Cole said he smelt an unusual smell, you know, it smelt like it was a tarry type of smell, you know.

Right. Do you remember what else was said?-- Michael said he would call George Mason and have a talk to George and see about starting the seals, and George Ziebell as well, I think, he wanted to contact for men.

Had you seen George Ziebell that day?-- I saw George at work, yeah.

Okay. Well now, what significance did you attach to the mention of the tarry smell?-- Well, I didn't really think there was a heating there because of the CO readings, it had only gradually gone up slowly, but I thought it more likely to have been stale from not getting good air flow over it, you know, that's what I thought.

When you say the CO readings had just gone up slowly, what had you been able to see or observe in relation to CO readings in 512 Panel?-- Just from watching - reading the CO make up in the deputies' cabin on the wall and on the graph and looking at the Unor daily and that, you know.

When you looked at the Unor you saw the parts per million mentioned there?-- Yes.

Of course, but no CO - you didn't calculate a CO make from that yourself?-- No.

The other thing that you would have been aware of was the graph that was on the wall in the deputies' cabin, did you say?-- Yeah. They used to do one every week, and once it was brought up to date they would pin one inside on the wall in the deputies' cabin.

Each week?-- Yeah.

Would you keep an eye on that graph?-- Yeah.

To what extent would you look at that graph? How closely would you inspect it?-- Oh, just look at it from, you know, across the table type of thing and just look at the trends.

You would see it up on the wall; is that right?-- Yes.

And you would see generally a direction in which the graph line was heading?-- Yeah.

You didn't read the dates that were plotted along the bottom or anything like that?-- No, I didn't.

You would basically look at the line up in the middle?-- Yes.

And that's the other factor that you relied on in determining whether or not there was likely to be a heating in 512?-- That's true.

Okay. Did you have any particular expectation in respect of the CO make in 512?-- I thought we might have had a bit more CO make than we had in other extraction panels I had been in.

Why is that?-- Because of the way it was mined. We were ramping down all the time and the big punches and leaving very small pillars, a lot of pillar crush and a lot of loose coal on the ground, whereas 401 and 4 South A and 4 South B sections that we were in - I was in, we cleaned right into the back of the punch, punched areas, and there wasn't much loose coal around at all.

And the more loose coal on the ground, the more CO you would expect?-- More oxidisation, yeah.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Rose, you were helping Steve Bryon on 22 July to do his first readings as ventilation officer; is that so?-- That's true.

Had you done that sort of work before? Had you ever assisted a ventilation officer before?-- At No 4.

At No 4?-- Mmm.

On how many occasions was that?-- Oh, a fair few times really.

Did you ever act as the ventilation officer yourself or simply to assist the ventilation officer?-- No, only ever to assist.

On this occasion you went down to ventilation station 46 which you have described as being in the No 1 heading in 510 panel?-- That's true.

Why did you go to that particular area to take these readings?-- Because that's where they had been taking the whole lot of them all the way through and that's a vent station. We knew the cross-sectional area and all the rest of it, we would get accurate readings.

Did you understand that to be important in terms of getting accurate readings later for a CO make?-- Yes.

Because unless you knew the exact cross-sectional area of the point where you took the readings, you could have other variables, couldn't you?-- That's true.

Now, on that day you and Bryon each verified the 8 ppm Drager reading?-- That's true.

That was taken right in the vicinity of that ventilation station?-- Right at it.

Same point where you took the air velocity readings?-- That's true.

Now, you said there was some discussion later that day about some concerns about the level of the CO make. It worked out to 18.62 litres per minute?-- Yes.

Did you hear any discussion about a proposal to calculate the CO make on a shift by shift basis from that point on?-- Yes, there was some discussion on that afterwards.

And that was the same day, was it?-- That afternoon, I think, or that day we were talking about we should start doing it, yeah.



That's the same occasion you were having discussions after Jacques Abrahamse had calculated the 18.62 litres per minute; that same discussion you heard this talk about doing the shift by shift make calculation?-- Yes.

What was said about that, do you recall?-- All he said, I think, was because we had a little - a rise down there, you know, it might have just been a flush out of the waste area, but we were getting higher readings, that we should start taking them daily just to get a more accurate reading than going by weekly average, or something a bit closer, you know.

Now, if there were to be readings taken every shift from that point on, where did you understand those readings should be taken?-- At the vent station.

The same place you had taken your readings that Friday?-- That's true.

Again, was that because that was the only way you would get accurate readings to calculate the CO make?-- Well, you knew the cross-sectional area there. You didn't know it anywhere else, unless you went in and measured it again, got surveyors down or whatever.

Now, you know just around the corner from vent station 46 was the 512 top return?-- That's true.

Did you know there to be a monitor point, which I think was No 16, at some stage just inbye of the prep seal area in the top return?-- No, I wasn't aware it was there, right just in behind the seals. I thought it might have been in further.

It might have been. You know the monitor point I am talking about in the top return?-- I do.

All right. Can you tell us generally the size of the top return at that time?-- The top return in further was mined to the normal height and then the bottoms were taken out to another probably six foot in on the top there, further in.

When you say "further in", roughly what sort of cross-cut are we talking about? How far further inbye? Do you want to have a look at the map?-- I wasn't too - I'm not too sure how far we come back out without taking the bottoms out. I know they were taking bottoms out of there. I hadn't been in there.

Back around the area between 1 and 0 cross-cut there were no bottoms taken there?-- No, because of the prep seals.

Now, in that area there, roughly what size was the roadway approximately?-- Seven by two and a half probably.

Was it much different to the area where vent station 46 was?-- Be similar in cross-sectional area.

On this occasion when you were talking about taking the readings every shift, was there any procedure discussed as to how that should be reported?-- Not at the time when I was

there.

Was it discussed later in your presence?-- No.

Did you ever take part in taking measurements on any shift you worked there after that time, 22 July?-- No.

Did you ever work there after that time?-- I don't think I did after that.

Other than this weekend we are talking about?-- Yeah. I didn't work in there that weekend.

So, you don't know what, if anything, happened about taking those readings that had been discussed in your presence after Friday, 22 July?-- No, I don't know where they were taking them at all.

Did you ever hear any discussion about plotting those readings on a shift by shift basis onto a graph of the CO make?-- No, I hadn't seen one.

Was any graph produced in your presence by Jacques Abrahamse on that day, 22 July?-- Yeah, the one with the CO make of the weekly average one.

That's the one that was up to that point, was it?-- Up to that date, yeah.

Was that produced by Jacques in his office, was it?-- Yeah, through the computer.

Now, on that Saturday shift, 6 August, you say Cole Klease expressed some concerns about a smell he detected in 512?-- Yes.

Did you understand the significance of a smell, an unusual smell, like that being detected inside the panel?-- Well, it would depend how strong and what type of smell it is.

Well, if you accept - I think you gave the description of a tarry smell that he was talking about, was he?-- Well, that was what he told me. I never went in there to verify it or to detect it.

You never smelt it yourself?-- No, I didn't smell it.

What does the description "tarry smell" signify to you in terms of an underground coal mine, if anything?-- It could be the start of a heating or just rapid - or a lot more oxidisation in the place, you know, in the coal.

Did you have any training in relation to spontaneous combustion prior to August this year?-- I got issued with a little booklet on it at one stage, if I remember.

Did that booklet, to your knowledge, say anything about a smell associated with heating?-- It did.

031194 D.13 Turn 14 mkg (Warden's Crt)

What did it say, do you recall?-- A bituminous -----

Sorry?-- Bitumen, tarry smell.

What did it tell you about that type of smell? What did it signify?-- That it - I can't recall what it said in the book.

And no-one at No 2 Mine has ever told you or given you any instructions about things to look for in relation to spontaneous combustion, like smells and things like that?-- No, we have never had any instruction.

You did your Mines Rescue just this year, was it?-- Yeah.

Have you ever had any instruction at Mines Rescue about spontaneous combustion?-- Didn't really get that much time.

Thank you, Your Worship.

MR MARTIN: I will be quite a while.

CROSS-EXAMINATION:

MR MARTIN: Mr Rose, for a Unor reading of parts per million of carbon monoxide to have any validity when compared with a Drager tube reading, wouldn't it follow that the velocity would have to be known at the precise time that the reading was measured?-- For the Unor?

Yes?-- To be valid it would have to be.

To do a valid comparison between what the Unor is saying?-- And what we did?

Yes?-- Yeah, it would have to be.

When were you told that there would be more CO make in Panel 512?-- No, I sort of presumed that.

041194 D.13 Turn 15 gc (Warden's Crt)

You presumed that. Just tell me a little, please, about your background. You went to Grade 12 at school, did you?-- Didn't finish senior.

All right. After you left school what did you do?-- I worked as a trainee storeman at Golden Plateau Cracow Gold Mine.

For how long?-- Oh, probably three or four months on the surface as that and then I went underground.

But then how long were you underground?-- About another six months until the storeman quit and I had to go back up to store.

Did you stay then as a storeman for some time?-- Only for a little while, while they were closing down. The mine closed down and they wanted me to stay for the sale and catalogue everything.

Then did you have some other jobs?-- I got this other job lined up and I had to take it.

And the Cracow Gold Mine, of course, was, what, a hard rock?-- That's right.

Yes. I think you have told us in very broad terms that you didn't know very much about the operation of the Unor; is that right?-- The computer part of it. I can read the screen.

Yes, yes. So, you could look at the screen and see your methane make and your carbon monoxide make?-- Yes.

Providing it was showing, if it was on that programme?-- Yes.

Did you have any higher knowledge about it than that or its other functions or what it could do?-- No, I didn't know - I know what it can do, but I don't know how to do it, ring up Coward's triangle and things like that. I don't know how to use it on the computer.

Obviously it can do Coward's triangle. What else, do you know, it can do?-- Ellicott's diagram.

Anything else?-- Give you weekly averages on a graph, daily, hourly.

And what about - there was a gas chromatograph there too at No 2, wasn't there?-- Yes.

Did you have any knowledge about that?-- No.

You mentioned a book you were given. What colour was it, red?-- Orangy red, I think it was.

Just have a quick look, please, and say whether you recognise it, and the blue one too. Do you recognise either of those?-- Yes.

The one in your right hand?-- We were issued one of them, I

041194 D.13 Turn 15 gc (Warden's Crt)

don't know how long ago. It was a fair while now.

More than ten years ago? I am just trying to fix a time?--  
Well, not in the last five or six that I can remember,  
so -----

All right. Who gave you that?-- I can't recall actually.

All right. Have you ever seen the blue book?-- I have seen  
the blue book at the mine.

All right. Where in the mine? Where at the mine?-- In Joe's  
office.

In whose?-- Joe Barraclough's office.

Righto. You were never given one?-- Not that I can remember,  
anyway.

You have told our learned friends - I am sorry. No training  
really on spontaneous combustion?-- No, not really.

Why at Mines Rescue was there no time to learn anything about  
that?-- I only completed me practical part of it in July -  
June/July - end of June.

All right. So, there has not been any -----?-- Haven't gone  
into any more of the stuff, you know?

Since you have been at Moura what training or courses or  
instructions have you ever been given by your employer in  
relation to spontaneous combustion, any at all?-- Not that I  
can recall.

What about the danger of gases, exploding gas underground,  
anything like that, that you recall?-- There had been some at  
safety meetings, type of thing.

What do you recall at safety meetings? What do you recall of  
it at any safety meeting?-- Everyone had a chance to raise  
any concerns they had around the place and it was all -----

Can you recall any safety meeting or - where there was  
anything raised about spontaneous combustion either by you or  
by anybody else?-- I don't remember.

I suppose - I don't want to dwell on this. Do you know an  
organisation called SIMTARS?-- I know of them, yes.

Do you know what facilities they provide or can provide, if  
asked, to a mine?-- They install and look after the  
chromatograph, as far as I know, or keep it.

Is that all that you know about it, really? Is that about the  
extent of your knowledge?-- I knew that they - they were  
formed after No 4 to research into coal mining explosions,  
etc.

At No 2 Moura, before 7 August 1994, attached to or as part of

XXN: MR MARTIN

WIT: ROSE P G

041194 D.13 Turn 15 gc (Warden's Crt)

the Unor system was there an alarm, a horn, a siren? Some alarm that sounded if something went wrong, according to the Unor?-- I am not sure.

You don't know?-- No.

Have you never heard a siren or a horn?-- We have got sirens and horns there for emergency phone number and fan and all the rest.

All right. Do you know anything about a device called a probeye?-- I have seen it. I don't know anything about it.

Where have you seen it?-- In the Unor room, or it was.

Were you given any instruction on that?-- No.

Do you know what its purpose is?-- Yes.

What is its purpose?-- Purpose? To pick up any difference in heat, hot spots or cables or anything.

Even to detecting a heating?-- A heating, yes.

Have you ever seen it used?-- I remember seeing it used in 3 North East. I think it was 3 North East, a long time ago.

Approximately when?-- About 1987.

Was there one at the Rescue station, Mines Rescue?-- I don't know. I think they might have one.

Have you ever given any time to reading a book by a Mr Strang and a Mr MacKenzie-Wood?-- I have got that book, but I haven't read it right through.

Where did you acquire that?-- Through Mines Rescue.

Very recently?-- Just recently, yes.

Before or after 7 August?-- I beg your pardon?

Before or after 7 August, 1994?-- Before.

You know, of course, that the Bowen basin - I am sorry, the Moura seam coal is gassy?-- Yes, I do.

And you know, of course, that it is known to have a capacity to spontaneously combust?-- Yes, because they had a heating in 5 North.

Are you prepared to put yourself forward as some kind of expert on the incubation period of coal?-- No.

Did Panel 512 have a lot more loose coal than other panels?-- It did.

Well, could you put a percentage on it? Did it seem twice as much, half as much again?-- What, in comparison to

XXN: MR MARTIN

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other -----

In comparison to other panels you have worked in or had been in?-- Extracted?

Yes, I am sorry?-- Yeah, probably a third again.

Have you ever seen a final seal built out of this Tecrete?-- This is the first time we had used them.

I suppose you know very little about the correct place to put a final monitor point behind a seal, is that right, or do you have an opinion about that?-- No, I wouldn't know.

You wouldn't know?-- Oh, I haven't got an opinion about it, where I would put it.

You don't have an opinion, all right, but do you know who issues the instruction as to where the final monitor point must go behind a seal?-- No, I don't know.

Thank you.

WARDEN: Do you wish to start, Mr Morrison?

MR MORRISON: I will be more than five or ten minutes. I think I will be closer to an hour.

WARDEN: Yes.

MR MORRISON: I am happy to start, but I don't see a lot of point.

WARDEN: I don't think we are going to gain anything. Thank you, gentlemen. We will terminate proceedings today. We will resume on Monday morning, about 10.15 a.m.

THE COURT ADJOURNED AT 3.06 P.M. TILL 10.15 A.M. MONDAY,  
7 NOVEMBER 1994





WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 05/11/94

..DAY 14

THE COURT RESUMED AT 10.36 A.M.

PETER GILBERT ROSE, CONTINUING:

WARDEN: Thank you, gentlemen. I apologise for this late start. The aircraft arrival was a bit beyond our control unfortunately. Thank you.

Mr Rose, witness, you took an oath on Friday; you understand that?-- Yes.

You are still bound by that oath. It is regarded as still being in force and effect; you understand that?-- Yes.

CROSS-EXAMINATION:

MR MORRISON: Mr Rose, you mentioned that you were usually a deputy for 5 South; is that right?-- That's true.

In fact, there were almost no occasions on which you worked in 512, I think, as a deputy?-- Well, I can't recall.

Well, we couldn't locate a single deputies report for you for 512. I mean, would it be as infrequently as that, almost never?-- Yeah, almost never.

On Saturday, 6 August you worked the day shift and that was the day you and Rod Helander went around several of the sections. That would have been one of the first times you had been in the 512 Panel?-- I went past the 512 Panel going into 510.

I misled you. I didn't mean to put words in your mouth. I didn't mean you went in 512, but you went past 512 that day and that's about as close as you had got to 512 in its lifetime?-- Basically, yeah.

You were doing weekend inspections, there was no production going on?-- There was no production anywhere in the pit.

There was some chaps working at 512 shifting machinery around?-- Yeah, they were working on the continuous miner and shifting the ratio feeder out of the section.

You didn't actually go into the section that day at all?-- No, I shifted an MPV out of the road, out on the supply road so we could get past to go and do an inspection of 510.

You are then driving on an intake roadway for 510, the supply road?-- That's true.

The main roadway, that's the No 1 heading of 510 that runs past the - what, later to be the seals of 512, that's in fact a return airway?-- That's a return airway.

So, on that occasion at least that day with you and Helander you didn't go into 512 in any sense of the word?-- No.

And as close as you got to 512, which is driving on the supply road for 510, there was nothing apparent about the area outbye 512 that gave you any concern at all?-- No.

No smell, haze, heat, nothing like that?-- No.

Now, during that morning you referred to a conversation you had with Cole Klease and others?-- That was probably around about lunchtime or after. I'm not too sure on the time.

No. You weren't sure - I think on Friday you weren't sure that Rod Helander was in fact there; he might not have been?-- No, in the conversation I am not too sure whether he was there.

I will come to what was actually said in a second, but certainly at that point of the conversation it was apparent to you that Squires had not then rung George Mason, had he?-- Not at that stage.

The context of the conversation was something was said and Squires was going to go off and ring George Mason about sealing?-- That's true.

Now, the topic, as I understand it, from what you said the other day, was that Cole Klease was referring to the CO make; is that right?-- To the - about the CO that he found, yes.

So, he was talking, as you understood him, about a parts per million reading that he had taken, not a CO make?-- Not a CO make, just parts per million.

Did he mention the figure, by any chance?-- I can't recall that. Around about 10 parts, I think.

That's your gut feeling for it?-- Yeah, that's all I can sort of remember, around about that.

You can't really accurately remember what it was he said and what the reading was?-- No.

In this conversation did he go on to say anything else about the CO?-- I'm not sure whether he said anything else.

He did mention something else, though. You said he mentioned the smell?-- Yeah.

That was basically it, the CO and the smell?-- Yeah.

Are you sure he didn't refer to the smell in terms of being a benzene-type smell?-- No, he didn't actually say that. He sort of said a tarry sort of a smell.

I see, all right. Did he happen to mention - so far as you can recall, did he mention where he had experienced it?-- No, he didn't actually.

But you understood him to be talking about 512?-- Yeah, well, I didn't really know my way around down there, so I don't know where he done it.

You hadn't seen him on your inspections?-- No.

And you had covered the pit basically apart from 512?-- Yes.

So, you assumed then that he must have been talking about 512; is that right?-- Yes.

All right. The tenor of the conversation was that he had got some sort of a CO reading, experienced some smell, and since preparation work was under hand why not just go ahead and seal anyway?-- That's what I said. That's what my opinion was.

Your understanding was at the time that preparation work was in hand to seal anyway?-- Yes.

It's not as if this was accelerating it by any substantial margin?-- No, well, it was due for the next shift on Sunday anyway to start sealing anyway, so the prep work was in hand for - on the Saturday.

I gather from what you say then that it didn't - what Klease said didn't sound too dramatic or of grave concern or anything like that?-- Well, it didn't mean a lot to me at the time just by parts per million.

He didn't seem overagitated by it either. He was simply conveying some information to Mr Squires and you were there as well?-- Yes.

And it seemed like - I mean, your suggestion was it seemed like a convenient course, since you were doing this work anyway, why not seal it off?-- Yeah, well, they got the miner going and the feeder out of the road, so I thought may as well get going with it.

Your memory is that the description by Klease was of a tarry smell, not a benzene smell?-- Well, that's what he said to me, or that's what I gathered from - what I can remember from it, you know, when we were talking.

There was no - it wasn't more than one conversation. You didn't have one with Klease and then later one with Klease, yourself and Squires. You are talking about the one conversation, aren't you?-- Yes, yeah, 'cause I went down and done an inspection after that back down the pit when some of the other conversations were going on.

When you went back down the pit for the second set of inspections, it again did not include 512, did it?-- No.

Same basic routine as before?-- Yes.

Now, you mentioned in relation to this point in time that you didn't think there was a heating there because the CO readings hadn't gone up or had only gone up slowly, they hadn't gone up in that sharp rise you told us about?-- Yes.

Did you actually look at the Unor screen that day?-- I normally looked at the Unor screen, but I can't recall what it would have been that day.

I remember you saying your normal pattern was to go and look at it in the morning?-- Yes.

And if you followed your normal routine, you probably would have?-- More than likely.

If you followed your normal routine, when you looked at the screen you would flick down over the various points?-- Well, everything is up on there all the time so you just read down them.

There is really no impediment at all. From where you stand at the start point you can see the screen quite easily, can't you?-- If it's turned around. If it's not, you go inside and look at it.

Nobody says, "Don't go in the Unor screen and have a look at the screen.", do they?-- No.

You can't recall from having looked at the Unor screen, assuming you followed your routine, there was nothing unusual about what you saw?-- Well, no more than one part over what it had been the previous week, you know, Thursday, Friday.

Which, to you, wasn't a very great rise at all, was it?-- No.

And that was the predominant thought in this conversation about the CO, that whatever the reading was, it wasn't a great increase?-- It wasn't accelerating real fast, you know what I mean? I didn't think that it was a heating.

Your training and experience told you at the time still that when you are looking at CO, what you are looking for is that sharp take-off, you know, as a signal of a problem?-- Yes.

You certainly didn't see anything like that?-- Well, not from the readings on the Unor anyway.

All right. Now, you mentioned in relation to this point that sealing was due for Sunday anyway. How did you come to know that, can you recall?-- It was on the weekend job work - job sheet.

All right. This is a sheet that Mr Mason produces, I think, isn't it?-- Yeah, on a Friday or a Thursday.

Every Thursday afternoon they have a meeting and the work for

the weekend is laid out in terms of how many men you will need for what sort of job and so forth?-- Yeah, that's right.

Like, you know, four men seals or three men belts or whatever else?-- Yes.

You actually had a look at that two page sheet?-- Yeah, well, most deputies normally do because some blokes are working afternoon shift and there is no undermanager and they want to know what men they have got and what jobs are on.

So, you saw on the Thursday produced sheets that there was some writing on that suggested to you, or indicated to you, that sealing was due for Sunday anyway?-- Yes, that's correct.

Okay. Now, in relation to the sealings at the No 2 pit, you had been through quite a few of them?-- Yes.

The only time men stayed out after a sealing was in the 5 North section, wasn't it, 5 North-west?-- It's the only one I can remember.

All right. The problem with that one was that people were concerned about frictional ignition setting the place off?-- No, I was talking about the one prior to that when they had a heating, the original one.

The original one they had a known heating, didn't they?-- Yeah.

Everybody knew it and it was sealed off knowing that?-- Yeah.

Were you involved in the subsequent one?-- No, I think I might have been away on holidays or something.

Now, when you were working - let me just check this - you worked a number of years at No 4 Mine as well. In relation to seals at No 4, they normally were arranged to happen on a Friday, weren't they?-- Yes, so it had time over the weekend to go through the range.

That's right, but notwithstanding what you say, it's also the fact that at No 4 weekends were non-production too, weren't they?-- Most times, yeah.

So, you would seal on a Friday, there would be no call for production crews over the weekend and so there was a couple of days where people from production crews wouldn't go down?-- That's true.

But deputies would go down anyway to do inspections and so forth?-- Yes.

So, it's not the case that the men were kept out of the pit at No 4. It was just really quite a convenient arrangement to seal on a Friday, production is off on the weekend and the deputies make their inspections on - like, on the dog

watches?-- Yeah, sometimes - I think there was an occasion where we had - we stayed out on a Monday at one time. I can't recall.

It might have been a production RDO perhaps?-- No, we never had RDO's then.

Didn't you?-- No.

Not structured ones, anyway?-- No.

And let me just take you to this point when you were down with Steve Bryon to do the vent readings. When you went to help him did you have any warning, that is, what you were going to do, or did it just sort of happen on the day, Bryon grabbed you and said, "Listen, come and give me a hand."?-- I can't recall. There was something wrong with me. I was - like, I was on partial duty. I came in and I can't remember what was wrong with me, I had a sore back or something, pulled muscle, whatever, and I just was doing some light work with him, helping him.

Truly on spare sections that day?-- Yes.

So, you went to give him a hand. You went down to do, amongst other things, a reading at 512; is that right?-- That's true.

Now, you mentioned that you took that at vent station 46 which, I think, you identified on the plan as being in that No 1 roadway of 510; is that right?-- That's true.

Now, it was Bryon who did the readings and you wrote them down?-- He done the anemometer reading, I done the CO reading with the Drager.

Okay. Now, there was a muck-up with the anemometer, wasn't there?-- The last reading we took for our average, yes.

I think there was also a bit of confusion about the fact that it was a ventilation department anemometer, not the Mines Rescue anemometer which Steve Bryon was used to?-- I think so. That's why he read it incorrectly, because of that, I think.

That's right, it was just a bit of confusion over the different instrument and he read it incorrectly?-- Yes.

Now, you wrote down what he told you about that in some notebook or other?-- Yes.

Do you still have the notebook by any chance or has it long since gone?-- I don't know where it is, I am sorry.

When you came up to the surface you went to see Abrahamse, Jacques Abrahamse?-- Yes.

Down in his office; is that right?-- That's correct.

And I think when you came - you gave him figures?-- Yes.

I think you might have actually given him just one reading for the ventilation, not all three? You might have given him the one average reading?-- I think we gave him the whole three.

Did you give him the notebook or did you just read them out?-- I just read them out from the notebook.

Now, it was pretty much apparent straight away that the



8 ppm was not matched by the Unor?-- That's true.

You knew that pretty much when you took the 8 parts because I think you said on Friday that the Unor had been reading 6 before you went down?-- We had a look before we did go down and another look when we came out.

When you got 8 parts it was obviously immediately apparent to you it was out of whack with the Unor?-- Yes.

But taken at the same monitoring point that the Unor was reading, effectively?-- Close enough to it, yeah.

So, can I suggest that the discussion that you had with Abrahamse, perhaps other people, pretty much straight away was that the readings are out of whack, "We really have to go and verify them."?-- Yeah, well, that's what we started looking at our anemometer reading for and we found we had written down the wrong one, we misread the instrument.

And so, in fact, the reading that was written down was wrong, wasn't it?-- Yes. Two of them were correct, but one was wrong.

And so there was a bit of discussion about whether, in fact, you and Steve Bryon might go down and verify it, but certainly someone was going to?-- Yeah.

You later found out that was done on the afternoon shift, I think?-- Yes.

By Dave Kerr and Mr Atkinson and Jacques Abrahamse?-- Yes.

You found out later on they all got 6 part or less down there?-- Yes.

I take it you would know Mr Kerr reasonably well?-- I do.

You would trust his judgment about this sort of thing, wouldn't you?-- Yes. The reason we wanted Dave Kerr is to bring the Mines Rescue Multiwarn out.

To get a better reading?-- Yeah, well, it reads CO.

Now, when you were with Mr Abrahamse when you first brought up the set of readings was there any calculation done from them or plotting on a graph or anything like that?-- Yeah, Jacques run some through the computer.

That's at the point when the discussion was going on about, "The readings can't be right.", or, "The readings are wrong.", or whatever?-- Yeah, either wrong or we have got to go and have a real serious look at it.

You weren't too enthused about going back down to have another look at it?-- I would have, with the right instruments and everything.

There was some discussion about getting better readings than

you had already?-- Yes.

Now, I think you said on Friday that - I am sorry, I should just finish this point before I go away from it. You wrote down the readings in the book that you had down there and you have mentioned them in your statement, but do I assume from what you told us on Friday that you don't really have a good memory of what the readings were just sitting here now?-- Only around about.

1.7 something?-- Yes.

I think in all three cases you might have said - not in your statement, but in evidence on Friday - it was "1.73 or 4", "1.7 something", "1.7 something"?-- Yes, they are just figures that I thought were in me book, you know, trying to remember.

It would be difficult to remember without the book, obviously?-- Yes.

Now, the day you were down there to do those readings, were people working in 512 at that point, shifting machinery and so forth?-- The day that we were down there?

When you went down with Steve Bryon to take those readings?-- It was on production.

Still on production?-- Yes.

I am sorry, you are quite right. Were there also supplies being brought in, MPVs moving around?-- There is - normally we come in a diesel vehicle ourselves. There are other Rovers around and stuff like that as well.

You came down specifically to take the reading at the vent station?-- That's true.

Were you able to drive the PJB right up to it?-- Right up to the crib table just outside the stopping. Would you like me to show you?

You had better show us. Turn around and look at the map and show us what you are talking about?-- Straight up to here, parked it there - parked it there - and went through the door and up into the thing. First of all we come in, we parked down the bottom -----

Just hang on, slow down. We can all see what you are pointing at, but the lady can't write it down. You are indicating the crib table is at the junction of the No 2 road for 512 and the No 1 road for 510 and your point of entry was down the number 4 road and into the No 1 road for 510?-- Yes.

Now, you were saying on Friday that from time to time you looked at the graphs that Mr Morieson put up about the CO make?-- Yes.

And one was clearly posted in the deputies cabin right next to

where you sit at the table?-- Yes.

And whilst you didn't investigate the underlying figures and so forth, you knew basically what the graph was supposed to show you, CO make for the panel?-- Basically.

And you also knew what you would be looking for on such graph that would be of interest to you, namely the sharp take off?-- Yes.

Do I gather correctly from what you said on Friday that at no stage did you see on that graph that sort of sharp take off that indicated a concern to you?-- No.

Now, if I can take you back - I am sorry to do this to you, but my notes are not in brilliant order, but if I can take you back to this occasion with Steve Bryon. You ended up talking to Abrahamse about the readings you took at VS46. Was there some discussion about that point about whether further readings would be taken day by day or shift by shift?-- Yes, just general discussion.

No firm decision made at that point?-- Not at that point.

Just discussion about whether it would be a good idea or not and how it might go?-- Yes, that's all.

The discussion was really in terms of taking Drager readings on a shift by shift basis?-- Yes.

In other words, the discussion was in terms of getting readings of CO parts down the pit, not in terms of getting CO make every shift?-- Yes.

Can I just ask you this: when you went down to take the readings with Steve Bryon did you know what point you were heading for or did Steve Bryon say, you know, "This is where we are going."?-- I knew what point we were going to.

That was the vent station just outbye the top return?-- Yes.

Now, there is a monitoring station just inbye the prep seal there, isn't there?-- No, it was -----

Inbye the prep seal of the top return?-- That was only put in after the sealing, wasn't it?

No, I don't mean a monitor point, I mean a monitor station; in other words -----?-- Another vent station?

Yes. There was an area marked on the ribs where ventilation could be measured, can you remember that, just inbye - if you turn to the map, just inbye the prep seal right at the top of the top return?-- No, I wasn't aware of that one, but there was one down on the bottom return.

I understand there was one on the bottom return. You don't know anything about the monitor station in the top return and whether its cross-sectional area is the same as the

ventilation?-- No, I wouldn't know.

I have nothing further, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: If I could just ask you about that conversation that you spoke of on the Saturday. You mentioned Cole Klease being present, Michael Squires being present and you mentioned how in your statement Rod Helander was there, but now you weren't quite so sure as to whether Rod had been there. Do you understand what I am talking about?-- Yeah, well, Rod was due to go down the pit too at the time and I don't know whether he was there - he was ready to go down. I don't know whether he was in on the conversation. I can't quite remember all the faces that were there.

You can remember Cole saying something about a smell?-- Yes.

Is that correct? I think you told us on Friday something about a tarry smell?-- Well, that's how he put it over, yes.

Did he at any stage express any concern to you that it may have been related to diesels in some way?-- Not at the time.

At any time did he say that to you?-- No, not that I can recall.

Just so I am clear on it, who out of that conversation made the suggestion that 512 should be sealed?-- I don't know. It was sort of just a general discussion, mutual sort of an agreement to it.

You see, I was having a look at your evidence from Friday in relation to that - for the panel's benefit it is on page 1325 of the transcript. You were asked by Mr Clair, the gentleman right down the far end, to tell us you about the conversation. He said to you, "Just do your best. I am not expecting any super-human effort?" Your answer was, "Cole was concerned about it and he raised his concerns with Michael, and because everything was ready to roll practically to complete the sealing, he suggested that we go ahead with the sealing before any more rise in CO or any other thing."?-- Well, excuse me, when I was in getting my transcript redone there I was asked by the girl that done it whether it was "he" or "we" and I couldn't quite remember that.

You can't remember?-- When I was out here, you know, when I went back in?

I am not being critical?-- It was we were all sort of in discussing it.

Are you saying, in effect, it was sort of not necessarily one person's suggestion, it was something you basically agreed on

amongst yourselves; is that what you mean?-- That's correct.

Now, you spent most of the time working as a deputy on 5 South, didn't you?-- That's true.

I take it you were pretty familiar with the conditions in 5 South?-- Yes.

You were familiar with how far the work had advanced before this incident?-- That's true.

In your statement there is quite a bit of detail about conditions generally in 5 South. Are you familiar with what is in your statement?-- I can remember most of it.

You make this point on page 2 of your statement: "Under normal cutting conditions in 5 South it would be unusual for the Trolex to trip. However when intersecting the methane drainage holes trips of the cutting head only are not unusual depending on the location of the hole in the bord. When this occurs the problem is easily solved by simply adjusting the brattice line." Is that something that happened when you intersected the pre-drained methane drainage holes?-- Yes.

I would like you to look at this original deputies report, No 1205. It is for 5 South, Thursday day shift on 4 August. Is that your report?-- Yes, it is.

Now, there is reference up in the right-hand top corner under "Action Taken". Just tell me if I have read this correctly: "Power off heads 1.25 per cent and power off continuous miner until CH4 diluted below 1.25 per cent. Cross-cut should have been mined 2-3 so" - sorry, I can't read the next word?-- "Live".

So, "live borehole"?-- You know what I mean, it is breathing?

"Was on return side"?-- That's true.

What were you talking about there in relation to - "B/H", I take it, is "borehole"?-- Yes.

What hole in particular are we talking about, can you remember?-- The hole between 2 and 3. There is one hole - only one hole up there.

Now, was there some problem at the time that hole was intersected?-- Well, we were on a long brattice line which didn't help things much and the brattice line was on the opposite side to the Trolex on the miner.

And that happens from time to time, does it not?-- Well, the way we were mining it we intersected on the return side. You know, that's where the - would have been close to bleed the gas off.

What you try and do normally is have the brattice line as close as you possibly can to where you are working, don't you?-- That's true.

Was that an example of what you were talking about in your statement, that incident?-- That's probably the incident that was brought up with the management about that too, decided to drop one road off the top so that we didn't have to mine the pillars the other way around, backhole them.

The top road itself, was that your understanding?-- Yeah, well No 2 heading would be the original top road, but we put an extra row of pillars all the way along the top of the section and made that become No 1 road.

Did you have discussions with management yourself about this problem?-- This here, yes.

Was that the only time something like that happened?-- That's the only time we did that, yes.

In your statement you talk about "trips of the cutting head only are not unusual depending on the location of the hole in the bord"; by that were you meaning that there were other occasions as well?-- When you do intersect a borehole, even on the right side of it, you know, it only just trips the cutting edge. This trips the whole miner.

We are talking here about a borehole which is one of the pre-drilled holes that run parallel with the -----?-- That's right.

You would intersect them every cross-cut?-- That's true.

Who did you talk to about the problems in relation to this incident that day?-- The undermanager, I think. I don't know who was on. I couldn't remember.

I tender the original of that report, Your Worship. I do have copies here available. I will just indicate on the copies the number was cut off and I have written on it myself. It's not actually part of the document.

WARDEN: We will mark that Exhibit 97.

ADMITTED AND MARKED "EXHIBIT 97"

WARDEN: What's the number again?

MR HARRISON: 1205.

XXN: MR HARRISON

WIT: ROSE P G

I would like you to have a look at another production deputies report for 5 South. It's not yours, it's one completed by Mr Mills. It's number 3695 and it's for the Monday night shift on 1 August. You will see in the notes under the first inspection which was done at 10.30 p.m. - or commenced at 10.30 p.m. on 31 July, it looks like "1.3 per cent layering face 2 heading. 5 per cent plus issuing from borehole." Action taken: setting up hose in borehole." Now, did you ever become aware of what I might term the incident which is reported there?-- Yes.

How did you find out about it?-- Read his report.

Do you know off-hand just where the work was in 5 South as at that night shift on 1 August?-- No, I wouldn't - we were breaking off in 2 to 3, I think. He put one hose in, and up further where that last one of mine is where we intersect another borehole that we had to put a hose in to go across the road, I think.

What cross-cut were they at at that stage, do you know?-- I can't recall.

I will give you a look at a plan and tell me if this helps you just from your own knowledge of what was happening in 5 South?-- -----

This is plan 45-14, Your Worship.

You can see 5 South there. Does that plan to your knowledge reflect as far as the work got in 5 South?-- Yes.

By reference to that would you be able to give us some idea as to where the first workings were as at the Monday night shift on 1 August? That's exactly a week before the incident?-- We were in No 2 heading. I think we would have been in No 2 heading ready to break off uphill to No 1 heading - number 3 heading to break off to No 2 heading.

What did you understand the problem was with the borehole on that occasion?-- It was on the wrong side of the miner when we were breaking off and we had to -----

That same problem we discussed earlier?-- Yeah, it's just coming into the intakes rather than being bled off into the return.

Can you look again at that production deputies report that I just showed you? There is a reference immediately under that in relation to "ventilation slow top return. Requested inspection of top regulator."?-- Yes.

Were you aware of any ventilation problems in 5 South at or about that time?-- When we changed from one regulator to the other, sometimes you have slow ventilation if you don't change them over straight away.

Can you have a look at the next entry? "Fall of roof after

approximately five cars. Miner cable hung", it looks like?-- Yeah.

Were you made aware of that fall?-- Well, I would have seen the results of it.

Can you tell us where it was?-- It was probably just one in the face because most times on a break off in the face where we are losing up to 12 inches of stone out of the roof - it's not a big fall. It wouldn't have been otherwise -----

Losing up to 12 inches of stone?-- Yeah, in flakes and that.

Was that a regular problem in 5 South?-- No, we did have some problem up in the top few roads.

You are aware of this particular fall, obviously, from what you've read; is that right?-- Well, if I knew exactly where we were, yeah, at that time. I can't recall now.

Would I be correct in saying that from what you've been saying to me it did happen from time to time where sections of the roof would fall?-- Yes.

And that would happen invariably at the face or elsewhere?-- No, at the face.

It seems that on this occasion that occurred at the face, not necessarily at the same time, but in the same shift that there were readings of 5 per cent plus taken in the area of the borehole?-- But he set up a hose in the borehole, so that probably would have come down from that. He would have -----

Did you ever have to set up hoses from the boreholes at any stage?-- Yes.

Was that something that you did from time to time in 5 South?-- No, only - I've only set up the one there.

When was that, can you recall?-- On that same report where I intersected the borehole on the wrong side.

The same one I referred you to earlier?-- Yeah.

Do you know off-hand, and if you can't answer it don't, as to whether or not we are talking about the same borehole?-- On both reports?

Yes?-- No.

We are not?-- No. Ken set up one of the first boreholes just after the break off and the one I set up was right up - just before breakthrough.

With this plan that I put in front of you would you be able to indicate the borehole where you set up the hose? Perhaps just describe it for me might be best. Just tell us where it is in relation to the headings and the cross-cut - just the headings will do?-- Cross-cut 38, 2 to 3 heading - I mean 3 to 2



heading we were heading. We were going -----

That's the way the workings were going?-- Yeah.

Do you know where the workings were planned for the night shift - it's called the Monday night shift - on 8 August which was the shift on the night of the incident?-- Know where it was up to?

Yes?-- Yes.

Where?-- The break off was just started downhill from 3 to 4 heading.

Now, when I referred earlier to the report which you've got in front of you, the report of Mr Mills, do you know from your own experience or from what you've heard, what borehole he was referring to?-- No, it's not written down as a number, no.

I appreciate it's not written there, I'm just wondering whether you might know from what you've been told or from your own observations?-- I know which one he put the hose into.

You do, do you?-- Yes.

Which one was that?-- The bottom one from 3 to 2.

Was it the case that fairly early on the shift on the night of the incident the crew was due to intersect the borehole between 3 and 4 heading?-- Yes.

Can you just explain in what circumstances you've used the hose previously? You have told us how you have used it; what firstly has caused you to adopt that procedure?-- To stop the gas being on the intake side of the miner and direct it into the return.

So it depends really - the positioning of the miner is very much relevant to whether you do or you don't adopt a course such as that; is that right?-- Positioning of the brattice line is probably more important.

That's probably a better way of putting it. Do you know anything at all about the positioning as it would have been on the evening of the 7th which was the Monday night shift?-- Well, I was in there on the Saturday and the brattice line was across number 3 heading face and into the start of the break off.

It would have last been worked some time on the Friday afternoon shift; is that right?-- I think they tried to work on Friday arv and had problems, breakdown.

If I can talk to you about the stonedusting in 5 South, you mention in your statement, the paragraph after the one I just referred to, that there were difficulties with the wetting agent because the injection system was not operating?-- Occasionally it wouldn't operate, yeah - or a fair few times it wouldn't operate.

XXN: MR HARRISON

WIT: ROSE P G

Just before I go on with that, I seek to tender the original of report number 3695. Again I do have copies available.

WARDEN: We will mark that Exhibit 98.

ADMITTED AND MARKED "EXHIBIT 98"

MR HARRISON: With the wetting agent there were problems in that week leading up to the incident with the Endo dust machine; is that right?-- Yes.

And were you familiar with those problems?-- Yes.

Was it basically out of service?-- It got fixed a couple of times. It got taken to the top and come back down and it was working for a couple of shifts.

Do you know off-hand if it was working again by the weekend?-- I'm not sure.

I have attempted to locate through the reports any reference to it, and the first I can find again is a report of Mr Mills, number 3686, the Friday night shift, 29 July. Can you just have a look at that? Now, there is a reference there to Endo dust not working in the action taken on the second inspection, do you see that?-- Yes.

To your knowledge, after that were some repairs made to the machine which got it working again?-- It was taken out of the pit and serviced and put back on, if I remember.

Do you know when that was?-- No, I couldn't tell you.

There is further reference in deputies report number 3697. I can't identify the signature on this. You might tell me who it is. It's for the Monday afternoon shift for 1 August. Just have a look at this. Mr Russell, is it?-- Clive Russell.

There is reference there, you will see right down underneath the second inspection, "Endo dust pump could be U/S again." Is that "unserviceable"?-- Yes.

When something is marked as "U/S" does that invariably mean it's out of service awaiting parts or awaiting maintenance?-- It's awaiting maintenance or someone to look at it.

It could be waiting for parts?-- Could be.

The next one I'd like you to look at is 3700. If I'm right this is one of yours, or is it? It might be Mr Russell again. It's for Tuesday afternoon shift, 2 August. It's Mr Russell's, is it?-- Yes.

XXN: MR HARRISON

WIT: ROSE P G

This one in the notations under the second inspection refers to the "Endo pump U-S. Required removing." Do you see that?-- Yes.

Was that your understanding roughly as to when it was actually removed and repaired or removed for repairs?-- They would have either brought a fitter down to fix it on the job or taken the pump off itself and taken it up the top.

Have you got any idea roughly just to what extent it was out of service in that week leading up to the incident?-- What, how many times?

Yes?-- Well, no, I wouldn't have any idea.

Now, did you have some concerns about the effectiveness of controlling the airborne dust when this injection system, this water injection system, was not operating well?-- Yes, at the face because all the water goes out of it when it's been pre-bored and drained.

Even though there has been reference to dusting to the extent that the area was as white as snow, I think is the reference that's been made?-- That's all the returns and back workings when we come in and re-dust them again after you have mined.

So, your concerns are from about the last cross-cut completed up to the area of the face. Is it in that particular area that you were concerned?-- No, just that airborne dust generated by the machines.

So, at the very face itself?-- Yes.

That was something that worried you, was it?-- Yeah, well, the Endo dust machine made it a lot better, there wasn't - you just had to be - keep the brattice closer to the face to try and control the dust, you know, keep it away from the miner driver and the men working there.

Do you know offhand when was the last time that you actually worked in 5 South that week?-- No, I'm not too sure because Doug Moody worked Friday, I think. I can't remember.

I did find a reference to the Thursday day shift, a report completed by yourself earlier. That was No 1205. That was the one that you looked at first?-- Yeah.

To your knowledge, was that the last time you actually worked there that week?-- In production?

Yes?-- Yes, I think it was.

At that stage was the Endo dust machine out of service?-- No, I don't think it was. I'm not too sure because it was working - the Endo dust was going through the feeder at the time and, therefore, it goes through to the face.

Now, at the face itself, from your experience, if you are in a situation where you are cutting through those areas where the boreholes are between headings in 5 South, is it the case that from time to time, the way the miner is operated, that area that's being cut is sumped out in the middle; in other words, the cutting goes well into the face?-- Yes.

Have you seen that happen in that particular area in those circumstances where it's been cut like that?-- No, no more than two, three cars.

All right. Then the sides are cleaned up from there basically, is that how it's done?-- Yes.

In those circumstances, if a borehole was being intersected, could it be that there would be quite a substantial area between the brattice line and the area which has been sumped out?-- Not really.

Quite a substantial distance, I should have said?-- Well, the sump wouldn't be any more than three metres and your bag line wouldn't be any more than a metre from the face in that situation where you are in the middle.

Is that the procedure you normally try to adopt when you are mining in that area?-- Yes, put a pogo stick in and put it right near the heads of the miner that starts to sump in the middle.

Your Worship, if I can tender those reports I have been referring to. There is number 3695, 3697 and 3700. I have just been corrected by my learned friend and he is right. 3686 was the first one, then 3697, 3700. I have got copies of two of those, Your Worship, for the panel and my learned friends. I will have to get 3697 photocopied later in the proceedings.

WARDEN: Thank you. Marked 99, 100 and 101 in the order in which they were read out.

ADMITTED AND MARKED "EXHIBIT 99"

ADMITTED AND MARKED "EXHIBIT 100"

ADMITTED AND MARKED "EXHIBIT 101"

MR HARRISON: I have nothing further of the witness, Your Worship.

MR CLAIR: Your Worship, just some short questions.

RE-EXAMINATION:

MR CLAIR: Mr Rose, going back to the events on 22 July when you took that reading of 8 ppm. Now, I think you told us in your evidence-in-chief that - you told us how you read the Drager tube and that you had no doubt that that's what it was reading; is that right?-- That's what the Drager tube was

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reading, yes.

These readings that were taken on the handheld Drager tubes, were they - what did you understand was the purpose of taking them on the Drager tube?-- To check against the Unor.

To check against the Unor, so that were they intended to ensure that the Unor was reading correctly at the time or - when you say to check against the Unor, how do you mean, to check the Drager tubes or to check the Unor?-- Check the Drager tubes and the Unor against each other, you know, to see -----

Now, what was the normal practice if there was some significant difference between the Drager tube and the Unor? What normally happened?-- You check out the Unor.

Check out the Unor. Do you know if there were any steps taken on this occasion to check out the Unor?-- We went - well, they checked what the - I think Dave Kerr would have checked that when he took the handheld instrument down.

Do you know if Dave Kerr did in fact bring the multiwarn with him that afternoon?-- Well, I was under the impression that he did.

Okay. Now, you were asked some questions about where you drove to and where you parked when you took that reading at vent station 46. You indicated, I think, that you parked outside the doorway in No 1 heading in 510 there?-- Yeah, parked straight up the hill.

Then you went through the doorway?-- Yes.

You closed the door?-- Yes.

When you arrived there and parked, was the door closed?-- Yes.

You got out, you opened the door, you went through it and you closed the door and you went over to the vent station where you took the reading?-- That's correct.

So, there was no machine of any kind that actually got into that area where it might affect the atmosphere that was coming out from that top return in 512?-- No, not right in the return. There was nothing in the return.

Not in the return, nor in that area behind the doorway, that's outbye the doorway in that top return or No 1 roadway of 510, you didn't have any machinery in there?-- No.

Okay. Now, I would like you to just have a look at this larger version, if you would, of a plan of 5 South?-----

For the record, Your Worship, it's in fact drawing No 45/20 in document 149 which is part of Exhibit 9, or in fact Exhibit 8, I should say.

You were asked some questions by Mr Harrison about the difficulties with intersecting the methane drainage holes when the new cross-cuts were being created in development of 512?-- Yes.

And that on some occasions the drainage holes were intersected in such a way that the gas coming from the drainage holes would come onto the wrong side of the miner?-- Yes.

That's the intake side, I think you said, of the miner?-- Yes.

Now, you will see represented there in what would in fact be cross-cut 38, although it's not numbered as such on the plan, but it's the furthest inbye part of development there. You will see illustrated an area which is described on the plan as the shaded area where night shift was to cut coal; do you see that?-- Yes.

Then just slightly further along that cross-cut from the - where that cross-cut would extend from that shaded area appears to be a methane drainage hole marked; do you see that?-- Yes.

Now, assuming that there was mining into the shaded area during the night shift on 7 August, then if it was only the shaded area that was mined, it wouldn't intersect with that methane drainage hole; is that so, first of all?-- It may not be. The drainage hole can deviate around the place.

But let's just assume for some reason because of a deviation like that or because the miner went a bit further than the shaded area marked on this plan, assume there was such an intersection there with that methane drainage hole, if you assume that for the moment, what would be the position then with the miner in relation to that methane drainage hole in terms of what you were being asked about by Mr Harrison earlier?-- Where would the miner be?

Yes, where would the miner be and where would the drainage end, as it were, of that methane drainage hole be in relation to the miner?-- The drain on the left-hand side and up beyond the bag line if you intersected it.

Right. Would that have the effect that Mr Harrison was asking you about earlier; that is, would that lead to the methane being on the intake side of the miner?-- No, it shouldn't.

It shouldn't?-- No, if the brattice line is kept up to the face.

Right. Now, you will see where the bag is indicated there?-- Yes.

That's a bag that's designed to ventilate down around the working face; is that right?-- That's true.

Is that what you refer to as the brattice line?-- Yes.

So that if the brattice line was kept in that area that's marked on the plan as "bag"?-- Yes.

And the mining was to take place in the shaded area or just beyond it and to intersect with the methane drainage hole, what would you expect then, that the methane coming out on the left-hand side of the miner should be carried away by the ventilation and then towards the return; is that so?-- That's so.

That would take it down around the back of the bag; is that right?-- Yeah, behind the bag and up the return.

Okay. Thank you very much, Mr Rose?-----

I have no further questions, Your Worship. I will have you pass that map back, if you would.

EXAMINATION:

MR PARKIN: Mr Rose, you stated that you rarely worked on production in 512; is that right?-- That's correct.

But you had some concerns about the panel design and I believe some ventilation problems. Would you like to elaborate on exactly what you mean?-- Well, when they - when ACIRL brought this design to the company and showed it to them, I wasn't very impressed with it myself because we had just spent a fair bit of money on a ventilation survey to tell us not to put dead-ends and stuff in our roadways, and we go and design them into a section.

Were you involved in those discussions at any stage?-- I probably said something about it, but I wasn't involved in discussions over it.

Were there a lot of people like yourself who shared those concerns?-- There were some.

You know the business of ramping down. Did that create some problems for you?-- It created more loose coal.

Just going back to the ventilation, what created your biggest problem with the ventilation? Was it the size of the pillars or -----?-- The roads not being straight through. Air coming in, hitting that and then having to split and go back and sort of come back and ventilate in here again, both ways around the pillar.

So, what you are saying is it would absorb some of the velocity of the air as it hit the coal?-- Well, it increased the ventilation in the top two roads and decreased it down here.

Those concerns were discussed with management?-- Yeah.

RXN: MR CLAIR

WIT: ROSE P G



Have you seen this daily graph? It's a CO make of 512?--  
No, I haven't.

You have never seen that at all?-- No, it hasn't been in the  
deputies' cabin or anything.

Would you look at this, please? It's Exhibit 96. So, you  
have never seen that document?-- No, I haven't seen that one.

Can we turn to Exhibit 21, please? That's a CO make in 512.  
If you turn to five pages from the back you will see some  
readings there of CO make and it's from 22/7 through to 6/8?--  
Yes.

Have you seen that before?-- I haven't seen it with my name and everything on the bottom of it.

Well, if we turn - if you turn the page you will see those - you will see the figures - a graph of the figures from 28/2 right through to 5/8; can you see that? The CO make?-- Yes.

Have you seen that graph before?-- Might not have been right up to date.

You have seen it before?-- Yes.

Well, can you tell me - you last worked on Saturday, 6 August. What was the last reading that you were aware of in CO make in litres per minute?-- I can't answer that.

Well, if we turn back to the previous page you will see that on Saturday, 6 August, 16.66 litres per minute CO make was observed and recorded?-- Yes.

If you turn to the last page of that exhibit you will see that that 16.66 litres per minute of CO make is recorded on that graph; can you see that? I think it is to - it is on weekly intervals and I think it looks like - is it 17? Can you see the graph?-- Is that the graph that is, "Carbon monoxide makes in litres per minute versus weekly intervals."

Yes, that's right?-- And 512 is the diamond one?

Excuse me, Your Worship, can the clerk show - just indicate to him which graph it represents. This one here. It's the one there. You might mark it for him, please.

Do you see that?-- Yes, I see that.

Before I ask you the question regarding the graph, what is your understanding of a problem in terms of CO make in litres per minute?-- Well, litres per minute I couldn't really tell you. Most of the sealings and everything I have ever been in we have just done parts per million.

So, if you saw on a graph over 16 litres per minute of CO it wouldn't register any problem to you?-- If I saw it in a graph and it was - the trend was going along in a steady line and the 16 litres per minute was a lot higher, it had to cause some concern.

Can I ask you the question: if you look at the graph does that graph trend cause you any problems?-- Yeah, the last bit.

One final question: between - if you go back to the graph that is four pages from the back of that document that you have got there? Have you got that?-- Yes.

If you see on 15/7?-- Yes.

I think that registers just over 14 - about 14.2 something litres per minute of CO and then it goes through to 5/8 and it

is approximately the same reading and you will see there is a bit of a dip in the graph there. Are you aware of any ventilation changes that were carried out in 512 between those dates?-- I can't recall any.

Thank you.

EXAMINATION:

MR NEILSON: I want to ask you a few questions about your statement. In regard to the questions and answers concerning the men remaining underground after an area had been sealed, you were asked, "Do you know of any other occasions when men had been sent underground after sealing panels and when the atmosphere within the sealed area presumably would pass through the explosive range?" Do you remember being asked that question?-- Yes.

Your answer at that stage was, "At No 4 Mine I can't remember men ever working underground while a sealed area went through the explosive range."?-- Yeah.

You then said, "At No 2 Mine I believe in the past it has been the practice to work normally after a sealing as most of the sections took a long time to go through the explosive range."?-- Yes.

Okay. If we go to the No 4 Mine experience then, why were men withdrawn after sealing an area, because it was going to go through the explosive range or because it was going to do it quickly?-- Because it was fairly gassy and goes through it pretty quickly. That's why most times it was done on a weekend.

Well, can I ask you this question: at No 4 Mine had the atmosphere not passed through the explosive range by Monday morning or Sunday night shift would that have meant any difference to the actions of men? I mean, would they have gone back or would they have waited for it to go through the explosive range?-- Like I said before, I think we did wait on one occasion on a Monday that we didn't go down.

Is this No 2 Mine?-- No 4 Mine.

So, only on one occasion you can recall waiting for the atmosphere to go through the explosive range?-- Yes.

And on every other occasion it had done that by the Monday morning; is that correct?-- Yes, or hadn't got to it.

Well, I really need you to tell me, in your view is - no doubt there is an element of danger when an atmosphere goes through the explosive range?-- I beg your pardon?

There is an element of danger when an atmosphere passes

through the explosive range?-- Yes, if there is an ignition source, yeah.

Well, there is an element of danger?-- Yes.

Okay. Now, is that element of danger the fact that the atmosphere is going to pass through the explosive range or the time that it is going to take it to do so or is it both?-- Can you repeat that again, to get it right in my mind?

The reason I am asking this question is there seems to be a little bit of confusion and I want to tidy this up. You have said in your statement that at No 4 Mine it was common practice for the men to be brought out of the mine after a sealing - after an area has been sealed whilst that area passed through the explosive range; right?-- Yeah.

You then went on to say, "At No 2 Mine I believe in the past it has been the practice to work normally after a sealing as most of the sections took a long time to go through the explosive range."?-- Yes.

Now, the question I am now asking you is if there is an element of danger in the fact that an area is going through the explosive range - I assume there must be, that's why men were withdrawn at No 4 Mine?-- Mmm.

Then what makes is not so dangerous or not so concerning at No 2 Mine? Is it the fact that there is no problem with it going through the explosive range or is it the fact that it is going to take a longer time?-- Well, in some of the ones that took a longer time we didn't expose as much roof or anything like that and the place was pretty clean. There wasn't any risk of falls or knocking stoppings down or anything like that.

Well, can I then ask you what would happen if there was a risk of a roof fall after the area had been sealed?-- Well, the risk would be you could knock the stoppings down and contaminate the rest of the mine and that mixture could go and find an ignition source.

Okay. But you weren't a normal deputy in 512 Panel, were you?-- No.

Well, I won't ask you some of the other questions I would normally have. You then were asked, "To your knowledge was there anything different about the circumstances of the 512 sealing compared to other sealings?" You said, "I don't think so. I think most of the other panels had that much CO prior to sealing them." Just for my benefit, when you gave that answer were you referring to No 2 Mine only or No 2 and No 4 Mine or can't you remember?-- I can't remember No 4. Certainly No 2 ones, going by Drager tubes, they were similar sort of readings.

So, you would have been referring to only No 2 Mine in that answer?-- Yes.

Okay. You then were asked the question, "Can you remember any occurrence at No 2 Mine when men did not go underground following a sealing?", and you said, "Yes. After sealing the 5 North panel because there was a heating."-- That's the first 5 North sealing. I don't know - I was over at No 4 at the time and I was on shift when they decided to seal it and I went over and give them a hand on the surface, took a loader over for them and general things.

What would make you answer, "... because there was a heating."? Can you remember why you would have said that?-- Because they said that they had a massive CO in the return.

It wouldn't have been because - or could it have been because they had a concern of frictional ignition because of roof conditions in that panel?-- I don't know. I was still at No 4 then.

Thanks.

EXAMINATION:

PROFESSOR ROXBOROUGH: On 22 July when you and Mr Bryon together measured the 8 ppm of carbon monoxide in the top return, did this measurement strike you as being unusually high?-- No, because I had seen at different times during the day on the Unor that - between 6 and 7 parts. So, it was only one more part above what - the high on the computer during the week.

But the previous recent history were values which were somewhat lower than that, as I recall, 5, 6 ppm. You didn't think from 5 or 6 to 8 was a significant increase?-- Are they Drager ones or Unor?

Yes, Drager, I am talking about Drager measurement?-- I wasn't aware of the Drager. I was aware they took the weekly average for the CO make.

Mr Bryon didn't say anything to the effect that it was a significant increase in carbon monoxide?-- I can't recall him saying that to me.

Was it a practice at all when you got, perhaps, a higher than usual or an unusual reading that you would take check measurements? You would take a second measurement with the Drager?-- Not often because they were taking it with the Unor weekly average anyway.

I see, okay. Sorry?-- I was going to say the tubes were in date and all the rest so I presumed they were all right.

Okay. Now, your false measurement with the anemometer which, I think you said, was a velocity of 3.7 something metres per second?-- Yes.

I think it was said by you, and also Mr Bryon, that the actual figure was locked onto the machine when you went to the surface?-- Yes.

Is the velocity actually locked onto the machine or is there a calculation involved in getting to the velocity from readings made on the instrument?-- The metres per second is on - stays on the dial until you reset it.

That means -----?-- Unless it is spun. We put it back in the box and it stayed in the box.

Can I take you through the process? The anemometer is a vane type anemometer?-- Yes.

That has a propeller that spins and is driven around by the air flow; is that correct?-- That's correct.

On that instrument is a dial - a sort of dial, gauge or clock with a pointer on; is that correct?-- Yes.

And when you do a measurement you set that to zero?-- It clicks back to the zero.

Clicks back to zero?-- And the time sets back to zero.

You point the instrument in the direction of the air flow which you run for one minute?-- Yes.

So, you have taken a reading for one minute and the dial gauge will have shown so many metres -----?-- Yes.

Of travel of the air. So, that doesn't give you a direct reading in metres per second, does it? There is a calculation involved?-- No, it gives you that metres per second, 1.7.

It is calibrated that way?-- Yes.

The instrument is calibrated that way?-- Yes, it locks on this and stays on there, anyway.

Can I just clarify one or two things that you said to Mr Harrison when he was talking to you about the circumstances in 5 South? How wide were the cross-cuts in 5 South?-- The width of the roadways?

The width of the roadways?-- Probably 7 metres.

And when you described to him the process of sumping, you are not just talking about the head sumping in to rip down the face, the head of the miner ripping in to sump down the face, you are talking about advancing one side of the heading to a distance of 3 metres; is that correct?-- Yes, the miner going in for that far.

Did you always advance the same side of the heading?-- You always advance the bag side, try and keep your brattice up.

The brattice was always on the solid coal side as distinct from the side that gave you access to the headings? Perhaps I am not making myself very clear?-- No.

If you are in the cross-cut direction, okay, you are driving the cross-cut direction, and I presume, if we can look at the plan on the left, you would be driving in an approximately north west direction; is that correct?-- Yes.

Okay. So that the air bags would be on the left-hand side?-- Left-hand side.

On the left-hand side, thank you. So, the intersecting holes that you intersected - the gas holes that you might intersect would be contained behind the brattice, providing the brattice was well up?-- Yes.

I am trying to see the circumstances in which methane could then have got into the intake air? I am a little bit puzzled about that? Is there any way you could describe it to me simply?-- Unless the brattice fell down somewhere up the back.

I see?-- Or if you are mining it the other way around so that you are intersecting - this is all the solid coal that has been drilled that way -----

Is it possible, perhaps -----?-- Could I draw something?

If you could I would be grateful -----

MR CLAIR: Your Worship, it may be easier on that plan 45/20 which is a blown-up version of 5 South with positions of the machinery for the witness to illustrate the point that Professor Roxborough is asking about. I apologise, I should have really put it up on the whiteboard at the time that I was asking the witness about it.

PROFESSOR ROXBOROUGH: Is it possible to do that now?

MR CLAIR: Yes, if it could go up on the whiteboard it will be a bit plainer

WITNESS: We were mining this way, right. When you intersect it, this is your live -----

PROFESSOR ROXBOROUGH: I wonder if, for the sake of the Court Reporters, it would be okay, and from my point of view, if you could sit down and you can use the pointer? Will it work that way?-- Yeah, I will try and do it that way.

See how we go?-- If you - where they are mining there, they are breaking off down this way to drive down here. These gas holes bleed gas this way. Your brattice line is this way. Your airflow is behind the brattice line and up the return, right? So, as you intersect that hole if you have got your brattice line extended enough your gas is coming out and up behind there and not contaminating the intake side.

If we drove the other way, and say this was a dead end here and we were breaking off up this way, the brattice line for the air would have to come from this side, maybe this side, or if we run the bag along the top side here and this way, when you break into the hole it's on the intake side of the miner and you have to put a hose out - that's talking about the hose before, put a hose into the hole and grout it in and hang it across the top of the roadway and over behind the brattice line to bleed it away.

I see. So you didn't always drive in the same direction when you were breaking away?-- Most times our sequence of driving was this way and down to do it to intersect them on that side all the time. On one occasion we had to drive the other way because the boot end was too far away and we never had enough cable to reach to come up along the top and break off downhill.

And it would require those circumstances for you possibly to get methane over the machine?-- Yes.

Thank you.

EXAMINATION:

MR ELLICOTT: I wonder if you can indicate the vertical position of the boreholes in 5 South in relation to the seam.were they near the top of the seam or mid-seam or bottom seam?-- Most times it was between the top of the seam and the floor. We did intersect a couple just in the floor line, this far from the bottom.

Do you have any idea of the vertical position of the borehole between 3 to 4 headings?-- On this side of the pillar up here it was, if I recall, about half-way, mid-pillar.

That's mid-face?-- Mid-face.

At about mid-pillar position?-- No, five or six metres around the corner. It's about where it's marked on the plan.

That's the first one that would have been intersected on the evening of the 7th?-- Yes.

What about the second one that may have been intersected?-- They wouldn't have got that far.

What if they did?-- If they did, I think it's closer to the roof. It's about 18 inches or so off the roof, but that means that in that pillar they may have hit the roof, turned the drill and gone back down again.

You've indicated that you took a Drager reading while Steve Bryon took a ventilation reading on 22/7; is that correct?-- That's correct.



In taking that Drager reading you would have taken 10 pumps to get a sample?-- Yes, I did.

Are you in the habit of watching the Drager tube while you are taking those 10 pumps?-- Yes, I do look at it to make sure that the bellows have come right out and you look at the tube when you are doing it.

What about the extent of the stain on the tube? Are you in the habit of sort of watching the progress of that?-- Yes. Because you are using a one pump - or in this case I think it was a two pump for the high scale and 10 pump for the smaller reading, I always look at it after the first couple of pumps anyway and watch to see if there is any instant deceleration.

Have you come across instances where you seem to get a lot more discolouration during any one pump than during the others?-- No.

So in all your readings, and in particular with the reading on 22/7 you think the stain sort of progressed fairly evenly down the tube?-- Well, I didn't pay that much attention to it.

Can you think of any means by which air containing approximately 8 ppm carbon monoxide can go into a Unor sample line at one end and come out the other end containing approximately 6 ppm?-- No.

Thank you very much. That's all.

MR CLAIR: I have no further questions, Your Worship.

FURTHER EXAMINATION:

MR PARKIN: Mr Rose, just a quick question on 5 South. It's obvious when you look at this plan that you only intersect to the methane drainage holes when you drive the cuts; is that correct?-- That's correct.

Could you tell me what length of time - and this is a pre-drained area you that were mining?-- Yes.

Could you tell me what length of time there is between, you know, the length of time the holes are on pre-drainage prior to production?-- I can't recall when these were finished drilling. No, I'm not sure of the amount of time it was bleeding.

Have you experienced any problems yourself when you do intersect any of these methane holes on the cross-cuts?-- Only the heads dropping off occasionally on one and a quarter per cent.

XN: PANEL

WIT: ROSE P G

I mean it's pretty well drained?-- The coal in between, yes. It's no more than .2 to .4 depending on the length of bag you've got.

Thank you.

MR MORRISON: Your Worship, we do have the figure for the length of days drained and we are trying to turn it up now. Approximately 15 months is the period it was drained. We have got the precise number of days here for each panel in the pre-drainage operation.

FURTHER CROSS-EXAMINATION:

MR MORRISON: I think you've still got Exhibit 21 with you; is that right?-- Yes, I have.

I just wanted to ask you a couple of things about that. You've got it open at the front, have you?-- Yep.

Could you go to the last page, and you were asked a question in relation to that graph there and you were looking at the second line or second set of lines from the top, weren't you?-- Yes.

You said that the only part of that graph, I think, that gave you a problem was the last bit?-- Yes.

So you are talking about the last line between two dots?-- Yes.

Otherwise that graph doesn't give you a problem?-- Not really. The little high in between there could have been caused by ventilation changes on the day or something like that, but the general trend was still going evenly.

Can you go back three more pages from there, and you should have another graph dated 18 August 1994. Do you see that?-- Yes.

Now, I think you were asked whether you had seen this graph before and you thought you had seen perhaps an earlier version of it; is that right?-- Yeah, well, I saw the one probably up to about 23rd - it might have been 29/7 was the last one I've seen.

You couldn't have seen this one because this one wasn't produced until after the accident, but the only part that was added on after that was that link between 5 August and 6 August, the last section. So there is some previous edition of this, is that right, containing previous segments, that is?-- I can't remember the exact date on it. It was still on the board out at work a while back.

Your memory is it was around 29 July, somewhere around there?-- The 23rd or the 29th, the last couple.

You also mentioned that you thought that concerns about the panel design had been raised with management; do you recall that?-- Yes.

I take it you didn't raise these concerns yourself about the panel design, you assumed that other people had?-- No, I did talk about it, yes.

With management?-- Yes.

Who in particular?-- We talked to Jacques and it was in the planning on it, and I think Mark McCamley and a couple of others, maybe George at times I've said something about it.

Is this at the stage after ACIRL had produced the plan?-- Yes.

Thanks very much.

MR MARTIN: Your Worship, I do have one question arising out of something that Mr Rose just said which I would like leave to ask.

WARDEN: Yes, leave granted.

FURTHER CROSS-EXAMINATION:

MR MARTIN: Do I understand you to say that there was a graph until relatively recent times still on the deputies board?-- Well, it was up during the Inquiry - during - I don't know the last time I saw it there. It was probably a month ago.

Was the graph to what stage? To 29th -----?-- I don't know whether it was the 23rd or 29th.

Of July?-- Of July, I think.

That's the graph there for the deputies to see?-- Yeah, this CO make one here. That's the one that he normally puts up on the board.

But to 22 or 29 July?-- It looked very similar to that up to about that stage.

Yes, but not showing any rise that disturbed you?-- No, not -----

In any case it's a graph to 22 or 29 July?-- Yeah, I think so.

Thank you.

MR MORRISON: Can I just mention document 128A in the Inspectorate's documents has drainage times all the way through the mine, all the relevant ones anyway, for 5 South 3, I think it's here. Anyway it's shown there 12 to 15 months in total.

In relation to that last point that Mr Martin was asking about, I don't know if the panel noted it, but the graph was up the day that the Inquiry inspected the mine in the deputies cabin and it's the one, as I understand it, to 5 August. On my instructions it's still there now.

WARDEN: Well, should we have it?

MR MARTIN: Yes, we should.

MR MORRISON: We can retrieve it.

MR CLAIR: Your Worship, I think there may even be one or two graphs pinned on the board behind that one that's presently up. Perhaps they should be produced in the order in which they appear on the board.

MR MORRISON: We can take care of that. They are the same as ones we have already got. They are no different, but we will retrieve them in the order in which they are. We took the view we shouldn't really touch anything in the deputies cabin, not out of fear of the deputies as such, it's a sacrosanct place, we know, but we took the view that the board should remain that day on the day of inspection.

WARDEN: Thank you. You can arrange for that to happen.

MR CLAIR: My only point is perhaps if they can be kept in that order so we know - if they are taken in position we know precisely what was on the board or at least is still on the board.

WARDEN: Thank you. Thank you, witness. You may stand down.

WITNESS EXCUSED

WARDEN: I just wonder the advantage of starting another witness now. We could take the early lunch and resume earlier. Is that possible?

MR CLAIR: There is no course one way or the other that's going to make it any quicker, Your Worship, so I'm quite happy to take the lunch break now.

THE COURT ADJOURNED AT 12.22 P.M. UNTIL 1.45 P.M.

FXXN: MR MORRISON

WIT: ROSE P G

THE COURT RESUMED AT 1.44 P.M.

MR CLAIR: Thank you, Your Worship. May it please Your Worship, I recall Reece Robertson.

WARDEN: Thank you. Would you re-swear him, please? It's been some time since he gave evidence.

REECE WILLIAM ROBERTSON, RECALLED AND RE-SWORN:

FURTHER EXAMINATION:

MR CLAIR: Mr Robertson, it's unfortunately been necessary to call you back to have you address some particular issues. I don't intend to be all that lengthy with you, though?-----

I wonder if the witness could see Exhibit 96, please, Your Worship.

Now, that exhibit consists of a number of documents. I would like you to look at the first page, though, and you will be possibly able to recognise some of your writing which appears there, in particular on the lines that are numbered off on the left-hand side as 6 and 7; do you see that?-- Yes.

The figures that have been written into a number of those columns. I won't at this stage particularise which of the columns, but a number of figures have been written in by you?-- Yes.

Now, if I can take you to some documents then that appear behind that, in particular a deputies report 3735 which should be the fourth page of that document. Do you see that one?-- Yes.

That's a copy of a deputies report for the afternoon shift of Saturday, 23 July '94?-- Yes.

That's a deputies report that you have filled out yourself; is that so?-- Correct.

The set of initials that appears in the "manager/undermanager" area down there?-- Yes.

Whose are those?-- Terry Atkinson's.

Then if you go to the next page you will see a deputies report 3736?-- Yes.

Which is deputies report for the night shift on Sunday, 24 July 1994 which in fact was the shift immediately following

FXN: MR CLAIR

WIT: ROBERTSON R W

the afternoon shift of Saturday -----?-- Yes.

----- 23 July; is that right?-- Yes.

Again, that second report 3736 is a report which you filled out?-- Yes.

Again, the signature, or at least initials are those of Terry Atkinson; is that correct?-- Correct.

As the undermanager who acknowledges the report?-- Yes.

Now, before I go to the particular contents of those documents, do you have any independent recollection yourself of working those shifts on that weekend?-- No, not particularly because most of my shifts that I worked the weekend, if I could I would try and work those ones, but, no, not -----

There is nothing of particular note in the deputies reports which distinguishes these shifts from any others; is that so?-- Yes.

I think when you were here last time you had your attention drawn to a whole series of deputies reports that you completed during this period and on most of them at least you described the ventilation as slow in the waste and adequate elsewhere in the section?-- Yes.

But apart from those features, these deputies reports would indicate uneventful shifts; is that so?-- That's correct.

Now, one thing that is distinctive, though, about those reports is that in the general comments area on 3735, that's the first of them, what you have put in is "top return readings" and you have set out there the methane level, CO2 level, the CO level and then the wet and dry readings, is that right, temperature readings?-- Yeah, O2, then wet and dry.

O2, sorry, and then the wet and dry, and then the wind velocity?-- That's correct.

Now, that is more comprehensive than what you would normally have put into your deputies report; is that right, or am I right there? Did you always put in the wet and dry and the wind velocity?-- It was at some stage - I'm not sure who told us that we had to start doing it, but we were told that we had to start taking full readings and that included the wet and dry and all the other gas readings that I have here.

Right. I think when you were here giving your evidence last time the change in the nature of your reporting your readings was drawn to your attention; is that right?-- Yes.

I think it might have been pointed out that it was in those - I will be corrected, no doubt, if I am wrong in this - but that it was in the reports which followed 22 July that you put in the more comprehensive readings?-- Yes.

Well, that at least would comply generally with your memory that there was a point in time at which there was a change?-- That's correct.

Now, thinking about it, are you able to help us any more about just who it was who asked you to take more comprehensive - at least not to take more comprehensive readings but to note in your report more comprehensive readings?-- If I recall, it was Stephen Byron.

Stephen Byron?-- Yeah. He was our fire officer at the time. Allan Morieson was away on holidays. I think that's who it was who told me to - asked me to do a set of readings and this was the go now and we had to do the readings.

Do you remember whether you were told at any time the reason why these more comprehensive readings were to be recorded?-- No.

Did you ever, as a deputy, calculate yourself the CO make in litres per minute?-- No, that was left up to the fire officer. We done the readings, put them in our report, and if I recall, the fire officer used to come down once a shift, he would do the same readings and he would do it as well.

That's your recollection?-- Yeah.

When you refer to the fire officer, do you remember Steve Bryon actually doing that?-- Yeah.

Do you have any recollection of Morieson, Allan Morieson, ever doing that? Just say if you don't?-- No, I don't recall.

But your memory - when you refer to the fire officer, you are referring at least in particular to remembering Steve Bryon doing it?-- Yeah, that's correct.

Okay. Well now, can I take you back then to that first page of the document that I have given you, and I would be pleased if you could keep those pages that you have got there in the same order. That's all right. Don't change them necessarily now, but just so they end up in the same order and we all know which pages we are dealing with, but go back to the first page of the document and you will see that that's a document headed "CO make 512", and then there is a table set out which has the date over on the left-hand side commencing 22/7/94, two sets of readings for that, and then 23 July '94, and it was one of those readings for 23 July '94 that I directed your attention earlier?-- That's correct.

Now, that second line for Saturday, 23 July '94, you will see, first of all, that on the printed material, the way that the document was set up, there is reference to "VS 59"?-- Yes.

And the "59" is crossed out and "46" is put in?-- Yes.

Is that right?-- That's correct.

Where that "46" is put in, is that your writing there?-- No.

Then if you come across that same line you will see a set of readings, and if you wanted to just check this yourself, you will see that the readings that are entered in there are in fact the same as the readings recorded in your report 3735 - sorry, 3734, I should say - no, 3735, I am sorry, 3735?-- Yes, that's right.

Now, do you remember putting those figures in on this document?-- To be honest, no, no, I don't. I know that I have because they are my figures.

They are certainly your figures from your deputies report and they are in your handwriting, aren't they?-- That's correct.

Just to identify them for the record, it's the 1.72 in velocity, the wet and dry temperatures of 20.5 and 26 respectively?-- Yes.

.3 CH4, 20.9 O2 and 6 ppm CO?-- That's correct.

They are all in your writing?-- That's correct.

You don't remember putting those in there?-- No.

You don't remember the circumstances under which you put them in there?-- No, I honestly don't, no.

The following line then, which is the first of the sets of readings for Sunday 24 July, if you compare those you will see that they are in fact figures which correspond with your deputies report 3736 for that Sunday night shift?-- Correct.

Again, those readings are ones that have been entered in in your handwriting?-- Correct.

At least in the same columns that I referred to for the previous reading?-- That's right.

Again, you would be in the same situation; is that right?-- Yes, yes.

You can't remember how they got there?-- No, no. I don't remember the circumstances as to why we had to put them in here.

Now, both of these reports have the initials of Terry Atkinson on. Do you remember any conversations that you had with Terry Atkinson about readings in relation to 512 Panel?-- No, no.

Were you ever aware of any documents that were being kept to record readings in 512 Panel on a shift by shift or day by day basis?-- No, I'm not. The only one I remember was the graph that was in the deputies' cabin on the wall that was updated, I think, every Friday.

That was a week by week updating; is that right?-- Yes, that's correct.



Not a day by day updating?-- No.

Well, look, I would like you just to have a look at the second page of that document now. That in fact is a graph which is headed "CO make 512"; is that right?-- Yeah, that's correct.

You will see that there is a part of that graph which is apparently put in - drawn in with a pen rather than being printed out?-- Correct.

That's the last two lines on the graph?-- Yes.

For 23 and 24 July. Now, have you ever seen that document before?-- Not this particular one, no.

You will see in fact that the balance of the graph provides for readings, or at least points, to be plotted daily as from that date - as from 22 July in fact, but in particular from those two points that have been plotted on 23 and 24 July, from there on in there is provision for the entry of a daily plotting?-- That's correct.

Have you ever seen a graph that has provision for a daily plotting of points of CO make in 512?-- No, no, I haven't.

Ever been told that such a document existed?-- No. Like I said, the graph that I recall was just the weekly one and it was posted on the deputies' cabin board. I believe there was one in the undermanager's office too, I am unsure of that, but to my knowledge it was just a weekly graph.

That weekly graph, is that one that you saw when you were here on the last occasion?-----

Perhaps if the witness sees Exhibit 25, please, Your Worship.

Have a look at that one, Mr Robertson?-- Yes, similar to this.

Now, you will see that that may not be a weekly graph all the way through?-- No.

But certainly from - well, it has an entry for 15 July, then 22 July, there is actually one for 23 July but then it goes back to a weekly basis, 29 July and 5 August?-- Yes.

Is that one of the forms that you recollect seeing in the deputies' cabin?-- Yes.

Put that one to one side, if you would. Now, do you recall yourself ever having any conversations with Mr Abrahamse about either the CO make in 512 or the recording of readings by deputies in 512?-- No.

With a view to calculating CO make on a day by day basis?-- No, not with Jacques.

Now, you do acknowledge that your writing occurs on the first page of that Exhibit 96, that's the CO make for 512 on those

two lines. Is there any other writing of yours anywhere there that you can recognise?-- No.

That writing up the top is not yours, for instance?-- Where, right up the top here?

The top - just along the top of the document?-- No.

Okay. Now, obviously then you at some stage saw this document, or the original of it, to put your figures on there?-- Yes.

You can't say just when that was?-- No. As I said, no, I really don't remember.

Then you wouldn't be able to say when you last saw the document either, I take it?-- That's correct.

Thank you, Your Worship. Perhaps I should just take the witness quickly, Your Worship, to some other documents which are flagged here.

Just look at this bundle of documents, if you would?-----

For the record, Your Worship, it's the originals of the 512 deputies reports covering the period 1 June '94 through to 5 August '94 that I am handing to the witness.

If you could just look quickly at the ones that have been flagged and which have an "R" on the yellow flag there, you see?-- Yes.

Just tell the Court the date, first of all?-- The date was 26/7/1994.

Right, and that's one of your reports?-- Correct.

You have recorded all of the same kinds of readings there?-- Correct.

For one of your inspections on that date?-- That's correct.

You don't recollect ever transferring those to any document similar to that first page of Exhibit 96?-- No.

Just go to the next - coming forward in the bundle to the next one with a flag. That's again a report of yours?-- Correct.

For which date?-- 27/7/1994.

Same set of readings again?-- Correct.

Again, you don't recall transferring those?-- No.

Just go to the next one?-- This is 28/7/1994 and the same readings have been done again.

Same kinds of readings?-- Correct.

Again, you don't recall transferring those?-- No.

And the next?-- This is 29/7/1994, again they have been done but I don't recall them.

That's your report again?-- That's correct.

In relation to all of those, you can't recall why it was that you were recording all of the data?-- No. As I said, I think Stephen told me that we had to start taking them. That's basically the only bit of memory I have of it.

Certainly you don't recall yourself transferring any of those further ones that you have just looked at now?-- No.

To any other document?-- No.

Do you remember any document down in the crib room on the panel which provided for these readings to be recorded?-- No.

Thank you.

FURTHER CROSS-EXAMINATION:

MR MacSPORRAN: That exhibit in front of you, Exhibit 96, you have identified the writing on part of that as being in your hand; is that so?-- That's correct.

And the two lines of entries by you relate to Saturday, 24 July and Sunday, the 25th?-- That's -----

23rd and 24th, I beg your pardon?-- Yeah.

Weekend of 23/24 July, and the readings you have identified are those for velocity, wet and dry temperature and then the gases methane, oxygen and carbon monoxide?-- That's correct.

Now, you were then referred to the deputies reports, in particular 3735 and 3736, which are the two reports from - that relate to those same figures; is that so?-- That's correct.

If you look at 3735 you will see that all of those figures are, in fact, recorded?-- Correct.

That's methane, oxygen, carbon dioxide, wet and dry temperature and carbon monoxide as well as air velocity; is that so?-- Correct.

Now, the following report, 3736, has all of those figures again except it doesn't appear to have the air velocity reading?-- Correct.

But the sheet - the table where the air velocity is recorded does have a figure; is that so? 1.68 metres per second?-- That's correct.

Can you tell us if you recall the circumstances wherein you haven't recorded it on the deputies report, but apparently you have put a figure on the table?-- I have no idea why.

Normally when you did the air velocity reading that would be underground, obviously?-- Correct.

You would fill out your deputies report at the end of the shift underground?-- On the surface for the weekend.

On the surface. Where would you record the figures for the readings underground?-- Usually on my arm.

On your arm? You come out and transfer those onto the deputies report?-- Normally, yes.

I think you have told us you have no recollection of filling out this table at all?-- No.

So you really can't help us with how a velocity reading could be tabulated on there and not in your deputies report?-- The only thing is if I have done this earlier on in the shift and

written it in here and gotten it dirty or just haven't seen it. I don't know, to tell the truth.

I suppose one way is you may have filled out the table from the reading recorded on your arm, or even from memory, and then forgotten to place it on the deputies report when you later filled that out?-- Quite possibly so.

Can you say for us that the 1.68 metres per second recorded on the table would, in fact, have been the reading that you took underground?-- This long ago now, no, I couldn't be sure.

It is certainly in your writing?-- Yes, it certainly is.

If you recorded that figure on the table you would expect that you calculated that reading or took that reading underground at some stage that day?-- Yes, yes.

Now, on the deputies report the figures are recorded after you have written "top return readings"; is that so?-- That's so.

The tabulation refers to ventilation - vent station 46?-- Correct.

Were your top return readings taken at ventilation station 46 or somewhere else?-- They weren't in the beginning, no, they were taken around the corner inbye of the prep seal at the vent station there, I just forget the number of it off-hand, and then Stephen come down and he was coming into the section to do the readings as well and I was in there already doing them and he said, "What are you doing down there, you fool, it is up here we have got to do it, 46." I said, "No, we've been doing them here all the time, Eddie and myself, there's all the tubes there on the floor." There was a marked area there already and it was after that period, I forget what day that was, that I started taking them around on vent station 46.

The evidence appears to indicate this new system, taking the readings every shift started after - started that weekend that you were taking them on 23/24 July. Do you know how long after that time it was that you started taking the readings at vent station 46?-- No, I don't.

Was it a substantial period after that weekend?-- It would only be a guess if I said it, and -----

All right?-- No.

Anyway, you had been taking them and you said "Eddie". You mean Eddie Bentham?-- Yes.

You had been taking them inside the top return just inbye of the prep seals; is that right?-- That's correct.

And you say there was a vent station there?-- That's correct.

By that do you mean there was a Unor monitoring point or was there something different to that?-- There was a mark on the rib where it had been marked by the fire officer, and I

believe that was Allan Morieson who marked it, and that was a vent station there. He just used it later on, I believe, because of the eddies that you would get with the ventilation going through the stopping.

When you say "stopping", you mean the prep seals, do you?-- Yeah.

So, do I understand that the - that having been established as a vent station it was a known cross-sectional area at that point?-- I believe so, yes.

When you - I suppose this goes without saying, but when you discovered that you had been taking the readings, in effect, at the wrong point, was there any attempt made to correct the information you had been taking inside the top return; in other words, to have the records noted that is where you had been taking the reading as opposed to vent station 46?-- Not so far as I know, but from the fire officer doing their readings, they were doing them at 46 so I was led to believe all the time, and so they were doing their readings daily as well as the deputies in the section.

Right?-- And so far as I know, no.

So, on that tabulated sheet in front of you, Exhibit 96, the two readings that you took for air velocity being 1.72 and 1.68 metres per second for 23/24 July purport to have been taken at vent station 46 but, in fact, were taken in the top return?-- That's correct.

Just finally can you tell me how it was or what your practice was in terms of taking the air velocity reading; what the procedure was?-- You would get the vane anemometer, set it up on the stick - it had a stick with it. The normal practice was to do a practice run first, but most of us knew how to do them fairly well. You set the timer, put it up in the top corner, wait for the clock mechanism to go off, you could hear it click, and then you would traverse the road. As you come up to the top of it to stop eddies off your body you would swing underneath it so that you come down on the other side of it and could walk out instead of going backwards and it should take you a minute to traverse the road. You would do one reading like that then wait three minutes, do another reading, wait another three minutes, do another reading and then take the average of those three readings.

Just so the record will indicate what you were demonstrating, you are saying when you traverse the roadway you are indicating from floor to roof?-- Floor to roof, floor to roof, floor to roof across the roadway.

When you say "floor to roof" you mean to the actual roof or as close as you can get to it?-- Well, you could reach the roof should you want, but, no, you wouldn't put your instrument right on the top because of your clock mechanism there.

It was on top of the instrument, was it?-- Not on the very top, off to the side a little. If you had it sitting in front

of you it would possibly be at 1 o'clock, the timer mechanism was, which was a lever that come up about an inch off it at an angle. So, if you took it up like that you would hit the roof with it as you traversed with it. So -----

When you were taking that reading, assuming you did so in the top return, would you be facing inbye with the instrument in front of you?-- No, when you take it - if you can imagine you would have your instrument on the end of that, you would be to the side of it. You would start up in the corner, then just start traversing.

Walking sideways?-- Walking - yeah, backwards, actually.

Backwards?-- Then you would swing it over the top of your head, come down and walk over to the rib on the other side, doing it like that, taking a minute to get there.

You were careful to make sure your body didn't interfere with the airflow going to the instrument?-- Yeah, the stick - it was on a metre and a half stick, possibly, and you would keep it at arms length as well as - whatever the length of your arm was and that as well.

Finally can I get you to look at those deputies reports again from the originals in the book? The ones you were shown lastly, the originals there. Over here?-- Oh, yes, sorry.

The bundle. I think you looked at four of them, 26, 7, 8 and 9 July. Can you just look at those again quickly and tell me whether on each of those you have actually recorded the air velocity readings?-- On the 26th I have, on the 27th I have, on the 28th I have, on the 29th I have.

All right. Now, just again quickly can you tell us where it was that you took each of those series of reading? Is it on the top return. On these reports dated 29/7 I have indicated vent station 46. On 28/7/1994 I have indicated vent station 46. On 27/7 I have indicated vent station 46. On the 26th I have not indicated which vent station it was.

Have you written anything like "top return reading"?-- No, I have got "On the waste return".

So, it seems at least from 27 July you were taking them at the right position in vent station 46; is that so?-- Yeah.

Thank you.

FURTHER CROSS-EXAMINATION:

MR MARTIN: Entering the entries we have been speaking about on the 23rd, I think, or 24th July, that seems to be the first occasion that was done by you, into that format?-- That's correct.

FXXN: MR MARTIN

WIT: ROBERTSON R H

Where did you do it? Whereabouts at No 2 Moura?-- I have no idea.

You really can't be serious, can you?-- I certainly am.

Well, that form wouldn't have been underground, would it?-- Not if it was this clean possibly, yeah, but I couldn't say for sure, no.

You don't - you say you don't remember?-- That's correct.

At all?-- That's correct.

Something which was not at all a usual everyday occurrence?-- There were a lot of things that went on from your day to day that were unusual. To pick one particular thing all the time would be rather difficult and I honestly don't remember, as I have said.

Looking again at 96, do you recognise any other handwriting on it or figures, whether of deputy, undermanager, or underground manager-in-charge?-- No, I don't.

None at all?-- No. The "2" - if anything there is only a "2" there that looks similar to that of Steve Bryon's. On Sunday, 24/7, on day shift, I would imagine that would be.

That's immediately under -----?-- Yeah, immediately underneath that, "1.72", the "2" looks a little similar to that of Stephen's.

What about the writing on the top, "CO 1/pm area and velocity", etc? Do you recognise whose writing that is?-- No.

Just leave that to one side. I want to talk about something else, very briefly. Were the bottoms taken in the top return?-- Yes, they were.

To what depth?-- 4 and a half, 5 metres, probably.

Just so that I am not confused, is that 4 and a half, 5 metres of bottoms?-- In total, from the bottoms to the roof.

All right. That is what I thought you meant - were meaning to convey. So, the machine cuts No 1 road down to cut-through 13; is that right?-- No.

To a certain level - of course - well, as you progress with the -----?-- The top return was cut - the bottoms were taken out on development, not extraction.

That is what I wanted to find out. Thank you.



FURTHER CROSS-EXAMINATION:

MR MORRISON: Can you just tell me if one looks inbye on the top return where did the bottoms that were taken commence? At around about 5 cut-through?-- I beg your pardon?

Down around 5 through to about 9?-- No, around about 2 to 3, from memory.

2 to 3 through to?-- About 7, somewhere there.

Not up in the area we are talking about where the vent station is?-- No.

The vent station where you took some of these readings right inbye the prep seal was, in fact, a marked vent station on the rib?-- Correct.

Marked by the fire officers in the same way VS46 is?-- No, it didn't have the reflective sign there. It was written in stone dust, marked with a "V" and the vent station - the number I just forget off-hand, but it was marked on the top side, I think, as I recall.

You could tell where the point was by the mark on the rib?-- That's right.

Now, you said a couple of times - I think I made a note right - that the fire officer would come down himself once a shift or, at least, once a day to do readings himself?-- Yeah, I remember Mouse coming into the section and doing readings down there while I was in there.

At the same points as you were or at VS46?-- At vent station 46, so I found out.

And you don't know whether he translated any of these figures onto this sheet, Exhibit 96?-- No, I don't.

Okay. Now, can I just ask you to confirm that on the copy of that 96 that you have got there I think it is pink colouring for the two lines that are in your writing?-- That's correct.

All of the writing that is on that document that is yours is in pink?-- That's correct.

I might just get you to do a little mechanical exercise for me so we can continue to see how this goes. I just want you to get down some - like, a table at the bottom so we can see whose colours belong to who. Can you write one for me - this doesn't relate to your evidence. You can put them anyway below in that blank area. Write in one line the word, "Atkinson", brackets "confirmed" and then close the brackets, and now can you just colour that through with orange and directly under that the words "Atkinson possible", and put "possible" in brackets, then colour that through in yellow. When you finish that then directly under that "Robertson" and when you finish "Robertson" you can colour that through in pink. That's all done?

Can I just ask you to look at one other thing, please? You won't need the pens or the colours any more. Can you look at line 12 on that table, the last set of handwritten figures, and having marked that can you turn to the deputies reports the second last one? It should be one of your reports of 26 July, 3743. Have you got that?-- Yes.

I think you might just confirm for me that the figures you had in the deputies report are in fact, with the exception of velocity, the figures that appear in line 12, if you leave aside velocity and you leave aside the calculation, whoever wrote them in wrote them in from your report, it seems?-- Or they got the same readings as I, one or the two.

Or they got identical readings?-- That's correct.

I think you may have indicated that looked like Mr Bryon's writing?-- No.

Not sure?-- No, I didn't indicate that one. I went to straight underneath 29/4/94. That looks similar to Stephen's too. That's the only one that looks similar to his.

Thanks very much.

MR HARRISON: I have no questions, Your Worship.

FURTHER EXAMINATION:

MR ELLICOTT: Weren't you at all curious as to why you were asked to start taking these readings?-- I have no recollection of being - why we had to do them there. I'd have to say no. That's all I can say, I'm sorry.

Thank you.

MR CLAIR: No re-examination, Your Worship.

WARDEN: Thank you, Mr Robertson. You may stand down.

WITNESS EXCUSED

MR CLAIR: I call Steve Bryon, Your Worship.

STEPHEN MICHAEL BRYON, RECALLED AND RESWORN:

FURTHER EXAMINATION:

MR CLAIR: Mr Bryon, I want to ask you some more questions about the events of 22 July and about some documents. You will recall when you were here on the last occasion you did tell the Court about taking part in the measurement of the wind velocity and the CO parts per million and other readings down at 512 Panel with a view to calculating the CO make; do you remember that?-- Yes, that's correct, yes.

I think you told us that those readings were taken at vent station 46?-- Yes.

Now, you mentioned that there had been initially some wrong reading recorded for the third of the anemometer readings which was to be averaged with the other two?-- Yes.

And that fortunately you were able to consult the anemometer and look at the locked in reading; do you recall that? I think the figures were that you had written down - sorry, the gentleman with you had written down 3.76; is that right?-- Yes, that's correct.

That was Mr Rose?-- Yes.

And that in fact that should have been 1.76?-- Yes.

I just want to ask you about that first of all?-- -----

If the witness could see Exhibit 21, please, Your Worship?

Go to the page which you've looked at previously and which is five pages from the back of the document. I think we have established that the first set of readings there for 22 July 1994 was the set of readings which came from yourself and Mr Rose and in fact the note down below indicates that. Now, you've told us that that CO make was calculated by Jacques Abrahamse?-- Yes.

You were present at the time?-- Yes.

Just to be clear about this, was there a CO make calculated at any time on the basis of the incorrect anemometer figure which you had written down or was it the case that before there was any calculation of CO make that the mistranscription of the anemometer reading, the third anemometer reading, was cleared up?-- I believe the latter.

The latter? Because when you went to average out the anemometer readings you found that one of them was grossly in excess of the other two?-- Yes.

I think you told us it was at that point you consulted the

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WIT: BRYON S M

locked in reading on the anemometer?-- Yes.

So to your recollection there was never any CO make figure calculated on the basis of the incorrect anemometer reading?-- No, not to my knowledge.

Do you recall any later conversations in which the high CO make in the panel was ever attributed to an incorrect anemometer reading, any conversation in which you were involved?-- No, I don't recall that.

From what you've told us, it wouldn't be correct to say that there was any exceedingly high CO make figure calculated then on the basis of some wrong anemometer reading?-- No, not on an anemometer reading.

This figure that appears there then of 18.62 for the reading at vent station 46, that was calculated on the basis of an anemometer reading which reflected the correct readings; is that so?-- Yes.

And the other figures that are all recorded there were used, including your figure of 8 parts per million?-- Yes.

I may have asked you this at the time, but when you saw that figure of 8 ppm and recorded that down at vent station 46, who was it that was actually reading the Drager tube at that time?-- It was myself who read it first.

You read it first and what did you do then?-- I then handed it to Peter Rose and said, "Would you clarify that as 8 ppm?"

And he read it?-- Yes.

And confirmed it as 8 ppm?-- Yes.

I think you did tell us in your evidence that one of the things that was then discussed later after you had taken up with Jacques Abrahamse on the surface and a CO make was calculated, one of the things discussed was establishing a system whereby readings were to be taken each shift in 512 Panel?-- Yes.

Were you party to those discussions?-- I was party to some discussions about that, yes.

What was the extent of the discussion that you were party to? First of all, when did it take place on that Friday?-- The discussions I had with myself, Mr Abrahamse, Mr Rose and Mr Barraclough were after we had calculated that reading. Even though we believed that that 8 ppm may be perhaps higher than normal, we still discussed that we should take a little more - put a little bit more effort into doing it more frequently than on a weekly basis.

Who suggested that?-- It was suggested by - I think it may have been suggested by myself and Mr Barraclough who was the acting manager at the time.

And Mr Abrahamse, did he agree with that?-- Yes, he did agree with that.

Was there any discussion as to what practical steps needed to be taken to achieve that, what directions needed to be given and what kind of records needed to be kept?-- Not in the discussion I had, no.

What happened after the discussion that you had? Did you have any further association with establishing that system during that day, that's 22 July?-- No, I did not.

What was the next point of association that you had with it?-- The next point of association I had with it was when it was told to me by Mr Mason on the Monday that - and I also read a notice that he had put in and around the mine on the surface that it would be done on that basis.

Apart from the notice that was put in and around the place did you see any documentation which related specifically to it that you can recall, that is specifically to establishing and running this system?-- I did see a log book that had been printed, yes.

Could the witness see Exhibit 96, please, Your Worship?

Now, that's a collection of documents, Mr Bryon. The first page of it is the one that I want to direct your attention to first of all, and in particular if you go to line 8 as they have been numbered over on the left-hand side?-- Yes.

And that appears to relate to a set of figures which would, as the document is set up there, be the second set of figures for Sunday, 24 July 1994; do you see that?-- Yes.

Now, the writing which appears in that column from 1.72 in the velocity column and along that line in the following columns, what can you say about that writing? Do you recognise that?-- Yes, that would appear to be my writing.

Can we just establish how much of it is yours? The 1.72 in the velocity column?-- Yes.

The 21 wet temperature?-- Yes.

26 dry temperature?-- Yes.

.4 CH4?-- Yes.

20.9 O2?-- Yes.

6 ppm CO?-- Yes.

What about the figure from the Miahak, six? Do you recognise that?-- It appears to be my writing.

That appears to be yours too. Righto. Well, I would ask you just at this stage to turn over to the documents behind that and in particular to a shift report - sorry, production

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deputies report 3738. It will be about the sixth page into the document?-- Yes, I have it.

That's your deputies report?-- Yes, it is.

For the afternoon shift on Sunday, 24 July in 512?-- Yes.

Now, you have recorded there in respect of your first inspection over on the right-hand side, readings taken at vent 46; do you see that?-- Yes.

Now, those readings there, do those readings correspond with the readings in your handwriting on that document on the first page, at least in so far as they go?-- Yes.

Righto. Well, now in the readings that appear on the deputies report, their wet and dry temperatures, the wind velocity, the oxygen and methane readings, but there doesn't appear to be a CO reading; do you see that there?-- Yes.

Can you see any CO reading recorded anywhere on that deputies report?-- No.

Just look back at the first page then. First of all, is that the log that you have referred to as the log set up for the purpose of taking these shift by shift readings for CO make in 512?-- Yes, it is, yes.

Are you able to say anything about when you first saw that document?-- I couldn't exactly recall when I first saw the document, no.

You seem to have been on shift for that afternoon shift of the Sunday which is the shift for which you have entered the readings?-- Yes.

Are you able to say whether you saw it at that time?-- Not 100 per cent, no. I couldn't say whether it was exactly at that time.

Can you say anything about the circumstances under which the figures for measurements at vent station 46 at that shift came to be on the document here, the CO make, 512 log?-- No, no, I can't recall putting those figures on there.

Do you remember whether you received any instructions in relation to filling the document out?-- No, I can't recall having a direct instruction to fill the document out, no.

Do you remember where the document was at the time that you put those readings in for the Sunday shift, 24 July?-- I would imagine that the document would have been on the crib table in the section.

This document, this log?-- I believe so, yes.

When you say you would imagine that, do you have a memory of this particular document being there?-- No, I can't exactly recall that, no.

Do you know whether there was any document like this kept up on the surface? Do you recall that?-- No.

Do you remember any such document as this being in, for instance, the undermanagers office?-- No, I have seen this document in Mr Abrahamse's possession, in his room.

Now, when did you see that?-- I can't recall exactly when I saw it, what date, but I have seen it there.

How long was it after the 22nd of July?-- I would imagine it would have been half-way down this document, possibly on the 25th, on the Monday.

Possibly on the Monday. Yes, I see what you mean. Half-way down the columns. At the time you saw it - you say you saw it in Mr Abrahamse's office; was it in the small room he is in or in the general room -----?-- No, it would have been in the small office.

In the small office where he has his desk; is that so?-- Yes.

Do you recall where it was in his room?-- It was on the desk on the left-hand side of the room.

As you walk in?-- As you walk in, yes.

Were there any other documents with it?-- No, just this document, I believe, in a blue folder.

Under what circumstances did you see it? Had you gone there to put figures on it yourself or to see what figures were on it?-- I can't recall.

You were the acting ventilation officer at the time. Was there any discussion with you about any activity on your part to supervise the filling out of this document?-- No, there was not.

Did you know who was in fact entrusted with the duty of ensuring that the document was filled out?-- No, I do not.

Now, you told us that the arrangement was that there should be measurements taken at each shift for the purpose of the CO make being calculated. At the time that you had those discussions was there any discussion about a graph being created to show the CO make in 512 on a daily basis, that is, plotting points on a daily basis?-- Not to my knowledge, not a graph on a daily basis, no.

Just have a look at the second page of that Exhibit 96 there and you will see that in fact it is a graph headed "CO make 512" and that the dates running across the bottom are initially on a monthly and then on basically a weekly separation but with one or two aberrations there, and then that comes right up to 22 July. Do you see the reading there for 22 July?-- Yes.

In fact, there are two points plotted for 22 July?-- Yes.

One of them being consistent with that CO make that was calculated on the basis of your figures of 18.98; do you see that one?-- Yes.

That's the one with the question mark against it, and the other being consistent with the second reading that was taken on that Friday after you were no longer involved, that is, 13.7?-- Yes.

Okay. Then you will see that there are two more lines drawn in for 23 and 24 July respectively?-- Yes.

Now, you will see then that in fact along the bottom axis of the graph there is provision for the plotting of a daily point, or the plotting of points daily for this CO make in 512?-- Yes, I do.

Right through to 2 August?-- Yes.

First of all, let me ask you this: have you ever seen that document either with the additional lines for 23, 24 July on



or even without those lines on?-- No, I have not.

Those points that were plotted for 22 July, they weren't plotted while you were about, or at least the top one wasn't plotted when you were about on that day?-- No.

When you saw the CO make 512 log that you have already referred to, the first page of that exhibit there, in Mr Abrahamse's office, did you see any graph like this, the graph that you have just looked at, together with it?-- No, I can't recall seeing it, no.

Well, you were the acting ventilation officer at the time. Was there any discussion with you about such a graph being in existence at any time?-- Not for a daily basis graph, no.

You say that there were discussions on the Friday that there should be this extra vigilance, as it were, in respect of the CO make in 512 with shift by shift readings and an eye kept on the CO make from day to day. Did you take up with anybody during the following week about what steps were being taken to put that into effect?-- No, I did not. I was under the belief that it was already in effect from the notice that was on the board.

From the notice that you had read?-- Yes.

That notice, of course, from what you have told us, directed deputies to take these readings on each shift?-- Yes.

Did it direct deputies as to where they were to report that, just on their deputies reports, or was there any more specific direction than that?-- I don't believe so, no. It was just to take the readings on a shift basis.

Okay. As far as you were concerned, that was all that was required and you thought that things were happening from there without you being any further involved?-- Yes, that's my belief.

What about when you put the figures onto line 8 of this CO make log, the first page there? Did that have any bearing on your attitude towards whether something was being done or not to calculate this CO make on a regular basis?-- No.

On that occasion it seems you wrote the figures into the log yourself from your deputies report?-- It appears that way, yes.

Do you see any further writing on that document that appears to be your writing that's below that line, line 8, any further entries or readings?-- There is a possibility that day shift on the Tuesday may be my writing.

I see. Which figures there? You had perhaps best identify which figures you say could be your writing there. That's line 12, is it?-- On line 12, yeah. The velocity reading, the wet and dry reading, the CH<sub>4</sub>, the oxygen and the CO Drager.

That's the CO parts per million, the Drager, not the Maihak reading, not the "6", is that what you are saying, under the CO Maihak?-- No, that "6" doesn't appear to be my handwriting.

Do you know where they came from?-- I believe I copied them in there from the readings that Mr Robertson had taken.

That was directly from him or from his report?-- It is my belief that we were sitting at the crib table and I filled it in with my hand on his verbal from his report.

From his report. You are talking about filling it in down at the panel?-- I believe so, yes.

Was that straight onto this document?-- Yes, I believe so.

The one that you have got in front of you down there. You don't have the practice of putting it onto some other document?-- No.

And then putting it onto this at some later stage?-- No.

So, if you go to the second last document in that bundle you will see deputies report 3743?-- Yes.

That appears to be for the Tuesday day shift; do you see that?-- Yes, that's correct.

Some of those figures seem to correspond with what you have copied down onto the report there. For instance, the wet and dry temperature, 21 and 24.5 respectively, CH4 is .3 per cent, O2 20.9 per cent, CO parts per million 5 per cent; see that?-- Yes.

5 parts per million, I should say?-- Yes.

But the metres per second is in fact 1.77 on the log but 1.72 in the figures?-- Yes.

Do you have any comment about that?-- No.

Do you remember whether you took them off his report or whether they were related to you?-- I think they were verbally related to me.

By him?-- By him.

On your hot seat changeover?-- No, it wouldn't have been a hot seat changeover.

Well, whereabouts, down at the crib room?-- It would have been in the crib room, yes.

Well, there is no explanation you could give for the different velocity reading then?-- No.

Okay. Well now, do you recall what happened with that

document that was down there in the crib room on that day?--  
The document I have in front of me?

Yes, well -----?-- I would believe it would have been left  
on the crib table.

Did you ever see it again after that?-- No, I did not.

Do you recall whether you ever filled out any document similar  
to this after that day, Tuesday the 26th?-- No, I can't  
recall filling out a similar document, no.

Given that you had made a number of entries on such a  
document, do you recall whether you ever discussed with anyone  
what had happened in relation to this system in your capacity  
as ventilation officer, acting ventilation officer?-- Well,  
it was my belief that this document was on the crib table and  
would have been filled out by the deputies as they made out  
their reports.

You never saw it again, you said?-- No, I did not.

Can you tell me what your practice was as a deputy in so far  
as your deputies reports were concerned? Who was it that you  
would give your deputies reports to as a matter of course?--  
At the end of shift?

Yes?-- When we got to the surface we would hand the deputies  
reports to the undermanager on shift. He would then read them  
and initial them and post them on the deputies board.

Was that the undermanager who was towards the end of his  
shift, that is, doing the same shift that you were on, or the  
undermanager at the beginning of the next shift?-- It was a  
standard practice to hand the reports to the undermanager that  
was on the shift that we were on and finishing, but in some  
cases that wasn't always the case.

How often did it happen - I mean, on a percentage basis - how  
often did it happen that you would end up handing your  
deputies report to the oncoming undermanager, 10 per cent of  
the time, 20 per cent of the time, less than 10 per cent?--  
I would say approximately 10 per cent of the time.

So, the undermanager who was on your shift in the case of that  
10 per cent of the time wouldn't get the information relating  
to what had occurred during that shift, or at least wasn't  
getting to see the report setting out that information?--  
Well, that's possible, but first hand he wouldn't see the  
information on the report, no.

Now, as far as you were concerned then as ventilation officer,  
who was it that you understood was responsible for processing  
the information that was being entered on the log?-- It's my  
belief that if there was any problem with what was being  
entered on the log that Mr Abrahamse would process the  
information.

But you told us the log was down in the crib room when you saw

it?-- Yes.

That's down in the panel?-- Yes.

How was the information then transferred to him, on the deputies reports, you say?-- On the deputies reports, and if he saw that there was - I would imagine if he saw there was some rise or some problem, that he would then either use a deputies report or this log.

Do you know what system was in place for the deputies reports to be made available to him on a regular basis?-- No, I don't know if there was that system.

Okay. Well, if this log was down in the section and the deputies reports were going up top, what was the purpose of keeping the log down in the section? I mean, you were ventilation officer, but you didn't do anything with it because you understood the deputies reports were going through the system somehow to Mr Abrahamse. I take it that there wasn't a practice of Mr Abrahamse coming down to the section to look at the log because, if you are correct, he was seeing the deputies reports. Do you know why this document was in existence down at the section?-- No, just to fill in. Just to correlate with what was on the deputies report.

Well, was somebody going to refer to this and start doing something with it, plotting points on a graph or translate it into something that was meaningful and useful?-- I would imagine if someone saw that there was a problem with the information that was on here, they would then plot it onto a graph, yes.

Who would that someone be? You see, I am really looking to find out who it is that assumed that task under the system that you understood was set up?-- I would -----

If someone saw there was a problem, who was going to look at it to see whether or not there was a problem?-- It would be the management, they would look at it.

Who?-- Mr Abrahamse.

But he doesn't come down to the section, or does he? Does he come down to the crib room and have a look at documents on the crib room table?-- He may have come to the crib room and had a look at the documents, yes.

Was that part of any system that you were aware of?-- Not any system that I was aware of, no.

Well, as ventilation officer did you see any need to suggest any change to the system of leaving this document down at the crib room?-- No, I didn't.

Thank you, Your Worship.

FURTHER CROSS-EXAMINATION:

MR MacSPORRAN: Mr Bryon, on that Monday, 25 July, you said that you spoke to Mr Mason; is that so?-- I believe so, yes.

That's when you first learnt about the notice that was going up on the board?-- Yes.

Did you see the notice?-- Yes.

Was it a typed notice?-- Yes.

Can you recall what information it had in it?-- Basically I can recall the information said that the readings that had been done on a weekly basis would now be done on a daily basis, on a shift basis.

Did it specify which particular readings were being referred to?-- I believe it specified the readings, yes.

Did that include air velocity readings?-- Yes.

Did you see that notice after that day?-- Yes.

Whereabouts did you see it?-- In the deputies' cabin.

That was on the noticeboard in the cabin, was it?-- Yes.

When was the last time you saw such a notice?-- The exact date, I couldn't recall.

Was it before the incident on 7 August or after the incident?-- It would have been before the incident.

Have you ever seen it since the incident, the notice?-- Since the incident I haven't frequented the deputies' cabin very often, but I don't think I have seen it, no.

In any event, the last place you saw it was in that cabin on the noticeboard?-- Yes.

Did the notice itself detail where the readings were to be taken underground, that is, the location?-- I don't believe so, no.

Because the log, as you have referred to, in Exhibit 96 makes it fairly clear that they should be taken at vent station 46?-- Yes.

Did you become aware sometime after that weekend that some deputies were taking readings at different locations?-- I was made aware of that, yes.

When did you find out about that?-- When I walked into a return and Mr Robertson was taking a reading down by the seal. I asked him what he was doing taking a reading down there and he said this is always where he takes his readings.

When you say "down by the seal", are you referring to just  
inbye of the prep seals in the 512 top return?-- Yes, that's  
correct.

As opposed to around the corner where vent station 46 was?--  
Yes.

Do you know when it was that you came across Mr Robertson taking those readings in the top return?-- No, I don't, but I believe it would have been a Friday, otherwise I wouldn't have been in that return. The exact date I can't tell you.

Do you know how close it was to the weekend we are talking about here, 23/24 July?-- No, I can't tell you exactly.

Was Mr Robertson the only one that you found out had been taking these readings in the wrong location?-- To my knowledge, yes, at the time.

You have told us that you informed Mr Robertson he should have been taking the readings at vent station 46?-- Yes.

Did you tell anyone else that there had been a practice, at least with Robertson, of taking the readings in the wrong location?-- How do you mean did I tell anyone else?

Mr Mason, for instance? Did you tell Mr Mason there was a deputy, at least, whom you discovered was taking the readings in the wrong location?-- No, I did not. Mr Robertson was only taking a carbon monoxide reading and not an actual velocity reading at the time.

Was it important though to have the velocity readings taken at the vent station 46?-- Yes.

To your knowledge was there an area in the top return where Mr Robertson was taking his CO reading that had a known cross-sectional area as marked on the rib?-- No.

You weren't aware of that?-- No.

As far as you know the notice that was up on the deputies cabin noticeboard was never amended or altered to reflect the fact that these measurements should be taken at the vent station and not elsewhere?-- I don't believe so, no.

Thank you?-- It was my belief that all deputies apart from Mr Robertson were taking their readings at vent station 46.

Thank you.

FURTHER CROSS-EXAMINATION:

MR MARTIN: Just remind me, did you have much to do with the panel 512?-- Not a great deal, no.

When you took the readings with the aid of Mr Rose on Friday, 22 July 1994, which we have been discussing over and over, where did you take them?-- Vent station 46.

FXXN: MR MARTIN

WIT: BRYON S M

Yes, but of the general body or where? Just describe what you did? What was done?-- I don't understand the question. What are you specifying, velocity reading?

I just want to know whether the readings at roof level were taken or - where were the Drager readings taken?-- In a general body position.

Going back in time before 22 July 1994, how long did the practice extend that weekly graphs were posted? How far back in time?-- Weekly graphs?

Yes?-- I would imagine from the start.

No, no, I don't want you to imagine, I want you to tell us you remember?-- From the start of the panel.

Would you just look at Exhibit 25 and just tell the Inquiry when you put your signature at the foot of that document?-- I believe my signature went on that document on 5/8/1994.

And in what circumstances? Where did it go onto the document? Obviously on a piece of paper, don't tell me that, but whereabouts?-- In the end office.

Whose - which is the end office?-- Mr Morieson's office and Mr Abrahamse' office.

Of course, Mr Morieson was a production deputy on that date and wasn't aboveground, was he? He wasn't fulfilling the duties of ventilation officer on that day?-- Mr Morieson would not be on site when I did this.

Do you remember what time of day it was that you did this?-- Approximately after lunch.

Thank you.

FURTHER CROSS-EXAMINATION:

MR MORRISON: Can I just ask you to look at the coloured thing, Exhibit 96, again? You can put 25 to one side. Can I ask you to think again about the CO Maihak reading in line 12? I just want you to compare the way that "6" is written with the way you wrote the "6" in line 8 under "dry bulb" and the way you wrote the "6" under line 8 for the "CO parts" and the Maihak parts and having compared those three "6's" would you agree with me that more than likely it is your "6" in the CO Maihak in line 12?-- It is possible.

All right. What I want you to do - you will see some names written down below there with colour over the top of them, "Atkinson", "Atkinson", "Robertson"?-- Yes.



Can you just take a pen and write in the next line under those names your name, "Bryon", and I want you to just - I think Mr Dahlke has got a purple colour for it, just colour through your name with that purple, thanks. Now, can I ask you a couple of things while you have got that document there? If you look on the right-hand side - right-hand blank column there, there are three or four things written there. The first one is "Drager Read", I think it is?-- Yes.

Next is "Checked P.M." - actually, my copy is cut off. "Drager Reading" is the first one. The next one is "Checked P.M."?-- Yes.

Do you recognise whose writing that is? Could it be Mr Abrahamse'?-- It possibly could be, but it is not mine.

I am not suggesting it is yours at all. Then further down, "One Fan Operation"?-- Yes.

Mr Abrahamse'?-- Possibly.

Okay. Now, I want you to do another thing for me, if you wouldn't mind. I am sorry, have you still got the purple there?-- No.

I think at the moment line 8 hasn't been coloured in in purple; is that right? Could you colour it through in purple to signify it is yours? In line 12 I think you can colour in the "1.77" because I don't think that is in purple yet either. Okay, thanks very much. Now, for that 1.77 figure that I was just asking you about in line 12, that's for 26 July. There were three deputies reports for that day from which that figure might have come and I just want you to do a calculation for me on the calculator. Is it switched on? Can you average them for me, 1.72 plus 1.81 plus 1.78, then divide by 3 and hit the equal sign and tell me what the answer is? 1.77?-- Yeah, that's correct.

Is it likely then that is probably what you did, you averaged the three deputies readings and put in the "1.77"?-- That could be possible, but I can't recall doing that.

No, I understand you may not recall it now, it is one small event in time, but it looks like that's a likely explanation since "1.77" is not on any deputies report, but happens to be the average of all three; does that seem fair?-- Yeah.

Can I just ask you this other thing too: can you recall - we are talking there for that line, that's Tuesday, the 26th. Can you recall if Mr Abrahamse was away sick that day and, in fact, he was away the rest of that week sick? That is Tuesday the 26th inclusive through to the Friday? Do you recall he was away the balance of that week?-- No, I can't recall that, no.

And only returned on Monday, 1 August? Do you recall him coming back from having been away?-- No, I can't recall that either.

Now, you obviously saw that log, that document there, on two occasions. The first must have been the 24th when you wrote your first line in and then the second time was Tuesday or some time after that?-- Yes.

Do you recall the circumstances - I am sorry, I will start again, I don't want to go over this unnecessarily. You don't recall the circumstances of writing in either set of figures, except that you assume it must have been down at the crib room?-- Yes.

It could equally have been on the surface, couldn't it?-- It is possible it could have been on the surface.

I was just thinking if Mr Abrahamse, in fact, was away on the Tuesday you might have gone to his office to write in those figures in the last line on the document in his office and that would give you the reason why you might have done that, that is, you could then collate or would have had the opportunity to collate all three readings off the deputies reports?-- That's possible, but I can't recall it.

Okay. Now, you mentioned - in answer to Mr Clair's questions that he was asking about who was responsible for seeing this through your response was basically if there had been any problem with what was being entered then Abrahamse would process it. I think I am right in recalling your evidence the other day was that that was what you viewed this document for, if something untoward was shown then the CO make would be plotted on a graph to check it?-- That was my understanding, yes.

And Abrahamse was the engineer, not an undermanager so he wouldn't normally get deputies reports, would he?-- No.

But it is nonetheless the fact that when he was around he did happen to go down the pit fairly frequently, at least when he could; is that right?-- He did, yes.

In relation to the notice that you saw stuck up, it is - you remember it as a typed notice. Not possible it was handwritten?-- No, I remember it as a typed notice.

Now, can you recall from what you can remember whether it talked about taking readings on a daily basis or a shift basis?-- I believe it said "shift basis".

Okay. Now, just keeping 96 in front of you, can you recognise any of the other writing on that document that is not currently marked with a colour? You see, there are really only two lines, it is 9 and 10?-- No, I can't recognise this writing.

If I could just ask you to look at the CO litres per minute calculations on 11 and 12? There are some non-coloured ones there too. 10, 11, 12, can't recognise that?-- No.

Thank you, Your Worship.

FURTHER CROSS-EXAMINATION:

MR HARRISON: I would like you to have a look at a plan. It is part of plan No 44/24. It shows the area from around 510 through to 5 South. What I am interested in is your understanding of the ventilation through 5 South and the ventilation through 510 after the sealing of 512. In other words, I am interested in the flow of ventilation through both of those panels. Bearing in mind you were ventilation officer up until Friday, the 5th, some two weeks, would you be in a position to help me in that regard in terms of indicating, perhaps by using that purple pen, the flow of air through those two panels, particularly indicating the flow of air in relation to the monitor points 6, 7, 16 and, for what it is worth, 18?-- This is after sealing of 512?

Yes?-- I was not there after sealing of 512.

I appreciate that, but did you understand, for instance, how 510 was being ventilated even up until the Friday? If you can tell me that much, just as you can last recall it? Are you still on 510 at the moment? ?-- Yeah, 510.

Are you able to say in relation to the returns which regulators were open and which were shut?-- No. Can I say something to the Inquiry?

Yeah?-- It seems to me that everyone seems to be referring to me as the acting ventilation officer. My task in those last three weeks were just to do a few jobs that were set down by the ventilation officer. I have very little, if any, knowledge of where - which regulators were open, which regulators were shut.

Would that be because no-one really required you to do - that is, what you are saying is you were really only asked to do a few defined tasks?-- All I was asked to do initially was a few little jobs which included stone dust sampling and taking a few readings at that spot. Everyone keeps referring to me as the acting ventilation officer. I think they are way, way off the mark.

Do you feel confident to do the exercise I am asking you to do?-- Probably not, no.

Do you know who I could turn to to try and ascertain just what the flow was through those two panels at the relevant time in that regard?-- No, I don't. I can give you the best of my knowledge. I can put it on there for you.

If you can just put it on there to the best of your knowledge and leave it at that?-- You want 5 South through 520?

Yes. If I can just have a look at that, thanks?-- The purple is the return air.

Just in fairness to you, that's as best as you can recall the situation, not being particularly responsible for the ventilation; is that a fair summary of it?-- That's the way I understood the ventilation was travelling and I can't tell you which regulators were open and which regulators were closed.

Thank you. I have nothing further of the witness and I formally tender that sketch if anybody wants to have a look at it.

WARDEN: That will be marked Exhibit 102. We will get some copies made in due course.

ADMITTED AND MARKED "EXHIBIT 102"

MR HARRISON: Thank you, Your Worship.

FURTHER EXAMINATION:

MR ELLICOTT: I'm wondering if you could tell me who at the mine you would normally approach if you wanted to get the sort of information that Mr Harrison was looking for?-- You would approach probably Mr Abrahamse and Mr Mason.

Thank you.

MR CLAIR: Thank you, Your Worship. I have no further questions of the witness, Your Worship.

WARDEN: Thank you, witness. You may stand down. You are excused.

WITNESS EXCUSED

MR CLAIR: I call Allan Morieson, Your Worship.

ALLAN GEOFFREY MORIESON, RECALLED AND RESWORN:

FURTHER EXAMINATION:

MR CLAIR: Mr Morieson, some questions have arisen since you were here last. It has unfortunately been necessary to bring you back. You took leave from 15 July to 5 August as I recall your evidence on the last occasion?-- Yes.

You did mention in your evidence that when you came back on 5 August in fact you came back as a production deputy on the afternoon shift on that Friday?-- Yes.

You didn't in effect resume the reigns of ventilation officer as such; is that right?-- That's correct.

But you did, however, have a conversation on the day of your return about the situation in 512, I think you mentioned that being with Mr Abrahamse?-- Yes, that was probably actually the day before.

Probably the day before?-- Probably.

4 August?-- Yes.

Under what circumstances was that?-- When I got back to home I rung - or he rung me up and I asked him about what was going on in the panel.

Did he say why he was calling you?-- He's a personal friend.

It wasn't with any specific -----?-- No, no.

----- question in relation to the ventilation area?-- No, no, it was just -----

So you asked him about 512 and can you just tell the Court what discussion then took place between the two of you about 512?-- He just informed me of this misreading and how he and Dave Kerr - I can't remember, I think it was Terry Atkinson, went and did a further inspection and found out that the reading was just a mistake and that the reading wasn't graphed.

What did he say about the misreading?-- That it wasn't graphed.

Yes, but you say I told you about the misreading. What did he say about the misreading?-- That it was just misread, the anemometer - or had written it down incorrectly.

What was the area of concern about the reading?-- Well, it was a high reading.

A high CO make reading?-- A high CO make reading, yes.

FXN: MR CLAIR

WIT: BRYON S M

Did Mr Abrahamse say that the high CO make reading was due to some problem with the anemometer? How did the conversation go?-- I can't recall. I think what he said might have been that he had misread the anemometer, multiplied the inner scale by two instead of just one.

Did he specify when this high CO make reading had occurred?-- He did mention the date, but I can't recall. It shows on the graph.

In any event, he did mention a high CO make reading?-- Yeah.

And he said that it was later checked and there was a lower reading?-- Yes.

And you understood it was checked the same day by, amongst others, Dave Kerr?-- Yes.

There was some reference also to a misreading of the anemometer?-- Yes.

Did he discuss with you establishing a system then as a result of some concern about a high CO make reading, establishing some system for more regular reporting?-- Yes, I think he said that they were doing daily or actual shift recordings.

Did he say anything else about that?-- I can't recall anything else, no.

Now, that was on Thursday the 4th you had that conversation?-- Yes.

The 5th you came to work on the production shift in 512?-- No, in 5 South.

5 South, I'm sorry. 5 South on the 5th. Did you have any conversation with anyone when you were there on the 5th about the ventilation situation in respect of 512?-- No, when I arrived there there were no undermanagers. The only person was the lamp room attendant and he told me I was doing a hot seat change in the 5 South section.

You didn't speak with Mr Abrahamse that day?-- I think he was away at a meeting. I don't recall speaking to him that day, no.

Did you go to the room where you normally operated as the ventilation officer, that's the big room at the end?-- Yes, I went into there and got some of my stuff out, yes.

What about Mr Abrahamse's room? Did you go in there at all?-- From memory, no, I don't think so. He wasn't there.

Could the witness see Exhibit 93, please, Your Worship, and 94?

Now, if you look at 94 first of all, that's the table document, have you ever seen that document before?-- No, not

until just a few - today.

Today?-- Yeah.

Have you ever had discussions with anyone about a document like that?-- No, I've never seen it before or had any discussions.

What about the other one, Exhibit 93, that graph there?-- No, I have never seen those two extra lines. Up to the 15th probably was my graph and then someone looks like they have added on to it or they could have pulled that out of the computer. My signature would be automatically on that unless they change that on Lotus.

Right. Now what you are referring to is down the bottom on the right-hand side it has "Issued by A G Morieson"; is that right?-- Yes, yes.

You had never issued a document like that, had you?-- No, not like this one.

If you look at that document, you have referred in connection with the document to your graph - perhaps you should have a look at Exhibit 25, if you would. That may be already there in that. Does that have Exhibit 25 on it?-- Yes.

If you have a look at Exhibit 25 you will see that that's a document that you have looked at previously, I think, when you were in the witness-box and it's one that starts out with readings or points plotted at monthly intervals and then moves on basically at weekly intervals with a couple of aberrations where there are readings on sequential days through to 22 July. Do you see that?-- Yes.

Then there are readings for 23 July, then 29 July and then 5 August?-- That's correct, yes.

I think you've told us that you were away in any event from 15 July, so you had nothing to do with those further points that were plotted?-- No, those last four points I didn't plot.

But up to 15 July that's what you refer to as your graph?-- Yes.

Is that right?-- That's correct.

If you look at Exhibit 93 which I have just handed you you will see that that goes through on the horizontal axis with the same dates, in effect, as appear on your graph?-- Yes.

And then from 15 July it goes to 22 July?-- Yes.

With in fact two points plotted for 22 July. You see one up the top with a question mark?-- Yes, one question mark and one - yes.

Then one down below?-- Right.

Then after 22 July there is provision in fact for a point to be plotted every day?-- Yes.

You made some reference to being able to pull the graph out of the computer?-- Yes.

And in effect set it up with those further daily points; is that right?-- Yes, you could change the work sheet.

So that if it was intended to plot a CO make reading every day this document could be produced from what was already there at the time you left to go on holidays, is that right? That is, by adding to your graph?-- By adding to my graph, yes.

But changing the time intervals on the horizontal axis?-- Yes.

You said that you have never seen that document at all?-- No, no, I've never seen this.

Even after the incident on 7 August?-- This is the first time I've seen it.

Was there ever any mention to you that there was a graph that was to have been calculated or plotted on a daily basis?-- No, not while I was there.

But what about since the event on 7 August? Has anybody ever said anything to you about a graph that provided for plottings on a daily basis?-- No, I don't know of this at all.

Of course, if there were points plotted on a daily basis then, that is a CO make plotted with some calculations on a daily basis of the CO make in 512, then you would progressively have quite a good picture, wouldn't you, of what was happening in the panel as opposed to a graph issued on a weekly basis?-- Yes, if you had more information, yes.

Of course if you were a bit concerned of a high reading of CO make or high CO make in the panel that would be one sensible way to keep track of it, from the ventilation officer's point of view; is that right? Would you agree with that? The one good way to keep track of it would be to calculate and then plot points on a daily basis?-- Well, yes, I'd say it would make it ----

And if you did do that then would you take the calculations, I should say, on a daily basis as what we will call spot readings as opposed to averaging back over a week? You see I think you've mentioned in your evidence that this weekly graph was ----?-- My ----

Your graph ----?-- Was a weekly graph.

Was one that had points plotted on a weekly basis, but also the points were plotted on the basis of a weekly CO make average; is that right?-- Yes, that's correct.

And that weekly average was something that you could extract from the Miahak computer?-- Yes.



In fact if you were doing a graph on a daily basis you would simply use the readings that were taken each day whether they be Drager tube readings or Miahak readings; is that right?-- That would be one way of doing it.

As what we would call spot readings?-- Yes, spot readings.

Simply take the reading, calculate the make and plot the point, no averaging?-- The only trouble by doing that is when you've got machines running there and that you can get, you know, a graph that was out of proportion. You might have a loader working there cleaning up and that would throw you out and you might go into a panic then that something was happening because you had a high reading due to machinery working.

Now let me ask you about that. If then you had a high reading because of machinery working there were other ways in which you could do a more accurate check of the CO level on a parts per million measurement; is that right? For instance, you could take a bag sample and put it through the gas chromatograph?-- No, well, the parts that you were getting were only around the low area of the chromatograph so you weren't getting a very accurate reading from the chromatograph.

You say it's above 10 that you get a more accurate reading from the gas chromatograph?-- Yes, above 10 you can rely on it more.

What about the other instrument that's been referred to that's kept by Mr Kerr at Mines Rescue?-- Yeah, it's more accurate, the Multiwarn.

The Multiwarn which has -----?-- A digital read out.

So again if you were concerned about a particular reading you might then check it with an instrument like that; is that right?-- Yes, that would be a better way to do it.

And tell me, if in fact there was a heating in a panel and there were some difficulties with ventilation in some areas of the goaf - first of all, would it be the case that a heating might begin to develop because of some areas of poor ventilation in the goaf?-- Yes.

That would be something that could enhance -----?-- That would be one of the things that could enhance -----

The possibility of a heating commencing; is that so?-- Yes.

Now if you had that situation where sometimes - or where there was poor ventilation in some area, well then, would it be the case that if ventilation changes were made either in some other area in the panel which caused a bit more ventilation through the area of the heating or if there were some other changes made in other sections of the mine which caused more ventilation to come into the section, that is a slightly

higher velocity of air through the section and thus a bit more ventilation through the part where there was a heating, would it be possible that on some occasions there could be some CO picked up from the area of the heating when the ventilation was for one reason or another improved, and that then on other occasions when the ventilation in that section returned to being somewhat poorer that the same amount of CO would not be picked up in the return air?-- The way it was designed with those things you would expect there was reasonable ventilation coming through the goaf in most areas, but that is a possibility, yes.

What I put to is a possibility?-- Yes.

If there was some area of poor ventilation, whether it be because of a fall or whether it be because of the things we have heard about with difficulties in the No 2 roadway, or if for any reason there were ventilation difficulties you could have some substantial variation from time to time in the CO parts per million contained in the return air; is that right?-- Yes, I believe so.

Is it the case too that simply looking at the parts per million on a set of readings, for instance, would not by any means give you a clear indication of the actual CO make at any given time; is that so?-- It's far more accurate to have a velocity reading with it, yes, and do a proper make, yes.

Because the extent of the CO make can vary quite widely according to the wind velocity?-- Yes.

Now, if you would just have a look at that thick document there which is Exhibit 96, you will see that it's a copy of that log that you previously saw, Exhibit 94, and that there are a number of - well, the first section of it appears to have two readings there for Friday, 22 July. It's a table. It's quite similar to a document that I think you looked at last time you were here which is part of Exhibit 21; is that right?-- This is -----

Similar layout?-- Similar layout, yes.

You might recall that you looked at a page in Exhibit 21 - I think you have made passing reference to this earlier today - it's the fifth page from the back of that Exhibit 21 which is the bundle you have just put your hand on there?-- Yeah.

Which sets out two readings also for 22 July '94; do you see that? Fifth page from the back is the one you will need?-- Yes.

Do you see that there? It's got two readings, 22 July '94?-- A.m. and p.m., yes.

I think you may have looked at that when you were in the box previously?-- Yes, that's correct.

Now, you will see that the one in Exhibit 21 then goes on to 23 July, the Saturday; do you see that?-- Yes.

And then 29 July which is a week after the 22nd and would be a Friday again?-- Yes.

And then 5 August?-- Yes.

And then 6 August?-- Yes.

Now, you produced that document, is that so, sometime later in August, 18 August; is that right?-- Yes, that's right.

You produced it off the computer system?-- Yes.

Those notes on the bottom, do you know where they came from?-- Jacques Abrahamse put those in.

When did he put those in?-- When that was being produced on the 18th, I think.

Now, can you tell me, were you present when the document was being produced off the computer?-- Yes, I think I was there then.

Can you tell me what process was adopted to end up with those dates being reflected there, that's two readings for the 22nd, one for the 23rd, and then the 29th, that's back to the Friday readings, then the 5th and then the one for the 6th? What process did you adopt to produce the document in that form

with those dates selected, as it were?-- Do you mean where we got the figures from?

Yes?-- Off the deputies reports, I believe.

No, but I am actually interested in how that information was extracted from the computer records?-- That information was fed into the computer. I think Jacques was actually doing that. He actually fed those figures in.

When was this, on the 18th or sometime prior to that?-- Yes, somewhere around the 18th. I just can't remember. It might have been the 17th or the 18th, and I signed that and put it into the QA records.

Well, did he have any discussion with you about what dates should be incorporated onto this document?-- Not that I can recall, no.

Well, did you have any part in the process of selecting the dates that were to be reflected on this document?-- No.

I understand from what you say that it wasn't the case that this actual information was already there and on the computer records at the time that you and Jacques extracted this document, set this document up and printed it out, as it were. You say that the information was fed in, calculations were made and -----?-- No. From memory, I think the readings were in and it wasn't the - the other reading was not graphed, the two - the Friday a.m. wasn't graphed on the document, and -----

Sorry, wasn't graphed on which document?-- On the partner to this one which is that other one.

The graph?-- The FB700009.

The page behind it in Exhibit 21?-- Yes.

The Friday a.m. reading, that wasn't included?-- Wasn't included in it, and just to make it clearer I believe he wrote that note up to explain why that graph reading was not put - you know, plotted on the graph.

That's why the notes were put in down the bottom, you mean?-- Yes.

Now, what about the selection of the reading for 23 July? Do you know why that was incorporated in this table?-- No, no, I think that was just there to show an extra point, that it had gone down and it wasn't at that 18 parts - 18 litres, sorry, 18.98 litres. Just to show that there was, you know, more -----

So that was 23 July and then there are two further Friday readings and then there is the reading for 6 August?-- Yes.

Any discussion about that one going in?-- Well, that was the last reading as they sealed off. That was the last time they

could get a velocity reading, I believe.

So that was put in as a final reading?-- Yes.

16.66. Just go back to the first page of Exhibit 21 and you will see there that's also a CO make and that's for Friday, 5 August '94 through to 7 August '94. Now, did you have any part in producing that document?-- No.

Do you know under what circumstances it was produced?-- No.

Just have a look in particular at the reading at 12.45 a.m. on 6 August '94 and then 10.15 a.m. on 6 August 94; you see those?-- Yes.

They would be what we would refer to as spot readings; is that right? They didn't involve any weekly averaging or anything?-- No, by the look of that they were spot readings.

Now, do you recall whether at the time that that other CO make document was produced, the one that you signed on 18 August, was there any discussion about putting in these readings from 12.45 a.m. on 6 August or 10.15 a.m. on 6 August?-- No, I can't recall any discussions.

Okay. Well then, let me ask you this: do you know whether there was any discussion about putting in any readings as they appear on that - on the first page of that - at least on Exhibit 94, that's - the first page of Exhibit 96 in fact might be easier for you to look at, those readings there. Any discussion about putting in the CO make calculations that have been arrived at according to the figures against those daily readings, not just the 23rd but the 24th, the 25th, the 26th?-- Yes, no, I didn't know of any discussion or anything.

Okay. That other document, Exhibit 93, which is the second page of Exhibit 96, if you just have a look at that. Any discussion about reflecting those daily readings on a graph that was to be produced by you on 18 August?-- No, I hadn't seen this graph before.

Okay. As ventilation officer were you ever informed, whether before or after the incident, that one of the calculations on 26 July - one of the calculations of CO make showed a CO make of 16.25 litres per minute?-- Not that I can recall.

Well, would you have recalled it if you had been told that there was such a CO make recorded?-- At 16 probably, yes, I would have recalled it.

Or that on 27 July there was a set of figures which led to a CO make calculation of 14.59, would you have recalled that if that was mentioned to you?-- On the 27th?

27 August, yes - 27 July, I should say?-- I just can't recall.

You don't recall anything being put to you?-- No.

Or that on 28 July there was a set of figures which would have led to a CO make calculation of 19.35, was that ever mentioned to you?-- No, not that I can recall.

No doubt you would have remembered that too?-- Yeah, that sort of -----

I see you looking for the figures. These are CO make calculations based on the readings that were recorded in deputies reports, you see. That was never mentioned to you?-- No, I didn't see those until after the event.

The deputies reports?-- I read all the deputies reports when I was preparing some work later on, and I saw the deputies reports and then saw these, but -----

Did you calculate CO make from those deputies reports as part of that exercise from the deputies reports that you perused?-- I just - I think we might have. I just can't recall, to be honest.

Okay. Well, just have a look at that Exhibit 96 again. You will see a number of deputies reports there. The one on 27 July that I have referred to for the Wednesday night shift, that's 3745, that's the last one in that bundle. Is that one that you recall looking at, 27 July '94?-- Yes.

That's one of Mr Newton's?-- Yes.

Did you, as part of your exercise, ever calculate that CO make?-- I don't think I personally did, no.

Could the witness see Exhibit 95, please, Your Worship?

Just have a look at the second page of that, if you would. That's deputies report 3748. You will see a set of figures there again taken by Mr Newton for 28 July, that's the Thursday night shift, and when calculated that indicates a CO make of that figure I gave you, 19.35. Do you remember calculating that one at any time?-- I didn't calculate it myself personally, no.

What exercise was being done at that stage that you speak about? This is after the explosion when you were -----?-- Yes, this is after the explosion and I was assisting getting reports and so forth, and I was looking through and just going through information having a look to see what was there.

Was there discussion at any time during that process about the fact that there was a log of daily readings that perhaps couldn't be located or something?-- I don't recall any discussion or any notification of a daily log or its existence.

Nobody was saying, "Gee, if only we could find that daily log of CO make in 512.", there is no-one saying that to you, "We will get you to have a look at that.", or, "Draw up a graph on the basis of that."?-- No.

Did anyone say that to you?-- No.

Did anybody say, "Look, I know there is a graph somewhere that provides for the plotting of daily points but at the moment I just can't find it."? Was there any suggestion of that sort of thing?-- Not that I can recall, no.

I see, okay. Thank you, Your Worship.

FURTHER CROSS-EXAMINATION:

MR MacSPORRAN: Mr Morieson, when you had a discussion with Mr Abrahamse the day before you returned to work, that was 4 August, you learnt of this new procedure for taking readings shift by shift to calculate the CO; is that right?-- I just - I think he might have mentioned that now, yes.

When you returned to work did you ever see a notice to that effect on the noticeboard?-- I have a vague idea that there was something posted in the deputies' cabin.

Do you recall what sort of notice that was, whether it was typed or otherwise?-- I can't recall whether it was typed or that. It might have been a handwritten one. I just ----

Did it say anything about where the readings were to be taken?-- I think it just mentioned daily CO make. I just can't recall. I would assume that would have been at that monitor point 46.

When you say "daily CO make", was it your understanding that the figures were going to be used to calculate a CO make each day?-- I just can't remember whether it said a CO make or whether the readings were to be taken by the deputies.

All right. Well, put the notice to one side. In discussions you had with Mr Abrahamse did you understand the purpose of taking these readings every shift was so that a CO make could be calculated daily?-- Yes, I would say so.

And you understood that from Mr Abrahamse as far as you now recall?-- I think so, yes.

Was that confirmed to you at any stage after that discussion with Mr Abrahamse, that is, that a CO make would be done daily?-- I can't remember if it was confirmed. It was just I was talking a lot about things, where I had been.

You mentioned some difficulties you saw with taking spot readings and calculating a CO make from those?-- Yes.

One of the difficulties you mentioned was the possibility of contamination through diesel vehicles working underground at the time the readings were taken?-- Yes.

That difficulty would be not just a difficulty reflected in the Drager readings but also on the Unor system, wouldn't it?-- Yes.

And you would get on the Unor system peaks of CO parts per million if you had contamination through diesel, for instance?-- Yes.

And you could pick those up on the Unor reading if you wanted to?-- Yes, if you plotted them - what's a name - by each individual reading and looked at them, you could see, you know, that there was just a peak point where it might have stayed up for, you know, an hour or so when they were working or doing something there, then you would look more at the daily average to get a better trend because that's all we were looking for.

So, it wouldn't be a difficulty in that sense because it would be easily identifiable as being a momentary or a transient difference in the CO parts per million concentration?-- I believe so, yes.



Then more particularly if you knew there were diesel vehicles working underground at the time you could make allowances for that?-- Yes, that is what I tended to do. There was a monthly survey that I did where I think it might show 15 parts and that was - there were diesel vehicles working at that time so I wasn't concerned by that 15 parts when it went down the next day.

So, it is not really a difficulty, is it, in terms of taking and plotting spot readings because you can check with the Unor whether that reflects the same sort of trend?-- Yes, if you compare it to -----

You could discount any high readings if they are due to diesels underground?-- If you know what is going on in the section at the time, yes.

You can still plot every reading you take on a graph?-- Yes.

And more closely, therefore, monitor a CO make trend?-- Yes.

The Unor screen had the ability to display a daily average, didn't it, of the CO concentration?-- Yes, you could do daily average, hourly average or actual readings, or weekly average too.

Did that just take, as you understood it, every reading from the Unor system and just divide it by the number of times that the reading had been taken?-- I am not sure on what - how it worked behind - what its actual system was, but I believe it just took an hourly average over all the readings it took in that hour, just averaged them, getting rid of peaks and say for the daily average the whole day and the weekly would do the whole week.

What would a Unor reading of zero signify to you, zero CO? Firstly, obviously, there was no carbon monoxide in the atmosphere?-- If it was in that section of 512, that would signify there was a malfunction or something, you know?

Because you would expect -----?-- A leakage. I would expect always 2 or 3 litres on that, the same as the 5 South return always would show, you know, a couple of litres. That was part of the normal make.

So, if you had some readings of zero from 512 for CO you would expect there - some malfunction in the Unor sampling point recording it?-- I would say there is a hiccup or, what's a name, something tube - or the tube, you know, might have had a leak.

If you then had an average which included occasions when there had been a malfunction or leak in the tube recording zero, your average would be itself incorrect, wouldn't it?-- Yes, it would be.

You would be dividing theoretically by a greater number than the system really recorded accurately?-- Well, always, anything - you record more points you can plot a graph to

accuracy. We were looking for a trend and -----

A trend would only be valid providing the average was a truly representative average for that period?-- Yeah.

You don't know yourself how the computer or system calculated that average?-- No.

You assume it would be on some straight mathematical basis?-- I imagine so, yes.

Thank you.

FURTHER CROSS-EXAMINATION:

MR MARTIN: I ask you to look at this document, FB 700 008, and say whether it is the No 2 underground mine ventilation survey for shaft south and shaft north return and 512 top return, please, and don't bother with the second page at the moment. Is that the ventilation survey prepared by you?-- Yes.

And it is what I said it is, I take it, amongst other things? The highlighting, in particular?-- Yes.

So, it is the ventilation survey for the whole of the mine, isn't it, No 2?-- Yes, that's correct.

As at 27 June. And the total make for the mine of carbon monoxide was, what, 10.23?-- That's correct.

Litres per minute. So, there is no problem presumably there, seeing it is for the whole of the mine?-- No.

But isn't it the case that the make for Panel 512 was 15.07 - I don't have the document in front of me?-- I beg your pardon?

What is the make for 512?-- On this document it says 9.71.

All right. Well, looking at the next document, 12 July 1994, what is that, another ventilation survey prepared by you?-- That's correct.

For that date?-- For 12 July.

For the whole of the mine?-- For the whole of the mine, yes.

What's the make for 512?-- 15.07.

Did that not cause you considerable concern? It is only a fortnight away from the earlier one?-- Yes, but the time that I was doing that vent survey there were machines running around in the section, they were prepping it for a belt retraction. There was a loader, from memory, an MPV and PJB

plus my own PJB that I had when I drove in which all would have been adding to the CO make.

But isn't it a 55 per cent increase, approximately?-- Yes, I suppose it is about a 55 per cent increase.

Are you suggesting that's diesel?-- Yes, we are only talking about from 5 parts to 6 parts CO. We are only talking about one part, trying to -----

Aren't we talking about the same thing? Hasn't it gone from 9.17 litre per minute on the first survey to 15.07 on the second?-- Yes.

Litres per minute? What did do you about that? It is a 55 per cent increase, isn't it?-- This survey was presented to management as normally was done.

You are the ventilation officer?-- Yes.

What did that startling finding lead you to do?-- It - from memory I checked the next day and I watched what parts were coming up on the Unor screen and I found that the - that - when I did a survey like this the daily average for that point might be 5.2, but if I took a hand-held reading of 6 parts I would take the 6 parts. I would always go to the highest figure, the way this was calculated. So, I watched it the next day and it went down and I believe on the Friday it was probably down to 13, from memory.

Why did you have to wait at all when you had a facility or the mine had a facility available to it to determine how much was from diesel or whether any of it was from diesel? You heard us talk some time ago about oxides of nitrogen?-- Yes.

There was that facility in the scientific instruments at No 2 to tell precisely whether it was diesel related or not, wasn't there?-- Yes.

Why wasn't it used?-- If you are referring to that, I am monitoring CO there and the CO that was there - I didn't know how long the - what's a name - machines had been running for. As they had been there for quite some time I thought that one extra part was due to that thing and when I came back up top I looked at the monitor point after I did this thing and it was - from memory I think it was only 5 parts or 5.2 on the monitor screen.

The easy way to have determined what could have been a problem immediately was the use of the available scientific instruments?-- Which instrument in particular?

The one that measures oxides of nitrogen?-- Measuring oxides of nitrogen would not have given us any information more on the CO.

It would have told you, wouldn't it, whether it was from diesel or -----?-- Oxides of nitrogen is different from carbon monoxide.

Yes, if you had used the machine you could have - you would have known whether it was coming from coal or not because it doesn't come from coal, does it, oxides of nitrogen, only from diesel?-- Yeah, but the diesel machines also give off carbon monoxide.

We all know that?-- So that's what I was - there was an increase in carbon monoxide, not oxides of nitrogen.

After 5 August you told one of either Mr MacSporran or Mr Clair that you were preparing something or going over something; do you recall that?-- On the -----

After 5 August you told either of those gentlemen - I am not sure which -----?-- Yes.

That you were going over documents?-- Yes.

What documents were you going over?-- I was looking through deputies reports.

On whose instructions?-- I think it might have been for my own benefit.

On whose instruction? Somebody instructed you to do that, didn't they?-- I can't recall being instructed by - it - I was looking for my own -----

Asked to do it then?-- I think the Mines Department - I was collecting the documents together. Some were filed in George's cabinet, some were on the noticeboard and I was getting other books out of the record room and compiling all the reports together.

Are you saying your employer did not ask you to go through the records in relation to the daily readings and calculations, things like that?-- I can't recall being given a direct instruction to, say, calculate -----

An indirect instruction, if you prefer that?-- No, I think what we did was we looked at every report.

