CORONER: We've been going almost - not quite two hours, is it time for a break for everyone?

MR TATE: It is, your Honour, and I need to tender Alana's map and I'm not sure whether that's  $\bullet \bullet \bullet \bullet$ 

CORONER: All right. I think we've got that as a number, but I - and we need also in - we need to photocopy that and photocopy these additional letters. That will be 20 - sorry, that will be 29, I think. Yes, sorry - beg your pardon, that's 26. Twenty-six it is.

ADMITTED AND MARKED "EXHIBIT 26"

CORONER: And we'll photocopy that and photocopy these two letters in the meantime. So you want what, 20 minutes?

- MR TATE: Thank you, your Honour.
- CORONER: Thank you, we'll adjourn.

THE COURT ADJOURNED

THE COURT RESUMED

## PORTION OF PROCEEDINGS NOT RECORDED

**COMMENT** by Michael McFadyen - the transcript does not indicate who was on the witness stand for the next section of the inquest. However, by deduction, it must be Detective Sergeant Scott Knowles as on the next page he states that he accompanied Detective Sergeant Campbell to the US. In a later page he comes back after as just before he took the stand it is realised that the profiles he has prepared are not correct. Therefore, everything in the first section till he comes back should not be relied on to be accurate.

## SCOTT KNOWLES

MR TATE: •••••I think as part of this investigation you had some conversations with Detective Sergeant Campbell from the Townsville CIB?-- I did, yes.

And as a result of those conversations you viewed the investigation brief at that time?-- That's correct. Yes.

Now, can I take you back please. At what - approximately what date was this?-- I think it was in October of 2005 was when the sergeant came down.

•••••back of the Court••••?-- My apologies.

•••••can hear you as well. Now, just so that we're - have a good understanding of what you knew, can you indicate please what information you had?-- The sergeant brought with him all the material he had in relation to the investigation.

Yes?-- He brought the photographs of the equipment, the statements that had been taken at that time and subsequent to that time, the data from Oceanic, basically he brought with him copies of - of everything that he had arising out of the investigation to that point in time.

All right. And apart from your discussions with him, you read that material?-- I did, yes.

And I think you talk about that in your - in your statement. Equally, I think you have qualifications and experience in diving?-- I do.

If you'd let us know your experience and your qualifications?-- My qualifications are under the NAUI system, which is the - a similar system from what PADI, which is what they all are. Basically my qualifications there are open water 1, open water 2, advanced diver, I'm also a qualified rescue diver under the NAUI system and I've got specialty qualifications in terms of wreck penetration, cave diving, those sorts of qualifications which are pertinent to this.

All right. Now, you, I think, tell us in your statement that you prepared a report as part of your involvement in the investigation?-- That's correct. I prepared a report back to the region in relation to the end result of my review of that investigation.

And can you tell us what were your suggestions or what was the conclusions in your report?-- The conclusions I drew in the report were that there were some indications of some suspicious circumstances in the - in the incident. My recommendations were, and I simply broke them down saying that there were a number of enquiries that had to be conducted locally, nationally and internationally and I simply broke those - those enquiries down and suggested that they needed to be conducted before they're presented before a Court.

All right. And I think in due course you accompanied Detective Sergeant Campbell to America where further statements were taken?-- That's correct, yes.

And one of those statements, I think, was Dr Stutz who was allegedly an eyewitness?-- Correct.

Now, am I right in assuming that as part of your task of reviewing the evidence, you had the opportunity of seeing the dive computers?•• I didn't see the dive computers physically. I saw the data that had been extracted by Oceanic.

All right. Now, your Honour, I've had a discussion with my - my friend about this. It's proposed that the constable who was giving evidence yesterday, be in Court to hear the evidence about how the graph that, your Honour, has before you there - slide 6, and also the document that we had yesterday.

CORONER: Yes.

MR TATE:  $\bullet \bullet \bullet \bullet \bullet \bullet$  was prepared and it's proposed that he be present in Court. That was Exhibit 21A $\bullet \bullet \bullet \bullet \bullet$ 

CORONER: Yes, I've got - got that.

MR TATE: •••••marked for identification. I wonder if he might just be brought into Court and sat down?

CORONER: Thank you.

MR TATE: It's proposed after the dive profile information is given and concluded and we move onto other topics, that the - Officer Murdoch will leave the Court.

CORONER: Yes. Thank you. And the witness knows why he's in Court?

MR TATE: Yes, he does.

CORONER: Thank you.

MR TATE: Now, Detective Sergeant, what has been circulated to his Honour, as well as the other barristers at the Bar table, are three sheets?•• Mmm-hmm.

Do you have a copy of ••••?•• I do, yes.

Then, there's another one which appears to have the dive profile? •• Correct.

And then there's a third one which appears to be a number of columns?•• That's correct.

Yes. All right. And lastly, we have this document ••••?•• Correct.

Can I ask you to take this document first, please? •• Mmm-hmm.

And do you have a copy there?•• I - I do, yes.

All right. If you'd open up to it. Now, how should his Honour understand this document? What does it portray? We'll come to how you arrive at this information.e.e.

•••••in due course. At the moment, I'd just like to identify the documents with you?•• Probably I should say from the outset is - is correct a situation in relation to this - to the first document which is the - the document which contains all four profiles on it.

Yes?•• At this - at this time, you can see that the deceased's profile is outlined in the dark blue.

Yes?•• This document was prepared by me, probably a couple of days ago. At the time I prepared that document, I came across what I believed was a dive profile provided by Oceanic from the deceased's computer. In reviewing the material on the way up here, I realised that the deceased's computer, which is the Versa computer, doesn't store that sort of data. It - it stores merely the maximum depth - maximum time that they spent underwater and the maximum depth that the diver reached or that that computer reached on that dive. It doesn't actually store this amount of data. It - it tabulates as - as you're diving, so it knows how long••••

Yes?•• •••••you're spending and how long you - how long you've got left to spend underwater, but it doesn't store the data. When I reviewed it what I've actually done is - is mistaken the dive profile provided by Oceanic for Singleton as being the one for the deceased.

Now, Senior Sergeant, we'll probably do it this way, if this is okay? •• Mmm-hmm.

I'm pleased that you've reviewed the material and we'll have plenty of time to go through ••••?•• Sure.

•••••chapter and verse••••?•• Mmm-hmm.

•••••how you've come to your calculations?•• Yes.

And I'm sure we all appreciate the fact that you now - now need to tell us about what you found on review?•• Mmm-hmm.

What the data tells you, how the - it came about. So, that's all fine?•• Mmmhmm.

•••••is just concentrate on identifying the documents?•• Sure. Okay.

•••••that you're going to talk to us about•••••?•• Mmm-hmm.

•••••so that we can better put in perspective what you're going to tell us about the dive profiles?•• Sure. Okay.

Does that makes sense?•• It does.

•••••the deceased and Watson, it's called - Tina and ••••?•• That's correct.

•••••Watson. Tina and Mr Singleton, Mr Watson and Mr Singleton and then lastly the page that you've just been talking about••••?•• Yes.

•••••which is Tina, Gabe - possible Gabe and Singleton?•• Mmm-hmm.

All right. So, that's that document. I tender that, your Honour. And that, of course, is the one that you prepared?•• Correct.

Now, of the other three documents, which one should we go to first?•• Probably the - the one with the - the numbers tabulated on it. All right. That's - that's this•••••?•• That's correct. This one?•• Yes. Right. Yes. Well, perhaps we might call this one "A", Senior Sergeant, so•••••?•• Sure. •••••in future that's going to be "A". I propose tending - tendering these at some stage. I don't know whether, your Honour, wishes to include them••••• CORONER: Yes. Well, I want to mark them as we go. So, this one here is "A"?•• Correct, your Honour. MR TATE: No, your Honour. This one?•• No, no. CORONER: Top one there? MR TATE: Yes. CORONER: Have you got my - the last of those? No, you put them back. So, this is 27A.

ADMITTED AND MARKED "EXHIBIT 27A"

CORONER: Yes.

MR TATE: Now, can you just tell us briefly where this information came from and roughly what it depicts. We will return to it •••••?•• Sure.

•••••so, at the moment just a rough indication?•• Basically, what this information is, is it's a tabulated form of the data provided by Oceanic, both from the dive computer of Singleton and of the dive computer of Watson. It also contains data in relation to the deceased's dive - dive profile. Whilst that wasn't drawn from a particular computer, because her computer doesn't record that data, it was, I guess, suppositioned that she would have been following a similar dive profile to what Mr Watson was prior to their separation. Subsequent to that separation, she has to have sunk••••

All right. Again, you're going into ••••?•• Okay.

 $\bullet\bullet\bullet\bullet\bullet$  too much detail. Now, I'd just like to confirm that Officer Murdoch has a copy of these documents.

UNIDENTIFIED SPEAKER: Yes.

MR TATE: All right. So, that's 27A•••••?•• Okay. Yep.

•••••and that's information or data from Oceania?•• Yeah. Well, that - that's basically the data from which the graphs are drawn from.

All right. That's okay. Now, the second document ••••?•• Probably •••••

•••••we shall identify is this which is•••••?•• It's correct.

•••••looks to have a profile on her?•• It does.

CORONER: Twenty-seven B.

ADMITTED AND MARKED "EXHIBIT 27B"

MR TATE: Thank you, your Honour. Now, again, if you can just identify for us•••••?•• Yep.

•••••where this - where this comes from and roughly what it depicts?•• This data was retrieved by Oceanic from the dive computer of Mr Singleton. Comment by Michael McFadyen: THIS IS INCORRECT Right?•• They produced the graph. It - it basically depicts the - the profile of Mr Singleton's dive on that particular day.

All right. And that's information that was just provided to you as a profile from Oceania?•• Correct.

Now, did they by any chance give you a similar graph for Mr Watson?•• There - there is a similar graph but the - this graph material was actually drawn from the actual physical data because I actually had the data from Oceania.

Right. And that's 27A?•• No. The - the next document you're going to refer to•••••

All right. That's this one ••••?•• Correct.

•••••with the columns?•• Is the actual - it's actually the data from the dive - from the computer company as to - it's a mathematical data or mathematical dive plan.

Right?•• They did provide a graph, which I can certainly provide but essentially it's - I used the - the data to do it, it's more accurate.

All right. Well, now•••••

CORONER: So, that's 27C.

ADMITTED AND MARKED "EXHIBIT 27C"

MR TATE: Thank you, your Honour. Now, so the three documents we've just been talking about ••••?•• Mmm-hmm.

•••••is information given to you by the manufacturers and distributors of the dive computers?•• Two of the items are. The other two are what I have drawn from that data.

Yes. All, indeed. Okay. Now, take us through, please, Senior Sergeant, chapter and verse, take your time, where do we go, what do we start with? Should we start with 27C?•• Well, basically what we knew at this time was that the data from the computer was probably the most reliable, I guess, eyewitness that we had at that time, because it - it gave us time, depth and - and generally what was occurring within that column of water.

All right ••••? •• So ••••

So, if we go to 27C, are you telling us that these records taken from Gabe's computer are the most accurate profiles that we have?•• Correct.

All right. Now, please, take us from the left-hand column where it says, "Dive time" and take us through. So, at the moment, I don't want you to draw the inferences and tell us about ••••?•• Sure.

•••••drawing the graphs?•• Yep.

Senior Sergeant, we need to understand •••••?•• I understand.

•••••what the data is?•• What it actually depicts is the dive time gives you how long into the dive that it's recording that the data for.

Yes?•• This particular device records data on a depth variation, so about every 10 feet or three or so metres, it records an occurrence.

Yes?●● And it's - it's restricted to that, in that it records on the variation of depth, not on time.

Yes?•• Newer models do record on time as well.

Yes?•• This model doesn't, it only records on a variation of depth. So what you've got is the dive time is simply the time that the computer records the occurrence of a change of - of about three metres depth.

Yes?•• The depth gives what depth it was at when it made that record.

Yes?•• The first record was at one metres, that's just the activation of the device once it detects some pressure in the water.

Yes?•• So it's an automatic activation of the device when it detects the fact it is under water, basically.

Yes?•• So it makes a record then. NBG is - is basically a nitrogen blood gas, it's a way of working out whether they need to do a decompression stop or not, it's••••

Yes?•• •••••probably irrelevant data for this - this matter here.

Yes?•• O2 is a similar thing in terms of - of oxygen in the blood, it mainly refers to diving without using air, but using a - a mix of - of other gas or - usually oxygen and nitrogen, it determines O2 blood gas.

Yes?•• The ascent rate or descent rate, whichever way it runs, but the ascent rate is basically the computer working out between the last time it recorded and - and its record now is what the descent rate was. So, if we look at the first reading, it says "one metre"?•• Yes. And the time is 000?●● Yes. So that's clearly indicating no time has elapsed? •• That's the activation. Yes. And the commuter is - computer is activated at one metre?•• Yep. And then if we go down to two metres, we see •••••?•• Two minutes, you mean? Two minutes, yes; we see that we're told that we're now at 9.5 metres in depth?•• Correct. And that between that reading and the reading that was taken at 000 six metres?●● Yes. There's been a descent of three metres? •• Of about three metres per minute. Yes. And if we go one back, again, we see a zero to three minutes, and that tells us that we've gone from 3.5 metres down to six metres? •• Correct. And so the descent is about three metres per minute? •• Correct. And again the one before that gives a - a record of really what appears to be from the surface down to about 3.5 metres and that's telling us it's a descent of three metres?•• Correct. And then we have the first reading which ••••?•• The first one is just •••• Is curious?•• •••••an activation record and it's - I mean it can't determine a a - an ascent rate at that point in time, it's just simply an activation. Yes, all right. So we really, we don't learn very much from that first entry?•• From that first - that record, no. All right?•• It's just the fact that the computer has activated and is operating. All right, thank you. Now, I think we can then follow that and we might come back to some of the other readings. We then have temperature?•• Yes. Which I take it is water temperature?•• Correct.

No descent time or? •• No, that's no decompression time.

Right?•• What that is relating to is if you are under - well, you're under pressure under water, therefore your tissues are absorbing gases, predominantly nitrogen gases the - is a worry for divers. A no decompression stop tells you how long you have remaining at that depth before you have to do a decompression stop on the way back up. So if you have a look there at - at say - at say six metres depth, it's basically saying to you, that point in time in your dive at that depth, you can remain under water for another nine hours and 59 minutes before you need to worry about decompressing yourself on the way back up. Mmm, Mmm?•• So it - the computer actually relays to the diver how long they have got left at their current depth considering their dive profile to that point••••

Yes?•• •••••before they need to worry about basically the bends.

I see, all right. And depth stop, just lastly, second lastly?•• <mark>Yeah, I don't</mark> quite know what that is for.

And violation status?•• Well, violation status would be if it records the fact that you're ascending to quickly

Yes?•• •••••it will record the fact it's - it's a violation.

Yes?•• Because what the computer will tell you is, you know, you're ascending too quickly, which then gives you concerns for - for the bends and things like that.

Yes?•• So it actually keeps a record of any - any violations that have occurred. It's - it's got it's own, I guess, maps dive plan, that it considers the safest.

All right?•• And it records any violations against that. Comment by Michael McFadyen: Violation status is actually ascending shallower than a prescribed decompression stop or ignoring it altogether. Now, is it in relation solely to this document or to this document plus others that you then plotted Gabe's dive profile?•• It was solely on this data•••••

All right?•• •••••here that the dive profile for Gabe was plotted.

Can I show you Exhibit 6, and if we're lucky we may even - we may even have a smaller copy of that to give you so that you don't have to be looking off into the distance?•• That's fine, I can••••

Did you accurately record Gabe's dive profile from this information on slide six?•• As best I could, I did. As you can see on the data itself, he covers, you know, covers six metres depth - he covers six metres depth in basically no minutes.

Yes?•• Obviously that - that can't occur, so there - there has to be - that one minute has to have occurred - oh he has to have covered that depth in say one minute. Comment by Michael McFadyen : it was actually less than one minute

Yes? •• The graph basically extrapolates the fact that he must be moving •••••

Yes?•• •••••and gives a - gives a - a reasonable ascent - or descent time at that point in time. It's extrapolated to this data which is how I then drew - drew the - the data where I plotted on the graph.

••••firstly?•• Mmm-hmm.

Which in - in and of itself is derived from how the computer, dive computer actually provided you with information ••••?•• Mmm-hmm.

•••••is accurate?•• Correct.

All right?•• The - the blue line depicted on there is the best that I can replicate the dive profile for Mr Watson••••

Yes?•• •••••on that day.

Right. Now, if we go to what is now our Exhibit 21, you see there that you have a red line for Gabe?•• Correct.

Does that red line follow exactly the same profile as we see in Exhibit 6?•• Correct, it's exactly the same data that was used to plot that - that I used to - to plot••••

All right?•• •••••what you see in Exhibit 6.

Now, what I'll do, is using Exhibit 21A because we've all got that and I understand that that's probably the document we'll be spending a lot of time with; take us through the various recordings, how they were made, and the reasoning and logic behind how you plotted this?•• Okay, so we're talking about••••

21?•• ••••this - this graph?

Yes, yes?●● Okay.

Yes. So that's 21.

CORONER: You don't have it in colour, do you?•• I have it in colour, your Honour, yes.

Good, thank you.

MR TATE: Now that's our first one, we have four, and the first one is  $\bullet \bullet \bullet \bullet \bullet \circ \bullet \bullet \bullet$  It basically depicts deceased and Watson on that graph.

There you are ••••?•• Oh no, you've got four.

•••••I'll just - I'll - I've got - we'll - we have a four, I'm sure?•• Yeah, I've got it too.

Well, can I just ask you to have a look at this document?•• Yep.

Which is my copy? •• Oh okay.

And please arrange your things in the same order.

CORONER: Now, that's exhibited as 21, we'd better number the four pages, A B C and D.

MR TATE: Thank you, your Honour.

