



Country Fire Authority

Report of the Investigation Team

Wonga Park Pumper/Tanker

7 February 2009

Kinglake Fire Complex

Disclaimer

This is a report to the Chief Officer of CFA by the Investigation Team. The report has been prepared in accordance with the Terms of Reference, and the authorisation issued by the Chief Officer. The object of the investigation was to identify in a timely manner, matters that needed to be considered by the Chief Officer.

The report is the findings of the authors based on the information available at the time the report was compiled. Given the restraints of time and circumstance, the report may not have identified all relevant facts and issues. The authors acknowledge there may be inaccuracies or omissions in the document.

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EXECUTIVE SUMMARY

This investigation was carried out at the request of the Chief Officer of CFA in response to an incident where the North Warrandyte Tanker 1 was involved in a burn-over incident and the Wonga Park Pumper Tanker crew undertook a rescue of the North Warrandyte crew.

1.1 Date of the Incident

The incident occurred on Saturday 7 February 2009 at approximately 1830 hours.

1.2 Location of the Incident

The incident occurred in Victoria Road, opposite Reserve Road, Kinglake.

1.3 Jurisdiction

The fire was part of the Kinglake fire, burning on private land. The control agency for the fire at the time of the incident was CFA.

1.4 Summary of Findings

- On the day of the fire Victoria was experiencing some of the most severe fire weather conditions ever encountered.
- The ferocity of the fire and its rapid rate of spread created hostile conditions and stretched resources over vast areas.
- Fire management and command and control measures were all under extreme pressures for some hours after the fires were first reported.
- Responding crews and Strike Teams were provided with very rudimentary briefings which were mostly out of date and lacking vital details.
- Wonga Park Pumper/Tanker is a CFA Pumper/Tanker Prototype vehicle but is not fitted with Protection Sprays, nor does it carry chain saws.
- This vehicle has a 2500 litre water tank and carries 50 litres of Class A Foam.
- At 1709 Hrs this vehicle, with a crew of five, responded to a report of a grass fire in Marshall's Road, St Andrews.
- Three other tankers, from Kangaroo Ground, Lilydale and Nth Warrandyte were also responded to this call at the same time.
- Wonga Park Tanker 1 had earlier been despatched to other fires in the Healesville area.
- Wonga Park Pumper/Tanker crew had been selected prior to the call being received and all five members were on station at the time of call.
- En-route to Marshall's Road they received a radio message about a CFA vehicle (Nissan Patrol) on fire which they then dealt with. They were then directed to head to Hildebrand Road via St Andrews Fire Station.
- At St Andrews Fire Station the rapidly changing situation was causing confusion and no clear direction was given to the Wonga Park Crew.
- The crew heard a "PAN, PAN, PAN" message over the radio from Nth Warrandyte Tanker 1.
- With no other task being given to them the Wonga Park Pumper/Tanker crew progressed along the St. Andrews/Kinglake Road, towards where Nth Warrandyte indicated they were.