Who is "we"?-- Jacques Abrahamse and myself. We looked at all reports, deputies reports, that we had on hand and he recorded the readings onto that.

Are we talking about the same occasion when you produced that document dated 18 August?-- Yes.

Can you tell the Inquiry - bottoms were taken from No 1 return in 512?-- Only on the very end of 13 cross-cut straight ahead.

But when, approximately, do you remember?-- Bottoms were taken in a couple of other sections between - they started mining back up the return. I couldn't give you a date.

No?-- There are plans available with dates, but -----

FXXN: MR MARTIN

WIT: MORIESON A G

I am just interested in the taking of the bottoms in No 1 return?-- Yeah, there were some bottoms taken in No 1 heading, yes.

Can you help us with the approximate time in relation to before or after the extraction commenced?-- There was some done prior to extraction.

And some after?-- And some right at the end of No 1 heading at the start of the, you know, extraction sequence. That was the -----

All right. What about the bottom - what about the bottom return, were bottoms taken there?-- Yes, there was bottoms taken there.

Can you say when?-- I couldn't tell you when.

I don't want a precise date, all I want is whether it is before or after extraction commences?-- I cannot recall. There might have been one place where there was a little bit taken right on the end.

On the end of what?-- Around 13 cross-cut.

But when, I keep asking?-- I beg your pardon?

MR CLAIR: I wonder if the witness could be permitted to finish his answer because I am really finding it impossible to follow what the witness is saying because he never really gets an opportunity to finish his answer.

MR MARTIN: I apologise.

Talking about the bottom return. You have said that there were bottoms taken?-- Yes.

Can you tell the Inquiry when?-- The actual time I cannot tell you, no. My job was not being in there the whole time. The section deputies could tell you when, but I was aware when I had been called in on different occasions that in the first - when they started commencing extraction I was aware of the sequencing and there would be areas to be - to have the bottoms removed, yes.

That obviously means after extraction commenced?-- Yeah, once extraction commenced.

And is that the same position as to time in relation to the top return?-- No, not - No 1 heading, they had actually started to take the bottoms, I believe, and then it was decided that was not the way to go and they didn't take any more bottoms in the No 1 heading.

I just want to get it clear: was that after extraction commenced?-- That would have been prior to this main extraction.

That leaves me confused. Are you talking about the retreat?--  
Before the retreat, yes.

Do you know whether the taking of bottoms in either of those  
two returns was part of the design?-- I believe the design  
was for taking bottoms.

I will be quite a lot longer and I will probably hasten it if  
I could go through my notes and condense them.

WARDEN: We are not going to finish this afternoon anyhow  
because I did mean to stop very soon. Is that suitable to the  
parties? We can resume at 9.15 tomorrow morning. Thank you,  
witness. Thank you, gentlemen.

THE COURT ADJOURNED AT 4.23 P.M. TILL 9.15 A.M. THE FOLLOWING  
DAY



WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 08/11/94

..DAY 15



THE COURT RESUMED AT 9.16 A.M.

ALLAN GEOFFREY MORIESON, CONTINUING:

MR MARTIN: Yesterday we were speaking about ventilation surveys prepared by you on 27 June '94 and on 12 July 1994; do you recall?-- Yeah.

I will just show you these documents again. They are not the same or precisely the same document. They are the same document, but unmarked copies. In your evidence yesterday you said the survey or surveys was presented to the management as normally was done. Do you recall that?-- Yes, I believe so.

So, in relation to the 27 June 1994 survey, you presented that to management?-- Yes, that's correct.

Who in management did you present it to?-- I cannot recall who was the acting manager on that date, whether it was Joe Barraclough or whether it was Albert Schaus.

Is it the case that you presented to whoever is the acting manager or manager - I am sorry, not manager, but mines superintendent?-- Yes.

Not Mr Abrahamse?-- No.

And, similarly, is the same position applicable in relation to the survey on 12 July 1994?-- Yes, that's correct.

So, whoever was acting as mines superintendent?-- Yes. It would have been placed on his desk in the undermanager-in-charge's room if they weren't there.

If they weren't there? If they weren't in their own room?-- No, if that - most of the time the superintendent would actually work out of George Mason's office. So, the record book was 90 per cent of the time in there. So, I would put the copy in there, in the record book, and make them aware that one had been done.

Did you ever have any conversations with either - with the mines superintendent, either acting or permanent, in relation to those documents?-- I can't recall on these particular documents whether I had any -----

But as a generality?-- Generally if we said, "Oh, look, we have got leakage here.", or, "It has gone up, it is higher.", we would have some discussion, yes.

Just keep those there for the moment. Yesterday in your evidence you said you were going over deputies documents. What were you looking for?-- I was just getting a background of what had happened prior to the explosion.

FXXN: MR MARTIN

WIT: MORIESON A G

What background did you get?-- Just some - that there were warning signs there of a, you know, heating.

Which you readily perceived when you looked at the documents? You saw quite easily that there were signs of a heating on the deputies reports?-- I could see there were definite signs there of a potential heating, yes.

Yesterday afternoon you told the Inquiry that you got some documents from George's cabinet. Was that George Mason?-- I can't recall that. I got some documents which ----

I will just read a piece of the transcript for you. "Somebody instructed you to do that, didn't they?" "I can't recall being instructed by - I was looking for my own" - I interrupted you and said, "Asked to do it then?" "I think the Mines Department" - you said - "I was getting the documents together. Some were filed in George's cabinet, some were on the noticeboard."?-- That's right, yes, I now recall.

So, that was George Mason's cabinet?-- Yes, that was George Mason's cabinet. There were missing some deputies reports of originals, I believe, and what happens sometimes on the weekend is the reports are left in the book and we had to go back through the carbon copy book and pull out some reports to put them in order.

Well, what documents by way of deputies reports, first, did you find in George Mason's cabinet?-- George Mason's cabinet has the original documents. Once they have been posted at the starting point at the end of the day usually George would take them down and put them in his filing cabinet.

So, what you are saying, as I understand you, is that he had all of the originals of the deputies reports from, at least, 22 July onwards?-- I believe so, yes.

And when you said to the Inquiry yesterday you were compiling all the reports together, do I understand you to mean you were gathering each of the deputies reports in sequence?-- Yes.

Just something we haven't touched on at all, I want to talk about after the first explosion in a moment. Did you - were you one of the persons who took readings from the fan shaft?-- Not initially after the first explosion, no.

Did you do it at all?-- I did do some, yes, just at the initial - of the second explosion.

What, after the second explosion or just before it?-- Sorry, no, I was present with someone when they took some readings there.

After the first explosion?-- After the first explosion, yes.

And before the second, obviously?-- And - yeah, at the second.

It was really a matter of great good fortune for you and this

other person that the explosion didn't happen when you were at the fan shaft?-- The first time could have, yes.

Who was the other person?-- I just can't recall who I was with at this stage.

Who sent you to do that?-- That was - the Mines Rescue were maintaining the monitoring and we were just paired off.

Who told you from Mines Rescue to go and put yourself into that position?-- I think it was Superintendent Dave Kerr, to take the sample.

Just touching on something else, when you came to go on holidays, what was it, about 17 July?-- Yes, I think that's right.

You knew Mr Bryon was to replace you in some respect, at least, in your ventilation officer's duties?-- No, I didn't know right up until that last day that he was -----

Yes, I am not suggesting you knew otherwise, but on the last day you knew he was to replace you?-- Yes.

Did you know he was not authorised under the Quality Assurance programme to act as ventilation officer?-- I don't know how you mean, like authorised to be in the position of being a ventilation officer - my position - my job description - I think people are very misunderstanding of what my actual part as ventilation officer was. I was not there to interpret, I was there to do the leg work, take the readings, compile them, present them to management and also I could suggest, but I did not have the power to make changes. You have to be a second class manager to be able to make any changes to the ventilation and I am only a third class ticket holder.

So, you do those things you have just told us about, hand them onto the responsible superiors?-- That's correct.

For them to do what they want to do?-- Yes.

Can I just ask you this, turning to another aspect: just clear up for me, a waste is an area which has been extracted; is that right?-- The second workings, yes.

Yes, and when the roof falls does that become a goaf?-- Yes, or - "waste" and "goaf" are the same thing. A waste area and a goaf are - there is no difference, saying an area now had a roof fall, it now becomes goaf. It is just a terminology that is used, either "waste" or "goaf", for the area that has had done the second workings where it is no longer as safe as the initial first workings.

Just in the mining industry lots of people have different understandings of different terms. Was it possible, in your view, to conduct any type of inspection of the waste or the goaf from about cut-through 8 to cut-through 13 on the bottom return side of the mine?-- Prior to me going on holidays, yes, I believed it was possible. You had to be careful. You

had to be alert of the extra danger of the high ribs that you were going through and I did do those waste inspections across -----

I am not meaning any criticism of you, I am just wanting to know if it was possible. Knowing what you came to know after you came back - well, after the explosion you gathered this data and coupled with an Ellicott's diagram on the verge of the explosive range, what would you have done in terms of going underground in No 2?-- I believe that the signs of a heating were there, the smell, the thing. I would have done as I have been shown in the books, the blue book and the other, which suggested that for at least 24 hours you stayed out of the mine.

And particularly with reference to Ellicott's diagram, if it was punched up on the Unor screen just very close to going through the explosive range, that would highlight it, would it not?-- It is very hard. Like, the plotting of a Ellicott you can - the computer system there, when it plots it you have to actually watch the plots because for some reason - I don't know what is in the package - it can throw a false plot in and it sort of jumps about a little. I don't know what the hiccup is in the system, but I have noticed that from past plottings.

Just assume this for the moment: that you are vested with the knowledge from the deputies reports, all right, by the evening of 7 August, had you been there - I am asking it theoretically?-- Right.

So, you know what the deputies reports show in terms of temperatures and wet bulb/dry bulb velocities and so forth. With that background you then stand at the Unor screen and see it, the Ellicott's diagram point, hovering close to going into the explosive range. What would you have done, either in terms of going under yourself or telling a crew of men what to do?-- I would probably say, you know, that we wouldn't go down until - knowing the background factors as of now, but it is very easy to say that in hindsight. At the time the Graham's ratio, which is also on that computer, gave no indication that there was a heating in those previous days.

That's right?-- It was plotting all the time, from memory, of plots from that Friday when I was there and I don't believe it was above .4.

Just turning to another question: you were, of course, an on-duty underground deputy before you took your present position or then position of ventilation officer?-- Yes.

When a deputy in relation to mining writes in terms of ventilation "fair" or "adequate" or "good", it is the case, isn't it, that he is referring to the area where the mining activity is being carried out?-- He is referring to - a section deputy, if he puts "fair" in his report or "adequate", he is talking about - they had a zone from the, like, crib table area, inbye of that area would be area he is concerned with, and the outbye deputy would be responsible for saying what was in the outbye areas.

All right, but just so that I understand, when a deputy uses those terms and doesn't refer to anything in particular, but says "Ventilation Adequate", he is referring, as I understand it, and as you say to the area inbye the crib table to the area where the mining activity is actually going on?-- Yes.

Yes, all right, thank you. Between the time of the explosion and the time that Mr Abrahamse with the computer prepared the graph which bears the date of 18 August 1994 -----?-- Yes.

What discussions did you have in relation to the explosion or the cause of it with Mr Schaus?-- I can't recall having any discussions with Albert at that stage. He was tied up with everything else that was going on.

To 18 August?-- This is after the first initial explosion?

You can't recall any discussion up to the time that 18 August document came into existence with Mr Schaus?-- That other document that was here yesterday?

Yes, it was issued by you or under your hand -----?-- With those notes, yeah.

Sorry, those dates?-- Yeah. I don't think I had any discussions with -----

Albert?-- ----- Albert about that at all.

Can I ask you the same question precisely in relation to Mr Mason?-- No, I don't think I had any discussions with him.

What about Mr Barraclough?-- Not that I can recall, no.

What about Mr Abrahamse?-- Only as we did it I was just calling out the figures.

What of any of the undermanagers including Mr Squires?-- No, I don't recall having any discussion with him.

We just might talk about - it's unfair without you having the document in front of you, it's Exhibit 21. It's a few pages from the back that I want to refer you to. It's a CO make 512. Are you looking at the same document? That's the document that has the comments about -----?-- On the bottom, yes. Page 2.

Yes. As I understand it the figure of 16.66 litres per minute carbon monoxide was adopted for the preparation of the final graph?-- Yes, all I did with this graph was Jacques had a piece of foolscap with numbers - these other readings, the velocity readings and the wet and dry, and I just called them out to him as he typed them into the computer.

Is there any explanation that you can offer as to why a 16.66 litres per minute was adopted by Mr Abrahamse for the purposes of the graph and not the other two figures higher up which is 18.98, for instance?-- No, I don't know.

Just put that to one side and look at the other documents, if you wouldn't mind, the ventilation surveys. Between 27 June and 12 July the CO make for the total mine on the fan shifts increases by 300 per cent?-- Yes.

So on 12 July there is a most alarming feature about the CO make, isn't there?-- No, that's not an alarming thing because if you look where the parts are coming from, the biggest increase, of course, is that 512.

Yes, but there is nowhere else, is there, in the mine that accounts for that increase?-- I would have to just work out and look -----

Take your time?-- There appears to be some increase in the 5 South area, but the main of it, yes, comes from the 512.

From what you've told us, however, it's not your job to interpret that document. That wasn't a loaded question, Mr Morieson, you have already said it was for management -----?-- Yes.

I understood yesterday you to be saying, well, really the explanation for the difference between, say 9.71 litres per minute on 27 June and 15.07 litres per minute on 12 July was not really significant because there was only a 1 ppm difference?-- One part, and the velocity had increased also too I didn't add.

The velocity had increased significantly?-- Yes.

And that would have a significant effect, wouldn't it?-- So that's why it came up as the 15, but you also must remember that the loaders and the things that were running in that section could quite easily produce up to 40 ppm per machine working in those conditions they were working under. So therefore they would have injected more CO into that atmosphere.

What document do you need to refer to to - readings, that is, of parts per million between 27 June and 12 July - so that you can tell the Inquiry about usage of diesels? Is it the Unor parts per million?-- The Unor parts per million would be what you would probably need plus the undermanagers report saying what was going on in that section, and the deputies reports.

Could the witness see, please, Exhibits 35 to 38?

They are a series of print-outs, and select the one which gives you the relevant period, if you would. Do you have the document which helps you with -----?-- I can't find 12 July.

It's Exhibit 33. That might help you instead, Mr Morieson. Tell us if it does?-- Yeah, this document is just a daily average for monitor point 16. It's showing 5.6 parts and you can see that I've taken a CO make of 6 parts.

Yes, but there is nothing really significant in terms of CO on a daily basis to account for -----?-- What you really need is an hourly make, the hourly spot, because this is taking the whole reading over the day and at this stage you wouldn't be able to get that because the computer dumps its actual readings after a week.

Do you have a document there which covers a period, say between 27 July and the sealing which was on the morning, very early in the morning, of 7 August?-- Yes.

27 July onwards to 3 August, can you give any indication from that document whether it tends to show that there was diesel fume influence?-- No, this part here on the 27th is showing that the - it looks like the Unor has actually gone down. It's registering zero.

Just go forward in time to a time when it is registering?-- Once again it's just giving hourly averages, not actual

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readings. You need to know what is going on in the section at the time.

Would the SIMTARS document help you?-- I don't know what a SIMTARS document -----

If you could turn to Appendix 2.1.7J which is about more than half-way through the volume?-- What was that number again, please?

2.1.7J, towards the back. It's headed up "Point 16 512 top return", and in particular page 14. Do we think we are looking at the same document, you and I?-- I hope so.

Have you found it?-- Yeah, page 14 of 46, "Point 16 top return".

What I am suggesting is an indication of diesel influence appeared on 3 August at 11.09 when it shows 7.6 parts per million and then rises to 8.8 ppm?-- Yes.

And then drops back to 7.6 ppm at 11.45, some 30 or 40 minutes later. That's diesel influence, isn't it?-- I would consider that some of that would be diesel, yes.

Again if I can take you to 5 August, at 5 p.m., the same thing happens, I suggest. It goes from 8.8 ppm to 9.2 ppm at 5 p.m. and the influence disappears from diesel at 5.47 p.m.?-- You are talking about a.m. or p.m. there?

Page 18 it is?-- Page 18.

Yes, p.m.?-- 1700 hours, 1709 in that area where it peaked at 9.2.

The influence lasted only for some 47 minutes before it returned to its previous reading?-- Yes.

That's most probably an indication of diesel working in the area?-- Yes, I would say that.

Have you ever seen a CO/CO2 graph?-- No.

I won't ask you about that. Did you know of any contingency plan existing before 7 August 1994 at No 2 Moura relating to emergency sealings or emergency evacuation of men?-- There was one to emergency procedures, but not to emergency sealing as far as I know.

Or to evacuation of men in the event of -----?-- Not indirectly with heating, yes - no, I don't know of any written document.

The Unor system aboveground in the instrument room, the computer and the screen, that has a warning system on it, doesn't it? You can pre-set a level and a red light will come on, it will perhaps even flash, and a beep occurs; is that the way you understood it?-- I believe that's correct, yes. It flashes on the screen, and depending - there is another alarm

FXXN: MR MARTIN

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that comes up on the other wall and a siren goes off.

But in addition it's the case, isn't it, that there was also a hooter or a siren mounted outside that room?-- That's what I just said.

So that when a pre-set alarm point was reached it would alarm inside and the siren or hooter would start sounding outside?-- Yes, that's correct.

Where was the switch for that, that is for the hooter or siren?-- I don't know.

Do you know -----?-- I know the switch to reset it and acknowledge it. There was one switch on the panel up on the wall where the light port was, and it had a series of little things. One of them was the Unor alarm and there was low air for the fan, low compressed air, and you pressed that one button. There was one button in there and one button outside in the undermanagers room just by the doorway as you went in.

You don't know where -----?-- I don't know how you disable that system, no.

I just want to ask you a series of questions on one subject which - when the weekly figures and graph are produced which is finally pinned up on a board?-- Yes.

It's the case, isn't it, that what the Drager has read is ignored?-- On the weekly figures, yes.

And what is adopted is the Unor reading?-- Unless there was an alarming difference between the two, yes.

Could you tell us whether the Unor figure adopted was the weekly average?-- The Unor figure was the weekly average, yes.

Could you tell us whether the litres per minute of carbon monoxide was a weekly average?-- It was the reading, the anemometer reading on that point, on that time that I took it. It wasn't an average of the air. It was assumed that the air was the same, hadn't been changed for that week.

It's the case then, isn't it, that it's an invalid exercise unless the velocities for the Unor are known at a precise moment that any test is done underground with the wind - with the velocity reading? It has to be the same for it to be valid, it has to be the same moment?-- Well, the graph was looking for a trend, not a -----

All right. Yes, thank you.

FURTHER CROSS-EXAMINATION:

MR MORRISON: Mr Morieson, can I just ask you to look at a document, please? Keep the page open where I've opened it for you and just have a look at the front of the document and - I'm sorry, open it out to where the front would be, but keep the place. That is in fact the Moura No 2 emergency procedure from 1993; isn't that right?-- That's correct.

And it's document number 18 for the record?-- Yes.

The page I've opened at, page 8, does it there deal with evacuation of the mine in the event of emergencies?-- Yes.

In section 4.3. Do you see section 4.3 is the section?-- Yes.

You can close that up. In fact there was in fact a written emergency procedure from 1993 relating to evacuation of the mine in emergency?-- Yes.

You can hand that document back. It's document 18. You were being asked some questions yesterday about the occasion when you had returned from leave and discussed with Mr Abrahamse the misreading on 22 July. Do you recall that occasion?-- Yes.

Mr Clair was asking you about whether there had been - about that conversation and whether part of the conversation concerned a misreading of the anemometer?-- Yes, I believe so.

As you understood it there had in fact been a misreading of the anemometer?-- Yes.

I know you weren't there when it was all done, but that's as you understood it?-- That's as I understood, yes.

You in fact mention that in your statement, from the very first when you did your statement, I think. Let me just read it to you. "Steve Bryon had confused the ventilation department anemometer with the Mines Rescue anemometer which he was used to so as to give a higher air quantity than actual."?-- Yes.

That's as you understood the position?-- That's what I believed, yes.

It's not as if this was some new thought occurring to you yesterday in your evidence or anything?-- No, no.

Now, you were asked also some questions about whether if one wanted to keep a track of CO make or CO parts whether the one good way to do that would be to keep a daily graph and you said, well, that is one way. There are other ways of doing it as well, aren't there?-- Yes.

It's just a question of assessing which is the best way in the circumstances in which one is found?-- I believe so, yes.

There may be occasions when the machinery is not particularly useful for one reason or another and there may be occasions when it is?-- Yes.

And there maybe occasions when having hand-held readings down below are more appropriate than having just reference to a machine on the surface?-- Yes, I believe so.

One of those occasions that might be appropriate is the one that you've been discussing most recently with Mr Martin, that is to say, if you just look at the Unor readouts they don't actually tell you what's producing the CO, do they?-- No.

All they tell you is you've got CO and what the figure is?-- Yes.

So you really need to know more than just the print-out to know whether the CO is being produced by coal, oxidation or whether it's being also produced by diesels or anything else?-- Yes.

And so in one sense then it is appropriate not just to rely on the machines on the surface, but to have the men down below who can tell you what is happening in the section?-- Yes, that's more accurate.

That's exactly the feature that applies to your ventilation survey for that 12 July date when the figures produced a 15.07 litre per minute result. You knew in fact that that was an inflated result from the operations of diesels in that section that day?-- Yes.

And not just one but quite a number of them. I think you mentioned two PJB's, an MPV and an Eimco as well?-- Yes, that's correct.

And they were there for a substantial period moving machinery around?-- Yes.

So that that figure, when produced, did not alarm you because you knew the cause of it?-- Yes, that's true.

Can I take it correctly that you conveyed that view of yours to Mr Abrahamse in your general discussions about that vent survey?-- I probably would have.

It's almost certain you would have, isn't it? If you had in mind an explanation for the figure, you would have conveyed it?-- Yes.

Have you still got Exhibit 121 with you? I am not sure if you have or haven't?-- Yes, I have.

You do. You have it open at a page, I think, that bears your signature and the date 18 August?-- Yes.

Can you go back one page, I think the last entry which showed that a few days after that 12 July vent survey you in fact got a figure for the 512 Panel less than what you had in the survey?-- Yes, that's correct.

So, it had in fact dropped as you would have expected it to?-- Yes.

You can put that document away for the moment. If I can stay on that point that we were just discussing. Whilst the reference, say, to the Unor on one particular division of time or another, be it hourly or 13 minute period by 13 minute period, reliance on that totally could be misleading, couldn't it?-- It can be, yes.

Because you just cannot tell from that why the figures are the way they are, it simply tells you that they are that way?-- Yes.

The same thing really applies to results, say, from a multiwarn as opposed to a Drager. If all you knew was the multiwarn result and not the reason for it, you could be mislead in the same way?-- Yes.

So, whilst the multiwarn might be more accurate in a technical sense, it's not going to tell you more about the cause than the Drager does?-- No.

Now, you were asked some questions also about your knowledge of the - state of knowledge of the figures from the deputies reports in the period where people were taking more frequent readings than had previously been the case; that is to say, shift by shift readings?-- Yes.

And I understood you correctly to say that you only looked at

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those figures after the event?-- Yes.

And that in the context of collating information for the purposes of this Inquiry on behalf of the Inspectorate?-- Yes.

So, what you were doing was really defined by the request the Inspectorate had made for information?-- Yes.

Now, in relation to those, Mr Clair asked you had anyone told you about a set of figures in addition to those in Exhibit 21 which showed or would show it calculated - I think it was put to you that it would lead to or led to a CO make figure, and in fact they weren't done for some of these till later?-- No.

But notwithstanding that, the figures, if they were calculated, would lead to 14.59, and you said you hadn't been aware of that one?-- No.

Mr Clair also asked you about the set of figures that would, if calculated - even though they hadn't been - would have led to 19.35, and you said you weren't aware of that one?-- No.

That 19.35 type of figure is quite high, isn't it?-- It's very high, yes.

If there had been a jump up to that figure, of itself that might raise an eyebrow, but the real point of interest would be if that figure was continued, the trend was maintained?-- Yes.

Because if it dropped back severely almost immediately to the levels that have applied before the jump, that might suggest it was just an aberrant reading from a Drager tube?-- That would be one possibility, yes.

For instance, if one is looking at CO litres per minute, a 1 part difference in the parts per million reading can lead to about a 2 litre difference in the litres reading, can't it?-- Yes, that's true.

So that if some deputy got 8 parts that day, wrongly got 8 parts that day, and that was 2 parts above what it was in reality being read the whole day by the Unor, that would affect the way you viewed the 19 litre figure, wouldn't it?-- It would tend to, yes.

If you knew that he was 2 parts out completely and not verified by any Unor reading on that entire day, on the 13 minute by 13 minute cycle not verified by any part of that day, you would think to yourself, "Look, this reading is just a bit over the top."?-- Yes. It could be the tube hadn't been kept refrigerated or -----

It could be. I am not -----?-- Numerous things.

----- saying it's just a deputy's error in reading. There could be a faulty tube, there could be 100 reasons why it's

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happened?-- Yes.

One thing you would look at in looking at such a figure would be the reading he got verified by the Unor. If it's not verified by the Unor, then you raise an eyebrow about whether the figure is accurate at all?-- Yes.

Particularly if he takes his 8 parts reading at the precise place where the Unor is taking its reading, the monitor point at VS46?-- Yes.

So, there is no room for differential in the reading because he is in the panel near the face or in the goaf or in the return or anywhere else. He is taking it at the same spot the Unor is taking it and so he is widely inaccurate against the real reading?-- Yeah.

If the jump up to the 19 was in the order of, say, a 6 litre jump and then immediately following that reading of 19 it dropped again 6 to 7 litres, that would confirm in your mind, wouldn't it, that the 19 was an aberrant figure?-- Yes.

Because the trend had not been maintained?-- No.

It's like all of these figure. I mean, one tends to become fascinated by the supposed scientific features of X point so-and-so when in fact it's the trend that matters, isn't it, not just the spot reading?-- Yes, that's true.

If one got 16 litres, for instance, the mere fact of getting 16 is interesting but only becomes significant if the 16 is maintained or increased?-- Yes.

If the 16 then drops away again, well it was of interest but of no concern?-- Still it's getting high, but you would be more vigilant in what you were doing.

But it's the question of maintaining or increasing the trend that is the real significant feature, isn't it?-- Yes.

We could all be mislead, couldn't we, if we paid too much attention to spot readings which were not maintained at their level?-- No.

And staying with the 19 figure, if the drop then was of the order of 6 to 7 litres and remained down at least 5 to 6 and 7 litres for the next subsequent, say, seven surveys or seven readings, that would tend to suggest, wouldn't it, that the 19 was an aberrant reading?-- Yes, I would say that.

Now, you were referring today and yesterday to some features of the computer. Mr MacSporran was asking you yesterday about what you understood to be the way in which the computer took its average, and as I understood you, for instance, on, say, a weekly average, the computer, when you asked it for a weekly average, would take this moment and back one week from this moment?-- Yes.

So that if you asked it in an hour's time for a weekly

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average, it would take from one hour's time back one week?--  
I believe that's the case.

That's a product of the software that comes with the Maihak  
system, isn't it?-- Yes, I think so.

As you understand it, I think I am right in saying that that's  
proprietary software that belongs to Maihak. It's not  
software developed by BHP for its mine, it comes with the  
machine?-- Yes, that would be right, I would imagine.

So, this sort of software is in use in many places, isn't  
it?-- Yes.

In all Maihak systems that proprietary software would exist?--  
I would imagine so.

So, whatever features it has in terms of its internal quirks  
about how it measures and how it reads and when it changes  
scales and so forth, that feature will be endemic to all  
Maihak systems which use that proprietary software?-- I  
really don't know other systems.

As you understood it, I think I am right in saying that being  
proprietary software, you can't just tinker with that  
yourself; Maihak really have to be the ones to do that?-- I  
believe that's the case.

I think in fact Maihak keep their software codes themselves,  
don't they? They don't hand them out so you can break in and  
tinker with them?-- I don't know.

You are not aware of that. Now, can I just ask you this: you  
were asked some questions about the position of vent station  
46, which I think we are all correct now in identifying as  
just outbye the top return in 512 and in the No 1 road of  
510?-- Yes.

There was in fact a monitor station just inbye near the prep  
seal in the top return in 512, wasn't there?-- Yes, 64.

Is it called vent station 64 or monitor station 64?-- Vent  
station 64.

Now, in fact there had been a calculation done of the  
cross-sectional area of that spot, hadn't there?-- Yes.

That was done by Mr Carl Durrie?-- Yes.

On 23 June 1994?-- I believe so, yes.

And the cross-sectional area was 21.63 square metres, wasn't  
it?-- Yes.

Can you just look at this document just to make sure that we  
are talking about the same thing? Was there in fact a  
document produced which represents the cross-sectional area of  
vent station 64 and recording its cross-sectional area?--  
This document here?

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Yes. Is that the document you have in your hand?-- Yes.

Recording the cross-sectional area of 21.63 square metres?--  
Yes.

And its precise position in the 512 top return?-- 22.8  
metres inbye of D2213.

And D2213, there was a misnotation there. It should be D2113,  
shouldn't it?-- Yes, I believe so.

No doubt it's the 512 top return and roughly where it's marked  
just inbye the prep seal?-- No, I sprayed on the rib with  
paint to show Carl where I wanted it taken and that's where  
this was measured.

And the representation you have there is facing inbye down the  
top return?-- Yes, that's correct.



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When done - where in relation to the monitor point was that?--  
That was just here.

So, you are indicating -----?-- The monitor point was here.

Just slow down. You are indicating vent station 64 as just  
inbye the prep seal in the top return?-- Yes, just inbye of  
the prep seal.

And the monitor point is outbye near VS46?-- That's correct.

I tender that document.

I think that document bears the date 23 June 1994 and  
Mr Durrie's initials, doesn't it?-- Yes.

WARDEN: Exhibit 103.

ADMITTED AND MARKED "EXHIBIT 103"

MR MORRISON: Then for practical purposes when one is  
measuring velocities at a cross-sectional area of 21.92 as  
opposed to 21.63 the difference is not very significant, is  
it?-- No, it is very small.

Now, in relation to - this morning you were asked some  
questions by Mr Martin about what you would have done on the  
night in question. I think you said it is very easy to do  
this sort of thing with hindsight?-- Yes.

You have at this moment an enormous amount of knowledge  
derived from not only appearing in this Inquiry, but sifting  
through deputies reports and reading statements and all that  
sort of thing?-- Yes, that's correct.

None of which was available to you before the event or very  
little of which was available to you?-- No.

So, you would have a degree of knowledge now unmatched, I  
suggest, by anyone's knowledge before the event?-- Yes, I  
would say that would be right.

All of the stuff that you know now from all the sources you  
know now wouldn't have been collated in one place for one  
person at any one time, would it?-- No.

Very easy to sit here in this Inquiry and be asked knowing  
what you know now what would you have done?-- Yes.

It doesn't represent at all what people on the ground might  
have had to confront on the night in question, does it?-- No.

And decisions that might be made in circumstances such as  
applied here have to be made according to the circumstances as  
they present themselves and the state of your knowledge at the

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time?-- Yes, that's correct.

When you said that you had formed the view there were definite signs of a potential heating, what you are talking about is having amassed all this documentation and sifted through it and looking at it knowing what had happened you formed this view?-- Yes.

In other words, you were looking at that documentation knowing what had happened and looking for signs?-- Yes.

Now, I just want to touch for the last time, if I may, about the Maihak software because you mentioned another aspect of it today. That was in relation to the plotting of the Ellicott diagram. You mentioned when you call it up you have to watch as it is being plotted?-- Yes.

Because it can throw in a false plot?-- It is also hard to follow which plot - the plots, as it came on that software system, weren't numbered so you didn't know which one - if you looked away from the screen for a second and missed the plot you didn't know whether that one had gone into potential explosive and then it had gone back to non-explosive.

So, the screen won't show you the - the screen won't show you which point is the next in time to another point?-- No, it doesn't go one, two, three or link them up. It is, I find, hard to read.

And that is a product again of the Maihak software itself?-- Yes.

Can I have Exhibit 86, please?

Can you just have a look at this document, please? When you call up the Ellicott diagram on that Maihak screen is that the sort of plotting you see?-- Yes.

And you can't tell which point follows which in time, can you?-- No. You would have to assume that it is heading towards the explosive and not the other way around.

But that's an assumption you might make that might not necessarily be right?-- That's correct.

Yes, you can hand that back. Now, you were asked also about in Exhibit 21 - if you have still got that with you, I think you have - the 16.66 figure which appears at the last entry. The notation for that is that it was taken by Mr Tuffs at 8.30 p.m. on 6 August. Now, that's the night - sorry, have you got that page now? That's the night that the panel was being sealed and the sealing commenced at about 3 p.m.?-- Yes.

Now, you would agree, wouldn't you, as one effectively throttles back the ventilation by erecting seals across entries that affects the CO make calculation for that panel?-- Yes.

And if that was done in circumstances where also, if you just look at the map, the door that's in the No 1 heading of 510 between No 1 and 2 heading for 512, was partly open and the regulator behind the ventilation was also partly opened in order to let machinery through, all of these features would affect the veracity of that reading of CO make?-- Yes.

And if you knew that at the time this reading was done that the belt road had been effectively completely sealed and the top return was on its - well on its way, at least a metre high, that would have a serious impact on the veracity of this reading, wouldn't it?-- Yes, it would affect it.

Thank you. Have you got that page still open? Can I ask you to look up in the table to 23 July 1994? Do you see the entry there for Saturday?-- Yes, the 13.42?

That reading of velocity 1.7 there, do you know anything of the source of that reading?-- No.

It wasn't your own, I think you were away?-- Yes, no, I wasn't on that weekend.

All right. Now, in a panel that is to be extracted in mines it is the fact, isn't it, that approval has to be obtained in order to commence extraction?-- Yes, that's correct.

You can put Exhibit 21 away. And a formal proposal is put to the Mines Department for approval to commence extraction; isn't that right?-- Yes.

And that was done in this case, wasn't it?-- I believe so, yes.

Can I just ask you to look at this document, please? This is document 110(a) - I am sorry, it is (a), (b) and (c). Now, that's the request for approval to extract in relation to 512, which is already part of the Inspectorate's documents, made on 30 March 1994. Do you see that letter that was written to the Senior Inspector, Coal Mines?-- Yes.

Containing the proposed scheme of work for 512?-- Yes.

And in the third paragraph it refers to the mining method as being similar to that in 402/401 which involved taking every second row of pillars and leaving every alternate row of pillars intact?-- Yes.

Then mentions in the next paragraph that ACIRL had been involved in the design of the panel layout?-- Yes.

You knew that to be the case, didn't you?-- Yes.

ACIRL was pretty heavily involved in the design of the pillars in this panel?-- Yes.

And they were, in your view then, probably still are, experts in the field?-- I believe so, yes.

And experts outside BHP; in other words, independent of BHP?--  
Yes, independent.

Now, the letter then goes on to say that the plan which is attached shows the areas proposed to be extracted in 512 and then on the top of page 2 the general ventilation arrangements for the whole panel are included?-- Yes.

Including location of preparation seals?-- Yes.

It then goes on to refer to the mining height and the significance of that height in avoiding exposure to operators?-- Yes.

Then a specific section on ventilation on page 2 mentions that it was proposed to keep the waste ventilated to reduce the risk of build-up of methane and carbon monoxide?-- Yes.

And then giving points to note about that ventilation which go on to the next page; isn't that right?-- Yes.

Then also dealing with, on page 3, the monitoring points?--  
Yes.

And announcing that they would monitor for four gases and with nominated high and low alarm settings?-- Yes.

Which in the case of CO was low 5, high 10; is that right?--  
Yes.

And then attached to that, and after you get past the letter, if you turn over a few pages, the first plan attached to that shows the method of taking bottoms?-- Yes.

Indicating on it that a feature of it might be the leaving of a stub?-- Yes.

And then if you turn the page what follows is the precise sequence in which bottoms would be taken or pillars would be lifted -----?-- Yes.

For each section. I think that follows then for about three pages?-- Yes.

Then follows a bolting plan for roof bolts?-- Yes.

Then follows a plan view of one of the drives in the seam indicating rib bolts for the roof on one sectional view and below that rib bolts on the plan view?-- Yes.

Then follows immediately a plan which sets out geological mapping, but contains also the precise pillar design?-- Yes.

With two rows of large compartment pillars?-- Yes.

Situated, as we see it, on the plan to your right on the board?-- Yes.

If you turn over to the next major plan there are various

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documents dealing with geological mapping, but then the next major plan is the same plan, but with topography outlines on it?-- Yes.

Following that is the same plan, but with depth of cover?-- Yes.

And then follows a letter from ACIRL to Mr Schaus dealing with the pillar design; isn't that right?-- That's correct.

And indicating various technical data about the analysis for pillar loads?-- Yes.

And signed by Mr Bernard Madden of the Geotechnical Engineering Department of ACIRL?-- That's correct.

Then follows a plan again showing the layout of the panel, but also including ventilation details; isn't that right?-- That's correct.

In fact, you can see on that the main return is indicated as well as the bleeder return?-- Yes.

In addition, all the stoppings between 12 and 13 cross-cut across each of the pillars?-- Yes.

And each of them having a door?-- Yes.

And also what might be called segregation stoppings between 1 and 2 heading and 5 and 6 heading?-- Yes.

So, that plan, in fact, shows ventilation details for that panel, doesn't it?-- Yes.

All right. Then there are various other plans shown, including precise sequence details for extraction?-- Yes.

And the last document in that - that I have given you then is the letter from the Department of Minerals and Energy on 28 April 1994 approving the commencement of extraction subject to some nominated conditions?-- Yes.

And some of those conditions included pre-extraction training of personnel?-- Yes.

Supervisory control by various persons?-- Yes.

And the carrying out of a formal risk assessment?-- Yes.

And that's to be facilitated by ACIRL?-- Yes.

And you know the risk assessment was, in fact, facilitated by ACIRL and carried out, don't you?-- I wasn't part of it, but I know it was.

I know you weren't part of it, but you were aware it was carried out. So, in fact, it would appear, wouldn't it, that the department has given its approval to the extraction of this panel and given it on the basis that it knows the pillar

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design?-- Yes.

That it knows the ventilation details?-- Yes.

That it knows the method of extraction which involves ramps?-- Yes.

And that it knows that that method might leave stub ends of coal as a consequence?-- Yes.

I tender that document as a separate exhibit.

WARDEN: That's Exhibit 104.

ADMITTED AND MARKED "EXHIBIT 104"

MR MORRISON: I don't know if you have still got them with you, but you were given, I think, Exhibits 33 and 35 to 38 which are the Maihak printouts. You may have some left?-- Yes, I have some here.

I think you might be able to confirm for me, if not by reference to those document then certainly from your own knowledge, that the computers were changed on 27 July and so we have to be careful then looking at readings before and after that date to make sure we are looking at the right computer printout?-- Yes.

Yes, I have nothing further, thank you.

MR MARTIN: Before Mr Harrison goes on could I just tender the ventilation surveys for 27 June and 12 July, which Mr Morieson was referring to, as one exhibit?

MR MORRISON: I think one is already Exhibit 91.

WARDEN: I have something similar as Exhibit 91; is that the case?

MR MARTIN: I don't want to tender them if - they are not both in so - it is the 12 July document, I think, that should go in.

WARDEN: The ventilation survey dated 12 July will be Exhibit 105.

ADMITTED AND MARKED "EXHIBIT 105"

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FURTHER CROSS-EXAMINATION:

MR HARRISON: I would like you to have a look at production deposits report 1209. It is for 5 South on the Friday afternoon shift of 5 August this year. As I understand the position, that was the first shift that you undertook coming back to work; is that right?-- Yes, that's correct.

You completed that report?-- Yes.

I would like you to look at the second inspection of 5 South. If you can just read into the record what you have said for the second inspection commencing at 6.30 p.m.?-- "0.3 CH4 maximum found general bodywork face, 5 per cent plus from gas holes diluting to 0.3 per cent."

Now, just on that, were you talking about the drainage holes generally at 5 South or were you talking about one or two in particular; do you recall?-- I was recalling to the ones that were adjacent to where - I haven't a plan here, but just to the ones that were across the heading.

Now, I might be able to help you. I will hand you a photocopy of part of a plan - for the record it is plan 45/20. Just have a look at this and get your bearings and tell me if you are able to identify on that particular document which hole or holes you were talking about?-- -----

MR CLAIR: Your Worship, I think a copy of that plan is the one on the left-hand side of the whiteboard too, where Mr Morieson might then be able to illustrate for us, looking at it.

MR HARRISON: I didn't realise it went back up there. You might be able to illustrate on the board. I might get you to mark that one rather than mark the one on the board?-- That hole I am talking about is where it says, next to that heading 37, "Long hole .5 from floor".

I will give you a highlighter here and get you to mark it on the plan you have got. Then you might indicate it for the Tribunal's benefit up on the plan on the wall with the laser pointer. Can you just read into the record - perhaps if you can return to your seat and just tell us where that is relative to the headings and cross-cuts in 5 South?-- It is between 3 and 4 heading on 37 cross-cut. It is the hole closest No 3 heading which was the hole that the miner was going to cut through.

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Can I just look at what you've marked on that plan? While I'm looking at that, is it the case that it was only the one hole that you had concerned yourself with?-- Yes, that was the gassiest of them.

This was one which you understood was due to be intersected fairly quickly when production recommenced?-- Yes.

Production ceased on your shift that particular day, didn't it?-- Yes, we had a breakdown.

It wasn't due to start again until the Monday night shift?-- No.

Now, can you just tell me what you did when you found those readings? Where were you relative to the borehole when you found those readings?-- I was - I put my Minder close to the what's-a-name, borehole originally, and it just went straight off the scale. Once I stepped back about a metre, within a metre of the hole it was diluting to .3, so it wasn't a high volume flow. It was just bleeding out of that hole.

Did you as a matter of course check any other holes in the course of that second inspection?-- Yes.

And was this one different to the others in that sense?-- It was the greatest one. It had the highest methane coming out, but it wasn't - they were about the same, but as this was the closest one to what we were going to dissect, that's why I made the note.

Before I go any further, Your Worship, I tender that copy plan with the marking. I will just pass it around so my learned friends can have a look at it.

WARDEN: Exhibit 106.

ADMITTED AND MARKED "EXHIBIT 106"

MR HARRISON: Could I just turn to something else on that second inspection? There is an entry further down, is there, and I'll get you to read it again, I just had a bit of difficulty with a couple of words there, starting "Three cars taken"?-- "Three cars taken from centre of bord. Roof appears secure elsewhere with minor fretting of places.", and in action taken I've got, "Loose rib pulled down supply road." There was some loose rib.

As at the end of your shift was it the case that you understood that three car loads had been taken - three cars had been taken from the centre of the bord heading from the number 3 heading across what would have been, had it been completed, 28 cross-cut?-- Yes.

Your Worship, I also tender that production deputies report,

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the original. I don't have copies, I'm sorry. It's part of the document number 26.

WARDEN: Exhibit 107.

ADMITTED AND MARKED "EXHIBIT 107"

MR HARRISON: If I can just turn to something else with you, Mr Morieson, the ventilation in 5 South, were you familiar with how 5 South was being ventilated, certainly as at the Friday afternoon shift when you were there?-- No, I wasn't familiar with - it was just as I came in I had to inspect and find out where things were.

Did it become apparent to you in the course of that inspection how it was being ventilated?-- Yes, there had been changes made from when I had gone on annual leave.

If I gave you another plan, this is again a photocopy extract from plan number 44-24 which shows the 5 South Panel in its entirety, would you be able to, again using that highlighter, mark for me as best you can recall the flow of air in and out of the 5 South Panel with particular reference to the flows past monitor points 6 and 7 which are near vent stations 37 and 36 respectively? Have I hit you with too much of a mouthful there?-- Yes, I think so.

All right. Well, I'll take that bit by bit. What I'm interested in is the flow of air through 5 South as you understood it as at that shift on the Friday afternoon, and in particular I'm interested in the flow of air past monitor point 6 and 7 which are near the two vent stations?-- I really need a larger plan to -----

Do what you can and then I'll ask you a few more questions about it. Just so that I've got it clear, as at that stage return air was going through both the top and bottom return?-- Yes.

So neither regulators were closed off at those vent stations?-- Not to my knowledge. That was outbye my area of control.

I think you mentioned earlier that that had changed from when you had seen it previously?-- Yes.

In what sense?-- Before the air was coming over those overcasts that are marked there, those two overcasts, I believe there was temporary stoppings put across there so the air couldn't go up that way and was going over on that bottom return.

Are we talking about up where it meets the returns from - the headings, I should say, from 510? There might not be a plan here that helps you?-- Yeah, we have got a plan here. We are

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talking about this area. When I was here, the air - return air before was coming along here and here. There was intake air going through there, so this pump that was here was receiving intake air. That brattice stopping and that was not there.

I see what you mean, but can you just read into the record the area you are talking about just so that we know?-- It's 6 heading 34 cross-cut. There was intake air where it is showing a brattice machine door. The air was going in towards 7 heading which is the start of the 520 panel. The air was travelling around the brattice line and then wiping these gas holes along 7 heading and then back out 6 heading.

Which are the 520 drainage holes you are talking about?-- Yes.

They were connected to a range, weren't they?-- They were, I believe, yes.

Thank you. I tender that marked plan, Your Worship. Perhaps I should also pass that along. I have nothing further of the witness.

WARDEN: Exhibit 108.

ADMITTED AND MARKED "EXHIBIT 108"

MR CLAIR: Your Worship, before I re-examine the witness I just want to sort something out. I was handed this morning by my instructing solicitor two bundles of documents which I understood he was given by Mr Morrison's instructing solicitor and they are documents which, as far as I am aware, haven't formed part of the documentation previously, and from what I can gather - it may be Mr Macsporrán is in a position to get some confirmation on this - I gather that they are not part of the documentation which was taken into possession during the inspectors' investigation. I just wonder before I proceed to ask questions about it, perhaps Mr Morrison can enlighten the Inquiry as to where they came from so that I can properly identify them and deal with them in my re-examination. He may even have the originals and have copies available.

MR MORRISON: I find it difficult to respond because I am not really sure what Mr Clair is referring to. Can you just identify it?

MR CLAIR: As far as I am aware there are only two bundles that have been handed to my instructing solicitor this morning. I will just check that. I will identify them by saying that they are the two bundles of documents that were handed to my instructing solicitor this morning.

MR MORRISON: In which case I can identify the source. They came from my instructing solicitor. The documents are the historical graph which we see Exhibit 25 as being the final

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product. They are simply the previous versions of that going back in time. I am not sure that the Inspectorate took them. They were certainly always available. They have come from Mr Morieson's files. They were asked for yesterday and we responded overnight by obtaining them. If the Inspectorate didn't take them they obviously had a reason why they didn't consider them to be of any particular significance for the purposes of investigation. I don't know that I can say much more than that.

MR CLAIR: My understanding is they have come from Mr Morieson's files, that is the witness Morieson's files.

MR MORRISON: Yes.

MR CLAIR: Can I ask Your Worship whether the originals are available, in fact?

MR MORRISON: What we have got in the files are here. What is in the file is here. Now, I think as I look at it - I'm pretty sure that these are photocopies themselves, but the only ones that are in the files are here. That's the graphs I'm talking about. Now, as to the tables, as I look at them I think they are photocopies as well. There is one original plus a number of photocopies, but they are the ones from the files. They are here now in the sense that they are the originals. They are here with me now.

MR CLAIR: Perhaps, Your Worship, if I could have those that have come from Mr Morieson's files, that way if I do tender any from my own copies I won't have the embarrassment of tendering documents on which I have made notations and be accused of altering exhibits, or even have to make confessions to altering exhibits. I'm not sure whether there were copies also provided to the other parties and to the members of the panel.

MR MORRISON: I might - just so there is no misunderstanding, we didn't provide them to the members of the panel simply because Mr Martin asked for them, and so to honour that undertaking I gave the other day, if parties ask us to look for documents, we will provide them if we can, and we weren't sure if Mr Martin wanted to tender them, we weren't sure if anybody else wanted to tender them and increase this paper war that we are undergoing, so we didn't provide them at that point. We didn't think it was right to provide them at that point until someone decided to make use of them.

WARDEN: Thank you, I understand that.

MR CLAIR: Thank you, Your Worship.

FURTHER RE-EXAMINATION:

MR CLAIR: Mr Morieson, I will ask you then to have a look at these documents that have been provided. I will give you the two bundles. If you can keep them in their separate sleeves as they are at the moment so that they don't get mixed up, and I am not sure whether there is any significance of the order in each sleeve, but I would ask you to keep them in that order so the order of the documents in the sleeve is the same as the ones which we have at the Bar table. Now, I see that you are looking at that set of documents which is a series of the logs or tables of CO make in 512; is that right?-- That's correct.

That's the first bundle you are looking at there. A number of those bear your signature?-- Yes. You got the same information just on one sheet as you - I produced and it was just put on these sheets, so there is really nothing significant about them.

Just before you put them away, the bottom page of that document is one which involves CO make up to 27 May. That's signed by you?-- Yes.

And each page is one up to - it's got "3 May" on it but it would appear to in fact be 3 June; is that right?-- Yes.

Because it's a week following 27 May?-- Yes.

That is a table again signed by you. It would reflect your Friday activities; is that so?-- Yes.

Where you extracted this document and then there has been a graph plotted?-- Yes.

To correspond with the document each Friday?-- Yes.

That's the graph that ordinarily is posted on a Friday?-- Yes.

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In the deputies' cabin?-- Yes, with this stuck on the back of it.

With this on the back of it?-- Yes, I used to photocopy this on one side and -----

Graph on the other?-- I used to photocopy this graph and this other table would be on the back of the graph on the same sheet of paper.

The table and the bundle you are looking at now would be reproduced on the back of the graph?-- Yes, just the one.

The next table then, coming up through the pile, is 10 June, I think we said, is that right, signed by you?-- Yes.

The next one is the 16th - I am sorry, there is one then with 11 June and 16 June added to that?-- Yes.

Signed by you. The next one then has 24 June as the only additional line; is that right?-- Yes.

Signed by you; is that so?-- Yes.

Then the next one is just a page with only one entry on it, a table with only one entry?-- Yes.

Being that for 22 July '94?-- Yes.

With that reading of 18.98 on it?-- Yes.

That appears to be signed by Mr Bryon?-- That's right.

The next one is again a table which runs through to 8 July and that's signed by you; is that right?-- Yes.

The next one is one signed by you that goes through to 15 July?-- Yes.

The next one is a document which you have already seen as part of Exhibit 21, that's the one issued by you on 18 August?-- Yes, that's correct.

Okay. Now, can you look at the other bundle of documents? That's the graphs. Just before we go through those, have you yourself recently produced these two bundles of documents? Did you have any part of producing them just now?-- I am not sure. On Saturday just gone - I am sorry, I have forgotten her name that's assisting Mr Morrison.

Mr Morrison's instructing solicitor?-- Yeah, she came over to the underground and got anything that was left in the underground, files or anything, cleared out the rest of my -----

Were you there at the time?-- Yes.

Were you there when these were located?-- No. She had already collected some stuff up before I got there. I just

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called out to let them know where the keys were - I had my keys in my overalls - and so they could get to the other room.

But there had been some stuff collected, you say?-- Yes.

When you got there?-- Yes.

Okay. You don't know yourself just where these came from the other day?-- Not offhand. They could have been in the file or on my wall.

Okay. Now, the other - well, you don't know whether the two bundles were found together, but they were bundles that were kept together; is that right, as you recall?-- From my memory these were on my wall in front of my desk.

The graphs?-- These - both these slips like this. This is the way I would keep the graphs, in one of these sheets just hanging up on the wall, and I would keep the current one in front.

Just have a look at the other bundle, and basically they appear to be the graphs that correspond with the tables that you have referred to; is that right?-- Yes, that looks right.

So there is a series of them that represent your tables?-- Yes.

Then you come up to your table up to 8 July which is before you went on leave. Do you see that one? That is your graph up to 8 July. That will be fourth from the top?-- Yes.

And then yours up to 15 July?-- Yes.

Then the next one is in fact a graph that's got your name on the bottom?-- Yes.

But in fact -----?-- I never produced, no.

It's got, "Issued by A G Morieson", but you see the signature there, it appears to be the signature of Mr Bryon. I don't know whether you have got one on your copy?-- It's just got Byron's signature.

It purports to be a graph up to 22 July?-- Yes.

Perhaps you can just hold it up so we can see which one you are referring to. That's one that goes up very steeply to that point that we have heard about in evidence otherwise?-- Yes.

Is that right?-- It looks like the misreading one.

The misreading one, you say?-- Yes.

It's actually got noted down in the corner Drager 8 ppm?-- Yes.

Maihak 5.7?-- Yes.

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But there was in fact a graph produced then singularly as a graph in the process of the normal Friday production of a graph; is that what's indicated to you?-- That's what it appears to be. I wasn't there, but it looks like he produced this graph on that Friday.

Ordinarily that graph would go up on the wall?-- Yes.

But you don't know whether it did or not?-- Well, it must have gone up on the wall, otherwise it wouldn't have been on the wall.

You say it must have gone up on the wall?-- Yes.

So you deduct that from the fact that it was in your -----?-- That it was in that sleeve, yes.

In your sleeve?-- Yes.

And that's the way that they were kept?-- That's the way they were kept in my room, yes.

Then the way that it presented to you, if it was still in that sleeve, is that the page in front of that would have been put in in front of that graph after that graph was up on the wall?-- Yes.

In the plastic sleeve as the front one?-- Yes, the last one would be the front one always.

Now, the one that went up on your wall would have gone up on the wall in the various other places in the mine if the normal system was followed; is that so?-- If the normal system was followed, yes.

Do you know whether it was in that case?-- I don't know.

Well, looking at that graph, it really shows quite a steep rise, doesn't it?-- Yes, it does.

If that graph had gone up at other points, it's one that you would have expected would cause some concern amongst anybody that looked at it?-- I would say so, yes.

Who had any knowledge of the significance of the increase?-- Yes.

In any event, you can't say yourself whether or not it went up on the wall?-- I have no knowledge of it, no.

The front page then is in fact the graph we have seen previously as part of Exhibit 21?-- Yes.

The one that's plotted through to 6 August?-- Yes.

Your Worship, I will tender those as separate exhibits, the first one being the bundle of documents headed "CO make 512" produced on today's date and the other as a separate exhibit,

the bundle of graphs headed "CO make 512" produced on today's date.

WARDEN: The first lot Exhibit 109 and the second lot Exhibit 110.

ADMITTED AND MARKED "EXHIBIT 109"

ADMITTED AND MARKED "EXHIBIT 110"

MR CLAIR: Now, you have said in answer to some questions from Mr Martin, first of all, yesterday that you and Mr Abrahamse were carrying out some joint exercise in preparation for this matter, that's after the explosion?-- Yes.

Do you remember talking about that? At one point you said - and this appears at page 1418 of the transcript, Your Worship, at line 49 - you said this: "We looked at all reports, deputies reports, that we had on hand and he recorded the readings onto that.", and at the time you had a number of documents in front of you and you were about to indicate which document as you said that, but at that point Mr Martin asked you another question and you didn't quite get to finish your answer?-- Yes.

Are you able to say now what it was that you were about to refer to, that is, which document were you about to say that Mr Abrahamse recorded the readings onto?-- The one I signed on the 18th, that last page of -----

Exhibit 21?-- 21.

Or was it Exhibit 25? Perhaps the witness should see Exhibit 25?-- Yeah, I might need to see 25.

Alternatively if you wanted to look also at the page fourth from the back in Exhibit 21 just to see whether you can identify which it was that you were talking about?-- It was page 2 on the back of Exhibit 21. That's the one - fifth page from the back.

Fifth page from the back. Well now, of course, that page only records - as I think you saw yesterday and had seen previously - that records two readings for Friday the 22nd, one for Saturday the 23rd, one for 29 July, one for 5 August and one for 6 August?-- Yes.

Now, as I understood your evidence, you were saying yesterday that you and Mr Abrahamse looked at all the reports, all the deputies reports, which had all these relevant readings on to enable the calculation of the CO make?-- At that time I was reading from a piece of foolscap paper that Jacques had produced and I was just reading out the numbers to him as he

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typed them into the computer and I wasn't actually looking at the deputies reports. It was later on that I looked at the deputies reports.

Right. Well, these figures that were on the foolscap paper, were they ones that had been produced from deputies reports?-- I believe so. Jacques could tell you.

Right. Well, from what I understood when you were answering questions yesterday, you said that you conducted this joint exercise where you went through all the deputies reports?-- Not at that stage, at a later stage.

At some later stage. Well, when you went through all the deputies reports, was the CO make calculated according to those figures that were produced on each of the deputies reports?-- I don't think so.

Okay. Well now, you said also to Mr Morrison this morning, or at least you were asked some questions by Mr Martin and I think you said this morning that there were - looking at it later, looking at the deputies reports and other things, you would say that there were in fact clear signs of a heating, is I think the way you put it?-- Yes.

Later you agreed with Mr Morrison that you said that on the basis of information that was now available to you?-- Yes.

What sort of things were you referring to as the information which enables you to say that there were clear signs of a heating?-- When looking at all the deputies reports taking into -----

Pausing a moment. Deputies reports, that is the deputies reports which had on them the relevant readings, particularly velocity?-- The readings -----

Wet and dry?-- Wet and dry, CO make.

So, that was one source of information that enabled you to express this view in retrospect that there were clear signs of a heating. What other sources of information?-- The smell, the smoke.

When you say a smell, evidence of a smell, that is evidence coming from deputies?-- Yes.

That was on the deputies reports?-- Yes.

About a benzene-type smell or a slight tarry smell?-- Yes.

Or a strong tar smell?-- Yes.

You mentioned a moment ago smoke; is that right?-- Yes.

You are referring there to evidence of a haze that was present?-- Cole Klease's haze and smoke.

Cole Klease's evidence referred to that; is that right?--

Yes.

In fact, that was in the deputies reports too; is that so?--  
Yes.

Any other sources of information?-- The graph, the air quantity, the reduction of quantity, just looking at the overall picture.

Can you just explain what you mean when you say the graph, the air quantity?-- When you look at these graphs that have been produced -----

That's the graph of CO make?-- The CO make, doing them on the daily - not the daily, but closing in those gaps made it look a bit - did - it closes up the grade more.

That is using a proper time sequence on the bottom axis of the graph?-- On the bottom axis, yes.

So you say once you do that, of course the picture becomes a bit more clear in terms of the rise in CO make?-- Yes.

Is that right?-- Yes.

Now, you did refer to a daily graph but then corrected yourself. Of course, you have never seen any daily graph, have you?-- No.

Any graph calculated on a daily basis as to CO make; is that right?-- Yes.

The best you have seen is that one that's the fifth page back from the end of - sorry, the fourth page back from the end of Exhibit 21; is that right?-- No, that was - I was referring to that one that I was shown yesterday.

Oh, yes, okay, the one that you were shown yesterday, the last page of Exhibit 21, the one that has comparative graphs on, but -----?-- No, the one that had two points. It had a - on the scale, last reading it had the snake's tongue. It had two -----

Okay. I will get you to look at it, Exhibit 92 or 93 - I will just check - Exhibit 93. Is that the one you are talking about?-- Yes.

Well, of course that doesn't give you much information, does it?-- No, it just shows that vertical heading towards 20, so that if that reading was correct, you know, it shows alarm.

Yes, yes, I see. Anything else that you would say that is further information that you had available to you during your investigations subsequently that indicated these clear signs of a heating?-- No, just those reports.

Now, you did agree with Mr Morrison when he said to you this morning, "Well, all this information is now available to you but was not available at the time to any one person." You

agreed with that, I think?-- Yes.

Was that so, that that was information not available at the time to any one person?-- Well, I was there for one shift, so I didn't see, that's what I am referring to, to me as a person. You start a shift -----

Certainly wasn't available to you?-- Yeah, I wasn't referring -----

Certainly wasn't available to you because you only came back to work one shift on the Friday afternoon as a production deputy?-- Yes.

But it's not true to say, is it, that there is any of that information which was not available prior to the explosion to anybody if they cared to look?-- No, I'd say -----

That's right, isn't it?-- That's right.

It was all available?-- It was all available.

Okay. Of course, Mr Morrison also said to you, of course, having emceed all this documentation now and knowing what happened, you were in a position where you can make some sort of an enlightened judgment in retrospect, but of course when - and you have agreed with that?-- Yes.

But in fact the documentation we are talking about was really documentation that was available before the explosion, isn't that so?-- Well, I never saw that Friday's graph. When I went down I didn't see it.

No, you didn't see it?-- But someone may have, yes.

But you weren't in fact intending to agree with Mr Morrison that there was any documentation that was available later that couldn't have been available beforehand. The documentation, for instance, by way of deputies reports with daily readings on, they were available?-- I believe so, yes.

The ability to calculate the CO make from those reports, that was available?-- I find now that some deputies weren't - didn't know, you know, about the CO make. I find that a lot of them now that you assume did the same course that you did would know something and they weren't familiar with it.

But you have seen the deputies reports?-- Yes.

And they have, for the most part, recorded the figures necessary to calculate the CO make on a daily basis?-- Yes, the figures are there, but whether they were calculated or not I don't know.

I have only referred to the figures being available to enable the CO make to be calculated?-- Yes.

There was even provision, looking at those documents you saw yesterday, for those figures to be entered on a daily basis,

that's - you recall that other table you saw yesterday?--  
Yes.

In fact, on that graph in front of you, 93, provision for it to be plotted on a daily basis, so even that documentation was available, isn't that so?-- Yes.

Apart from that, really there is no other documentation that you would say, from what you told us this morning, that would need to be available, isn't that so?-- No, with the exception that a lot of the deputies would have not had available to them the information that I had available to me in the likes of those SIMTARS books on CO make.

Yes, I see?-- That - the background to interpret - there wasn't a sheet to say if you had 20 litres, you know, alarm bells go off, like, you know, pull people out and seal. There wasn't, to my knowledge, a procedure or a set figure at which we would seal the section. So, in that respect there wasn't a procedure for them to be guided by it.

So, you are saying there would be some deputies who wouldn't be aware of the meaning of all of these danger signals that you can now see?-- Yes.

But somebody who is trained at least to your extent you would expect to be aware of the danger signals, isn't that so?--  
Yes.

Now, you were also asked some questions by Mr Morrison about a situation, for instance, where you might have readings of CO make around 11 or 12, they might go up to 14.59 was one reading that he referred to, or even to 19.35, and then it might drop back, and he suggested to you, well, that might be - if it dropped back and stayed back might just be regarded as an aberrant reading. Do you remember him putting that to you?-- Yes.

And you said, "Well, that would be one of the possibilities, yes."?-- Yes.

What other possibilities would exist if you had readings perhaps at the same level or slightly increasing and then a high reading and it dropped back? What other possibilities would exist?-- That you had had a flare up and then something had changed, a fall or something had smothered it.

That's a flare up of any heating, for instance, that might be producing the CO?-- A heating that suddenly become buried in a fall.

Now, that sort of thing - I mean, you answered that quite readily. Is that the sort of information you would expect to be available to somebody with at least your standard of knowledge about ventilation and spontaneous combustion?-- I would think so, yes.

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Any other possibilities?-- It could be a change in air quantity.

The sort of thing you answered some questions to me about yesterday, where there could be -----?-- Yes.

Some change in ventilation at one point, it picks up the result of a heating and then it changes and doesn't pick up the result of a heating?-- A heating.

Of course, that possibility is enhanced by the very real prospect that any heating is only likely to develop in a position where the ventilation is poor?-- Yes.

Now, you also said - when Mr Morrison asked you, "Well, a reading of 16.66 wouldn't be of concern if it was just one reading in a run of lower readings?", your answer to that proposition was, "Well, it is still getting high and you would be more vigilant."?-- Yes.

What sort of things would you do to be more vigilant if you had a reading like that?-- You would try and locate where the CO was coming from, if it was possible.

Would you then also, perhaps, ensure the daily CO make was calculated and plotted?-- Yes, that would be one way.

Now, I want to ask you briefly about a different area altogether and that is 5 South where you indicated to Mr Harrison that there was some concern that you had about - when I say "concern", at least you did a reading which showed 5 per cent methane coming out of that hole?-- Yes.

Where it was intersected at cross-cut 37 in 5 South?-- Yes.

Which diluted to .3 per cent when you stood back. You made the comment that this hole, this drainage hole, was the gassiest of them?-- Yes.

Can I just ask you to explain that a bit further? The gassiest of which holes?-- Of those holes in that 5 -----

The holes that ran off the end of 5 South?-- Just at 5 South, not at 520. I didn't go into 520.

This was the gassiest of all those holes along the back. Significantly more gassy?-- Not significantly more, but if you keep placing your Minder into that sort of methane it will blank it out and saturate the cell. So, it was about the same, but it was - it was the one that was of concern to me because it was the one that you were going to dissect -----

Yes, in the next -----?-- Next cutting.

Part of the sequence?-- Yes.

In that connection then I would like you to look at this. In fact, just a section of that plan that you have looked at over there, 45/20, and on the left-hand side of the whiteboard. It

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is an enlargement of a section of that plan?-- Yes.

Showing 37 - or 36, 37 and then the working area?-- Yes.

Now, that working area shown there -----

Perhaps, Your Worship, I might ask Mr Dahlke if he could just put that at this end of the whiteboard so that the witness can also refer to it up there.

That working area has been chartered in a detailed fashion on that plan. It has the position of the bag stopping?-- Yes.

Position of the continuous miner and a shuttle car there?-- Yes.

And then above that it has got a shaded area where night shift was to cut coal?-- Yes.

This seems to have been plotted as at the beginning of night shift on the ill-fated Sunday, 7 August; is that right?-- It is just trying and anticipating what they would have cut in the time they had available to them.

So, it should really represent the position at the end of your shift?-- At the end of my shift.

Friday afternoon?-- Friday afternoon. That piece that is cut out there is what we cut out, that little bit in the centre.

Right?-- And what - dog-watch on Sunday night would be probably cutting out that other black bit because I believe some coal was produced.

Some coal was produced. And given the vagaries of drawing plans and vagaries of extracting coal, there would be some possibility of the dog-watch shift on Sunday actually cutting further than the shaded area and cutting across that methane drainage hole; is that right?-- That's a possibility, yes.

Now, that bag stopping as it is illustrated on the plan there?-- Yes.

Is that illustrated in the very position it was in at the end of your shift?-- It might have been extended in another metre.

Extended in to the cross-cut?-- Just in a little bit. We had a snap jack there just to get it to the centre of the bord because we dusted out.

What would happen then as the night shift cut further into cross-cut 38 there?-- They would have extended that bag line in on the bottom side.

That's normal practice, to do it while the production shift is on, to extend the bag line, step by step?-- Yes, to keep the miner behind the bag.

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And what would the practice -----?-- Sorry, to keep the miner in advance of the bag.

In advance of the bag?-- The bag in advance of the miner. I will get it.

Righto. So, we get back to, what, the miner behind the bag; keep the bag in advance of the miner?-- Yeah.

What's the practice, it extends a metre at a time?-- Oh, no, you would extend it about 2 metres at a time.

2 metres at a time?-- You wouldn't have more than 3 metres, 4 metres from the face at the most.

What would be the practicalities if the miner did breach that extraction hole there in terms of keeping the stopping up far enough to ensure that the - any methane that came out of the open end of the extraction hole?-- The air in there was quite good at the time and if - the amount of methane that was coming out in 37 cross-cut, it would indicate that the air that would have been at 38 cross-cut would have handled any issue of gas coming out of that hole.

Assuming that the stopping -----?-- Assuming it wasn't blocked up, the hole, and you were just where you were cutting it.

Right, well, the methane coming out into cross-cut 37 would have indicated whether or not there was any substantial blockage in the hole that might have caused some build-up or pressure?-- No.

It wouldn't have indicated that?-- No.

Okay. So, what you say is that assuming they had moved the bag stopping up there would be sufficient ventilation to prevent any methane building up around the miner itself?-- Yes.

And getting into the intake air?-- Yes.

Okay. Your Worship, I will tender a copy of that enlarged section of that plan 45/20. I have no further questions of Mr Morieson.

WARDEN: Could you just stand down? We will take a short break. The panel want to look at some of those exhibits. You may be required to come back. We will have a short adjournment.

THE COURT ADJOURNED AT 11.24 A.M.

FRXN: MR CLAIR

WIT: MORIESON A G

THE COURT RESUMED AT 11.41 A.M.

ALLAN GEOFFREY MORIESON, CONTINUING:

WARDEN: That last plan that was tendered apparently is not on the record. I have it down as Exhibit 111.

ADMITTED AND MARKED "EXHIBIT 111"

WARDEN: That's the enlarged part of 45/20.

MR MARTIN: There has been an error too, Your Worship, in relation to Exhibit 105. The document that should have been tendered was 27 June 1994, Ventilation Station Survey, No 2 Underground Mine. So that has to be read with Exhibit 91, 91 being 12 July.

WARDEN: I had it down as 12 July. You want that changed to 27 June?

MR MARTIN: Yes.

WARDEN: Thank you. The amended list will come out tomorrow morning. The panel have a few questions, witness.

FURTHER EXAMINATION:

MR PARKIN: Mr Morieson, who did you report too again, please?-- Undermanager in charge and the superintendent.

So nobody specifically?-- Who do I report to -----

Not specifically one person?-- Not specifically one person, no. As part of my job as fire officer -----

Fire and ventilation officer?-- Fire, ventilation, stonedust and that I was under direct control of the superintendent and the other undermanager in charge. The undermanagers could use me only if they really were stuck for someone, but my two immediate superiors were George and Albert.

So you took your instructions from George and Albert, but if there were any changes underground you could take those changes from the undermanager?-- Yes.

I was going to ask you the question in terms of communication, if ventilation changes were made, how were they communicated?

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For instance, if one undermanager asked you to change the regulator or whatever, how would you communicate that through the system?-- That was the trouble. Most of my ventilation changes, when I was told to go down they would get me to - say they had a problem if 512, they would ask me to go down, see what the problem was and then I would contact by the phone and say, "I need to do this.", and they would then authorise me to do that and I would have assumed that it would have been kept in the shift report, but that wasn't always the case.

So that's not the most efficient way to operate; is that right?-- No.

When you returned from leave and you worked on 5 August, who was in charge of ventilation at that particular time do you know?-- Michael Squires was the undermanager on shift.

So he would be the guy that would be in charge of ventilation?-- Yes.

Could you have a look at document 87?-- I don't have that.

MR MARTIN: It's Exhibit 91.

MR PARKIN: Have you got the document now?-- Yes.

Can you see that's the ventilation survey for 12/7?-- Yes.

If you look at 512, the top return and the bottom return, if you total those quantities up, 41.787 and 8.49 respectively you should get 50.36 cubic metres per second of ventilation; is that right?-- Yeah, I'd say -----

Say 50 for round figures?-- Yes.

Can you look at Exhibit 21, please? Six pages from the back you will see the CO make in 512, page 1 on the right-hand side. Can you see that now? It's got your signature on the bottom right-hand corner?-- Yes.

If you look at the bottom of the page on 15/7/94 you will see the ventilation station for 46 and 59 there?-- Yes.

I guess you can take my word for it - I could ask you to do it but we will save some time, I think - if you calculate that total quantity out you will find that it's about 57.79 cubic metres per second?-- Yes.

So I guess the question is, and I could ask you a few more questions about ventilation, but they are after the 15th and you went on leave on the 15th, I believe?-- Yes.

There is an increase of 7.4 cubic metres per second from the 12th to the 15th?-- Yes.

Can you tell me why that happened?-- No, off-hand I don't know why that happened.

Because I mean you were still there at the time. You were

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still the ventilation officer?-- Yes.

The reason I ask the question is that if you look at the velocity, you can see the velocity in metres per second?-- Yes.

And if you look at the 1.8 for 15/7 you will see that that's the highest velocity recorded?-- Yes.

And if you are to look at it and work it out you find that that 57.79 cubic metres per second is the highest quantity of air that's been recorded in 512, is that correct, or would that be correct?-- Yes, I think it would be correct. Now, just from memory, the air was increased probably because we had closed other two returns down.

Which other two -----?-- The bottom return had been closed down and -----

When was the bottom return closed down?-- Here on this other thing it's shown on 1/7 the thing was closed completely off. There was no flow.

But on the 15th you've got a flow?-- And then the 15th - I don't know whether it was due to a fall that - that bag that was closing off - there was a flow and that's what brought up that .95 velocity, and it looks like it was reduced from there on until it was sealed up completely.

I guess the question is on the 15th you've got something like 18.3 cubic metres per second of air flowing past vent station 59 and yet previously on the 8th and the 11th it was closed. Now, I can't understand why that would be the case?-- Why it was closed on those occasions?

Yes?-- The bag was placed on the regulator after - I just can't recall when they had a fall that partially buried the miner. We had put up a stopping at that bottom regulator and I was instructed to close that off, that bottom return, because of this re-circulation effect that we had been getting from that return being open, and we put up brattice and it was nailed to the roof and to the plates that were up on the roof and there was a fairly good seal. There wasn't enough for the anemometer to pick up.

On 15/7 we have established this 57.79 cubic metres per second of air total quantity in 512?-- Yes.

I can't say exactly, but that was certainly the largest ventilation quantity in the panel?-- Yes.

I think the previous figure was about 49 and yet we have got 14.59 litres per minute of CO. Can you explain that?-- Because that bottom bleeder return had been re-opened again it looks like - and with that quantity of air it's picked up more what's-a-name, another 1.1 litre of CO from the waste or the goaf and brought that into being, I think.

I mean, wouldn't that raise some concern for you?-- It was

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getting up to that concern area, yes.

See, I've got some questions after the 15th, but I mean you left on the 15th so we will leave that?-- Yes.

But if you look at Exhibit 25, if you look from 16/6 to 15/7 you can see that you increase from about seven and a half litres per minute to 14.59. We have just established that at that time on the 15th we have got the largest ventilation quantity in the panel?-- Yes.

And I mean I've asked you this question previously, but I will reiterate the question, if you more than double or approximately double the CO make in litres per minute in one month exactly knowing that you've increased the ventilation by something like seven and a half cubic metres per second, I mean that - we talked about trends this morning, but wouldn't that trend give you some reason for concern?-- Yes, it gave reason for concern. It was certainly, you know, heating upward. It was at this time, I believe, Joe Barraclough was just taking over as acting manager and I was going away, so communication - I was concerned to the fact that I wasn't going to be there. I spoke to Joe at around 2.30 p.m. that I wasn't - I still hadn't been able to contact - because I thought Mick Caddell was going to do my job when I was away and he didn't and then Steve Bryon - Steve Bryon was underground. I was going to go at three o'clock. I wasn't going to be able to talk to him directly, so Joe Barraclough arranged then for me to speak to Rod Stafford to pass on the information to him so he could pass it on to Steve Bryon.

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So, as far as you were concerned, that information about the CO make on the 15th was communicated?-- That was communicated, yes.

It's been mentioned this morning that an emergency procedure did exist at Moura No 2, there was a document there?-- Yes.

Can you remember the last emergency procedure practice at Moura No 2?-- There had been no emergency procedure practice at Moura, to my knowledge.

Okay, thank you.

EXAMINATION:

MR NEILSON: Mr Morieson, you have been asked a number of questions about the effects of diesel machinery and how carbon monoxide make readings can be influenced by the operation of diesel machines?-- Yes.

You answered one question, I believe, to a question asked by Mr Morrison in respect to the Unor, and you indicated that the Unor simply only tells you what the reading is but doesn't tell you what the cause is?-- Yes.

Can you tell me how many causes you are aware of in an underground environment of carbon monoxide?-- Well, the natural distilling of the coal, there is some CO being produced; the diesel machinery produces the CO. Other than that, unless you have got a fire, I don't see any other answer to, you know, producing the CO.

So, you are saying there are basically two causes?-- Yes.

One is the oxidisation of coal?-- Yes.

Which can lead to spontaneous combustion?-- Yes.

The other is diesel machinery?-- Yes.

Okay. I guess the idea of you taking the carbon monoxide make readings and plotting the graphs is all to have some idea of how the 512 Panel would be trending as far as carbon monoxide make is concerned?-- Yes.

In answer to a question from Mr Martin you indicated that - I think you said diesel machinery working under heavy conditions can produce up to 40 ppm of carbon monoxide?-- Yes.

Now, would I be correct in assuming that you meant 40 ppm would be produced at, say, the exhaust?-- Well, you know, like a metre or two metres away, yes.

But certainly not into the general body of the area?-- Not into the general body 40 parts.

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Have you ever taken carbon monoxide readings at the monitoring points or the ventilation survey stations with regard to trying to ascertain what effect one diesel machine may have on the carbon monoxide levels?-- No.

Do you think it would have been wise to do so?-- It may have, yes, been wise to.

Well, we are monitoring an area that is under suspect, aren't we?-- Yes.

And if you had one or maybe two or even three diesel machines operating in that particular panel, it could have quite a significant bearing on the carbon monoxide make, is that not true?-- Yes.

And yet nobody - at least you didn't take any time to go and actually ascertain what that effect might be under those conditions?-- Yes, I looked at the monitor later on during the shift to see if it had settled down after that machinery had finished working.

Yes, but I mean at any given time if there was a need for alarm because of a sudden increase in the carbon monoxide make, how would you relate that to diesel machinery? I mean, if you knew, for example, that yes, there was diesel machinery operating in the panel, how could you then relate that to the reading that you might have if you did not know what type of make or increase in make you could expect from either one, two or three machines?-- Well, I had noticed that, you know, you would get, you know, one or two parts more when, you know, the diesels were working in the actual section for a long time.

But how did you notice that?-- By the readings on the Unor Maihak system.

Well, you may have not heard one of my previous questions to you. I guess I asked you did you go and take readings and you said no?-- Well, I didn't take handhelds. The Maihak is monitoring all the time and you could see when they were doing a belt shift in a section - especially in that 512 when they were cleaning up loose coal around the boot and that you could see a higher reading for, you know, four or five hours through the Maihak that I am not personally taking but the actual system is taking, so that's how I based that that reading that I had when I got that vent survey of that extra 1 part per million - that's how I was not concerned by that one particular reading, because of the fact that I had known that that machinery had been operating for some four or five hours solidly in a working, so their exhaust gas in that general body would have lifted the readings by 1 part.

Okay. Well, I will put the question to you another way. Are you aware of just what effect the operation of one or two or three machines would have in terms of carbon monoxide make?-- Yes, that it would raise the -----

You are, okay. So, there could be no confusion then in your

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mind should there be a sudden increase or whatever there might be in terms of carbon monoxide make?-- Yes.

I mean, you would not be confused, or should not be confused of whether or not it was a genuine CO make from the panel itself from the oxidisation of coal or whether or not it was being influenced by diesel machinery operating?-- Yes.

You would not be confused?-- No.

You have also been asked a number of questions in relation to the intersection of the gas drainage hole in 5 South?-- Yes.

You indicated that that hole - I am not sure if it has a number - but in 37 cut-through or between 37 - yes, in 37 cut-through just outbye of where the continuous miner was situated on the night shift -----?-- Yes.

----- on the Sunday night, you indicated you had a reading of 5 per cent?-- Yes.

Can you explain to me in relation to the hole where you were actually taking that reading?-- Putting my mind - almost actually onto the hole, so it was actually - the rip was there and my Minder was there, so the sensors were getting straight up the - the gas lifting straight up into the sensor heads.

So, you were taking the reading where there was no influence at all from the ventilation?-- No.

You then said that reduced to a reading of .3 per cent CH4?-- Yes.

Where did you take that reading in relation to -----?-- About a metre away from the hole.

At what height?-- At the hole height.

Is that a reason for alarm, I mean in your mind?-- If you had a car wheeling along there where a cable would be going past that hole, yes, I would put, what's a name, bull hose in that hole and piped it into the return so you couldn't have the possibility of a car cable flashing and igniting.

Did you do that?-- No. The car wasn't wheeling with a cable on that side to the hole.

Okay. Now, if we assume that the continuous miner in fact did intersect that drainage hole on the night shift?-- Yes.

Had it encountered at the hole itself a similar amount of methane, and that's 5 per cent?-- Yes.

What would have happened?-- I believe it just would have dissipated between the sprays and the air that was down there, it would have just -----

Don't you have sensors on the miner heads to cut the power off?-- Yes, the sensor would be on the - away from the hole

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side. The sensor was on the driver's cab side which was the right-hand side of the machine, so it would be probably another - depending on where - if you just cut straight through the hole completely, the sensor would be on the right-hand side and about, you know, a metre way from the head, so it would have dropped the power.

Can you just have a look at that plan up there where it shows the circumstances? I mean, my understanding is the miner would have intersected that hole on the right-hand side?-- Yes.

That's right?-- Yes. Well, the miner was actually coming around square and it would have been parallel to that hole when it intersected it.

Okay, you can sit back down. Well, I will just return to my other question. Had the miner intersected the hole and experienced a 5 per cent methane outflux, what would have happened?-- It would have dropped the power off to the miner.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Morieson, there is one aspect of the ventilation of Panel 512 which continues to puzzle me, and in that regard could I refer you, once again, to Exhibit 21 and to the page six from the back which is showing the CO makes in 512. It's something that you have looked at already this morning?-- Yes.

I would like you to look at the quantities flowing on 24 June, and although the quantities aren't shown on this table, would you accept the figures that I give you that in the top return that relates to vent station 46 there was 35.1 cubic metres per second going out of the top return and in the bottom return relating to that .74 metres per second there would be 14.3 cubic metres per second going out of the bottom return?-- Yes.

You will accept those figures?-- Yes.

Then we see at some time between 24/6 and 1/7 the bottom return was closed off?-- Yes.

It was closed off presumably to improve the amount of air flowing through the goaf?-- Yes.

And you would have a reasonable expectation that most of that 14 cubic metres per second would, therefore, go through the goaf?-- Yes.

The fact is, however, on 1/7, just looking at the velocities

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of 1.72, that equates to a volume of 37.7 cubic metres per second which is little more than was passing through the top return on the 24th?-- Yes.

Well, that might have been thought to be an aberration of some sort, but we find precisely the same a week later, that the quantity of air passing over the goaf as a consequence of closing the bottom return has not perceptibly increased; would that be true?-- Yes.

Have you any explanation for that?-- Depending on what they were doing in the gas range in the 510, that would affect the amount of air if they had increased their air in 510. I just can't recall - I have got on one deputies report that I did myself where I later closed by half the deputies - the regulator and increased the air. That's how we got the increase of air where we got the - what's a name - 1.8 later on on 15/7, because I had reduced the air going into the gas drainage because they were not drilling at the time.

Okay. Well, just let's leave it for a moment and move onto the second page, and we see precisely the same sort of pattern emerging when we move from 22 July where we have both the top and bottom return functioning?-- Yes.



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On that occasion we have - I hope you take my word for it - 39 cubic metres per second in the top return?-- Yes.

And 8 and a half cubic metres per second in the bottom return?-- Yes.

Once again on the 23rd when closing off the bottom return with the expectation of more air passing through the goaf we get virtually no extra air passing through the goaf. So, there, once again, we have a similar circumstance in which the bottom return has been closed with no perceptible effect on the ventilation passing through the goaf?-- Yes.

Again we find the same on Friday, the 5th and Saturday, the 6th. Now, I am puzzled as to how we have a situation in which a return is closed with the intention of increasing the airflow and it appears to have no effect whatsoever?-- The reason being is that it is on another split of air. If we can look at this plan here, this bottom return - this was the stopping here, a stopping here and the return over this side of the mine, it was getting - drawing its air off this return. When that was stopped, obviously that air was not now going that way, was increasing the velocity in this 510 area and not this here - the regulator here must have still been set at the same setting that it was being - to my knowledge that hadn't been altered. So, therefore, it didn't increase the air in this panel because all it did is it took it from here and gave it to the 510 section when that was closed.

So, the desired effect of increasing the ventilation across the goaf was not occurring?-- No.

And was anyone aware of the fact that it wasn't having the desired effect?-- Well, that was done after I went away although there was those occasions before where - like you pointed out, that it had increased a little, but it hadn't had the effect that, you know, we had more air in that return, no.

You will forgive me, it is not your fault, but I am not a lot clearer, but it is something we are going to have to follow through to -----?-- You have got a ventilation plan. If we went to the ventilation plan - you have got it in a series of documents - it shows all the returns and that which could make it a bit easier for me to show where the air probably went to.

MR CLAIR: Plan 45/22 shows the ventilation layout.

PROFESSOR ROXBOROUGH: Perhaps we will leave it at that and I will have a look at plan 45/22 a little bit later?-- Yes.

Can we quickly move into 5 South?-- Yes.

I think you said this morning in response to a question by Mr Harrison that at some stage, it was certainly the situation when you were in there on 5 August, that the air into 5 South was now splitting and a separate air circuit was going into 520; is that true?-- No, it was different from when I previously had been there. I pointed out on that diagram - and I think he has given everyone one, the air on this - here,

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before that was intake and it became return once it passed those holes and going back out here. When I left for holidays they had changed that and they put the stopping here and the return air now was going around here and this was all return whereas before this was intake.

I understand, okay, thank you.

EXAMINATION:

MR ELLICOTT: Can the witness be shown Exhibit 86, please?

This is a schematic of what might be called an Ellicott diagram; is that true?-- Yes.

I think you indicated in response to Mr Morrison that there may have been some potential for confusion with that on the Unor computer system?-- Yes, our - when you were plotting our plots you didn't get a nice even thing like that, it would scatter occasionally into potentially explosive or might, you know, be down here. It wasn't as clear as that.

Can you tell me if there was the facility on the system to print out an Ellicott diagram for any particular time?-- Yes, you could print the screen, what was up on the thing. It would plot all that.

Would that clearly indicate where the last sample point was?-- I don't believe so, no.

So, even resorting to the printout there was still the potential for the same confusion?-- Yes.

Would you agree that in a sealed area sample points would generally move in one direction or another along the general trends shown in that diagram?-- Yes.

And the trend towards the explosive quadrant would in general be caused by increasing gas in the sealed area?-- Yes.

What do you understand may cause a trend in the opposite direction along that general line?-- Trending away from - if the oxygen had reduced - if nitrogen had been inserted or placed into the thing you would find it, you know, reducing the gases.

Yeah. Would increasing the air into the area result in the thing moving back away from the explosive range along the trend shown on that diagram?-- Is this before we sealed or after it is sealed?

This is after it is sealed?-- Barometric pressure does play some part.

A leaking sample line?-- Well, that's another point, yes, a

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leaking sample point.

A failed seal?-- A failed seal, yes.

All of which are fairly serious?-- Yes.

No further questions, thanks.

FURTHER RE-EXAMINATION:

MR CLAIR: Perhaps, Your Worship, I should just let the witness clear this up. Could the witness see plan number 45/22 out of Exhibit 8, please?

You referred, Mr Morieson, while that is being obtained, to there being a plan of ventilation -----?-- Yes.

That was prepared. Does that, in fact, show ventilation after the sealing of 512? You are not familiar with it yourself?-- I can't -----

Okay, have a look at that there?-- No, that does not show the ventilation after the sealing, that is incorrect.

What does that show?-- Probably shows what they anticipated it to be, but it was not like that.

It was not like that?-- No.

Now, what time are you speaking of, when you left and went on holidays or when you came back and worked in 5 South?-- At any time, to my knowledge, it never - the return between 2 headings down to 5 headings was never returned on that No 1 heading of 510. It is showing it as a return and that was never the case, it was intake.

You and I have the advantage of having a plan in front of us. Perhaps that plan should be put up and you can - this plan here might be put up and you can just show what you are talking about. While it is being put up, on that plan the blue lines indicate the intake; is that so?-- Yes.

And the red lines the returns?-- Yes.

Okay. This - if it is incorrect you had better tell us in what respect?-- That was not the case.

If you can describe also what you are pointing to it will help for the record?-- 5 heading 512 was being wiped by this No 1 heading return across these temporary overcasts from 510. There was a stopping between 4 and 5. There was a door between 1 and 2 headings 510 and -----

In what cut-through?-- 4 cross-cut, 510.

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Mmm?-- There was a door - machine door, I believe, and that was where the intake air came in and went across and wiped the other headings and into the return there.

That's Nos 1 to 4 headings on 512?-- Yes.

And that then went into the return, whereabouts?-- And that went into the return there.

No 1 heading in 510?-- Yeah, No 1 heading 510.

Yes, and then around into?-- Back out 5 South.

No 5 in 5 South; is that right?-- Yes, yes.

Okay. So, to what extent then are you saying that plan is incorrect, in that it shows -----?-- Well, it shows -----

All five of the headings being wiped by the return air?-- By the No 1 heading.

In No 1 heading?-- It has got a red line in it between 4 and 5.

I am sorry?-- It has got a red line. The red line is joined up between 4 and 5 and half - it should only be - there should be a blue line between - half-way between 4 and 5 to where the stopping was.

Right. Okay. So, that there was no connection, there was a stopping, in fact, between 4 and 5 cut-throughs in 510?-- Yes.

Now, the situation that you speak of was the situation as you understood it after the sealing of 512?-- After the sealing, yes.

Okay. Before the sealing of 512 - do you know if there is a ventilation plan that shows - can you illustrate it by reference to that plan, where that cut-off was that caused the air to - that is the additional ventilation resulting from closing that No 5 roadway into 512 to go up into 510?-- There was a stopping between 4 and 5 headings on No 1 heading in 510.

Yes, same one you have spoken of after the sealing?-- Yes.

Go on?-- That stopping was there. So, the return air from 510 was coming that way and just wiping that one seal and then from -----

Is that - when you say "that way", coming -----?-- Outbye.

Coming back up No 1 heading in 510 and swinging across cross-cut 5?-- Yes, swinging across cross-cut 5.

In the process wiping or, at least, before the sealing - yes, it was still at that stage - before the final sealing of 512 it was wiping the seal of No 5 roadway in 512; is that

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right?-- Yes, that's correct.

Which had been sealed earlier?-- That had been sealed earlier.

When was that sealed?-- Off-hand I couldn't tell you. It was done while I was away.

After you went on holidays?-- Yes.

Okay, right. So, that the result of that No 5 roadway being blocked off was to produce no additional ventilation in 512? That's the bottom line; is that right?-- Yes.

Okay. Thank you, Mr Morieson. Just on that point, you have got that Exhibit 21 in front of you. If you go back a page to the first page of the CO make that you have signed there, you were asked some questions about that by the panel members. Now, in fact, the first date that shows that bottom return closed is 1 July?-- Yes.

And on that occasion then there was effectively no increase in the amount of air passing through the panel?-- No.

The same again on 8 July?-- Yes.

No increase in the amount of air passing through the panel so that through that time, although the bottom return had been closed off to further ventilate the panel in light of some concerns before that, is that right, 24 June, I think?-- It had been closed off to stop them opening it up further and that was adding to the re-circulation problem.

Yes, because of the re-circulation problems observed back in June?-- Yes.

Okay, so it was closed off to further ventilate the goaf but in fact there was no further ventilation of the goaf which resulted because we don't see any increase in the flow of air?-- No.

So any problem that was there in June really wasn't being addressed by closing off the bottom return; is that right?-- No, it reduced the problem because of this big pillar problem that we had with the way the air was splitting and going across. When they were working on that right-hand side they would tend to rely on that and not letting the air go straight down No 2 heading.

So it was addressed then to some extent?-- Yes.

Closing off the bleeder return or the bottom return addressed the problem to some extent?-- Yes.

But it certainly didn't produce any substantial increase in the flow of air that you would normally have if the additional air that was previously coming out, as it were, through the bottom return, was going through the panel?-- No.

Is that right? Okay, so if there was a heating there consistent with the signs noticed in June then that heating could well have flourished during the first period in July there?-- Yes.

The first and the eighth, and then on 15 July with the bottom return open again you do get a substantial increase in the amount of air going through the panel; is that right?-- Yes.

The amount of ventilation?-- Yes, the highest.

And at the very same time you get a substantial increase in the calculation of CO make litres per minute; is that right?-- Yes.

And that could be quite consistent with the scenario that we dealt with earlier where there might be on one occasion not much of the CO picked up from any heating because the ventilation wasn't touching the area or not sufficiently touching the area -----?-- Not flushing.

----- of the heating, but then when you get more ventilation through that area it picks up the CO and you get a jump in your CO make - or at least the reading of your CO make?-- Yes.

So that scenario is quite consistent with the figures you read here?-- Yes.

Thank you, Your Worship. I have no further questions.

MR MORRISON: Your Worship, I just want Mr Morieson to do one thing. Can you take this plan, please? It's 45/19.

FURTHER CROSS-EXAMINATION:

MR MORRISON: Can you take this plan, please? The plan I've just given you shows the top end of the 512 Panel where it joins with 510; do you see that?-- Yes.

What I would like you to do using red for returns and purple for intake, I want you to draw on the change that you noticed, that you just told us about in relation to the big plan. Before you do can I just ask this one thing: were you saying that the No 1 road in 510 was at no stage delivering return air between 1 and 4 headings at 512 or was that only after sealing?-- Before we developed the 512 Panel that was returned straight across there as shown by that plan, but once we started developing there then the second, third and - the No 2, No 3, No 4 headings were intakes on 510.

So from development of 512 the return air down No 1 heading 510 from that point on did a left-hand turn at the bottom return in 512?-- Yes.

That's the position I want you to mark on that plan using the red for return and purple now for intake. Show me the way the air did go?-- As at the time of sealing or pre-sealing, sorry?

Pre-sealing. Have you done that?-- Yes.

Mr Dahlke, could you hold it up so that perhaps we could all see it?

Now, as we look at it the left most red line in the centre of the plan is the one coming out of the top return of 512. You are now indicating that with the laser light, that's the top return of 512?-- Yes, that's correct.

Could you indicate to us No 2 roadway in 512 with intake air? Moving in and then splitting down cut-throughs 2, 3 and 4 of 510?-- Yes.

Down towards the entrance drives to 512 and from that point into 512?-- Yes.

FXXN: MR MORRISON

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Then after sealing is the only change to that sequence the erection of the seals across each of the drives to 512; is that correct?-- Yes.

With the result that that intake air then turns left at the No 1 heading of 510 and joins the otherwise return air?-- Yes.

Thank you. I tender that plan. I have nothing further, Your Worship.

WARDEN: That will be marked Exhibit 112.

ADMITTED AND MARKED "EXHIBIT 112"

FURTHER CROSS-EXAMINATION:

MR HARRISON: Mr Morieson, Mr Neilson questioned you about the 5 per cent readings obtained from the borehole in 5 South?-- Yes.

I note from the report that was tendered earlier you referred to 5 per cent plus?-- Yes.

Correct me if I am wrong, because I took no note being on my feet at the time, but did you say to me something to the effect that the readings went through the scale?-- If - the minder is only an instrument supposed to, you know, to my understanding, read to 5 per cent, but it would actually give - the little LED would go right up to nine and then it would just black out. It's gone - as far as being accurate I believe it's only accurate to 5 per cent and once it goes off 5 per cent you can't say that you've got 7 or 8 per cent, all you can say is you've got greater than five.

You were asked about concerns in relation to that and you said that it would have been enough of a concern to you to ensure that there was no cable going past there because of the possibility of cable flash?-- Yes.

Obviously you were concerned in terms of having any possible ignition source in that particular area?-- Yes.

And the way around it had cables run that way would have been to take that away with a hose or something like that?-- Yes.

Now, from your experience from time to time there can be sources of ignition at the work face, can't there?-- Yes.

One obvious example might be a pick from the continuous miner coming into contact with sandstone?-- Yes.

Can I just clear something else up, and that's what you

FXXN: MR HARRISON

WIT: MORIESON A G



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believe would have been the positioning of the continuous miner as the work continued on at 5 South, in other words, on that last shift?-- Yes.

The miner is shown in a certain position on that plan up to the left-hand side of the whiteboard?-- Yes.

Would you have expected it to have been, in effect, perpendicular to the borehole?-- It would have been - the heads would have been parallel to the borehole, yes. The miner was in enough that it could turn around and do the right angle break-off, and we actually had the miner at the right angle stage.

Are you saying it could work from the position it was in but still have the heads perpendicular to the borehole? That's all I wanted to clear up?-- Yeah, that miner is still heading straight ahead down that No 3 heading and it wasn't - it was actually facing the 38 cross-cut. It was actually -----

It was actually in there facing -----?-- It was actually facing as if it was driving 38 cross-cut straight away.

From 3 to 4?-- Yes.

And the Trolex in that situation would have been on the front right-hand side of the -----?-- Yes.

----- machine, on the opposite side to the brattice?-- Yes.

Thank you. I have nothing further.

MR MORRISON: Your Worship, I just feel that I may have left Mr Morieson and everyone on an incorrect basis with something I said. I should correct it now.

FURTHER CROSS-EXAMINATION:

MR MORRISON: You've got that plan in front of you that I most recently tendered. I think I suggested to you after sealing the only change was seals across the roadway into 512 resulting in those three lots of intake then sweeping the seals?-- Yes.

I think I'm wrong in saying that because there were in fact stoppings erected in No 2 and No 3 cross-cut of 510?-- Yes.

So that the only intake air then sweeping the seals would have been going in the normal intake in 510 then down No 4 cross-cut then back across the seals?-- Yes, that's correct.

Thank you very much. Nothing further, Your Worship.

WARDEN: Thank you, gentlemen. Shall we take the lunch break? You are excused, Mr Morieson, thank you.

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WIT: MORIESON A G

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WITNESS EXCUSED

WARDEN: Resume at 2 p.m.

THE COURT ADJOURNED AT 12.45 P.M. UNTIL 2 P.M.

FXXN: MR MORRISON

WIT: MORIESON A G

THE COURT RESUMED AT 2.03 P.M.

MR CLAIR: May it please Your Worship, I call Edward James Benthams.

EDWARD JAMES BENTHAM, SWORN AND EXAMINED:

MR CLAIR: Your full name is Edward James Benthams; is that correct?-- That's right.

You are a mine deputy employed at Moura No 2 Mine?-- That's correct.

You started in the mining industry in 1967 at Appen Colliery in New South Wales as a miner; is that right?-- That's right.

And after 12 months there did you come to Moura No 1 mine for six months?-- That's right.

Then you returned to Appen through until 1969; is that right?-- That's correct.

And then after a break from the industry did you work at Stockrington No 2 Colliery?-- That is right.

For about 18 months?-- Correct.

And then at John Darling Colliery, New South Wales for six months?-- Correct.

And then Burwood No 2 Colliery?-- Correct.

And then in about 1974 did you work the Victoria seam at Burwood - you finished at Burwood and you moved to West Wallsend; is that so?-- That's correct.

And then to Lambton Colliery?-- Correct.

And you gained your deputies certificate at Lambton in 1981; is that right?-- That's right.

You transferred then to Stockton Borehole Colliery?-- Correct.

And worked there as a deputy in '81/'82?-- Correct.

And, in fact, through to 1988?-- That is right.

Okay. You moved then to Queensland and after 12 months working out of the industry you started at Laleham No 1 Colliery in 1990 as a deputy?-- That's correct.

And then you came to Moura No 2 in August 1990?-- That is

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correct.

You have worked there since as a deputy?-- Yeah, that's right.

Now, during your time at Moura No 2 you worked in practically all the panels, is that so, on relief duties?-- That is right.

Then when 512 Panel commenced were you made a regular deputy for that panel?-- Yes, I worked there for about 80 per cent of the time.

That was 80 per cent of the time, what, throughout the life of the panel or -----?-- Yes, the - I worked through the panel when we formed the pillars and then meself and Doug Moody were relieving deputies as the management wanted him to learn how to pillar extract or punch.

I see. So, you - what you are saying is that you were associated with the panel from the outset?-- That's correct.

But that 20 per cent of the time you might have been working in other panels?-- That's right.

Okay. Now, in terms of the development of 512 Panel, there was a new method used, is that right, the cut and flit method?-- That's correct.

What was your assessment of that?-- It was a very efficient method of mining, but at times we were having trouble with ventilation when we got in about three or four pillars.

That was during development?-- That was during development.

And why was that?-- Once we formed our first large set of pillars and we got inbye of those, we were regulating on the top and bottom regulators. The miner would take the biggest percentage of air in the section where they were cutting in the heading while the other blokes were bolting and they got less air and made it very uncomfortable.

Perhaps if that top plan could be folded over to the back, you will see underneath that a plan of 512, up on the whiteboard there. If you pick up that laser pointer at your right hand there you might just indicate where you got to when you started having these problems?-- Well, there was the first big row of pillars that we formed.

Yes?-- Then - well, it wasn't so much in that area, but if we were cutting and flitting there and there -----

Sorry, you will just have to pause a moment so we can describe it for the record?-- In 3 heading and 4 heading - if we were bolting in 3 and cutting in 4 I would be returning on the bottom side for 4 and the top side for 3. The regulator would then be changed over onto the bottom side for the cutting cycle and there would be less air in 3 for the bolting cycle.

Right. So, the balance of air would favour the miner?-- That is correct.

Just for the record, you are indicating between 6 and 7 cross-cuts there and earlier the big set of pillars you referred to are those between 4 and 5 cross-cuts?-- Yeah, that's those there, yeah.

Now, what was the effect of the big pillars on the flow of ventilating air into the panel?-- Well, it restricted the air because the air wasn't running in a straight line and when the air was coming down it was hitting the pillars and it wasn't going straight through. There was - we had what you call a restriction of air.

And was that a problem that you noticed later on in development too when there was a second set of big pillars established between 8 and 9 cross-cuts?-- Yeah, the same thing occurred.

Okay. Well, now, you were there throughout development and then, of course, the extraction phase commenced. What did you find with ventilation during extraction?-- Well, ventilation wasn't too bad when we were extracting.

In particular, was there any difference that you noticed depending on what side the miner - what side of the panel it is that the miner was operating at any given time?-- Not initially. When we got back a bit we were only running on one return which was the top return.

Okay. Well, look, perhaps I will come to that in a moment, but before we do, the method of extraction that was used in the panel, was that a method of extraction that you had previously been involved with yourself?-- No.

Well, what were the particular features of it that you recall and what sort of comment would you make about it?-- It was - well, it was the first time I was in a section where we operated a remote control miner when we were punching. The depth of the punches were 9 metres, which in other panels are only 6, up to where the miner driver was sitting. The ramping of the bottoms was completely new to me. We was only ramping 15 metres so the shuttle car driver would be sitting on top of the ramp in a safe position away from the rib.

What was the effect of that in terms of the amount of coal that was left?-- Well, it wasn't at times very successful because once a miner driver was standing back with the remote control, if a miner broke the floor up then we would have to get the car in with a chain to pull the miner out. Now, once we pull the miner out of that ramp we could no longer go in there because we would get bogged again.

Right. And with this method of extraction, where there were the shorter ramps that you have spoken of, was there any difference in the amount of loose coal that was left on the floor compared with other panels you had been in?-- Yeah, if the miner broke the floor up we couldn't get the coal that we

had already cut or any loose coal that was in front of the miner. It had to be left.

Right. Okay. Well, what concern did you have about leaving that amount of loose coal there?-- We had ACIRL in who formed this type of mining - the system of mining for us and we, as the deputies at the mine, were down underground with ACIRL and I, myself, and other deputies had concern with the amount of coal that was left behind with spon com.

Yes, I see. Was this spon com an area of concern that you had had experience with in the past in other panels you had worked in?-- No.

Had you had much training yourself in relation to recognising the signs of spontaneous combustion?-- No.

Okay. Well, in any event, you say you were a bit concerned about it simply because of the amount of loose coal that was left there?-- That's correct.

Were there any particular signs that you noticed on occasions when you were in the panel that raised your level of concern about the existence of spontaneous combustion then?-- No.

Okay. Now, you stayed with the panel until the end of the extraction process?-- Yes and no. There was meself and Doug Moody. We worked in the panel a week about. I would work in there on afternoon shift and he would work day shift.

All right. So, you, perhaps, couldn't say that you were there continuously?-- No.

In the sense of being there every week?-- No, that's right.

Okay. Now, I want to draw your attention to an event or, at least, a shift that you worked on 29 June -----

If the witness could see Exhibit 83, Your Worship?

That's a copy of a deputies report, Mr Bentham, 3438 or, at least, it should be; one that has been completed by you in respect of the Wednesday afternoon shift, 29 June '94 for 512 Panel?-- That's correct, yeah.

Now, in the space provided for a report on your first inspection on that day you have recorded there, ".6 per cent" - it looks like, ".6 per cent methane"?-- That's correct.

Maximum detected in the general body in the intake No 2 heading; is that right?-- That's correct.

Okay. You mentioned diluted or dilutes to .1 per cent methane?-- That's correct.

That was somewhere back up along No 2, was it, that it diluted; can you remember?-- It diluted it completely along 2 heading.

Along 2 heading? What, outbye along 2?-- From the goaf area or the waste where we had a stopping, from there outbye.

Yes?-- Which was approximately five pillars.

Right. Well, now, you noted there in the "Action Taken" section that you erected stoppings at each of the cross-cuts between the supply road and the belt road?-- That's correct.

Can you just indicate with the pointer there where you put those stoppings on 29 June?-- I erected stoppings in the supply road there, the belt road -----

You are indicating - if you can just describe where you are pointing? We can see it, but we need to have it on the record, you see?-- That's 4 heading - supply road in 4 heading, we put a temporary partial stopping across that road.

That's in cross-cut 2?-- Yeah. In the belt road, which was 3 heading, there was a partial stopping put across there.

That's again in cross-cut 2?-- That's right, and partial stoppings between 2 and 3 heading, the belt and supply roads, and 3 and 4 to allow the air to flow down 2.

That's in cross-cut 3 and cross-cut 4?-- Yes.

Between the belt and supply road?-- I can't recall, but possibly it could have been even 5 as well.

Yes, I see. Do you recall where the sequence of mining was at the time, 29 June?-- Well, it would have had it on here, I would say. Sequence 13.

Sequence 13? Just bear with me a moment?-- Well, I couldn't tell you where sequence 13 is on that because it is not marked on there.

I will get you to look at an exhibit which will tell you that -----

That's Exhibit 85, please, Your Worship.

If you have a look at that it should have a sequence 13 marked on it?-- I can't tell you which pillar it was in because each pillar has got a "Sequence 13" in it.

I see. What area - which -----?-- Sequence 13.

Which cut-through are we talking about?-- It is in - well, that's what I am just saying to you, I don't know in what pillar it was because each sequence - each row of pillars has a "sequence 13" in it.

I see, okay. That's 85 you have got there, Exhibit 85?-- Yeah.

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It should have some dates on it. Can you see dates on there?-- 27/6 - 29/6 -----

Yes, okay?-- That would be between 5 and 6.

Between 5 and 6?-- That's correct.

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WIT: BENTHAM E J



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Okay?-- That's between 5 and 6 cross-cut over at 5 heading.

5 heading, okay. Just point up to the plan on the whiteboard, if you would. Number 5 heading between 5 and 6 cross-cut, I think you said?-- Yeah.

So that's where mining was taking place at the time. That was at the bottom end of the panel?-- That's correct.

It may be easier if you just pass that plan over. It can be folded up and put away, that Exhibit 85. Now, you say that you had to erect - they were brattice stoppings; is that right?-- That's correct, the men erected the brattice stoppings.

The purpose of that was to push more air down that No 2 road; is that right?-- That's right.

To clear the methane which you had noticed accumulating there?-- To dilute, yeah.

At the goaf edge. Now, do you recall whether on that shift you discussed that difficulty with anyone?-- Yes, I ran up George Mason, the undermanager in charge, at the beginning of the shift, explained to him the situation that had occurred and that I would be putting up brattice stoppings before I started production and to dilute the CH<sub>4</sub>.

How long would those brattice stoppings have remained there? Are you able to say that?-- No, I have no idea.

You put them up, you didn't take them down?-- No, I didn't take them down, no.

Do you recall when you were next in the panel?-- It would have been the following day.

Were they still up at that stage?-- They were.

Following that were they stoppings that remained, as far as you can recall, throughout the contact you had or were they taken down?-- No, they were taken down.

But you don't know just when?-- No.

That then was 29 June. Do you recall whether you encountered that same difficulty again with the methane accumulating in No 2 roadway at any time when you were on shift?-- If I did I would have reported it. If there is nothing in the reports I can't recall it happened.

Now, I just want to pause a moment and ask you about your practice with your deputies reports. Did you have any standard practice as to what you did with your deputies report at the end of the shift?-- With my own deputies report?

Yes, that's right?-- I'd fill it out, date it and sign it.

And what would you do with it then?-- When I got to the

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surface I would personally hand it to the undermanager on shift.

Did you find that the undermanager who was there and available at the end of your shift for you to give your deputies report to was invariably the undermanager who had worked that same shift as you or was it sometimes the incoming undermanager?-- Not always. It could have been the incoming undermanager at times.

Apart from handing the report over would you have any discussion with the undermanager about significant events that occurred during your shift?-- Well, 90 per cent of the time the undermanager, you'd seen him during the shift in the panel and you would talk to him down there if there was anything wrong, and if there was anything wrong at the end of the shift it would be in the report and you would tell him verbally.

I see. Now, at some stage towards the end of the extraction phase was there a change in the practice in relation to what deputies were required to report on their deputies report so far as the readings were concerned?-- Yes, there was.

How long before the end of the -----?-- I don't recall how long it was before the end of the extraction, but there was a notice in the deputies cabin stating the deputies take readings in 1 heading return at a monitor point for CO, CO2, wet and dry bulb temperature reading and methane.

Did you do that?-- Yes.

Whereabouts did you take those readings?-- I was never - I asked the deputy before me where he was taking the readings - I wasn't at work the day they were told where to take them - and he said it was inbye 1 heading prep seal approximately three to five metres. There was a marking on the ribs stating where the monitoring point was.

Who told you that, I'm sorry?-- Reece Robertson.

And can you just indicate up on the plan there with the pointer where it was that you took those that's in your No 1 heading, okay?-- Approximately there.

You recorded your readings each time?-- Yeah, they were placed on me deputies report.

Can I ask you this - perhaps first of all we should try to establish just when the change took place. I will ask you to look at this bundle of deputies reports relating to 512?--  
-----

That's document 45, Your Worship.

The report that I've isolated there with a flag with a B on, that's your report?-- That is correct.

For what date?-- 18/7/94.

You don't have those additional readings recorded there; is that right?-- That's right.

Can you come forward to what has been isolated as your next report in that bundle? Going forward you will see another one flagged with a B further up. Just turn through the intervening ones, if you like, and satisfy yourself there are no others of your reports in the intervening time. Then there is one flagged with a B; is that right?-- That's correct.

That's which date?-- 26/7/94.

That does have those additional readings; is that so?-- That's correct.

If you just turn quickly to the further ones that are flagged which are later reports than that, they are all your reports, if you could just confirm that?-- Yes, correct.

Some four or five of those?-- Correct.

They all have those additional readings on?-- That is correct.

It seems that change in your practice came some time between the 18th?-- That is correct.

And the 26th, I think you told us; is that right?-- That's correct.

You've told us you recorded them in your report. Do you recall whether you - first of all, do you recall the terms of the direction that deputies were given in this notice that was up on the wall?-- It was just a notice stating that we were to take CO<sub>2</sub>, the CO readings, wet and dry bulb, the air velocity in 1 heading - no, it wasn't in 1 heading - it was in 1 heading, in the return. I don't know whether the other deputies were told where to take them. Like I said earlier, I wasn't there on the day that the undermanagers told the deputies where the readings were taken. That's why I asked the deputy that was on shift before me when I went down the pit where he was taking his readings, and he said in 1 heading there is a monitoring point that's marked on the rib.

That was Reece Robertson?-- That is correct.

You were told to take the readings, as you understood it, and you also said you were told to record them in your report. Was there any direction they were to be recorded elsewhere?-- Not that I know of.

Apart from your report?-- Not that I know of, no.

Were you ever aware of any document that was down in the crib room in 512 apart from the deputies report book?-- No, I never seen one, no.

Nothing there for the recording of these measurements?-- No, I never seen one, no, that's right.

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Did you come to any understanding as to what the purpose was of these measurements being taken on every shift?-- Taking CO readings for precaution in case of spontaneous combustion in the return.

What was the advantage, as you understood it, in these measurements being taken every shift?-- Well, that would have given us a guide on an upward trend of CO.

Did you take an interest yourself in the trend of CO make in 512 Panel during the time that you were associated with the extraction?-- What do you refer to as the CO make?

Well, you have referred to an upward trend?-- Of CO, that's right, parts per million.

Were you aware of any way in which you might, as a deputy, inform yourself about the CO make, that's the rate of production of CO in the panel?-- No, I've never been shown and I don't know how.

Did anybody ever tell you about the existence of any graph?-- No.

Did you ever see a graph in the deputies cabin up top?-- Yes, I did.

And what did you understand that graph to relate to?-- Well, I couldn't understand it.

You had no idea what it related to?-- No.

Did you ever take any interest in the information on the Unor screen that was adjacent to the assembly area?-- Yes, I did.

What sort of information did you look at on that screen?-- At the start of shift I'd have a look what the CO<sub>2</sub>, CO readings and CH<sub>4</sub> readings were with my panel, 512.

What would you look at yourself particularly to determine whether there was any reason for concern about the level of CO in the panel?-- Well, I had no concern because the CO readings were very low.

But what would you look at to determine whether there was any reason for concern?-- If there was a sudden change, a very quick change from a low reading to a high reading.

Of parts per million?-- Parts per million, yes.

Did you ever yourself appreciate the significance of the wind velocity reading being taken together with the CO parts per million reading either at that point that you've referred to or any other point in the panel?-- No.

You didn't -----?-- No.

----- appreciate that. On the Unor screen there were a number

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of columns in relation to each monitor point at any given time; is that so?-- That's correct.

There was one column there that was described as a Graham's ratio?-- Don't know.

You were never -----?-- I was never shown and never taught how to use -----

During the time that you were extracting did you have any opportunity to observe the falls in the goaf, the size of the falls?-- Yes, from a distance.

What would you say about the size of the falls that you did see?-- Some were big falls, but there was no - what you could see from on the safe side of it, there were some big falls in 6 heading and there were some big ones in 3 heading. I think we buried a miner in that area.

Can you just remember looking up at the plan on the board there where those falls were?-- No, I can't recall where they were at the time. No, I couldn't, no.

As part of your inspection as a deputy how far would you proceed inbye of the area of workings at any given time? You mentioned going into No 1 heading, No 1 return there, in order to take those measurements. Were there occasions when you would go down that top return to the back of the panel?-- Yeah, I'd do a weekly inspection of the old and waste workings with an experienced miner at least when I was in there once a week.

So you go down the top return, what about across the back? Did you go across the back?-- Yeah, down 1 heading and across 13 cross-cut to about 5 heading.

Did you ever go in through any of those stoppings and into the goaf area from either No 1 or the number 13 cross-cut?-- Went through the doors in 2, 3, 4 headings and 13 cross-cut just to check the goaf visually and take CH<sub>4</sub> and CO readings.

When you say you went through the doors, how far through the doors would you go?-- About three metres.

Would you have been prepared to go further in than that?-- No.

Why was that?-- It was not safe and accessible.

Now, those stoppings down the top return between top return and No 2 heading, do you recall what kind of stoppings they were?-- They were Tecrete.

That was all of them?-- Yes.

Do you remember whether they had doorways in?-- Yeah, they had a steel door, I think. I'm not sure though. I think every third one had a steel door on it.

As you recall?-- Mmm.

The stopping in 12 cross-cut, do you remember when you went in to do your inspection whether there was any opening in that?-- Yeah, there was a hole in it.

When you saw that was that hole open or closed or what was the position?-- It was open. It was cut open. Someone had cut a hole. I'm not sure whether it was 12 or 11, but there was a hole cut in one deliberately.

The times that you did an inspection across the back, do you remember whether those stoppings between 12 and 13 had holes in them which were open?-- They had canvas or brattice doors that were rolled up.

They were rolled up on each occasion you saw them?-- They were rolled up, yes, yes.

Were you ever told of any particular signs in the panel, this is prior to sealing when you were there as a working deputy in the panel, were you ever told by anybody of any particular signs in the panel of the existence of a possible heating?-- No.

Was there ever any discussion with you, for instance, in the latter part of June about anybody smelling a slight tarry smell?-- No.

What about a benzene type smell?-- No.

Never any discussion with you about that -----?-- No.

----- at all?-- No.

When you assembled to go underground did you tend to have discussions with the miners first of all? Was it a practice that miners would gather in the assembly area and talk about matters related to the situation underground -----?-- No.

----- with the deputy?-- No.

No practice of that?-- No, deputies -----

What about around the Unor screen? Would miners tend to consult the Unor screen and talk about the level of CO -----?-- I have no idea.

----- in the panel?-- I was in the deputies cabin. I don't know what they were doing around there.

You wouldn't -----?-- No, I wouldn't have seen that.

Wouldn't have been party to that, okay. Did you have a practice yourself of when you came on shift of reading the previous deputy's report and acknowledging it in some way?-- Yeah, when I went underground.

When you went underground you'd do that?-- Yeah, the report book was underground and he would have the original copy with

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him and I'd have the copy of the original, so I would just counter-read his report and sign it and he'd bring the original copy out to the undermanager.

And that was part of the required procedure that you read the previous deputy's report; is that right?-- That's correct.

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Well then, was there any practice that you were aware of of reading back beyond that of a deputy, for instance, reading further reports beyond the one for the shift immediately preceding his to familiarise himself?-- I did it occasionally, but not often.

Well, what would you look for if you did do that? What would you be looking for in those reports?-- Well, if there was something unusual in the report that I had just signed, I would go back one or two reports to see if that incident was in there as well with regarding bad roof or poor ventilation or any build-up of CH<sub>4</sub>.

Okay, thank you, Mr Bentham. Thank you, Your Worship.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Bentham, you have worked at a number of collieries; is that so?-- That is correct.

At some point you received some training, did you, in relation to spontaneous combustion?-- Slight training, yes.

How long ago was that?-- About 10 years ago.

Was that at Burwood No 2, was it?-- It was in the training room.

Your statement records that that training was one day per week for three weeks?-- That's correct, that's three days.

Did you learn anything about the signs of spontaneous combustion during the course of that training?-- Yes, we were taught that.

What were you taught in relation to the important signals, if you like, for spontaneous combustion?-- With the smells, the tarry smell, the benzene smell, the rising of CO, taking hot and dry bulb temperature readings, that will get an increase in temperatures and that the oxygen levels were getting lower.

I take it from your evidence today that the rise in CO that you refer to is the rise in parts per million?-- That is correct.

You were totally unaware, were you, of any significance in a rise in CO make?-- It was non-existent in those days. This CO make has only come out in the last five years with regarding litres per minute.

Right. As at August of this year you weren't aware of that fact?-- That is correct.

You have learnt about the significance of CO make being litres per minute since the incident on 7 August this year?-- I

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haven't learnt, no.

You have become aware of the fact?-- I have been aware of it, yes.

So, prior to 7 August, as you have told us, you were unaware of what the graphs that were posted in the deputies' cabin actually signified?-- That is correct.

And the things that you watched on the Unor screen were for sharp rises in parts per million CO?-- That is correct.

Had you been told that there had been unusual tarry, benzene-type smells detected in the 512 Panel, would you have seen that as being significant?-- If I had been told that, yes.

What would you have done if you had been told of the existence of such smells inside the panel as a deputy?-- Who would be telling me this?

Well, anyone who happened to be underground and smelt a benzene or tarry-type smell?-- I would investigate - firstly, report to the undermanager on shift and take a man with me and investigate. What I would do is take Drager tubes with me and go in the area where the smell was detected, take an experienced man with me.

Now, on - it appears as though the date was 29 June - you noticed what you referred to as a backing up of air in the No 2 heading in the top supply road in 512?-- That is correct.

What did you actually observe when you say backing up of air in that heading?-- I don't think I said "backing up", did I?

I am just referring to your statement?-- To me, it was a sign of re-circulation where I was getting CH<sub>4</sub> coming out of the goaf.

Up No 2?-- Up No 2 heading, yes.

No 2 is ordinarily an intake roadway; is that so?-- That is correct.

Was there still fresh air coming down No 2 as well?-- Very slightly.

At about what level in the roadway was that fresh air coming in, could you tell?-- No, I couldn't tell.

Could you tell whether or not there were in fact two flows of air, that is, fresh air in and a higher layer coming out of methane?-- No, I didn't detect that. When I detected CH<sub>4</sub>, the first thing I wanted to do was remove it. I was not aware of anything like that, no.

All right. Then I think you have told us that you took steps after you told Mr Mason to put up the brattices - brattice

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stoppings to flush the roadway out?-- That is correct.

The readings that you detected of methane were general body readings; is that so?-- That is right.

Is that at about, what, chest, shoulder height?-- Eye height.

Eye height in the roadway. So, you didn't take any samples any higher than that?-- No.

At that time you took no CO readings with Dragers, or did you?-- Not that I recall. Well, on my report it says there I have in 1 heading 3 cross-cut.

You don't recall taking that, though?-- I did, yeah. I would have taken them if it was on my report, yeah.

You don't now recall doing that. It appears as though you did on your report?-- Yeah, I did. It's on my report. If it's on my report, I did it.

That was obviously in the No 2 heading as well, was it?-- That was in No 1 heading 3 cross-cut. It's on the report.

So, you took no CO readings in the No 2 heading?-- No. All I wanted to do was get rid of the CH4. That was my first priority.

Now, the notice that you saw on the deputies' cabin referring to the procedure for taking readings each shift, was that a typed notice, as you recall, as opposed to a handwritten notice, I mean?-- Yes, yes, I think it was. I wouldn't be sure.

When was the last time you saw that notice on the deputies' cabin board?-- I don't recall that, no.

Did you see it recently at all?-- No. I am no longer employed at Moura No 2, so I wouldn't have seen it then.

When did you leave Moura No 2?-- About two weeks ago.

You say that you weren't there the day that the deputies were told where to take the extra readings, that is which part of the roadways, but you were told by Reece Robertson that it should be taken in the top return itself?-- Well, that's where he took his readings and that's where I asked him where he took his readings and that's where I took mine, yes.

In that area you say there was a mark on the rib, was there?-- That's correct.

Do you recall what the mark was?-- It was only in stone dust, and someone had just used their hand to make a mark on the rib straight down the rib with an "M" beside it. That was it.

Had you ever heard that point referred to as ventilation

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station 64?-- No.

You know of ventilation station 46?-- No.

You never heard of that either?-- No.

So, all the readings you took were taken at that point in the top return, were they?-- Inbye the prep seal, yes.

To state the obvious, you say you were never told about a smell inside 512. Mr McCamley, an undermanager, didn't ever tell you anything about what he detected inside 512?-- No.

Thank you.

#### CROSS-EXAMINATION:

MR MARTIN: Just a couple of questions, Mr Bentham. You told the Inquiry that the deputies went underground with ACIRL about a concern of spontaneous combustion. Do you remember saying that?-- Yes, I do.

Could you help us with an approximate time?-- What do you mean by an approximate time? A date or what?

Just whether it was middle of March, middle of April, middle of May, June, July. Do the best you can. Was it in extraction?-- Yes, we were extracting, yes, at that time, yeah. I can't give you a date because I can't recall what month it was.

All right. In terms of retreating or extraction, how many cut-throughs back, any idea? Does that help you to fix a time or an extent?-- No. Well, the only way I would recall that is that I would have to go through the reports. I don't know whether it was - I was doing a double shift anyway. The only time I would realise what date it was, because I think the Government Inspector was there at that date, so that would be the only way I could recall what date it was.

All right, I won't take that any further. When that did occur, however, were there any management personnel present?-- Not with the group. We were all deputies plus - I can't recall his name - the chappy from ACIRL.

Well, were you instructed by management personnel to do this?-- To go down the pit with ACIRL?

Yes?-- That's correct.

Could you say who of management instructed you?-- Undermanager-in-charge, George Mason.

One final question: can you tell us whether the bottoms in cut-through 13 had been taken?-- Yes, they were.

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Thank you.

CROSS-EXAMINATION:

MR MORRISON: Mr Bentham, the alternation of you and Doug Moody was to let Doug Moody get some exposure to the method of mining?-- That's correct.

The cut and flit you were talking about - that cut and flit was really only applicable on development, I think, wasn't it?-- That is right.

And that's where you get - the miner goes in, cuts a bord, then it flits around to the other side of the pillar to cut the next bord, meanwhile the bolting team goes in to bolt the first bord?-- That's right.

Then you switch like that back and forth?-- Yes.

Which is what you are telling us was the difficulty with that ventilation, you had make sure there was a split so each team of guys got their air?-- Not necessary in the way you say that. We needed more air at the miner when it was cutting coal to dilute the CH4 and disperse the dust.

Because where the miner was would be probably the biggest source of CH4 from the coal, wouldn't it? You are not going to get much from bolting?-- That's correct.

So, it would make sense then to stick the air over the miner to clear the CH4 out?-- That's right.

Now, that system, I think you were saying, worked pretty well?-- That's right, yes.

And was pretty efficient too?-- More so in 510 than it was in 512, yes.

Any particular reason for that you can tell us about, so far as - in your judgment what was the reason for that?-- Yes, because when we were working in 510 we didn't have any restriction of air with the drillers in 510. We had all the air in 510 and we could ventilate with both returns with no problems.

I see, okay. So, cut and flit was on 510 on the way in too?-- That's where we started and we learnt how to do the system, yes.

I will just pause while you get organised there. When you came to 512 it was not quite as efficient because, nonetheless, some air had to go down the 510 anyway for the drillers down there?-- When they were drilling, that's correct, yes.

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That's - what's the name of the deputy who had 510?-- Neil Tuffs.

And there was another fellow, a guy with a wooden leg?-- Rod Helander.

Bony Helander, I remember. Now, at the No 2 Mine there was a few committees around the place that would handle safety-type issues, weren't there?-- That's correct.

One of them is the Mine Consultative Committee?-- That's correct.

I think you were on the subcommittee of that for production and productivity?-- For about two meetings, I think.

But looking at that cut and flit system?-- That's right, yes.

There were also things that I would call safety meetings - I don't know what they are really called - safety meetings from time to time that people would have to go to?-- Yeah, once a month or once every two months, yeah.

When they would do that, that would usually be start of shift and you wouldn't work while that was going on obviously?-- That's correct.

And they would try and do them over a couple of days to catch all shifts over two days?-- Yes.

I think you participated in those safety meetings in the sense of having your two bob's worth on anything that concerned you at the time?-- Could you repeat that?

At the safety meetings - well, I will put it in short terms. You were one of those people who spoke up on things that worried you about safety meetings?-- Yes, that's right.

And other people did too. I mean, there is not a bunch of wilting flowers at these meetings, are there?-- That's correct.

People are airing their views and pretty forthrightly like you do. I am not saying you are aggressive or anything like that, I don't mean that, but you are one of those fellows who did speak up?-- When it concerned me I did, yes.

When they were looking at the development and the extraction sequence for 512, were you involved in the discussions about that? I assume you were on the cut and flit side. I don't know about the extraction side?-- Occasionally when I was there.

So, you knew what they were thinking about was taking bottoms, doing short ramping, that sort of thing?-- Yes, yes.

And taking bottoms wasn't new. I mean, you had been involved

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in collieries that had taken bottoms before?-- No.

You hadn't?-- No.

What about ramping?-- That was new too.

The newness was what people were concerned about in the ramping, wasn't it? It was just they had never done it before?-- At the start, yes.

Then when they actually got it going, it seemed to work reasonably well with the exception of when the miner hit some spongy floor and got bogged?-- That happened on many occasions, yeah.

Particularly down the bottom of the panel, I think there was some bottoms down there that were pretty soft compared to the top, so you would get coal spewing out under the miner?-- What do you mean by the bottom of the panel?

Well, down around, say, 12, 13 cross-cut rather than up around, say, 7, 8?-- I have no idea. I didn't extract in 12 and 13, so I wouldn't know what the bottoms were like in there.

Okay. Was that because of this switching with Doug Moody?-- Yes, and I possibly might have been on holidays when we started extracting in 512.

Okay. So, your experience is a little more outbye in the panel than 12 and 13?-- That's correct.

Now, at one stage there was a suggestion for switching the sequence for mining the pillars; is that right? You people were talking about switching the sequence so you didn't have to wheel around the pillars?-- Yeah, that's correct, yes.

You were involved in discussions about that?-- That's correct.

We are talking about, what, the big compartment pillars there or just the ordinary pillars when you were discussing that? Was it just wheeling around any pillar or the big ones?-- I think it was in the last sequence of extraction in the row of pillars between, I think it was, 1 and 2 headings.

All right, okay. For a time was that change of sequence tried out?-- Yes, it was, I think, yeah.

Did it stay with the changed sequence or did it switch back again?-- I can't recall.

Were you - was your crew - when you were in charge were you down doing bottoms in the bottom return at any stage?-- What do you refer to as a bottom return?

No 6 roadway. It's at the top of the plan as you look at it. So you are looking - as you look at it, the entrance to 512 is on the right?-- Yes, yes.

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Was there a stage when that sequence was switched too so you were effectively ramping uphill rather than downhill?-- I was never in there when they ramped downhill but I was in there when they were ramping uphill, yes.

Was that a switch in sequence for that ramping?-- Yes, it was, yeah.

That was tried for a time, and then I think Albert Schaus said go back to the old way?-- That's right.

That suggestion for switching that ramping in the bottom return, that was a suggestion by either the miner drivers or the deputies, I can't remember which, it wasn't management?-- Miner drivers weren't satisfied with it, that's correct.

And so when they raised it management said, "Yeah, give it a go.", and after a while said, "No, switch back."?-- That's right.

You were saying there was some loose coal being left behind, particularly when the miner bogged. Now, given the amount of exposed roof that you would have once you put that ramp down and remote control and the rest of it, you wouldn't advise going back in there to get that coal, would you?-- No, once the floor was broken, no, I wouldn't, no.

The whole idea of this system was, I think, so the miner driver would never be exposed to high ribs because he would do it by remote?-- That's right.

The shuttle car driver himself would never have to go past the 3 metre rib height?-- That's right.

To get that coal out in the circumstances where you got a bogged miner you would have to do exactly what you were told not to do; that is, go beyond the rib height?-- That's correct.

So, no-one is really going to do that, are they?-- I don't think so.

Not unless the production bonus lifted by a huge amount?-- You just don't do it.

Yeah, and loose coal being left behind like that, not so much in the ramps, but just loose coal generally, that's not an unusual feature about extraction, is it? You always get a bit left behind?-- Are you referring to Moura No 2?

Yeah, well, start with Moura 2?-- Is that what you are referring to, are you?

Yeah, yeah?-- Yeah, there was at times, yeah.

I mean, the amount of loose coal -----?-- But there was more coal left behind with the ramping.

Yeah, I understand that, but comparing this panel to other panels, even though there was a bit left in the ramping it was not a staggering amount of coal left behind in this one, was there?-- There was a lot left behind because you couldn't go through - at times when you ramped down you - you still might have had two or three pillars - 2 or 3 metres of coal to get off the bottoms. Once the floor broke up you could no longer go down and get it so it was left behind.

What you are talking about then is like the stub end of the ramp?-- That's right, that's between a cut-through and a heading. So, you would leave 3 metres - 2 to 3 metres where you wouldn't send the miner back down there because you would have it bogged again.

Okay, I understand. I understand. Now, the concern you had about loose coal was the increased risk of spontaneous



combustion and that's what led the deputies to talk to the ACIRL fellow?-- No, we were down the pit with the ACIRL fellow. He was showing us once we started extracting where they had their monitoring systems in the roof and the rib and the way the pillars were designed and the way we were ramping out and we, as deputies, told him that we were concerned the amount of coal that was left behind could cause spontaneous combustion.

Can you remember what the response was?-- By whom?

By the ACIRL guy?-- I can't recall, no.

It might be hard, but you don't remember the guy's name? Was it O'Beirne?-- I have no idea.

Little fellow?-- With glasses.

Little fellow with glasses?-- I don't know. He was about my size with glasses. I have no idea what his name was.

Okay. You said - I think I got the note down right, I think it was, anyway - on that occasion that the inspector was there that day?-- Yeah, he was underground then, yes.

Which one is that?-- Michael Walker.

Mike Walker? Was he with the ACIRL fellow at that stage?-- He was talking with the panel deputy.

In 512 we are talking about?-- That's right.

Who was the deputy that day, do you remember?-- Cole Klease.

Okay. Was Klease and the inspector sort of with you and the ACIRL fellow?-- No, they were outbye talking.

Right, okay. If I mention the name Mr Hill from ACIRL, does that ring a bell with you?-- Christian name?

Gee, I will give it to you in a second?-- Well, then I will answer it.

You can give me an answer when I find out. David Hill?-- Yes.

That's the guy?-- Yeah.

Too many Christian names around this place. I can't tell you his nickname either. Perhaps we won't get on to them?-- No, I think we will leave them go.

Okay. Now, when the stoppings were put up that you talked about in your statement between the supply road and belt road, they are what you would call segregation type stoppings?-- Yes.

And they didn't take very long to set up, I don't think, did they? You would probably pick it up on your deputies report

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because I think you might have put down 40 minutes for that. I am sorry, I will just turn it up for you, 3438 I think the number is. You seem to have down the bottom there, "Stoppings 40 minutes", right at the bottom right-hand corner?-- Where is that? Oh, yeah, yeah, I see it, yeah.

So, that didn't take very long to set up and that was really just to clear your readings of CH4?-- That's correct.

Get rid of them, which was what you saw at the time as the absolute first priority?-- To me, yes.

And that seemed to work?-- Yeah, diluted to .1 per cent.

.1 is really sort of minimal, isn't it, you know?-- Yeah, we can run power with that, yeah.

I noticed when - in the statement when you were talking about those stoppings, I think you said that they - I will just try and find it. I think you said those stoppings stayed up. Yeah, once those stoppings were erected they remained there. They sort of remained there for a period of time is what you mean?-- Well, they were there for the Thursday and Friday that I recall.

They would eventually go?-- Well, once you are coming back they would come down.

Once you lifted the pillars they would be gone?-- That's correct.

They stayed there for a while, anyway?-- They were there Thursday and Friday plus the Wednesday.

Okay. Now, when the time came that this notice was put up that the deputies had to do more readings and everything else, I think you said - yeah, you did say in your statement that you took readings in accordance with what that notice said and the readings you took were pretty stable?-- That's correct.

You didn't see anything about the readings that would have caused you any concern as a deputy in charge of a crew?-- No.

And you did what you did, filled out the deputies report with the readings in?-- That's correct.

Okay. Now, you didn't see any document down around the crib table that you were supposed to fill in either, did you?-- No, I didn't see any document.

Right. I might just get you to have a look at something -----

I think it might be 94. Can I have 96 as well?

I want you to have a look at this thing. I will leave it in its plastic for the time being. I just want you to have a look at that and tell me if - have you seen that thing before? You can slip it out of the plastic if you want to?-- No, I have never seen this.

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I mean, just from its very look you wouldn't think that would have been down around the crib table for any length of time? It is a bit too clean?-- I don't think it has ever been down the pit.

Can you just keep it there for a moment? You just said you haven't seen it before. There is no writing on there that is yours?-- No.

Could you just have a look at the entries? There are only two lines I really want you to have a look at. You will see one for Monday, 25 July. There are two lines for that, starting "1.74" and "1.0". Do you see those two lines?-- Yes.

Anything in there yours?-- No.

What about - see to the right of that some figures "9.2" and then "16.25"; any of them yours?-- No.

That line "1.81" etc, directly below that?-- No.

Okay, you can hand that back. Now, I just want to ask you about these readings you took. From what other deputies were doing at the time, taking their readings, did they say anything to you like, "I have got this huge reading.", or got any reading that caused them some concern; anything like that?-- No.

And around that same time was anyone talking about smells or hazes or anything like that?-- No.

You haven't got all your deputies reports there, have you? You have got some?-- One.

Okay. I might just ask you to look at one of them, if I can turn it up for you. Night shift, 18 June. I think that folder your glasses are on are all the originals. I am afraid I can't tell you exactly where in that it is going to be. It is 18 June 1994, 3404, if that helps you find it?-- June, what date?

18 June?-- I am going the wrong way.

Mr Dahlke, I can give you a copy of it while he is looking for it.

It should be a Saturday night shift, 18 June?-- Yeah, I have got it here, yeah.

Okay, now, I think that follows - if they are in the right order the shift immediately before that should be one that Reece Robertson was on, afternoon shift, 17 June?-- Afternoon shift? Reece Robertson? I don't think so. On Friday, day shift, 17/6, Reece Robertson.

Sorry, I have got it wrong, Friday day shift. Reece was on that shift, 17 June, Friday day shift?-- That's right.

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Okay. Now, did you read that report of his at any stage? Can you recall seeing it? I think it is only the one page?-- Well, I can't say because there is no oncoming deputy's signature on it.

Okay?-- Where is the report for 17/6 afternoon shift?

Just -----?-- That will tell you who followed him.

Just at the moment I can't tell you. You didn't follow him because you were on the night shift on 18 June?-- That's right.

Now, I just want to ask you simply this: can you recall Reece Robertson telling you anything about what happened on his 17 June day shift?-- No, no, nothing.

Did you ever hear anything about smells or ventilation problems to do with that?-- No.

McCamley reckons that he told, amongst others, you?-- I beg your pardon?

McCamley reckons he told, amongst others, you that he smelt a smell that day. Did he ever tell you that?-- McCamley never spoke to me about nothing about that, no.

He reckons he might have laid it out chapter and verse for you, what he did about the ventilation that day?-- I don't think so.

You don't recall ever getting a long dissertation from McCamley about ventilation changes in the panel?-- No.

Okay. I will just show you this one. I am not sure if it is there in the originals. You were asking for the afternoon shift, Friday. This is one - I think it is Doug Moody's?-- What is that, the 17th? Well, he would have spoken to Doug Moody, not me, because I wasn't in there.

But - all right. Well, you don't -----?-- And on top of that he would have been on day work so I wouldn't have seen him on afternoon shift.

If McCamley had been talking to you about smelling smells in the panel you would certainly remember that, wouldn't you?-- I would, yeah, I would.

You can hand those document back, I don't need you to have a look at them any more. Now, when you did a waste inspection, which I think you said was once a week, you took a miner with you. Usually you would take an experienced bloke?-- Yes, I always took an experienced miner.

You would walk the top return, down the back and across 13 cut-through?-- That's correct.

As far as you would go, I think, was over near 5 or 6?-- That's right.

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Now, the stoppings along there at the back between 12 and 13, mostly those doors were open, weren't they?-- That's right, the brattice flaps in them.

Mostly you were getting a reasonable flow of ventilation through there?-- That's correct.

Certainly every time you went there that's what you experienced?-- That's right.

Now, on any of your inspections down there, going down the top return, then across 13 cross-cut, did you ever smell a smell?-- No.

Or experience anything unusual that was of concern to you?-- No.

Can you remember an occasion at all when Neil Tuffs and Lex Henderson and Dick Stafford might have come down to see you in the panel?-- Yes, they were going down 1 heading to do readings.

And you understood them to mean not only Dragers, but they were going down to get a bag sample?-- Yes, that's right.

So far as you were aware they did get the bag sample?-- That's correct.

And it was somewhere down the bottom of the panel?-- I don't know where. Yeah, down the bottom.

Somewhere down there. Do you recall what the result of it was? Did they ever tell you?-- What, the bag sample?

Did they ever tell you what the result of running the bag sample was?-- No.

Did they talk to you when they came back out after doing it?-- Yeah, they just told me they came out and I think one of them said they found 5 ppm CO.

Which is not very high, is it?-- No.

This is going to be hard to estimate, I suppose, but between, say, mid June and the end of the panel - we are talking about early August - how many times do you reckon you walked that return and cut-through? I mean, does it average once a week?-- No, I can't say that. The simple reason is I was in there every fortnight or every third week and as a deputy - the waste inspections only had to be done once a week by one deputy, not all deputies on each shift.

I see?-- So, I can't - the times I did them would have been put on the report.

Okay. Well, we can check the reports. You used some designation like "waste inspection" or something like that?-- That's correct.

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I have nothing further, thank you, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: You have told us today a couple of times about what you would look out for in relation to CO - and I presume you mean parts per million - is a sudden increase?-- That's correct.

Now, is that something you have learnt from your own experiences generally or is that related to some particular experience?-- Well, when we were at Burwood No 2, yes, it was shown to us, at least, if there was a sudden increase in CO it possibly could be a fire or a heating in that area.

Now, when you say "shown to us", was that by way of reference back to what happened in 1986 in 5 North?-- I know nothing about 1986 in 5 North.

I know you weren't at No 2 then, but you said you were shown certain things?-- Yeah, in New South Wales. We were shown videos of spontaneous combustion underground, how to dig it out, how to get rid of it or how to seal it up.

So, it is something you learnt in New South Wales -----?-- That's correct.

You think from videos, that sharp increases in ppm CO can indicate a heating?-- Yes.

Your Worship, could the witness be shown Exhibit No 98? If he could be shown the carbon copy as well?

What I have shown you there is the original of a production deputies report for 5 South signed by Mr Mills for the Monday night shift on 1 August 1994. I have also put the carbon there as well. Can you see from the carbon, firstly, you signed as the oncoming deputy after that shift?-- That's correct.

The original itself isn't signed?-- Pardon?

The original itself is not signed by you?-- No, it wouldn't have been there.

Just on that procedures generally there, is it the case that normally you would sign the original if you saw it before it was handed on by the outgoing deputy?-- No, I wouldn't see it before it went out.

You'd normally sign the book; is that the case?-- That's right.

So that's a fairly normal situation as you see there?-- That's correct.

I would just like you to have a look at the contents of firstly Mr Mills' report in relation to readings that were taken, methane issue from a borehole and ventilation problems and a roof fall all on that particular shift?-- That's correct.

You need not read it out aloud, but you are familiar with what I'm talking about?-- That's correct.

Do you have some recollection of those problems having taken over from him?-- Do I have any recollection -----

Can you remember now taking over after that particular shift?-- No, I don't remember, no.

Can you have a look at your report following that, 3696? We only have the carbon available, I think?-- That's right.

I will ask you to have a look at that?-- That is correct.

Can you see there where there is reference - and again I'm having trouble here because all I've got is a very poor quality photocopy of the carbon, but reference to the results of tests done by you in relation to methane, in particular methane issue from boreholes. That's your first and second inspection?-- At the boreholes?

Yes. Is that what it says or am I reading it incorrectly? There is a short answer to it. Can you just read what's in your first inspection?-- .8 per cent CH<sub>4</sub> detected at work face during cutting plus 5 per cent CH<sub>4</sub> maximum detected issuing from borehole diluting to .3 per cent CH<sub>4</sub> in general body intake.

Your second inspection?-- 1.25 per cent CH<sub>4</sub> maximum detected at work face during cutting plus 5 per cent issuing from borehole. Diluting to .3 per cent CH<sub>4</sub> general body in the return. .3 per cent CH<sub>4</sub> maximum detected in general body intake. Advancing back to face to dilute CH<sub>4</sub> to less than 1.25 per cent before power to the miner was restored.

If I can take you back to the first inspection, are you talking about boreholes generally or one particular borehole?

Can you recall?-- I can't recall. If it was in the work face at the time we could have bisected that hole and it would mean in the return. I don't recall on that day what we did there.

Again in relation to the second inspection are we talking about one hole or more holes or what?-- Only one hole in the face that I can recall.

We do have on the whiteboard to your right, and I am referring to the plan furthest away from you, a plan which shows basically how far the first workings had gone in 512 as at 7 August, if you would just like to walk across and have a look at that just so you have your bearings in relation to 5 South. I might ask you to go back to the microphone. Are you able to say by reference to that particular plan what borehole in particular you were talking about?-- I'd have to have a look at the plan again.

By all means?-- Could have possibly been No 2 because it's in the return.

Just so that we know what you are talking about you are talking about a borehole situated between - you might tell me which headings?-- That's 1, 2, 3 - between 2 and 3.

At the start of what would have been a complete 38 cross-cut?-- Yeah.

Just getting back to what I asked you before, you can't recall whether the testing was done at a time after it had been intersected or whether or not perhaps the testing may have been done back at 37 cross-cut before the particular borehole -----?-- I can't recall that day, no.

Was it your recollection that the workings at that stage, the first workings, were between 2 and 3 cross-cut - 2 and 3 heading, sorry, on 38 cross-cut?-- We would have - I'm just reading me report here. It says "Start of shift driving 37 cross-cut 2 to 1."

So we are talking there -----?-- Yeah. So if I was driving from 2 to 1 I would have bisected that hole.

What I'm really asking you was - and again you may not be able to help me - whether your testing in terms of the 5 per cent that you've referred to was done on that hole, say back at 36 cross-cut before it was intersected, or whether it was done after it was intersected between the 1 and 2 headings?-- I can't recall.

In that earlier report I referred you to, the one of the previous shift there was reference to a fall, a roof fall. Do you see that reference at the bottom of the first inspection notes?-- That's correct, yeah.

Are you able to tell me where that fall was?-- No, I couldn't.

You don't have any recollection of that?-- I can't recall, no. It states in his report the roof was loose and broken at



the work face and fall of roof after approximately five cars, so that would have possibly been at the work face. It says "roof loose and broken work face, ribs loose."

Do you have any particular recollection of the condition of the roof in that area -----?-- Not on that day, no.

----- just generally, or was it the case you didn't get in there too often?-- I've worked in there very regularly, yes - no, on occasions when a deputy might have been off that would have been the only time I was in there. I wasn't the regular deputy in there.

In short, from your own experience you don't know much about the condition of the roof in 5 South down around that area?-- That's correct.

I have nothing further, Your Worship.

MR CLAIR: Thank you, Your Worship.

RE-EXAMINATION:

MR CLAIR: Mr Bentham, you did tell the Inquiry that you had no capacity to calculate the litre per minute make in terms of CO?-- That is correct.

And that what you looked at was the level of parts per million?-- That is correct.

In particular I think you said you looked to see whether there was any increase in that?-- Sharp increase, yes.

Any sharp increase in that. When you looked at the Unor screen you would see a parts per million on the screen; is that right?-- That's correct.

You wouldn't know particularly what had been the reading on the shift before that or the shift before that; is that so?-- No, that's right.

So would you also look to see whether it had reached a particular level?-- Well, at the times I was looking at it it was pretty stable. It was only possibly 1 ppm difference in it.

I think you mention in your statement readings of around 4 or 5 ppm?-- That is correct.

Well, put aside any question of sharp increase, at what level would it become a matter of concern for you? Seven, eight, nine, ten?-- Well, if it jumped from four to seven, yes.

If you were aware of a reading of 10 ppm would that be a matter of concern for you?-- Yes, it would be, yes.

RXN: MR CLAIR

WIT: BENTHAM E J

Okay. Now, if you as a deputy with the knowledge that you do have of spontaneous combustion, if you were aware that there had been a report of a slight tarry smell in a panel and a report on another occasion of a benzene smell in a panel and then a report of a strong tarry smell in a panel and aware of a reading of something in the record of 10 ppm, what sort of assessment would you make as to whether or not there was some spontaneous combustion problem in the panel?-- Well, that depends if there was diesel machinery in the panel as well. I would say if readings like that were given to me, or I took readings like that, I'd inform the undermanager and we'd an investigation to see what is causing these readings to get up so high.

What about the smells?-- You are talking if I personally smelled them?

No, if you had been told that there had been reports of those kinds of smells that I mentioned?-- Well, there'd be a suspected heating.

Now, Mr Morrison established with you that you were the sort of fellow who would speak up at a safety meeting. I think he put it in polite terms. He is not suggesting you are aggressive, but you are not a man to sit back?-- That's correct.

If 512 Panel had recently been sealed and there was a question that arose at a safety meeting as to whether or not the men should be underground while the panel went through the explosive range and you were aware of those features that I've just mentioned to you, the smells, the reading of 10 ppm, what would you do on that sort of occasion? Would you speak up?-- Would I speak up?

Yes?-- Most definitely.

What would you be saying?-- I would make sure the men were informed of what was going on with - regarding that the panel had been sealed up and it was through the explosive range or going through the explosive range and that there was a possible heating in there.

Thanks, Mr Bentham.