CORONER: And the order ••••?•• That's what I had.

The one's that I've got are stapled or we done that one.

MR TATE: Yes. Your Honour, perhaps A could be the dive profile on the righthand side headed up "Deceased and Watson". CORONER: Yes. The next one "Deceased Singleton".

MR TATE: Yes, your Honour.

CORONER: The next one "Watson Singleton".

MR TATE: Yes, your Honour.

CORONER: And the next one "Deceased Watson, possible Watson and Singleton".

MR TATE: As do, your Honour.

CORONER: Yes. Least we know where we are.

MR TATE: All right. Now, senior Sergeant, did you get those?•• I do, yes.

All right. So we're on graph A?•• Correct.

Please, can you take us through as I said the data, the reasoning, the logic and how we should understand the red profile of Gabe on Exhibit 21A?•• A, okay. Basically what the graph depicts is a pictorial view of the statistical information contained in the - the tabulised form.

Right?•• I - I mean it's just done simply straight of Excel. It's data added into Excel, I then asked for a graph to be plotted. What it - what it depicts is basically the dive profile, it's the same that Oceania would have used, or a similar sort of system. It depicts the dive profile of Mr Watson during that dive.

All right. Now, I'm just going to stop you there for a moment, Senior Sergeant. So, where we are at the moment is that you've told us that you've used 27(c) which is the information you've given••••?•• Yes, yes.

•••••as the••••?•• As the••••

●●●●●data from Oceania?●● Correct.

When we look at 27(a) which are a number of entries?•• Yes.

Insofar as those entries relate to Gabe this is now an Excel spreadsheet?•• Correct. It - it's basically a direct translation of the data from Oceania••••

## Yes?•• •••••into - into Excel.

Comment by Michael McFadyen: it could not be as the times are only recorded in minutes, he must have made guesses at minutes and seconds And you did that•••••?•• I did that.

•••••exercise?•• Yes.

All right. So, we understand that. Now, we've got this information ••••?•• Yes.

•••••which if we look at in terms of 27(c) should be the same?•• Correct. As

again - as I said extrapolated slightly ••••

Yes?•• •••••because - because of the fact that the computer only records that increment so therefore you cover six metres in - in zero minutes. So, therefore it has to be extrapolated slightly.

Yes, all right. Now, sorry, I took you away then from this, but it's just important that we understand ••••?•• Sure.

•••••the process you see?•• Yep.

All right. If you continue please?•• So, basically what - what you're looking at here is the dive profile of Mr Watson which is the pink one extrapolated from the data from Oceania.

Yes?•• It obviously shows he descends. The figures - or the numbers beside it are the - the rough descent rates that he covered over that period of 30 seconds•••••

Yes?•• •••••to arrive at the depth that he was at at that particular point in time.

Yes?•• So it shows that originally he started out at about 6 and a-half metres per minute descent••••

Yes?•• •••••this is in metres not feet and he - he sort of continues down. He - he slows his descent rate at about the one a-half minute - sorry about the one minute mark which is at about say six and a-half metres, or six metres.

Yes?•• It continues down before - you know before it again starts to, I guess, dive at a - an increased rate••••

Yes?•• •••••to about the 12 metre mark.

Yes?•• At that point although he is descending it's only a very gradual descent.

Yes?•• So, it's - it's at about one and a-half metres per minute.

Yes?•• So, it's only a gradual descent until about the - the five minute mark - 15 metres mark.

Yes?•• Where it appears he - according to the computer, the computer now starts increasing or decreasing depth, I should say.

Yes? •• Where it appears he then starts returning to the surface.

Yes?•• The graph obviously depicts the fact that he's returning at about the six minute - sorry, six metres per minute - five metres per minute then accelerates to about eight and a-half metres per minute before - again sort of steadying off but that's roughly the ascent rate that - that was taken.

●●●●●minus 1.82●●●●?●● Yes.

•••••going right down to, if you like, minus 1.2?•• Yes.

Then there's nothing? •• Yes.

And then coming up ••••?•• Yes.

•••••we see a 6.0, a 5.5, an 8.54, a 4.26 and a 6.1?•• Yes.

Now, I think I understand what you're telling us. Do we understand that to be - and if we take 8.54, for example, that between those two dots one - a little above 10 metres?•• Mmm-hmm.

And one just on or a little below minus 5 metres?•• Yes.

That he's done what?•• What that depicts is in that 30 second period••••?•• Yes.

•••••from - from he was at about 9 metres to about 5 metres.

Yes?●● He was, I guess, ascending●●●●

Yes?•• •••••at about eight and a-half metres per minute••••

Yes?•• •••••in that 30 second period.

Yes, all right, thank you. I think I can understand that. Now, there are no other documents that you've provided us with today that talks about the data entry for either, what we're calling slide 6 and what we're calling Exhibit  $21? \bullet \bullet$  No, there's - there is no other data.

All right. Now, can I take you to 21(d) and that is the one that has the four profiles?•• Mmm-hmm.

Now, the difference in this one is that you've included, I assume, exactly the same graph for Gabe in •••••?•• Mmm-hmm.

Which - red or pink or purple?•• Yes.

But you've included a - a yellow ••••?•• Yes.

•••••graph which says, "possible Watson" or "possible Gabe"?•• Correct.

Now, again can you take us through your data for this •••••?•• Mmm-hmm.

•••••the reasoning and logic you used and how it was that you plotted this particular••••?•• Okay.

•••••graph and lastly after you've done all of that you can tell us what significance it has, if any?•• Okay. The - the dive computer that was being used by Mr Watson on that day only records an occurrence every - every three metres or so. So, every 10 feet it will the record an occurrence which is what the - the data from Oceania shows. That's it's trigger to make that occurrence. Basically what happens is if I'm at say a 15 metres depth I can move in that depth almost 20 feet - 10 feet either side of the 15 metre mark.

Three metres either - either way?•• Yeah, three metres either way without the computer necessarily recording the fact that I have moved that - that distance because as I said it only records, on a change of depth of about three metres. So, I can essentially move from - from 15 metres to, you know, 12 and a-half or 17 and a-half without the computer actually saying, "You've changed the depth.", because as far as it's concerned it hasn't occurred. What I did here was I

said, well, he could possibly have been deeper than 15 metres without the computer actually saying he was at 17 and a-half metres. What I - I had attempted to do here was to say, okay, if, for instance, he was at 17 and a-half metres what sort of ascent rates would it have had to have been achieving in order to make it back to the surface at the same time it - its recorded by the computer.

Yes?•• So, the yellow line basically depicts that given up to about the 15 or up to about the five minute mark, it's probably essentially irrelevant but I mean the same thing could apply there. He could be either side of that line at that point in time. The main crux was at that five minute mark. If he was two and a-half metres deeper than what his computer says what ascent rates would he have had to have had in order to achieve surface again by that seven and a-half minute mark. The yellow line and the yellow figures basically show that he would have to have had been ascending at a greater rate which is obviously - you know, it's common sense, coming from a deeper depth, he had to have been ascending at a greater rate in order to make that surface. The reason that was being looked at was he suggests - Mr Watson suggests that he was racing to the surface. I wanted to see what sort of speeds he - he may have been doing in order to break surface, you know, if he was certainly accelerating to the surface. The original pink line sort of gave me a suggestion but I needed to look a little bit further in that. If he was just that little bit deeper and the computer hadn't recorded that fact what speeds must he have been doing in order to achieve that - that surface break at - at seven and a-half minutes which is what the yellow line depicts there. It's depicting a scenario of, if Mr Watson is deeper than what his computer is suggesting what speeds must he have been doing to achieve surface ••••

Within the time frame of  $\bullet \bullet \bullet \bullet \bullet ? \bullet \bullet$  Within the time frame that the computer had said. Like the computer basically says at the - at the - about the seven - seven and a-half minute mark he has to have broken surface. Now  $\bullet \bullet \bullet \bullet$ 

Equally of course, Sergeant, that if we go back to the point - what we're calling the point of separation ••••?•• Mmm-hmm.

•••••if it went the other way and he was perhaps two metres••••?•• Shallower.

•••••this deep••••?•• Mmm-hmm.

•••••then that would have a more gradual••••?•• Correct.

•••••ascent rate?•• Correct. It would be less than what those pink figures depict.

All right. So, am I right in assuming then that the value of the yellow line is first of all to give full credit to the dive information contained in the computer?•• It's probably - should give full credit to Mr Watson••••

Well, I was going to get to that, so ••••?•• Okay.

•••••it's really first of all you're giving full credit to what you're told in the computer••••?•• Correct.

•••••and secondly you're accepting what Gabe has said to police in terms of his rate of ascent?•• I accepted - well, I - I was perhaps testing his - his statement in that he is saying that he was racing to the surface to - to get help. In order to test that or to give it full credit I had to say, well okay, if he was deeper than what the computer sort of suggests then that would - would obviously increase his ascent rate.

Yes?•• So, I had to then - as you said, give full credit to what Mr Watson was saying and - and test

Mmm?•• •••••<mark>what he was suggesting</mark>.

Mmm?•• Which is what that yellow line basically does.

In other words you were attempting to be thorough? •• Correct.

All right. Now, is there anything else in any of these profiles that relates to Gabe in Exhibit 21A that we need to deal with just at this moment?•• The - the only other one is the one where it's graphed with Mr Singleton.

All right. Well, we might come?•• Which is "C" but••••

Yes, we might come back to that? •• Sure.

So, can I now take you to slide 6 which you have?•• Yes.

Your yellow line that we've just been talking about, I assume is the blue dotted line....

•••••in there. Now, I notice that that seems to track down to about 12 or 13 metres and then zip off at a shallower angle for a period of time and then goes down to the point of separation••••?•• Mmm.

•••••and continues down and then you've given - you give the - the ascent?•• Correct.

How should we understand the part of the dotted line before the point of separation, what are you trying to test there or understand?•• I'm probably not testing anything there but I'm showing the margin of error that I'm giving to the data from the computer.

Yes?•• I'm suggesting that when it is saying he's at 15 and a-half metres••••

Yes?•• •••••he may not necessarily be, he may be - it had to have reached 15 and a-half metres for the occurrence to occur.

Yes?•• So, for it to have occurred the computer had to have gone, right we're at 15 and a-half metres and make the record. From that point he may have gone shallower or deeper after the occurrence without the computer actually physically recording that occurrence. What the dotted line is suggesting here is he may have been shallower or deeper either direction - it - it basically shows the error that - that I've - that I've allowed for on the data from the computer.

Mmm?•• The - the dotted line prior to that 15 minute mark - sorry, 15 metre mark may be, I guess, able to be misinterpreted because he can't have left his dive profile at 12 metres and continued at that depth - well, I suppose he could have, he could have left that and still made the 15 and a-half minute mark - or

metre mark at - at about the five minute time by simply going shallower and then making a rapid descent for whatever reason. What I'm suggesting here, is okay, this is the margin of error I'm allowing, Mr Watson does suggest that his mask was knocked off, he's had to correct that situation, replace his regulator. At one point he suggests that he does try to go after the deceased as she's descending. What I am probably suggesting here that the dotted line is saying, well that is a possibility. I mean, it may have been that he was merely at the - not the 15 minute mark when they separate but maybe at the - the say 12 metre mark before they - the mask is knocked. He then goes after her, at five and ahalf metres though the computer has - at five and a-half - about five, five and a-half minutes the computer says, he is at 15 and a-half metres.

Mmm?•• If he is - regardless of whether he is descending after Tina whether this is where they separate.

That's - that's where you - you - you run into trouble, drawing inferences about what the behaviours or the - the acts that were occurring, that's just going too far from the dive computer information •••••?•• Correct.

•••••which is really more clinical?•• Well, the - the data is simply just that it just says, at this time he was at this depth. It doesn't say what was occurring, how he arrived there, where it all - you know, that sort of thing. So, what I'm suggesting here is again I'm probably trying to give as much credit as I can to Mr Watson by simply saying, okay he could simply have been here at this point in time, which may match his version of events.

Mmm?•• Again I'm suggesting that - you know, this is the margin of error that I'm allowing.

Mmm, all right, I understand that. Now, can we go to Mr Singleton? So, that's probably map number 21B?•• Mmm-hmm.

And I assume there again we start at 27A - sorry, we start at 27B, which is the dive profile that you were provided from Oceania?•• Correct.

In relation to Mr Singleton's dive?•• Yes, yeah.

Now that seems to be already given to you in graph form?•• It was, I - I can't find the same tabulised information that I had for Mr Watson. So•••••

Well, just bear with us for a moment ••••?•• Yep.

•••••Senior Sergeant, we'll - we'll go on a - a hunt. What we're going to do, if you don't have that piece of paper with you, I don't want you to miss out on the opportunity of identifying it for us because we need to know how it all ended up in a graph for, you see?•• Sure.

We're not able to find any other documents, but ••••?•• I - I'm going to say, I'm not - I'm not 100 per cent sure if we actually saw the data or if Oceania simply gave us ••••

This one?•• ••••their graph.

Yes?•• If we had the data I would have - I would have done it the same way that I had for Mr Watson.

Yes?•• I half think - I don't think we actually got the physical data, we simply had Oceania's graph••••

All right?•• •••••of - of what that data represented, which - in which case I - I simply drew from there••••

Yes?•• ••••the data••••

Straight onto your spreadsheet?•• •••••that I'd used, that's right. I - I simply went right at - at 30 seconds it's approximately - he's approximately at••••

Yes?•• ••••three metres.

All right. Well, before we get there let's just have a look at this document which is our 27B?•• Mmm-hmm.

I see on - about half way down, it's dive number 37? •• Correct.

Dive type, non-stop, alarms is at ascent?•• Yes.

Dive time, 9 minutes and at the top we seem to have a date that says, Wednesday the 22nd of October 2003 and the time 10.31<mark>?••</mark> Correct.

And that seems to be consistent with what we understand to be the - the rescue dive?•• Correct.

•••••from Oceania, am I then right that you plotted it into the spreadsheet at 27A under the heading, "Singleton"?•• Yes.

And as a result of that you produced the - the graph that we can now move to which is  $21B? \bullet \bullet B^{*}$ , correct.

All right. Now, again, can you take us through this particular dive. At this point we're not interested in Tina?•• No, sure. I understand.

We'll return to Tina in due course?•• Yep.

Just Mr Singleton. Now, was this all organised?•• Okay. On this graph Mr Singleton's depicted in orange, or his dive profile is depicted in orange.

Yes?•• Essentially it's been done the same way that we - I did for Mr Watson. I extrapolated the data from what was provided by Oceania to the - basically to the data table that you see in - in  $A^{\bullet\bullet\bullet\bullet\bullet}$ 

Yes?•• •••••which then produces this graph.

Yes?•• What the graph depicts is that Mr Singleton obviously enters the water. In his version of events he's with three other divers, two of which are on an orientation dive.

Yes?•• The graph that - that is produced tends to support what is - what Mr Singleton is suggesting in that if they're on a - on an orientation dive it shows that what he does is he - he descends a certain period of time before he appears to pause before then descending further. Which••••

And we see - we see an example of a pause, I take it, where - from about 2.5 minutes through to about 3.5 minutes where he seems to be fairly stable•••••?•• Correct.

•••••at about 11 or 12 metres?•• Yeah. Well, you see it say at one minute to one and a-half he appears to pause which would be normal because you'd be checking to make sure they're okay, that things are fine. They then descend further. As you said, correctly, at about two and a-half to about 3 and a-half he appears to pause again••••

Yes?•• •••••before descending again. His descent rate is, as depicted in the in the orange figures there, about eight metres per minute descent before he pauses. So, he appears to be descending, oh, probably, you know, on an average speed considering he's got others with him.

Just as a matter of interest, from - from the point at about 5.5, if I understand it, down to collect the deceased ••••?•• Mmm-hmm.

•••••how much time passes? Because we know that's about - about 14-odd - 13, 14 - 12, 13, 14 metres. How long does it take him to leave the 15 minute mark and actually reach••••?•• It takes him••••

•••••the deceased?•• It takes him about - well, when you actually look at the data from about the five and a-half minute mark to about the six and a-half minute mark is his descent to where the deceased was.

Yes?•• He pauses and - and this is probably corroborated - this graph corroborates what he says in his statement in that he pauses to check to see if she's all right, those sorts of things, before he then moves down to her to - to pick her up and take her to the surface. That's corroborated by the graph somewhat because at five and a-half minutes you can see quite a marked descent from about the 15 - 15 metre mark to about the 22, 23 metre mark before he slows his descent as he appears to be approaching the deceased.

Yes?•• He then pauses for about 30 seconds Comment by Michael McFadyen: this appears to be an incorrect assessment of Wade Singleton's dive - he dropped from about 24 metres to Tina, not from 15 metres he did not take 1.25 minutes to get to her from when he spotted her Mmm?•• •••••before again descending and then you see that the - the marked - or

One of the interesting things if we - we return now to the - Exhibit 27B is Oceania appear to have been able to give you quite an accurate dive plot for Mr Singleton. In your investigations were you able to establish whether Oceania was able to download his computer readings in real time as opposed to the staggered reasons that we have for Gabe?•• Oh, this is for Mr Watson?

No, this is for Mr Singleton?•• Mr Singleton. Right.

We're looking at 27B?•• Yeah. Yeah. I think it - from what I understand it's the same situation in that his computer only records variations again, not times.

Yes?•• Again, it's going to be in that staggered format••••

the rapid ascent from that point from about the 28 metre mark.

Yes?•• •••••because the records are only in - or the - the occurrences are only recorded with a variation of depth.

Comment by Michael McFadyen: incorrect, Singleton's computer records based on time, not depth

Yes?●● So, it's going to be - going to be broken. Their graph looks very rounded compared to where mine is - is quite - quite sharp.

Yes?•• I - I would probably suggest that's probably the software that they're using which probably rounds the graph out to look a bit more pretty I guess••••

Mmm?•• •••••then what - what mine is using because mine is just running straight off cold data that's there.

