

CERTIFICATE OF FINDINGS**Section 94, Coroners Act 2006****IN THE MATTER** of Robert Terry FARQUHAR**The Secretary, Ministry of Justice, Wellington**

As the Coroner conducting the inquiry into the death of the deceased, after considering all the evidence admitted to date for its purposes, and in the light of the purposes stated in section 57 of the Coroners Act 2006, I make the following findings:

Full Name of deceased:	Robert Terry FARQUHAR
Late of:	23 Gilshennan Valley Red Beach
Occupation:	Maintenance Assistant
Sex:	Male
Date of Birth:	2 March 1983
Place of Death:	Matakatia Bay Matakatia Parade Whangaparaoa New Zealand
Date of Death:	29 December 2012
Cause(s) of Death	
(a). Direct cause:	Drowning
(b). Antecedent cause (if known):	Diving related accident
(c). Underlying condition (if known):	
(d). Other significant conditions contributing to death, but not related to disease or condition causing it (if known):	Coronary Artery Disease

Circumstances of death

- [1] Mr Farquhar was a 29 year old who lived in Red Beach with his partner. He had three children. He is described as a fit and intelligent man who competed in mixed martial arts competitions. He sometimes trained in mixed martial arts with his friend, Louis Aelwyn. Mr Farquhar was not a qualified diver.
- [2] On Saturday 29 December 2012, Chris Colley, Louis and two other friends made a plan to do some spear fishing at Red Beach, which is where Mr Farquhar was living. Chris was with his girlfriend Holly and Louis was with his girlfriend, Fay. Louis had done a basic diving course about five years previously and describes himself as "not a very keen diver."

- [3] Chris, Louis, Holly and Fay drove to Red Beach from Auckland and stopped on the way to pick up some dive cylinders. Chris was a commercial diver who had been diving for six years. When they got to Red beach, Mr Farquhar was there with some friends. Chris and Louis set up their gear and went for a dive. Mr Farquhar stayed on the beach with Holly and Fay. Chris found the weather was too rough so after about an hour they came back in. A man on the beach told them there was some good diving at Army Bay, so they all decided to go there.
- [4] They had the following equipment with them:
- Two regulators
 - One BCD
 - Two pairs of fins
 - Two masks
 - Two snorkels
 - Two weight belts
 - Three wetsuits
 - Four dive cylinders (all filled at the Dive Centre)
 - One spear gun
 - A pillow case to be used as a catch bag.
- [5] Chris had checked all the equipment and was satisfied there were no faults.
- [6] On the way to Army Bay they could see that it was looking rough and that Matakatia Bay was looking calm so they decided to dive there. For this dive, Chris, Louis and Mr Farquhar were all wearing wetsuits. Chris was also wearing a cylinder and a weight belt. He had his fins, mask and spear gun. Louis was wearing his cylinder but had forgotten his weight belt so Mr Farquhar took the cylinder off him and carried it while he towed the two women to a small island about 700 metres off the beach. This island is locally known as "Fisherman's Cap". The women were in a small inflatable boat they had brought with them. Once Louis retrieved his weight belt, he and Chris walked out to the island (the water was shallow at that stage) and met the others. Louis thinks this was about 5:00pm.
- [7] Louis and Chris were the first to go diving. Mr Farquhar and the two women sat on the island. After about 15 minutes, Chris and Louis surfaced and Chris got out of the water and took off his cylinder, weight belt, dive boots, mask and snorkel.
- [8] The plan was for Louis and Mr Farquhar to go for a dive and look for crabs and sea urchins. They were going to stay together during the dive. Chris helped Mr Farquhar into the gear and rechecked the cylinder contents. The gauge read 90bar and Louis told Mr Farquhar to let him

know when it got down to 60bar. When Mr Farquhar entered the water he was therefore wearing his own wetsuit (which Louis described as being more of a surfing suit than a dive suit), a cylinder from the Dive Centre, Chris's weight belt, a regulator, a mask, a snorkel and dive boots. He had on a neoprene glove but did not have a Buoyancy Compensator Device (BCD). The cylinder was attached to him by a back plate and harness system which had two quick release clips.