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- The crew proceeded in this direction in a cautious manner believing there would be other vehicles closer to where Nth. Warrandyte Tanker 1 was and would be able to provide quicker assistance.
- Soon they heard a MAYDAY call over the radio from Nth. Warrandyte Tanker 1 indicating Nth. Warrandyte Tanker 1 was still on St. Andrews/Kinglake Road but unsure exactly where.
- Wonga Park Pumper/Tanker crew decided to continue along St. Andrews/Kinglake Road in response to the MAYDAY call and so advised VicFire over the radio.
- En-route they located a motor cycle on the side of the road and the burning remains of the rider some distance further on. This is most probably the same bike and rider discovered earlier by the Nth Warrandyte Tanker 1 crew.
- A number of trees had fallen across the road forcing the crew to regularly leave the vehicle to manually remove the trees and allow further progress.
- The Wonga Park crew then resorted to pushing trees from their path using the vehicles front bumper bar in the hope of saving time.
- As fire intensity increased around them the three crew members riding on the rear of the vehicle were forced to lie on the floor to help with breathing.
- Fire blankets were not accessed by the crew.
- The crew believed that they were the only hope for the Tanker crew as no-one else had been heard answering the MAYDAY call.
- Wonga Park Pumper/Tanker arrived at the large roundabout just before Kinglake and noticed a nearby Service Station nearby well alight.
- The roundabout includes the intersections of Victoria Road and Healesville/Kinglake Road.
- Here they were able to get some vital information on the possible location of Nth Warrandyte Tanker 1 from some residents sheltering near the roundabout.
- Wonga Park soon located the Nth Warrandyte vehicle in Victoria Road.
- When pulling up beside the stricken tanker it was surrounded with intense fire activity with a number of near-by houses fully alight.
- On opening the doors of the Nth Warrandyte Tanker the Wonga Park crew found what they initially thought were the five lifeless bodies of the Nth Warrandyte crew still under the protection of blankets.
- Wonga Park assisted the Nth Warrandyte crew from their vehicle on to the back of the Wonga Park vehicle.
- Little assistance was provided by the exhausted and dazed Nth Warrandyte crew members and, due to the extreme conditions, some forceful tactics were deployed.
- With all five Nth Warrandyte crew now on the back of Wonga Park Pumper/Tanker, one of the Wonga Park members hopped in to the cabin. This meant there were now three crew in the single cabin and seven crew on the rear ROPS (Role Over Protection System).
- Structural Turn-Out Clothing carried on the rear of the vehicle was used to provide some protection from the heat and flames.
- With seven crew now on the back, woollen blankets could not be accessed.
- The crew headed back down Victoria Road with the intention of heading in to Kinglake but were advised to go to Coldstream where medical assistance was available.
- This required the crew to travel along Healesville/Kinglake Road, through the main part of the fire.

- A disagreement between the Wonga Park members and Nth Warrandyte members developed relating to the use of hand sprays for protection. The Nth Warrandyte crew insisted sprays be used because of the heat and burning embers while the Wonga Park members were determined to save water in case conditions got even worse.
- The Nth Warrandyte Crew Leader, lying face down across the floor of the vehicle with severely injured back, had a burning ember lodge in the middle of his buttocks while the Nth Warrandyte driver had an ember land in his beard. Drinking water was used to deal with these situations.
- The front sprays of the Wonga Park Pumper/Tanker had been damaged when pushing trees off the road. This led to the sprays not being able to be used any further.
- As the vehicle turned right on to the Melba Highway and headed south towards Yarra Glen, they had cleared the main part of the fire, however as they headed down part of the highway known as 'The Slide' they were suddenly surrounded by a spot fire.
- The heat and smoke caused confusion as horses in paddocks found an escape along the highway, with one almost colliding with Wonga Park Pumper/Tanker.
- By about 1920 Hrs the Wonga Park Pumper/Tanker and all ten crew members from two Brigades were now safely at Coldstream
- Apart from members needing eyes washed out, there were no injuries sustained by the Wonga Park members involved. For full details of injuries to the Nth Warrandyte crew members please see "*Nth Warrandyte Tanker 1*" report.
- The damage to Wonga Park Pumper/Tanker was limited to: damage to the strap beneath drive shaft, damage to front bumper bar, siren speaker melted, scratches and dents along sides of vehicle. For full details of damage to Nth Warrandyte Tanker 1 please see "*Nth Warrandyte Tanker 1*" report.

2. SCOPE

2.1 Investigation Team

The Investigation Team comprised Ken O'Brien representing CFA.

2.2 Duration of the Investigation

The Investigation Team began their work on 1 June 2009 and completed it on [insert date].

2.3 Authority to Undertake the Investigation / Terms of Reference

The Investigation Team responded at the request of CFA Deputy Chief Officer Greg Esnouf.

2.4 Sources of Information

During the investigation, the Team spoke to the personnel identified in Schedule 6.1.

2.5 Constraints Affecting the Investigation Team

Due to the high number of investigations and other operational activity following the conditions of February 7 this investigation could not commence until almost four months later.

3. DESCRIPTION OF THE INCIDENT

3.1 Area Affected by the Fire

The fire was part of the large Kinglake Fire which originated near Kilmore East at around 1130 Hrs. By the end of the day this fire had caused severe damage and loss of many lives in Kinglake, Kinglake West, Strathewen and numerous other communities.