Mmm. All right?•• It still would only be in a staggered format again 'cause there's only the - the record occurring every change of depth, not - not with what the current dive computers do where they're recording on a time basis as well as a depth variation basis. So, you may get two records occurring in very close proximity simply because there's a change in depth which causes an occurrences but then also a change in time which causes an occurrence.

All right. Now, if we go to - so, that's how we understand "B". I take it "D" just reproduces that graph in that table?•• Correct.

If we now ••••?•• It's exactly the same data.

Thank you. If we now go to 6, I take it that's the same graph again reproduced there?•• Correct.

All right. Now, if we can have a look at probably 21A and 21B. I take it there we've got the same dive profile for Tina reproduced?•• That's correct.

And that same dive profile is also again reproduced in "D"? •• Correct.

And likewise it's reproduced in slide 6?●● No. This is where●●●●

That's all right. So, the answer is, "No"?●● Correct.

Okay. We're going to come back to slide 6?•• Okay.

We're using Exhibit 21 which I understand is the one that you've recently reviewed?•• Correct.

And you've told us about how you've produced these? •• Correct.

So, let's now have a look perhaps at 21A?•• Mmm-hmm.

And help us understand this, what information, if any, were you able to be provided by Oceania?•• The only information Oceania could provide in relation to Tina's dive on that day••••

Yes?•• •••••was the maximum time - or the time that she spent underwater.

So, I'll just make a note of this. Maximum time underwater?•• And the maximum depth that she achieved in that dive.

Maximum depth achieved?•• I think, if I recollect too, her computer also has a -

a mechanism by which it'll record any - any - like, if she ascends to quickly and things like that it'll record that fact that she's ascended to quickly as well and display that data.

All right. But in terms of ••••?•• In terms of •••••

•••••your exercise which was to obtain information•••••?•• Correct.

•••••about depth and times from Tina's computer••••?•• Yes.

•••••you were only able to obtain her maximum time underwater?•• That's right.

And the maximum depth she achieved? •• Correct.

Now, let's start with the second one. What is your understanding of the maximum depth that Tina achieved?•• The maximum depth she achieved from my recollection was about the 28 metre. It was actually a•••••

Mmm. Yes?•• And••••

We'll just get these ones out for you?•• It's actually photo 1 and 2 of the - the Versa dive computer.

Yes. All right. Now, what I'm going to do is hand to you our Exhibit 220000. Mmm-hmm.

•••••attachment - attachment 2 and there appear to be some photos starting at 1 going through 2A, 3 and continuing through that way for - through to 9, 11 up to 18 which depicts something?•• Mmm-hmm.

Can you identify these photographs for us, please, Senior Sergeant? Now what I'll get you to do is, when you've had a look through them, please identify them••••?•• Yep.

•••••and then, of course, you're going to tell us information from that?•• Yes.

When you're relying on a photograph to give you information, can you turn it around so that we can all see it?•• Sure.

All right?•• Okay.

And let us know what the photograph number is?•• The photographs that - that I've got here depict what was explained to me as the dive computer used by Tina••••

Yes?•• •••••on this day, which is the Versa - Oceanic Versa. They're photographs - basically what happens is once the dive computer is activated, it will routinely go through basically the log of - of previous dives. The photographs depict here - are photographs as its progressing through its log of what the previous dives were recorded on that computer.

Yes?•• Your photo 1, which is the - the very first photo of the - they've got "Varsa" there but it's actually "Versa" - what that is basically saying is, "This is dive number 1 data that I'm going to show to you." It's actually when it's saying "dive number 1" it's actually stepping back in time. So this is the last dive that this computer recorded.

Yes. So it's the most recent dive?•• Correct, correct. It gives - it gives a time of 7.28. That's the surface interval. It's necessary when you're starting to look at subsequent dives and those sorts of things••••

Right?•• •••••it's - it all involves off-gassing of nitrogen and things like that.

Yes?•• The second, which is photo  $2A \bullet \bullet \bullet \bullet$ 

Yes?•• •••••is, I guess, the next page of this log•••••

Yes?•• •••••which provides the data of the fact that the maximum depth for that dive was 89 feet.

Yes?•• It shows a time of 10 minutes.

Yes?●● And it also shows that it's got "too fast" written, I guess, under the "feet max" reading, which is●●●●

Right?•• Which is just here.

All right?•• What that indicates is, and it's also - that's coupled with the - the blue, yellow and red graph to the right on that dive computer - that indicates that she ascented or ascended too quickly for that dive.

All right. Now I'll just stop you there. I might ask Sergeant Campbell to just retrieve that particular photograph. Thank you. Would your Honour pardon me? Did anyone else want to look at this? Thank you. Now I'm sure you did the calculation. 89 feet, Senior Sergeant, is how many metres?•• About 27 - 27 metres.

Thank you?•• So that - that data indicates then for that particular dive the maximum depth and maximum time that that computer spent under the water or under pressure.

All right. Now, if we go now to 21A, that assists us with two objective pieces of information: the commencement of the dive at time zero?•• Mmm-hmm.

And leaving the water at time 10?•• Correct.

It also confirms the deepest reading which we have? •• Correct.

Now, were you able to obtain any further information from Oceanic in order to help you do the graphs for Tina?•• Not at all.

•••••we have a number of readings for Tina at these time intervals: zero, .5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 going right through to 10?•• Correct.

And that's that top column?•• Correct.

Now obviously they were relevant in terms of what was need to plot ••••?•• Yes.

•••••her under water••••?•• Correct.

•••••in your graph?•• Yes.

Now the next one has a number of measurements and we need to go through this in somewhat slow, boring, particular fashion. At zero you've got minus 1.22?•• Correct.

We should understand that to be under the water 1.2 metres?•• Yeah. As I said, these computers usually activate at about the one metre mark when they detect••••

That's all right? •• •••••that pressure, so that's the activation point.

No, that's okay, I'll get you to come back and tell us? •• Sure.

At half a minute, minus 3 minutes; at 1 minute, minus 4 metres; at 1.5, minus 4; at 2 minutes, minus 7; at 2.5, minus 11; at 3, minus 12; at 3.5, minus 13; at 4, minus 15, and that continues on until 5 minutes at 15. So we have a thing going like that. At 5.5, 16; then down to minus 21; then down to minus 24; and at 7 again, minus 24; 7.5, minus 26; at 8 minutes you have entered the maximum depth that you were told from the computer, which is 27, and then at 8.5 you've got 25; 9, minus 20; 9.5, minus 15, and then 10, 0?•• Mmm-hmm.

So that reflects the time? •• Mmm-hmm.

Now, Detective Senior Sergeant, the sixty-four thousand dollar question, obviously, is how did you come by those depths readings and how did you come by those time readings? So take your time •••••?•• Yep.

•••••and take us through slowly where that information came from and what hypotheses you used in order to come up with•••••?•• Sure.

That's against all dives? •• That's against all dives, regardless.

So that's a constant?•• Correct.

Yes?•• In relation to the data that is displayed here, as I explained earlier, that data is incorrect, that data is what I - what I drew from what I believed was the graph of the deceased's dive profile. The reason it reflects Mr Singleton's dive profile so closely is because it is Mr Singleton's dive profile.

Yes?•• The data for slide 6, which was the original data that we used at the -during the review of this process is probably the most accurate one that there is.

That's on slide  $6? \bullet \bullet$  Correct, on slide 6. The reason for that is that graph was produced the same way this was, but in that graph the deceased's dive profile

we, I guess, extrapolated given Mr Watson was saying she was - that the deceased was with him during the dive, she would approximately follow his dive profile.

All right. Let's work backwards. Can I take you to D? Now you can see there we have - this is, of course, 21D?•• Mmm-hmm.

We've got two profiles there when Tina's coming - being brought up?•• Yes.

Now, the orange one is Wade Singleton?•• Yes.

And the dark black one is, of course, Tina? Yes?•• That - that's what's being depicted there, yes.

Yes, indeed. Now, the thing that we know is that Mr Singleton was behind Tina, that he inflated her  $BCD \bullet \bullet \bullet \bullet \circ \circ \bullet \bullet$  Mmm-hmm.

 $\bullet\bullet\bullet\bullet\bullet$  he was holding her regulator and basically they were together  $\bullet\bullet\bullet\bullet\bullet?\bullet\bullet$  Mmm-hmm.

●●●●●going up●●●●?●● Correct.

•••••with perhaps the tank separating them?•• Sure.

Now, question number one is, if that's the case, why do we have Mr Singleton coming up at 9.5 and Tina coming up at 10, because we know that that's an objective reading on the evidence that we heard from Mr Singleton and others?•• Sure, yep, again the reasoning behind it is - is the - I guess it's the extrapolation of - of the data. Both lots of data were coming from the same graph. That was done, yeah, well, nearly two years ago now, two years ago.

Yes?•• Which was done at the beginning of the week. The difference is, when I was sitting down reading it this time, there's been slight variations in the depth as I was reading the graph.

Yes?•• You know, it's - you know, a metre difference. Given the reason that her dive computer had suggested at about the 10 minute mark, she breaks surface, I know that at 10 metres - 10 minutes, she's at - at zero.

Mmm?•• It's extrapolated that way. But, as I - as I was suggesting there, the data is incorrect because I'm not reading her profile. I don't have that data to produce that graph.

Well, hang on a second. Let's - let's - you've totally confused me now. In relation to Mr Singleton's ascent. Yes.

•••••we do have that data?•• Correct.

And that is an accurate ascent?•• Correct.

Secondly, we know from Mr Singleton's evidence ••••?•• Yep.

•••••and other witnesses, as I indicated to you, he took Tina up?•• Mmm-hmm.

So, objectively, you would expect their dive profiles on descent to be

virtually ••••?•• Correct.

●●●●co-terminus?●● Correct.

And that's certainly what you've indicated in slide 6?•• Yes - yes.

So, we can take that as quite objective ••••?•• Yep.

••••• on that information?•• Yes.

Now, can we now go back to A, and if we can deal with the next part of it which is the time from zero down to the period at 15 metres that we call the point of separation  $\bullet \bullet \bullet \bullet \circ \circ \bullet \bullet$  Mmm-hmm.

•••••where Gabe goes up?•• Mmm-hmm.

And that's objective data? •• Sure.

And also we have the objective data about Gabe going down, don't we?•• About Tina going down?

No, about Gabe going down. If you have 21A, yes?•• Yes.

You have the objective data about Gabe, which is the red line or the pink line?•• Oh, his - his descent, you mean - yes, yes.

Yes, and his ascent. So that's objective? •• Correct.

Right. Now, you have another line which is Tina's?•• Yes.

But you don't have any dive computer information •••••?•• Correct.

•••••to put that in?•• That is correct.

You have numbers that you've used on 27A?•• Yes.

Tell me, firstly, what information did you use and what was your reasoning behind putting the depth that you have in 27A, into your tables?•• Again, that was an error. It was - I was interpreting Mr Singleton's dive profile from Oceania as though it was Tina's.

Yes?•• The - the data I was drawing from there, is what I was putting into the table which produced that particular graph.

Yes?•• So, the data is••••

MR WALTERS: Your Honour, with - with due respect, isn't this going to go on for a long time about something I think everybody's fairly in agreement with. There is no profile from Tina, other than the maximum depth she went to and the amount of time she was underwater. The only two graphs we have any certainty of so far as the data recordings, is Mr Singleton and Mr Watson. The difference in the times, of course, is the fact that Mr Singleton didn't go underwater at the same time as Mr Watson and Mrs Watson, Tina, and the difference in the position there is that he - at the time of nine and a-half minutes, should have gone back from when he and - he and Tina came out of the water. Otherwise, we're going to be going around in circles here forever and a day.

MR TATE: I'm - I'm quite happy. My concern is that we've been told that we

should trust explicitly, the dive profiles, and I don't want that unexplored.

CORONER: Well, that's right but he's saying is that the dive profile he was using for  $\bullet \bullet \bullet \bullet$ 

MR TATE: Yes.

CORONER: •••••Tina, was wrong. It was Mr Singleton's.

MR TATE: Indeed.

CORONER: So we have to disregard all of that, don't we?

MR TATE: Indeed. Thank you, your Honour. Now, Senior Sergeant, if we then return to 6?•• Mmm-hmm.

Do you make the same comment, we disregard that profile, or is that an accurate one?•• That one is as accurate as what we can determine. We know that in all likelihood, Tina and Mr Watson descended together.

Yes?●● So therefore, her dive profile would - would replicate what Mr Watson's dive profile is on slide 6.

Right?•• We know at - at about the five minute mark, at about 15 metres, they separate.

Yes?•• That's according to Mr Watson.

Yes?•• And - and in terms of depth and when he then says that he then goes - starts ascending towards the surface.

All right?•• We know at that - we know then that at a point when she is seen by Mr Singleton, she is on the bottom of the ocean. When you extrapolate with what Mr Singleton's dive profile is, you can see the - I guess it's the pause in his descent at the - at the 15 metre mark from about four minutes through to about six minutes, where he pauses. We know at that point, he sees Tina on the ocean floor. So therefore, she must have at the latest

MR WALTERS: Well, I don't think that's correct either, your Honour. I think Mr Singleton's evidence was - and I'm just discussing it with my friend, was that he saw her when he was at about the 25 metre mark and it's the latter part that he goes down. At that point, he - he's still conducting the - the trip with the other parties. As I understand, he••••

CORONER: That's - that's not my clear recollection either, because we're talking about when  $\bullet \bullet \bullet \bullet \bullet$ 

MR WALTERS: In - in his statement at paragraph 31, he said this, "We were diving for about five minutes. We were at about 25 metres or 75 feet when I saw a diver lying on the sand about 10 metres up the wreck to my left." So, my - my fair recollection of his testimony is that he didn't see it at 15 metres, he saw it at the 25 metre mark.

MR TATE: That's my understanding also for the photo, but what I'm troubled about, your Honour, and I don't mind whether my friends think about this over lunch or the Senior Sergeant thinks about it over lunch, I'm just very, very interested to know what reliance we can put, and maybe this is the only question that I need ask, and I'll just let the Senior Sergeant take it - tell us about it after lunch.

CORONER: Mmm.

MR TATE: What reliability, if any, can be put on the profile on slide 6 in relation to Tina's proposed dive profile.

CORONER: Well, what I thought he said so far is that basically accepting Mr Watson's evidence, the profile should have been pretty much the same until they separated.

MR TATE: Yes.

CORONER: Give or take what - the problems with the - the computer. I mean the sense of the 10 feet either side. There's evidence from Schultz and there's evidence from Mr Watson about her descent to the floor.

MR TATE: Yes.

CORONER: And there's evidence from Singleton about when he saw her as I've just been reminded, and what he did then. So one would assume that the - that item 6 is going to be relatively accurate to about the 15 metres and fairly accurate from the floor up to the surface when Mr Singleton arrived, taking on board what Mr Walters has said about the difference between the 9.5 and 10 minutes••••

MR TATE: Yes.

CORONER: •••••because we're dealing from different - we should be working backwards rather than forwards.

MR TATE: Yes.

CORONER: And that seems to me to be logically explained. So the - the issue is going to be what happens to our profile really, from when she and her husband separated, to when she got to the bottom, isn't it?

MR TATE: Indeed.

CORONER: In probabilities, we're talking about.

MR TATE: Yes.

CORONER: And from accuracy from this thing, accepting the basis upon which this witness has already worked his calculation.

MR TATE: Thank you, your Honour.

CORONER: So, if I'm wrong there, the matter can be clarified after lunch. We're at 1 o'clock now, gentlemen, and ladies; when do you want to resume?

MR TATE: In your Honour's hands.

CORONER: I'm in your hands, gentlemen; 2.30 again?

MR WALTERS: 2 o'clock. I'd be happy to resume for my part at 2 o'clock, your Honour.

CORONER: 2 o'clock it is; thank you. We need to pick up some time. We're

slowing down, aren't we?

THE COURT ADJOURNED

THE COURT RESUMED

SCOTT KNOWLES, CONTINUING EXAMINATION:

CORONER: Thank you. Yes, Mr Tate.

MR TATE: Thank you, your Honour. Senior Sergeant, perhaps I might just cut to the chase. In relation to slide 6, in attempting to understand the descent dive of Tina through to the point of separation •••••?•• Mmm-hmm.

•••••what information did you rely upon and how accurate do you - tell us that dive profile is?•• In relation the - the descent of Tina the - the information that is relied upon is the same as being relied upon for Mr Watson. It comes from his dive computer data so it's - it's objective data in terms of at a specific time he was at a specific depth. The suggestion that - that Tina has followed that same or a similar dive - dive profile comes from the fact that Gabe says that they were together up until they separate. I mean she may have been one or two metres difference deeper or - or - or shallower but essentially it is a similar dive profile based on the objective data from Gabe's computer. Similar the ascent from the ocean floor of Tina is based upon the objective data of Singleton's computer. Again, his computer simply says at a specific time he was at a specific depth. It doesn't attempt to say anything other than that. So, it's - it's the objective data of those two computers that - that this graph has drawn upon.

All right. Thank you. Your Honour, that's the evidence in relation to the dive computers. And I think by agreement, Officer Murdoch is just to leave us now.

CORONER: Thank you. Thank you, Officer.

MR TATE: I really only have one further matter I want to raise with you. You tell us in your statement that you went to America with Detective Sergeant Campbell and various enquiries were made and towards the end you tell us that on the 24th of April, 2007 you attended Gabe's lawyer's office and there was some sort of discussion?•• Correct.

Was that recorded in any way?•• It was.

And how was it recorded?•• The Detective Sergeant Campbell had a recorder with him and to my knowledge, I - I haven't heard it since, but to my knowledge it was being recorded.

Thank you very much. Thank you, your Honour.

MR ATKINSON: I have - I have no questions, your Honour.

CORONER: Thank you.