MR HARRISON: Your Worship, I did cross-examine Mr Bentham about the contents of a deputies report. Perhaps I should tender that. It's number 3696. The original seems to have been misplaced today and if and when this turns up I will tender it. In the meantime I merely seek to tender a photocopy. I do have some copies for the panel and also copies for the Bar table.

WARDEN: We will mark that Exhibit 113 and if the original turns up we will substitute the original.

ADMITTED AND MARKED "EXHIBIT 113"

MR HARRISON: Thank you.

EXAMINATION:

MR PARKIN: Mr Bentham, a few questions. How often did you bog the machine during ramping operations?-- Occasionally it occurred twice a shift, possibly three times. It all depends what heading we were in. The coals seemed to be softer in one heading than in others.

But when you bogged the machine, how long did it take you to get the machine out?-- Well, we had - the management had a system of getting the machinery out that only the car driver and the miner driver and a cablehand were to be involved in this operation so that there were the least amount of men around that area when we were pulling the miner out with the shuttle car that there'd be less possible chance of anyone being injured if a chain broke.

How did you actually pull it out? Did you use the shuttle car?-- Shuttle car and chain.

Was that a standard work procedure or -----?-- In Moura No 2 it was, yes.

Was it a safe working procedure that was used?-- Yes, it was. The chain never broke. It was a very - I can't recall what tonnage it was, the linkage, but it was a very heavy chain. We also had a wire threaded through the links so if it did break and the wire didn't break it would hold the links, but we never, ever had any trouble with that, no.

Because you did say, I think, earlier that you weren't in the panel when 12 and 13 cross-cuts were retreated?-- No, I wasn't. That was the start of it. No, I wasn't.

Because it would be fairly steep down at that bottom end of the panel?-- It is very steep, yeah.

Did the bogging get better as you retreated out or -----?-- Yeah, the further we got out the less we did get bogged, yeah.

Did you have any concerns about the methods of work yourself?-- In what way? Regarding the method of punching.

You said in development you didn't have a problem, but in retraction you had some problems?-- Yeah, well, problems where that - there was a lot of coal left behind and the miner, when it was ramping down was getting bogged, and I never ever did any inspections in the middle of the goaf because of the bottoms taken out and the roof that had fallen

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in there it wasn't safe and accessible, but in me own mind I thought there could have been some dead spots there behind the bigger pillars where the roadways were formed in a manner that they just came straight down to the pillar itself.

How long did it take when you usually bogged a machine to get it out approximately?-- Well, if it came out on the first pull, approximately 20 minutes, but if it didn't come out on the first pull we'd have to try and build up under the tracks to try and get it out because if the coal was broken - once the coal was broken it left a lip for that machine to try and climb back up over the top.

You have spoken about some ventilation problems in 512 so I don't need to go through those, but did you communicate those concerns to anyone?-- The undermanager in charge, George Mason, at the start of the shift.

On many occasions?-- No, it was only on that one occasion where I had a build-up of CH<sub>4</sub> in 2 heading and I rang up the undermanager in charge and told him that I wasn't starting production until I diluted all the CH<sub>4</sub> in that section in that roadway.

You never had any problems once you - management were very happy to fix the problem?-- Oh yeah, oh yeah.

You talked about some large falls in 512; did these falls cause any disruption to production at all?-- Not while I was in there producing. I didn't - there was - no falls occurred while I was down there on production, but there was some big falls in there, yes.

Can you tell me something about the maximum area of roof - the width of the roof that would be exposed at any one time?-- With regarding punching?

Well, when you are retreating?-- -----

Could the witness see Exhibit 85, please? I think it's 85. It's a plan of the sequence of extraction.

WITNESS: Nine metres.

MR PARKIN: That would be the maximum width of the roadway exposed at any one time?-- Yeah, when we done our first punch the miner would go in nine metres, yeah.

What I'm looking at, and you might be able to clarify for me, if you look at the - going from the seals on that plan in front of you, the third pillar, if you look at the third pillar and then you look at the pillar between No 1 and No 2 roadway you can see where you've punched into that pillar, it's on number 4 cross-cut. Can you see that?-- Yeah, I wouldn't have been in there at that time, no.

I am just trying to get some idea of what the actual maximum width would be of the roadway when you were retreating. In other words, how much had you exposed?-- It would be nine metres plus your roadway which is seven, so that would give you 16 metres.

Okay. Production was generally stopped when you were doing a waste inspection; is that right?-- That's correct, yes.

Did it happen on each occasion that you stopped production when you did a waste inspection?-- When we stopped returning on the bottom return, and I had two returns, if I was returning on the bottom return I would do a waste inspection with a man with no problems because I wasn't getting dusted out, but when we stopped using 6 heading as a return, all the air and the dust would return up 1 heading, so before I do my inspection the production would stop, yes.

Thank you. You said that you were not aware of the graphs, what they indicated in the deputies' cabin for CO make?-- That's correct.

Did you ever ask at any time as to what they did indicate and why they were there?-- No, I didn't.

Have you any reason for that?-- No, I can't say, no.

You said you were not aware of the ventilation stations in 512?-- That is correct.

And you took readings yourself inbye of the seals?-- Where there was marked - where I was told to take the ventilation readings in 1 heading.

Who told you to take the readings there?-- The deputy that was before me, Reece Robertson.

And this is when daily readings were being taken?-- That is correct. By shift they were.

Because it would make a difference if people expected to use the ventilation stations and readings were taken elsewhere, I guess?-- Well, it could make a difference, yes.

You were never told about the ventilation stations?-- No.

Was there any reason for that?-- I don't know. I don't know why I was never told.

Thank you very much.

EXAMINATION:

MR NEILSON: Mr Bentham, you have worked at quite a number of other collieries, haven't you?-- That is correct.

XN: PANEL

WIT: BENTHAM E J

Looking at your resume, some of those collieries were what would be classed as very gassy mines?-- They were.

I see that you worked at West Wallsend Colliery, No 2 Colliery, and in fact were there until it exploded in 1980?-- That is correct.

Can you just refresh my memory as to the actual cause of that explosion?-- Two deputies were doing a pre-shift. What I can recall is that the fan was possibly off over the weekend and the power was turned on before the pre-shift commenced.

Okay. You also worked at Burwood No 2 and that was sealed off due to a fire. I take it that that was the end of that colliery then, wasn't it?-- No, we had two seams. We had Victorian seams and Dudley seams. The Victorian seam was above the Dudley seam. They just sealed that off and a big percentage of the men were then transferred or could go to another mine while the latter worked underground in the Dudley seam.

Okay, but that sealed off seam didn't reopen?-- No, not that I know of, no.

In all of the collieries that you have worked at, have you ever experienced an area that was sealed off in any one of those mines due to spontaneous combustion?-- No, not that I know of.

You have never worked in a mine that has been in fact sealed apart from that?-- No, I haven't, no, other than Moura, no.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Bentham, during the development phase of 512, I presume there was a support pattern prescribed by the manager's rules?-- That's correct.

Could you describe it to me, please?-- The bolts would be 1.5 by 1.3 metres apart, 700 mil from the ribs.

So there were three bolts?-- No, there was five bolts.

Five bolts?-- In some headings and four in others.

But what spacings along?-- 1.5.

And they didn't have straps?-- No, we were using butterfly straps.

I see. What, in your experience - how, in your experience, would you describe the nature of the roof? Was it a good

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roof?-- At Moura? It was one of the best roofs I worked with, yes, with the sandstone, yeah.

Were you cutting to what you might describe as a clean parting?-- At times, yeah. At other times the roof was flaky and bad, but other than that it was pretty good, yeah.

Was this support system the same system that was used in the development of other panels?-- In the mine?

Yes?-- Yes.

So, it was not a system that was unique to 512?-- No.

Are you aware of there having been any falls during the advance stage of the development of 512 Panel?-- I think we might have had a few small ones, but they weren't anything that were significant. We could still bolt them up and keep working.

Were there any additional supports or any special provision for supports at intersections?-- No. We still used the same amount of bolts on intersections but we bolted all ribs on both sides and where they were required we used straps.

Can I talk to you for a moment about the stone dusting? I think you said that the 512 Panel was well stone dusted?-- That is right.

And that stone dusting extended throughout the waste, did it?-- That's correct.

Was that stone dusting as a result of dusting during extraction or was additional dust thrown into the waste area?-- There was additional dust thrown into the waste.

What do you believe to have been the purpose of the stone dusting?-- To mingle with the coal dust. It tried to stop any spontaneous combustion or if there would have been an explosion.

You said "mingle with"?-- Yeah.

So you understand that to inhibit -----?-- To mix with, yeah.

But to inhibit spontaneous combustion the dust needs to be mingled with; is that what you are saying? It needs to be mingled with the coal dust to have any effect on preventing spontaneous combustion?-- Yes, yes.

Would there be any chance of the stone dust thrown into the waste actually mingling with the coal that might be in the waste?-- Well, when we are producing, yes, because the stone dust - the duster was going at all times when we were producing coal or extracting and the trickleduster was set up in a position alongside the miner, so when it was cutting in the goaf area the stone duster would intermingle with the dust itself and go throughout and then we would pump more dust in

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afterwards and that would settle on top.

Or if you are thinking of a waste which I think you described as white?-- That is correct, yes, I did.

The impression that one gets is that the stone dust is lying on top of rather than being intermingled with?-- When we pumped it in afterwards, yes.

Thank you.

MR ELLICOTT: No questions.

MR CLAIR: No further questions, Your Worship.

WARDEN: Thank you. Could we have five minutes before the next witness and this witness is stood down. Thank you.

WITNESS STOOD DOWN

THE COURT ADJOURNED AT 3.50 P.M.

THE COURT RESUMED AT 3.57 P.M.



WAYNE JEFFREY BARNES, SWORN AND EXAMINED:

MR CLAIR: Your Worship, I call Wayne Jeffrey Barnes. The witness has just been sworn. His statement is number 70/42. I might say that Mr Barnes was one of those from whom we weren't going to call oral evidence, but Mr Martin has requested his being brought in.

Now, your full name is Wayne Jeffrey Barnes; is that right?-- Yeah.

Mr Barnes, you are a miner employed at Moura No 2 Mine?-- Yes.

How long have you been working there?-- 10 and a half years.

If you can attempt to speak into the microphone, then everybody will hear what you have to say?-- Righto.

Now, you have given a statement in relation to the matter; is that so?-- Yes.

I want to ask you particularly about Saturday, 6 August of this year, the day before the first explosion at Moura No 2. You weren't working on that day; is that so?-- No.

At about lunchtime on that day did you run into a fellow miner, Darren Young?-- Yes.

Was there some discussion about whether or not you wanted to work that afternoon; is that right?-- Yes.

Well, can you recount as best you can recall the discussion that took place?-- He just said that - he asked me if I wanted to go to work and I told him I had my overtime up, and he said that there was - they had to seal 512 because of a heating and I said, "If they need someone, give me a ring.", and he didn't - he must have had enough blokes, he didn't ring up.

Was that the full extent of the conversation as far as it touched on the mine?-- Yeah.

Okay. So, you didn't hear anything, you didn't go to work that day?-- No.

The following morning you were at a union meeting?-- Yeah.

That's the Sunday morning?-- Yeah.

Was there some discussion there about men working over their overtime limit?-- Yeah.

What was that that you recall?-- Oh, just George Ziebell said - he was explaining about how the blokes done over their limit. He - the words - he never actually said a heating, but the way he said it I thought he said a heating.

XN: MR CLAIR

WIT: BARNES W J

That's the way he said it you thought yourself there was a heating?-- Yeah.

What I would like you to do is attempt to recall as best you can what words were used. I know that's difficult, but just do your best?-- Well, there was concerns with the readings, also about a smell they could smell. That's about it. I can't remember.

Now, did you have any conversation with any other miners at that meeting on 7 August about 512 Panel or the sealing of 512?-- Oh, I was talking to Nello at the meeting and he said - all he said was they finished at 2 o'clock Sunday morning or something.

Who was that?-- Mark Nelson.

Now, were you in fact rostered to work in the shift, the night shift, commencing that Sunday night?-- Yeah.

What panel were you to work in?-- Well, I was 512 but that was finished. I don't know what I would have been doing.

Right, but as far as you were aware on the Sunday you were still to work on the Sunday night, that's the night shift?-- Yeah.

Did you go to work that night?-- No.

I don't want to delve into your personal life, but was there any particular reason that you didn't go?-- No, just crook.

You were crook?-- Yeah.

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I have no further questions, Your Worship.

MR MacSPORRAN: I have nothing.

CROSS-EXAMINATION:

MR MARTIN: I would like you to take your mind back to the sealing of 5 North panel. Were you involved in that?-- Yeah.

And, as I understand it, the men were evacuated after sealing? From the mine, that is?-- Yes, that's right.

And was that after an argument with management?-- Yeah, we were suspended and the deputies were going to lose their tickets for a while and then they agreed to leave us stay out.

I will just turn to another matter. Your education was to, what, age 15 or so?-- Yeah.

And after you left school did you have a variety of manual type jobs?-- A variety?

Yes?-- Yeah. Well, a couple, yeah.

Well, you worked for the Wheat Board, did you?-- Yeah, the construction of a shed.

All right. Then in gravel mining?-- Yeah.

And when you first became a miner what induction did you get before you went underground? How long?-- A week, I think it was.

Anything about spontaneous combustion taught to you?-- No.

Since your induction underground have you had any training or retraining or courses or anything of that nature in relation to spontaneous combustion?-- Only what the older blokes had told me.

All right, but nothing from management?-- No.

Were you ever given a red or a blue book by your employer relating to the subject of spontaneous combustion?-- No.

And is it the case that your knowledge of spontaneous combustion or incubation period of oxidation of coal is very, very basic?-- Yes.

Thank you.

XXN: MR MARTIN

WIT: BARNES W J

CROSS-EXAMINATION:

MR MORRISON: You are a member of the Rescue Brigade, aren't you?-- Yes.

And have you been learning stuff through the Rescue Brigade?-- Yeah.

About spontaneous combustion?-- Not much.

Not much?-- No.

But some?-- Yeah.

And you were also, I think, studying for your deputies certificate?-- Yes.

How far through your studies are you?-- Only - I have done two modules.

Two modules of what?-- Geology and occupational health and safety.

Okay. You are going to persist with that?-- Yes.

You know that spontaneous combustion gets dealt with in that course, don't you?-- Yes.

You have been looking at that yourself?-- No, I haven't.

You haven't been sort of boning up in advance?-- No.

Now, you had a habit at the mine of going into the undermanagers' office, didn't you, at the end of shift?-- At the end of shift?

Yeah, you would go in and check the scales?-- Yeah.

The scales tell you how much production there had been?-- Yeah.

The result being you could tell with some degree of accuracy how much production bonus you would get?-- Yeah.

You would also, in that practice, have a chance to talk to the undermanagers who would be around?-- Yeah.

You would tell them about what was going on in the section?-- Yes.

And sometimes they would ask you questions about it, sometimes they wouldn't?-- Yeah.

And there would be other people there at the same time?-- Yep.

Occasionally deputies?-- Yep.

XXN: MR MORRISON

WIT: BARNES W J

Same thing, information being exchanged about what was going on in the section?-- Yeah.

Now, in your statement you said about Mr Ziebell - you thought he said it was because of a heating. That was the way you put it in the statement. You are not sure about that now?-- Yeah, the impression I got from what George said - the way they were talking about it was there was a heating.

Okay. Who was "they"? "The way they were talking about it"?-- Well, after what Darren Young told me and George said at the meeting I just took it as a heating.

Okay. You certainly remember him talking about concerns with readings and something about a smell that could be smelt?-- Yeah.

You don't recall what he said about either of those two things?-- No.

Now, did anybody at the meeting speak up and say, "Well, listen, we should look about what the men are doing, whether they should be down or not."?-- No, ever since 5 North was sealed, as far as I was concerned we just went down.

And there were deputies at that meeting?-- I couldn't -----

Rod Stafford, for instance, Neil Tuffs?-- I don't remember seeing them there. They may have been there, I don't know.

There were certainly people that we might call check inspectors? You don't recall seeing anything of them?-- No.

This is a union organised meeting for union members?-- Yeah.

Management are excluded?-- Yep.

Certainly no-one at that meeting seeks any management view to be put forward at that meeting, do they?-- No.

All right. You were talking to Mark Nelson after the meeting?-- While they were talking about it. While George was talking about it he just happened to say they finished at 2 o'clock that morning. I think it was at 2 o'clock that morning.

Mark Nelson said that?-- Yeah.

He had been one of the people who actually sealed it?-- Yeah.

Did he say anything to you about it beyond that, they had finished about 2?-- No.

Did he say to you anything bad about it, any concerns or any worries that he had?-- No.

Just routine?-- Yep.

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Okay. Now, in relation to 5 North, this is - let me just check. 5 North was in 1986, wasn't it?-- No, that was the first one.

Yeah? That's not the one you are talking about?-- No, I think it was about '91 or something like that.

5 North was sealed because there was a belief about a heating or there was a known heating, sorry, in 5 North, wasn't there?-- Yeah, that was the first one, yeah.

Then 5 North West was sealed because there was some rising CO and people couldn't get in to inspect and check out what the cause of that CO was because the roof was working?-- Yeah, that's - that was why we refused to go down.

The roof was working?-- Yeah, they were worried about frictional ignition.

They weren't worried about heatings and things, it was the problems of frictional ignition?-- Yeah.

Just tell me again what you said before: there was an argument with management?-- Yeah.

Were you part of that?-- Yeah, I was taken in the office, yeah.

Who was the management with whom this argument was had?-- Phil Reed.

With Mr Reed. Now, who else was present? You, him?-- Well, I know of - what's his name - Byron Byrne, Kenny Mills. I can't remember exactly who the miners were down there, but I remember the deputies.

The deputies were raising the question of frictional ignition?-- Yeah.

And deputies were going to lose their tickets?-- That is what was mentioned in there, yeah.

Who mentioned that?-- Phil.

I see. How long did this go on for?-- Oh, probably half an hour or something. Then he cooled down and he said okay.

All right. Now, you said the men were to be suspended or the work was to be suspended or something was going to be suspended?-- The men, we were.

Going to be suspended?-- Yeah.

So, from what you tell us these comments made by Mr Reed didn't persist at all, did they?-- No.

Within the course of the meeting that was all blown up and blown over?-- Yeah.

XXN: MR MORRISON

WIT: BARNES W J

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You didn't take it as a serious threat, did you?-- No.

No. Then the upshot of the meeting which lasted, at most, half an hour was, "If you want to be out you are out."; is that right?-- Yeah.

I think you stayed out, what, 24 hours?-- Two shifts we were out - two days.

Two shifts?-- Yeah.

All right. I see. Yes, I have nothing further.

MR HARRISON: I have no questions.

MR CLAIR: No re-examination, thank you, Your Worship.

WARDEN: Thank you, witness, you may stand down. You are excused.

WITNESS EXCUSED

MR CLAIR: I call Rodney James Stafford. I see Your Worship is displaying some reluctance. I won't promise Mr Stafford is a brief witness.

WARDEN: We will give it a try.

MR CLAIR: Statement No 70/49, Your Worship.

RODNEY JAMES STAFFORD, SWORN AND EXAMINED:

MR CLAIR: Your full name is Rodney James Stafford; is that correct?-- That's right, yeah.

You might like to move your chair in and if you can comfortably speak into the microphone?-- Righto.

Then we will all hear what you have to say. You are a mine deputy at Moura No 2 Mine?-- That's right.

You have had a long history in the mining industry; is that so?-- Yeah.

You started in 1962 at Howard Collieries at Burrum?-- January '63, I think it was.

January '63. Then you were appointed a deputy at Dunstan Colliery at Burrum in 1970?-- That's right, yeah.

In February '73 you moved to Kianga Colliery as a spare deputy/machine man?-- That's right, yeah.

In fact, you were the deputy in 4 North section at Kianga where the heating occurred; is that right?-- Yeah, one of the deputies, yeah.

One of the deputies there. After the explosion in Kianga - and that was 1975, am I correct?-- Yeah, 20 September '75.

You moved to Moura No 2. That was in October of '75?-- Yeah.

And you worked there ever since; is that so?-- That's right, yeah.



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Now, your duties at No 2 have been principally as a production deputy; is that so?-- Yeah, most of the time, yeah.

And you've worked in all of the panels there?-- Most of the panels around the mine, yeah.

Now, you are familiar, of course, with 512?-- No, not 512, no.

But I mean you know 512?-- I know 512, yeah.

How many times did you work in 512?-- Only worked in there about twice, but I've been in there, in the section another couple of times. About four times, something like that.

At what stage of the process in 512 did you go there? During the development of the panel or during the extraction phase?-- During the extraction when they hadn't extracted too much back all the deputies went down there one afternoon with what we call the rock doctor trying to teach us something about roof control.

Who was the rock doctor, if I can ask you that?-- I don't know his name.

Was he somebody employed at the mine, a geologist employed at the mine or was he from outside?-- Somebody from outside, yeah.

From ACIRL or somewhere like that?-- Probably ACIRL, yeah.

Do you know just when that was? You say it was -----?-- No.

They were a couple of panels back in the extraction, was it?-- We went down and we looked over the ledge and saw big heaps of coal there where they had been mining and hadn't cleaned it up, you know, heaps of coal there, and we - he was talking about roofs and we mentioned about spon com, you know, about all the coal laying around.

How many deputies were there?-- Probably about six or seven, I think.

I think you said it was when they were a couple of panels back in extraction?-- Yeah, might have been only the first road or something like that.

But there was some goaf area there -----?-- Yeah, there was some.

----- that you were looking at and bottoms had been taken out?-- Yeah, well - yeah, that's why the coal was there where they had graded in and couldn't get in to clean it all up.

Was there much coal on the floor?-- Yeah, heaps of it, yeah.

Was that your first time into that panel or had you worked there during development?-- Not that I can recall, not very much - you know, I can't recall working there much at all.

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What response was there when the deputies raised this question about spon com as a result of the coal being around on the floor?-- I can't really remember. We mainly talked about roof control.

Was there anything that you would discern to be different about the method that was being used to extract?-- It was similar to 401/402 where I was a deputy in there. It was similar, it's just that they - we actually took some bottoms in there too, but they were taking more bottoms and grading in a bit steeper, you know.

In 512?-- Yeah.

So what would you say as to the amount of coal around on the floor in 512 compared with 401/402 after extraction?-- There would have been more, yeah.

More in 512?-- Yeah, but there was still coal left in the other section too.

Was there an occasion when you went into 512 Panel with Neil Tuffs and Lex Henderson?-- Yeah, yeah.

Can you tell the Inquiry about the circumstances of that, how you came to go in there and what occurred when you did?-- When I gave me statement I said I thought it was about two weeks before.

Before the explosion?-- Yeah, on a Monday. I thought it was a Monday, but then I worked out that week I would have been on an afternoon shift and it was a day shift, so I worked out that it must have been three weeks before when we went in there, right?

So approximately what date? About 18 July, thereabouts?-- If that's three weeks before, yeah, I'd say about that, yeah.

It was a Monday, was it?-- Pretty sure it was a Monday, yeah.

What happened?-- I just -----

What were you doing? You were on a day shift, did you say?-- Yeah, my section wasn't working and I was doing spare sections and I just heard them talking about going down to 512 to take some bag samples, and I said, "I wouldn't mind coming in for a look too.", so I went with them, you know.

That's Tuffs and Henderson?-- Yeah, yeah.

Where did you go to?-- We went up through the door up to -----

If you turn to your right you will see a plan there of 512 Panel. You might just indicate with that black instrument in front of you there. If you press the button it develops a magic laser pointer that will show up on the plan?-- We went through the door.

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The door in 0 cross-cut; is that right?-- Yeah. We went down the return there.

Down the top return?-- Yeah.

Were there samples taken along the way down the top return?-- No, we took - one of them took a bag sample around there.

That's at the bottom of the top return where it meets with 13 cross-cut?-- Yeah, and the other one took Drager reading for CO and I walked down around there and just had a bit of a sniff around the back there just to see if I could smell anything.

Just pause a moment because we can see what you are indicating, but we just want to get it on the record. You are indicating down to the No 2 heading?-- No 2 heading there, yeah.

In 13 cross-cut, and you had a smell in through the - there was an opening, was there, in that bag stopping?-- Just sort of stuck me head through the bag stopping there.

And you had a sniff, you say?-- Yeah.

What did you smell?-- I smelled a gob smell.

Can you explain what you mean by that?-- Well, when I first started working in the mine the old contractors that I worked with used to call it a gob stink, and when we were in pillar extraction you smelled that smell all the time because it was coming from the old workings and we never, ever had heatings or fires there, and I smelled this - the smell I smelled in there is the same as what I smelled at those times, you know.

From other goafs?-- Yeah.

Where you had worked in other panels?-- Yeah, and I smelled the same smell in goafs in other panels at No 2, yeah.

That doesn't strike you as anything abnormal; is that what you are saying?-- No, no.

Well, what did you do then?-- Did I tell you the reading? We got 5 ppm, I think we did, yeah.

That was the Drager reading at the bottom of the top return?-- Yeah.

I wouldn't know exactly which stopping, but we came back, I'd say, approximately half-way back and we went through a door. I'm not really sure because this is a while back, but ----

What sort of door was it?-- I'm not sure, but I thought it might have been a flap sort of a door, a flap, and just through the door there was a ledge where they had taken the bottoms right up nearly to the stopping.

Just pause a moment there. You are talking about coming back

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up the top return about half-way so you are looking somewhere around 6 or 7 cross-cut?-- I'd reckon one of those, yeah.

Do you remember what sort of stoppings they were?-- I didn't take a lot of notice, but I just thought it was a bag sort of a stopping, you know.

Was there a provision to roll up part of it and get through or what sort of -----?-- No, I thought it was a flap that was -----

A flap?-- Yeah, I just sort of can't remember because I didn't take much notice, but I thought it might have been - I don't know, I thought it might have been a rubber sort of flap, you know. I can't remember now.

You went in there, did you?-- Yeah, we went in through there and just stood on the ledge and the smell there was a little bit stronger.

Same kind of smell?-- Same smell, but a little bit - it was a stronger smell than down the bottom end, yeah. We -----

What sort of description would you give to that smell?-- Well, that was a smell that I have worked in in the contract mines, that smell. I'd say a stale air smell where air has not much movement and it's been just stagnant air, you know.

Was there another reading taken then?-- Yeah, it was exactly the same as the other one.

That's the 5 ppm?-- Yeah.

What else did you do then?-- We walked back up the return, went back through the door. We went back in to see the deputy. I think we went to see the deputy before we went up. He wasn't there or we didn't see him, so -----

Before you went up top?-- No, we went to see the deputy before we went up in the return, but we didn't see him so when we came out we went into the panel and saw him and told him what we had done and then we went to the surface.

Do you remember who that deputy was?-- Eddie Bentham.

Then you went to the surface and what happened there?-- We went to the surface with the two - they had two bag samples. I went back on my job, I think, doing spare sections that day. Must have been doing spare sections, and I can remember sort of asking - I thought it might have been Lex Henderson, I think it was later that day, they were planning to put the bag sample through the chromatograph and I asked him what - did they go through all right and I can remember - sort of remember him telling me that they had trouble getting a result and that's all I know, you know?

Were you familiar with the use of the gas chromatograph yourself?-- No, no. When it was first come to No 2 I can remember being there and - with Dave Kerr, another couple of

deputies, and they gave us a bit of a run through on it and I remember saying that day unless I was to go up there every week or twice a week and use that machine I wouldn't go and use it in an emergency. I wouldn't know how to do it, you know, unless I was more familiar with it, you know? I thought it might have been better for one or two people to be trained on it and if you needed to use it, get those fellas to use it, you know.

I want to come forward to 5 August, that's the Friday two days before the explosion?-- Yeah, yeah.

Before I go on to that, do you recall any other occasions then - or any occasions after that 18 July date and prior to 5 August when you worked in 512?-- Yeah, I said - when I gave my statement I said about four times and when they worked out the wrong date for that time we went down that return I couldn't work out when the other one was, but the other day was a Saturday.

That was 30 July, was it?-- A Saturday, yeah.

I'll just ask you to -----?-- I mainly went down there to take the section and other deputies were going to come and take over from me, but I ended up staying there all day.

I'll ask you to look at this document here. For the sake of the record, Your Worship, it's a deputies report in document number 45.

Just have a look at that document. It's deputies report number 3755; is that so? Just have a look up in the top right-hand corner. There is a red number?-- Yeah, 3755.

That's the deputies report that you filled out in relation to that shift?-- Yeah, yeah, that's the day I was there, yeah.

I want to ask you just about one aspect of it. You have actually noted on that document the CO parts per million reading that you took together with wet and dry temperatures, and correct me if I am wrong, a wind velocity?-- Yeah, yeah.

Do you remember taking those measurements and recording them?-- Yeah, yeah.

First of all do you know where you took them?-- Yeah, in the right place.

Which was the right place in that case, Mr Stafford? You can use the pointer again and show us, if you like?-- About there. Just about there - no, just about there.

About there?-- Yeah.

And that's actually at a vent station -----?-- Number 46, was it?

Vent station 46; is that right?-- Yeah, I went in there with Cocky Morieson one day with him when he did readings there and

-----

Prior to this obviously, prior to this shift?-- Yeah, yeah, that's how I knew where to take it.

He told you take it here?-- Yeah. The time I went with him he took one there and he took one at the bottom return, yeah.

At the other vent station?-- Yeah, because - I think he might have been going to get me to do that reading for him one Friday or something if he wasn't going to be available or something like that and he showed me where to go, you know, what to do.

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Did you ever end up doing the Friday reading when Cocky Morieson wasn't available?-- Yeah, I can recall doing one, yeah, yeah.

Can you?-- Yeah, I think so, yeah.

Was he on holidays or something?-- No, this wasn't when he was on holidays, no. This would have been before then.

Okay. Well now, I am drawing your attention to that 30 July?-- Yeah.

Now, what was it that led you to doing those readings and recording them in your deputies reports, because earlier deputies reports don't seem to have that same group of readings on?-- Well, I don't really know, but when you are getting 5 ppm, I suppose you have got to think that you have got an early stage sort of heating, could be, you know, and you can't really rely on the readings on the surface, so if you take your velocity readings down there, 'cause the readings could be the same on top, but you could have - the velocity - something could have happened to the regulators and could have been different velocity down there, so that's a better way of keeping a check on it. That's what I thought, you know.

The readings on the surface you are referring to are the Unor -----?-- On the Unor, yeah.

What you are saying is that the Unor might give you a parts per million but it doesn't tell you the wind velocity at the time that was measured?-- That's right, yeah.

So, in order to calculate the CO make you had to know the wind velocity and the parts per million?-- That's right, yeah.

And, of course, they had to be taken at that specific point where there was measurement of the air space?-- Yeah, and I reckon they should be taken by the same person to get accurate readings.

Why do you say that?-- Well, I could take a reading different to Cocky or someone else.

Everybody takes it in their own way?-- Everybody takes it in their own way, yeah.

Particularly the anemometer readings; is that so?-- Yeah, that's what I mean, yeah. I still thought that it would have been better if they would have been taken down at the seals, a pillar or so down there.

That's down in the top return?-- Yeah, yeah.

Did you ever take readings down there?-- Yeah, I have taken readings down there, down along there, but not to put in the report in that place there.

Right. I am not referring to the occasion when you are down

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there with Tuffs and Henderson, but on other occasions you have taken readings down in the top return?-- On the last time I was in there I took one down a bit further there.

Okay. Now, I mean, you may, if you want, refer to some of your earlier reports, but I want you to apply your mind to this: do you recall any particular direction or discussion that led to you taking that comprehensive set of readings with wind velocity, wet and dry, CO parts per million and recording them in your deputies report as at 30 July?-- Yeah, well, I remember seeing a notice up in the deputies - on the wall that George Mason had signed, I think, and it said that all those readings are to be taken at - I don't know whether it said actually where - oh, it said on each shift. It did say where but I can't remember, but it said only there. That's the only place they were to be taken, was there, and I think that may - the "only" might have meant because they were taking them at the bottom return and decided they weren't going to take them there because you didn't get a reading there anyhow, and only to take them there, it might have only meant in that certain place too.

You don't recall what was on the notice to identify where it should be taken, whether there was a reference to a vent station or a reference to a particular location?-- It may have. It would have said the vent station. That's probably why I wouldn't have taken any notice of it, you know, because I knew where it meant.

Now, after you read that notice did you commence that practice whereby you put it on your deputies report?-- Yeah, well, I was only in there twice.

Right. Do you recall any directive or any discussion about those measurements having to go on some other kind of document, some other kind of log?-- No, I wasn't told about that.

Did you ever see a log of any kind down in the 512 crib room?-- No. I have been there a couple of times but I haven't seen anything, no.

If I can come to 5 August?-- That's the Friday before.

Yes, that's the Friday. On that day did you start work at 1 a.m. as the roadways deputy?-- I did, yeah.

At about 3 a.m. did you go to 512?-- Yeah, I was crook that night and I had to work a doubler because Lenny Graham had swapped a shift, he had that day off, and I went in and I walked the belts down 1 North-west and walked back and I finally finished up in 512 - I said 3 a.m. but that's only a guess.

That's an approximate time?-- That's only a guess, yeah.

What did you do when you went to 512?-- When I got into 512 it was cold and I was bloody freezing and I went - when I got down to the end of the belt there I walked up to the crib

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table and I walked down through the prep seal in the supply road and I walked down to where they were mining. They were mining just down below -----

Just go on, just down below?-- Somewhere in there.

Somewhere in there. You are indicating between 3 and 4 headings in between 1 and 2 cross-cut?-- Yeah, between 3 and 4.

Was that in fact the last bit of coal to be taken from the panel that was being mined there?-- Yeah, I went down to see where they were getting all the coal from. I think the miner that was there was gone - would have been gone and they were just cutting - they were just cutting in there somewhere, but they had to leave all this here because they had to get the feeder and the miner out, and -----

What did you do then?-- I walked up there. There was a bag up in 2 heading. I walked up there and just stood there at the bag there where it was warm, out of the cold, you know.

Whereabouts? Now, you are indicating down about 3 cross-cut?-- Just there.

1 cross-cut?-- Yeah, just there.

That was really the goaf edge at that stage, isn't that right?-- Yeah, just on the goaf edge there, yeah.

What did you notice?-- Oh, it was warm behind the bag, the bag flap that was there, yeah.

You went in behind the flap?-- Just went behind there and stood there in the warm in the canch there and I went back out and went and talked to the fellows and that, they were having trouble with the miner.

Anything else you noticed at that time?-- No, I just noticed there was - the air was a bit warm behind that, you know.

That smell you have referred to on the earlier occasions, what you call your normal gob stink, did you ever notice that again?-- No, I didn't smell it there, no.

At any other time you were in the panel, apart from that occasion that you spoke about earlier in your evidence, did you ever notice that gob stink again?-- No.

You didn't?-- No, not down in the intakes there, you know, no.

So, 18 July was the only time you noticed that?-- Up until that time, up until when I was in there that morning, yeah, I think so, yeah.

Well, you told us about 18 July, you smelt it down in 13 cross-cut?-- Yeah.

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And halfway up a bit stronger?-- Yeah.

You have mentioned there were other times you went into that top return to take measurements and that sort of thing?-- Yeah, yeah.

Did you ever smell that gob stink on those other occasions?-- No, you didn't smell it very strong up there, no.

At all, though?-- No.

Okay. Well now, what did you do after you had warmed yourself up? Did you leave the panel after that? You say you went and spoke with the fellows?-- Yes, I was waiting around to get a ride and I just talked to the fellows and I think they told me that they were going to cut and that, have the car and the miner out by knock-off or something, so -----

Now, you mentioned that you were working a doubler, so you went on to work the day shift that day in 512; is that right?-- Yeah, I normally would have went to 1 North-west as a production deputy there, but seeing I was doing a doubler, George Mason was in charge and he asked me to go to 512 seeing I had to come up top for a hot crib, you know, so that's one of the reasons I went to 512.

Okay. Production had been completed on the night shift?-- Yeah.

You mentioned that the machinery was to be pulled out?-- Yeah, they pulled the car out and the miner. When they were pulling the miner back they had a problem with one of the miner cables, and when we went down we was told to take a miner cable off, and someone else must have been told, but we trammed the miner up and they took the covers off and hosed the miner down because they had trouble with the cutting head motor.

Well, did you carry out some inspections around the panel then?-- Yeah.

About what time was that?-- Oh, possibly 7 o'clock or something like that, I think, I'm not sure.

What did you find when you made those inspections?-- I just went down behind that bag - behind that - where that wind bag was.

In No 2 heading?-- Yeah.

Where you had been earlier that morning?-- Yeah, I went down there and I took a reading there, and I'm not sure, but I thought it might have been .2 or .4, I'm not sure. I think in my statement I put .4, but I'm not sure, you know. I thought later it might have only been .2, but I am not sure, you know, but what I wrote in my report would have been right.

I see. You did record this in your report?-- Yeah, at the edge of the waste.

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Okay. Was this a production deputies report or a roadways deputies report?-- Oh, it would have been the same type of report, yeah.

Production report?-- Yeah.

Can you just pass that bundle back for the moment? You checked that again later, a reading of that point again later that day?-- Yeah, yeah, about 11 o'clock I checked it again and it had gone up about .2, so - and I pulled that - there was a wind bag up there that didn't have to be there, I sort of pulled it half down.

This is in behind the stopping?-- No.

Or the stopping itself?-- No, there was no stopping. It was just a wind bag.

I see?-- I pulled it down to probably get a bit more air going down there.

Right. Tell me - that was on the later occasion you were down there, but tell me, on the earlier occasion, that is about 7 a.m. when you were there, what was the position with the air in that return? Was it still warm as it had been earlier that morning at 4 a.m.?-- Yeah, still the same. Well, probably not as warm as you would think it was because the air outside was real cold, you know, made it seem like the air was warmer in there.

At 11 a.m. was it still warm at that stage?-- Yeah, just the same.

Any smell at that point?-- No.

When you pulled the stopping down, was there a bit of a flow of air down No 2?-- Oh, a little bit, yeah.

I won't say a stopping; the bag that you refer to. Okay. Did you make another measurement at the end of your shift?-- Yeah, it rose another .2, so ----

Do you remember what that was? Do you need to look at your report; is that right?-- Yeah, well, I don't know.

Now, did you go back about 12 noon, or did you go at 12 noon to that sampling point?-- Yeah.

To make a CO measurement?-- Yeah. Well, I'm not sure about the time, but I thought it was about 12 o'clock.

What did you find on that occasion?-- Well, I just went to that sampling point because the ventilation officer normally came down on the Friday and took readings to do the CO make, that's what I understood, it was done every Friday.

Yes?-- And he hadn't been in, and I went up there and took the readings, and when I finished the readings I sort of

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walked down and sort of went in and had a look - had a bit of a look at the prep seal in the return there, and I was just sort of looking around there -----

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That's in the No 1 -----?-- In No 1, in the top return, and there had been a bit of a fall down - must have been right down the bottom of the panel somewhere. I heard a bit of a rattle on the door, but there wasn't much displacement of air in the return where I was. There didn't seem much of a fall, you know?

I see. It actually occurred whilst you were there; is that right?-- Yeah, while I was in there, yeah.

Okay?-- Somewhere around about that time I heard a vehicle drive up to the crib table which is just not far out the door. I was just going to go down the return and I heard - I heard a vehicle come. So, I went back out - I went back out to the crib table and the vehicle had gone and I asked the fellow there - I said, "Who was in the vehicle?", because I thought it might have been Stevie Bryon, you know, coming in and I think they said it was George and Albert and they come in and went out. Just at that time -----

This was some time after midday or thereabouts?-- Well, yes, it was midday. Yeah, I don't know.

Okay. And did you - well, did you see them down there at that stage?-- Not at that stage, no.

Okay. Now, what about at that time, anything unusual about the smell or the heat?-- No, no.

Okay. I want you to have a look at this report, if you would. That's 3773. Is that a report that relates to the shift that you have spoken of, the day shift?-- Yeah.

That's the carbon copy; is that right?-- Yes.

And those readings that you have referred to, the methane readings first of all, .6?-- Yeah.

At 6.30 a.m.?-- Yeah.

And then .8 on the later inspection; is that right?-- Well, what's in the report would be right. I thought it rose three times, you know, but I did a few tests, you know, but, yeah, well, it might have been .4 the first time and then when I wrote this inspection in here it might have been .6, yeah.

Your first inspection for which you have a time of 6.30 you have got .6?-- Probably, yeah.

The second inspection you have got there -----?-- No, I might have went down and checked that early and I was .4 - this is how I remembered it.

Yes?-- Then when I checked it again it was probably .6 and I put that in.

You have written that in?-- Written that in at half past 8 and at the end of the day it was .8.

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.8. That is the one you have noted for your second inspection?-- Yeah, yeah.

.8 methane, okay. Now, did you also record on that report the readings that you took at the vent station 46 for the CO?-- Yeah.

Okay. What were they?-- CO 7 ppm, CO2 .15 per cent, CH4 .6 per cent, wet bulb 21, dry 24 and 1.55 metres per second.

They were all recorded there. You didn't calculate any CO make yourself from that?-- I didn't calculate - doing that.

Now, you have mentioned that you were told that Albert Schaus and George Mason came into the section. Did you have some conversation with George Mason?-- Yeah, they came back not long after.

Yes. Did you have some conversation with him?-- Yeah, I was talking to George. I couldn't get in a word to Albert, Woolie was talking to him.

Is that Woolie Barnes?-- No, no, Shorten - Phillip Shorten.

Phillip Shorten?-- Yeah, they were buying new machinery and everything.

I am not fully educated on the nicknames, you will appreciate, Mr Stafford?-- Yeah. I walked down with George - walked down to the belt road and I asked him about the seals and he explained to me he was going to do the belt road first and it was going to be sealed off from the inside. He said, "It is going to take a bit longer, but probably the best way to do it.", and he told me that if we got the boot end out by the end of the shift and that there was some - the gear for the sealing was on a tray, I think he said, and if we had a chance we had the machine there, to get it in ready for the sealing. So, I thought they were going to seal it probably on afternoon shift or night shift.

On the Friday?-- That's what I thought, you know?

You were talking to him. This was early afternoon on the Friday?-- Yeah, whenever it was. I had lost track of the day. I had been down there since 1 o'clock.

You had lost track of time at that stage?-- Yeah.

Any other conversation with George Mason at that point that you remember?-- Yeah, I asked him about readings for the CO make and I said I had them written on a bit of paper. I said, "I will give them to Jacques later on the shift.", because I didn't know where Steve was and he said, "Yeah, good, good, pal.", he said, so - and ----

"Steve", you said. That's Steve Bryon?-- Steve Bryon. Yeah, we had a - sort of talking about machines, where the machine was going to be placed.

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Nothing else you can recall particularly?-- Yeah, well, I wanted the machines taken out a bit further out and I asked him couldn't we power up into the tranny that was over the other side of the belt because he wanted them to set them up to work on them over the weekend. Where we ended up putting them was at the crib table, on the top side of the crib table next to the stopping, the stopping with the little door in it. We ended up putting - the feeder and the miner were parked side by side up near that stopping there and I couldn't see - I couldn't see the point in sort of leaving the machines there to work on them over the weekend because I sort of reckon that when they were going to do the seals I thought they would have knocked the doorway in that - the machine door in that stopping, that has got the little door in it, knocked it to get the machine in it and brattice it up again because that was -----

That's the stopping in 0 cross-cut between 1 and 2?-- There.

Yes?-- I thought they would have just knocked a hole in it to get the machine in to get the gear in for that seal and they would have had to brattice it up properly again because that's a stopping that is regulating the air - forcing the air down into the panel. You can't - when you are sealing the section you are not allowed to alter the ventilation and, well, I thought when the seals were actually completed you would have to knock that stopping out to equalise the pressures on the seals and what would be the use of having the machines - your machines would be no good there because they would be in the return of the seals and you wanted to work on them on the weekend, you know? So -----

Well, what did he say to that?-- No, I am not sure whether I discussed that with him. I don't think I did, but we didn't have long enough cables to get them out. We ended up putting them there near the crib table. I think they were probably going to be moved later on, you know, because the gate end box was still inside the seal.

Well, then, at the end of your shift did you speak with the undermanager on shift?-- Yeah, when I took me report around to the undermanagers I just spoke to - well, I didn't see the oncoming deputy because there was no - they only had one deputy there and that was Cocky and he went to 5 South and no other deputy, and I didn't speak to the oncoming deputy and I went around to Michael and I gave him the report or put it on his desk and I just said to him about the machinery, you know, I said, "It would be a good idea if you can get a cable and sort of move them out of the way from where they are, move them out a bit from there.", and I also said to him about where I had pulled that bit of brattice down in No 2 heading. I said, "If you are not going to seal it up in a hurry, you know, you might have to keep an eye because the CH4 might build up a bit.", because there is a tendency to sort of - in that road there it was hard to get ventilation to sort of go down it.

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You mentioned the readings that you had obtained?-- Yeah.

The No 2 heading, CH4 readings?-- Yeah, I just mentioned that to him, yeah.

What about the CO readings? Did you discuss that with him?-- No, no.

Just pause a moment. The Michael you've referred to is Michael Squires; is that right?-- Michael Squires I talked to in the undermanagers, yeah. He's the undermanager on for afternoon shift. I went down to see Jacques to give him the reading but he wasn't in the office, and I met Steve Bryon and gave him the sheet of paper with the readings on.

And that was about what time?-- I'm not sure, but I came out of the panel early, earlier than normal because I was doing the section with no production and I thought 5 South was going to start producing and I may have had to do the 4 South seals and Wally's workshop panel and 6 South for the last inspection, yeah.

Just having regard to that can you just give us an estimate of the time you gave that to Steve Bryon?-- I think I left the section at half past one. I think we went down 510 and we sort of went out to the surface.

So two o'clock?-- It might have been two o'clock or something like that.

Your Worship, I'm about to move on to another point. I won't be long on it, but I am quite content to do it in the morning.

WARDEN: Can you finish it in three minutes?

MR CLAIR: I suspect so.

WITNESS: I'd like to stay another hour.

MR CLAIR: I don't think we can finish it all for you this afternoon, Mr Stafford. You might be finished with me though. After you had dealt then with Mr Bryon and given him those figures you then attended to the other things you had to do to finish your shift; is that right?-- Yeah, I think I found out that I didn't have to go down and do those sections.

Those other sections?-- Yeah, that - I don't know, I think 1 North West might have broke down and I don't know, the deputies from there might have went to 5 South, I don't know. The other deputy did the other spare sections.

And you finished work then at about three o'clock?-- Yeah, I finished then and I didn't work on the weekend.

I want to take you back to 1986. I think you particularly set out some details in your statement in relation to events in 5 South?-- 5 North.

You were a deputy in 5 South in 1986, but you were rostered to

XN: MR CLAIR

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do an inspection at 5 North; is that so?-- Yeah.

That was on the Saturday day shift 19 April?-- Yeah, that's right.

Can you just tell the Court what you do recall about those events?-- You'll have to stay another hour if I'm going to tell you about this.

I see, it's something that might have occupied only a page of your statement, but you think you might need a bit of time to talk about it?-- I think I might need a bit of time to talk about that.

WARDEN: Thank you, gentlemen. Mr Stafford, we will stand you down until tomorrow morning. Can I just mention that the training videos can be viewed tomorrow afternoon, five o'clock in the Wistari Room. We have arranged for that. The panel will be looking at them just to get a general idea of the content. They may become more relevant later on. If any party is inconvenienced I would indicate you can borrow them at any time and view them at your leisure. Adjourn until 9.15 tomorrow.

THE COURT ADJOURNED AT 4.58 P.M. UNTIL 9.15 A.M. THE FOLLOWING DAY



WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 09/11/94

..DAY 16

THE COURT RESUMED AT 9.16 A.M.

RODNEY JAMES STAFFORD, CONTINUING:

MR CLAIR: Mr Stafford, when we finished yesterday afternoon I was about to take you to some past matters that you wanted to deal with?-- Yeah.

And in particular I was asking you about the situation in 1986 and your involvement in the sealing of 5 North section, 5 North Panel; do you remember that?-- Yeah.

If you want to move your chair in so that you are a bit closer to that microphone then you might be more comfortable, but if you can speak into the microphone so we can all hear you. Now, I think you said yesterday afternoon that in fact you were the deputy in 5 South at the time but you were rostered to do the inspection at 5 North on the day shift of 19 April. Now, perhaps if you can take it from there?-- Yeah, the reason why I said 5 South yesterday was to point out that I wasn't the normal deputy in 5 North. I probably was working in 5 South at the time. 5 South was probably my section.

What do you recall about the circumstances of the 5 North sealing?-- What, from the start?

Yes, well at least your involvement in it and matters that you wanted to mention about it?-- Well, it's in my statement. Do you want me to go through that?

If you want to refresh your memory from that, yes?-- From when I started work on the Saturday morning?

Yes, well, I think you mention in your statement the previous afternoon shift deputies had noticed a CO in the top return of 11 ppm; is that right?-- I started work on Saturday morning. I signed the deputies report from the previous afternoon shift and in that report I read where there was - he had noted 11 ppm carbon monoxide. I went down the mine, did my inspections, and when I got to 5 North section I did the inspection in 5 North and when I went to the top return I went in there and I smelled a slight heating smell. Different to the smell that I smelled in 512, but it wasn't real strong, and as I walked down towards the goaf you could see the haze in my light, faint haze, and I took the readings there and I got 13 ppm carbon monoxide and 1.3 per cent CH4. I thought to myself, "Gee, I wonder when they are going to seal this off. It's getting that way it could be another Kianga." I was a bit concerned about it. I went back up to the surface and I went into the deputies cabin and I looked back through the previous deputies reports for the last few days, and I noted that on the Thursday night night shift report there had been 10 ppm reported and on the Wednesday night there had been 14 ppm reported. So I thought, well, it's gone from 14 to 10 to 11 up to 13, it's just sort of probably been hanging around

like that, you know. I didn't know what the trend actually was, and I was a little bit concerned about the smell and the haze, and so I went around to the undermanagers office and you had to look through the door to have a look at readings on the Unor, and I watched it go through about four different times when it came around on that section, and every time it rose 1 ppm, but the readings there were lower than what I got down at the goaf because the monitoring point was about 700 metres up from the goaf area. It was up in the return.

Do you remember broadly what range those parts per million readings on the Unor screen were?-- I think that they got up to about 15 ppm.

You say they went up -----?-- While I watched it, you know.

They went up 1 ppm each time that monitor point came around?-- Yeah, that's right.

Just pause a moment, I want to ask you this: how long did you have to stand there watching the Unor screen to see it come around about four times?-- I think it took about 12 minutes a time.

So you stayed there for about - well, something just in excess of a half an hour or a bit more?-- If you are going to make a decision - I thought I may as well make the right decision, not - you know. While I was watching it I was thinking about what I remembered about Kianga and how we should approach the situation. I was trying to think all the recommendations that I read in this book here, that the Mines Department sent me after the Kianga Inquiry, and -----

Just pause a moment. We can come in time to anything that you want to mention about the recommendations in that report, but you say that those sorts of things were on your mind when you were looking at this question as to whether there was a heating -----?-- That's right, yeah.

----- in 5 North, and whether some action ought to be taken to seal it?-- Yeah.

Just pause a moment again. You said that the readings on the Unor screen were in a lower range to the ones that you had seen in the section?-- Yeah, that's right.

I think the ones you have mentioned so far as the readings in the section, you had read 13 ppm?-- That's right, yeah.

And then when you went to the Unor screen the first reading there was lower than that?-- Yeah, that's right, yeah.

You explain that by saying that the monitoring point was away from the goaf?-- Yeah. Well, then I decided that I should go back down and have another look. So I went and got the undermanager who was around in the deputies cabin and I said to him, "I'm going down the mine" - I told him that I suspected that we had a heating and he said he'd come down with me, and I said, "I'll ring Ian Kramer." who was the

acting manager at the time. He was back in Moura and we gave him a ring and I told him - I said, "Just stay by your phone. I think we have got a heating. I think we'll have to seal the section up and I'm going down to take some more readings." So we went to that monitoring point.

When you say "we", that was yourself and the undermanager?-- And the undermanager, yeah.

Who was that?-- Frank Puts.

We went to the monitoring point and I took an anemometer because I knew from the Kianga Inquiry that velocity - no good taking readings unless you take velocity readings. So we took a velocity reading at that monitoring point and we took a CH4 reading and we took the CO which I was mainly concerned about, and at the time we got sort of 20 ppm when we got down there.

At the monitoring point?-- At the monitoring point, yeah.

Then we went down to the section, went back into the top return, down towards the goaf, and the haze had - you could see it a bit stronger in your light, and the smell - I thought the smell was a little bit stronger, and took a reading there and we got 40 ppm and that was - it had increased from 13 at about quarter past seven to 40 at about half past nine, quarter to 10, something like that. We couldn't exactly see where the haze and that was coming from because it was a fallen goaf area from one side of the panel to the other side and it was just coming sort of over the top. So there is nothing we could do to attack it from that angle anyhow.

You couldn't go into the waste and do a closer inspection?-- If we could have we would have gone down and seen if we could have handled it another way, you know. So we went back up to the surface and when we arrived at the surface the acting manager and the undermanager in charge and - Dave Kerr was there, he had some instruments in his hands and that. They were sort of waiting, and sort of told them that - the readings that we had, and I think they were watching on the Unor and they could see what was happening there and they knew by that time that something had to be done, and they probably spoke about it while we weren't there, and the undermanager in charge said to me, "We're going to go down the mine and we're going to put up four brattice stoppings. We're going to bring the machines back and we're going to seal up at the prep seals."

So the undermanager said that?-- Undermanager in charge.

The undermanager in charge. What was that?-- Joe Duncan. I said, "No, you're not." I said, "We won't be altering the ventilation at all.", and no-one would take any notice of me.

Did he say why he wanted to have the brattice stoppings put up?-- That's just what they wanted to do. That's what they organised.

But for what purpose?-- So they could get the machines out, I

suppose. I said, "That's exactly what they did at Kianga. Why should we do it again?", and I said, "I've got recommendations from the Inquiry and it states there that you don't alter the ventilation." He said, "Go in the undermanagers office and stay in there with Ian Kramer.", and he organised the other deputy and the other couple of men that were there and they got some brattice and they went down the mine. So I went down to the end office and I rang Bill Allison. Bill wasn't home but I spoke to his wife or someone and they said, "I'll get Bill to ring you back. He should be ringing you back in about half an hour." I went back up to the undermanagers office and I tried to convince Ian Kramer, but I couldn't convince him, sort of thing.

You tried to convince him that the ventilation shouldn't be changed?-- That they were doing the wrong thing. I thought I waited half an hour, but in the situation when you are waiting around it might have only been 10 minutes or quarter of an hour, I don't know. I thought I waited long enough anyhow, and I said to Ian Kramer - I said, "There's only one way to sort this out, we'll ring John Brady."

He was the mines inspector?-- He was the mines inspector, yeah. So we rang John Brady. I had a talk to him on the phone. Ian Kramer had a talk to him and he said to Ian Kramer - he said, "If they've put any stoppings up get them to pull them down straight away. I don't want the ventilation interfered with in any form.", and he said, "And put the men on completing the prep seals.", and Ian Kramer said, "What about the machinery?", and he said, "Stuff the machinery." He said, "If they wanted to save the machinery they should have sealed off a week ago." So Ian Kramer rung down underground and gave instructions that they don't put the stoppings up or if they had any up to pull them down, and Brady said, "I'll be out there. I'll be out there as soon as I can get there." They organised a chromatograph to come from Brisbane. They tried to get it on the plane, but it came up by car and just after that Bill rang me and I told him exactly what had happened and that I wanted to talk to him earlier but he wasn't available and how upset I was about what went on, and Bill arrived up there on the plane later that day. John Brady arrived -----

The final seals were commenced?-- I'm not sure of the time because I was up the surface, but they had men coming in. They called a lot of men in. Ian Kramer went out and talked to the men outside and he told them that it was a dangerous situation, they didn't have to go down if they didn't want to. I had a talk to them and I said - I sort of made a decision. I thought that we may - that it wasn't advanced quite as much as Kianga and the one thing we had on our side, we had the prep seals. All we had to do was complete the prep seals.

All you had to do was complete the final seals?-- Yeah, Kianga didn't have any prep seals.

You are saying in this case the prep seals were in; all that had to happen was the final seals put in place?-- Yeah, just complete them. So Len Cumner arrived on the scene and I went

down the mine with Len Cumner. I expressed my concerns to him. He didn't say too much. We went down around the section and I said to the fellas working on the stoppings, I told them not to - try and get them completed as quick as they could because, you know, we - the situation wasn't real good. Then I went back up top and later on that day I went back down again with Bill Allison and John Brady. We went back down there later in the shift.

Were the seals completed at that time?-- No, the seals weren't completed.

Were you there when the seals were completed?-- Yeah.

At that stage had the CO levels increased considerably?-- Yeah, well, there was two deputies down there and Dave Kerr were down there in the haze and that. They were down there all the time taking readings. They had taken some GFG samples which - they took them from down there at certain times and these were - I think Michael Squires might have taken them up to Rockhampton to get analysed during the day, and -----

What position was Michael Squires in?-- He was the office boy we used to call him, down the end office, but I think he did the job that ventilation - what you are calling ventilation officer or something now. He did the dust sampling and vent surveys and that type of thing, I think. He might have been a cadet manager at that time.

Can you tell me this: what level did the CO reach? What level did the CO reach at the time of sealing?-- I'm not really sure, but I think around 150 parts or maybe more.



Was there any change in the haze that you had seen earlier?--

Yeah, there was a fair haze there, yeah.

More or less than there had been earlier?-- Yeah, probably a bit more, yeah.

Okay. Well now, your concern, you have said, was that there would be no alteration to the ventilation?-- Yeah.

Prior to sealing?-- Yeah.

Now, why did you have that concern?-- Because I had read in this report here about -----

The Kianga report?-- Yeah.

We can go to that in a moment, but what did you see might be the effect of altering the ventilation once you had observed some evidence of a heating in the panel?-- Well, before the Kianga Inquiry I had to go and give some plans and discuss on how the 4 North section at Kianga was worked, and I drew up some sketch plans and took them up and gave them to this fellow who wrote this book here on coal fires, Harry Donegan, and he told me a bit about sealing up heatings, and he told me that not to - you don't alter the ventilation because the air that you got going over your - over the heating is taking the heat away and if you stop that, the heating will accelerate and it will draw in mine gases that are accumulating and it will still have oxygen to draw in and that heating will keep accelerating, so it's best - if you don't alter your ventilation, well the heating is probably not going to accelerate much, plus your methane is not going to build up to an explosive range, and then - like, when you are doing your final seals, you have got to seal them that way so that when you finish them you want to get out in a hurry. I will go back to just before the final seals. Bill Allison, myself -----

This was at Kianga?-- No, in this 5 North.

In 5 North, right?-- Bill Allison, myself, John Brady, we had walked down to the bottom where the deputies were taking the readings and that. I was starting to panic; it was getting close to 5 o'clock on a Saturday afternoon. I think Bill was starting to panic a little bit, and John Brady never actually panicked but I could see the perspiration coming down on his forehead and I knew he was worried, and we were - I think we were very close to coming out of the mine that day, but we walked up to the prep seal, the fellas were working there, and one of them said, "How long is it going to take to finish this seal?" I'm not sure exactly what they said, whether it was 30 minutes or 35 minutes, but nobody else spoke. Everybody started picking up bricks and concrete and we worked on that seal. I went across and checked on all the other fellas because I couldn't just work on the seal. I kept thinking about Kianga.

What was the significance of the 5 o'clock on Saturday afternoon?-- I think Kianga might have blew up about 10

past 5.

On a Saturday afternoon?-- On a Saturday afternoon.

You had been a deputy at that 4 North section where that heating was; is that right?-- That's right, yeah.

Just coming to the sealing of 5 North, your concern was that there ought to be as much of the normal ventilation flowing through the section to keep the heating cool while the seals, the final seals, were being completed; is that right?-- That's right, yeah.

That was something you had learned from what you had been told at the time of the Kianga Inquiry by the expert you have referred to?-- If I hadn't had this book and talked to this fella there, I probably would have gone along with putting the brattice stoppings up.

When you say "this book", if you hadn't read the Kianga report?-- Yeah, yeah.

What you are saying is that this question is something that's dealt with in the Kianga report?-- Yeah.

That is the necessity to maintain the ventilation while the seals are erected?-- That's right, yeah.

Okay. Now, you have the distinction of having been involved in Kianga and, of course, then the 5 North sealing?-- Yeah.

In talking with other people more recently at Moura No 2, that is, over the recent couple of years?-- Yeah.

What was your impression, that there was a degree of familiarity with what occurred in Kianga and what had been reported and recommended there or that there was really no general degree of familiarity with that?-- Yeah, I think so, yeah.

Well, what would you say, that people seemed to be aware of problems with Kianga or that they didn't seem to be aware of it?-- Oh, you mean at No 2 were they aware of it?

Yes?-- No, that's what I was upset about, because nobody was aware of it, and when someone who was aware of it tried to tell them, they wouldn't listen.

Right?-- And -----

Back in 5 North you mean?-- Yeah.

Okay. Well, that's what you wanted to tell the Court about that?-- Yeah, well, the seals were finished and we got out in a hurry.

In 5 North?-- Yeah, and John Brady did make out a report that no-one go down the mine for 24 hours, but I'm fairly sure none of us would have been going back.

Have you seen the records in relation to the 5 North sealing yourself or is that -----?-- Yeah, I have. They are a bit biased.

In what way?-- Oh, they weren't written by me but they are written probably as if I have - they are written from a lot of the information that I supplied.

I see, okay. Thank you, Mr Stafford?-----

I am reminded by my instructing solicitor that yesterday I had Mr Stafford look at a production deputies report for that Friday day shift, 5 August '94.

Just have a look at this document, this copy document. I think you looked at the original yesterday. Just satisfy yourself that that's a copy of it. That's the one that you -----?-- That's the one I looked at yesterday.

----- recorded the readings on?-- Yes.

Okay I will tender that as a separate exhibit, Your Worship. It's part of document 8C in Exhibit 9, but I will tender that page as a separate exhibit. I have copies for the panel.

WARDEN: Exhibit No 114.

ADMITTED AND MARKED "EXHIBIT 114"

MR CLAIR: And for my learned friends. I have nothing further of Mr Stafford, Your Worship.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Stafford, just a couple things about your statement. You say on Friday, 5 August, when you started work in the early hours of that morning, you noticed that the air in the No 2 heading, the top supply road in 512, was warmer than usual?-- Not warmer than usual. I haven't sort of been in there, you know.

In any event, you noticed a - what your statement records as saying an upper warmer layer?-- Yeah, sort of warmer a little bit higher up. It was sort of cooler - the air that was going in was going lower. Well, that's normal for the hot air to rise, hey?

Did you notice that the - well, that roadway, the No 2 heading, was an intake roadway?-- Yeah.

There was fresh air coming in at the lower level?-- There was a wing bag across there where - they put it there to sort of direct more air down over the miner when they were cutting.

This upper warmer layer, was that travelling in any particular direction?-- No, it was just sort of still.

Just hanging in the air?-- Yeah, just sort of hanging, yeah.

That's where you took a sample, I think you said?-- Yeah, I took a reading. I just thought the CH4 might have been building up there, you know.

Had you ever seen that phenomenon before, a build-up of CH4 in the ceiling?-- No, but we had problems in the mine in 5 South where on the supply road there the ventilation don't go - goes - reverses a bit in 5 South up in the supply road. You have problems there. When you drive down there and you get to a certain cut-through, I think it might be 23, you go from cold and it just goes hot.

All right. In any event, it was something that you thought was unusual and you took notice of it, this upper warmer layer?-- No, not really. I just wanted to check to see that there wasn't a high percentage of methane build-up there, you know.

That same day you worked a doubler?-- That's right.

You again checked that area on the next shift?-- Yeah.

And you noticed that it had gone; is that so?-- No, it was still there.

Still there?-- Yeah.

You recorded there was no smell associated with that layer?-- Yeah.

How did you determine that? Did you walk up and down the roadway in that area or what did you do?-- No, I didn't go down there. It had been punched out. I just went around the corner. The only reason I went down in the first place was just to get down behind the bag where it was warmer because it was freezing outside.

All right. So, you didn't walk up and down the roadway to see whether there was a smell associated with that layer at all?-- No, I only went to the edge of the waste.

Again, this was No 2 heading still?-- No 2, yeah.

Now, I will just take you back slightly on what appears to have been 18 July, the Monday. There was some bag samples taken?-- That's right.

Was that usual procedure as far as you understood it in 512?-- No, no.

Did you understand from anyone who was involved that day as to why they were taking bag samples on that occasion?-- Not really.

But it certainly wasn't a usual procedure to take bag samples inside that panel?-- Not that I know of.

Do you know whether there had been any reports of anything unusual observed in that panel to prompt a bag sample being taken?-- No, I heard nothing about anything that was going on.

I think you have told us the only thing you heard about the fate of those bag samples is they were having difficulty getting a result?-- That's right.

Can I take you just briefly to the 5 North sealing in 1986? You had had experience at Kianga back in 1975?-- Yeah, I worked there, but at the time of the explosion I hadn't been there for five weeks. We were stood down - on strike and stood down and I hadn't got back to work.

In any event, it was because of your experience at Kianga, and more particularly reading the reports, that you were aware of certain signs to be on the look-out for at the sealing of 5 North in '86?-- That's right.

In particular, you were concerned about a proposal to change the ventilation during the process of sealing?-- That's right, yeah.

As you have told us, you got the Inspector, John Brady, involved and the sealing progressed from there?-- That's right.

Now, it's the case, isn't it, that up until that Saturday morning when you did your inspection there were no terribly unusual signs about that panel?-- I don't know. I had never been in there.

But you read the deputies reports for a couple of days prior to that Saturday?-- Yeah.

And the readings were high but not extraordinarily high?-- They were high on the Wednesday, 14 ppm.

They went from, I think you said, 14 down to 10 and back to 13?-- 11 and then 13.

It fluctuated in that area?-- Yeah.

Did you ever see the Unor print-out for the readings on the days leading up to that Saturday?-- No, I hadn't then.

In any event, on that Saturday, 19 April, the CO parts per million readings rose very rapidly, didn't they?-- Yeah, yeah.

In fact, your inspection at 7.15 in the morning recorded a

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reading of about - what was it again - 20?-- The first one was 13 and it went up to 40 at the edge of the waste, the goaf there.

13 at 7.15 and then up to about 20, I think, at 9.15, 9.30, thereabouts?-- No, 40 down at the -----

40, was it?-- Yeah, 20 up at the Unor.

And 40 at the waste edge?-- Yeah.

And then just continued to climb very rapidly?-- Yeah.

Throughout the process of sealing?-- Yeah. I wasn't doing it. I was taken off the job. There was two deputies there and Dave Kerr with all the instruments and they were doing a good job down there.

It was fairly obvious that during the process of sealing it was a very dangerous situation?-- That's right.

Because the rise in parts per million of CO indicated there was a very real problem in that panel?-- Yeah, that's right.

And a problem was escalating very rapidly on that Saturday shift?-- Yeah.

And there was a very real prospect, wasn't there, that an incident, explosion, could have occurred during the course of the sealing process itself?-- That's right.

After the sealing was completed late-ish that afternoon, John Brady, the Inspector, determined that no-one should go down the mine until the gases inside that sealed panel were determined to have been outside the explosive range?-- That's right.

That occurred, I think, a couple of days later, didn't it, that the panel went through the explosive range?-- No, it wouldn't have taken long because that section hadn't been pre-drilled.

So, there would have been a much more -----?-- Probably would have gone through the explosive range through that night. It was 20 per cent the next day.

It was outside the explosive range the next day?-- Yeah, the next afternoon.

So, it seems to have gone very quickly through the explosive range?-- Yeah, it would have done, yeah.

You think that was in part because the seam hadn't been pre-drained prior to extraction?-- Yeah. I was a bit worried because there was this big fall and then behind that there was an area that had been just punched and bottoms taken and all that, and I wasn't sure where the fire was at the time, could have been down in behind there, and I wasn't sure that there may have been an explosive mixture of gas floating

XXN: MR MacSPORRAN

WIT: STAFFORD R J

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around down there somewhere, you know.

Was it your understanding that, in relation to a suspected heating, if you waited for the CO readings to rise sharply, you could well run out of time during the course of the sealing process?-- That's right.

And that what you should be looking for is a steady rise in CO parts per million in litres per minute to indicate a possible heating?-- Yeah.

And that a decision to seal should ideally be taken before the CO make or parts per million takes a sharp rise?-- I realise that.

But that's the lesson from Kianga?-- Yeah.

And the lesson from perhaps the sealing of 5 North in 1986?-- Yeah, that's right.

Were you aware of a sealing of 5 North-west, I think it was, in 1991 at Moura No 2?-- I was there before the sealing. We had a creep and the CO was starting to rise a little bit.

Did you say, "We had a creep"?-- Yeah, the roof was working all the time inside and the CO was slowly rising. I think it got up to about 6 parts per million in one return and I think it was a bit lower in the other one.

And a decision was taken to seal that?-- Yeah, the right decision was made.

To seal it before -----?-- Yeah, before it got any higher. It wasn't actually sealed because of the CO, I don't think.

But there had been a steady rise in the CO?-- There had been, yeah.

There was a recognition, wasn't there, in 1991 that the CO readings could take off sharply at any time?-- That's right.

And it was desirable to seal before that happened?-- That's right, yeah.

And the CO make in 1991 in 5 North-west was only 12 litres per minute, are you aware of that - at the time of sealing, I mean?-- In 1991?

Yes?-- Well, that's probably high enough anyhow.

Just finally, can I ask you: when you took some readings, you took them, I think, at vent station 46, was it?-- Yeah.

And that's in No 1 heading 510 just outbye of the top return in 512?-- Yeah, that's right.

Were you aware of any point in the top return itself inside 512 where there was provision made for taking accurate readings?-- No, I didn't know that, but I had taken a

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reading in there myself just down along there, just - I only took them at that vent, that 46, for that - to put in the book, enter in the book there, because I thought they might have been doing something with it, I didn't know.

When you say "the book", you mean the deputies book?-- The deputies report book, yeah.



When you took your readings in the top return was that just inbye the prep sales in the top return?-- Yeah, probably a pillar or so down.

Had you ever heard of a position inside 512 called vent station or monitor station 64?-- No.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MARTIN: Most of the things I wanted to find out about you have covered, thank you very much. I would just like to take you back, however, to the incident in 1986 when you were told to go to Kramer's office and stay there?-- Yeah.

Where was Mr Kerr when that occurred, I mean when you were ordered to go there?-- I don't know. He must have been there with them somewhere.

And he, of course, would have been aware of your absence?-- Yeah, he must have been, yeah.

Was he in sufficient proximity to know you had been ordered - to hear you had been ordered to go to Kramer's office?-- I don't know. He was there somewhere, anyway. He had instruments and that.

In any case, he must have known that you were absent?-- Yeah, yeah.

You mentioned Len Cumner in relation to the 1986 sealing?-- Yeah.

Who was he? What position?-- He was the superintendent of the underground -----

Mine superintendent?-- Yeah.

The same position as Mr Schaus occupies presently?-- Yeah, probably, yeah.

You said something in your evidence yesterday which I took to be - you said something like, "I went to see" - that's 512 - "where they were getting all the coal from."?-- Yeah.

What are we to understand from that, was there very good production from 512?-- Yeah.

Particularly in the closing stages?-- I was in there the Saturday before and I thought we produced - we were going to produce Saturday and Sunday. I thought they were planning to seal the section on the Monday, that was my opinion, that is what I thought. They were still - but there was still a lot of coal - there was still some coal left, you know, but I

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didn't think it would have lasted until the Friday.

Do you recall an occasion in about July of this year when Cocky Morieson went on holidays?-- Yeah.

Were you ever asked by Mr Barraclough to communicate some notes to Mr Bryon who temporarily filled in?-- Yeah, that's right.

Did you?-- Yeah, don't call me the ventilation officer but, I want to get home.

Your tongue is quicker than my ear. Just look at this document, please, and say whether you recognise that. There are two pages?-- Yeah. I haven't - I have only seen them lately.

But is the first page the report by Kramer in the mine manager's book?-- This here?

Yeah?-- I don't know. Probably is.

All right?-- I wanted to sort of have an investigation into this, what happened that time, but nobody sort of wanted to listen to me.

Who was "nobody" who wouldn't listen to you?-- Nobody at the mine or -----

You are talking about management, of course?-- Yeah, all they were interested in was getting the machinery out.

And they subsequently did that, didn't they?-- Yeah, I actually spoke to Billy Allison and Matt Best, but the next time I saw them it was after the No 4 explosion and they had too much on their plate to sort of talk about what I wanted to talk about and nothing was ever done about it. I reckon there should have been - I reckon the situation shouldn't have to arise that we should have went down to seal off a section like we did, you know? Some recommendation should have been put in place.

Yes, but that didn't occur?-- That didn't occur, no.

Just a completely different subject at the moment: when a shift deputy writes on his shift deputy report "fair" or "adequate", am I to understand that that is a reference to inbye the crib table and to where the actually mining is taking place?-- Yeah.

I am talking about ventilation?-- Yeah, probably, yeah.

Do you recall telling the Inquiry yesterday that you went down underground with other deputies and the rock doctor?-- Yeah.

During the course - soon after extraction started -----?-- Yeah.

In panel 512. Was anybody from management present?-- No, we

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had - we had a talk up in the office.

Sorry, who is "we", management?-- Yeah, I would say there would have been management there. I just can't remember, but when we went down I think it was only deputies and the rock doctor.

But not the engineer Abrahamse?-- Yeah, he may have been there, yeah, now you say.

Just think about it for a moment. Can you say whether he was or not?-- No, I wouldn't really say, because I'm not sure.

We can ask him that. This was a delegated duty for the deputies by management, however, to go down with the rock doctor on that -----?-- Yeah, yeah. I am not sure why we had it, but he was sort of trying to teach us something about the roof, I don't know what, but I can remember him standing there saying, "We don't know where the weight is going, we don't know where the weight is going.", from where we had taken most of the pillars out and left a bit of coal to hold the roof up and I said to him that day, I said, "When we extract 512 and we extract 4 South Level you will probably find out where the weight is going then and then you might not be able to get into 5 South."

I just want to make it absolutely plain: but for an instruction from management on that day you are talking about you would have had to go about your other duties? You were told, in other words, by management to go and do this with the rock doctor?-- Yeah. I think it must have been after our normal shift.

Just tell the Inquiry: when you were there on any occasion in 512 is it the case that there was always a lot of loose coal lying around visible for you to see?-- That's right, yeah.

Just turning to 5 August very briefly, I want to talk about the occasion when you were underground, I think it was, and George Mason was present?-- Yeah.

And you were talking about readings and so forth. Did you tell him about the 7 ppm?-- No, I didn't tell him about the 7 ppm, but I told him I had the readings in my pocket.

He didn't particularly seem interested to hear about them? He didn't ask you about them?-- No, no, he never asked me about them. Not that I can recall, anyhow.

Your Worship, I just tender - I am sorry, can I have that back, please - part of document 124 being Acting Manager Kramer's report of 19 April 1986 and the report of Mr Brady? I think there is probably a little bit cut off on the photocopying, but apparently it is dated 19 April 1986, referring to the events that Mr Stafford has told us about, and I have nothing further.

WARDEN: Exhibit 115.

ADMITTED AND MARKED "EXHIBIT 115"

CROSS-EXAMINATION:

MR MORRISON: The time when you were down in 512 on 5 August and George Mason came along with Albert Schaus, they were in the course of an inspection, weren't they?-- Yeah.

You knew that?-- Yeah, yeah.

They had come down for a quick visit and they had gone off probably to 5 South or maybe 1 North West?-- Yeah, I didn't see them then.

They came back and you knew what they were doing then was conducting an inspection?-- That's right, yeah.

In fact, you spoke to Mason and Schaus was speaking to one of the workmen who was working there?-- Yeah, yeah.

You don't know what Schaus and Phil Shorten were talking about?-- Yeah, heard them talking about getting money from the company to buy new machinery.

And you were talking to Mason about 512 and what was going to happen with it?-- Yeah, I was interested about the sealing, asked him about how the sealing was going to take place, you know?

And you and Mason, I think, Schaus as well and Phil Shorten, went down slightly inbye to the goaf edge, had a look around together?-- I can't recall that.

All four of you went down?-- Went down on that intersection there, went up and had a look at prep seal in the belt road, never - you could see down in the waste from where we were standing, yeah.

And one of the things you told Mr Schaus about was the fact that there had been that fall that you mentioned earlier and -----?-- No, I didn't mention to them about the fall.

And you went to see if you could have a look at it or see if you could spot where it was?-- No.

Mr Schaus did that, didn't he?-- No, I didn't - I didn't mention to him about the fall.

I see. Well, do you think Phil Shorten might have?-- He may have, yeah.

All right. In any event, there was an occasion during that point where what you might call an inspection towards the goaf

edge was done?-- Yeah.

And there was Mason there and Schaus?-- Yeah.

All right. Now, during that inspection there was nothing unusual about the atmosphere, no smell, no haze, no heat, no nothing?-- No, no.

Okay. We can tell that because on your report for that day there is absolutely nothing mentioned about any signals?-- No, no.

All right. Now, when you saw Squires at the end of that shift you, no doubt, told him the same sort of thing; you didn't tell him about there being any smell or heat or haze or anything like that?-- No, there was nothing to tell him about that.

No, that's right. In fact, the - as is his usual practice he probably asked you, "What is the section like?", and you told him almost certainly it was okay, it was normal?-- No, he didn't ask me nothing.

Didn't he? Well, you spoke to him?-- I spoke to him. Only reason why I spoke to him was because there was no deputy there to replace me at that time.

You gave him your report?-- Yeah.

And your report indicated that everything was okay?-- I was expecting just to run into a deputy, you know, understand? I didn't run into a deputy so I sort of gave him a little bit of a report that I would have told the other deputy.

Basically the status of the section?-- That's right, yeah.

So, you certainly not only handed him the written report, but you gave him a bit of a verbal rundown?-- That's right.

And you had a piece of paper with your readings on it and you were going to hand that to Steve Bryon?-- I think I had already handed that to Steve Bryon around at the bathroom.

Why him?-- I thought - I took it down to give it to Jacques, but Jacques wasn't there.

But why Steve Bryon then? Was he just some convenient person to hand it to?-- He had taken over the job from Allan Morieson.

And readings on a piece of paper was something you had done before?-- No, I knew they always did a CO make on a Friday and no-one had done it so I thought I would bring the readings up and make sure it got done.

You handed it to Bryon for that purpose?-- That's right.

To do a CO make. Okay. Now, the readings that you took were - I know you told us yesterday they were in the right

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place, but can you just tell me again where they were?-- At 46. Straight up - go through the door and straight up past 1 heading.

You wrote in the report "return readings", "return readings"?-- Yeah.

That's not in the return, is it, vent station 46?-- Yeah, because I couldn't remember the number because I had only been in there a couple of times.

I am just wondering whether you might have taken them at that spot just inbye the prep seal?-- I took them at that 46, but I didn't write "46", I wasn't sure what number it was.

You wrote "return readings" which to anyone else would suggest you took the readings in the return, wouldn't it?-- Well, isn't that a return where I took them?

What, for 512? Is that a return for 512, is it?-- Well, it is just -----

It is not, is it?-- Like I said yesterday, I reckon they should have been taking them down in 512.

I know that. I just want to know where you did take them. You say it was at vent station 46?-- That's right.

Now, on the previous occasion you did that, 30 July 1994, what you wrote on your report then was "Readings taken 1 C/T". That means "1 cut-through", doesn't it?-- What date was that?

Would you like to have a look at it?-- Yeah, please.

Report 3755 from document 75 for 30 July. I will give you my copy?-- I only took them in the one place anyhow.

I understand that, what you are saying. Report 3755 is yours dated 30 July 1994, Saturday day shift; you see that?-- Yeah, that's the Saturday.

Yeah, that's right. You see you have got the readings all noted towards the bottom, wet and dry, CO?-- Yeah, yeah.

Etc?-- These were taken at the same place. I have only taken these readings in the one place all the time.

I understand that?-- Yeah.

You have got "Readings taken 1 cut-through"?-- Well -----

That's the note you have made at the time?-- I probably made a mistake there. I was probably thinking that was the first cut-through, yeah.

First cut-through of 512? Not an easy mistake to make?-- Yeah, but the readings that we put there in our report, I have always taken in the one place. So, I think if anyone reads that they should have known where they were.

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I am just wondering, in fact, whether you took them just inbye the prep seal?-- No, I didn't, no.

You really must slow down a little bit and let us ask questions before you answer. I know it is easy to answer questions before we hear what they are. Let's just try, shall we? Are you sure you didn't take them just inbye the prep seal where there was a marked monitor station on the rib?-- The only readings that I had taken inside the prep seal is just a Drager on its own.

Okay. I tender the report 3755, 30 July 1994. That copy will do.

WARDEN: Exhibit 116.

ADMITTED AND MARKED "EXHIBIT 116"

MR MORRISON: Now, the day you were down with the ACIRL person, that was David Hill, wasn't it?-- Yeah. I couldn't remember his name.

Okay. And whilst he was talking about roof geology and so forth, nonetheless spontaneous combustion was a topic raised by the deputies?-- That's right, yeah.

And raised with him in relation to the 512 Panel?-- I think we just talking about it. Everybody was having little conversations on their own there and it wasn't really - I don't think it was - he didn't talk about it.

Well, you said yesterday you couldn't remember what his response was. Is that still the position?-- Yeah.

You can't remember what he said about it?-- Yeah, still the same, I can't remember what he said about it.

Nonetheless, it was a topic of conversation in which everybody was involved, wasn't it?-- May not have been everybody, but some, anyhow.

There were only six deputies plus him?-- Yeah, yeah.

And six deputies were pretty well all the deputies that could be gathered?-- I am not sure about that.

Now, can I just ask you this: you told us yesterday and today about the occasion when you went down to take bag samples with Tuffs and Henderson in 512. Now, in your statement you gave the date for that as Monday, 1 August. How did you fix that date when you gave the statement?-- When I - I didn't know the date and I said we went down there about two weeks before and -----

Sorry, can you just stop for a second? Is that what you told the person taking the statement?-- Yeah, two weeks before.

Two weeks before, and they wrote down "1 August"?-- No, and then I said - I worked out I was on afternoon shift that two weeks before. Then I said, "Well, it was either three weeks before or one week.", and I wasn't sure, you know, and I thought because this is - you are looking at ten weeks after the explosion, you know?

I understand that?-- You know? So, when I went home and had a think about it I realised that I had been in there on that Saturday the week before and I knew that the other time - the time we went down there was before that. So, I worked out it had to be three weeks before because I had been there on that Saturday one week before.

So, it is some time three weeks before?-- Yeah, and I just said I thought it was a Monday.

You are not really sure about that?-- I am pretty sure it was a Monday.

Well, let me just -----?-- If they said it was a Tuesday I would go along with them, you know?

I just want to understand -----?-- Yeah.

In fact, there is no Monday when - if we look through the shift reports there is no Monday going back into June - well into June - when you, Henderson and Tuffs were there at the same time as Eddie Bentham, the deputy. There isn't one?-- Well, it must have been a Tuesday - well, whatever day it was. I just thought it was a Monday.



You seem pretty sure yesterday it might have been a day shift too, is that what sticks in your mind?-- Yeah, it was a day shift.

Not an afternoon shift?-- Well, that's what sticks in me mind, a day shift.

If it's a day shift then the only times that can be - let me tell you from the reports - is back in June. Thursday, 23 June or Wednesday, 22 June. That's the only time when you, Tuffs and Henderson were there together when Bentham was a deputy in 512. You are not talking about that far back, are you?-- I don't think so.

So the only other possible occasions that can be are either 13 or 14, a Wednesday or Thursday, both on afternoon shift in July. They are the only possible occasions it can be. Does that ring any bells with you?-- Not really. I just thought it was a day shift. I don't know what made me think that.

It could be 1 August because that's the next day you are all together there with Eddie Bentham as the deputy?-- 1 August was - that would have been after that Saturday I was there and I'm pretty sure it was before then.

You can't be sure when except it was some time before, that's really the sum total of it?-- Yeah.

Now, there were, I think you said, two bag samples taken?-- Yeah.

One down about 13 cross-cut?-- Yeah.

Near No 2 heading?-- Just down a little bit from 1 heading, yeah.

And the other one outbye on the top return, I think you said -----?-- Down through the door.

Yeah, through the door in one of the stoppings along the top return and I think you said yesterday - I'm not sure if I made a proper note of it - it might have been around 6 or 7 cut-through?-- Yeah, about half-way down, I thought.

Those bag samples were taken by which person?-- I'm not sure.

Not you anyway?-- One took the Drager, one took the bag. It wasn't me, no.

You knew that the purpose for going down there was to take some bag samples and that those bag sample were going to be put through the chromatograph?-- That's what I understood, yeah.

As I understood what you said yesterday, when this was happening you actually purposely went around and stuck your head through at the No 2 road in 13 cross-cut to have a sniff?-- Yeah.

There is no question, is there, that what you got was just normal goaf smell?-- That's right, yeah.

And that stayed the same?-- Yeah.

All you heard back about the bag samples was - who was it from? Was it one of the three guys you went down with, one of the two guys?-- Yeah, yeah.

Tuffs or who?-- I thought it might have been Lex.

Lex Henderson?-- I thought it might have been him, yeah.

All you can remember about what he said was they were having trouble getting a result?-- That's right.

Not that they hadn't got a result, just that they were having trouble?-- Having trouble.

You said yesterday that you didn't see Eddie Bentham on the way down but saw him on the way back. Are you sure about that too?-- Yeah, I'm certain of that.

I just had this view that you might have actually told Bentham you were going down to take the bag samples and saw him on the way back?-- I don't think we found him from what I remember.

Now, in relation to the gas chromatograph while we are just talking about that topic, did I understand you right to say yesterday that whilst you had had some training early on and some other people had had some training early on on the chromatograph, your own view was that it was a bit silly to do that if you weren't going to keep on it day after day after day, and it would be much more sensible to have designated people to do it?-- Yeah, that was my opinion.

You would see that as a much more sensible idea, have a couple of designated people who were trained and could do it and you could call on them to do it?-- Unless they were going to let me come out of the section and do it every week so I can keep familiar with it, and that wouldn't happen.

It applies even more to miners too, doesn't it? The same sort of thing?-- Yeah.

Unless you are going to keep pulling them out of the section to let them do it it doesn't make any sense, does it?-- That's right.

You mentioned that you had gone down and done some readings were Morieson one day and he had showed you where to take readings; do you remember that?-- Yeah.

That's before he went away on holidays?-- Yeah, yeah.

So could it have been the day he was knocking off to go on holidays?-- No, I don't think it was.

You knew that he wanted you to pass some information to Steve

Bryon?-- That's right, yeah.

You got that information?-- Yeah.

Did you speak to Bryon and give him that information?-- Yeah, saw him on Monday or Tuesday.

Was it information written on a piece of paper or something like that or just oral information? It might have been a list of jobs and things?-- Yeah, just showed me which dust sampling had to be completed and which water barriers had to be checked and just to take - I think he must have known about the readings on the Friday, take the readings every Friday.

That information was given to you by Morieson specifically to pass on to Bryon?-- Yeah.

And you did that?-- I did that, yeah.

I think you said that Morieson actually got you to do a reading one day when he wasn't available?-- Yeah, I think I can remember doing them one time.

Was that for the Friday graph or was that some other reading?-- It would have been the Friday graph because they weren't doing them any other time.

The graph was something stuck up in the deputies cabin as well as other places?-- Yeah, I can sort of remember seeing a CO graph in the deputies cabin, yeah.

It's on the noticeboard right next to the table where you have crib?-- Yeah, I have crib underground.

Sorry?-- Yeah, I had seen it there, yeah, on that noticeboard, yeah.

Did you say you thought it was underground?-- No, I said I wouldn't have seen it when I have crib underground, but I have seen it up in the deputies cabin, yeah.

I understand what you are saying. I just missed that, sorry. Yesterday you said that you didn't know why they were taking the shift readings, shift by shift readings?-- I said the reason why they would be taking them was to check the air, quantity of air.

I thought you indicated yesterday you weren't really sure how that had all come about, why they had started to do it?-- Why they started to do it?

Mmm?-- I don't really know, but when -----

You made some assumptions of your own?-- If the CO has gone from four to five to six you've got to make sure you get some readings, more accurate readings more often, I suppose.

Yesterday you gave us in pretty quick succession some views about whether the five parts would indicate an early stage of

heating; do you remember saying that?-- Yeah, well - yeah. I suppose if we got four parts or five parts you are probably looking at an early stage heating, yeah.

Four or five parts doesn't tell you much, does it? You really need to know what the trend is?-- That's right.

You immediately went on to say you can't rely on the readings on the surface; what do you mean by that?-- Well, the ventilation could be changed and the readings on the surface could be different, you know, they could be faulted.

You get accurate readings for the gases on the surface, but at surface it doesn't tell you ventilation quantities?-- No.

And it doesn't tell you the reason for some of the gases, like what's producing the CO?-- That's right, yeah.

When you proffered that information to us yesterday, I'm just not quite sure why you did because it was in response to explaining why the readings were being taken. Did you tell us that because you sort of heard a bit of what has been going on here in the Inquiry?-- No, not really.

I know it's very easy to hear outside. If you are waiting you can hear what's happening here, can't you?-- No, it's not because of that.

You can, can't you, if you are waiting outside?-- We have done that before.

Sorry, no, can you just listen to what I'm saying?-- Yeah.

If you are waiting outside you can hear what's being said in hear, can't you, on the loud speakers?-- Not much.

The transcripts are out there and witnesses have been reading them, haven't they?-- No.

I don't mean you have, but people have been sitting out there reading transcripts, haven't they?-- I saw people reading transcripts out there when I come in this morning, yeah. I thought they must have been reporters.

Well, hopefully they were. Your view is that in terms of taking the sort of readings we are talking about it would be better to take them in the return than outside?-- Yeah.

Because you get a better idea of what is going on in the panel when you take them in the return?-- A lot of sections before we have taken them down through the prep seal a little bit.

One of the reasons for that is that that increases your chances of not getting any dilution from some other return?-- That's right, could be a door that could be leaking a bit.

That's right. On the Friday, if I can bring you back in time - sorry to do this to you - but if you come to Friday, 5 August, you worked the doubler from night shift through to

day shift?-- Yeah.

You started night shift a bit late from what you say, 1 a.m.?-- I was on day shift and I was doing a back to front doubler, start at one o'clock.

I see. Anyway, you started at one. Now, during that day through the day shift did you talk to Neil Tuffs at all?-- Yeah, I did.

What was that about?-- He discussed with me about when they sealed up the 512. He was concerned about having to work down on the gas drainage which was down below the 512 section while it was going through the explosive range, and I sort of - I thought about it and I said, well - I thought, well, if they seal the place up by Saturday, I said to him, "Well, you'll have to wait and see. It could be gone through the explosive range by Monday afternoon, you know? You'll have to wait and see." Something to that effect.

That's basically where it was left?-- Yeah, and we didn't know - at that stage no-one had smelled any Benzene smells or saw any haze or anything like that, you know.

But where you left it with Tuffs was you are basically saying to him, "You'll just have to wait and see what you do come Monday."?-- That's right, yeah.

He wasn't due to go down again until Monday?-- That's right, yeah.

You were at the union meeting on the Sunday following that, weren't you?-- Yeah.

Mr Ziebell made some announcements about the 512?-- That's right, yeah.

What did he say about that?-- I can't exactly remember what he said, but -----

What was the gist of it? I think you can remember some of it?-- Not really, no. It just registered up here to me that he was talking about a heating.

Whatever it was he said that recorded a heating to you?-- It recorded a heating to me, yeah.

Did anyone at the meeting put up their hand and say anything about that?-- No, no-one said nothing that I can recall.

There were all varieties of miners there in the sense of just ordinary miners, deputies as well as check inspectors?-- Yeah, probably.

And no-one raised a hand to say anything about the men not going down or anything like that, did they?-- Just thought it would have been normal -----

No, but no-one raised their hand to say it, did they?-- No.

You didn't either?-- No.

Neither did Neil Tuffs?-- No.

Tuffs had worked on the sealing, you knew that?-- Yeah, he told me that.

Other people who worked on the sealing were there to?-- They could have been, yeah.

You mentioned that when you were down with Mason and you had taken some readings you had them on a piece of paper which you were intending to give to Abrahamse but you ended up giving to Bryon because Abrahamse wasn't around?-- Yeah.

You were talking to George Mason and he didn't ask for and you didn't give him the CO readings?-- That's right, yeah.

But that was really because you had already told him - or you had told him at that point that you were going to take them up to the surface and give them to Abrahamse?-- Yeah, that's right.

And he said, "Good, pal."?-- Yeah.

There was no question of holding back any readings or anything else? You were going to get up to the surface and give them to someone who could do something with them?-- That's right, yeah.

In relation to 5 North sealing in 1986, let me just ask you a couple of things about that. You've given us a long explanation of what took place there and also you've been asked to look at various peoples reports about it, and you were saying that you had wanted - or have wanted some sort of investigation into it?-- Yeah.

It's true to say, I think, isn't it, that you must have told Brady your concerns as it was happening?-- Yeah.

One of the reasons he was there was because you got hold of him?-- Yeah.

You also must have told Mr Bill Allison and Best and others what your concerns were?-- Yeah.

And from what you say you've tried to raise it with them since. You said after '86 -----?-- I raised it with them at the time of the No 4 explosion.

Yeah, 1986. So it's true to say, isn't it, that the inspectors and the union officials have been aware of your concerns or your views about the 1986 incident since then, since 1986. That's true, isn't it?-- Well, some of them were involved, yeah.

But what I say is true, isn't it?-- Yeah, probably, yeah.

Both inspectors and unions have known of what you are telling us about since 1986?-- Yeah.

In relation to 5 North, let me just ask you this: I think I can run through the readings just to get them in sequence. About 7.15 was when you were on and got 13 parts CO?-- Yeah.

When you came up the Unor system was showing 20?-- I can't remember. It may have been.

Well, we can check the readings, I suppose, but it was showing 20 at the time. Now, that sampling point was seven, 800 metres from the goaf, wasn't it?-- That's right, yeah.

Quite a long distance?-- Yeah, yeah.

This was a very long panel in the one sense?-- Yeah.

Then you got hold of the shift undermanager, then you did some more tests by about 9.30 and what was happening then was that at the goaf edge you got 40 parts?-- That's right, yeah.

At the sample point where you tested there was 20 parts?-- That's right.

So within, say, two hours you had had a jump from 13 at the goaf edge up to 40?-- That's right, yeah.

Then by about 11 you were back up the top again, I think?-- Yeah.

The Maihak was showing 40 or 39 at that point for the sample point?-- Yeah.

And at about the same time the goaf edge had gone up to 50?-- Yeah, I probably didn't know about the goaf edge reading, but -----

Within another hour it's gone up another 10 parts?-- That's right.

It was really leaping up the scale, wasn't it?-- Yeah.

Then soon after that the decision was made to seal?-- The decision was made to seal a long time before that.

About 11.50 a.m. can I suggest to you the decision was made to seal at the prep seal sites?-- I'd made the decision to seal before that.

You had. Now, your worry about what was being done was that you didn't think that the headings should be bagged off?-- No, that's for sure. Didn't want to see another Kianga.

Basically what you wanted was sealing to proceed without the headings being bagged off?-- That's right, as a recommendation. Why not listen to them?

I understand what you are saying, I'm just interested in

knowing what the features are, you see. So what you would recommend yourself, and in line with what was said out of Kianga was if you were going to seal you wouldn't bag off those headings, you would just seal?-- Yeah, don't alter the ventilation in any way.

We are talking about what was being proposed, that they were going to go down and bag off the headings to get the machines out?-- Yeah, exactly the same as what they did at Kianga.

I understand what you are saying. Now, okay, I think I understand that point. You mentioned Joe Duncan, he was -----?-- He was the senior undermanager.

And Mr Puts was?-- Undermanager.

And who was the manager? Kramer?-- Acting manager, Ian Kramer.

Who was the manager?-- Phil Reed, but he wasn't there, he was -----

He was away?-- Yeah.

Who else was on site? Dave Kerr was there?-- Yeah, Dave was there, yeah.

And the deputies were, yourself -----?-- I don't want to mention the other deputy's name, you might call him back. Allan Morieson.

He loves coming here, he really does. There were two deputies down while you were up, who was the other one? Cocky was one?-- They called two more deputies in after lunch.

From what you are telling me Squires was not then in a management position. If he was it was very junior?-- Yeah, that's right.



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And he was given the task of peeling off and driving to Rocky with some samples?-- Yeah.

Okay, I understand. Now, if I can continue with the readings. By about 2 in the afternoon, 2.15 in fact, so we are now talking seven hours after you took your first readings at the start of shift?-- Yeah.

By then the goaf edge was 90 parts?-- Yeah, well, I didn't take them, I don't know, but probably would be right, yeah.

90 parts, and then within an hour after that, roughly an hour, 2.15 to 3.20 was 110 parts at the goaf edge?-- Yeah.

And then about 4 o'clock when the sealing was well underway it was up to 130 parts?-- Yeah, and there was those tube samples that would have been taken around during that time too.

A short time before sealing there was 120 at the goaf and 150 at the seal sites, wasn't there?-- Yeah.

Now, the probeye was used down there on that occasion, wasn't it?-- Yeah. I didn't do it.

I know you didn't do it?-- Yeah, I didn't do it.

You know it was used and it didn't reveal any heating, any hot spots; you remember that?-- I didn't really know that.

That is the case?-- Yeah.

The probeye was used and didn't indicate any hot spots?-- Yeah. Probably couldn't get to where they were.

Then within 24 hours once the chromatograph was up and running - within 24 hours what you had was 1300 plus parts of CO and 26 per cent methane?-- Yeah.

So, within that 24 hours it had well and truly gone through the explosive range?-- That's right, yeah.

I think I am right in saying, am I, that even though Mr Brady wrote in the record book that people should stay out for 24 hours, deputies did go down and take samples?-- They didn't go down, no.

People were out for 24 hours?-- Yeah, nobody went down. It was longer than 24 hours.

All right. So, when we are talking about what happened at 5 North, we have got really quite staggering jumps in CO, haven't we? 13 to 20 within a couple of hours, then up to 50 within another hour, up to 90 within a few hours?-- Yeah.

Really quite enormous leaps?-- That's right.

And the CO in litres - I am sorry, I will start that again. Now, I think at that point people weren't doing CO in litres

XXN: MR MORRISON

WIT: STAFFORD R J

per minute, were they?-- No, that's right.

I think you might be one of the old school that was trained up on parts and looks at parts?-- Yeah, that's right.

Come 1991, they had a pretty bit jump in litres there, didn't they? It was 2 up to about 6, or 2 up to 9?-- Yeah, it was rising before I went on holidays, yeah.

But it was a big jump that they had?-- That's right, yeah.

Talking about 2 to 9 to 12 within a very short space of time?-- Yeah. The only reason Phil Reed would have made a decision to seal that was probably because of what happened in '86.

Yeah, well, there was - were you around during '91 when that sealing -----?-- Yeah, that was - yeah, I was in that section and the CO was starting to rise. I'm not sure whether I mentioned anything to him, but I went on holidays and they sealed it when I was on holidays, just after I went.

Well, you were away when they actually did the sealing, but you know since that there was concern about the working of the roof through a fault line?-- Yeah, it was working before I left, yeah.

And people couldn't get in to inspect, could they, because of the roof conditions?-- That's right, yeah.

Kenny Mills, I think, raised the question of whether there might be some frictional ignition from a roof fall?-- Yeah, I heard about that when I came back, yeah.

That's basically why people were kept out there, because Phil Reed said, well, you know, can't rule out frictional ignition?-- Yeah, that's right.

Just excuse me a moment. Now, I just want to ask one last thing - I will find the note - about '86. I was reading out to you the readings which basically conforms with your own memory of what happened in '86. That's the sort of rapid rise you are talking about in terms of seeing a rapid rise, isn't it?-- Yeah.

Certainly if you saw that sort of rapid rise, you would be pretty concerned about what was going on?-- That's right, yeah.

But if you have just got a very slow and gradual rise, then that's a different picture, isn't it?-- That's right, yeah.

Thank you very much, I have nothing further.

CROSS-EXAMINATION:

MR HARRISON: Mr Stafford, you spoke about Michael Squires' role back in 1986?-- Yeah.

You described him in a number of ways. Does this ring a bell? Was he technical assistant back in 1986?-- I thought he was. I'm not sure, you know.

Now, with the day shift on Friday, 5 August, I note from your production deputies report that the results of the first inspection, or the notes for the first inspection and the second inspection in relation to ventilation are adequate?-- Yeah.

You have told us today and also yesterday about what happened in No 2 heading and how you pulled down that bit of brattice?-- Yeah.

You told us also about readings of methane and a possible build-up of methane in part of 512?-- That's right, yeah.

You didn't at the time you completed your report consider them to be any problems relative to ventilation?-- No. Well, I pulled the bag down and - could have been staying there longer. If it would have kept rising I may have had to put a bit of stopping up down in No 3 heading to direct a bit more air, but I didn't want to alter the ventilation if I could get away from it, you know.

Anyway, what you observed didn't cause you enough concern to put anything in your report about it?-- No, I just put what I found at the edge of the waste, yeah. That was actually the edge of the waste.

Had what you seen there caused you any real concern, I take it you would have put something in your report?-- That's right, yeah.

Now, you have said earlier today that you understood that the section was going to be sealed on Monday. Did you mean on Monday, 7 August?-- No, I meant Monday, 1 August.

You are talking about the earlier Monday?-- Yeah.

You said that's why you expressed some concern about where the coal was coming from because you didn't think there would be enough coal to last until the 5th, is that what you meant?-- Yeah. Could have been some breakdowns, I don't know.

But what was your understanding as at the 5th when you were on shift as to when 512 was going to be sealed?-- Well, from when I talked to George he had asked me to get the tray with the gear on it into that No 3 heading inside the seal, and I sort of thought that they must be going to start sealing it on afternoon shift or possibly dog-watch, you know.

What, you thought it was being sealed fairly quickly after that shift?-- Yeah, well, he told me he was going to slow it down a bit by doing that one on the inside, so I thought they already sealed two. I thought they were going to do that one that day, either in the afternoon or the night.

You weren't aware at that stage that arrangements had been tentatively made to seal it on the Monday, the 7th?-- No, no.

If I can just turn to the conversation you had with Michael Squires at the end of the shift?-- Yeah.

You told us about that yesterday. You said you discussed with him about machinery and movement of machinery; that you told him about pulling down that bit of brattice in the No 2 heading?-- Oh, yeah, I think I may have told him that, yeah.

Aren't you sure about that?-- I told him about readings and to keep an eye on it.

I see. What you said yesterday, "If you are not going to seal it up in a hurry, you know, you might have to keep an eye because the CH4 might build up."?-- That's right, yeah.

Now, at that stage were you aware of any plans in relation to sealing?-- Like I said before, from what I was talking to George on the day shift.

I take it you weren't at that stage suggesting that there was any urgency to Michael that it should be sealed urgently?-- No, not really, but why - when it's ready to seal, why not seal it?

But when you spoke to Michael, when you had that conversation, you had no serious concerns, did you?-- Not really, no.

The conversation you had with Michael, would it be fair to describe it as just a normal conversation, not one where you had some sense of urgency when you were talking to him?-- No, I probably wouldn't have said nothing much at all to him if I would have run across the deputy that was taking over from me.

What, you may not have even bothered to speak to him just for the fact that you didn't run across the deputy that was relieving you?-- No, that's right. Sometimes we just put the reports on the table in the undermanager's office.

I note from your statement in relation to that conversation you say that, "I spoke with Michael Squires about the location of machinery. I also told Michael about the CH4 laying in No 2 heading and that they should keep an eye on it until the panel was sealed."?-- Yeah.

So, could it have been that there was no reference to sealing in a hurry in the conversation?-- Yeah, that's right, yeah.

All right. I take it that at that stage you had no concern in

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relation to the CO parts per million readings that had been taken?-- It was on a slow increase.

Certainly you never expressed any concerns about CO to Michael?-- No, no.

Thank you, I have nothing further, Your Worship.

MR CLAIR: No re-examination, Your Worship.

EXAMINATION:

MR PARKIN: Mr Stafford, following on from Mr Morrison's questions regarding the conversation with Neil Tuffs, did Neil Tuffs at any time talk to you about a benzene smell in 512?-- I just can't hear.

Did Neil Tuffs at any time speak to you about a benzene smell in 512?-- No, no.

Did anyone talk to you about a smell in 512?-- Knew nothing about any smell.

So the only conversation - well, did you have a conversation with Neil Tuffs? I think you explained about the panel being sealed and then going through the explosive range?-- Yeah.

You remember that conversation?-- Yeah, what I said before, yeah.

Could the witness have Exhibit 25, please?

This is a graph of the CO make in 512 and it's been mentioned earlier this morning that it was in the deputies' cabin. Have you seen that before?-- Yeah.

We have been talking about trends, and I think you mentioned yesterday that you took the measurements in the right place and that you recorded 7 parts per million?-- That's right.

That would have equated to approximately 14.27 litres per minute of CO?-- Yeah.

If you look at that graph and you look on 16/6 to 15/7, it's gone from about 7 and a half litres per minute to about 14.5 or thereabouts?-- Yeah.

Would you consider that a fairly steep rise? It's doubled in a month. Would that cause you any concern?-- It's sort of a steady rise, isn't it? I wasn't concerned at the time, but I thought that the section was going to be sealed up before it got to the stage where it was going to start accelerating. That was my opinion.

We have learnt this morning - you had the statement from

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Mr MacSporran that 5 North-west was sealed when the CO make was 12 litres per minute?-- That's the - yeah, yeah. I am just a bit confused because the first section used to be called the 5 North-west and whoever has put the - made out the plan now marks that down as 5 North and the other section 5 North-west. It's just a bit confusing, that's all.

You understand that anyway?-- Yeah.

Just a question regarding your knowledge of Kianga and Moura '86. If changes were made like stoppings being breached and regulators being adjusted, what effect do you think that would have on a potential heating?-- Like I said before, you would be taking the ventilation away that's going over the heating and - which is taking the heat away, and if the heat stays there, the heating is going to accelerate and the gases - methane could be building up around the heating.

Okay, thank you. No further questions.

EXAMINATION:

MR NEILSON: Mr Stafford, just a point of clarification, if we could, to help me and perhaps clarify something in Mr Morrison's mind as well. Can you go to the board and turn that plan back to the plan of the 512 section? Now, there has been a deal of confusion with regard to the sampling point where the CO readings have been taken from 512 Panel, and Mr Morrison took you to one of your reports where you indicated on your report that you took the readings at 1 cut-through?-- Yeah.

Now, Mr Morrison then led you to a question about 1 cut-through in 512 Panel?-- Yeah.

Can you put your finger on 1 cut-through 512 for us, please?-- There.

In the return. Okay. Now, can you put your finger on where you took the readings?-- Just here.

Okay. Now, can you put your finger on 1 cut-through 510 panel?-- There.

No, in the return. Okay. Now, where you took the readings?-- Where did I take the readings?

Yes?-- Up here at the station.

Okay, but when you wrote 1 cut-through, would you not have been referring to 1 cut-through 510?-- Yeah, I sort of got a bit mixed up there in the cut-throughs, but I am not real familiar with the area.

It's very close to 1 cut-through in 510?-- Yeah.

It's certainly a long way away from 1 cut-through in 512?--  
Yeah, that's probably what I meant, you know.

Well, not probably. I mean, you wrote 1 cut-through and I am just trying to clarify this, that's all. It's important that we know where readings have been taken because it is -----?-- It's just I couldn't remember the number of the monitoring point, you know, so I just sort of put 1 cut-through because I knew it was near 1 cut-through.

When you wrote 1 cut-through, you were referring to  
1 cut-through 510 panel?-- Yeah.

Because that is in fact 1 cut-through?-- Yeah, it is, yeah.

Thank you, that's all.

EXAMINATION:

PROF ROXBOROUGH: Mr Stafford, could I trouble you to get up again and return the map that was there before? You mentioned in response to a question from Mr Parkin that there had been some changes on the mine plan as to which was 5 North and which was 5 North-west. Just to be sure, which was the one that you were referring to which was sealed?-- Well, when we drove it in that was 5 North and we used to call that 5 North-west down there, right? Then we came back here and we went down there. I think we may have called that 5 North Sub, but on here what I have been talking about is this one here, 5 North.

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Mr Morieson referred to that as a long panel, but it is a slender panel, it is a narrow panel?-- Yeah, that's right.

Do you recall how many headings there were into the panel?-- Here? Four down at the bottom there where the seals were.

Four headings for the length of the panel?-- Yeah. It widened out down there, we were punching around.

Two intake airways, two return airways?-- Two returns, yes.

You may sit down. Do you have a recollection - perhaps you don't because you didn't work there a long time, but do you have any idea how long it took from completing development to sealing the panels?-- That panel in particular?

Yes?-- No, I wouldn't know off-hand.

Again from your memory of 5 North, do you know the method of pillar extraction that was used?-- Well, at the bottom it was just punch the ribs a bit and might have split a pillar and took some bottoms down there.

You took bottoms?-- And then we did split and fender Wongawilli system. You can see where the coal has been extracted there and then we went back to splitting pillars again.

Would you think in 5 North compared to panel 512 there would be much the same amount of loose coal left in the panels?-- Yeah, down the bottom there would have been a lot of coal left too.

Much the same or would there be more in 512?-- Probably more in 512.

More?-- Because of the ribs and getting men hurt, you weren't allowed to go back in and clean it up.

Was 5 North well short of complete extraction before it was sealed off?-- I beg your pardon, which panel?

Sorry, 5 North, was it well short of completing extraction before it was sealed off?-- Yeah, about four rows of pillars.

Thank you.

MR ELLICOTT: No questions.

MR CLAIR: No further questions, Your Worship.

WARDEN: Thank you, witness, you may stand down?-- Can I just ask you something before I leave?

Just hold on, please. Do you have something not dealing with this witness?

MR MORRISON: No, only some dates for Professor Roxborough so I don't need the witness.

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WARDEN: What's the problem?-- If something comes out that the explosion wasn't in 512, will you - on the evidence I gave on that sealing of that 5 North will you bring down some recommendations for future sealings of sections where men don't have to go down and risk their lives, where, like, they are sealed off at 8 or 10 litres per minute or something like that, and put down some recommendations about not altering the ventilation and something like that?

We will be looking at a whole range of things, Mr Stafford. Please don't concern yourself. We will be looking at everything?-- That's good, thanks.

Thank you, you may stand down.

WITNESS STOOD DOWN

MR MORRISON: All I wished to say was Professor Roxborough was asking about the dates for extraction and sealing. Extraction commenced 17 September '91, it was completed 3 February - hang on a second. The extraction finished 3 February '86, sealed 19 April '86 and development finished October '85. October '85/February '86 for extraction, then sealed April '86.

MR PARKIN: Could I ask you how long it took for the sealing?

MR MORRISON: Sealing - I don't have - I don't think I have got a date - a duration for sealing. No. I don't have a duration, but we can investigate that. I think I can tell you from the report that the report suggests that the decision to seal was made at 11.50 a.m., to seal the panel at the prep sites, and I will just have to - it is about - yes, sorry, sealing operation was completed at 5.10 that day.

MR PARKIN: 510 p.m.?

MR MORRISON: 11.50, decision made to seal, the four headings were done by 5.10 p.m., I should say, so we don't get confused. I wonder if I might also - I think it is probably convenient - Exhibit D for identification, that Mr Clair produced very early on in the piece, is the report by Mr Kerr into the 5 North sealing. That may be conveniently included as part of the exhibit that Mr Martin tendered which were the other reports from the mine record book about the same incident. I just can't recall the number that that got at the time, 115. Perhaps I should tender that as part of that exhibit, then they can be collected in one spot.

WARDEN: Yes, 115, report by Kramer and Brady.

MR MORRISON: And now Kerr as well.

WARDEN: And now Kerr.

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MR CLAIR: I think it was, in fact, produced through Mr Harrison early in the piece.

WARDEN: We will make that part of 115. Could we have a short break for five minutes, please?

THE COURT ADJOURNED AT 11.01 A.M.

THE COURT RESUMED AT 11.16 A.M.

WARDEN: Just one matter, Mr Morrison, we have arranged for those media reports to be located in a different position so there is no re-occurrence if there was an occurrence.

MR MORRISON: You can understand the concern that we all have that that might be occurring.

WARDEN: Yes. We were trying to keep an eye on it and I didn't notice anything, but they have been removed.

MR MARTIN: Can I just say this: there have been two people outside keeping witnesses - potential witnesses away from those documents for the whole of this Inquiry.

MR MORRISON: Can I just mention, the dates that I read out to you in relation to the sealings, extraction and so forth, they are contained on a document that is, in fact, part of the Inspectorate documents and I suspect are in the various annexures that have been tendered as part of the report. I am trying to get the number of it. I just can't give it to you off-hand. It is a handy guide to each of the panels in terms of development start and finish, extraction start and finish, date of the sealing, how many sealings and so forth.

WARDEN: If that's available in the documents we can take it from there.

MR MORRISON: I will try and identify the number.

MR CLAIR: I can't say off-hand what the number of that is. I might mention also that Mr Boiston, my instructing solicitor, who has been going in and out of Court on occasions, mainly to pacify witnesses who have been waiting considerable lengths of time, advises me that he hasn't seen any potential witnesses consulting the transcript. The only occasion when he has seen any witnesses looking at transcript is after they have given evidence. I call Norman Vincent Cross, Your Worship.

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NORMAN VINCENT CROSS, SWORN AND EXAMINED:

WARDEN: Have you got his statement number?

MR CLAIR: It is statement 70/11.

MR MORRISON: That document I was referring to is 164, the schedule in relation to sealings for panels.

MR CLAIR: Thank you, Your Worship.

Your full name is Norman Vincent Cross; is that correct?-- That's right.

You might like to pull your chair in a bit so you can speak comfortably in the microphone without having to lean forward. You are a miner employed at Moura No 2 Mine?-- Yes.

You have been in the industry since May of '82, initially at Moura No 4; is that right?-- Yes.

And you transferred to Moura No 2 in late '84 and you have worked there ever since?-- Yeah.

Now, you worked at some stage in 512 Panel?-- Yeah, a few times.

A few times only. During development or during extraction?-- Extraction.

Okay. In particular, you were on the Saturday day shift of 6 August of this year; is that right? The day before the explosion, the first explosion?-- That's right.

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And on that day was there work being done on the 512 seals?--  
Only supplying gear to it.

Okay. You on that day were assigned to what duties?-- Me and  
Phil Shorten were taking Tecrete to the seals.

To the 512 seals?-- Yes.

In particular you were driving the Eimco; is that so?-- That  
is correct.

Phil drove an MPB, I think you say in your statement?-- Yeah.

Now, I wonder if you could stand up, just push that map there  
on the right-hand side of the whiteboard over to the back and  
behind that you will see a plan of 512 seals. See the map on  
the front? Just lift that over the top. Mr Dahlke will do it  
for you. You will see a plan there of 512 Panel. Do you  
recognise that?-- Yep.

Just sit down again, and if we can relocate laser pointer I  
will just get you to indicate which route you took when you  
were bringing in the materials on the Eimco. We have been  
keeping a jealous eye on that pointer?-- -----

WARDEN: It's gone. That's the spare one.

MR CLAIR: In any event, there is another one. If you press  
the button on the side of it and turn it on you will see a red  
spot appear up there. Now, you were bringing the material  
across on the Eimco from where?-- From 510 then we come  
across here, up this road.

If we can just describe it as you go, you were coming across  
4 cross-cut in 510?-- 4 cross-cut. The miner was there. The  
miner was broken down there.

That's in No 2 heading of 510?-- Yes.

At 4 cross-cut?-- The feeder was right behind it, and I  
squeezed the Eimco between the rib and the feeder and come up  
here into this road.

That's 0 cross-cut at 512 we are into now?-- Yep.

At No 4 heading?-- Then I come up here, under the belt.

So that's outbye along 0 cross-cut?-- Yeah.

To No 3 heading?-- And into the supply road of 512 here.

Into the supply road?-- Went through here into 1 cross-cut  
and back into the belt road which is there and dumped the  
pallet of Tecrete there.

Inbye of the prep seal in No 3 heading?-- Yes.

When you were making your way across that No 4 heading of 510  
did you - were you - you indicated where the miner was first

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WIT: CROSS N V

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of all?-- Yeah.

That's the miner that had been taken from 512 Panel?-- Yes.

Did you have to go through a doorway there? Was there a  
-----?-- No.

That brattice stopping that seems to be marked on there  
-----?-- That one there, that was put up on the Sunday.

That was put up afterwards?-- Yes.

That was the only route that you needed to take to bring in  
the supplies that you had brought in that morning?-- Yes.

What about Phil Shorten? Did he come the same way?-- Yep.  
It's the only way in.

Did you see George Ziebell and Brad Richards at some stage?--  
At the end of the shift.

What had they been doing?-- They were putting a pallet of  
Tecrete - I should say a tray full of Tecrete into this seal  
here, in the return road.

That's the top return in 512?-- Yes.

Where the prep seal was located?-- Yep.

Okay. Did you see which way they were accessing that?--  
Yeah, they were coming via 5 South through the door here.

Through a doorway which is over between the bottom road in  
5 South; is that right?-- That's right.

And the next heading along in 5 South; is that so?-- Yep.

Then they were coming back along the 5 South return?-- Yeah,  
they headed along the 5 South return -----

So the bottom return?-- And into 512 this way.

Into 512 via that No 1 roadway in 510?-- Yes.

So the position you mentioned a moment ago?-- That's right.

How long did you work there?-- Where?

No, how long did you work at the job you were doing?-- We  
were all day.

You were there all day. What time did you leave then?-- I  
couldn't say. I didn't have a watch.

You didn't have a watch, did you say?-- No.

Before dark, after dark that you left the panel?-- Before  
dark.

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So about when the afternoon shift would have normally started?-- No, before the afternoon shift started.

While you were there were there any seals actually being constructed?-- No.

Hadn't started when you left?-- No.

Now, the deputy who was on the shift and in particular with George Ziebell and Brad Richards, was that Cole Klease?-- Yes.

Do you recall being present during any conversation between Cole Klease and anyone else?-- Yes.

Where was that?-- That was in 512, in around this area here. I can't remember the exact position I was, but it was around either here or in there.

So that's either near where the miner was as you indicated earlier or around in that 0 cross-cut of 512?-- Yes.

What conversation did you hear? Who was there first of all?-- Cole Klease and Michael Squires.

About what time of day was this?-- After smoko.

What conversation did you hear?-- They said there was a benzene smell in the return and the CO was about between six and 7 ppm.

Who said that there was a benzene smell in the return?-- Cole Klease.

He was saying that to Michael Squires?-- Yes.

What else was discussed as far as you could hear?-- And then Michael was saying, "We might have to get the blokes in afternoon shift to seal her up."

Was there any discussion as to when the sealing was to take place?-- No.

Now, you say that was after smoko. Can you put a time on that?-- No, I can't.

When is smoko normally?-- Around nine o'clock was smoko, so it's probably between 10 and 11.30.

Thanks, Mr Cross.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Cross, did that mean anything to you, the fact that Klease was saying to Mr Squires that there had been a benzene smell detected in the return?-- No.

You didn't understand what that meant?-- I knew that a benzene smell means that there is coal burning, but the way they were saying it, that it was only sort of a slight smell  
-----

Where did you find out that a benzene smell means there is coal burning? Who told you that?-- No one told me that.

Did you read that in some book?-- No.

How did you find out?-- I just heard people saying it, that's what they were describing it. I always heard it as a tarry smell.

I take it by what you say you've had no formal training in what a tarry or benzene smell may indicate underground?-- No.

You've just picked it up from hearing people discuss it?-- Yes.

You've been in the industry since May 1982?-- Yes.

At Moura?-- That's right.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: After that conversation you overheard did it seem to you that the sealing took on some urgency?-- Not really.

Were you present on the surface later than that conversation when Mr Squires and Mr Mason addressed some men who were going to continue sealing?-- I'm not sure what you mean.

Well, were you part of a meeting or a gathering on the surface when some instructions were given?-- No.

Mr Squires told you nothing personally about reasons for sealing?-- He just said he didn't like the benzeney smell.

Did you hear any mention of haze or heat shimmy?-- No.

Thank you.

CROSS-EXAMINATION:

MR MORRISON: Mr Cross, can I just ask you this? When George Ziebell and Brad Richards came up from 5 South with their gear they would have had to go through the regulator in No 1 heading, 510, wouldn't they?-- That's right.

Did you see how they did that?-- No, I wasn't in the return.

You must have been in the return at some point because you drove down that No 1 return -----?-- No, I didn't.

----- of 510 in order to get in the supply road of 512, didn't you?-- No.

Just show me again where you came down. Out of No 4 cross-cut 510?-- At 4 cross-cut I drove into here.

And what heading are you in now in 510?-- That is intake.

Yes, then you drove where?-- Back outbye. This is the 512 supply road up here, then in through there.

That's all intake air?-- That is all intake air.

Did you see the condition of the regulator after Ziebell had brought his gear in?-- No.

That's sufficient. You don't know how they got through or what they did with it?-- I do know they pushed it over the Eimco.

The whole regulator or only part of it?-- I'm not sure, because that was one of the jobs - if I got my job finished I was to go over there. It was either me or George Ziebell had to push half it over to make access.

So you knew that either you or Ziebell were going to knock over part of the regulator in order to get through with the gear from 5 South?-- That is correct.

As far as you are aware that happened?-- Yes.

That's some time during day shift Saturday?-- Yes.

When you were working with Mr Shorten bringing that gear in, you say in your statement you didn't notice anything unusual about conditions at that time?-- No, I didn't.

So no haze, no smell, no nothing like that?-- No.

No excessive heat?-- It was slightly warmer when I drove through the supply road seal, the prep seals, but that is only normal when you take the ventilation away slightly.

I understand. Now, you mention a conversation between Klease and Squires and you say that that took place when those two



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were together down around the miner or in that area?-- Yes,  
in that area, yes.

Each of them out of PJB's?-- Yes.

What had Squires been doing just before that, do you know?--  
No, I don't know.

What had Klease been doing just before that, do you know?-- I  
don't know.

There were other people around that area, I think, working on  
the miner, weren't there? Ian was there?-- Yes.

Some others?-- Electrician and someone else. I can't  
remember.

So you say this conversation you overheard was Klease and  
Squires face to face at about that point. I want you to think  
about this because I'm not sure it's right?-- There was the  
three of us together sort of.

You were with them?-- Yes.

And participating in the conversation?-- Yes.

What was your input?-- Nothing.

You said Klease referred to the smell as a benzene-type smell?-- Yes.

That meant something to you at the time, didn't it?-- I presumed he was talking about a tarry smell, yes.

So, in your own mind you had an idea of what he was talking about?-- Yes.

And what its significance was at that time?-- That's right.

You didn't choose to say anything, though?-- No.

Did you tell anyone else about this?-- No.

Did I understand you right - I think you were answering Mr MacSporran - one of the reasons that you didn't either pay much attention to it or didn't do anything about it was the way in which it was being discussed between Klease and Squires?-- Yes.

Very sort of - not so much offhand, I suppose is probably the wrong way to put it, but you described it as being - the way they were saying it was sort of a slight smell?-- That's right.

Your memory of the description of it is that it was, what, very slight, just there?-- Michael Squires said it's - he said there's a benzene - he said it's a real benzeney smell. I don't know what he meant by that.

You sure Squires said that?-- He did say that, yes.

In your presence to Klease at that point?-- I don't know if Kleasey was there at that point.

All right. So, this is some other conversation then?-- It may have been.

Well, what do you mean "it may have been"? You are not sure about who was present?-- I am not exactly sure.

You are not exactly sure who was present?-- That's right.

You are not exactly sure what was said really, are you?-- Yes, I am.

But you don't know who was there when it was being said?-- Cole Klease said it when Michael Squires was there, but I'm not sure if Cole Klease was still there when Michael Squires said there's a benzene - he said a real benzeney smell.

He said that to you?-- Yes, and he may have to get people in to seal it early.

Who was there when that was said to you?-- I can't remember.

Where was that, same position as the previous conversation?-- Yes, around that area.

About the same time?-- Yes.

I see. You didn't report that to anyone either, did you, the fact of that conversation?-- I don't think I had any need to report that to anybody.

Well, I mean, you didn't even mention it in your statement when you gave your statement?-- Mention what?

The comment by Squires. It didn't make it to your statement, did it? Would you like to tell me why?-- I mentioned that they said - talking about sealing it up on Saturday afternoon shift.

I don't see anything about Squires talking about the benzene smell. Can you tell me where it is in the statement?-- No, well, it's not there, is it?

It's just something you have thought of since then?-- No.

So, you were aware of it when you gave your statement. How come you didn't mention it?-- Well, I didn't think there was a need to say that both of them said it, they were both there together.

So, you actually had it in mind when you gave the statement but chose to put forward one part and not the other; is that what you are saying?-- Sort of.

And that was a decision you made unilaterally. You didn't give all the information to the statement taker and then let them decide. You decided to put one bit forward and not the other?-- I just didn't think of it at the time.

No, you just told me you did have it in your mind at the time. Now, what's the position? You either did have it in your mind and you chose not to put it in or you didn't have it in your mind; which is it?-- I didn't think it would be - was any - I don't know how else to put it. I didn't think it really worried that much.

I am sorry, you didn't think it worried you or the statement taker, the Inquiry?-- The statement. I put in that I heard the benzene smell and they were sealing up early on afternoon shift.

I see. Yes, I have nothing further.

MR HARRISON: Just one thing, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: You said that conversation would have been around after smoko. Can you tell us roughly what time of day

XXN: MR HARRISON

WIT: CROSS N V

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that would have been?-- Around - I said that before - around 10.30, 11.30, sometime like that. I'm not exactly sure. It could be later, could have been earlier.

Was that the only conversation between Cole Klease and Michael Squires that you were present for that day?-- What I can remember, yes.

Thank you, I have nothing further, Your Worship.

MR CLAIR: No re-examination, Your Worship.

WARDEN: Thank you. No questions from the panel. Thank you, witness, you may stand down.

WITNESS STOOD DOWN

MR CLAIR: May it please Your Worship, I call George Ronald Ziebell.

WARDEN: Have you got his statement number there, please?

MR CLAIR: It's document number 70/24, Your Worship.

GEORGE RONALD ZIEBELL, SWORN AND EXAMINED:

MR CLAIR: Your name is George Ronald Ziebell; is that correct?-- That's correct.

Mr Ziebell, you are a miner at Moura No 2 Mine; is that so?-- That's right, yeah.

Are you also the United Mine Workers Lodge Treasurer?-- Yeah, that's correct.

Now, you started in the industry in August of 1971 at Moura No 1; is that so?-- Yes, that's right.

You transferred to No 2 Mine when No 1 finished. Can you say when that was?-- I can't remember the exact time.

Sometime in the 70's obviously?-- Yes.

Then later did you transfer to No 4 Mine?-- Yes.

Okay. After the explosion at No 4 in 1986 did you transfer back to No 2 Mine?-- That's right, yeah.

You have worked there ever since; is that right?-- Yes.

Okay. Now, in the months leading up to the explosion at No 2 on 7 August of this year, had your regular job been as a miner in the 5 South crew?-- Yes.

But on occasions did you work on the 512 Panel filling in for absentees?-- That's true.

Can I draw your attention to an occasion when you were on day shift in 512 when Reece Robertson was the deputy?-- Yes.

And that the work was ceased at the beginning of the - near the beginning of the shift as a result of some gas readings. I am just identifying the occasion for you?-- Yes.

Perhaps if the witness could see Exhibit 44, please, Your Worship.

That's deputies report 3401. I am trying to put a date on this for you. Mr Robertson has told us that the occasion that's referred to in that report was an occasion when mining was - when work was stopped at the beginning of the shift, and he has noted that in his report there, and you will see that's 17 June. Does that accord with your memory of this event that you are talking about?-- Somewhere around that time.

Okay. You can put that to one side then. Now, at the beginning of the shift was the outgoing deputy there, Rob Newton?-- Yes, he was at the crib table filling out his report.

Did you have some conversation with him?-- Well, he told us

that they were having problems with the gas and that they were putting up stoppings and that trying to get rid of the gas.

Okay. Did he say what the problem with the gas was or where it was that you recall?-- I just recall that they had a problem with the methane building up and coming back up the supply road.

The supply road, that's the No 2 heading?-- Yes.

Okay. Well, Reece Robertson was there?-- Yes.

Did you go with him and another miner?-- Yes.

For the purpose of rearranging some stoppings?-- That's true, yeah.

At this stage when you went to do that initially was there still work going on?-- Yes, they were cutting coal still.

What part of the panel were they cutting?-- Just down on the bottom side of the panel.

Where did you go with Reece Robertson?-- Well, we went down the supply road and also down the belt road there putting up stoppings and trying to redirect the air so that we could clear the methane.

Redirect it down that No 2 heading?-- Yes.

Okay. It was at some stage after the commencement of shift then that Reece Robertson stopped the work?-- Yes, that's true.

Okay. Do you remember measurements being made of the methane in that supply road?-- Well, what I can remember what was said, that 1.8 per cent methane was backing up the supply road as far as the cross-cut inbye the crib table.

Do you remember where the crib table was at that time?-- I can't remember exactly what cut-through.

But at that stage, just in broad terms, there was, what, about half of the panel extracted or more or less, do you remember?-- I would say probably around about half or something like that.

Well now, the crib table was somewhere about two pillars back from where the workings were; is that so?-- That's true, yeah.

Now, do you remember him measuring the methane at the crib table?-- Yes, and from what I can recall there they were getting about .8 per cent at the crib table.

Now, Reece Robertson stopped production, you mentioned. Did all the men gather at the crib table then?-- Yes, that's true.

What happened after that?-- He asked someone to go up and turn the power off the transformer and then he made some phone calls to the surface.

Were you there when he made the calls?-- Yeah, we were sitting at the crib table when he made the calls.

Did you take any notice of what was said at that stage?-- I can't remember what he said.

Okay. Well now, before I move on to what happened next, did you notice anything yourself in relation to the temperature in the No 2 heading?-- It was noticeable at the cut-through below the crib table there where the incoming air was meeting the air coming out of the goaf and that, the air in the section, the cool air coming in was meeting the warm air that was in the section.

I see, okay. Well, what do you next recall after Mr Robertson made the phone calls?-- Well, what I can recall, that Allan Morieson and Reece and Greg Edelman, they said they were going to walk off down into the waste area and have a look around.

Allan Morieson came down after the phone calls; is that right?-- Yes.

He was the ventilation officer. Greg Edelman was a -----?-- He was a miner driver.

A miner on the shift?-- Mmm.

Did they head off together?-- Yes.

Okay. What do you recall happening after that during that shift? Did work start again at some stage?-- Well, I can't remember exactly sort of what happened after they come back from being down there and that. I can't remember if the work started or what happened after that.

Okay. Well now, you mentioned that you did work on 512 a number of times during that extraction phase?-- Yes.

At the beginning of the extraction phase was there a matter that was of some particular concern to you?-- A matter that was - at the seals there wasn't any gear there ready to seal the section off if they had to seal it off in a hurry. There wasn't any of the gear there to do a quick seal on it.

Why was that a matter of concern to you?-- Well, in the past there has always been gear put at seals and that ready to do - seal them off with a quick seal, if necessary.

You say that's always been the case or was that a practice that was adopted at some stage?-- Well, as far as I know it's always been the case.

Okay. What is the likely difficulty if there is not material there ready to complete the seals?-- Well, if the material is not there, you have got to waste time getting that material

from somewhere.

What is it that adds the urgency, or might add the urgency to getting the seals up, what sort of problem?-- Well, if you got a problem inside there and you got to seal it off, seal it off in a hurry, well the quicker you can do it the better.

When you refer to a problem inside, you mean with a heating or suspected heating or something of that nature?-- Something along those lines.

Did you ever have occasion to familiarise yourself with problems that had occurred in the past, for instance, Kianga or -----?-- No, not Kianga, no.

----- in relation to the 5 North sealing?-- At Kianga?

No, 5 North at Moura No 2?-- No. I think at that time we were working at No 4 Underground at that time.

So you weren't familiar with that, okay. In any event, what did you do about your concerns that the materials weren't available at the prep seal sites for a quick sealing?-- When I got back up top I went and raised the matter with George Mason.

Did you say you discussed it with Reece Robertson?-- I did first up, yeah, yes.

This is back at the beginning of the second working in 512 we are talking about?-- Yes, I discussed it with Reece in the section.

What did he say?-- Well, he said, "I'll go and ring Michael Squires."

Okay. Well, you say when you got up top you raised the issue with George Mason?-- Yes.

What occurred when you did that?-- Sorry, Frank?



Okay. What occurred when you did that?-- Well, we just had a discussion about it and about what gear was needed there to - and after a while, when it was decided that the gear would be put there, I was given the job of taking the gear down.

Well, when you raised this problem with George Mason what was his response?-- Well, I can't remember exactly George's response, but it ended up in a bit of a heated discussion about it. I can't remember the exact words he said.

When you say "a heated discussion", I mean, in broad terms what was he saying and what were you saying?-- Well, I can't remember exactly what George said, but I said words like, "If nothing is done about it I will stop the section. I will have this section stopped until we get the gear there."

So, it was a matter you felt strongly about, anyway?-- Yes.

Then you got the job of making sure the gear was put there; is that right?-- That's right, Frank.

And did you do that?-- Yes.

Okay. Well, now, on - the gear stayed there, at least, the basic gear remained there during the extraction phase?-- Yes.

Okay. Now, I want to bring you forward then to the day shift on 6 August, that's the day before the explosion?-- Yes.

What duties were you performing on that day? It was initially for you just a normal day shift; is that right?-- Yes, that's right.

And were you working with another miner, Brad Richards?-- Yeah.

And a fellow from Tecrete, Doug Stampa?-- Yes, that's right.

Where were you working initially?-- We were working down in the 4 South level section finishing off a seal there, Tecrete seal.

And that was just a normal sealing there, it wasn't one that had been brought on by any particular circumstances; is that right?-- No, no, it was just a normal seal.

Okay. Now, do you recall around noon that Michael Squires came to where you were working with those two men?-- Yes, I recall him coming there.

What conversation took place then?-- Michael come down and he said that - asked me is there any chance of getting some blokes to come in on afternoon shift that afternoon because - and start sealing 512 off because they had a concern about the readings and the smell in 512.

Right. And what did you say to that?-- Yes, well, we were just about finished at that seal, we were just doing the top part of the seal, and we hadn't had crib then and I said,

"When we come up top I will ring up and get some blokes up to come in on afternoon shift."

And what happened then?-- Well, Michael went away and we finished the seal and then come up to the surface and started ringing around to get some blokes to come in on afternoon shift.

Now, when you were there at that seal site in 4 South level was there some conversation between Michael Squires and Doug Stampa and were you present for that conversation or were you at some other point?-- Oh, it was - there was talk there, but Michael - sorry, Doug at one stage was around the other side of the seal because he was doing the top part of the other side of the seal and we were doing the outside.

And the conversation that you recounted is conversation Michael Squires had with you? You don't recall any conversation, particularly, between Michael Squires and Doug Stampa?-- No.

Is that what you are saying?-- Yeah.

Well, now, you did go up for crib?-- Yes, that's right.

About what time?-- Oh, about 1 o'clock.

And did you - you have got a particular capacity with the union; is that right?-- Yes.

And did you take steps to authorise any overtime restrictions to be lifted so that men could be brought in to do the sealing of 512?-- Yes.

On the afternoon shift?-- That's correct, yes.

Okay. Well, now, did you yourself go back underground again?-- Yes, we did.

Where did you go?-- We went back down to the seal because Michael had asked us to take all the gear that we were working with over to the seal in the top return of 512 ready for afternoon shift.

Now, if you turn around you will see a plan there that shows 512 Panel, but it also shows the bottom return in 5 South; do you see that there? Are you able to indicate on that plan there the route that you took to actually access that top return road with the gear that you were bringing over from 4 South level?-- Yes.

Okay. You might use that laser pointer there that is on the table in front of you. You have to press a button on the side, I think, to turn it on, but if you can stay where you are and indicate with the pointer and just describe it as you go?-- Well, we come down - drove down the 5 South supply road to, I think it was, No 22 cut-through. You went under the 5 South conveyor belt there. You then drove up that intake road there until you turned - until you come to a stopping

here with a door in it big enough to get the machines through. Went through that stopping there into the return.

That's the 5 South return?-- Yes, the 5 South return, up there, over to that one till you come to a stopping there.

Just pause a moment. You are indicating there where you turned left from the 5 South return into the No 1 heading in 510?-- That one there, yeah.

Is that right? Is that so?-- Yes.

Okay. Now, I just want to get this down on the record as you go, you see? You came to a stopping there. What did you do with that stopping?-- Well, to get through that stopping I had to knock that down with the Eimco.

What sort of stopping was it?-- Well, it was a stopping made out of props and battens.

And when you say you had to knock it down, did the whole of the stopping come down?-- Most of it come down. It was - you had to hit it pretty hard a few times to knock the props out, most of it, yeah.

And was that stopping - before you went through there was the stopping blocking off the whole of that heading or just part of it?-- It was right across the heading, the stopping was.

It was right across the heading. So, you effectively opened up the whole of that heading?-- Mmm. When I got there, Frank, there was no bag or anything on the stopping, it was just the props and the battens were still left on it.

Right. So, it was partly open? I mean, all that was there was the props and the battens, but no bag over the top?-- Yeah.

Okay. Right, and then continue from there? Which way did you go?-- Just drove down there and dropped all the gear off at the stopping in the top return there.

For 512?-- Yes.

Righto. Now, were you - did you make a few trips to bring that gear over or just one?-- No, got it all in the one trip.

Okay. And then what did you do? You brought it over there?-- Well, dropped it off - dropped it off and then because the Eimco also come in there with that tray full of Tecrete, because the road was rough I had to grade a bit of that road with the bucket so the Eimco could get back out again.

And then what did you do?-- Well, we drove back out then.

That was the end of your shift?-- Yes.

Or close enough to it?-- Yeah, close to the end of shift.

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That was around 3 p.m.; is that right?-- Yes, that's right.

Okay. Did you arrange to come on night shift yourself that night?-- Yeah, well, we were coming on night shift anyhow.

Were you?-- Yeah.

Quite independently of any special arrangements -----?--  
Yeah, that's right.

For additional people?-- Yeah.

When you came on did you come on with Cole Klease as your deputy?-- Yes, that's true.

Where did you go?-- We went down to the 512 to relieve the blokes on afternoon shift, to finish sealing it off.

Which roadway did you go to?-- Well, we drove down the normal way and we pulled up outside the top supply road seal. That's where we pulled up there.

Okay. Now, did you at that stage notice what the position was with that doorway in the seal that goes across that 0 cross-cut in 512 between 1 and 2 headings? That doorway there, yes, that's right?-- That one there?

Did you notice what the position was with that, was that open or closed?-- I can't remember, Frank.

Were there any items that were coming through that doorway, any hoses or anything like that?-- There was air and water hoses and that, yeah.

Air and water hoses?-- Yeah.

Coming, what, further outbye?-- Yeah, for the machine that was in the top return.

And were they coming through the doorway?-- Yes.

The doorway you wouldn't be able to close entirely then; is that so?-- No, that's right.

At this stage was the seal finished in the top return?-- No, they hadn't quite finished it.

They were still working on that?-- Yes.

And did you, together with others, stay there or did you stay there then and work on the supply road seal?-- Yes.

How long did you stay there?-- We stayed there right till the time we finished the both seals off.

Do you know what time that was?-- It would have to be roughly - probably around 1 o'clock or maybe a bit later by the time we finished the actual sealing of it, of those two seals.

XN: MR CLAIR

WIT: ZIEBELL G R

Now, when you first arrived there you say Cole Klease was your deputy. Who was the outgoing deputy on the afternoon shift?-- Lennie Graham.

Were you present for some conversation between Cole Klease and Len Graham?-- Yes.

What was that?-- Well, when we got there Lennie said words to the effect, something like, "Oh, I don't know what the panic was. There is sort of no real problem down here.", and Cole had a bit to say, I can't remember what he said, but Lennie said something about there was no real need for a third deputy to come in on the afternoon shift and that he ----

Was there a third deputy in on the afternoon shift?-- Yes.

Who was that?-- Neil Tuffs.

And had he stayed right through that afternoon shift?-- Well, Lennie said something - words to the effect, "Oh, Neil has gone home early."

Okay. Was there any discussion about a smell -presence or absence of a smell?-- Well, what, between the two deputies?

Between Klease and Graham?-- I can't remember the exact words that were used.

Okay. Righto. Now, the seals that were being put up were Tecrete seals; is that so?-- That's right, yes.

Had you been associated with Tecrete seals before yourself?-- The only time I had been associated with them was once before I was sent down with another bloke to erect one on the bottom supply road, but that's the first time I had ever had anything to do with it. I had never had anything to do with them in the mine itself before then.

Well, do you remember then what time you returned to the surface after that shift where you completed the seals?-- By the time we did everything and got everything out, about 20 to 4 in the morning.

What did you have to do after you completed the seals?-- We had crib and that because we had worked straight through right from the start of shift.

Right. Did you pull out the other gear that was there?-- Yes, we pulled out the transformer and also erected a stopping outside outbye of the supply road seal and I had also went to the surface and got the MPV with the cable reeler on it so we could roll up the high tension cable on it.

Now, after you had returned to the surface and had crib you went home; is that right?-- No, we waited there till the end of the shift, till the day shift blokes come in.

Anything else happen during that time?-- No.

And that morning was there a union meeting on?-- Yes, that's true.

What time was that?-- 9 o'clock.

Can you tell the Inquiry what occurred at that union meeting?-- At the mine meeting I got up and just told them what had happened, that a request had been made for extra men to come in on the afternoon shift because they wanted to seal 512 off. I just told them that we finished sealing it off that morning, Sunday morning.

Do you remember what you said about the sealing of 512?-- The only thing I can remember saying, that Michael said to me that they had had a concern about the reading and that there was a smell there.

Was there some discussion about overtime limits?-- I had also said that some of the blokes may have gone over their overtime limit, but I had given them permission to do it.

Okay. How many people were at the meeting, do you remember?-- Approximately 70.

Were minutes taken of the meeting?-- Yes.

And do you recall whether, when you mentioned the sealing and the circumstances surrounding the sealing, there were any questions - this is in a public sense - at the meeting? I take it when you say you stood up and you said this you said it to the meeting generally?-- Yes, that's right.

Okay. Were there any questions from the floor of you or anyone else about the circumstances of the sealing then?-- Not that I can remember, no.

Did you have any discussions with anybody privately yourself at that meeting about the circumstances of the sealing, that you can recall?-- No, I can't recall having any, no.

Now, after the meeting you weren't working any day shift that day or had no occasion to go to the mine until later that night; is that right?-- That's right, yes.

And under what circumstances did that occur?-- At quarter to 12 on the Sunday night I was in bed and I received a phone call from Michael Squires telling me that there had been some sort of explosion at the mine and could I come out to the mine. I asked him what sort it was and how bad it was and he said to me, "I have lost contact with 5 South." He said, "Could you come out straight away?"

Go on?-- So, I rang Steve Davis and told him and told him I would pick him up, which I did, on the way out and we drove out to the mine.

Mmm. What did you find when you got there?-- Well, as we were driving down the bitumen road along the belt line before

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we even could see the buildings you could smell it and then when you could see the buildings the whole place, it was just covered in a haze.

Right. And that smell that you smelt, had you run across a smell like that before?-- Yes, I have.

Where was that?-- After No 4 underground blew up. When I went back down the mine straight after the explosion there, it was the same sort of smell.

Now, when you arrived there did you speak with Mr Squires?-- Yes.

And were there also some men that had come out of the mine?-- Yes, I also spoke to some of the men who had come out.

And then did you arrange for roads to be sealed off to stop anybody driving down into the cut?-- That's true, yes.

And you contacted some union officials?-- Yes, I rang up the local union officials and told him, and then I rang Andrew Vickers, our State president, and told Andrew.

You seem to have some concern about the speed at which seals might need to be built, going back to what you were saying early in your evidence about material being available?-- Yes.

What was your understanding of any difference between the Tecrete seals and the old method of doing the seals, the brick seals, in terms of the amount of time that it took to put them up?-- Well, knowing what I know about the brick seals and seeing how the Tecrete seals were put up and the gear that was being used to put them up, I believe that the Tecrete seals would take a lot longer to put up than what a brick seal would.

That's assuming you start with the prep seal, with the prep seal already in place you are saying?-- Yes.

Well, you were party to putting in at least one of the seals on this night. What was your experience there? How did you find the erection of the Tec seal on that occasion?-- Well, you had to put the baskets in place first and then you had to mix up the Tecrete and pump it in. The more Tecrete you was putting into the baskets, because of the amount of stuff you was putting in the seal was starting to lean over a bit, and what we had to do was the bolts, the reinforcement bolts that were coming out of the roof and that for the seals, we had to tie rope on to those and tie them on to the machine, the mixing machines and that, because the seal was starting to lean over with the weight of Tecrete that we were putting into it.

Why did you tie the ropes on to the mixing machine?-- Well, to help hold the seal upright because the seal was starting to lean over with the amount of Tecrete that we were putting into it.

It was starting to lean inbye?-- Yes.

So that you were keeping it back by tying the ropes on while the rest of it was being sprayed?-- Yeah, trying to keep it upright as we were filling the baskets with Tecrete.

Any other difficulties that you experienced?-- Just seemed a bit of a slow process, you know, with the mixing and the stuff - with the pumping and that.

Have you been involved in building brick final seals?-- Yes.

What sort of difference would you estimate in terms of time between building a brick seal and building the Tecrete seal, final seals that is?-- I couldn't put a time on it, Frank.

You couldn't? Has it been part of your training at the mine



to learn something about spontaneous combustion and recognising signs of spontaneous combustion?-- We haven't had any training in that.

What about the method of extraction in 512? Did you form any view as to that? Any difficulty with that method of extraction in terms of whether or not it might create more risk of spontaneous combustion?-- The view was that with that section there was a fair bit of coal being left on the floor when they were developing the section, and also when they extracted there was a fair bit of coal getting left behind.

Did you understand that that might enhance the possibility of spontaneous combustion occurring?-- Yes.

Finally would you look at this document here?-- -----

Your Worship, this is document 156 from that bulk exhibit, Exhibit 9.

Mr Ziebell, is that a copy of the minutes of the union meeting that you've referred to?-- Yes, that's a copy.

I tender that, Your Worship.

WARDEN: Exhibit 117.

ADMITTED AND MARKED "EXHIBIT 117"

MR CLAIR: No further questions, Your Worship.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Ziebell, can I take you back to the occasion when Reece Robertson, the deputy on shift, stopped production because of a methane build-up? That appears to have been a shift on 17 June this year; is that so?-- Yes, somewhere around there, yes.

Your evidence was that it was very noticeable in the top supply road where the cooler in coming air met the warmer air in the section in that roadway?-- Yes.

What did you actually observe? You say it was noticeable; what did you actually see?-- I didn't see anything, but I think when you stood in a cut-through there you could sort of feel the cool air coming in on one side of you and feel the warm air on the other side of it.

Were both streams of air flowing?-- Well, I imagine the incoming air would have been flowing.

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That's the cooler air coming down the intake in No 2?-- Yes.

What about the warmer air you felt? Was that flowing?--  
Well, it didn't seem to be flowing like a normal airway would.

Could you tell, if it was flowing at all, in which direction  
it was going?-- No, I can't.

Anyway, it was very noticeable. There was a different  
temperature layer of air in that same heading?-- Yes.

Steps were taken to correct that?-- Yeah, as I said, we put  
the stoppings up and tried to get rid of it.

I'm going to take you forward to the Saturday day shift on  
6 August. You were sent down to the 4 South Level; is that  
so?-- Yes.

The idea there was to complete a seal that had been started  
before that shift?-- That's true.

Who was working with you at that location?-- Brad Richards,  
another miner, and Doug Stampa, a Tecrete bloke.

So just the three of you working on that seal?-- Yes.

What time did you start approximately?-- Well, on Saturday  
shift we always started work at seven o'clock, so a short time  
after seven o'clock.