3.2 Weather at the Time of the Incident

The weather conditions were generally as expected with extreme temperatures in the mid 40's and gusty N-NW winds ahead of a strong S-SW wind change.

4. ANALYSIS – OBSERVATIONS

4.1 Incident Sequence

4.1.1 Before the First Call

Saturday 7th February was perhaps the most extreme fire weather day in Victoria's history. As such, as on virtually all bad fire weather days, volunteers gathered at their stations in readiness for what may be the inevitable call to respond to a grass or scrub fire. Wonga Park was no exception.

Crews were allocated to vehicles and all preparations were carried out in readiness for the inevitable calls. By mid afternoon it is becoming very clear that large fires are burning at various locations further north.

Wonga Park Tanker 1 had already been responded to fires in and around Healesville as part as Strike Team 1364 which left Wonga Park Pumper/Tanker (a CFA Pumper/Tanker prototype) and a Big Fill vehicle left to provide fire protection in and around Wonga Park. These vehicles responded to one local fire mid afternoon before a pager message was received at 1709 Hrs to Marshalls Road, St. Andrews. Soon after, at 1609 Hours, VicFire responded four stations including Nth Warrandyte, to a grass fire in Marshalls Road, St Andrews.

4.1.2 Responding

As the crew for Wonga Park Pumper/Tanker were all at station when the pagers were activated, response was quite swift. The crew were aware that a number of other Brigades were being responded to the same call but Nth Warrandyte Tanker 1 was the only other crew heard to provide a response message to VicFire. All radio channels being monitored by Wonga Park Pumper/Tanker were heavily congested.

The crew originally attempted to reach Marshall's Road via Buttermann's Track but were met with the front of the fire and so retreated to find another route. At Marshall's Road there were no other CFA vehicles to be seen. Radio traffic was still chaotic with nothing heard of the other vehicles they expected to meet at this location. With no other information available and assessing that their current position did not offer sufficient protection from the fire up wind, the crew decided to make their way to the nearest CFA station at Panton Hill. En route they received a radio report of a CFA Nissan Patrol on fire. After extinguishing the car their water tank was topped up and they were advised to make their way to Hildebrand Road via St. Andrews Fire Station.

4.1.3 Gaining Further Intelligence

Expecting to get further information on the fire situation and their potential tasks, the Wonga Park crew found a very confusing situation involving conflicting and ever changing reports with no real clarity or direction available.

Soon a 'PAN, PAN, PAN' message was heard over the radio from Nth Warrandyte Tanker 1 who were on the road between St. Andrews and Kinglake. Though they believed that other crews would be in better positions to provide any assistance to the Nth Warrandyte crew, the Wonga Park Pumper/Tanker began a cautious journey from St. Andrews to Kinglake as a potential backup to any possible rescue operation. Along the way it soon became apparent that a major disaster was unfolding. Burning houses lined both sides of the road.

4.1.4 Responding to a MAYDAY

The crew were about to assist residents save a house under sever threat near Muller's Road when they heard the Nth Warrandyte Tanker 1 crew upgrade their distress call to MAYDAY. Though they did not have an accurate location the Nth Warrandyte message stated they were still on the road between St. Andrews and Kinglake. Wonga Park Pumper/Tanker acknowledged the call via VicFire and resumed their journey towards the Nth Warrandyte tanker. Progress was frustratingly slow due to the intense fire and fallen trees. Crews regularly were forced to dismount their vehicle and man-handle trees from their path. Soon they came across a fallen motor cycle and, further along the road, they found the rider. A quick inspection by the crew identified that the rider was deceased and, as rescue of the Nth Warrandyte crew was their priority, they continued.

A large tree temporarily halted their progress as it was too large to move by hand. Their vehicle did not carry a chainsaw so a combined effort using the crew and the vehicle's bull bar finally saw the tree moved off the road. During this action, combined with the actions of moving yet more trees from the road resulted in the front sprays being damaged. A request from VicFire to provide an ETA was difficult to answer as the Wonga Park crew were still not sure of the exact location of the Nth Warrandyte crew, nor were they sure of the number of trees or other obstacles they may still encounter. Each time a fallen tree was encountered the crew riding on the back of the vehicle were given updated information on their task and any available information on the condition and location of the Nth Warrandyte Tanker 1.