MR WALTERS: I have no questions, your Honour.

CORONER: Thank you. Mr Zillman.

MR ZILLMAN: Thank you. Sergeant, have you got a copy of 27a there?•• Is that the - the profiles with deceased and Watson on it, yes.

Yes. Now, reading across from the top we've got the - the minutes and then beneath that the metredge, is that correct?•• Correct.

Now, this is a document, as I understand it, you compiled? •• Correct.

And that was a - a document able to be compiled by reason that you received certain data from Oceanic, is that correct?•• Correct.

When you say it's from Oceanic was - do you mean to say that there was communication directly from that company to you or via some other person?•• No. The - the - or the - the communication wasn't direct. I was supplied with data that I was told was drawn from Mr Watson's computer by Oceanic and it is that data that I used to compile the - the graphs.

All right. Well, do you - have you heard of a Mr White at all? •• Nuh.

CORONER: Would you have a full name?

MR ZILLMAN: Yes, I'm just - I was trying to remember it and I'll - I'll just - A Mr Adam White and I'll also try and determine where he's from so I can be precise on it. And he being the customer service manager at Oceanic Australia?•• Mmm-hmm.

You can't help me one way or the other?•• It - the name doesn't - I don't recall the name. It doesn't mean anything to me.

All right. Well, did one of the police officers pass that data onto you or?•• Yes. Yeah, Detective Sergeant Campbell was the one that passed the data to me.

Okay. Do you remember if it was in, in terms of the depths, in increments of of feet or was it in metres so I want to know if you did the conversions or not?•• It was in metres.

Okay?•• Yes.

Just bear with me. So, it was as - as simple as we read it, in other words you - you simply replicated from whatever document you were given?●● Mmm-hmm

What was on it onto this piece of paper which now becomes 27a?•• That's correct.

Very well. All right, I'll put that aside. Just a moment. Well, still staying with 27, B is self explanatory again in the sense that that data again was supplied to you by Oceanic, in fact it's Oceanic which you understand to be the author of the graph?•• Correct.

And in terms of 27c you say you have that data and you in effect then compiled that document, is that right?•• They're - the data is all the same. All I have

done is added or removed different persons from the scenario so - so as to get comparison graphs between different divers. The data remains exactly the same so, for instance, D shows basically all participants, I guess, in the incident in one graph. I would then, for example, remove say the data for Tina and the possible data for Watson to get graph C.

Okay. But just staying with then A and C?•• Sure.

A and C should read the same for Gabe Watson, should they not?•• It should, yes.

There seems to be however more precision in A then there is in C in that, for example, we'll take you to the two metre mark?•• Mmm-hmm.

Sorry, two minute mark where the metredge is expressed 9.14, do you see that?•• Which - might be referring to something different, I'd say.

27a I'm looking at?•• So that's not the exact - that's not the graph, that's just the - the data itself.

That's it?•• Yes.

Two - two minute mark●●●●?●● Yes.

●●●●●the metredge is 9.14?●● Yes.

If we go to the two minute mark on 27c it's expressed as, well, two - two figures, one 9.5 metres and the other is 12 metres, do you see?•• Yes.

I'm wanting to understand where the precision of 9.14 comes from?•• I must have had data in the imperial measurements which I converted then for me to get - to get those sorts of figures. I'd have to go back through what I've got here. As I said I must have had the data in imperial as well. It must have been supplied in the - in the material. As - as I said this was done 2005 so I would say I must have had imperial data that I converted.

Well, I though the extent of the data that you got from the Oceanic were documents (a),(b) and there unit (c). Is it taken from somehow the graph?•• No, not at all. I've - I've got the data here that I would have used. This is the imperial version of the metric table that you're looking at so I have - not with (c) but I must have had the imperial version when I did the conversion.

Well, that still doesn't make sense to me because - I just want the witness to have a look at Exhibit 43 insofar as Mr White's various tables and details and record are concerned, your Honour.

CORONER: Could you provide that Exhibit 43 to the witness please.

MR ZILLMAN: I think there's more to it than that. Just while that's about to come over could I ask you - have you currently got the copies of anything that you were given?•• Just the book that I was supplied with which has got basically the data, I was assuming from - well, I would presume from Oceanic.

Yeah, but what I'm asking you is have you got all of those documents that you were supplied with?•• From•••••

Oceanic?•• Yes.

Right. Okay. Have a look at Exhibit 43 now. I don't know if it's in a particular order that appears in my brief but - now, I just want you to look through all of the documents and tell me if you've received all of those - copies of all of those documents?•• Without exactly going through to check I think I do, yes.

Well, it's only going to take you a moment or two, isn't it, to check?•• It's a fair wad of paper I've got to get through.

Well, is it in various places, it's not in the - in the one area?•• The way yeah, well, the way it was presented was - yeah, it all depends on what computer I'm looking at as to what - I do - I do have the - I see you've got the imperial which - it's got DC serial number 1390 on the 1st of the 1st '96, 13 minutes. It's imperial••••

Well, just a moment, I've just got to isolate this document you're referring to. Which one?•• It's the first one, it's••••

Well, the first one doesn't mean anything to me?•• It's got a DC serial number 1390, dive date 1/1/96, start time is 13 a.m.

All right. And that's a table  $\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet$  That's a table in  $\bullet \bullet \bullet \bullet \bullet \bullet$ 

•••••NPG et cetera going across to, "Stop death violation status"?•• That's correct in imperial format.

●●●●●because we'll come back to 27(a)●●●●?●● Yep.

CORONER: Did you want him to check the other documents?

MR ZILLMAN: I beg your pardon?

CORONER: Did you want him to check that he had all the other documents as well?

MR ZILLMAN: No, not at this point ••••

CORONER: Okay.

MR ZILLMAN:  $\bullet \bullet \bullet \bullet \bullet \bullet I'm$  happy with his answer. I think he said he believed he had them all.

CORONER: Yeah.

MR ZILLMAN: If we just go with 27(a) and the document that you've just identified as part of Exhibit 43?•• Yes.

The depth - the first depth that we see on Exhibit 43••••?•• Yes.

●●●●●is four feet?●● Yes.

Converted that becomes 1.22; is it?•• Correct.

Ten feet then becomes 4.57; is that correct? •• Yes.

And then - well, we follow them through. 20 feet becomes 9.1 - 7.9 - 7.01, I think it might be; is it? 7.01?•• For 20 feet?

I beg your pardon? •• Is that what you're saying 20 feet?

Yes, 20 feet?●● Yes.

Well, I'm just having some trouble with these conversions then because 4.57, we'll go back to that one is greater than 10 feet; isn't it?•• It would be.

And similarly so 7.01 is greater than 20 feet? •• Mmm.

So, what - what's happening here then.

CORONER: This is 7.01; is it?

MR ZILLMAN: Yes. I've - I've referred him to three feet as - the first one is 1.22, the next one is 4.57 and the next one is 7.01?•• I'm sorry, I - I don't know. Yeah, I'm sorry, I don't know. I can't - I don't know why - or how that's occurred.

Did you use the detail in 27(a) to create Exhibit 6?•• Yes.

Well, if you did Exhibit 6 must reflect that's in 27(a)?●● That would be correct.

And if 27(a) is wrong 6 is wrong? •• I'd agree. I don't understand why or how that - that's happened that way.

I don't - I don't where we realistically go from here.

CORONER: Well, I think we need do all these calculations again; don't we? We need to accurate check, that's what we need to do.

MR TATE: I think that's right and, your Honour, I think the - the crossexamination is entirely appropriate. It's important, in fact critical that these calculations be accurate and certified as accurate.

CORONER: Well, we've been relying on a lot of this information to date.

MR TATE: Yes.

CORONER: And it needs to be accurate.

MR TATE: And my request, your Honour, is that with the Senior Sergeant's help he gets to remain in Townsville until it's cleared up.

CORONER: Well, it goes a bit further than that; doesn't it •••••

MR TATE: We might to call him tomorrow.

CORONER: •••••because we really can't progress much further until such time as we collect - correct this.

MR TATE: Indeed.

CORONER: I mean because the evidence of this - of the officer outside •••••

MR TATE: Yes.

CORONER: •••••is largely dependent upon various information that he's been provided as well?

MR TATE: Yes.

CORONER: Well, are there any other witnesses that we - this witness should stand down to redo these calculations and - and research his papers.

MR TATE: Yes. Your Honour, if we could take a - perhaps an adjournment.

CORONER: Well, I - I'm happy to do that because I think this is where we're at and we've got to do this.

MR TATE: Yes.

CORONER: I'm also very mindful of the fact that I'm not - don't want to waste too much time about it  $\bullet \bullet \bullet \bullet$ 

MR TATE: No.

CORONER: •••••so can we look in the adjournment about what other witnesses we can use - do in the meantime so we can progress this and even if we have to postpone this senior sergeant's evidence and the other officer's evidence until tomorrow••••

MR TATE: Yes.

CORONER:  $\bullet \bullet \bullet \bullet \bullet \bullet$  and at least we can - or the next day, we can - we can at least progress some of the things along the way.

MR TATE: That was the purpose of the request for an adjournment, your Honour  $\bullet \bullet \bullet \bullet$ 

CORONER: All right. Well look, I'll stand the matter down.

MR TATE: •••••so I can just make sure••••

CORONER: I'd like the parties to confer. The other issue that I - I thought we'll canvass now too because it looks at the future, Mr Zillman, I will be requesting you for your assistance in the adjournment between now and next year, effectively document your objections in relation to those affidavits, circulate that information with both submissions to the parties.

MR ZILLMAN: Yes.

CORONER:  $\bullet \bullet \bullet \bullet \bullet \bullet$  and see if we can reach some sort of concurrence rather than spend a day trying to work things through. We may have to spend a reasonable amount of time  $\bullet \bullet \bullet \bullet$ 

MR WALTERS: Your Honour, I can indicate Mr Zillman has approached me and it would seem that if there was probably a lot of the objections would have originally surfaced [indistinct]. Look, I believe that we'll be able to agree on those matters. If there's anything that's left that's not been brought to the Court that approaching the matter as a black letter lawyer I think we can work those matters out into what matters are admissible and what aren't.

My clients, so far as they are concerned, appreciate that certain matters have been provided to give a background to it, that they understand at law some matters are admissible and some aren't and they're well aware that ••••

CORONER: All right. I'm just raising that because I wanted to try and streamline that process so we don't end up with a huge amount of days on the next adjournment. Okay, well, I'll leave that ••••

MR WALTERS: We'll work that out.

CORONER: I'll leave that out and I'd like you to liaise with Mr Tate about that as well, but having said that Mr Atkinson, do you want to be involved in any of that?

MR ATKINSON: No, your Honour, I'm satisfied for my colleagues to sort it out.

CORONER: Thank you, that solves that. Well, we'll stand down now and - and if you can get back to us when you can?-- Thank you.

## WITNESS STOOD DOWN

THE COURT ADJOURNED

THE COURT RESUMED

MR TATE: I believe, your Honour, what is being arranged is for two catch up witnesses to call in. The first, all going well, will be Barton Painter and the second is Craig Haslett.

CORONER: And that's what we're going to do this afternoon, that will be it?

MR TATE: Yes. Yes.

CORONER: And tomorrow morning, who - what time and who are the witnesses? I mean Friday. Do we know who they are? What time do we want to do it on Friday, that's all? Is that the 8 o'clock start?

MR TATE: It is, your Honour. If I can take your Honour to •••••

CORONER: I think it's Jackson, isn't it?

MR TATE: Yes, I think it is, your Honour.

MR TATE: Thank you, your Honour. Your Honour, just by way of housekeeping, I'm now - now able to provide the Court with version 11 of the  $\bullet \bullet \bullet \bullet$ 

CORONER: Thank you.

MR TATE: •••••witness list which indicates the proposed witnesses for today and tomorrow. I should indicate that if we're quicker than has been suggested in the witness list, I understand from police that we have some people available by telephone, but I don't know who at this point.

CORONER: Okay. Now, this statement should be 147, shouldn't it?

MR TATE: Yes, your Honour.

CORONER: Because one hundred and - the one by Mr - by Kasper [indistinct], he - that was - that - that's actually placed - filled in 115, didn't it?

MR TATE: Yes.

CORONER: There was no statement there before?

MR TATE: No.

CORONER: All right. So - okay. Thank you. Mmm.

PORTION OF PROCEEDINGS NOT RECORDED

CORONER: Formally open the Court now, thank you.

SCOTT KNOWLES, CONTINUING EXAMINATION:

MR TATE: Thank you, your Honour. Senior Sergeant, I think following your evidence yesterday, you've spent time late in the afternoon and this morning preparing a fresh statement?•• I have, yes.

You have a copy of that statement ••••?•• I do, yes.

•••••statement with you?•• Yes.

And that's an addendum statement, which I think sets out the actions you've taken to reconfigure or recalculate the various dive profiles that we were talking about yesterday?•• That's correct, yes.

All right. Now, I think you can probably take it that we've all had an opportunity of reading your statement. What I'd like you to do, please, is to go to each of the annexures to the statement and just explain what they are. And you don't need - need to go in and tell us what they're talking about?•• No, sure.

Just, please, identify the document and the first one, I think, is a familiar document from yesterday, but it relates to who and what is it?•• The document that's - that's titled at the top, "DC serial number 1390" is the data that was extracted from the dive computer by Oceanic and the - that's the dive computer of Mr Watson's dive computer.

All right. Well, that's the - that's that one. And it came from Oceanic?•• Correct.

All right. Now, the next appears to be what we would now understand to be a dive profile and that is what?•• The next two are - are dive profiles that were provided by Oceanic, I would presume, based on the data that they extracted. The reason there's two is one's in feet and the second's in - in metric.

That's all right. And that's why we're going to go through one at a time?•• Okay.

•••••you'll confuse me. So, the - the first one?•• The - the second item is the dive profile produced by Oceanic in the imperial measurements.

And that is for whom?•• That's for Mr Watson.

So, that's US imperial?•• Correct.

All right. Now, if we go to the next one it seems to be somewhat similar?•• Mmm-hmm.

And - and I take it that is now again from Oceanic? •• Correct.

It's Gabe's?●● Correct.

And it's in metres?•• That's correct. That's in metric.

Now, am I right in assuming that Oceanic gave you those calculations in both metric and in imperial?•• Correct. They've provided both of those graphs in•••••

All right. Thank you. And the next document which again is a familiar one but again, who does this relate to?•• This is the - the dive profile provided by, I think it was Quick Silver, which is the data from the witness, Singleton's dive computer.

Yes?•• Basically graphically represented in a dive profile.

All right. Thank you. And now, that's in metres? •• That one is in metres.

All right?•• Yeah.

The next has different colours on it and it seems to be an Excel spreadsheet?•• Correct.

Is that your calculations?•• This - this is my correct - that's my calculation.

All right. Now, are these the same as the document you gave us yesterday or is

this a freshly generated Excel spreadsheet?•• This is the - the new Excel spreadsheet based on the recalculations of the conversion rates from feet to metres.

All right. Now, we then I think move into the next document which is a dive profile. But just before we get to the dive profiles, tell me, in reviewing the figures yesterday where did the error occur?•• The errors occurred, and - and I don't understand or how it - how it did occur that way. So, I'd have to apologise. But the errors occurred in that the - the depths of Mr Watson's calculations that I was using actually puts him slightly deeper then what he actually was based on the - the correct conversions.

Mmm-hmm?•• This slightly adjusted the ascent and descent rate of Mr Watson based on those calculations.

Now, have you checked, double checked, triple checked and had someone else check all the calculations?•• I have.

Are you able to say to this Court that we can now rely on the conversions?•• Correct.

All right. Your Honour, just in case I forget, Officer Murdoch is in Court.

CORONER: Yes.

MR TATE: I take it ••••

CORONER: I noticed that.

MR TATE: •••••that that agreement from yesterday still remains in relation to the diving information.

CORONER: And so, gentlemen? Yes, noted.

MR TATE: Now, if we can go to the next. Now, this is headed up, "Corrected 1" and it says, "Proposed dive profiles from dive computers"?•• Correct.

Now, I want to be quite clear. This is a - two dive profiles for Gabe and Singleton after you have done your corrections?•• That's correct.

All right. What does it tell us?•• It - it basically demonstrates in a graphical format the data from both of those computers indicating, as I said, in a graphical format a - a scenario of descent and ascent based on that data from those two computers.

All right.

CORONER: Well, that still has a - an error in it doesn't it? Because the you've got the same descending time as at nought. Effectively Mr Singleton's dive was 9.5 minutes. So, he shouldn't start at the same zero should he? He should start at .05?•• I - yeah. Your Honour, I - I - I looked at that. If you - if you have a look at the data from Oceanic itself their graph actually says that he finishes at about the 10 minute mark. His - his dive computer itself says he finishes some time in that ninth minute.

Oh, I see?•• Their graphical representation indicates that it must have been closer toward the end of the ninth minute because it tends to indicates he exits the water at about that 10 minute mark. I would suggest probably on the - on
the nine minute side, probably the late nine minute side, but their graph represents him exiting on the 10th minute and it's from that graph that I - I drew that data. So, I've re-amended those calculations to indicate he does exit at about that 10th minute.

Yes.

MR TATE: All right. Now, in terms of Mr Singleton's descent and ascent, it looks to me on this graph that there's no real effective change from the earlier to the latter?•• Probably the only changes in that - the ascent part in that originally I - I'd had him coming in at about the nine and a-half, trying to split that difference between what the graph represented and what the - the dive computer was indicating.

Yes?•• Probably to be more, I guess accurate, I drew that data directly from the graph and simply represented it here again. So, it has him exiting on the 10th minute. The end result of that is it's slightly changes his ascent rates. But other then that there's no other change.

There are no changes to the descent rates?•• And there's no changes to the descent rates.