Did you work with those other two men, Richards and Stampa,  
for the whole time you were working at 4 South on that seal?--  
Yes.

Did you all leave that area together?-- As far as I know we  
did, yes.

So as far as you know you were all together when Michael  
Squires came down to speak to you?-- We were in that area  
there, yeah.

What time was it that Michael Squires came down that you  
recall?-- It was somewhere around 12 o'clock.

That's when you were told, I think, or asked whether you could  
organise some men for afternoon shift to seal the 512 Panel?--  
That's right, yeah.

What stage were you at in the 4 South sealing process when he  
came down about midday?-- We were just completing the last  
part of the seal, the top part of it.

Was that the only occasion that Michael Squires visited you  
whilst you were working on the 4 South seal?-- I can't  
remember off-hand whether Michael had come down before that.

Did you think the last occasion might have been at about  
midday on that Saturday?-- Yes.

It certainly wasn't after that that he came back down, before you left that section?-- I can't remember whether he come down there or not, because after we finished the seal, as I said, we went back up to the surface then we come back down after that, started shifting the gear over.

Anyway, you remember one occasion when he asked you to organise labour for the afternoon shift and that was whilst you were working at 4 South seal?-- Yes, that's right.

You can't specifically remember any other occasion when he came down whilst you were working on that seal?-- No.

But he may have?-- He may have, but I can't remember.

Before you left that section did you in fact complete the seal or did you leave it almost complete but not fully complete?-- We completed that seal before we left.

Are you sure of that?-- Positive.

Was Stampa with you when you completed that seal?-- Yes.

He was the Tecrete employee, was he?-- Yes, yes.

So again you and Stampa and Richards were all together at the time that seal was completed?-- Yes.

And as far as you know you all left the section together after completing the seal?-- As far as I know we did, yes.

When Michael Squires came to see you about sealing 512, what did he say the concerns were?-- He said they had a concern about the readings in 512 and that there was a smell.

Did he elaborate on what the smell was that had been detected in 512?-- I can't remember. I can't remember if he elaborated, but I can remember him saying that - those two things.

Did the fact of a smell being detected in 512 have any significance to you as to what that might mean?-- Well, when Michael says things like that, he's got the concern about the readings and the smell, well - you think to yourself, well, there is something going on there, but -----

But you didn't know what?-- Didn't know what, no.

You didn't see any significance in relation to any smell being detected in 512 in relating it to some condition or some event happening inside 512?-- Well, as I just said, you think something is going on there, but you don't know what.

I think you've confirmed you've had no formal training in the signs of spontaneous combustion?-- That's true.

You don't necessarily relate a smell to a sign of spontaneous combustion?-- No.

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Have you learnt since 7 August anything about the significance of the detection of a smell in such a panel?-- No.

Were you aware of the posting of a CO make graph in relation to the 512 Panel leading up to its sealing?-- No.

You knew nothing about that?-- Well, if I did I can't remember, but I can't remember knowing anything about a graph.

Have you heard the term "CO make" before?-- I have heard it.

Do you know what it means?-- No.

When you moved the equipment into the 512 top return area, about what time did you say?-- Well, we went up to the surface and had crib and then rung around, got the blokes to come out on afternoon shift and we come back down to that seal and got all the gear and took it over, so it was getting close towards the end of our shift.

So close to 3 o'clock?-- Yeah, bit before 3.

When you moved the equipment into the 512 section who was with you?-- Brad Richards and Doug Stampa to start off with.

When you first got into 512 did you notice any haze inside 512?-- No, because the road that we had to drive up and into that return, the road was rough and dusty, and with the dust and that, being that dusty we couldn't - didn't see anything apart from that.

So, it was just very dusty?-- Yeah, just a dust from the machine and exhaust and that.

Was there any conversation about those conditions when you first came into 512?-- No, well, you drive the machine by yourself, you see.

Now, when you finished your shift at 3 o'clock you went to the surface?-- Yes.

Did you see Stampa there on the surface?-- Oh, there were men there. He could have been there, I'm not sure.

Did you understand that he was staying on for the afternoon period to continue working on the seals in 512?-- I can't remember him doing that.

Do you know a man called Parker, another employee of Tecrete?-- The first time I met Rob was when we went on dog on Saturday night. That's the first time I met him.

So, you didn't see him obviously at 3 o'clock when you changed - came off shift?-- I can't remember seeing him.

Did you see any occasion when Michael Squires was talking to a group of men at around the time you finished your shift at 3 o'clock on the Saturday afternoon?-- No, I can't remember, no.

You say that one of the deputies on that afternoon shift, Len Graham, said something about not knowing what the panic was?-- Words to that effect.

Was the activity at that time - did that give the impression of there being a panic to seal the section?-- What time was that?

This is on the Saturday night, isn't it, when you came back on shift?-- I wouldn't say it was a panic. It depends how you use the word "panic". Just what Michael said to us, you know, they just wanted to seal it up starting that afternoon shift.

But Graham's words, as far as you can now recall, he didn't know what the panic was?-- Words to that effect.

Was there any discussion at that time about any smell or haze having been detected in the section?-- Oh, I can't remember. I can't remember all that was said. I can't remember anyone saying about a haze or anything like that.

Now, there are check inspectors, aren't there, at the mine?-- Yes.

What's their role or function as far as you understand it?-- Well, if there is something wrong, something with regards to safety or - their role was safety.

Was there a procedure whereby anyone on shift could approach a check inspector with concerns they might have had about any safety issue?-- Yes.

Was it a procedure that was to be followed, that is, if you had some concerns or noticed something unusual, you should report it to a check inspector?-- You could either report to a check inspector or you would go and see the management.

I will just take you back very quickly, Mr Ziebell, to when you first came into 512 on the afternoon of Saturday the 6th. You said there was a lot of dust as you drove into the section?-- That was from the condition of the roadway and the machines stirring the dust up.

Then you, I take it, would have stopped the machines to unload the equipment?-- Oh, we didn't actually stop the motor but just went there, and because I had the gear in the bucket of the Eimco, other people there, and we took all the gear out of the bucket.

Ventilation was flowing at that time, was it?-- I imagine it would be.

Did that seem to clear the atmosphere at all in that area?-- It was dusty the whole time we were there.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: Mr Ziebell, there is a distinction, isn't there, between a miners' officer and a mines inspector? I don't mean check inspector - I do mean check inspector. There is a distinction between the two?-- Between a miners' officer-----

And a check inspector, or don't you know?-- They are one and the same.

That's your belief?-- Yes.

Are you talking about people who actually live and work day by day at Moura in No 2 Mine as check inspectors?-- Yes.

Is it the case that these people you refer to, many of them are not actually deputies but just miners with basic training?-- They can be, they can be.

Well, Terry Vivian was one who was I will call a miners' officer and you will call a check inspector who was not a deputy; that's the case, isn't it?-- He was, yeah.

But he wasn't a deputy?-- No, not a deputy.

Can you just tell me, please, there was a call for men to seal on the Saturday. You organised that, and is it the case that there was then a meeting on the surface with the men who were gathered before they went underground, or don't you know that?-- I don't know.

Do you know whether this sealing was brought forward?-- No, I don't. I don't know if it was, no.

Can you say whether it seemed to adopt some sense of urgency or not?-- I suppose it did if they wanted to start it on the Saturday afternoon shift, because we were telling them dog-watch on the Saturday night to do other work.

It involved overtime, didn't it, to do that work?-- What work, the sealing?

Yes?-- Yes.

When you spoke with Mr Squires after the explosion when you arrived at the mine, what did he tell you?-- Like, I can't remember everything that was said. There was that many things being said and that.

Yes, but what the Inquiry is interested in, of course, is what you learnt. What can you tell us about that so far as your conversation with Mr Squires is concerned?-- Well, I can remember when we got there, spoke to Michael and, as I said, one of the first things we did was get the road sealed off up the other end of the cut and also up near the compound so that no-one could get into the area.

All right. Is that about all you remember of this conversation with Mr Squires?-- We said other things, but I can't remember everything that was said.

Just before I forget, have you been stationed outside this room to ensure that nobody, no potential witness, reads transcript?-- The reason I have been outside this room, because we haven't been allowed to come into this room before we give evidence.

All right. Have you seen any potential witness reading transcript?-- No, I have not.

You have told the Inquiry about a meeting on 7 August 1994. That's after the sealing?-- Yes.

Is that a meeting which is paid for - I am sorry, not paid for, but attendance at the meeting is paid for by BHP Australia Coal?-- Yes.

You have told us about the minutes of attendance - of the meeting, I should say. Have you prepared minutes of attendance - people present?-- Have I what?

Can you say who was present at the meeting from a document you have prepared?-- I don't prepare any document myself.

Well, can you just look at this document and say whether you recognise it?-- Yes, I recognise that.

What is it?-- It's a document that each person signs when they go to a meeting. It's a record to say that they have been at the meeting.

By looking at that document is it possible to tell who was at the meeting on the Sunday morning of 7 August?-- Yes.

Well, would you tell us in relation to the people who went underground and survived or people who went underground and didn't survive, which of those people were at that Sunday morning meeting?-- How long do you want me to take to look through it?

However long you want to take?-- You are only talking about the ones who survived, are you?

No, if you can just tell the Inquiry of the people who were there on that Sunday morning, which people went underground on the Sunday evening shift?-- John Dullahide.

Is he a deputy?-- No. John Hill's name is here. He was on permanent night shift, but I'm not sure whether he was at work that night or not.

Was he a deputy?-- Sorry?

Was he a deputy?-- No. Mark Nelson.

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Was he a deputy?-- No. Michael Shaw.

Was he a deputy?-- No. Darren Young.

He wasn't a deputy either, was he?-- No. That's all.

Thank you. I will tender that document, Your Worship.

WARDEN: Exhibit 118.

ADMITTED AND MARKED "EXHIBIT 118"

MR MARTIN: Thank you, Your Worship.

Were there any miners' officers or, as you call them, check inspectors at that meeting?-- The only two miners' officers were Steve Byron and Terry Vivian. I don't think their names were there.

A perusal of the list, the document, will tell us that without you going through it again, will it?-- Yes.

Thank you.

WARDEN: We will take the lunch adjournment before you start, Mr Morrison. We will resume at 2 p.m.

THE COURT ADJOURNED AT 12.45 P.M. TILL 2 P.M.



THE COURT RESUMED AT 2.03 P.M.

GEORGE RONALD ZIEBELL, CONTINUING:

CROSS-EXAMINATION:

MR MORRISON: Mr Ziebell, you are the lodge treasurer of the United Mine Workers Union?-- That is correct.

That would mean you are the most senior union official at the mine?-- One of the senior ones. Not the most senior.

Who might be otherwise?-- You have the president, secretary and the treasurer.

Who was the president at the time of this incident?-- The president at the time of this incident was -----

It probably doesn't matter. Can you recall the name of the secretary?-- Paul Marks was the president and the secretary was Rodney Ditman.

Mr Marks was the president. Who was the secretary?-- Rodney Ditman.

And you are the treasurer. Are marks and Ditman miners at No 2?-- Paul Marks is, Rodney Ditman's not.

As a union official at the mine, notwithstanding you weren't a deputy or anything else, you nonetheless had a deal of power to stop work in sections if you thought things weren't going right and on occasions you've used that power?-- I don't know whether I'd use my position to stop it and I can't remember off-hand if I've ever stopped any - a section, in my capacity as a union official.

As a concerned miner then?-- As a concerned miner? What, as far as stopping the section?

Mmm, that's happened on occasions, hasn't it, and I don't mean stopped for a long time, stopped until whatever was the problem has been rectified?-- I can't remember off-hand whether has. I'm not saying it hasn't and I'm not saying it has.

That was something that you raised with Mr Mason when you were talking to him about the gear being on site to do the stoppings or to do the seals?-- Yes.

That was a possibility that you raised unless something was done that might be influenced?-- Yes.

I think I'm right in saying when you say you had a heated

discussion with Mr Mason, he was pretty angry that the gear wasn't on site himself, wasn't he?-- I can't remember sort of exactly all the words that George said, but I know that I was a bit upset because the gear wasn't there.

He wasn't giving you any fights, he was a bit annoyed about it himself and got it fixed up pretty quick smart?-- He may have been.

Can I just ask you about that time when Reece Robertson stopped the section and you did some stoppings? Can you remember where the stoppings were that you rearranged? Were they those between the supply road and belt road?-- Just from memory there was a stopping we put up between the supply road and belt road. At one stage we put a stopping up at the end of the belt road and I think we may have put a stopping up also across the end of the supply road.

When you say "across the end", do you mean shutting it off?-- Not completely shutting it off, no.

This was to better direct some flow across the miner?-- We were just trying to get the flow so that we could clear the methane.

That's the methane around the miner?-- Not around the miner, on the top supply road where we were concentrating on.

On that occasion - I think it's been suggested to you it was 17 June, I assume you don't have any particular memory of the exact date?-- No, but just looking at that report it looks like it might be that time.

Did anyone mention a smell to you that day?-- No, no.

You've had some experience in the aftermath of No 4?-- Yes.

You'd recognise and know the significance of a tar smell or a benzene smell?-- If it was the same smell as No 4 I would, yes.

Certainly no-one that day said anything to you or in your presence about a smell?-- No.

You hadn't worked much in 3512, I think you said, but only on occasions?-- That's true.

If we check the shift reports what we see is that you weren't in there between 26 June and 5 August, that Friday. If you accept for the moment that those dates are right -----?-- If they are right - I say I can't remember exactly what days I was in there, but -----

We should be able to rely on the shift reports because they list people who turn up and work and that's a good way of keeping a pay record and things like that?-- That's true, yeah.

Notwithstanding that you weren't in there very much you kept

track of 512 in terms of progress of work and what concerns people had about it?-- It's just the normal way people spoke about things around the mine. Someone might mention -----

I'm not suggesting you went out of your way specifically on a mission or anything else, but people do talk about different parts of the mine all the time?-- Yes.

And you don't have to be in one section to hear about it, you know, because people talk?-- That's true.

You would have kept up with or at least had some view about the way the section was progressing?-- Yes.

If anyone had come to you and said, you know, "Gee, I'm really worried about this or that or this is being done badly", you certainly, given your position, you would have interested yourself in that?-- Yes.

And if you had had any thought that there was a problem, say with the way in which the seals were done, you would have certainly spoken up to management about that?-- Depending what the problem was, I suppose.

If you thought that the whole methodology of the seals were wrong, that they were going about it back to front or with the wrong sort of seals you would have raised that sort of question with George Mason?-- I may have said something at some time about the seals themselves, the new type of seals, but -----

You didn't think that they shouldn't be using them, you just thought there might be some more problems with them than the old brick and mortar ones?-- Yes.

Likewise there wasn't any feature in the way they were going about the sealing process, the sequence or the timing that had any worries for you?-- When - maybe it's because you are sort of used to the old brick seal and here's a new type of seal that's come in.

Change is always a bit threatening, isn't it, that sort of thing?-- Sometimes.

One of the features about the old brick and mortar seals was that you are effectively turning miners into brickies and they have their own problems about laying them if you have an uneven floor, and making sure they don't slip themselves with the mortar?-- Yeah.

You would get people getting their hands injured, because the bricks aren't besser blocks, are they? They are big solid things?-- Big heavy blocks, yeah.

So you could see some advantages, I think, with the Tecrete in the sense that you don't have to - it's going to reduce those hand injuries, for instance, leaving aside time and how fast and all that sort of stuff?-- One thing I did notice about them is when you are talking about hand injuries, like the

wire baskets and that, if you've got to cut the baskets and things like that. That is one thing I noticed about it. You had to be careful like that.

You are not going to get your fingers crushed by bricks when you put them in the wrong way on the levels?-- The basket is a bit lighter than brick.

On that Saturday when Squires came down to see you you were working at 4 South Level. He told you that there was a haze. You mention he mentioned a haze to you?-- I don't remember Michael saying a haze, no.

Certainly some concern over readings and a smell, but he didn't say what sort of smell or anything about it?-- No, that's all I remember Michael saying.

Basically all you are saying is he was a bit concerned about that, the smell wasn't in the same spot as it had been or it was in a different location?-- I just remember him saying the smell.

And he asked you to shift the gear over to 512 when you had finished that seal?-- Yes.

You never understood him to mean "Drop your bundle now and forget what you are doing and come straight over to 512."?-- Well, he could see we were just finishing that seal off and that, so we just finished it off and then ----

Went and had crib?-- Well, went up there, had crib, rung up the blokes to come in afternoon shift.

In fact you had the authorisation that you could give so people could go over their overtime?-- Yes.

I think the reason for that was that in any month span you are only supposed to be able to use up four overtime shifts?-- Yeah, certain amount of overtime, that's all you are allowed to do.

The union has to relax that in order for people to work more than that four times?-- Yes.

Now, when you went to bring the gear over you were pointing out on that map there how you came up out of the return in 5 South, then effectively up the No 1 heading of 510, and you had to go through a stopping there, you called it. Turn around and you will be able to see it. Just outbye that vent station?-- Are you talking about the stopping where we go through into the return?

Yeah. I haven't got the laser, but when you come out - follow up the return of 5 South, into the 5 South return?-- Yeah, that's the return there.

Now move up towards 510. You turned left there and into the No 1 heading of 510?-- Yeah.

The stopping there you described as props and battens?-- Yes.

I just want you to think about that. I think it might have been a regulator that had louvred doors in it. The props and battens one was in fact the regulator down in 5 South. I think that one there was a regulator that - a Tecrete stopping that had two sets of louvre doors in it and the right-hand side next to the rib was what was next down for the Eimco to get through?-- It was a regulator, I know that.

Certainly you are not meaning to suggest that the props and battens were there with no bag on them or anything like that. If it was a regulator it would have a covering over it?-- It depends. Some regulators never had the louvres in them. Some were made out of props and brattice and battens.

Can you just turn your mind to this particular one? So it's sort of next to vent station 46 just outbye the top return, 512. I'm pretty sure if you think about it it's a Tecrete stopping with louvres in it and it's - as you are driving towards it to take the gear in it's the right-hand side, like one third of it that you knock down next to the rib in order to get through?-- I can't remember about the louvres, but I can remember knocking - I can remember knocking the left-hand side down to start with, the left-hand side going in to start with. I can remember knocking that part of it down.

Do I understand from that that you might have knocked the whole lot down subsequently?-- If I didn't knock the whole lot I knocked a fair bit of it down.

That was on the way in to shift the gear in?-- Yes.

When you got in there you've mentioned a bit of the road was rough where the Eimco had gone in and you had to grade the road. What sort of distance are we talking about in terms of grading?-- Just from that - just, say, from when I dropped the gear off there.

You are talking about the intersection of the top return and No 1 road 510?-- Yeah, just, say, back out to about the next intersection there.

Indicating back out to the next intersection of the 5 South return and No 1 road 510. You would have gone back and forth, back and forth grading that and shifting coal out of the way?-- Yeah, a fair bit of stuff there and that.

That took a little bit of time, no doubt?-- Yes.

During that time the other guys are shifting gear in from the other direction?-- Well, I can remember that about the MPV being in there with the tray of Tecrete, that's why I had to grade the road. I'm not sure what the other blocks were actually doing.

No doubt that grading process raised a fair bit of dust from the mere fact of grading the road?-- Yes.

Trundling back and forth, back and forth?-- Yes.

Can I just take you to that night you went in? You are going in on the night shift to help out with a sealing?-- Yes.

And Cole Klease was there and also Lenny Graham?-- Yes.

Lenny and Cole Klease had some words about why they were there at all really, didn't they?-- Something like that, yeah.

Without using the particular language they used, Len Graham thought that Cole had gone off the deep end a bit, didn't he?-- I don't know whether he thought he had gone off the deep end, but they did exchange a few words, like I said before.

With Len really saying, "I can't understand why this is all going on. We don't really need the third deputy."?-- Words to that effect.

Really blaming Cole for having called it on?-- I don't know about blaming him, but he just voicing his opinion.

He was using a particular Australianism for what Mr Klease was, wasn't he?-- Well, if you said it I'd probably understand the word no doubt, but whether I can remember what he said is another thing.

I can suggest a few, I suspect, but I don't know if they are the one miners use?-- You'll have to tell them to me.

Basically Len Graham saying, "What's the panic? There is no real problem down here."?-- Yeah, something like that.

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Okay. After that job was done, after the sealing was done, one of the things you did was put a stopping in, and I think you described it as being outbye the supply road seal?-- Yes.

Can you just point out with the laser where that stopping was erected? The supply road is the second one?-- Just across that seal there.

That's outbye the top return?-- Sorry, not the top return.

Okay?-- The supply road, sorry, there.

So, it's a stopping going across cut-through No 2 of 510 between roadways 1 and 2 of 510; is that a fair description?-- I will have to believe you.

All right?-- That's where it was. That's where it was there.

Okay. Well, that will do for my description of it and I think we can understand where it is now. That's just a bag stopping?-- Yeah.

Okay. The purpose of that is to direct air down that No 1 heading of 510?-- To have the intake air coming past your seals.

Okay. So you get a sweep across the face of the seals from that?-- Yes.

Now, can I just ask you something else? You were asked some questions about who was at the union meeting, and I will ask you - have you still got that list of people?-- No.

Exhibit 118. Also look at Exhibit 51. While they are being obtained, I might ask you this other question to finish off the Tecrete seals: they were being used down the mine. You had one full one at 4 South level and there were some prep seals otherwise. Now, you knew that the use of those sort of seals had been approved by the inspectors, didn't you? You couldn't use them otherwise unless they had been approved?-- I imagine that would be the case.

Now, can I just ask you to look at - I have given you two documents there. Now, one is the list of people who were at the union meeting, that's Exhibit 118?-- Yes.

And the other one is a list of who was working when over that weekend, that's Exhibit 51. I am going to ask you if you can turn over in Exhibit 51, the manning list, to the manning list for Saturday, 6 August. I think it's the fourth page in. It should be anyway?-- Saturday shift, yes.

You can see, if you have a quick look at that, on the night shift leading up to the day you worked on Saturday, 6 August two of the deputies in that day were Bob Newton and Mick Caddell, that's the left-hand column?-- Yes.

Then on the day shift, which is when you were in there, you

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have got two deputies there at least, Rod Helander and Cole Klease?-- Yes.

And you are listed there as well. That looks like an accurate list, I think, doesn't it?-- Yes, I can't remember everyone that was in that shift.

No, I understand that. You can accept that this is an accurate list of the shifts for that day. Now, I just want to examine one thing. I want you to check some names for me as we go through them, particularly on the union list, because on Exhibit 51 that I have given you you will see the afternoon shift listed for Saturday, 6 August. Now, they are fellows who worked on the seals, and, likewise, if you turn the page you will see the night shift going into Sunday, they are also blokes who worked on the seals. You will see Lenny Graham's name there and you in fact as well on the night shift?-- Yes.

Now, I just want to check a few people and see if they were at the union meeting as well as whatever else they did, but John Dullahide, he was there on the afternoon shift working on the seals. Now, did he go to the meeting?-- Can I look at the list here?

Yes, you have got it there. I think it's the second page. He did, I think?-- Yeah, John was there.

So John Dullahide did the seals, went to the union meeting and we know that he went down on Sunday night when the explosion happened?-- Yes.

Now, the next one on the afternoon shift, Lenny Graham worked on the seals?-- Yes.

He didn't turn up at the meeting, or at least he didn't sign his name?-- No.

He also went down on the Sunday night. You must know that?-- Yeah.

He brought the people out of 1 North-west?-- Yes, that's true.

The next one then is Mark Nelson, he worked on the seals. Now, did he go to the union meeting? I think you might find he did?-- Yes, Mark was at the meeting.

So, Mark Nelson worked on the seals, went to the union meeting?-- Yes.

And he was down the night it exploded?-- Yes.

Now, next one on the list is Mr Young, G Young. That's Greg Young, isn't it?-- Yes, Greg Young.

Greg Young worked on the seals. Did he go to the meeting?-- Yes, he was at the meeting.

And he went down on the night that it exploded?-- Yes.



Then the next one I want to take you to is down a couple to Mr D Young?-- Yes.

Darren Young?-- Darren Young.

He worked on the seals. Did he go to the meeting?-- Yes, he was there.

And he went down on the Sunday night too, didn't he?-- Yes.

The next one on the list is George McCrohon, the deputy. Now, he worked on the seals. Did he go to the meeting?-- No.

He didn't turn up at the meeting, but we can see by looking at the list that he went down - he worked a doubler on the seal night, afternoon shift following the Friday night shift, a doubler on the seals?-- You mean Saturday afternoon through Saturday night, is that the one?

Yes, that's right?-- Yeah.

And he went down that night too. He was one of the fellows who got out of the mine?-- Yes.

And we know he is a deputy. Then Mr Tuffs worked on the seals. He is a deputy too. Did he go to the meeting? I think he did?-- Yes.

Now, if we turn over to continue with the night shift people, that is still the people who worked on the night shift on the seals?-- Yes.

Got Mr Ein?-- Peter.

Peter Ein. He worked on the seals. Did he go to the meeting? He hasn't put his signature in?-- No, no.

But he went down the mine on the Sunday night?-- Yes.

Then we have got Lenny Graham?-- Yes.

We certainly know he worked on the seals and he is a deputy. He didn't go to the meeting, but he went down the following Sunday?-- Yes.

And we have got Col Parsons. He worked on the seals, or maybe he was up the top, I am not sure. Can you recall about him?-- No, I can't recall what Jimmy done.

Now, he worked that night at least while it was being sealed. I think we can see from 118 he didn't sign his name, so it looks like he didn't go to the union meeting, but he did go down the Sunday night?-- Yes.

Okay. Then the next one on the list is Mick Ryan?-- Yeah.

Mick Ryan worked on the seals. Did Mick Ryan go to the meeting? He hasn't put his name there?-- No, he didn't go

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to the meeting.

He worked on the seals and then he went down the Sunday night?-- Yes.

We have got next on the list then Cole Klease worked on the seals. He effectively skipped a shift. He worked on day shift Saturday?-- Yes.

With you and then with you worked on night shift Saturday?-- That's correct.

The Sunday night shift to get the seals done?-- That's correct.

Then the next on the list again is George McCrohon, isn't it?-- Yeah.

Who we have dealt with. Now I take you to day shift Sunday, if I could?-- That's the last page, is it?

No, no, stay with Sunday, the Sunday manning level?-- Yeah.

Day shift on Sunday. I want to take you to a couple of names. About a third of the way down that list you have got Hutchinson?-- I must be on the wrong page.

I am sorry, it will probably be the last page of Exhibit 51?-- P W Hutchinson.

Now, he worked on day shift Sunday. He hadn't worked on the seals but was he at the union meeting?-- No.

Well, could you have a look then? I think there is a signature for - sorry, the other Hutchinson, not P W. He worked on the day shift on Sunday and we know he went down the mine Sunday night?-- Yeah.

Then can I take you down a couple to Norm Cross?-- Yes.

Now, Norm Cross was there on the shift that you were on during Saturday day shift shifting gear in to 512?-- Yes.

Ready for sealing, and then he worked on the Sunday day shift?-- Yes.

Was Norm Cross at the meeting?-- No.

Doesn't look like it, no. Next I want to take you down to Brad Richards?-- Yes.

He also worked on the same shift as you shifting gear in?-- Yes.

For the sealing. Then he worked on the Sunday?-- Yes.

Can you just see if he was at the meeting? Doesn't look like it?-- No, he wasn't.

Next on the list then is Mick Caddell. We know Mick Caddell worked on a couple of shifts back, the night shift on Saturday, that's the one starting Friday night and running through to Saturday morning?-- Yeah.

He worked as a deputy on that shift. Didn't go to the meeting. There he is working again on the Sunday day shift?-- Yes.

If we go then to the afternoon shift Sunday, there is Michael Shaw?-- Yes.

Now, Mr Shaw, I don't think, worked on Saturday, but he is there on afternoon shift and he did a doubler. He went down the mine Sunday night?-- Yes.

Was he at the meeting?-- Yes, he was.

Now, there is quite a number of people that we have just identified, including some deputies, who worked on the sealing process and went to the meeting or didn't go to the meeting and worked subsequently down the mine, isn't that right?-- Yes.

Whether it's on one of the shifts on Sunday or the particular shift Sunday night?-- That's true.

There was quite a number of people who actually went through the sealing process or immediately before it who subsequently went and worked down the mine who also attended the union meeting?-- Yes.

Now, at the union meeting you announced to those who were gathered that the sealing had been because of concerns over - sorry, I have lost the wording of it - concerns over some readings and a smell?-- Yes.

Now, can I just ask you this: you said that you had had no particular training in relation to spontaneous combustion?-- That's true.

You have in the last few years, I think, done an induction course again, haven't you, in 1990? About four years ago you did the induction again and perhaps with Bruce Danvers?-- I can't remember what was said there or what -----

Can you remember sitting for an exam on 5 December 1990, a theory assessment sheet, where you had to mark off answers to various questions about factors to do with mining?-- No, offhand I can't, no.

I will show you something in a minute. It's probably breaching all the instructor's rules to show an examinee his examination sheet, but you might be able to identify at least by the writing your name at the top. That's your writing there?-- Yes.

You sat for that multi-question or multi-choice exam?-- Yes.

Just hand it back to me for the moment. You got 80 per cent, don't worry about that, you did well?-- That's probably a miracle.

But there were questions asked in that exam about spontaneous combustion and what caused it, isn't that right?-- I can't remember without reading through it now.

Well, the question was spontaneous combustion was caused by a range of things. You marked oxidisation of coal. You seemed to know that much at least. Then there were questions about what underground fires - how they may be classified, what the effect of pyrites are or is, then the basic constituents for a fire underground, questions of that sort. Do you recall any of those? I will just give it back to you and you can have a look at it. Question 10 was one on spon com. There are some in the subsequent pages about it. Are you satisfied now what I say is right?-- What about, me doing the exam?

Yes, and the topics that I have just mentioned to you?--  
Yes.

Okay, you can hand that back. I don't think I will need to tender it, but can I just ask you to look at this document, please? It's Exhibit 39. In order to do that course there was a hand-out given to the people who were doing it and I think that's it. Do you remember reading through this in order to prepare for and sit for that exam? If you look at the pages that I have flagged for you, page 16, for instance, you will see down the bottom there is some information about the initiation of goaf fires?-- Yes, I see it here.

By air causing slow oxidisation of materials such as broken coal, how to detect it?-- Yes.

Page 28?-- Page 28.

I am sorry, I should leave you at page 16 for a moment rather than jump you through these sections. It tells you how to detect it by an increase in carbon monoxide levels as well as a musty aromatic smell?-- Yes.

Page 28 I was going to take you to?-- Yes, I have got page 28.

A section on detection in relation to heatings which can lead to spontaneous combustion?-- Yes.

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How to detect it by increases in CO and corresponding oxygen deficiency?-- Yes.

The ratio of carbon monoxide as it increases and so forth?-- Yes.

And then some other pages in the trainee handout notes under, "Fires and Fire Fighting and Explosions", page 18?-- Yes, page 18.

You have got page 18, "Causes of spontaneous combustion"? Do you see them listed out there?-- What, the (b), (c), (d) and -----

Well, if it is page 18 of the notes I am referring to, the trainee handout notes, it should start with the heading at the top, "Causes of Spontaneous Heating", and under that, "The chemi-sorption of oxygen" -----?-- I am sorry, I was on the wrong page 18.

I will wait. It should have a flag on it. You should be able to go from flag to flag?-- Yes.

Is that page 18 with the, "Causes of Spontaneous Heating"?-- Yes.

Turn the page, page 19?-- Yes.

Some steps taken to reduce the possibility of spon com?-- Yes.

Turn the page plus one to 21?-- Yes.

Information about the explosive range of methane and methane and air?-- Yes.

If you keep going then to the overhead slides section, it should be the next flagged page, 10?-- Yes, page 10.

There were overhead slides about the causes of spon com and so forth?-- Yes.

Reflecting what was in the previous pages?-- Yes.

Can you remember being given that to read in order to prepare for the exam that you sat for?-- No, I can't.

You can't recall it?-- No.

You can't recall ever seeing it before?-- I may have seen this book in a room, but I can't remember ever being given a book to study.

There is no doubt you sat for the exam? You saw your name on the sheet that I gave you?-- Yeah.

You can return that. All right. Now, can I just ask you again about that Saturday night when the sealing was on?-- Yes.

XXN: MR MORRISON

WIT: ZIEBELL G R

You went in - you had left at about 3 in the afternoon?--  
That Saturday afternoon to go home?

Yeah?-- Yes.

And then came back when?-- 11 o'clock Saturday night.

By then the belt road seal was certainly finished?-- Yes.

And the top return seal was well on the way to being  
finished?-- Yes.

Likewise the supply road seal?-- That's true.

Yeah. Thank you, I have nothing further.

CROSS-EXAMINATION:

MR HARRISON: If I can just take you back to that  
conversation you had with Michael Squires?-- Yes.

On the Saturday day shift on the 6th?-- Yes.

You were working down at 4 South Level with Brad Richards and  
Doug Stampa?-- That's true.

On a Tcrete seal; is that right?-- Yes.

And were the three of you there together when Michael  
approached you?-- We were in that area around the seal.

And was Doug Stampa present when Michael spoke to you?-- He  
was there. I can't remember exactly whether he was outside  
the seal or whether he was the other side of the seal.

You can't remember specifically where he was?-- No.

With that conversation, how long was Michael there with you  
for?-- It is hard to say.

Well, just a couple of minutes?-- Maybe five, ten minutes,  
could have been a bit longer. It is a bit hard to say.

Did he speak to you on the same side of the seal that you  
were?-- Yes.

Which side was that?-- The inbye side of the seal.

Now, if I can turn to the afternoon, when you finished your  
shift, was it the case that you had left before all of the men  
arrived to commence the afternoon shift?-- We knocked off at  
our normal time. It might have been a little bit later than  
3 o'clock when we actually left the mine.

I see. But you - were you there when the men on the afternoon shift went back down into the pit or went down in the pit?-- Well, when we got to the surface there were men around, but I can't remember now who the men were, there were that many men that were there.

Do you know roughly what time it was when you left?-- As I say, around 3 o'clock. It could possibly be a bit after 3 o'clock.

Did you notice any of the men from the oncoming shift at the time you left? Did you notice any of them around anywhere upstairs or up the top?-- As I said, there were men around there, but I can't remember who they were or how many.

Yes, thank you. I have nothing further, Your Worship.

MR CLAIR: No re-examination, Your Worship

EXAMINATION:

MR PARKIN: Just a few questions, Mr Ziebell?-- Yes.

Could you look at that 512 plan on the - to your right?-- Yes.

You said earlier this morning that Michael Squires on 6/8 told you that he wanted to seal the 512 Panel because of concerns about readings and a smell?-- Yes, that's true.

And you took the equipment from 4 South and in the process had to knock the regulator down to gain access to the 512 Panel top return?-- Yes.

I think Mr Morrison took you through the business of accessing that regulator?-- Yes.

Could we - I am a bit puzzled. Can we be a bit more precise about what happened at that regulator? Did you knock half of it down or two thirds of it down or what did you do, can you remember?-- Well, I knocked a fair bit of it down. As I say, I can't remember. As I said to Mr Morrison, if I didn't knock it all down I knocked a fair bit of it down.

When you knocked it down what did you do then when you got through? Was it left down?-- Yes.

Well, would that effect the ventilation of the stopping area?-- I don't know.

I find it amazing that you just knocked a regulator down that relates to the whole district of 512 and nobody seems to have any concern about it. I mean, that affects the whole ventilation in the panel?-- I didn't say I hadn't a concern about knocking it down.

XN: PANEL

WIT: ZIEBELL G R

Did anybody else - when you knocked the thing down did you communicate that to anyone?-- No, well, Cole Klease, the deputy, and other people were there and you had to do it to get to the seal.

Yeah, I realise what you had to do, but if you knock a regulator down, that has to be communicated to someone because it certainly would affect the sealing operation because you have just destroyed your regulator?-- Well, I don't know how effective that regulator was there. You would have to ask someone else that.

But you do accept the fact that if you do move that regulator down then it is going to seriously affect the ventilation in 512 and possibly for the people concerned with erected the seals?-- Well, if the regulator is doing the job and you knock it down, it is going to affect something, yeah.

Exactly, it is going to create a pressure differential?-- It is going to do something.

Now, perhaps you can help me here because I am a little bit confused about the sequence of the sealing. Now, when you went through that regulator could you just indicate on the plan what roadways had been sealed in the 512 Panel?-- What roadways had been sealed?

Had been sealed at that time?-- Well, as I understood it, the only ones - the only - that one and that one. The only ones that were left that had to be sealed were the top return, the supply road and the belt road. They were the only ones left that had to be sealed.

So, at that particular time you have got three roadways that had to be sealed and am I right in assuming that one of those roadways was a return?-- Yes, that's where I took the gear to, the top return.

And two were the intakes?-- Yes.

Well, do you know the final sequence of the sealing process?-- Well, what we do is when you seal the final seals up you seal them both up together.

Right. Was that done? In other words, what you are saying is that when you seal a return and an intake off in a sealed area you need to do it simultaneously?-- Yes.

Was that carried out?-- Yes.

So, that was done with which - which were the last two to be sealed, do you know that?-- The top return and the supply road because when we got in there on dog-watch they had finished the belt road one.

Okay. You stated that when you were building the seal, and I think it was the 512 top return, you said that the Tecrete stopping started to lean?-- Mmm.



Is that correct?-- Yes.

Could you elaborate a bit more on that, please?-- Well, have you seen one of these baskets -----

I am familiar. I am just wondering about it leaning?-- Well, the baskets being as light as they are, as you are pouring the Tecrete into them because of the weight of the Tecrete it is pushing the baskets over.

Can you tell me on this particular stopping you were working on, how was it prepared? Was it prepared - had they chopped floors out and sides? What was the process of the preparation of the final seal?-- Yes. Yeah, the sides and the floor were dug out and the roof bolts were put into the ribs and the roof for support for when Tecrete was poured into the baskets.

You see, I am just a bit concerned as to how it was leaning because, I guess, when it is prepared as you have just indicated it is impossible for it to lean because it is all secured?-- This one was.

Of course, if you have got a stopping that is leaning, ultimately its final strength is going to have a bit of a problem? That's the reason for the question, I guess?-- Yeah, well, that's why we put the rope around the mixer for, to help hold it straight up so it wouldn't lean too much.

Now, I have heard all the comments over the past few days about this particular weekend, particularly when the sealing process was carried out?-- Yes.

Did anyone ever raise any concerns with either miners' officers or the district check inspectors?-- Not that I know of.

Okay, thank you.

EXAMINATION:

MR NEILSON: Mr Morrison referred to the examination that you sat for?-- Yes.

I think in 1990?-- Yes.

Can you recall who else might have sat for that examination?-- No, I can't.

Well, are you aware of who else may have sat for it?-- No, I couldn't give you names at this point in time.

Well, roughly numbers? I mean, when you did it did you sit in a room full of other people or were you on your own?-- We would have sat in the training room and done it.

XN: PANEL

WIT: ZIEBELL G R

So, there would have been a number of people?-- There would have been other people.

Well, would everybody underground have been required to do that exam, for example?-- I can't remember who sat for it.

But you did. Well, you got 80 per cent?-- I wish I would have did that well at school.

I didn't know you were that smart, George. You can't recall who you sat next to, can you?-- Obviously you don't know me well enough.

Seriously, about this exam?-- Yes.

Did you receive any instruction by anybody before this examination? I mean, were you gathered and given some training about things such as spontaneous combustion or ventilation or anything?-- I can't remember, you know, if we received, as I said to Mr Morrison, reading.

You were handed some - the text that Mr Morrison showed you?-- Yes.

But with that did any instruction come along? Did you go to classes to be taught about those things? Surely you would remember that?-- No, we didn't go to any special classes.

You were given that information and you were told to take it home, read it and you would be subsequently asked questions on that?-- Yeah, but I didn't take that folder home there. I never took that folder home.

Well, what was it given to you for, do you remember?-- I can't remember it being given to me.

I see. You may not have seen that? I thought you identified it?-- As I said to Mr Morrison, I may have seen it in a room, but I have never taken it home with me or anything like that.

Okay. So, when you sat for this examination you had no preparation for it?-- Well, as I keep saying, it is a bit hard to remember, sort of.

Well, what I am really trying to get to is were you given any formal instruction about the subjects that the examination took you to? For example, spontaneous combustion? Were you shown any videos or did you attend lectures on these subjects?-- Yeah, I can't remember everything that we have been shown now. I can't remember whether we had a, say, special thing. As I said before, we never had any real training into spontaneous combustion or anything like that. When you start talking about videos and things like that, you know, we have been shown videos, some you might remember, some you can't.

Okay. You obviously must have answered 80 per cent of those questions correctly. Where do you think you would have got

that knowledge from to be able to do that?-- I suppose some of that knowledge just come from experience.

From experience?-- When you work in the underground.

But did anybody teach you any of that? Formally teach you, I mean?-- As I say, you know, different times you might see something or that - you read something or see something, but as far as formally teaching, as I am saying, as far as spontaneous combustion, we have never had any real training in spontaneous combustion.

Or on ventilation or any other subjects?-- I suppose how much you mean "formal", you know? Say, you might sit in a room sometimes, you might read something, you might see something.

Well, I mean, I am only trying to get some information about this?-- Mmm.

Can you recall on any occasion when management people, for example, or a training officer may have called you and a group of people in and talked about these things? I mean -----?-- It is a bit hard to remember everything that we have done, you know?

But, I mean, wouldn't you remember if you had any formal training? I mean, if there had been a concentrated programme to try and teach you something about something like spontaneous combustion, would you not remember that?-- When you start talking about "concentrated", what are you talking about, days or a week? You would be talking about something like that?

Whatever, because you couldn't learn too much about spontaneous combustion in an one hour session?-- No, we have never had anything like days or week or anything like that with regards to training.

Just a little bit about the examination itself, I haven't seen the examination, I'm not aware of it, but what was the format of the examination in terms of how the questions were asked? Can you remember that?-- Just looking at that they were multi-purpose, a few different answers you could pick from.

So there is a question and then there is a series of answers and you put a tick beside the one?-- Yes.

You are not asked to explain why you might give an answer to any -----?-- Just from looking at that document, yeah.

I'm still not quite sure whether you said you do remember doing that exam or whether you don't?-- I can't remember doing it.

You can't remember doing it? It couldn't have been too important in your mind if you couldn't remember doing it, could it? I mean I can remember the last exam I did?-- So can I, and I failed it. That was at school.

But you can't remember this one?-- No, I can't.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Ziebell, you worked the day shift on Saturday, 6 August?-- Yes.

And then you returned to the mine to help complete the seals at 11 o'clock on the Saturday night?-- Yes.

And then, according to what we have heard, you went to the surface for crib at 3.40 a.m. or something?-- That's when we finished all the sealing and everything, got the gear out.

What did you do after crib? Did you go home?-- No, we stayed there until the day shift blokes come to work.

What time would that be?-- They started arriving about half past six, between half past six and seven o'clock. When they started arriving we went in and had a shower and went home.

You would go straight to the Sunday morning meeting, did you not?-- No, went home, had breakfast and then went to the meeting at nine o'clock.

Did you preside at that meeting?-- Yes, I was there.

Who sort of ran the meeting?-- The president.

The president? The other union officials were there, were they?-- Yeah, the president runs the meeting.

Was it a routine meeting, not one that was called for any special purpose?-- No, it was just a routine monthly meeting.

Did these meetings usually have an agenda or were they just an open forum where people could raise matters that were of particular concern to them?-- We had an agenda but it's also an open forum meeting where you can raise any concerns you like.

In your statement on page 5 - I don't know if you have it in front of you?-- Yes.

The fourth question from the top is, "Was this sealing in your experience any different to other sealings?", and I presume that referred to the 512 sealing?-- Yes.

And your answer is, "Previously the seals were built of brick." Does that mean that 4 South seals were made of brick or were they Tecrete seals?-- The one that we did on the Saturday day shift?

No, the seals that you had been doing in 4 South?-- 4 South?

Have I got it wrong?-- The seal that we did on the Saturday day shift in the 4 South Level, that was a Tecrete one.

That was a Tecrete one as well?-- Yeah.

So 512 wasn't the first Tecrete seal?-- The one in 4 South Level was the first time that I actually Tecreted a Tecrete seal.

I think that's all I have.

MR ELLICOTT: I don't have a question of the witness, but rather a request of Mr Morrison and that is could he please provide a copy of that examination paper, preferably a clean one.

MR MORRISON: I will do that.

MR CLAIR: Your Worship, just one question of Mr Ziebell.

RE-EXAMINATION:

MR CLAIR: At 4 South Level sealing - or the seal at least that you were doing, what was that? Was that just one of a number of roadways in 4 South?-- Yes, that was one of a number of roadways in 4 South, yes.

It was, what, the first or second of the seals to be erected there, was it, or was 4 South Level actually being completely sealed?-- 4 South Level was going to be extracted.

Was going to be extracted and this was -----?-- The start of

RXN: MR CLAIR

WIT: ZIEBELL G R

erecting seals.

This was one of the early seals in 4 South; is that right?-- Yes.

So it wouldn't be correct to say that 4 South had ever been sealed in terms of the section being sealed?-- Not that area, no.

While I'm on my feet, you mentioned in answer to Mr Parkin, I think it was, that the purpose of doing the seals in the top supply road and the top return in 512 simultaneously was to still enable ventilation to pass through the section; is that what you understood, pass through the panel?-- Well, it's always just a job to do them and do them both together so that you haven't got - still got one left to do. You just do them and the whole section is sealed off at the same time.

I just want to ask you about that door that's between those two roadways, 1 and 2 in 512. You say that that was open when you went there on the Saturday and you remember some hoses going through it; is that right?-- Yes, that's correct.

Did it stay open all day while the seals were being done?-- Yes, as far as I know, because the hoses were run through there all the time while we were sealing it off.

After you had taken down whatever that stopping was further over in the No 1 heading of 510 to get the Eimco through?-- Yes, the regulator.

You had effectively removed whatever was there anyway, or a good part of it; is that right?-- Yes, that's right.

So that that would have, if anything, increased the air that was passing along that roadway. Would have allowed more air to be sucked out by the ventilation fans along there; is that right?-- It could have done.

That door you referred to between 1 and 2 in 512 would have pulled the air straight through there; is that so?-- Well, that door where the hoses run through, Frank, if it was just left open up enough for the hoses to go through - would have only had a small gap that it would have been open.

When you say it was open, it may not have been fully open?-- No, just enough for the hoses to run through it.

That's your memory, is it?-- Yes.

That it was only open enough for the hoses to be run through?-- Yes.

Thank you, Your Worship.

MR MARTIN: I have one or two very short matters.

WARDEN: By leave, thank you.

FURTHER CROSS-EXAMINATION:

MR MARTIN: Just to make it plain, the 4 South seal that you've talked about, that was a prep seal, was it, preparatory to extraction?-- Yes.

You've been asked about the regulator, a fair bit of which at least you knocked down. Now, it's the case, isn't it, that Mr Squires must have known that that had to take place to get the gear over and the equipment over?-- I would imagine that he would know about it.

Did you see Mr Mason underground at any time on the sixth when you were there?-- I can't remember whether I saw George underground or not, I'm not sure.

Did you see him on the surface?-- I can't remember whether I did or not, but I'm not saying he wasn't there.

You said, I think, that Mr Squires came over to 4 South about noon?-- Yes.

And you've told us what happened after that. What I'm particularly interested in is at what time it was that you were using the Eimco getting gear over?-- As I say, went up to the surface - I was having crib, we rung the blokes to come in on afternoon shift. So you are looking at anywhere after half past one. Half past one to three o'clock, in at that time.

You, of course, were by yourself doing that?-- No, there were other people with me.

I'm talking about usage of the Eimco?-- Yes, there were other people there. Brad Richards was driving the MPV.

He wasn't sitting with you on your Eimco, that's the point I'm making?-- There is only one seat there.

Mr Stampa was doing other things?-- He was there with us.

He was moving gear himself?-- Yes, well, he wasn't sitting on me Eimco with me.

I'm not suggesting he was, I'm just suggesting to you that you don't know what he was in fact doing?-- He was helping us shift the gear.

He but he was separate from you shifting the gear. He wasn't beside you or with you, he was using another vehicle, wasn't he?-- He was doing other things there somewhere.

Thank you.

MR MORRISON: Your Worship, I have nothing arising out of

that, but in relation to the assessment sheet, an edition of it is already in Exhibit 39. We have flagged that with a green tag, but Mr Ziebell's was a later version of that. To protect the innocent I can either white out the entries or simply provide a copy. It's no matter to me one way or the other, but it may be of concern to Mr Ziebell.

WITNESS: It wouldn't worry me if you show my results.

WARDEN: I will tender it as Exhibit 39A and keep it separate, Mr Ziebell's examination sheet.

ADMITTED AND MARKED "EXHIBIT 39A"

MR HARRISON: Can I just have one brief matter?

WARDEN: Yes.

FURTHER CROSS-EXAMINATION:

MR HARRISON: Mr Ziebell, it was suggested to you earlier that Michael Squires must have known that you had done what you told us about with the regulator?-- Sorry?

It was suggested to you earlier that Michael Squires must have known what you did about taking a fair bit of the regulator?-- Yes.

I take it you never actually told Michael as such what you did?-- I can't remember where Michael was at the time because there were us blokes who were shifting the gear and we were in there doing this all, and I don't know where Michael was at that point in time when I was knocking the regulator down.

Just to finish that off, you don't have any recollection of telling Michael about it?-- No, no.

Thank you. Thank you, Your Worship.

FURTHER EXAMINATION:

PROF ROXBOROUGH: I'm sorry, Mr Ziebell, I'm still puzzled by this situation in 4 South and I would really like to have it clarified. Perhaps you are not the person to answer the question. The impression I'm getting now is that you were talking about the seals in 4 South being prep seals and that 4 South had not commenced or were in the process of undertaking



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pillar extraction; is that correct?-- They hadn't commenced extraction in 4 South Level.

The reason I'm puzzled is because I'm looking at a plan here which, the way I read it, shows that there has been quite extensive pillar extraction in 4 South. This is drawing number 45 -----

MR MORRISON: Professor, this section of 4 South that's known as extracted is called 4 South, the central section is 4 South Level. 4 South is the -----

MR PARKIN: It's sealed off inbye.

MR MORRISON: The central section is what is known as 4 South Level.

PROF ROXBOROUGH: I understand. Thank you.

WARDEN: Thank you, witness. You may stand down.

WITNESS EXCUSED

MR CLAIR: I call John Richard Owens.

JOHN RICHARD OWENS, ON AFFIRMATION EXAMINED:

MR CLAIR: Your full name is John Richard Owens; is that correct?-- That's correct.

Mr Owens, you are a miner employed at Moura No 2 Mine?-- Yes.

In fact you commenced your employment there on 22 May 1989?-- That's right.

That was your first work in the mining industry?-- In the coal mining industry, yes.

You have remained at Moura No 2 since that date; is that so?-- That's right.

Now, you've worked in various panels there; is that so?-- Yes.

In particular 2 north, 5 North, 4 South Level, 402 and 1 North West?-- That's right.

And on odd occasions you've relieved in other panels there?-- Yes.

Have you worked in 512 Panel at all?-- Two or three shifts.

Was that during development or extraction?-- I think one shift on development and two on extraction.

Those two on extraction, was that early in the extraction process or later on?-- About half-way out.

Now, you were rostered to work the Monday night shift, that's the one commencing 10.15 p.m., Sunday, 7 August?-- Yes.

You attended at the mine at that time?-- Yes.

Your regular job at that time was as a member of 1 North West crew; is that right?-- That's right.

You had recently finished development in the 5 South Sub panel?-- Yes.

You had only just moved over to 1 North West, your second shift in fact?-- I think it was the second shift, yes.

Now, whereabouts did you gather with the other members of the shift when you reported to the mine that night?-- At the starting point.

Did you have a practice at the starting point of consulting the Unor screen which could be seen through that window adjacent to the assembly area?-- Possibly - probably about 50 per cent of the time.

What sort of thing did you look for as a matter of course on

that screen?-- Only if a section was sealed, the methane level.

The methane level? What purpose did you have in looking at the Unor screen?-- Well, I was told that it was sealed - finished, sealed, at about half past one or 20 past one Sunday morning.

This is 512 Panel you are talking about?-- Yeah, yeah.

Perhaps before I move to that, you say that it was your practice 50 per cent of the time to have a look at the Unor screen?-- Yes.

What sort of thing did you normally look for when you looked at the screen?-- Just if any of the sections were flashing.

what sort of readings did you look at?-- Mainly just the methane level.

This particular night you say that you understood that 512 Panel had been sealed some time early on that Sunday morning?-- Yes.

Where did you gain that information?-- From Greg Young.

Greg Young? When was that?-- That was before starting time.

That night at the mine?-- That night, yes.

There had been a union meeting earlier that morning, did you go to that meeting?-- No.

So the first time you knew that 512 had been sealed was when you spoke with Greg Young?-- I knew it was due to be sealed that weekend.

Given that you had been told 512 had been sealed, what did you look for on the Unor screen this time?-- Just the methane level.

Methane level in 512?-- Yes.

Nothing else?-- No, that's all I noticed and then Jimmy Parsons and myself talked about - Jim said something about the oxygen level was 18 per cent or something like that and the methane was - I think it was 4.3.

What significance did you attach to those readings?-- That it was going - just going into the explosive range.

Were you able to form that conclusion yourself?-- Yes.

Or was that something that Jimmy Parsons said to you?-- No, I realised that. We discussed it, but it was - I knew it was just about to go into the range itself.

When you looked at the Unor screen did you ever look to see what the CO level was in the various panels? Did that mean

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anything to you?-- No.

There is also a column there against each panel which is referred to as a Graham's ratio. Did you ever consult that?-- No.

Have any idea what the Graham's ratio told you?-- No.

Had you had any instruction at all about spontaneous

combustion underground?-- Just basic - basic - couple of sheets of paper which I got here on induction five years earlier.

When you -----?-- When I started.

When you first took on the job?-- Yes.

Okay. Well, I will perhaps come to those sheets later, but I want to stay for the moment with the events of this Sunday night. Did you have some discussion with Jimmy Parsons?-- Yes.

What did you and Jimmy Parsons discuss?-- Just that it was going into the explosive range, and I think Jim said something like, "Maybe we shouldn't go down.", and we discussed that we had been down before when other sections were sealed, so we just got in the Rover and went to work.

Okay. Was there any address by anybody on the management side about the situation underground?-- No.

Who was there at the assembly point, the miners?-- Yes, the miners.

The deputies?-- The deputies would have been in the deputies' room.

In the deputies' room. Did you gather with the deputies to go underground?-- Yes, when the deputy comes out of the deputies' room we hop in the Rover and go down.

Any discussion when the deputies joined you about the situation underground?-- No.

Had you ever been told of any reports of a smell being detected in 512 Panel?-- No.

At any time?-- Never.

In particular over the weeks prior to this shift?-- No.

Ever been told about there being a haze observed underground?-- No.

In 512 the previous day, the Saturday?-- No.

If you had been told of a slight tarry smell in a panel in the mine, what would that have meant to you?-- Well, I would have asked our deputy about it.

A strong tar smell, strong benzene smell, are they terms or words that you would attach any significance to?-- Well, yes. Well, you would understand that there was something going on.

Of what kind? Something going on in the panel?-- Yes.

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Something unusual?-- That's right, unusual.

Okay. You say you would ask your deputy about it?-- That's right.

In those circumstances. Well, you went underground to 1 North-west; is that right?-- That's right.

What happened when you got there?-- We cut a car of coal, or picked up a car of coal off the floor, loose coal, and we had a water hose broken on the miner, so we rang the fitters.

That was some time after you had got that first cut?-- No, it would have been - we would have rang the fitters straight after we cut the first car.

Okay. Did the fitters come down?-- Yes.

Or at least one of them?-- Two fitters.

What happened then?-- They started working on the miner and were probably there about 5 or 10 minutes when we felt the concussion and the air all filled with dust.

Well now, whereabouts were you at the time?-- I was on the driver's side of the miner.

Given where the miner was, was that the outbye or inbye side of the miner?-- I was outbye the miner probably three or four metres.

Just describe, if you would, what precisely happened at the time that you say you felt this concussion? What did you feel?-- I heard a crack, a loud crack, like a stockwhip, and then the compression of the ears, and the whole area was just - the air was just filled with stone dust sort of instantaneously.

How long did that pressure on your ears remain?-- I estimate about half a minute.

The movement of the air, how violent was that? How would you describe it? You were standing up, I take it?-- Yes. It was violent, but it wasn't enough to knock me over, and I think that was due to me being in a dead-end.

Was there a brattice stopping nearby?-- Yes.

What happened with that?-- It just flapped.

Didn't go over?-- It didn't go over where I was.

Okay. Any conversation when ----?-- Yes, somebody - I think it was Greg Young - said that that must have been a big fall and I said, "That's not a fall, that's the big one.", and we headed out.

Now, were you somewhere near an intersection at the time that you felt this concussion?-- About 25 metres inbye the

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intersection.

Were you looking towards the intersection at the time it happened, or about that time?-- No, I would have been looking at the fitters - fitter and the miner driver on top of the miner.

Right. Then did you turn around sometime after you began to feel the compression?-- Yes, straight away I turned around, yeah.

What did you see when you looked towards the intersection?-- I seen one of the men rolling across the road in the intersection.

That intersection was a crossroads; is that right?-- Yes.

It was a crossroad with a roadway coming from which direction?-- I don't understand.

You were in 1 North-west?-- Yes.

Perhaps if you were to just lift up those front plans there, you might be able to look at the big plan that's underneath on the left-hand side. You see that one? If you put the top two back over the whiteboard, you will see that that one underneath is a plan of the whole mine. Just study it from where you are there?-- Yeah.

Have a good close look at it, and if you could stand back a bit so we can see where you are indicating. Indicate where you were?-- There.

You were in a dead-end there?-- Yes.

And the intersection you looked towards?-- That one there across there.

Across there. You are indicating there the cross-cut which is in fact the third one in from the end of 1 North-west; is that right? Would I be right?-- Well, it's the first intersection on the road we were working. We were working that road.

Okay. The first intersection on that road. That's first back from the end?-- Yes.

And you saw somebody being bowled across the cross-cut?-- Yes, from that direction.

Right, okay, heading in a south-westerly direction, okay. You can sit down again now, if you would, Mr Owens. What happened then after you suggested leaving?-- We walked towards the crib table and we seen Peter Hutchinson coming from the feeder. We waited for him, and then one of the fitters got into the Rover, into the fitters' Rover parked just above that intersection, and I told him not to start it until we had seen Lenny Graham. Then we went - all of us went to the crib table.

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That was the four of you that were there; is that right?--  
There was five of us then.

Peter Hutchinson joined you?-- Yes.

Five of you went to the crib table, and who did you see there?  
Was Lenny Graham there?-- He was.

Was he on the phone at that stage?-- I think he was on the  
phone and he said - all I heard him say, "We're heading out."

Then did Rodney Buckton go back and get the fitters' Rover,  
brought it up to the crib table?-- Yes. I asked Len first  
when he said we were heading out were we taking the Rovers and  
he said yes. That's when Rodney Buckton went and got the  
other Rover.

Seven of you got into the crew Rover?-- Yes.

With Lenny Graham driving?-- That's right.

The two fitters were in their Rover behind?-- That's right.

Okay. What sort of visibility was there at that time?-- I  
would think about five metres.

Well, did Lenny Graham then suggest that you put your  
self-rescuers on?-- Yes.

You all did that; is that right?-- That's right.

Then you made your way out of the mine?-- That's right.

Would you be able to just indicate where you went? Did you  
move on to the supply road?-- That was the supply road we  
were in, our supply road. We came up four cut-throughs,  
turned left and then right up to 6 South.

You are indicating where now? Did you go across from which  
road, the supply road to where?-- From the supply road  
across the dip belt road and onto the dip, main dips.

Onto the main dips?-- Yeah.

And then straight up the main dips; is that right?--  
Straight up the main dips to the portal.

And visibility became more difficult as you went along that  
area; is that so?-- It was down to about one foot from when  
we left. Two pillars from the 1st North-west crib table it  
was down to about, I imagine, one foot because I had to lean  
forward in the Rover with the cap lamp on to watch the  
temperature gauge.

Okay. Now, at some stage in fact did the following Rover hit  
the one in front up near the portal?-- I think we hit that  
Rover about four times.

Okay. Now, you have set out in your statement which you made

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in relation to this matter in slightly more detail the way you made your way out. I don't need you to go through that orally at this stage. After you reached the portal, you found the atmosphere immediately outside the portal was much the same as inside; is that right?-- That's right.

Then you did go up and report at the lamp room where you registered your names?-- That's right.

Thank you, Mr Owens.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Owens, on that Sunday night when you got to work, the men assembled in a certain area, was that so?-- That's right.

You said later the deputies joined the miners and went underground?-- Yes.

At no stage during that process were you ever told about there being smells detected in 512 or a haze?-- No.

Now, even at that stage on that Sunday night you and Jimmy Parsons had some concerns about going underground?-- I don't think I had any concerns. Jimmy may have.

Well, was it Jimmy that said to you he didn't know whether you should be going underground?-- Yes.

The reason he had said that to you was that you had realised it was going through the explosive range sometime on that night shift?-- Yes, we knew it was close.

But you didn't know, that is neither yourself nor Parsons knew, anything about smells or hazes being detected inside that panel prior to that Sunday night?-- I didn't, no. I don't know about Jim. I imagine he would have told me if he knew anything.

If he had known, he would have mentioned it to you in the context of the conversation you had about going underground?-- Yes.

But he didn't at any stage express that as a reason for his concern about going down?-- No.

The panel going through the explosive range would not ordinarily be of concern unless you had an ignition source or a possible ignition source, would it?-- That's right.

Did you know of any - at that stage, that Sunday night, did you know anything of any possible ignition source inside 512?-- No.

Now, as part of the process of assembling did you see Mr Vivian that Sunday night before you went down?-- Yes.

Was he a check inspector or a miners' officer, one or the other?-- He was a check inspector.

What role did the check inspector normally play in terms of safety issues, for instance?-- If someone brings something to his attention, he follows it up.

When you say "follows it up", would it ordinarily be his responsibility or role to inform the men of any safety concerns, firstly?-- Yes.

And, secondly, perhaps deal with the - raise with the management as to concerns that he may have had on behalf of the men about safety?-- Yes.

Nothing was raised by him obviously at the assembly area that night?-- I don't know.

If it was raised by him, it certainly wasn't in your presence?-- That's right.

Is it the case that it was Terry Vivian and Steve Bryon who were the two check inspectors for No 2 Mine?-- That's right.

And the only two?-- Yes.

Terry Vivian of those two was the only one there that Sunday night shift?-- Yes.

Now, after you had gone underground and the incident occurred, your priority obviously was to get out of the section 1 North-west to the surface?-- Yes.

You were assisted in that process to some extent by having vehicles near where you were working that night?-- That's right.

In fact, how far was it approximately from where you were at the time the incident happened to the surface? How far was it roughly?-- About two kilometres.

Having vehicles, firstly, enabled you to more quickly get to the surface, firstly?-- That's right.

And, secondly, get to the surface without having to expend energy walking or running?-- Yes.

If you are walking or running, you would be breathing heavily?-- That's right.

Or more heavily, and you would be expending more energy. For most of that period from after the incident until you emerged at the surface you were wearing self-rescuers?-- Yes.

Again, they have a limited life, don't they?-- They do.

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So, it's important that you get quickly to the surface if you are wearing one of those?-- That's right.

Again, the vehicle assisted in that process?-- Yes.

Now, as I read your statement and the way in which it traces your route from the area where you were to the surface, you had some difficulty finding your way. The group had some difficulty finding their way to the surface?-- That's right, yeah.

One of the reasons for that was the extremely poor visibility after the explosion?-- Yes.

Because as soon as it occurred, the whole area was filled, firstly, with stone dust?-- Yes, the first two pillars after we left the crib table were stone dust and then we got into smoke.

And the visibility was very limited where you first started. It got slightly better as you went outbye towards the portal?-- Yes.

But for most of the roughly two kilometres you had great difficulty finding your way?-- That's right.

It seems from what you say that the method of getting out ultimately relied upon one or more of the group recognising areas within the roadways that told you where you could turn to get onto the main dips and out?-- Yeah, I think most of it was done by memory.

In other words, there was no pathway illuminated or marked in any special way as an escape route, if you know what I mean? There was no special marking on the rib walls that could enable you to more readily recognise a way out, for instance?-- You wouldn't have seen it. If we had to walk we still would have taken the same way that we drove.

Yes. What I am saying, I suppose, is that if that access route was more readily marked as such it might have been easier for you to find your way out?-- We wouldn't have been able to see any markings.

Perhaps the witness could see one of the plans, Your Worship? I think it is number 45/33 which is one of the bundle of plans.

WARDEN: That number again?

MR MacSPORRAN: 45/33. It is part of document 182. It is document 182.

I don't want to spend much time on this, but you will see that that is or appears to be a plan of the 1 North West section?-- Yes.

Showing the position of the miner at the time of the explosion on the night of 7 August?-- Yes.

Then, I think, there is a red line which draws a path from that point roughly to the surface?-- Yes.

Can you just confirm for us that is, in fact, the path that the crew followed that night as you have described it briefly in evidence?-- That's correct.

I think you have said you left - you went up the roadway about four pillars, turned left and then immediately right, went some distance outbye, turned left again to reach the main dips and then went straight up the main dips to the portal?-- That's right.

So, there were several intersections you had to negotiate to get the crew out?-- Yes.

Were you able to follow any physical objects such as cables or things like that? Would that, perhaps, have assisted your escape from the area?-- We recognised the 6 South belt which crosses - we had to drive under the 6 South belt and that gave us an indication we had one pillar to go to turn, but we couldn't find that corner anyway. Jimmy Parsons got out of the Rover and used his arms, I think, to find the corners on the ribs.

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So, if there had been some sort of cable for the purpose - that was a route to the surface you may have been able to follow that?-- I don't -----

Make your way straight out by touch rather than by sight, that's what I am getting at?-- If you were walking, yes.

If you were walking. All right. Anyway, that was one of your problems, wasn't it, recognising areas with that poor visibility to find your way out?-- Yes.

Perhaps, Your Worship, I can tender that plan separately, make it a separate exhibit? It is part of 8, I understand, but perhaps if it could be made a separate exhibit itself, the plan itself?

WARDEN: Exhibit 119.

ADMITTED AND MARKED "EXHIBIT 119"

MR MacSPORRAN: Thank you.

CROSS-EXAMINATION:

MR MARTIN: Just taking up where Mr MacSporran left off a little while ago, you said it was about 2 km from, really, somewhere close to the face at 1 North West to the surface?-- Yes.

Now, I take it that distance was predominantly, if not wholly, uphill?-- Yes.

And fairly steep?-- About two thirds of the way up was steep.

And if it wasn't for the presence of the vehicles do you think you would have got out at all?-- I don't think so.

And if those vehicles had been away doing various other jobs that would have been the case, wouldn't it, you wouldn't have got out, probably?-- I don't think we would have got out.

And particularly if one was - or the men there were injured in any way, such as a man you saw bowling past the cross-cut. If he was injured he would slow everybody up?-- If we had to walk, yes.

What is the life of a self-rescuer in terms of usage, when you use it? What time frame?-- In those conditions I imagine probably 15 or 20 minutes.

And a newcomer underground separated from experienced men

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would never have had a chance, would he?-- No.

Do I understand that really all you knew about the danger was CH4, when you were looking for a sign of danger?-- Yes.

Can I just see the two pieces of paper you brought with you? Yes, thank you. Do I understand you correctly to say you received this on your induction?-- Yes.

Tell me again, when was that, 1989 or something?-- That's right, 22 May.

And was there any accompanying lecture explaining each item?-- I can't remember. There may have been a video, but I can't remember clearly.

Nothing like, "Now, listen inductees, the importance of this item is this, the importance of that item is that and look out for that in particular or this in particular."; anything like that on induction?-- I don't remember. I think the video had more to do with coal dust explosion.

But I am really talking about the points on these two sheets of paper?-- I can't remember.

All right. In any case, where did you have this induction in relation to these two sheets of paper?-- In the training room at No 4 bathroom.

In the what?-- Training room at No 4 bathroom.

Do you know what category of person, if not his name, distributed these or said anything about these two?-- Bruce Danvers. He was the undermanager.

He is no longer at Moura No 2, I take it?-- No.

Since you received this document some, what, five years ago, any further course on spontaneous combustion or what to look for?-- Not that I remember.

All right. Well, I tender these documents - these two sheets as one exhibit, Your Worship.

WARDEN: Mark that Exhibit 120 and we will have some copies made, thank you.

ADMITTED AND MARKED "EXHIBIT 120"

MR MARTIN: Now, when you arrived for the night shift on 7 August was Mr Squires to be seen? More particularly, did you see him?-- Yes.

Where was he?-- In the starting point allotting - telling the men which section they had to go to.

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Did you hear him say anything whatever which might have alerted you to any danger underground that night?-- No.

I understand that you had some hard rock experience before coal mining?-- Yes.

And that it is because of the hard rock firings you instantly knew that there had been an explosion?-- Yes.

And is it the case that you left school at a very young age of 13?-- Yes.

And had you ever seen Ellicott's diagram?-- No.

On the Unor screen?-- No.

Do you know anything about - not what you have learnt since 7 August, but prior to 7 August, did you have any understanding whatever of its function?-- No.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Can you just tell me this: Jimmy Parsons was with you at the start point on the Sunday night?-- Yes.

And you knew that Jimmy Parsons had worked on the sealing in 512, didn't you?-- No, I didn't know that.

Did he not mention to you that he had, in fact, worked in the process of sealing 512?-- No.

Okay. Was it Jimmy who might have told you that it had, in fact, been sealed?-- No.

Did Jimmy Parsons tell you anything about having been told why the sealing was taking place?-- Not that I remember.

Did he mention to you that prior to going down to do the sealing Mr Squires had addressed the men who were going to do the sealing?-- No.

Did he mention to you that Mr Squires had told the people who were going down to do the sealing that they would be sealing because of a haze and a goaf smell?-- No.

He didn't mention any of those things to you?-- No.

Did Mr Parsons tell you that the men had been addressed by Mr Squires prior to going down to do the sealing and told the CO levels?-- No.

Now, you and Mr Parsons were standing together looking at the

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Unor screen; is that right?-- Yes.

And the screen at that stage was pointing out towards the assembly point; that is, out through the window?-- On about a 45 degree angle, I would say.

And the screen was showing the normal lines of figures for points?-- As far as I could see, yes.

You looked for the 512 point, didn't you?-- Yes.

And you could easily pick it out because it is designated No 5 and called 512 seals?-- I am not exactly sure what it says, but it has got "5 South" - "512" on it.

You certainly picked up the 512 line. Can you tell me from your memory what you saw? I don't need precise figures unless you can remember them, but tell me what you saw on the screen?-- The methane level was 4.3.

Tell me about the line that dealt with 512 seals, what colour was it?-- I can't remember.

You know it is a colour screen and some figures are in green and sometimes some figures are in blue and sometimes some figures are in red. Do you know that?-- No, I can't remember what colour it was.

Okay. When you think back now about looking at the screen were there any flashing red lights on the screen?-- No.

Are you sure?-- I didn't see any red flashing lights.

You must have been standing reasonably close to the window to look at the screen?-- Probably a metre.

Okay. That's a metre from the screen or a metre from the window?-- From the window.

And Parsons was with you?-- Yes.

Now, while you were looking at that Mr Squires did something, didn't he?-- I don't follow your question.

Did Mr Squires come and do something to the screen?-- Not while I was there.

I think Mr Squires might have brought up the Ellicott diagram for you and Mr Parsons to look at?-- No.

MR MARTIN: I would like proper questions. What Mr Morrison thinks doesn't matter. It is what this man knows. So, if questions could be put properly I will appreciate it.

MR MORRISON: All right. I am sure Mr Owens appreciates that I don't know anything about this except what I have been told.

Was I there that night? No. Now, could it have been that Mr Squires brought up the Ellicott diagram for you and Parsons

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to look at?-- I never seen Mr Squires in the room where the monitor was.

All right. Did you see the Ellicott diagram though?-- No.

All right. Could there have been an occasion when Parsons was looking at the screen without you?-- Of course, yes.

Were there any other persons with you when you were looking at the screen? There is you and Parsons plus others?-- There may have been, I can't remember that.

Okay. So, you don't have a memory of Squires going and bringing up the Ellicott diagram?-- No.

For the men to look at?-- No.

Okay. You know what the Ellicott diagram is, don't you?-- No.

I don't mean its technical data. You know there is one that can be looked at?-- I have heard since that it was something to do with the triangle.

Okay. Now, it was Mr Parsons who expressed the view that maybe you shouldn't go down, wasn't it?-- Yes.

Did you ask him why he said that?-- He said, "It is going into the explosive range" -----

"Maybe we shouldn't" -----?-- "Maybe we shouldn't go down."

You didn't question him any further about that?-- No, I just said that we have been down before while sections went through the explosive range.

And so you then - that was basically the end of the conversation?-- Yes.

Okay. All right. Now, at this point in time the deputies weren't there?-- No.

Len Graham was going to be your deputy that night?-- That's right.

You knew by that stage you were going to 1 North West?-- Yes.

How did you know that?-- That's my normal crew.

Yeah?-- You work in your normal crew unless there is a breakdown and you are shifted somewhere else.

Okay. Now, all the one crew went in the one PJB?-- Yes.

Down to 1 North West. That PJB would normally stay with the crew, wouldn't it?-- No.

What would normally happen to it? Who would bring it out?-- They would send down a spare man if they needed the Rover for

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another job and he would come down with the transport driver and take the Rover out.

So, if the PJB was required for another job it would then be taken, but otherwise it wouldn't be, would it?-- That's right.

Now, when you - when the event happened you didn't immediately put on the self-rescuers, I think?-- No.

Lennie Graham directed you all to do that at some point?-- That's right.

So, he made a decision about when that should be done?-- Yes.

It was he who collected the men together and gave them directions about what to do?-- Yes.

And there was effectively no break? Once the event happened Len Graham was immediately in charge, directing people what to do, where to go, what was happening?-- From when we got to the crib table, yes.

The crib table was a pillar or so back from the face?-- About three pillars.

That's where the Rover was too?-- One Rover was at the crib table. The other Rover was one and a half pillars from the miner.

And was that the fitter's Rover?-- Yes.

When you moved up to the crib table did you all go by foot or did you get in the fitter's Rover to go up?-- No, we went by foot.

Then at one stage Len Graham said, "Put on the self-rescuers."?-- Yes.

You knew how to do that?-- Yes.

You had been shown how to do that?-- Yes.

At Moura?-- Yes.

And you had been given some training or - some training, we will call it, in relation to what to do, don't panic, that sort of thing?-- That's correct.

And you kept that in your mind while you were coming out?--  
Yes.

I gather from what you were saying to Mr Macsporrán over here that really, if there had been marked pathways and things the atmosphere was so thick you wouldn't have seen them anyway?-- That's right.

So thick that at one stage even to find the corner one fellow had to get out and use his arms?-- That's right.

The pathway seems to have followed at least in its early stages, the high tension cable. Were you aware of any decision -----?-- Yes.

----- made by Len Graham to in fact follow the high tension cable?-- I don't know. I wasn't in the Rover that he was in.

Were you in with the fitters?-- Yes.

I'm sorry, I see. Now, you've produced the two sheets of paper from the induction course five years ago?-- Yes.

Done by Mr Danvers; is that right?-- Yes.

Did he personally do it?-- Yes.

There were other people doing the induction at the same time?-- Yes.

These two sheets weren't the only piece of information you were given, were they? They are photocopies out of a large document, aren't they?-- They are the only two I could - I kept all my paperwork from induction. They are the only two I can find on spon com.

You've got others from the induction?-- Yes.

So these are just two that relate to some particular part?--  
Yes.

And the induction would have gone for a number of hours, I imagine?-- A full week.

And involved going down with experienced miners?-- No, we went down with Bruce Danvers.

Sorry, he might be what I call an experienced miner, perhaps?-- Yes.

It was the case that new miners, notwithstanding the hard rock experience, new miners weren't allowed down in the mine without being in the presence of experienced miners?-- Yes.

There was a period of time that would apply?-- Yes.

The proposition Mr Martin was talking about, that is to say newcomers being separated from experienced men, that shouldn't have happened if the directions were followed, newcomers would

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be with experienced men?-- Yes.

Now, the self-rescuer you wore was a W65 MSA?-- Yes.

The 65 designation tells you that it's designed for in excess of an hour's use?-- I didn't know that.

You used the phrase in relation to its life expectancy, you said 15 to 20 minutes in those conditions. Are you talking about the dust or the gas levels or what?-- The smoke level.

But you would expect it to have a longer life expectancy than that, wouldn't you? A longer duration, I suppose I should say?-- If the conditions weren't as bad it would have lasted longer.

Now, in the induction, going back to that, there were sections of the induction to do with fires down mines?-- Yes.

Spontaneous combustion?-- Yes.

Signs of it and how to detect it?-- Just basic information.

Thank you. I have nothing further.

CROSS-EXAMINATION:

MR HARRISON: Just one question, Mr Owens. I take it that Len Graham, the deputy on your shift that night, never told you of any dangers associated with going into the pit that night?-- No.

Thank you.

MR CLAIR: No re-examination, Your Worship.

EXAMINATION:

MR PARKIN: Under normal circumstances how long would it take you to walk from your normal working place to the surface?-- I would think more than at least half an hour. At least 30 minutes.

So if a self-rescuer was able to sustain the conditions underground at that particular time, if it would last 30 minutes, you would have been able to walk out of the mine?-- I think in the conditions it would have taken more than 30 minutes.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Owens, you referred to experiencing a loud crack; was there only one crack or were there multiple cracks?-- I believe there was only one.

And it had an instantaneous effect, an immediate effect on yours ears?-- Yes.

Was there a rush of air some time after that?-- Yes.

What would that be? A matter of a few seconds perhaps?-- Yeah, only a few seconds.

And it was that rush of air, was it, that led to the thick atmosphere of dust?-- Yes, yes.

How long was it before you put on your self-rescuer?-- Probably about three minutes.

And I think you said that you didn't taste or smell anything -----?-- No, I didn't.

----- in the intervening period. Were you wearing glasses?-- No.

Did you have any discomfort in the eyes?-- Yes.

Was that mainly from the dust?-- That was from smoke.

Presumably you washed your eyes when you got to the surface. It would probably be one of the first things you did, was it?-- No, I can't remember.

But you don't recall having any continuing stinging effect on the eyes for a long time after you left the mine?-- No.

In your statement you said that someone said, "That must have been a good fall."; did you at any time think it was a fall?-- No.

You knew immediately what it was?-- Yes.

Was the ventilation good in 1 North West?-- Yes.

Before the incident you could feel a good flow of air?-- Yes.

How was that flow of air affected by the incident? I know it was full of smoke, but was the smoke moving -----?-- The ventilation seemed to stop completely.

You said initially it was dust and then that gave way to smoke; do you recall how long after when it turned, if you like, from dust, or when smoke first appeared? Was that on the journey outbye?-- Yes, two pillars from the crib table

that's when we got the smoke.

So you met the smoke before you got to the main headings into 5 South?-- Oh, yes.

Well before that? Thank you.

EXAMINATION:

MR ELLICOTT: I'm curious why you've indicated the conditions would only allow an effective duration of 15 to 20 minutes for a self-rescuer. Can you explain that to me, please?-- Well, we were told that in thick smoke, if you had to use a lot of exertion, the time would be cut on a rescuer by at least half.

Did the rescuer get hot to breathe through?-- Warm.

Not uncomfortably warm?-- No.

Did it become difficult to breathe through so that you had to sort of suck hard to get air in it?-- No.

So what you are saying now is based on what you may have been told prior to the incident rather than your experience on the day with the self-rescuer you wore?-- Yes.

So in getting out of the mine on the day of the incident you had no real difficulty or discomfort with the self-rescuer that you wore?-- No, because we weren't doing anything, we were just sitting in a Rover.

No more questions, thanks.

MR CLAIR: No further questions, Your Worship.

WARDEN: Thank you, witness. You may stand down.

WITNESS EXCUSED

MR CLAIR: I call Colin James Parsons.

COLIN JAMES PARSONS, SWORN AND EXAMINED:

MR CLAIR: Your full name is Colin James Parsons; is that so?-- Yes.

Mr Parsons, you might want to just move your chair in so you can speak comfortably into the microphone there. You are a miner at Moura No 2 Mine?-- Yes.

You started in the coal industry at Excell Colliery, Bluff, in 1964; is that right?-- Yes.

Then at Moura No 1 mine in 1966?-- Yes.

Then in '68 at Sirius Creek until 1972 when there was an explosion there; is that right?-- Yes.

Then you returned to Moura No 1 in 1972?-- Yes.

And remained there until 1974 when you transferred to Moura No 2?-- Yes.

And you've been there ever since; is that right?-- Yes.

You've been a member of Mines Rescue since 1972?-- Yes.

Now, in the months or weeks even leading up to the first explosion at Moura No 2 on 7 August where had you been working in No 2 Mine there?-- Mostly in 4 South Level.

Did you work occasionally in other panels?-- Yeah, I worked in 5 South, 512 and a bit of cleaning up and that in North West.

How often did you work in 512?-- Not a great many times, just if somebody was missing and just to fill the vacancy, that's all. Never in there permanent or anything like that.

The times you did work there, was that during development or extraction?-- Probably both.

Well, on the occasions that you worked there did you yourself observe any difficulties with the panel either by way of ventilation or any difficulties with the design?-- No.

You worked on what I'll call the Monday night shift, but commencing on the night of Sunday, 7 August?-- Yes.

Do you remember what time you arrived at the mine?-- Probably around five to 10, 10 o'clock, something like that.

You got dressed and you went to the assembly area there; is that right?-- Yeah.

Now, adjacent to that assembly area there is a monitor screen on the Unor system?-- Yes.

Just inside the window?-- Yes.

Was it your practice to consult the Unor screen at the beginning of each shift you were working?-- Not a practice, but we used to fill our - make a cup of coffee there because the hot water urn was there and it was right beside the window, always had a look or ----

What sort of things did you look at as a matter of practice on the Unor screen?-- Just what the readings were and whatever section it was going through at the time, you know.

What readings would you have read on that screen? I'm not talking particularly about this night, but when you looked at the screen, what readings would you look at?-- Just the methane and whatever the methane was or the oxygen or - mostly.

There were, of course, readings for carbon monoxide on that Unor screen; did you ever attach any significance to those yourself?-- I never looked at them, no.

There was a column called the Graham's ratio; did you know what that referred to?-- No.

Now, on this particular night when you looked at the screen do you recall what it was that you looked at?-- Yeah, I looked at the methane reading and the O2 reading.

For ----?-- 512.

Why was that?-- Well, that's what it was on when I went there, and I had worked on the Saturday night shift before, the night before when they were sealing it.

You had worked on the Saturday night shift, on that Saturday night were you the surface lamp room attendant?-- Yes.

On communications?-- Yes.

Did you have some discussion with someone in relation to 512?-- No, not really, just the general talk and that that was going around, that's all.

What was the general talk going around?-- Well, they thought there was a heating there and they were sealing it because of that.

You don't recall who it was that said that to you?-- No, it was just the story we were getting around because when I got into work there was extra blokes in there, extra cars in there. I just said - I don't know who it was, somebody just said they were sealing 512 because they thought there was a heating in there.

Anything else mentioned in relation to 512?-- No.



Did you have any discussion with anyone as to why it was that there was some suggestion of a heating in 512?-- Oh, just - well, I didn't discuss it with anybody, but I just heard that the deputy or somebody had seen a haze and there was a tarry smell or something down there and that's why they were doing it.

You can't recall who it was that said that to you?-- No.

Or the circumstances under which that was said to you?-- No.

Well, from your own point of view, against the background of your own experience, what significance would you attach to a haze and a tarry smell in an underground coal mine panel?-- Well, there is a heating somewhere or something was wrong.

Okay. Well, after you had been working on the Saturday night did you have occasion to talk with any of the other miners or deputies before you reported for shift on the Sunday night?-- No.

You didn't go to the union meeting on the Sunday morning?-- No, I can't recall whether I did or not. I probably went straight to bed.

In any event then, coming to the Sunday night when you consulted the screen you said that that background, what you had heard on the Saturday night, caused you to have a look at the 512 Panel readings. What did you see there?-- Well, the methane was around 4.3 and I think the O2 was about 18.6. I didn't look at the others. JO was standing beside me and I just said to him that I didn't know whether we should be going down or not because it was just about into the explosive range, the methane.

"JO" is John Owens?-- Yeah.

You expressed your own doubts about whether you should be going down or not?-- Yeah, and he said, "Well, you know, we used to do that once, but we didn't do it the last two times we sealed 4 South level and 4 South B."

That is you didn't stay out of the mine?-- Not to my knowledge, no.

Okay. But that was the comment that he had made to you, was it?-- Yeah.

That on the occasions of other sealings the men hadn't been kept out of the mines?-- On them two, yes.

The figures that you saw, did those figures indicate to you that 512 might be about to go through the explosive range?-- Well, on that, yes.

After you had that conversation, what was your feeling about going underground?-- Well, I never thought any more about it.

Why was that?-- Well, I didn't know whether there was a heating there or not. George said he was working on a Saturday night, he come up to get a machine to go down and get the high tension cable. He said that the oncoming deputy and the deputy that was there on the afternoon shift had a few words about it because the oncoming deputy reckoned he couldn't smell anything, he couldn't see anything, so George said he couldn't smell anything, so we didn't know what was going on.

The George you are referring to is George Ziebell?-- Yeah.

And you had spoken with him on the Saturday night?-- Yes, when he come up to get a machine, yeah.

Well, I think the question was what you felt then about going underground. You said that you didn't really think any more about it then?-- No, we just jumped in the Rover and went down.

You didn't know yourself whether there was a heating or not?-- No, I didn't know. Just the talk that was going around, that's all.

What was your position? Did you have some view as to whether somebody else would be applying their mind to it?-- Well, I thought if there was, I thought somebody should have said something to us.

Perhaps you can say whether or not you saw it as your role to be raising any reservations that you had in light of the knowledge or in light of what you had heard about 512?-- No, I don't think so, no.

You didn't think it was your role?-- No.

Well, you went down underground?-- Yes.

To 1 North-west?-- Yes.

What did you do when you got down there?-- We went down to the face, cleaned up the stuff that they had left where they had been working on the miner, and we cleaned up one car of coal, the loose coal, that was laying on the floor and we seen the busted water line and we rang and got the fitters down.

That was on the miner?-- Yes.

Did the fitters come down?-- Yes.

How long after you started your shift?-- Well, probably half-hour. By the time, you know - they probably got down about quarter past, 20 past 11 or something like that.

What happened after that?-- Well, they were working down on the face on the miner. I was sitting outbye when something happened.

What was that?-- Well, I don't know what it was. The noise

was deafening anyway.

If you can just describe what you did hear and see?-- Well, I don't know what I did, but I was sitting on a miner cable and I got that big of a fright. The bag blew down behind me. I didn't know whether I was blown over or tripped over trying to get away in a hurry, but I ended up on an intersection on my hands and knees.

Right. You say you had been sitting on the cable?-- Yes.

Was that at the intersection that you were sitting on the cable?-- Yes.

Well, were you able to feel the direction from which this blast of air came that knocked you over?-- Yeah, it come from the belt road side behind me.

What happened then? Did you feel - what else did you feel? You were blown over. What other things did you feel?-- Nothing really. I don't know. Nothing. It was just dusty and -----

Now, after you were blown over then, and perhaps some time after that, did you feel something else in relation to your ears?-- Yeah, my ears popped very badly. They were very painful.

Was there a delay between when you were first blown over and when you were conscious of your ears popping?-- Oh, yes, probably half a minute, maybe a minute, I don't know.

Okay. What happened then?-- Oh, we yelled out to see if everybody was okay, and we all come out and we decided to make our way back to the crib table. I think Greg Young got on the phone and called the surface and asked them had they heard or felt anything and they said no, and we proceeded to head back to the crib table, and on our way we picked up Peter Hutchinson that was on the feeder in the belt road. He was heading out. We could see his light up above the level, and we told him we were heading up the crib table to come out.

When you say "we", you are referring to yourself and John Owens?-- Yes.

The two fitters?-- Yes.

And you picked up Hutchinson on the way back?-- The two Youngs were there, Peter Ein.

That was back at the crib table?-- No, they were at the face. Only ones that wasn't at the face was Peter Hutchinson and Lenny.

Well, you got back to the crib table. What else had you noticed at this stage?-- By that time there was - the dust was a bit thicker and there was - oh, the smell and the acidic taste in your mouth.

Was it at that stage just dust or was there some other element in it?-- Well, it looked like dust anyway.

Just dust at that point, okay. Was Len Graham in the crib room?-- Yeah, Lenny was at the crib table, yeah.

Now, this taste that you sensed, had you tasted that sort of thing before?-- Yes, yes.

In what circumstances?-- Well, when No 4 blew we were sent down there on Mines Rescue and we didn't have our suits on when we first went down because they told us it was only just a fall, and we started off, and when we got down the tunnel a bit it was just about the same taste.

Is that the only time you had tasted the same taste otherwise?-- Yeah, to my knowledge, yeah.

Well, then you say that Len Graham was there in the crib room. Was he on the telephone at that stage?-- I couldn't say, no. When we all got up there we all picked our gear up and I think we got - he jumped in the seat of the Rover and we were going to try and ring the surface again or something like that and he just said to tell them we are coming straight out, that was it.

I see. Now, at this stage when you got back to the crib room did you have your self-rescuer on?-- No.

When did you put that on?-- When we got in the Rover to go out.

What caused you to put that on?-- Well, I suppose just sense, commonsense.

Well, did you get into one of the PJB's that was there?-- Yes.

Was that one that Len Graham was driving?-- Yes.

Then the fitters got in their PJB; is that right?-- Yes.

And the two vehicles proceeded outbye?-- Yes.

You have set out in your statement the route that you took on the way out?-- Yes.

Did you have any difficulty finding your way out?-- Yeah, great difficulty.

You had to go pretty slowly?-- Yes. Once we got one cross-cut up from the crib table and went around the corner it was just like hitting a brick wall.

Visibility reduced considerably, did it?-- Yeah.

What would it have got down to?-- Well, I don't know. You couldn't see much more than that far in front of you.

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That's about 18 inches?-- Yeah, or maybe a metre, I don't know. The further you got out a bit, I think the thicker it got in that section.

Did Lenny Graham's Minder alarm at some stage?-- Yes, I think it went off, yeah.

On the way out?-- Yeah.

Very long after you set out?-- Probably not a great deal. Once we got around a corner, I think it was, when we got into the thicker atmosphere of the dust and that, it went off just around there, I think, probably one pillar or so up from the crib table.

Now, you ultimately got back up to the portal; is that so?-- Yes.

When you got outbye of the portal George McCrohon jumped into the PJB, did he?-- Yes.

Then you went up to the lamp room?-- Yes.

What did you do yourself then?-- We took our self-rescuers off and made a cup of coffee or something, and then I got the key off Michael Squires and went over to the rescue room and started testing suits.

No further questions of Mr Parsons, Your Worship.

WARDEN: I don't think we will continue on this afternoon. We had an early start and a short lunch and we won't finish this witness today, so I am afraid we will require you back here tomorrow morning, witness, thank you. Adjourn the Court till 9.15, please.

THE COURT ADJOURNED AT 4.28 P.M. TILL 9.15 A.M. THE FOLLOWING DAY



WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 10/11/94

..DAY 17

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THE COURT RESUMED AT 9.21 A.M.

COLIN JAMES PARSONS, CONTINUING:

WARDEN: Thank you, witness, you are still on the oath that you took yesterday; you understand that?-- Yes.

Thank you.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Parsons, you worked the weekend of Saturday/Sunday, 6 and 7 August; is that so?-- Yes.

On the Saturday night you said there was general talk around the mine about there being the panel sealed because they thought there was a heating?-- Yes.

Can you recall anyone in particular you heard that from?-- No, not really.

How widespread was the talk about the sealing of a heating?-- Well, I didn't know till I got to work that night, just all the extra cars there and they said - just the talk in the bathroom was they were sealing because of a heating.

Did you know what a heating was?-- Well, the coal heating up, I suppose.

That's what you understood a heating to be?-- Yes.

And that's what you understood the talk around the mine to refer to, refer to a heating?-- Yes.

You thought it referred to coal heating up?-- Yes.

And the reference was to inside 512 Panel?-- Yes.

I think you also told us you had heard that a deputy had seen a haze and smelt a tarry smell?-- Yes.

Do you know where you heard that, from whom?-- Yeah, George told us.

That was George Ziebell?-- Yeah.

When was that?-- When he come up to get an MPV and a cable reeler to go down and roll the high tension cable up.

That was on Saturday, was it?-- The Saturday night.

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WIT: PARSONS C J



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Did he say whether or not he had seen any haze or smelt any tarry smell himself?-- No, he said he couldn't smell it when he was down there because it was nearly sealed.

Now, on the Sunday night you came on shift; is that so?-- Yes.

And you assembled and spoke to John Owens?-- Yes.

And there was some discussion about whether or not you should be going down the pit that night?-- Yeah, I discussed with John about it, yeah.

You were aware that the mixture inside the 512 Panel was going through the explosive range that night?-- Well, it wasn't when we looked at it but -----

But did you understand it to be trending that way?-- Yes.

At the time you looked at it?-- Yes.

Which meant that sometime on shift when you were underground it was most likely to go through the explosive range?-- Yes.

And you had some concerns about that?-- Yes, otherwise I wouldn't have mentioned it if I didn't.

At that stage you knew from Saturday night that there had been a report of a haze underground and a tarry smell?-- Yes.

And a heating?-- Yes, but I was also aware that some of them said they had never seen the - smelt it or seen anything either.

Did you mention to John Owens when you spoke to him that there had been reports of a haze and a smell?-- No.

Was there any reason for that?-- No, just - it just didn't come up in conversation.

Was it an important matter, the fact that there had been a haze and a smell inside 512?-- Well, I think it was all on the screen there for everybody to see if they wanted to look at it.

What was on the screen for everyone to look at?-- Well, the readings.

What readings?-- Well, the methane was 4.3 and the oxygen was about 18.6.

But that simply related to the fact that the panel would go through the explosive range?-- Yes.

That wasn't particularly a problem unless there was a potential ignition source for that mixture?-- Yes.

And a potential ignition source could have been a heating in the panel?-- Yes.

XXN: MR MacSPORRAN

WIT: PARSONS C J

And you knew that they had sealed apparently because a heating had been detected?-- Yes.

And associated with that was the smell and the haze?-- Yeah, but I never smelt it or seen it.

But you were told about it?-- Yes.

So, you didn't tell Owens?-- No.

Although he was expressing concern about whether he should go underground that night because it was going through the explosive range?-- No, he didn't express a concern, I did.

What did he say about it?-- Well, he said they used to do it but they don't do it any more. When they sealed 4 South level and 4 South B they stopped doing it.

In any event, the end result was, I think you told us yesterday, you didn't know whether there was a heating or not?-- No, I said that yesterday.

I think you said that if there had been a heating, you would have expected someone to tell you about it?-- Yes.

When you say "someone", who are you referring to?-- Management or the deputies in charge of the shift.

Was it ever the practice that before going underground you would be addressed by a deputy or undermanager about the conditions underground?-- No.

It didn't happen that night?-- No.

You may have spoken of this yesterday, but were you familiar with the fact of a graph being posted on the deputies' cabin and elsewhere about the mine?-- No.

Do you know anything about CO make and the significance of it for a panel?-- No.

Just finally, when the incident happened that night whilst you were underground, you came out?-- Yes.

The crew came out in two vehicles; is that so?-- Yes.

At one stage the visibility was so bad, I think you came out of the vehicle and led the vehicle by walking in front of it to see where you were going?-- Yes.

That's a fair indication of how bad the visibility was?-- It was bad, yeah.

And you had to rely upon your knowledge of the roadways to find your way out?-- Yes.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: To what age did you go to school, Mr Parsons? To what age did you go to school?-- 13.

Is that about grade 8 or something?-- Yes.

After that a few years cutting timber?-- Yes.

And were you then with the Main Roads Department?-- Yes.

And you worked in a sawmill?-- Yes.

Is it correct to say that your knowledge of things such as spontaneous combustion are of the most basic kind?-- Yes.

Is that true also of the Unor, the machine, the Maihak?-- Yes.

Do you know anything about Ellicott diagram?-- No.

You have been in Mines Rescue for some years?-- Yes.

What were you taught there in relation to such fundamental things as spontaneous combustion?-- Not a great lot.

Well, can you tell the Inquiry, first of all, who taught you anything about spontaneous combustion?-- What was that?

Can you tell the Inquiry who it was that taught you whatever it is that you were taught?-- Probably Dave Kerr.

Well, can you tell the Inquiry what he taught you about spontaneous combustion?-- Well, you got to have a heating. I suppose you have got to have three basic things: heat, air and fuel.

Is that about all he told you about it?-- Probably. He might have told me more but, you know, this is 20-odd years ago - not quite that long, but -----

Is that all that you have ever learned about spontaneous combustion?-- Yes.

What about your employer, what did it teach you?-- About the same, I'd say, probably.

Since you came to Moura have you ever had any retraining or training - retraining in addition to what you have told us about from your employer about spontaneous combustion?-- No.

Are you familiar with an instrument called a probeye?-- Well, I have seen it. I'm not real familiar with it, but I've seen it, yeah.

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Where have you seen it?-- I first seen it when Leichhardt Colliery had a heating about 10 to 12 years ago.

Was that used for the purpose of detecting a heating?-- Well, it was at that time, I think, yes.

Was there a probeye in the Unor room at Moura No 2?-- Yes.

Did you ever see it used there, I mean at No 2?-- No.

Were you ever instructed on it?-- No. It was used because in the 5 North sealing we used it, yes, 5 North-west.

Do you know whether it detected a heating in 5 North-west?-- Yes.

Do you know where it detected a heating?-- Yes.

Please tell us?-- Well, Frank Puts was the undermanager, he was in Mines Rescue, myself and I think there were three others. When they sealed the section they had an airlock in it so we could get in and walk around the place with our rescue suits all in check while it was sealed, and we went inbye and we - in the belt road - I don't know where in 5 North-west - we detected a heating in the roof where there was coal starting to fall out, there was a bit of coal in the roof, and we could see the glow and that of the probeye, and about three cut-throughs back up from the face on the top return about three feet from the floor on the top rib we detected another one.

Just coming to the weekend of 6 and 7 August, did you see any undermanager underground or indeed on the surface on the Saturday shift? It was a Saturday night shift, wasn't it, that you were on?-- Yeah, George Mason was there when we arrived there Saturday for the night shift one.

Where was George Mason when you saw him? Was he aboveground?-- Yes.

Did he tell you anything about a heating or a tarry smell or a haze?-- Not that I can recall.

On the Sunday, Sunday evening, did you see either of Mr Mason or Mr Schaus at No 2?-- Beg your pardon?

Did you see either of Mr Mason or Mr Schaus at No 2 Mine?-- No, not Sunday night shift, no.

Did you see Mr Squires?-- Yes.

Where did you see him?-- On the surface.

Well, just be a bit more particular, if you would. Where on the surface? Where was he?-- Well, in the lamp room or just outside it.

Did he tell you that, "Well, listen, it's going to go through the explosive range, we have a tarry smell and a heat haze.",

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and things like that? Did he say anything like that to you?--  
No.

Do you know whether there was a hooter, a siren, which alarmed  
when the Unor alarmed?-- There was a siren there, yes.

Did you hear that at any time that night? I am sorry, more  
particularly the evening of 7 August?-- No, no, I can't  
recall it going off, the siren going off.

Well, you would certainly recall if it went off because it's  
quite a loud noise, isn't it?-- Yes.

You had obviously heard it on prior occasions?-- Yes.

So, you knew most definitely what it sounded like?-- Yes.

But it didn't alarm whilst you were aboveground on the evening  
of 7 August?-- No.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Can you just tell me in relation to the night of the sealing when you worked, you came in on night shift?-- Yes.

That normally starts around 10.15; is that right?-- No, the weekend it is 11 o'clock.

Okay. Who else came in on night shift with you?-- George Ziebell, I think it was Mick Ryan -----

Ryan - let me give you a few names and tell me if you agree with me: Peter Ein?-- Could have been, I am just not sure.

Lennie Graham?-- Yeah.

There was you, Mick Ryan?-- Yes.

Col Klease?-- No, he was on the shift before that, I think.

George Ziebell?-- Yeah.

George McCrohon?-- I just can't remember. I don't recall if George was there.

You know that Mr Ein was on the sealing actually working down the mine, wasn't he?-- Yes.

You were on the surface at communications?-- Yes.

And was he one of the persons who might have told you some of that information you said was general talk around the mine?-- Could have possibly have been, yeah.

He, you know, worked down the mine when the explosion occurred?-- I beg your pardon?

You know he came down the night that you went down on the Sunday night?-- Yes.

He was there at the start point when you went down?-- Yes.

Did he say anything to you about what had happened at the sealing?-- No.

Did you ask him?-- No.

Lennie Graham was a deputy on the night of the sealing and working on the sealing itself, wasn't he?-- Yes.

You heard that there was an exchange of words between Cole Klease and Lennie Graham, didn't you?-- Yes.

You heard that from George Ziebell?-- Yes.

And others?-- Mainly George.

From what George told you it was a bit of a heated exchange between Lennie and Cole?-- He never said anything about it being a heated exchange. He said they were talking about it.

They had a difference of opinion as far as you understood?-- Yes.

And that difference of opinion was that Len Graham was saying there was no need to bring on the sealing the way it had been brought on and disagreeing with Cole Klease about the signs?-- I don't know about that, I wasn't there. He just said he couldn't smell anything or see any haze.

That's Lennie Graham said that?-- Yes.

Now, Lennie Graham was your deputy on the night you went down the Sunday night, wasn't he?-- Yes.

You know that Len Graham is a very, very experienced deputy and a very, very experienced Mines Rescue bloke?-- Yes.

And you trusted his judgment?-- Yes.

And you took some comfort from the fact, I gather, that Len Graham had not seen these things which you would otherwise regard as signs of a heating?-- Yes.

In other words, it was two things that affected your judgment: one was that people had not seen or smelt the things that other people were talking about; that's one factor?-- Yes.

And the second factor about that was the quality of the people who disagreed, and Lennie Graham was no fool?-- No.

And if he hadn't smelt these things and he hadn't seen these things that meant something to you?-- Yes.

Did you talk to Lennie Graham before you went down on Sunday night about his view?-- No.

You already knew it, didn't you?-- Yes.

He hadn't seen the haze, he hadn't smelt the smell and he thought the sealing had been brought on unnecessarily, didn't he?-- Yes. He said he thought they panicked a bit, yeah.

Yeah. You knew that that was his view both on the Saturday night when the sealing was taking place and you knew that on the Sunday night when you went down?-- Yes.

All right. Now, you also knew that George McCrohon was a deputy on the night of the sealing and he was also a deputy on the night that you went down on the Sunday?-- Yes, I think he was there Sunday night, yes.

You knew that George McCrohon hadn't seen the haze and hadn't smell the smell either?-- No, I didn't say that.

I know you didn't say that. I am asking did you know that?--

No.

Did you know it either on Saturday or Sunday that George McCrohon did not detect the things that other people had said they had detected?-- No.

Would you have drawn comfort from that fact, bearing in mind that George McCrohon is a very experienced deputy too?-- Yeah, if I had heard him talk about it, yes.

All right. Now, there were a number of people who worked on the sealing operation who also went down Sunday night, weren't there?-- Yes.

Johnny Dullahide was one?-- Yes.

And he is a very experienced miner, even though he is not a deputy?-- Yes.

We have mentioned Lennie Graham. He is a very experienced deputy?-- Yes.

Who both worked on the sealing and went down Sunday night?-- Yes.

Mark Nelson is another?-- Yes.

Greg Young?-- Yes.

The other Young?-- Yeah.

We mentioned George McCrohon, he is an experienced deputy?-- Yes.

Worked on the sealing and went down Sunday night?-- Yes, he went down Sunday night.

Then we mentioned Mr Ein. He worked on the seals and went down, didn't he?-- Yes.

Then there is yourself. You didn't work down the pit on the seals, but you were certainly there and heard reports of the sealing process?-- Yes.

Then we have got Mick Ryan as well, worked on the seals and went down?-- Yes.

You know that there were other people who worked on Sunday day shift who did a doubler through to night shift on that night?-- No, I don't think so. There was -----

Hutchinson was one, worked on the day shift Sunday, then backed up on the night shift when the explosion happened. Did you know that?-- What was that?

Hutchinson worked on the day shift Sunday?-- Yeah.

And then backed up on the Sunday night?-- No, I can't recall that.



All right?-- He might have worked day shift and afternoon shift, but I don't think he worked night shift. He might have. Peter, yeah.

Yeah?-- Peter Hutchinson, yeah.

I am sorry, I forgot there was more than one Hutchinson?-- Yeah.

I apologise for that. All right. Now, just staying with this talk around the mine on Saturday, there was talk, you said, generally in the bathroom, the bathroom being the place where people changed their day clothes to their work clothes and back again at the end of the shift?-- Yes.

And that's a routine meeting place for miners on shift?-- Yes.

And deputies?-- Possibly, yeah. The deputies have got a deputies cabin there, so -----

But the deputies don't have a separate bathroom?-- No.

And the talk was not confined to just you and one person, there was general talk amongst a few people, wasn't there?-- Yes.

It would be right to say, wouldn't it, that the general talk covered most of the people who were at the mine that night?-- Yes.

And the talk was - whether it is right or wrong I am not interested in that, but certainly the talk amongst the miners was that the sealing had happened because of a heating?-- Yes.

That a deputy had seen a haze?-- Yes.

And that a deputy had got a tarry smell?-- Yes.

And that deputy was mentioned, Cole Klease?-- Yeah, Cole's name was mentioned, yes.

Now, you know Cole Klease went and worked on Sunday day shift too, don't you? I am sorry, no, I will withdraw that, I won't put that to you because I don't think that is right. I am sorry, I don't need you to respond to that, it is incorrect. Now, at the time the general talk was being discussed around as to what had happened and why and who had seen and experienced what. That's the same time that there was some talk about the fact that Lennie Graham disagreed with Cole Klease?-- No, not really.

Well, that was talked about though, wasn't it?-- I beg your pardon?

That was talked about, wasn't it, the fact that there had been a difference of opinion between -----?-- Yes, there was a

difference of opinion, yes.

So, miners that night were aware - leaving aside whether all these things are right or wrong, just talking about what they said to one another, miners that night were talking about the sealing having happened because of a heating, one deputy having seen a haze and smelt a tarry smell, but another having not seen that haze and not smelt that smell?-- Yeah, possibly, yeah.

And you, like others, knew the significance of what the haze and the tarry smell might indicate; not necessarily would, but might?-- Might, yes.

And in the general talk other people appreciated what that all meant too, didn't they?-- Yes.

And some of those people, as we have discussed, were people who then went down Sunday night?-- Yes.

Now, when you came to shift - just let me - before I finish that, you and others knew what was common knowledge, namely if you seal a panel the gases build up behind it and it goes through an explosive range?-- Yes.

The explosive range commonly referred to is in relation to methane, isn't it?-- Yes.

So, part of that talk that night was about the fact that it would do this?-- Yes.

At some point?-- Well, yes.

It was a common expectation of miners that that would happen?-- Well, I never spoke to all of them, but I just spoke to JO - John Owens about it.

I don't mean on the Sunday night, I mean back on the night of the sealing. Whenever a sealing happened there is talk amongst the miners about the fact that the panel will go through the explosive range and even speculation about when that might happen?-- Yes.

And that happened on this occasion too, on that Saturday night?-- No, I wasn't talking to a great lot of people that night.

There was general talk about that though?-- No, not to my knowledge, no.

And you and other people, in your experience, knew the significance of methane getting to that point where it was going to go into the explosive range?-- Yes.

You knew, and others knew too, that that was around 5 per cent?-- Yes.

And through to about 15?-- Yes.

Now, when you got there with the other night crew on the sealing night, that's Saturday, George Mason was there on the surface?-- Saturday night, yes.

And he spoke to the night shift guys before they went down?-- I don't know, I can't recall.

Can I suggest to you he did and he told the men assembled when they were going down that the panel was being sealed as a precautionary measure and that they were to work on the sealing until it was finished, not to stop?-- Yes.

Now, you and John Owens, I think, drive to and from work or used to?-- Yes.

You must have told JO something about the night of the sealing and something about that general talk?-- Quite possibly, yes.

On the way in on Sunday, most likely a topic of conversation as you drove in?-- I can't recall.

It would be usual for you to talk about things to do with the mine on the way in?-- Not really.

And you think it is possible though that you told him something about the fact that the panel had been sealed?-- Could have possibly, yes.

And something about the general talk as to why it had been sealed and what people thought?-- Yeah, could have, yes.

And also - I am sorry. Now, on the Saturday night you worked through to the end of night shift which was, what, 6.30 in the morning?-- Yes.

By that time the panel had been sealed?-- Yes.

And you knew that?-- Yes.

The people who had done the sealing work had - some had come up, some had stayed down to shift machinery around?-- Yeah, they all stopped down to shift the machinery around, yes.

To your knowledge they were putting up a couple of stoppings to make sure the seals got wiped by the ventilation?-- Yeah.

And finally they all came up at the end of shift?-- Yes.

And day shift took over?-- Yes.

Now, when you got to the mine on Sunday night and got changed one of the first thing you did was go over and look at the Unor screen?-- Yeah.

That has been a practice of yours for quite some years?-- I have a look at it there, yeah, if it is there.

You are not the only one who does that, plenty of people do that?-- Yes.

The screen is routinely positioned so that it faces out to the assembly point?-- Yes.

Just so that people can see it?-- Yes.

When you went to look at that John Owens went with you?-- Oh, he was there. I don't know whether he went with me or not.

When you were looking at it at some point, in fact, Michael Squires changed the screen for you so you could see a different screen, didn't he?-- No.

He brought up the Ellicott diagram?-- No.

You know what the Ellicott diagram is, don't you?-- I have heard of it.

I don't mean its technical details. You know it is a quadrant graph?-- Yes.

You can tell from it whether the atmosphere is going into an explosive atmosphere or not?-- Yes.

What I want to suggest to you is that Michael Squires brought up that screen that night before the men went down?-- No.

You didn't see it?-- No.

He may have brought it up for others?-- We were the last group on the surface so not to my knowledge he didn't.

Right. Now, you formed the view when you looked at the screen - you knew what the figures meant, that it was about to enter the explosive range?-- Yeah, the methane was, yes.

Did you look at the CO figures at all?-- No.

You have no interest in the CO or do you know what the CO rise signifies?-- No, not a great lot about it, no.

Well, what did you know about CO at that point?-- Not a great lot, really.

Well, not a great lot?-- Nothing really.

Well, did you know what produced CO?-- No.

You have no idea what produced CO at that time?-- No.

You didn't know coal produced it?-- Possibly, yes.

You think you might have known that?-- Yes.

You also knew that diesel engines would produce it, like all exhausts?-- Yes.

You knew you would get some CO when you started extraction in a panel?-- No, not a great lot, no.

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You knew it was a feature of extraction, didn't you?-- Yes.

And you knew that people did watch CO, didn't you?-- Yes.

And you knew that people watched CO to see if it was going up or staying level or whatever?-- Yes.

And you knew that rising CO had some significance for some people, maybe not for you, for others it did?-- Yes.

And you knew that what people were looking for was big rises in CO or sharp rises?-- Yes.

Notwithstanding that knowledge you didn't look at CO that night?-- No.

You had been, at that stage, a miner for over 20 years, hadn't you?-- Yes.

And in Mines Rescue for about as long?-- Yes.

I think it's fair to say you were a very safety conscious person?-- Yes.

That applies to most miners, doesn't it?-- Yes.

Not restricting miners from management, everybody combined is safety conscious?-- Yes.

You yourself raised the question about whether it was a smart idea to go down or not?-- Yes.

And you raised that only with John Owens?-- Yes.

And he gave you an answer about the fact that men had stayed down before basically?-- Yes.

After that you didn't give it another thought?-- No.

You didn't think to raise it with Lenny Graham?-- No.

You already knew what his views about it were, didn't you?-- Yes.

And you must have known at that point that you were going down with Lenny Graham?-- Yes.

Having been around the mines for 20 odd years, you would have noted the fact that miners have spoken up on endless occasions about safety issues?-- Yes.

And you've done that yourself?-- Yes.

And miners generally are not reticent about speaking up on such things, are they?-- No.

And it often happens that you would get miners bailing up the management about something or other that they are worried about?-- Yes.

XXN: MR MORRISON

WIT: PARSONS C J

And by the same token management aren't slow about speaking up about safety matters either, are they?-- No.

So given your background then in Mines Rescue, given your safety conscious aspect, given what you knew about the situation that night, why was it that you thought it was not your role to raise those matters, your concerns?-- Why was it my role to do it?

Well, why wasn't it predisposes the question. You are a very experienced miner. You were there on the night of the sealing. You knew the significance of what the general talk meant?-- Yes.

You yourself had a question about whether it was a smart idea to go down or not?-- Yes.

And yet you didn't raise it with anyone except John Owens?-- Yes.

Can you explain to me why that is so?-- I probably thought there was no danger in going down. If I had thought there was any danger I wouldn't have went down.

If you had had the slightest concern about going down you wouldn't have, would you?-- No.

That applies to just about all miners, doesn't it? If they were concerned about going down they wouldn't?-- Yes.

There is no question that if someone had that concern and raised it management isn't going to force them down, are they?-- No, possibly, no.

It's just not going to happen because the men wouldn't do it, would they?-- No, the men wouldn't do it.

It's a feature of not only this mine, no doubt it's others, but this one certainly, whilst there might be - you might have superiors like deputies and managers and undermanagers and everything else, no-one obeys a stupid order?-- No.

If you were worried about going down and didn't want to and management said, "No, I think you better go down.", it just wouldn't happen, would it?-- No, no.

There had been at this mine, I think, regular safety meetings held?-- Yes.

You had been a regular attender at them?-- Yes.

At those safety meetings all sorts of safety issues would get raised?-- Yes.

And there'd be a good attendance at them?-- Well, everybody on shift would attend them, yeah.

It was effectively compulsory to attend, wasn't it?-- Yeah.

On production days when those meetings were held production wouldn't start until the meeting had finished?-- No.

Sorry, do you agree with that?-- Yes, I agree with that.

In terms of what was happening on shift to shift I think it was your practice as well, and the practice of other people, I'm not saying you are singled out in this, you would very frequently go into the undermanagers office at the end of shift?-- Yes.

And one thing you'd check out is the scales for the tonnage produced?-- Yeah.

And that has a couple of features about it; (1) there is a bit of rivalry between shifts as to who produces the most. It's a friendly sort of thing, no-one gets bitter about it?-- Possibly.

The second thing is it's got direct relevance to a production bonus?-- Yes.

In that routine you would often give information to undermanagers and anyone else who was there, deputies and so forth, about what was happening in the section you had been working in?-- Yes.

You are not the only person to do that, other people did it too?-- Yes.

And so there was a fair exchange of information on those occasions about what had happened in the section, whether there had been a fall, whether there were some problem encountered or whether it was as smooth as ice?-- Yes.

I understood from what you said, but I'm not sure I got the note right, back in 5 North West when the probeye was used, was that when you re-entered the mine? You said there was an airlock and you went back in?-- Yeah.

So that was after the first sealing and the airlocks had been established and you went back in to get machinery?-- No, we just used to go in and check every now and then.

Nothing further, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: Just a few things, Mr Parsons, going back to Sunday night shift when you started work or just before you started work, you've told us about how you and John Owens had a look at the Unor screen?-- Yes.

That screen was obviously facing out?-- Yes.

XXN: MR HARRISON

WIT: PARSONS C J

Do you recall if any of the other people from either 1 North West crew or the 5 South crew had a look at the screen at that time?-- I can't recall.

You can only recall you and John being there?-- Yes.

I take it you never really took any particular notice as to whether or not any of the other men that were going down that night had a look at the screen?-- No.

How long before you went down was it that you had a look with John?-- Probably 10, 15 minutes before we went down.

You've been asked a few questions about what happened between Lenny Graham and Cole Klease the night before at the time of the sealing and how you knew that Lenny had expressed some surprise about the sealing being brought forward because he hadn't detected anything unusual?-- That was his first shift down there.

Was it the case that certainly up until the time you went down, or even when you were down there, Lenny never said anything to you to suggest that he had had any change of heart about that?-- No.

Thank you. I have nothing further, Your Worship.

MR CLAIR: No re-examination, Your Worship.

EXAMINATION:

MR PARKIN: Mr Parsons, just a few points for clarification, please. On that Sunday night you were concerned about 512 going through the explosive range?-- Yes.

You've said that. Could you tell me or just elaborate a little on why you were concerned?-- Well, it was nearly in the explosive range. The methane, I thought, was at 4.3.

I think you've said to Mr Morrison that you've been in Mines Rescue since 1972?-- Yes.

So you were an experienced Mines Rescue person?-- Yes.

Did anyone tell you at any stage that a haze and a smell had been observed in 512?-- Well, that was the general talk, yes. I wasn't told personally, no.

You had heard some talk about that?-- I had heard talk about it, yes.

Did anyone tell you at any time why the sealing of 512 had been brought forward?-- They just said that they thought there was - they had a -----



Sorry?-- Because of the haze and the smell they had decided to seal it.

That's your understanding?-- That's my understanding, yes.

Did anyone ever tell you that on the Saturday, this is not on the Sunday, that the CO make in 512 was in excess of 16 litres per minute?-- No.

Do you understand what litres per minute are?-- No.

So you had not been told in your Mines Rescue training -----?-- Could have possibly been told, but I don't recall.

So if somebody had said to you "16 litres per minute" you wouldn't have been any wiser?-- No.

I have no further questions, thank you.

EXAMINATION:

MR NEILSON: Mr Parsons, you indicated that it was quite common for you to go to the Unor screen prior to going underground on shifts occasionally or whenever?-- Yes.

You said that you only ever looked at the CH4 readings, the methane readings?-- Well, whatever section it was reading in, you know. I'd look at that, that's all.

I can't hear you, can you speak into that mike, please?-- Wherever it was going through -----

What was it you were really looking for when you went to the Unor screen?-- Everything in general. It was right beside where you filled your thermos up or made a cup of coffee. Just looked at it, that's all, but because I knew 512 had been sealed that night I just looked to see what it was.

That was my next question, and the question is, on the Sunday evening when you went to the Unor screen did you really know what you were looking for?-- I just looked to see what the methane was in 512, the reading was, and it was 4.3 per cent.

what would the methane reading tell you?-- Well, it was high. It was 4.3 and it was just about in the explosive range, I thought.

If it was in the explosive range or about to go into the explosive range, you did say that you expressed a concern about that?-- Yes.

Why would you have been concerned about it going into the explosive range?-- Well, I couldn't have been too concerned, I went down.

You couldn't have been too concerned, no?-- I expressed me opinion about it, but if I had been real concerned I probably wouldn't have went down.

You didn't look at the carbon monoxide readings that night, did you?-- No.

Why did you not look at the carbon monoxide readings?-- I don't know, I just didn't.

I think you said because -----?-- All I really looked at was the methane. That's what I generally looked at. I didn't look at the others.

You had been at Moura Mine for, I think you said, about 20 years?-- Yes, 22, yeah.

You've got, I think, almost 30 years experience in the industry?-- Yes.

Do you know if Moura Mine, particularly No 2 Mine would be classified as a gassy mine?-- Well, it was classified as a gassy mine, yes.

It was?-- Yes.

Do you know that the seam itself was liable to spontaneous combustion?-- Yes, I had thoughts of it, yes.

There have been previous occasions where heatings have developed in the mine, hasn't it?-- Yes.

You are not aware then that an indication of spontaneous combustion is an increase in the make of carbon monoxide?-- I do know, you know, if it had lifted a little bit or whatever, but not really, no.

Can you tell me a little bit more precisely -----?-- No.

----- what you do know about carbon monoxide and spontaneous combustion, or if you don't know, just say so?-- No, I don't know.

You only know a limited amount about that?-- Yes.

You see, on Sunday night had you been aware of the carbon monoxide makes that had been occurring in the previous two days, and particularly since the sealing of 512 Panel then you may have been able to translate your concerns to the fact that there would be danger associated with it?-- Yeah, could have possibly, yes.

But you've never been trained, you've never been taught, you've never been instructed on how to translate things such as haze, smell, carbon monoxide make, particularly increased carbon monoxide makes to relate them to a dangerous situation?-- No, not really.

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So I guess we can conclude by saying that because you were unaware, because you were untrained, because you were uneducated you weren't able to contribute to the fact that maybe you should not be going down the mine on that occasion?-- You can put it that way, yes.

Thank you.

WARDEN: Nothing arising out of that. Thank you, witness. You may stand down.

WITNESS EXCUSED

MR CLAIR: If it please Your Worship I call Peter Raymond Ein.

PETER RAYMOND EIN, SWORN AND EXAMINED:

MR CLAIR: Your full name is Peter Raymond Ein; is that correct?-- Yes.

Mr Ein, you are a miner employed at the Moura No 2 Mine?-- That's right.

You started in the mining industry in January of 1979 at Moura No 2; is that so?-- That's right.

After three months you transferred to No 4 and you stayed there until late 1986 when you transferred back to No 2 Mine; is that so?-- That's right.

You've worked there since as a miner?-- Yes.

You've been a miner driver for at least 10 years; is that so?-- That's right.

As far as Moura No 2 is concerned you had experience in many panels at the mine?-- No, a few of them.

And in particular you worked regularly at 512 Panel; is that so?-- Yes, I done all the work in 512.

That was as a miner driver?-- Miner driver on some nights and driving shuttle cars some other nights. Swap around now and then.

What particular observations did you make about the system that was adopted for development first of all at 512?-- We had a new system called cut and flit which worked quite well, and -----

You achieved good production with that method; that's right?-- Yes.

Were there any particular difficulties from the point of view of the miner itself?-- What do you mean? A machine?

Yes, with the use of the machine. On development I'm talking about. For instance, any occasions when the Trolex tripped out?-- Tripped out a couple of times on development, but on production I don't think it tripped at all.

The extraction system, was that the same or different to others that you had been involved with?-- No, it was a different set-up this time, and shorter pillars made them hard to come out when we are taking bottoms. The miner's too heavy, kept getting bogged on the ramps.

That's because the ramps were shorter?-- Yeah, on 15 metre ramps.

I suppose too at the bottom end there was a bit of natural slope?-- Once you got down a bit and started levelling out

again it was just too heavy on the bottom, kept bogging all the time.

With the shorter ramps and the method of extraction that was used was there coal left on the floor of the waste?-- Yeah, there was a lot of coal left on the floor. Those big miners are a lot dirtier than a smaller miner. We just couldn't pick it up properly.

How would you compare them with other sections that you had been in in terms of the amount of coal?-- Sections with the little 12CM in, they were fairly well clean all the time, but with the big miner it was just too heavy and wouldn't pick it up properly.

Was there more coal left on the floor in this panel than you had experienced elsewhere?-- Yeah, a lot of coal in 512 left over, yeah.

There was a system, was there, of operating a miner by remote control in some places?-- Yeah, in 512 was remote control.

101194 D.17 Turn 4 mkg (Warden's Crt)

And that was in order to ensure the safety of the miner driver; is that right?-- Yes, that's right.

Did that involve any difficulties either in terms of the miner getting bogged or in terms of -----?-- No, not really. It was just the weight of the machine on short ramps.

What about in terms of cleaning up the loose coal, was that more difficult?-- Oh, no different to driving it manually.

Okay. Now, as to your own experience there when you were driving the miner, was there any occasion when you had problems with roof fall?-- Well, a couple of times we had bad roof and I remember one night I buried the miner on a bad roof fall and it was buried for two days, I think.

Do you know what it was that contributed to the bad - to the roof fall?-- Oh, cracks in the roof and gutters, taking them - punching the wrong way in the gutter and running across the gutter. We didn't see the gutter when we were doing the last punch.

You didn't see the gutter when you were doing the last punch?-- Yeah, there was gutter going across the roof and going across the miner to get the last punch and only got one or two cars out before it fell in.

And you didn't have the opportunity to get the miner out?-- Couldn't get the miner out, it stayed there for two shifts.

Now, that was a substantial fall; is that right?-- Yes, it was a fairly big fall, yeah, probably three quarters of the way along the pillar and around the corner to the next pillar.

Sorry, around the corner?-- Went around the corner.

To the next pillar?-- Yeah, rounded the corner to the next pillar.

I take it that after the roof fall there was then some of the sandstone roof that had come down over the loose coal on the ground; is that so?-- Yeah, fell a fair way. When it come down it buried half the miner and fell probably three quarters of the way along the pillar and landed on the ground.

Now, after you extracted the miner then, there was still the sandstone covering the loose coal on the floor?-- Yeah, that rock stayed there, I think. I don't think they went back in to get it. There was too much rock on it.

Too much rock?-- Yeah.

That sort of result with the sandstone down over the loose coal on the floor, was that something that occurred on other occasions through the panel, from what you could see looking into the waste area?-- No, I can't remember too much about it. I think I went on holidays after I buried the miner, so I don't know what happened after that for a while.

101194 D.17 Turn 4 mkg (Warden's Crt)

I see. You thought it was a good time to take a break?--  
No, that was early in the week and I went on holidays the following week, I think.

Okay. Well now, you stayed with the extraction of 512 right through until the last shift of production; is that right?--  
That's right, yeah.

That was on Friday, 5 August?-- That's right.

Which shift?-- Night shift.

Night shift?-- Mmm.

So, that in fact was starting late on the Thursday night, going through till Friday morning?-- Friday morning.

Were you driving the miner on that last shift?-- I used to drive through smoko break. Wayne Barnes was actually driving the miner that last shift, but when he went to smoko I drove it.

Okay. Now, was the final production sequence completed?--  
No. The miner broke down probably about 3 o'clock in the morning, and we rang up for a fitter and they said the gear box on the conveyor motor was gone, so we were told to bring the machinery out.

And to leave the balance of what was to be taken?-- Yeah.  
It was only probably - I don't know offhand - probably another 10, 15 cars maybe at the most.

Would that all have been taken during the balance of the shift?-- Yeah, we would have got it out if the miner kept going.

All right, okay. Well now, were the shuttle cars and the miner pulled back from the work face?-- Yeah. We took the two shuttle cars outside the seals and went back to get the miner, got the miner back between the belt road and the supply road and it broke down and it stayed there until day shift come in Friday morning.

Okay. You then left at the end of that night shift on the Friday morning?-- Yeah, we went home. I knocked off at 7 o'clock Friday morning.

Now, let me ask you this: was there anything unusual that you noticed in the panel at the time you left night shift on the Friday?-- No.

Well, you were rostered to - were you rostered to work the following day?-- No.

Saturday, 6 August?-- No.

You were contacted by someone; is that right?-- No.

Well, did you come into work at 11 p.m. on Saturday?-- I

XN: MR CLAIR

WIT: EIN P R

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worked Saturday night shift for a Sunday shift.

That was for a Sunday shift?-- Yeah.

Was that a rostered shift?-- Just overtime on weekend.

It was overtime on the weekend. Put it this way: when you left on the Friday you knew you were coming back -----?-- I was coming back on the Saturday night, yeah.

So, it wasn't as though you were specially organised to come in?-- No.

You had been rostered?-- Yeah, I put in to work the Saturday night.

Well, you did go to the mine at, what, 11 p.m. on that Saturday night?-- That's right.

What happened when you got there?-- George Mason said some boys are down there sealing 512 and asked us to go down and relieve them to finish off the sealing, but I was only there for probably about an hour and me and two other blokes pulled the transformers and crib room and all that out outside the - back up the 510 supply road.

Well then, prior to arriving at the mine that night did you know that 512 was being sealed?-- No, not till I come in.

You hadn't spoken with anybody during the day about it?-- No.

Okay. Well then, were you told by anyone why 512 was being sealed?-- No.

You say George Mason gave you certain instructions. He told you that 512 was being sealed?-- He told us, yeah, at the start of shift Saturday night.

Were all the men gathered together at that stage?-- There was only about four or five of us there, I think, if I remember.

Was that the whole complement of the Sunday night shift?-- Yeah, Sunday shift, yeah.

Was there anybody else present apart from the fellows on that shift and George Mason?-- I can't remember, no.

But it was George Mason who told you what was going on and so forth?-- Yes.

Now, was there any suggestion during that gathering, either by George Mason or anybody else, about there having been any smell or a haze detected in 512 that day?-- Not what I can recall anyway, no.

Well, let me ask you this: at that stage had you ever been told any time prior to that about any smell being detected in



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512?-- No, no.

Now, did you see Cole Klease there at the mine that night?-- Yes.

When did you first see him?-- Start of shift he was up top in the bathroom when we were ready to go down.

Was he present when George Mason addressed the collected group?-- I don't know. I can't - no, I couldn't tell you actually.

Okay. Did Cole Klease say anything to you at all about his shift earlier that day?-- No.

He said nothing to you about a haze or any smell?-- I never seen him till we got out of the Rover down the seals at 512.

You didn't see him before you got down there?-- No.

When you got down there, did you speak with him down there?-- No, he just said to go on the seals, and I give him a hand there for about an hour, and then he said, "Jump in the Eimco and pull the transformer out.", and I pulled that up the road down in 510 supply road.

Well, you say he gave you those directions, but before he gave you the directions did he tell you anything about why 512 was being sealed?-- No, not early on, no.

You say "not early on"?-- Well, I mean, he never said anything to me.

Okay. Well, you say that you did pull that machinery out. You pulled it up to 510 - into the 510 supply road?-- Yeah, on the 510 supply road outside the overcast.

What was happening in relation to the sealing of 512 when you were down there?-- It was - they only had about an hour to go, just putting final touches onto it.

Which roadways were being sealed?-- Top supply road and the return, top return.

Okay. Did you have to go up into the area of the top supply road?-- No.

Or the top return during your shift?-- I went in the supply road. That's where the transformer was, outside the seal in the supply road in 512.

So you took the transformer out of there?-- I pulled the tranny out of there.

When you first saw it, was that seal well advanced?-- Yeah, it was nearly all the way up. It was only probably that far off the top.

Where was the transformer at that stage?-- Outside the seal.

XN: MR CLAIR

WIT: EIN P R

Just outbye the seal?-- In the cross-cut outside the seal.

Well, did that take you to the balance of your shift to do those things?-- That's right.

What time did you go home then?-- 7 o'clock Sunday morning.

Did you go to a union meeting that Sunday morning?-- No.

Well, during the time that you were at the mine who was it that you were working with?-- What do you mean, the miners?

Yes?-- Michael Ryan, George Ziebell, Peter Robson. I don't know who the others were now.

Any talk with those other miners that you were working with about why 512 was being sealed?-- No.

Well now, you returned for the Monday night shift, is that right, commencing 10.15 p.m. on the Sunday night?-- That's right.

Again, was that a rostered shift?-- No, that started my normal five day week, Sunday night through to Friday morning.

So, it would have been your normal shift?-- Normal shift, yeah.

Okay. When you arrived there that night where did you go to?-- Went in the bathroom, got changed into my work clothes and sat outside on the seat.

Were there others in the bathroom getting changed?-- There was a few in there, yeah.

Was there any discussion in the bathroom amongst those people that were there about the sealing of 512?-- Not what I can recall, no. I was outside, like I said before. There was three or four of us sitting outside on the seat.

But you were in the bathroom first of all?-- I got changed into my work clothes and got my light, and I never heard anyone say nothing, no.

Was it the same when you were outside sitting on the seat?-- Yeah, that's right.

You don't recall any discussion at all about 512?-- No, nothing at all, no.

Did you go to the assembly area adjacent to the monitor room there?-- No, I never - no, not that night, no.

Where did you gather to go down underground?-- We were just sitting on the seat outside the bathroom, and when they told us to go we just jumped in the Rover and away we went.

What was your practice normally when you were assembling to go

underground? Did you go to that assembly area?-- A few times I might have went around there, yeah, but not all the time, no.

Were you aware of a Unor screen, computer screen there?-- Yeah, I know it was sitting there, yeah.

Did you have a practice of looking at that Unor screen?-- No.

Do you know what sort of information the Unor screen revealed?-- CO readings, CH4 and that, yeah. I knew they were on there but I never used to take a real great look at it.

You say CO readings, methane readings?-- That's right.

Showed that for various monitor points throughout the mine?-- Throughout the mine, yeah.

Now, there is another column there which is called the Graham's ratio?-- No.

Did you ever have a practice of looking at that?-- No.

Did you know what that was?-- No.

Well now, this time you knew that 512 Panel had just been sealed, that is, in the very early hours of the Sunday morning. Well, you did know that, to start with?-- Yes.

Were you interested to know what was happening in relation to the build-up of gases in 512?-- I don't know. I never even thought about it actually. I don't know.

Are you familiar with what happens after a panel is sealed, that the gases mix in such a way as to move into the explosive range?-- Yes.

Were you interested to see whether 512 was moving into the explosive range?-- I don't know really. I didn't even give it any thought that night, you know.

Well, you were about to go underground?-- Yes.

Were you concerned at all?-- I don't know, not really.

Not really. Were you aware of the fact that explosions had taken place in the past after panels were sealed when there was a source of ignition in the panel?-- Yes.

Did you entertain the possibility of that happening in 512?-- No, it never crossed my mind, no.

Were you originally to work as a TA for the fitter on the 512 miner on that night shift?-- Yes, that's right.

When were you told that?-- Start of shift when I was sitting around on the seat beside the tank stand.

Who told you that?-- Michael Squires.

Did you have any conversation with Michael Squires about the position underground?-- No, he just told me to go TA, and about 10 minutes later he told me to - I had to go on the crew, they were short of men.

And you went with the 1 North-west crew?-- Yeah, that's right.

You did go underground to 1 North-west?-- Yes.

What happened when you got there?-- We pulled straight into the section and pulled up to the crib room, the boys put the crib bags on the table and walked down to the miner. The miner was still chocked up from the fitters working on it on the weekend.

I see. What happened? You had to unchock the miner?-- Yeah, we pulled the chocks out of the miner and then stacked it all up in the rib, and Greg Young drove the miner into the face.

And he cut some coal; is that right?-- Yeah, just cleaned up around the face area one car, and the miner burst the water hose.

What happened then?-- Oh, the miner was down till we got the fitters down and they come down about 25, 30 minutes later.

Okay. They went to where the miner was?-- Yeah, they were looking for the burst hose on the miner.

Were you up there where the miner was?-- No, I was in the first cross-cut outbye the miner.

What happened then after they arrived and started work on the miner?-- Just a big loud crack like a pretty bad roof fall and the ears popped painfully. I don't know, someone yelled out, "What a big roof fall.", and that and Jimmy Parsons said, "No, it sounded like an explosion.", and we all gathered up around in the corner cross-cut and we walked up to the crib room. Peter Hutchinson met us on the way back to the crib room and we all - before he got - there was a phone call. I think it was Michael Squires talking to somebody on the phone about, you know, if anything happened down our way and we said no.

You understood it was Michael Squires up top?-- Yeah, you could hear it through the phones, yeah.

Somebody took the phone call at your end. Who was that?-- Greg Young, I think.

I just want to pause there. Go back to when you heard the noise and you say your ears popped painfully. You were standing at the time?-- I was standing up beside the supply tray on the cross-cut, yeah.

Did it have any effect on you?-- It blew me forward a little bit, not much, and Jimmy Parsons and Darren Young were sitting on a table behind the stopping and one of those - one of them boys got blown over.

One of the stoppings -----?-- The brattice stopping came down on top of them.

Did you sense the direction from which the pressure of air was coming?-- It come down the return where they were sitting behind the bag, come through that cross-cut there.

Okay. Now, after Greg Young had spoken to someone on the telephone then what happened?-- We all put our self-rescuers on and hopped in the Rovers and tried to find our way out.

Who was your deputy down there?-- Lennie Graham.

Righto. Did he give any directions or orders to everybody?-- What do you mean?

Well, did he - did you all put your self-rescuers on?-- Yeah, we put them all on.

Were you told to do that?-- No, we put them on before he said anything.

Okay. Then did he indicate what should happen at that time?-- He just said, "Jump in the Rover and we will get out of here."

Okay. Righto. There was the fitter's Rover down there too; is that right?-- Yeah, that's right, that was one pillar inbye of ours.

Len Graham was driving the Rover?-- That's right.

You were in that with him?-- Yeah, sitting in front beside him and the other boys were in the back of it.

Then the fitter's Rover was behind?-- That's right.

And you set out in your statement, is that right, the events that occurred on the way out; is that right?-- Yeah.

And, as far as you can recall, the route that you took to get out; is that right?-- Yeah. I can't recall the route too much because I never worked that section until that night. That was the first night I had been in there.

But there was some difficulty? Even those that knew the section had some difficulty finding the way out; is that so?-- Yeah, lot of difficulty there.

Sorry?-- Yeah, real lot.

Yeah. Visibility was down to only a very short distance; is that right?-- That's right.

What would you estimate?-- Half a metre maximum.

And did that improve a bit as you got further outbye?-- To about three quarters of the way out of the main dip it started clearing, you could see a lot better - I wouldn't say a lot better, but you could see the props as you were driving past.

You could see the props as you were driving past?-- Yeah.

Now, at some stage after you left the section you felt or tasted some particular taste; is that right?-- Yeah, acidic taste, before I put the self-rescuer on.

That is while you were still in the section?-- Yeah.

Okay. Righto. Well, did you have any difficulties with your self-rescuer?-- No.

Ultimately you got back outside the portal?-- Yeah.

And then did you go up to the lamp room?-- Yeah, still pretty dusty outside the portal, the tunnel there.

You didn't know whether you were inside or out at some stage?-- Yeah, once we got out, yeah, very hard to tell if we were inside or out.

Now, did you subsequently receive some medical attention that night?-- No, I got none at all on Sunday night. I went to the doctor Monday afternoon.

What, first of all, were your symptoms at that stage?-- I had bad headaches and very hard to talk and I have still got the croaky voice up till now.

What did the doctor tell you?-- He said I had CO poisoning and bad headaches.

CO poisoning?-- That is what he diagnosed.

You did keep your self-rescuer on?-- I had it on right all the way.

From the time you put it on in the section to the time you got into the bathroom. And did the self-rescuer become -----?-- It got very hot.

Quite hot when you were using it?-- Yeah.

At what point did it seem to you to be quite hot?-- How long after?

While you were still in the mine?-- Oh, yeah, on our way up the main dip it got warm, yeah.

Can you make an estimate as to the amount of time that it took for you to go from the point where you put your self-rescuer on in the section up to the time that you took it off?-- 25 minutes.

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25 minutes. Okay. I have no further questions, Your Worship.

CROSS-EXAMINATION:

MR MacSPORRAN: If you speak a little more slowly, it has to be taken down?-- I have got a sore throat. That's why I am still croaky, you know.

Anyway, your normal work place was the 512 Panel; is that right?-- That's right.

Was that during development as well as extraction?-- It was from when we first started till we finished, yes.

So, most shifts you worked were in 512?-- 512.

Including the last production shift which was the Friday, 5 August?-- That's right.

At no stage during any of those shifts throughout the life of the 512 Panel did anyone tell you that they had detected an unusual smell inside the panel?-- No.

Did you subsequently find out that there had been reports of such phenomena inside the panel?-- No, I never heard anything, at any time at all.

Not even after 7 August?-- Oh, not that I can recall, no.

No-one has told you since the explosion that there had been reports of such things inside the panel?-- No, not from what I can recall, no.

Of course, it is true to say you yourself did not notice any such smell on any shift you worked?-- No.

That was the position up to and including the weekend of 6 August?-- Well, when I finished on Friday morning I didn't know nothing, no, didn't smell nothing.

When you came in on the Saturday night, at that point no-one reported anything unusual happening inside 512 to you?-- No.

When you went underground to the area where they were sealing you noticed nothing abnormal?-- Just some men working on the seals, yeah, that's all.

Did those men include Doug Stamp, the Tecrete fellow?-- Yeah, there was two of them, yeah, Doug and that Parker, I think his name was.

Robert Parker?-- Yeah.

You saw both of them there that night?-- When I first come in, yes.

XXN: MR MacSPORRAN

WIT: EIN P R

What about Greg Young, was he there working at the seal area there?-- Yes.

As I understood your evidence, the only part you went to was the No 2 supply road?-- I went in there for a while and, like I said earlier, I had to pull a transformer out.

Was this shortly after you came on shift?-- Probably about half an hour, three quarters of an hour from when I first came on.

What was the ventilation like down there at that stage?-- It was still a bit breezy. Not a great deal of air. There was air there.

Was the atmosphere clear in terms of visibility at that stage?-- You could see there was no haze or anything in the air.

What about dust?-- No.

So, you had a clear view of the whole roadway there outside the seals in 512?-- Outside the seals it was good, yeah.

You noticed no haze, you said?-- No.

You detected no smell?-- No, couldn't smell nothing.

Were you ever in the area of the top return in 512?-- No, not on that night, no.

The area where you were, which was the top supply road, was an intake road, wasn't it?-- Yes.

It was that road that was, with the top return, where the seals had almost been completed when you went down?-- Yeah, they were only about probably a foot off the top when I seen the one in the supply road.

Did you notice the stopping or regulator in that vicinity?-- There was a regulator in front of the transformer in the supply road.

What about in the 510 No 1 heading, did you notice a regulator or part of one in that heading?-- No, I can't recall, no.

Your impression was when you went down at about 11.30 or so that there was air movement, but it was slow?-- That's right.

It wasn't the normal ventilation quantity that you would expect to have down there?-- There wasn't a great lot of air in that section to start with, you know?

Well -----?-- The ventilation in that section was poor.

When did you first notice that?-- Oh, I don't know off-hand, no. No, I can't remember.



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Well, the ventilation you noticed that night, was that any different to what you had noticed on previous shifts down in that area?-- Probably not, no.

So, you think the same air flow was going through?-- Probably about the same, yes.

This is about 11.30 Saturday night, 6 August?-- Yeah, that would be right.

Now, as you have told us you had trouble getting out of the mine on the Sunday night?-- That's right.

In fact, you said in your statement that you weren't very familiar with the route out of the panel under normal circumstances?-- Yeah, that's right. I never worked in that section at all until that night. That was the first time I had been in there.

So, you were forced to rely upon others who were more familiar than yourself to get out?-- That's right.

If you had been there on your own or with others who had the same knowledge as yourself you may not have?-- Maybe not, no.

It was a fair distance to travel from where you were to the surface, wasn't it?-- Yeah, about 2 km.

Did you see any Tecrete pump hoses coming through a doorway in that vicinity when you were underground on the Sunday night?-- No.

Did you see the hose?-- Tecrete machinery was outside the seal when I seen it, but the hoses were running down the supply road underneath the belt and to the belt road.

You didn't see any doorway they were coming through?-- No.

Did you see the doorway?-- There was a door in the top return. I remember I was driving past it all the time. I think there was a door in there.

Was that open or closed when you saw it?-- On that night it was open, I think.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: I would just like to get some of your background from you, please. You went to school to Grade 9?-- That's right.

And after that what did you do? Did you go straight into the mining industry?-- No.

XXN: MR MARTIN

WIT: EIN P R

Just give us a bit of an idea as to what sort of jobs you did before?-- I drove trucks interstate for about seven years.

And you then entered the mining industry. What type of induction did you have or did you have an induction, indeed?-- Yeah, I think we had a week's training, I think. Like, you know, I think about a week, I think.

And did you ever receive what is known as a red book on spontaneous combustion or a blue book?-- No.

Or a blue one?-- No.

Did you have any induction in relation to spontaneous combustion?-- No. I had no training at all whatsoever.

Since you went underground for the first time to 7 August 1994 had you ever had any form of training or retraining? We know you are a miner driver and you had to be trained for that and a shuttle car too?-- Yeah. That's the only training. We had had no training on anything else.

You are a lot closer to that plan right behind you. Just if you turn around and have a look at it for me, please. I can't see it properly here. Is that a plan showing the final position of 512 Panel?-- What do you want to know?

I want to know whether that represents the final position in 512, in terms of what was extracted?-- What do you mean, on the last shift?

Well -----?-- Yeah.

Does it represent -----?-- Yes.

According to your memory the sequence of extracted coal?-- Yes.

As it stood when you were last there, I think, on 5 August?-- Yeah, that's right, yeah.

Did you experience whilst you were working, particularly on extraction in 512, movement in and out in a particular heading; of air, that is?-- No, not - no.

What was bad about or poor about the ventilation that you told Mr MacSporran about?-- Can you repeat that question, please?

I think you said that the ventilation in panel 512 was poor?-- Mmm.

What was poor about it? Just tell us in your own words what your opinion of it was?-- When we were in development we did a cut and flit and we had two roadways at the same time getting cut and, you know, the air wasn't good enough for two faces.

Was the problem of the air fairly constant from the time

extraction started to the time it finished?-- Yes.

Would you just tell the Inquiry this: you have told it about loose coal in various places. Was that a common feature for the entire extraction process?-- That was all the time, yeah, because very hard to pick it up with that big miner, but - you know, a lot dirtier than a little miner.

Being a miner driver, was it a common experience of yours to be put on such jobs as sealing as you were on Saturday, 6 August? Is that unusual?-- No.

On the Saturday night when you went to work did Mason not tell you that, "We have had a haze, we have had a tarry smell."? Did he not tell you that?-- No, he didn't say nothing to me, no.

There were four or five men collected together, was there?-- Yeah, around about four or five, yes.

He said nothing either, I take it, about a rise in CO reading?-- No, he didn't say nothing, no.

Had he told you about a rising CO reading would that have meant anything to you?-- Probably would have, yes.

What would it have meant to you?-- A heating.

What would it have meant to you in association with a tarry smell and haze?-- Fire.

Had you been told those things what would you have done about going underground?-- I probably wouldn't have went down.

Did you say that you saw Mr Squires on the Saturday night as well as Mason?-- No, I didn't see him on the Saturday night.

All right, I misheard you. But you saw Mr Squires on the Sunday night?-- That's right.

As I recall your evidence he had two opportunities to tell you of any problems in 512 panel, didn't he? He spoke to you once and gave you orders and came back ten minutes later and gave you other orders?-- That's right.

And did he not tell you about problems of rising CO, problems of haze and problems of smell?-- No, he didn't say anything about that, no.

Had he told you those things what would you have done?-- I wouldn't have went underground.

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Could you just help the Inquiry, if your recollection is sufficient now, where it was that bottoms were taken in road 5 or No 1 return?-- Whereabouts they were taken?

Yeah, how much of the roads were taken in bottoms?-- Probably about three metres.

Probably about?-- Three metres.

All right, but length. Three metres -----?-- No, three metres deep.

How long? The entire roadway?-- We were for a while until they stopped us taking it. I don't know off-hand how many pillars we done, but we did take quite a few.

What about cross-cut 13? Bottoms taken there?-- I can't recall, can't remember.

Just one thing I wanted to have you clear up, if you would, after the explosion there was a conversation on the telephone between Greg Young and Michael Squires; how did you know it was Michael Squires?-- You can hear on the speakers on the other phone.

Did you know about Ellicott's diagram by 7 August 1994?-- No.

Have you ever heard an alarm, a hooter or siren going off outside the Unor room?-- I heard it, yeah, a few times.

Did you hear it at all on the evening of 7 August?-- No.

Thank you.

CROSS-EXAMINATION:

MR MORRISON: Mr Ein, you used to go into the undermanagers office fairly frequently at the end of shift, didn't you?-- That's right.

That was something that other people did routinely?-- I just - deputy and miner driver used to go in there and tell them in the morning how we went. That was about all, yeah.

When you say "tell them", you are talking about undermanagers and deputies and so forth?-- Yeah, that's right.

That was very routine for you?-- Yeah, I done it, yeah.

And routine for other people too?-- That's right.

One of the things you'd look at while you are there is production scales?-- Yes.

Is it correct to say that you were involved in the cut and

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WIT: EIN P R

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flit productivity group at the start?-- Yes.

And you were also involved in the extraction sequence development in relation to 512?-- Yeah.

What you told us about ventilation was relating to cut and flit where you've got the miner cutting one bord, flitting to the other side to cut the next bord and meanwhile the bolting crew is bolting the first bord?-- That's right.