4.1.5 Locating the Stricken Tanker

When approaching Kinglake the Wonga Park crew found themselves at the large roundabout that includes the intersection of Healesville/Kinglake Road as well as the start of Victoria Road. Here they requested VicFire to check if the Nth Warrandyte Tanker 1 had passed this roundabout. When they heard that Nth Warrandyte had not passed through the roundabout the Wonga Park crew became very concerned that they had somehow passed the stricken tanker without noticing it. During this time the Wonga Park crew saw a small group of residents standing beside the roundabout and so investigated their condition. This group seemed very disorientated and suffering some level of shock, so the crew supplied them with bottles of drinking water.

Before departing the crew asked if they had seen another CFA tanker in the area, not expecting any form of helpful answer. Fortunately one of the residents thought they had seen some red/blue flashing lights further down Victoria Road. With no other more reliable information the Wonga Park crew headed down Victoria Road in the hope that they may be on the right path. From the roundabout the St. Andrews/Kinglake Road continues for only a short distance in a straight line before reaching the centre of Kinglake and the crew felt it unlikely that they would be 'lost' in this short distance.

As they travelled along Victoria Road the Wonga Park crew came across a set of speed humps. Thinking that it was probably one of a very small number of speed humps in the area the crew again radioed VicFire to ask if Nth Warrandyte Tanker 1 had crossed any speed humps. When Nth Warrandyte answered that they had passed speed humps there was a sudden lift of spirit within the crews on both vehicles. Wonga Park Tanker 1 continued and soon noticed red/blue flashing lights ahead. By now it had been some time since the crew on the back of Wonga Park Pumper/Tanker had any updated information on Nth Warrandyte Tanker 1.

4.1.6 The Rescue

When Wonga Park Pumper/Tanker pulled up along side Nth Warrandyte Tanker 1 they noticed it was facing in the opposite direction and had been driven off to the side of the road into a culvert. Fire was surrounding the vehicle. Trees and bushes along the side of the road were burning freely. Houses on all corners of the nearby intersection were totally involved.

Immediately their vehicle stopped the crew from the back of Wonga Park Pumper/Tanker dismounted and approached the Nth Warrandyte vehicle. As they opened the doors they realised that it had been some time since they had the last report on the possible condition of the Nth Warrandyte crew. The first thing they noticed was the lack of movement within the crew cabin of the Nth Warrandyte Tanker. All members were still under the protection of the fire blankets but, due to a mix of exhaustion, stress, fatigue and a possible mental shift from firefighter to patient, the crew were not able to move or respond to the arrival of their rescuers.

Four of the five Nth Warrandyte crew were taken from their vehicle using quite forceful tactics. The Crew Leader in the front passenger seat was seen to be slumped forward on the dashboard. He was the last to be taken from

the Nth Warrandyte vehicle and virtually thrown face down across the floor on the back of the Wonga Park vehicle.

By now all five Nth Warrandyte members were now on the back of the Wonga Park vehicle. Two Wonga Park members resumed their places also on the back while the third crew member joined his crew leader and driver in the cabin.

A radio message to VicFire at 1850 Hrs advised that all Nth Warrandyte crew were on board Wonga Park Pumper/Tanker and they were now leaving the area. A radio message was then received from Region 13 RECC to confirm that five Nth Warrandyte members had been accounted for.

4.1.7 Returning to Safety

Wonga Park Pumper/Tanker used the space around the intersection to turn the vehicle around. The intention was to return to the roundabout where they could make a right hand turn and head in to Kinglake. At this point the crew were unaware of the devastation that had already been wreaked upon Kinglake and they thought it would be the nearest point of safety.

They were then advised by radio to make their way to Coldstream as that was the closest location for medical support. The crew were not pleased about this as it meant that they would need to travel through a major part of the fire with seven people travelling in the open ROPS on the back of the vehicle.