- [9] Chris had stressed to Mr Farquhar that if he got into trouble he should ditch the weight belt. Chris did not think Mr Farquhar looked fatigued at this stage.
- [10] Chris does not recall what time it was that Mr Farquhar started his dive, but initially Chris sat with the women on the island. However they got cold so Chris went over to where Louis and Mr Farquhar were diving and said he was going to take the women back to the beach. He asked them if they were alright and they both replied they were fine. At this stage they had only been diving for about five minutes. They asked Chris to throw them the pillow case which they were going to use as a catch bag.
- [11] On the way back to the beach the boat began to deflate so Fay waved to a fisherman in a small boat and he came and got the two women. Chris kept swimming to the beach. At this stage the tide was rising and Chris recalls that the water visibility was clear, there were no currents, the water temperature was warm and there were no obvious dangers.
- [12] Louis and Mr Farquhar made their way around the edge of the Island and gathered a few crabs and sea urchins. They stayed very close to each other and were never out of sight of one another. During the dive they surfaced about three times to check that they were both alright. After about ten minutes the gauges were between about 60 and 70bar and Louis decided that they should save some air and start back to the beach. Before they left the Island, Louis went back to pick up his fins which he had left on the island. Mr Farquhar did not have fins so they agreed that they would have one fin each to swim back to the beach. They got about one third of the way back to the beach and surfaced again. Louis noticed that they were not going as fast as he thought they would have been. The gauges were down to 60bar at this point (These readings are taken from the Police statement made by Louis the day after Mr Farquhar's death. Louis cannot recall whether he looked at Mr Farquhar's gauge himself or whether he was told what the gauge was reading).
- [13] Louis had a BCD and would be able to float if necessary so he decided to give Mr Farquhar his other fin. While he was giving it to him, Louis's spear gun came loose and sunk. He told Mr Farquhar not to bother about the spear gun but Mr Farquhar dived down to get it. Louis estimates they were in about four metres of water at that stage. Louis waited a couple of minutes and put his head in the water to see if he could see Mr Farquhar. He did not want to

leave the surface because he had emphasised to Mr Farquhar that if he got into trouble he should surface and do a 360 degree check for Louis. Louis did not want to be under the water if Louis surfaced.

- [14] Louis called out for Mr Farquhar but could not see him. He managed to get the attention of a nearby boat but they did not have a radio onboard so he asked them to take him back to the beach and when he got close to the beach he yelled out for someone to call the Coast Guard.
- [15] In the meantime Chris got back to the beach and met up with Holly and Fay. He estimates it was about half an hour after he left the Island. At that stage he could see Louis and Mr Farquhar swimming back to the beach and the people who had given Holly and Fay a lift back headed out to pick up the two divers.
- [16] The Coast Guard was contacted and Chris boarded a boat to begin the search for Mr Farquhar. After about 30 to 40 minutes, the Police and the Westpac Rescue Helicopter arrived. Mr Farquhar could not be found but his body was recovered by the Police National Dive Squad (Dive Squad) the following day.

Pathologist Report and Toxicology Report

- [17] A forensic toxicologist analysed a sample of Mr Farquhar's blood but nothing of note was detected.
- [18] A forensic pathologist, Dr Stables, conducted a post mortem examination of Mr Farquhar. In his opinion, the cause of death was drowning in the context of a diving related accident. Dr Stables also found a moderate degree of narrowing of one of the coronary arteries and considers it is possible that due to fatigue Mr Farquhar sustained a cardiac arrhythmia (abnormal heart rhythm). Dr Stables reports, "However I make note and place particular significance on the fact that when found, his oxygen tank was empty and consider lack of oxygen as more significant than the coronary artery disease, although the latter may clearly have contributed in the presence of low tank oxygen levels."

Police National Dive Squad Report

- [19] The Dive Squad completed a report into Mr Farquhar's death. The Report notes that as Mr Farquhar did not have a BCD he was negatively buoyant (that is, he would have to kick to remain at the surface as otherwise he would sink). When the body was recovered by the Dive Squad, the gauge read zero bar. Safe diving practice taught by dive institutions recommends that divers end their dive with 50bar of air remaining. The Dive Squad also found the weight belt was rotated 180 degrees so the buckle was on Mr Farquhar's back.

[20] The Dive Squad examined the equipment used by Mr Farquhar and the circumstances of his death and noted:

- The cylinder was in good condition and "in date" for use;
- The cylinder valve was clean and unblocked;
- Mr Farquhar had depleted the air in his cylinder;
- There was a slightly raised carbon dioxide level in the cylinder but expert opinion received from Professor Gorman, Professor of Medicine at the University of Auckland and a senior consultant to Diving and Hyperbaric Medical Services is of the view that the gas contents were not significant;
- The water content of the air was greater than 130ppm against the required standard of less than 80 ppm but the Dive Squad is of the view the quality of air did not contribute to Mr Farquhar's death;
- When tested, the quick release buckle on the backpack worked well;
- The regulator was in good condition;
- Mr Farquhar was not wearing a BCD and prolonged physical exertion to remain at the surface may have led to exhaustion;
- The First Stage Regulator provided adequate air supply but had a raised intermediate pressure;
- The Primary Second Stage Regulator purge button was prone to free flow which may have added to Mr Farquhar's stress or wasted some of his air supply;
- The Submersible pressure gauge (SPG) was found to read slightly high. The calibrated SPG used by the Dive Squad read 190bar and Mr Farquhar's read 200bar.
- The weight belt used by Mr Farquhar weighed 7.9 kilograms. According to the Dive Squad, when Mr Farquhar died he remained on the seabed but his cylinder was floating off the seabed and was held down by Mr Farquhar's body weight and weight belt. This indicates that even without the cylinder, Mr Farquhar was negatively buoyant. Good diving practise is to adjust the weight so the diver is neutrally buoyant at the surface before commencing the dive. When Mr Farquhar was found the buckle of the weight belt had rotated 180 degrees so it was near the centre of his back. However, when tested the quick release system worked well;
- Mr Farquhar was wearing a thin (2mm) wetsuit which offered only a little buoyancy;
- Mr Farquhar was only wearing one fin which may have caused fatigue and would have slowed his progress through the water.

[21] The Dive Squad reports that the conditions at the time of the dive were good. The weather was warm and the sea relatively calm. The water temperature was about 23 degrees. The island is about 700 metres offshore and is accessible at low tide by wading through shallow

water. The depth at the dive sight was four metres and visibility varied between two and five metres.

- [22] Two possible scenarios were considered by the Dive Squad. Mr Farquhar intended to hold his breath and retrieve the spear gun but ran out of breath and could not reach the surface. Alternatively he may have intended to use the air from the cylinder but ran out of air and could not reach the surface.

Findings and reasons for findings

- [23] Under section 4 of the Coroners Act 2006, the role of the Coroner includes establishing the cause and circumstances of a person's death and making recommendations or comments that may reduce the chance of the occurrence of other deaths in similar circumstances. A Coroner must not determine civil, criminal or disciplinary liability.

- [24] The events after Mr Farquhar made the decision to retrieve the spear gun will never be known with any certainty. It is possible, as noted by Dr Stables, that due to fatigue Mr Farquhar developed an abnormal heart rhythm. He may have, as suggested by the Dive Squad, attempted to hold his breath and dive for the spear gun. If he began to run out of air, reaching the surface would have been difficult due to the weight belt, lack of BCD and having only one fin. If Mr Farquhar was using the air in his cylinder, and that ran out, he may have panicked and, in his panic, been unable to release the weight belt.

- [25] What is known is that Mr Farquhar was not following safe diving practice:

- He had not completed a dive course;
- His thin wetsuit did not offer much buoyancy;
- He was not wearing a BCD;
- His weight belt was able to rotate so that the buckle was on his back. This would have made it difficult to release in an emergency, especially for a person not trained in emergency procedures;
- He was not buoyancy neutral before making the dive;
- He was not wearing two fins;
- He made the dive for the spear gun when his cylinder was becoming low in air.

- [26] The comments above may be perceived as adverse to Mr Farquhar. As a result, they were sent to his wife for comment under section 58 of the Coroners Act 2006. While Mrs Farquhar agrees that the comments are factually correct, she is angry that her husband was allowed to dive without proper training and with insufficient equipment. As she pointed out to me, her

husband would not have been aware of the importance of matters such as wearing a BCD or the importance of ensuring that the weight belt was properly adjusted so the buckle could not rotate.

- [27] This death is a reminder that diving can be a dangerous sport and it should not be attempted by people who are untrained or people who do not have proper equipment. Trained divers would be alert to the risks of diving without proper equipment or training. Amateurs should "have a go" in carefully supervised conditions as the consequences if anything goes wrong can be fatal. According to the Water Safety New Zealand website, males account for 90% of drownings that occur during underwater activity.
- [28] I find that Robert Terry Farquhar, late of 23 Gilshennan Valley, Red Beach, died on 29 December 2012, at Matakatia Bay, Whangaparaoa, the cause of death being drowning from a diving related incident.
- [29] A copy of these findings will be sent to Water Safety New Zealand.
- [30] I would like to take this opportunity to extend my condolences to Mr Farquhar's family.

Prohibition on Publication

- [31] **Section 74, Coroners Act 2006:** I have, under section 74 of the Coroners Act 2006, prohibited the making public of photographs of the deceased taken by Police.

Signed at Auckland on 18 October 2013



Coroner Deborah Marshall