When you say problems with ventilation, that's what you are talking about, aren't you?-- That's right, yeah.

You mentioned in relation to the loose coal that the 12CM was a smaller machine and fairly clean by comparison to the ones you were using?-- Yeah, we had a HM9.

Sorry?-- We had a HM9 in there, a bigger one.

As far as you can tell that was the real reason for not getting up the loose coal?-- Yes, that's right.

Now, when you buried the miner - sorry, not when you buried the miner, when the miner got buried by the fall, that's on 28 June, I think, fairly well up the panel?-- I don't know what date it was, no.

Could the witness see Exhibit 85, please?

I'm just going to ask you to have a look at the panel retreat plan sequence, or sequence and date by date and shift by shift. I just want you to have a look, when you've orientated yourself, look at 5 cross-cut between 5 and 6 heading. You will see there there is a larger than usual stub end of a pillar and you'll see the dates - mine's a little hard to read, but I think it says 27 June and 28 June. Do you see that?-- No.

As you look at that plan the top return is on the bottom?-- That's right.

As you look at the top of the plan for 512 that's the bottom return?-- Yes.

Go to 5 cross-cut and see it's numbered with a circle and a 5?-- Yeah, I've got the circle and a 5 on it, but no 28 on it.

Sorry?-- It hasn't got 28 on there.

Go up the top towards the bottom return, if you can follow that. See the sequence there with dates?-- Yeah, I found it, yeah.

That's about where the miner was when it was buried, I think?-- That's right, yeah.

The fall that you described was in that intersection which we have described as basically the section of 5 cross-cut and the

bottom return?-- That's right.

Extraction continued from that point after the miner was pulled out?-- Yeah, once we got the miner back out, yeah.

I think George Mason came down to check out that pinned miner, didn't he?-- No, - I don't know. I can't remember, no.

Was it pulled out using shuttle cars?-- No, we brought an Eimco down and tried to dig the rock away from it and tried tramming it on the remote with an Eimco trying to tow it at the same time. Couldn't pull it.

It eventually got out a couple of shifts later?-- Yeah, we got it out again on the Tuesday night, I think.

You can put that plan away, thanks. Just staying with the miner at the moment, the HM9, that's been around quite a while, hasn't it?-- Yes.

It's been in use in various panels since about, I think - since about '86?-- Yeah, they got two in '86, yes.

Having loose coal left around the place from a dirty miner like that is not an unusual feature about panels, is it?-- No.

Now, when you knocked off on the Friday at the end of the last production shift there was at that stage, I think you said, nothing unusual about the panel that you noticed?-- Yeah, that's right.

No smell, no haze, no heat?-- No.

And nobody said anything to you that day or any other day to indicate that they had got any smell or haze or heat?-- Not what I can recall, no.

When you came in on the Saturday you can remember that George Mason spoke to those people on night shift who were going to go down?-- Yes.

One of those persons, I think, was Cole Klease who was the deputy coming in on night shift?-- Yeah, I know Cole was there, but I don't know if he was in the bathroom or not. He might have been in the deputies cabin.

You knew Cole was coming back after having worked a shift one before that?-- I didn't know he worked, no.

Did Cole Klease take you down the mine?-- He was in the Rover when we went down, yes.

Did Cole Klease say anything to you about what he had seen or smelled or observed in that panel?-- No, not to me, no.

Did you overhear him saying it to anyone?-- Not what I can recall, no.

When you are down there you are down at the seals for about an

hour; which seal were you working on?-- On the supply road.

Supply road seal? At the time you got down the belt road seal had been done?-- Yes.

And the only two left to be done are the supply road and the top return?-- Yeah, they said there was two to go and I done a bit of work on the supply road one for a while.

Both of those had pretty much reached high up towards the roof?-- Yes.

And you knew they had to be done simultaneously?-- Yeah, had to be together, yeah.

And that sort of sequence, that is to say sealing off headings and leaving two, an intake and a return, to be done simultaneously was not an unusual thing?-- No.

That's what you had always done. Most people at the mine knew that, didn't they?-- I'd say so.

When George Mason talked to you before you went down he told you that people were sealing 512, he wanted you to relieve them and he said to finish off the sealing. So he basically said, "I want you fellas to keep working until the seals are done."?-- Yes, that's right.

And he told you that they were sealing the panel as a precautionary measure?-- I can't sort of really remember what George said to me that night. He said to go down on the seals, I remember that.

And keep going until they were finished?-- Yeah.

After about an hour you were detailed off to go and pull the tranny out?-- Yeah, Cole Klease come up to me and Peter Robson and George Ziebell to remove the tranny and the high tension cable.

Just pausing there for a moment, was Lenny Graham around at that point?-- I don't think Lenny was in there. I think he was gone home, I think.

He had been there as far as you knew?-- He was there when we first come down, yes.

At that point when Cole Klease gave you this other job did he say anything to you then about hazes or smells or heat or anything like that?-- No.

Did George Ziebell say anything like that to you?-- Didn't say nothing to me, no.

Did you hear either then or a bit later about a difference of opinion between Lenny Graham and Cole Klease?-- No.

Even in general talk around the mine there had been a bit of a blow up between Lenny Graham and cole Klease?-- When I first

got in there Lenny and Cole walked through that door, I think, in at that top return - the bottom return.

Can you turn around and tell us which door that is? Is that the one between 1 and 2 roadways?-- Yeah.

So it's the outbye 512 between 1 and 2?-- Yeah, that's right, yeah.

Cole and Lenny were walking through that?-- When we first got there Lenny and Cole walked through that door. I remember that.

Can you remember them talking to each other or hearing them talk about what was going on?-- No.

At that door - I think a couple of the Tecrete grout pumps were through that door, weren't they?-- I can't recall the hoses going through that door, no. I seen one Tecrete pump with a seal on the supply road. That's the only one I saw.

You didn't go up towards the return?-- No.

When you had to shift the tranny, I think you said you had to drive past the return a number of times?-- No.

Was I wrong about that? When you were pulling that equipment out were you going back through the normal route?-- I was going down the supply road back to 510 supply road, yeah.

In all the time you were working down there on that sealing night, Cole Klease never told you anything about smells, hazes, heat, anything unusual?-- No, mate.

Nor did anyone else?-- No.

I think you might have known there were three deputies that night, Cole Klease, Lenny Graham, Neil Tuffs?-- No, two. I seen two of them. Only Lenny and Cole.

You saw two of the deputies down there that night. Neither of them said anything to you about any problem?-- No.

You yourself didn't detect any problem, did you?-- No.

And it didn't strike you as being that this was some sort of panic going on, urgent sealing, or anything like that?-- No, didn't, no.

There were a few fellows working with you on those shifts that went down on the Sunday night with you?-- That's right.

Amongst them John Dullahide, Mick Ryan and a number of others?-- That's right, yeah.

There were quite a few, I think upwards of half a dozen, who worked on the sales and then went down Sunday night?-- Yeah, I know a couple were, yeah.



Now, by the time you went down Sunday night you knew that 512 had been sealed, obviously. You had helped out?-- That's right.

But you also knew from your past experience that what happened after sealing is that the atmosphere builds up and it can go through the explosive range for methane?-- That's right.

You had some idea of what that range was?-- I had a rough idea, yes, but I never -----

Roughly 5 to 15?-- Yeah.

It may not be perfect knowledge, but that was what you understood, and you knew that had happened on panels before?-- Yes.

And you knew that when that happened on panels before, notwithstanding that, men worked down the mine?-- That's right, 24 hours -----

No, men worked down the mine after sealing while -----?-- Not after sealing for 24 hours.

On other panels - you are talking about 5 North, aren't you?-- Any other panel there, yeah.

I want to understand what you said. Are you saying that in No 2 your evidence is that after every sealing men stayed out for 24 hours?-- That's right.

What other sealings had you been involved in in No 2?-- 5 North.

That's the only other one?-- Yeah.

Now, you knew that the gases could go through this explosive range and which gas that was, that was methane?-- What's that, mate?

You knew about the explosive range or a thing called an explosive range that the atmosphere could go through?-- Yes, that's right.

You knew that that was to do with methane?-- Yeah.

And you knew - I think you answered Mr Macsporrán - that explosions had happened before?-- That's right.

Or had been known to have happened. It was your practice usually to look at the Unor screen, wasn't it?-- I usually look at it, but this night I never, no.

But you said in your statement you thought that might have been because you were running late?-- Yeah, we went around and picked one bloke up and I sat out the front of his house for about 10 minutes and his wife come out and said he wasn't going. We got there pretty late.

But not so late that you had to jump straight in the PJB; you were sitting on the benches for a while?-- Yeah, about five minutes, but I never looked at that screen, no.

There was plenty of opportunity for you to do that?-- Yeah.

You chose not to follow your usual course?-- Yeah.

If you had followed your normal course, that is going to look at the Unor screen, what would you be looking for? The methane?-- Methane and CO and the readings.

If you were looking at the screen what would you be attracted to about methane, whether it was about to hit 5 -----?-- Just a percentage, how high it was.

What about the CO then? What would you be looking for in that?-- Probably the same.

And if you were going to look at the CO is there any particular level you'd be looking for that would raise alarm bells in your mind or attract your attention?-- I don't know, mate, no.

I want to take you back for a second to the night of the sealing; was there some general talk around the mine, in the bathhouse and afterwards, about the sealing, people talking about it?-- I can't recall anyone talking, no.

Did you sort of get showered and shoot through?-- Yeah.

So you weren't party to any general talk with anyone?-- No.

About features of the sealing?-- No.

Let me ask this question about the night of the sealing: when you had to take the tranny out, what machine were you using for that? Was that -----?-- Used the Eimco.

Used the Eimco?-- Yeah.

That took a bit of time to do, I take it?-- What's that?

That took a bit of time to do?-- By the time we got it out there we had to pull that regulator down to get in there, take two crib tables out of the road, and then I backed it on the tranny and chained it on, pulled it out.

During that operation have you got the machines running for quite a while, the Eimco?-- I had the machine turned off.

Which is the regulator you are talking about?-- It was in front of the transformer.

Can you just turn around to the map and point it out to me? Locate it first. Don't talk until you've found it and then when you've found it point it out to us and you can come back to the microphone?-- I can't see it on there. There is one outside the seal anyway, where the tranny was.

I think you said that you finished that around half past three odd in the morning?-- Sunday morning?

Yes?-- Yeah.

You came up to the surface then?-- Come up top, had crib and that and went back down and just hauled the high tension cable out.

The high tension cable is back in around the seal area?-- Yeah, where the tranny was, over the belt road into a what's-a-name, isolator.

That was done with the Eimco as well?-- No, MPV.

I just want to go back to this regulator question. You are saying that the regulator you had to go through was outside of where the tranny was?-- The tranny was behind the regulator.

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Can you just point out to me where the tranny was then?-- On the supply road half a pillar outside of the seal on the supply road.

You are talking about the 512 supply road?-- 512 supply road, yes.

What was the regulator made of?-- Brattice, three or four props up of brattice on it.

And you removed a section of that to get through?-- Yeah, pulled it down to get the tranny out and the high tension cable and then we put it back up.

Bagged it back up again?-- Yeah.

Did you work on the regulator that has the louvres on it?-- No.

That's a bit further down, isn't it?-- Yeah.

Past the top return?-- Yeah, I had nothing to do with that, no.

Okay, but the only regulator you were involved with you bagged back up again?-- We put it back up when we pulled the tranny out.

When you were down the mine on the Sunday night and it went up, you all had to put your self-rescuers on?-- That's right.

Lenny Graham directed you to do that, told you when?-- We had them on before Lenny said to put them on.

So, some of you knew instantly to put them on?-- Yes.

You had no problem doing that?-- No.

I think there had been some training given to various people from time to time about -----?-- I had training on it, yes.

About the importance of having them, the importance of putting them on and what to do when you have got them on, like don't panic, don't try to exert yourself too much, that sort of thing?-- Yes.

That training obviously helped you that night, didn't it?-- Yes.

Without that you might have been in a much worse position?-- Yes.

When the event happened, the deputy Len Graham took charge?-- That's right.

He basically controlled things from that point on?-- Yes.

Just one last point, if I may. You were saying that you

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hadn't been involved in discussions with people after the sealing shift about features of the sealing. I take it from what you say that there may well have been discussion amongst other people about that?-- No, I can't recall any, no.

What I am saying is you weren't party to it, but other people might have been?-- They might have been, yes.

Thank you, I have nothing further.

MR HARRISON: I have no questions, Your Worship.

MR CLAIR: No re-examination, Your Worship.

EXAMINATION:

MR PARKIN: Just a few questions, Mr Ein. You stated in your statement that there was more flitting because of the small pillars in 512. Could you elaborate a little bit more on that?-- They were only 30 metre pillars, you know, so you had to flit the miner quite more often than before. On the longer pillars, you know, you had more time in there, but on the shorter pillars you were flitting all the time.

So, it's only just a question of the time of flitting that you are speaking of?-- Yeah, it used to take a bit of time, yes.

I think you answered Mr Morrison's question regarding the ventilation. I think you said at one stage there was not enough air to ventilate the two faces?-- At times, yeah, it was very poor, there wasn't enough air for the two faces.

When that occasion arose, was it rectified at any time?-- Not what I can recall, no.

Well, I mean, you must have complained to someone if there was a problem?-- The deputy came and had a check on it, the wing bags and that.

It would be rectified?-- Yeah.

Did you have any other problems while working in the panel?-- No.

I am interested in this bogging of the machine. I think you said in your statement - you talked about the steeper ramps?-- That was when we were taking bottoms. After we punched in you go and take the bottoms out, but on the short ramps they're only 15 metres ramps. By the time you level out on a 15 metre ramp it's too soft on the bottom.

How often did you bog the machine?-- Quite a bit.

How did you get the machine out?-- Chain and shuttle car.

Was that a safe working procedure?-- We had training on that, yes.

So, you didn't have any problems really?-- No, not really, no.

And you were happy that it was a safe working procedure?-- Yes.

I wonder if you could tell us a little about the roof fall. I think Mr Morrison mentioned this, I think. You say in your statement that it gave no warning apart from a bit of rib fretting. Could you tell us a little bit about that, please?-- I was operating the miner that night. It was on remote control. I was standing beside the rib and a bit of rib fell out now and then. I walked away from the corner, and then all of a sudden it just fell, no warning from the roof or anything. It come down in one big lump.

Where were you at the time? You were operating the machine remotely?-- Yes. I was in the - up from the right-hand side of the tail.

So, where did it fall in relation to the machine?-- I had the miner in - just started on the first punch on the left-hand side and it fell across the top of the miner and probably back to the cab, driver's cab, and three quarters of the way along the pillar.

Did you have many falls of such dimension in 512 or was that an isolated incident?-- No, we had a couple of others on night shift. Nothing big, though, not like that one.

What would the maximum width of the workings be at that time when you had experienced a fall?-- Oh, I don't know now offhand.

Well, approximately?-- Taking the miner in nine metres, nine metre punches, it fell back to nine metre punches.

So, what would that be, another seven metres wide?-- Seven metres wide on top of that nine, yeah.

So about 15 metres, 16 metres?-- Yeah, around about that, yeah.

Between 15 and 16 metres?-- Yeah.

Thank you.

EXAMINATION:

MR NEILSON: Mr Ein, you say that the method of extraction in 512 was a new method. It was different to what had been done in the past?-- That's right.

What advantages could you see in that new method? I mean, when it was proposed to you, you know, what was the main reason for doing it? What were the advantages to be?-- To get more coal out, I think it was, you know, while we were cutting, to cut and flit, you know, cut to the face at the same time, and we got a lot of coal out of it, and even on extraction we got a lot of coal from extraction.

So, it was a good method as far as production was concerned?-- Yeah, yeah, good.

Were any disadvantages brought to your notice?-- No.

None?-- Not that I can recall, no.

Was it not a feature of that particular mining practice that more coal would be left behind?-- There was a fair bit of coal left behind, yes.

Because of the actual ramping itself?-- Yeah. It wasn't getting down there. The big miner was just too heavy on the floor, and even once we got the miner down the cars were starting to get bogged then.

And there were a lot of localised roof falls throughout the -----?-- Yeah.

Small ones?-- Small ones, yeah.

Some big ones, but mainly small?-- Yeah.

Now, the method of extraction of punching into the pillars, if you would just like to have a look at that plan behind you, would create a lot of areas that we probably would refer to as dead spots, but certainly areas where ventilation would not -----?-- Wouldn't have got down there, no.

----- get down to it. It might get on the periphery of it but would not get in there?-- No.

So, we have a lot of areas where ventilation would not only be poor but virtually non-existent. Now, can you tell me what you know about spontaneous combustion?-- I can't tell you anything. I don't know.

You know nothing about it?-- No, had no training whatsoever on it.

But you do know that it's heating of coal?-- Heating of coal, yeah, that's about all I know.

Okay then. Well, during the course of any discussions that you might have had, and I guess being a miner driver if anybody would have had any concerns about the actual mining practice, then I would assume that you would be involved in any such discussions?-- Yeah, that's right.

Well, were you ever involved in a discussion where a concern

was raised that because of the practice of mining, because of the leaving of so much coal behind that the mining method just can't get to and the fact that the ventilation would be poor in certain areas as the panel came back, that there could be an inducement of spontaneous combustion somewhat different or quicker than you would normally experience in other panels?-- There could be, but I didn't talk to anyone about it, no.

Can you remember that sort of discussion ever taking place in 512?-- Not on night shift, no.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Ein, you have said on several occasions that the smaller continuous miner is better at clearing up or cleaning up loose coal, small coal, than the big machine. I think you said the small machine was a 12CM?-- That's right, yeah.

And the big machine is a HM9?-- Yeah.

Why do you think the big machine is worse than the small machine for clearing up?-- Well, got a lot of spillage outside the shovel, and gathering arms pushed outside the shovel can't take it away quick enough.

Is that because it's operating in a thicker seam and therefore more spilled coal, or is it the different design?-- That's the way the miner is set up.

Did you use only remote control during the extraction phase or was there at any time during extraction where you actually drove the machine from the cab?-- No, not from a HM9. On a 12CM I did.

During development of the panel you always operated the machine from the cab?-- Till we got the HM9 in there, yes.

So, the machine - the HM9 has always operated by remote control?-- That's right.

Would you say in your experience as a continuous miner driver, if you were able to drive the machine from the cab, would it be possible to clean up better? Do you think using remote control makes clean up more difficult?-- No, it's the same as operating them manually. There is no difference.

Doesn't make any difference?-- No.

MR ELLICOTT: No questions.

WARDEN: Anything arising out of that?



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MR CLAIR: Not from me, Your Worship.

MR MARTIN: No, Your Worship.

MR MORRISON: I do.

FURTHER CROSS-EXAMINATION:

MR MORRISON: I just want to ask a couple of things, Mr Ein. When you were talking about the system of extraction for 512, that is the method of mining, you were involved in development, or at least talking about that?-- Yeah.

One of the central features of that and one of the main reasons for doing it was to enhance the safety of the operator of the miner?-- That's right.

That's why it was being done by remote?-- Yes.

And because bottoms were being taken, one of the perceived dangers was there would be high ribs, isn't that right?-- That's right, yeah.

And one of the whole bases of this method of mining was not to expose men to high ribs?-- That's right.

So the miner driver would operate by remote and stay away from the high ribs?-- Yeah.

Likewise, the shuttle car driver is not supposed to go -----?-- Go down the ramp.

Yes. That was the central advantage of it?-- That's right.

And it was largely developed in order to protect the men?-- Yeah, that's dead right.

In relation to the ventilation, your main concern was on development when it had to split to cover two faces?-- That's right.

It's really only development where you thought there was a problem with ventilation?-- When the ventilation got bad we only cut one way, one heading.

What I am saying, it's really only on development that you are talking about that?-- Yeah.

You don't set yourself up as a ventilation expert or anything like that?-- No.

When you were asked about dead spots, you are really just surmising about that, aren't you?-- Probably are, yeah.

As for spon com, you do know something about that, I think.

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You know it's a heating of some kind?-- Yeah.

You said if you get a heating of coal that you are you going to see or smell something, you told me you are going to smell something?-- Yeah.

You know that much?-- I know that bit, yeah.

You know that it can go on if it doesn't get cool?-- Yeah.

You know enough, I think, to answer the question earlier from Mr Martin that if you had known about the smell and the heat or a haze or high CO, you wouldn't have gone down the mine?-- Probably not, no.

You know a bit about spon com to know that much at least, and you pick up a lot of that from just general experience, don't you?-- Yes.

You work in a seam like Moura for enough years, you learn from the men around you and you learn from your own experience, don't you?-- That's right.

Thank you, I have nothing further.

WARDEN: Thank you, witness, you may stand down.

WITNESS STOOD DOWN

WARDEN: We will have a short break before we start the next witness.

THE COURT ADJOURNED AT 11.32 P.M.

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THE COURT RESUMED AT 11.51 A.M.

ROBERT WILLIAM DAVIDSON, SWORN AND EXAMINED:

MR CLAIR: Your full name is Robert William Davidson; is that right?-- Yeah.

Mr Davidson, it will make it easier for us if you can just move your chair in and, perhaps, position that microphone so you can speak quite close to the microphone? It is just that everybody has to hear what you say, particularly these young ladies here. Now, you are a miner employed at Moura No 2 Mine; is that right?-- Yeah.

You started in the mining industry at Burgowan when you were 17 years of age; is that so?-- Yes.

And that would have been 1958?-- Yeah, around there.

Over the past 22 years you have worked at Moura No 1, No 2 and No 4 Mines; is that so?-- Yes, that's right.

Your position at Moura No 2 in recent times has been as lamp room and bathroom attendant?-- Yes, that's right.

And your job in that capacity was to check the lamps of the men coming on shift?-- Yeah, that's right.

You had to check that everyone took their allocated lamp?-- Yeah.

Issue a spare if any were found to be faulty?-- Yes.

Register the number of the spare?-- Yeah.

And who it was given to?-- Yes, that's right.

In that way you would have a record of who it was who had gone underground?-- Yeah, on each shift.

Can I just say this: if you let me finish the question and then give your answer it makes it a lot easier for those people who have to take it down, you see?-- Yeah.

Okay. So that you had a record of who had gone down underground on each shift?-- Yeah, every shift, yeah.

And who had what lamp?-- That's right.

Now. If you can move in a little closer to the microphone. Just pull your chair up. That's it. Now, you were on duty in that capacity as the lamp room attendant on Sunday, 7 August, at the commencement of the Monday night shift?-- Yes.

You came to the mine at about what time that night?--

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Somewhere around quarter to 10, I think it would have been.

Your shift started at 10.15?-- Mmm.

Did you have any conversation with anyone after you arrived about what was to happen that night?-- No, just idle talk about what had been doing over the weekend a bit and that.

Sit into the microphone and speak up. We are all having a bit of trouble?-- I just talked to - normally with the fellows, you know, with what had been doing and that.

Okay. Well, of course, you issued lamps to those people going underground?-- Yeah, they all were there, yeah.

That night the men who were the regular employees of the mine, they each took their own lamps?-- Yes, they checked in, yes.

There was a gentleman named Robert Parker from Tecrete and was he issued with a lamp No 86?-- One of the spare lamps.

As far as you can recall. Okay. Now, had you been working on the Saturday night shift?-- No, no, Saturday was my first night shift for the week.

Had you become aware at some stage that 512 Panel had been sealed during the weekend?-- I knew they were going to do it, but I didn't know whether they had finished when I first got there.

When did you learn that they were going to do it?-- I heard one of the fellows at the hotel on the Sunday afternoon.

On the Sunday afternoon?-- Saturday - on the Sunday afternoon, yeah, when I come back from up at Janbin, the cattle property at Jandin.

At Janbell, I see. "Jandin", I am sorry, J-A-N-D-I-N?-- Yeah.

That was Sunday afternoon?-- Yeah. That would have been about probably half past 5 or 6 o'clock in the afternoon.

You spoke with another miner or other miners?-- No, just one of the mates in the pub, that's all.

And what were you told at that stage?-- He said they had men out sealing 512, that was all.

That they had the men out sealing 512?-- Mmm.

I will have to ask you again if you can raise your voice a bit, please. It is essential we hear what you have to say. Okay. So, when you arrived on shift that night did you find out whether, in fact, 512 had been sealed?-- No, I never asked anybody at the time.

Well, in the course of that shift did you become aware at some stage that 512 Panel had been sealed?-- Yeah.

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When was that?-- Oh, that would have been probably half past 10 I found out.

Who told you that?-- The transport man, Greg Bennedick.

Greg Bennedick?-- Yeah.

And what did he tell you about it?-- He just said that they had sealed 512 on the Sunday and finished it.

And any other discussion about it?-- No.

Did you have any discussion with anyone about whether 512 was going through the explosive range?-- No.

Had you had any discussions with anyone about any unusual signs in 512, such as a smell or a haze or anything like that?-- Not on that shift on the Sunday night.

No, but at any time?-- I had heard Mick Caddell saying in the previous week, I think it was, he smelt a sulphury smell in there.

You say that was within the previous week. Can you pin it down any more accurately than that?-- No, I couldn't honestly say what day or shift.

Again if I can just ask you, Mr Davidson, to let me finish talking before you start giving your answer. What were the circumstances of that? Where did you see Mick Caddell?-- Outside the lamp room.

Was that the beginning of a shift or the end of a shift?-- No, would have been through a shift.

Some time during a shift?-- Yeah.

That you had that conversation with him?-- Yeah, yeah.

What was the last shift you worked prior to the Sunday shift, Sunday night shift?-- On the Friday - Thursday night, Friday - dog-watch shift.

So that would be the Friday, dog-watch shift starting late Thursday night?-- Mmm.

Okay. Well, after you had issued the lamps, the men went underground, you carried out other duties; is that so?-- Yeah, washing down the bathroom.

Was one of your jobs to keep an eye on the telephone?-- Yeah, that's right.

And also to remain in the area so that you could respond to any alarms or emergency calls?-- That's right.

Well, now, the bathroom, when you refer to washing the bathroom, that would have been the bathroom in the No 2 block; is that right?-- Yes.

While you were washing that bathroom in the No 2 block did you in fact hear a phone ring somewhere?-- Yes, the undermanagers phone rang.

Did you go over to the undermanagers office?-- Yeah, I went around to the office and when I got there Michael Squires was on the phone talking.

Do you know what time that was?-- 20 to 12.

20 to 12? Now, you say you saw Michael Squires on the phone in his office, the undermanagers office; did you turn around and go back to where you were or did you walk into his office? What did you do at that point?-- I walked into the office and Michael said that he was talking to Mr Mazzer and the phone had gone dead.

Mr Mazzer, that was Geoff Mazzer?-- Yeah, that's right.

Had he gone down that night with the crew in 5 South?-- Yes, that's right.

Did you notice anything else at that time or around that time?-- As I walked around to the undermanagers office there was a cloud of black dust coming up the incline.

Was this before you got there?-- As I was walking around to the office.

As you were walking around there?-- Yeah, we come out of the bathroom and go out and around to the office.

How far was it from the undermanagers cabin that you were when you noticed this cloud of black dust?-- About 20 feet from the door.

20 feet from the door?-- Yes, as you turn the corner to go to the office the cut's straight out in front of you.

Anyway, the cloud of dust you saw was down in the cut?-- Yeah.

And was it outside the portals at that stage and was it advancing up the cut?-- Yes, that's right.

How far up the cut was it when you first saw it?-- About two thirds of the way.

So you saw that when you were about 20 feet away from the door of the undermanagers cabin. You continued to walk and you walked into the undermanagers cabin; is that so?-- That is right.

You say that at the time you arrived at the undermanagers cabin you saw Mr Squires on the telephone?-- That's right.

Was he still talking or did he just have the telephone in his hand?-- Had the phone up to his ear and he said to me that the phone had gone dead on the other end.

So he wasn't still talking at that stage -----?-- He was talking to me only.

Only to you?-- Mmm.

Well, did you draw his attention to the cloud of dust?-- Yes.

Did you say something then?-- I said to him, "That's not usual like that.", and thought we better get in touch with the management.

What happened then?-- Michael sent me over to the lamp room to try and ring on that phone through to the 5 South.

Did you do that?-- I tried three times, but it was nothing there, no ringing sound or anything.

What sort of sound did it get?-- Just like as if someone was on the other end, you know?

An engaged-type signal?-- Yeah.

A beeping signal. What did you do then?-- Went over to the electrical workshop and I told Mr French that I thought there was trouble in the underground and he went over to the Unor room.

At this stage had you heard any alarm?-- Well, I thought I heard one as I was going into the electrical office itself, but it could have been noise from the workshop straight behind and I'm just not sure of that.

What sort of noise was it?-- Well, I thought it was a siren meself.

Did that siren continue or did it stop at some stage?-- No, it was off when I come out of the electrical office.

Who had you spoken to in the electrical office or electrical workshop?-- Brian French.

Did he leave that office before you did?-- He walked out in front of me and he went over to the Unor room and I went around to the workshop to tell the boiler maker and the TA that was over there.

When Brian French left you and walked out in front of you, had that alarm sound, the siren sound stopped?-- There was no noise when I come out of the electrical -----

You came out just behind Brian French?-- Yeah.

When you went to the mechanical workshop you spoke with Clarrie Bayles and Gene Johnson there; is that right?-- Yes, that's right.

Did the three of you then go to the lamp room?-- That's right.

After you got back at the lamp room was there a phone call from underground?-- Yeah, the first phone call that rang was from Greg Young.

Had he gone down to 1 North West?-- To 1 North West section.

Did you speak with him?-- Yes.

What did he say?-- He said he thought there had been a bad fall or something bad in the section because there was dust everywhere and smoke.

While you were speaking with him was there another phone call?-- There was another phone call, but - Lenny Graham come in on the second phone that's in the section and he said there was dust where he was too.

It's a party line of some kind; is that right?-- Yeah, they have got one a pillar from the face and one at the crib room.

While you were listening to what Greg Young was saying you



heard Len Graham on the telephone?-- Yes, that's right.

What did he have to say?-- He just said there was dust and smoke down where he was too.

Did you get another call after that?-- Yes, I got a call from George McCrohon, the deputy.

This was the separate phone call?-- Yeah, that was after Mr Young.

And what did he have to say?-- He said that he had been blown over and there was dust and smoke everywhere and he was at the phone on Dip 2.

You understood that to mean the Dip 2 conveyor drive?-- Yeah, that's right.

At about 24 cross-cut?-- Yeah, around about that, yeah.

Well, what did you say to George McCrohon?-- I said to him, "Have you got your rescuer on, George?" He said, "I've had it on but I just took it off so I could talk to you on the phone.", and he said he was on his way out.

Did he say anything about any difficulty with breathing?-- Yeah, he said there was real heavy dust and hard to breathe.

That phone call finished and then you and Clarrie Bayles and Gene Johnson went into the emergency procedure?-- That is right.

You tell us in your statement?-- Yes.

What did that involve?-- It meant taking down the names of everyone that was on shift and the numbers of their light and all that, and then you had to stop - if there was any way, you had to block up the roadway or anything, you know, to stop anyone going down into the cut or anything. You had to proceed with those duties.

Now, you've referred to that as a standard emergency procedure. Was that a procedure that you had been instructed on at some stage?-- Well, we were told they were going to have a mock evacuation turnout about a month or two months before, and Mr Barraclough worked out some planning of it and we had a form on the wall of the light room and you had to memorise who was in each section, write down their names and what transport was down the pit and that so you could have an evacuation success if something did go wrong.

Had you instructed yourself then from this notice that was on the wall of the lamp room?-- Yes, that's right.

Notice as to procedure?-- Yes.

This emergency exercise that you say was to take place - or Mr Barraclough said was to take place at some time, did that emergency exercise actually take place at any time?-- No, not

to my knowledge.

Did someone else arrive shortly after that?-- Yeah, Mr Mason come first.

Which way did he come?-- Via the cut past the portals.

And he went to the Unor room when he arrived?-- Yes.

And then did he send Gene Johnson and Greg Bennedick off to check the mine fan?-- That's right.

Then did some further people arrive there?-- Yeah, well Albert Schaus, he come, but I think the men were - the other men had come out of the pit, got there just before him.

How did they come?-- The men that come out the pit come up in 2 PJBs.

Did they come to the lamp room?-- Yeah.

Then you say Mr Schaus arrived, at least you think it was after they arrived there Mr Schaus arrived, and what did you do when the men came up to the lamp room?-- We just checked through who was there and then we got the list of the other blokes that were still down there.

Did you manage that recording of the names of those that had come out of the mine?-- Yeah, we had that wrote down, yeah.

There is reference in your statement to an emergency phone?-- Yeah, that's on the wall there.

That's what, sorry?-- It's on the wall in the lamp room, the emergency phone.

Did that ring at any time?-- No.

What exactly is the emergency phone?-- It's a phone - if anyone wants you in a hurry they ring 66.

If anyone wants to -----?-- It's a siren one and it's a buzz sort of a noise, and if they - as in an accident they need you, they generally ring you, anything, it's best to ring on this, but this night Greg had rung on the ordinary phone.

Do you know yourself where the emergency phones are available within the mine, that's underground?-- Well, you could - they are tapped into all the phones.

I see?-- And it's one particular number. It just rings on the emergency phone.

So you pick up any phone underground and you ring - did you say 66?-- Yeah, the emergency phone number.

And that would ring the emergency phone and that has a louder ring or -----?-- A big buzzing sort of ring.

A buzzing sound. You say that didn't go off at any time that night?-- No, definitely not.

This siren that you think you heard when you went over to the electrical workshop, did you know - was that a siren that you had heard on other occasions?-- I thought it was the fan phone - siren.

You thought it was the fan siren?-- Yeah, when the power is off it.

How many kinds of alarms have you heard yourself?-- I understand there is three of them out there.

You understand that, but have you actually heard a whole variety of sounds?-- Well, over the years I probably heard a lot of them since I've been there, you know.

Are they different sounds or similar sounds? Is there just one kind of siren?-- Well, I thought they had three different sounds.

Tell me this, Mr Davidson: from the time you came on that night through until when these events occurred when you saw the smoke in the cut, you were, of course, on the surface the whole time?-- Yeah.

And you were near the bathroom or the office, certainly in that area of the No 2 administration area; is that right?-- That's right.

Did you hear any alarm go off that night from the time you arrived through until you saw that smoke?-- I can't say that I did.

Either a siren alarm or any similar loud alarm?-- No, I don't think so.

You actually arrived there at 10 to 10?-- Yeah, 10 to 10 it would have been.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr Davidson, I want to ask you some questions about the phone system between 5 South and the undermanagers cabin. I take there is more than one phone in 5 South?-- Yeah, there is two - two in every working section.

You can use either of those phones to dial 66 and the alarm goes off on the surface, does it?-- That's right, yeah.

If you are not wanting to use the emergency phone do you dial some other number to get to the undermanager, do you?-- Yeah,

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yeah.

What number would you dial from underground in 5 South; do you know?-- To get the undermanager?

Yes?-- 58, I think it was.

You dial a different number to 66?-- Yeah. You wasn't to use 66 unless it was an emergency.

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Now, if you dialled, say, 58 underground in 5 South, would the phone in the undermanager's office ring the normal tone?-- Yeah, there is an underground phone and the emergency phone, it's in the lamp room.

So, the underground phone was the one you think you heard ring as you were in the No 2 bathroom cleaning?-- Yes.

Is there only one such phone in the undermanager's cabin?-- No, there is an outside phone.

The one you heard, was that the internal one, was it?-- That was the underground one.

If you wanted to ring from the undermanager's cabin, or office, I should say, underground, would you dial a certain number?-- Yeah.

And that would get you through to 5 South underground?-- Yeah, you could ring from there anywhere around the pit, all the sections.

Just by dialling different numbers?-- Yeah.

If you did that, the phone underground in 5 South would ring?-- Yeah, two of them should ring, one at the crib table and one down where they work at the face, back from the face.

So, both of those phones ring at the same time?-- Yeah, they are hooked in together, yeah.

And they both -----?-- They are the same number.

And they both stop ringing as soon as one of them is answered?-- Yeah.

Now, on this night, the Sunday, you heard, you think, the underground phone in the undermanager's office ring?-- Yeah.

You left the bathroom and walked into the undermanager's office to answer that phone?-- Mmm.

When you arrived there, you saw Michael Squires, the undermanager on shift, already talking on that phone?-- Yeah, he had the phone up to his ear.

Now, are you sure that the phone you heard ring was the one that he answered?-- Well, that's the only one you could get in touch with the underground with from his office.

Are you sure that the phone you heard ring was the one in his office as opposed to some other phone somewhere else?-- No, it was the one from the underground.

You say that because you have heard that phone in that office ring before?-- Yeah, well, that's part of my job. If Michael and them are down doing their inspections, it could be another section rings looking for him, well you explain to the people who was ringing where he is and what section he has

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gone to.

So, as far as you are concerned, it could not have been any other phone -----?-- No, that's right.

----- that rang?-- That's right.

So, from what you tell us, someone underground in 5 South rang the undermanager and Michael Squires answered that phone?-- That is right, yeah.

As opposed to Michael Squires phoning himself underground?-- Well, Michael can ring the section, yeah, from -----

But if he rang the section, his phone wouldn't ring, would it -----?-- No.

----- on the surface?-- No, it had to be one from underground.

That's the one you think you heard ring?-- That's right.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: Mr Davidson, I will just ask you to look at page 4 of your statement, please, at the very top. You see where you say, "This alarm" - that's emergency phone alarm - "is in addition to the other three alarms which I described."?-- Yeah.

Just tell me, are these the alarms other than the emergency phone: the fan shaft alarm, is that one of them?-- Yeah.

What sort of alarm is that? Is that a hooter or a siren?-- It's just - oh, I'd call it a hooter, like a hooter.

What was the other alarm, one of the other alarms?-- When the power is off in the sub-station, like if the mine power goes off.

What sort of alarm is that by sound? Is it a hooter or a siren or bell, or what is it?-- Like a siren.

Then there was one other alarm and that's the siren or hooter attached to the Unor system?-- Yeah.

So, very soon after, very soon after, minutes perhaps, after you see this black cloud coming out of the shaft, you for the first time hear an alarm; is that right?-- Well, that's what I thought at the time.

Now, did you see Mr Squires when you came on duty that night?-- Beg your pardon?

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Did you see Mr Squires when you came on duty?-- Yeah, he was talking to the men out in front of the lamp room.

Did he talk to you?-- Not at that time, no, not when I first come on shift.

Can you just tell us, as best you can, the number of occasions you saw Mr Squires after you came on duty that night?-- Possibly three times.

Where did you see him? Where was he?-- Out at the front talking to the men, like, before they went down; then when I was cleaning up on my duties I walked past the undermanager's cabin and he was in there, and then the next time was when I went in to answer the phone when the smoke came.

Prior to hearing the hooter or siren which you heard coinciding roughly with the black smoke, did you hear any prior hooter or siren?-- No, not that I can remember.

But you would certainly remember, wouldn't you?-- I thought that the only siren I heard on that night was when I was over in the workshop talking to the electricians.

But that's the case, isn't it, because if there was a prior alarm, hooter or siren, you most certainly would have noticed it, wouldn't you?-- I would say so, yeah.

Because that was your job. Do you know whether the Unor siren, hooter, alarm can be disabled by a switch?-- There's a reset button.

That's on the machine?-- Yeah.

Is that what you are saying?-- On the wall of the undermanager's office.

So, the switch on the wall of the undermanager's office can be used to turn the hooter, siren or the Unor off?-- As far as I know, yeah.

Are you trained up on the Unor in any respect?-- No.

So, it's not part of your duty to go into the Unor room to check on it at any time?-- No.

It's not your duty. Do you have any capacity to understand what's on the Unor screen at any time?-- No, not really.

You are very nervous, are you?-- Yeah.

When Mr Caddell was talking to you in the past week, and you said something about a sulphur smell; do you recall that?-- Yeah.

Was there any other conversation?-- No.

Did he say anything about a rising CO level?-- No, I never

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heard him say anything about that.

Or anything about a heat or a haze or a heat shimmy?-- No.

Michael Squires was very busy that night, wasn't he? He was running around trying to find men?-- He -----

Organise labour?-- He organised the back-to-front, a couple of fellows to come in, yeah.

Could you tell the Inquiry what approximate time it was that the body of underground miners went underground on that night, approximately?-- Around about 20 past 10.

You told us that Mr Mason, when he arrived, went straight to the Unor room?-- Yeah, he went through to the undermanager's office and then he -----

Just a little about your background. When did you first go to Moura?-- Well, 22 years ago.

Did you have any induction underground before you went underground?-- I worked in the contract mine down at Howard Coal Field before I came to Moura.

When you got to Moura were you inducted before you were sent underground?-- Yeah, I think so.

How long was that for? How long was the induction? How long did it take, or wasn't there an induction?-- Well, I worked at the washplant first up and then I went to No 1 and then they -----

You will have to speak up because I am missing about every second word and I think the ladies are too. Can you just answer this: before you went underground mining at Moura did you have an induction course?-- Yeah.

How long was it?-- Oh, half-hour, I suppose.

You know the Moura coal is gassy, a gassy coal?-- Yeah.

You also know that it is capable of spontaneous combustion?-- Yeah.

Can you speak into the microphone, please?-- Yeah, it's gassy, yeah.

Do you also know that it has a capacity to spontaneously ignite?-- Yeah.

The Moura coal?-- Yeah.

Were you ever given any instructions or training in relation to spontaneous combustion by the people who conducted the Moura mines?-- No.

Not ever, not even right up to the present time, the whole of the time you have been working there; is that right?-- I

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would say no to that.

What did you say?-- I said no.

Have you ever been given a red book on spontaneous combustion by anybody?-- No.

Or a blue book?-- I got the blue book.

You got the blue book?-- Yeah.

Where did you get that?-- I think it might have been in the lamp room there, I reckon, in the cupboard.

Is that part of the fixture in the lamp room, part of the equipment in the lamp room?-- No, not really, it had already been just on the desk there, but -----

But not given to you by your employer?-- Not personally, no.

So, it is there, so you picked it up and you read it. What did you learn from it?-- Not a real lot because I am not really bright.

I have nothing further.

CROSS-EXAMINATION:

MR MORRISON: You and I are both getting these things shoved in our face?-- I beg your pardon?

You and I are both getting these things shoved in our face, aren't we? Let's do our best. Now, can I just ask you a couple of things, if I may? One of the things you had to do was allocate lamp numbers?-- Yes, that's right.

Each person, when he gets an allocated number, keeps that number?-- That is right.

The only time when he wouldn't have his allocated cap lamp is if he got a spare for some reason, because his was being repaired or whatever?-- That is right.

But having got his repaired he would go back to his cap lamp with his cap lamp number?-- Yeah, his number.

I think there was a log kept of whose lamp had which number?-- Yeah, that's right.

Do you remember any of them off-hand? If I asked you a few numbers would you remember whose they were?-- Not off the top of me head. Like, I can - if I was out there I just show you, you know, where they were.

Well, I think we can find the log if we look. Now, you said that on the Sunday afternoon you were talking to someone, just a mate at the pub, who told you about the sealing of 512?-- Yes, that's right.

Who was that? Can you tell us who?-- Oh, he was just one of the mates that was down there.

He was definitely someone who had been down on the sealing?-- Oh, someone that knew of someone who was on there doing the seals.

Okay. And you got told certainly that the panel had been sealed, that much?-- Yeah, on the Sunday.

Was there some general talk about what was going on when it was sealed?-- Just said that the 512 section had been sealed, that's all.

No mention of any of the conditions or anything like that?-- No, no.

And it must have only been a couple of days before that when you spoke to Mick Caddell about the smell?-- It was in the week before, but I couldn't say exactly what day it was.

And how did he come to be talking to you about that? Did it just come out of the blue?-- He wasn't actually talking to me directly. There was about five or six of us there and it was just in idle talk.

Okay. Can I just pause there and ask do you have any memory of who else was there when he said this?-- Oh, it would only have been the blokes who were on shift that day. Like, I say, on different days I get there with the different shifts, you know?

There weren't - these people were miners, not management?-- Miners, yeah, on the shift at the time.

And Mick Caddell was mentioning to them something -----?-- Yeah, that's right.

About a sulphur smell?-- Yes, that's right.

Was "sulphur" a word that he used?-- I beg your pardon?

Did he use the word "sulphur"?-- That's right.

I see. Did you understand what he meant by that?-- Well, if you have been around fires and that you can smell the different smell.

That's what you assumed he was talking about?-- Yeah, that's right.

And did it appear to you that is what everybody else assumed he was talking about?-- I would say so, yeah.

Now, on the Sunday night - you have been asked some questions about the various alarms. I would just like to see if we can't agree on some of the aspects of the alarm systems. There was an alarm for the fan shaft?-- Yeah.

Which I think you have described as a hooter?-- Well, we know what they are when they go off, you know?

Okay?-- Normally anyway.

Sorry?-- I said normally you know - we know where to go and switch them off, you know, which ones they are.

All right. So, when you hear the sound you can get an idea of what - which alarm it is?-- We got a board in that Unor room

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and you see whether it is a fan or whatever it is.

I will just come back to that in a second, if I can, to talk about that. There is an alarm for the fan shaft, there is one for if there is a power drop?-- Mmm.

And there is one for the Unor system?-- Yes, so they tell me.

There is one that is called the BM1. Do you know about the BM1?-- No, what's that?

All right. Have you heard of an alarm called BM1 alarm that is linked to all the other alarms?-- No, not really.

Okay. You know that the alarm system is linked?-- Yeah.

And you told us that in the Unor room there is a panel that you can see on the wall with various lights on it?-- For the fan and that, yes.

If an alarm goes off all you have to do is walk into the Unor room, look at that panel and it will tell you if it is the Unor alarm as opposed to the fan or as opposed to power tripping off?-- Yes.

Then what you can do either at that spot or in the undermanagers room is there is a button you can hit?-- Yeah.

And if you hit that button the siren or hooter stops?-- Yeah.

But the alarm lights stay on?-- No, it resets, doesn't it?

Well, there are two ----?-- When you push the button?

There are two things to do. You can hit the reset button - hit one button, and the sounds go off, hit another button and the lights go off. Isn't that what happens?-- The one that is in the undermanager office, when you push it the light goes off and it resets itself.

As far as you are aware there was only one button to push?-- As far as I know, yeah.

Have you ever used the two buttons that are there or in the undermanagers office?-- No.

Okay. You have only ever hit the one?-- Yeah.

But you know there is one? You understand there is a reset button?-- Yeah. That would be the one I used all the time.

You will have to speak up?-- That is the one I pushed every time when the fan alarm went off. It resets it.

The reset is to cancel the alarm that you can hear and the alarm you can see so that it can happen again, if necessary?-- I would do that, yeah.

All right. Now, the phone in the lamp room, the one you were

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telling us about, the lamp room phone, that has a bell on it, doesn't it? Not a siren or a hooter, it has got a bell?-- What, the emergency one?

Yeah?-- Yeah.

That's a bell sound, isn't it?-- No, a buzz.

Sorry?-- A buzz sort of sound.

Well, there are two phones. There is a lamp room phone and an emergency phone, isn't there?-- Yeah.

The lamp room phone has a bell?-- Yeah.

The emergency phone has a sort of hooter?-- Yeah.

A honking hooter?-- Yeah.

The emergency phone in the lamp room doesn't have a siren, does it, it is a hooter?-- A hooter.

Sorry?-- It is sort of a buzz hooter, you know?

Yeah, that's the emergency phone?-- Yeah, the red one, the red phone.

Now, when you were there that night you can't recall hearing the siren?-- Not on that red phone, no.

Well, the red phone won't give you a siren, the red phone will give you a hooter?-- The red phone didn't ring then, no. It was only the underground phone that rang in that office.

Only the underground phone?-- Yeah.

Where was that?-- Mmm?

Where was the underground phone?-- On the bench in the lamp room.

On the bench in the lamp room. That one has a normal phone or bell attached?-- Yeah, it just rings, you know?

All right. Now, on that night at one stage you went to the undermanagers office and Michael Squires was there and had a phone in his hand?-- Yeah, that's right.

And he told you something about talking to Geoff Mazzer?-- Yes, that's right.

And it could have been that he said to you that he had been talking to Geoff Mazzer, not that he was then talking to Geoff Mazzer?-- He said he was talking to Geoff and the phone went dead.

Yeah. That's right. What had caused you to go around to the undermanagers office to see that?-- Well, I was working in the shower room, cleaning it down when the phone rang.

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Can you just pause there for a second? If it was the normal phone that undermanagers ring down underground on, the normal underground phone that is not connected to a siren, is it?-- Not as far as I know. It is only just sort of communication between underground and -----

If you were working in the bathroom, cleaning in the bathroom, and that phone rings there is just no way you would hear it. Just the normal phone, you wouldn't hear it from the bathroom?-- Yeah, we can hear that from the bathroom because the bathroom wall is right up against it.

What I want to suggest to you is that what led you to go around was that the siren had started up, that's why you went around, and when you got there Michael Squires told you what you have said, that he had been talking to Geoff Mazzer on the phone and the phone had gone dead?-- No, I don't think there was no siren going when I walked around to that office.

It may not have been going when you got there, but that's what started you on your way, the siren went off. By the time you got there it may well be that Michael Squires had hit the two reset buttons and turned the actual sound off, but what started you on your way was the fact that the siren went off; that's what I am suggesting to you?-- I don't think so.

You don't think so, sorry?-- I said I don't think so.

Certainly what he told you when you got there was he had been talking to Mazzer and the phone had gone dead?-- Yes, that's right.

Now, at that point the lamp room phone went, remember that? You talked to Squires, Squires says speaking to Mazzer, phone has gone dead and that's about when the lamp room phone rang and you went around to answer it?-- I thought it was a bit after that because I was in the lamp room when Greg Young phoned.

All right. Well, you certainly answered the lamp room phone when it rang?-- Yeah.

It was after you talked to - who was it on the lamp room phone?-- Greg Young.

Greg Young and he was calling from 1 North West?-- 1 North West section, yes.

He asked the question?-- He told me that there was dust everywhere down there and he thought there had been a bad fall.

Did he ask you did you know of anything that had happened?-- Not at that time.

And did you then go around to tell Squires about that call?-- Yeah.

And it is then when you are going around to tell Squires about the fall that you saw the dust coming up out of the cut?-- No, I had seen the dust before that, before I got the call from Greg Young.

All right. Now, certainly in terms of what can go off at the mine, there are a variety of alarm sounds. One is a siren, there are a couple of hooters, there are bells, all that sort of thing?-- Yeah, that's right.

And there is a link between the alarm sirens and hooters so that you can deal with them from the undermanagers office or the Unor room?-- That's right.

So, there is a central control area where someone can respond to any of the alarms?-- Yeah.

Now, you mentioned an emergency procedure that Mr Barraclough had worked out. I will just ask you to look at this document. Actually, no, I don't need you to look at it -----

What I will simply do is tender as a separate exhibit document 18 from the Inspectorate documents which is the emergency procedure.

WARDEN: Exhibit 121.

ADMITTED AND MARKED "EXHIBIT 121"

MR MORRISON: Mr Davidson, there was a notice or a document of some sort pinned up that you had reference to about emergency procedures?-- It was on the wall of the lamp room, yeah.

So far as you can see the emergency procedures worked pretty well, didn't they?-- Well, we went as best we could do it, yes.

Certainly you felt adequately prepared from having that document and studying it to do what was needed to be done?-- That's right, yeah.

Did you know that there had been - or were you aware that there had been an exercise called on at one point by McCamley?-- No, not by meself.

You couldn't tell us before just when it was that Caddell had told you about the sulphur smells. We should be able to tell it from shift reports, shouldn't we?-- Beg your pardon?

Perhaps I am speaking too softly. You are not sure when it was Caddell told you about the sulphur smell?-- No, I couldn't say what day it was.

But it was a time when you were both working together in the sense that you were both on shift?-- We were both on shift, yeah.

Now, if we check the shift reports it looks like the only time that can be is on Saturday, 6 August?-- No, I never worked on Saturdays.

I'm sorry, I'll give you the shift in a moment. It's the night shift, Saturday night shift that starts Friday night late and it goes through; is it that one?-- No, I never worked a Friday night shift.

Can you just have a look at this?-- I start Sunday night and finish Friday morning.

Have a look at this shift report: see the names that are highlighted on that shift report? One is yours and one is Mr Caddell's. It may be that there is a change of shift, not during a shift when Caddell spoke to you; does that help you remember?-- I can't remember doing that Saturday shift. I haven't worked a Saturday shift for a long time.

Sorry, there is too much sound -----?-- I normally only just work from Sunday to Friday morning.

It does show you down there for that shift, doesn't it?-- Well, I must have been in then.

Certainly it was in that few days leading up to this incident that you heard from Caddell?-- Yeah, before it, yeah.

Whilst you can't remember specifically the names of the men that he was talking to, were some of those people who worked on the sealing on the Saturday?-- Some of them would have



been, yes.

And some of them were men who went down Sunday night when the explosion happened?-- Yes.

Thank you.

I tender that shift report for 6 August, undermanagers shift report, 6 August 1994.

WARDEN: Exhibit 122.

ADMITTED AND MARKED "EXHIBIT 122"

MR MORRISON: Thank you. I have nothing further.

CROSS-EXAMINATION:

MR HARRISON: Mr Davidson, I had a bit of trouble hearing you before, what time did you say it was that you went to the undermanagers office that night?-- About 20 to 12.

Was it more like 11.30?-- Well, no, I think it was later than that.

I've got your statement in front of me. At page 2 it says that it was at 11.30 when you went there. Have you got the statement there in front of you?-- Yeah.

At the top of the second page?-- Yeah, that's what it's got too.

Would you say that your memory might have been better when you made the statement to what it is now?-- No, I think it was honestly 20 to 12 when I walked into Michael Squires' office.

Would it have been the case that you were mistaken when you put 11.30 in your statement?-- I would say that I made a mistake there, yeah.

Can you explain why you made a mistake such as that if you are now clear that it was 11.40?-- No, I can't see a reason for it.

In your statement at page 3, have a look at that. At the top of the page again, this is when you talk about the phone call with Greg Young?-- Yeah.

You go on to say after that phone call finished, "Straight afterwards I got a phone call from George McCrohon, deputy, and he said, 'I've been blown over and there is dust

everywhere and I'm at Dip 2.", and you go on to say, "I took this to mean Dip 2 conveyor drivehead at about 24 cross-cut."?-- Yes, that's right.

Why did you take it to mean that?-- Well, George was on roadways and he walks the belt road one way and then back out the other way.

Did you understand that there was a phone there?-- Well, every driver and every boot end's got a phone on it.

Your statement says "straight afterwards". Was it the case that you had no sooner hung up from the first call when you got the second call?-- It wasn't that long after, yeah.

Not that long afterwards?-- Well, I hadn't moved away from the phone when it rang.

Are you talking about seconds or minutes or longer?-- It would only be a few seconds, I would say.

Only a few seconds. Now, are you sure that George McCrohon told you that he was at Dip 2?-- Yes, I'm sure of that.

It wasn't the case, was it, that he told you that he was actually ringing from the cut sub-station?-- No, no.

Do you know what I'm talking about there?-- Yeah, I know where the sub-station is, yeah.

Are you sure that he told you Dip 2 and not the cut sub-station?-- No, I'm sure he said Dip 2.

And are you also sure that it was only a matter of seconds between the two phone calls?-- Well, it wasn't that long after the first call anyhow.

You couldn't be mistaken about either of those two points?-- No.

Similarly you've told us about the sequence of events with your conversations with Michael. You are quite clear that the conversations with Michael occurred as you've told us today?-- Yes, as far as I know.

See, when you came in was Michael actually on the phone?-- He was standing at the table with his phone up to his ear.

He wasn't talking into the phone?-- No, the only talking he done was when he told me that the phone had gone dead.

You couldn't be mistaken about the fact that there was a phone ringing immediately before you went in there?-- No, I reckon I heard the phone ringing, that's why it made me go around there.

Where did you come from when you heard the phone ring?-- Out of the middle of the shower room where I was hosing down.

Just from your own experience, how long would it take you walking at a normal pace to get from there around to the undermanagers office?-- About a minute to two minutes.

Would it take you that long?-- Give or take.

You never heard any siren at all on the way there?-- I don't think so.

Could you be mistaken about that?-- No.

Didn't one of the phones ring in the lamp room while you were talking to Michael in the undermanagers office?-- I thought it rang when I was walking back around.

Not when you were there, but when you were walking back around?-- When I was back around there, yes.

Before or after you went over to where Brian French was?-- That had been after.

So it didn't ring until after you had been to see Brian French?-- That was when Mr Young rang me up.

That's the call I'm talking about, the one you got from Mr Young?-- Yes.

You never heard that phone ringing until you had been over to see Brian French at what I might call the electrical section?-- That's right.

Again you wouldn't be mistaken about that, or couldn't be?-- I don't think so.

When you were in the undermanagers office with Michael, had you observed certain things about dust or whatever on the way there?-- When I was going around to the undermanagers office I could see the black cloud of dust in the cut, coming up the cut.

You say you said something to Michael like, "That doesn't look right."?-- That's right.

Did Michael say anything?-- He looked out the window and he never actually said anything to me, but he looked out at it.

Did Michael do anything with the phone when you were there?-- The phone that he was talking on?

Well, was he talking on it when you got there?-- Well, he had it up and he was talking to me about - Mr Mazzer was on the other end.

Did he do anything with any phone when you were there? Did he ring anybody?-- Not while I was in the room.

What caused you to leave the room?-- Michael asked me would I try the lamp room phone to ring 5 South.

It wasn't the fact that you heard a phone ring yourself that caused you to leave?-- I don't think so.

When did you see Michael again after you left the room?-- Probably five, 10 minutes after.

Where was he at this stage?-- In the undermanagers office.

Did you report back to Michael about what happened in relation to the phone call from Greg Young?-- Yes, I think I did.

When did you do that?-- Not long after George McCrohon had finished ringing me.

Did you go and tell Michael about both phone calls?-- At the same time, yeah.

What did you tell him about the phone call with Greg Young?-- I told him that the North West had rung and said there was heavy dust and smoke down there and they were coming out.

Did you tell him about the phone call with George McCrohon?-- I told him George had been blown over and found it hard breathing and he was coming out.

What did you do after that?-- Well, we were memorising everyone that was on shift and writing down names.

Did you see Michael at any stage make any phone call to George Mason?-- No, not while I was in the office at all.

Did Michael appear to you to have noticed the dust in the cut?-- He should have because it's straight out through from the office table.

Perhaps you might have got a bit ahead of me, I hadn't finished. Did he appear to notice any dust in the cut before you went in there?-- I don't think so.

Did it appear to you as though you brought it to his attention?-- I would say so, yes.

Why do you say that?-- Well, normally we don't get any big dust clouds like that or anything hanging in the cut. It's unusual, you know.

What was it about your conversation or contact with Michael that suggested to you that he didn't know it was there?-- Well, I don't know whether - actually know whether he knew it was there or not, but it's very unusual for a big black cloud to be hanging in the cut like that.

Yes, I accept that. What I'm asking you about is why it was apparent to you that Michael didn't seem to have noticed it before you brought it to his attention?-- I don't know whether he did or whether he didn't.

Thank you. I have nothing further, Your Worship.

RE-EXAMINATION:

MR CLAIR: Mr Davidson, do you normally have any difficulty in hearing?-- Yes.

How long have you been having that difficulty?-- Quite a while.

You depend to some extent on lip reading - I mean, for instance, today, have you had to rely to some extent on watching people's lips?-- No, not really.

Do you tend to have any difficulties with the high frequencies, that is high pitched sounds?-- Oh, yeah.

For instance, if there were four people in a room and a phone rang two rooms away would you tend to be the last one to hear it?-- I would say so, yeah.

Has this affected your operation in terms of hearing telephones at the mine, that kind of thing?-- I do hear them out there. I hear them all right.

Could it be that the phone could ring and you might not hear it whereas other people who are around the place would?-- Yes.

Out at the mine?-- I would say so, yes.

And sometimes if there was a hooter or a - you know, perhaps a buzz alarm, as you have referred to one of the alarms, again would other people tend to hear it before you did?-- Oh, not really.

You think that would be loud enough to -----?-- Yeah.

----- draw your attention?-- Yeah.

But can I ask you: might you, depending where you were, have a bit of difficulty in distinguishing just what kind of sound it was, what kind of telephone was ringing or what kind of alarm might be ringing?-- I'd say so.

Now, have you had any treatment? I mean, is has the hearing loss been such as to cause you to have treatment?-- No.

Any diagnosis of what it is?-- No.

Okay. Thank you, I have nothing further, Your Worship.

EXAMINATION:

MR PARKIN: Mr Davidson, just one question for clarification purposes. About two months before the incident you were told by Joe Barraclough that an emergency exercise was being planned, and I think Mr Morrison made a reference to that earlier. Have you ever been involved in an emergency exercise previously at Moura No 2?-- No.

Thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Davidson, you said you heard the telephone ringing in the undermanager's office from the bathroom, from the bath-house?-- Yeah, that's right.

And you went to answer it, you went to the undermanager's office to answer the telephone; is that correct?-- Yes, that's right.

While on the way to the undermanager's office could you still - could you hear the telephone still ringing?-- No, not when I got around there.

You couldn't hear it ringing on your journey from the bath-house to the undermanager's office?-- Only from where I started walking coming around it was ringing a bit, and then when I got around there Michael had answered it.

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But you were unable to say if the telephone stopped ringing or you just couldn't hear it ringing?-- It wasn't ringing when I got around there.

Do you think there had been any time for a conversation between Michael Squires and Geoff Mazzer?-- Not a full conversation.

Did Squires say what, if anything, had been said between Squires and Mazzer? Did he say anything to you about the nature of that conversation?-- No.

Thank you.

MR ELLICOTT: No questions.

WARDEN: Nothing arising out of that? We will take the lunch adjournment, gentlemen, resume at 2.20. The witness is stood down.

WITNESS STOOD DOWN

THE COURT ADJOURNED AT 1.03 P.M. TILL 2.20 P.M.

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THE COURT RESUMED AT 2.21 P.M.

GREGORY LESTER YOUNG, SWORN AND EXAMINED:

MR CLAIR: Your full name is Gregory Lester Young; is that right?-- That's correct.

Mr Young, if you can speak in a loud voice or as loud as you can manage into the microphone, we will all be able to hear what you say. You are a miner employed by BHP Australia Coal?-- Yeah, that's right.

You started in the mining industry as a junior miner in 1979 at Moura No 4?-- Yep.

In 1986 you transferred to Moura No 2 Mine and you have remained there ever since; is that so?-- Yes.

You have been employed mainly in production sections?-- Yes.

In particular, did you work in the 512 Panel at any stage?-- Only as a spare person. If somebody else was away I went in there.

How many times would you have worked in 512?-- Oh, probably four or five times.

Was that during the production phase - during the development phase or the extraction phase?-- A couple of times development, a couple of times extraction.

Okay. Now, you were rostered to work on Saturday, 6 August, that's the day before the explosion at Moura No 2?-- Yes.

You arrived at work at 3 p.m.?-- Yes.

Were you rostered for any particular work before you got there?-- We were called in about 1 o'clock, or we got a phone call saying that they wanted to seal the 512 section because there was a benzene smell coming out of the section.

Who was it that phoned you?-- Our roster owner called Kenny Selff.

Ken Selff?-- Yep.

Well, did you have any further discussions with him about it other than that?-- Not really. He just told us that they wanted blokes to come in on extra overtime to do the 512 seals.

Had you before that known when the 512 seals were to be done?-- Well, I was on night shift and I finished Friday morning and I was told they were going to seal them on the Friday night, but apparently they had a difficulty with the

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machinery breaking down before they could get it - get the machines out of the section.

So, they weren't sealed on the Friday night?-- No.

What would ordinarily have happened if the sealing wasn't completed on a Friday night?-- Oh, well, they would have continued the seals on the Saturday day shift until they were finished.

Okay. Anyway, you came in then on the Saturday afternoon, and were you to work with Robert Parker, one of the Tecrete fellows?-- Yes, that's correct.

When you arrived at work that afternoon do you recall gathering together with other people that were there to work on the seals?-- Yes.

Whereabouts was that?-- The undermanager got us together outside the lamp room and he told us to get in a couple of groups and there had to be three seals completed. He told us the belt road and the top return had to be completed - or the belt road completed first and the top return built up and then your normal - our - what they call transformer road had to be sealed, and then we had to seal so much of the transformer road and so much of the return road before we could do the final sealing.

The transformer road is the No 2 heading; is that right?-- Yes.

The return you are referring to is the top return?-- Top return, yeah.

Okay. Well, who was the undermanager that -----?-- Michael Squires, I think, was the fellow that told us.

Who else was at the meeting then, the fellows that were there on shift, anybody else?-- Oh, I can't remember. I think around about 8 or 10 blokes were called in, and I can't remember who was there all at the one time.

But apart from the fellows that were to go down and work on the seals, there was Michael Squires, anyone else?-- I think George Mason came in. I'm not sure whether he was there at the start of shift or he came in, you know, a few minutes later.

Well, you went underground to 512?-- Yes.

Where did you go to first down there?-- I had been working with Robert Parker all week on seals in 512 and 4 South level, so I went with him in the top return where we were going to do the work in there.

That's you and Parker?-- Yeah.

And some others with you?-- Yes.

Okay. Just before we go on, what seals had you worked on with Robert Parker in 512 earlier?-- We had done the man and supply seal. That was No 4 heading, I think, and we had to complete that during the previous week, so we sealed that road first and then we moved all our gear over to 4 South level and we done seals in there.

Now, what did you observe when you went to the top return on the Saturday afternoon?-- Well, when we got to work we were told there was a bit of a haze and there was a benzene-like smell. When we went in there you could smell - you could smell the benzene and it was very hot in there, but I couldn't actually detect a haze because I'm not trained in that sort of atmospheric-type condition.

Well now, you say that you were told that there was a haze and a smell. Who told you that?-- Michael Squires.

Was that at the meeting that -----?-- That was at the - when we got to work and we all gathered outside the lamp room we were told that.

Okay. Now, the smell that you smelt, was that a smell that you had previously experienced?-- No, I have never smelt that smell before.

How would you describe the smell yourself?-- I suppose like a bituminous sort of a smell which is most likely to be benzene. That's why I have never sort of smelt that smell in an underground atmosphere before.

You say that the top return there was also warm?-- Yes.

How would you describe that? Was it warmer than you would normally experience in the top return?-- Yes, I normally wear overalls and you sweat fairly bad in overalls, and that's what was happening when we first went in there, you were sweating like anything.

Okay. Well, did you have any discussion with the other people that went down there with you -----?-- A few people -----

----- about that?-- A few people that were in that top return, we did comment to each other how hot it was in there.

What about the smell, any discussion about that?-- Yeah, there was discussion on the smell. Everybody could smell what was coming out of that section.

Now, you worked on the sealing of other panels at both No 2 and No 4 mines; is that so?-- That's correct.

How many would there have been?-- Probably four or five.

Which were they? Perhaps I should ask you which ones you weren't involved with. Were you involved with 1 North-west?-- No.

What about 1 North?-- No.

Neither of those?-- Which 1 North, in No 4 or No 2?

In No 2?-- No.

Okay. Well, let me ask you: first of all, the smell that you were experiencing on this occasion in the top return, had you ever smelt that at any other sealing?-- No.

The level of temperature that you have referred to in the top return of 512, had you experienced that same kind of temperature at the other sealings?-- In some cases yes, in some cases not. It just depends on how much ventilation you have got in that section.

Okay. Well, what did the existence of that smell and the high temperature indicate to you?-- I had heard there had been heatings or a source of heating in 512, so when it was mentioned to me that's what I assumed it was, it was just a small heating.

You say that you had heard that. Where had you heard that kind of a thing?-- Just talking amongst the blokes that were actually - crew blokes that were in the 512 section previous.

How long before?-- Probably a couple of days before.

Do you remember who was there?-- Oh, I can't remember.

Do you remember how many people were there when these things were discussed?-- Oh, two or three or four, I just can't remember.

You wouldn't be able to remember any of the names of those people?-- No, I can't remember.

Okay. Well, when you experienced the smell and the temperature, did that cause you any concern at all?-- The only concern it caused me, that we had to get the seals up pretty quick, and once they were sealed as far as I'm concerned I had no concerns over it.

What was the extent of your knowledge at that time about problems associated with spontaneous combustion?-- I knew a heating could probably advance further, but from what I have done with seals, once you got the seal up you should never, ever have a problem after that.

Why was that?-- Well, once you put a seal up it goes through a natural process of where you deplete the oxygen and the methane builds up, and once it gets past the explosive range I have been taught that you shouldn't have any problems.

What about if the heating was still there when the panel went into the explosive range?-- Well, I haven't been taught anything about if a heating advances any further than a heating, so I wouldn't know the consequences of that.

Right, okay. Now, what was the source of the information that

you did have about spontaneous combustion or heatings in coal mines?-- Well, I'm not very knowledgeable of that, and as far as I can remember I haven't been taught anything about spontaneous combustion.

Well, you have referred to heatings in the mine. Was there any time when you did have any training or receive any information in any formal way about that kind of thing?-- I'm not sure on that. I just can't remember.

You can't remember -----?-- No.

----- attending particular courses about it?-- No.

Well, the information that you did have, how did you come by that, talking to other miners or -----?-- Yeah, just through talking to other miners. Like, if there was a heating somewhere, you would discuss the heating and that was the end of it. It was just general talk.

Your understanding was that once the seals were up, the problem was solved?-- Yes.

Is that what I understand you to say?-- Yep.

Well, you worked on that seal in the top return. How long were you there working on that shift?-- Nearly a full eight hours. We had a bit of a break for smoko which was staggered. Once I worked with Robert Parker we got the seal in the top return up at a pretty good height and then we went around to check to see what the belt road was like, and they were having problems there, so a couple of blokes went up for smoko and a few blokes stayed down to get that belt road seal finished so we could start on the transformer road, so we could keep an even height for the top return and the transformer road, but I worked right through from 3 o'clock till I think about half past 3 we were down the pit. I think we finished the seals around about half past 1, but we had to stop and clean up all the gear and clean up the areas.

Now, apart from the smell and the temperature, did you notice any other problems, anything else of note, during the time that you were completing the seal?-- Not to my knowledge.

What about the temperature then? Did it abate as the seals were progressing?-- In the top return when we got the seals nearly completed the temperature went fairly cool, it wasn't the heat that we had, but when we went down there it was 3 o'clock in the afternoon, when we finished the seals it was about half past 1, so it would have been a fair bit of temperature reduction for that time of the morning.

Just a natural temperature reduction you mean?-- Yeah.

But apart from that did that indicate to you the source of the warmth that you had experienced earlier?-- No.

Okay. Now, after you finished your shift early that Sunday morning you went home?-- Yes.

Did you go to a union meeting at all that morning?-- Yeah, I did go to a union meeting.

Do you remember any discussion at the union meeting about 512 Panel?-- The only discussion was, if I can remember, that they had brought the sealing of the panel forward. I think that's what was said, that they brought the sealing of the panel forward because of the section was heating up and they had a benzene-like smell.

Was that something that was said publicly, that is, to the whole meeting, or was that in private conversation?-- That was said publicly.

By whom?-- I can't remember, but it was one of our union delegates that sit up the front of the table at the union meeting.

You were also rostered to work on the shift commencing late on the Sunday night; is that right, 7 August?-- Yes.

Did you attend at the mine at the start of that shift?-- Yes.

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That was about 10.15 p.m.?-- Yep.

Where did you go to when you arrived at the mine that night?-- I got dressed, put my self-rescuer and battery on and I sat outside the lamp room.

Were there other fellows there at the time?-- Yes.

Just tell me, before I move forward, at the union meeting, apart from what you referred to earlier, what was said in that public way, was there any private discussion that you were party to about the 512 Panel?-- No.

Did you mention to anybody what you had experienced during the shift the previous night when the seals were being built?-- No. I didn't get home until about 4 o'clock Sunday morning so I only had a couple of hours sleep when I went to the union meeting. I was still fairly tired.

During that day did you have any discussion with anyone about what was happening at the mine?-- No, I slept all day.

Well, now, you say that you were sitting outside the lamp room. There was some other fellows there, did you say?-- Yes.

Did you remain there until you went down -----?-- Yes.

Underground?-- Yes.

You didn't at any time go around to the assembly area just adjacent to the monitor room?-- I did have a look at the monitor, but it was just a quick look, but I didn't determine anything from there.

Was that your practice before going underground, to look at the monitor?-- Not normally.

Did you look at it this night for some particular reason then?-- A couple of blokes were looking at it and I went over and had a look, but the monitor - I just had a look at parts per million whatever of CO, oxygen and that doesn't really register to me because I am not trained in sort of the amounts that we are supposed to have.

Well, it does show the amount of CO?-- Yes.

Parts per million. You say you wouldn't have appreciated the level of that?-- No.

The methane?-- I had a look - I didn't actually look at the methane. A guy that was looking at it, he had a look and he mentioned 4.3 per cent of methane.

Did that mean anything to you?-- It meant that the section was starting to go through the explosive range, or about to, but it was just common practice for us over at No 2 to go down the pit.

Common practice to go down while the panel went through the explosive range?-- Explosive range.

You say at No 2. Was that different to the practice elsewhere?-- Yes, at No 4 when it was going through the explosive range we never went down the pit. As far as I can remember we were always given another job on the surface to do.

How many sealings would you have been involved with at No 4?-- I think about two.

Apart from that were there other sealings whilst you were working there?-- Yes.

You say on no occasion did you men go down the pit while the sealed panel went through the explosive range?-- Well, we were given other jobs so we never went down the pit.

Yeah, okay. What about at No 2, did you have any memory of any occasion when the men didn't go down?-- I think - I am not sure whether I was there or not, I think it was the 5 North section where they sealed and we didn't go down the pit.

5 North? That is - in fact, I may have said 1 North, I meant 5 North?-- Yeah.

5 North West is what I was intending to refer to. Now, did you know why the men were kept out when 5 North was sealed?-- I think they detected a heating in there and that's the reason why the blokes didn't go down the pit.

And you were aware of that -----?-- Well -----

Just let me finish my question. You were aware of that at the time that we are talking about, that's the night of 7 August just gone?-- Not really, as far as I can remember. I am not sure whether I was working at No 2 when that happened on the 5 North section.

Okay. You see, I am just trying to ascertain how much knowledge you had as at the night of 7 August this year when you were -----?-- Yeah.

Gathering to go down underground. You can't say at this stage whether you knew about the reason for staying out of 5 North when it was sealed, or can you?-- Depends on 5 North - like, when we transferred from No 4 to No 2 there were a couple of different sections of 5 North and I'm not sure whether I was working over at No 2 when they did have that problem.

Can I just suggest this to you: in 1986 there was a sealing of what is now referred to as 5 North and 1991, I think it was, a sealing of what is now referred to as 5 North West?-- Yeah, I was in 5 North West section, not 5 North.

Okay. You were there at the time of 5 North West?-- Yes.

Okay. Now, at the time that you were at the screen, I think you said, there were others there and you looked at the methane levels. Was there any comment by anyone or any discussion amongst any of you about the fact that the panel was about to go through the explosive range?-- The only comment I did hear was just the amount of methane and nothing else.

The people that were gathered around the screen, were they the miners who were going down on the shift; is that right?-- Yes.

Were there any deputies there?-- No.

Did you at any time before you went down underground that night have any conversation or discussion or contact with the undermanager who was there at the time?-- No, there was no discussion at all.

And after you had been gathering around the Unor screen then did everybody just go down to the panel?-- Yes. When the deputies come out and hopped in the Rover we all hopped in the Rover and went down to our sections to start normal work.

Was there any discussion amongst any of you as to whether it was wise to go down underground given that 512 was about to move into the explosive range?-- As far as I can remember, no.

Well, now, you yourself had experienced the smell the previous day when you were sealing the panel. You had also been told about the occurrence of a smell in the panel before that and you also had experienced this higher temperature the previous day. What was your own view as to whether there was any danger in you going underground about 10.15 or just after that on 7 August?-- Well, my own view was we went to work on the Sunday night to do our normal work practice and it didn't concern me that we were going down the pit because that was our normal work practice. We just went to work to go down the pit to cut coal and that was it.

Did you have any niggling concerns in your mind about whether there could be an explosion in 512?-- There could have been, but in my mind it was safe to go down the pit because it was just normal for us to go down the pit at No 2 when a section was sealed.

Okay. Well, your role that night down at 1 North West was as the miner driver?-- That's correct.

After you arrived down there some of you went to the work face?-- Yes.

And you cut some coal there; is that right?-- We cleaned up one car of coal. This was the first time we had been in that section and the machine was still sitting on maintenance blocks. So, we drove the miner off those maintenance blocks and we moved all the blocks out of the road, cleaned up the area and then we went to cut a car of coal and I turned the



water sprays on and there was a massive leak on the left-hand side of the miner - on the miner's side. So, I finished cleaning up the car of coal while one of my workmates went and rang the fitters to tell them about the leak, come down and fix it.

Did they come down?-- Yes, they came down within about ten minutes.

And what happened after they came down?-- Well, it was a hydraulic hose and it had a rusted coupling on it. We tried undoing it with shifters and it was just too rusted to undo it and it was in an awkward place. So, one fitter stayed on the side of the miner with a big shifter and another fitter, Rodney Buckton, and I hopped up on top of the miner and we had another big shifter and we tried undoing it from there, but it was still - wouldn't move.

What happened then?-- After a couple of minutes being on top of the miner we heard a big sound like a roof fall in the extraction section and then we got the concussion - we got - the air moved violently. The brattice hooked onto the rib at the intersection let go and then the brattice down along the face, which was a fair distance in, tore off the props and blew straight up in the air and then went down. When the brattice blew off I seen Jimmy Parsons being thrown through the air and me younger brother Darren being blown through the air.

Whereabouts were they?-- Jim was in the intersection where the brattice let go off the rib and me younger brother, he was standing along the brattice line about half-way down the roadway.

In which direction?-- He was facing towards the opposite coal rib.

Okay. He was actually in the intersection, was he?-- Jimmy Parsons was and me younger brother was half-way down.

Half-way down. Where you were was into a bit of a dead end area where the miner was?-- Yes, we were on top of the miner and it was in a dead end. Our ears popped pretty badly then.

And did that sensation last for long, that pressure on the ears?-- Well, the pressure - felt like my head was exploding and it lasted for around about five minutes.

Five minutes?-- Yeah.

Okay. Now, you said that it sounded like a big roof fall?-- Yes.

Was there some discussion about this?-- Yes, well, I made the comment while I was on top of the miner that it sounded like a big roof fall and then Jimmy Parsons - once we got the pressure he said, "I don't think so. I think an ignition has occurred."

What did you do then?-- I hopped down off the miner and all of us in a couple of seconds made the comment about our ears popping and I walked to the telephone to ring the surface to see if anything had happened up there.

Now, this telephone you went to is the one up or near the face?-- Yeah, at the face. We have got a two-way hook-up. There is one telephone at the face and one at the crib table.

That's a party line, is it?-- Yes.

When you rang did somebody answer the phone?-- Yes, the lamp room attendant Bob Davidson answered.

Was there much delay?-- It was answered fairly straight away, probably, I would say, three or four rings and the phone was answered.

Yes, go on? What conversation did you have with him?-- I asked him had anything happened on the surface and he said, "No.", and I made the comment, "Something bad has happened down here." Lennie Graham, the deputy, was at the crib table and he took over the conversation. I can't remember what he said on the phone. Then somebody asked the question, "Are we coming out in the mine Rover?", and he said, "Yes, we are going out.", and on our party lines, if you take over a phone conversation you should press the dial accept so the phone conversation will keep going, but it cuts out after a couple of seconds and Lennie Graham didn't press the dial accept and the phone went dead and that was the end of our conversation.

Right. And what did you do then?-- Once we realised what had happened everybody got together and gathered at the crib table and the two fitters, they went to hop in the Rover which they had parked down about two pillars back from the face, and another bloke and I yelled out, "Do not start that Rover.", because we had been taught about - if you had been in a methane outburst don't start the Rovers, and then we heard Lennie Graham, the deputy, yell out from the crib table to start the Rover and they - in the meantime they had come up to the crib table and when Lennie yelled out to start the Rover they decided to go back. Most of us got our crib bags from the crib table and we hopped in the Rover and when the dust - once we hopped in the Rover we got all the dust and the smoke and we decided to put our self-rescuers on.

So, the Rover hadn't moved when you were engulfed by the dust and smoke?-- Yes.

It had?-- We were just starting to leave the crib table.

Just starting to leave. Did you put your self-rescuers on then?-- Yes, most of us put our self-rescuers - we all put our self-rescuers on. I had a little bit of trouble with mine. I got the red seal broken on the rescuer, I couldn't get the lid off. Jimmy Parsons took it off me and got the lid off and I put the rescuer on.

What about Rodney Buckton, did he need a bit of help with his

rescuer too?-- Yes, John Owens that was in our Rover, he went back - hopped out of the Rover and he went back to make sure they were putting their rescuers on, the two fitters, and while Rodney was driving the Rover John Owens helped put his rescuer on.

Did you look at your watch at some stage?-- Yes. I am sure I looked at my watch at the crib table to see what the time was. The reason for that is we knew something bad had happened and in my own mind I didn't know whether we were going to live or die because of the smoke that we were getting and the concussion that we had. So, I looked at my watch just as something to do.

Yeah. You noted the time? What was the time?-- I am sure my watch said about 10 minutes to 12.

Your self-rescuer, as you understood it, had some time limit?-- Well, we have always been taught around about half an hour to an hour that it would last in unstressful conditions.

What did you regard these conditions as?-- They were stressful, but after we got out we had discussion that nobody virtually panicked down there. We all got together, put our rescuer on and we headed out. I think, you know, like, we were all concerned whether we were going to get out or not.

Yes, okay. Now, I would like you to just describe briefly the journey out?-- Once we left the crib table the dust hit us. We had our rescuers on and then with the carbon monoxide in the area our eyes were burning very badly, our eyes were watering and they were irritable. We had about six corners to get on to the man and supply road which was negotiated with a lot of difficulty because we couldn't see in front of us. We got lost at one stage. When we could see the belt line then we seen the next road. When you looked up above you could see a belt line just above you and the next road we went up we were lost there and I looked up above again and there was a pipeline which in normal circumstances, if I drive down in that section, I look for that pipeline to turn into and I looked up, I found the pipeline, I tapped my younger brother on the shoulder to point to another guy to point to the driver in the Rover where to go. Just before that happened Jimmy Parsons got out of the Rover trying to find his way out walking along the road. I don't know whether the driver of the Rover could see Jimmy or not because we were flat out seeing Jimmy and his light at the same time.

What would you have estimated as the distance of visibility at that stage?-- Well, I sat behind the driver with my cap lamp light shining on his shoulder trying to see out the side to give him an extra bit of light to see and I don't think that made any difference.

So, it was only a very short distance?-- A short distance. Once we had negotiated the six corners - I think it is about six corners to get on the man and supply road, the main travelling road, we had a fairly straight run from there, but

you still couldn't see. Like, we bounced off the ribs a couple of times and I think we hit a couple of props on the way out. When we - I could see on the way out - when we got to the 5 South intersection I could still see the mirrors because part of the light reflected in them.

That, at least, gave you some idea -----?-- Some idea where we were.

Okay. Did you - do you recall arriving back at the portal?-- When we got through the 5 North overcast there was a change of ventilation there, but it was - once you got to the outside - it was a fairly long overcast. Once you got to the other side of that overcast you still couldn't see and then once we got to about 14 cut-through visibility came a little bit better, but once we were driving fairly fast when we got to the portal there was a big prop, it must have got knocked out by the force, and we hit that prop and I remember the vehicle going up in the air. It is like hitting a big speed bump where the vehicle jumps right up in the air and comes back down again and we still couldn't see once we got to there and we hit the prop and I remember Jimmy Parsons flying up through the vehicle and coming back down again, and my brother has got a crib port made out of galvanised sheet - galvanised plating, it is just like - just like a steel mug is made out of, and Jimmy came down and hit his elbow fairly hard on that. When we seen - we seen one fellow outside, it was fairly dusty still, and one fellow, which was George McCrohon, he was outside the portal. We stopped and I told him to keep going because the next vehicle behind us picked him up.

Now, did you have any difficulty at all with your self-rescuer apart from the difficulty of putting it on?-- Yes, I got a stomach full of carbon monoxide before I put it on and once I put it on I still - the nose clip wouldn't seal me nose, so I moved the nose clip around until I couldn't feel any carbon monoxide coming inside me stomach and then I pinched the nose clip together with me fingers until I got out.

How did you feel at the time that you got out?-- I think we were all relieved once we got to the surface. I took my self-rescuer off and I tried vomiting and I couldn't. I was dry retching. The self-rescuer was just lukewarm. It didn't blister my mouth, but it was just that feeling that - what you had to breathe in made me dry retch.

You were conscious of having breathed in what you took to be carbon monoxide before you put your self-rescuer on?-- Yeah.

Did you have any longer term effects from that?-- I suffered with headaches a little while after, but that was a couple of days afterwards. After the mine explosion had settled down I went away for a week's holiday to try and settle things down, but if I hopped in an elevator I felt a fair bit of pressure in my head.

After you got back out through the portal of the mine you went up to the lamp room; is that so?-- Yes.

And you had your name taken there or some process -----?-- Yes.

Those coming out were identified; is that right?-- Yes, the lamp room attendant was in a pretty nervous state so I decided to help him write down all the names that got - all the people that got out and the people that were still down the pit, and because of the circumstances I had forgotten a couple of names and then we realised about half an hour later that there was more people on that list.

After that did you stay about for a time? Are you a member of Mines Rescue at all?-- No.

Just let me ask you, when you say that you had a bit of difficulty with fixing your self-rescuer on, had you had training on how to fix the self-rescuer?-- I think we did have training. We had refresher training, but I can't remember whether I was there or not at the safety meetings. I think I was there sometimes, but I never actually done a practical test on the training rescuer.

You've never done one of those?-- No.

When you came on shift on that Sunday night, you say that was about quarter past 10, were you aware of any alarms sounding at that time?-- No.

You would recognise the alarm if there was one sounding?-- Being at the mine there is a lot of alarms set off, a lot of alarms for different equipment, and I've heard them - their

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alarms go off, but I've never heard a monitor alarm go off.

There is just one matter you deal with in your statement, on the Saturday afternoon when you were on shift in the mine was there an occasion when you saw George McCrohon and George Mason together?-- Yes.

Whereabouts was that?-- In the top return.

512?-- 512.

And what were they doing at the time?-- George McCrohon had taken a gas sample on a Drager tube and they were comparing the amount - I think it was the carbon monoxide tube, and they were comparing the amount that was on that tube. I didn't see the tube very close. I seen it from a distance away and it appeared there was a minute trace of colouring on that tube.

How far away were you?-- Probably a couple of feet away. I was busy loading Tecrete into the Tecrete mixing machine.

Have you had much experience yourself in reading the Dragers?-- No.

Thank you, Your Worship.

#### CROSS-EXAMINATION:

MR MacSPORRAN: Mr Young, you were aware that Saturday that the panel was being sealed because of the benzene smell; is that so?-- Yes.

When you went down underground on that shift and went into the 512 top return to start sealing it, you noticed a similar smell to the one you had heard about; is that so?-- Well, I've never actually experienced that smell before until that afternoon, but I didn't hear it - you know, it was just common talk about the smell.

But when you went underground a smell you detected you could describe as a benzene-type smell?-- Well, that's all I could describe it as because that's the way it was put across to us, that it was a benzene-type smell.

So what you smelled on the Saturday afternoon in 512 was consistent with what you had been told was the reason why it was being sealed?-- Yes.

In fact it was so obvious, the smell, that the people with you working at the seal were all talking about it?-- Yes.

It was obvious to you that they could smell it as well?-- Yes.

Do you know who they were? Do you remember any names of

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people who were working with you at that time?-- The only bloke I can remember was Robert Parker who was the Tecrete guy. There was a whole range of us and, you know, we were just called in to do the job and I just can't remember some of those names.

The comment you made earlier was that you had detected the smell, but you didn't or couldn't detect a haze because you were not trained on that?-- That's correct.

What did you mean by that?-- Well, a few people that were around the area, and when we started shift, said there was a benzene smell and a haze and I'm not familiar with detecting hazes, so when we went down there I had a bit of a look around and the only thing that - you could smell the benzene smell and you could also detect the heat, the atmosphere. It was fairly hot.

What was the atmosphere like, visibility wise? Could you clearly see about you?-- Yes.

Was it dusty at all?-- No.

Was there any talk amongst the other people with you that there was a haze, that they noticed at the time you were underground?-- Maybe the deputies concerned said there could have been a haze, but I'm not sure on that.

This is when you are underground. Do you think there may have been some talk from others, deputies, you think, about there being a haze?-- I can't remember.

In any event, those signs, that is a haze and a smell, signal to you that there was some sort of heating inside 512?-- From talk, yes.

Was that also consistent with your general knowledge about the signs of a heating, that is a smell, haze, things like that?-- Well, I've never really been involved in a heating as such as that afternoon. All I know is just general talk between blokes.

The general talk between the blokes was of a heating inside 512?-- Yes.

When it came to the Sunday night you had no real concerns about going underground because firstly you thought once the panel was sealed there'd be no danger; is that so?-- Yes.

On what basis did you believe that there would be no danger once the panel was actually sealed?-- Once we seal a section we have virtually got nothing to do with the after work of it. The main thing that we were - if I wasn't involved with sealing we could be sent down to set up ventilation around the seals, but other than that I've never been involved in seals after sealing a section off. So, you know, it's the deputies and the management that do the most work after a section has been sealed and we are not involved in it any more. We are sent somewhere else. If it's during a normal shift or on

overtime, if we finish the sealing we either go home or are sent to another job.

Do you mean that if there was a heating in a panel once it was sealed it would be all right unless you were told otherwise by someone superior to you?-- Yes, that's correct.

But had you ever been told that if you seal a panel, if there is a heating inside it will be all right?-- No.

So when you went down on the Sunday night you believed that if there had been a heating there or not, if there was any danger you would have been told about it before going underground?-- We should have been told.

And you weren't?-- No.

And no deputy or undermanager or anyone above that level approached you or any other miner in your presence to tell you of any danger?-- No.

But there was talk that night, you say, about the mixture - or gas mixture inside the panel going through the explosive range?-- The only comment I heard was that the methane was 4.3 per cent.

But you understood, as I perceived your evidence, that that meant it would go through the explosive range some time on that shift?-- Yes.

Did you understand that if a heating had been ongoing inside the panel that that would be a possible source of ignition?-- I didn't understand that, no.

You had never been told that by any training or instruction?-- No.

And you had been in the industry since, what, 1979?-- '79, yes.

That was always at Moura?-- Yes.

Since 1986 after the No 4 explosion you had been at No 2?-- Yes.

Can I take you back to when you went down on the Saturday afternoon? You went to the 512 top return; is that so?-- Yes.

You were working there with Robert Parker?-- Yes.

And others as you've told us?-- And others.

Had there been equipment delivered into that section for sealing prior to your arrival?-- There was equipment in the top return and there was also equipment in the belt road. Once they finished the belt road they had to transfer the equipment from the belt road into the transformer road.



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Do you know how that equipment had been brought in?-- The Tecrete itself was on MPV trays, and I think the Tecrete mixing machine was delivered on MPV tray too.

Was all of that done before you arrived on shift?-- Yes.

Do you know which way it would have come into the section?-- I think off a road coming off the 5 South. There is a couple of roadways in there and that comes into your 5 South return and delivered into 512.

Do you know anything of a regulator being knocked down or adjusted to enable machinery to be brought in?-- No.

Do you know of anything in relation to Tecrete pump hoses coming to the site through a doorway?-- Yes.

Did you see that, did you?-- Yes.

Whereabouts did you see that doorway?-- That was on the right-hand side of the top return where we had a doorway.

When you say the right-hand side, do you mean between the top return and the top supply road?-- Between the top return and the transformer road side.

The transformer road is the No 2 heading?-- No 2 heading.

You saw hoses coming through at that doorway, did you?-- Yes.

Did you mean by that that the door was ajar?-- It was only ajar by the width of the hoses which is inch hose and that was - only ajar by that much.

The door itself was mostly closed?-- Closed, yes.

That was the situation when you first arrived underground on that shift?-- Yes.

Was that the situation when you left or did you clean up that area?-- No, we cleaned up that area. Robert Parker was a pretty specific person and when he finished the job he liked cleaning up the whole area, so that's what we done. We cleaned up the machinery, the Tecrete - empty Tecrete bags and we rolled up all the hoses and the air leg that we used to put bolts into your roof and your rib. We cleaned all that up and packed it away on a supply tray.

That was shortly after 1.30 on the Sunday morning, wasn't it?-- Yes.

So from that point was the door closed, that door you've been talking about, after you packed up the hoses?-- From memory we did close it, but other blokes came in and they were setting up the ventilation around the seals, so it could have been open to ventilate those seals once we completed them.

What was your understanding about whether that door should be open or remain closed?-- I think as far as I'm concerned that

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was part of the ventilation, ventilating the seals, so if it was left open it should have been that way. I'm not sure on that.

Just to take you back to the Sunday night, you said that you basically had no concerns in going underground. Did you know anything about a CO make graph that used to be posted on the noticeboard in the deputies' cabin every Friday?-- No.

Did you know what CO make is?-- No.

I think you said at some stage that your practice was to check the Unor screen for parts per million of CO and other gases?-- Yes.

Why did you do that?-- It was just something that everybody went and had a look at the screen and they had a look and then walked away.

You weren't familiar with any calculation that could be done from those figures to enable you to arrive at a CO make figure?-- No, we weren't trained.

You had never heard about litres per minute of CO?-- No, never heard of it.

Did you know anything about a system that was put in place about two weeks before the explosion to monitoring on a shift by shift basis the CO readings underground?-- No.

You had never heard of that?-- No. 512 wasn't my normal section so we weren't in there. We didn't hear what was going on.

When you came out after the explosion you've told us you had some difficulty making your way out?-- Yes.

On the way out you were at some stage in the 5 South section?-- No, we went past the 5 South intersection.

You went past the 5 South intersection and you noticed one of the overcasts was intact?-- Yes.

That was at about 24 cross-cut?-- Yes.

That overcast would ordinarily have been feeding ventilation in 5 South Panel?-- Yes, the main fan shaft is not far from there.

You told us when you went down on the Saturday afternoon you smelled this unusual smell inside 512; is that so?-- Yes.

The other men were talking about it, you've told us that?-- Yes.

You were there from about 3.30 Saturday afternoon until 1.30 Sunday morning completing those seals?-- Yes.

For how long of that period was that smell present that you

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now recall?-- Only once we finished the top return seal. When we had the top return and the transformer road one sealed completely, that's the last smell.

And, of course, the top return in the transformer or top supply road seals were done at the same time?-- Same time.

That was after the belt road was sealed?-- Yes.

Those two seals were completed about 1.30 on Sunday morning?-- Yes.

So did you detect the smell from when you first went underground at about 3.30 on Saturday right through until about 1.30 Sunday morning?-- Once your seals start getting built up there is a lot more pressure there and a lot more ventilation and you could still smell that benzene smell until the top seal was nearly completed. It's just the last final bit of patching that we had to do when you couldn't smell it any more.

At some stage between 3.30 on Saturday afternoon and 1.30 Sunday morning you've told us that Mr Mason was underground with George McCrohon taking a Drager reading?-- Yeah. On the Saturday afternoon George was underground for a fair bit of time. George Mason helped us pick up some of the empty Tecrete bags and stack on the MPV tray.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: Mr Young, when you received the phone call on the Saturday afternoon from Mr Selff, you said that the sealing was being done because there was a benzeney smell coming out of the section?-- That's correct.

Did he also say that the sealing was commencing because it was heating up?-- I can't remember.

When you got to work, it was emphasised to you that the men had to stay sealing until it was finished?-- Yes, that's right.

At that meeting I understand there was a mention by Mr Squires of a tarry smell or a benzeney-type smell?-- Yes.

A haze or a heat?-- I think he just mentioned a benzene smell and a haze.

All right. Was Mr Mason there then?-- I can't remember whether he was there straight away or not.

All right. When you got underground for the first time that day, how would you describe the smell, as strong or a really strong smell?-- It was fairly strong smell.

Would you describe it as a burning smell?-- Well, I've never smelt that sort of atmosphere before, so I can't explain what sort of smell it was. All's I know, it was fairly strong.

All right. But when I suggest the word "burning", does that help you or not?-- It possibly could. I've played football a bit and we have had end of season celebrations and we have had a bit of coal burning in a fire, and it could have smelt something like that, but I'm not sure.

All right. When you first got underground and first experienced the smell for yourself, how far was the seal from completion?-- The top return, it was started probably a couple of weeks before in preparation, it was just in the prep seal stage, and there was a fair bit of work to be done to complete it.

All right. You have told us about Mr Mason being present during the course of your shift on a few times, or was it many times?-- He was there a fair few times going between seals checking out how the seals were going, and then he came back and helped us stack Tecrete bags in the meantime.

Where was he when he was stacking bags?-- Well, he was beside the MPV tray helping load bags and empty pallets onto the tray.

He could not but observe the smell. He must have smelt it is what I am putting to you?-- Yes.

Just in relation to the nature of the smell again, if I may. Were you at No 4 or did you go underground at No 4 after the explosion?-- Yes.

Did you observe something about your clothes after you came out in terms of smell?-- Yes, it smelt like a grass fire. If you got the smell on your clothes it smelt like that and it had a very bad smell on them.

Was this smell that you had experienced in No 2 Mine on 6 August compatible with that? Was it the same type of smell?-- Yes, same smell.

Just one or two other matters. At any time after you arrived at work on the evening of 7 August to the time you went underground did you hear any hooter or siren?-- No.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Mr Young, when Mr Selff rang up, that wasn't an unusual thing, he was one of the coordinators to get in the overtime people?-- Yes, that's correct.

And the conversation with him must have been pretty short such as, you know, "Can you work this afternoon?", "yes" or "no"?-- Well, the conversation I had - we were allowed four overtime shifts a month according to the union rules, and I had my four in, and I said to him I cannot work because of the four and he said not to worry about that, it has been approved by the union to come in because they needed men to come in and seal the section.

Okay. Was it after you discussed that that he mentioned the purpose of you going into work or before that?-- The only thing that he mentioned was that they wanted to do the seals in 512.

That's all he said?-- As far as I can remember, yes.

So, "Can you come into work?", discussion about the overtime and at some point, "I want you to come in to do the seals in 512."?-- Yes.

So far as you can remember, that's the extent of the conversation?-- Yes, I think so.

So, mention of benzene smells really came when you were at the mine itself?-- Yes.

Not from Mr Selff?-- As far as I can remember, no.

Okay. You said in evidence that you had been told previously, or you had formed the view previously, that they were going to

seal on the Friday night?-- When we left on the dog-watch shift on the Friday morning, that's what we were told. That was the discussion amongst the blokes.

I am sorry, I will just separate what was happening. You say, "That's what we were told." Who told you that?-- I don't know whether it came from management, but it was just a common discussion.

Common discussion amongst the crew on Friday dog-watch?-- Yes.

Was that the last production crew in 512?-- I don't know on that, 'cause we finished 7 o'clock Friday morning and we're not required at the pit unless we work overtime, so I could not tell you that.

This is Friday, 5 August, the Friday before the explosion?-- Yes.

Now, the discussion amongst the guys then was that the panel would be sealed and that you would just assume it would be on the next shift?-- Yes.

But there would have to be a fair bit of movement of machinery before it could be sealed, wouldn't there?-- Yes. Well, that would have given two shifts to move the machinery out, and the machinery wasn't far from the seal sites.

I think most of the machinery was down at, what, 4 South?-- No. What do you mean by that? Like, machinery in the section or -----

No, well, sorry, you are quite right. I am confusing you now. There is two sets of machinery. First you have got to get out the miner and the cars, the tranny, gate end box, the whole thing?-- Yes.

And then having done that, or at the same time you have got to bring over the Tecrete stuff?-- Yes.

The Tecrete stuff was what was over at 4 South?-- Yes.

So, it's unlikely that it would have been sealed on the next shift, or even the one after that would be taken up with moving machinery?-- There would have been two shifts in between when we finished work to the Friday night shift which is your Saturday shift. Like, there would have been day/afternoon shift.

Oh, I see, I understand. So, your anticipation was that there would be some time, a couple of shifts at least, to get machinery moved around, get things into place and then sealing?-- Yes.

No suggestion at that point that you were aware of that there was any particular hurry to seal or anything else?-- Not as far as I was concerned.

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You had been working in 512 on only very rare occasions on production, hadn't you?-- Yes.

I think you mentioned four or five and of that only a couple on extraction?-- Yes.

Do I assume correctly that in none of that time you had actually been in the return of 512?-- No.

So, the entirety of your experience in 512 was spent in intake airways?-- Yes.

Now, when you got there on this Saturday in order to participate in the shift that sealed, it was Squires who got the men together?-- Yes.

That was a deliberate formal sort of thing?-- Yeah, well, he was the undermanager on shift. He was the one giving instructions.

And he called the whole shift together?-- Yes.

And Doug Stampa and Bob Parker were there?-- Yes.

And they were included?-- Yep.

And he indicated that the panel was to be sealed, and he mentioned a number of features about what was leading to that?-- Yes.

One was a slight haze; is that right?-- Yes.

And then he mentioned there had been a smell?-- Yes.

But he didn't say and he didn't give a description of the smell?-- He said a benzene smell.

Are you sure he said "benzene"?-- Benzene, yes.

He might have said "tar"?-- No, he said "benzene".

All right. And that the sealing was - he gave some CO readings. You may not be able to remember precisely which -----?-- No, I can't remember that.

You may not be able to remember the precise figures, but he did give some CO readings?-- I can't remember.

Okay. It's possible that he did?-- It's possible.

And he mentioned that the sealing was a precautionary measure?-- Yes.

And George Mason was there for all or part of that address?-- I'm not sure whether George was present or not.

He may have been but you may not have noticed?-- He may, yes.

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When you went down, was it only the top return seal that you worked on with Bob Parker?-- We checked - once we got part of our top return up, we went around and we checked the belt road to see how they were going, and they were having trouble with their machine, but at that time that was about smoko time and I went to the surface and had smoko while some blokes stayed back to finish that belt road, but I also helped on the transformer road.

All right. So, you in fact visited all three seal sites at one point or another?-- Yes.

The belt road seal was being done from the inside, wasn't it?-- Yes.

And that's because of the caunch outside -----?-- Outside.

----- the prep seal site. So, in order to get there, you had obviously gone in through the tranny road and across 1 cross-cut?-- Yes.

And then slightly outbye to get to the prep seal site?-- Yes.

Now, the smell wasn't there, was it?-- No.

Likewise, in that area near the tranny road, the smell wasn't there?-- No.

Now, other people visited or passed from time to time the top return, in particular George Mason and George McCrohon?-- Yes.

So, consistently with what you said to Mr Martin, whatever you were smelling was most likely to have been smelt by George Mason and George McCrohon?-- Yes.

You know George McCrohon to be a very experienced deputy, don't you?-- Yes.

And you know Mr Mason to be a very experienced miner as well?-- Yes.

And you know that Mr Mason was involved in the No 4, or was around at the time when the No 4 Mine exploded?-- Yes.

And had experience with what that smelt like?-- Yes.

Now, you mentioned to, I think, Mr Clair that you were pretty hot working in the overalls and sweating like anything, but you then said in relation to whether the temperature was the same as other sealings that it was in fact similar to some cases and some not?-- Yes, well, it depends on the amount of ventilation that's in that section.

Okay. So, depending on what sealing you are talking about, the temperature was like that or maybe a bit more than other sealings?-- It may be a bit more than other sealings.



Now, when you smelt the smell that you have told us about, did you discuss that with Parker?-- There was just a bit of general talk for about five minutes and then we got on to do our job which we were sent down to do.

Did you discuss it with Klease, Cole Klease?-- I can't remember.

He was a deputy down there on the sealing process, wasn't he?-- Yeah.

And he was around the top return?-- Yes.

Did you discuss it with George McCrohon?-- I'm not sure. I could have done in passing talked to him, but I can't remember on it.

Did you discuss it with George Mason?-- No.

You have a memory of not doing that?-- Well, I was busy mixing Tecretre. I was the one mixing Tecretre to pump it into the Tecretre bricks that we had, and because the job was fairly important to complete you didn't have much time to stop, you had to just keep mixing and putting the Tecretre and the Tecretre bricks up.

Did you discuss it with any other miner into whose presence you came that entire shift?-- There could have been general talk when we had so much of the seal built up, but it was just so quick I can't remember on it.

Okay. Now, I just want you to stay with me for the moment. You mentioned in your evidence that there was general talk about this smell down there. Do I understand you now to be suggesting that there may not have been that general talk?-- I know there was general talk but I can't remember between who or, you know, who was present.

Or precisely what was being discussed?-- Discussed. I remember talking about the benzene smell and the heat of that return.

To who?-- Well, I can't remember the blokes. When you went down there to do a job and to get it sealed as quick as possible, you were busy doing your own work, and there was just people coming in and out.

If I suggest names, would that be likely to trigger your memory?-- You can try.

Okay. Let me just suggest a couple and we will see if they do ring a bell. John Dullahide?-- I think he was on the belt road stopping, so I didn't work with him.

No, but you are talking about discussing the smell with various men, that's the topic. John Dullahide?-- Possibly.

Lenny Graham?-- I think possibly too.

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Now, he is a deputy -----?-- He is a deputy.

----- who helped out in the sealing, and a very experienced deputy?-- Yes.

Mark Nelson?-- I think I did talk to him.

Greg Young?-- That's me.

That's you. What about your brother?-- Well, he wasn't down at that time. He was on the surface getting extra gear that we needed in a Rover.

When he came down or on the surface did you talk to him about it?-- No.

Okay. Did you think your brother would not be interested in that, or is there some particular reason why you didn't raise this with him?-- Well, he was working away in the belt road area, so I didn't get a chance to talk to him.

Okay. Mr Dickson?-- Possibly. I'm not sure on it.

Mr Hinton?-- I never seen Bruce. He was in a different area.

George McCrohon, you may have done, you are not sure?-- Yes, not sure.

Neil Tuffs?-- I never seen Neil, as far as I can remember. Like I said, I was busy mixing Tecrete all the time.

I understand that, I understand that you were busy, but I am just interested to know if any of these names are ones you recognise as being persons with whom you discussed the smell. Mr Ein?-- Possibly with him, yes.

Mr Parsons?-- No.

Mick Ryan?-- Possible.

Mr Robson?-- Well, that's another possibility too.

George Ziebell?-- Well, I'm not sure on that.

Very difficult to tell who you discussed things with, and may I suggest very difficult to tell in fact what it was you were talking about that night given the activity you were engaged in?-- Yes.

Is that reasonable to say?-- That's reasonable.

Now, you said that - you were asked a question what did the smell that you referred to - I am sorry, no, I will start again. Now, as I understand you correctly, you have, in fact, never smelt benzene?-- No.

So, you only give that description to this smell because someone else said that?-- Somebody else said it, yes.

You don't - okay. Your experience doesn't tell you that - you have no experience with benzene so you don't tell us that it is a benzene smell, do you?-- No.

You suggested, I think, that it might have some correlation to the aftersmell of No 4; is that what you were suggesting?-- It is possible.

You are not sure, obviously?-- No.

I take it that it is very difficult to describe this smell and very difficult to suggest a similar type of smell?-- Well, No 4 had a very distinct smell.

Yes, that's right?-- But the smell that we had that afternoon, it was there, but it wasn't as distinct as No 4.

It is not really like No 4, which was a post-explosion smell, wasn't it?-- No.

And you wouldn't really embrace describing it as a burning smell either, would you?-- No.

Should we really understand it correctly to mean that it was an unusual - just an unusual smell which you can't really pin down?-- It is nothing I have smelt in an underground before except, like, the smell from No 4 was distinct and it was - wasn't like that.

It was certainly coming out in a return airway in which you had not been before in this mine?-- I had been there doing prep seals. I helped prep that area.

That's some time before?-- That was some time before, yes.

Could it have been the chemicals from roof bolts, by any chance, do you think?-- Well, I know the smell of chemicals and it is totally different.

You mean chemicals from roof bolts or just chemicals?-- Yes, chemicals from roof bolts, they have got a very distinct smell to it.

You have smelt them when the roof has fallen and the bolts have been ripped out?-- Yes.

You don't think it was that?-- No.

Now, whatever it was that this smell was that you were smelling, I understand you correctly to say that any of those who were in your vicinity near the top return could not have

helped but smell this smell?-- Well, I think it is possible everybody did smell it. Well, I talked to Robert Parker when we first went in there and that was - we just made a comment, you could smell that smell and also just the temperature in the section was hot. I definitely know I talked to him, to Robert Parker.

Well, you are sure of that one, but do we understand you correctly to say you are not really sure of the others?-- That's right.

Now, you said or you were asked a question what did whatever the smell was and the temperature indicate to you and you said that you had heard that there had been a source of heating in 512. "Just a small heating" was the words you used?-- Yes.

Who had you heard that from?-- Well, just from blokes when we come on shift and general discussion that afternoon.

So, it is only as a result of discussions that day?-- Discussion, yes.

Not prior to that?-- No.

Prior to that had you heard anything about smells, hazes, heat or heatings in 512?-- Possibly a couple of weeks before there was talk of a possible heating, but that was just common talk.

Common talk around the mine?-- Yeah, about the mine.

We are talking about, what, late July?-- It is possible.

That was just general talk, you can't remember with who?-- No.

Or in what terms?-- Well, it was just general talk. When you have got a crew of blokes you are just talking amongst each other and you know, like, I worked with different crews because our section was down.

So, in terms of your answer today as to what those things indicated to you, when you mentioned you had heard about a source of heating you are really talking about some comments made that day?-- Yes.

The sealing day, but you can't recall who made them?-- No.

Now, your view at the time was that once the seals were up then matters took a different course?-- Yeah, well, natural - the build-up of methane gas and depletion of oxygen took - is a natural process and that's the way I took it, after you sealed a section that was the process it went through.

You certainly knew at the time that after sealing the gas atmosphere would increase in terms of methane?-- Yes.

And you were aware that methane had a range through which it was explosive?-- Yes, 5 to 14 per cent.

And you knew that most panels, if not all panels, had that phenomenon about them after sealing?-- Yes.

So that when you say that once the seals are up you had no further concerns, you weren't concerned about being down the mine while a panel went through the explosive range? That's true, isn't it?-- Through common practice at No 4 where we never went down the pit that concern was there, but when we transferred to No 2 and the practice changed you weren't concerned.

Just tell me about No 4? I think I am right in saying with No 4 -----

MR MARTIN: I object. I objected yesterday. What we need to know from this witness is what this witness knows, not what Mr Morrison thinks.

MR MORRISON: I am right in saying, aren't I, that at No 4 most sealings were done on a Friday?-- Possibly.

And that at No 4 weekends were non-production?-- Yes.

And that as a consequence production crews did not go down over the weekend after a sealing?-- It is also during - sometimes the sealing is not done - finished and production during the week - the sealings - some seals were finished during the week and we were sent up to - went to the overland belt and chipped weeds and cleared coal out from underneath the beltline.

Let's just stay with one thought, if I may. On weekends which were non-production after a sealing, nonetheless deputies went down to take samples, didn't they?-- Yes.

So, it is not the case that at No 4 all men were out of the pit after sealing, is it? It is just not so?-- I can't remember on that. I have never done deputies duties so that is not my department.

But you just agreed with me, and I think it is correct - I am sorry, it is correct to say that deputies did go down to take samples after sealings in No 4?-- I can't remember that.

As a general rule sealings were done on a Friday with the result that the production crew was out of the pit two days simply because weekends were non-production?-- I think so.

Now, at No 2 in your experience men did stay down the pit after a sealing?-- Yes.

Now, after you had left that day, that is to say the morning you finished the seals, albeit only a few hours later, you went to the union meeting?-- Yes.

There was a fair representation of people there?-- I think so.

You weren't the only person at the meeting who had been

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working on the seals?-- No.

For instance, George Ziebell was there?-- Yes.

And he worked on the seals. It was Mr Ziebell who made an announcement about the fact that 512 had been sealed?-- I am not sure on that. I just know it was one union executive.

The announcement was not only it had been sealed, but also the reasons why it had been?-- I think so.

It is true, isn't it, that nothing was said at that meeting by anybody about concerns about the men going down the pit?-- As far as I know, no.

Certainly you didn't speak up?-- No.

Either publicly or to any deputy, check inspector or union official at the meeting?-- It was a practice we were used to at No 2. At No 4 when we sealed a section a graph went up in the crib room, a full blown-up graph of a Coward triangle, as it is called. Everybody knew what the gas was doing. At No 2 we never ever seen one of those graphs unless it was plotted on a computer and I know nothing of computers.

So, just take me back a step because you are going fast. Where was the Coward triangle you saw?-- It was in the crib room of No 4.

You had seen such a representation at No 4, but no such representation as No 2?-- It is called a different graph at No 4 to No 2.

You knew how to read the Coward triangle graph?-- The only reading I knew was methane.

Now, it is the case, isn't it, that between the union meeting and going back to work on the Sunday neither you nor anyone you know was involved in discussions about whether the men should go down or not?-- I don't think so.

No. When you got to the mine you were sitting outside the lamp room and there were other men there. Do you recall who you were sitting with?-- Peter Ein, probably Michael Ryan, Peter Hutchinson, John Owens, Jimmy Parsons. I think that's about all.

Now, you said that in your statement, I think - just let me check that - "We all looked at the mine monitor screen." Now, that's a truthful statement, isn't it, most people did?-- Most people looked at that, as far as I know.

That's a screen that was facing out through the window directly into the assembly area?-- I think so, yes.

And you have seen it before?-- Yes.

Normally it shows various lines of data for various monitor points?-- Yes.

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The one you were interested in was 512 seals point?-- Well, I just looked generally at the monitor.

That was your usual practice, wasn't it?-- Yes.

There were other people you noticed doing the same thing as you?-- Yes.

Was the screen altered at any time while men were looking at it?-- I can't tell you that.

I thought Mr - I am sorry, it is true to say, isn't it, that Mr Squires brought up the Ellicott diagram?-- No.

You didn't see that?-- Did not see it.

Are you familiar with that diagram?-- No.

Or how to read it?-- No.

You saw Mr Parsons looking at a screen, I think - I am sorry, didn't you?-- I think so.

And Mr Owens?-- Yes.

And some others?-- Yes.

Now, someone made the comment that the methane was about 4.3 per cent. Who was that?-- I think it was John Owens.

Now, you knew what that meant yourself, didn't you?-- It was nearly going through the explosive range.

And someone said that too?-- I think so.

You said in your statement, "Someone made the comment that it was starting to go through its explosive range."?-- I think that could have been John Owens.

Right. Now, that comment was made by him certainly in your presence?-- Yes.

And the presence of some others?-- Jimmy Parsons.

Anyone else?-- I don't think so.

Did you hear that comment repeated to anyone else on the shift?-- No.

Did you raise that comment with anyone else on the shift?-- No.

Did you go to see Len Graham, who was your deputy, and say, "Listen, Len, this is what some fellow has just said. What's it all mean?"?-- No.

You knew Len Graham had been on the seals?-- Yes.

And you knew that Len Graham had had a difference of view with Col Klease about physical signs during the sealing?-- I don't know.

You didn't know that?-- No.

Did you basically trust Len Graham, if -----?-- Yes.

He would look after you?-- He has been my crew deputy so I trusted him.

Yeah, you trusted him to speak up and tell you things? If he was going down you were happy to go down?-- Yes.

All right. Now, shortly after that everybody went down in the PJB?-- Yes.

Now, on that night while you were waiting to go down did you mention to anybody that night that you had - about the smell you had experience during sealing?-- No.

But it is true to say, isn't it, that the fact that 512 had been sealed and what had happened was a topic of discussion?-- Well, being a Sunday night I was fairly tired from working Saturday and Sunday through. So, I didn't talk much on that night.

Others were talking about it though, weren't they?-- Only when we left the surface and then we went down in the Rover. When you go down in the Rover you don't talk.

When you left the surface men were talking about the fact that 512 had been sealed and what was happening with it?-- No.

What were they saying about it?-- We don't really talk when we go down in the Rover.

I am sorry, you said there was some discussion and then when you got down the road it ceased. I am interested to know what was being discussed?-- Just the amount of methane on the screen, on the monitor screen.

So, more than one person was discussing that topic?-- Well, it was mainly Jim Parsons and John Owens.

Okay. Now, can I just ask you or take you back to the night of the sealing. When you went down it was with the shift that was actually starting the work on the seals?-- Yes.

So, you would have got down there at, what, roughly quarter past, half past 3?-- Yeah, about quarter past 3.

Now, had the monitor points for 512 been moved at that point?-- We were instructed by the management to move one point outside the seal and one point to stay inside the seal.

Now, let's just - I want to take it step by step, if you don't mind. When you say "instructed by the management", who did you mean?-- Michael Squires.



One point was to be moved outbye?-- Yes.

That was situated where before it was moved?-- It was situated in, I think it was, the top return.

And it was moved outbye the top return?-- I think so.

And the other point was moved inbye?-- Inbye, yeah.

And that went where when it was moved?-- I think it was the one in the belt road, I am not sure, the belt road or transformer road.

Ended up in the belt road?-- Yes.

Now, were they moved at the start of your shift?-- Yes, we moved them.

You were involved in that process yourself?-- No. I was involved in moving the top one out, which we were instructed to do, but I never moved the other one.

But you knew it had been moved and about the same time as you moved yours?-- Yes.

That's the start of your shift?-- Start of our shift.

Okay. Now, in order to get materials in they were brought in through a regulator that is just outbye the top return?-- I know nothing of that. All the gear was brought in.

Well, I know you weren't there. If you just accept that for the moment, that's - if you turn around and look at the map, that's the regulator that's situated in the No 1 road of 510 between the 5 South return and the 512 top return?-- That one there?

That's it. Now, did you see that regulator on the night you were there?-- No.

You didn't go down there at all?-- No.

Did you have any role in fixing any regulators or dismantling any regulators?-- No.

You were purely seals?-- Yep.

Now, the Tecrete seal you worked on was a top return seal mostly?-- Mostly the top return.

And you had been working with Mr Parker for a week or so doing these sort of seals?-- Yes.

I think you had been working down in 4 South on some?-- Yes.

And they are constructed by cutting a channel in the floor in the ribs?-- Yes.

Inserting roof bolts in the floor, ribs and roof?-- Roof, yes.

And then putting mesh baskets around those roof bolts having tied connected roof bolts with cable ties?-- Cable ties, that's correct.

And then grout is pumped into the mesh and filled up and into the cuts, into the floor and ribs and so forth?-- That's correct.

Now, the sealing process went fairly smoothly this time?-- The only problem we had was the belt road where the machine wasn't pumping the Tecrete properly. That's why it was behind time.

It took a bit of extra time?-- Yes.

That was a fault of the machine itself?-- Well, I'm not sure on that. When we done our part of the seal in the top return we went around to check the belt road and it was a slow process, and somebody did make a comment about that.

You went back to check the belt road seal at one point you just mentioned, that's obviously before it was finished?-- Yes.

You must have noted or seen it at about the time it was finished, because it had to be first?-- First, yes.

Am I correct in saying that was about 6.30, thereabouts?-- Around about that. We went up for smoko and we left blokes behind to finish that seal, and by the time we got back it was finished.

Okay, so around 6.30 the belt road seal is done and at that point in time the tranny road and top return seals have been built up to some degree?-- The tranny road wasn't because we had to finish the belt road and then bring all the machinery back out.

But the top return had been built up to some degree?-- It had been built up to the height that - around about the same height as the transformer road.

For that process to continue, that is to say the belt road seal and others, those hoses were through the door that you were asked about before?-- Yes.

And remained so until the end of the sealing process?-- Until the end of the sealing, yes.

If we can take roughly 8.30 odd that night, then certainly that doorway was open at that time because sealing was still going on?-- Yes.

I think that's all I need.

I have nothing further, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: Mr Young, have you ever seen the Ellicott graph?-- No.

You've never seen it either on paper or on a screen that you can recall?-- No.

You wouldn't recognise it if you saw it?-- No.

That night, and I mean the Sunday night just before you started work, you had a look at the Unor screen?-- Yes.

You had a quick look at the methane, was it?-- Yes.

I take it that you never stood there staring at the screen for any great length?-- No, it was just a quick glance and that was it.

Am I correct in saying that it's merely the methane you looked for?-- Yes.

You just saw the methane amongst a number of figures in relation to 512?-- That's correct.

Other people were looking at the screen?-- Yes.

Were you actually in front of the screen for very long or was it only a matter of seconds?-- It was just a quick glance and that was it.

If I can take you to when you were down at the mine and when you experienced what you first thought was a roof fall, was it fairly quickly after that that you got on to the phone?-- I was on top of the continuous miner. Once I hopped down it was within a matter of 30 seconds to a minute.

Because once Jimmy Parsons let you know the seriousness of it you then realised the need, I take it, to do something urgently with the phone?-- Yes, it was just, I suppose, a thought to find out if anything did happen on the surface.

You were only on the phone very briefly before it cut out for

the reasons that you explained before?-- Yes.

How long do you think it was from there until when you actually got out of the mine?-- It felt like a long time, but I don't think it was a very long time. When I looked at my watch it said 10 minutes to 12, but general comment between the blokes that were down the pit, they seemed to think it was about 15 minutes, but my watch said 10 minutes to 12 and I didn't look at the watch when we got to the surface, and some blokes said it was midnight, some blokes said it was after. So - I was too busy dry retching with my rescuer -----

I know you certainly had a lot on your mind?-- Yeah.

Would you agree that it would have taken 20 minutes or so to get out in those conditions?-- It's possible.

Maybe a bit less?-- Lenny Graham, the driver, he done a good job, so it could have been 15 minutes, it could have been 20 minutes, but I'm not sure. You know, everything happened in that period of time.

I'm interested in when you caught up with George McCrohon. Where were you in relation to the mine when you caught up with him?-- He was out at the tunnel mouth when we hit the prop coming out.

If I could just take you back to the Saturday when you started on the afternoon shift, you've told us that in his briefing Michael said something about - that's Michael Squires, said something about a benzene smell?-- That's correct.

How many men were there gathered for that briefing?-- Everybody that was called in on that Saturday afternoon for overtime.

Were there experienced miners in the group that were there addressed by Michael?-- There were some.

Did any of those experienced miners say anything at all when he mentioned benzene?-- No.

Could it have been the case that what Michael actually said in relation to smells was goaf smell?-- No, he definitely said benzene.

You are quite certain about that?-- Yes.

You don't think that that's something you may have picked up from discussions later on?-- No, it was definitely benzene smell.

Thank you. I have nothing further, Your Worship.

MR MORRISON: Your Worship, could I just ask one question? I forgot to ask it before and it will only take a second if I may.

WARDEN: By leave.

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FURTHER CROSS-EXAMINATION:

MR MORRISON: Mr Young, I forgot to ask you right at the end when I was talking about those two seals, the top return, at the point when the belt road was done in that period about 8.30, how high were those?-- The tranny road was probably around about four foot high. The tranny road was already built up and had its steel frame up and the other - the top supply road one, probably five, six feet high, something like that.

Top return, you mean?-- Yes.

MR CLAIR: No re-examination, Your Worship.

EXAMINATION:

MR PARKIN: Mr Young, could we return to the Saturday afternoon, please?-- Yes.

I think you were told at the start of the shift there were three seals to put on?-- Yes.

The belt road, the top return and the transformer road?-- That's correct.

I'm asking this question for clarification specifically after Mr Morrison's cross-examination. Can you tell me the exact position of those three stoppings when you arrived on the Saturday afternoon, please?-- Top return was only just the prep seal done. It was most likely left open to keep ventilation in the section. The belt road one, it was wide enough to walk through when the conveyor structure was through the seal. It was wide enough on both sides to walk either side and it was the height of the conveyor structure of a normal link. The transformer road was built on either side and up high enough to let the continuous miner through the shuttle cars and the feeder through.

So in effect you had got two intakes and one return at that stage?-- Yes.

I think you mentioned to Mr Morrison when he asked the questions, did you have any problems with leaning of the stoppings whilst you were erecting them, pumping the Tecrete in?-- There was one problem but we straightened that out before we continued with it.

Something that puzzles me, and you might enlighten me, and that is as the two final seals - I think you said that's the

top return and the transformer road, was it?-- Yes, that's correct.

They were the two final seals?-- Yes.

I think you said that as you got nearer to the top of the two seals it got cooler in the top return?-- Yes, that's correct.

I just want to understand this, that's all. If we look at the seal on the top return, how many metres from No 1 heading in 510 is that?-- I couldn't tell you that. I'm not involved in that area.

Would it be five, six, seven, eight, nine metres?-- I don't know.

How did you ventilate that stopping whilst you were working on it?-- As far as I know it was a normal return where we were working and the only door that was open was the inch of a gap of the hoses and your return was carrying on.

So whilst you were working on that top return stopping are you telling me that the only ventilation you had got was the air coming through the stopping?-- I think so.

Because how can it get cooler?-- I don't understand.

Perhaps I'm not explaining myself very well. There is two roadways that are finally being sealed. One is the top return and the other is the transformer road?-- You seal them - you leave a certain amount and then you seal them both at the same time.

Okay, so you seal simultaneously?-- Simultaneous, yeah.

What I'm interested in is in the top return which is the return airway, and presumably as you start and seal that, I'm wanting to know how you ventilate that stopping. Had you got a brattice up from the - had you got any brattices up at all to ventilate the area?-- I don't know that.

The question I'm interested in, and I'm still a little puzzled, is if you don't have a brattice that's giving additional air from the 510 No 1 road then the only ventilation you've got is air coming actually through the stopping?-- Well, I don't know that situation.

Because it wouldn't be cooler?-- It was definitely cooler when we were -----

Perhaps you can't answer that question. You can't remember any brattices being in the top return ventilating that face of the stopping?-- No.

Thank you.

EXAMINATION:

MR NEILSON: Mr Young, I'd like you to clarify something for me. I'm a little bit confused about what it is you actually smelled?-- All I know -----

I haven't asked the question yet. You've indicated in your statement that you smelled a fairly strong burning smell?-- It was an unusual smell which I've never experienced before.

You then at a later stage indicated that you thought it was a benzene-type smell?-- I'm only going on what the undermanager told us, that it was a benzene smell.

But if I can ask you to think back yourself, if you were asked to describe that smell to us, what would you say?-- I don't really know. It's something I've never smelled before. It was unusual, so I can't compare it to anything.

But you've obviously attached it to a heating of some description. That's the feeling that I've got from listening to what you've said?-- Well, most likely from common talk where it was everybody attached to a heating, that is what I've been told and learnt from.

But you didn't actually know that yourself?-- No.

When you drive to work from Moura out to the mine do you pass a certain point where quite often there is a strong smell? I think it might be around No 1 mine?-- No 1, yes.

Do you know what that smell is?-- From what I've been told it's a heating in No 1.

The smell that you smelled in 512, could you relate it to that smell at No 1?-- It's possible.

I'm not asking you if it's possible. I mean you've smelled the two smells, I'm asking you for an answer as to whether it's similar or whether it's not?-- Yes.

It's a similar smell?-- Similar.

So it's fair to assume then, isn't it, that the smell that you smelled in 512 was some sort of a heating, early stages or whatever?-- Most likely.

You would think that would be reasonable to assume?-- Well, when you compare No 1 to that smell it's - yes.

Yes, but did you do that at the time?-- No, I was sent in there to do a job and that's what I done.

You are only answering that because I'm asking you that question now?-- Yes.

So at the time in your own mind did you have any concerns that

there could have been a heating?-- Not really.

Thank you. The other thing, you worked at No 4 Mine for a considerable time, I think about seven years; is that correct?-- Yes.

On how many occasions were you aware of an area being sealed off during that period? Just roughly?-- Probably about five or six sections maybe.

About five or six, and do I understand you to say that on every one of those occasions after the sealing had been completed the men would not go back down the mine for a period of time?-- Yes.

On every one of those occasions?-- Not on every one. I can't remember every one of those occasions.

That may be a bit unfair of me. Can you remember any occasion when they did go down the mine?-- Possibly when I wasn't at work, but I can't remember.

You wouldn't remember then?-- No.

You then said that at No 4 Mine after an area had been sealed the Coward Triangle was put up?-- Yes.

Where was it put up?-- In the crib number at number 4.

In what form?-- In a big graph type form on something like that.

On the board?-- Yes.

Do you know who would have put that up?-- Most likely the management.

What did that mean to you? When I say what did it mean to you, did anybody come along and explain to people what it was about?-- There was discussion on the graph, but there wasn't an actual explanation. They just told you what figures were there.

Who were they?-- Well, management and deputies.

Was this an organised type thing? Did they actually bring people in and say, "Well, now we want to explain to you what is happening underground and we are going to use a Coward Triangle to do it."?-- As far as I can remember, no.

So there was no formal information session or anything like that or was there?-- I think there was discussion at certain stages of it.

So is it fair to say then - or for me to assume, that the Coward Triangle was put there for the very purpose of explaining to the workforce just what was going on behind the area that had been sealed?-- Yes.



You then went to No 2 Mine, and can I ask you how many areas that have been sealed you've been involved with there?-- About four or five, I think.

And on the first occasion that you were involved in an area being sealed at No 2 Mine were the men withdrawn from the mine?-- No.

Do you know why not?-- Because I think it was a change of practice between No 2 and number 4.

Did that concern you at all?-- It did concern me when I first went over there, but when you got used to the work rules of No 2 it sort of went by the wayside.

So you were used to working in the system where when an area was sealed off management would put up an illustration on the board, in your case a Coward Triangle, and take the time to explain to the workers why they shouldn't go down the mine?-- Yes.

Was it the men themselves that wouldn't go down the mine or was it management that said they wouldn't go down the mine?-- I think it was an agreement between the company and the men themselves.

So we have got this agreement and management then explained to people why men shouldn't go down the mine. What did you learn the reason to be why men should not be down the mine after an area was sealed?-- That something could happen after the sealing.

So if something could happen after a sealing in No 4 Mine and men should not go down the mine because of that, tell me what's different with No 2 Mine if you can. If you can't, I'm not trying to pressure you?-- It was just a change of work rules.

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Okay. So, the fact that we now have different work rules that all of a sudden say it's okay to go down the mine after a sealing, everybody has accepted that?-- Yes.

During the number of sealings that you have been associated with then at No 2 Mine, at any stage has management taken a similar practice to what they did at No 4 Mine by putting up either the Coward Triangle or using the Ellicott diagram to explain to the workforce what could happen in the event of an area going through the explosive range?-- No.

Not at all?-- No.

And certainly not on this occasion?-- No.

Do you find that a bit unusual having been used to that sort of thing at No 4 Mine?-- Well, when you change work practices, you do what you do at your new mine, and that's what you were used to doing.

You would have also had timbering rules at No 4 Mine?-- Yes.

I would imagine that those rules would say that you can only leave so much of an area unexposed?-- Yes.

And that you don't walk out into unexposed roof?-- That's correct.

And that's how you would have worked at No 4 Mine?-- Yes. They were the rules of the mine.

When you came to the No 2 Mine, if they changed those rules and said it's okay for you to go 20 foot out further than the last roof support, what would you have done?-- I wouldn't have went out that far.

You wouldn't have accepted that they are just new rules?-- No.

Just one other question, Mr Young. You said that you had a practice of looking at the Unor?-- Yes.

And that you basically were looking for the methane reading?-- Yes.

Are you aware of anything else that the Unor tells you?-- No.

You have never heard of the Graham's ratio?-- No.

You don't know that you can take the CO readings from there and then convert that to CO make levels?-- No.

So, really when you were looking at the Unor, you didn't really know what it is you were going to do?-- No.

And you had no training or no instruction about that?-- I had no instructions on it.

You have had no instruction about spontaneous combustion either?-- As far as I can remember, no.

Would you expect then that there should have been a practice at No 2 Mine - I mean, I know everything is easy in hindsight, so I would ask you to try and answer this question of what you may have been through prior to the incident. Would you have expected that had there been any possibility of something going wrong as a result of the things that you have been asked about today, that somebody should have informed the men?-- Yes.

Who would you expect that someone to be?-- Well, most likely the discussion should have been between management and the deputies and then us - then the normal mine workers.

So, you would have expected at least management to tell you?-- Yes.

And then perhaps the deputies as well because they have some responsibility in this area too, don't they?-- Yes.

Would you be surprised if I was to say to you that quite a number of deputies at No 2 Mine have had no formal training in spontaneous combustion?-- I wouldn't be surprised.

You wouldn't be surprised?-- No.

Why would you not be surprised?-- I'm not sure on that, but it's probably just -----

Can I say this to you: it doesn't surprise you to - because maybe you have never been associated with formal training, it may have been a concern - you tell me if it's right. Was there a concern that there wasn't enough training in these sort of areas?-- There was concern about different aspects of training, different areas of training, and I have heard deputies talk about other training that they should have been doing.

Thank you, Mr Young.

EXAMINATION:

PROF ROXBOROUGH: Mr Young, just a couple of small points, if I may. You have had some difficulty in describing a particular smell and I have some sympathy with you in that regard because I think smells are notoriously difficult things to describe and different people might describe the same smell in different ways, but when pressed, I think it was by Mr MacSporran, you did liken the smell to that of the burning coal fire after your football game; is that right?-- Yes.

That is quite a distinctive smell. I suppose in this room I have smelt as many coal fires as anybody, and a coal fire

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often has a bit of a taste to it. Did the smell -----?--  
No.

It didn't have any taste?-- No.

Well, that apart, would you say that the smell of a coal fire  
would be the closest description to what you smelt in 512  
return?-- It's possible.

Possible?-- Yes.

You still have the difficulty in pinning it down closer than  
that?-- Closer, yes.

I would like to ask you a couple of questions about this  
situation in which you were describing one - I don't know  
whether it was one or more hoses passing through a door.  
Could you say which door that was, please, by looking at the  
plan?-- That's the seal there, that's the door there.

So that's the door between -----?-- That's the top return.

----- the top return and No 2 in the 510 return?-- 510, yeah.

That door is a door for the full height of the roadway, is  
it?-- No, it's just a man door that you climb through.

It's a trap door, is it?-- Trap door.

Roughly what height would that trap door be?-- Well, there's  
part of a Tecrete seal underneath it which could be a foot to  
two foot high and then the door sits on that, and it's just a  
normal man door that you climb through.

That door should have been closed, should it?-- Well, on  
every seal that we have built we have always run our hoses  
through those sort of doors, and the door is closed except for  
the width of your hose.

So, the air that was passing through the door - there would be  
some air certainly going through there?-- There is a small  
amount of air.

And that was done consciously and deliberately?-- Yes.

Thank you.

MR ELLICOTT: No questions.

MR CLAIR: Your Worship, just some brief questions.

RE-EXAMINATION:

MR CLAIR: On that same point, Mr Young, if you were to turn around and look at that plan again, you are the person who seems to have been there for most of the sealing of that top return in 512, you see?-- Yes.

I want to get some idea of what was happening with the ventilation. The 512 seal was being, in effect, closed as you got to the end of that sealing at the top return. At that point you got air being drawn up that return in 5 South; is that right?-- I think so. The ventilation, it wasn't part of our duties. That's part of the deputies' duties to look after.

I want you to assume that there is air being drawn up that return in 5 South. Between the return in 5 South and the top return in 512, that is in the No 1 heading of 510, there is reference on the plan you are looking at to a stopping but that in fact was the regulator, part at least of which had been taken down to get the Eimco through to deliver stuff for the seal site in the top return; is that right?-- That's possible. I wasn't familiar with what happened in the ventilation area.

I see. When you were going to that top return site did you see what the position was with that regulator?-- No, when we went into the section we came through the travelling road and came to there. So, we never actually went up into that area.

You came to the intersection in - the intersection of the No 1 heading in 510 and the top return in 512; is that right?-- Yes.

You didn't notice what the position was straight ahead of you in that -----?-- No.

Okay. Just assume for the moment that part of that regulator, at least, has been taken down. Then - so, there is air being drawn along that No 1 heading in 510. As you finish the seal in the top return in 512 where would that air be drawn from?-- Well, I would assume it was going up the 5 South return.

Yes, but where would it be drawn from? You have got the doorway that you referred to that was partly open?-- Yes.

But not very much?-- No.

Apart from that, in the cross-cut in 510, which is the extension of the No 1 roadway in 512, there is a stopping shown on that plan; is that right?-- Which one, that one there?

No, the extension of the top return in 512. Go to the top return of 512?-- Yes.

In that cross-cut there in 510 there is a stopping shown. Down closer to - down closer to where you were?-- There? That one?

No, taking your top return in 512. Top return in 512. Okay. Go straight outbye along that?-- Yes.

Is there in that plan a stopping shown?-- No.

Is there no stopping shown there?-- No.

Was there a stopping there, as you recall?-- I don't recall.

What is that line on the plan? Can you see it? There's a red line just there?-- Oh, yeah.

Do you know what that is yourself?-- No.

Okay. Can you remember whether there was a stopping there?-- No.

You can't. Okay. Well, if there was a stopping there then the only place that the air is coming through is this slightly open doorway in 512?-- 512, yes.

Or, at least, in that 0 cross-cut of 512?-- Yes.

Yes, thank you.

WARDEN: Thank, you witness. Anything arising out of that?

FURTHER CROSS-EXAMINATION:

MR MORRISON: Sorry. I was pausing as diplomatically as I could.

You mentioned that the work rules at No 2 were different from the work rules at No 4, in your experience?-- Yes.

Have you ever been aware of any district check inspector trying to get those work rules at No 2 changed?-- Possible. I am not sure.

You don't know of any, do you?-- No.

Nor of any check inspector doing that?-- No.

So, from your own experience and your own knowledge it could well be that no district check inspector or check inspector has tried to change those work rules?-- Well, I am not sure.

Likewise, you are not aware of any member of the Inspectorate trying to change those work rules, are you?-- I am not sure of it.

You don't know of any?-- No.

Thank you.

FURTHER CROSS-EXAMINATION:

MR MARTIN: Can I ask a question by leave?

WARDEN: Yes, Mr Martin.

MR MARTIN: We have been talking about this door within the stopping with the hose going through. Did you notice anything about the velocity of air around it?-- When you open the door up, you walk through it, there is a fair pull of air and there was a fair pull of air going through that door when we first went in and I think most likely when the seal was around about half stage that it still had that pull of air, if I can remember.

And can you just help, were there two hoses?-- Yes, an air hose and a water hose.

What diameter?-- About an inch.

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Were they one on top of the other or side by side?-- Yes, one on top of the other.

Thank you.

WARDEN: Thank you, gentlemen. Thank you for coming to this change of venue today. We will resume tomorrow back on the fourth floor. I propose a 9 o'clock start. The Court Reporting Bureau has consented to that early start. I am not sure if they consulted the union on it. With the promise of an early finish they have consented. If we can start at 9 o'clock, I propose to adjourn at 10.50 for Remembrance Day. We will resume at 10 minutes past 11 and then run through to a late lunch, hopefully between 1 and 1.30, subject to the fall of the witnesses, and we don't want to carry on with a part-heard witness. We will terminate these proceedings. That will allow people to make arrangements for aircraft later in the afternoon. If that is okay?

MR MARTIN: Thank you.

MR MORRISON: Thank you, Your Worship.

WARDEN: Adjourn till 9 a.m. tomorrow morning.

THE COURT ADJOURNED AT 4.36 P.M. TILL 9 A.M. THE FOLLOWING DAY





WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2. ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 11/11/94

..DAY 18

THE COURT RESUMED AT 9.15 A.M.

MR CLAIR: May it please Your Worship, before I call evidence this morning there are just a few housekeeping items that I would raise. One is that my instructing solicitor and myself were handed some documents the other day by Mr Morrison's instructing solicitor which were documents that had been taken into possession at the mine and were items which - they are items that have been discussed in evidence, namely copies of the graphs that were kept on the noticeboard in the deputies cabin. The arrangement that was made was that they would be taken into possession in a way that indicated where they came from, at least at the time they were taken into possession. Now, I will tender those original documents. There is also a sketch that comes with them that indicates the position where each of the documents came from. It might be best if I give Mr Morrison the opportunity to describe the way in which that sketch relates to the documents themselves.

MR MORRISON: Thank you. In the folder which Mr Clair was provided there are the following documents: on the front a sketch which shows in plan form two noticeboards and the numbers 1 through to 4 which then relate to the two noticeboards in the deputies cabin and the position in which the following documents were found on 8 November. You will recall that on the 7th a request was made that we have someone at the mine collect the documents from the deputies cabin and we made a point of leaving them there and - specifically leaving them there on the day the panel inspected the mine because we didn't think we should interfere with anything in the deputies cabin at all. The documents were then collected in - the form in which they are shown in the plan is the form in which they were on 7 November when they were collected and the document which is numbered 1 on the plan is the CO make graph for 5 August. That's a copy of Exhibit 25. The second document is the CO make graph ending 15 July and the third and fourth documents are stapled together, and I think it is apparent from the pin hole on them that they were stapled together, on the deputies noticeboard and they consist of the vent survey for 12 July 1994 and behind it the vent survey for 27 June 1994. Now, on my instructions on the day of the inspection when the panel was out there document No 1, that is the CO make graph which is a copy of Exhibit 25, was, in fact, sitting on top of document No 2, the previous version or the earlier version of a graph, and they were sitting in that position at the point which is numbered 2 on the plan. That's as I understand the position they were in on the day you inspected the mine. By 7 November someone had moved No 1 to the left. So, we kept them in the positions they were in on 7 November when the request was made and that's the condition in which they have been provided to Mr Clair and they are contained in the folder.

MR CLAIR: I will tender them as a bundle with that explanation of Mr Morrison's, Your Worship.

WARDEN: I will mark that Exhibit 123.

ADMITTED AND MARKED "EXHIBIT 123"

MR CLAIR: The next matter I want to deal with, rather than attempt to deal with this at the end of the day, is that it will be necessary for my instructing solicitor and myself, and through us the panel, to be aware of the - first of all, the additional material that is to be provided by way of reports of experts and, secondly, some indication of any further witnesses, if there are any, that the parties would wish to see called and we would like to have that - those indications by mid January. Now, against that background what I would ask is that the parties do advise Mr Boiston of those items, that is any additional witnesses that they consider should be called and, secondly, any reports of experts who are to be called by the parties. If that could be done by 18 January that would enable sufficient time then to be taken to distribute any additional material to the panel and to plan the course of evidence for the next phase of the hearing. I trust there is no difficulty with any of that with the parties. If there is likely to be any difficulty could we be advised now, please, Your Worship?

MR MORRISON: Your Worship, I was rising simply to indicate we will do our best to comply with that, but with the actual provision of a final report, we will have to wait and see. We will certainly endeavour to comply with that. I have no difficulty with providing names of any additional witnesses, I am certain we can do that. It is just whether we get final reports by then. I am not sure. We will certainly do our best.

WARDEN: Even if it is in the shape of a draft. If you can't produce the original by then we would be happy with the draft on the understanding that an original is to follow - a full final report is to follow later on.

MR CLAIR: A draft would serve our purposes because it would, at least, give us some indication as to, first of all, length of time that is likely to be involved in the calling of the expert evidence and, secondly, perhaps, determining the order in which the material should be placed before the Inquiry. The next item, Your Worship, is in respect of three witnesses who were on the list to be called initially yesterday and they are presently on the list for today. They are the witnesses Shane Bishop, Rodney Sonter and John Potter. They were members of Mr Tuffs drilling crew and statements were obtained and the witnesses were arranged to be present for the purpose of giving evidence at the request of Mr Morrison. He has since indicated that having seen the statements of the witnesses he doesn't require the witnesses to be called and the other parties, as I understand it, have also indicated that they don't require the witnesses called. Perhaps the best course at this stage, Your Worship, is if I tender those statements and they can each be given a separate exhibit

111194 D.18 Turn 1 gc (Warden's Crt)

number. I have got the original statements here and if any party at this stage has any need for the witnesses to give oral evidence then the witnesses are available still this morning.

111194 D.18 Turn 2 dfc (Warden's Crt)

WARDEN: Thank you. In the order that you read them out, Exhibits 124, 125 and 126.

ADMITTED AND MARKED "EXHIBIT 124"

ADMITTED AND MARKED "EXHIBIT 125"

ADMITTED AND MARKED "EXHIBIT 126"

MR MORRISON: Can I just indicate for the benefit of the Panel the purpose of requiring those gentlemen in the first place was because it was evident from the undermanagers shift reports that they had worked on the plugging of the holes between 5 South and 512 and other holes of that nature, but between the request for them and their statements coming we have heard from a number of people about that and we rather anticipate that as an issue that's a dead issue, and so we don't need to put the gentlemen through the business of giving evidence on a dead issue. That's the purpose.

MR CLAIR: I think I might indicate that one of the other bases on which they are requested is that they had some conversations with Mr Tuffs - or Mr Tuffs claimed to have had a conversation with them towards the end of that week prior to the explosion and that's the basis on which the statements were obtained. It's fair to say that by the time the statements were obtained it didn't seem that there was any live issue about the plugging of the methane drainage holes. If nobody requires those witnesses called, Your Worship, then I'll move straight on to the witness, Brian French. I call Brian James French.

BRIAN JAMES FRENCH, SWORN AND EXAMINED:

MR CLAIR: Your full name is Brian James French; is that right?-- Yes.

Mr French, you might like to just pull your chair in so that you can speak comfortably into the microphone, and adjust it, if you would, so it is close to your mouth. That way we can hear everything that you are saying. Now, Mr French. You're an electrician; is that so?-- Yes.

You are employed at Moura No 2 Mine?-- Yes.

How long have you been employed there?-- 13 years.

XN: MR CLAIR

WIT: FRENCH B J

111194 D.18 Turn 2 dfc (Warden's Crt)

Has that been 13 years at No 2?-- Up until the time of the explosion, yes.

You started your working career at the Callide Power Station, is that right, as an apprentice electrician in 1977?-- Yes.

And then at Moura No 2 in '81. Now, your duties as electrician involve the repair, maintenance and installation of electrical equipment; that's one aspect, is that so?-- Yes.

And do you, as part of those duties, also maintain the electrical aspect of the monitoring system there; is that so?-- Not the electrical aspect of it, more the tubes going down the pit.

And you install the monitoring points; is that right?-- Yes.

In that role then you are familiar with the way in which the tube system operates to collect samples for the Unor system on the computer?-- Yes.

Now, how much did you learn about the Unor system?-- I learnt enough about the Unor system to be able to put test samples at each point and to check the read-out against the sample that we put up.

When you say "test samples at each point", what do you mean by that?-- Put a sample of CO or CH<sub>4</sub> at each test point in the pit and we would get a read-out on the Unor screen as to what that sample came up as.

Now, that would involve - is that what has been referred to also as span gas testing? Is that what you are talking about?-- Yes.

That's not designed so much to check the accuracy of the Unor system in its analysis of the gas as it is to check the time that it takes for the sample to come from the point up to the testing point on the surface; is that right?-- Partly so. It's to check the time - we always check the time it took from - for the sample when it was put on to when it came up on the screen, but basically the test was there for checking the state of the tubes going down the pit. If it was diluted there is obviously a hole in it.

I just want to establish that when you say test the samples at the monitoring point, you don't take some other reading at the monitoring point -----?-- No.

----- and then compare that with the reading on the Unor?-- No.

That's not part of your function. Now, in relation to this span gas testing is it the position that when you are doing the span gas testing what happens up at the screen end is that only a certain limited number of testing points are isolated to be shown on the screen; is that so?-- Yes.

111194 D.18 Turn 2 dfc (Warden's Crt)

How many?-- Three.

Three points are shown on the screen at any given time?--  
Yes.

While the testing is going on?-- That's right.

And the purpose of that is to - well, first of all I'll ask you this: although there are only three points isolated on the screen, the Unor system is still in effect sampling at each of the other points, that is drawing in a sample at each of the other points; is that right?-- I'm not sure.

You are not sure?-- No.

Is it the case that the purpose of isolating the three points on the screen is to make sure that when a sample of gas which has been put in at a monitoring point below reaches the surface and is sampled by the system, that that reading appears on the screen at the time that that gas reaches the surface, the sampling point - the testing point or analysis point on the surface; is that right?-- You'll have to say that again. You lost me.