As they travelled along the Healesville/Kinglake Road they were consistently bombarded with burning embers. Again they were forced to deal with trees fallen across the road. They passed a number of cars that had earlier been caught as residents tried to escape the raging inferno. More cars began to follow the tanker as it tried to make its escape however some of these cars got caught by other trees falling in their path. Where possible the crew handed out bottled drinking water to pedestrians and car passengers they came across in the hope that it would help them survive their nightmare.

The Nth Warrandyte crew members began getting their senses back and urged the Wonga Park crew to use their hose lines to provide water spray protection from the oppressive radiant heat. However the Wonga Park members refused to do so as they feared that even worse conditions may lie ahead. Some strong words were used by members on both sides of the argument. During this time the cramped conditions caused by seven members thrown into an area designed to carry just three, meant that there was little if any room for movement. Each person was forced, no matter how uncomfortable, to stay in the same spot, holding the same position, for virtually the whole journey back to Coldstream. In this position the only protection they had outside of the Wildfire Turn-Out clothing they were each wearing, were some sets of Structural Turn-Out clothing the Wonga Park crew carried with them. The five blankets carried in the back were still in their tote bins and inaccessible at this point.

During the ember attacks one ember landed between the partially exposed buttocks of the Nth Warrandyte Crew Leader and another ember lodged itself in the beard of the Nth Warrandyte driver. This led to more urgent demands

for the use of water sprays however the Wonga Park crew simply opened bottled water to deal with this situation.

As the crew reached the Melba Highway they were now clear of the fire. They turned right to head south towards Yarra Glen. Soon, as they travelled down an area known as the 'Slide' they were surrounded by a rapidly spreading spot fire. This fire caused horses in nearby paddocks to run uncontrollably with some making their way on to the highway, one of which almost colliding with Wonga Park Tanker 1.

Finally, at about 1920 Hrs, Wonga Park Pumper/Tanker with ten people on board arrived at Coldstream.

4.2 Individual Human Factors

4.2.1 Crew Experience

All Wonga Park Pumper/Tanker crew members had worked and trained together and had full confidence in each others capabilities though only two members had more than four years experience as a CFA Firefighter.

All members had been involved in Wildfire fighting training including Safety and Survival. However most of this training had been with the Wonga Park Tanker, not the Pumper/Tanker prototype.

4.3 Equipment Factors

4.3.1 Pumper/Tanker Prototype

The Wonga Park Pumper/Tanker is a CFA Pumper/Tanker prototype which had been designed as a flexible vehicle to respond to a large range of fires regularly encountered on the urban/rural interface. In past this type of vehicle has been useful in Wildfire situations when providing asset protection to buildings of small towns potentially under threat from approaching grass and scrub fires.

It is a single cab vehicle that carries two crew within the cabin and three crew within the ROPS system on the back. The ROPS system is an open area that provides a lesser level of protection than the enclosed crew area however, with the use of blankets and hand held spray nozzles, can afford a minimal level of protection. The vehicle is not fitted with fixed protection sprays apart from the ground sprays fixed under the front bumper bar. This vehicle carries 2500 litres of water plus 50 litres of Class A Foam.

5. FINDINGS

5.1 Responding in a Pumper/Tanker

On Saturday February 7 Wonga Park Tanker 1, a CFA 3.4D Tanker had earlier been responded to calls in the Healesville area as part of Strike Team 1364. This Strike Team also had Nth Warrandyte Tanker 2 as one of its members. It appears obvious that, as this Strike team had been responded from within the Healesville Group that either VicFire were not advised of their deployment, or

that VicFire did not record notification of the deployment of Strike team 1364. As a result VicFire were of the opinion that, at 1709 Hrs, when the call to Marshall's Road was initiated, several tankers such as Nth Warrandyte and Wonga Park were still at their respective stations ready to turn out. When pager messages were sent to these locations crews already waiting on station simply responded with the most appropriate vehicle still left at their disposal.

CFA Pumper/Tankers are designed and equipped to play a role at a large range of fires and incidents, and at Wildfires they have proven in the past to be very suitable for providing asset protection. However their role was never intended to include being a front line wildfire attack vehicle. The use of such a vehicle with minimal protection for the crew on the rear, to assist another vehicle whose crew are all within a crew cabin, is questionable in wildfire conditions such as this.

