

Fire Investigation Report

Vegetation Fire



Fire Authority Name: Fire and Emergency New Zealand

Fire Name: Marley Hill, Port Hills

Fire Date: 13th February 2017

Date of Investigation: 14th February 2017 to the 30th November 2017

Report Completed By: Graeme Still (Lead Investigator) and Jamie Cowan

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(Copies of my original notes are on file if required)

PART 1: WILDFIRE INVESTIGATING OFFICER

Name Graeme Still (Lead Investigator)

Qualifications

- Unit Standard 10615 Investigate origin and cause of vegetation fires
- Unit Standard 20392 Protect and preserve a fire scene
- NRFA Wildfire Investigator L2

Significant Fires Investigated

- WYE Creek Queenstown Lakes 2008
- Wenita Forest Fire Clutha District 2009
- Beaties Fire Dunedin Fire District 2010
- Allanton Fire Dunedin Fire District 2010
- Hyde Fire Dunedin Fire District 2012
- Taieri Beach Forest Fire Clutha District 2012
- Awarua Wetlands Southland RFA 2012
- Revisit Saunders Fire 2008 Clutha District on behalf of Fire Service Commission
- Horse Hoof Station 2014
- Northburn 2014 (Fatality)
- Early Valley Road 2017

PART 1: WILDFIRE INVESTIGATING OFFICER (2)

Name James. P. Cowan (Supporting Investigator)

- Qualifications**
- Unit Standard 10615 Investigate Origin and Cause of Vegetation Fires
 - Unit Standard 20392 Protect and Preserve a Fire Scene
 - National Certificate "Fire and Rescue Services" (Vegetation) L4 (2011)
 - New Zealand Fire Service "F1, Structure Fire Investigation Course" (2017)

- Significant Fires Investigated**
- 7-Mile (2010)
 - Closeburn Road (2011)
 - Queenstown Hill (2011)
 - Rob Roy Lane (2012)
 - Mount Rosa (2012)
 - The Stack Fire (2012)
 - Matukituki Fire (2013)
 - Northburn Fire (2014) *fatality*
 - Waitaki Rail Fires (2015)
 - Saddle Hill Fire (2015)
 - Waitaki Island Fire (2016)
 - Rat Point Fire (2017)
 - Piha Fires (2017)
 - Early Valley Rd, Port Hills (2017)
-

PART 2: EXECUTIVE SUMMARY

Location	Below the Flying Nun mountain bike track, Summit Road, Governors Bay, Port Hills, Christchurch.
Date of Ignition	13 th February 2017
Time of Ignition	First reported via 111 at 19.11 CAD Number F2245689.
Area (ha)	The Marley Hill Fire contributed to approximately 660 ha of the total complex area of 1661 ha (Appendix 1, MAP 5)
Area and Point of Origin	Within 1m of Waypoint E 1570934 N 5171447 (NZTM)
Impact of Fire on Environment & Property	<p>This fire had a large impact on the environment, property and infrastructure. From ignition on the 13th of February until the fire had stopped running on the 16th of February it had covered approximately 660ha, damaged one house on Worsleys Road and destroyed six homes on Worsleys and Hoon Hay Valley Roads. The Adventure Park facility and infrastructure was severely damaged along with a series of mountain bike trails. Power infrastructure was damaged and destroyed. This fire would eventually meet up with the Early Valley Road Fire on the afternoon of the 15th February.</p> <p>The environmental impact was significant, numerous shelter belts, a large forestry block and several smaller commercial forestry blocks were destroyed. Land cover was compromised leaving the area exposed to the prevailing northerly winds, and subject to erosion. The land cover consisted of:</p> <ol style="list-style-type: none"> 1. Scrub consisting of gorse, hebe and pockets of bracken 2. Forestry mainly <i>Pinus radiata</i> with some Douglas fir and Eucalyptus 3. Grass cover consisting of mainly rye grass and cocksfoot. <p>Regeneration in these environments with low fertility soils is very slow, thus allowing for the invasion of gorse and weeds. Major replanting of forested areas will need to be undertaken to reestablish and restore vegetation cover.</p> <p>The majority of the area burnt is privately owned except for the Christchurch City Council owned large forest block. There will be a slow recovery for private gardens and shelter belts.</p>
Cause of Ignition	This fire cause is categorized as 'undetermined' however it is probable that it was deliberately lit.

**Persons or
Persons
Responsible for
Fire**

No responsible party was identified during the course of this investigation and this fire is still under investigation by police.