The purpose of the span gas testing is the gas put in down at the monitoring point?-- Yeah.

That gas travels from the monitoring point up to the analysis point on the surface?-- Yes.

Adjacent to the Unor room there?-- That's right.

You say that only three points are isolated on the screen at any given time?-- Yes.

Ordinarily there are how many points showing on the screen?-- Nine or 10.

Is it the purpose in isolating those three points that it ensures that when the sample which has been put in at the monitoring point reaches the analysis point at the surface, that the arrival of that sample as it were at the analysis point will show up on the screen?-- Yes.

Nevertheless whilst there are only three points on the screen is it the case that samples are still being gathered at the other monitoring points down below?-- I don't know.

You are not sure about that. Okay. Now, you were on shift yourself on Sunday, 7 August 1994?-- Yes.

And on the morning of that day - you may or may not be aware of this - were there some span gas tests carried out?-- Yes, as far as I know.

Prior to your arrival on shift?-- On the day shift.

You arrived for the afternoon shift?-- Yes.



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What time did you arrive at the mine; do you remember that?-- Quarter to three.

You started duty at what time?-- Three o'clock.

Now, when you arrived at work that day was there any siren sounding that you can recall?-- No.

You went down the pit at what time after commencing work, are you able to say?-- Well, John Blyton got me to adjust the CH<sub>4</sub> alarm levels at the start of shift and straight after then - I wouldn't know the exact time, but I'd say half past three.

But you did some things on the surface first?-- That's right.

And then you went underground?-- Yes.

If I can deal then with the duties you carried out on the surface, you mentioned John Blyton; what conversation did you have with him?-- He asked me to adjust the levels - the alarm levels of the CH<sub>4</sub> on point 5 on the Unor.

Can you explain what the system is in relation to these alarm levels on the Unor?-- I would bring up that point and adjust the alarm up to whatever he or the undermanager or whoever was there wanted them brought up to or down to or whatever.

On the Unor system there is a provision, is there, in the case of methane, for an alarm to go off when the methane level at a particular monitoring point exceeds a fixed limit, that is a limit fixed on the system?-- Yes.

Is that right? And you say that that limit can be adjusted?-- Yes.

Through the computer system?-- Yes.

Now, is it the case that in respect of some if not all of the alarms that there can then be another limit fixed leaving that first limit - we will talk about methane - where it's fixed as a limit, whereby the alarm sounds once the gas exceeds that level. We will call that the first alarm limit for the moment, the first alarm limit that's fixed, okay? Is there also provision on the system for another higher alarm limit to be in existence too at the same time?-- Yes.

That's then a second alarm limit; is that so?-- Yes.

Running in parallel with the first - or it can be in existence at the same time as the first limit?-- Yeah, both alarm levels are in place on a certain point on a certain gas or whatever.

Now, we have spoken of methane. With CO is there also a provision whereby the alarm will go once the amount of CO goes above a certain level?-- Yes.

And is it the same case with CO, that there can be then the second level, second limit fixed at the same time as the first

111194 D.18 Turn 2 dfc (Warden's Crt)

where the alarm would go if it goes above that second limit?--  
Yes.

With oxygen is there a limit fixed on the Unor system whereby  
an alarm goes off once the oxygen drops below a certain  
limit?-- Yes.

Do you know if there is a second limit that can be fixed  
then?-- Yes.

For oxygen too?-- Yes.

Where it drops then below a limit fixed lower than the  
first?-- That's right.

What happens when the alarm sounds, that is - when the alarm  
is tripped is probably the best way for me to put it.  
Assuming that the methane at a particular monitoring point  
goes above the level fixed for that point, what we will call  
the first level, what happens?-- Where the point that the  
alarm has occurred on will go red, and the gas, CO or CH<sub>4</sub>,  
oxygen, whatever, that also will go red and it will come up an  
active - the status beside it will say "active", and up in the  
left-hand corner of the screen a red square will flash, and  
this system is interfaced with a con log or enunciate or  
behind on the wall, directly behind where the Unor screen is,  
and it had different - it was just an alarm system and the  
siren would sound -----

Sorry, the siren would sound?-- The siren would sound and a  
light would show that it's a Unor fault.

111194 D.18 Turn 3 mkg (Warden's Crt)

The light would show up on this con log?-- That's right.

Does that - well, you have said that that con log interfaces with the Unor system?-- That's right.

Does the con log also interface with a number of other alarm systems?-- Yes.

Can you mention some or all of those?-- Low water, the DA set running.

What's the "DA"?-- Diesel alternator back-up electricity supply for the ventilation fan.

Yes. Any others you remember?-- Low water. I can't remember any others.

Okay, but there are in fact a number of systems quite separate to the Unor which are operating within the mine and which are then connected to this con log and designed to alarm once something happens in relation to any of those other systems?-- Yes.

When the siren goes off - well, let me ask you this: the con log is connected to a siren?-- That's right.

When an alarm trips at the con log in relation to any one of those things that are connected to the con log, does that cause the siren to go off?-- Yes.

Is it the same sound, that siren, for any one of those alarms?-- Yes.

It's the same siren in fact?-- Yes.

Now, assuming then that the siren went off, if one were to go into the monitor room and look at the con log, I gather from what you say that there would be some indication on the con log as to which of those alarm systems has tripped the con log or set the siren going?-- Yes.

Is that a panel of some kind?-- Yes.

One of which would light up - one part of which would light up, is that what it is?-- Yes.

To indicate what it is that has alarmed. Now, if it was - you nodded your head?-- Yes.

Not that there is anything wrong with nodding your head, but it can't go down on that machine there?-- You kept talking. You didn't give me a chance.

Maybe I am talking too much. Then if it was the Unor system, what would be the next thing that a person would do? Having looked at the con log, the siren still going and it's flashing Unor, or at least displaying the Unor system, what's the first thing that a person would do?-- You would accept the alarm on the con log which would turn the siren off.

How do you do that? How do you accept it?-- Beside the indication lights on the con log there's an accept button up there, and also on the left-hand side of the door in the undermanager's office there is also an accept button and reset button there in parallel with the buttons on the panel, so either of these places.

That's the door between the Unor room and the undermanager's office?-- Yes.

On the undermanager's wall or in the Unor room itself?-- On the undermanager's wall.

Now, that means then that the siren could be - the alarm could be accepted and the siren turned off by simply manipulating a button on the undermanager's wall?-- Yes.

Wouldn't be necessary to go into the con log or the Unor screen?-- Yes.

And it requires the pushing of a separate button, does it, to reset it?-- Yes.

Now, what's the effect of resetting the system?-- Once you have accepted the alarm and whatever has caused the siren to go off, you must clear that fault condition to be able to reset it, and once it's reset that condition will be able to be alarmed again.

Well, let's assume that the event is an excess of methane at monitor point 5 and it's tripped that first level of alarm that we have spoken of. Now, then the con log would show the Unor as being the thing causing the alarm?-- Yes.

You say that the siren would be turned off by accepting the alarm?-- Yes.

Pressing the reset button at that stage, what would that achieve?-- Nothing.

Nothing, so it would be necessary to go to the screen, go to the Unor system, and take some action that would address the fault, that is, the excess of methane at monitor point 5; is that right?-- Yes.

Now, apart from clearing away the excess of methane at monitor point 5, putting that to one side, the only other action that could be taken would be to raise the level at which the methane alarm, that is what we will call the first level at which the methane gas alarm at monitor point 5 will be tripped; is that right?-- Yes. This - yes.

Sorry, did you want -----?-- That would do it, yeah.

And that would mean that the lower level, or the first level at which it will trip will be higher than it was originally?-- Yes.

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That second level could still stay where it was, the second level we spoke of earlier?-- Yes.

There is no need to adjust that at the same time?-- No.

Okay. Now, assuming then that the fault was addressed in that way in the Unor system by raising the gas level of, in this case, say, the methane level at which it will alarm, what would happen then? Would it be necessary to press the reset button after that's been done?-- What we spoke about just a minute ago was - is right back - that point on the screen would still be in alarm condition until it was accepted. Once you have raised the alarm level, until it's - until it went through its scan and came back to that point again and sees that the alarm level is lifted and so the system sees that as normal, then you would be able to reset the con log.

Right. So the con log couldn't be reset until the Unor system has recognised the new level which is being fixed?-- Yes.

And that new level won't be recognised until the Unor system has continued through its scan of all the monitor points?-- Yes.

And come back to the monitor point which alarmed?-- Yes.

And sees that there has been a new level set?-- Yes.

I take it, from what you say, that until that time you will still have that point in red?-- Yes.

You will still have the methane column reading in red; is that right?-- Yes.

You will still have over beside that line relating to that monitor point the word "active"?-- Yes.

In red, is it?-- Yes.

And you will still have up in the top left-hand corner, was it, of the screen?-- Yes.

A flashing square, is it?-- Yes.

Flashing red square?-- Rectangle, whatever.

Rectangle indicating that there has been an alarm?-- Yes.

Okay. But once the scan gets around to that, if the levels have been adjusted upwards, then they will go back to the same print as everything else and the screen will return to normal?-- Yes.

But then it would be necessary after that to press the button again to reset the con log?-- Yes.

Now, what about if those - if the new level was fed in but the button wasn't pressed to reset the con log?-- The Unor would still alarm but the siren would not alarm.

I see?-- Wouldn't operate.

So that you could then get a further excess of methane over and above the new level, you would get all those changes on the screen, red point 5, red methane, active, all in red, flashing rectangle up in the top left-hand corner of the screen, but you get no alarm?-- Yes.

Because the con log wasn't reset?-- Yes.

Okay. I suppose the level could be changed again if it alarmed again; is that right? That level at which it would alarm could be changed again on the Unor?-- Yes.

Again you could get another excess of methane at point 5, and unless the con log has been reset you would simply get the alarm showing up on the Unor screen but no siren?-- Yes.

And so on?-- That's right.

Okay. Well now, you did mention that you were asked by John Blyton to reset the methane level, I think you said, for 512; is that right?-- Yes.

I would like you to have a look at this document here, and I will mention for the sake of the record, Your Worship, that it is a copy of Exhibit - the current Exhibit 90, but I will show the witness this copy because I would like to tender this as a separate exhibit in due course. Now, just ignore the colour coding for the moment and go to the entry. I have copies for the panel and for my learned friends, Your Worship, which might make all of this a bit more intelligible. I might say that the mixing of the orange and the green is purely coincidental.

Now, Mr French, if you go to the entry which has a little cross out in the left-hand margin; you see that there?-- Yes.

Now, running across the columns, that relates to monitor point 5, the location being the 512 seals, and it relates to an event on 7 August at 2.31 and 33 seconds, is that right, and that event - that time is the time at which an alarm went off in relation to that monitor point; is that so?-- Yes.

The next column indicates the time at which the alarm was acknowledged and that appears to be about just over one and a half minutes to 3, 14.58 and 21 seconds; is that right?-- Yes.

That indicates that it's the oxygen alarm at the 512 seals; is that right?-- Yes.

And the next column is called "Alarm Type" and the entry there is "Gas High 1"; is that right?-- Yes.

And that indicates that whatever was tripped at that stage was the first level at which the alarm had been set. Remember at

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the beginning of your evidence you told us you could have gas alarms set at two levels?-- Yes.

In the case of oxygen it would be fixed at one level and then at the same time at a level lower than that; is that right?-- Yes.

Because what you are looking for with the oxygen is that when it goes down below a certain level it trips the alarm; is that so?-- Yes.

Okay. The next column indicates an alarm value of 23.77 - I am sorry, 18.95. I was reading the wrong column. 18.95, and that's the actual reading which tripped the alarm; is that right?-- Yes.

Then there is a corrected value. Do you know what that refers to?-- No.

And then there is the set point value which, in that case, is 19?-- Yes.

So, pausing for a moment, what we see is that the oxygen in that case at that time, just after half past 2, dropped to 18.95, it breached the set point level of 19 and it caused the alarm to go off at that time; is that right?-- Yes.

Now, there is a final column there which has - I should say too the other column acknowledges that it was - shows that it was acknowledged at about one and a half minutes to 3. Now, there is a final column there which has the number "5" in it. Do you know what that refers to?-- It's the number that is put up on the screen when you acknowledge an alarm.

Okay. Now, can you describe for the Inquiry what actually happens on the screen when a person acknowledges an alarm? This is on the Unor screen. We have assumed that somebody has gone to the con log and pressed the button and accepted - acknowledged the alarm there and then it's a Unor alarm so they go to the Unor screen. What do they do at the Unor screen?-- You move the cursor by a mouse on the screen over a block saying "alarm" and the screen changes and you have a block of nine digits and you move the cursor up and bring up two digits and then down to another block that says "okay", hit that and the alarm is then accepted and it returns to the original screen.

Unless there is something else done, it stays at the same level; that is, the set point value stays at the same level unless you adjust the set point value?-- That's right.

Now, do you know the purpose of entering those two numbers and the "okay" into the screen?-- At the time, no.

What two numbers would you have entered into the screen if you did it?-- Any two numbers.

Any two numbers. Could it be "05" or "01" or -----?-- Yes.

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Could be anything?-- Yes.

You didn't use any particular number?-- No.

Was there ever any instruction to you that you were to use a particular number when you acknowledged an alarm on the Unor screen?-- No.

No suggestion you should use your cap lamp number or anything like that?-- No.

Did you have a cap lamp number?-- Yes.

Do you remember what that is?-- No.

You haven't had to use it much by the sounds of it, okay?-- Never looked at the number on it.

Okay. So, in effect, just a random number is entered, then "okay" and that effectively on the Unor screen then acknowledges or accepts the alarm?-- Yes.



Now, I want to ask you some other questions about the document there. Before I do can I ask you this: you mentioned that you did adjust the levels for the methane at John Blyton's request. Did he tell you what new set point value was to be entered?-- Yes.

Do you remember now what that was? You don't remember yourself what it was?-- No.

You just did what he told you?-- Yeah, whatever he wanted the alarm set at that's where I put it.

Now, you went to the Unor screen that afternoon. Do you know if there was an alarm showing on the screen?-- No.

You say there wasn't or you just can't recall now whether there was?-- I can't recall.

If there had been an alarm showing on the screen in respect of that monitor point what would you have done?-- Would have accepted it and reset the system.

On the screen?-- Yes.

You say there was no siren sounding?-- No.

So, obviously the con log hadn't been tripped?-- No.

After you - if you had accepted that alarm on the screen for a gas point - for monitor point 5, would you have yourself then pressed the button on the con log to reset the siren, do you know?-- Yes.

You would have done?-- Yeah, that was common practice when you reset alarms, the procedure you go through.

Common practice. Invariable practice?-- Yes.

Invariable practice?-- Yes.

That you would go and reset the siren?-- Once you have acknowledged an alarm on the Unor.

Do you have any recollection of doing that -----?-- No.

That afternoon? Okay. Now, can we have a look at the document. Just go back, first of all, and have a look through the green points that have been highlighted there. The first of those is an alarm that was tripped at 5.44 that same morning at point 5; is that right?-- Yes.

And that was in respect of methane. It was the gas high 1 level that was tripped; is that right?-- Yes.

And at that stage the set point value was 1.7?-- Yes.

And the number that was punched in to accept that was 88?-- Yes.

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And then the next green line is again a breaching of that methane level at monitor point 5?-- Yes.

At just after 7.15 that same morning?-- Yes.

But at that stage you will see that the set point value which had been breached was 2?-- Yes.

So, obviously the alarm level had been increased from 1.7 to 2 some time between that first alarm at 5.45 and the alarm at 7.15; is that right?-- Yes.

Come down to the next green one which is again the methane gas high 1 level that was breached at monitor point 5 at 9.49 that day?-- Yeah.

Just after 9.49. At that stage the level that was breached was 2.5?-- Yes.

So, again that had been increased between 7.15 and 9.50 or 9.49?-- Yes.

That set point level, somebody had moved that from 2 to 2.5; is that so?-- Yes.

Go down to the next green one. That is a breaching of that same alarm, the gas high 1, monitor point 5 at 12.47 that same day or just after?-- Yes.

And the level that was breached at that stage, the set point value that was breached, was 3?-- Yes.

So, again that had been increased from 2.5 to 3?-- Yes.

Now, again you see those numbers over on the right-hand column? In that case it is 16; is that right?-- Yes.

That wouldn't indicate anything to you?-- No.

Because, as far as you know, it is just a random number that is punched in there to accept the alarm on the screen?-- Yes.

The next item then in green is a breach of that same gas high 1 CH4 level at monitor point 5 at quarter past 8 that night or, to be precise, 8.15 and 39 seconds that night; is that right?-- Yes.

And the level that was breached at that time, the set point level, was 4.5?-- Yes.

So, that would indicate that the level was increased from - some time between 12.47 and - so, that is almost - almost 12 minutes to 1 that day - between 12 minutes to 1 and about quarter past 8 that night the level was increased from 3 to 4.5, that's the set point value?-- Yes.

And you say that that was the level which you adjusted. It was that methane level for monitor point 5 that you adjusted at John Blyton's request?-- Yes.

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Would that appear to be the adjustment you made? You pushed it up from 3 to 4.5?-- Yes.

Now, if I can take you back to the orange ones, they all refer again to monitor point 5; is that right?-- Yes.

They refer to the CO level at that monitor point?-- Yes.

And, in particular, the gas high 1, that's the first level of alarm?-- Yes.

Without going through the times, the first of those was - the first of those alarms was tripped at 16 minutes past 11 on the Saturday night; is that right?-- Yes.

And the set point value at that stage was 5?-- Yes.

And then it was increased to 10 some time between then and 8 minutes past midnight?-- Yes.

Then it was increased to 45?-- Yes.

Some time before quarter to 6 in the morning or thereabouts; is that right?-- Yes.

Then it was increased to 60 some time before 25 past 8 in the morning, the Sunday morning; is that right?-- Yes.

And then increased to 80 some time before 26 minutes past 11?-- Yes.

And then increased to 150 at some time before 28 minutes past 10 that night?-- Yes.

Now, do you remember whether you increased that CO alarm level set point value at any time?-- No, I didn't - I don't remember adjusting the CO.

It was only the methane one that you adjusted?-- That's right.

Okay. Now, if you go then to the alarms which occurred on that monitor point 5 at - that's the last of the green ones there, that's the breaching of the methane at quarter past 8 on the Sunday night; do you see that one?-- Yes.

Now, you will see that if you go to the time acknowledged column -----?-- Yes.

You will see that one was acknowledged at 12 minutes past 11 that night. Sorry, no. I am sorry, what am I saying? At 23 minutes past midnight, I should say?-- Yes.

23 minutes past midnight. Yes. 23 minutes and 12 seconds past midnight on the 8th, that's the early hours of the Monday morning?-- Yes.

The next one is 23 minutes and 11 seconds past midnight?--

XN: MR CLAIR

WIT: FRENCH B J

Yes.

That's the 510 North one. The next one is the 512 seals being that breaching of the CO at about 28 past 10 and that was acknowledged also at 23 minutes past midnight; is that right?-- Yes.

And then there follows a whole series of other alarms that were all in respect of various points around the mine that were all acknowledged around about 23 minutes past midnight; is that right?-- Yes.

Including the last two on the page which are again the monitor point 5 at the 512 seals?-- Yes.

Now, they have all got the number "1" against them over on the right-hand side. You don't know what the significance of that number is apart from the fact that that would be the number punched in by whoever was acknowledging the alarm -----?-- Yes.

On the Unor screen. Now, just - I will just ask you this: that second last one on the page, that's a breaching of the CO level at those 512 seals and you will see the level of CO is actually running at a 1000 in each of those - in those two columns; that's the alarm value and corrected value?-- Yes.

Do you see that?-- Yes.

But you will see the level that has been breached - the set point value that has been breached is a value of 200?-- Yes.

Now, that is actually the gas high 2 level; is that so?-- Yes.

So that going back to the last orange entry there, CO at 512 - and to illustrate these two levels, the CO has gone past the 150 level at 28 minutes past 10 at that monitor point 5, that's the last orange one?-- Yes.

Gone past the 150 level. There has been no resetting of any set point value because we know that those alarms weren't acknowledged until 23 minutes past midnight; is that right?-- Yes.

And the CO has continued to increase and it has actually - at 49 minutes past 11 it has breached that second - the second level at which the alarm was set, the gas high 2 level?-- Yes.

Now, I want to come back to the events of the Sunday night. You say that you reset - the Sunday afternoon, first of all. You reset the methane level in respect of monitor point 5. Then you went down to the pit?-- Yes.

You carried out various duties down there; is that so?-- Yes.

Do you remember when you next returned to the surface?-- Half past 8, around about.

And what was that for?-- Crib time or - crib is at 8 o'clock, but we finished what we had to do down there and came out of the pit. We had no more work to do down the pit.

Okay. You - when you came back up to the surface were you aware of any alarm or siren sounding at that time?-- No.

After you returned to the surface what did you do there? You had crib?-- Yes.

What about after that?-- Did nothing, read the paper and waited for the night shift blokes to come in.

And - well, during the time you were up on the surface did you hear any alarm?-- No.

Did you remain - were you still at the mine later that night, about 11.35 or thereabouts?-- Yes, I was in the office over at the workshop.

That's at the electrical workshop; is that right?-- Yes.

And what happened there? What do you recall about that?-- I heard the siren go off at whatever time that was, half past 11, and I just waited there expecting a phone call from Michael Squires and Bobby Davo to say what the problem was, why the siren went off, and Bob came over and told me to get over there and have a look.

Bob Davidson?-- Yes.

Where did you go?-- I went straight over to the lamp cabin and saw that - through the window where you could see the screen, saw that it was all alarmed, all the alarms were up on most of the points and then ----

Sorry, just pause a moment. You say all the alarms were up. This is on the Unor screen?-- Yeah.

What about on the con log itself?-- I didn't look on the con log.

You didn't look on the con log, you looked straight at the screen?-- Yes.

Was that from inside the monitor room?-- No, from the outside.

From outside, looking in through the window?-- Yeah.

Okay. Yes, go on?-- And then Bob said he had been trying to contact the 5 South crew on the telephone and couldn't get hold of them and I tried myself and there didn't seem to be anything wrong with the phone system and then Michael Squires asked me to come in and have a look at the readings on the Unor and said that the printer wasn't - wouldn't operate and he wanted to print the screen as the system went through each scan so we had records there of what levels the gas were at

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what times.

Mmm?-- And because the printer wasn't working, and I couldn't see anything obviously wrong with it, so he asked me to do - write them down on paper and note the times.

I see. Did you do that?-- Yes, and - yeah.

What happened after that?-- And then everybody was out there. Dennis and Max, my immediate supervisors, were there.

That's Dennis who?-- Dennis Evans and Max Robertson.

Yes?-- And they had a look at the printer and couldn't see anything wrong with it either, but then at this time it must have been half past 12 or somewhere. I shut the system down and rebooted it and the printer was then working.

So, when you say "the system" you mean the Unor - the computer that the Unor system is on; is that right?-- Yes.

Do you recall any of the circumstances surrounding the acceptance of these alarms at 23 past midnight?-- No, I have no idea. Only that - that's possibly when I shut it down and rebooted it.

Well, if, in fact, the system was shut down while there was an alarm showing, was there a default number that would come up on the system as that authority number, the right-hand column over there?-- Don't know.

You don't know that? You have never had occasion to do that?-- No.

Your Worship, I will tender that multi-coloured copy of Exhibit 90 as a separate exhibit. No further questions.

WARDEN: Exhibit 127.

ADMITTED AND MARKED "EXHIBIT 127"

CROSS-EXAMINATION:

MR MacSPORRAN: I just want to ask you a few questions about the Unor sampling system. Part of your job was to maintain that system; is that so?-- Yes.

And part of that involved testing the system to see whether - how long a sample of gas would take to get from a particular monitor point to the surface?-- Yeah, we would always note down the time it took for a sample to reach - to when it appeared on the screen.

XXN: MR MacSPORRAN

WIT: FRENCH B J

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Right. And at the same time you would be able to tell whether there were any leaks or deficiencies in the system because you would introduce a known concentration of gas at the monitor point; is that so?-- Yes.

Now, what was the procedure? Was that done on a regular basis?-- Once a month.

And the results of that would be recorded once a month, would they?-- Yes.

Now, just the mechanics of it, if you take CO, for instance, you would introduce a known concentration of CO at a particular monitor point underground?-- Yes.

And then that would take some time, depending on where it was in the mine, to reach the surface and be analysed?-- Yes.

How was it actually timed? How would you time the period it took to get from the monitor point to the surface, analyse it?-- The person putting the sample through the sample point would note the time that he put it in there and once - used to do three points at a time and he would do those three, note down each time that he put it in each one of those, and then he would ring you and say the time at each one and then when they appeared on the screen you would note that time down and work out how many minutes.

So you would be in the Unor monitor room on the surface?-- Yes.

You would get a call to say he had introduced a known sample of CO at a particular monitor point - three monitor points at three different times?-- Yes.

You would watch the screen, would you, on the Unor system to see when those samples registered?-- Yes.

How would they register? If you assumed that the concentration of CO was 44 ppm, how would that register on the Unor screen?-- It would alarm.

As 44 or would it alarm at a given rate and then rise to a maximum of 44 or how would it be done?-- It would show up the known quantity - the known concentration of gas would come up on the screen, or very close to it, if that line was in good condition.

Do you mean that the first warning you would have that that particular sample had reached the surface would be a read-out on the screen of, say, 44 or very close to it?-- No, depending on when the system looked at that sample it might analyse the first - only get some of that sample and the next time - the next time it scanned it it would get the full sample and then - like, the first time you'd see it on the screen it may not be the value that you put into the line at the sample point, but on the next one, the next time it got around, and you looked at that sample it would be the full amount or very close to it.

And what delay was there between the first and second time the analyser may have scanned that sample?-- Four minutes.

So which figure did you put down for the lag time from the



monitor point to the time it was analysed as at that sample on the surface?-- When the highest - the closest value as to what we put in. We would take that time. If it came up short on the first scan and the second time it came up a better reading -----

You'd take the second reading?-- You'd take the second reading and that would be the time taken.

Which would have given you a greater lag time from the monitor point?-- Yeah, than the first scan, yeah.

Was that more often the case than not, that you wouldn't get the full sample on the first span of it?-- Luck of the draw.

It varied, did it?-- Depending on when the - it looked at each sample many point for - I'm not particularly sure, it was a minute or thereabouts, and then go on to the next one. So it could get that full sample through there straight up or it might not.

If you got it straight up you'd note that time as being the lag time?-- Yes.

If it didn't get it straight up you'd note the longer time as being the lag time?-- Yes.

Would there ever be occasions when you would wait longer than two spannings of the sample? That is, if you got a low value first, a high value second but not still the sample value, would you wait longer to see if it came up further?-- Yeah, we'd leave that point up on the screen and brought the next - when you disabled those points and enabled the next set of points you are looking at, and in between that time it would scan through that and if it still didn't come, well, you would disable it and note it down on the sheet of paper that we got a poor result on that sample point.

A poor result on a particular sample point might tell you there was a leak in that particular tube?-- Yeah, it might.

And if that result was achieved what would you do to repair such a problem?-- Well, that would be - the supervisor would get that sheet, look at it, and schedule somebody to go and check that line right through and find where the leak, break et cetera was. It was never done on the night or day when the samples were done because it took the best part of a shift to put the samples through each point in the mine.

At any given time when you were doing these checks there would be three points up on the screen; is that right? You'd be waiting for results on three points?-- Yes.

Would they always be far enough apart so that you wouldn't have to read two of them at once?-- Two could come up at the same time.

And you'd then have to deal with both of them at the same time?-- Yeah.

Did that cause you any difficulty?-- No.

You'd have to be determining for each of those at the same time whether the maximum value of the sample had arrived, and if not you'd wait longer to see if it would?-- Yes.

You'd be doing that for both at the same time potentially?-- Yes.

That didn't on any occasion cause you any confusion or difficulty?-- No.

Could the witness see Exhibit 11, please, Your Worship?

Do you see that appears to be a record of the span and leak tests on the various monitor points over a period of time?-- Yes.

The front page, I think - or the second page in from the front cover is the testing that was carried out on Sunday, 7 August?-- Yes.

Do you see for monitor point 18 there is just no result?-- Yes.

Did you become aware of that?-- No, apparently that sample at point 18 didn't arrive at the surface until some hours after being introduced.

That would tell you that there was an obvious problem with the tube relating to point 18, wouldn't it?-- Yes.

Had there been any other difficulties with point 18? If you look back through the records -----?-- No.

My copy doesn't have a date on it, but it's the second sheet from the back, I believe it is, point 18 has a lag time of 57 minutes, I think it is?-- Yes.

The next sheet in has a lag time of 70 minutes?-- Yes.

The next one has 65 minutes?-- Yes.

And the last one, as we have confirmed, just wasn't recorded at all, it took some hours. Those lag times varying between 70 and 57 minutes, would that be an indication of any difficulty with point 18's monitoring?-- I wouldn't know.

You wouldn't know?-- I wouldn't know.

Well, as a matter of common sense, if you introduced a sample at point 18 on a number of occasions you'd expect it to arrive at the surface roughly the same time, wouldn't you, same lag time?-- Yes.

If one sample at point 18 took 57 minutes to arrive and another took 70 minutes to arrive you would suspect something was wrong, would you?-- Yes.

To the extent that you would require some checks to be carried out as to whether the point was monitoring validly or not?-- Yes.

Did you have any involvement personally with any of those tests recorded on the exhibit in front of you?-- No, I couldn't say.

In terms of the recording of the time taken you said the sample would be introduced underground and then you'd be phoned and told what time that was?-- Yes.

Where would that time come from? Would it be a deputy telling you the time or would you check the time in the office where you were?-- They would tell you the time.

They would tell you the time they had introduced the sample?-- Yes.

From a watch they had underground?-- Yes.

Was there any check, do you know, done between the time pieces carried by the deputies and the clock in the Unor room?-- No.

Because if they weren't recording the same time there'd be room for error, wouldn't there?-- Yes.

As far as you know that was never checked?-- No.

There was no procedure in place to check that?-- No.

After the 512 Panel was sealed, the sealed point which is point 5 was apparently left on the screen whilst the monitoring was carried out on 7 August. Would that be a standard procedure when a panel was sealed?-- I don't know. I've never done a test while the section has been sealed.

I mean if you wanted to closely monitor the progress of the sealed panel you'd have to leave on the screen all the time the seal monitor, wouldn't you?-- Yes.

If you were at the same time carrying out integrity tests on the monitor system, how many points would you have up on the screen at one time?-- Three.

Would one of those have to include the seal point?-- If you wanted to keep an eye on it, yes.

You couldn't have any more than three on the screen you say?-- You can have the whole lot on there if you want to.

These tests on the monitoring system were done monthly, weren't they?-- Yes.

This panel had been sealed, we are told, at about one o'clock on the Sunday morning, 7 August. Do you know whether that day, 7 August, was just the ordinary schedule day for the checking of the monitoring system?-- I don't know.

It wouldn't have been a very good choice of day to test the whole system, would it, if you were trying to closely monitor the whole panel after sealing?-- I couldn't say.

Anyway, you don't know whether 7 August was a normal monitoring day that was scheduled or whether it was a -----?-- No, I don't.

On 7 August, that Sunday when you came on shift, that was in the afternoon, was it, the afternoon shift?-- Yes.

You didn't know anything about any difficulties or problems that they had experienced in the 512 Panel around about the time of sealing?-- No.

No-one told you of any smell or haze that had been detected inside 512?-- No.

You were totally unaware of the status in fact of 512 Panel on your shift?-- That's right.

You heard no-one expressing any concern about the panel?-- I had known that the CO - that they had some CO in there, but that's all.

How did you find that out?-- Hearsay the week before from somebody. I don't know. I couldn't say where I heard it from. Don't know. I just knew that they had CO in there.

That's the week before as opposed to that shift when you came on on the Sunday? You had heard the week before?-- Yes.

What you had heard, was it that the CO was high or what had you heard?-- No, just that they had some.

Was it CO?-- Once it goes over zero it's high.

Are we talking parts per million or litres per minute or -----?-- Parts per million.

You don't now know who you heard that from?-- No.

Do you know whether it was a deputy or a miner or -----?-- More than likely a deputy.

Just one final matter, Mr French. When you were looking to establish the highest value that a particular monitor point would record with a known sample of gas, how did you ultimately determine that what you saw was the maximum value? Did you wait for the trend to peak and then drop away or how did you measure it?-- Yes, you sort of - it would peak at its highest amount and then it would dilute because it was only a set amount of that sample that went up the tube.

So again would you record as the time that it reached the surface the peak time?-- Yes.

But you wouldn't know that time until it dropped away by being

diluted?-- Well, you wouldn't know. I would record the time when I saw it at its peak.

Again you wouldn't know what that value was until you saw it drop from that level?-- Well, you would note down - I would note down the time I first saw a sample come on the screen and then - just on a piece of notepaper - and then wait for the next scan and if it was higher, write that time down, and then it went through again, if it was lower you would put the time down that it was at its peak.

You did that for every monitor point?-- Yes.

You had up to three on the screen at one time?-- You never had three - you had three on the screen, but I can't recall ever having three on there at the same time because - just because of the geography of going from one point to the next down the mine they wouldn't - if they all came up in 20 minutes - took 20 minutes for one point to reach the surface it would still be another 10 minutes or more between taking the gas bottle and gear from one point out of that return over to another - you know, there always seemed to be enough time.

Was there a sequence set down for introducing samples into the monitor point to avoid any problem like that? That is you would sample from point X first and then go to a sequence?-- Yeah.

It was set down, was it?-- It wasn't set down. We would - before the deputy or whoever was putting the sample in went down we'd say, "Well, we'll do these three points first and then once we do that we will do the next three over somewhere else."

And was that set down so as to -----?-- We'd write it down on a piece of paper.

That would hopefully ensure you wouldn't have any problem with the samples arriving on the surface at the same time for any couple of points?-- Yeah, that just was the system so we could keep a track of what was going on.

Thank you.

CROSS-EXAMINATION:

MR MARTIN: Mr French, who is it, so far as you know in or at - who was it at No 2 Moura who determined where the final monitor point went behind a seal?-- The manager.

Can I just ask you about the printer on the Unor which apparently didn't work, had apparently nothing wrong with it that you could see and then printed when you re-booted it; do you understand?-- Yeah.

Can you give us any explanation for that?-- Just a leach in the system, you know, I've got no idea.

When it did print was it a continuity of printing there - in terms of time, I mean?-- It printed out in sequence every screen that it was asked to print from when it wasn't working sometime on the day shift.

That's what I wanted to know. When you came on shift at about 2.45 or so on the Sunday?-- Yes.

Did you see Mr Squires?-- No.

Did you see him at any time before, I think it was Mr Davidson came to get you, after you came aboveground - in other words, about 11.30 that night, did you see Mr Squires before then?-- No.

Did you see either of Mr Mason or Mr Schaus that afternoon or that shift?-- No.

Could you look again, please, at Exhibit 127 and go to the - a few from the top which - the first reference to 512 top return, have you got that? I just want to run down the first three columns. Are you with me?-- Yeah, sorry.

It seems that on 2 August there was an alarm at 6.01 and not acknowledged till 9.54?-- Yes.

Of carbon monoxide, and on the 3rd an alarm of 512 which took eight hours or so to acknowledge on carbon monoxide; that's right, isn't it?-- Yes.

And looking right over to the right there is a jump of 1 part per million, isn't it?-- Yes.

Let's continue to run down. On the 5th there is an alarm on 512 top return of carbon monoxide and that took something like - not very long - something like 16 minutes to acknowledge?-- Yes.

And then the following item of carbon monoxide alarm on the 6th at 7.49 and not acknowledged until, what, at a rough estimate, an hour and a half or so at 14.21 - sorry, seven hour delay?-- Yeah.



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Again on the 6th, the immediately following entry, at 8.21 it's acknowledged at 8.22, within a minute; that's the case, isn't it?-- Yes.

And then progressively running down those following items there is a constant acceptance of alarms within a minute or so until 8 minutes past midnight on 7 August. That's acknowledged within about a minute or so?-- Yes.

And these are, of course, all of CO, and the next alarm when it's been reset from 10 ppm to 45 ppm is acknowledged very quickly at 5.44 - I am sorry, it's alarmed at 5.44 and it's accepted at 5.46, but really it's even a less time than that, isn't it, it's a matter of half a minute or so that it's taken to accept that?-- Yeah.

And the next entry, alarm of CH<sub>4</sub>, we have already dealt with those, but they are accepted within a couple of minutes, aren't they, when you look at it?-- Yes.

A minute or so as you progressively run down. So, that suggests, doesn't it, and when you keep looking down those columns, that there is somebody in immediate proximity keeping an eagle eye on all of this?-- Yes.

There must be. Say you run down through the morning of Sunday the 7th, 9.29 alarm CO, acknowledged really within half a minute or so, and so it goes on in the early stages of the morning until about 10.04 or thereabouts, an alarm, but that takes 33 minutes to acknowledge, but then it's not too bad, I suppose. At 11.26 there is an acknowledgement of 512 seal, alarm carbon monoxide, which takes about two minutes to acknowledge, and it's fairly well acknowledged and fairly quickly acknowledged within minutes progressively down that page until 12 - the entry after 12.47. 12.47 the alarm was acknowledged within something like three minutes but then it drops off completely, doesn't it, until 7 August, 14.31, that's not acknowledged until 20 minutes, and then we have those problem entries where there is an alarm of 8.15, not acknowledged at all and so forth. So, in the early stages after the sealing what I am suggesting is there must have been somebody constantly looking at this machine?-- Yes.

Thank you, Your Worship.

WARDEN: I might take a short adjournment, gentlemen, thank you.

THE COURT ADJOURNED AT 10.48 A.M.



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THE COURT RESUMED AT 11.11 A.M.

BRIAN JAMES FRENCH, CONTINUING:

CROSS-EXAMINATION:

MR MORRISON: Can I ask you a couple of things? When span tests are put through they are put through routinely by a team which consists of men down the pit putting the samples into the Unor lines and an electrician sitting up on the screen writing results down?-- Yes.

When a sample is put in it takes a varying amount of time to reach the surface depending on which sample point it is put in?-- Yes.

Some are short, some are long?-- Yes.

When it hits the surface and goes through the analyser the analyser records whatever percentages of gas is in the span sample?-- Yes.

And sometimes they will be a straight CO make or they may be a CO plus CH<sub>4</sub> mix, depends on what span is used?-- Yes.

And what happens is that the analyser then or the computer then takes the information from the analyser and converts it into data which you see on the screen?-- Yes.

And the data you see on the screen is represented in figures?-- Yes.

So that for CO you will have a number for parts and for methane you will have a percentage?-- Yes.

So, that when you see the result of the span hitting the surface and going through the analyser you don't see anything rising to a peak and then tailing away, what you see is digits?-- Yes.

And the only change you will see in those digits from when it first reached the span is four or five minutes later when it comes back and reads that point again?-- Yes.

Because the analyser is set so that it has solenoids which trip from tube to tube in a particular sequence?-- I am not sure.

You can ask it to sample one line or ten lines?-- Yes.

Or, as you say, on span days three lines?-- Yes.

And you can also ask it not only to sample the three that are

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being the subject of span tests, but any other one as well?-- Yes.

So that if you had up to three for the span tests plus point 5, say, from behind the seals what you would see is that point 5 would be sampled more quickly than its normal 13 minute cycle?-- Yes.

Because ----?-- What I said before was if you wanted to have that point up there you would only have another two sample points so you only had the three on the screen at one time.

Yeah. It may be that you could have the three sample points up plus the fourth, it just depends on who does the combination?-- That's right. You could have the whole lot up there.

If you have less than the full amount so you have just a few sample points plus one other you are going to sample all of them much more quickly in terms of their sample time than would normally be the case?-- Yes, shorten it to - shorten the scan time.

Yeah. So, you could easily get a point being reviewed every four or five minutes as opposed to every 13?-- Yes.

And points that are not shown on the screen, whilst the gas is still being sucked up the tube by the pump that gas is being discharged into the atmosphere?-- I don't know.

Now, when one is doing a span test the person sitting on the surface is looking for basically two things: firstly, are the readings in accordance with what the span should be, that's the first thing?-- Yes.

And that will - if they are not that will tell you a number of things. Firstly, it might tell you that the tube has a leak in it?-- Yes.

Or it might tell you that the tube is crimped and, therefore, there is some delay in dilution in the sample getting up?-- Yes.

Or it might tell you that the analyser is not working properly or it might tell you that the computer is not working properly?-- Yes.

But if you make assumptions about the machinery being right, what you are looking for is to see is it reading in accordance with the span?-- Yes.

Now, the second thing that it tells you, and which is recorded in the documents which you were shown, is how long the sample takes to get up?-- Yes.

And when you put a span test through it is easy to tell when it arrives because it is such a large amount of gas for a particular reading?-- Yes.

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So, for instance, on the sheet - I think you have still got a copy of Exhibit 127 there?-- Yes.

So, if we look down, say, on 7 August - let's just pick one. You will see about half-way down a reading on 7 August at 9.40 a.m. for 4 South, point no 1, there is a gas high on CO of 43?-- Yes.

That's a span test?-- Yes.

So, it is easy enough to see when it hits the screen and in terms of selecting a time, that is to say, recording a time when you are sitting there, it is dead simple because all you have got to note is when does it hit the screen and that's the time?-- Yes.

So that if - I know it hardly ever happens - perhaps in your experience never has, but even if two samples hit the screen at one time what you are looking for instantly is time and that's easy to record?-- Yes.

And the figures stay there until the next pass?-- That's right.

So, you don't have to instantly look at the figures because they will remain there for the five or six minutes till the next pass through that sample line?-- Yes.

All right. So, the problem that Mr MacSporran was asking about, worrying about sample points hitting the screen at the one time, just doesn't really exist, does it?-- Not really.

Now, the spans on the Sunday, I think, were done by Mr Pearse, weren't they?-- Yes.

He is another electrician at the mine?-- Yes.

Is he senior to you or are you all the same?-- We are all the same.

So, if we look through 7 August, I think we can see spans being put through from around - I will try and pick one. About 8.48 in the morning, I think, might be the first one, point 19 Dips North return?-- Yes.

We can see those, for instance, on those CO figures, certainly all those 40 and 43 parts figures through the rest of that day down to about midday, which is the 5 South top for point 7, they are all span tests going through?-- Yes.

Now, it would be, I anticipate, the routine thing for the team doing the span test to turn off the siren?-- No.

Well, otherwise it would be going off every time a span hit the machine, wouldn't it?-- It would.

So, if this was - it was left on during this span test day you would have a dozen occasions, at least, when the siren would be going off?-- Yes.

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And the siren is so loud that no-one in their right mind is going to sit there with it still on, are they? You can't live with it?-- That's right.

So, do I correctly anticipate that most span test teams, when they are putting the spans through, would turn the siren off?-- You would leave it off - if you left the room because of the time difference, if you knew the next sample point would be 20 minutes, half an hour, whatever, before you had a judgment on that sample reaching the surface, you would reset it and be doing something else and the siren will go, but if you are in the room there, that's right.

You turn it off?-- You would see the alarm come up on the Unor.

Because you don't actually need to have - you don't actually need to have the siren going off for you to know that there is an alarm, you can see it equally well on the screen?-- That's right.

And if you hit the con log accept button that turns the siren sound off, that does nothing to the screen, does it?-- That's right.

So, you can hit that and turn the sound off, but that doesn't give you the time at which that acknowledgement is put in the machine?-- Yes.

So, you could be perfectly well aware of an alarm by seeing it on the screen, but nonetheless have the siren off and put your acceptance in some minutes - a lot of minutes later?-- Yes.

And all that this acknowledgement time on this sheet will tell us is when someone actually punched - I am sorry, punching the buttons is the old system - used the mouse to record an acknowledgement and enter a figure?-- Yes.

And staying with the span tests for the moment, there is good reason to have the siren off when you don't need it on during a span test because if it is constantly going off people are likely to start ignoring it, aren't they?-- That's possible.

Now, when you arrived at work on the Sunday - no, I am sorry, let's just do something else for the moment. I want you to talk about the actual sequence of the machinery. You told us that when an alarm goes off on the machine the particular point goes red?-- Yes.

Now, if we just pick one that we can talk about, let's say it is point 5 which is designated "512 seals"?-- Yes.

The letter "5" and the words "512 seals" would go red?-- Yes.

And the individual gas that had caused the alarm, that figure would go red?-- Yes.

But not any other line - not any other reading on that line?--

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No, only at the end it would say, "active", and it also would be red. It is on the same line as that.

As the general data at that point and it is on the right-hand end?-- Yes.

Now, if the readings are normal the rest of the day is in green?-- Yes.

So, at the same moment as the alarm goes, if everything is operating normally, the siren will go off?-- Yes.

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You can stand up and hit one of two buttons, an accept button at the con log in the Unor room, or alternatively the parallel accept button in the undermanagers room?-- Yes.

All that does is turn the siren off?-- Yes.

It doesn't do anything for the screen?-- Yes.

You then go back to the screen and you use the mouse to call up the alarm accept?-- Yes.

And when you put in an alarm accept the screen changes, doesn't it?-- Yes.

It goes blue?-- I don't know.

Well, you must have done this. Have you never accepted an alarm?-- Yes.

When you accept the alarm does not the word "active" change from red "active" to blue "accept"?-- The writing goes blue. You said the screen.

I'm sorry. I accept it's my fault?-- It has different colours.

Let me start again?-- Right.

I'll try and be more precise. When you do the acknowledgment on the screen the word "active" changes to "accept" and is coloured blue?-- Yes.

The point that had previously alarmed and was in red changes to -----?-- Blue.

So do the colours of the letter 5 and "512 seals", that goes blue?-- Yes.

And it will stay blue until the next pass on that sample tube?-- Yes.

And if at the next pass on that sample tube conditions are normal it will then at that point revert to green?-- Yes.

If conditions are not normal, if it's back in its alarm, within its alarm range, it will again alarm and go back to red?-- Yes.

The red flashing light at the top left of the screen in alarm mode when you hit "accept" and the digits go blue, that light disappears?-- Yes.

Having done the accept on the machine, punched in a number and hit "okay", if you don't then hit either of the reset buttons at the con log or the undermanagers office the siren will stay off, won't it?-- The siren will not go off on a gas - on a Unor alarm again.

It will go off on any of the other alarms around the mine, but

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not on a Unor alarm, will it?-- That's right.

So you have to hit the reset button in the correct sequence otherwise the siren will stay off for a Unor alarm?-- Yes.

And hitting the reset button at any point earlier in that sequence, we have discussed, won't have any effect, will it?-- Yes.

So if you hit the reset button earlier than you should it will not in fact reset the siren for the Unor?-- Yes.

When you changed the alarm levels for a particular point you don't have to wait for an alarm to do that, do you?-- No.

You could at any time change alarm levels if you so chose?-- Yes.

And if one was sitting there and watching the increasing levels of a particular gas, it doesn't matter which, and you knew what the alarm levels were, you could easily change the alarm levels before the actual alarm hit?-- Yes.

Changing the alarm levels is a complicated process?-- No.

It's not something that ordinary miners do. People who are trained to do it do it?-- No.

So do ordinary miners change alarm levels, do they? They don't, do they?-- Not as far as I know.

Alarm levels are changed because designated people or people with particular positions request them to be changed?-- Yes.

It's most unlikely that if an ordinary miner came to you and said, "Excuse me, Mr French, will you change the alarm levels on X?", that you would do it?-- That's right.

If you have an alarm on a particular gas, you accept the alarm and change the levels, unless the gas has risen to the new alarm levels by the next pass the point will show normal?-- Yes.

Remain in green along the whole line of data?-- Yes.

Routinely with a full screen up, the pass is 13 minutes?-- Yes.

If we look at a particular increase of alarm level, if the gas has reached the new alarm level by the next pass it will alarm?-- Yes.

Even if the siren is off it will change on the screen?-- Yes.

So if we now look at 127 for a moment and we look at those two entries, the one for 512 seals at 12.47 where there was an alarm on CH4 with an alarm level set at three, do you see that one?-- Yes.

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And you look down two lines to the next alarm level for CH4 for that point and it's at 4.5, the alarm level is set?-- Yes.

All that tells you is that by the pass that occurred at 8.15 the alarm level was set at 4.5?-- Yes.

It doesn't tell you by looking at this log when that alarm level was set to 4.5 except that it must have been within that 13 minute pass; is that correct?-- Say that again?

All it tells you is that as to the time when the level was set, by looking at this document all that tells you is that 4.5 must have been set within the 13 minute pass that resulted in that alarm. It doesn't tell you other than that when it was changed to 4.5, does it?-- No.

Let's go back two lines to the three. If the alarm level was changed - not changed at that point it would alarm again, wouldn't it, on the next pass?-- If the gas level was still there, yes.

So that if at 12.47 and 12.50, if that alarm level of three was not altered, within the next 13 minutes on the next pass that CH4 would have alarmed again; isn't that correct?-- If the gas was still present, yes.

Unless the gas dropped, yes?-- That's right.

Well, you wouldn't normally anticipate in a sealed panel of this sort that CH4 was dropping, would you?-- No.

So isn't it true to say when we look at the document that the alarm level for CH4 must have been changed when that alarm was accepted at 12.50 because otherwise 13 minutes later it would have alarmed again?-- It's possible.

Well, let's accept that the gas was not dropping, it was at the same level or going up, that CH4. It must have alarmed again unless the points were changed?-- Yes.

Now, you weren't there at 12.50, were you? This is two hours roughly, or an hour and a half before you arrived?-- Yes.

So does it not follow that you did not change the CH4 level from three? You could not have done so, you were not there?-- I remember at the start of the shift John Blyton asking me to lift the CH4 to whatever levels he wanted.

I understand that. That wasn't the question I was asking. You did not change the level from three, did you?-- I don't know.

Well, on the face of this log it couldn't have been so, could it, because we don't have another alarm for methane 13 minutes later and it's most unlikely that the gas was going down. So it's almost certain that the level was changed at that point, isn't it?-- I don't know.



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We don't have another methane alarm on that point until 8.15 at night, do we?-- Yes.

So the change in levels that you talk about with Mr Blyton, if it was CH<sub>4</sub>, must have been a change of levels when there was no alarm on CH<sub>4</sub>; isn't that right?-- Yes.

Now, knowing that, do you think you might have changed some other levels, perhaps O<sub>2</sub>?-- All I can say is what I remember on the day and it was CH<sub>4</sub>.

Well, your memory is now being matched with this log. This log is a print-out of what actually happened, so let's just examine it a bit further, shall we? You arrived about 2.45 and went on duty at about three?-- Yes.

The acceptance between the two lines that we have been looking at must have been an acceptance you did, must not it?-- Yes.

And that's an acceptance for an alarm on oxygen?-- Yes.

Does it not follow, since there is no subsequent alarm on oxygen for that point for some time, that you reset the alarm levels on oxygen at that time?-- The oxygen levels were never changed. It's gone off here again at - hang on, I don't know  
-----

The next oxygen alarm is for 4 South and when the pit went up, not for 512?-- 512, yeah.

There is no subsequent oxygen alarm for 512 on that sheet, is there?-- No.

Does it not follow that when you accepted the alarm for O<sub>2</sub> at 2.58 that you changed the levels of O<sub>2</sub>?-- No.

Isn't it more likely that when you are asked to change some levels it was the levels in respect of the point that was in alarm mode at that time?-- No.

Well, at that time we only have one point that was in alarm mode. At that time methane was not in alarm mode; isn't that true?-- That's right.

The screen then was in alarm mode for one gas when Mr Blyton asked you to change the levels?-- Yes.

Doesn't it follow then that you probably changed the alarm levels for oxygen and not methane?-- No.

You think you may have changed the alarm levels for methane notwithstanding that it was not then in alarm mode?-- Yes.

Now, in order to accept the alarm which was on on the screen at the time you were there you would have to follow the procedure that we discussed earlier?-- Yes.

And it follows then that unless you hit the reset button at the end of that procedure the siren for the Unor would not go

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off after that time, would it?-- Yes.

So if in fact the siren did not go off after that time - we are talking about the audible siren, if in fact the audible siren did not go off after that time, does it not follow that it is very likely you did not hit the reset button?-- That's possible.

It is possible you didn't, isn't it?-- That's right.

You did not accept any subsequent alarm that day, did you?-- No.

We can tell that because the print-out shows us the automatic acceptance when rebooting occurred?-- Yes.

That's what the machine shows us, doesn't it? When the rebooting happened the machine automatically ran back through acceptances?-- I don't know, I'd have to assume so.

You don't know of any other reason why it would appear this way. We know then - or you accept then that the siren is so loud that if it went off on an alarm, there is - no reasonable person would sit there and put up with it for very long?-- Yes.

And all the training of everybody is that if the siren goes off it has to be checked because it could be something quite serious?-- Yes.

And if the siren goes off it's not necessarily the Unor, it could be one of the other sirens?-- Yes.

So that if we got an alarm at 8.15 that night you can't think of any miner on shift that would have ignored that siren sound, can you?-- No.

Nor would you expect anybody to ignore the siren sound, would you?-- Yes.

Let's go back one line to the O2 acceptance. The designation of authority number there is number 5. That was put in by you, wasn't it?-- I don't know.

Well, you accepted that alarm, that number must have been put in by you to accept the alarm?-- You said I accepted that alarm.

You agreed with me?-- I said it's possible.

I'm sorry -----?-- Whatever. If I did -----

You did accept that alarm, didn't you?-- Righto.

You did, didn't you?-- If I was there at the start of the shift when I was asked to adjust the CH4 level on the 512 monitoring point and that alarm was up there I would have accepted it, yes.

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Now, consistently with what we have just discussed there is no way in the world you would imagine anyone would put up with the siren sounding - sorry, I'll withdraw that. I'll start again. I just want to explore one thing, if you don't hit the reset button and the audible siren is off for Unor, Unor alarms, that does not stop the siren going off for any other alarm in the pit?-- Yes.

When you go through the reset procedure on the con log, when the alarm goes a light comes up which tells you whether it's Unor or electricity or low water -----?-- Yes.

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And that light remains on and flashes, doesn't it?-- No.

Does it flash?-- No.

When you accept the light goes out, doesn't it?-- Yes.

It doesn't go out if you simply hit the audible siren off button?-- The accept button.

The accept button. The light stays on?-- Yes.

It only goes off when you do accept on the machine?-- When you re - it's a reset button and you push the reset. If in that time you rectified the problem that's caused that alarm, then you can reset it.

But the light only goes out when the reset button is finally hit?-- Yes.

All right. Now, you said that the con log can't be reset until the new gas level - if you have adjusted the new level - is recognised by the system. That's not correct, is it?-- Beg your pardon?

You said in your evidence right at the start when answering Mr Clair that the con log could not be reset until the new gas levels which had been put in were recognised by the Unor system on the next pass around?-- If it hasn't - if the alarm hasn't been accepted.

No, if the alarm hasn't been accepted, the screen will stay red for the digits that are relevant to that alarm?-- Yes.

The red light will keep flashing -----?-- Yes.

----- in the top left, and the light on the con log will stay on?-- Yes. Once the alarm has come up, it will stay on there until it's reset.

And you can't set new levels until you accept the alarm?-- I don't know.

Once you accept the alarm, you can either change the levels or not depending on what you want to do?-- You can change the levels at any time you want.

But if you accept the alarm, you can reset the con log without resetting the levels, can't you?-- Yes.

Now, when you were down the pit on Sunday night, what exactly were you doing? Can you recall where you had to go?-- 5 South and 1st North-west to check the methane monitors on the miners.

You are talking about the Trolex?-- The Trolex.

So you went to 5 South first?-- I don't know.

When you talk about checking the methane monitors, what were

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you doing to check them?-- Putting a sample through.

So, that would be the introduction of a small span into the Trolex itself to see that it would trip at the right level?-- Yes.

And when the Trolex trips it cuts off the heads?-- Yes.

But not the miner?-- It has two levels.

The first level cuts off the cutter heads, second power to the miner?-- Yes.

You were testing both of those levels?-- Yes.

At both of those places, 5 South and 1 North-west?-- Yes.

Having done that, what else did you have to do down there?-- Earth leakage tests.

And where is that?-- On the transformers supplying power to the panels.

So, that's 1 North-west and 5 South?-- Yes.

No other panel was operational that night?-- No.

Power, I think, was down to 510?-- I don't know.

Did you check to see if 510 had power through to the tranny there?-- No, I didn't go into 510.

Then after the earth leakage test what?-- Belt starters, transformers and pump transformers, same thing, earth leakage tests that were done once a week.

Was this done in company with anyone or were you by yourself?-- Michael Shaw was with me.

And then up the top at what point?-- Half past 8.

Do you recall the time by any particular thing or you just assume that that was your ----?-- We left the pit after 8 o'clock and it would have been around - getting close to half past 8 somewhere. I don't know the exact - it wouldn't be an exact time.

All right. Your normal crib time would be when, about 8?-- 8 o'clock.

You have no reason to think that you were delayed this night, do you?-- Delayed where?

Down the pit. You have no reason to think that you were delayed that night and came up late, do you?-- No. Well, we did the tests and then got - made sure the conveyor belts were running and that's it.

Well, it could well be the case, could it not, that you were

XXN: MR MORRISON

WIT: FRENCH B J

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up at around normal crib time, at about 8?-- No.

Why not? Why are you so sure not?-- Because I remember being down the pit and saying - I don't know, we had to go and have a look at another belt, I can't say which one, and it was after 8 o'clock and we were still down the pit.

But you don't know what time you arrived on the surface?-- No.

I see?-- Well, not an exact time.

Now, I just want you to tell me this: when you look at the screen, if it's the normal data screen on the Unor, it shows you points 1 down in numerical sequence. I don't mean 1, 2, 3 necessarily but it will be, you know, in this case 1, 3, 4, 5, 6, 7, etc?-- Yes.

It goes numerically down the page - down the screen, I am sorry?-- Yes.

So, in terms of what you saw when the pit went up and you went over and saw the screen, you said it was all red, all the digits were red?-- Yes.

There is nothing that would alter the sequence of points on the screen. The data might alter but the same sequence always applies, the same set of -----?-- Yes.

----- order of points. Well, you saw those points at about, I think you said, 11.30?-- Would have been later than that, but not too long after.

Not too long after, I see. Well, can I just ask you to have a look at a document, please? The point that we are looking for in accordance with what you said earlier today, you said you were still in the mine later that night at about 11.35, you were in the office over at the workshop and that's when the siren went off, about half past 11?-- Yes.

Now, that's your memory of it. Well, what I would just ask you to look at is a print-out of the samples as they entered the Unor analysers that night, and this is a print-out of what the screen showed from time to time. Now, if we look down on page 2 - I might just indicate to you that the highlighted figures are simply the alarms that are shown on the log that you have been looking at. All right. Now, if you look down on page 2?-- Yes.

As you look through that document you will see it gives you a print-out for each set of points for each page, so if we take any particular page it will commence with point 1 through to 19, then the next screen would have been when it changed point 1 through to 19 again. You can see each screen in that sequence, can't you?-- Yes.

Let's look down to 11.30 then. We are looking at the bottom of page 2, I suggest, the screen commencing with point 1 towards the bottom of page 2, 7 August, 23.31?-- Yes.

If we look through that sequence - we haven't copied enough, but can I ask - we haven't marked enough perhaps is what it really is. Can I ask people to share it for the time being? We will rectify the numbers in a minute. We are looking at the bottom of page 2 where it indicates point 1 through to point 9 on the bottom of page 2. That's the screen for 11.30 and there is only one alarm or two alarms in that screen. The screen goes over onto the top of page 13 through to point 19, you see that?-- Yes.

Does that accord with your memory of what the screen looked like when you went over, only two points alarming, or do you think -----?-- How do you say there is only two points alarming?

The two highlighted points - sorry, three. Point 9 has two alarms on, one for CO, one for CO2, and the top of page 3, point 14 has one only for CO. Is that in accordance with your memory, or do you remember the screen showing a lot more red data than that?-- I couldn't recall.

Well, if you look at the next screen, that's on page 3, points 1 through to 19 again, there's a whole range of alarms showing at that point, that's from 11.45 through to 11.59, in that range. Does that accord more with your memory of when you went over?-- You have got CO here on point 16, 18 and 19 at 10 parts, 4 parts, 1 part, so that -----

Sorry, are you looking at page 3?-- Yeah, at the top of the page from the screen that started from page 2 on point 1 through to 19.

Yes. I am now asking you to look at the next screen which is only on page 3 and wholly contained on page 3 from point 1 through to 19?-- Yeah.

Do you see that?-- Yes.

Does that level of alarms, that many alarms over that many points, more accord with your memory of what the screen looked like when you went over there? Many alarms, not few is what I am getting at, or can't you say?-- I wouldn't say, but what - at this - oh, yeah. You got from the previous page here from point 1 where you have CO - what were the alarms set on these CO? Were they alarming or not, or have you got -----

What I want to tell you is - perhaps I didn't make it clear before - the highlighted figures are the alarms for that screen, you follow what I am saying? So that if -----?-- So the CO on point 16 was 10 ppm - I suppose they sealed the section.

Do you understand what I am saying?-- Yeah, the only thing-----

So, we are comparing two screens, the one screen on the print-out starts at page 2 on the bottom of the page with point 1?-- Yes.

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And the next screen is wholly contained on page 3 from points 1 through to 19?-- Yeah.

What I am asking you is this: when you went over and saw the screen, which of those more accords with your memory of what was showing, only a couple of alarms or a lot of alarms? That's the comparison between the two, isn't it? Are you able to say? If you don't remember -----?-- I can't say.

You can't say, all right, very well. I tender that document. Perhaps the best description is as it's contained on the front, list of samples as they entered the Unor analysers. May I just indicate the data on this is taken from the SIMTARS data and matched with the alarm log which is Exhibit 90 or 127, it doesn't matter which.

WARDEN: That is marked Exhibit 128.

ADMITTED AND MARKED "EXHIBIT 128"

MR MORRISON: I have nothing further, Your Worship.

MR HARRISON: I have no questions, Your Worship.

MR CLAIR: Thank you, Your Worship.

RE-EXAMINATION:

MR CLAIR: Mr French, you did mention earlier that when you were accepting an alarm that's on the Unor screen that you had the practice of punching in two digits and then "okay"?-- Yes.

When you say that - first of all, what would be the effect of putting in a zero, for instance, a 05? What digit would be recorded in the final column of this print-out that you have seen, a 5 or what?-- I don't know.

Okay. My other question is this: when you say you were in the habit of punching in two digits, was that digits other than zero or could zero have been one of those? You just don't -----?-- Could have, I don't know. It could be any number.

Including zero?-- Yes.

And you don't know if you put in 05 whether you would end up with a 5 in the column or something else?-- No, I don't know.

Could the witness see that Exhibit 127, please, Your Worship?

RXN: MR CLAIR

WIT: FRENCH B J



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Just looking at the entries in this alarm log, first of all the alarm log would contain a record of all of the alarms; is that right? I mean, that's the purpose of a log. It's not just some particular class of alarms?-- I don't know. I would think so.

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Okay. Were you associated with the installation of the new system - new computer system -----?-- No.

Yourself? Do you know when that occurred?-- A week or so previous to the incident.

You will see the first readings there on that alarm log relate to 27 July. They seem to be, some of them at least, readings without a set point value and the first four of them only refer to point 8, point 9 and point 16?-- Yes.

Would that seem to indicate that 27 July might well have been a date when the system was being set up?-- Yes.

Okay. Yes. Now, the first five readings were on 27 July, but you see a series of readings which all relate to point 16 which was then in the 512 top return. That's 2 August, 3 August, 5 August, 6 August and then a second one for 6 August?-- Yes.

Do you see that? And all of those are readings for carbon monoxide?-- Yes.

They all alarmed on the gas high 1 level or alarm; is that right?-- Yes.

And if you go across to the set point value you will see that during that time the set point value appears to have been increased from an initial setting of 7, then to 8 and three alarms went off whilst it was at 8 and then the set point value has moved up to 10 at some stage on 6 August; is that right? Between the last and the second last of that group of five?-- Yes.

Do you remember whether you were associated with resetting those carbon monoxide levels on the 512 top return monitor point?-- No.

Thank you, Your Worship.

EXAMINATION:

PROFESSOR ROXBOROUGH: You said that any two digits inputted via the mouse can be used to accept an alarm?-- Yes.

So, it seems that the system is capable of identifying by number who accepted a particular alarm?-- Yes.

It wasn't being used in that way?-- No.

Do you know if it was a feature of the design that it should have been operating that way?-- I don't know.

It seems strange to have such a feature to identify who was accepting an alarm and not having it functioning in that

XN: PANEL

WIT: FRENCH B J

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way?-- Yes.

Can you have a look again at Exhibit 127 which is in front of you? There are two columns to the right side, "Alarm Value" and "Corrected Value"; do you see them?-- Yes.

Now, right down those two columns you have got identical numbers between alarm value and corrected value except on one occasion and that occasion is about two thirds of the way down the page. It is, I think, four lines below the cross on the left-hand side of the page; do you see that?-- Yes.

Then it shows 512 seals at 5 to 11 and it shows for alarm value "10.65" and it shows for corrected value "5". Do you know what the significance of the difference is there?-- No.

You don't. Okay. Thank you.

EXAMINATION:

MR ELLICOTT: You indicated earlier that when span gas - excuse me - span gas tests were done on the Unor system the work sheets from those tests were given to a supervisor?-- Yes.

Can you tell me who that supervisor is?-- Max Robertson.

What is his position at the mine?-- Electrical supervisor.

Do you understand him to be in charge of the Unor system?-- No.

Who do you understand to be in charge of the Unor system as a whole? If you don't know just say so?-- I couldn't say who was in charge of it.

Okay. I think you also indicated that when performing span tests on the Unor system there was a set amount of sample that had to be introduced into each tube; is that correct?-- What do you mean, a set amount of sample?

Well, when producing a span gas sample to a tube was there a set time that you had to introduce the sample or a set volume you had to put in?-- You did it on time.

Which was?-- Generally five minutes.

Okay. So, in performing a span gas test you would have a cylinder and you would vent the contents of that cylinder into a line for five minutes?-- Yes.

Can you indicate to me any possible effects you understand may occur if you didn't put that volume of sample into a line, that you put considerably less in?-- What would - it is possible that if you haven't put the sample on for long enough

XN: PANEL

WIT: FRENCH B J

and as the computer goes through its scan of the points, that if you only put it in for two minutes, say, and it was scanning for 13 minutes with the whole lot it would be quite easy to miss that sample.

Can you see a situation where even if the computer didn't miss a sample that you may get an erroneously low reading if you don't put a sufficient volume of gas in?-- I don't know.

Thanks very much.

MR MARTIN: Your Worship, when Professor Roxborough asked that question of Mr French about the 5.65 and 10.65, there is an explanation for that, if the panel is not aware, on page 32 of 80 of Exhibit 5. The other thing, may I ask a question by leave?

WARDEN: Yes, thank you.

FURTHER CROSS-EXAMINATION:

MR MARTIN: I think the panel may well want to know this: there was a new computer system, you said, had been there for about a week?-- Yes.

All right. As well as the various alarms or warning or whatever you like to call them you have told us about, was there also a beeping system on it, on the new one?-- No.

No beeper?-- No.

Right. Thank you.

MR MORRISON: I just wanted to mention, to make it easier to find the page with the explanation, it is, in fact, Exhibit 87. It was tendered as a separate exhibit and in short terms the change simply seems to be a software problem when it changes from low change to high range in reading automatically. The machine does it itself.

WARDEN: Thank you, gentlemen. A couple of matters before we adjourn. The SIMTARS models, if there is no objection I will return them to the offices of SIMTARS for safe custody until we resume, unless you want to take them home yourself. I will formally adjourn the Inquiry to 11 a.m. on 6 February 1995 back to this location. I formally adjourn the Coroner's Inquest to a date to be fixed. I would like to see counsel and their instructing solicitors in the Wistari Room for a directions hearing. I wish to discuss the manner of dealing with the evidence for the reconvened hearing next year and I wish to indicate to you certain technical matters in respect of the Coroners's report which I hope to bring down before we resume. If you would like to convene there? The witnesses' room is occupied by family and witnesses. So, if we go to the Wistari Room so we don't disturb them. Before we close, thank

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you for your attendance and assistance here, gentlemen and  
madam, and the witness is excused.

WITNESS EXCUSED

THE COURT ADJOURNED AT 12.10 P.M. TILL 11 A.M., 6 FEBRUARY  
1995



WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2 ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 06/02/95

CONTINUED FROM 11/11/94

..DAY 19

THE COURT RESUMED AT 11.30 A.M.

WARDEN: Thank you, gentlemen, ladies. The Inquiry which previously commenced on 18 October is resumed. We have the appearances the same as before. Any amendments? No change? Thank you very much. Mr Clair?

MR CLAIR: Thank you, Your Worship. Your Worship, before we move on into evidence, there are just some brief matters that I would mention as to the general format that's yet to be followed, and there are also some exhibits that I wish to tender at this stage. Your Worship, as far as the general format of the proceedings from this point forward is concerned, it's intended to proceed with the list of witnesses at least in the same order broadly as we were following at the last session, and that will involve calling the rest of the witnesses on the list who were associated either with the accident itself by way of being in the mine or doing something in relation to the mine, then the witnesses who were involved on the various aspects of management, and then to proceed to the expert witnesses. I won't detail now the numbers of expert witnesses that might be involved, but reports have been received and distributed to the parties and those reports will no doubt find their way into evidence in due course.

Now, Your Worship, following then the evidence of an expert nature, it's expected that there will be some submissions to the Inquiry, and the parties had indicated towards the end of the hearing last time that they are happy to proceed basically by way of written submissions, and I might just place that on the record at this stage.

Your Worship, as to exhibits, there are just some matters that I would like to tidy up from last year, first of all, and the first of those involves two letters that were received in fact by Your Worship from parties who wish to place material before the Inquiry. Copies of these were made available by Your Worship to the parties last year, but they haven't as yet by tendered formally and given exhibit numbers. The first of those is a letter addressed to Your Worship from a Mr Bruce Wilson. I will tender that. The second is a letter to Your Worship from CSIRO setting out some material in respect of the involvement of the Numbat vehicle.

WARDEN: Thank you. I will mark those Exhibits 129 and 130 in the order in which you tendered them. They can be referred to the experts in due course.

ADMITTED AND MARKED "EXHIBITS 129 & 130"

MR CLAIR: Your Worship, last year at the commencement of the Inquiry I tendered a copy of a report on the preliminary investigation by the Chief Inspector of Coal Mines, Mr Brian



Lyne. That became Exhibit 1. There were various annexures, some of which were tendered as separate exhibits, and I have recently been provided with a copy of a report on the investigation which in fact contains some changes and would take the place of the actual report section of Mr Lyne's report as tendered last year. It's been updated in some respects. Could I suggest that that document be tendered and marked, or be admitted and marked as Exhibit 1A and it can then be kept with the original report on the preliminary investigation?

WARDEN: Yes, thank you. That amended report marked Exhibit 1A.

ADMITTED AND MARKED "EXHIBIT 1A"

MR CLAIR: Again last year in fact as one of the annexures, I think it was, to Mr Lyne's report there was a report from SIMTARS which was marked as Exhibit 5. Again, I have recently been provided with an updated version of the one that was tendered at that stage which contains some changes, and might I again suggest that that be admitted and marked as Exhibit 5A so it can be related to the original SIMTARS report?

WARDEN: Thank you. That amended report admitted and marked Exhibit 5A.

ADMITTED AND MARKED "EXHIBIT 5A"

MR CLAIR: Your Worship, the next body of material that I tender at this stage is a set of three videotapes which could be admitted as the one exhibit, though I will describe what each of them are. There is one tape which is described as the original tape of footage taken from the borehole which was put down in the mine during the currency in fact of the hearing last year outside the roadway, No 1 roadway, I think it was, in 511 Panel, and again the parties have been provided with a copy of that, and I think the panel and the parties had an opportunity to view that material at an earlier stage. I might mention that this original is one which is marked on the outside as "not reversed", and perhaps for the sake of the record I should indicate that the actual original video, because of the way in which the camera was used in conjunction with a mirror, gave a mirror image which showed things happening in the reverse direction. It should perhaps be noted, as I say, for the sake of the record, that this video, being the original, would show it that way. Again, there have been reversed versions which the parties and the panel have had an opportunity to view. The second of the videos is a similar tape in relation to the borehole which was sunk outside the No 2 roadway in 512 Panel, again not reversed, and

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the third of the videos is another in respect of 512 Panel. I will tender those three perhaps as one exhibit, Your Worship.

WARDEN: Thank you. Admitted and marked Exhibit 131.

ADMITTED AND MARKED "EXHIBIT 131"

MR CLAIR: The first of the 512 ones relates to 17 November and the second relates to 18 November. Your Worship, there was distributed to the parties at the time they viewed those videos a log in relation to what was being shown on the 511 Panel video and the log indicating what was shown on the 512 Panel video. I will tender both of those logs.

WARDEN: Those logs admitted and marked Exhibit 132.

ADMITTED AND MARKED "EXHIBIT 132"

MR CLAIR: There was also distributed at the time a plan showing the position of the borehole in relation to that heading in 511 Panel at which the borehole was sunk, and various positions which are described in the log as position 1 through to position 5, or position 6, I should say, and that map is one - or that plan is one that would be used in conjunction with viewing those videos and also another video which I will tender in a moment. I will tender that as a separate exhibit.

WARDEN: Admitted and marked Exhibit 133.

ADMITTED AND MARKED "EXHIBIT 133"

MR CLAIR: And then there is a similar map. There is a similar map in relation to the position of the borehole outside a No 2 heading of 512 which again would be used in a similar way in respect of the 512 videos. I tender that as a separate exhibit.

WARDEN: Admitted and marked Exhibit 134.

ADMITTED AND MARKED "EXHIBIT 134"

MR CLAIR: Your Worship, there were then two documents distributed at the same time which were described as "Summary of Operations", one in respect of Panel 511 and one in respect of Panel 512 and that summary contains some observations relevant to the taking of those video tapes. I will tender those two as one exhibit, Your Worship.

WARDEN: Those two documents admitted and marked Exhibit 135.

ADMITTED AND MARKED "EXHIBIT 135"

MR CLAIR: Your Worship, I couldn't at this stage estimate the total time involved in the sum of those three videos, but what I could say is that they are fairly lengthy in total. What was done subsequently is that an abbreviated version was compiled from all three of those videos and it is a version which was prepared to reflect the significant parts of those videos, or at least parts thought to be significant. It was also done with what I might call English subtitles, indicating the direction in which the camera was pointing at the time of the scenarios shown and, in total, as I understand it, takes about 37 minutes. I will tender that, Your Worship.

WARDEN: Admitted and marked Exhibit 136.

ADMITTED AND MARKED "EXHIBIT 136"

MR CLAIR: That video could be used in conjunction with those plans, Exhibits 133 and 134 to identify the points referred to in the subtitles, or positions referred to in the subtitles. Finally, in respect of this body of evidence, I tender what is described as a "running order" in respect of that edited video, and that also contains indications as to the bearing of the camera at any given time and some brief comment in respect of each segment as to what is being shown in the segment. I tender that, Your Worship.

WARDEN: That document admitted and marked Exhibit 137.

ADMITTED AND MARKED "EXHIBIT 137"

MR CLAIR: Your Worship, those videos were produced as a result of a drilling and inspection program which was the subject of an agreement - a protocol agreement between the parties, and, again, the subject, in turn, of an order that was made by Your Worship on 19 October last year. Basically that order gave the weight of the Court to the terms of the protocol, the manner by which the program was to be carried out. The order also provided that the contents of what was

produced in that program be kept confidential in terms of the agreement contained in the protocol and, further, the order was made that until further order, there be no publication of any part of any such document, including any photographic record or the contents of such document other than for the purposes of the Inquiry. Depending on the attitude that Your Worship adopts in respect of publication - the contents of those videos that have just been tendered - there will need to be some consideration of how that order might be modified.

Can I indicate that from the point of view of counsel assisting the Inquiry, the intention is that having regard to the fact that members of the panel have seen the edited version - or have seen all of the videos and, more recently, the edited version of the video and all of the videos, including that edited version, have been distributed to the parties, and, in fact, the parties had some opportunity to view all of the pictures that are included in the edited version, or abbreviated version, I should perhaps call it. It still isn't intended to actually take up the Court's time at this stage by showing the video here in Court today, however there is equipment available for the video to be viewed, and it is felt that it is important that members of the public and, included in that, members of the media have an opportunity to view the video. The intention is that after this Inquiry adjourns for the luncheon adjournment, that the video will be shown, that there will be present at that time Mr Roger Bancroft, who, in fact, compiled the edited version of the video, or had a major hand in compiling the edited version of the video and, as I understand it, a representative of BHP present at the time, so that what might otherwise be unintelligible images can be made intelligible; that is, as to the direction the camera is facing, and the video can be related to those plans that have also been tendered.

Now, that will then give an opportunity for a public viewing in the context of the hearing, without, at the same time, at this stage, the Tribunal sitting through the video. It may be that at some later time in the course of evidence of witnesses, either expert witnesses or otherwise, that the whole or parts of the video will need to be shown. I might say also that pursuant to suggestions that have come from members of the panel today, that some inquiry will be made to see whether still photographs can be produced of certain parts of the video. Those inquiries may take some time, and production of any still photographs may take some time, so that in the end result there will be, at this point at least, a showing that would produce the same effect as if the video was shown here in Court in the course of evidence.

It is also intended that after the video is shown that at least one witness who can speak to the position of items prior to the first explosion be called to give evidence and he may be able - he has viewed the video and will view it again - he may be able to give some evidence with reference to the video of what he has seen of the video.

Your Worship, in light of that, there will be an opportunity for members of the public and members of the media to observe

what is contained therein, so that the question then arises as to the extent to which there might be any further publication of what has been seen. It is a matter for Your Worship as to what order might be made to modify the earlier order.

WARDEN: Yes, I'm satisfied the order does need some modification, and I would amend the order (1) to allow the videos into evidence and (2) to allow the videos to be shown to the media and interested members of the public during the luncheon adjournment. If it is possible to take still photographs off the video, we propose to investigate and put that into motion and, at the relevant time, when the photographs are referred to a witness or the experts and admitted into evidence as a still photograph, copies can then be made available for the public record. It is not proposed at this stage to allow a copy of the video tape itself to be made publicly available. The matter might be reconsidered at the time the report is completed. At this stage, though, certainly those persons can view the video. I would indicate that the panel feels there would be some danger in persons making any comments on what they see, because the videos are still, and will be subject to interpretation by experts in the field and will be commented on by other witnesses, no doubt. So, with that caution, I'd allow the videos in and amend the order to that extent.

MR CLAIR: Thank you, Your Worship. That completes all the matters I wanted to deal with in a preliminary way. I don't know whether any of the other parties have preliminary matters they wish to raise before we commence?

MR MARTIN: No.

MR MORRISON: Can I mention two matters? Firstly, Exhibit 1A, Mr Lyne's final report, I don't know if other parties are in this position, but we don't have a copy of that. Perhaps that could be provided as soon as possible. That's a small item. Secondly, may I just indicate for record purposes, as I think the Inquiry is aware of it, the edited video was shown to the families of the deceased miners last week with the prior agreement of the solicitor assisting the Inquiry and the representatives of the unions and we notified Your Worship's clerk about the need for a further tape and the purpose to which it was to be put. In a sense, we didn't seek at that time to vary the order, as we apprehended, in fact, that Your Worship had agreed to the course by permitting the release of the tape for that purpose. I don't know that there is any need for a retrospective relaxation of the order in that respect. It was to honour a commitment that BHP had made to the families, and I'm sure the Union had made in their own way to the families - that they would let them see what might, to them, be very sensitive material, before it was aired publicly. It was considered appropriate to do that really for them as a special class in view of their special position. Both the unions and BHP have been very sensitive about the reaction of the families to any intrusion into the mine where obviously the miners were lost. So, I thought I should place that on the record, though unless Your Worship thinks otherwise and Mr Clair thinks otherwise, I don't know that

there is a necessity to deal with the order in that respect.

WARDEN: Thank you, Mr Morrison. I don't think so either. I was aware of the proposal and I consented to that course of action. Thank you, Mr Clair?

MR CLAIR: Your Worship, I call Douglas Martin Moody.

DOUGLAS MARTIN MOODY, SWORN AND EXAMINED:

MR CLAIR: Your full name is Douglas Martin Moody; is that correct?-- Yes.

Mr Moody, you are a miner?-- Yes.

You joined the industry in 1979 at Moura No 2; is that right?-- That's right.

And you stayed there until September 1994?-- Yep.

You gained your Deputies' certificate in May of 1993?-- Yes.

And you've been a member of the Mines Rescue Brigade for some time; is that right?-- I was, yes.

Now, 512 Panel at Moura No 2 was one that you were involved with?-- Yes.

That was the first extraction panel as a Deputy that you had been associated with?-- Yes.

You had worked at other extraction panels as a miner before that?-- Yes.

Now, on 16 June last year were you on duty as a Deputy for the afternoon shift? Perhaps if I can ask you to have a look at this production deputies report. That's a report number 3999.

I have copies available for members of the panel and the parties, Your Worship.

Mr Moody, that report is one that you are familiar with; is that so?-- Yes.

It deals with that afternoon shift of 16 June?-- Yeah.

Now, in the course of that shift, did you have occasion to do something in relation to the ventilation?-- Yeah.

Can you say what led to that and-----?-- At the start of shift?

Yes, at the start of shift?-- We went down to the miner to start producing coal and there was a bag to the left-hand side of the stopping. There is a road coming up from the goaf

area.

Do you know where the miner was located at that time?-- It was in a cross-cut, 12 - sequence 12, sorry.

Sequence 12?-- Yes. I'm not sure what number cross-cut it was.

Well, are you able to, by reference to that plan that's up on the white board there which shows 512 panel - are you able to indicate just what stage the retreat - the extraction was at that point?-- It was about probably here.

You are indicating cross-cut 8 - around cross-cut 8?-- Yeah, there was a roadway behind us and we were to take coal, like this.

No 2 heading, actually - sorry, number 4 heading at that point; is that right?-- I think so.

What else did you find there?-- Well, there was gas behind that stopping, methane gas, and it was too close to the miner to produce coal so we pulled the stopping down and took it inbye, that means in that way.

Yes, further into the panel so as to produce more ventilation?-- No, just so as to have that 1.7 per cent concentration further down the hill rather than have it where we are going to cut coal.

Right. Okay. So you reduce the amount of methane in the area -----?-- Intake.

In the area close to where the miner was?-- Yeah.

But at that point, as far as you are aware there was still the 1.7 behind the brattice after you moved it?-- Yeah.

Okay. Now, did you take any steps then to - perhaps if you can tell us, what did you do after that?-- Well, we had to wait for a while, probably half an hour, until that area cleared and then we cut coal.

That cleared to .5 per cent; is that right? You've noted in your "Action Taken" section in the report there?-- That would be right.

Now you've also noted there that there was still 1.5 per cent methane in the general body just inbye of that stopping that you had moved further in?-- Yeah.

Were there any steps you could take to disperse that or -----?-- I don't think so, no.

I tender that production deputies report, 3999.

WARDEN: Exhibit 138.

ADMITTED AND MARKED "EXHIBIT 138"

MR CLAIR: You were also on duty the following day, is that right, 17 June?-- Yes.

Just have a look at that report, if you would. That's report number 3402. While the witness is looking at that, Your Worship I will pass up copies for the panel and there are copies also available for the parties. Now, it seems that that report is one in respect of which you carried out or reported on the first inspection; is that right? Am I correct there?-- Yes, it would have been.

Mr Henderson has completed the report -----?-- Yep.

-----in respect of the second inspection?-- Yes.



In relation to the first inspection or at least - before we move to that, at the beginning of that shift did you have some conversation with Reece Robertson, another deputy?-- Yes.

What was that conversation?-- He said to keep an eye on gas levels in the No 2 heading because they had been - gas had been coming up No 2 heading roadway and he said he had found some through the day and that was about it.

Did he indicate that steps had been taken to try to reduce the amount of gas that had been found in No 2?-- I can't remember if he said that.

You did note in your report that there was .2 methane at the face area, .7 and 1.2 per cent methane layer was detected in No 2 heading at 8, 7 and 6 cross cuts; is that right?-- Yes.

And 10 ppm of CO was detected in that No 2 heading at 8 cross-cut?-- Yes.

They were readings that you took?-- Yes.

So that was after the commencement of your shift that you found those readings there and reported them all accordingly. Now, you've indicated in your "Action Taken" section of the report that a brattice was erected at the face to push air down No 2 and the gas was cleared to .2 per cent methane in the general body before cutting commenced?-- Yes.

Can you just indicate by reference to the plan there. There is a laser pointer there, if you take that up and press the button and aim it at the map you will find a red spot will appear up there?-- What cut-through was it? 8 cross-cut.

You mentioned that the face area -----?-- No 2 would have been that one there and we were cutting down about here somewhere and so we pulled the miner back, put a stopping up there and took this one down so the air would go that way rather than that way.

And you did that yourself?-- Yep.

That was after commencement of your shift and after Mr Robertson had gone?-- Yes.

The stopping that you erected was designed to keep that - where the ventilation was clearing out, No 2 heading was still designed to keep that away from the miner; is that so?-- Well, the miner - yeah. By having this one down all this was still intake air, fresh air, and the stopping down here - where the stopping was, that's where the return ended, you know, or the waste I suppose you could say.

Yes?-- But the air did come down and push that gas back into the goaf.

And did you monitor that during your shift?-- Yes.

At all?-- Yes.

Did you notice any clearing of that No 2 heading?-- Yes.

The 10 ppm CO that you detected, did that cause you any concern?-- No, because it sort of - it comes up - creeps up the road from out of the waste area and once we got ventilation to that roadway it went back down again.

The 10 ppm reduced?-- Yeah.

You didn't look for any particular explanation of a 10 ppm CO reading?-- No.

I tender that report also, Your Worship. That's 3402.

WARDEN: Admitted and marked Exhibit 139.

ADMITTED AND MARKED "EXHIBIT 139"

MR CLAIR: Now, you put that report in. Did you have any discussion with anyone that you can recall after your shift on that occasion in relation to those readings or the steps that had been taken?-- I may have said something to Lex, the other deputy that come in after me.

Lex?-- Henderson.

Henderson, right?-- But I can't recall the conversation, but I thought I would have said something about it, yes.

The change in the ventilation that you made on the occasion of that shift, you put that into your report as action taken. Were there any other steps that you would ordinarily take if ventilation was changed in that way by way of advising people or - I'm just interested in the system more than anything. Was there any system for -----?-- No, no, I don't think so.

Well, would you have spoken with anyone before making that change in the ventilation?-- No, I think Reece before me done the same thing. So we thought that was the way to deal with it.

That's okay. There was no system for discussing possible changes in ventilation with somebody at any central point?-- No.

A deputy might make a change in ventilation, he would note it in his report and that would be it -----?-- Mmm.

----- as far as you knew?-- Yeah. Well, unless there was something, I never thought it was a big enough concern to ring undermanagers or anything. The bloke before me had told the undermanager about what was going on.

Yes, and you knew that at the time?-- Yeah.

XN: MR CLAIR

WIT: MOODY D M

You knew it had been discussed with the undermanager?-- Yeah.

As I say, I'm more interested in any system of recording changes in ventilation. As far as you know was there any system whereby -----?-- A major one there would be, a major change, but that wasn't considered major, I don't think.

Some time in late July was there some change in the way in which readings were taken and recorded in relation to CO and CO2 particularly?-- Yes. There was a notice on the deputies' board that we should take more gas readings than we have been and CO and methane and air quantity - air velocity rather, and wet and dry temperatures in the return of 512.

That notice, do you know who that was from?-- George Mason, I think.

It was a formal written or typed notice to deputies, was it?-- Yep.

Now, did you know the purpose in taking those additional readings?-- No, I just assumed that it was to keep a closer eye on gas coming up the return.

Did you yourself know the significance of taking the wind velocity readings in conjunction with the CO reading and parts per million?-- Yes.

What was that for?-- I thought they wanted to calculate the quantity.

That's the CO make?-- Mmm.

The actual rate of production?-- Mmm.

Were you instructed in how to do that yourself, calculate the CO make?-- Not at the mine. Not at the mine.

That was in the mines safety brigade - when you say not at the mine, somewhere else?-- Yeah, Mines Rescue did do it, I think.

Was there any instruction in how you were to approach taking those readings, the wind velocity and the parts per million CO?-- Only where to.

Where to, but -----?-- Yeah, but not how to. We were taught how to do it so we done it the way we were taught, to take air velocity readings.

Did you ever have any discussion with anyone as to the reason why the practice was changed, that is why it was necessary to keep a bit of an eye on it?-- No.

Was there ever any discussion with you about keeping a graph of some kind to show the increase in the CO make?-- No, I knew there was, though, a graph kept of CO make.

Whereabouts was that kept?-- In the deputies' cabin.

In the deputies' cabin?-- One was. I don't know if there was more, but -----

How often were you aware of that graph being updated?-- Weekly, I thought.

And did you as a deputy take much notice of what was on that graph?-- Yes, I looked at it, yes.

What sort of thing would you look for?-- The amount of CO that was in the - on the chart.

The increase in the production of CO?-- Yeah.

And what sort of thing would have caused you concern in relation to a graph like that?-- When I done my deputies course I was told the amount is significant. So the amount was the most significant thing I thought.

The amount being produced. What about the direction of the graph, rate of which it was increasing or decreasing?-- Yeah, if it was increasing faster than normal it was a concern too.

When you took your readings for the purpose of - particularly after that instruction in late July, where would you take your readings for the purpose of calculating CO make?-- Well, I don't know if these ones were used for the -----

I should say the purpose of recording wind velocity and parts per million of CO?-- Just here.

You are indicating at that ventilation or monitor point which is in No 1 heading of 510 just outbye of No 1 roadway in 512; is that right?-- Yep.

Anywhere else?-- No.

Did you go down No 1 heading of 512 to take readings?-- No - yes, but not all of those readings.

You wouldn't take the wind velocity readings down there?-- No, no.

You would take -----?-- CO parts per million and methane.

Could the witness see Exhibit 94, if it please Your Worship? Have you seen that document before at all, Mr Moody?-- I think so, yes.

You say you think so?-- Yes.

Whereabouts do you recall seeing that?-- In the deputies' cabin, I think.

Does any of your writing or any notations by you appear on there?-- I don't think so, no.

Did you ever receive any instruction to fill out that kind of document at all?-- No. No, I never did fill out anything on one of these, I don't think, and I can't ever remember being instructed to fill it out. When you saw it were you aware of the purpose of it or -----?-- Yes, yes.

Did you ever have any discussion with anybody about it at all?-- I don't know really.

You can put that to one side. Did anyone ever discuss with you reports of any smell or any haze in 512 Panel?-- No.

That is prior to the first explosion on 7 August?-- No.

Were you on duty during the week leading up to that explosion?-- Yes, Thursday was my last day.

Thursday was your last day?-- In that section, yeah.

Up to that time had you ever been party to any discussion with any other deputies about any concern that there was a heating in the 512 Panel or a suspected heating?-- Not that there was a heating, but we were - I don't even know who it was now, but I remember we said, "Isn't 10 litres a lot of CO?", and someone agreed with me. I remember - I think it was only me and another deputy in the deputies' cabin talking about it and he agreed, "I think it is, yes." But that's the only discussion, but nothing about a heating or hot spots or anything or smells.

That's as far as the discussion went. And do you remember what stage that was at?-- I think it was 10 litres.

But what stage in the extraction process, I guess, how long before -----?-- No, I don't recall what time it was.

Now, do you recall at some stage somebody from ACIRL coming out to talk with deputies in relation to the panel design?-- Yes.

Can you say when that was? Was it early in the retreat or extraction process or -----?-- It was about halfway, I think.

What sort of things were discussed with the deputies about that?-- Roof mostly. The ACIRL people were telling us about roof convergence in these kinds of panels that are extracted and what to look out for and things like that.

Any discussion about ventilation at all?-- No, I can't remember if there was any ventilation - discussion on ventilation.

In the discussion about the roof falls, what problems, if any, were raised?-- Oh, they told us about - well, there didn't seem to be any problems where we were, but they told us about problems that had happened overseas and that with that kind of method, and the likeness of it, you know, because we have only started to do this in the last few extraction panels.

When you say "do this", what sort of thing?-- Leave coal so the roof stays up. The majority - you know, the major roof stays up.

I see?-- Whereas before we took all the coal. So, they give us examples of overseas, how dangerous it can be. Just the geology part of it they were talking about.

And in terms of that method of extraction, did you yourself have any concerns about the way in which the extraction proceeded?-- No, I thought it was good because it was safer, like, geology-wise as far as roof goes.

And what about the ramping process? Was there any difficulty with machines in relation to the ramp at all?-- Yeah, there was.

Were they ones that were easily overcome?-- After a while, yeah, the ramp - we decided to make the ramp more gentle.

A bit longer rather than shorter?-- Yes.

Why was that?-- Because the miner would bog - the floor would break up and the miner would bog.

What about the amount of coal you were able to get out, that is, in terms of loose coal?-- There was a fair bit of loose coal left because you couldn't go past a certain point because the sides were getting too high, and our manager made the ruling that we weren't to go past this point, you know, because of people getting hurt by ribs.

So, that had the disadvantage there was some loose coal there?-- Yes.

060295 D.19 Turn 4 mkg (Warden's Ct)

No other concerns that you had in respect of it?-- No.

Thank you, Your Worship, I have no further questions.

CROSS-EXAMINATION:

MR MACSPORRAN: Mr Moody, you have told us that on 17 June when you came on shift you spoke to Reece Robertson?-- Yep.

I think you also told us when you came off shift that same day you think you spoke to the oncoming deputy, Mr Henderson?-- Yeah.

That practice of speaking to the deputy when you came on and left shift, was that a practice you always followed?-- Yes, that - yes.

Was that an instruction to you or something you thought was appropriate, or how did it come about that you adopted that practice?-- It's just commonsense really to let them know what's going on in the panel, and if nothing is going on not much is said, and if something is going on it's talked about.

Would that be after you had completed your report or before?-- Be after, I think.

So, would you have your report with you when you discussed with the oncoming deputy what things you had noticed?-- Yes. He would have had to read it before I went up. Actually, he would have took the report to the surface because he was the second deputy on.

That's always the way it happened as far as you can recall where you were concerned?-- Yeah, you always talk to the deputy before you go.

You have told us that at some stage - and it's noted on your report - you had measured 10 ppm of CO but it wasn't a concern to you?-- No.

I think you said it was simply a case of once the ventilation was corrected, the gas would then be taken away?-- Yeah.

But did you understand anything about the significance of a reading of 10 ppm CO?-- Yes.

What did that mean to you?-- Well, our readings in the return are 7 parts every day and 10 parts - that's why I wasn't concerned about 10 parts in the still roadway - where the air was still. I thought it wasn't a lot.

So, an increase from 7 to 10 -----?-- Well, no, I'm not saying that. In that roadway it was 10 that day, but in the return where we took the readings here it was 7.

XXN: MR MACSPORRAN

WIT: MOODY D M

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That top return?-- Yeah. So, 7 - by the time the air goes all the way around there and comes out here it's 7, I thought 10 parts wasn't a reason for concern.

Well, all things being equal, what would you think about an increase from 7 to 10? What would that mean to you if the ventilation was the same?-- Over a long time it wouldn't mean much.

Does an increasing parts per million reading of CO have any significance to you?-- I thought it did, yes.

But what does that mean?-- It means the coal -----

When CO parts per million goes up?-- Either the ventilation has gone down or oxidisation is increasing - oxidisation of coal.

Did it have any significance to you in terms of a possible or suspected heating?-- No.

Can it be significant to a possible heating, a rising parts per million reading of CO?-- If it was 2 the day before and it's 10 the next day it would, yeah, but not -----

Not 7 to 10 in those circumstances you have described?-- No.

So, as far as you were concerned, once the ventilation was altered to correct the situation, that was the end of the concern?-- Mmm, because this 10 parts wasn't down the hill. I could never find this 10 parts down the hill. It seemed to be only on the top side, or it was only there for one day anyway.

You have told us that sometime in late July the system of recording was changed to have more readings taken; is that so?-- Yep.

You weren't told why that was?-- No, I can't remember being told why it was, no.

But you knew the sort of readings that were involved and you knew those readings would be used - the sort of readings they were would be used to calculate CO make?-- I assumed it; I didn't know that.

So, no-one told you that at all?-- I don't think so, no.

At that stage you were a deputy?-- Yes.

Working in this panel, 512?-- Yes.

No other deputy, as far as you can recall, discussed with you anything about CO make and the requirement to take those readings?-- Not daily, no.

And I take it from what you have told us, you didn't ask anyone what the significance of the increased readings was?-- Pardon?

XXN: MR MACSPORRAN

WIT: MOODY D M



You didn't ask anyone yourself why it was necessary to take these readings?-- Maybe not.

Do you think you did or -----?-- Don't know, can't remember.

And you didn't ever apparently see any CO make calculations taken from those daily readings?-- Not those ones. Not those ones done shiftly, no.

But you did see some taken earlier?-- Weekly I think they were, yeah.

And that's the one you saw, or ones you saw in the deputies' cabin at some stage?-- Yes.

Now, where was it you think you saw the copy of the exhibit in front of you, I think, Exhibit 94?-- In the deputies' cabin.

What, just on the desk in there?-- No, it's on a noticeboard thing.

Did you relate that document to the requirement that you had heard about to take extra readings on a daily basis?-- No, I don't think I did.

So, you think you saw that there but you didn't ever really know what it was?-- No.

Do you see now looking at it, it seems to be a sheet that would enable you to record the daily readings that were taken from late July?-- No, because they were done shiftly. These are only done daily.

So, the readings that you were instructed to do were taken shiftly?-- Yeah.

And that sheet is to enable readings to be done daily, recorded daily, is it?-- I think so, yeah.

So, you think you saw that in the deputies' cabin but didn't relate it to any requirement to take extra readings?-- I never put, like, this in like -----

In that context?-- No. I just done the other ones, put them in my report, but I never put anything on paper like this.

And as far as you know, you were never instructed to -----?-- No.

----- put them anywhere else other than in your report?-- Yeah.

And you didn't take part in or hear any discussion about that document, Exhibit 94, on the deputies' cabin noticeboard, as far as you can now recall?-- No.

It wasn't talked about, as far as you can recall?-- No.

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At that time, that is, after late July, as far as you can recall, there was no discussion generally about CO make and its level?-- No, there wasn't.

Your last shift, I think you told us, in 512 was on Thursday which was 4 August?-- The Thursday before the explosion.

That was right near the end of the production from that panel, wasn't it?-- Yes, it was.

Had you heard anything about the proposal to seal the panel?-- Yes.

Had you heard when that was to be done?-- No. I knew - I think they had trouble with machines, getting machines out or something, I think they were broken down, but, no, I didn't know what day they were going to do it.

And you heard nothing about a proposal to bring forward any proposed sealing time to seal earlier than had been planned?-- No. No, I think the section finished. I think the section was finished right up, I thought.

Did you attend the union meeting on the Sunday, the Sunday morning, the 7th?-- No.

Did you have any discussion with any of the other deputies or miners after you finished in 512 on the 4th and before the explosion?-- No.

So, you heard nothing of any concern about 512 after you finished working in it?-- No.

You told Mr Clair that you had never heard anything about a reported smell or a haze inside 512?-- Never.

Do those facts, that is, smell and haze, those observations, have any significance to you?-- Yes.

What would it mean to you as a deputy?-- Be a hot spot.

What do you mean by a "hot spot"?-- Fires - fire.

Do you mean if there was a fire of some sort, you would smell it?-- I think so, yes. I've smelt it before.

You have smelt it before, have you?-- Yes.

Whereabouts?-- 5 North-west.

That was when the panel was sealed, was it?-- Yes.

Were you one of the men working on the sealing process?-- Yeah.

And was that in 1991, was it?-- I don't know what - there were machines inside, I think, at the time.

And it's a very characteristic smell, is it?-- Oh, yes.

XXN: MR MACSPORRAN

WIT: MOODY D M

And if you smelt such a smell, you would relate it to a fire in the coal?-- Yes.

Or at least a heating?-- Yes.

What significance would you place upon haze being observed? What do you mean by a haze?-- The same - well, a haze. A haze can be made by methane in large amounts.

Have you seen one before?-- Yeah, in Mines Rescue, yeah.

What appearance did it have?-- Like a gassy wave. Like a rolling - it was very thick, over 80 per cent, but it's like a wave.

How do you relate that to a fire or heating?-- Well, it would be smoky, I thought. I have never seen a haze when I have smelt this smell. I never seen any haze then.

But you are aware from your training at Mines Rescue that those two things, that is, the smell and the haze, can be indicative of a fire or heating?-- I know the smell can; I know for sure.

Have you heard that a haze can be a sign of such heating?-- Yes, or sweating.

And has that been from Mines Rescue, has it?-- Yes.

Have you had any formal training in respect of the detection of heatings or fires at the mine itself at Moura?-- I don't think so, no, not at the mine site.

Now, at some stage there was a discussion between, you think, another deputy and yourself about a level of 10 lpm?-- Mmm.

Is that so?-- Yes.

What significance to you does the figure of 10 lpm have?-- Well, when I done my deputies' course they said that 10 litres was a figure for - that's reason for concern.

Concern about what, though?-- Well, the increase in CO.

What would that mean, increase in CO reaching 10 lpm, as far as you understood?-- Either low ventilation or a heating.

Or a heating?-- Mmm.

And you think this discussion related to the 512 Panel?-- Yes.

You can't now remember, though, who it was you were speaking with?-- No, it was very brief too. It wasn't a long discussion.

Was it the case that you raised the figure of 10 lpm or the other party?-- Yeah, I think it was me.

And that related to a figure of 10 lpm coming out of 512?--  
Mmm.

Where had you obtained that figure from, do you remember?--  
Deputies' course, Mines deputies' course.

Where had you obtained the figure -----?-- I think it was  
off that graph, off the graph that was in the deputies' cabin.

That's the weekly graph, is it?-- Yeah.

So, you had noticed on the graph in the deputies' cabin at  
some stage the CO make coming out of 512 had reached 10 lpm?--  
Yeah.

And that was of concern?-- Yes. I asked this person - I  
said to him that, "Isn't that a lot?", and he agreed, but  
because it was so brief, the discussion, I don't even know who  
it was now.

After that occasion did you keep an eye on the graph to see  
whether the level continued above 10 lpm or what it did?--  
10 is the last figure I remember actually.

And that, you think, was at a time when you looked at it on  
the wall?-- Yes.

As far as you remember, you didn't again look at the wall  
after that time?-- No, well - to see the graph, no.

The graph what?-- No.

Was the graph there after that?-- I don't know. I can't  
remember seeing the graph there, no.

Has that been the only discussion you have had in relation to  
the CO make and its level in 512 before the explosion?--  
Yes.

Thank you.

WARDEN: Mr Martin?

CROSS-EXAMINATION:

MR MARTIN: Could you just tell the Inquiry, please, where it  
was - you said that at the deputies' course that you got a  
knowledge that 10 lpm was a concern?-- It was at the Mines  
Rescue Brigade at Moura.

It wasn't in connection with the deputies' course at all that  
you learned that?-- Yeah, that's where we done our course.

How long ago was that before August 1994, when

XXN: MR MARTIN

WIT: MOODY D M

approximately?-- A long time. Our course took two years. It was supposed to - apparently you can do it in eight weeks, but because of delays and -----

In so far as you were concerned, when did you gain that knowledge about 10 lpm of carbon monoxide as being of concern?-- Probably near the end of the course, I suppose.

Can you just tell us when?-- No.

But you can tell us surely whether it was 1970 or 1990?-- I was registered as a deputy - I thought it was in '92. You say '93.

So, it was relatively recent information before 1994. Did you get no further instruction than that that 10 lpm of carbon monoxide is a concern? Did you receive no further instruction than that?-- No, I don't think so. The first - that's not the first time I done that course. I done this course before and failed the course. Then they used to just - it was just parts per million - increase in parts per million was - a rapid increase in parts per million was important then.

Well, depending on the cross-section, I suppose, and the velocity, a rapid increase in litres per minute would be of equal concern?-- Yeah.

But didn't somebody tell you, "Well, when you strike that, you should do X or do Y or do Z." - what you should do when you encounter this?-- Yeah, inform managers or undermanagers about - is that what you mean?

Yes?-- Inform somebody?

Yes, superior to you?-- Yeah, it was there in black and white. I assume they knew about it.

That's in your deputies report - production deputies report - that's what you are saying?-- No, I am talking about the litres per minute chart. So, there is no litre per minute chart in my report.

Of course not. In relation to the deputies' cabin, you have told my learned friend, I think Mr MacSporran, about a graph, have you, on the wall?-- Mmm.

Well, can you respond in words, please, instead of nodding your head?-- It has dates and amounts of gas - amounts of CO.

I am talking about a graph - a plotting on a graph with an axis. Did you ever see one on the deputies' cabin wall of litres per minute?-- Yeah.

When is the earliest time, can you help the Inquiry, when you saw that?-- Pardon?

When is the earliest time that you saw such a graph?-- I can't remember when the earliest time was.

Can you give the Inquiry some idea - before August 1994 - whether it was years before, weeks before, or days before that you first saw it on the wall?-- I don't know.

You must have some idea whether it was years or weeks or months?-- It wouldn't have been years because the panel wasn't going that long, and I don't know when they took their first one.

That's what I'm trying to get, you see. Do you have any idea when it first appeared - the litres per minute CO make by way of graph on the wall of the deputies' cabin?-- No.

Did you, yourself, appreciate the significance of such a graph if it was rising - say rising above 10 lpm? Did you appreciate that?-- Yes.

If you look at Exhibit 94 - is that still in front of you?-- Yes.

And was it in that state, to the best of your recollection, when you saw it?-- I don't know that either.

You see, the very last entry at the bottom - which is blank, of course - is Tuesday, 2 August, on the left; that's right, isn't it?-- Yes, Tuesday, 26th of the 7th. That's June - July.

It's blank, anyway?-- Pardon?

All I'm trying to fix with you is whether you are relatively certain or certain, or uncertain, for that matter, that that was the document you saw on the wall in the deputies' cabin?-- Yes, I thought there was one of these in there, yes.

But you can't fix a time as to when it was that you saw it on the wall?-- No.

Except obviously it must have been after 22 July - it must have been, because that's the first figure on it, isn't it, on the left - if it is the same document we are talking about?-- Yeah.

You told my learned friends, both of them, that you didn't receive any instruction as to why you were to take these daily readings with velocity and wet and dry bulb temperature - that's after 22 July - you recall saying that?-- Yes, I do. No, I didn't know why they wanted them. I assumed it was to keep a close eye on gas makes in the panel.

Is it the case that you, yourself, on one of those occasions after 22 July, received 8 ppm at the return air station?-- Yes, that could have been right.

I would like you to look, if you would, at your own certificate number 3761 and say whether you recognise it; that is, your certificate for the day shift on Monday, 1 August. Do you recognise that?-- Mmm.

The shorthand writers have to take down what you say, so you have to say "yes" or "no". You recognise that?-- Yes.

You, in fact, did find 8 ppm on that occasion, didn't you?-- Yes.

Did I understand you to say before that you had the capacity to calculate litres per minute from parts per million?-- Yes.

The cross-section at the point - if you do the calculation, I suggest that that will, in fact, give you 18.93 litres per minute?-- See, we weren't asked to do the calculations. We were only asked-----

I'm not suggesting that. But that's high, isn't it?-- Yes, it is.

Is it trending towards, in your opinion, danger level, in accordance with what you know?-- Yes.

So, you have told the Inquiry you weren't asked to do any calculation of litres per minute and just to record on the production deputies' report that information - CH<sub>4</sub>, CO, wet bulb, dry bulb, velocity?-- Yes.

I just might ask you to look, if you would, as well, at three other reports of yours going back in time, really - going

forward in time, I should say - 3764, 3767 and 3770. Just, if you would, identify that they are your deputies production certificate reports?-- Yes.

And you have repeated your instruction there; that is, to take the velocity, wet bulb, dry bulb, CH<sub>4</sub>, CO and that is where your instruction finished?-- Yes.

And not to do anything further by way of-----?-- No.

Just as an aside, might I ask you when you, in particular, use the term "fair ventilation" - and you have used that in some of those?-- Mmm.

What do you mean by that? Do you mean that to refer to the area being mined - actually being mined?-- Well, just adequate.

Well-----?-- Not adequate as in excellent, but just adequate. I think you can still be hot-----

But don't you on occasions - that is, you personally - use the word "fair" as opposed to "adequate" and "adequate" as opposed to "fair"?-- Well, yeah, but it's-----

All I'm trying to get from you is what you intend to convey when you write "ventilation fair"?-- Not comfortable.

Hot?-- Yes.

When you caused the brattice to be changed - I've forgotten precisely what it was - 17 June, I think, from recollection - do you recall your evidence earlier about that?-- Pardon?

Do you recall your evidence earlier about that?-- Yes, yes.

Isn't the effect of change in the brattice like that to deprive some other section of the panel of air?-- For a long time, yes, it would.

Well, that's undesirable, isn't it?-- Yes.

Do you need an instruction - you personally, on that occasion, for instance - did you need instruction or permission to do that?-- No.

Was that left to your own discretion?-- Left - I think it was left to my own discretion.

Do you recall in the deputies' cabin - whether it related to 512, or some other panel for that matter - any weekly posting of a graph recording the past and the future up to that - the end of that week; do you recall that?-- Recording of what?

Sorry, litres per minute, CO make?-- Yeah. Yes, I remember seeing the graph in the deputies' cabin.

I am talking about a graph and a series of graphs on a continuing basis brought up to date, say, each Friday; do you



recall whether that was the system or not - before?-- I think so, yes.

All right.

I tender those reports, Your Worship, respectively for ease. They are the production deputies reports 3761, 3764, 3767 and 3770, which could be one bundle.

WARDEN: Admitted and marked Exhibit No 140.

ADMITTED AND MARKED "EXHIBIT 140"

MR MARTIN: I'm just going to hand you a document which, in fact, you will observe quickly, is a graph with an attached series of handwritten information, and I would ask you to - it is graphed daily - litres per minute CO make, commencing 23 July and ending at about 8 - I think it is - on 6 August 1994. Just have a look at it, if you would. Now, what I'm asking you to assume about that and the handwritten figures attached to it is that that is a recording of the daily shift readings of the deputies commencing on 23 July 1994 for Panel 512 in the top return air station 46?-- Yes.

All right. Now, if one asked you to assume that the information contained on that in the handwritten information figures and so forth is correct, and if that's plotted correctly, what does that indicate to you as you go across the page from 23 July - that is, the graph? It's consistent-----?-- Yeah.

Isn't in the early stages after 23 July - a high reading - it says 10 lpm - what, around about the 15-odd?-- Till when?

Well, I'm just asking you. I don't have one in front of me, sorry?-- On the 28th of the 8th it's high and on the 1st of the 8th it's high and on the 6th of the 8th it's higher, but not much higher.

But on the 28th, in fact - 1 August, I'm sorry, is up, isn't it - that's the high one?-- Pardon?

Well, 1 August you have got something up about 18.93 litres which you spoke about before?-- 8 ppm, yeah.

And that's recorded as a spike, as it were?-- Yeah.

On that graph, isn't it? Well, when you get across to 5/6 August, what I suggest you have there, up until about 8 o'clock at night, is a rapidly trending increase in the CO litres per minute?-- Yes, that's different.

What does that indicate to you?-- That there may be a heating, or increase slowly - slow increase in CO.

Certainly a heating is a distinct possibly-----?-- Yes.

-----in your mind, and would have been, I suggest, had you seen such a document on 6 August 1994?-- I don't know, no, because between the 30th of the 7th and 1st of the 8th, that's even more severe, I thought.

But nonetheless-----?-- And yet-----

Nonetheless-----

MR MORRISON: Let him finish, please.

MR MARTIN: Sorry.

WITNESS: You're right. Go on.

MR MARTIN: No, go on?-- As I say, it's a rapid upward trend as well and yet after that it drops.

It drops, but then rises again?-- Yeah.

Most sharply, doesn't it - on 6 August?-- Go down and then-----

What is it on 6 August at its highest point?-- 20.

About 20, anyway?-- Mmm.

To be fair about what you are talking about - about 20?-- Mmm.

What did 20 litres per minute indicate to you with whatever knowledge you had at that time?-- It would be a large amount of CO coming up the return.

If not positively dangerous, certainly warranting urgent investigation, if that were possible?-- Mmm, yes.

I have to tender that for identification, Your Worship, to prove it. It's a graph of the daily make of CO litres per minute from 23 July 1994 until and including 6 August 1994 with attached handwritten figures extracted from the production deputies reports.

WARDEN: Make it Exhibit A for identification?

MR MARTIN: Yes.

WARDEN: And copies can be organised for the panel and the parties.

MARKED "A" FOR IDENTIFICATION

MR MARTIN: Mr Moody, I won't keep you much longer. I need a

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little of your background. You needn't worry about that document. To what age did you go to school?-- To what age?

Yes?-- 16.

And to what grade?-- 10.

And after you left school, what did you do?-- Went fishing.

Did you go straight to the mine, or-----?-- No.

Or something else?-- Went fishing.

Professionally, I take it?-- Nothing, really. Worked in the meatworks and forestry.

And before you went underground - when did you come to the mining industry?-- '79.

What induction did you get before you went underground?-- None - very little.

What was communicated to you at that time, or for that time, before you went underground in relation to spontaneous combustion?-- At that time?

Yes?-- Very little.

Well, since that time, apart from - well, apart from your deputy course, did you receive any instruction from the mine in relation to spontaneous combustion?-- Pardon?

Apart from the deputies' course - and I will come to that in a second - from the first time you were inducted underground -----?-- Yes.

----- have you ever had any training on spontaneous combustion?-- No, I don't think so. Mines Rescue -we had a bit on Mines Rescue.

Nothing from the mine?-- I don't think so, no.

Your employer?-- I don't think so.

What instruction or information were you given by Mines Rescue as to spontaneous combustion in particular?-- Parts per million, to see if - the increase in parts per million, and litres per minute, to calculate litres per minute.

And was 10 lpm the figure at which to become concerned about -----?-- Yes.

----- on your instruction?-- That's what I was told, yeah. At me deputies' course that was.

Were you given any written literature a miners' red book or a miners' blue book?-- There was a grey book, Mines Rescue book, but I can't remember the red book or the green book or the blue book.

Have you ever seen any books by Messrs Strang and Mackenzie Woods at Moura mine?-- I don't think so, no.

Do you know anything about incubation period of coal?-- Yeah.

What do you know?-- Different coals have different stages of incubation.

Is that all you know about incubation?-- Incubation?

Mmm?-- To the point where they start to oxidise -----

It's not an exam, I'm just running through a -----?-- Up to the point where they oxidise, well, once they start oxidising, that's what we were taught, from when they start oxidising onwards.

When you did your deputies' course at Mines Rescue was there any written format dealing with spontaneous combustion which you had to learn or become familiar with?-- I was told the 10 lpm was a reason for concern if that was what was shown, you know, and -----

And who told you that information?-- Dave Kerr.

Was there no curriculum or anything like that laid down for your deputies' course, I mean specifically dealing with spontaneous combustion?-- No, one week it would be one thing and the other week it would be something else. It was all over the place.

Id you know an instrument called a probeye?-- Yes.

Do you know that it's an infrared camera type device to detect a number of things not the least of which is an underground heating in a panel?-- Yes, yes.

Did you know whether one existed at Moura mine?-- I didn't know it was at the lease, I thought it was at the rescue station.

Did you ever see it at the rescue station?-- Yes.

Can you just tell me whether you are familiar with an organisation called SIMTARS?-- Yes.

In broad terms what do you know about it? It provides information -----?-- Yeah.

A specialised information service and assistance to a mine such as Moura?-- Yeah.

Do you know about their gas chromatograph?-- Yes.

Did you know that there was one at Moura?-- Yes.

Were you trained on it?-- No.

Did you know its capabilities?-- Yes.

With any detail or just very broadly?-- Yes, it could find out parts per million of different types of gases accurately.

Did you ever know it to be used at Moura for the detection of gases in a particular sample other than a span gas testing arrangement?-- I've never seen it used, but I thought it was used, yes, with bag samples of gas.

Do you know who was trained on it?-- No.

What about the Unor system? What can you tell the Inquiry about the Unor or the Maihak system at the mine?-- It went down -----

Are you familiar with it?-- Yes.

To what extent?-- I don't know how to - the computer that comes with it, well, we weren't allowed to touch it. You don't - we weren't trained on it.

Were you allowed into the Unor room?-- Pardon?

Were you allowed into the Unor room?-- Yeah.

Or was that prohibited territory?-- You weren't to fiddle with things though.

I beg your pardon?-- You don't play with things in there. We weren't trained on it and we weren't supposed to touch it.

Well, do you know that the computer changed in the last few weeks before August 1994?-- No.

You don't know that?-- No.

When, if you can assist - it's asking a lot now, I appreciate - did you make a habit of looking at the Unor screen before you went underground or when you were above ground or before you went off duty?-- When there was a section sealed up you would because you would be interested to see when the explosive range was going to come and go.

Sure, but you personally -----?-- Unless there was -----

Other than on that occasion or in conjunction with that sealing would you look at the Unor screen?-- Then yeah, yes.

You would then, but on other occasions would you?-- Yeah, when there was an interruption in ventilation you would look at the computer to see how things are doing down the mine as far as fresh air getting back into the pit, you know.

Well, where did you usually look at the Unor from? From what position?-- Outside through the window.

What distance from you was the screen approximately?-- Three feet.

Could you clearly see what was on the screen?-- I think so, yeah, yeah.

Do you know whether the Unor was connected to a siren?-- There was alarms on it, yes.

Well, you know that the Unor will alarm if it receives information beyond or above a pre-set gas limit; do you know that?-- Yes.

So that's one alarm, the machine itself, that the screen will alarm, is that so or can't you say?-- Yes, the screen - it's got a red - comes up "Alarm", says "Alarm".

So that's one alarm. Is there another alarm that you are aware of running off the Unor screen, more particularly the siren?-- No, I didn't know that.

Have you ever heard a siren on the Unor, gas alarm?-- No. I've seen the alarm on the machine blinking and no other alarms go off. You wouldn't know it was on the screen unless you seen it, unless you were looking at it and -----

When before 7 August 1994, if you can tell us, was the last time you saw an alarm on the screen?-- I don't know.

Once again can you help us at all, whether it was a week or 10 weeks or -----?-- Probably a few weeks beforehand, but what section they were I don't know, and a lot of the time they would be - they just put it down to a fault or something like that.

Yes, and it could be well removed and quite unrelated to 512?-- Mmm.

I have nothing further.

WARDEN: How long do you think you will be?

MR MORRISON: More than half an hour.

WARDEN: Thank you. We might take a lunch adjournment, thanks.

MR CLAIR: Your Worship, arrangements have been made for that video to be played in this area just over here, as I understand it, during the luncheon adjournment. There was a question raised at some stage about whether or not cameras would be allowed in while that is being played. I don't know that we have dealt with that as yet.

WARDEN: No, we haven't. My feeling was initially that they could view it, but I think it might be an unwise move if the cameras were recording at the same time. I have certainly no objection to personnel viewing it, but to make a video copy of the video, I'm not prepared to allow it at this stage.

MR CLAIR: Thank you, Your Worship.

THE COURT ADJOURNED AT 1.09 P.M. UNTIL 2.15 P.M.

THE COURT RESUMED AT 2.22 P.M.

DOUGLAS MARTIN MOODY, CONTINUING:

CROSS-EXAMINATION:

MR MORRISON: Mr Moody, can I just ask you a couple of things? You did a deputies' course through TAFE, I think you said?-- Yes.

Was that conducted out at Moura?-- Yes.

That was the one you described as taking over a couple of years?-- Yes.

Was the bulk of the lectures in that course given by the Dave Kerr that you referred to?-- Yes.

And who was he exactly?-- He's the Mine Rescue superintendent. He looks after the Mines Rescue Station, does the training for Mines Rescue.

Is he one of the most senior people in Mines Rescue?-- Yes.

During the course you would have, I assume, lectures?-- Yes.

So there was a classroom content and was there then practical lessons as well?-- Yes, sometimes, yes.

I take it you weren't the only person to be doing this course?-- No.

Can you tell us who are the others?-- Clive Russell and Trevor Dickson. There were quite a few, but ----

That will do, just a couple?-- Clive Russell and Trevor Dickson.

Now there was a bit of that course, I think, on spontaneous combustion?-- Yes.

And that was so much as you knew about it from the course was taught to you by Dave Kerr?-- Yes.

And I think it was that that you were referring to when you said you had been taught to look at litres per minute of CO?-- Yes.

Previously people had concentrated on parts per million, not litres?-- I think so, yes.

And he taught you something about the litres per minute to do with particular levels of it?-- Yes.

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And was that that when you got to 10 there was a reason for concern?-- That's right.

Which would lead you to do what as he taught it to you?-- Notify somebody else like the manager or the undermanager.

So something could be done about it or investigated?-- Yes.

Was there any discussion about what would follow once that happened?-- No.

Above 10 litres did he teach you anything about that?-- No, I don't think so, it's just that 10 was the time when it should be discussed about keeping an eye on it closer or doing whatever they do.

In the parlance of deputies in the pit and undermanagers as well, when someone asks you to "keep an eye on" a panel or "keep an eye on" a section you understand them to mean that they want you to actually monitor something?-- Yes.

If they are talking about methane, for instance, and they say, "I'd like you to keep an eye on that methane in the No 2 road.", you understand them to mean that what they want you to do is go down, do some testing and see what the levels are?-- Yes - yeah, well - yes. You do your inspections like as per the Act and - but they don't go down and say specifically. They say, "You are the deputy today in this panel, go to it.", you know.

Everyone knows what that means?-- Yeah.

If you are told to "keep an eye on" a panel you certainly know you are to go down there and do some monitoring of whatever it is your attention was directed to?-- Yes, and if there is anything extra they would say.

Getting back to the litres per minute for a moment, were you told something about rises above 10 litres?-- Yes, I was.

And was that basically from Dave Kerr that if there was a rapid rise above 10 there was a concern?-- Yes.

And if there was that rapid rise that would call for what as he taught it to you?-- To notify managers or undermanagers and they can make a decision on what to do.

In accordance with what he taught you in that course did you ever see a graph that showed you such a rapid rise that you thought it fitted in with what you were taught?-- No, I can't remember seeing the rapid rises on the -----

No, nothing you saw in the graph was of that sort of rapid nature that you had been taught would signify that you had to do something?-- No.

I gather, but I don't know - perhaps you can tell me - it seems that you were the most recently trained deputy at this

mine in terms of having done the course?-- Yes.

Now, during the course in so far as attention was paid to spontaneous combustion, were you given any information about what the options were to deal with it?-- Yes.

Can you tell me about that? What happened there?-- They said you could inert it, the atmosphere that's in the mine, or you could seal it up.

By "inert it" that means to neutralise the gas that would otherwise be there?-- Yeah, fill it up with nitrogen.

Were you told something about the practicality of those things?-- How do you mean like?

Well, did Dave Kerr, in discussing the options, give you to understand that one would be good or bad or indifferent and the other one would be -----?-- I see. Well, I can't imagine them inerting it with nitrogen because it's costly. I could see they would seal it up. They have sealed them up before and left the machines in there and they have recovered machines at a later date, but I don't know the cost, but I assume it's expensive to inert it.

Your own point of view was that sealing was the sensible or only option to deal with the spon com?-- Yeah.

And there was nothing in the teaching by Mr Kerr that made you think otherwise than that?-- No.

The TAFE course - you were asked some questions about whether there was formal curricula for it. Was there a special format to the lectures? You didn't just sit around a table having a cup of coffee and talking?-- No, it was - we sat down, we didn't have a cup of coffee and that unless we went outside and had a cup of coffee.

It was a formalised sort of thing?-- Yeah, yeah. We all knew each other.

There was a topic to be dealt with each week?-- Yeah, we didn't know that until we got there though. He would say, "Today we are going to talk about that."

Dave Kerr would say, "Tonight we are going to deal with X.", or whatever, and then you would get on with it?-- Yeah.

As part of that course which was conducted through TAFE did I understand you to say that you weren't given the red or blue books through the TAFE course?-- I can't remember the red or blue book. I know there was a little red gas book, a little red - it had all the different gases in it, but that's the only one I know.

As part of the course about spontaneous combustion, and I will just dwell on that for the moment, did you learn something about what causes it?-- Yes.

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Which is or was as you were taught it?-- Lack of ventilation.

Or lack of cooling ventilation?-- Yeah, look of cooling ventilation, yes.

You were taught something about the signs of it?-- Yes.

You mentioned some before, I think, that may indicate - wouldn't necessarily, but may -----?-- Yes.

----- indicate that, and that's smell and haze and sweating. And as we mentioned the methods that you might adopt to control the panel where that was occurring, and so far as you understood, what you were being told, it was really only sealing that was the sensible option?-- Yes.

Did you get any information in the course of those lectures

relating to spon com about things specific to Moura as opposed to coal generally?-- No, I don't think so.

The course that you did at the TAFE, is that under the supervision of the Department of Mines?-- Yes. Like, they - the papers were sent away to, yeah.

So, the Department of Mines takes an interest in either supervising or controlling that course?-- I think so, yeah. Well, they were sent - our exam papers were sent to TAFE after they were done. No, I'm not sure actually about the Mines Department.

Now, can I take you then to the 512 Panel for a moment? You mentioned that you were a production deputy in the 512 Panel?-- Yes.

Were you involved in being a deputy in there on development too?-- Yes, I think I was.

And you mentioned that you thought the method of extraction was a good one?-- Yes.

Could you just explain to me how it is you hold that view? What was it about it that you thought was good?-- Because when you - it's partial extraction, and when you do total extraction the roof always falls right where you work, you know, but here you can work all day and then you can go home and come back tomorrow and the roof is still there, it's still standing up, it hasn't fallen, and there is not as much crush, so the sides are more stable. That's the reason.

So, holding the roof up, you thought, was a good idea?-- Yes.

And did this panel as you worked in it - not just the theory but the practicality - did it have less rib crush than other panels that you had worked in?-- Less, yes.

All right. In terms of the safety of men, how would you rate this panel to other panels?-- Good, geologically.

Did you have a plan available to you as a deputy down in the pit itself which showed you the geology of the section?-- Yes.

Was that done by, I think, Mr Mason?-- Yeah, at safety meetings they showed us the plan and then they put one down.

In the crib room?-- Yeah.

And it was, amongst other things, a plan - you could have a plastic overlay, and when you put the plastic overlay on you could see the precise geology of any part of the section?-- Yes.

So you could see wherever you were going to be - just by picking up the plan and overlaying you could see exactly what

you had to deal with?-- Yes.

And you mentioned that the manager, Mr Schaus, had imposed a condition about high ribs. Just tell me about that again?-- Well, one fellow was hurt going down the ramp one day and a piece fell out and broke his leg, so he just made the rule no-one is to go down the ramp, and that's why we had to make so many ramps, because you would make one and you would get too deep to go any further and you would have to come back and make another one. So, the idea is if no-one can be there, no-one is going to get hurt.

I think there was a rule imposed that no-one was to be exposed to more than three metre rib heights?-- Yes.

And obviously down in the ramps it's higher than that?-- Yes.

And that was, in your view, a safe sort of rule?-- Yes, it was good.

And worked well?-- Yeah.

You mentioned that the ramping was changed. After a period of time the ramps were at a lower angle, or more gentle angle; is that right? Is that due to the condition of the coal?-- Yes.

Was the coal softer down the bottom of the panel?-- Well, the weight of the machine on the steep ramp would break the coal than it would on a gentle ramp, you know.

So, was that an initiative of the deputies on production to tell the guys to ramp a little less?-- Yes, that was, yeah.

There was no need to have a big meeting about that, like a safety meeting or anything?-- No.

It was a deputies' decision?-- I don't know who - well -----

I don't mean one deputy in particular?-- We could see by bogging the miner wasn't getting us anywhere, so we made more gentle ramps. I don't know where the decision came from, but it was obvious.

It was obvious to you and, no doubt, other deputies on production itself?-- Yes.

Did that seem to solve the problem?-- Yeah, of bogging, yeah.

In terms of the operation of the miner, was bogging the main problem at the start? You didn't have any existing gas levels or anything like that?-- No.

So, in terms of the operation of the continuous miner, about the only difficulty was bogging where the ramp was a little steep?-- Yeah.

And that got better when the ramps were reduced in angle?--

Yeah.

Did the panel change in terms of its geological make-up - I don't mean the roof so much as the floor - as you came back through the panel on extraction?-- I don't think so, no.

On development did you work sort of most of the way through on development or did you sort of chime in at some particular point?-- I can't remember really.

All right. If you can't remember, you can't remember. But you certainly worked on development and extraction?-- Yeah.

No doubt in the course of your duties then you would have had occasion to walk through, one way or the other, a significant part of this panel?-- Yeah.

Depending on where the sequence was that you were working on?-- Yeah.

Do I assume rightly - you can turn around and look at either the map or anything behind you - would you have had occasion to walk the areas inbye those big pillars? You see the big untouched pillars?-- Yeah. Before extraction?

Yes?-- Yeah.

Did you notice anything in particular about those?-- No.

Was there anything unusual about them or the ventilation around them?-- No.

Now, if I can get specific with the big pillars then. By checking your deputies' reports we can see exactly where you were for what shift, and we can work it out, but did you have some figure in mind for how many times you might have gone near the big pillars or around the big pillars - two, three, half a dozen, 10, 15?-- Yeah, lots a times, yeah. Lots of times.

Not just the isolated occasion?-- No.

And - sorry?-- They were sort of in the panel like every third row, every fourth row, you know, so you were passing them all the time, yeah.

Can I ask you some questions about being in behind and around those big pillars? Did you notice any particular concentrations of gas or layering of gas behind them?-- None that I can remember.

Was there reasonable ventilation through there?-- Yes, yes. There was enough to keep any gas levels away because I could never find any.

You didn't find any dead spots?-- It was a bit slow at times, yeah, in places.

But not dead?-- Where the seals were at the bottom, here.

You are indicating down next to the bottom return?-- Yeah.

At about cross-cut -----?-- Well, any cross-cut really. It's where the stoppings were, all the way along here. That one there shows it better, but - and up against the stoppings there it was a bit slow but -----

But not dead?-- No, there was never any gas - I never found any gas in them.

Did you notice something about the movement of air? Was there some indication that air was actually moving apart from the fact that gas didn't accumulate there?-- Yeah, in the roads here - these roads here as you walk -----

I am sorry to interrupt you. When you say "here" with the marker, when we read this later on we have got to understand what you are indicating. Can you tell us what heading and cross-cut?-- Heading 1 of these roads that go down this way.

You are talking about roadways 4 and 5?-- I am talking about the whole panel, but on this bottom side, and if you walk you can see the dust moving with you, so, you know, you know there is air there, air flow.

That sort of dust wouldn't stay around, it would get carried away?-- Yeah, it would go away, yeah.

Now, I might just ask you to have a look at your deputies' reports if I could. Perhaps I might just direct an inquiry through Your Worship down to Mr Clair and Mr MacSporran to inquire about the volume that has the duplicates or the originals of the deputies' reports. I don't think it's been made an exhibit yet.

MR CLAIR: It will be Exhibit 9, Your Honour.

MR MORRISON: Part of Exhibit 9, Your Worship.

MR CLAIR: Which is what we have referred to as the bulk material. Certain of the deputies' reports have been tendered separately to that.

MR MORRISON: Mr Moody, can I just ask you a couple of questions, sir? The first report in time is 3008 and I think it's 14 April '94; is that right?-- Yeah.

Now, that's a production report. I want you to run through five more pages, if you would, to a report on 29 April '94, number 3054. Do you find that?-- Yeah.

Now, you have got noted down there under "General Comments" in the first inspection, "punching first sequence of extraction"?-- Yes.

We can tell from that, I think you would agree, that 29 April was when extraction started?-- Yes.

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Friday day shift. So, the reports leading up to that time are development reports?-- Yes.

Can we go back to the start now having established that? Now, on each of the occasions of inspection on 14 April you described the ventilation as adequate on each occasion?--  
Mmm.

By which you mean there was enough ventilation to carry gas away and dust away and so forth?-- Yes.

Then the next report is 3011 for 15 April, and again ventilation on each occasion is described as adequate?--  
Mmm.

Nothing else of any particular note on either the first or second report, very low gas levels?-- Yes.

Nothing of any particular interest, nothing unusual about the panel?-- No.

The third report is 3021 on 18 April, again development and again ventilation adequate as found by you, and nothing particularly of note about anything happening in the panel?--  
No.

Then 3051, 28 April, this is the day before extraction started, again ventilation adequate on each occasion of inspection?-- Yes.



And nothing of any particular note. Then, the one to which I referred you, 3054 of 29 April, when extraction started, again ventilation adequate on each occasion of inspection?-- Yes.

And by "adequate" on those occasions, what you mean is there was a discernible air flow taking away gas and dust and so forth?-- Yes.

That's 29 April. Nothing else of any interest in that report to us? And then the next one is 3067 on 3 May. Again, on each occasion of inspection by you, ventilation is described as "adequate", in the sense that we have discussed it?-- Yes.

Now, you have got down on the second inspection under "General Comments", "number 6 heading needs pumping"?-- Yes.

I take it that's a reference to water?-- Yes.

Was there some accumulation of water at various places in the bottom of the panel?-- Yes, right in the bottom in the corner.

As one took the coal out and left a ramp, some of those ramps would get water in them too?-- Yes.

At any particular point in the bottom half of the panel or even a bit further up, you can find pools of water from time to time lying around at the bottom of ramps and in the bottom corner?-- Yes.

So, when you put them all together, there would be, I suppose, quite a reasonable degree of water down there?-- Probably, yes.

And there most of the time, too?-- Yes.

There may be - and perhaps you can help me - there may be, in fact, some water that had come through from another seam or another heading into that panel - some dirty water?-- I don't recall any coming from another panel.

Okay?-- There was a bore hole up near the beginning of the panel, but it was - it wasn't pouring out. It was sort of-----

There was some water coming out, though?-- Yes.

Not enough to cause any concern?-- No.

But enough?-- Yes.

When one looks at it and one imagines dry coal being left dry after the miner's gone, that's not really right because there are pools in the ramps and pools down the bottom and water used in the process itself?-- Yes, there is still a lot of dry coal there.

Yes, quite. I think the next report is 4 May, 3070. Each time you inspected that day, the ventilation was adequate in

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the sense that we have been discussing?-- Yes.

And down under "Comments" on the second inspection, I can't quite read it - "marking-----"?-- "Mopping".

"Mopping"?-- Mmm.

"Mopping up number 6" - what's the next word - "end of shift"?-- Yeah.

"Mopping up number 6 roadway, end of shift"?-- Yes, that's the term we use for trying to collect the water and load it out on a conveyor belt.

And, "losing the panel, pulling back to where it's dry"?-- Yes.

There is quite a degree of water down in that bottom corner?-- Yes.

And it remained that way?-- Yes.

Next report, 3073, 5 May. Again, on each occasion ventilation adequate in the sense that we have been discussing it?-- Yes.

Nothing of any particular note that day - no methane or very little, and nothing else of any significance?-- No.

The next report is 6 May, 3076, again on each occasion of inspection by you that day, ventilation adequate?-- Yes.

Nothing otherwise of any interest?-- No.

7 May, 3078, the next report; adequate again on both occasions of inspection and nothing of interest otherwise?-- No.

Then 8 May, 3081, same thing?-- Yes.

Adequate, and nothing of interest otherwise?-- No.

The next one is 9 May. I haven't got a number. Perhaps you do. Can you see a number on yours for that?-- 8300083.

I think that might be a pagination number. Anyway, it is 9 May, night shift?-- Yeah.

Anyway, on this occasion you have just countersigned this report; is that right - or is any part of this yours?-- Yes, this is Bob Newton's report.

You have countersigned it to indicate that you have, in fact, read it?-- Yes.

And the next following shift is yours - Monday day shift, 9 May?-- Yes.

Now, can I just stop you for a second and just ask you a couple of general questions, if I may? Now, Bob Newton's shift preceded yours. He was a production deputy?-- He is

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night shift.

Night shift deputy. All right. But working on production too?-- Yeah.

Was he a fairly experienced deputy?-- I think so, yes.

Was he more senior than you in terms of years of experience?-- Yes.

And he had been mining a long time?-- I don't know when he started before me, but he was there before me.

Certainly before you?-- Yes.

And you have been there a good while?-- Mmm.

He had worked in this panel too - he knew all about this panel?-- Yes.

He had participated in the discussions about it - the method of mining and all that sort of stuff?-- Yes, he would, yes.

And when the ramping method was discussed and the rules were laid down about three metre heights and all that sort of stuff, he would have participated in that as a production deputy?-- Yes.

Can I assume, or can you tell me if I'm wrong, he was very well regarded as a deputy?-- I don't know if he was. I thought he was a good deputy, yeah.

Your own view of him was that he was a good, competent deputy?-- Yeah.

Knew what he was talking about?-- He was a Mines Rescue member as well.

All right. Can we come to your report, then, on 9 May? Again, I think I've managed to chop the numbers off, but it is Monday day shift, 9 May?-- Mmm.

And this is your report, countersigned by Mr Robertson?-- Yes.

Again, on each occasion of inspection, ventilation is described as "adequate"?-- Yes.

Very low gas and nothing of any particular interest?-- No.

Then the next day, 10 May; this is a John Blyton report, countersigned by you; is that right?-- Yes.

John Blyton you know to be an experienced deputy too?-- Yes.

He has got a description of ventilation as being good on each occasion, hasn't he?-- Yes.

And the next following shift was yours on the day shift - 10

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May?-- Yes.

Which we've got there, and on your inspections on each occasion ventilation was adequate in the sense in which we have been using that term, you and I?-- Yes.

Very low gas and nothing untoward in the panel?-- No.

I've just been told the number for that - probably you and I don't have it - is 3087?-- Oh, yeah.

That's for the record. The next one I want to take you to is 3090 on 11 May. Again, on each occasion of inspection, ventilation adequate in the sense we have been discussing it?-- Yes.

Gas very low, nothing untoward. Then 12 May, 3093, same thing?-- Yes.

Then 23 May, 3927, same thing?-- Yes.

Now, pausing at that one, that's Monday day shift 23 May, "action taken on second inspection", you have got a notation there of "stopping repair at 13 cross-cut"?-- Yes.

Can you recall what that was about?-- Not the exact day, but I go down to the bottom road - down there and inspect-----

That's 13 cross-cut?-- That is 13 cross-cut, yeah, and inspect the stoppings there, and if they are damaged, I fix them up.

Did you do regular inspections down along 13 cross-cut?-- Yes.

Perhaps not every shift, but regularly?-- Yes.

And on some occasions, perhaps this one that we are referring to on 23 May, you found some of the stoppings either in need of repairs or closed or blown down?-- Yes.

You effected repairs to them?-- Yes.

You wouldn't pause to get approval to do that; that's something you obviously have to do?-- Yeah.

It's certainly not the sort of change to ventilation that you would consider or anyone would necessarily consider would require an undermanager's approval, for instance?-- No.

And on occasions, do I understand it the correct way that they - those stoppings - might have been blown shut or closed on those occasions from falls?-- Yes.

That wouldn't be an unusual occurrence at all, would it?-- No.

You would take whatever action was necessary to put the stoppings back into their proper position?-- Yes.

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Now, I think I understand rightly that the stoppings along the back of 13 cross-cut in each roadway - in fact, most or all of them have a hole in them?-- Yes.

Through which air could move?-- Yes.

That was always the case once the panel had reached the end and started back?-- Yes.

In fact, I think all of them might have had holes or flaps in them?-- Yes.

Just pause with me for a moment while I try and find something. Did you on any occasion of those inspections down across 13 walk into the goaf itself?-- We weren't allowed to walk into the goaf but you could walk to the other side of the stopping here and look in.

You are indicating - there is a particular roadway you are indicating; that's the belt road?-- You could do it at any.

You could go through the stopping and look at the goaf?-- You couldn't look this way because you couldn't get around the corner.

You are indicating you couldn't look along the next cross-cut because you couldn't see around the corner but you could look up the roadways?-- Yeah.

Did you do that from time to time?-- Yes.

Did you see anything that you regarded as being unusual or out of the ordinary for an extraction panel?-- No.

Any sort of particularly large falls or anything else?-- No.

Now, there were falls in that panel as there are in every panel; is that right?-- Yes.

In every production panel you are going to get localised falls of stone - coal and stone once you take away some of the pillar supports?-- Yes.

That's nothing new to any miner?-- No.

And that's precisely why you have the geological information down there so you can be forewarned of any area that might give you trouble?-- That's right.

Did this roof in 512 give you any unusual problems?-- No.

How would you rate it against other panels that you had worked on: good, bad, better?-- Good.

Can I ask you to look at the next report? That was 23 May. On 24 May, report 3930, you don't have that number, but just accept from me that that's so?-- Mmm.

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Again, on each occasion of inspection, it's adequate?-- Mmm.

Nil or no gas - nil gas, in fact; nothing untoward in the panel?-- No.

Likewise next report, 25 May, 3933?-- Right.

Same thing. Next report, 26 May, 3936, same thing again?-- Yes.

Two inspections, ventilation adequate each time. Then the next one - perhaps you can help me - I think it's 27 May?-- Yes.

It seems to be over-printed - 3939. Same thing again?-- Yes.

28 May. The next one is 3942, same thing again, ventilation adequate each time you inspected?-- Yes.

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And then 29 May, 3945, same thing again?-- Yes.

There is no doubt, is there, that all of these reports accurately record what you found down there?-- Yes.

Now, on that one for 29 May you've got there noted under "Action Taken" on the first inspection, "Stoppings inspected 13 cross-cut." Is that is that the sort of inspection we discussed a moment ago?-- Yes.

On each of those times you went down to cross 13 would you stick your head through and have a look around - or on most of them?-- No, not if the - if the stopping wasn't down or blown off the side I would just look at the stopping, and if it was up I would go on to the next one.

When you went across the back of 13 cross-cut could you feel the air coming out through the stoppings?-- You could feel it coming around this corner here. When you go around there you can feel it. It was -----

You are indicating the bottom of the first heading in the 13 cross-cut intersection?-- Yeah, and I never found any concentrations of gas down there, high amounts.

Minimal stuff?-- Yeah.

I will get a document for you to have a look at in a moment. I think it might have disappeared into the archives, but would you accept from me for the moment that in the week leading up to 29 May back up through the panel, and you are in fact extracting in sequences directly behind the big line of compartment pillars between 8 and 9 cross-cut?-- Yeah.

Would that accord with your memory generally?-- No, no. One road looks the same as the other, but -----

In due course when it comes I will show you the extraction sequence plan, not general sequences, but actual dates?-- Yeah.

I think if you look at that document which should have the marking Exhibit 85 on it, can I ask you to direct your attention to the cross-cut numbered 10?-- Yes.

Up around roadway 4 and 5?-- Yes.

From that up to big compartment pillars you will see all of those sequences being worked on dates around 27, 28, 29, 30 May?-- Yes.

So in that week leading up to 29 May with the report we were just looking at a second ago, number 3945, the area of working was directly behind those big compartment pillars, wasn't it?-- Yes.

You didn't notice any dead spots during that time?-- No.

You can put the map down on the floor is probably the easiest

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place because I might have to take you back to it in a moment. If we then turn over to the next one, 10 June, 3980, again the description of ventilation on each occasion of inspection is adequate?-- Yes.

The only difficulty being experienced at the time was nothing to do with gas or CO or anything else, it was simply the floor breaking up and the miner bogging at times?-- Yes.

That was the only problem you were facing at that stage. The next report is 14 June, Tuesday afternoon shift, 3993, and again ventilation on each occasion of inspection is adequate in the sense that we have been discussing it?-- Yes.

And you've got an inspection of 13 cross-cut noted again in "Action Taken" on the second inspection and repairs being done?-- Yes.

Is that, so far as you can recall, the same sort of reason that we have been discussing, they had been knocked down or perhaps closed or partly closed by some sort of action of the pit itself?-- Yes.

Ventilation on each time was adequate on that occasion. 15 June is the next one, 3996, same thing, ventilation adequate -----?-- Yes.

----- both times, and then we come to the next one, 16 June, 3999, that's Exhibit 138. That's already been shown, and this was where you had to shift the brattice bag in order to push some air down No 2?-- Yes.

Now, the finding of methane behind the bag was not unusual?-- No.

There was no reversal of air that you saw that day, the problem that you had to face was methane behind the bag and moving towards the cutting area?-- Yeah.

You couldn't detect any reversal of air as such?-- No.

It was a localised problem that you had to clear?-- Yes.

Is that why you thought - I'm not suggesting it was wrong, so don't imagine that - is that why you considered it wasn't something you needed to clear with anyone?-- No, the stopping was still in the same road and still in the same set of pillars, it was just moved inbye.

The effect of that was to achieve what you wanted to achieve, namely shift the methane so that you could actually cut?-- Yep.

Now you've got noted down on that report down on the bottom right-hand corner, "Late start due to meeting and gas. Three hours 45 minutes down." Can you recall what that was about? We know about the gas, you've mentioned that?-- The meeting was probably a union meeting.



Would that account for the three hours, and 45 minutes was the rest?-- Or a safety meeting. Pardon?

More likely a safety meeting, I suggest?-- Yeah, I can't really remember, but one or the other.

So that meeting would be conducted on the surface, not down below?-- Yes.

So can I understand from this report that you would have in fact been quite some hours later to the pit than you would normally?-- Yes, I don't know if it was hours, but, yes, a safety meeting usually goes at least an hour, yeah.

So the meeting had the product that you were later down to the pit and dealing with things in the pit than would have been the case normally?-- Mmm.

With the methane being just inside that bag stopping, I took it from what you were saying earlier to the other gentlemen that you didn't view that with any concern at all. That was a routine problem to be dealt with?-- Yeah.

And dealt with in a routine way. Notwithstanding the problem you had to deal with locally, ventilation described by you, accurately so, as adequate on each occasion of inspection?-- Yes.

The next report is 3402, 17 June?-- Yes.

I will just check that I can give you the correct notation of these. Yes, this report is Exhibit 139. Now, on that occasion you erected some brattice at the face to push air down No 2?-- Yes.

And that was the occasion, I think you said in answer to one of my learned friends, that it was what Reece Robertson had done on the previous shift. Can you respond verbally for me?-- Yes, it was in 8 cross-cut.

I don't need the location identified for the moment. You understood from speaking to Reece that that's pretty much what he had done?-- Yes.

And I took it from what you said that you had also understood from him that he had got undermanager's clearance or managerial clearance to do it?-- Yes.

So you weren't doing anything more than had already been approved?-- Yes.

Is that the reason why you didn't seek a separate approval as it were?-- Yes.

Is it the sort of ventilation change that normally you would seek an approval for had you not known what Reece had told you?-- No, I don't think so.

Were the sort of ventilation changes that required reports

major changes?-- Yeah - yeah, if you make a major change you  
-----

Such as what? What would you class as a major change as  
opposed to, say, this?-- With the return on the other side  
instead of the air flowing this way, up this road, making the  
air flow up that road or -----

So if the regulators were changed in such a way that you could  
reverse the returns?-- Yeah.

That you would categorise as a major change?-- Yeah.

But this certainly wasn't?-- No.

And tell me, was it effective this action you took? Did it  
work?-- Yes.

And was it quickly cleared?-- I don't - that day I think I  
left before we took the stopping down, but it was clearing.

That's right, because you've got a split report with Lex  
Henderson, haven't you?-- Yeah.

Your memory is you certainly spoke to Lex and in the parlance  
of the pit you asked him to keep an eye on it too?-- Yes.

And there is certainly - you measured 10 ppm there?-- Yes.

At No 2 heading 8 cross-cut?-- Yes.

You weren't working in No 2?-- No.

That was just the main intake, and can you tell me where you  
measured it? Was it low down, medium range, high up?-- High  
up.

Near the roof?-- Yeah.

Now, you said earlier today that the fact that you got 10  
parts wasn't itself of concern to you either?-- No.

I understood you to say, and I don't know that I got it right,  
that that was because you had been getting seven before and  
continued to get seven?-- Yeah, but not seven in that area  
though, seven -----

In the return?-- Yeah, which ventilates the whole panel.