After reaching the Nth Warrandyte vehicle, Wonga Park Pumper/Tanker then carried ten people through extreme fire conditions with seven of these in an overcrowded and exposed ROPS that was designed to safely carry only three.

5.2 Vehicle Tracking

From the time Wonga Park Pumper/Tanker first turned out their actual location was known only to them right up to the time they advised VicFire that they were responding to Nth Warrandyte's MAYDAY call. This was a total of 1 hour and 15 minutes (from 1709 Hrs to 1826 Hrs) where, if anything unexpected happened to the crew, no one would have been aware of any potential tragedy, nor would any one know of their actual location.

Their movements, following their initial response, was based on advice being given to them by individual officers that they happened to meet, or by attempts made by them to provide assistance based on monitoring uncontrolled radio messages.

5.3 Radio Communications

Radio communications on the day of February 7th have been described by many as chaotic. Many important messages could not be sent due to the consistent barrage of traffic, particularly from mid afternoon till early evening. Other messages that were sent were simply lost in the heavily congested radio system. At times some crews attempted different channels in the hope that a message they needed to get out would be picked up by someone able to act on it.

Wonga Park Tanker 1 was able to give a Turn-out message that was acknowledged by VicFire. However their next radio message was not sent/acknowledged until they advised VicFire that they were responding to the MAYDAY call issued by Nth Warrandyte Tanker 1. Even then there was little confidence that this message would get through because, even though a MAYDAY had just been sent, the radio traffic was still being filled with unimportant chatter.

One radio message was also sent by Wonga Park Pumper/Tanker to say they were moving forward in response to Nth Warrandyte's PAN, PAN, PAN message, however this was not acknowledged by VicFire (VicFire records however show that this message was heard).

Following the MAYDAY call there appeared to be some efforts made to clear that particular channel as messages between Wonga Park, Nth Warrandyte and VicFire were sent and acknowledged regularly though other messages did interrupt frequently.

5.4 In Truck Communications

Wonga Park Pumper/Tanker is a CFA Pumper/Tanker based on a single cab Isuzu vehicle. The single cab holds just two crew members, the driver and the Crew Leader, while three other crew members travel and operate from the rear of the vehicle fitted with a Roll Over Protection System (ROPS). Generally communications between the crew in the cabin and those on the back is via an intercom system with microphone/speakers fitted in both areas.

Past experience has resulted in the Wonga Park crew having so little faith in the operation of this system that they did not consider using it on this day. When used in the past the speakers deliver a constant droning noise when the vehicle is moving, which cuts out most attempts to communicate unless the volume is turned up high. However, the higher the volume the greater the droning noise which then interferes with crew operation in both the cabin and the rear of the vehicle.

During this incident the cabin crew were able to continuously provide updated information to the crew from the back each time they stopped to move trees and other debris from the road. The last time the crew communicated this way was when they stopped at the roundabout leading in to Kinglake. From there it was some minutes before they arrived at the location of the Nth Warrandyte Tanker. Here, as it was easy for the crew in the back to dismount their vehicle, they were the first to access the cabin of the Nth Warrandyte Tanker, but suddenly realised the amount of time that had passed since the last update of the crews condition. This caused some stress to these Wonga Park members, particularly as, when they opened the doors all five Nth Warrandyte crew members were sitting quite still under the protection of blankets.

5.5 The Use of Water Sprays

Wonga Park Pumper/Tanker carries 2500 litres of water and started the rescue operation with a full tank of water and virtually ended up with the tank still full at the end. On many occasions the crew members in the ROPS considered using the hand held sprays as they made their way forward along the St. Andrews/Kinglake Road, however their main concern was to ensure they still had water if the situation got any worse.

After successfully getting all five of the Nth Warrandyte crew aboard the Wonga Park Pumper/Tanker was forced to then travel through the main part of the fire with seven crew on the exposed rear of the vehicle. Pressure was being placed on the two Wonga Park members by the five Nth Warrandyte crew to use the sprays because of the burning embers and radiant heat. During this time two of the Nth Warrandyte crews suffered minor burns from these embers. These were dealt with by the Wonga Park members using drinking water.