Now, I see that there are a number of plateaus between one and approximately 1.5 metres. One at about 12 metres for what seems to be again approximately a minute to a minute and a-half and then at the 15 metre mark we seem to hit about - coming up to about four minutes through to 5.5 minutes. Again that one, there's a plateau?•• Mmm-hmm.

And then further down at about 23 or 24 minutes there's another - another plateau and I'm having some difficulties working out the time for that last plateau. It looks to me to be about six through to about 7, is that right?•• It's about six and a-half to seven, yes.

All right. Thank you? •• Six and a-half minutes to seven minutes.

All right. Now, if we go to Gabe's which I assume is the darker red rather then the orange?•• Correct.

What does this tell us in the corrected form? First of all, let's look at the descent down to again what we call the point of separation which is around - or slightly below 15 metres?•• Again it's - it's - it represents basically what yesterday's graph was representing. It appears to have been a steady descent. Again you would have to take into consideration the provisos I said yesterday in terms of at any one of these points if he passes through a certain depth it gives up to say 10 feet in either direction that he can meander without necessarily registering another depth variation. So, I haven't put it in here just to save the confusion, but it's that same blue line in that he could be 10 feet of either side without it registering a depth variation. But it tends to down to that - that point of separation, tends to - to indicate a - what appears to be a normal dive. It's a, you know, relatively steady descent rate. It all appears to be in control.

Now, the ascent rate. When - at what time according to your graph, "Corrected 1", does the ascent commence?•• The ascent appears••••

Now, if you need - if you need a ruler or if you need to refer to something that tells you the time, please do?•• Sure. It - it appears to commence at - at about the five minute mark.

Yes?•• That appears to be his - his deepest - deepest depth before he then starts ascending.

Right. And he arrives at the surface?•• Correct.

At what time?•• At about - sometime after that 7th minute. So, at about seven, seven and a-half, thereabouts.

Now, is there any reason why you can't be more accurate in terms of times at the point of separation and times at the surface, at the conclusion of the ascent?•• The reason for that is, is the dive computer data only gives it in whole minutes. The data that was supplied by Oceanic, only provides it in whole minutes, not in - in parts of minutes.

Right?•• [Indistinct] need to try and provide a bit more of a continuity in the graph, I've broken it down into 30 second increments, which I - I then drew from the data or the graph provided by Oceanic.

All right, thank you. Now, if we move to the next graph which is of - or before we do, is there anything else about corrected 1, that you need to tell his Honour about?•• No.

All right. Corrected 2 then, now this seems to, at least in relation to Mr Singleton, have two ascent times; one getting him up to the surface at 10, and one getting him up there at 9.5. Again, just for clarity, I'll ask you why we have these two dive profiles for Mr Singleton?•• This chart provides a - a comparison between what the original data was, the erroneous data provided.

Yes?•• And what the - the corrected data provides. So it's - it's simply a - a way of showing what the differences between the two profiles were instead of having to try and overlap them. I've overlapped them here just to show the difference between the two data, so it shows that in terms of Mr Singleton's dive, I've allowed that extra 30 seconds which has actually partially decreased his ascent rate to take into account what Oceanic have provided. In relation to Mr Watson's, it gives a demonstration that the - the errors that were in the original calculations, when those errors are corrected it actually reduces his depth of his descent, so he'd actually have a shallower depth going down on these occasions. When he's - he's returning to the surface, it's still very similar to the original data, but on some occasions he's slightly deeper, on some occasions he's slightly shallower, which is - which is the issue in that conversion.

Mmm?•• Which has caused the problem. The••••

Now, as I would read the two graphs that you have here for Mr Watson, there does not appear to be any difference of any significance between the first set of data that was provided on slide 6 and the corrected data that you're providing this morning?•• At the worst, we're probably maybe looking at a metre difference, in terms of I had him a metre deeper yesterday than what the corrected data provides, and that's only on the descent. In terms of the ascent, there were slight changes in terms of his ascent rate. Some were slightly quicker, others were slightly slower, based on the new data.

All right. Now, if I can just ask you to have a look at the descent data for - for Gabe?  $\bullet \$  Mmm.

We get down to about nine metres and the dark red line seems to be totally consumed by the lighter line?•• Correct.

I take it the darker line is hiding behind the lighter line?•• That's correct.

All right. Now, if we move to corrected 3, what does this actually tell us?•• Well, this is the - it's the same as corrected 1, in that it is the - the dive profile on the corrected data. What I've done here though is, I have placed on it the ascent and descent rates based on the new - the new data calculations.

All right, thank you. So this is really the same as yesterday, with the descent through the various metres and whatnot or how far he descended between the points?•• Correct.

And also the ascent, and the same for Mr Singleton?•• That's correct.

And we're able to accept these - these figures as accurate?•• As accurate as what the data that was [indistinct] provided, yes.

All right, thank you. And I think Detective Sergeant, that probably is it. Now, the last question I have is, are you satisfied in your own mind that you've undertaken a sufficient review and have had enough time to undertake a review so that you can vouch for these figures now?•• I can, yes.

All right. Thank you, your Honour. Your Honour, probably Officer Murdoch needs to leave.

CORONER: Thank you. Mr Atkinson?

MR ATKINSON: Thank you, your Honour. Senior Sergeant, I only have two issues for you. The first one concerns paragraph - or page 1 of your addendum?•• Mmm-hmm.

Can I take you to the last line there; you mention there, Senior Sergeant, that the dive computer reports a surface interval of 13 minutes?•• Correct.

Can I ask you to assume these things, that we've had evidence from someone from the manufacturers from Oceanic?•• Mmm-hmm.

The fellow called Adam White who was mentioned to you yesterday? •• Mmm.

That he says that when this dive computer resets itself, it resets itself to a factory setting of 1 January, 1996?•• Correct.

And that it resets itself, amongst other things, when the batteries are taken

out?•• That's correct, I accept that.

The dive computer records, of course, that this dive took place on 1 January, 1996, so what you know from that is that the computer has reset itself?•• Yes, I - I'd agree. This wasn't necessarily to suggest any of those sorts of things. This was just merely that - that data there was merely to identify the document that I used to extract this data from.

## Sure, all right?•• I agree with what••••

I'm being a little bit pedantic but it's important to my client?•• Yes.

When you say the surface interval is 13 minutes, given that the background that we discussed, what it really might be saying to you in substance is that it's been 13 minutes since the battery was changed? •• No.

No?•• No. That would - that surface interval, it starts when the diver returns to the surface. What it actually does is, monitors the off gassing of nitrogen from the diver. The surface interval, basically, when - when the computer breaks the surface it then starts the surface interval.

So, if there was a second last dive, and then this is the last dive, what you're saying is that, all things being right, the dive computer is saying it's been 13 minutes since the last dive?•• No. That surface interval starts after the end of the dive, so if I've - if I've dived, I'll take - for example, that's - we're talking about Mr Watson's computer, so he has entered the water.

Yes?•• He's gone down to - to the 15 minute depth, returned back to the surface. When he breaks that surface, the surface interval then starts, so because of the short period of time he's been under the water, the computer has basically said, look, there isn't any need to monitor any longer than the 13 minute mark, because the nitrogen uptake of his body wouldn't have been sufficient to worry about for any second or subsequent dives. The surface interval becomes important when the diver then goes for a second dive, because it has to take into account the residual nitrogen in that diver's body from the previous dive.

Comment by Michael McFadyen: Complete and utter bullshitting The purpose of the surface interval section in the dive computer is to tell you the interval between two dives?•• Correct.

So that you can have time to off gas? •• That's correct.

But if the batteries are taken out?•• Yes.

Then the computer resets itself to 1 January 1996 at midnight?•• That's correct, but that doesn't affect the surface interval. The surface interval is merely a timer to time how long you've been on the surface between your dives.

But if the batteries are taken out, the 13 minutes can only refer back to the moment when the batteries are taken out because prior to that the computer had stopped recording?•• No. The - the first dive that Mr Watson would have - would have done, which was only the very shallow dive before he returned to the boat.

Right?•• There would have been a surface interval timer started when he returned back to the surface.

Yes?•• That would have been - if it was [indistinct] it would have been right when the battery was removed, so that surface interval basically became

irrelevant. This surface interval only becomes relevant if Mr Watson has done to the dive to 15 metres and returned and then planned on doing a third - or a dive subsequent to that dive.

•••••he didn't dive again?•• Exactly. But the surface - so therefore, the surface interval at this point in time is irrelevant because it would only become relevant if he was going to do a subsequent dive to that because the computer and the diver needs to be aware of how much nitrogen they've got left in their body from the previous dive to take that into account when they go for their next dive, because if you haven't removed all of - the nitrogen hasn't been removed from the tissues in the body, you're simply adding more and more on top.

This - this 13 minutes, you say, records the time that's passed since he surfaced  $\bullet \bullet \bullet \bullet \bullet \circ \circ \bullet \bullet$  Correct.

•••••from the dive where Tina is lost?•• That's correct.

All right. Now, there's one other question. If I can take you to the second - well, the - the graph that's - not the graph but the table with all the•••••?•• Yes.

●●●●●the colours?●● Yes.

If we look at Mr Watson first and if I take you, if you don't mind, Senior Sergeant, to the 5.5 minute mark?•• Yes.

That's the time according to these tables when Mr Watson starts to ascent?•• That's the time according to the tables when Mr Watson reached 41 - 41 feet. It would suggest he has probably started his ascent sometime between five minutes and five and a half minutes because the dive computer says at - at five minutes we're at 50 feet and then at five and a half minutes we're at 41 - 41 feet. So he has started his ascent sometime in that time.

All right. So, to be precise as you are, it's from about the five minute to 5.5 minute mark that Mr Watson starts his ascent?•• Thereabouts, yes.

And then if I take you down to the - the bold black print down the bottom and we go to the Watson rate of ascent?•• Yes.

We see that from that at the five minute mark he still seems to be going down a little bit or maintaining his - his - his speed but from the 5.5 minute mark he starts to ascend at various rates?•• Correct.

And they vary between 5.5 metres per second and about 7.4 - 7.32 metres per second?•• That's correct.

Then if you come to Mr Singleton, he starts ascending at about the 8.5 minute mark or eight minute mark, he goes from 27 metres to 25 metres at the eight minute mark. And you see that in the red bold type?•• That's correct, yes.

And if one then goes down to his rates of ascent they vary, he starts off at four metres per second and then it increases to 26 metres per second?•• Correct.

Per minute, sorry. Twenty-six metres per minute? •• Correct.

Have you averaged out the respective speeds to see how fast each of them was going on average?•• I haven't. No, basically I haven't averaged it out over that period of time, no.

Yes. But it looks like Mr Singleton's going at a rate of something like an average of about 13.6 metres per - per minute?•• Well, if you go, you know, roughly the - over that

two minute mark with a - with a weight it'd be similar to that, yes.

And that's approximately double Mr Watson's speed?  $\bullet \bullet$  You could suggest that, yes.

I have nothing further, your Honour.

CORONER: Mr Walters?

MR WALTERS: I have nothing arising, your Honour.

CORONER: Do you need a - a - a break, Mr Zillman?

MR ZILLMAN: I will but I just want to ask a couple of questions before I do that, your Honour, if I can.

CORONER: Mmm. Mmm-hmm.

MR ZILLMAN: Is that okay?

CORONER: Yes - go ahead, yes.

MR ZILLMAN: Your evidence was that you plotted Mr Watson's dive on the basis of a graph supplied to you by Oceanic, is that correct?•• No, I plotted it on the data that was there. The data though on occasions has large gaps, like there's - there's one where there's a depth recorded at two - two minutes. The next depth is recorded at five minutes so therefore there must - there must be something in between that so I referred back to the dive data, the dive chart that they have provided to establish what had occurred in between those terms.

Well, you're confusing me already but ••••?•• If - if you look at the ••••

Let's just start with this proposition ••••?•• Yep.

•••••and this may answer it or it may not. On the various data that you were provided and I'll just see if I can identify it, particularly Exhibit 27c - now,

that's the one you identified before by reason of the serial number 1390, do you know the one I'm talking about?•• I do, yes.

It's got depths and times? •• It does.

And, well they - they all speak for themselves in terms of metredge. In terms of the times the surface time there was seven minutes, is that right?•• No, that's the underwater time.

Oh, I see. All right. Well, we'll do it this way. He got to the surface seven minutes after this dive commenced?•• That would be correct, sometime in that seventh minute, yes.

Well, on that it might be seven minutes and one second and seven minutes and 59 seconds? •• That's correct.

Well, going back to your various profiles and graphs that you •••••?•• Mmm-hmm.

•••••charts rather, that you compiled, you've got him exiting the water at around about the seven and a half minute mark?•• Correct.

Well, where does the half a minute come from?•• As you said correctly, it's sometime - in that seventh minute that he may have surfaced.

All right?•• So therefore what I'm trying to do there is - is establish a general profile, a general indication of - of that - that dive profile.

I know but why do you choose seven and a half as against seven or eight for that matter?•• Against, it's - it's a - it's a way of basically having a - a - a general point of exit. It's, you know, we could go seven, we could go - the - the reason I probably went more seven and a half is because there was two records of seven minute records so therefore one must have been, you know, possible 7:01, the other one has to have been later. So, to give that general viewpoint I arbitrarily chose about seven and a half.

I'll come to that in a second but what are the two records that gave you seven minutes so that one could be 7:01, one had to be a bit later?•• The - the data table is provided by Oceanic.

Well, the table says the dive time is seven minutes? •• Correct.

Well, there's just one entry as it were which is relevant and that's the seven minutes?•• I'm sorry?

Well, where's the two, that's what I'm asking?•• There - there's one there at seven minutes at 10 feet.

Oh, I see, okay?•• And one at seven minutes at three feet.

All right. So, I - I understand now. So, we've got three and a half metres to - to travel and you've therefore chosen, on that basis, the arbitrary figure really of seven and a half?•• To average it, yes.

Okay. Right, understand that now. The one with Mr Singleton has 10 minutes or the various references I think are he exiting the water at 10 minutes?•• At - at - at approximately that time, yes.

Now, is there a chart that gives us the same details with respect to he, as

we've just been looking at with Mr Watson?•• No, there was nothing like that provided.

Well, if that's the case, Mr Singleton - is this - am I getting this right or not? Mr Singleton might've exited the water at 10 minutes 59 seconds?•• No. I would suggest that he has probably exited the water sometime in the nine minute, probably later in the ninth minute. I am basing that upon the graph that's provided by Quicksilver which is the - this graph here in the - the material I've given you.

I'm basing that upon the graph that's provided by Quicksilver which is the - this graph here in the - the material I've given you.

All right. Well, just let me find that. I've got it, yes ••••?•• WS1.log.

Yes, I've got it?•• The reason I'm suggesting that is - is the dive computer where it said - "as - as you can step down into the third section down - it's actually got a dive time, it's suggesting nine minutes••••

Wait on you've - where's this other section ••••?•• as you're [indistinct] on the table - you got - you got - where it says, "maximum depth," [indistinct].

Yes, thank you?•• To the right of that it's got a dive time of - of nine minutes••••

Yes•••••?•• here we face a similar situation what we've got looking at [indistinct]. Somewhere in that [indistinct] we finished somewhere in that ninth minute.

Right••••?•• When it's been graphed by the software provider, the software is suggesting past the 10th minute is the exit point.

Okay••••?•• I've drawn the data I've used from that chart because I haven't been provided with the [indistinct] data.

All right, thank you. All right, well this might be suitable for you....

CORONER: Yes, okay. How long do you need - do you think you need?

MR ZILLMAN: I don't know•••••

CORONER: Okay. Well, look why - why don't we - you have an early morning cup of coffee everybody and we'll aim for about half an hour, that should....

MR ZILLMAN: Should do.

CORONER:  $\bullet \bullet \bullet \bullet \bullet \bullet may$  be sufficient? Should be sufficient? Than at least we can know where we are going to stand from there. This will be our morning tea

break, everybody.

THE COURT ADJOURNED

THE COURT RESUMED

SCOTT KNOWLES, CONTINUING EXAMINATION:

MR ZILLMAN: Now, I just want to ask you some more questions about this document 1390. There's one of them in feet and there's one in metres, I think you did the conversion to metres, is that right?•• That's it attached to the statement that's here? Is that [indistinct].

Well, I don't know if it's attached to your most recent statement or not, I'll just check. Yes, it is. The one you've attached I think is in feet••••?•• There is one in metres••••

And there is one in metres, that was 27C?•• Yes, but I - I didn't do these - I didn't do that conversion.

All right. That's okay. Now, just staying with that document for the moment, there are various columns providing certain information including the ascent rates, is that right?•• That's correct.

Now, the ascent rates are not averages, do you understand that to be the case?•• I would - I would suggest without knowing exactly where they're drawing the ascent rate from, I would suggest that that's probably the maximum ascent rate detected by that - that computer at that time.

All right. Otherwise, a snap in time? •• I would suggest so, yes.

It's one or the other?•• I - I would probably suggest between the first - the record - between the first recording and the third recording that middle ascent rate would have been the difference between the previous depth and where you are currently.

All right?•• I [indistinct] that correctly.

Well, you would obviously refer to those from Oceanic who can tell us with proceeding whether it's a snap in time or a maximum?•• I would - I would suggest that they would be the best people to ask.

Yes, all right. We do know that the depth is simply a - a record taken at various depths of - again at a point in time?•• Probably if I explain it this way. The - the dive computer itself is based on the old dive table that we used to use. The old dive tables worked in increments of - of about 10 feet - about three metres.

Well, that's exactly what I'm getting at?•• So what the - what the computer is basically doing is saying - it's working off the old dive table process in that

it'll record the fact that it has changed the depth by 10 feet.

That's right ••••?•• Thus causing the occurrence, yeah. That's what you were trying to say that - yeah, you would be correct.

Well, let's go back then to this document 1390, the one that's annexed to your statement. We do know actually that he descended to a maximum depth of 54 feet in that dive, is that right? Do you know that?•• A maximum depth of - according to that, correct, yes.