So you are talking about a localised reading?-- Yeah.

As opposed to a reading for the whole panel?-- Yeah.

You regard the reading for the whole panel as far more  
significant to a miner than that localised reading?-- Yeah.

So you paid attention to the 7 parts in the return?-- Yeah.

Apart from that problem that you dealt with that day, can you

recall anything else that was unusual about the panel that day? Was it sort of particularly hot or was there a smell? Was there a haze? Was there anything of that sort?-- No.

You had to go from wherever the face was down to No 2 to organise the brattice there, then back down to fix it up later on?-- Yeah.

So you in fact walked a bit of the panel that day?-- Yes.

And at no time during that time did you get any smell?-- No, none.

Or haze or excessive heat or anything else?-- No.

From what you would say you in fact experienced the atmosphere inbye the bag at the face?-- Yes.

Same thing, no smell, no haze?-- It's warm. You could feel the change in temperature.

It isn't like intake air, is it?-- No.

So it's warm for that reason, there is a difference?-- Yeah.

What about the smells and haze and stuff?-- No, no smells, no hazes.

Now, that is on that first inspection. If you can have a look at it, that is the first time - in fact as we will discover it's the only occasion - in all of the time you were in 512 you described the ventilation as less than adequate?-- Yes.

That's assuming "fair" means less than adequate. "Fair" means warm I think you said earlier?-- Yes.

There is still an airflow and it's still clearing dust and gas and so forth, it's just warmer?-- Yes, it's - that gas was coming up the road, so the ventilation had to be better - it paid to be better.

This is afternoon shift, 17 June. You are working at that point cross-cut 7, immediately inbye cross-cut 7, between 4 and 5. Just have a look on the map and satisfy yourself that's so. You can pick up the sequence plan actually, Exhibit 85, and just confirm for me that that is so. Cross-cut 7 immediately inbye between 4 and 5, afternoon shift, 17 June?-- Cross-cut 7? Yeah. What are the blue ones?

Blue ones are sequence numbers, red ones are dates and directions?-- Yeah.

Shift dates, so "AS 17/6" means afternoon shift, 17 June?-- I see.

I think I've described it correctly?-- Yep.

While you've got that there and you are looking at it can you

tell us by reference to cross-cut and heading where it was you erected the brattice at the face to push the air down? I mean you can do it on the map on the board up there if you prefer that. I don't mind either way?-- What's the date? 17th? It would have been there - there.

Would that have been at 7 cross-cut between 4 and 5, pretty much where you were?-- Wherever the miner was cutting, right in front of the miner we put it.

That would be 7 cross-cut, somewhere between 4 and 5 heading?-- Yeah, between 4 and 5.

Okay, and then I think you said -----?-- No, it would have been in one of the cross-cuts. It wasn't between any of the cross-cuts. It was right in one of the cross-cuts.

Sorry, that's what I mean, in cross-cut 7 and situated between roadways 4 and 5, so it blanked off cross-cut 7 completely in front of where the miner was?-- Yeah.

And then I seem to remember you saying that you also pulled down the bag that was across No 2 heading just inbye 7 cross-cut?-- Yes.

And that then resulted in the air being pushed down past where that bag was and into - down No 2 heading?-- Yep.

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And then that was reversed at the end of the shift. When you finished with it, that bag went back up on No 2 heading?-- Yeah.

Now, you can turn to the next report if you would. That's 5 July, 3455. Again on each occasion of inspection ventilation adequate and nothing of any particular note?-- No.

No repeat of any of the difficulties you had on 17 June or 16 June?-- No.

And the same goes for the next report, 6 July, 3458, each time you inspected - I am sorry -----?-- Yeah.

Ventilation adequate. That, I think, is a split report, isn't it?-- Yeah.

Part of it is Eddie Bentham and the other is yours?-- Yeah.

Then 7 July same thing?-- Yeah.

Ventilation on each occasion adequate. That number is 3461. Then 3464, 8 July, same thing again?-- Yep.

3474, 11 July, same thing again?-- Yep.

Likewise on 12 July, 3702?-- Yep.

And each time you have got "adequate" down there where it's being used in the sense that we have been describing it, that is, it's air pushing through clearing gas, clearing dust, clearing things of that nature?-- Yes.

And it accurately records what you found?-- Yeah.

Then to 19 July, 3722, same thing with the ventilation?-- Yep.

And an accurate description?-- Yep.

And you had some problems that day, electrical problems with the miner and you lost a fair slab of the shift to that?-- Yes.

Over six hours. Then down on the second inspection, again a notation of stoppings being repaired after a fall sometime before day shift?-- Yep.

It was the day shift you were on, that's Tuesday day shift, 19 July. Can you remember where the fall was?-- No. It was down the bottom side of the panel, I don't know how far back, but it was down - these stoppings that go across here like this were blown down.

That's across the compartment pillars you are indicating?-- Yeah.

Between cross-cuts 5 and 6; is that right?-- Oh, well,

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that's not - no, that's - it's not necessarily those pillars, but it's this bottom area where it was.

I'm sorry -----?-- I don't know what row of pillars it was.

That's right. The reason I am asking you to pause is when we come to read the transcript, descriptions like "around this area here" don't mean a lot, so I think what you are indicating, if I can accurately record it, is the area between cross-cut, say, 4 and 6 and between roadways 4 and 6?-- Yeah.

In that general area there?-- Yeah.

Stoppings were down?-- Yeah.

Now, that's 19 July. That's now roughly a month after you had that problem with putting brattice up to force air down No 2. At the time that earlier problem happened did you get any smells, heat, haze, anything of that nature?-- No.

Did anyone tell you at that time, particularly on 17 June, about them getting a smell?-- I can't remember anybody telling me about a smell, no.

Now, do you remember talking to Mark McCamley that day? I am making a jump back, I know, but bear with me. 17 June, a month before we are now talking about. Do you remember talking to McCamley at the start of your shift that day?-- No.

Did McCamley tell you that he wanted brattice put up or down or something done at the start of the shift, or is that a decision you made that day, 17 June? You can check the report again if you want to. It's 3402. That's the one that's Friday afternoon shift, 17 June. More particularly, did McCamley talk to you about getting a smell himself?-- I can't remember him saying anything about a smell, no.

It's the sort of thing you would remember?-- I think so.

And if it had been reported to you by either McCamley, or anyone for that matter, that they had got a smell, would you have done something about it yourself?-- Yeah.

Like what?-- See if I could get a smell or take a reading with the CO tubes in the return.

And if you went to check out the smell and you couldn't find it yourself no matter how hard you tried, would that suggest - obviously you couldn't get the smell, we know that, but would it suggest to you the problem might have gone away?-- No, no. I've only ever smelt one fire, but I couldn't smell it that day, but, no, I don't suppose it means it goes away or it's not there.

Let's come back to 19 July where I had you originally, 3722. We have talked about the electrical problems and the stoppings down and the ventilation. The next report is 21 July, 3728.

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On each occasion of inspection ventilation adequate each time again?-- Yes.

Same thing with 22 July, the next one, 3731?-- Yes.

Now, that's a day shift on 22 July. It finishes in the afternoon roughly, what, 2.30, 3 o'clock?-- Yeah.

Did anyone speak to you that day that you can recall about taking more frequent or more CO readings, velocity readings and that sort? You can't recall?-- No.

Now, if you turn the page, 25 July, 3741. Is it 25 or 28?-- 25, I think.

Only one occasion of inspection that day. Do you remember why?-- No.

Adequate ventilation, though, on your inspection. Turn the page to 1 August. 1 August was the first report where you recorded your full readings that you said was in response to Mr Mason's notice; is that right?-- Yes.

Ventilation on both times then adequate again?-- Yes.

And the readings are recorded there. Was the first you heard about the extra readings when you read the notice?-- I think Bob Newton said something too. He said - he told me too, you know.

Bob Newton did?-- I think so, yeah. He said, "Don't forget you got to do those readings from now on."

And you did that, you took the velocity. Can you describe to us, if you wouldn't mind, how you do take the velocity? How does one take it?-- With an instrument called an anemometer. It's like a little windmill and you set it and you traverse it across the roadway over a one minute period, and it's got a little measuring clock on it as well to tell you in metres per second, and when the one minute is up it clicks, it turns off, and then you read the -----

Does it have like a self-timer in it so it will click off at one minute?-- Yeah.

And do you do that only in one direction? Do you take a minute to go across one way or do you go back and forth?-- No, one minute - all the way across in one minute. You had to do it three times to get an average.

Do you have to hold it some particular way?-- Yeah.

Where?-- The way - if it's - if the windmill is going back to front you won't get - all the measurements will go back to front.

Do you have to hold it somewhere in relation to the roof or the wall or the floor?-- Right angles to the flow of the air.

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So where in relation to your body?-- Away from your body.

If it's too close, that can affect the reading?-- Yeah.

If you don't take exactly one minute to do it, that affects the reading?-- Yeah, that's why you take three, so you get an average.

If you spend too long of that one minute next to the rib, that affects the reading?-- Yes.

Likewise, if you spend too long of that one minute in the middle, that affects the reading?-- Yes.

Very tricky thing to do?-- Yeah.

Now, coming back to 1 August, ventilation adequate; likewise 2 August, 3764; likewise 3 August, 3767; likewise 4 August, 3770, the last time you were in the panel. Now, as we have seen from that review of those reports, on only one time out of all your inspections did you record the ventilation as being what might be called less than adequate?-- Yes.

On all the other occasions, which include both development and extraction, shift after shift it was adequate in the sense in which we have heard you say?-- Yes.

I tender that bundle of reports. Perhaps it could be designated "Bundle of Deputy Moody's Reports".

WARDEN: Admitted and marked Exhibit 141.

ADMITTED AND MARKED "EXHIBIT 141"

MR MORRISON: Now, can I just ask you this: when there was a changeover of shift in - let's deal with this panel and the mine generally, but this panel will do - when there was a changeover of shift, was there a deal of communication between the deputies?-- Yeah.

Oncoming to outgoing?-- Yes.

And would that sometimes take place down the pit?-- Yes, all the time.

And sometimes at the top?-- If there was some reason for them to come to the top early, yeah, it would be on top, yeah.

And that exchange of information was very much a routine thing?-- Yes.

All deputies did it to one degree or another. Some might not have been as verbose as others?-- Yeah, that's right.



But they all did it?-- I think - yes, especially when there was something out of the ordinary.

Would it be right to say that to a fair extent the deputies developed trust in one another to do the right thing, to do the reporting?-- Yes.

And you each depended on the other and you depended on them, they depended on you?-- Yes.

To do that reporting to make sure that the people did understand what was going on in the mine?-- Yes.

In your experience, was it successful in terms of conveying information about the panel and problems that were encountered?-- I thought so, yes.

And would there be an exchange of information also - I don't mean in a formal sense of reports or anything - but miners talking to one another at the miner level?-- I think so, yeah.

And on occasions you have mentioned the provision of reports. I think you said the outgoing deputy sometimes took the oncoming deputy's - sorry, took the report up after the oncoming deputy had read it out of the pit?-- No, there is a carbon copy. He could take his original copy and the carbon copy is left there for him to read.

I understand what you mean now. What would happen to that report that was taken up top?-- It would be taken up and put in the undermanager's - mine were put in the undermanager's office.

On the desk?-- Yeah.

And if the undermanager was there, would you do something in particular?-- Yeah, if he was standing right in front of me, I would pass it to him.

When that sort of thing happened, would the undermanagers talk to the deputies about what had been going on, "Are there any problems?", you know, "Anything I need to know?"?-- Yeah, they'd say, "How's it going?", and you'd say, "Everything's going okay.", and away you go, unless there was a problem, and you would say there was a problem.

And deputies and miners weren't backward in speaking out their concerns?-- No, no.

Now, on the occasions when the undermanager wasn't in the office, that report would be put on the desk to be read by the undermanager and then posted?-- Yes.

And that happened?-- Yes, I presume so. I'd put it on the desk. They'd say, "Is your report on the desk?" I'd say, "Yep."

And then they get posted in due course?-- Yeah.

And where they are posted they are really for anyone to read?-- Yes.

When you had to take the extra readings, I think you said that you didn't get told why that was going on, but you made some of your own assumptions?-- Yeah.

And the assumption being that they obviously wanted to monitor something and these were the readings to facilitate that?-- Yes.

And you saw no need to quibble with that, you just did what the deputy was supposed to do?-- Yep.

No-one suggested to you you were doing the wrong thing or should have been doing more or less in the way of taking readings?-- No.

Now, in this mine there were a number of bodies, committees, to do with safety, weren't there? There was a consultative committee, various subcommittees?-- Yeah.

Were you on any of those?-- No.

Were you aware of their activities?-- Some of them, yes.

And there would be safety meetings from time to time?-- Yes.

Of varying duration?-- Yeah.

And in varying places. Sometimes in the training room, sometimes down in the pit?-- Yes, mostly in the training room.

Would it be right to say that people took those things seriously?-- Yes.

Particularly the management side?-- Yes.

There would be no cause to say that the management were ignoring safety, would there?-- No.

That didn't strike you - that wouldn't strike you as being an accurate description?-- No, it's not accurate, no.

Would it be an accurate description to describe the management team, by which I mean say Mr Schaus and Mr Mason and Joe Barraclough, the training officer, or whoever else, as being, in your view, safety conscious?-- I thought they were - since Albert got there they made lots of changes with risk and things like that, yeah.

Albert being Albert Schaus, the manager?-- Yes.

Do you think the system got better once he got there?-- Yeah. He had good intentions, yes.

But those intentions carried through?-- Yes.

Well, can you give us an example of that?-- Well, the ribs, remember we said the three metre ribs and a bloke broke his leg, so he thought, "Well, that won't happen again.", so he just made it so no-one could go there, get in that position, and then another bloke got hit in the leg with a bit of chain 'cause the chain broke, so he just said, "Well, we'll just use chain this big from now on.", and that's what we done, and we weren't allowed to use little chains, and every time something happened he would just overkill so it wouldn't happen again.

What do you mean he would "overkill"?-- Like, you would use massive chain instead of a chain that would maybe carry the load, you know.

He would sort of go further than might have been needed to overcome the problem?-- Yeah.

Well, can the same thing be said about the others, say, Mr Mason?-- Well, he was - Albert was in the safety meetings with everybody else, you know, so when a rule was made up, I suppose it was passed to him, so he would say, "This is going to be the rule.", and he would just sort of overrule every other rule, sort of, you know.

So, he had the ultimate say, as it were?-- Yeah.

Did you have much to do with the others in the management side, say, George Mason as opposed to Albert Schaus?-- George mostly more than Albert.

Was there some particular reason for that?-- I don't know, no.

Was George more down the pit than Albert was?-- I think so, or he was more talking to deputies than Albert was, you know. Like -----

George Mason was talking to them?-- Yeah, I think so. I think it was more George than Albert, yeah.

And what about George Mason then, was he approachable on these safety questions?-- I thought so, yes.

What about the training side of things? It's the fact, isn't it, that people were given ongoing training at this mine?-- Yeah. Training was - it was slow going through it. When people did do training it took a fair while. It seemed to me it took a fair while before they let them get their ticket, you know. It was up to the trainer to have the final say whether that person was competent in using a certain machine of some sort.

The trainer would be who?-- A miner or a deputy or - but a competent operator.

So, in your view, they seemed to be taking longer than was necessary to let people get ticketed?-- Oh, no, it wasn't my view. If they thought it took that long, then that's as long as it takes.

Sorry, I understand. Did you participate in the training yourself?-- I was on-the-job instructor, but I only ever trained one person.

In relation to what was that?-- It was an end loader - an Eimco.

In terms of the relations between miners on the one hand and management on the other, how would you describe them? Were they at loggerheads with one another-----?-- Some were, some weren't. Some miners would have good - a lot of miners would have a good opinion about one bloke and a bad opinion about another, you know.

In terms of passing information up, though, complaints by miners to management, information coming back from management to miners, any problem about all of that?-- I never thought so because our safety meetings sort of ran into that area a little bit too. They used to veer off the safety bit and get on to "this should be done" or "that should be done", or something like that, and then we would get back on the safety bit, you know.

This is miners making suggestions about "this should be done" and "that should be done"?-- Yeah, yeah.

And in terms of some of the things that happened at the mine, there were a number of cable flashes, for instance, where cables were broken on shuttle cars. There was a response to that - to each time that happened?-- Mmm.

Was that adequate in your view?-- Yeah. They had a cable damage report and I suppose that would be one way of finding out how it happens - what's the biggest cause of cable damage and that - but - yeah, sometimes you can't help but break cables. Just mud gets into things and-----

How were they dealt with, those - what you might call investigations into cable flashes?-- I think they were just put on the report, what happened, how it happened, and probably who drove the car, and then it was given to management, I suppose.

But did something happen with production when they were investigating? If you had a cable flash while the pit was operating, would production get stopped while the investigation was carried out?-- Yes, if you can see a spark - if it is an open spark.

Like a reportable incident?-- A reportable incident, yeah.

Am I right in thinking that they would actually - if that happened, it would be roped off and production would be ceased until the investigation was finished?-- Yeah.

So instead of just replacing the cable, production would actually stop?-- Yeah, it was - George and other people would come down and look at it and discuss it.

When the panel was being developed and the extraction method was being discussed, it was discussed with deputies, amongst others - that is to say, exactly how they would go about it?-- Mmm.

Including the ramping. And what was the position with the ramping? I mean, did the idea come from some particular area?-- Yes, there was a lot of coal on the floor, so - and they wanted to get that coal, so that's where it would have come from, I'd say. It would have been a waste to leave it there.

And in terms of the method of ramping, did Mr Schaus impose that method?-- Of not going beyond the three metres?

Yes?-- Yes.

That was a hard and fast rule?-- Yes.

And you understood why that was being done?-- Yes.

What did you understand at the time?-- Well, one bloke got hurt - like I said before, he broke his leg because he was down past this three metre height, and so he said no-one's to go past the three metre height.

It was for the safety of the men that that was imposed?-- Yes.

I have nothing further, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: Mr Moody, you were questioned earlier about your TAFE deputy training. Was that done in Moura?-- Yes.

I take it also that you received quite a deal of training through Mines Rescue?-- Yes.

You mentioned earlier the involvement of Dave Kerr. Was he involved in the TAFE course and in the Mines Rescue training?-- Yes.

You were questioned also about certain things you came to know about spontaneous combustion. Mr Morrison asked you that this afternoon?-- Yes.

Did those matters arise in the Mines Rescue training or in the TAFE course, or both?-- A bit of both.

Now, do you know to what extent the training went into spontaneous combustion, and by that I mean are we talking about a series of lectures or are we talking about something that was discussed as part of one lecture, or something different?-- No, it wasn't a series of lectures, I don't think. It was - they just told us how it occurs, and how to measure it with the Drager 21/31 instrument.

How to measure what?-- CO.

What, CO make are you talking about?-- Parts per million.

Ppm?-- Mmm.

All right?-- And the course did teach us how to calculate litres per minute, but because you never ever use it, well, I have forgot - the formula has gone now as to how to calculate it.

Was that part of your TAFE course?-- Yes.

And it was something that you never encountered in a practical sense after that?-- No.

In other words, you were never called upon to do it?-- No.

With the mines rescue course, spontaneous combustion, was that something that was only very lightly touched on?-- I can't really remember, but there was enough there for me to understand it. Like, you know, I can't remember how much time we put into it.

Now, you told us before that you do have some experience in relation to what happened at 5 North-west?-- Yes.

Now, was that the incident in 1986 when it appears there was a confirmed heating?-- Yes.

And were you familiar - I'm not asking you the specific reading - but were you familiar with what happened in terms of the parts per million reading of CO in the day leading up to the sealing of that particular section?-- The parts per million rose rapidly through the day - I think somewhere between 10 and 20 ppm it went, I thought, so-----

But you were - sorry, I'll let you finish?-- So - I think we had a computer then, too. Anyway, we went down the dip to find out what's going on with Dick Stafford - I was with him - he was deputy and I was the miner - and we went into the return with the 21/31 Drager and found out it was right.

There is some material before the Tribunal to suggest that in the last day, from about 7 in the morning up until about 5 in the afternoon that there was a rise in CO parts per million at the goaf edge from about 20 to 110 and even higher at the seals?-- Yeah, I don't know. I can't remember the figures,

but I know it was - we went down and looked into it.

But, in any event, was it the case with you that you associated a very sudden increase - a very substantial sudden increase in CO parts per million with any heating?-- Yes.

And from what you know of CO make, did you also associate a fairly substantial increase in CO make with the heating?-- Yes.

Now, to your knowledge, was that a view that was generally held by people out at Moura - that for there to be a heating, you needed a very substantial increase over a short period of time, say, in your CO parts per million?-- Yes, I think so.

Or in your CO make?-- Mmm.

Thank you. I have nothing further, Your Worship.

WARDEN: Thank you. Mr Parkin?

EXAMINATION:

MR PARKIN: I would like to ask you some questions basically for some clarification. How often would you make ventilation changes in 512?-- Not very often. Oh, well, come to think of it, once you finish the sequence, you would have to change it once every sequence just about, I think, yeah - that's a minor change, not a major change.

You said in your statement you got gas level readings, but you had to stop mining and you had to correct the ventilation. That might be considered normal practice, but how do you communicate that to the following shift, or indeed the undermanager?-- Put it on the report.

Is that all you do? Is there another sequence that you go through?-- If it's a major change, I would ring up and let the undermanager know what we are going to do, but I never made any major changes.

So, the incident that's on your report, you wouldn't consider that serious enough to report that to anyone?-- No.

Just on your report?-- No. Yeah, it's just on the report.

Okay. Now, what about ventilation in 512 generally? Now, you said that you believed the ventilation to be pretty good; is that correct?-- Yes.

So, these very large barrier pillars never created a problem with ventilation of air at any time as far as you are concerned?-- Not in intakes, no.

What about the return?-- Well, in the goaf you couldn't - the

only way you could do it was go to 13 cross-cut and find what's coming around the corner. You could never go to the goaf and find out what's - it's too dangerous. You can't go out there. But, like I say, it was hot, you go behind the bag. It is much warmer than what it is in intake air.

Now, you have stated that the communication between shifts is very good at Moura. Did any other deputies have problems with ventilation in 512 to your knowledge?-- I don't think so.

In general conversation, talking to them, or any of the miners?-- No, I don't think so.

Did you know that on 15/7 the CO reading was over 14 lpm in 512?-- No, I can't remember seeing a reading of 14 lpm.

I think you have indicated to us earlier, though, that if it is over 10, then you believe there is a problem?-- Yes - well, yeah, it should be reported, yeah.

So, then, on 15/7, although it was known that the litres per minute was over 14, you didn't have any concerns?-- No, I don't remember being concerned about any readings over 10.

Did you know it was 14 on the 15th?-- No, I can't remember seeing a reading of 14, no.

Well, let me ask you another question: I think the last shift you worked in the panel, as you have said this morning, was on 4 August. Did you know what the CO make was then?-- No, only parts per million.

Yeah, but what about litres per minute?-- No, I didn't know that.

What about the deputies' graph on the deputies' wall?-- I don't remember if I seen it that day.

So, you didn't see it on that particular day on the 4th?-- No, I can't remember seeing it, no.

So, communication was pretty good and at no time did anybody talk about a haze or a smell or any other thing between shifts, other than the 15th of the 7th or 4 August?-- No, I never heard anybody talking about smells or hazes.

I think you said that compared to all the panels you worked at Moura, you found this panel to be pretty reasonable; is that right?-- Yes.

I think that's with the exception of ramping?-- Yes, ramping was - it wasn't dangerous, but it's just time-consuming.

Well, perhaps you might enlighten us a little, because you said that someone broke a leg whilst they were ramping?-- Yes.

Could you explain what happened to him and how it happened and why and what you did to prevent a recurrence?-- That's what



we done. The management said they will reduce the places where people go to three metres because the person who broke his leg - this is before the new rule come in - and that's what they done - they said, "You're not to go down the ramp any more than a three metre height.", so that's what they done.

So, what happened when the guy actually broke his leg? Was the job actually stopped and fully investigated?-- I would say so.

I am asking you the question?-- I wasn't there on that shift.

Was it communicated-----?-- As a matter of fact, I don't even think it happened in that panel. Pardon?

It didn't happen in 512?-- I don't think so, no.

Well, I was led to believe that it happened in 512?-- Maybe it did. That's the action they took, anyway, when it did happen.

What about the chain that - I presume that the chain that you spoke of that injured someone, injured someone when he was ramping and pulling the machine out when it was bogged; would that be right?-- I don't know what they were pulling. I wasn't there at the time. They just said the chain broke and the link hit him in the leg or the chain hit him in the leg.

Did you know of any other accidents in 512?-- I can't think of any, no.

So, just coming back to the ramping, you can only recall one incident - you are not quite sure about the guy that broke his leg, but one guy certainly got hit with a chain and to your knowledge there were no further - there were no accidents?-- No.

Tell me, between June and August, how many safety meetings did you attend?-- I think they were once a month - safety meetings - once every month, I thought.

So, what you are saying is you had a safety meeting in June, one in July?-- Yes, they were every four weeks I thought we had them, yes.

And at those safety meetings that you had, these problems were never discussed - about the litres per minute in the panel?-- No, I never heard - no, I can't recall them discussing litres per minute.

I have no further questions, thank you.

EXAMINATION:

PROF ROXBOROUGH: Mr Moody, in response to Mr Morrison you described the nature of the lectures that you attended for your deputies' certificate; am I right in understanding that that was in fact a TAFE course?-- Yes.

It was a TAFE course. How many people would there be in a class?-- There was only three at the end.

At the end?-- Yeah, three, yeah.

So you were effectively getting personal tuition almost -----?-- Yeah.

----- for such a small class, and I presume that the lectures were sort of chalk and talk, that the lecturer would be writing on the blackboard and showing slides, projections of graphs and -----?-- Yeah.

Mine plans and layouts and things of that sort?-- Yeah.

And you were required to take notes, were you?-- Yes.

Did you get handout material? Was material given to you to assist you in the learning process?-- Yes.

And did you keep that material?-- No.

You didn't keep it? Were you given any reference material, any private reading that you had to do in order to present yourself for your deputies' certificate?-- How do you mean like?

Well, for example, he might have said there is a good article that's been written in such and such a magazine about -----?-- Yeah, Mines Rescue magazines and stuff like that.

You were given those references, were you? Were you actually given those references or did you have to find them yourself?-- No, they were given to us.

You were given copies of it and did you keep those?-- No, I had to hand mine back for some reason. I think I lended mine - mine was on loan or something.

You kept your own lecture notes, I presume. You needed these things to revise to take the examination?-- Yeah, I kept it all.

Then you just abandoned them, you didn't keep them after that?-- No.

On this other question of the conditions of the ventilation behind the large pillars, I think you said that you felt that the ventilation and conditions there were quite reasonable or words to that effect; did you in fact take any measurements of

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any description behind -----?-- No.

----- the pillars? Did you ever take -----?-- Only methane measurements.

You took methane measurements but not any anemometer readings behind the -----?-- No.

It was just your feeling that the ventilation was adequate, your perception?-- Yes.

Could I refer you to an exhibit you have already seen, Exhibit 138, which is one of your reports, the report dated 16 June, number 3999? Just a small point on that, if I may, Mr Moody. In the centre at the bottom it says, "Dust used - 30." I presume that means that during that shift that you distributed 30 bags of stone dust; is that right? Was all of that stone dust put into 512 Panel?-- Yes.

How frequently would 512 Panel be stone dusted?-- This is with a trickle duster.

Yes?-- Every shift that was to be done.

And would there be as much dust as that spread? Surely you wouldn't spread 30 bags of dust a shift, would you?-- Yeah.

Every shift? Was that dust directed into the waste area as well?-- Yes, that's where it was.

It was done every day - every shift?-- Supposed to be done every shift, yes.

Were you aware of the dust samples being taken afterwards to find out the effect of the stone dust?-- In the waste?

Mmm?-- No.

Thank you.

MR ELLICOTT: No questions.

WARDEN: Thank you.

MR CLAIR: I have no further questions of the witness, Your Worship.

WARDEN: Thank you, witness. You may stand down -----

MR MORRISON: Your Worship, not just yet if I may.

WARDEN: Mr Morrison, by leave.

MR MORRISON: We are getting the record for the two incidents that Mr Parkin asked about. The man who was injured, broke his leg, was Dave Campion. He was in 4 South A, not 512. It was a reportable incident. It's in the mine record book which I think is in the exhibits, and we are getting the reference now. It's in Inspector Document No 1 and the page that deals

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with it is dated 16 February 1994 and bears a number 138C. I'm not sure if that designation comes through on the other one, and the chain incident was Mr Trevor Dickson and he was in 6 South. It was not a reportable incident so it's not in the mine record book, and I think that's the reflection of the level of injury more than anything else. Can I just ask one question that arises out of what Professor Roxborough was asking?

WARDEN: Yes.

FURTHER CROSS-EXAMINATION:

MR MORRISON: I understood when you were answering questions earlier that you noticed that the ventilation had an effect on dust produced. Not only gas was being cleared but dust as well; is that dust generated by the machines working, by the miner and so forth?-- Just as you are walking along the road.

Is there dust generated by the shuttle cars and so forth?-- When you are cutting coal, yeah.

Is that shifted too by the ventilation?-- Yes, yeah. We hose it down. If we thought it was bad enough we would keep hosing it down every shift.

It wasn't just a feeling, you could actually see the physical effects of the ventilation?-- Yeah, yeah.

Thank you.

MR CLAIR: Perhaps the witness could be excused, Your Worship?

WARDEN: Yes, thank you, witness. You can stand down. You are excused.

WITNESS EXCUSED

MR CLAIR: I recall John William Thomas Blyton. I have been asked to recall Mr Blyton. I think there are some questions that one of the parties wishes to ask of him, but while he is here I want to ask him some questions in relation to the matters shown in the video too, Your Worship.

JOHN WILLIAM THOMAS BLYTON, RECALLED AND FURTHER EXAMINED:

MR CLAIR: Mr Blyton, you have given evidence earlier in relation to the matter and you told us in the course of that evidence that you were on duty during the afternoon shift of Sunday, 7 August 1994 and that you did carry out some duties underground during that shift; is that right?-- That's correct.

In the course of carrying out the duties underground you had occasion to go to the area of 512 Panel?-- That's correct.

Or at least past the recently installed seals in 512; is that right?-- Yep.

And did you go beyond there, that's further into 510 as far as the area adjacent to the 511 seals?-- No, I did not.

You didn't go up that far?-- No, I did not.

Well, then can you recall when you would have most recently visited the area adjacent to those 511 panel seals prior to 7 August? Within the previous week or previous month?-- Would have been probably within a fortnight.

You had occasion today to look at what I will call the abbreviated form of certain video film that's been taken down through the inspection boreholes that have been drilled in the area of No 1 heading 511 and No 2 heading in 512; is that so?-- That is correct.

In fact you yourself were present on some of the occasions when that footage was initially being taken?-- That's right.

You were associated with the drilling and inspection program?-- Yep.

You have seen that abbreviated video twice today?-- That's right.

I simply want to ask you some questions, Mr Blyton, about items that you remember being in the area that's shown in that video, first of all in respect of the 512 No 2 road, when you were last down there and then to ask you what you have observed in the video as to whether those things were still in position. Do you understand what I mean?-- Yeah.

It may be of some assistance to you if you were to have a look at first of all this small plan which is described as drawing number 45-48, I think it is, and I might mention, Your Worship, that that's a drawing that was distributed to the parties and the members of the panel at the time that the first of the video film was being shown on the last day of our sittings last year. That plan shows just the intersection of that 512 No 2 road with the No 1 heading of 510 panel and a little bit of each of the four roadways leading off that; do you see that?-- Yep.

It's described as "Moura No 2 Underground 512 No 2 Road Seal Pre-explosion" and on the plan there are a few things that are indicated there. I want to ask you first of all whether the location of those things on the plan accords with your memory at the last time you saw that intersection on Sunday night, 7 August last year. First of all, there is an indication that there was a mixer over in the No 2 heading not far from the seal itself?-- Yes, that's correct. That was a Tecrete mixer there.

And that mixer, is that a fairly substantial piece of equipment?-- Yes, it is, yeah.

That was a mixer that the Tecrete people had down there to complete the seal; is that so?-- Yes, that's right.

And to your knowledge was there some suggestion on that night that the two Tecrete employees who were down underground at the time of the explosion were down there with a view to, at some stage at least, shifting their equipment from the area of the 512 seals across to 4 South?-- Yes, that's what I've been told.

So that mixer was there when you were down there that evening?-- Yes, it was.

But you don't know whether it would have still been there at the time of the explosion?-- No, I don't.

There is another notation on that plan over in the extension of that No 2 heading where it becomes a cross-cut in 510. I can't tell you from this plan just what the number of that cross-cut is, but you see first of all that there is an indication of two fire extinguishers being up on the rib just adjacent to the corner, the inbye corner of that cross-cut and No 1 heading in 510?-- Yeah, that's correct.

Is that your memory as to where those extinguishers were?-- I don't think they were up on the bracket, I think they were taken down, because all the gear was going to be moved out of that area and they were more on the corner.

They were more on the corner?-- Yeah.

On the ground?-- Yeah, just standing on the ground.

Now, when you looked at the video today, first of all did you see some evidence of a bracket or brackets on the rib in that area?-- It was hard to distinguish, but it did have some similarity to a hanging bracket that we use to hang the extinguishers on, yes.

Did you see any fire extinguishers on the ground in that area there?-- No, I did not.

You will see a notation there on the plan saying "Roof bolts laying down and vertical"?-- That's correct.

Does that accord with your memory when you were down there, that there were roof bolts in that area?-- There were roof bolts and drill steels and they were on the corner in that first cross-cut going down to 510 direction wall.

Perhaps if you can hold that plan up just so that people can follow what you are saying?-- They were more on this corner here.

Around the corner from where the words appear there. How much of that equipment was there? Was it a large stack of equipment?-- Just off-hand I would probably say three or four bundles of bolts, three or four steels. Probably 20 bolts.

In the video as far as you could discern was there any evidence of those things still being in that area?-- No, I could not see any.

Just move a little further across that cross-cut in 510. You will see a reference to a crib table just about in the middle of the cross-cut?-- That's correct.

Does that accord with your memory as to the location of the crib table?-- No, the crib table was closer to the top rib so that the machines could back into that cross-cut so they could turn around.

So in fact further down towards the bottom of that plan in front of you?-- Yeah.

When you saw the video today did you see any evidence of that crib table in any location there?-- No, I couldn't.

Looking as far as you could in the video, further along that cross-cut up towards the 510 belt road, were you able to discern anything up in that area that was of a substantial size?-- It was hard to tell.

Moving then to the top rib of that cross-cut you will see a telephone mentioned there on the plan; does that accord with your memory?-- No, it doesn't.

Where was the telephone as far as you recall?-- I'm pretty sure that the telephone was down there where the extinguishers are marked.

Going back to what you saw on the video, did you see any evidence of a telephone anywhere?-- No.

Either on the rib where the extinguishers are or anywhere else?-- No, I did not.

As far as that intersection is concerned was there other equipment that you remember being there that's not shown on this plan here in that intersection?-- Yeah, I'm quite sure that there was a hand basin right next to the crib tables.

Any evidence of that in the video when you saw it?-- No, there wasn't.

Of course, when you last went past the seal in this No 2 road I take it the seal was still in place?-- Yes, it was.

You measured some methane in that area; is that right?-- Yes, that was on the belt road seal.

Certainly as far as this seal in No 2 heading was concerned there appeared to be no particular problem with it, it was intact and in place?-- Yes, it was, yes.

In the video what did you see?-- That there was no seal there.

The seal was a Tecrete seal, it had the Tecrete material in association with wire baskets when it was made; is that right?-- That's correct.

We have heard about the method of making it. Did you see any evidence of wire baskets in the video?-- There was evidence there of Tecrete mesh, whether it was either the mesh or baskets, but, yes, there was some evidence there.

Whereabouts did you see those baskets as far as you could discern in the video?-- According to the directions of the camera it said that it was outbye.

It was outbye of the location of the seal?-- That's correct.



Any other items that are not marked on the plan that you can recall being the area of the intersection?-- There was a - just behind the crib table there was a brattice stopping, brattice and prop stoppings.

That's your memory when you were down there that night. Do you remember just how far beyond the crib table? This is going across the cross-cut -----?-- That's correct.

----- in 510?-- Between the 510 belt road and the man and supply road, yeah.

How far beyond that crib table was that stopping?-- Probably four or five metres.

Now, when you looked at the video did you see any evidence of that?-- No, I did not.

Anything else that you recall?-- Not offhand, no.

Now, what about your memory in so far as props and things were concerned in the area of this intersection? Were there a number of props in close?-- Yeah, there were a few around, yeah.

Do you remember if there were any loose props on the floor at the time you were down there that night on the ground? That might be asking a bit much, but -----?-- Yeah, I think it is.

That's all right. Now, as far as that intersection in respect of No 2 road in 512, was there anything else that you noticed in the video that appeared to be of significance to you in terms of what direction the force of the blast was moving, for instance, or the way in which equipment was moved?-- It's pretty hard to tell because of the poor resolution, but I was quite surprised that there is any props standing around in that area and it was pretty hard to tell just from past experience just by taking a photograph of one sealed area. You really couldn't make an assumption.

You say looking at the seal on 1 roadway in respect of the panel that you wouldn't make any assumption as to the force of the blast; is that what you are saying?-- There was a substantial blast down there, but you couldn't tell which way it was coming from.

Now, I will just ask you to look at that plan out of Exhibit 8. It's number 45/19. It's the book of plans, Your Worship, Exhibit 8, 45/19. You will see, Mr Blyton, that that is a plan indicating the machine positions in 512, and if I can just, first of all, ask you to look at that intersection of No 2 heading 512 with No 1 road in 510, the intersection that was shown in the other plan. The position of that double brattice with the batons is shown there; is that right?-- Yeah. That's the approximate position, yep.

Also the phone is shown on that corner that you indicated?-- Yes, that's correct.

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That accords with your memory?-- Yes.

The plan also shows just outbye of that intersection with that No 1 heading in 510 there is a reference to "man door open"; do you see that?-- Yes, that's correct.

Can you describe what you remember to be the situation in respect of that man door open when you were down there that night?-- Yes. That was a Tecrete stopping. There was a normal man door in it. In front of it was a brattice screen because just prior to that that was used as the toilet area and the man door was left open. That was to regulate the ventilation flowing up through that No 1 roadway.

When you looked at the video today could you see anything in relation to the structure that was there?-- No, you couldn't.

You couldn't see that far?-- No.

From what you saw of the video, could you say that there was any structure still in that position there?-- No, it was hard to tell because that's up around the corner and I think the camera was back in the other heading.

Now, can I just ask you to look down - perhaps you should look up towards the top of that plan continuing with that No 1 heading in 510, and just at the very top you come to the intersection of that heading with what would have been No 1 heading in 511; do you see that there?-- Yes, I can.

And it shows the position of the seal?-- That's correct.

That accords with your memory of the position of that seal?-- Yes.

Now, the camera in that case showed the condition of the area where that seal had been; is that right?-- That's correct, yes.

Were you able to see, or form any conclusion as to the direction of the blast in respect of that seal? It was a brick seal; is that right?-- Yes, that was a brick seal.

And did you see any bricks on the ground?-- There were shapes which did appear like bricks, yes.

Whereabouts were they in relation to the -----?-- They appeared as if they had gone inbye.

You will see in No 1 heading of 510 there is reference to a regulator closed down. This is just short of that intersection, just outbye of that intersection where we were talking about, right up to the top, No 1 heading 510?-- Yes, I see that.

Just outbye that intersection?-- Yeah.

In the video were you able to see sufficiently far to see what

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the position was in relation to that regulator?-- Yeah, you should have been able to see it, yes.

And did you see anything there?-- No, I did not.

Any evidence of where it had been?-- No.

Did you see some roof support still remaining upright in the area of this intersection in the video?-- Yes, I did.

How far away from the intersection was that?-- To me it seemed like it was very close to the 512 bottom return road.

The 512 bottom return road?-- Yeah.

That far outbye of the intersection?-- Yes.

And that consisted of a couple of props?-- Yes.

Is that right? That's your memory?-- Yes, there was one prop up there, yes.

Now, on the cross-cut in 510 which is, in effect, the continuation of that No 1 heading in 511 Panel, you will see a doorway marked there on the plan. That's the cross-cut, in fact cross-cut 6?-- Yes.

Yes, it appears to be cross-cut 6. Again, looking at the video - well, first of all, on the last occasion you were near that intersection that doorway was still intact?-- It was.

When you looked at the video could you see sufficiently far to ascertain whether the structure associated with the doorway was still in position?-- You could see far enough, but there was nothing there.

You actually were looking along that cross-cut in the video towards that 510 belt road; is that right?-- That's correct.

Were you able to see as far as that intersection whether 510 belt road intersected with that cross-cut?-- Yes, I think you could just get to the end - you could just see to the intersection, yes.

Some sort of structure still in place there, do you recall?-- I couldn't really see if there was any structure there or not, but there was something there.

Now, that plan there, if you can hand that back to Mr Barker, can go back into Exhibit 8. Your Worship, I will tender that first document that Mr Blyton was looking at. That's drawing number 45/48, it looks like. It shows the position of that 512 No 2 road seal pre-explosion.

WARDEN: Marked Exhibit 142.

ADMITTED AND MARKED "EXHIBIT 142"

XN: MR CLAIR

WIT: BLYTON J W T

MR CLAIR: Thank you, Your Worship, I have no further questions.

WARDEN: Yes, thank you.

MR MACSPORRAN: I have no questions.

WARDEN: Mr Martin?

CROSS-EXAMINATION:

MR MARTIN: Mr Blyton, you recall, of course, giving evidence back in November or so of last year?-- Yes, I certainly do.

And you may not recall this specifically, but I indicated to you then there was something I then didn't understand about the Unor system or the computer screen, I have forgotten exactly which now, and that's still the case. I still don't understand some feature or features of it. I would ask you to bear in mind that it's very important that this Inquiry has a proper understanding of it, so I would like to ask you some further questions, if I could, about that. When Shaw came to you in the shower room soon before you left for the evening, I don't think in your evidence you said what colour the light was that he reported as flashing. Do you remember?-- I can't recall.

Are you saying that you cannot now recall what colour, if any, the light was that he said was flashing when he came to you in the shower?-- No, I just can't recall whether he mentioned that there was a - what colour the light was.

Do you think your memory would have been better when you gave your statement to Mr Walker in the presence of Mr Allison which I suggest was on 17 August 1994? It would have been better then? Within 10 days or so of the explosion your statement was given?-- Yes, it would have been.

I will just ask you to look at that and say whether that is your signature on that document which is a copy of your statement on that date?-- Yes, that is my signature.

If I could take you to page 2?-- Yes.

Towards the bottom part of that page you have got, "At approximately 9.40 while I was showering Michael Shaw came and said that there was a red light flashing on the Unor and asked if it was okay." Do you see that?-- Yes, I see that.

Does that refresh your memory?-- Yes, it does.

And you asked him in return "which red light and he said it

XXN: MR MARTIN

WIT: BLYTON J W T

was the top left-hand of the computer screen", and you explained that it was an alarm "but I have accepted it", or that you had accepted it?-- That's correct.

So, having read that, do you now accept that Mr Shaw told you it was a red light that was flashing?-- That is correct.

MR MORRISON: If it helps, it's page 1,122 of the transcript, line 52, "There was a red light flashing?" "That is correct."

WARDEN: Thank you.

MR MARTIN: Very well. So, when he came to tell you that, you were able to tell him that you knew of that because, as I recall your evidence, since you came up from underground for the last time that night you had been to the Unor room yourself?-- That is correct.

So, you too would have seen a red light flashing?-- Yes.

In the same place, I take it, that is, in the top left-hand side of the computer screen?-- Yes.

And I think your explanation was as well, or your evidence was that you took that to be because of the adjustment or the alarm on oxygen perhaps at much earlier in the day at about half past 2, 3 o'clock when Mr French made an adjustment?-- Yes, that's correct.

So, if that's your understanding of the machine, the red light flashing in the top part of the computer screen would have been flashing each time you looked at that computer screen that afternoon?-- That's correct.

What do you understand - the red light that was flashing, was that a red rectangle at the top left-hand side of the computer screen?-- Rectangle or square, I just can't -----

All right, that's fine. It was one of the two?-- Yes.

All right. Some other parts of your evidence also left me in some confusion. Did I understand you to say that there was not only an alarm on oxygen that you had Mr French deal with, or Mr French dealt with, but also a methane alarm?-- That is correct.

Well, what's your understanding of the machine when methane alarms, or any gas, for that matter? What do you understand it does?-- That it's recorded a - if it's CH<sub>4</sub>, there is a higher level than what the alarm is set at, or if it's oxygen, it's a lower level than what the alarm is set at.

Well, you said, I think, in your evidence that you and Mr Squires were outside the Unor room and you weren't too concerned at what was on the screen, but I think you said there were figures on the screen. That's at the very outset at the start of your shift; do you recall that?-- Yeah.

You and Mr Squires then went into the Unor room and there

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again looking at the screen there was still the figures, but then the diagram was brought up, that's the Ellicott diagram?-- That's correct.

Do you recall what the screen was showing in relation to point 5 at that time in relation to the figures?-- Point 5?

Well, that's the final monitoring point for 512 seal, isn't it?-- Right, point 5. No, I -----

Do you recall what colour the figures or words were?-- No, I cannot recall.

You see, what I suggest to you is that when the Unor system, including this computer, is not in alarm mode, there's four various points. There are a set of green figures running across, or words running across the screen - green?-- Yeah.

Do you agree with that?-- Yeah, okay.

And when it is not in alarm mode, there is no flashing rectangle or red square at the top on the left of the computer screen?-- That's correct.

And when it's not in alarm mode further over to the right, there is the word "normal" in relation to alarm - further over to the right on the screen opposite a particular point?-- Don't know.

But you do agree that if you look at a particular point, if it is not in alarm mode, it will be green - a series of green letters and figures?-- Yep.

And what I also suggest to you is that if there is an alarm, the point which is alarming changes from green to red?-- That's correct.

And then correspondingly on the screen, the gas that alarms will change from green to red?-- That's correct.

And I suggest also that for the first time then when it alarms, the flashing red square or rectangle then comes up in the top left part of the screen?-- Yes.

So, on your evidence on the previous occasion, if you saw a flashing red rectangle, you, in fact, saw an alarm?-- That's correct.

So, when you went into the Unor room on the evening of 7 August, what you saw was the machine alarming?-- That's correct.

It had to be. That's the case, isn't it?-- That's right.

And what you saw when you went there, somewhere around about 9-ish or so on that evening, was an alarm gas high 1 on methane which hadn't been acknowledged from 8.15 approximately - that's what you saw, wasn't it?-- I don't know what time it was acknowledged, no.

But what I'm suggesting is what you saw was an alarm on methane in the Unor room when you went there at about 9 p.m.?-- Probably, yes.

What did you do about it?-- I'd checked the levels on the screen and I brought up the Ellicott diagram, as I explained.

But you have got an alarm saying that the pre-set level is reached, haven't you?-- That's correct.

On methane?-- That's correct.

What did you do about it?-- Told Michael Squires when he came in where the levels were.

What levels are you talking about?-- What levels were on the screen.

What about the print-out? The machine prints out on an alarm as well, doesn't it?-- I don't know.

You may not know that. So, what did you say to Michael Squires when he came in - this is when you are in the showers about 9.30 or so that evening? What did you say to him?-- I expressed my concern and told him what the levels were and what I had - what I estimated with the Ellicott diagram.

Did you tell him that the machine was actually alarming on the pre-set gas high 1 CH4, because that's what you saw when you were in there yourself, wasn't it? Did you tell him that?-- No, I didn't.

There is two questions there. That's what you saw yourself. It has got to be so, hasn't it?-- Yeah, that's what I had seen on the screen, yes.

And did you tell him that?-- No, I did not tell him that.

Why not?-- Because when I - for one, I thought that the alarms were still acknowledged because there was no sirens-----

Well, if we just pause there - and I don't want to chop you off - so you recall what you want to say and add to it. Where did you get that information from - that the - what did you say, that the alarms had been accepted and there was no siren?-- That's correct.

But how could that possibly be so if, as I suggest to you, at the very same time, it's all in a red alarm mode for CH4, 1.5 with a red rectangle flashing or square flashing and, as I suggest to you, on the right-hand side, alarm red active?-- Any other time that I had been associated with the alarms going off on the Unor, there had been a siren associated with it, and because the siren wasn't going off, I had assumed that the - that that alarm had been accepted.

But you know the acceptance procedure, don't you? That when one goes through the acceptance procedure, the line goes blue, or cian, as its called, I think?-- I don't know what colour it is.

And the red flashing at the top on the left disappears, so you couldn't have thought that, I suggest?-- But the absence of the siren, I'd assumed that the - that it had been accepted.

I don't want to labour the point and I don't want to seem to be overbearing towards you, because that's not my purpose - because the siren was not sounding - that's the siren outside - that's what you are talking about?-- That's correct.



You presumed, are you saying, that despite the machine at that point or the screen at that point, at 1.5 showing red and alarm, that nonetheless something has happened to accept the alarm; is that what you are saying?-- Would you say that again, please?

I'll try. Are you saying that because there is no siren going off outside the Unor room, that notwithstanding that when you look at the screen you see the red danger colour - red flashing rectangle - that there has been some mechanism, would you accept, notwithstanding what you see - do you understand? I think you have agreed you looked at the screen?-- Yep.

You looked at the screen and you saw that it was in alarm mode - the CH4?-- Yep.

I think you are saying you expected a siren in all the circumstances?-- That's correct.

That because you didn't hear it, that you presumed that something had happened whereby the alarm had been accepted?-- That is correct.

What gave you that idea? Where did you learn that?-- Because every other time that - as I said, when I had an association with an alarm going off on the Unor screen, the siren sounded as well. You have also got to realise that we don't use these Unor screens all that often. We are employed as an underground deputy, and our knowledge of this - well, my knowledge of this was enough to either get me out of trouble or-----

All right. I think you may be able to refresh my memory. In the early stages of your evidence last year, am I correct in saying that you didn't know whether you were authorised or not on this machine?-- That is correct.

What was your formal training, if any, on the Unor system and computer?-- Very limited.

Well, can you just be more precise than that?-- I was shown how to bring up the graphs.

What's that, the Ellicott-----?-- Coward Triangle.

Graham's ratio?-- Yep.

Can you help the Inquiry with - there was something of a new system there, or at least a new computer at the time by 7 August; do you not know that, or do you know that?-- No, all I knew that the - we were having a lot of trouble with the mouse moving across - bringing the direction arrows across. See, the old screen was a touch screen.

Essentially, that was a major difference between the two computers - the two computer screens; one was operated by touch to the screen itself and the other by mouse?-- Yep.

The other point I would like to deal with - there seems to be

some confusion, at least in my mind, as to whether, apart from the colour changes and the red rectangle and a siren, if it went off, there was any other audible or other warning sound in the system at all, such as a beeper - a beeping sound, that is - and I'm talking about the system which existed at 7 August 1994?-- I don't know.

Can you help us with this, then: was there a beeping sound when there was an alarm mode on the computer, which was there before it was replaced with the mouse system, if I might call it that?-- That I couldn't tell you, because I have slight industrial deafness. It's the wrong decibel sound for me. I can't hear them anyway.

I understand and sympathise. One other thing I would like to clear up if I can: my recollection of your evidence is - and I think you would agree with this - that there was an alarm on oxygen and Mr French fixed that?-- That's correct.

After you came on shift the first time - about 2.58 or 3 o'clock, from memory. Then you started speaking about methane, and my recollection is that on methane you were saying that that alarmed as well, or somehow went into alarm mode. Do you recall that or not?-- I think I mentioned something about it, yes.

I don't want to be unfair about it because it has been quite some time ago, but I'm suggesting to you that there was no formal alarm or no alarm on methane at any time existing after you came on shift. The last methane alarm, in fact, was at 12.47 - this is, early in the day. I'm talking about after you came on shift, you understand?-- Yep.

I'm suggesting that before the 8.15 alarm on methane, the only other earlier alarm was 12.47 in the afternoon and there were alarms perhaps before that, but none after 12.47, so far as your shift was concerned, until 8.15 that night?-- I think I mentioned that I got Brian to raise the alarm limits because the CH4 was either there or just about there.

Well, one understands that because if you are going underground, of course, for some time you want it to be coped with, so is it the case that so far as Mr French was concerned on methane you asked him to raise the gas high 1 and gas high 2 a point or so. That's the practice, isn't it, raise the methane a point of a per cent?-- Yeah, I just can't recall what I had asked him to - how high I had asked him to raise it, but I did, and then after I done that I had also just went out and conferred with Michael to make sure that it was all right.

In the Unor room or anywhere else at Moura did you know of, back in August of 1994, did you know of any manual or brochure relating to the operation of the computer, the computer screen in the Unor room?-- Not off-hand.

Did you ever read any document like that?-- No, I did not.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Mr Blyton, can I just ask you about Exhibit 142, the plan? Perhaps you could have it back. This is the location plan of the intersection immediately outbye the 512 No 2 road seal. Do you remember Mr Clair asked you some questions about that?-- Yes.

Can I just establish a few things if I may? On 142 your recollection is the telephone is on the opposite rib to where it's designated?-- That's correct.

And that in fact accords with the second plan that Mr Clair showed you?-- Yes.

Okay. Now, you refer to a mixer having been present in front of the seals at some stage?-- Yep.

When was that?-- That was there on my first inspection and my second inspection.

On the Sunday night?-- On the Sunday afternoon.

It's possible that got moved away by the people who came in on the night shift following?-- I believe that there was two men going to move some gear, but I couldn't see it being possible for two men to physically move that mixer and only with a PJB.

Now, is that mixer the same thing that might be designated a as batcher on the other plan?-- Yeah.

Is it the same thing?-- Yep.

It's a Tecrete implement and one of the people going down that night was Mr Parker, the Tecrete man?-- So I've been told,

yes.

It's possible, but you have some doubt about it?-- Yes, I would.

They wouldn't be going down to shift a crib table, I suppose?-- I don't know.

You are not sure either?-- No.

Same thing? Possible that it was moved?-- Yes, they could have hooked on to it and towed it away, yes.

Does it have wheels and things?-- No, just on sleds.

So the absence of the crib tables, it's hard to say just whether that was at explosion time or not?-- Yeah, we can't tell, no.

You have a little more doubt about the mixer. Was the mixer on wheels? Is it a mobile mixer?-- No.

Are you surprised to see on the video that there were some props standing?-- That's correct.

The prop you are talking about, if one looks out from the seal, out from the seal is on the immediate right-hand corner of the rib, isn't it?-- Yes, that's correct.

And that one is standing there as clear as day on the video?-- Yes.

That's the one you are talking about, you are surprised to see that still there?-- Yep.

Because of the angle of the camera, when the camera comes around and looks at that pole you couldn't actually see down to where the man door is, could you?-- No, you couldn't.

We really can't make any assumptions about that either?-- No.

After they finished sealing, something like one, 1.30 in that order, the shift didn't actually finish until about three. It's possible that some things weren't cleaned up that might have been cleaned up otherwise?-- It's possible, yes.

What I'm asking is when you went down on the Sunday - I'm not sure if you went to all the seals, but you certainly went to the belt road seal?-- That's correct.

Did you go to No 2 at all?-- No 2 - I went to all the seals twice.

I'm just wondering if it's possible that there might have been Tecrete baskets lying around, not cleaned up?-- There were Tecrete baskets at the - in the cross-cut between No 2 and No 1 seal, but they had been picked up and taken away on the afternoon shift.

So there were no Tecrete baskets lying around on your last inspection?-- I don't think there was any left, no.

With what degree of certainty; do you remember? I'm just wondering how much we can assume from the video you see, when we see things on the video. I'm just wondering how easy it is to make assumptions that might not be genuine?-- I can nearly say for sure that there was none left, yeah.

Likewise down outside 511 there were two props within close proximity still standing?-- That's correct.

And a third leaning against the outbye rib as one looked out from the seal?-- That's correct.

And that's surprising they are there in your view?-- Yeah, the main one that really surprised me was the one between 511 and 512.

And I take it at the end of the day you are not prepared to really say whether things went in or out and with which explosion since there were two?-- That is correct.

Thank you. I have nothing further. May I just mention this, Your Worship, and Mr Blyton won't like to hear it: it's possible he might have to be recalled because when we do come to talk about the video some descriptions he has given have been not given with reference to particular points on the video. Maybe that could be corrected. For instance, when he says he can see up to the 510 belt road, I'm not sure which part the video he is talking about. So it may be, but hopefully won't be, necessary to have him back for that purpose, otherwise we won't be able to make sense, just like people saying, "It's that area there.", or, "This area here." We can't make sense in the transcript.

WARDEN: All right, thank you. Mr Harrison?

MR HARRISON: I have no questions.

MR CLAIR: No further questions of Mr Blyton, Your Worship.

WARDEN: Thank you, Mr Blyton. You may stand down. We will contact you again if you are needed.

WITNESS EXCUSED

WARDEN: More comebacks than Pat Cash. Do you want to terminate today or do you want to chance another witness?

MR CLAIR: I do have a Mr Hutchinson there who in fact at one stage was sought to be taken off the list, but I think one of the parties indicated that they would like to have him here. I would expect he will be fairly short. Subject to everyone's agreement I would be quite happy to call him today.

XXN: MR MORRISON

WIT: BLYTON J W T

WARDEN: We will have a five minute adjournment while we ascertain that, and if he's only short we may run him through.

THE COURT ADJOURNED AT 5.05 P.M.

THE COURT RESUMED AT 5.12 P.M.

MR CLAIR: I call Peter William Hutchinson. I might mention that Mr Hutchinson has made two statements - just while is being sworn, Your Worship - one is part of document 63, 63/10 and the other, his main statement, is document 70/26.

PETER WILLIAM HUTCHINSON, SWORN AND EXAMINED:

MR CLAIR: Your full name is Peter William Hutchinson?--  
That's right, yes.

You are a miner employed at Moura No 2 Mine?-- Yes.

And you have been a miner since 1979; is that right?-- That's right.

Mr Hutchinson, you worked on the Friday night, 5 August 1994?-- Yes.

You started work at 11 p.m. and you were involved in getting sealing materials into the 512 seal sites; is that so?-- Yes, yes.

Did you drive in there on an Eimco with Mr Bob Newton, a deputy?-- Yeah, he was already in there.

He was there?-- Yeah.

You dropped some gear off around the belt road seal site?--  
That's right.

And after that did you and Bob Newton go and have a look along the waste edge in the No 3 and No 4 headings -----?-- Yes.

----- of 512?-- Yes.

And at that stage did you notice anything in relation to a smell?-- Yes, it was like a stale, musty smell like I said.

Was it a smell that you were able to recognise one way or the other?-- Sort of hard to explain. No, no, I couldn't.

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Did you see any haze in that area?-- No, I didn't, no.

Did you discuss what you did smell with Mr Newton at the time?-- No, no.

You then drove out of that section; is that right?-- Yes.

Were you on shift then on the Sunday night, that's for what we call the Monday night shift?-- Yes.

And did you go to the mine at about 10.15 p.m. that night?-- What was that?

Did you go to the mine about quarter past 10 that night?-- Yeah, we went down the pit about half past 10.

Prior to going down the pit were you told by Mr Squires, all of you, where you were to work that night?-- Yes.

Was there anything else said by Mr Squires other than indicating to you all where you were working?-- No.

Was there any discussion of the fact that 512 had been sealed?-- No.

Any discussion about it going through its explosive range?-- No.

When I say discussion, I don't just mean with Mr Squires there, any discussion with anyone else?-- No, I just - I seen Jimmy Parsons looking at the monitor.

The Unor screen, and were you the only one there or were there other men around when he was looking at that?-- There was a couple there, standing there, but the rest were just seated along the seats where we usually sit.

You were assigned to 1 North West?-- Yes.

And you say you did go down there with the rest of the crew?-- Yes.

At some stage after you got down there something happened, you heard a sound; is that right?-- Yes.

I think you say in your statement it sounded like a large roof fall?-- That's right.

And you've set out in your statement all that you can remember occurring after that. I won't take you right through it now, but just taking up the main points, you say your ears popped?-- Yes.

Not so much as to be painful or severe?-- No, it wasn't painful.

You felt no particular force against you but you could - it was sufficient force of the air for you to hear it hitting the air bag?-- That's right.

XN: MR CLAIR

WIT: HUTCHINSON

That's the stopping adjacent to the feeder. You describe in your statement how you made your way out of the mine, is that so, with the rest of the men?-- That's right, yeah.

Thanks very much, Mr Hutchinson. I have no further questions, Your Worship.

WARDEN: Mr Macsporrان?

CROSS-EXAMINATION:

MR MACSPORRAN: You started work on the Friday night, 5 August, at about 11 o'clock; is that so?-- Yeah.

And your job that night was to move materials to the seal sites; is that right?-- That's right, yes.

Had you been told when it was proposed to seal 512?-- No, when we were in there I asked Bob when they were going to seal it and they said Sunday.

That's Bob Newton?-- Bob Newton, yes.

You were moving gear late Friday night for sealing on Sunday?-- No, I was - they had finished one stopping and I was moving it from the stopping on the supply road to the belt road.

As it turned out Bob Newton was the deputy that was in charge of your crew that night?-- Of that section.

That section?-- Yes.

Was there another deputy on duty that night at the mine?-- Yes.

Who was that?-- Mick Caddell.

Was that his first shift for the day or do you understand -----?-- Bob's first or -----

No, Mick, Mick Caddell's?-- I couldn't be sure whether he worked the afternoon shift or -----

But you saw Mick Caddell there?-- Yes, yes.

And he was the other deputy with Bob Newton who was on duty that night?-- That's right.

Were there any discussions when you first came on duty amongst the deputies and the men?-- No, no.

Was it ever the case that the deputies would discuss with the crew what had been happening in the panel that you were going



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to?-- No, not particularly on a Friday night. They just - we had have our jobs handed out to us and -----

So you weren't told anything about what had been happening in the panel earlier that day?-- No, no.

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When you went in to 512 you did smell something which you have described as a musty smell; is that right?-- Yes, that's right.

Which you hadn't smelt before; is that right?-- That's right, yeah.

And you would have trouble describing what it was like?-- Yes.

Did you discuss it with any other member of the crew, the smell you encountered that night?-- No, well, really it didn't concern me on the night. It's just sort of happened, you know, like a week after the disaster, sort of dawned on me then, you know, there was a slight smell in there.

Whereabouts exactly were you when you encountered that smell, do you remember?-- Oh, just on the edge of the goaf, like where the roof had fallen in.

And you have never smelt that particular smell in 512 before?-- No, no.

Thank you. Thank you, Your Worship.

CROSS-EXAMINATION:

MR MARTIN: You know what an Eimco exhaust smells like, do you?-- Yes.

Would you describe the smell as stronger than an Eimco exhaust?-- Again I'll say it's hard to say. Yes, a slightly stronger smell.

Would you describe it as a strong sulphury smell?-- I wouldn't say strong, no.

Then would you say sulphury?-- It could have been slightly sulphury, yeah.

Have you smelt such a smell since, say, around No 1 or - No 1 mine, the old closed mine?-- No.

Did you look at the Unor screen before you went underground on the Sunday night?-- No, I never.

Were there a number of men standing looking at it or not?-- Like I said, I seen Jimmy Parsons there looking at it and there was one or two standing around that area, but there's - you know, every shift there seems to be people standing around.

Did you see Michael Squires in that area?-- Oh, I can't recall, no.

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Did you see Len Graham?-- No, I can't recall either. I can't recall, no.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Mr Hutchinson, you were shifting gear with Bob Newton from the belt road to No 2, I think you said?-- No, from the supply - the bottom supply road - from the bottom supply road to the belt road.

Turn around and have a look at the map. That's No 4 heading as you enter the 512 Panel to No 3, the belt road?-- Where are the seals here? From this seal here to there.

So, it's the number - it's the - just so we can position it - you want to stand there with your finger back on it again so we can all understand? Find me the bottom return in 512. You have got there, righto. Now, it's not that seal, it's the next one up?-- Yes, the supply road.

So, that's what I call the No 4 drive heading into 512; is that right?-- That's right.

And were you shifting gear from there into the belt road?-- Into here. Into there.

And which route did you take?-- We had to come under there in and around to there.

Can you just stop for a second? What you are indicating is you had to drive under the belt itself through the area which has been graded?-- Yes.

And then right at which heading?-- No 3.

No 3 is the belt road?-- Sorry, No 2.

Okay. So under the belt up to No 2, then right into the panel?-- Yeah.

And back around to the belt road seal site?-- That's right.

So, that's the move you were making. What was the gear you were shifting?-- Tecrete mixer and water hoses and -----

The preparatory stuff?-- Yeah, just -----

Thanks very much. Now, did you at that stage have any reason or did you - just look at the map again - go through the man door that's between No 1 and No 2 heading?-- Here? No, I never went nowhere near that.

You can sit down again. Now, on the Sunday night you saw

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Parsons looking at the monitor. Sorry, you will have to respond, this lady can't -----?-- Yes, that's right.

She will have to listen for your voice, not look for your nods. You know what the monitor is, it's something to do with gas monitoring?-- That's right, yes.

And whether you call it a Maihak screen or a Unor screen or just a monitor screen, you knew then what it would show - not the figures, but what sort of things it would show?-- Yes, that's right.

It would show you information about methane; you knew that?-- That's right, yes.

Oxygen, carbon monoxide, those sort of things?-- That's right.

And you knew as a miner that carbon monoxide was one thing you had to keep an eye on generally?-- Generally - in what -----

As a miner you are conscious of the fact that carbon monoxide is not something you want to encounter -----?-- Yes.

----- because it's bad for you, so people keep an eye on it from time to time, and you do yourself?-- Well, that night I never looked at the Unor.

No, I accept that, but people were looking at the Unor screen, weren't they?-- Yeah, that's right.

And there was some general talk about 512, wasn't there?-- No.

Did you think to ask them what they were looking at?-- No.

Is it something Jimmy Parsons did regularly? Was he in the habit of doing it?-- Everyone seemed to look at it at - time to time again.

And there were a few people looking at it that night?-- Yes, that's right.

Lenny Graham was your deputy that night?-- Yes.

Was he checking the screen?-- I did not see him, no. He may have, but I did not see him.

Lenny didn't say anything about 512 or whether to go down that night or not, or anything else like that?-- No.

He didn't seem to have any difficulty or caution about going down, he was just going down as normal?-- Yes, that's right.

And you knew Len Graham for some time?-- Yes, I know Lenny, yes.

You knew him to be a very, very experienced, very highly regarded deputy, didn't you?-- Yes.

And he is certainly one of the fellows at the mine you would trust?-- Yes.

And you did that night, you trusted his judgment. Where Len would go, you would go too, or not?-- Oh, that's - you know, like it's - I'm experienced too.

If you don't agree with me, say so. Don't say things -----?-- Like, I wouldn't - just because he said something I wouldn't, you know -----

You wouldn't necessarily do it?-- No, that's right.

And that's a feature that's common to most miners at this mine, isn't it? I mean, if someone in management or even at deputy level or undermanager level tells you to do something that's stupid, then they get stood on their ear and they are told it won't be done?-- Yes, that's right.

And if you are told to do something that's unsafe, there is not a hope in hell that it's going to happen?-- No.

Now, you were asked about the smell, and I really get the impression that you can't pin a description to it at all?-- No, I can't.

Are you familiar with the sort of smell that one gets from the old No 1 mine?-- The real strong sulphury smell?

Yes. You know the smell you can get when you drive near the old No 1 site?-- Yes.

It wasn't that smell, was it?-- No.

Now, can I take you back to the Friday night when you were down there with Bob Newton shifting the gear around? You went actually down into the panel to have a look around?-- Yeah, that's right.

Now, he didn't say anything to you then about smells or hazes or anything else, did he?-- No.

And you had a good look around?-- Oh, yeah, I was in there for roughly 5, 10 minutes.

But like all miners, wherever you walk in the mine your eyes are moving, your senses are working?-- Yeah, I went for a walk with Bob - he done his inspection along the goaf area.

And there was nothing he said about anything unusual?-- No.

Thank you, I have nothing further.

MR HARRISON: No questions.

EXAMINATION:

MR PARKIN: Just one question, Mr Hutchinson. On that Sunday night did anyone tell you at any time that 512 Panel was approaching the explosive range?-- No, no.

Or indeed any of the events of the previous two shifts?-- No.

So, did you have any communications with anyone on that Sunday night before you started work, other than which job you were going to?-- No, no. We were just told which section we were going to and that was it.

Thank you.

WARDEN: There is no other questions from the panel.

MR CLAIR: No other questions from me either, Your Worship. If Mr Hutchinson could be excused.

WARDEN: Thank you, Mr Hutchinson, you may stand down, you are excused.

WITNESS EXCUSED

WARDEN: At this stage we might terminate proceedings and adjourn until tomorrow morning, 9.15 a.m.

THE COURT ADJOURNED AT 5.32 P.M. TILL 9.15 A.M. THE FOLLOWING DAY





WARDEN'S COURT

MR F W WINDRIDGE, Warden and Coroner  
MR R J PARKIN, General Manager, Capricorn Coal Pty Ltd  
MR P J NEILSON, District Secretary, United Mine Workers' Union  
MR C ELLICOTT, Training and Development Officer, Department of  
Mineral Resources, New South Wales  
PROF F F ROXBOROUGH, Professor of Mining Engineering, School  
of Mines, University of New South Wales

IN THE MATTER OF A CORONIAL INQUIRY IN CONJUNCTION WITH  
AN INQUIRY (PURSUANT TO SECTION 74 OF THE COAL MINING  
ACT 1925) INTO THE NATURE AND CAUSE OF AN ACCIDENT AT  
MOURA UNDERGROUND MINE NO 2 ON SUNDAY-MONDAY, 7-8 AUGUST  
1994

GLADSTONE

..DATE 07/02/95

..DAY 20

THE COURT RESUMED AT 9.16 A.M.

WARDEN: I just have two matters, Mr Clair, before you start, housekeeping matters. Exhibit A yesterday, Exhibit A for identification, I am informed, should be Exhibit H for identification. I thought we had finished and we would go back to A, but apparently not. I will mark that Exhibit H.

MARKED "H" FOR IDENTIFICATION

WARDEN: And you were previously advised there was some minor changes to the SIMTARS model. The changes are in effect and if you need to be updated, please see the SIMTARS personnel here at Court and they can give you a run-down on the changes and the markings on the model. Thank you.

MR CLAIR: Thank you, Your Worship. I will take some evidence from the SIMTARS representatives that are called in due course to place something on the record about those changes, but for the moment people can be informed by speaking with the SIMTARS representatives. Your Worship, I call George Louis McCrohon.

GEORGE LOUIS MCCROHON, SWORN AND EXAMINED:

MR CLAIR: Your full name is George Louis McCrohon; is that right?-- That's correct.

Mr McCrohon, you are a mining deputy?-- That's correct.

You started, or you are employed by BHP at Moura No 2 still; is that so?-- Yes, that's correct.

You started in the mining industry in 1958 at Dawson Valley, Baralaba?-- Yeah, that's correct.

And you moved the following year to Sirius Creek?-- No, 10 years later.

10 years later, I am sorry, 1969, and then in 1970 you moved to Moura open-cut?-- Yeah, that's correct.

And then you started at Moura No 2 when it was commenced in 1970?-- That's right.

You gained your deputy's certificate in 1976 and were appointed a deputy soon after that?-- That's correct.

And since that time, other than for a short period on relief duties at Moura No 1 mine, you have been a deputy at No 2; is

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that so?-- Yes, that's true.

Since 1991 you have been on outbye deputy duties basically?--  
Yeah.

And on occasions you have worked in the 5 South and 512 panels  
about once a month?-- Yeah, that's about right, yeah.

On rostered weekend inspections?-- Yeah.

Now, were you familiar with the extraction phase in 512 by  
virtue of those inspections?-- Oh, yeah, yeah.

Did you get involved in any discussions with your fellow  
deputies or other people at the mine about the design of the  
panel in 512?-- No, no. They had already started there by  
the time I started.

Okay. Now, when you made your inspections there, these are  
the weekend inspections, what sort of steps would you take,  
what kind of readings would you do, what inspections -----?--  
I would only take the Drager tests in the return and the tests  
around the working areas, monitor the CH4 around the working  
areas, that's all.

In the course of your inspections did you notice anything  
unusual at all?-- No.

In relation to the position in which you took your readings in  
the return, was there any change in that position during the  
time that you were taking readings or was it at the same spot  
every time?-- Same spot.

In the course of your carrying out those inspections in 512  
was there any instructions as to changing the kind of readings  
that you took or recorded there that you remember; that is,  
whether there were more readings to be taken/recorded later in  
the piece than earlier in the piece or any change -----?--  
We had to take the anemometer readings and - that was later  
on, yeah, not at the start; say, the last month or so, yeah.

How did you become aware of that change?-- Well, I was told.  
We were told about it. There was a notice put up for us to do  
it.

Did you have any discussions with anyone as to why that change  
was made?-- No.

Over the years at Moura No 2 have you had some involvement  
with sealings of panels?-- Yeah, yeah.

In particular which ones?-- Well, there's 1st South-west,  
1st South, 2 North-west, 2 North, 2 North-east, 3 North-east,  
5 North-west, 5 North.

Well, I will come back later to some aspects of that. I want  
to direct your attention to Saturday, 6 August. You were  
rostered to work the afternoon shift?-- Yeah.

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And you attended work at 3 p.m.?-- Yeah.

And the other two deputies on duty at that time, who were they?-- There was Neil Tuffs and Lenny Graham.

Did you work out amongst yourselves what duties you would carry out during that shift?-- Yeah. If they were going to seal it, one of us had to be there all the time. We decided one man there all the time, we would split it up.

That's 512?-- Yeah.

When you say sealing it, you are talking about 512?-- Yeah.

Well, what arrangement was made for splitting it up, who was to do what?-- Well, I was to do the first one, 3 till 7.

At 512 seals?-- Yeah, and then Neil Tuffs would take over and then Lenny Graham would take over.

Then after you finished your duties at 512 seals what were you going to do after that?-- Well, I would do the inspection of 6 South and 1st North-west.

The outbye deputy's duties?-- Yeah, yeah.

Well, you say that you understood at that stage when the duties were worked out that 512 was to be sealed?-- Yeah.

How did you learn that 512 was going to be sealed that afternoon?-- Oh -----

Was being sealed?-- The deputy of the previous shift in the changeroom told me they were ready to seal it.

That was -----?-- Cole Klease, yeah.

Do you recall what conversations you had with Cole at that stage?-- Oh, just he said something about - I don't know whether it was him. I think it might have been him, I'm not too sure, it's that far back, but he said that there was - that he thinks he saw a haze and the CO readings had gone up. He said that's why they're sealing it.

Did he say anything about who had made the decision to seal it or -----?-- No.

----- discussions he might have had previously?-- No.

Now, can I ask you this: as a matter of practice what would you do in relation to the deputy's report from the previous shift?-- What would I do to it?

What would you do? Was there a practice you had in relation to the deputies -----?-- Yeah, we just read the report and sign it.

Where would you see that report normally?-- It would be in the deputies' book, or a copy of it would be. The original

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would be on the board.

In the deputies' cabin?-- No, it would be outside the bathroom where everyone can see it.

Outside the bathroom door?-- Mmm.

And again as a matter of practice did you speak with the outgoing deputy?-- Only in the bathroom.

But that would be your practice?-- Yeah.

I am just looking, Mr McCrohon, at - since you have been at the mine a long time - at what you would call the general practice, or at least the practice that you adopted, whichever you speak about?-- No, we - half the time I don't even see the other deputies. It's just that we read the reports, that's all. There was only - there was that day as I was coming in, Cole was coming out.

So, this was a bit unusual that you actually did speak with the outgoing deputy?-- For a length of time, yeah, yeah.

Generally you would rely on -----?-- On the report, yeah.

----- reading the report. Would you just read the report of the outgoing deputy or would you look back at other deputies' reports before that?-- Oh, well, depends what was on it. If it was something that was a bit unusual I would probably go back. If it was just normal I wouldn't.

Now, Cole Klease's report on this occasion, did that have anything unusual in it that you recall?-- No, only what I said.

Look, I will get you to have a look at this report and that will, no doubt, assist you. That's report number 3776, and I have copies available for the members of the panel. 3776, it's the report which relates to the day shift on 6 August. That was the shift that preceded your shift that day, Mr McCrohon?-- Yeah, yeah.

I think your initials - do your initials appear there? I am sorry, they might actually be Mr Klease's?-- No, mine's not there.

Yours isn't there. Did you have any practice of signing the reports of the outgoing deputy when you read them?-- Yeah, but it would have been on the - it would have been on the-----

In the book?-- Yeah, yeah.

That's okay. Just keep that there with you. You will see that in the "General Comments" section in respect of his first inspection he notes there, "Haze evident in top return."?-- Yeah.

Do you recall reading that at all?-- Well, not really. Only he mentioned it when we were in the bathroom, that's all.

Did you speak with him in the bathroom before or after you read his report?-- Before.

Before?-- Yeah.

But having spoken with him, you did read his report after that?-- Yeah.

Now, whether you saw that in the report or whether you learned it from Mr Klease, would this be a matter that you would regard as being unusual or concerning, that there was a haze evident in the top return?-- Oh, I would be a bit concerned, yeah.

Were the other reports from earlier shifts there in the deputies' book?-- Yeah.

And available to turn through?-- Yeah.

Do you remember whether you did on this occasion?-- No, I didn't.

Again, if I can ask you about matters of general practice, Mr McCrohon. As far as you are aware, would other deputies be inclined to turn back and have a look at earlier reports?-- Oh, some do, some don't.

Okay. I am not trying to criticise you in any way. Don't take that from my questions. I am really trying to establish how it is somebody might get a bit of a general picture, you see, as to what's been happening?-- Yeah.

Mr Caddell had done the previous afternoon shift on the Friday, Mick Caddell. Did you ever see his report -----?-- No.

----- from the previous afternoon?-- No.

Did anybody ever discuss with you the fact that he had smelt a smell, a tarry smell or benzene smell?-- Not for a couple of weeks after.

Nobody discussed that with you on the Saturday afternoon?-- No.

Did Cole Klease, for instance, say anything about, "Mick Caddell reported a bit of a smell last night."? There was nothing like that?-- No, he never said nothing like that.

As far as you knew, Mr Klease may never have been aware of what Mr Caddell reported?-- Yeah, yeah.

And you spoke when you arrived there with Cole Klease, you have told us. Did you speak with anyone else at that time - the undermanager?-- Yeah, before we went down, yeah.

Before you went down?-- Yeah.

That was Michael Squires?-- Yeah.

Was that before or after you spoke with Mr Klease?-- After.

And did you have any discussions with Michael Squires about, first of all, the haze that was reported in Cole Klease's report?-- No. All-----

Or that Cole Klease had mentioned it to you in the shower - whichever way you learned it?-- No. He just told us what had to be done and what was going to be done and that was it.

Did he make any reference to some smell being detected?-- Yeah, he said Cole Klease had mentioned it. I said, "Yeah, he has already told me."

Just listen to my question. You say that Cole Klease told you about a haze?-- Yeah.

Evident in the top return?-- Yeah.

Did Cole Klease say anything to you about a smell?-- No.

Well, my question to you was: did Mr Squires say anything to you about a smell having been detected the previous afternoon?-- No.

A tarry smell or Benzene smell or anything like that?-- No.

Tell me, did the existence of the haze reported by Cole Klease worry you?-- No.

Not at all?-- No.

Did it give you any kind of concern at all?-- No, not really, because sometimes it could be the fumes from diesel machines. They were pulling all the machines out, so-----

If you had known that there had been a tarry smell or a Benzene smell reported the previous afternoon, would the existence of the haze combined with the knowledge of that smell have meant anything to you? Would it have given you any concerns of any kind?-- Well, probably, yeah, you would be a bit concerned, yeah.

It would cause you to make further investigations, at least?--

Yeah, yeah.

Or make further inquiries about what else other people had seen?-- Yeah.

Now, that report, first of all, Your Worship, I will tender that - 3776. It hasn't been tendered previously before. It was referred to in Mr Klease's evidence, but at that stage we weren't tendering the reports separately.

WARDEN: Admitted and marked Exhibit 143.

ADMITTED AND MARKED "EXHIBIT 143"

MR CLAIR: Did you have any discussions with Mr Klease about the CO reading which he'd taken in the 512 return - top return?-- No, I don't recall.

Was there any mention of a CO reading of 10 ppm in the 512 top return?-- Only on his report.

And was that a matter that would cause you any concern?-- No, not really.

You say that the ceiling - you were told the sealing was to take place that afternoon. When had the sealing been planned as far as you knew prior to that? I mean, when was the panel to be sealed in any event, putting aside any concern about this haze?-- Well, it was supposed to be sealed as soon as the machines got out, and they started moving the machines on - well, Thursday night shift was the last shift that worked in there, and they were finished and they said the machines were coming out, and once they come out, we knew it had to be sealed, and then I didn't know nothing about it - I was talking to Peter Hutchison and he worked the Friday night shift and he said, "the machines are out and they'll start sealing today." I was a bit surprised when I went in on Saturday afternoon and they hadn't even started the sealing. I read Cole's report where the electrician was still working in there and the miner was in the road, that's all.

Were you ever told that the ceiling of the panel had, in fact, been brought forward because of some concerns, or did you understand when you went in there on the Saturday afternoon that this was just the normal sealing?-- Just the normal sealing, yeah.

Nobody ever told you that there was at least - I won't say a hint of panic, but at least of sufficient concern to bring the proposed sealing forward to the Saturday; that is, that it was what might be called an urgent sealing, one that was being done ahead of the normal time? Did anybody ever suggest that to you or inform you of that?-- I was informed, but it wasn't suggested. Michael Squires informed me that afternoon.



Were you informed that it was being brought forward; that is, that they were doing it sooner because of some concern?-- No, I just naturally thought that that's what they were doing.

You thought it was just the normal sealing?-- Yeah.

All the machines were out?-- Yeah.

Extraction had finished and the panel was being sealed in the normal course of events?-- Yeah.

You had the conversation with Michael Squires. He told you what needed to be done?-- Yeah.

You were going to be the deputy for at least the first third of the shift?-- Yeah.

What did he tell you about what needed to be done?-- That they had to get another mixer from the 4 South level and they were going to have the two mixers on there and split the crews up and work on two different seals.

Any discussion about how the equipment was to be got in there, or anything along those lines?-- Well, yeah, it would be taken in with machines, yeah.

Nothing about which route might be used to take it in and any problems with the ventilation or stoppings or anything like that?-- No.

Was that effectively left to you to decide how you might move the machines in?-- No, they just drove straight down the supply road.

You went down with your crew at about 3.08 p.m. I think you mentioned in your statement?-- Yeah.

And after you arrived down there, did you go to the top return?-- Yeah.

And you took a CO reading?-- Yeah.

With the Drager?-- Yeah.

That was at the vent station you normally took it at?-- Yes.

And the reading you got was 7 ppm; is that right?-- Yes.

Methane 7.5 per cent?-- Yeah.

Did you then go inbye along the top return?-- Yeah, well, they had to run hoses out before they could start the mixer, see, and I said, "While they're doing that, I will slip down a bit further.", and I went down four pillars and took another reading.

And there you got a CO reading of 7 ppm?-- Yeah.

Methane 0.9 per cent?-- Yeah.

The stopping in that 4 cross-cut between No 1 and 2 headings, that was a solid one; is that right, or no door in that one, like you mentioned in your statement?-- Yeah.

At No 4?-- Mmm.

What about the stoppings in the 1 and 2 cross-cuts?-- No, they were solid too. I think they were, yeah.

Those three stoppings were all in quite good condition?-- Yeah.

The stopping in No 3 cross-cut, did that have a door?-- Yeah, a man door, yeah.

And what position was that in when you saw it that afternoon?-- It was closed.

You did, when you made your inspections, previously go down the top return?-- Yeah.

And you had occasion to inspect all of those stoppings down there?-- Yeah.

Or look at all of those stoppings down there?-- Yeah.

And this particular afternoon, did you go further inbye along the top return?-- No, I only went as far as 4.

When you saw those other stoppings inbye the 4 cross-cut on previous occasions, you noted what sort of stoppings they were; is that right?-- Yeah.

And can you recall whether they had doors or not?-- Every second one did, yeah.

Every second one?-- 3, 5, 7, 9.

And in 9 cross-cut, was that a man door?-- I'm not too sure whether it was 9 or 7. There was one there only had a piece of belt as a door.

So that it was a flap?-- Yeah.

To be used as a door?-- Yeah.

Rather than a steel door?-- Yeah.

When you were in there on the Saturday afternoon and you went in as far as 4 cross-cut, did you notice anything unusual?-- No. It was warm. It was a bit warm; stagnant air and that. Not - nothing unusual for a section that's worked out, but.

When you say "a bit warm", you had been in other sections when they had been at this stage of development?-- Yeah.

About to be sealed?-- Yeah.

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How did it compare with that? Much the same? Warmer?-- No, about the same, yeah.

Now, you had been made aware that a haze had been seen in the top return in the morning?-- Yeah.

Did you look closely?-- Yeah.

To see whether you could see one this afternoon?-- Yeah. No, I couldn't see any.

And was there anything unusual in the way of a smell?-- No, I couldn't smell anything.

You went back to where the sealing crew was working; is that right?-- Yeah.

And did work commence on those seals?-- Yeah.

At No 2 roadway?-- No 3 - a belt road.

No 3 first?-- Yeah.

No 3?-- No 3 and No 5.

They were done first?-- Yeah, well, they had to because they had to take the - they couldn't get the mixer in on the belt road because where the seal was going, the belt structure was still there.

Now, did George Mason come down there at some stage?-- Yeah.

You had some conversation with him?-- Yeah, yeah.

About what time was that?-- Oh, it might have been around quarter past 4 or something like that. I don't know. I never had a watch.

Did you tell him about your trip into the top return?-- Yeah, I showed him the tubes.

7 ppm still showing?-- Yeah.

And you mentioned the 0.9 per cent methane?-- Yeah.

And what did he say to you?-- He said, "We'll go and have a look - go back down again and take another reading.", and by that time the seal on the return was too high up. George had a crook leg then and he couldn't get over it, so we said we would go down No 2 road and go in through the doors.

And that's what you did?-- No, we couldn't. We got down to the number 3 door and when we went in the bottoms had been taken right out and you couldn't reach the door at all.

So that was in No 2?-- Yeah.

So how far were you able to go down No 2 heading at that stage?-- Well, we only went down as far as number 3 stopper.

No 3 cross-cut?-- Cross-cut, yes.

In order to do that did you have to skirt around a fall at the intersection with 2 cross-cut?-- Yeah, that's right.

And then once you got to No 3 you found it was really impossible to go any further?-- Yeah -----

At least George Mason couldn't go any further with his leg?-- I wouldn't have been able to reach it meself anyhow, so -----

Now, did you take any readings when you were in there?-- No - only with the minder.

You did a methane reading?-- Yeah, yeah.

Whereabouts did you do that reading?-- Just around the corner between 2 and the return - between 3 and the return.

How high was the roof from -----?-- It would have been another 12 foot higher than what I am.

So well in excess of -----?-- Yeah.

Around 18 feet?-- 15, 16, yeah, something like that.

You were using the minder; what sort of access could you get to do the readings there?-- Only just as far as I could reach, that's all.

You didn't have any extension arm or anything?-- No.

You measured there .5 per cent methane?-- Yeah.

Which was not a matter of concern to you?-- No.

There was no way you could access what was right up near the roof there?-- That's true, no.

Which might have been another 12 feet?-- That's right, yeah.

Just let me ask you this: were you ever made aware of any rule that miners weren't to go into an area where the roof was higher than three metres?-- No.

Was that ever discussed with you at all?-- No.

I know you were working basically as an outbye deputy, but I'm just wondering whether you had ever been told of that kind of rule?-- No.

Now, you and George Mason then went back to the seals again?-- Yeah.

And where did you go then?-- Well, George took the Drager and the tubes back up to the top seal and I stayed with the ones on the belt road seal.

Then there was a smoko at some stage?-- Yeah.

And half the crew, including yourself - half the crew went and you stayed with the rest of the crew, is that right, working on the belt road seal?-- Yeah.

Was there any sense of urgency about getting the seals done?-- Yeah, they were going to try and get them done as quick as they could, yeah.

Was that just the normal sort of urgency?-- No, the reason was that you could - you could only go up so high with the return seal because when you close the belt road off you had to get the supply road seal up then finish the supply and the return at the same time.

Yes?-- That's what the idea of it was. The top one was - it was already up as far as they were able to go, so that's why they went for smoko. Then they come back and they would start doing the other one then because the other one would have been just about ready to finish on the belt road, see.

There was pressure to get that done?-- Yeah.

Because once you had started the sealing process it really should be finished as soon as it can be finished?-- Yeah.

As you understood it was just the normal sort of urgency attached to any sealing process?-- Yeah.

Is that right?-- Yeah.

You weren't aware of any added sense of urgency?-- No.

No-one ever told you that because of what had been seen and smelled and all the rest that it was necessary to get the sealing done as soon as possible?-- No, well it's just the normal to get the sealing done as soon as possible. It's always to get the sealing done as soon as possible.

Because of those features you mentioned before?-- Yeah.

Now, at about five or 5.15 p.m., thereabouts, did you go from No 3 down to No 5 heading?-- Yeah, yeah.

In No 1 cross-cut?-- Yeah.

What did you notice down there? First of all in relation to temperature?-- Yeah, it was a lot warmer, yeah.

A lot warmer. Of course, that No 5 heading had been sealed

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some time before; is that right?-- Yeah, that's right, yeah, so had 4.

And No 4 had also been done some time previously?-- Yeah.

Was there any ventilation down in that corner?-- Very little.

You say it was markedly warmer?-- Yeah, yeah.

And again you would have been in those sorts of situations before where a panel was being sealed; how would you compare it with those? Was this unusually hot -----?-- No, no.

----- or was it much the same as any other situation like this?-- It was much the same, yeah.

You took a methane measurement down there?-- Yeah.

.7 per cent?-- Yeah.

And that was at the intersection of 1 cross-cut and 4 heading?-- Yeah.

You then went back to where George Mason was at the seal in the top return and you told him what you found?-- Yeah.

And then did you take a CO and methane reading at that seal?-- At that top one, yeah, again, yeah.

That was again 7 ppm?-- Yeah.

And .5 per cent methane?-- That's right.

Did you have some discussion then with George Mason about the modifications that were needed to the ventilation in order to -----?-- Yeah, when it was completed - yeah, for when the seals were completed, yeah, yeah.

What did you decide about that, getting the air across the seals?-- Yeah, just so as to equalise the air, yeah. No, that there had been stoppings go up between the supply road, belt road -----

If you want to take that little laser pointer there and turn to your right you will see the plan there and you can just point out what it was that you -----?-- Here?

----- planned in relation to the seals?-- This here?

Yes. If it's easier for you, and we might be able to hear you better, you could pick up that black thing that looks like a pen on the table there, Mr McCrohon, and just switch the side on and you will get a little red dot up on the plan. That's it?-- Yeah, those there. They had to be put up.

You are indicating there the stoppings that are in No 2 - the continuation of No 2, 3 and 4 headings?-- Yeah.

Where they have actually become cross-cuts of 510; is that

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right?-- Yeah.

That's continuations outbye from the seals?-- Yeah.

Between No 1 and 2 roadways - I'm just putting this on the record - between No 1 and 2 roadways and 510 panel. Okay. Well, now, what is shown on that plan there is what you discussed with Mr Mason, is that right, that that's the way it would be done?-- Yeah, then I asked George about that one there.

Which one is that?-- That's the one between the return and the supply road, that one there.

The doorway in the 0 cross-cut of 512?-- Yeah.

Between 1 and 2 headings?-- Yeah, and I said, "They will have to knock that one down too, won't they?", and he said, "No, we will leave that one up and leave the door open", he said, "because they will have to come in from down this way and pick up that tray there." They had a tray of Tecrete in there. It had to be picked up and brought up that way.

The tray of Tecrete - just let me get this on the record. There is a tray of Tecrete adjacent to the seal in No 1 heading?-- Yeah.

And what you discussed with Mr Mason is that they would have to get that tray out; is that right?-- Yeah, that tray had to come out.

And in order to do so, what I think has been described as a regulator; is that right?-- Yeah.

In the stopping between - in the No 1 roadway of 510, that would have to be taken down; is that right?-- Yeah, and that tray be taken out and the regulator fixed up and then that other one could have been taken down then.

So after the regulator was fixed up then the doorway in 0 cross-cut between No 1 and 2 headings could be taken down?-- Yeah, yeah.

That's what was planned, is that right, when you discussed it with Mr Mason?-- Yeah, yeah.

Are you in a position to say that that's what in fact happened in time? Did you ever -----?-- No, no, I never went back.

But that was certainly what was planned, that that doorway -----?-- At that time, yeah. At that time, yeah.

So that would enable the seal in the top return to be ventilated -----?-- Yeah.

----- effectively after all the seals were done?-- Yeah, it would have equalised the pressure on either side of the seals then.

And equalised the pressure?-- Yeah.

So there would be some pressure, in effect, in against the seal in the top return, I suppose. You say that the doorway would have had to have been left in place in the meantime?-- Yeah.

Because the other stopping with the regulator would have had to be taken out for the tray to be removed?-- That's right, yeah.

Okay, thank you. Now, you had discussion then with Mr Mason about those matters; anything else that you spoke with him about at that time?-- Not that I recall.

Okay. Now, Neil Tuffs was the man who was going to take over from you for the second third -----?-- Yeah, that's right.

----- as deputy, and did he come at about 6.40 p.m.?-- Yeah, something like that, yeah.

And what was the position at that time as far as the seals went?-- The belt road seal was just about completed and they had already started on - getting prepared to do the No 2 seal.

You left 512 after Neil Tuffs took over from you?-- That's right, yeah.

And did you then go about the duties of outbye deputy?-- Of the other sections, yeah.

6 South, 1 North West?-- Yeah.

You inspected there?-- Yeah.

And also the ex-drill site, gas range; is that right?-- That's right.

Nothing unusual in those areas?-- No.

Then did you carry out those duties through to the end of your shift?-- That's correct, yeah.

What time would you have left that night?-- I didn't.

You didn't?-- No, I worked through until Sunday morning.

You did a doubler?-- No, I did a Saturday shift and a Sunday shift.

You worked through until Sunday morning?-- Yeah.

But you stayed on?-- Yeah.

What time on Sunday morning would you have left?-- Half past seven - half past six, I mean.

Did you have any further discussions with anyone about the situation in 512?-- No.



You left at half past six; did you go to a union meeting that morning at all?-- No, I live 40 mile away.

I suppose you are pretty tired after -----?-- Yeah.

----- after you had been on all night; is that right?-- Yeah.

You came back to the mine for what would be the Monday night shift?-- Yeah.

Starting at 11 p.m. on Sunday night?-- I do, yeah. The others started at quarter past 10, yeah.

The reason you start at 11 p.m. is, what, because you were the outbye deputy?-- Yeah, that's correct.

So by the time you arrived the men who were working on the underground shifts, the production shifts, had gone down?-- That's right, yeah.

When you arrived at the mine was there anything unusual that you noticed at 11 p.m. or thereabouts? Let me ask you, was there any alarm going or anything?-- No.

Did you go and have a look at the Unor screen?-- Yeah, yeah.

Adjacent to the -----?-- That's right, yeah.

----- assembly point. Was that your normal procedure?-- Yes.

To go and have a look at that screen?-- Yes, it is, yeah.

What sort of things normally did you look for when you looked at that screen?-- Just if there had been any increases or that, yeah.

What information did you understand you could get by looking at the figures on the Unor screen?-- Well, you'd see how it was building up inside behind the seals.

Well, that was on this occasion because there had been - 512  
had been recently sealed?-- Yes.

You say that you normally went and had a look at the Unor  
screen anyway?-- Yeah, it would tell you whether there had  
been an increase in the CH4 coming up the returns and all  
that, yeah.

Would that be the normal thing that you would look for?  
Putting aside the fact that on this occasion 512 had just been  
sealed, you say you would go and look at it - you would look  
to see whether there was any noticeable increase in methane?--  
Yeah, yeah.

On any of the monitor points that were shown on the screen?--  
That's right, yeah.

Anything else that you would look for on that screen?-- Oh,  
there would be CO readings, if there is any there, or CO2,  
yeah.

Well, what would you look for when you looked at CO readings  
on the screen?-- What would you look for?

Yes. I mean, would you look to see whether there was a  
reading that you thought was particularly high?-- Yes, an  
increase, yeah, yeah.

How would you know whether there had been an increase by  
looking at the screen? I mean, would you remember what was  
there previously or -----?-- Yeah.

I am just trying to -----?-- Yeah, yeah.

I am just trying to ascertain from you, Mr McCrohon, what it  
was that you looked for on your normal shift when you went and  
looked at the Unor screen. You mentioned methane?-- Yeah.

That there was a build-up in methane, and I suppose you would  
only have to look at the methane readings shown there to  
indicate to you - I mean, the simple reading itself would  
indicate whether the methane -----?-- If it was getting  
high, yeah. The same with the CO.

Well, what would you regard as a high CO reading at any one of  
those monitor points, for instance?-- High?

Yes?-- Well, most of them generally show around about 1,  
1 ppm. Then it would jump up to 2, then it might be 3. If it  
went over 3 you would know it is starting to get a bit high.  
Then it might go up to 4 and it would go back to 3. You would  
just notice that, that's all.

You obviously looked at that to see whether there was any  
reason for concern or alarm at any time?-- Yeah.

That was your practice?-- Yeah.

At what sort of level in terms of parts per million would you

begin to have the concern or alarm yourself?-- Probably if it got up around about 8; if it went quick, you know.

What would you do if you saw a high CO reading in terms of parts per million? Would you talk with somebody about that?-- Yeah, I would have to go and talk to someone higher, yeah.

Did you ever have occasion to do that, go and talk to somebody about high CO readings at any of the monitor points?-- No, not really, no.

Now, with the CO readings, of course, it may be that a reading of 8 ppm might be worrying in one set of circumstances but not worrying in another; is that right?-- Yeah.

Okay. Well, what did you understand about changes in CO readings, that is, the rate of increase in CO readings? Did you ever - were you ever instructed or informed about what to look for in that regard?-- No.

Was the rate of increase in the CO reading a matter of any significance in terms of what you had been told?-- What are you talking about now?

The rate of increase - in terms of what you had been instructed or learned during the course of your job -----?-- Yeah.

----- was the rate of increase in CO in terms of parts per million, read in parts per million, a matter that you would look for or have some concern about?-- Yeah, yeah, especially if it wasn't in a sealed area, yeah.

Well now, the Unor screen, which is what we were dealing with, shows a whole series of figures, doesn't it?-- Yeah.

One of those is the Graham Ratio, or do you know whether one of those is the Graham Ratio?-- No.

Have you heard of that?-- No.

Did you ever receive any instruction about the significance of those other sets of figures on the Unor screen apart from the actual readings at particular points?-- No, no.

But there were columns there that you looked at but you never really understood?-- No, no, never did, never told anything about it.

There were columns there but you didn't really understand them; is that the case?-- Yeah.

Well, since this event have you heard mention of a Graham's Ratio or Graham Ratio?-- Oh, yeah, yeah.

Which indicates the amount of CO in relation to the amount of oxygen?-- Yeah, yeah, I've heard about it now, yeah.

You have heard about it now?-- Yeah.

But you say you didn't know about it?-- No, no, didn't have a clue.

What do you understand about it now?-- I don't. As I said, I just heard about it.

Okay. Well, on this particular night when you went to see the Unor screen it was against the background that you knew that 512 Panel had been sealed?-- Yeah.

The previous night?-- Yeah.

What were you looking for on the Unor screen?-- Oh, just what the CO was and the CH4 was.

In particular, did you look at the 512 monitoring point?-- Yeah, yeah.

Do you remember now what you saw on the screen?-- I think CH4 was about 4.7 or something; what's a name, CO, was 140, 147, 140 something, and I think oxygen was about 19.6.

Now, obviously from your experience you knew that after a panel was sealed it moved into the explosive range at some stage?-- Yeah.

What was your assessment when you looked at the screen that night as to how close 512 was to moving into the explosive range?-- Yes, I could see it was moving close, yeah.

Was that a matter of any concern to you?-- Yeah.

Why was that?-- 'Cause I thought that - I actually thought - I didn't expect to see anyone go down there that night, but then the Check Inspector had already gone and the other two deputies and I thought, "Well, they must know something I don't know."

When you say they had already gone, they had already gone underground?-- Yeah.

Who else was still around?-- Michael Squires.

Michael Squires was there?-- Yeah.

And I suppose there would be someone in the -----?-- Bathroom -----

----- electrician's room, or anybody else that you are aware of?-- No, bathroom attendant, Michael Squires.

They were the only ones you are aware of?-- Yeah, that I can recall, yeah.

Well, what you say is the fact that the other men had gone underground -----?-- Yeah.

----- in a sense allayed or alleviated the concerns you had

because you thought they must have known something that you didn't?-- Yeah, yeah.

Did you have any discussions with Michael Squires after you arrived at work that night?-- Yeah, I just asked him what was going on.

Was that before or after you looked at the Unor screen?-- After.

After?-- Yeah.

Did you go specifically to see him or did you just happen to see him?-- No, I went to see him because they were a deputy short. I just asked him if he had made arrangements for another deputy to come out, and then I asked him what was going on and he said they are producing in 5 South, 1st North-west.

Did you say anything to him about your concerns when you looked at the Unor screen and saw that the panel was about to move into the explosive range and realise the men had gone underground?-- No, but he said that, "It's going through quick. It should be through it in the morning.", he said. That's the words he said.

Referring to 512 Panel?-- Yeah.

Well now, you also went to the deputies' cabin and got a Minder; is that right?-- Yeah.

And you read the 512 seals report from the previous shift?-- Yeah, yeah.

There was some reference there to there being 3 per cent methane layering on the right-hand side of the belt road seal?-- Yeah.

That was John Blyton's report?-- That's right, yeah.

And it was after you had gone to the deputies' cabin then you went and had this conversation with Michael Squires?-- Yeah.

You mentioned about another deputy. Did he say that there was another deputy coming?-- Yeah, yeah, Kenny Guest was supposed to come out at 1 o'clock.

Did you tell him what you intended to do?-- Yeah.

What was that?-- I told him that I would walk the belts in and I would check on the 512 seals before the other deputy come in, check it out.

Then did you leave to go underground?-- Yeah.

Well, if you can just tell the Inquiry what happened then, where you went and who you saw. What time was it when you were heading underground?-- 11, 5 past 11, 7 past 11, something like that.

You walked down?-- Yeah.

That was your normal practice?-- Yeah, yeah.

Did you see anybody on the way down?-- Yeah, there was Terry Vivian and Robert Parker. They pulled up. They were going down and they pulled up and asked me did I want a lift and I said, "No, I'll walk."

Was that when you were still in the cut?-- Yeah.

Where did you go then?-- I went around - up around the stacker boot end, checked out the stacker boot end roller and that and I proceeded down then.

Those areas you mentioned are outside the portal?-- Yeah, yeah.

Then you went in through the portal and down the main dip?-- That's right, yeah.

Inspected the belt as you went?-- Yeah.

How far did you go?-- I got as far as 15 cross-cut.

Can you just turn around - if we can look at the plan behind that one - sorry, it's about to be revealed for you - you will see where 15 cross-cut is marked. That's the wrong map. I thought we had a plan of the whole mine. There we are. Can you just have a closer look then? I think you will find that 15 is marked on there, Mr McCrohon. The main dips are over on your right there. Just take your time. So, if you can just point to the position that you were in as far as you can recall when you say you were in 15 cross-cut?-- It was - the Dip 2 drivehead is where I was, but that's 15 cross-cut.

15 cross-cut?-- Yeah.

Now, can you just -----?-- I can't see the numbers there.

Don't worry about the numbers, but just point to where you say that is, if you can, just so we can see?-- Somewhere there, about there somewhere.

Somewhere there. So, you weren't quite as far in as where the first set of ventilation lines there turns off to the right; is that right?-- Yeah, that's right, yeah.

To the left, I mean, to the left?-- Yeah.

I will learn left and right one of these days. Now, what happened then whilst you were at 15 cross-cut?-- Well, I was about probably three frames from Dip 1 boot end when my ears popped and then the Dip 2 belt started to wind down, like it was stopping, and I didn't take any notice of that because the beltman usually might have a crook roller, they just stop the belt and toss the roller out, and I walked on. I just got to the Dip 2 drivehead and I was going to put the date and my

signature on it and next I was blown back about three metres. I tried to get up, I couldn't get up, the force was holding me back, and I crawled over toward the rib, and the wind and the dust particles started coming, and I had my hat over the side of my head trying to protect my face, and I reached out for my rescuer, and I don't know how long it was, it probably wasn't long at all but it seemed long, but the dust and the wind cleared and I got up and I started walking up along the belt again.

Now, the first thing that happened in that sequence was that the belt stopped?-- Yeah, it was slowed, yeah.

And your ears popped about the same time?-- Yeah, around about the same time.

Then there was some delay before you were actually knocked over?-- Yeah, yeah.

After the belt stopped and your ears popped, you actually walked to the drivehead with your piece of chalk to put your initials on and then you were bowled over?-- That's right.

Okay. Now, you say that it seemed like a long time, and I don't think anybody in this room doubts what you say there, but what sort of estimate could you make of that time?-- Oh, probably 10 to 15 seconds.

And had you heard anything?-- No, no, the belts were running. I didn't hear nothing. Only my ears popped, that was all.

Your areas popped, but either when the belt - certainly from the time the belt stopped - before the belt stopped the belt was running. From the time the belt stopped you didn't actually hear anything?-- No, because Dip 1 belt was still running.

Dip 1 belt was still running?-- Yeah.

Now, after the rush of air subsided and you had reached for your rescuer in the meantime, what happened then? Were you able to see all right or was it -----?-- No, couldn't see at all.

Couldn't see at all?-- No, just practically nothing.

Black. Your lamp was still on?-- Yeah.

But there was just no visibility?-- No, negative, you couldn't see anything, feel your way out.

So, what did you do? You were able to get up at that stage?-- Yeah. I started coming up as fast as I could.

Now, you seemed to have acted pretty quickly in relation to your self-rescuer?-- Yes.

Had you had some particular training on that?-- Yeah, about

- I don't know, probably two months six weeks before we were all taken into a room to see if we could pull it apart and put it on in the dark, yeah.

And you were able to do that on this occasion?-- Yeah, thank God I did, yeah.

Did you have any difficulty in doing that or -----?-- Yeah, I tried - I was doing it with one hand because I had my hat over my face with the other one.

But overall you managed to get your self-rescuer on fairly quickly?-- Yeah, yeah.

And you say that was to some extent because of the recent training?-- Yeah.

Right. Well, you started walking outbye?-- Yeah.

And you were able to go in that direction because you were following the belt structure?-- Yeah.

Was it easy to get out?-- No. I was either hitting the belt structure or I was hitting the rib, but I got there anyhow, that's the main thing.

How did you go with the self-rescuer on the breathing front?-- Pretty hard.

Pretty hard?-- Yeah.

You got up to where there are some timber cogs at 4th cross-cut?-- Yeah.

And did you - was the No 1 belt -----?-- Still going.

----- still running?-- Yeah.

Did you pull the trip wire there to stop it?-- Yeah, I felt along and felt the wire and pulled it. I thought I would be better off if I got along to the supply road. It's a lot wider and I wouldn't be running into the belt, I don't think.

Does the trip wire run the whole length of the belt?-- Yeah, yeah.

And it's easy enough to find even in the dark, the trip wire?-- Yeah, yeah.

Okay. Now, you got over the belt then and made your way to the supply road?-- Yeah, yeah.

Any difficulty doing that? Was it still -----?-- Still-----

----- no visibility?-- Oh, as I got towards the supply road I could see a little bit more, yeah.



And then you made your way out on the supply road to the portal?-- Yeah.

The lights were still on on the main supply road?-- Yeah, just down the portal.

At the portal?-- Just down from the portal, yeah.

You got outside the portal. You tried the communication system there?-- Yeah.

And that wasn't working; is that right?-- That's correct.

You then went to the pit substation in the cut and you rang the lamp room?-- That's right.

You spoke with Bob Davidson?-- Yeah.

And you told him there had been an explosion?-- Yeah.

And that was your view in light of all that happened - that there had been an explosion?-- Yeah.

Even though you didn't hear it?-- That's right, yeah.

And he said he would get somebody to pick you up; is that right?-- That's right, yeah.

But, in fact, two PJB's came out of the portal?-- Yeah.

They were the crew from 1 North-west?-- Yeah.

You got in one of those and went up top?-- That's right.

Then Mr Mason arrived - George Mason arrived some time after that?-- Yeah, yeah.

I've asked you a number of questions about what you regarded as the significance of - that a haze might have and what you might - what significance you might attach to a smell, and I think you have given us some answers in relation to that, but if you had been aware of the fact that there had been a smell detected in 512 panel back in the middle of June - a slight tarry smell - and that there had been some - at that point - layering of methane and a bit of warmth, difficulty of ventilation in the No 2 heading there, and if you had been aware that there had been a smell on the Friday - a smell reported on the Friday night and then on the Saturday morning this haze came, would those things have indicated anything to you in relation to spontaneous combustion?-- Yeah, it would have, yeah.

What sort of things from your training - what sort of things have you been asked to look for or told to look for in relation to spontaneous combustion? That might be asking you - I'm asking the question the wrong way. Can I ask you this: had you ever been given any training in relation to spontaneous combustion?-- No, never.

From your experience, then - just your talk with other deputies, experienced miners - what sort of things had you come to realise might be indicators of spontaneous combustion?-- Large - quick increase of CO.

Quick increase of CO?-- Yeah, it goes up quick, yeah.

Had you ever been given any instruction as to how to calculate-----?-- No, no.

Just let me finish the question - how to calculate the rate of production of CO - the CO make?-- No, wouldn't have a clue.

These extra readings that you were asked to take - the wind velocity readings?-- Yeah.

Did you know the significance of those?-- No, not really, no.

Did you know why it was necessary to take wind velocity readings?-- Yeah, yeah.

What was the necessity of taking wind velocity readings?-- For the velocity of air.

For what purpose? Why was that necessary? Why did you need to know or somebody need to know-----?-- See was going in, yeah. Calculate the amount of air that was going through to the section.

And what about in relation to CO make? Did you know-----?-- No.

-----whether wind velocity had any relationship or any role to play in calculating the CO make?-- No.

Had you ever been given any booklets on spontaneous combustion?-- Only the red one.

A red booklet?-- Yeah.

And when was that?-- After the Kiangra explosion.

That was back in 1975?-- Yeah.

And whereabouts were you at that stage? At Moura?-- Yeah. Yeah, I was at No 2.

You were given a booklet at that time. Was there any instruction to miners - you were a miner at that stage?-- Yeah.

Or a deputy?-- No, miner.

Still a miner at that stage. And you gained your deputy's certificate in '76?-- Yeah.

Were you given any instruction in conjunction with the red booklet - you know, when I say "instruction", instruction about spontaneous combustion?-- No, they just handed it to us

and we were told to read it, that's all.

And after that, any other sessions at all in relation to the red book or in relation to spontaneous combustion at any time?-- Not that I can recall. You have got to remember I was permanent night shift.

Oh, yes, I appreciate that?-- And you don't see too many of them around - like, the officials around or anything on night shift.

If there was compulsory training sessions, though, things would be organised so that you could be there?-- I suppose so, yeah.

Were there other areas of training that you had - other training sessions?-- No.

No training sessions?-- I never had any, no.

Now, you did mention earlier in your evidence about being involved with quite a number of sealings-----?-- Yeah.

-----of panels. Now, this sealing of the 512 panel on the Saturday afternoon, as far as your knowledge went, first of all, was that sealing just the same as the general run of sealings of panels you had been involved with?-- No.

What was different about it?-- They were only using Tecrete. The other ones were all bricks. Every other one was brick.

This was the first Tecrete panel sealing you had ever been involved with?-- Yeah, yeah.

Now, apart from that, anything else unusual about it?-- I didn't think they were thick enough.

You didn't think the Tecrete was thick enough?-- No.

Anything else unusual about it?-- No, not really.

Out of all those sealings of panels you had been involved with, were there any of those that were different in the sense that they were urgent sealings - ones that had to be done quickly?-- Yeah.

Done because there was some sense of danger?-- Yes.

Which were they?-- Ones in 5 North-west.

5 North-west?-- Yeah.

When you say the ones - one of those might at least be now referred to as 5 North sealing and the other 5 North-west; is that right?-- Yeah, 5 North-west. There's two sections. One was inbye and the other one was outbye.

One of them is sometimes referred to as 5 North; is that right, or is 5 North a separate one?-- 5 North is a separate

one.

Well, the ones in 5 North-west, what do you recall about those? What was the sense of urgency? Why was it created?-- Because there was - it went - there was found an increase in CO in the morning and in the afternoon it had gone up over 220, 230, over 300 ppm, and that was sealed in the afternoon. All the machines and everything were locked in - they were sealed in. I think it was - that was - I think it might have been May, and I think July or some time - July they took the seals back out and got the machines out and resealed it again, yeah.

What about in terms of the period during which the panel went through the explosive range? Were there any people allowed underground during that time - 5 North-west?-- No, no. No, I don't think so. Not for 48 hours, anyhow, if I remember correctly.

So, the men were kept out?-- Yeah.

Was there anything special done in relation to the methane drainage drill holes on that occasion?-- No. You have got the wrong 5 North. You have got the wrong 5 North-west.

See, I'm just looking at what's in your statement here?-- Yeah, well that's wrong.

There might have been some confusion?-- Yeah. One was back in 1986, and that one you are looking at was 1991 or 1992.

But that was 5 North-west in '92?-- Mmm.

I see. The one in '86 is the one you are talking about?-- Yeah.

That had to be done quickly?-- Yeah.

And the one you described a moment ago, the one in '92, what happened in relation to that?-- Well, they had a build-up of CO, and they were coming back and they were in a faulted area and they decided it had to be sealed, so they sealed it and-----

And the methane drainage drill holes?-- Yeah, well, because they were frightened that around the fault area there could have been a large fall and knocked the seals over, they turned the gas drainage off.

And was there some step taken, in effect, to render the panel less dangerous?-- Yeah.

By flooding it as they moved out?-- Yeah, yeah.

The panel was flooded behind the workings, I think you say in your statement?-- Yeah.

As you retreated out?-- Yeah.

070295 D.20 Turn 5 sbd (Warden's Crt)

Now, what about 5 North that you have referred to?-- Yeah.

Were you involved in the ceiling of 5 North?-- No, not in that one, no.

Thank you, Your Worship. Thank you, Mr McCrohon.

CROSS-EXAMINATION:

MR MacSPORRAN: Mr McCrohon, you started in the industry in 1958; is that so?-- Yeah.

You started at Moura No 2 when it commenced in 1970?-- Yeah.

And then you became a deputy in 1976?-- Yeah.

And the whole period you've worked at No 2 since then?-- Yeah, except for a small time over at No 1, yeah.

So, you would have been one of the more experienced deputies at No 2 at the time of this incident?-- I don't know about more experienced, but one of the oldest ones there, yeah.

You have been in the industry for a long time?-- Yeah, yeah.

And when you were working at No 2 from 1970, that covered the period when the Kianga explosion occurred?-- Yeah, yeah.

And that's when you were given a red book that dealt with signs of spontaneous combustion; is that so?-- Yeah, yeah.

You were told to read that?-- Yeah.

And no doubt you understood that was to assist you to understand what happens with spontaneous combustion?-- Yeah.

You knew, of course, that Moura No 2 was a gassy mine?-- Yeah.

As Kianga had been?-- Yeah.

You understood all that?-- Yeah.

Did you receive any other instruction or guidance as to what had happened in the Kianga explosion in 1975?-- No.

No-one discussed that with you after the event?-- No, only by reading the paper, that's all.

Did you understand that there had been a heating and fire at Kianga?-- Yeah.

Now, your involvement with 512 was mostly by way of the weekend inspections?-- That's all, yeah.

XXN: MR MacSPORRAN

WIT: McCROHON G L

That was about, you think, once a month?-- Around about there, yeah.

So, roughly how many times do you think you would have been inside the 512 panel? From just your recollection of events, roughly how many times would you have been in 512?-- Oh, probably three, four. Four at the most.

Does that include the weekend of the-----?-- No, that's the weekend you are talking about, yeah. I used to go in there every night along the belt when I was doing the outbye, yeah.

For that whole period that you were inside 512, whenever that was, the way you would communicate what you found and learnt of what others had found would be via the deputies' reports?-- Yeah.

And occasionally you might speak to another deputy?-- Yeah.

But that was the exception rather than the rule?-- Yeah.

Normally you would simply enter something on your report and that would be how you would communicate what you found to another deputy?-- Yeah.

And you would read his report or another deputy's report to find out what they had observed in the panel?-- Yeah.

Only rarely did you ever talk to any other deputies?-- Yeah.

And, in fact, on the weekend of 6 August, it was really by chance that you spoke to Cole Klease?-- That's right, yeah.

That was in the bathroom?-- Yeah.

That was really out of the ordinary?-- Yeah.

Did you think that was a satisfactory way of finding out what had been going on inside the panel - read the reports and have others read your reports as opposed to talking-----?-- In hindsight it probably wasn't, but that's the way it was done, wasn't it.

The reports themselves were not very full, were they, in detail, often?-- No, probably not, no.

And you would glean the bare minimum information from the reports, wouldn't you?-- Yeah.

It would be far more satisfactory to talk to the deputy who had filled out the report to get the true picture?-- Probably, yeah.

Just to confirm this: throughout the whole of your contact with the 512 panel, up until 6 August when you came on shift, you had no idea there was anything wrong in 512?-- No.

You had no idea there had been any smell detected-----?-- No.

070295 D.20 Turn 5 sbd (Warden's Crt)

-----apparently inside 512?-- No.

You heard nothing until the Saturday shift about a haze being reported inside the panel?-- Yeah, that's correct.

You knew nothing about the ventilation difficulties in the top supply road - recirculating of air?-- No.

Layering of methane?-- No.

You knew nothing about any of it?-- No.

Although you had contact with the panel on a regular basis at weekends once a month?-- Yeah.

Then you came to that weekend and the first indication you had of anything being untoward was Cole Klease's deputy's report. You read that before you spoke to him, didn't you?-- No.

The other way around?-- Yeah.

He told you simply that he detected a haze in the top return?-- Yeah.

That's all he said?-- And, "They're going to seal it."

Didn't mention anything about a smell in the same area?-- No.

So, haze was the only information you had on the Saturday?-- Yeah.

You told us that that didn't really concern you?-- Yeah.

Because that could be accounted for by the operation of diesels underground?-- Yeah.

A smell would be different, though, wouldn't it - if you had a smell with a haze?-- Yeah.

Why would that be different?-- Well, you'd - it would indicate there's something wrong.

But why? Why would it indicate, as far as you're concerned, that something was wrong if you had a smell and a haze? Why would that be the case?-- That would be an indication that there is a heating there.

And what sort of smell are we talking about?-- It's sort of a - it is sort of a musty smell, it is.

Have you smelt a smell from heating coal before?-- Yeah.

Whereabouts?-- At the gate - at No 1 - at the gate of the mine.

Do you understand that that is an area where there is still some heating or burning coal underground?-- Yeah.

Which emits an odour?-- Yeah.

XXN: MR MacSPORRAN

WIT: McCROHON G L

And you've smelled that?-- Yeah.

And you would describe that in your terminology as a musty type smell?-- Yeah.

A reporting of a smell similar to the smell coming from No 1 at the gate would concern you, would it?-- Yeah, yeah.

And would be, to your state of knowledge, a sign of there being heating coal?-- Yeah.

But no-one told you anything about a smell being detected inside the panel?-- No.

Such a smell as that coming from No 1 would be easily distinguished from a diesel smell, wouldn't it?-- Yeah, yeah.

They are two entirely different smells?-- That's right, yeah.

And you wouldn't confuse the two?-- No.

Now, I take it from what you've already said that you had no knowledge of any calculation being done of a CO make for that panel, 512?-- No.

You had been told, I think you said, at some stage the system had changed to instruct the deputies to take further readings of velocity and CO on the Drager tubes?-- Yeah, yeah.

And you did that?-- Yeah.

And that was as per the notice on the board I think you told us?-- Yeah.

But you had no idea of what that was to be used for?-- That's right.

Had you ever heard any discussion in relation to 512 of a graph being plotted of the CO make?-- Yeah, yeah.

When did you hear that?-- About - I think it might have been a fortnight before.

Before the explosion?-- Yeah.

In what circumstances did you hear that being discussed?-- I think it was - if I remember correctly there was one put in the deputies' room.

And you saw that, did you?-- Yeah.

What was being said about it?-- I can't recall actually what was said about it. All I said - I couldn't understand what it was.

Was that the first time you've seen it?-- Yeah.

And you just didn't know what it was?-- No.



070295 D.20 Turn 6 dfc (Warden's Crt)

And did you ask someone, did you?-- Yeah.

And what were you told?-- They said, "That's a CO graph."

And what did you understand that to mean?-- Actually that it was - I didn't understand it actually, I still don't.

Again you didn't understand that the reason you were taking further readings and recording them on your deputy's reports was related to such a graph?-- No.

You had no idea about that?-- No.

You still don't?-- No.

Can I ask you this: at some stage by agreement Neil Tuffs relieved you on that Saturday evening; is that so?-- Yeah.

He looked after the seals as the deputy in charge?-- Yeah.

When he came on did you speak to him about the state of the panel?-- Yeah - no, I just told him that they were just about finished the belt road seal, I said, "and they will be starting the other one very soon."

Was there any mention to Mr Tuffs about what Klease had informed you about, that is the haze in the top return earlier on?-- Not that I recall.

Did Tuffs express any concern about what was happening inside 512 to you that evening?-- No.

Did he say what actions he may be taking in subsequent shifts with his men?-- Later on after he had done his turn down there we were on the surface and he said that - he said he won't be taking his men into the - he was on the long hole drilling. He said he wouldn't be having his men inbye while that was going through the range.

So he told you this at the end of the shift on the Saturday night, did he?-- Yeah, at the end of his shift, yeah, yeah.

That's the Saturday night, the sixth?-- Yeah.

Did you ask him why he was concerned about not taking his men down when it went through the explosive range?-- No, because it seemed common sense to me.

But why?-- Well, I didn't think anyone was supposed to be down when it was going through the explosive range.

Did you have any idea why that should be the case, that the men should not be underground when it went through the explosive range?-- I think that came out in the Kianga inquiry, for men to be withdrawn while it's going through the explosive range.

That's as you understood it, was it?-- Yeah.

XXN: MR MACSPORRAN

WIT: McCROHON G L

Did Tuffs say anything else about any readings he had taken that Saturday night, to cause him concern?-- Not that I know of.

He didn't mention them to you anyway?-- He could have done. I can't recall.

Anyway, the state of your knowledge that Saturday, and indeed Sunday night, was that there was no problem inside 512 other than the atmosphere was going to go through the explosive range?-- Yeah.

You knew nothing about a suspected heating inside the panel?-- No.

Until afterwards?-- Yeah, that's right.

The only reporting to you was of a haze which you had been unable to find?-- That's right.

So when you said to us before that you were surprised to see the men had gone down?-- Yeah.

That was simply because of a usual practice as you understood it, that they didn't go down?-- Yeah.

That had happened before in 512 in '86 and '92, you thought?-- Yeah.

In '86 because the mines inspector, Mr Brady, issued an order to keep the men out of the mine for a period?-- Yeah.

And then in '91 or '92, whichever, the manager had instructed that the men were not to go down until the atmosphere stabilised?-- That's right.

Something like that?-- Yeah.

Your surprise was not because you thought there was a heating underground, but simply because the practice was not to send them under?-- That's right, yeah.

Can I just ask you one thing. You were asked about a rule, did you know anything about a rule not to send miners into an area where the roof was higher than three metres. Do you remember being asked about that by Mr Clair?-- Yeah, yeah.

Do you know anything about a policy or a practice where when bottoms were being taken in 512 the miners were not to go into areas where the -----?-- Yeah, yeah.

Roof was higher than three metres?-- Yeah.

You understood that to be a practice operating inside the panel?-- Inside the panel, yeah.

As a safety precaution?-- Yeah.

For falling ribs and -----?-- Mmm.

Thank you.

WARDEN: Mr Martin?

CROSS-EXAMINATION:

MR MARTIN: Mr McCrohon, I understood you to tell Mr Macsporrán that the first time you had really seen a - what you now know as a CO graph was about a fortnight before -----?-- Mmm.

----- a fortnight before the explosion; is that the case?-- That's what I thought anyhow.

Approximately?-- Yeah.

And of course you were - where did you see it when you saw it for the first time?-- It was in the deputies' room.

Whereabouts?-- It was on the board in the deputies' room, yeah.

On a board on the wall?-- Yeah.

And, of course, you were a frequent visitor there after that first occasion you saw it, fairly frequent?-- Yeah.

Did you see that same type of graph after that first occasion and up to the explosion on the board?-- No, I can't say for true what it was, no.

Do you know whether after you first saw it -----?-- I know it was taken down once.

That's what I was going to ask you. After you first saw it until the time of the explosion you said that it was taken down once?-- I think so, yeah.

Was it replaced?-- Yeah, I think it was, yeah.

With another similar document perhaps or not?-- I couldn't say.

Well, tell the Inquiry, please, about the period before the time you first saw a graph in the deputies' cabin that you remember anyway. Can you ever remember seeing a CO graph on the board in the deputies' cabin before then?-- No.

And of course you were a frequent visitor -----?-- Yeah.

----- to the deputies' cabin?-- Yeah.

The notice board is in an obvious place?-- Yeah.

XXN: MR MARTIN

WIT: McCROHON G L

So the probability is that you would have seen such a thing if it was there before -----?-- Yeah.

----- the occasion you now first remember seeing it?-- Yeah.

In any case you didn't have a clue what it meant?-- No.

The seal or seals I should say, constructed in 512 on the evening of 6 August, was that a final seal so far as you were concerned?-- A final seal?

Yes. Would you call it a final seal? It's sealed forever?-- Yeah. No, I didn't like that one at all.

No, but would you call it, in your terminology, a final seal?-- Yeah, yeah.

And do you know that they are supposed to be explosive proof?-- Yeah, so they say.

MR MORRISON: I don't know that that's a correct suggestion actually.

MR MARTIN: Well, if that's an objection perhaps my friend would elaborate.

MR MORRISON: Sorry, I wasn't really objecting, I was just expressing a note of caution because I'm not sure whether our learned friend is putting to him something that's in the general rules, in which case I don't recall one saying that they have to be explosion proof. I do recall one saying they have to be capable of withstanding 345 kpa, but if it's from some other source I was expressing concern about the lack of precision.

MR MARTIN: I thought 345 kpa might be a little bit confusing for Mr McCrohon, but anyway, so far as you were concerned you thought it was a final seal?-- Yeah.

And so far as you were concerned other seals, prior seals throughout No 2 were final seals?-- Yeah.

And the previous ones to 512 were brick and mortar?-- Yeah.

And the brick and mortar ones, were they substantial?-- Yeah.

How substantial? Can you give us an idea, say, for 5 North, how thick they were?-- How thick?

Yes?-- Well, they were - they were - how wide is a brick?

Sorry?-- How wide is a brick?

I don't know?-- No, probably 10 inches. Probably 10 inches.

Well, you weren't keen on the Tecrete?-- No.

Why?-- Because it's only about four inches wide, and there is - it was a fairly big area to cover in just pure Tecrete and -

XXN: MR MARTIN

WIT: MCCROHON G L

well, at least with the brick ones the only cement you've got is in between the bricks. It would have still been green, it had only been done 19 hours.

Of course there is a curing time -----?-- Yeah.

----- as everybody knows for concrete?-- Yeah, it was only 19 hours since it was finished.

Mr McCrohon, help us if you would, what you would describe as a quick increase in CO?-- A quick increase?

Yes? Which would demonstrate to you with your standard of knowledge back in August 1994 what might be a problem. What would you describe as a quick increase in terms of time?-- Well, in the matter of, what, five hours it goes from 4 ppm up to 340 ppm.

You have answered both questions, but what of an increase of, say, 10 to 150 odd or something like that over a period of a couple of weeks? Would that give you the same alarm?-- In behind a sealed area or what?

Just for the panel which became sealed at the end of the period. Would that alarm you?-- If the panel wasn't sealed it would be, yeah.

Just coming to this conversation you had with Mr Squires on the evening at about 11 p.m. or so on 7 August, you went to see him, you said. Where was he?-- He was in the undermanager's office.

And the undermanager's office has a door, if I'm correct, which is the only entry into the Unor room?-- Yeah.

And he said that the explosive range would be gone through by morning or that was his expectation?-- Yeah.

Where was he? Was he sitting down at a desk or what was he doing?-- Yeah, he was sitting at the - yeah, yeah.

When you told the Inquiry, I think in response to Mr Clair, that you thought the men who had gone underground must have known something that you didn't know because you were surprised they went?-- Yeah.

That's the general effect of your evidence, what did you think they knew that you didn't know?-- Well, I don't know. I thought they might have been - must have been some other arrangements made or some other agreement made that I wasn't told about, because I just thought that if it was going into the explosive range there would be no-one down there.

You just followed suit as it were?-- Yeah, like a little dog.

With hindsight, would you have expected management to have told you something about the conditions there on that night?-- Yeah, yeah.

What would you have expected them to tell you with hindsight? What sort of things?-- Well, I thought they would have told us that it was going through the range and it was up to you - up to the individual as to whether he wanted to go or not.

At least that?-- At least, yeah.

What about a direction that nobody should go underground whilst it was in the explosive range? Would you have expected that?-- That would be better still.

Of course it would. Just remind me, if you would, about your evidence. You went to the Unor screen which was outside, I take it -----?-- Yeah, outside.

You viewed it through the window?-- Yeah.

On that night what did you see? Did you see a row of points being monitored running down the screen with corresponding lines?-- Yeah, yeah.

Was that in green or red?-- All in green.

When you saw it?-- Yeah.

All in green?-- All in green. I think - whatever one was being monitored used to turn to blue, I think.

Well, when you say that do I understand properly - when it's being monitored you mean the point being monitored by the machine?-- Yeah.

Does a point turn blue, that point?-- Yeah, yeah.

Do you really recall now what you saw when you looked at the screen on that night?-- On 512?

Yes?-- Yeah, I think so.

You see, I'm suggesting to you that what you saw when you looked at that screen was a flashing red rectangle?-- No way. No way in the world.

You know what that means. Mmm?-- No way in the world.

Do you know what a flashing red rectangle means at the top left-hand corner of the screen?-- No.

Why did you say "no way"?-- If it was flashing I would have saw it, there was nothing flashing.

See what I suggest to you is you would have seen a red figure on CH4 and on CO -----?-- No.

----- when you looked at that screen?-- I didn't.

All I'm asking really, after this length of time might you be mistaken in that? Might it have been red and might not you have understood it?-- No, I didn't see nothing flashing.

Forget the red flashing for the moment and talk about just a red figure on CH4 and CO?-- No, I didn't see that either. I didn't even look at that corner to tell you the truth.

Well, what did you look at?-- I just looked at the panels, where the readings come through the panel, what they were.

So you can't really tell us what colour the figures were?-- Not in the right-hand corner, no.

Or the CH4 or the CO for that matter. You can't tell us what colour they were, but what you can tell us is the approximate readings?-- Yeah.

The right-hand side of the machine, do you know that there was at that time the word "alarm" with, depending on the state of the situation - the alarm mode might have "normal" or "active" or "accepted"; do you know that?-- Yeah.

Do you recall now what the alarm situation or mode was on the right-hand side of the machine in terms of any one of those three -----?-- No, I can't recall.

In any case, what you can tell us from your evidence is that there was no siren going?-- That's right, yeah. It wasn't flashing either.

Have you heard a siren before?-- Yeah.

Is that the one outside the Unor room or the washroom?-- Yeah.

Have you heard a siren going in connection with an alarm on the Unor screen?-- No, I can't say I have.

Do you know that if there is an alarm on the Unor screen that the siren is supposed to alarm?-- There is that many sirens, you don't know which one it is.

All right, but answer my question if you would. Did you know, I should say, at about August 1984 that if there was an alarm on the Unor screen - sorry, I am told I was 10 years out with the date - 1994. Did you know in August 1994 that when there was an alarm on the Unor screen that there should be a siren alarm at the same time?-- No, I didn't know.

You told Mr Clair, I think it was, perhaps Mr MacSporran, that when you went there, there was no alarm going. What did you mean by that?-- No alarm going?

I am just repeating your evidence. I just want to know what you meant by "no alarm going"?-- I don't recall it.

You had some conversations with Mr Mason in relation to 512 after you came on shift on 6 August 1994, didn't you?-- Yeah.

What did he say, if anything, about the position of the final monitoring seal?-- Beg your pardon?

What did he say to you, if anything, about the position of the final monitor point behind the seal?-- Well, the one that was in the return -----

Sorry, which return?-- The top return. It had been to be brought outside.

Into -----?-- Into - outside the top return seal.

Did that become point 16, or don't you know that?-- I don't know that. I wouldn't have a clue about that, and the one that was - the other one had to be put inside the belt road seal - between the belt road and the supply road, in the first cross-cut in there.

Had it been done by that time?-- Yeah.

That is the final monitor point within the seal?-- Yes.



So, by the time Mr Mason had this conversation with you, that final point -----?-- Inside would have been done, yeah.

----- would have been done?-- Yeah.

Well, was it done?-- Yeah.

Did you see it?-- Yeah.

Where was it?-- It was in between - the cross-cut between the belt road and the supply road.

How high from the floor?-- Oh, about five foot off the floor.

On the wall?-- No, it was in the centre of the cut-through - in the centre of the cross-cut.

Suspended?-- Yeah.

From the ceiling obviously, or the roof?-- Yeah.

Who determines the point of the final monitor point behind a seal? Who determines that?-- I don't know. It wasn't me.

I am not suggesting it was?-- I don't know who it was; I don't know.

Do you usually wear glasses?-- Only to read, yeah.

How is your long distance vision?-- Good.

When were you last tested?-- A couple of years ago.

If I can just talk for a moment about the events immediately before you went underground. You went underground with the crew who were to seal 512?-- Yeah.

Was there a meeting on the surface of the men who were to seal 512 at about 3 o'clock addressed by either of Mr Mason or Mr Squires?-- Not that I know of. There could have been, I don't know. I was in the deputies' room.

I beg your pardon?-- There could have been, I don't know. I was in the deputies' room.

I suggest that the sealing, or the men were told that they had to stay until the sealing was finished?-- Yeah.

Who told them that and where?-- They was told before they went down.

But by whom?-- I don't know. It could have been Michael Squires or George Mason, I don't know.

Well, how did you find out?-- When I got down there with them they told me.

They told you?-- Yeah.

It's not normal, is it, to bring in a special gang to effect a sealing on a weekend? This was a weekend obviously, and a lot of these men were brought in specially when they weren't on duty for this seal?-- Yeah, yeah.

That's not at all usual, is it?-- No.

So, despite what you said earlier, there was a sense of great urgency about this sealing, wasn't there, especially -----?-- No, no, no. It's just that once a section is cleared, they will get anyone in as long as they can seal it off. It's got to be all done at once.

Yes, but if it's not started, why couldn't it wait until the Monday in ordinary circumstances until normal -----?-- Yeah, I see what you mean there now, yeah.

That's what happened on this weekend, wasn't it?-- Yeah.

Men were dragged from off duty onto duty to cope, I suggest, with what might have been a potential heating?-- Yeah, yeah, I suppose so, yeah.

When you saw Mr Klease that afternoon in the bathroom, he told you, you have told everybody, of a haze. I think you said also he told you that the CO readings were going up; is that right or not?-- Oh, he could have done. It's that long ago I can't remember now.

I have nothing further, thank you.

WARDEN: We might have a five minute adjournment and then resume.

THE COURT ADJOURNED AT 11.10 A.M.

THE COURT RESUMED AT 11.23 A.M.

GEORGE LOUIS McCROHON, CONTINUING:

CROSS-EXAMINATION:

MR MORRISON: Mr McCrohon, can I just ask you a couple of things: you have been in the industry a long, long time, longer than a lot of people at Moura No 2?-- Yeah.

And a deputy for a long time, too - 18-odd years?-- Yeah.

So, without meaning to be impertinent, could I categorise you as one of the old school of miners who weren't brought up with sort of the more modern stuff?-- That's correct.

In your training days, when you were being trained not only as a miner but also as a deputy back in the early 70's, people didn't talk about the CO make stuff, did they?-- No.

No-one paid attention to it in those days?-- No.

What people talked about was parts per million of CO?-- Yeah.

That's what people have regard to for making their decisions?-- Yeah.

That's really the - in terms of CO - all of your training was in the pre-make days, if I can put it that way?-- Yeah.

So, in all of those years that you worked, in fact, your learning and teaching on CO served you pretty well. You were able to make proper decisions and assessments based on what you knew about parts and how they would perform?-- Yeah.

In terms of CO telling you about something untoward, I took it from what you said to a few people here today that basically what you would look for in CO would be a rapid and sudden take-off?-- Yeah.

And you would be looking for quite a substantial jump - nothing small?-- No.

If you had a routine panel that ran on, say, six parts for half it's life and then seven parts for the other and then maybe eight, one part change is not the sort of change you are talking about?-- No.

Even if went from, say, eight, perhaps, to 10 over a week or so, that equally is not the sort of change you are talking about?-- No, not really, no.

You are looking for a sizable jump and rapid as well?-- Mmm.

XXN: MR MORRISON

WIT: McCROHON G L

See, you see that sort of thing and you have got to raise an eyebrow and do something about it?-- Yeah.

You investigate it and report it to management. You do whatever seems necessary at the time to cope with it?-- Yeah.

And if you don't see that sudden and rapid jump in the parts, certainly to your mind and perhaps to others as well, the CO is not indicating any problem?-- That's true.

And all of that sort of view is quite consistent with the whole experience and training that you had, starting from the early days?-- Yeah.

It is not as if you are the only fellow that had that view; that was a view shared by a lot of people?-- Yeah.

One way or the other, you have been at No 2 for a fair proportion of its life, haven't you?-- All of it, yeah.

And with the consequential result that you have been through most of the sealings; whether you were actually doing the brickwork or not, I don't know?-- Yeah.

You were around when most of the sealings were done, one way or the other?-- Yeah.

Up until this sealing, they used brick and mortar?-- Yeah.

I think all of the seals, apart from this set, except 4 South?-- Yeah.

Were brick?-- Yeah.

All the old panels were sealed off?-- Yeah.

Do I take it correctly that that probably reflects pretty much what other mines do too? As far as you understand it, other mines have been putting in brick and mortar seals too?-- Yeah.

And of the same general description that we used at No 2?-- Possibly, yeah.

It is a fairly standard long brick - not like a house brick?-- No.

And the miners themselves would be doing the mortar work?-- Yeah.

So they would be miners as well as brickies and navvies?-- No, mostly miners, yeah.

I didn't mean to bring in people like that, but people would be doing that job?-- Yeah.

Not what a miner is really trained to do. A miner is trained to go and cut coal and that's what he wants to do, not be a

brickie's labourer; isn't that right?-- No.

All right. Now, those stoppings - I call them stoppings - final seals in all of those old panels, they would have been put up in the same way that these ones were approached, and I'll just explain to you what I mean by that. You get down to the stage where you have got one intake and one return and then you seal them together?-- Yeah.

And it is very important to make sure that that happens together?-- Yeah.

And that's exactly why this set of seals - as with every other set before them - that's why people were told, "Once you start, you have to stay there until it is done."?-- Yeah.

You can't just stop half way through and wander off and come back on another shift and let someone else finish. It is not done, is it?-- That's right.

The fact they were told to keep on with it until it was done is entirely normal and absolutely sensible procedure?-- Yeah.

Now, in all of those other seals, too, you would seal off by some process of selection the returns that weren't mostly used; for instance, you have got the bottom return?-- Mmm.

It is not a travelling road, so you can seal it off, and equally it is not an intake, so that was easy to do, and the next return up was sort of a - an alternative travelling road?-- Yeah.

But it wasn't the main travelling road, so it was sensible to seal it off too?-- Yeah.

And then you have only got three left to deal with. One is the belt, and obviously you can't fiddle with the belt road until you finish production, and likewise you can't fiddle with your intakes, and equally you can't fiddle with the return?-- The bottom two, too. The production had already finished down there too.

Yes. So the sequence and the way it was done here was, in your experience, entirely correct?-- Yeah.

So, you get to the stage where people are - would be on the seals, you get rid of the belt road, which leaves you with one intake and one return, and that's sensible, and then you make sure that you finish them together to make sure there is no undue pressure differences?-- Yeah.

And all of that's in accordance with long experience that you have had in this mine and what you know of others?-- Yeah.

In dealing with the sealings previously in this mine, I think I'm right in saying there is only two times out of all of them that men have stayed out of the pit, isn't that right - I'll tell you what I say they are. You might remember - it is 5 North and 5 North-west?-- Yeah, yeah, yeah.

And you can see a sensible reason for that. If there was just a blanket rule that people stay out of the pit after a sealing, it could cripple the mine, couldn't it, because some panels take a long time to go through the explosive range?-- Oh, yeah.

I think you had one here in this mine that took nine months to get through an explosive range?-- Yeah.

And, so, it is just a ridiculous proposition, really, both from the miners who have to make money - from their livelihood - and from the people who run the mine, who have to make it an economic prospect, it is just a ridiculous prospect to say that you should have a blanket rule after sealing everybody out, because it depends on the circumstances of the panel, how long it will go, how long it will take to get through the explosive range, and a whole host of other things. That would be right?-- Yeah.

You wouldn't expect anyone to be staying out for months, standing around, waiting and waiting?-- No.

So, in this particular mine, this No 2, people staying down the pit was much more the rule than the exception, wasn't it? There were only two examples in the whole life of the pit where they stayed out - that's 5 North and 5 North-west?-- Yeah.

It was very much the rule that people stayed down, and the experience of people is that they stay down, too. They go down the pit again after a sealing?-- Mmm.

Now, with the experience you had - that is, your training and your experience really depended upon parts per million, rather than make - does that explain why you didn't either pay a lot of attention or didn't understand what those graphs were about?-- Yeah.

And they were CO make. That was something you weren't familiar with?-- Yeah.

And from what I understand - tell me if I'm wrong - your experience would suggest to you that you didn't need to be familiar with it, because your knowledge of parts per million and how it worked had stood you in very good stead for 20 plus years?-- I wouldn't say that.

It had stood you in good stead. It had, hadn't it?-- I didn't have to make the decisions.

No. You have made your own assessment from time to time, though. You have kept an eye on CO over the life of panels?-- Yeah.

You have thought to yourself from time to time that this means such and such or, "Perhaps I had better keep an eye on that."?-- Yeah.

Or, you know, "There are no problems. It hasn't gone up."?-- Yeah.

Whatever. You have had the experience in the 5 North panel when you had that huge jump in a short space of time-----?-- Yeah.

-----of seeing just how it could go. So, anyway, your experience was such that you didn't really need to know about make, I suggest. You didn't feel the necessity to bring yourself up to date on make because you were getting along pretty well without it?-- I don't know how you come at that. No-one told me. I wasn't told about it. I wasn't offered the chance.

When the graphs went up, you saw them from time to time - in the deputies' cabin, on the notice board, just next to the table?-- Yeah.

And those graphs changed from time to time - you know, there would be one up for a while and then another one would be put up?-- Oh, probably.

I mean, there were quite a number over a period of time, and their appearance changed as the plotting got further along. If I show you a bundle, maybe it will jog your memory. This starts in reverse order with the most recent going back in time, you follow?-- Oh, yeah, yeah.

That's Exhibit 110 I have just given the witness.

These are copies of the graphs that were posted up on the deputies' cabin wall and you might actually recognise some; not necessarily the detail, but just their appearance?-- Yeah.

And each of them, I think, it headed with the black lettering at the top, "CO Make Graph"; is that right?-- Yeah.

And so you only had to look at it to see what it said it was - that's the CO make graph - whatever that means?-- Yeah.

And you asked someone at some stage either what it was or what did they mean or what did they signify, and got back the answer, "Well, it's a CO graph."?-- Yeah.

You didn't seek a further explanation than that?-- No.

Did you think to yourself it might be a graph that reflects parts?-- No, I didn't know what that was. I didn't think what it was.

You didn't feel the necessity to follow it through, though?-- No.

You can hand that back. So, references to litres per minute and things like that don't and wouldn't have meant very much to you?-- Mmm.

Whereas talking about the jump in parts would. You would have a much better knowledge of that sort of thing?-- Yeah, yeah.

Now, you were around when Kianga went up. Were you involved in any of the operations at Kianga?-- No.

Or in the rescue operations?-- No.

Or in No 4 when there was a problem there?-- No.

You are familiar with the smell that comes from No 1?-- Yeah.

I think you described it as a-----?-- Musty smell.

Musty smell. I understood you correctly to say when you were in the panel on the Saturday night, that's not the smell you smelt? That's not the smell you smelt?-- No.

It is very distinctive. There is no chance you would mistake it, is there?-- No.

I'll just go back to one thing. You obviously were a production deputy for quite some years?-- Yeah.

And then in 1991 you stopped being production deputy and moved on to outbye duties?-- Yeah.

And was it then you went on to permanent night shift?-- No, I was permanent night shift for 23 years.

By choice, obviously?-- Yeah.

And being the outbye deputy, that would mean a couple of things: firstly, the hours that you actually arrive and leave are somewhat different to the production deputy's hours?-- Yeah.

So, you wouldn't be in the position that a production deputy's in; that is, of doing hot seat changes down the pit?-- No.

And arriving and leaving at the same time as production deputies?-- Yeah.

So, you no longer had that changeover time when information could be exchanged?-- No.

But, obviously production deputies do?-- Yeah.

And they exchange information?-- Yeah.

And you would know that not only from your own observation, but you would have done that yourself when you were a production deputy?-- Yeah.

Talked to the bloke coming on, talked to the bloke going off, tell him about anything that needed to be mentioned?-- Yeah.

Problems with the panel, conditions experienced, anything that needed to be mentioned to an on-coming deputy?-- Yeah.



So, in terms of communication and knowing what was going on about various panels here, the very fact of your hours and duties put you in that position where there was a gap?-- Yeah.

And you had to rely on reports?-- Yeah.

And you would read back, if you thought it was necessary?-- Yeah.

But only if you thought it was necessary?-- Yeah.

And you saw no reason, I take it, to assume that the reports weren't accurate - they were recording what they should record?-- I can't say that.

Well, I mean, you didn't look at each one saying, "Well, this is a load of rubbish." You looked at them at face value and took the reports at face value?-- Yeah.

As all people do?-- Yeah.

You have to, don't you?-- Yeah.

And if deputies are doing their jobs right, then the reports contain the appropriate information?-- Yeah.

You put a lot of information, I think, or a lot of detailed information in your outbye reports, more so than other deputies might. I'm not being critical, I'm saying it is a difference between you and perhaps other deputies. Your reports tended to be a little fuller than others?-- I just do my job, that's all.

Exactly. All right. Now, on that Saturday you were - sorry, I'll go back a bit. I'm sorry to muck you around. You did do a number of production reports for 512, there were some occasions when you did that?-- A couple, yeah.

What I'll do is I will show them to you. As you say, there is only a few, and we won't spend long on them and I will put them into two categories. The first six are pre-extraction. There is only two that deal with the time on extraction. I don't need you to read all the details, you might like to turn them over one by one, satisfy yourself that they are your reports, I think in every case they bear your signature and in a lot of cases - maybe all cases - they are countersigned?-- Yeah.

We have six reports dealing with the period up to 20 April, that's report 3025?-- Yeah.

And then only two reports after that which deal with extraction time, is that right, and they are the last two pages you should have, 3065 and 3739?-- Yeah.

Now, in none of those as you flick through them was there anything untoward recorded by you, no -----?-- No.

----- unusual feature, it was a pretty normal panel, wasn't it, so far as you saw it?-- Yeah.