The vehicle does have sprays at the front of the cabin that spray water forward, ahead of the vehicle if driving through grass fires, to protect the tyres and under belly of the vehicle. Unfortunately these sprays were badly damaged when

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pushing trees that had fallen in their path. The damage would have resulted in water rushing ineffectively through broken pipe work if any attempt had been made to use them.

6. SCHEDULES

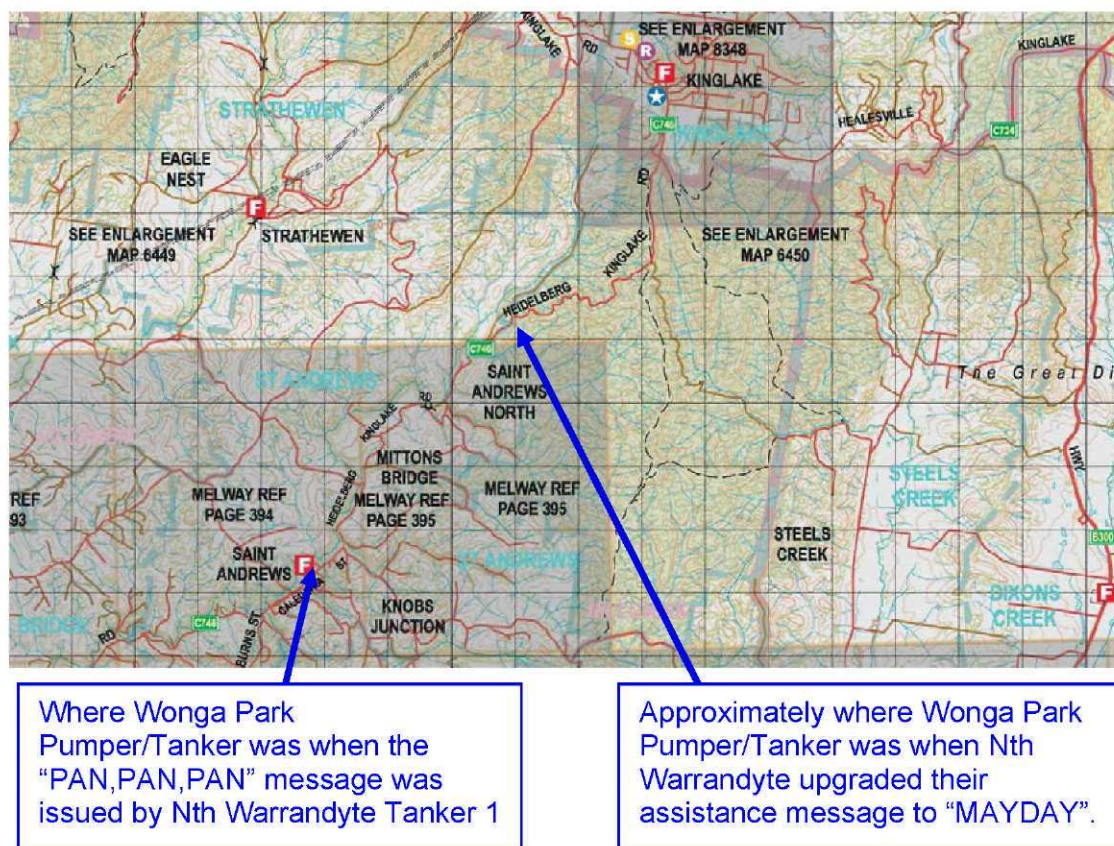
6.1 Sources of Information

The following personnel were interviewed. The table details their roles and the time and location of interview.