All right. Well, now that was at some point after the five minute mark, is that right?•• It would suggest so, yes.

Well, it has to be, doesn't it? •• That's correct, yes.

So, we might also take this much that at the five minute mark he was at least around the 50 foot point?•• That's correct.

So, we had a couple of seconds, and let's just say that was as the clock just ticked over the five minutes, after that he's descended to 54 foot? That would follow, wouldn't it?•• That's correct.

And theoretically that's giving him 54 foot at five minutes and five seconds, okay?•• That's a probability [indistinct].

Still within the five minute mark he has ascended to the 41 foot mark?•• Correct.

And up to the seven minute mark at 10 foot, correct?•• Correct.

That would have taken, on those figures I've just given you, a minute and 55 seconds, is that right?•• Yes.

Let's do another exercise. Let's just say at 54 foot it was five minutes and 50 seconds, okay? And as he ascends it gets to seven minutes precisely at the 10 foot mark. That ascent would have taken a minute and 10 seconds?•• I'd agree.

And then he might break the surface at some point after that?•• Sure.

Well let's go to Mr Singleton's ascent rates so we just get some sort of average. How long did Mr Singleton take to get from - he was very close to 90 feet because you might remember that the deepest depth recorded for Tina was 89 feet?•• Correct.

So, let's go to Mr Singleton's times. What do you calculate his time of ascent to being?•• It'd be somewhere in the region of about one and a half minutes.

Okay. Well, if we take that that's a good figure to use because that means a foot a second essentially? 90 feet ••••?•• Mmm-hmm.

•••••down and 90 seconds to come up, a foot a second?•• Mmm.

So if Mr Watson, on that average that we've just spoken about ••••?•• Mmm-hmm.

You know what I mean there, the last 10 feet?•• From the surface.

At Mr Singleton's rate that would have taken 10 seconds?•• [indistinct].

So, getting back to the figures that I'd postulated before, if Mr Watson left the 54 foot mark at five minutes and 50 seconds. Mmm-hmm.

•••••that would have taken him to reach the surface travelling that last 10 feet at the speed of Mr Singleton, a minute and 20 seconds?•• Mmm-hmm.

Is that●●●●?●● That's a●●●●

•••••arithmetic correct?•• Yep.

But the way you've put things onto the - the graph, that's Exhibit 6 for a start, it's over two and a-half minutes?•• Correct.

All right. So, there's a fair gap between a minute and 20 seconds that I've just put to you as a prospect?•• Mmm-hmm.

And two and a-half minutes, isn't there?•• There is, yes.

Right. Now, with respect to that gap you favour the two and a-half minute period as against the minute 20 second period?•• I would agree, that's also favoured by Oceanic in their data however that's been extrapolated by them.

No, well let's just stick with their data then?•• Yep.

The data that Oceanic gave to you was, as I understood it, the document annexed to your statement, the one we've just been talking about, 1390?●● Yes.

Plus this graph which is I think probably the next one in? •• Correct.

And then the same graph but just ••••?•• [indistinct].

Well, it's - has to be identical but it's being converted to - to metres?  $\bullet\bullet$  Mmm-hmm. Now, is there any other data relevant to this exercise that Oceanic provided to you?•• No.

Can I suggest this, if we just ignore the graphs for the moment?... Mmm-hmm.

And we just go back to 1390, and we just link the dots as it were, we just put down the dots?•• Mmm-hmm.

It would turn out like this, and I'll just pass this document over to you to have a look. Now, you can go back to 1390?•• Mmm-hmm.

To check these points, you see the first reading in terms of depth and time, I think comes in at 30 feet, is that right?•• With - with a - yes, I can see what you're saying, yes.

All right. Now, perhaps the - the first entry ought to have been at the zero in terms of depth rather than the 20 but that's the first recorded point which would mean feet and minutes, correct?•• Yeah, I agree.

Then we can take it down from there to the 40 feet mark because that's still at two minutes, correct?•• Correct.

Across to the five minute mark at 50 feet, correct? Is that correct?•• Well, the only problem with - with the - the representation you've provided here though also is - sorry, my mistake, yes, no, I agree, yes.

Okay. And then at the next recorded point is 41 feet at also the five minute mark?•• Mmm-hmm.

And so we can back it up to the 31 feet mark of six minutes, right?•• Yep.

Still at six minutes to the 19 feet mark, correct?•• Yes.

Ten feet at the seven minute mark?•• Yes.

And zero again at the seven minute mark, all right?•• Yes.

And I think there's one error there and that is it ought to have gone from zero - the first line should have been zero to 30, am I right in that?•• That's correct. Well, no, no, he's come••••

No, well ••••?•• •••••he's come down to - to 20 from the zero.

Well, it's just no coincidence between times and feet there though, that was the only reason I said that?•• That's only just due to the activation of the device.

Yes, I understand?•• Yeah.

But that's - what I'm getting at, putting aside Oceanic's graph? •• Mmm-hmm.

That's as much as you can plot on any graph from that bare data?•• I see what you're suggesting and - and I agree to the point of what you're suggesting is correct. What is also considered though is in terms of - of what you were attempting to extrapolate there in terms of - of possible scenarios, the data provides on 1390 that at least the sixth minute of that dive is - is recorded under the water. So, if we go by what you're suggesting there also that if we look at the - the second occurrence of the five minute mark and we suggest that's five minutes and 59 seconds we then move through to the first occurrence at the seven minute mark and suggest that that's dead on seven minutes that would give you a minute then to cover 31 feet. Your graph suggests it's a vertical ascent whereas or, you know, which - whereas the - that extrapolation of data would suggest it's - it's 31 feet per minute which wouldn't be the rapid ascent your - your - your data displays.

•••••is that's a matter of speculation essentially as to what it would be along those points?•• And I explained that when - with my graph also. I - I agree with what you're saying is that there's a - given the - the data that has come from the computer there is a variance, which is what you're suggesting a variance in - in what we are viewing.

Now, coming back to my graph, if you like? •• Mmm-hmm.

•••••for the want of a better word, arithmetic, that's as far as you can take it though?•• Simply plotting that data••••

That's right?•• •••••that would be correct.

All right. Well, can I tender that speech, your Honour?

CORONER: Who's the author of that?

MR ZILLMAN: My solicitor, but it doesn't really much matter because I - he's accepted it.

CORONER: Yes, but I just need to know who the author is so  $\bullet \bullet \bullet \bullet$ 

MR ZILLMAN: Correct.

MR ZILLMAN: My solicitor.

CORONER: ••••to - okay, so•••••

MR ZILLMAN: He can take full credit or all the blame.

CORONER: That's what I wanted his name for. That - I think this - have you got my - your numbers up there?

RECORDER: Twenty-eight.

CORONER: Twenty-eight. I'll get - 28.

ADMITTED AND MARKED "EXHIBIT 28"

I'll get copies of these to ••••

RECORDER: It's already been done.

CORONER: Beg your pardon?

RECORDER: They already have copies.

CORONER: They do have - sorry. Sorry.

MR ZILLMAN: Thank you. Just getting back to then this issue of the variances?•• Mmm-hmm.

It's correct, as you say, that on the scenario I put before you earlier, if we assume at 54 feet the time was five minutes and 58 seconds, let's say?•• Mmm-hmm.

It's quite correct to say that at the six minute mark, if he was at 31 feet?•• Mmm-hmm.

It couldn't have been six minutes and one second, because he couldn't have ••••?•• You wouldn't ••••

•••••as it were••••You wouldn't suggest so, that's correct.

●●●●●gone what 23 feet in three seconds?●● Correct.

So, you've - you've got to bear in mind those issues?•• Mmm. It's - it's - with your chart - it's the - the variance also effects yours in - probably if I explain it. You've - you went the - perhaps the lean side of the - the minutes in terms of five minutes is five minutes, full stop. The variance can also swing the other way to five minutes, 59 seconds.

Absolutely. But the difficulty is trying to find out what side of the minute mark at any point an event is occurring?•• I totally agree. But, the data that is there, if it was merely plotted as - as the - the - the data values, it - it - you know, the variance is, yeah, it's - it's - the variance is there••••

That's right?•• ••••that - that cause••••

Well, that causes all the problems really, doesn't it?•• It does and that's why it - it probably needs to be explored as to whether that can be more accurately - as - again, I don't know if Oceanic have more accurate means of extrapolating that data which is where their - their graph is produced from. I mean, that's a matter for Oceanic, which it - and they may have some other way of doing it which is why the graph is produced similar to what I've produced there.

Okay. Now, again, I just want to come back to another issue. You took it, you said, in 30 second increments with respect to your corrected version 3, I think, is that right?•• Mmm-hmm.

Now, that doesn't come from any other data than in terms of Mr Watson, than what? Where do the 30 second increments come from in his case?•• Well, it was -

it was a matter of - of attempting to get a uniform time line by which to - to, I guess, compare the two profiles against. The original data, the time scales were - were different, not so much the - the fact that they were minutes, they were minutes but when you actually look at the physical charts, you can't place them over each other to - to make any direct comparison. So, the 30 second increment was just a - I guess it's an arbitrary point I chose as a midpoint to at least extrapolate to see what it may indicate, if that explains your - or answers your question.

No, not really?•• Three - take - take for example, the - the first three occurrences of Mr Watson's dive there, in that at zero it starts at four; at zero it's still at 10; at zero it's still at••••

Wait on. You've got to go a bit slower for me?•• My apologies.

Just a moment, I'll get the other document I want to have a look at as well?•• That's the 1390.

Wait on. Yes, I know - I've got to get that - so, we're going by the - the one measured in metres this time?•• No, no. The one measured in feet.

In feet. All right. Just a moment. That's - I thought on corrected version 3, you were doing it in metres?•• I - I am. I don't know if there's a metre one there.

CORONER: The metre one is the other  $27 \bullet \bullet \bullet \bullet$ 

MR ZILLMAN: C.

CORONER:  $\bullet \bullet \bullet \bullet \bullet C$ .

WITNESS: If we look at the metre one, is that the one where you were looking at?

MR ZILLMAN: Well, I was but simply because I thought ••••?•• Yep. No, that's fine.

•••••it was metres to metres?•• Yep. No, that's okay. The - the first three recordings are basically from one to six metres••••

I see?•• •••••with no time variance at all.

That's right?•• Now, you don't descend six metres in - in a fraction of a nanosecond.

No?•• So, therefore••••

I accept that?•• •••••there has to be a gradual decline. The - I know at - at two metres - or sorry, at two minutes he's at nine and a-half metres. Now, again it's - the variance is still there in that - you know, that could be two minutes on the nose, it could be two minutes and 58 seconds.

Mmm?•• But, to get an indication, I know that he's at - at nine and a-half - nine and a-half metres at two minutes.

Yes?•• Which again their - theirs is slightly different in that I - I don't know what their conversion rates were because I think they may have rounded a little bit••••

Well, they have?•• •••••a little bit harder. Because - I'll - I'll just easily recite that to you. Do you see the - the 15.5 metre mark as being the maximum in depth? •• Yes. Now, we know it to be 54 feet?●● Yeah. Well●●●● Well, sorry••••?•• •••••they're saying 16 metres. CORONER: No. We don't. MR ZILLMAN: Their maximum here is 15.5. CORONER: Yes. MR ZILLMAN: On that table?•• Yes. But, above it of course we know he got to 15 point - we know he got to 54 feet. CORONER: Well, they say on the other one, it's 16 metres. WITNESS: Well, they're saying 16 metres, which •••• MR ZILLMAN: That's right. CORONER: Which is different [indistinct] ••••• MR ZILLMAN: But, if we convert 54 feet to metres, in fact it comes out at 15.3 - right, you can put that on the solicitor tells me. CORONER: Yes. MR ZILLMAN: Just a minute. CORONER: I did these calculations last night. WITNESS: Their - their rounding is - is ••••• MR ZILLMAN: I know they're rounding them off?•• Yeah. I made a note of this, I just want to correct - see if I'm right. Fifty feet, rather, is 15.38 metres. And 54 is 16.06, was it?•• But, just continuing on where I was, sorry, there's obviously three depth variations within that first minute. So, when you - when you - when you move through to - you can't just go, you know, he obviously plummeted the - the six metres in - in a - a nanosecond, he has to have descended  $\bullet \bullet \bullet \bullet \bullet$ 

No. I've already accepted that?•• He has to have descended gradually. So, what - what I would do is I - I then extrapolate out saying, well, okay it's a descent - it's a stead descent, a normal descent which is, as I say in my - in the chart here, the - the figures I've put for the excel spreadsheet, I've divided the differences up between them, saying, okay, if he's - if he's following down with a steady descent, which you would expect, 'cause their their only just going on a dive, then these would be roughly the depth variations he would have done over that period of time. So, what you - what I'm trying to do is - is map his profile as - as best I can with the data that I've got, either using the date directly from there or attempting to extrapolate what the depth variations would have been in between.

I know•••••?•• So, it's a bit of a combination of - of both try and - and map it out as - as best you can.

I know you're trying to do your best, but you see, they might have had, for example, a 20 second stop at the, for argument sake, at the five metre mark?•• Right.

And then continued down, or they may not have had a 20 second stop at the 5 metre mark?-- Yep. Yeah, I see what you're saying. Yes.

So when you, as you say, extrapolate these figures to try to get ascent and descent rates - descent and ascent I should put it around that way, it really is a question of guesswork in the - in large part?-- It - it's a matter of - of, I guess, estimating in terms of - I agree, I mean, there is that discrepancy without a doubt. I have - I'm not arguing that. So in terms of - of how he moves between the two, sure. Between the two depths, yeah.

And just to confuse things, he might have gone up or down 9 feet at any one point and there not be a record on the computer?-- That's correct. Unless there is more accurate data which we haven't been provided with, that is a possibility. That said though, you would - to do that in terms of say within that first minute or - you're looking at a large scale variations in - in depth. If he's moved up a certain percent - a certain distance before moving down to register it again you're looking at, you know, substantial ascent and descent rates to be able to - to meet those timing requirements.

That's right, because nonetheless, if you were at a given depth, and we'll just pick any depth we like at all here. Let's say you're at the 20 feet mark at let's say three minutes and you moved up to the 12 feet mark let's say, still within the three minutes. -- Mmm-hmm.

•••••and then you descended to the 22 feet mark, still within the three minutes, the data might, on its face, simply suggest you were still at all times at the 20 feet mark, but you weren't?-- The data here could suggest that, yes. Again, as I said, I don't know if Oceanic can extract any other data which is where their chart came from, but I - what you're suggesting would be correct.

And just to take that a bit further, then if you at the 22 feet mark descended another 10 feet  $\bullet \bullet \bullet \bullet \circ ?--$  Mmm-hmm.

•••••still at the - well, at that point going to the four minute mark, right, you might otherwise misread the data as saying it took you around about the minute to move from the 3 metre mark to the four when it didn't. The three sorry, the 20 feet mark to the 30?-- Sure. Yes, I agree with that.

Okay. Well, just put those aside for the moment. You've had experience diving yourself, have you  $\bullet \bullet \bullet \bullet \circ$ ?-- I have, yes.

•••••as I understood it? Were you familiar with the particular computer that Mr Watson had on this particular day?-- I haven't used that particular computer and I do use - or have used Oceanic computers, but not that particular computer.

All right. Well, it might be a feature of others as well, but do you know that

at least some computers will essentially sound an alarm when the ascent rate is beyond that which is within the safety limits?-- Yes.

Do you know that this one had that feature as well?-- Yes. Most of - well, if - from my experience all the Oceanics do.

And do you know that it was - well, in this case at least, the case that the alarm would sound at that point if you were travelling in excess of 60 feet per minute?-- That's correct.

Well, just going back to the document, 139A, which you've got on your - annexed to your statement.-- Yes.

•••••we know at least there was one record, according to that document, where that was achieved, namely at some point beside the 19 feet in depth column?--Mmm-hmm.

So assuming the computer to have worked correctly you would have understood an alarm to be sounding at that time?-- Would have expected so, yes.

## All right?-- The••••

Yes?-- If I could just quantify that. The - probably the main difference between the type of computer that Mr Watson was using and - and the Oceanic computer that - that Tina was using, was Tina's would be mounted in the - in the combination gauges that were - she would hold. So there'd be depth indicators, there'd be other indicators was well as the computer being mounted there. The computer that - that Gabe was using, the console itself is on his wrist which is where the - the depth detection device is also. The one that mounts to his tank merely recalls breathing rates and - and basically tank pressures and that sort of thing. So it can - it can work out how long he has left at his current breathing rate, et cetera, et cetera. I considered the ascent rate of 61 to 90 feet per minute thinking, well, you know, that's something - he's obviously accelerating quite markedly.

Mmm?-- The problem with that - that rate there, is to go back to the situation where to be in his favour, if we were to suggest he was at 41 feet at five minutes and 59 seconds  $\bullet \bullet \bullet \bullet$ 

Wait on, we've got - go a bit slower? -- Right.

Yes, at 41 feet ••••?-- At 41 - sorry, at - yeah, sorry, about 41 feet he was at five minutes - say five minutes and 59 seconds at 41 feet ••••

Mmm-hmm?-- •••••at seven minutes on the nose he's at 10 feet.

Yes?-- You know, if we favour him.

Yes?-- Gives us an approximate ascent rate of about 31 feet per minute over that minute.