I tender that as a bundle. It might be called Mr McCrohon's reports. I should for the record mention the dates of the last two since I mentioned the numbers 3065 is 3 May and 3739 is 25 July.

WARDEN: Admitted and marked Exhibit 144.

ADMITTED AND MARKED "EXHIBIT 144"

MR MORRISON: Now, in addition to those reports you would have done outbye reports which covered walking the belt?-- Yeah.

And on every night that you were on night duty you would have walked the belt in 512?-- Yeah.

Perhaps sometimes coming out via a different roadway?-- Yeah.

Perhaps sometimes walking out the belt?-- Yeah.

And that would generate an entirely different report to a production type report?-- Yeah.

Those occasions when you walked the belt are not occasions when you go and do a general inspection of the panel?-- No.

Or indeed take readings unless you think it's necessary?-- Yeah.

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So by the time this panel came to be sealed you had quite a degree of familiarity with it over the time you had to be in 512 either in production which was a little bit or walking the belts every night?-- Yeah.

And your knowledge of the fact that it was to be sealed came from a couple of sources; firstly you knew the panel had finished?-- Yeah.

And it's obvious that you seal a panel off when you finish; wouldn't you agree?-- Yeah.

There is no reason to wait around, is there?-- Not really, no.

It's not as if you should pose the question, you know, why to seal straight away. That's not the right question. The real question is why not to seal right away. It's the obvious thing to do?-- Yeah.

So the fact that it was going to be sealed around this time was of no real surprise to you, it was the correctly sensible thing to do?-- Yeah.

And when you came in on the Saturday and found that people would have been asked to come in and seal that wasn't abnormal either?-- No.

Because often people, especially on weekends, people have to be brought in to fill up a shift if a sealing is on?-- Yeah.

It's a fact of life, no doubt with other mines as with this one, that you don't always get the rosters filled quite as easily as you would like. Sometimes people have to be asked to come in on overtime, or sometimes the union has to give their permission for people to exceed their overtime limits?-- Yeah.

None of that is unusual?-- No.

In all of the sealings that you've been involved in in the mine including this one - we will concentrate on the others for the moment - in all of those a monitor point would be put inside the sealed section, the Unor point?-- Yeah.

And the purpose is obvious, someone wants to look at what the gas is behind the seals?-- Yeah.

In fact mostly when a panel was sealed there would be a degree of interest across all of the personnel about what was going on behind the seals, it wasn't just management making inquiries?-- No.

But deputies would too and so would the miners?-- Yeah.

And the fact that the panel had been sealed and what was happening behind it would be a topic of conversation for a period of time?-- Yeah.

People would say, "What's going on behind there? What do you reckon? How's it going?", thing like that?-- Yeah.

On those other sealings the usual practice was to put one point in behind the seals?-- Yeah.

Now, when you got - let's come back to the 512 seals if I could. You hadn't worked much with Tecrete before?-- No.

So you have no idea of its properties or how it will end up once it's cured and so forth?-- No.

By which I mean whether it would be harder than brick or strong or what?-- No, that's right.

But you obviously assumed, if you didn't know, that the seals - this material had been approved for use in the seals?-- Yeah.

Not just by the management, you've got to get approval from the Mines Department too?-- Yeah.

You can't do it unless they say you can. So whatever its properties were it was obviously an approved product to use?-- Yeah.

And you would expect in the normal course of events based on your experience that also the way in which it was to be constructed would be the subject of approval from the Mines Department, the inspectors would have a say?-- That's true.

And you would, in the normal course of events, have assumed that all of those approvals were given properly for this product?-- Yeah.

When you got there on Saturday, 3 p.m. was the normal kick-off time for an afternoon shift?-- Yeah.

And Len Graham and Neil Tuffs were the other deputies; did you all three sort of get organised in the deputies' cabin and then join the men to go down?-- Yeah.

So it's entirely possible that the men were called together for a meeting and given some sort of information by Michael Squires before they went down?-- That's true.

That would in fact be pretty normal, I would have thought?-- Yeah.

On a sealing process, the men would be called together and then told so that no-one is under any misapprehension, "Remember to do this. Remember to do the seals in this order. Stay there until it's done.", and so forth?-- Yeah, that's right.

So the fact that there was such a meeting would also be a routine thing?-- Yeah.

It's normal, and sensible?-- Yeah.

Now, Michael Squires gave you some information, was that in company with Len Graham and Neil Tuffs when each spoke to you?-- No.

Were you in the deputies cabin or had you gone out to see him about something?-- Yeah, I had gone into the - outside, yeah, outside the bathroom it was.

On your way around to the start point?-- Yeah, I was going with the men, yeah.

And basically he said that there had been a haze; is that right? What did he tell you?-- I can't recall.

You can't recall what Mr Squires said?-- Not really. I don't know whether he said it or it was on Cole Klease's report.

That's what I'm interested in. You had already spoken to Cole Klease by this time?-- Yeah.

Cole Klease had given you some information?-- Yeah.

And what you can remember him telling you was you had seen a haze, CO readings were up?-- Yeah, and they are going to seal it.

And that's why they are sealing it. Certainly Cole Klease didn't say to you anything about a smell or an abnormal smell?-- No.

That would stick in your mind if he had said something like that, wouldn't it?-- Yeah.

Just as it would if you got such a smell when you were down the pit yourself?-- Yeah.

Not the sort of thing you would forget?-- No.

That's basically what Cole told you then you went around, spoke to Squires, but you can't recall what it was Squires said - or maybe Squires didn't speak to you, may be it's really Cole that sticks in your mind?-- No, Squires told me what - that they had to go and get a mixer from the 4 South Level and -----

He gave you some operational information?-- Yeah, yeah.

Details of equipment and so forth?-- Yeah.

Then you went and read Cole Klease's report?-- No, that was before I saw Squires.

Sorry, but after you spoke to Cole Klease?-- Yeah.

So by the time you spoke to Squires you had spoken to the deputy himself?-- Yeah.

And he had given you information and you had actually read his report?-- Yeah.

The outgoing deputy?-- Yeah.

So by the time you spoke to Squires you pretty much had what information you needed?-- Yeah.

That's true, isn't it?-- Yeah.

You would expect Klease as a competent, experienced deputy to tell you if there was any problem?-- Yeah.

And just as you would to him if you were in the same position?-- Yeah.

There was nothing in his report when you read it that caused you any particular concern, there was nothing unusual about it?-- No.

It was standard for the panel?-- Yeah.

Just as operations you were engaging in were standard for the panel?-- Yeah.

And when you went down with the men did you all - you travelled in one or two PJBs?-- Two.

Was there talk on the way down about anything or did people basically just sit there and wait to get on with the job?-- No, the only talk was they wanted to get it over with and get home as soon as they could.

Usual sort of thing on a weekend?-- Yeah.

Get in, get the job done, go home?-- Yeah.

And when you got down there people were putting hoses out?-- Yeah, they had to rearrange all the hoses, yeah.

Just let me ask you this - you might have to flip that map over or maybe you can remember - there is a Tecrete stopping with a mandoor between the top return and the main supply road?-- Yeah.

There were hoses through there, I think; is that right? People had put hoses through to get to the batcher down in the top return?-- Yeah.

So that door was partly open and stayed so during the sealing process?-- Yeah.

Now, you took the CO reading and got seven parts?-- Yeah.

Nothing about that that caused you any concern? That was pretty much normal?-- Yeah, well, a fortnight before it was only six, so not -----

That's absolutely not the sort of jump you would consider was

of any significance at all?-- No.

As you said, a fortnight before it was six, so there is just nothing to be concerned about, is there? You will have to respond verbally for the lady?-- No.

And then when you say you went inbye four pillars, that's in the top return?-- Yeah.

And got exactly the same reading there?-- I think it would have been different, wouldn't it?

No, seven parts?-- CH4 was up, was it?

Yeah, CH4 was up slightly, but methane - here we go - CH4 was up slightly, but the CO was the same?-- Yeah, yeah.

Now, you looked at the stoppings on the way down which you've described. You didn't touch any of the stoppings, did you?-- No.

You didn't open them or fiddle with them?-- No, no.

That's an entirely appropriate course, isn't it? If there is one lesson people were told out of Kianga, it was don't touch the ventilation, internal ventilation, while you are sealing; that's right, isn't it?-- That's right, yeah.

What you did was entirely in accordance with what people learned out of Kianga?-- Probably, yeah.

Now, on that process of sealing you've got three seals being done at the one time, there is the belt road, main supply road, top return?-- Yeah.

Now, am I right in thinking that that mandoor was probably open quite a bit to let some cool air hit the guys working in the top return?-- It was opened all the time. It was left open, yeah.

I'm talking about how far open. It would have been -----?-- No, right open.

Right open?-- Yeah.

That would give them some cool air otherwise it would be like working in a sweat box down there on the top return, wouldn't it?-- It was warm, yeah, yeah.

So far as you can recall, in the time you were down there that mandoor stayed open?-- Yeah.

Pretty much fully the whole time?-- Yeah.

Now, on your walk down that top return you certainly didn't get any smell, did you?-- No.

Nothing at all that you would liken to that No 1 mine smell?-- No.

And no haze either?-- No, I didn't see any haze.

And am I right in characterising everything you saw and experienced on that inspection as simply being absolutely usual?-- Yeah.

And you told George Mason as much when he came down?-- Yeah.

You told him what you had found and told him that your opinion was nothing unusual here?-- Yeah.

And in fact when you did the inspection with him you and he agreed on that, you each found basically the same thing, didn't you?-- He couldn't get there.

Sorry, I don't mean you got well down, but you did go some distance around you walked down to No 3, you found you couldn't get through and came back up and had a look around generally?-- Yeah.

But you and he were in agreement generally about what the signs were and what the measurements were and so forth?-- Yeah.

And I think I'm right in saying that you and he had a little discussion about it at the end of your inspection, basically that people might have been panicking a bit here because there just wasn't anything unusual?-- I don't recall that.

Don't you? All right. Okay. But that was no doubt a thought you had in your mind?-- No.

It was certainly - you thought nothing unusual, just panels doing what it's doing?-- Yeah, yeah.

And any view you expressed to George Mason about what you found certainly would have been, "Look, this is all normal here. There is nothing unusual, can't find anything abnormal."?-- Yeah.

And no-one else suggested to you that they had found anything abnormal, did they?-- No.

Not only George Mason, but anyone else. No-one else said, "Found something, seen something, experienced something." No-one said that?-- No.

Now, when he came down, that's Mr Mason, you not only told him what you had got but actually showed him the tubes?-- Yeah.

Was that your normal practice? Would you hang on to the tubes or -----?-- Yeah.

To be actually able to verify what it was you had seen?-- Yeah.

And then you would chuck them into the rib, I suppose?-- Yeah.

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On the second occasion when you actually moved into the panel, maybe the third, you went down No 1 cross-cut towards 4 and 5?-- Yeah.

And you took a reading down there, I think, and got pretty much the same as everywhere else, I'm talking about CO?-- No, I didn't take - I - no, I give George the tubes when we come back and he took them back up to the top seal. I stayed at the belt road seal and I only took a CH4 reading down there.

Again on that inspection down there, no question - there is no smell, no haze?-- No.

Nothing abnormal?-- Only a bit warmer, that's all, fairly warmer.

That's entirely consistent with the two returns at the bottom, two drives having been sealed off some time before?-- That's right.

Now, finally Neil Tuffs came down to relieve you and he didn't say anything to you about any perceptions he had about signs or anything untoward. He expressed no view about that to you?-- No, not then, no.

And any view you expressed to him would have been consistent with what you found, namely, that things were normal?-- Yes.

And then you went off and inspected other areas including 6 South, 1 North-west and so forth?-- Yes.

Did you do Wal's workshop by any chance when you went off?-- No.

Would that just not be part of your normal route?-- No, well, what's a name would have done that. Lenny Graham would have done that one at that time, yeah.

And then you continued on doing things down the mine, and no doubt you came up the top a couple of times?-- Yeah.

Till finally you knocked off at 6.30 in the morning?-- Yeah.

Now, in that period I think I am right in saying also no-one said to you in that time anything about a smell or a haze or anything untoward?-- No.

It was all just normal?-- Yeah.

So, you went away from the mine at that point having in your mind that this was just usual?-- Yeah.

And you were due to come back for the Sunday night shift?-- Yeah.

Rather, the Monday night shift starting at 11 o'clock Sunday night?-- Correct.

And that again is a reflection of the fact that you were the outbye deputy; everyone else was due there at 10.15 or thereabouts?-- Yeah.

Now, when you arrived back on that Sunday night you obviously went and got changed first because you knew you would be going down the pit?-- Yeah.

Did you speak to anyone in the bathroom getting organised there?-- Only Bobby Davidson.

And Bobby Davidson is the bathroom attendant?-- That's correct.

You didn't see or speak to Terry Vivian?-- No, I didn't see Terry Vivian till he moved up in the Rover. I think they were over in the workshop getting something.

Now, from the bathroom you went around to the mine monitor?-- Yeah.

070295 D.20 Turn 10 mkg (Warden's Crt)

And you did that sort of deliberately in the sense that you didn't just happen to be there and think, "Oh, well, I'll look at this mine monitor while I'm here." You wanted to follow your normal practice -----?-- Yeah.

----- of looking at the monitor, and did you look at it through the glass from the start point?-- Yeah.

And noted CO at the levels you told us and oxygen and methane, so you looked at those three things?-- Yeah.

Certainly those three?-- Yeah.

And nothing that you saw there caused any alarm in your mind, did it?-- No, not then, no.

So far as you could tell at that time, the panel was doing what you might expect a panel to do?-- Yeah.

After you seal, you are inevitably going to get a build-up of CO and methane?-- Yeah.

All right. Then you told us about the levels. I don't want to go over those again, but you told us or told, I think, Mr Clair that your assessment was at the time -you actually had it in your mind at the time, "This is getting close to the explosive range."?-- Yeah.

And what did you - was it the methane that told you that and nothing else?-- Yeah.

Just the methane?-- Yeah, and the oxygen dropping too.

That it was getting close to the explosive range?-- Yeah.

And that of itself was no great concern to you, was it, of itself? Just the mere fact that a sealed panel was getting close to the explosive range doesn't mean very much, does it?-- No, no, no.

And every other panel in the whole mine had done that -----?-- Yeah.

----- at some time or other?-- Yeah.

And men had gone down while it was doing it. So, by itself that tells you not much, does it?-- No.

Now, you said that you thought, or didn't expect to see people down the mine?-- Yeah.

Is that something that you have really thought about since the incident happened?-- No.

Was that a thought on the night, was it?-- Yeah.

And did you say that to Squires?-- No.

Did you say to Squires, "Listen, Squizzy, I don't think or

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reckon people should be down the mine."?-- No, I didn't say that to him.

Any particular reason why you didn't?-- Because the other two deputies, they're in the Mines Rescue, and the check inspector, which was Terry Vivian, he was there, and if - I thought, "Well, they must know something I don't know."

What you said before was that you were, as it were, reassured or your concern was allayed, however you want to put it, by the fact that the check inspector had gone down and the other deputies had gone down?-- Yeah.

Well, the check inspector hadn't gone down, had he?-- Well, I didn't know that, did I?

You certainly knew it before you hit the pit?-- Yeah.

Because he stopped beside you in the PJB?-- Yeah.

There couldn't have been any doubt in your mind. He is the check inspector at the mine?-- Yeah.

Did you then say to Terry Vivian, "Listen, I don't know about going down the mine tonight. What do you reckon?" That conversation didn't take place, did it?-- No.

And in fact the check inspector, Terry Vivian, did go down the mine?-- Yeah.

Now, there was someone else with him; there was Parker, the Tecrete guy?-- Yeah.

You wouldn't pay much attention to him, would you? He is just a Tecrete guy and not a miner as experienced as Terry Vivian?-- I don't know. I don't know much about him at all. I only met him the night before.

Now, what you have told us about your concern and about being reassured by people having gone down and so forth, that didn't make it into your statement when you spoke to the inspectors. I am just wondering why that's so. Can you tell us why that is so? In your statement with the inspectors you went and spoke to Squires, he told you what they were doing, he told you about Ken Guest coming in at 1 a.m. and you said, "Oh, well, I'll go down and inspect the belts and check the seals."?-- Yeah.

None of this stuff got to your statement with the inspectors. Can you tell us why that's so?-- Not really.

You just didn't remember it at the time?-- Possibly.

All right. Now, the other comment you attribute to Mr Squires which is the one, "It's going through quick, it should be through in the morning.", that didn't make it to your statement with the inspectors either. Can you account for that?-- No, not really.

Just slipped your mind at the time?-- Possibly, yeah.

But in terms of the information you got on that night when you arrived, there is a number of sources for it. You certainly read John Blyton's report?-- Yeah.

He is the outgoing deputy?-- Yeah.

You know him to be a terribly experienced, very experienced deputy, don't you?-- Yeah.

And you would expect if there was any reason to be concerned about the safety of the pit -----?-- Yeah, it would have been in there.

----- it would be in his report, wouldn't it?-- Yeah.

And the fact that it wasn't in his report would lead you to assume that in his mind there wasn't a problem; is that right?-- Yeah.

That's why you draw some comfort from the fact that John Blyton had been down and here is his report -----?-- Yeah.

----- saying nothing is a problem. He is in fact - in terms of years and so forth - he is much more experienced than Michael Squires is?-- He is much more experienced than me, yeah.

He's been through it all -----?-- Yeah.

----- John Blyton, hasn't he?-- Yeah.

Been through Kianga, the whole lot?-- Yeah.

And so you got information from his report, and you also got information from the Unor screen about the levels of the gases and so forth, and you connected them in your mind as to the significance of the methane, so you had all of that information?-- Yeah.

But you, nonetheless, took the view that it was reasonable to go down the pit, didn't you?-- Yeah.

You must have done, you went down?-- Well, I went down, hey?

Yes, and you are not a reckless person, are you? You are not safety reckless?-- No.

You would pay due regard to proper safety questions?-- Yeah.

And behave accordingly?-- Yeah.

So, if you thought in truth that there was any problem about going down that night, you wouldn't have gone down?-- That's right.

Now, doesn't it follow from that that in your assessment that night, taking into account what you had seen and learned and

read, you, nonetheless, made the judgment that it was reasonable to go down?-- Yeah.

And that's a judgment which, in your experience, would be reasonable for other people to make, wouldn't it?-- Possibly, yeah.

Now, there is just one other thing I want to ask you about. When you came that night to the mine, that was the first time you had seen Squires since the sealing, isn't it?-- No, that's the first time I saw him since -----

Well, he had been there -----?-- On the Saturday afternoon, yeah.

Sorry, that's what I meant. He had been there when the afternoon crew came on?-- Yeah.

Then he went?-- Yeah.

Now, I think Squires asked you at that point about what you had - how did the sealing go, what had you seen, what were your thoughts about the sealing of the panel. Didn't Squires ask you about that on the Sunday night, maybe as colloquially as, "Listen, George, how did it go, how did the sealing go"?-- No, I don't recall that.

Can I suggest to you he did ask you about that and you gave him some information about your and George Mason's inspection, told him basically what you and George had seen and experienced?-- I don't recall. I could have done, I don't know.

It's quite possible, isn't it, that that would have occurred?-- Could have done.

His seeking information and you giving it?-- I don't recall it actually.

Well, you are not denying that it happened, it's just that you can't bring it to mind?-- No, I can't.

Now, can I just ask you one or two other things? You mentioned that you hadn't received any training from time to time. I think you were concentrating on the question of spontaneous combustion when you answered that; is that right?-- Yeah.

You had in fact received some training in a whole variety of things over time, various courses, safety meetings and things that you attended?-- Yeah.

Can I read a few and see if you agree with them? Pardon my eyesight, but I have got to look at these a bit more closely. First-aid in September '91 - I will just read them through. I don't need you to say "yes" to every one at the moment. First-aid in September '91, emergency procedures in October 1990, firefighting 25 March '91, traffic rules April '94, mining methods October '93, accident hazard reports May '93,

significant incident reports March '94, defect reports May '93, self-rescuers - you told us about that - April '94, and other self-rescuers in May '93, and one concentrating perhaps on cable flashes and things or electrical hazards March '94. There were quite a number of them, weren't there?-- Yeah, yeah.

You weren't meaning to indicate when you gave those answers that you hadn't been trained in anything, you were concentrating on spon com?-- Yeah.

Now, it's true to say, I think, isn't it, that in terms of your day-to-day experiences down the mine, the things that you are confronted with, a falling roof or rollers becoming jammed on the belt and causing a heat problem, all that sort of stuff, spon com incidents are not what you strike every day, are they?-- No.

You have to deal with a lot of other more important and safety threatening things than that day to day to day, things like miners getting hurt by cable cars, things like cables being crushed and arcing, things like the roof falling, all of that sort of stuff. That's the meat and gristle of your day-to-day mining?-- Yeah.

Can I ask you one last thing, and if I can just take you back to the sealing for a moment, that's the Saturday night. When you were relieved by Tuffs, you said that the belt road seal was pretty much finished?-- Yeah, I said it won't be long, yeah.

Can you give me an idea of the heights of the top return and the main supply road seals?-- Well, the top return would have been probably chest high to me, and the main supply road - well, they were only setting it up because they had to get the mixer out of the belt road because they had to do it from the inside, they couldn't do it from the outside, so it had to come back out before they could start on the supply road seal.

So, they proceeded perhaps, if we look at the height of the main return, what, about halfway up?-- What's that?

The top return seal was about chest high, halfway up the drive?-- Yeah, yeah.

The other one they were about to start on?-- Yeah.

I have nothing further, thank you, Your Worship.

CROSS-EXAMINATION:

MR HARRISON: Thank you, Your Worship. Mr McCrohon, just turning to what you found out on Saturday, 6 August when you turned up for work. You found out, as I understand from what you have said today, from Cole Klease something about a haze

and also something about a reading as high as 10 ppm CO in the 512 return; is that right?-- Yeah, something like that.

And you are not quite sure whether it's something he told you or whether it's something you picked up from his report, but certainly it's something you learned at that stage?-- Yeah, yeah.

Now, did that in any way concern you at that stage in the sense that you felt you should try and find out more?-- No, I only went down there just because he said there was a haze.

All right. At that stage you felt that there could have been a number of explanations for a haze?-- Yeah, yeah.

Only one of which might have meant a potential heating or a possible heating?-- Yeah. Well, if it was still there I would have investigated further, see.

Now, you were asked some questions by Mr Clair earlier. He asked you whether you would have been concerned if you had known a number of things. He mentioned to you a slight tarry smell in June; you remember that?-- No, I didn't know nothing about that.

But do you remember him asking you about that?-- Yeah.

That's what I am asking you. And he asked you about a benzeney smell having been detected on the Friday in 512; do you recall him asking you that earlier?-- Yeah, yeah.

And you were asked whether or not - had you known about those matters - whether or not that would have concerned you. You said before that you did - that it would have concerned you; do you recall that?-- Yeah.

Now, had you known all those things as at 6 August, that there had been reports, or people had said something about these particular smells, would that have caused you to, from your experience, look at the CO readings for the particular panel, 512?-- Yeah, possibly.

And from your experience, that would have caused you to look at the readings parts per million?-- Yeah.

Now, if it were the case that leading up to sealing there wasn't any sharp or rapid increase of the type you discussed with Mr Morrison before, would that have eased your concerns somewhat?-- Yeah, I suppose - no - oh, yeah, I suppose so.

You see, you had some familiarity with 5 North-west in 1986, didn't you?-- Yeah.

And you knew that from early morning on the day of sealing up until late afternoon when it was sealed there was a very rapid rise in CO parts per million?-- Yeah.

Now, was it your experience that if there was a heating, you would expect there to be that rapid sort of rise prior to



sealing? Is that the way you thought of things prior to then?-- No.

Was that, to you, an indicator that there was a heating, the fact that there was a rapid rise in CO parts per million?-- If there was a rapid rise?

Yes?-- Possibly, yeah.

Now, you have spoken of conversations you had with Michael Squires on the afternoon of the Saturday. You have said that you weren't present for a meeting of the men?-- Yeah.

You, in fact, spoke to him about the particular duties you had to undertake that day?-- Yeah.

You considered there may have been a meeting but you weren't present for it?-- Yeah.

You were also asked earlier about whether or not you were aware that all the men had to stay on until the sealing was completed; do you recall being asked that?-- Yeah.

And my note of that conversation is that - of that question is that you said something to the effect that you were told that by the men down there?-- Yeah.

In other words, that they had been told that they had to stay on until the matter was completed?-- Yeah.

Did any of the men down there at the sealing tell you at all about anything that had been said at a meeting involving Mr Squires or Mr Mason or anyone else?-- Not that I recall, no.

And I take it, following from that, none of the men down there told you that anything had been said in relation to a smell that may have been detected in 512?-- No, no-one said nothing about that.

Now, just turning to sealings generally, you have been involved in most of the sealings, have you, at the No 2 Mine?-- A fair few anyway.

Now, in this particular case would you have expected in the normal course of events that 512 would have gone through the explosive range sometime in the first few days after sealing?-- Yeah.

That's what you expected to happen?-- Yeah.

And certainly when you looked at the Unor screen when you started on the Sunday evening, what you saw was consistent with what you thought was going to happen?-- Yeah.

So there was nothing that surprised you?-- No.

The only thing is you say that you felt that there was some sort of policy or rule that the men could not be down there at the time the panel was sealed?-- Yeah.

You told us that you felt the check inspector, meaning Terry Vivian, and the other deputy must have known something that you didn't know?-- Yeah.

You didn't inquire of Terry Vivian when you saw him as to what it was that he knew that you didn't know?-- No.

You have told us how you finished at about 6.30 a.m. on the Sunday when you did your double shift on the Saturdays?-- Yeah.

Did Cole Klease and Lennie Graham finish at about the same time as you?-- Yeah.

Did you, Cole and George have a talk with Michael Squires at about the end of that shift?-- No.

You can't recall?-- I don't recall it.

You can't recall it?-- No.

You can't recall any conversation along the lines of Cole reporting about what had been done in terms of pulling out the section tranny, the high tension cable and directing bag stoppings to establish the return air flow past the seal?-- No.

Are they things you would expect would be discussed at that level?-- Possibly, yeah, but - possibly, yeah.

But you can't recall being present for that conversation?-- No.

Thank you. I have nothing else, Your Worship.

EXAMINATION:

MR PARKIN: Mr McCrohon, just a few questions: you stated that half the time you did not see the deputies and that you took most of your information off the deputies' reports?-- Yeah.

Now, in answer to Mr Morrison, I think he suggested that you

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would have different times than the normal shift?-- Yeah.

Was that the main reason for not having any communications with anyone?-- Yeah.

How would your normal communications - I mean, did anybody talk to you at any time during this particular weekend or prior to the incident?-- No.

Well, how were communications carried out with yourself; you know, for instance, I mean mid-week, how would communications transpire?-- I haven't got a section through the week.

But I mean your normal job, did anybody speak to you at all, or you just came to work, looked at the reports and went home again?-- Yeah.

So you had no communication with anyone else?-- Only the undermanager if he was still there, yeah.

How often would that be? How often would you see the undermanager?-- Start of every shift.

You would see him at the start of every shift?-- Yeah.

How would you describe communications between shifts, generally speaking, at Moura?-- I think they were all right. I mean, I'm excluded from that, but I think as far as the production crew is concerned, I think they were all right.

What about weekends?-- I suppose - I don't know. I suppose they are all right, too.

Did deputies always take each other off at the weekends and communicate to each other what had transpired in that shift or raise any concerns?-- I suppose they would have, yeah.

On the Saturday, we did talk about the haze, but on Cole Klease's shift on the 6th, you saw, I think, on his report that there was 9 to 10 ppm of CO; is that right?-- I think so, yeah.

That's in the top return, and that resulted in over 20 lpm of CO. Did you know that?-- No.

So, nobody ever told you at any time what the readings you took represented in terms of litres per minute?-- No.

You realise, of course, that the readings you had taken on that Saturday afternoon, I think, was 7 ppm which resulted in over 14 lpm of CO. Did you know that with over 10 lpm there is a problem in a mine? Did you know anything about that at all?-- I know nothing about litres.

Did you see a graph on the undermanager's wall at any time over that weekend?-- Oh, I can't recall. Could have been, could have not. I don't know.

So, nobody at any time explained to you what it meant?-- No,

that's correct.

When you took the readings, you reported them, but nobody explained to you what they meant?-- In litres?

Yes?-- No, that's right.

I mean, for instance, if you have got a slow quantity of air and you take a reading in an airway and you have got a high quantity of air and you take a reading in an airway, you are going to get different results, so somebody has to explain to you what you are doing; do you understand that?-- Yeah.

When you came to work on that Sunday night shift prior to the explosion - and I'm just reiterating this question that Mr Morrison asked you - were you concerned about going underground?-- No, not really. It was just that I just - I don't know, I seemed to have something in my mind that while it was going through the explosive range they weren't supposed to be down there.

Yeah, well, there is a difference between an explosive range and no leak. If you have got potential spontaneous heating, then that's a different story, isn't it?-- Yeah.

You understand that?-- Yeah.

Of course, on Sunday night, you know for a fact that the CO level was 146 ppm, your oxygen was decreasing and you had got nearly 5 per cent of CH<sub>4</sub>?-- Yeah.

But you still weren't concerned about going underground?-- Oh, well, not - straightaway I was, yeah, but when the others had gone down, I thought - as I said, they must know something more than I do.

Did you have any discussions with the undermanager? I mean, did he say - did anybody talk to you before you went underground on that Sunday evening and raise any concerns about safety or any other matters?-- No, no.

I have no further questions, thank you.

EXAMINATION:

MR NEILSON: Just a few questions, Mr McCrohon: in an answer to Mr MacSporran you said that you did not believe that anybody should be underground when an area was going through its explosive range?-- Yeah.

Can you tell the Inquiry why? I mean, why do you say that?-- Well, I just thought that that was a rule and that was given.

I mean, why would it be a rule? I mean, does it indicate danger?-- Yeah.

What would be one of the most dangerous sets of circumstances you believe you could have in a mine such as Moura No 2 - just one, not necessarily the most-----?-- Possibly a cable flash.

A cable flash would be worse than a fire?-- Depends where the fire was.

Well, why would a cable flash be dangerous?-- Well, most faces were all predrilled.

Now, my question is why would a cable flash be dangerous?-- Because it causes an ignition.

Well, given a set of circumstances where you may have a heating in an area contaminated with carbon monoxide, methane and a sufficient quantity of oxygen, what's the circumstances there - can't you have an ignition there?-- Yeah.

So, would it be fair to say that in any circumstances where you could have a potential ignition-----?-- It would be dangerous, yeah.

Would be dangerous?-- Yeah.

Probably equally as dangerous?-- Yeah.

In a question put to you by Mr Morrison, you answered that, yes, there are more important things than spontaneous combustion; for example, miners getting hurt, getting tangled up in cables, etc. Did you really mean that?-- Well, buggered if I know.

I would ask you to think very carefully and inform the Inquiry. I will just repeat it for you?-- Yes.

My understanding of what you said was that you agreed with Mr Morrison that there are more important things to be concerned about on a daily basis than spontaneous combustion and the example was miners getting tangled up in cables, etc, or getting hurt from rib falls, and you answered "yes"?-- Yes.

I am asking you now to think very carefully as to whether or not you really meant that?-- Yeah, well, I didn't take the question the way it was put, then.

You really didn't understand that question?-- No, not if it was meant that way - the way you put it.

Well, yes, I understand that. You have had a lot of questions put to you in a short space of time?-- Yeah.

You have indicated to a number of the questions that your belief of what would cause a concern in terms of spontaneous combustion would be a rapid rise in carbon monoxide parts per million?-- Mmm.

You have indicated that you have had absolutely no training at

all on the condition of spontaneous combustion and that you weren't aware that the industry in general, particularly at Moura No 2 Mine, had sort of bypassed the old system of recognising the potential dangers of carbon monoxide measured in parts per million and people have now realised that the more important or the more exact way to relate carbon monoxide to spontaneous combustion was to measure it in litres per minute?-- No.

You indicated-----?-- No, I had no knowledge of that whatsoever.

Yet you are a deputy at No 2 Mine?-- Yes.

You are a statutory official?-- Yeah.

You have responsibilities under the provisions of the Mines Act - or Mining Act?-- Yeah.

Do you find that somewhat strange, or do you find it acceptable that a person in your position has received absolutely no training to be able to understand what it is that you actually physically go and detect and then put in your report?-- That's right, yeah.

What's right, sorry?-- That I have no training, yeah.

Do you find that acceptable?-- No.

Because had you had some training and understood that in the new world - that you are obviously not aware of, because you haven't been trained in it - and as Mr Parkin has indicated to you, the reading that's recorded in Mr Klease's report on 6/8/94 where he indicated he found 9 to 10 ppm of CO and a velocity reading of 1.6 metres per second - you have indicated that that was of no concern to you because with 9 to 10 parts per million, that's no cause to worry?-- No, not there, no.

If I was to indicate to you that in the new world, and looking at spontaneous combustion, that anywhere over 20 lpm is considered to be in the danger zone and that that particular reading that Mr Klease took was a reading of 21.04 lpm, what would you think about that? I mean-----?-- Well, it would have been different, wouldn't it?

Are you concerned, then, that you were confronted with a report which, in fact, was indicating that there was a dangerous situation down the mine and because of your lack of training, you did not know that and yet you are a statutory official at the-----?-- Yeah, that's right, yeah.

You related in an answer to Mr Martin that even though you believed nobody should be underground whilst an area was going through its explosive range, that it was up to the individuals to make their decision as to whether or not they should go down the mine?-- Yeah, I remember saying that.

Well, can I ask you to think about that answer as well, and advise the Inquiry as to whether or not that is an appropriate

answer for you to give?-- I think so.

Well, you are suggesting to the Inquiry that there are people appointed at the mine with statutory responsibilities, the most important being to protect the safety of the workers at the mine, and they had no responsibility as to whether or not to either stop men from going underground or to advise them of a dangerous situation that existed and that the matter be left to individuals who, like yourself, could be entering into an extremely dangerous situation with no knowledge of it?-- Oh, yeah, I see what you mean.

So, you are not suggesting that people have a right to abrogate their responsibilities that they are charged with?-- No, that's right.

By statute?-- Yeah.

So what would your answer to that question be then? Who is it up to? The individuals or people charged with the responsibilities?-- The people charged with the responsibilities.

But that didn't happen, did it?-- No.

In another question put to you by Mr Morrison you indicated that you couldn't have men staying out of a mine or not going down a mine where there could be a period of months before an area went through its explosive range after it had been sealed. I mean that's really a non-event question, isn't it?-- A non-event answer to.

Yes, I would suggest that because obviously you would know, if the proper precautions and the necessary information was gathered, that if it was going to take months before an area went through its range you would wait until you went to a danger period?-- That's right.

Then you would withdraw the men, wouldn't you?-- Yeah.

You also indicated that you haven't had the occasion to make a decision on whether or not men would go down the mine in circumstances such as 7 August 1994. Can you tell us if you have ever had any occasions in your role as a deputy to either withdraw workmen from an area or to stop work in a section because of a potentially dangerous situation?-- Yeah.

You have?-- Yeah.

So you do accept that as a deputy you do have that responsibility?-- Yep.

You have also indicated that on the night in question of the incident, that because two other deputies who in your view were very experienced deputies, they were members of the Mines Rescue Brigade, along with the check inspector Terry Vivian, who eventually did go down the mine even after you had spoken to him, that that erased any concerns that you had because you believed that they must have known something that you didn't?-- Yep.

Can you say that even though you may have had that feeling and that belief, and I'm not questioning that, but can you tell me whether or not there was any element of doubt in your mind at all when you went down that mine?-- There was straight away, but not - when I got there, when I arrived there there was, but after there wasn't, no.

Can you tell me if there was anything said or any conversation that occurred that erased that element of doubt?-- No.

So it was simply because you saw the others going down the mine?-- Yeah.

And whilst you were -----?-- And also the previous report, yeah.



So whilst you were in fact on your way down the mine there was no niggling little feeling or something telling you that maybe something's wrong?-- No.

Once you were blown over, and I'm just asking you if you can recall this?-- Yeah.

How long did it take you in your mind to understand what happened?-- I couldn't say. Wasn't that long.

So you knew it was an explosion?-- Yeah.

Can you recall if you would have at the time thought where that explosion may have come from?-- No, not really, no.

So you didn't have some feeling or thoughts in your mind that, "Oh, yeah that's 512 that's gone out."?-- No, not straight away, no.

But that did occur after?-- Yeah.

How long after?-- Probably when I was on the surface after I got out.

So you probably wouldn't have had too many other thoughts on your way out in any case, would you?-- No, that's for sure.

Can I ask you this: you say that it did come to your mind that it happened in 512, or that something happened in 512?-- Yeah.

Was that something that came to your mind or was that after you had discussions with other people?-- No, something that come to my mind.

So it's fair to say that even though you didn't have any niggling feeling it didn't take you long to put together in your mind what happened and where it happened?-- Yeah.

If we can go back to the start, can I ask you what is your understanding - and probably I should ask it this way first: were you aware that the time for sealing 512 Panel was brought forward?-- No.

So when the decision was made to seal the 512 Panel you didn't realise that initially it was going to be done some time later?-- No, I didn't know that.

In your mind do you know what the reason was for sealing 512?-- What, now or then?

No, then?-- Only that it had been completed, finished.

I'm just trying to pick up on some of the questions that you have answered before?-- Yeah.

So at no stage in your mind did you associate that with a heating?-- No.

Or a potential heating?-- No.

Thank you, Mr McCrohon.

EXAMINATION:

PROF ROXBOROUGH: Mr McCrohon, Mr Morrison read out a list of training courses that you had attended; could you give us some indication of the amount of time that was involved in those courses? I think you mentioned things like First Aid, cable flashes, self-rescuers and so on. Did it take days or were they hours or -----?-- The First Aid took three days and the rescuer took about half an hour, 40 minutes and the other ones -----

So apart from First Aid they were all fairly short, perhaps courses of instruction, were they?-- Yeah, yeah.

I notice that all of those - from memory all of those that Mr Morrison mentioned were in the period 1993 and '94; do you recall having any similar courses of instruction between 1976 and 1993, 1976 being when you qualified as a deputy?-- Not that I recall.

Were any of those courses that Mr Morrison referred to specifically for deputies or were they for all of the workforce, would you know?-- I think they might have been for all the workforce.

Thank you.

EXAMINATION:

MR ELLICOTT: Did you have any difficulty breathing through your rescuer as you were making your way out of the mine?-- Mmm.

What form did that difficulty take?-- Burning at the back of the throat.

So the rescuer got quite hot?-- Yeah, it did.

Thank you. That's all.

MR CLAIR: Your Worship, just one brief matter.

RE-EXAMINATION:

MR CLAIR: Mr McCrohon, you mentioned in the course of your evidence that you were there whilst at least the commencement of the seals were being built, one was almost finished when you left and then there were two others that were only part way up. Do you recall any difficulty in relation to the baskets, the Tecrete baskets not staying up vertical when the material was being poured into them? It may be that they didn't get up high enough while you were there for this problem to be experienced?-- No.

But with the one that was higher do you remember whether there was any difficulty with that?-- Yeah, there was a couple, a couple had to go around the other side and straighten back up, yeah.

And how -----?-- That was in the belt road, yeah.

How did you go about straightening them back up?-- Just clamped them, clamped them on both sides.

While you were there was there any step taken of using a rope to ensure that the baskets stayed up vertical whilst the material was being poured?-- No, not while I was there.

Now, on the ground in the area where the Tecrete seals were being built was there some preparation made for the installation of the Tecrete seal?-- Yeah, yeah.

Were you there when that was done?-- Yeah, yeah.

And how was that done?-- It was done with a trench about so wide and so deep.

You are indicating about nine inches there? You just indicated with your hands?-- Yeah, so wide and so deep.

That doesn't show up on the record, I'm just trying to get it on the record. Is that about nine inches you are indicating with your hands, that distance you indicated?-- Yeah, probably. About - yeah.

Is that right? It's just that I can't see the distance either. That -----?-- Yeah, about that wide, yeah.

You agree that's about nine inches that you are indicating there?-- Yeah.

Were there then some bolts drilled down into the floor?-- Yeah.

Was that the case in respect of each of those three seals? Are you able to say whether there were bolts drilled into the floor?-- Yeah, well, see the belt road seal was - it had been half finished before and the same with the other one and the other -----

RXN: MR CLAIR

WIT: MCCROHON G L

Sorry, which other one?-- The top seal, the top return and the supply road seal, it was done with a gap left wide enough for the machines to come out of.

But either ----?-- Then the supply road seal had to be - the trench had to be dug in the bottom of the supply road seal, yeah.

So you saw the supply road seal being done?-- I saw the supply road trench being done, yeah.

And that's the No 2 heading we are talking about?-- Yeah, yeah.

And you saw bolts being put into the ground?-- In the ----

Into the trench, where the trench was?-- Yeah.

Were those bolts put in vertically?-- Yeah.

That is straight up and down?-- Yeah.

They weren't put in at an angle in any way?-- No, no.

Up the top were there some bolts put into the roof?-- No, they were already in there.

They were already in there?-- Yeah, that part was already done.

And were you able to see those bolts?-- Yeah.

The ones in the roof, I mean?-- Yeah, those vertical ----

They were vertical, they weren't put in on any angle?-- Not that I recall, no.

Sorry, Your Worship, that's a matter I should have covered in chief. I don't know whether there are any other questions that arise, it just might save recalling somebody else in relation to that. I have no further questions.

FURTHER CROSS-EXAMINATION:

MR HARRISON: Mr McCrohon, you were asked before by Mr Neilson about the most dangerous type of situation that you could encounter in No 2 and you said something about cable flash; do you recall that?-- Mmm.

And when he took you to task over that you said something about depending on where it was it could cause a fire and you then went on to make some comment about most places being pre-drilled; what did you mean by that, particularly the relevance - the reference to most places being pre-drilled?--

Well, the faces are drilled ahead to bleed the gas off them.

Yes, and what danger did you see as potentially arising from that? Are you talking about a danger at the work face or somewhere else?-- No, at the work face.

At the work face?-- Yeah.

In the sense that if a situation was arrived at whereby one of those boreholes was intersected is that what you mean?-- Yeah.

Thank you. I have nothing further, Your Worship.

FURTHER EXAMINATION:

MR NEILSON: I omitted to ask you one question before arising from Mr Martin's questions to you. Are you colour blind at all?-- I don't know. Don't think so.

Do you have any impairment at all in recognising colours?-- No.

Can you tell me what colour that folder is, the one in front of Mr Windridge?-- Yeah, that's red.

Thank you.

WARDEN: Thank you, gentlemen. That's all. We will adjourn for lunch. Resume at 2 p.m..

MR CLAIR: Perhaps the witness could be stood down.

WARDEN: The witness is excused and may stand down and leave, thank you.

WITNESS EXCUSED

THE COURT ADJOURNED AT 12.55 P.M. UNTIL 2 P.M.

THE COURT RESUMED AT 2.03 P.M.

MR CLAIR: If it please Your Worship, I call Gregory Gordon Bennedick.

GREGORY GORDON BENNEDICK, SWORN AND EXAMINED:

MR CLAIR: Your full name is Gregory Gordon Bennedick; is that right?-- Yes.

You are employed as a miner at Moura?-- Yes.

You started in the mining industry in about 1972 at Kianga; is that right?-- Yes.

You transferred to Moura No 2 in December 1975 and then you were at the Moura No 1 mine for some time before going to No 4 in '79 and back to Moura No 2 in '87; is that so?-- That's right.

And you have been at No 2 ever since?-- Yes.

Now, you were rostered to work on what in fact would be the Monday night shift but commencing at 10.15 on Sunday, 7 August last year?-- Yeah, that's right.

And you went to work arriving there at about 10.15 p.m.?-- Yeah, that's right.

After you arrived there did you go to the assembly point?-- Yeah, I did.

And were there other members of the crew there?-- Yeah, all crews were there.

Was there any discussion at all about what the position was underground?-- No, there wasn't at all.

Any discussion in relation to the fact that 512 Panel had just been sealed?-- No, nothing.

Were you aware of the fact that 512 Panel had been sealed the previous night?-- Well, not really.

Had you been to a union meeting at all that morning?-- No, I didn't.

When did you become aware that 512 Panel had been sealed the previous night?-- Well, it was after the explosion.

After the explosion?-- Yeah.

At the assembly point in behind the screen in the inside room

- in behind the glass, I should say, in the inside room there is a monitor room, the Unor screen?-- Yes.

Were you in the practice of looking at the readings that were shown on that Unor screen?-- No, I wasn't.

Did you know anything about the significance of those readings?-- No.

Did you have any knowledge at all of spontaneous combustion?-- No.

Had you ever received any training in relation to spontaneous combustion?-- Not really, no.

What about carbon monoxide readings, did you know anything about the significance of those?-- No, I didn't.

Ever heard of a Graham Ratio or anything like that?-- No.

Now, after you assembled there some step taken towards assigning miners to various places that night?-- Yeah, well, I had to get the gear for the crews to take down below, drill tips and all that, water bottles.

What was to be your job that night?-- I was on transport.

On transport?-- Yeah.

Was that a job you regularly did?-- Yeah, I did that all the time.

So, you were a transport driver. Did you serve all the sections that were working?-- Yes, I did.

Whenever you were on duty?-- Yeah.

Well, one of the crews that night was to go to 5 South?-- Yes, that's the one I took down.

And the other one was to go to 1 North-west; is that right?-- Yes, that's right.

Now, in order to take the crew down there what did you do? You would have had to load up some stores; is that right?-- Yeah, water bottle and drill tips, that's about all.

Okay. Were you given any special instructions this night as to what you were to do after you took the crew down?-- Well, I generally filled the oil drums and everything up after I drop the crews off, that's all.

That's your regular practice?-- Yeah. I change rubbish bins too.

And then what do you do after that as a matter of course?-- Well, I just wait around. If anyone wants any gear, I just go and get it. I pick up bolts and plates and all that sort of thing for them, bolts and that.

Ordinarily you would stay down there?-- No, I would go back up top and sit at the phone.

You would go back up top?-- Yeah, yeah.

You wouldn't wait down at the section until they wanted you to go and get something?-- Well, generally you don't because once they leave the crib room they go up the face and I go up the surface and they just ring the lamp room.

And then you took anything down?-- Yeah, then I take it back down.

Would you also take something down to another section if that was necessary?-- Yeah.

You are not restricted to one particular section?-- No, do the whole lot.

Now, did you receive some special instruction from Michael Squires before you went down this night as to what you were to do -----?-- No, not really.

----- after you took the men down?-- No.

Did you have any conversation with him before you went underground?-- No.

To take the men down?-- No, didn't talk to Michael at all.

Well, who drove the PJB down?-- Dave King.

Was he a member of the crew?-- Yeah, he was.

And you jumped in the back; is that right?-- Yes.

It was after you had loaded the gear on?-- Yeah.

And you all went down to 5 South?-- Yeah, that's right.

After you arrived down there did you carry out your normal practice, change the rubbish bins, pick up the empty oil drums?-- Yes, that's right.

And load them onto the PJB?-- Yeah, and went back up to the surface.

How long would you have been down at 5 South?-- Oh, probably about 5, 10 minutes.

And what were the men doing?-- Well, they just walked over to the crib room and then they started walking down to the face. That's the last I seen of them.

Was there anything unusual that you noticed in the section at that time?-- No, nothing at all.

Did you see where the continuous miner was?-- No.



You wouldn't have got close enough -----?-- No, didn't get close enough.

----- to see that. You only went as far as the crib room?-- Yeah.

The rubbish bins, are they near the crib room?-- Yeah, they're right next door.

The oil drums?-- Yeah, they were right there too.

Same area. When you got back up to the surface you went to the bowzers and you filled up the oil drums, I suppose?-- Yeah, I did.

Did you go to the bathroom then and have a conversation with Bob Davidson?-- Yes, I did.

And did he tell you that they wanted a water hose down at 1 North-west?-- Yes, that's right.

Okay. Well now, just going back to before you went down to 5 South, was there any arrangement for you to bring the PJB back up, anything special?-- Yeah, well, Michael told me to go down, pick it up and bring it out, that's all. He didn't say what about or anything, he just said go down and pick it up.

Sorry, this is Michael -----?-- Squires.

Michael Squires. When did you speak with him?-- Well, that was for about two seconds at the start of the shift when he told me to jump in the back of the Rover.

Before you went down?-- Yeah.

And what did he want?-- He just wanted me to bring it back up the surface.

Bring the -----?-- The PJB back to the surface.

That's the one you went down in?-- Yeah, the one I went down in.

You were to bring that back out?-- Yeah.

Ordinarily you would have brought that back out anyway?-- Yeah, well, if I had jumped in the driver's seat I would have had to bring that back up anyhow because that's my vehicle to run all the gear around.

Okay. Well, you didn't know why he asked you to bring it back up?-- No, didn't say anything to me.

When you came back up did you see him again or have any conversation with him again?-- No, I didn't see him again at all until after the explosion.

Okay. Now, you mentioned that you were at the workshop - bathroom, I should say, where you spoke to Bob Davidson. You then went to the workshop and you got some fittings?-- Yes.

And you were putting them on this hose that you were getting to take down to 1 North-west?-- Yeah.

And while you were doing that what happened?-- Well, Bobby Davo came over and - well, I was putting the ends on the hose and Bob came over and told me that she'd blown up.

Had you heard or seen anything before that?-- No, nothing at all.

Did you hear any -----?-- No, not even any shakes in the ground or anything.

Didn't feel anything?-- No.

Didn't hear any sirens or anything -----?-- No, nothing.

----- at that point. Had you heard any sirens earlier that night?-- No.

Any alarms?-- No, nothing.

Well now, after Bob Davidson told you this did you go over to the start point?-- Yes, I did.

And what did you see?-- A big cloud of dust, smoke.

Whereabouts?-- Down towards the portal.

Did you smell anything at that stage?-- Yeah, it smelled like coal dust, that's what it smelt like, something burning.

Okay. Well, Bob Davidson was there with you when you saw that?-- Yes, he was.

Anybody else?-- Clarry, Clarry Bayles, and Shorty Johnson was there too.

Were they?-- Yes.

What about Michael Squires, did he turn up?-- Yeah, Michael was in his office.

That was just near there?-- Yes, just around the corner.

And did you speak with him at all at that stage or -----?-- Oh, just after the explosion Michael said, "Just wait around here just to see how many of the other fellas come up out of the pit."

Who did he say that to?-- He said it to all of us.

What was the next thing that happened after that?-- Then about 20 minutes after that the boys started coming up out of the pit in Rovers - 20 minutes, half an hour.

That was the crew from -----?-- 1 North-west, yeah.

And after that you stayed on there?-- Yeah, I stayed out there until about quarter to 6.

And you carried out some other duties?-- Yeah, I just give the other blokes a bit of a hand over in the workshop.

You went out there to the fan and did a test at some stage with George McCrohon?-- Yeah, I went over with George McCrohon, yeah.

Thank you, Mr Bennedick.

CROSS-EXAMINATION:

MR MACSPORRAN: Mr Bennedick you started in the industry at Kianga in 1972; is that so?-- That's right, yes.

And there was an explosion there in 1975?-- Yes.

Were you working there at that stage?-- I was - well, I didn't work that weekend, no.

You weren't on shift at the time of the explosion?-- No, I had the weekend off.

Did you subsequently, after that time that the explosion occurred, did you find out, or were you told what had apparently happened at Kianga?-- No, I didn't.

Did you ever ask anyone?-- No.

It was then that you transferred to Moura No 1; is that so?-- Yes - No 2.

No 2, I beg your pardon. Then to No 1 in 1978?-- Yes.

And then to No 4, and there was an explosion in No 4?-- Yeah.

And then you came back to No 2 in '87?-- Yes, that's right.

You have been in No 2 ever since?-- Yes.

Whilst you have been at No 2 has your role always been as a transport driver?-- Yes, most of it, yes.

So, that would involve your going into various sections transporting men and materials and then coming almost immediately out?-- Yes, that's right.

So, you didn't at any stage spend any length of time in any one section?-- Not a great deal of time. As long as there was someone to lend a hand to bolt or something through the

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crib, that's about all.

Did you have much time in this panel, 512, in particular?--  
No, not a great deal.

At any stage when you were in 512 did you hear anyone  
discussing anything about problems in the panel?-- No.

Did you observe anything yourself that would indicate there  
was a problem inside the panel?-- No.

This Sunday night, I think you have told us, there was no  
indication to you by what you saw or heard, what you were  
told, that there was a problem in 512?-- Yeah, nothing.

Was it ever the case that the deputy in charge of your shift  
would discuss with the crew the conditions underground before  
you went underground?-- Most of them do, yes.

But that didn't happen on this night?-- No.

You didn't hear any talk amongst the other men in the crew  
about what might have been happening underground that night?--  
No, nothing at all.

Thank you.

MR MARTIN: I have no questions.

CROSS-EXAMINATION:

MR MORRISON: Mr Bennedick, normally when a crew goes down to  
a production face, that is an oncoming crew, they take a PJB  
down and then the outcoming crew would bring the PJB back  
up?-- Yeah, that's right.

So, it is the normal thing for the working crew to be left  
without a PJB?-- Yes, that's right.

I have nothing further.

MR HARRISON: No questions, Your Worship.

MR CLAIR: I have no further questions, Your Worship. Might  
the witness be stood down?

WARDEN: Yes, thank you, Mr Bennedick, you may stand down.  
You are free to go.

WITNESS EXCUSED

XXN: MR MORRISON

WIT: BENNEDICK G G

MR CLAIR: I call Alexander John Henderson, Your Worship.

ALEXANDER JOHN HENDERSON, SWORN AND EXAMINED:

MR CLAIR: Your full name is Alexander John Henderson; is that correct?-- That's correct.

Mr Henderson, you are a mine deputy at Moura No 2 Mine?-- That's correct.

I understand that you've got some injury to your leg at the moment?-- It's not too bad. I went for a walk at dinner time and it seems all right now.

If you have got any difficulty at any time during your evidence, if you need to stand up or just move about a bit, you can just raise the matter?-- Okay, thank you.

You started in the coal mining industry in 1966 at Moura No 1?-- That's correct.

You got your deputy's certificate in 1970 or thereabouts?-- Yes.

You went to No 4 as a deputy in 1979?-- That's correct.

And, in fact, you were a fire officer for most of the life of the Moura No 4 Mine?-- That's correct, yes.

At that mine?-- At that mine, yes.

After the explosion at No 4, did you stay there as a deputy in order to recover all of the equipment from underground?-- Yes, I did.

Then in about 1990, did you transfer to No 2 Mine?-- That's correct.

And you have been there since then?-- Yes.

In recent times have you worked principally as an outbye roadways deputy?-- That's correct.

That involves inspecting all the roadways of the mine, other than the working sections?-- That's correct.

Now, you had worked during the week prior to the explosion at Moura No 2?-- Yes.

Your last normal shift was on Friday day shift - that's Friday, 5 August; is that right?-- That's correct, yes.

And at that time you were working as the outbye roadways deputy?-- Yes.

There was nothing unusual or untoward that you noticed when you were working that shift?-- No.

Now, did you then next attend at the mine at 7 o'clock on the morning of Sunday, 7 August?-- Yes, that's correct.

And what led to you going in that morning?-- They were short of deputies. It wasn't my normal shift to work, but they were short of deputies so I went in on the other roster.

And what duties were you to undertake that morning?-- Covering all the spare sections.

Again, as an outbye-----?-- Yeah, covering all of the sections that - none of them had any men working in them.

There were two other deputies that commenced at the same time: Mick Caddell and Bob Newton; is that right?-- That's correct.

Did you have some conversation with the undermanager, Michael Squires, who was there at the time?-- Yes.

And what was the effect of that?-- What he wanted me to do was put samples through the Unor monitor system underground, and build brattice stoppings outside the seals in 512 and cover all the rest of the mine, and we originally asked him to get another deputy out and he explained to us there would be no men in any of the other sections, so we agreed with him that I would cover all the spare sections and Bob Newton would do the brattice work at 512 and the men working there, and Mick Caddell would do the Unor monitoring.

The brattice work at 512 was to set up stoppings to send the ventilation across the face of the newly erected seals; is that right?-- That's correct, yes.

When did you first learn that 512 had been sealed or was to be sealed on that Saturday night?-- Originally it was going to be sealed on the Sunday, but I knew on Friday, and then when we got to work on Sunday morning, I found that it had been sealed during the night.

You didn't know until you got there on Sunday morning?-- No.

Was there any discussion about why it had been brought forward from the Sunday to the Saturday?-- Not in front of me anyway.

Did you ever raise the question yourself with anybody during that day?-- No.

As to why the sealing had been brought forward?-- No, I did not.

Did you at some later time discover that it had been brought forward, or at least raise the question with anyone as to why it had been brought forward?-- No, I think the first time that I found it had been brought forward for any reason was after the explosion.

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Did you go and inspect your various areas in the mine?-- Yes, I did.

During the Sunday morning?-- Yes.

You found nothing of particular concern?-- No.

And did you go through until 2.50 that afternoon, in fact?-- Yes, that's correct.

When you knocked off?-- Yes, that's correct.

On the Sunday morning when you were together with Mick Caddell and Bob Newton, did you go and have a look at that Unor screen which is adjacent to the assembly area there?-- I went and had a look at it and Mr Pearse was in there setting it up for the Unor testing.

Was it your practice normally to look at the Unor screen before you went underground?-- No, not all the time.

You did it some of the time?-- Sometimes, yeah.

And what, in particular, would you look for when you looked at that Unor screen?-- Any increases in either methane or carbon monoxide or a drop in oxygen.

And for what purpose?-- Just ascertain-----

Would you look for those things?-- Ascertain whether there was any change in the atmosphere of the mine.

You were aware at that point that 512 panel had just been sealed-----?-- Yes.

-----the previous night. Did you look, in particular, at the readings in relation to 512?-- In particular I just sort of looked at the screen. I noticed the readings were a bit higher in behind the seals.

Did you know which of the points was the 512 seal? Was that indicated there on the screen?-- Yes.

And, again, when you looked at those readings, what would you have expected to see at that time?-- I would have expected the readings on carbon monoxide and methane to be up once the area was sealed and the ventilation wasn't diluting it.

So, it would be natural for it to be increasing?-- Yes.

The fact then that those readings were higher really wouldn't indicate much to you; is that so? I mean, if they were higher you would expect them to be higher and that would be it?-- That's true.

Was there anything else on that screen that you might look at in order to determine whether there was some problem behind the seals; whether, for instance, there was some kind of heating in there?-- No, not to my knowledge there isn't, no.

XN: MR CLAIR

WIT: HENDERSON A J

Do you know much about spontaneous combustion?-- No, not a great deal.

Well, what you do know, where did you come by that?-- Just from talking to other people and general knowledge around the mine, you know.

Did you ever have any training session in respect of spontaneous combustion?-- No.

From the beginning of your career, right through?-- No.

Ever receive any little red book?-- Yeah, we got a red book when we were still over at No 4.

You got a red book when you were at No 4?-- Mmm.

Under what circumstances did you get that? Was it at a training session, or just handed out to you?-- Just handed out to us.

By the mine management?-- Yes.

And what were you told about it? Anything?-- No, nothing.

I suppose you understood that you were expected to read it?-- Yes.

Did you ever read it?-- Yes.

And did that give you any information in respect of spontaneous combustion and the signs that might indicate the presence or absence of it, or don't you recall?-- No, I don't recall.

It is some time now since you got the red book; is that right?-- Yeah, I can't remember when it was. It was just after the No 4 explosion, as far as I remember.

Going back to '87, or something like that?-- Something like that.

Well, apart from the columns on the Unor screen that indicated the gas readings at particular points, were there some other columns? Do you remember if there was something there which is referred to as a Graham's Ratio?-- That's correct, yeah. That was on the right-hand side.

Did you know the significance of that?-- No.

Did anybody ever tell you that that might be helpful in determining whether or not there was a heating present?-- No.

Were you ever given any training session in relation to the information that appeared on that Unor screen?-- No.

Was it ever explained to you as a deputy-----?-- No.



-----what those readings all meant?-- No.

I suppose, then, that when you looked at the Unor screen, you saw that the readings in 512, the sealed panel, were up a bit, but that didn't cause you any concern?-- No.

Was there anything else on that screen that caused you any concern?-- No.

No doubt you knew that if the panel had been sealed that at some point it would move into the explosive range?-- That's true.

Did you have any discussion with anybody about that, whether and when it might move into the explosive range?-- Yeah, I think I had - I know I had a conversation with a Mr Johnston in the workshop, but just exactly what we discussed I don't know, but it was about the gas levels, I know.

This was just after you looked at the Unor screen, or some time-----?-- Some time during the shift I did.

Did you tell him something about those readings?-- I can't recall exactly what I said, but I think what I said to him was that it looked like it would go right through the explosive range by the next morning, the way it was going up, which was the normal thing that happened in No 4 when we sealed a section.

What was it that indicated to you that it might go through the next morning?-- Just that the methane levels were going up.

And the CO levels? Did you take any notice of those?-- Well, I had a - that was the only time I looked at it. It was up a bit, but I don't know whether it went up any more during the shift.

Now, was there a stage during that Sunday morning shift that the Unor alarm went off?-- Yes, there was.

And at what stage was that?-- About 10 o'clock, I think.

About 10 o'clock. I might just ask if the witness can see Exhibit 127, please, Your Worship? I just ask you to have a look at one line of that, first of all, which the best way to identify the lines is to go down the times which appear in the second column - or the third column, I should say - and you will come down to the time of 10.04.26; do you see that? It is not quite half-way down the page?-- Yeah.

You will see that that line refers to monitor point 18, which is the 510 north return. It shows just running across the line that the alarm went off at 10.04.26, and the next column shows that that alarm was accepted at - or acknowledged at 10.37.23; that it was an alarm for methane, and that at that stage the level that was reached was a set point value of 2; the reading of the level it's got as being 4.55; do you see that?-- Mmm.

That would be consistent with this methane alarm that you were aware of at about 10 o'clock; is that right?-- That would be correct, yes.

First of all, when the alarm went off, what happened? What sort of sound did you hear?-- I didn't hear any sound at all.

You didn't hear any sound?-- No.

No siren?-- No.

When you say the alarm went off, what did you observe yourself?-- I didn't observe anything. Mr Pearse, the electrician who was doing the checking of the Unor monitor, came around and saw me and said the alarm had gone off, so I went around with him and that's when he - he acknowledged it.

Okay. Now, I'm just interested, first of all, in where you were when Mr Pearse spoke with you?-- I believe I was in the deputies' cabin.

Are you able to say with any degree of precision what time it was when Mr Pearse came to see you?-- No, I wouldn't be able to.

I mean, was it just after 10, or was it 25 past 10, or-----?-- No, I can't recall.

Anything that helps you determine that time? I mean, when did you normally take your smoko?-- Normally at 9 o'clock, but because I had all of the spare sections to do, I did all of them before I had smoko, which made it late.

And at the time he came to see you, you had just finished your late smoko; is that right?-- That's correct, yes.

Does that help you at all as to just what time it was? Don't worry if you can't-----?-- No, I can't recall.

In any event, he told you that the methane alarm had gone off in respect of point 18?-- Yes, that's correct.

And you hadn't heard any siren or anything yourself?-- No, I had not.

How long had you been on the surface at that time? How long is your smoko normally?-- 10 minutes - oh, I'd finished my smoko, which is a cup of coffee and a couple of sandwiches, so I probably would have been 10 minutes or a little bit more.

You had that as soon as you came up?-- Yes.

And then you went in to the Unor room with him; is that right?-- That's correct, yes.

And what did he do after you went in there?-- He accepted the alarm.

Did you see what he did to accept the alarm?-- He just pushed

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the accept alarm button as far as I know. I don't know anything about the machine at all.

But he pressed a button or some buttons on the machine?--  
That's correct.

And did you see some change on the screen showing that he had accepted the alarm, or did you not? I mean, did you see any change on the screen?-- No, I did not.

Well, if you just have a look at that line that I drew your attention to you will see that it shows that that alarm was accepted at 10.37.23; do you see that?-- Yeah.

And did it appears that it had gone off at 10.04.26 looking back to the previous column?-- Yes, that's correct.

So it was accepted about 33 minutes or so after the alarm had actually gone off?-- Yes.

That's 10.04 through to 10.37?-- Yeah, that's correct.

Now what I want to ask you is is it likely, given all that you have said, is it likely that you were on the surface 33 minutes before you saw him accept that alarm or is it more likely that you were underground at that time? Just bear with me a moment. You recall that you were with him when he accepted the alarm by doing something on the computer?-- Yeah.

I'm really just trying to ascertain whether it's likely or not that you were up top some 33 minutes before you saw him do that, just to see whether you were there if and when the siren went off, you see?-- I would have still been underground at 10.04, I'm pretty sure.

Okay. Now, after he accepted the alarm did you have a look at something in relation to the delay times from the monitoring points?-- Yes, I did.

Why was that?-- Well, I knew Mr Newton had just finished draining the lines when I picked him up and I just had a look at that time and that roughly - roughly it would have been about the time it took me to pick him up and us to get to the surface.

You brought Mr Newton up with you?-- I brought him up to the surface, yeah.

This is before you had your late smoko?-- Yeah.

Was it the case that you were concerned about why there was a methane alarm; is that right?-- That's true, yes.

And did you want to try to work out the time at which the sample that caused the alarm to go off was actually taken from that monitor point 18?-- Yeah, that's correct.

With that in mind you were trying to work out the delay times from all the monitoring points?-- That's true.

Did you work that out?-- Well, there was a plan on the wall that had the delay times from each monitoring point marked on it.

You say that you worked out the time that it takes for the sample to come from monitoring point 18, did you actually take into account the time at which the alarm had gone off? Did you know what time the alarm had gone off?-- No, I didn't, no.

Okay, well, look, you say that you did look at a table on the wall. Could the witness see Exhibit 11, please, Your Worship? You will see that's a series of sheets. Go to the first sheet behind the covering sheet and you will see that relates to delay times for 7 August 1994 but doesn't have anything entered for 18, so just turn over from that one and you will see a similar sheet, the top is cut off, but it appears to be for some previous date; do you see that?-- Mmm.

It does have a value entered for point 18, do you see that, 65 minutes it's got on it - or "65" indicating 65 minutes?-- Yes.

Is that right?-- Yes.

If you went back 65 minutes from when the alarm went off, according to what we have on that sheet there you would be back probably about an hour and a half before - 65 minutes plus 33 minutes to be precise, so that's one hour and 38 minutes before that time at which you were working that out. Can you see that - or do you agree with that? See the 65 minutes there?-- Yeah, yeah.

So there would be a delay time for the sample to go from the monitoring point through to the sampler on the Unor system at the surface, that's 65 minutes, and it appears from that other sheet the alarm went off at 10.04. So that takes it back to around nine o'clock, or to make it relevant for your assessment of things, it would be about an hour and a half before you were actually there in the Unor room and trying to work this out. Now, would that hour and a half be the likely time that you would have picked Bob Newton up or the likely time that Bob Newton would have been carrying out his span gas tests at number 18?-- He would have been draining the methane drainage, not doing a span test.

Sorry, the methane drainage?-- That could be correct. I might be out with my times.

You say that it could be that?-- Yeah, I could be out with my times. I don't carry a watch underground.

It's not inconsistent anyway is what you are saying?-- Mmm.

He could well have been doing the methane draining at that time you suggest, that hour and a half or so before?-- Yeah, well, to do all those newly drilled holes would take probably 40 minutes anyway.

Would it?-- From the first one to the last one, yeah.

The one at point 18, what would that be, one of the first or last?-- Point 18 was outbye of the gas drainage line.

So would that be one of the first or one of the last that he would do?-- The first one was just inbye the monitor point and the furthest one was further down the hill. He started at the top and worked his way down because he was doing the

one at the bottom when I picked him up.

Okay. Well, in any event the conclusion that you drew that day and you explained this to Mr Pearse, Bunny Pearse, the electrician, that that alarming of the methane on point 18 could well have resulted from the methane drainage exercise that Bob Newton was carrying out -----?-- That's true.

----- in 510?-- That's true.

And there is nothing in those documents that would seem to you to make that unlikely when you have regard to those times that I've shown to you there?-- No, that's correct.

The 65 minutes and the 33 minute delay. Okay. Now, if you just put that to one side, that Exhibit 11, at some stage after that on that morning was Mick Caddell in the 510 return?-- Yes, that's correct.

And putting some span gas through that point 18 for his span gas tests; is that right?-- That's correct, yes.

And did you understand that he took a methane sample in the general body at .4 percent methane; is that right?-- That's correct.

Now, some time after that did Bunny Pearse come to you again and say that there was another methane alarm?-- Yes, that's correct.

On the Unor for point 18?-- That's correct.

Just have a look at that document Exhibit 127 again and you will see on the next line that there was a methane alarm first of all at 10.47 which was accepted at 10.51. Did you address the question in relation to that that day as to what might have caused that alarm?-- No, I wasn't told about that one, close to the other one.

Then if you go down another two lines you will see there was again a methane alarm at point 18 which occurred at 11.58 and which was accepted just over a half a minute later. Do you see that one?-- Yes, I see that.

And then on the next line there is a methane alarm on point 18 at 12.22 which was about 24 minutes later, 25 minutes later. Do you see that one?-- Yeah, I can see that, yes.

Now, the time at which Bunny Pearse came to you and said there was another methane alarm was after crib?-- Yeah, that's correct.

Crib is at 12 noon; how long do you normally spend for crib?-- Half an hour, 12 to 12.30.

And you think that it was after crib that Bunny Pearse came to you?-- Yes, that's true.

So that, you think, would be after about half past 12. If you

go down another three lines you will see that there was another methane alarm on point 18 at 12.33. Do you see that?-- Yes, I see that.

Do you think that might be the one that Bunny Pearse came to see you about?-- I believe it would be because I was just ready to go down the mine again and do my second inspection when he came and saw me, so -----

You are fairly well in a routine as far as your half hour for crib is concerned?-- Pretty well, yes.

Just before I go ahead and ask you a bit more about that one, did you at any time become aware of those methane alarms that are shown as having occurred at 11.58 or 12.22 -----?-- No, I did not.

----- at point 18?-- No.

Well, at least the second one of those it seems would have been when you were having crib, the one at 12.22?-- It would appear that way, yes.

Well, did you hear the siren go off at any time -----?-- No, I did not.

----- while you were having crib?-- No, I did not.

Have you ever had to turn the siren off yourself? You know it's connected to the Unor system, isn't it, and when an alarm goes not only does it show an alarm on the screen but the siren goes off; is that right?-- That's correct, yes.

Have you ever had to do anything in relation to that siren alarm, turn it off?-- No, I wouldn't know how to turn it off.

You wouldn't know how to turn it off?-- No.

Were there many people who knew how to turn it off?-- Probably all the electricians and that would be about it.

Was there any way that it could be turned off effectively for the morning?-- I wouldn't know.

You don't know?-- No.

When you are in the crib room up top is there any way that alarm could go off without you becoming aware of it?-- Not the siren part you couldn't, no.

The siren part, I suppose that's what I'm talking about, any way the siren could go off?-- You definitely have to hear it.

It's pretty loud, isn't it?-- Yeah.

It doesn't quite bounce you out of your seat but you get a bit of a surprise when it starts?-- That's true.

You are quite sure you didn't hear any siren during the time

you were having crib that day?-- No, I did not.

Did you hear any siren just after crib and just before Bunny Pearse came over and told you there was another methane alarm on the Unor?-- No, I did not.

Did that strike you as funny that he came over and said, "We have just had another methane alarm on the Unor.", but you hadn't heard any siren?-- I didn't even think of it at the time.

You say you are clear in your mind now that you hadn't heard any siren while you were having crib?-- Yeah, I'm clear in my mind on that, yeah.

You didn't hear one just before he came over to see you?-- No, I did not.

You are not hard of hearing in any way?-- No.

Now, you went to the Unor room again with Bunny Pearse; is that right?-- That's correct.

You saw that it was a similar reading to the first one, about 3.5, I think you said?-- Yeah, that's correct.

Now, what conclusion did you form as to what it was that caused that reading, that alarm?-- I assumed - I know that Bob Newton had gone back down to drain the holes again and I assumed that the same thing had happened again, that too much gas had come out with the water.

When you drain the water out of the methane range there is a sudden - can be a sudden burst of methane comes out of the -----?-- Yeah, especially on newly drilled holes.

The newly drilled holes particularly. So you were fairly relaxed anyway about there being a methane alarm on point 18 because you could think of an explanation for it?-- That's true.

But you couldn't think of any explanation as to why these alarms would have been showing on the screen but why you didn't hear any sirens at any time?-- No.

Other than perhaps that the siren had in some way been disconnected from the system?-- Yeah, that's correct.

Of course, when the span gas tests are being done that involves a boost of gases including the gases that would cause the alarm to go off coming through the system; is that right?-- Yes, that's correct.

So you might expect when the span gases reached the top that the alarm system would be tripped?-- Yes.

That is on the computer screen and also ordinarily with the siren?-- That's true.



Do you know if there was any practice when span gas tests were being carried out of disconnecting the siren?-- No, I don't know.

You are not aware of anything like that?-- No.

Did you ever have any conversations with any of the other deputies in relation to any unusual smells or a haze being discovered in 512 Panel?-- No, I did not.

At any time over the period of a month or two months even prior to the explosion?-- No.

Was there any practice whereby the deputies would have a discussion about what was happening in the mine?-- No, there was no system, and as a roadways deputy I'd do eight hours and all the other deputies were doing eight and a half hours. So the only time I saw them was when I walked into the section to the crib table or whatever.

You would arrive after they had gone underground ordinarily?-- Yes, half an hour later.

And as roadways deputy you would have the duty of taking readings at certain points through the mine? Would you be taking readings -----?-- Yeah, on the intakes, yes.

But not in the working panels; is that so?-- No, that was the section deputy's responsibility.

I have no further questions, Your Worship.

CROSS-EXAMINATION:

MR MACSPORRAN: Mr Henderson, you had worked on Friday, 5 August, that was your last normal shift?-- Yes, on the day shift.

Day shift, and then you were brought in especially on the Sunday morning which was the 7th?-- That's correct.

And when you had worked on the Friday the 5th you had learnt that the panel, that's 512, was to be sealed on the Sunday?-- Yes, they had pulled the machinery out of it and they were going to seal it on the Sunday day shift, yeah.

That was the accepted plan, for that panel to be sealed that Sunday, that weekend?-- Yes.

And you came in on the Sunday morning to discover it had already been sealed?-- That's correct.

So, that must have, to some extent at least, surprised you, that the sealing had been brought forward?-- Not really, I don't think.

Well, there was talk about the fact it had been sealed earlier, wasn't there, when you came on on the Sunday morning?-- Yeah, I think all that was said was they had finished sealing it on the night shift.

See, you remember giving your statement to Mr Walker, the Inspector, and Mr McMaster?-- Yes, I do.

And you remember them asking you this question: "When did you find out about the 512 sealing having been brought forward?" Remember them asking you that when they interviewed you?-- Yes.

And you said, "On Sunday morning when I started work. It was the subject of general discussion amongst us three deputies on shift." Do you remember saying that?-- Yes.

What was the discussion amongst the three deputies on shift about the sealing having been brought forward?-- I don't think the discussion was about the sealing being brought forward, just the fact that it had been sealed and the way it worked out we didn't require to get another deputy out.

You agree that's what you told the inspectors when they interviewed you -----?-- Yes.

----- about when you found out when the sealing had been brought forward. That was your remark to them, "It was the subject of general discussion amongst us three deputies on shift."?-- Yeah, just the fact that it had been sealed, not any concern about them having done that.

No discussion about why it had been sealed earlier than the

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Sunday when planned?-- No.

And you didn't ask?-- No.

Now, when you came on that Sunday morning there were two other deputies, that is Mick Caddell and Bob Newton; is that so?-- That's correct.

Was there any talk with them about what was happening in the panel generally, that's 512?-- No, not while I was there anyway.

No mention by Mick Caddell about having detected a smell in the panel Friday the 5th?-- No.

You didn't know anything about that?-- No, I did not.

And nothing said by Bob Newton, as far as you know, about anything happening in the panel?-- No.

You spoke to Gene Johnson on that Sunday shift about the Unor readings?-- Yes, that's correct.

And you said something about the CO reading was increasing fairly quickly; is that so?-- Yeah, that's true.

What significance did that have to you, the CO reading was increasing fairly quickly?-- I don't know whether it had a great deal of significance to me because that's the first time that a section's been sealed like that since I have been working at No 2.

You have been there since 1990, have you?-- Yes.

You don't remember any other section being sealed since 1990 other than 512?-- I remember other sections being sealed, but I don't think I have ever looked at the gas readings before, and I didn't know whether that was normal in that line or not.

See, again your statement - this was a question asked of you by the inspectors: "Can you recall going to the workshop on Sunday day shift and talking to Gene Johnson?" Remember them asking you that?-- Yes.

You said, "Yes, I can remember Shorty Johnson asking me what the gas readings were and if I had any concerns." That's what he asked you?-- Yes.

He said what were the readings and whether you had any concerns?-- Mmm.

"I can't remember exactly what time it was, but it was probably in the latter part of the shift. I think I said the CO reading was increasing fairly quickly and can't remember what else I said or if he made any comment." Is that right?-- That's true.

So, he had asked you whether you had any concerns and your

XXN: MR MACSPORRAN

WIT: HENDERSON A J

statement to him was, "The CO reading was increasing fairly quickly."?-- That's true.

Why did you report that to him when he asked you if you had any concerns?-- I can't really remember the conversation, but I think I said to him that the CO was going up a bit but it wasn't of any concern at the moment, or words to that effect.

Well, as at that shift, that Sunday the 7th, what did you understand to be the significance of a CO reading going up? Just what did you think that meant, or might have meant, could mean?-- Well, it could mean that there was a - some type of heating in behind the seal.

Well, was any such thing discussed or mentioned in any context on that Sunday?-- By whom?

By anyone in your presence?-- No.

Or by yourself?-- No.

See, you seem to have placed some significance on the CO reading going up when you spoke to Johnson?-- Yeah, I think when I made that statement I should have said the CO and the methane readings were going up.

Well, both would be significant; is that so?-- Well, CO readings would normally go up when you sealed a section off if you had a section that was gassy on the way in.

In any event, that was the extent of your discussion with Johnson, was it?-- Yes.

Thank you. Thank you, Your Worship.

CROSS-EXAMINATION:

MR MARTIN: Mr Henderson, just a few questions. The Unor screen that existed, say, as at Sunday, 7 August 1994, did you actually see it from within the Unor room?-- Yes, when I was in with Mr Pearse I did, yeah.

Can you not tell us anything about what you saw on the screen in terms of, say, colours of figures or flashing red rectangles or flashing alarms?-- No, I didn't see anything like that.

Are you sufficiently familiar with the machine to tell us anything about it?-- No.

Any of its colours or - the figures that is, or symbols? Can you say what colours they were ordinarily when you saw them? Were they green or blue or red or some other colour?-- I can't remember what colour it normally was. Blue, I think. I'm not sure, though.

Did you ever, or generally, looks at the Unor screen from outside through the window?-- Yes.

How clear was your vision of the screen from that position, that's outside, of the screen? Was it a good vision or not?-- Yes, I believe so.

Is it the case that that window was scratched and dusty and obscured vision, or dirty?-- Not enough that you couldn't see the screen.

Were you familiar with an experience when the screen was turned around to the window that the figures on the screen or the symbols on the screen or signs on the screen would suddenly drop out and not appear at all?-- No, not to my knowledge.

Were you familiar with an experience when you looked at the screen through the window when it was turned around that sometimes all the figures would turn the same colour and all the symbols would turn the same colour, perhaps would all turn green or all turn red, something like that?-- No.

In the period of, say, three months before 7 August 1994, give the Inquiry an estimate of the number of times you looked at the Unor screen through the window? Was it once or 100, how many, or not at all?-- Probably half a dozen times maybe, no more.

Whatever you saw on the Unor screen through the window on any occasion you looked, what would it have indicated to you? Did you have a sufficient understanding to know what it indicated or not?-- The only thing I would know is if there had been any change in gas levels.

What, any change in the percentage of gas or the, say, parts per million or something like that?-- Something like that, yeah.

Were you familiar with what the screen showed when it was in alarm mode?-- Yeah, whichever point it was that was alarming would flash on and off.

Flash which colour?-- Red.

Well, say, it was CH4 that was alarming, that's flashing red on what you have just said?-- The whole line.

The whole line is flashing red?-- Yeah.

What about a red rectangle?-- No, I have no knowledge of that.

What about on the right-hand side bottom of the screen, or perhaps I am wrong in that. I think the top of the screen, a red alarm showing "active", "active" in red?-- No, I've never seen that.

Do you know anything about a change of the computer system or screen, say, in the period of one month before 7 August 1994?-- Yeah, I think they got a new screen that didn't have the touch thing that the other one had.

On the two occasions when Mr Pearse was in the Unor room with you on Sunday the 7th, I think it was only you two, wasn't it?-- Yes.

What did he do to accept the alarm? Did he use the touch on the screen or did he use what people describe as a mouse?-- I can't recall, I don't know.

Well, you have obviously, because of your responses to Mr Clair, I think, heard the alarm by way of a siren at Moura No 2?-- Yeah, that's true.

Did you hear it at all on the day, 7 August, in the time you were on shift?-- No.

Start of shift to the time you went off?-- No, I did not.

Can you say when it was before 7 August you last heard the siren alarming?-- Probably the last time they put span gas samples through the - or one time when they were doing that.

Do you know anything about litres per minute in terms of carbon monoxide?-- No, I do not.

Are you only familiar with CO parts per million?-- That's correct.

And is that what you were taught a long time ago?-- Yeah, long time ago.

I suppose you were a frequent visitor per shift, I take it, to the mine deputies' cabin?-- Yes, that's correct.

Do you recall any system whereby there was some type of graph put on the wall on a noticeboard in the deputies' cabin?-- Yes, I recall that.

Did you see such a graph at any time?-- Yeah, there was one on the wall in the deputies' cabin.

What, a graph of CO make?-- Yeah, that's correct.

How long did that exist before 7 August, that practice?-- I don't know.

On what you have said, it meant nothing to you in any case?-- No, it didn't mean anything to me at all.

Did nobody attempt at any time to explain to you what its purpose was, why it was there?-- No.

Did you ever inquire?-- No.

Thank you, Your Worship.

CROSS-EXAMINATION:

MR MORRISON: Mr Henderson, can I ask you this: on Friday, 5 August you were working in the mine, that's the Friday before the sealing of 512?-- That's correct.

Doing outbye duties?-- Yes.

Which would have entailed you going into 512 at some point?-- Yeah, as far as the crib table, yes.

As far as the crib table. Following the supply road in?-- No, the belt road.

Walking the belt?-- Yes.

Were there miners at the crib table? I don't need names and addresses or anything like that; I am just interested if there were people there at the crib table when you got there?-- Oh, I can't recall.

Nothing you experienced that day in and around 512 would have suggested to you that there was any unusual activity or any problem or anything untoward?-- No.

And so far as you can recall nothing anyone else said to you that day to indicate that?-- No.

On Sunday you met Mick Caddell and Bob Newton as the other two deputies who worked?-- That's correct.

You obviously spoke to each to some degree or another?-- Yes, that's correct.

Mick Caddell you know to be an experienced deputy?-- Yes.

And likewise, Bob Newton was an experienced and competent deputy?-- That's correct.

And very experienced person?-- Yes.

Did either of those gentlemen say anything to you on the Sunday about problems with 512?-- No.

Did Caddell say anything about a smell?-- No.

Did Newton say anything about a smell or a haze or anything else?-- No.

In so far as you discussed, or the 512 sealing was mentioned, nothing that either of those two men said led you to believe that there was any difficulty or unusual feature about the sealing?-- That's true.

Now, on Sunday there was - there is no question, is there, that you knew men were down the pit on Sunday; yourself amongst others?-- That's true.

And there could be no doubt, is there, that Caddell would have known men were down the pit on Sunday?-- That's true.

And no doubt Newton knew men were down the pit on Sunday?-- That's true.

Now, in the split-up of work Newton was going to do the 510 panel and the 512 seals. Was there some particular reason for that? Might it have been he was the normal 512 deputy amongst the three of you; is that the reason?-- Well, yeah, he was normally the section deputy, I was the roadways deputy and Mick Caddell was normally a spare section deputy, so he knew where everything was around the section, so he chose to do it himself.

It was a question of utilising the best knowledge for the area?-- That's right, yeah.

When you went down on Sunday where did you do your inspections, can you tell me where? You were the spare sections deputy. You might have covered the entire mine for all I know?-- Well, I did cover the entire mine except for 510 and 512.

All right. Now, do you include in that the area that's known as Wal's workshop?-- Yeah.

You went through Wal's workshop?-- I did.

On your inspection what did you note in that area, anything -----?-- Nothing out of the ordinary.

Was there some methane in that section of the mine?-- Yeah, there is methane in every section of the mine. There was nothing out of the ordinary when I was in there.

There is a stub end in that area where work had been finished and the men had been pulled out in the Wal's workshop area?-- That's true, yes.

Akin to a sump but not quite?-- That's true, yeah.

And there had been some brattice erected at that point to direct air in and out of that area?-- Yeah, a wing bag running into it, yeah.

Did you see whether that was up or not?-- That was definitely up.

And was ventilation moving through that area?-- Yes, there was.

Because there had been a methane emission there, hadn't there, at that spot?-- When they were cutting coal, yeah.



There was a blower in the floor, wasn't there?-- That's true.

And the blower in the floor is a spot where high methane comes out in a concentrated burst?-- Yeah, that's true.

And when the men were pulled back from that area, is it not the case - and you would have seen this on your inspection - that some equipment was left there; not big equipment, I don't mean machinery, but smaller items, brackets, clips, some roof bolts, things of that nature?-- Yeah, that's true.

So, if one wanted to get some equipment of that nature, that's a likely place to go?-- Yeah, I suppose that's possible.

On Sunday you were up at one stage when Pearse came and told you about an alarm and you went with him to the Unor screen and he did something on the machine?-- Mmm, that's true.

Do I understand you correctly to say that you can't actually identify what it was he did? He pushed something, but you don't know what it was that he did?-- No, I don't know what he did to cancel the alarm.

So, you can't tell us whether what he did was the correct procedure to accept and then acknowledge an alarm and reset things, or not?-- No, I couldn't tell you.

And on the second occasion you didn't see him doing - or you couldn't identify what it was he was doing on the second occasion?-- No.

On the second occasion did you go back with him to the Unor room or did you have a discussion at wherever you were when you came-----?-- No, I went around to the room with him.

And you have no particular memory of the appearance of the screen on that occasion, or do you?-- No, not really.

It may be that it had red symbols on it, but you have no memory?-- Could have done, but I've got no memory of it.

During the shift, that's the Sunday shift, you obviously saw Newton and Caddell during the day when you were all up for smoko on the surface or in the crib room, whatever?-- That's correct.

There was no other comments made during any of those occasions about 512 - problems with 512; smells, hazes and the rest?-- No.

Nothing that those gentlemen said or did at any part during the Sunday on that shift would have led you to believe anything other than 512 was just behaving normally?-- That's true.

When you spoke to Mr Pearse, you said you looked at a plan on the wall that had times on it. Now, they were obviously not the times that Mr Pearse was recording that day for the span tests; they were something else?-- Yeah, they were something else.

Was it the sheet that you were shown earlier?-- No.

It was something else other than that again?-- It was a plan of the mine with each monitor point marked on it and next to it how many minutes it took to come from that particular point.

Not quite as big as that plan of the mine behind you, but something of that general designation?-- Yeah, about that size, yeah.

And times marked on it?-- Yes.

And you, for your proposition to be right - that is to say for it to be correct that it was Bob Newton draining the range that kicked the methane over the limit - that time would have to be right, wouldn't it? If the time was wrong, then there is a question mark over where the methane came from?-- Well, if the timing had have been wrong, I would have had to go looking to find out where it was coming from.

I know. You made the assumption that it was Newton draining the range that kicked the methane out of it; that's because you worked back the minutes on the plan and you said, "Yeah, that's roughly when I saw him down there."?-- That's true.

When you saw him down there and picked him up, he was doing the last of the holes - that's the most inbye, isn't it?-- Yes.

In its position as the most inbye, it's, as it were, the furthest from the monitor point?-- That's true.

He would have done, working in sequence, the one closest to the monitor point and then inbye to the end?-- That's right.

Then you picked him up?-- Yes.

That would be the normal sequence for draining?-- That's the normal sequence, yeah.

You can't tell us, can you, by any date that was on the plan when it was those times were ascertained; that is, the times for monitor point delays?-- No, there wasn't any date on it.

In any event, Pearse didn't say anything to you to indicate that they weren't current?-- No, he did not.

Did you indicate to Pearse in this process that that's, in fact, what you were doing? You were working out the delay and that that coincided with Newton, or did you simply offer him - do that in your head and then say, "Well, that's Bob Newton draining the range down there." Do you see what I'm getting at? Did you explain to him-----?-- Explain to Mr Pearse?

Yes?-- Yes, I did.

You did?-- Yes.

Okay. He said nothing to you which would suggest that he had any view other than that those delay times were correct?-- No, he did not.

To move from that day to general matters, do I understand correctly that from what you say, no-one told you about any smell in 512?-- No.

At any stage?-- No.

You didn't read any report which indicated any smell in 512 at any stage?-- No.

XXN: MR MORRISON

WIT: HENDERSON A J

Do I understand correctly also that on the basis of what you heard from the men about the sealing and what you had observed yourself, and so forth, that over that weekend you had no perceptions that there was any problem or danger or cause for concern about 512 at all?-- No.

And you certainly didn't operate on that basis? You didn't conduct your affairs on the basis of some concern about it?-- No.

You went about business as usual?-- That's true.

If anyone had given you - such as Caddell, for instance - had given you cause to think there was a difficulty, you certainly would have altered your behaviour?-- I certainly would have, yeah.

Now, when you spoke to Johnson, he was asking you something about - I'll try and pick up the note - asked you something about how the gas reading was going, or something like that?-- Yeah, something like that.

It was a very general question. You responded in a general way to him: "Either the CO or methane are going up fairly quickly" - or - "going up quickly.", or something like that?-- That's true.

You wouldn't have gone on and said, "Gee, if we make it through tonight, we're okay."?-- No, I wouldn't say anything like that.

I have nothing further.

MR HARRISON: No questions.

EXAMINATION:

MR ELLICOTT: Can you remember the figure that you used for the delay for point 18?-- No, I can't.

Where's Wal's workshop?-- Where's Wal's workshop? It was a subpanel that backed off 4 South. We were taken to the bottom-----

MR MORRISON: Can I assist? You may recall during the last hearing I indicated that small stub which sits up between 4 South and 5 South; that's Wal's workshop.

MR ELLICOTT: Thank you very much.

MR CLAIR: No further questions, Your Worship. Perhaps Mr Henderson could be asked to stand down, or stand up even more so, because I notice he is having trouble with his leg.

WARDEN: Thank you, Mr Henderson, you may leave.

MR MORRISON: Sorry, Mr Henderson. Your Worship, I completely apologise, as I should do, but I omitted to ask him to look at some report, sorry. I wish I could blame someone else for the omission, but I can't.

FURTHER CROSS-EXAMINATION:

MR MORRISON: Mr Henderson, can I ask you to look at this deputy's report, please? It is part of Exhibit 141, for the purpose of the record. Mr Henderson, that report 3402 on 17 June 1994 is partly by you, isn't it? I think the first inspection is by Doug Moody, the second is by you?-- Yeah, that's correct.

And that is for Friday afternoon's shift, 17 June?-- Yeah, that's correct.

You were on-coming deputy at least for the limited purpose of finishing off the shift that Mr Moody was on?-- Yeah, that's correct.

You will see noted under "Action Taken" at the top of the page that Mr Moody had to "erect some brattice at the face to push some air down the main supply road and clear methane which had built up in terms of percentage". Would you like a moment to read that before I proceed?-- Yeah, that's correct.

I'm sorry, I should also indicate it was tendered in its own right by Mr Clair. It is Exhibit 139. I won't tender it again.

Now, you will notice that under that notation Mr Moody put that the methane cleared to point 2 and then cutting recommenced. Now, during your inspection that followed it, the report shows that there was no repeat of the high methane?-- Yeah, that's correct.

And you didn't have to repeat any of the alterations to brattice?-- No.

Can we accept, then, that whatever it was that Mr Moody encountered was not repeated during the time that you were there?-- No. I would have reported it if it had have been.

You are agreeing with me it was not repeated?-- No.

Thank you. That's all I have.

MR CLAIR: Your Worship, I will just ask Mr Henderson a question.

FURTHER EXAMINATION:

MR CLAIR: It doesn't arise out of what Mr Morrison was asking you. Mr Henderson, were you aware of other occasions when the methane readings from point 18 seemed to be inexplicably high - that is, that it was a bit of an unpredictable quantity, or unpredictable monitoring point?-- I don't know of any other time the levels went like that.

Not that you have been aware of?-- No.

Thank you.

WARDEN: Thank you, witness. You may stand down. You are excused. You may leave.

WITNESS EXCUSED

WARDEN: I might take a five minute break while you are getting the next witness ready.

THE COURT ADJOURNED AT 3.34 P.M.

THE COURT RESUMED AT 3.47 P.M.

MR CLAIR: May it please Your Worship I call Andrew Leonard Graham.

ANDREW LEONARD GRAHAM, SWORN AND EXAMINED:

MR CLAIR: Your full name is Andrew Leonard Graham; is that correct?-- Yes.

Mr Graham, you are a mine deputy employed at Moura No 2 Mine?-- Yes.

You started in the coal industry in April 1979 at Moura No 2; is that right?-- Yes.

And you were transferred to No 4 Mine shortly after you started?-- Yep.

Where you worked as a miner?-- Yes.

You were appointed a deputy at Moura No 4 in 1982?-- Yes.

Transferred back to Moura No 2 in 1986 as a deputy?-- Yeah.

And you've worked there in that capacity ever since; is that right?-- Yes.

You joined the Mines Rescue in 1979 or 1980?-- Mmm.

And you've been a member of the rescue brigade ever since?-- Yes.

You did have some regular contact with 512 Panel when it was first commenced?-- I beg your pardon?

When the 512 Panel was first commenced, development of the 512 in No 2, you were involved with it on a regular basis?-- Yes.

And then that was as the day/afternoon shift deputy?-- Yes.

Then you went on to permanent night shift?-- Mmm.

And your duties in that regard were to relieve for any vacancies, deputy vacancies that occurred; is that right?-- Yes.

At what point did you change over to that permanent night shift, that is at what point in the process for 512 Panel? Was it during development or after extraction commenced?-- During development.

At some point development was completed, extraction commenced.

XN: MR CLAIR

WIT: GRAHAM A L

You mention in your statement something about being involved with the extraction of the first row of pillars in 512?-- Yes.

Was that at the end of your regular association with it or was that when you were relieving as a deputy?-- That was just an ongoing thing whether I was relieving in that section or - whoever was away I would relieve that section, yeah.

But that was some time after you had switched over to permanent night shift, was it, that you were involved with the extraction of the first row of pillars?-- Yes.

Now, after that time then you've worked in 512 on relief on occasions?-- On occasions, yes.

How frequently would that have been?-- No more than half a dozen times.

Over the period of extraction?-- Yes.

Did you on other occasions, on the weekends when there was no production going on in 512 have occasion to carry out inspections there?-- Yes.

Now, you do mention in your statement that you had concerns about the layout of the 512 Panel?-- Yes.

With regard to the ventilation circuit?-- Mmm.

Can you expand on that?-- I can't really expand any more than is written down in my statement, it was just ----

I would like you to do so in evidence here. I would like you to say why it was you had concerns?-- I was mainly concerned with the large pillar size in some of the areas and the way the roadways were set out. They weren't in straight lines, it was dog legs for the ventilation to go around, and on occasions there would be dead air areas - still air areas where the ventilation wasn't pushing the stale air out of those pockets or around the corner of the pillar or a pillar edge.

Okay. Do you mind just standing up and lifting up the front plan there and have a look at the one behind it. That's it. Just put that one over the back, if you would, and then if you sit down and you take up that pointer - it's a laser pointer, just switch it on. See the black thing there? Switch it on and you will find you get a red dot up on the plan. That's a plan of 512 that you see there; is that so?-- Yes.

Do you recognise that?-- Yes.

Just indicate for us, if you would, the areas that you were concerned about as being dead areas of ventilation?-- Those areas here around this pillar and this one here.

They are the big pillars that have been referred to as compartment pillars; is that right?-- Yes.



And for the record, what you are indicating is those pillars between cross-cuts 4 and 5 and then between 8 and 9?-- Yes.

Is that right?-- Yes.

And in particular the bigger ones towards the bottom of the panel, the larger ones I think you were pointing to?-- That one there and that one here.

Between 3 and 4 headings in particular?-- Yes.

Now, just explain with reference to where the ventilation was moving through the panel, if you can just show that, why it was that you thought there were likely to be dead areas there?-- If this side of the panel was being mined the ventilating current would come along these roadways along to ventilate your working face and out the return.

Just pause a moment because we can see where the red dot is but that's not going down on the record. Just to recap on that, you say if the top side of the panel was being mined then the ventilation would be coming down the No 2 road?-- Mmm.

Is that right?-- Yes.

And then coming back the top return?-- Yes.

What were the consequences of that?-- When this side of the panel was being mined the ventilation down through this side of the panel would be reduced.

That's the bottom side?-- Yes, on the bottom side of the panel, reduced down these roadways here by means of a regulator. I'm not really exactly sure where it was positioned.

Was that in the bottom return?-- In the bottom return.

And between 0 and 1 cross-cut. Was there a regulator there or was the regulator moved back progressively?-- As far as I can recall the regulator was between 0 and 1.

0 and 1. You can see a mark up there; is that right?-- Yes.

Between 0 and 1?-- Yes.

So that was the permanent position of that regulator?-- Yes.

Was that what was called the bleeder return?-- Yes.

Go on. You say when the top was being mined the ventilation was -----?-- Can I just say I am actually talking about in the development stage of the panel where there was no bleeder return at this stage.

I see?-- Both returns were used and one - you would swap from one return to the other depending on which side of the panel

you were working. When you were working the bottom side of the panel down here, the air along these roadways would be adequate to clear these dead areas here, but when we were working on the top side of the panel the air in these situations, in these areas, would be reduced somewhat which caused - I didn't come into contact with any abnormal readings of methane in those areas, but just by throwing stone dust in the area you could tell there was very little air movement.

That was during development you are referring to?-- Yes.

Before bottoms were taken?-- Well, during that stage. The initial stage of development, those areas that were dead would be dead, but when extraction took place those areas would still remain somewhat reduced in ventilation because of, like you were saying, the bleeder return down here and most of the air would be coming along across the working face and up the top return.

You are indicating there the air down the No 2 heading; is that right?-- Yes.

Or were you? You are saying during extraction the air would come where?-- During extraction the air would come down headings 1, 2, 3 and 4, but headings - sorry 4 and 5 the air would be reduced somewhat whereas most of your air would come in down the belt road which is No 3 heading and the man supply road which was No 2 heading.

Your concern then was in relation to those areas surrounding the bigger compartment pillars towards the bottom of the panel?-- Yes.

How would that be affected then by the taking of bottoms during the extraction phase which would produce a higher roof? What effect would that have on the slower ventilation in that area? Would it exacerbate it or would it have any effect at all?-- Would it what?

Would it make it worse or would it have any effect on it?-- The ventilation would become reduced in the extracted areas because of the size of the area, yes.

And the fact that more of the pillars are taken during the extraction process, that increases the size of that goaf or waste area?-- Yes.

Those concerns that you had about those dead areas of ventilation, were they matters that you discussed with anybody in authority in the mine?-- I would have discussed them with the undermanager at the time.

Do you remember doing so?-- Yes, on a number of occasions.

Who was it that you discussed it with?-- Well, I would say all the undermanagers that were on my shift. That would either be Terry Atkinson, Mark McCamley, Michael Squires.

Was there any particular system whereby the deputies had the

opportunity to raise these concerns?-- Yes.

Or concerns of this kind I should say?-- Yes.

And what was that?-- There would be possibly a pit top meeting where if you have any safety worries you could talk to the manager or whatever about your problems, about your concerns.

Did those meetings take place on a regular basis or just when required?-- I'd say on a fairly regular basis, but I would say I wouldn't have attended all of them.

Were they at a fixed time?-- No.

Would they have to be requested by either the undermanagers or the deputies or the miners?-- There was no fixed time, no, but it would be the undermanager that would decide to have a safety meeting.

And do you recall whether you raised concerns about the ventilation at any particular meeting?-- I wouldn't say at any meeting in the - at the pit top scenario, but privately or on a written report, yes, but not at a pit top meeting.

Let me turn then to other opportunities for communication between the deputies and the undermanager?-- Mmm.

Obviously you did a production deputy's report?-- Yes.

When you were involved with a production shift?-- Mmm.

What did you do with your deputy's report at the end of your shift on each occasion?-- Well, up until probably the beginning of last year the deputies' reports were hung on the report board at the front of the lamp cabin and after that your reports were handed directly to the undermanager or put on his desk.

Now, which copy did you hand to the undermanager?-- The original.

And the book that contained the carbons or the duplicates?-- Would be in the deputies' cabin.

For other deputies to look at?-- Yes.

When you gave your report to the undermanager would you, as a matter of practice, have some discussion about what was in it or about any matters of concern?-- Yes.

You would?-- Yes.

Did you invariably see the undermanager at the end of your shift?-- I wouldn't say at all times, but most times you would see the undermanager.

Who would you see, the undermanager on your shift or the incoming undermanager?-- Usually the undermanager on your shift.

So, you would be up there before he finished his shift?-- Well, they wouldn't go until everyone was out of the mine usually.

What sort of communication would you have then as a matter of practice with the oncoming deputy?-- Maybe a one to two minute verbal exchange down the mine when there was a hot seat changeover. If there was a changeover on the surface, you would have no contact with the deputy. All you could do was read his report because he was either in the bathroom or the shower or doing something else.

You wouldn't go out and speak with him if he wasn't in the deputies' cabin?-- I would if I had some concern, yes, and I did so on many occasions.

Apart from hot seat changeovers you would basically rely on what was contained in the report, that's the outgoing deputy's report?-- Mmm.

And if you had any concern arising as a result of what you saw there, you would go and seek him out and talk with him about it?-- Either the deputy or the undermanager, yes.

Now, you say that you can recall raising these concerns in respect of the ventilation in some way with the various undermanagers. Do you remember what sort of response you got in relation to that?-- Oh, I can't really. Responses, in my opinion, between management and men were, "We will do it our way, you guys can just sit there and lump it."

On this particular issue you don't remember what might have been said or even done in relation to your concerns about ventilation?-- No, I can't really recall it. It was just a concern, not a major disruption to the system, and if methane had started to build up in those areas, obviously the actions would have been taken.

You didn't yourself detect any higher concentrations of methane?-- Nothing out of the ordinary, no.

Well now, you were rostered to work the afternoon shift, or you did work the afternoon shift of Saturday, 6 August?-- Mmm.

How did that come about? Was that a normal rostered shift or were you asked to come in?-- Overtime shift.

When were you approached to do that shift?-- I can't recall but it would have been Thursday. I can't really recall. I can't say that for sure. Thursday the 4th or -----

Why do you say Thursday the 4th?-- Well, Thursday was the time when you knew what shifts you were going to work on the weekend.

You are just relying on -----?-- A tick on the wall.

----- normal practice?-- Yes.

And it wasn't that you were specifically sought out on the Saturday to come in because of some extra workload?-- No.

That doesn't ring any bells with you?-- No.

So, it would have been pursuant to the normal system that you found out on Thursday what shift you were going to work on the weekend?-- Mmm.

Now, at that time on the Thursday what was - assuming you were advised on the Thursday about coming in Saturday afternoon - well, first of all, would you have been assigned on the Thursday to work in 512 on the Saturday?-- No.

You would have just been asked to come in?-- Yeah.

And the duties would have been sorted out on the Saturday?-- Well, deputies usually sorted out their own duties, where they would rather go for the day.

On the weekends?-- On the weekend. You would usually find production deputies would get an off production panel and the deputies that weren't usually on production would get the areas where most work was going on.

Bit of a weekend treat?-- Well, probably.

Now, when you arrived there on the Saturday - first of all, are you able to say what time you would have got to the mine?-- On the Saturday?

Yes?-- 3 o'clock.

When you arrived there then at that time, were you aware that 512 was being sealed that afternoon?-- Once I got changed into my work clothes and went around to the deputies' cabin I

was aware that the section was being sealed.

But not before that?-- Beg your pardon?

But not before that?-- No. I knew that the sealing process would be taking place sometime during the weekend because the section had been finished, and that was normal custom and practice, to seal it fairly quickly.

And the section was finished when, on the -----?-- I can't recall.

But you knew before that that the section was either finished or about to be finished on the Thursday or Friday?-- Yes, yes.

Well, let me ask you this: what was your expectation before you got there on the Saturday and learned it was being sealed Saturday afternoon - what was your expectation as to when it would be sealed? Did you have any particular day in mind that you thought that 512 would be sealed?-- No.

When you arrived on the Saturday afternoon then and learned that it was being sealed that afternoon, did that come as any surprise to you?-- It did actually. I thought it was - I wondered why they were sealing it so quickly and why they would be doing it on a weekend. It was a bag of thoughts that came into my mind, and I sort of heard on the grapevine that they were sealing it because someone suspected a heating in the panel.

So, you understood the sealing had been brought forward to be done on the Saturday afternoon?-- Well, yeah, when I arrived at work that's the first I knew about it.

You mentioned the grapevine. Can you recall anything more precisely than that?-- Probably just the miners talking.

Did you understand or come to know who it was that had become aware of some benzene odour or -----?-- Not at that time but afterwards, yes.

When did you learn that?-- Oh, after the disaster.

But not that afternoon?-- No.

Did you read the deputy's report from the previous shift?-- Yes.

Whose report was that?-- It would have been the outbye deputy's report. I wasn't required in that panel and I'm not quite sure who that deputy would have been.

So, you would read the outbye deputy's report because you were going to be the outbye deputy?-- I wasn't going to the 512 Panel until later on in the afternoon.

Well then, just let me ask you this: when you came on duty, as a matter of practice, you would read the report of the

outgoing deputy for whatever panel or whatever duties you were going to do; in this case it was the outbye deputy's duties?-- Yeah, spare panel duties.

Would you ever go beyond that in what you read?-- Yes.

To find out what had been happening in the mine?-- Yes.

Under what circumstances?-- Any circumstances that I felt were in my own interests.

In this case when you heard that there had been some suggestion of a benzene smell, I think - is that the description that you mentioned?-- Yes.

Did you read the outgoing deputy's report in respect of 512?-- No, I don't think I did.

Did you make any other inquiries as to -----?-- I -----

Just pause a moment - as to what might have been detected on even earlier shifts in respect of 512?-- Like I said before, yeah, just on the grapevine from what people were talking about.

But you didn't go back to any earlier deputies' reports on 512, for instance?-- Not that day, no, but in days previous I would have read the reports, yes.

You mean when you were there on previous days?-- Mmm.

You would have read the reports?-- I would have read the reports as they were going through, yes.

You see, I am really wanting to ascertain what kind of system there was in place for people to get a general picture of what had been happening in any particular section. You mentioned that when you came on that afternoon, although you were the outbye deputy, that you were made aware of some suggestion of a smell in 512?-- Yeah.

Was there any system that you were aware of which then allowed you to find out what was the general picture in 512, what had been happening in the panel recently?-- Yeah, I put my gear on and went down and had a look.

To find out what had happened the previous day, for instance, in 512, any system for you to become aware of that?-- Only the deputies' reports.

I suppose they were available?-- Mmm.

But from what you say it wasn't really part of the system to go and look at those in these circumstances?-- Well, not if you weren't working there, no.

Well now, for instance, there was a report from the previous afternoon from Deputy Mick Caddell for the Friday afternoon shift which reported that there was a smell of some kind in

the 512 Panel. Did you ever see that deputy's report?-- No.

There was a report from the Saturday morning shift which indicated that there was a haze seen in the panel. Did you ever see that report?-- Possibly. I can't say yes or no. I can't really remember which reports on that evening, on that Saturday afternoon, that I did read, but I know I was concerned about it.

And the reason you were concerned is that you had been told about the benzene odour?-- Mmm.

Were you aware of any suggestion of a haze at that time?-- Not at that time, no, just a petrolly smell, that's all I had been told.

If you had been aware of a haze, would that have increased your concerns?-- It certainly would.

Or at least aware of the report of a haze perhaps I should say. You say that would have increased your concerns?-- Yes.

Now, tell me before we go forward to look at just what you did that afternoon, had you kept up to date as a deputy who worked on occasions in 512 with what had been happening in 512 over the past six weeks or eight weeks prior to ----?-- Yes, on occasions I would have been in the section myself, yeah.

You say there was about a half a dozen occasions?-- Yes.

Half a dozen occasions you worked there. On the occasions that you worked there as production deputy or even when you were working as outbye deputy on the weekends, what steps would you have taken to find out just what had been happening in the panel, just read the previous deputy's report?-- Well, there is nothing else you can do.

Were you ever party to any discussions about some slight tarry smell having been detected in 512 Panel back in the middle of June?-- No.

Did you become aware of that at any time?-- No.

Not up until - right up until now?-- Not up until after the explosion when I was talking to people.

A slight tarry smell in the middle of June. Concern about what appeared to be a reasonably high CO make in the panel at that time, were you aware of that in the middle of June?-- No.

Increase in CO make in the middle of June?-- No, no, I was never involved in CO makes at all.

I was just going to ask you whether, as a deputy, you had been instructed on how to calculate the CO make?-- Not as a deputy, no.



Well -----?-- I did know how to do it from my Mines Rescue training.

You know that from Mines Rescue?-- Yes.

As far as you were aware, was there any training within the mine whereby deputies were taught how to calculate the CO make in litres per minute?-- I can't talk for anybody else but I was never taught, no.

By virtue of what you learned either at the mine or in Mines Rescue, were you aware of the significance of calculating the CO make?-- Yes.

As opposed to simply reading the CO level in parts per million?-- Yes.

What was the significance of that, as you understood it?-- Well, I'm not exactly sure what the MAC values are, but once the CO make was over a certain percentage it would give you some indications of a heating.

Or a certain rate in litres per minute; is that right?-- Well, yeah, but what the rate is I'm not quite sure. It would differ.

And in your Mines Rescue training was there any suggestion of figures and you have forgotten them now or have you never actually been informed as to what figure in litres per minute might be significant?-- No, I was never really informed, no.

I mean, for instance, would the figure 10 litres per minute mean anything to you?-- Yeah, it would mean 10 litres per minute of CO was going up the return.

In terms of any dangerous situation would 10 litres per minute have any significance?-- In my mind it would, yes.

20 litres per minute - I am just trying to ascertain what knowledge you had, you see - 20 litres per minute, is that a significant figure at all?-- Well, twice what you just mentioned; obviously an increase.

If you had a CO make of 20 litres per minute in a panel, what would that mean to you?-- It could mean a myriad of things.

Would it indicate to you any danger level or any existence of something of concern?-- Depending on the situation.

Okay. I'm sorry, I am not trying to be critical?-- No, you're right.

I am just trying to ascertain what knowledge you had as a deputy. What about the rate of increase in CO make, what sort of significance would that have for you?-- None.

In terms of judging whether there was a heating in a panel, for instance?-- Well, I couldn't judge that. I was never taught that system.

Were you aware of a graph that was kept in the - put up on the board in the deputies' cabin?-- In the deputies' cabin, yes.

Showing the points plotted on the basis of CO make?-- Yes.

In litres per minute?-- Yes.

In respect of 512 Panel?-- Yes.

Okay. Did you read that graph?-- Yes.

Do you know how often it was updated?-- Oh, no, I couldn't say how often it was updated, no.

When you read the graph, what kind of things did you look for?-- Mainly consistency in the readings, or inconsistency, as the case may be.

How would inconsistency be shown on the graph?-- Well, if you got an increase in your readings, obviously something was happening. A steady increase would mean that things were just happening as normal. That's about all.

And a sharp increase?-- Would mean there was either an error in the calculations or something drastic had happened.

I'm talking about a graph, points plotted. So, you did look at that?-- Yes.

And you did look to see whether there was a sharp increase?-- Mmm.

The graph that you had most recently seen up on the board there prior to the weekend when it was sealed, what did that show? Did it have anything on it that concerned you?-- I can't remember there being a graph in the deputies' cabin for maybe the week before, for that whole week.

But the last graph that you saw, was there anything on there that caused you concern?-- Yeah, there was a sharp rise, which I queried with the fellows who were doing the actual calculations.

Who were they?-- Well, I'm not quite sure at the time, but I would imagine Allan Morieson and Jacques Abrahamse would have been doing the calculations at the time. There was a sharp increase on one day, which I heard was put down to instrument error, and I think that graph was just taken off the wall and thrown away and a new one put up.

How often were they posted there?-- I couldn't say.

Do you know what day of the week a new graph would appear?-- No, wouldn't have a clue.

Could the witness see Exhibit 25, please, Your Worship?

Does that document seem familiar to you at all? I know it is a bit hard for you to say at this stage whether that document might be precisely what you saw, or whether you saw something like that?-- I haven't seen this document, not from that far back.

The evidence is that this was a document produced on 5 August - that was the Friday. Do you recall whether you saw any document on the wall of the deputies' cabin on the Saturday when you went in there?-- No, I can't recall.

Did you work on that Friday?-- Thursday night.

You worked Thursday night?-- Yeah.

The next time you would have gone in was the Saturday?-- Saturday afternoon.

You can't recall whether you saw a document like this?-- No.

What about in previous weeks? Did you see a document that might be similar to this, but without the further extensions on it?-- Yes, I have seen documents similar to this.

And-----?-- But not as far back as the 2nd '94. They were usually a weekly one or fortnightly that was in the deputies' cabin, which would be changed by the person involved.

You will see that there are readings recorded there on a weekly basis from about 5 May, or thereabouts. It goes 5 May, 13 May, 20 May, 27 May, 3 June, 10 June, and then there is one for 11 June and then 16 August - sorry, 16 June, I should say, 24 June, 1 July, 8 July, 15 July; do you see that there?-- Yes.

And then you will see there is a point plotted there for 22 July which actually shows it coming down. Now, you say that you can recall seeing a document at least something like that on the wall in the deputies' cabin. I think you also mention that on one occasion there was a graph that showed a sharp

rise one day and that you discussed that with the people who were calculating it and you thought that that was Mr Morieson and someone else?-- Mmm.

Do you remember who else that was?-- Yeah, Jacques Abrahamse.

Jacques Abrahamse?-- And a Mr Bryon.

Mr Bryon?-- Yeah.

Mr Bryon relieved Mr Morieson, did he, while Mr Morieson was on holidays?-- As far as I can recollect, yeah.

Could the witness see Exhibit 95, please, Your Worship?

Just while that's being obtained, what sort of discussions then did you have with the people who had produced the graph?-- I'd say my discussions would have gone on around - I can't really say it in Court, but I probably said, "Gees, Steve, how come we've got a reading this high?", and there probably would have been a bit of a laugh and joke about it, and, "I must have taken the wrong readings.", or something along that scenario, and the next day they were put back to what they should have been, I would imagine. Someone else would have gone down and taken new readings and the graph would have then been plotted from that.

Where was the graph when you first saw it - the graph that had this high reading on it?-- I can't recall. Either in the deputies' cabin or the undermanagers'.

On a wall or on a desk?-- Oh, either/or. I'm not sure.

Were you called in to discuss it?-- No.

Was it one you happened to see?-- No, I just happened to spot it.

Do you remember what day of the week it was?-- No.

Did you normally work on a Friday if you weren't doing a weekend shift?-- No, not when I was on night shift.

Not when you were on night shift?-- No.

You normally didn't work Friday?-- We worked Friday, but Thursday night on to Friday morning.

Okay. Just have a look at that other exhibit there, Exhibit 95. You will see that that is slightly different to the one that you just saw a moment ago. It has the various dates along the bottom. But between the 15th and the 22nd, it has a reasonable rise in it?-- Mmm.

And then there is a question mark there, and then there is a point - there's no graph plotted on from the point where the question mark is, which is somewhere up around the 18 point something or between 18 and 19 occurred. Look over to the left-hand axis, but it is plotted in a downward direction

between the 15th and the 22nd. Do you see that?-- Yep.

To another point, and then plotted on from there?-- Yeah.

Do you recall ever seeing a graph like that?-- No.

Does that assist in terms of any discussions that you might have had about a wrong reading, or anything like that?-- Not really. It just would have been a normal discussion.

Can you recall whether at some stage there was an arrangement made to take additional readings in the 512 panel?-- No, I can't recall that.

That is, deputies were instructed to take additional readings in 512 panel, being the wind velocity - instead of just taking the normal readings, taking extra readings: wet and dry, wind velocity, so that the CO make could be calculated?-- No, I wasn't aware of that.

Not something that you had to do on any occasion?-- Obviously if I was in the panel I would have had to have done it, but I was never informed to do that.

You don't recall any formal instruction to do it - for the deputies to do that?-- No.

Were you ever party to any discussions about the need to calculate the CO make in 512 on a daily basis rather than a weekly basis?-- No.

So that some sort of eye could be kept on the CO make in the section?-- No.

So, when you were there on the Saturday, 6 August, then you were unaware of any slight tarry smell having been detected in the middle of June. From what you have said you were unaware of any concern that grew perhaps a bit later in the piece, say in late July, about the CO make in 512 panel? You were unaware of that concern leading to the suggestion that the CO make should be calculated on a daily basis so that it could be monitored - some sort of eye could be kept on it - and you were unaware of the fact that somebody had reported a haze on the Saturday morning?-- That's correct.

You were aware that there had been a suggestion of a Benzene type smell?-- Yes.

Or petrolly type smell?-- Yes.

At some stage?-- Yes.

You weren't too sure when?-- No.

You didn't know whether it was that morning, the previous afternoon, or-----?-- No, I'm not sure whether it was that morning or the previous afternoon. No, I'm sorry, I'll reiterate that. It would have been on the Saturday afternoon.

That it had been-----?-- That I would have first heard about the Benzene odour.

But you weren't - or were you aware as to when that Benzene type odour had been detected?-- No, I wasn't aware.

Whether it was that day or the previous day?-- No.

You knew at least there had been a Benzene type odour detected at some point recently to when you were there?-- Yes.

If you had known those other things that I have just mentioned to you about the slight tarry smell, etc, and concern about CO make in the 512 panel, and about the fact that someone observed a haze, would that have heightened your concerns about what was going on in 512 panel?-- Yes, it certainly would.

In what way?-- I'm a firm believer in not - in going to have a look for myself for my own peace of mind, and if these things had have been brought aware to myself, I would have gone and had a look and checked it out for myself and taken the instrumentation with me and gone and done everything.

Those things I have mentioned to you - I know this might sound a trite question to you, those things I have mentioned to you, what would they indicate to you?-- Spontaneous combustion.

In the panel?-- Well, wherever it was. Not necessarily in the panel, no.

Well, when I say "in the panel" - when you say "spontaneous combustion", you don't mean somewhere totally away from where these things were reported?-- Well, obviously not, no.

But you say those things would have indicated some danger, or risk, or possibility of spontaneous combustion?-- It would have indicated that some sort of - what would you call it - oxidisation of the coal was beginning to happen, yes.

Had you received much in the way of training on spontaneous combustion?-- Never.

At the mine or elsewhere?-- No.

Had you ever received a book of any kind?-- Yes.

That informed you about spontaneous combustion?-- Yes, through Mines Rescue.

When was that?-- Probably the first two weeks we were at Mines Rescue. About in 1980 or-----

What sort of book was it?-- I think it was in the Mines Rescue Training Manual.

It was in the Mines Rescue Training Manual?-- A big book about the size of one of your folders.

Never seen anything that can be referred to as a little red book on spontaneous combustion?-- Yes, when we first started at the mine.

That was given to you by who?-- Gosh-----

By who? By the mine or-----?-- By the mine, yes.

Did you ever read that?-- Yes.

When you received it, or some time just after that?-- Oh, during that period, yes.

Apart from being given that, were you given any other information about spontaneous combustion?-- No, not that I can recall, no.

Can we come back then to that Saturday afternoon when you, at least, were made aware about the Benzene odour? Did you yourself then speak with George McCrohon?-- Yes.

And with George Mason, the undermanager in charge?-- Yes.

And what conversation did you have with them?-- I would have mainly discussed the conditions, how far the sealing was in progress and how much longer it was expected to take.

Any discussion about the possibility of a heating in the panel?-- I didn't have a conversation with anyone about the possibility of a heating, but I did hear conversations going on.

Between whom?-- Between - oh, I'm not quite sure who it would have been between - whether the men and the deputy or the men and the manager, or the undermanager and the deputy - just in general conversation that they suspected that there was a heating in the section and that's why it was being sealed.

Now, you went down yourself, I think you told us, to 512 panel?-- Yes.

What did you do there?-- I talked to George when I first went into the panel, just general conversation about what he observed; whether he was worried about anything. I went up into the return to have a look and a smell for myself. I detected nothing out of the ordinary at this stage.

That's in the top return?-- Yes. I went back down to see George, probably had a drink at the crib table.

That's George who?-- George McCrohon, and then went into the panel along number 3 - No 2 heading, inbye where the men were building the seals, just to have a look around the waste edge of the goaf, which is as far as I was allowed to go.

How far was that in?-- Two pillars.

About three cross-cuts?-- Yeah.

070295 D.20 Turn 20 sbd (Warden's Crt)

And did you take some measurements up there?-- Just methane measurements, yeah.

Anything unusual in that?-- No.

Where did you go after that?-- I went around the mine, did my normal inspections of the spare section.

You left 512 at that stage?-- Yes.

While you were in 512, did you take any measurements with the Drager?-- Up in the top return, yeah.

What did you find there?-- It's written down here. I think it's about - I think it was about 9 ppm, which is what had been reported on previous occasions.

And apart from the Drager reading, did you notice anything else when you were in that area?-- No, nothing out of the ordinary.

Did you see any haze at all?-- No.

Smell any smell?-- Oh, a bit of a stale smell, but the returns were renowned for that. It's always a bit stale and a lot warmer than your intake airways.

Well, the degree of warmth, was that out of the ordinary for the circumstances there?-- No, not for a sealed section, no.

The smell that you smelt, was that unusual for the circumstances?-- Not with all the machinery around, no.

You say that you spoke with George Mason at some stage. Was that down in 512 panel?-- Yes, I think so, yes.

What sort of discussions did you have with him?-- I think it would have been just normal run-of-the-mill mining talk - what was going to go on during the shift, what was going to happen next shift and on the eventuation of the sealing, what was going to happen after that.

In relation to these seals, there was something new about these; is that right? They were Tecrete seals?-- Yeah.



Had you been associated with the use of the Tecrete seals before that, that's the final seals?-- No.

Did you have any particular view about the seals?-- I thought they were pretty raggy looking.

The Tecrete aspect of them or some other aspect of them?-- No, the solidity of them I would imagine. They didn't look pretty - very strong to me, anyway.

Well, you went and did your other inspections, you returned to the surface in time?-- Yes.

What time would it have been when you were down in the 512 Panel? Can I just go back to that?-- I'd say between half three and half four in the afternoon.

What time was it that you returned to the surface later?-- I'd say about six-ish.

Did you later go down to 512 Panel to relieve Neil Tuffs?-- Yes.

The arrangement was that you were going to do the last third, as it were, of the shift?-- Well, yeah, the last quarter.

The last part of the shift?-- Yeah. Neil was coming off shift and I was doing another shift after that one so it didn't really worry me where I was.

When you say the last part of the shift, that's the last part at the 512 seals?-- Yes.

So you were then in charge of the operations there until you were relieved by Cole Klease -----?-- Yes.

----- at 11.30?-- Yes.

During your time in 512 did you notice any change in the CO levels in the 512 top return?-- Yeah, I noticed a rise of between two and three parts on the Drager, but then again I put that down to the number of machines in the area as well.

What machines were operating there?-- Rovers, Eimco, personnel carriers and material carriers.

The mixer, was that going? Would that have any bearing on it?-- I don't know. I'm not sure what - I had never used one of those mixers, no.

Now, when you took over at 7.30/eight o'clock, how much of the seals had been built?-- I'll have to go back to my statement. During the period I was there the belt road seal was nearing completion, it was completed. The top return seal was completed to nearly a metre from the roof and the man supply road seal had been constructed to about a similar degree.

Was there any difficulty about getting equipment in, particularly into that top supply road seal -----?-- I don't

know. All the equipment was there when I got there.

----- or getting it out again? Was that something you were associated with?-- No.

You didn't have to make any decisions about what happened with the stoppings -----?-- No.

----- in order to get equipment in and out?-- No.

That wasn't a matter that arose during your shift?-- Not during my shift, no.

Now, when you were relieved by Cole Klease did you have some discussion with him about the regulator in the immediate panel return?-- Yes, I did.

Can you just indicate on that plan there behind you which regulator you are talking about there?-- That one there.

Was it the case that that had been previously partly dismantled to get equipment into that top supply road?-- It appeared to me that a machine had been run through it to take brick, mortar et cetera to the top return seal, yes.

That was before you had come on?-- Yes.

Did you suggest to him what might need to be done in relation to that?-- Well, no, I didn't, because I had already done it. When the Tecrete fellas and the men were building the seals a lot of the Tecrete was getting sucked through the opening and I was a bit bemused by this because I didn't expect this to happen. So I went for a walk around to find out why, and this is when I spotted that the regulator had been knocked arse over.

And that had increased the pressure from the ventilation, pressure on the outside of the seal?-- It would increase the ventilation into the panel, yes. I then -----

You had that repaired?-- I went back to the crib table, phoned the manager or the undermanager in charge, told him that - what I had found and that I was going to re-erect the seal back to its original position so that the men could keep working and informed Cole Klease when I was relieved exactly what I had done about the same situation.

Just on that point, when there were changes in the ventilation arrangements in a panel, whether it was during development or during extraction, were those changes registered anywhere either on a central plan, ventilation plan, or in some other way so that there was always some indication as to what the state of the ventilation was in any particular panel?-- Personally if I made a change in the ventilation I would inform the undermanager and I would write it in my report and that's about as far as it would have gone.

You don't know whether that would have registered on any central -----?-- No, wouldn't have a clue. There were

obviously central plans around, but they would change from day to day or week to week as the case may be. I don't think they would do it on a daily basis because you would end up with a thousand plans. Obviously during the operation you would change the ventilation maybe up to four or five times during a shift.

That's particularly the ventilation near the miner?-- Yes, but that was controlled by your regulators outside the panel.

Now, you remained on for the next shift, the night shift; is that right?-- Yep.

Did you have some discussions with George Mason about what you were to do?-- Yes, yep.

What was that?-- I was to man the Unor monitoring room and accept alarms raised - that came up on the monitoring system, on the Unor monitoring system, for methane and CO.

In the 512 Panel?-- In the 512 Panel and increase those set points as the alarms came up.

Just pausing a moment, during your previous shift, that is when you were working at the seals, did you have any input on this question as to where the monitoring point behind the seals might be located or was that already determined by the time you came on shift?-- That was always determined by the manager. A lot of fellas would have always liked the monitoring point to be right inbye the panel and in some cases this wasn't possible and in some cases it was, but basically all they did was leave a monitoring point about two pillars inbye the seals.

Just turn around and -----?-- But where it was I couldn't exactly say.

Just turn around and have a look at that plan up there in the No 3 heading. You will see a red point at first cross-cut which we have been told indicates the location of the monitoring point behind the seals?-- Right.

So that's really only about a half a pillar inbye the seals?-- Yes, that one is.

Now, at the time of sealing would there have been anything to prevent a monitoring point having been put further inbye by going down that top return and putting a monitoring point in through one of the doorways in the stoppings between 1 and 2 headings?-- No, don't think so.

You are not aware of anything that would have stopped that?-- No.

What would be your view? Would you get a better indication of what was happening inside the panel if it was further inbye?-- In my view I'd put your monitoring point way down here.

Right down the back?-- As far as you can, and have more than

one.

There would be nothing to prevent there being more than one monitoring point -----?-- No.

----- as far as you are aware?-- No.

Subject to the limitation of points on the Unor system?--  
Mmm.

Would there be any great degree of trouble or inconvenience to run a point down to that area, down towards the back of the panel?-- After extractions had taken place, yes, but not - they could have done it before extraction.

Or during extraction?-- Or during extraction.

What about after extraction but putting it in at least via that top return and then through one of the doorways?--  
What's the question?

Deputies - well, would that cause any problem?-- No.

Deputies quite regularly went down the top return to take readings after the extraction phase?-- Yes, the top return there was completely open right the way around.

And it was even possible to go across the cross-cut 13?--  
Yeah, if you were silly enough, yeah.

But certainly you could go down the top return and put something in through a doorway?-- Yeah.

In those stoppings?-- Mmm.

Even after extraction I mean?-- After extraction, yeah.  
Certainly not after the sealing, after extraction.

After extraction and before it's sealed?-- Mmm.

Well, you say that you were in effect put in charge of keeping the alarm levels up to scratch?-- Mmm.

It no doubt would have been anticipated that with the sealing the methane and CO levels in the panel would change?-- Mmm.

Is that right?-- Mmm, yes.

And each time that an alarm level was breached you would expect the alarm on the Unor system to change in relation - to alarm, I should say, to go off in relation to that breach; is that right?-- Yes, the Unor would alarm at the point which it was alarming at and you would accept that alarm and change the set points.

Now, ordinarily if the alarm point was breached, and for that reason the alarm set off, that would cause an alarm response on the Unor screen?-- Yes.

Is that right, and I won't go right through the detail of what that means, I mean it changes red and you get a red rectangle flashing; is that right?-- Yes.

And also the siren would be tripped?-- Yes.

Now, on this particular night after you were in the Unor room were there alarm levels breached?-- I can't say. I wasn't - after I was in the Unor room I don't know what happened.

No, after you went into the Unor room to keep an eye on things?-- Right.

After you started in the Unor room?-- Yes.

Were there alarm levels breached?-- How do you mean by "breached"? Reached?

Yeah?-- Yes, they were, a number of them. The lights went off, the Unor came up as active and the alarm sounded.

The siren sounded?-- Yep.

On each occasion?-- As far as I can recall, yeah.

Is it possible to disconnect that siren?-- I don't know.

You don't know? You've never taken any steps to do it yourself?-- No.

You've never been aware of the alarm on the screen going off without the siren sounding?-- No, I haven't been aware of that, no.

Well, on this occasion when the set points - the set points were breached a number of times while you were in the Unor room; is that right?-- Five times.

And on each occasion the siren went off?-- As far as I can recall, yes, apart from probably the last one where I reset the point before the alarm actually came up.

So in that case the alarm didn't come up?-- Yes.

And what you were attempting to do was to ensure that you set your alarm point at a level which was sufficiently higher to allow the gas to build up further without the alarm being tripped all the time; is that right?-- No, it's not. You would just reset it up to its next point regardless of how many times the alarm went off.

How did you select the next point on each occasion?-- I would go up by about .5 of a per cent.

Was that your own decision -----?-- Yeah.

----- or did you discuss with somebody what you ought to - what sort of extent you should go up?-- No, not really. It was my own decision about .5 per cent for the methane and

usually - I don't know, 10 parts for CO.

Which point did you look at on each occasion?-- I think the monitor - like I've got here the - I think the monitoring points were 5 and 16.

Could the witness see Exhibit 127, please, Your Worship? . The Unor system records various items in respect of this alarm system; is that right?-- Mmm.

Just have a look at that document and if we go down to - the best column to locate is the third column which talks about time of alarm. If you go down to the alarm on 6 August at 2316; do you see that?-- Not yet, no.

It's the first mention of the location of 512 seals?-- That's 6/8. Right, I've got it.

Yes, you see 512 seals?-- Yes.

There is a whole series of alarms at point 5 being the 512 seals and the first of those is 6 August, 2316, which would be 16 minutes past 11; would you have been in the Unor room by then?-- No.

And the next one is on 7 August at effectively eight minutes past midnight?-- Yes.

Would you have been in there by then?-- Yes.

And that shows an alarm on the CO gas level?-- Yes.

Where it breached a level of 40 - breached a level of 10 set point value, that's the second last column?-- Yeah, I've got that.

And it appears that the set point was reset then to 45 because you can see the next breach is 45?-- Yes, that's what it appears, yeah.

Was that the sort of thing that you would have done, reset those values like that?-- Yes.

The next one you'll see is a breach at 5.44 of that 45 CO level?-- Yep.

Then the next one then is a breach of the methane level being a level of 1.7 that was breached at about 5.44?-- Yes.

Very slightly after the CO breach and then it appears that the methane level was reset to 2?-- Yes.

And that was breached at 7.15?-- Mmm.

Would you have still been in the Unor room then?-- 7.15, yes.

And would you have been gone by -----?-- 7.15, no, sorry.

You would have been gone?-- I would have been gone.

What we have are effectively three alarms then that appear to have gone off whilst you were there, eight past midnight, one at 5.44 and 57 seconds and one at 5.44 and 58 seconds?-- Yes, but like I said, I did reset one set of sequences before the alarm went off as I was in the room all the time.

So you were trying to anticipate the alarm on occasions?-- Yeah.

Because you knew there would -----?-- Yes.

What appears there is pretty well consistent with your memory of things; is that right?-- Yes.

And the resetting. So there would have been three occasions then when you were there that there was actually an alarm on the screen and you say on each occasion the siren went off?-- As far as I can recall.

As far as you can recall?-- Yeah.

On those three occasions, if you look at that column of time acknowledged, you acknowledge the alarm fairly shortly afterwards?-- Yeah, it was pretty painful to listen to.

Nine minutes and 14 seconds after midnight the first one, and the others were only a couple of minutes after on each occasion; is that right?-- Yes.

When you accepted - I mean the first thing you should do when the alarm went off is to somehow deactivate the siren; is that right?-- No, it was a touch screen monitor. You press "accept" on the touch screen and that would shut off your siren and your alarm on the -----

So you would do all of that in one?-- Yes.

You wouldn't deactivate a siren before you accepted the alarm on the screen?-- No.

When you accepted the alarm on the screen what process did you use?-- Touch finger.

Did you have to put some numbers in at all?-- Yes, just punch in the settings that you wanted after they had come up.

You mean the new settings?-- Yes.

But in order to accept it, did you have to put some figures in?-- No, it's a touch screen.

Was it a touch screen on this occasion?-- Yeah.

Or was there a mouse?-- No, a touch screen. There was a mouse with a computer, but I don't know how to use a mouse. I used the touch screen.

You are quite sure on this night you used the touch screen?-- Positive.

And you don't recall, in order to accept the alarm, having to put two numbers in by way of what might be called an authority number or something?-- Yes, you do.

What numbers did you put in?-- Oh, gosh, I can't remember, mate. I would use any number from 1 to 69.

You didn't have any particular number assigned to you?-- No.

So, there was no way of telling later who it was. I mean, there weren't numbers assigned to people?-- I'd say there would have been.

But not to you?-- But not to me, no.

So, there was no way of telling later who it was that actually accepted an alarm?-- No.

I mean, you would just put in any number that occurred to you?-- Any number you like.

But you know you did have to put in numbers?-- You had to to accept it, yeah, two digits.

You can put that document to one side. Now, while you were in the Unor room the sealing was completed down below?-- Yes.

You were told that?-- Yes.

Sometime around 3 to 3.30; is that so?-- Yes.

Now -----?-- That's the time that I envisaged because that's the time that the men came out of the pit. How long it had been sealed before they came out I couldn't say.

They could have stayed on to do some cleaning up?-- Quite possibly, yes.

Well now, after you finished in the Unor room, was that the end of your shift at that point?-- Yes.

And you went home?-- Yeah.

Did you go to a union meeting that morning at all?-- Oh, no.



You think you might have needed a break at that stage?-- No, I don't think I went to it, no.

But you, nevertheless, came back to commence the night shift that night, 7 August at 10.15?-- Yes.

That was in fact the Monday night shift?-- Yes, Sunday night shift.

But commencing Sunday night?-- Sunday night.

Now, when you came back that night what did you do? It was just a normal night shift?-- Yeah, yeah.

What was your practice; where did you go?-- I got changed, went to the deputies' cabin, read any reports that were relevant to my situation where I was going.

And where were you to go that night?-- I wasn't sure until the undermanager informed us. I didn't think we would go down the mine at all that night, that's why I came to work; otherwise I wouldn't have.

Well, first of all, just before I come to that, do you recall particularly what reports you read that night?-- 1st North-west, as far as I can recall. That's where I was due to go.

Now, can I ask you this: why was it that you expected that you wouldn't be going down the mine that night?-- Because a panel had just been sealed, and from what I had observed in the past at the mine, if there was any - on the manager's authority you would not go down the mine if a panel had been sealed.

Did that happen in relation to the sealing of any panel?-- It happened once in the sealing of the 5 North panel.

What -----?-- But that was a definite - there was a definite heating found there with a device - I can't remember the name of it - probeye.

Right. You say it happened in relation to 5 North?-- Yes.

What about when other panels were sealed, what was the practice?-- Well, that was an ongoing argument with the management about the men staying out of the mine when the panel was sealed, and the answers that were got through these discussions were, "All you guys wanted some time out of the mine, it could take three months before the panel becomes inactive."

Just explain that a bit further. When had that response been given? You say there had been ongoing discussions. In what context, first of all?-- I couldn't - well, probably yelling matches, I would say.

Were you -----?-- Confrontations between the management and the men.

Well, in what circumstances did those confrontations arise, meetings or -----?-- Meetings, yes.

During discussions between deputies and undermanagers? Can you just explain it a bit further as best you can recall? What sort of meetings were these?-- It would just be a general safety meeting or you would say to the manager at the start of shift, "I don't think we should be going down the mine because the section is sealed. I believe we should stay out until the thing goes through its inertisation process and you've got no chance of an explosion."

Had you said that to managers or undermanagers in the past?-- In the past, yes.

On how many occasions have you had those kinds of discussions?-- I can't recall how many occasions.

Would it be once?-- No, more than once.

More than once?-- Yes.

Do you remember in relation to which panels those discussions had taken place?-- I would say any panel that had been sealed in the mine.

Well, did those discussions take place in circumstances where there was some concern about a heating, or were they discussions that took place when panels were being sealed without any concern about a heating?-- It would just be general discussion. When you seal a panel obviously it has to go through an explosive range, and if there is no ignition source behind the seals there is no chance of an explosion.

What about if there is an ignition source behind the seals?-- Well, when the levels get up to their explosive range there is obviously - if you have got enough heat, oxygen and - you have got the three - what do you call it?

Components?-- Components of an explosion, or something to happen.

What about the grey area where there is some grounds to suspect that there is a heating in a panel at the time that it's sealed, what's the situation then?-- I don't understand the question.

In terms of whether or not there is some danger?-- Well, you would obviously vent your concerns, but in the end the thing was you go down and work.

Had there ever been occasions when there had been any concern vented where there were some grounds to suspect a heating?-- Not that I can recall, no, but the possibility was always there.

I am interested at this stage in what you can recall about these discussions or meetings?-- A lot of these discussions

would just be personal discussions between two or three people. It wouldn't happen every safety meeting or union meeting.

When you say two or three people, who would that be, deputies, undermanagers?-- Obviously between the deputies and the management.

Now, what would have been the occasion most recently prior to this sealing of 512 Panel when a discussion of this kind had taken place?-- Like I said, every time a panel was sealed I would vent my disapproval of men going down the mine.

You say that you did it every time?-- Well, I would say 90 per cent of the time, yeah, whether it was to the manager on shift or to the undermanager or whoever was there.

You can't recall just how long before 512 was sealed that you would have had a discussion of this kind?-- When 510 was being sealed.

Do you remember that discussion?-- Not really.

Do you remember who you might have had discussions with?-- No.

Well, you say that that was the reason that you came in that night, because you really thought the men wouldn't be going underground?-- Yeah, I thought we would have a night off on the surface or something.

You arrived there, you said you went to the deputies' cabin and you read - you think you read some reports there?-- I read the report of the section where I was destined to go to.

When did you find out that you were destined to go to that -----?-- At the start of shift.

And who told you that?-- Michael Squires.

Under what circumstances? Was it just you and he talking, or were there a number of you there?-- He would yell out, "Okay, you guys are going down to that panel and you guys are going down to that panel.", and that was it.

Do you remember particularly on this night what sort of discussion took place with Michael Squires?-- As far as discussions between other people and Michael Squires, no, I didn't have any discussions with the men at all, apart from a few verbal abuses.

On this night, do you recall if there was anything said other than people being assigned to their jobs?-- There was a bit of a - nothing said by the management, no.

Anything said by the men in Michael Squires' presence?-- No, not that I can recall, no.

Did you, yourself, on this occasion raise or vent your concerns?-- No.

About going underground?-- No.

And why was that?-- I didn't want an argument.

How do you mean?-- Well, I've argued with this man many times.

This is Michael Squires you are talking about?-- Many times about certain areas of work, or how jobs were done, or who goes on what jobs and why sections should be stopped and why we should not be producing, and I could just get no - what would you call it - no feedback from the man. He was a very arrogant person, in my mind, and I'd been suspended twice in the past for arguing the point and stopping men from working.

Well, you say that that was the reason that you didn't raise it on this night?-- Yes.

The concerns that you had at that time, how great were they?-- They weren't great, no. I was under no assumption that the panel was undergoing a heating process anyway.

What information did you have at that stage that might have indicated the likelihood or possibility of a heating process?-- None.

The petrolly type smell, I think you called it, that had been mentioned to you the previous day-----?-- Well, like I mentioned before, I didn't detect anything myself. A slight stale smell, that's about all I could detect.

That didn't cause you any concern?-- No, didn't cause me any concern, no.

What about if on this Sunday night you had been aware about the earlier report of a slight tarry smell, the concern about the CO levels, the CO make, about the haze on the Saturday morning and combine that with the slight tarry smell - sorry,

the Benzene smell or petrolly smell that had been reported, would that combination of things have caused you to take any different approach?-- I would say so, yes.

Why was that? What approach would you have taken?-- If I had have been aware that all these points that you have just mentioned were correct, I would have informed the manager or the undermanager, as the case may be, that I, for one, wasn't going down the mine, and I would advise everyone else not to because a section had been sealed while it was heating up.

I want to come back just briefly to your knowledge of CO make?-- Mmm.

You say you didn't have much knowledge of CO make at all?-- No, not much knowledge, no. I knew how to calculate it, but what the figures meant or what the normal CO make of the mine was, I wouldn't have a clue.

If, for instance, you had known that the CO make, or that figures had been taken on the Saturday afternoon that indicated a CO make of around 18 lpm or 20 lpm-----?-- I didn't know-----

Sorry, let me finish. If you had known that, would it have made any difference to your approach?-- No, it probably wouldn't, because I didn't know what the normal was.

Now, you did take your crew underground then?-- Yes.

At the beginning of that shift down to 1 North-west panel?-- Yes.

And that was at about 20 past 10; is that right?-- Yes.

You arrived down there; there was some difficulty initially with the continuous miner; is that right?-- Yes.

The fitters had to be called?-- Yes, that's correct, it was broken.

There were some hoses to be fixed; is that right?-- Yes.

Two fitters came down?-- Yes.

And also another miner came down to make up your crew?-- Yes. The whole mine was running short that night. They had to get in extra men and deputies, as far as I was aware.

While you were waiting for the fitters, you carried out your normal inspections in 1 North-west?-- Yes, that's correct.

And found nothing unusual there?-- No.

At about 11.40 p.m. that night something occurred. Can you describe that for us? This was after the fitters had come down but before any mining had recommenced?-- I was - at that time I had been walking around the panel. I was walking from the - what they call the crib room area - the lunch room area

- back down towards the working face to see how the job was progressing, and I would have been maybe 5 metres or 10 metres off on my journey when I was blown off my feet.

In what direction?-- I was blown inbye - in towards the continuous miner.

Did that-----?-- My ears popped fairly violently. The brattice line moved and shook fairly violently. I then picked myself up and sort of tried to figure out what the heck had happened.

You had your minder with you at the time?-- Yes.

What happened to that?-- I don't really know what happened to it. It went off on alarm and I couldn't reset it. It just wouldn't do a thing.

And you couldn't read it?-- No.

What was visibility like?-- Within a minute - within a minute or two it would have been down to about five feet, or a metre, metre and a half.

Some time later when you got to the surface, you were able to turn your minder back on and there was a reading there you could see; is that right?-- Yes, that's correct.

And that was 1.4 per cent methane?-- No, it was negative 1.4 per cent.

Negative 1.4 per cent methane. After you picked yourself up, you could see some distance at that point?-- Yes.

Is that right?-- Yes.

This is before the visibility was reduced?-- Yes.

You could see as far as the continuous miner?-- I could see the lights. I couldn't see the actual continuous miner. I could see the lights of the miner there.

You called to the men and got replies from a number of people?-- Yes.

You told them to assemble at the crib table?-- Yes.

And you observed that there were eight lights coming up the roadway?-- Yes.

I suppose with some relief; is that right?-- Yes, much relief.

You then phoned the lamp room?-- Yes.

And while you were waiting for the phone to be answered, which was, I think you estimate in your statement, three minutes after the initial event - the initial concussion-----?-- Roughly. I can't really put much time into it at all. It was

a-----

That's your best estimate?-- That's my best estimate. I really haven't got much idea of time in that period.

It was about that time the thick brown smoke came in?-- Yes, very quickly.

And had an acid taste?-- Yes.

You spoke with Bob Davidson on the telephone?-- Yes.

And that was, as far as you could tell, the first he was aware of the incident?-- Yes.

You had some conversation with him. You then put your self-rescuer on and went to the PJB; is that right?-- Yes.

There was also a second vehicle there - the fitters' vehicle?-- The fitters had a vehicle, yes.

You have set out in your statement the events involved with the journey heading out of the mine?-- Mmm.

Just to detail it as briefly as I can: with some difficulty, the two vehicles made their way out of the mine; is that right?-- Yes.

And you noticed that all the men were using their self-rescuers?-- Yes.

You -----?-- Just in hindsight, one or two of the fitters had to be helped to put theirs on and a miner did that for them before we actually took off.

Had there recently been some exercise in relation to putting on your self-rescuers in the dark?-- Yes, there had.

You had been part of that?-- Yes.

In any event, apart from the fitters the miners seemed to handle their self-rescuers all right?-- Yeah, as far as I could tell, yeah.

As far as you could see?-- You can't really see much in the dark.

You came out the portal eventually; is that right?-- Yes.

And you went up to the bathroom. How did you feel when you got there? Any problems?-- I was - as I said, I had a bit of a spit which meant I was sick. My eyes were burning. I was shaking. I had a cigarette which was probably the wrong thing to do, and sort of got myself together and went over to the Mines Rescue room.

Now, you then had some conversation later with George Mason; is that right?-- Yep.

And you then took a light vehicle down the incline and kept an eye on the portals?-- Yes.

To see whether anybody else emerged?-- Mmm.

The air in the cut was very dusty. I suppose it, over time, cleared; is that right?-- Yes.

It took about one and a half hours to clear?-- Well, that's sort of - it was starting to clear over that time period. I think it would have been well on into the early morning before it was starting to - when the wind came up it would have started blowing all the dust and stuff out of the cut.

You were relieved in that position at about 2.30?-- Yes.

And you went back to the bath house?-- Yes.

You mention in your statement that you experienced a particular feeling at about 3 a.m.?-- Mmm.

What was that?-- I just felt useless within myself. I wondered what we were all doing standing around doing nothing and I was tempted to jump in a PJB with some oxygen equipment and go down the mine. So I kicked meself up the bum and went home.

You do make the observation in your statement that perhaps in



the circumstances people who have undergone the trauma involved in the explosion might best be removed from the area?-- Definitely, straight away.

Why do you say that?-- Just from my own experiences and what I felt.

Perhaps at that stage you are not acting in the most rational way?-- You are certainly not.

Thank you, Mr Graham. I have no further questions, Your Worship.

WARDEN: Thank you. Mr Macsporrán, unless you are going to be very brief -----

MR MACSPORRAN: I won't be quite that brief.

WARDEN: I propose that we continue tomorrow morning and you can commence then. Thank you.

THE COURT ADJOURNED AT 5.24 P.M. UNTIL 9.15 A.M. THE FOLLOWING DAY