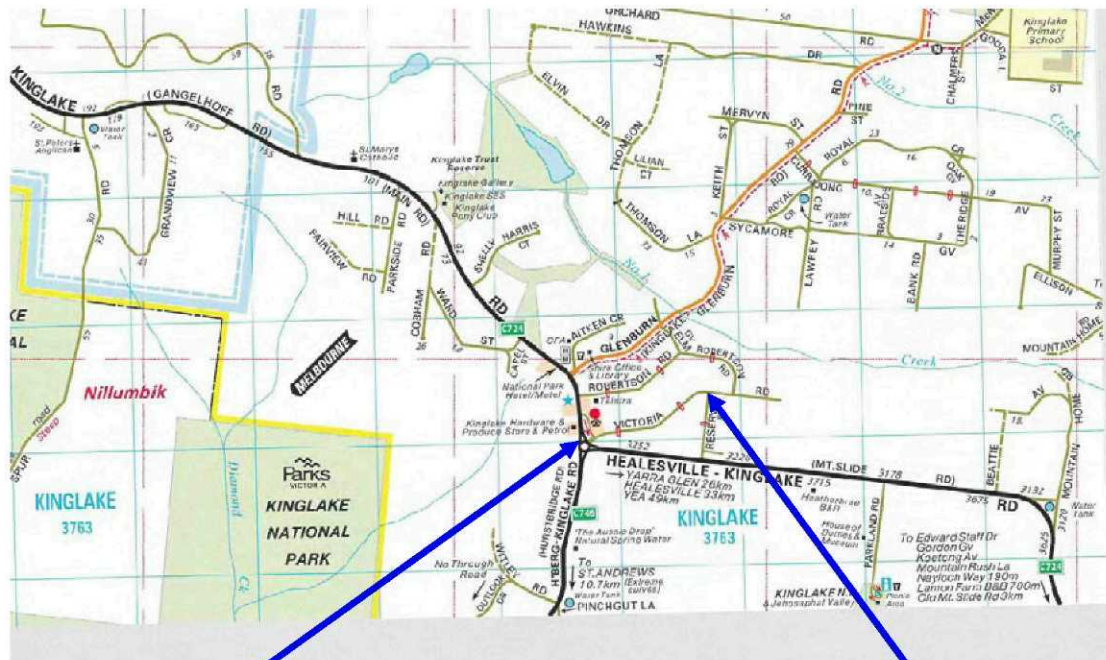
Name	Role/Unit	Location	Time
Andrew Wright	Crew Leader	Wonga Park FS	1900 Hrs 01/06/2009
Luke Thomas	Driver	Wonga Park FS	1900 Hrs 01/06/2009
Andrew Oxley	Crew Member	Wonga Park FS	1900 Hrs 01/06/2009
Rhys Doughty-Cowell	Crew Member	Wonga Park FS	1900 Hrs 01/06/2009
Tim Cochrane	Crew Member	Wonga Park FS	1900 Hrs 01/06/2009

This report should also be read in conjunction with the *“Nth Warrandyte Tanker 1”* report.

6.2 Topographical Map of the Area



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The roundabout where Wonga Park Members had a chance meeting with civilians who advised they had seen red/blue flashing lights in Victoria Road.

The approx. location where Wonga Park finally located the stricken Nth Warrandyte Tanker 1 and its crew.

6.3 Weather Conditions

The following table of weather observations were recorded at the AWS at Kilmore Gap. This AWS is approximately 42 kilometres north-west of the incident location. The incident occurred at 1830 hours.

Kilmore Gap AWS (Elevation 528 metres ASL)				
Time	Temp	RH	Wind	FDI
1500	41.4	10.0	NNW 63 G 91	155
1530	41.8	10.0	NNW 57 G 82	138
1600	41.6	8.9	NW 54 G 80	130
1630	40.5	9.0	NW 54 G 72	125
1700	40.6	10.0	NW 44 G 69	97
1730	40.5	10.0	NW 46 G 70	102
1800	40.1	10.0	NW 37 G 61	81
1810	39.9	10.0	W 17 G 54	50
1813	33.1	23.9	SW 26 G 50	30
1819	30.3	29.6	SSW 32 G 67	26
1830	28.8	34.0	SSW 32 G 59	21

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6.4 Photographs



Above: The intersection of Victoria Road and Reserve Road showing where Nth Warrandyte Tanker 1 ended after swerving to miss a burning tree falling in its path.
Below: The culvert itself.