That's right?-- When - when that's examined with the ascent rates that - that coincide with those entries we're looking at - at about 51, somewhere about - somewhere in that range, 51 to 60. We're then looking at 31 to 40, there's then that marked jump from 61 to 90 and then it drops back to about 41 to 50. The ascent rates remain reasonably, I guess, similar apart from that one marked jump at 61 to 90 indicating there's a rapid acceleration of - of his ascent. Well, of the computer's ascent. Because that is such an unusual occurrence it could

be suggested that because the computer is mounted on his wrist that the act of him raising his hand. Basically the instructions are, when you - when you're a diver, if you're approaching the surface to exit the surface it's usual practice to put your hand above your head before you break so that you don't end up whacking your head into a boat, you end up hitting it first with your hand so it's aware. That may indicate he's actually bringing his hand up to - to be above his head giving perhaps a - an inaccurate rate of acceleration there. It's••••

Mmm?-- Because you're under less pressure so - so the [indistinct] opens, the gas bladders in the - on the BCD opens, your rate of acceleration tends to increase as you approach the surface. Such a drop back from - from 61 back to the 41 to 50s I would suggest would tend to indicate it's a movement of the hand that is artificially accelerating his - his rate of ascent not the fact that he has markedly accelerated and then decelerated.

Well, that, with respect, doesn't make much sense. Because if you put your arm up to protect yourself as you're approaching the surface that'd be going up between the - the 10 feet and the zero mark, wouldn't it?•• It - well, it depends on how - how close you're getting there.

Well, wait on?•• Like, at this depth••••

We'll go back to where he was though?  $\bullet \$  At this depth he wouldn't be able to see the surface.

Well, that's right. So - well - well, hang on. If that is the case it has gone up on your scenario somewhere up to the 19 feet mark?•• Correct.

Well, that's entirely speculative as to whether it was his hand that - then went up that accelerated the ascent rate in terms of the data or not?•• It is speculative but what I'm suggesting though is, given his rate of acceleration before that point and his rate of acceleration - oh sorry, his rate of ascent before that point and his rate of ascent after that point that it's unlikely that there would be such a marked increase in acceleration followed by a marked decrease in acceleration of - of the entire body.

Right?•• It - it's more indicative••••

Well, let me [indistinct] - okay?•• •••••that the computer has - has accelerated, not necessarily the body.

Mmm. Well, on that scenario - well, two things. For all you know it might have been the body, it might have been the - the arm?•• As I'm saying, it's••••

Is that - is that a fair question or not?•• It's fair. But as I'm saying, given in light of what's there it - in my experience it would be more indicative of just the computer accelerating not necessarily••••

Okay?•• But what you are suggesting would - could be correct that it may well be the body. It's unusual though that there is such a marked acceleration followed by a marked deceleration when if he's approaching the surface usually the body is continuing that acceleration.

Yes, but do people as it were slow down when an alarm goes off as a matter of your experience?•• Valid point.

Okay?•• That - that is a possibility.

Well, let's get back••••?•• Given the situation I - I - you know, I don't know. But••••

Well, we do know an alarm would have gone off? •• You would expect so, yes.

Well, if the machine was working. Is that right?•• You would expect so. There - there's nothing on the ••••

•••••records?•• •••••on the Oceanic that there's any violation status to say that there was a violation.

Do you know this, that there was only a violation - well, I'll rephrase that. Do you know that there is never a record on the computer of a violation of ascent rates?•• I disagree because Mr Singleton's computer exhibits the fact that there's an ascent rate violation.

## Well....

CORONER: Is that specific in relation to this computer?

MR ZILLMAN: Yes, it is.

CORONER: Oh, well.

MR ZILLMAN: That was the evidence of Mr White you might recall. And I'll explain it to you in this way. See, we've heard some evidence from a man from then from [indistinct] Oceanic?•• Mmm-hmm.

Who said there is never a violation status reported for ascent rates for the reason that if there is a violation, I think there's something like a 24 hour period where you can't dive again, is that right?•• No. It would depend on the reason for the violation. I mean, there's a number of other reasons why but••••

Well, anyway he explained it in this way, that if you were swimming along and there was an obstruction in front of you, such as a bombora or something of that kind++++?++ Yep.

•••••it's fairly common that divers will quickly ascend, but not very

far●●●●?●● Yeah.

•••••to get over the obstruction and come back to their••••?•• Sure.

•••••ordinary course. And they might have kicked to therefore be travelling at a - a rate beyond the 60 foot per minute mark in that ascent. That's what he told us?•• Sure.

And if that was recorded as a violation then there would be consequences for that diver when it had nothing to do with an ascent as it were to the surface?•• Mmm-hmm.

And - and it was for that reason that there's never a record violation status for ascent rates?•• Well, as I said, that seems to be contradicted a little bit by Mr Singleton's computer in that it did record a violation for his ascent.

This is different to those computers that have data that can see that there was flashing signals or certain bars were - you know what I'm talking about in terms of bars?•• I do.

Full. That is up to their limit whether it be seven or eight bars or whatever?•• Yep.

That - that's a different concept again to a record of a violation?•• That'd be correct. But again, as I said, Mr Singleton's computer tends to record the fact that there is a violation merely on the ascent rate not for any other reason. The violation is because of the ascent rate.

All right. Well, let's have a look at that document anyway since you raise it, so we can see it. Is that somewhere?•• No, it wasn't in - I think it - I think it's mentioned in the statement of - of Mr Coxon.

CORONER: Is that Mr Coxon? •• Correct, your Honour.

MR ZILLMAN: Mr Coxon, all right. [Indistinct]?•• It mentions here that, in paragraph 13••••

CORONER: Thank you.

MR ZILLMAN: That's in his statement? •• In his statement.

Oh, right. I thought we were looking at data?•• No. Well, the only data we have in relation to Mr Singleton's computer is a graph. We don't actually have a break down.

All right.

CORONER: Can you just read out what he says there? I can't find it?•• He mentions here, "An alarm was activated [indistinct] ascent. It was during this period"- "this" - "the period during the alarm" - "during the dive when the alarm was activated was" - "is shown on the graph from eight and a-half to 10 minutes.". I'd stand corrected there that - that isn't a violation. It's obviously just an alarm.

MR ZILLMAN: All right?•• So, that was my error.

Right. Okay.

CORONER: I think Mr White went on further to talk about correcting nitrogen levels by diving further and doing this at various depth, didn't he, at that time. My notes say that anyhow. Thank you.

MR ZILLMAN: I just misplaced some documents, your Honour. Now, I - ask you about a document which was marked yesterday as Exhibit 21 and I think it's a (d). It must be - yes it is (b).

UNIDENTIFIED SPEAKER: Is that (b) or (d), Mr Zillman?

MR ZILLMAN: (D) - it was marked at. I know, I'm - I'm just trying to - I don't suppose my notes concern.

CORONER: What exhibit number is that?

UNIDENTIFIED SPEAKER: 21(d).

CORONER: 21(d), thank you.

MR ZILLMAN: This was the document with the profiles of all of them on it. Now, I think today there's been some corrections to the ascent rates, et cetera, and or ascent and descent rates?•• Correct.

But otherwise is it your evidence that that graph as it was remains true?•• As true as we - we know with the data we have.

I'm just getting a little bit confused here so I'll come back to that in a second. I just want to - so we've got three graphs from you today?•• Correct.

But we had four yesterday, you see? •• Yes.

Have you got yesterday's graphs there, that is Exhibit 21?•• Yep.

 $\bullet \bullet \bullet \bullet \bullet$  Mr Singleton on it, on their own? $\bullet \bullet$  Well, that - that one was incorrect yesterday. That  $\bullet \bullet \bullet \bullet$ 

Because that - that was ••••?•• That was a duplication of Mr Singleton's dive.

MR ZILLMAN: Right, okay. So, that's why we've got the three. So (b) is gone.

CORONER: Yes.

MR ZILLMAN: So, we've got the three. Now, lets go then to (d). And today that's represented by correction 2, is that right?•• Correction 3.

Is that right?•• No, it'd be correction 3.

Three, all right. All right. Okay, well on 21(d) you also had the dive profile of Tina?•• Correct.

But it's not on the corrected version  $3? \bullet \bullet$  On (d) that dive profile is actually a replication of Mr Singleton's dive profile.

Oh, well●●●●?●● So, it - it●●●●

Okay?•• That was error there. The reason I didn't put it on today's is - is it's probably to - we obviously know that she was probably following Mr Watson to the separation point so. And from there we know that her ascent followed the ascent of Mr Singleton.

Yes?•• The reason I didn't put it in any further is we still don't know what's in that middle there so it was probably just to save confusion in terms of - of me putting in data that we don't know.

Is it fair to say you've removed all of the - the descent rates of - of the deceased?•• That's correct - I've removed the - the deceased completely out of that chart because••••

All the charts?•• Correct, because we - we know that she was probably following Mr Watson's descent. She - or she followed Mr Singleton's ascent but that - that gap in between we know that she must have descended but in terms of - of rates of descent and time spent on the ocean floor we - we don't know.

Okay. You've also removed from that the possible ascent profile of Mr Watson which was on 21(d)?•• I have.

Why has that been removed?•• The reason was is just to reduce the confusion there. I still state that he may have been anything up to approximately nine feet deeper and ascended from that point. I don't - don't sway from that but it's just to reduce the confusion with - with the numbers and the lines. I - I was just trying to make it as simple as I possibly could.

Okay. Well, just go to 21(d), putting aside the rates ••••?•• Mmm-hmm.

•••••which we've already discussed••••?•• Yes.

You would say there was - the possible ascent rate there of Mr Watson is an accurate one?  $\bullet\bullet$  Based on  $\bullet\bullet\bullet\bullet\bullet$ 

On 21(d)?•• Based on the••••

No, I just want to know whether you say there's any errors there?•• Well, the - the data would be slightly erroneous because it was - well, no, sorry - no, I - I correct that. It probably would - is - is close to the ascent rate, given that••••

Forget the rates, I just want the path?•• Sure. The path could be the proposed path had he been deeper than - than what was indicated.

And in fact we could move the ascent point, that is when he breaks the surface, over basically to the seven minute mark as it is for the seven and a half minute mark for the reasons we've been earlier discussing?•• I'd agree.

And in fact you can, travelling at a fair clip as it were, ascend 10 feet in 10 seconds?•• Yep, be travelling at a fair clip but yes.

All right. Did you know there was evidence that he, as it were, broke the surface [indistinct] quite noticeably when he came up, Mr Watson?•• I don't know

the detail of how he broke the surface or anything like that but I know that he was noticed as he broke the surface.

All right. Okay. Solicitor just wants to raise some issues here. Can we have a short break for a minute?

CORONER: Yes, sure. Before that, do I understand the way we're going that that - scenarios that you've various put is that Mr Watson could've broken the water close to the seven minute mark.

MR ZILLMAN: Yes.

CORONER: Seven minute plus a second, I suppose.

MR ZILLMAN: Yes, well, not necessarily a second but.

CORONER: Or close to the - the variance is - is that or close to the eight minute mark but no-one knows.

MR ZILLMAN: That's about right?•• The data is that it's - it can be - or it•••••?••

CORONER: That's all right?•• •••••it says seven minutes on the data it would give you from seven minutes to••••

Seven minutes and 59?•• •••••Seven 59.

Okay. So, we're looking at •••••?•• Unless we can extract further.

I understand. Yes, I'll stand down. How long - well, let us know when you're ready. I don't want.

MR ZILLMAN: Ten minutes, thanks.

CORONER: Yes, okay. Thank you.

THE COURT ADJOURNED

THE COURT RESUMED

SCOTT KNOWLES, CONTINUING EXAMINATION:

CORONER: Yes, Mr Zillman.

MR ZILLMAN: Want to ask you again about some details in 1390. Can I ask you to have a look at the two documents, the metres and the feet records. Both of these came from Oceanic as I understand, right?•• From what I understand, yes.

Yes. Have you got them both there?•• Are you actually looking at the tabularised ones or the actual graphical one?

CORONER: I think the table you're looking at.

MR ZILLMAN: The tables.

CORONER: The horizontal tables, yes.

MR ZILLMAN: Have you got them there?•• I do.

Now, just explain for me again why it is that these records are in 10 feet increments, why we have at the start one of four feet on the one in feet, and equally so one metre in terms of the metres?

MR WALTERS: Your Honour, may I just raise a point, and I'm sorry to interrupt my friend's cross-examination. We've spent a day with this witness.

CORONER: Yes.

MR WALTERS: With due respect he really isn't the person•••••

CORONER: They're not his documents.

MR WALTERS: No.

CORONER: I accept that, but he's entitled to ask these questions.

MR WALTERS: I - and I don't at all quibble with what my friend is asking after the evidence has been led, but it - in terms of the usefulness of this evidence in assessing all these things, your Honour, in my submission, the witness is not an expert and - and in any event - and because of that he's really giving - and trying to be - give the secondary hearsay evidence of that thing.

These are matters which, in my submission, really should be asked of the technician from the company.

CORONER: Yes. Look, I accept that, Mr Walters....

MR WALTERS: Yes.

CORONER: •••••and we don't have that technician.

MR WALTERS: No.

CORONER: And as I understand it, I don't know whether we're going to get cooperation from that company any further.

MR WALTERS: No.

CORONER: I also understand that there's a possibility of getting far more information out of that machine than we've already got.

MR WALTERS: Yes.

CORONER: But accepting that, as we are, and knowing that this basically - the limitations of these documents  $\bullet \bullet \bullet \bullet \bullet$ 

MR WALTERS: Yes.

CORONER: •••••this witness actually drew some graphs••••

MR WALTERS: Yes. No, I appreciate that, your Honour.

CORONER:  $\bullet \bullet \bullet \bullet \bullet \bullet$  and I think Mr Zillman's entitled to ask the basis of where he got that information.

MR WALTERS: Your Honour - and I don't - I don't criticise that.

CORONER: But he - but he can't - he can't expect this witness to explain differentials....

MR WALTERS: Yes.

CORONER: •••••unless he's been told that. Because all this is based on - on what he's been told, or what he's been given. So  $I'm \bullet \bullet \bullet \bullet$ 

MR WALTERS: No, I appreciate that.

CORONER: •••••going - I want - I just want to allow this to be exhausted because I think that when we come back that we get more information from - from Oceanic, we may have to go through the whole exercise all over again. But if we don't then this will be the only evidence that I have.

MR WALTERS: If your Honour pleases.

CORONER: Yes.

MR ZILLMAN: All right. Could you just explain your understanding then of why 4 feet or 1 metre is recorded when the - otherwise as we hear it's recorded in 10 feet increments?-- The reason that the - that's the first depth recorded is, the dive computer, although it's - may be turned on at the surface, it doesn't start recording any data until it's about a metre depth. At that depth it realises it's underwater and it starts recording. Similarly, if you have a look at the end of that table at 7 metres, it finishes at 3 feet.

Mmm?-- Similarly, when it hits that point the computer basically determines that it is on the surface and starts recording surface intervals there. It's - it's the depth at which the computer activates and basically deactivates.

Well, that's the point I was interested in particularly, and that's the last records. Because you see we've got zero meters for the last entry in the metres tables, that's  $27C \bullet \bullet \bullet \bullet$ ?-- Mmm-hmm.

•••••and we've got 3 feet as the last entry on the feet tables?-- Mmm-hmm.

I'm wondering this much at least, just putting aside the fact that the metres is down to zero, we'll leave that aside, is it the case that if a diver surfaces and in the course of his being on the surface his arm is under the water $\bullet \bullet \bullet \bullet \circ$ ?--Mmm-hmm.

•••••that that's explanatory of the 3 feet entry as the last entry on that

table?-- He'd have to have a long arm to give that. That's - that's 3 feet deep for it to start reacting again, to start recording the fact that it is now diving again. What - what you would find would be, if that were to occur, that he surfaced and then put his hand in deep enough to reactivate the dive computer, you would see the fact that at 7 minutes there's a 3 foot mark where he is surfacing. Here's the 3 foot mark and the computer then goes into what's called a surface mode. It would then go back into a dive mode when he's gone below 3 feet again when he's - puts his arm in the water.

Well, just●●●●

CORONER: Well, from what you've told us already, the surface mode went to 13 minutes, did it not, on this computer after he came out?-- Correct.

Well, does that mean that the ••••?-- That would - that would suggest, your Honour, that the computer has gone into surface mode when it's hit 3 feet, it has not then gone any deep enough to reactivate the dive mode because otherwise - otherwise it would have had the surface mode substantially released.

I think in fairness to him we should have put to him some propositions about what he understands about these calculations, because if they've just been given to him, unless he's got some knowledge specifically from the company, how does he interpret these apart from what they were at face value, and I think that's your very point, isn't it?

MR ZILLMAN: That's - indeed it is.

MR WALTERS: Your Honour, this would be [indistinct] position, to ask this man what the - witness what happens or what this [indistinct] means.

CORONER: Well, I think that's all speculation because ••••

MR WALTERS: It is. The manual specifically, on this model, which is in possession of Workplace Health and Safety officer, clearly sets that out what happens on those things.

CORONER: Yes. Well, I'm sure everyone's got copies of those. I think I saw one the other day, but we've - I'll leave it to you to continue. I think Mr Tate can sort of get back to where I want to be, but the position is that - that as I understand it from this witness, that he got these tables directly from the company. Whatever explanation he got that's what he got. He got the company and he's drawn assumptions from that and prepared documents as a result of that. So why we would have stopped at 3 feet or stopped at zero is - is a matter he could speculate on, but he wouldn't really know unless they told him when they gave him the tables, would they?

MR ZILLMAN: Probably not, but he's done the graphs from it and it's •••••

CORONER: Yes, I accept all that. Yes.

MR ZILLMAN: All right. One other matter I want to ask you. You know that the computer has the ability to record a maximum depth because at least we've seen some tables to that effect, where 54 feet was the maximum depth?-- Yes.

And that's a standard thing on dive computers, is it?-- Basically - well, the ones I've used will always record the maximum depth.

And that can be simply recovered from the computer by pressing some buttons and

looking at what's shown on the screen?-- Correct.

Do you know if computers generally also record maximum ascent rates?-- It would probably depend on the model.

Okay, that's all right. That's enough. Do you know if this one did or not?--Going by what the data is indicating, it - it seems to indicate that it does record a maximum descent rate for - for the intervals at which it makes an occurrence.

Right. Do you know if there's - well, you don't know I suppose, one way or another, whether there's a separate record showing what the maximum ascent rate was?-- No.

But if we just take on its face some evidence that we've heard, and I'll read it to you, and this comes from Dr Griffiths' statement where he says this much, "The maximum ascent rate", and he's talking about this computer, "is recorded at 90 to 120 feet per minute which is faster than the old navy - US Navy recommended ascent rate of 60 foot per minute." Do you see that - hear that rather?-- Yes.

Now, 90 to 120 feet per minute is a faster rate than anything that appears on the table which is annexed to your statement because there it's 61 to 90, correct?-- Correct.

Do you know how to operate the computer?-- I don't use that particular sort, but it wouldn't be probably too hard to - to look at.

Well, what I'm wondering, you see, it's here in Court?•• Mmm-hmm.

Whether you've got the ability to see if that is disclosed on the computer?•• I can certainly try.

CORONER: Well, I want to make sure first of all and bearing in mind the information that I've been given that anything you do to the computer won't effect it's record or memory? •• No.

Because I - I'm going to have it returned to the manufacturer to find out what I can - what can be done, so I want to be sure about that. I'm sorry, I'm just going on the manual which  $\bullet \bullet \bullet \bullet$ 

MR TATE: I think probably the answer to that, your Honour, is - is - Inspector Coxon, are you able to do that?

UNIDENTIFIED SPEAKER: [Indistinct] - he - he can turn it on and get a single screen which will indicate that - again that the - some - there's basic information for that dive which will show on one of the little - there's four graphs around the edge of it and it'll show in one of those, the maximum ascent rate that was achieved during that - that dive and - and you can do that. It won't actually, you know, effect the information that's••••

CORONER: Okay.

UNIDENTIFIED SPEAKER: •••••that's logged in there.

CORONER: Well - yes.

UNIDENTIFIED SPEAKER: The problem••••

CORONER: Go on.

UNIDENTIFIED SPEAKER: Sorry. Just - it's just unlike - it won't be - when was this was all downloaded in the first place, that was the last dive that was undertaken, so it was the first thing that popped up. I don't know exactly what testing has been done, so we'd have to sort of - but, the testing effectively took this on other dives, so it would have to be scrolled through to find the dive - the last dive that Gabe Watson did as opposed to the last dive that computer's done which I suggest is probably - was done in the recompression chamber.

CORONER: That's right.

UNIDENTIFIED SPEAKER: So - so, there'd just need to be a little - little time to sort of scroll through and make sure we're all talking about...

CORONER: Well, could we try and •••••

UNIDENTIFIED SPEAKER: •••••the same dive.

CORONER: Would you be capable of doing that more than this witness?

UNIDENTIFIED SPEAKER: I don't know if this witness can do it or not.

CORONER: Well, perhaps this might be the appropriate thing to do over lunchtime, because what you're saying it's going to take - might take some time.

UNIDENTIFIED SPEAKER: At least a - a couple of minutes to sort of work •••••

CORONER: Well, let's••••

UNIDENTIFIED SPEAKER: •••••work - work it out.

CORONER: •••••do it now. Can we just stand everything down and let the officer - now, we - we - you know what you're seeking? Can you just ask him - well, perhaps you want to - have you got any more information you want to seek from it•••••

MR ZILLMAN: No.

CORONER: •••••let us know.

MR ZILLMAN: I just want to know if that's recorded as the maximum ascent rate on that dive.

CORONER: Okay. You got a hand up.

UNIDENTIFIED SPEAKER: Sorry, if I can just add, there's - there's another document that comes from the - with the information that was downloaded from it

initially, which was a summary of all the dives that were stored in the - in the memory function of the computer.

CORONER: Yes.

UNIDENTIFIED SPEAKER: And it's on that summary sheet that the maximum recorded ascend rate, the one that's being quote here, that Dr Griffiths was referring to - that maximum ascend rate is recorded on that summary sheet.

MR ZILLMAN: Well, that might be sufficient.

CORONER: Well, that - that's - that's my - that's my memory too, because that's what I understood they said, what was recovered - recorded on for each dive and then the dives dropped off after a number. Could we just have a look for that first of all, please?

UNIDENTIFIED SPEAKER: Yes [indistinct].

MR ZILLMAN: It's - it's - it's the same data.

CORONER: Yes.

MR ZILLMAN: We should be able to get the [indistinct] on the machines.

MR TATE: If, your Honour, would pardon me for a moment, I'll - I'll just ask Inspector Coxon to come up here. Your Honour, I think most of this information is, as I understand it, form part of his attachments to his statement which is our Exhibit 22.

CORONER: Yes. Could you look to Exhibit 22, you might find it all. I've just got the - the - the little thing I was Exhibit 22, I think.

MR ZILLMAN: Well, I think I've got the document, but it's only

CORONER: Can someone just point out to Mr Zillman where it is? Mr Coxon, would you be able to - sorry. Are you able to  $\bullet \bullet \bullet \bullet \bullet$ 

MR ZILLMAN: It's not recorded in feet, but it's recorded in metres, but I think it's the one.

CORONER: Could you just confirm that with Mr Zillman, please.

MR ZILLMAN: Look, I don't - I don't know that the witness needs to bother about the question. But, I - I think we're agreed here  $\bullet \bullet \bullet \bullet$ 

CORONER: Yes.

MR ZILLMAN: •••••that there is a record.

CORONER: Yes.

MR ZILLMAN: And it's in two forms. One's greater than 36 metres per minute which is in that bracket 90 to 120, because there's another document saying that as well.

CORONER: Mmm-hmm. Thank you.

MR ZILLMAN: I'll just state the obvious on that. If you accept what I've just

said to be accurate, those other tables that you've been referring to in terms of the ascent rates, it doesn't have a - an ascent rate above 61 to 90 feet per minute, does it?•• It doesn't, that's correct.

So, if you accept what I have just said for the moment, there apparently is at some point in the dive, an ascent rate up to - or between 90 and 120?•• Sure.

Okay. Thank you. But, I might be able to clear that up with Mr Coxon or someone else - or Mr White, but that's what the documents tell us. I - this is not really - I've - I've

finished with the witness, but I just want to inform, your Honour, of one thing, just so that there's no misunderstanding because there were some at the Bar table. That document that I tendered purports to be nothing more than a reflection of the raw data, it doesn't take into account any variables or anything of the kind. It just followed faithfully the tables themselves.

CORONER: Thank you. Yes, Mr Tate, do you have any re-examination?

MR TATE: If I may, your Honour. Senior Sergeant, can I just take you very briefly to 21D and it's the yellow line and I'm just wanting to clarify with you that when you prepared these graphs, it was your understanding that there was a - error rate is not the proper way of phrasing it, but rather that any given particular depth measurement may have an accuracy within three metres?•• That's correct, yes.

So, if we take the measurement at about five minutes, which is 15 metres, in theory that could be 13 and a-half metres or it could be 16 and a-half metres?•• It'd be 12 and a-half metres or 17 and a-half metres.

All right. Okay?●● But●●●●

So, in - in essence, what we can glean from the - this particular set of readings from the computer is a dive envelope?•• That's correct. What this is, is it's a - a direct comparison between the two dive tables provided - sorry, dive profiles provided by the company••••

Yes?•• •••••so that you can see them side by side but then taking into account the fact that the data itself has a degree of - of, I guess, discrepancy that may be - may be included in that data.

All right. Now, can I take you to your more recent graph which is corrected 1. Now, that as I understand your evidence from earlier this morning is the corrected profiles?•• Correct.

All right. Now, your Honour, I think my friend tendered was number 28?

CORONER: Yes, it is.

MR TATE: Thank you. Do you still have Exhibit 28?•• I do, yes.

Now, there's quite an amount of cross-examination, quite properly, about well, when we have a look at the raw data, if it says just simply, five, it could be five minutes and one or it could be five minutes and  $59? \bullet \bullet$  Correct.

We just simply don't have a way of understanding that, on the information that you have been provided by Oceanic?•• On the raw data, no. As I was explaining there, you can extrapolate between the times for example, the zero time there, that appeared three times between the depths of four feet and 20 feet. It would suggest that he has to descend there, so it's an extrapolation of what's occurring there.

All right?•• But based on the raw data, that is correct.

Now, can we go to 28; that, as I understand it, shows the depths against the raw data. So when it says six, we've got a six and we've got a movement upwards?•• Correct.

Now, I'm not certain whether I appreciate whether this is in real time, for example, there is the decrease from 50 feet to 40 feet in theory and no time?•• Mmm-hmm.

But that's obviously on the basis that there were two readings at five and that's the movement.

MR ZILLMAN: You mean an increase.

MR TATE: Well, a decrease in depth, decrease in - decrease in depth. Now, when we look at both your corrected document and we look at this document, I remain worried about one point. And that is information that was provided to police by - by Gabe himself, and at the bottom of page 10 of the transcript which I think your Honour already has, it says at the bottom - perhaps I might give you just a copy of this.

CORONER: Thank you. No, I think I've got a copy of that, don't I?

MR TATE: Just towards the bottom, it's about •••••

UNIDENTIFIED SPEAKER: It's Exhibit 22.

MR TATE: About eight lines up from the bottom, starts halfway down. "If I go all the way down, I can't come back up quick just because of how deep it is. So I thought well, I'll just turn, shoot back to the anchor rope where I saw the people and I remember just turning up. I probably never swam so fast in my life 'cause it just seemed like from the time she went down" - that must be, I'd suggest, the point of separation?•• Sure.

"To the time that I realised I couldn't, you know, get to her, that I was at the anchor rope and, you know, five or 10 seconds and then it could have been longer, I don't know, but it - you just know it just - I know I was moving. Got back to the anchor rope where some people were, and I remember shouting through my regulator - 'Tina, Tina, Tina', tapping them. I know the guy turned around and looked at me and I was pointing, you know, where she was going down, thinking you know, if it's people from my boat, maybe they'll make out that said 'Tina' and if they're not, maybe they'll realise I'm pointing and am distressed and maybe, you know, they can get a visual, 'cause I didn't know if people would be able to see her still going down. You know, they just kind of looked at me and from that point, I just - I pretty much turned around, pretty much just rocketed to - and I just swam up to the top and that was one of the things I thought about later, we were talking - all those people from that point, I - you know, I'm amazed that I didn't end up with the bends or something." Now, one of the things that's troubling me about Exhibit 28, as well as the readings that you've provided us in the corrected form today, is that I'm not seeing any plateauing in the dive profile or information or any slowing in the - the ascent envelope, to take into account the period of time Gabe must have been stationary in the body of water whilst he was talking to the people on the rope. Can you help me at all understand that from the - the dive profiles, 28, and the ones that you've been giving us today?•• There is a possibility that that occurred, given - I think it was slide 6 yesterday, shows that the••••

Well, we'll put slide - slide 6 up, so that we've all got it in front of us?•• Bear in mind this was done with the uncorrected data, but••••

Yes?•• •••••essentially, it's - it's a representation of what I'm trying to explain here.

Yes?•• You can see the - the dotted line which is the - the possible dive profile of Watson within the column of water, that won't necessarily be registered on the - on the computer. So essentially, it's about the three three and a-half minute mark, he could have been stationary and it - it still won't record it until there's - there's been that [indistinct]. So he'd be coming back up••••

You realise where you're referring us to at the moment is before the separation?•• Correct, yes, but I'm bringing you across.

All right?•• So that, at the 15 metre mark, if he's returning, I mean there is a possibility that he had paused at a certain point and has plateaued before perhaps going up at a - a quicker rate in order to reach the time points that are - that are recorded. I mean, that is a possibility. There is still that leeway. You know, he doesn't have to have descended say as far as 18 feet, he may have been at 16 feet, at that depth for a short period of time before coming back up again. It's a grey area at that point because the data doesn't say at this second, this is what happened, he was doing.

All right. So, in other words, when we look at this, it's not that we need to be troubled about the accuracy of the information you've provided us. Rather, we need to understand

all of the depth markings in terms of that envelope as I've described it?•• That's correct.

All right. Thank you, your Honour, nothing further.

MR WALTERS: Your Honour, I have something arising out of that.

CORONER: Thank you.

MR WALTERS: It wasn't a matter [indistinct]. Now, witness, what do you mean by that is, are you saying from the description that was read to you, this fellow said he'd already started going to the surface. This is after he has released

the girl. How does that fit with the scenario you've just put?•• Again, it could be - do you mind, your Honour, if  $I \bullet \bullet \bullet \bullet$ 

CORONER: Yes, you can go over there, you can turn Mr Atkinson's microphone around so we can pick you up, thank you. Do you want to  $\bullet \bullet \bullet \bullet \bullet$ 

WITNESS: He is basically saying that he is returning back to the anchor line.

MR WALTERS: Yes?•• So, that's at about - approximately 15 metres, the - the buoy rope runs from the bow of the vessel.

Yes?•• Now, there's nothing to say that he hasn't plateaued here for a short period before ascending.

Yes?•• The data just doesn't break that down enough to suggest one way or the other. There is a possibility that, you know, he has ascended 13 metres.

Yes?•• The computer has registered the 15 metres, it won't register the 13 metres because it's within the 10 foot envelope.

Yes?•• He may have paused there for a period of time before then reaching the next occurrence.

Yes?•• As he's - as he's ascending, so that's what I was trying to explain with - with this dotted line in that if you go by what Mr Watson is saying•••••

Mmm?•• •••••in that, you know, we were - I was trying to bring her back to the line.

Yes?•• I mean, probably if we - if we run down - his - his suggestion is, we're diving normally. At a point we - we get into some trouble.

Mmm-hmm?•• This may be that - that the data won't let me break it down any more accurately. It is a possibility, is what I'm trying to suggest, that okay, he may be trying to tow her back••••

Mmm•••••?•• but not changing the variation in his depth. That is a possibility••••

But when you're talking about towing her back or doing anything like this, we're talking about where he said •••••?•• I know •••••

•••••he - he's going to the surface••••?•• Mmm-hmm.

Yes?•• The same occurs on the opposite side though, there is still that area there where the computer won't pick up that variation in depth••••

Yes••••?•• but something may have been occurring at a fixed depth. So, he may have started ascending but not ascended enough to trigger an occurrence••••

Yes••••?•• so, you know, he may ascended from 15 to somewhere deeper than 12, have remained there for a period before ascending through the 12 metre mark.

But really what you're saying is going back to the proposition which - which was - was put by my friend, Mr Zillman, that all we have is a snapshot in time where

each data entry is taken. I mean, what you're saying, "He may have stopped at this point and then - because it's not - it's not a continuous recording."?•• That is correct, yes.

Nut taking the other side of the coin, that may have happened but certainly there's nothing on the graph to show it did happen?•• No, there - there's nothing in the - in the dive profiles provided by either company to suggest that.

Yes●●●●?●● that is correct.

But certainly, there is a version of what occurred underwater from another witness that is - is consistent with - with the profile as it is, is it not, and  $\bullet \bullet \bullet \bullet \bullet$ 

MR ZILLMAN: Well, I object to that. That's just a matter of submission at some point. It's not a matter that this witness can comment on one way or another.

CORONER: Well, I suppose he - he can be - have put that witnesses events to him and - and comment upon it as much as Mr Tate has put Mr Watson's events to him and comment upon it. I mean, what he - I think - well.

MR ZILLMAN: I don't - I don't believe, with respect, that any person in this Courtroom has got any doubt that the version of Mr Stutz in terms of his having hold of him - of - of Tina at a certain point, and then swimming from a distance of 10 feet to achieve that, is consistent with this, as is the version of Mr Watson consistent with this. In other words, this just doesn't help us one way or another on any scenarios. In other words.

CORONER: Well, that - that's saying •••••

MR ZILLMAN: •••••it doesn't disprove Mr Stutz, it doesn't prove Mr Stutz, it doesn't disprove Mr Watson, it doesn't prove Mr Watson.

CORONER: Mr Walters?

MR WALTERS: Your Honour, that - that's my friends comment, I mean, my asking about Mr Stutz's version is - is no less valid than •••••

CORONER: That's what I just said - started by saying ••••

MR WALTERS: ••••yes, yes,

MR WALTERS: Yes, and - and this harkens back to my concern about all of this evidence, as to what it is based upon and - and - and the weight that - that would necessarily be given to it.

CORONER: Well, that - that is what Mr Zillman raised as a question of submissions  $\bullet \bullet \bullet \bullet$ 

MR WALTERS: Yes.

CORONER: •••••if submissions are being called for in this case••••

MR WALTERS: Yes. CORONER: ••••in this inquest. MR WALTERS: Yes. CORONER: Do you wish to follow it further with this witness? MR WALTERS: No, I don't, your Honour, no. CORONER: Because I - I'm pretty - pretty certain as - as Mr Zillman is - is advanced, that if you put to him ••••• MR WALTERS: Yes. CORONER: •••••Stutz's - Stutz's version, he's going to say that's consistent with that - that as well. MR WALTERS: What my - my view on this evidence is - is commensurate or equal to what the length of my original cross-examination, I didn't ask any questions. Thank you. CORONER: Thank you. You can return. Is there anything else arising? MR TATE: No, your Honour. CORONER: Thank you. Well, I'm going to excuse the detective today, but it may be I'll have to recall him if further information comes to hand in the intervening period or not. But if there's no further requirement from him, then I'll excuse him today. MR TATE: Thank you, your Honour. CORONER: And if you could return all the documentation, please, that needs to be. WITNESS EXCUSED

CORONER: Do we have another witness available to go?

MR TATE: Your Honour, I think we were going to return to Officer Murdoch.

CORONER: Yes.

MR TATE: There's probably a couple of questions that I should put to him seeing as we've had the Sergeant, and then I think it's - my learned friend was just about to start cross-examination.

CORONER: Well, I'm going to ask - before he does that, I'll ask the other ••••

MR TATE: Yes.