PART 3: PROCESS OF INVESTIGATION

Introduction

At 19:11 hours on February the 13th, 2017 a fire was reported on Summit Road heading southwest from the sign of the kiwi. A second fire event that started earlier in the day at 17:43 hours off Early Valley road some 4km away, would eventually join with this fire to become one of the most devastating fires in New Zealand history in terms of property and assets lost.

For the purpose of this investigation we will refer to this fire event as the "Marley Hill Fire" with the Department of Conservation as the administering Fire Authority. A separate report was filed for the Early Valley Road Fire which was administered by Selwyn District Council as the Fire Authority.

Multiple crews and air support from throughout the country fought this fire for several days before it was brought under control, mop up continued for several weeks.

Investigation team

Lead investigator L2: Graeme Still
 Investigator L1: Roy Hoogenradd
 Investigator L2: Jamie Cowan
 Police: Detective Craig Farrant (Christchurch)

Subject matter experts

Scion Rural Fire Research Group, [REDACTED]
 Engineering Meteorology, Aurecon report by [REDACTED]

14 February 2017

Process

- At 06:30 hours, I was contacted by Mr. Tim Mitchell, National Fire Manager Region 4, asking if I could assist with a wildfire investigation for a fire that originated on Early Valley Road and a subsequent fire that had started off Summit Road, Lansdowne, Selwyn District, Christchurch on the evening of the 13th February. [REDACTED]
 - 07:00 hours, I rang Mr. Mitchell and informed him that I was able to assist, Mr. Mitchell formally requested me to carry out an investigation with instructions to assist Mr. Roy Hoogenradd a Level One Wildfire investigator for the New Zealand Fire Service. I informed Mr. Mitchell my arrival would be around 13:00 hours.
 - Whilst in transit to the site I contacted Mr. Hoogenradd and informed him I would meet him on the fire ground at Early Valley Road after meeting up with the Incident Controller at Selwyn District Council.
 - At 13:07 hours, I arrived at Selwyn District Council and received a briefing from Selwyn Principal Rural Fire Officer, Mr. Douglas Marshall, and Darrin Woods, Principal Rural Fire Officer Christchurch City Council, this included a summary of the incident.
 - All available Fire Weather data, the ICAD reports and other relevant material to assist with the initial investigation was collected.
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- It was initially thought this fire was under the authority of the Christchurch City Council, however, it was subsequently established that the Department of Conservation was the fire authority.
- 15:50 hours meet up with Mr Roy Hoogenradd at Early Valley Road.
- 18:20 hours, left Early Valley to go to the Marley Hill fire site.
- 22:30 hours, emailed police requesting assistance for both Early Valley Road and Marley Hill Fires.
- Terms of reference were discussed with Department of Conversation and later documented (Appendix 6)

15 February 2017

- 08:00 hours, available witness information gathered, and witnesses contacted for interviews.
- 10:30 hours, leave Marley Hill to go to Early Valley Road Fire

16 February

- Returned to Marley Hill Fire later in the afternoon to continue the scene examination

24 – 28 February

- Fire ground investigation on Marley Hill Fire continued. Site investigation carried out by myself, Police Detective Craig Farrant, a police photographer, Orion Investigator Ken Legat and IAG investigators, [REDACTED].
- Focus was on fire spread and Specific Origin Area (SOA).

1 March

- Confirmed Marley Hill Fire was not related to the Early Valley Road Fire
- 11 May- email to Police Detective Inspector Greg Murton, confirming that the Marley Hill fire was suspicious.

2 March -30 November

- Ongoing investigation and compilation of the report.
-

External Examination

Tuesday 14 February

At around 10:18 hours, Mr. Roy Hoogenradd carried out an initial external examination. Photographs were taken giving an overview of the fire scene and looking back to the General Origin Area.

At 19:00 hours, accompanied by Mr Roy Hoogenradd, I started my external examination by walking the perimeter of the General Origin Area. This was carried out twice, in clockwise and anti-clockwise directions. Observations were made of the unburnt fuel type and height to determine the type of fuel that was present within the General Origin Area prior to the fire. It was noted that there were two access tracks that led into this area. One from the car park off Summit Road and the other a mountain bike track which leads off down Dyers Pass Road. With fading light, we left the scene and returned again on the 16th February 2017 at 17:30 hours. (Photo log, Photo 14ch0482-9514

Over the next several weeks further external examinations were required to determine the source of the fire runs that developed under the gondola line on the 15th February. It was determined that these runs were caused by molten material falling from chairlifts that were on fire and still moving. These fire runs moved in a westerly direction towards Worsleys spur. (Appendix 1, Map 4)

The General Origin Area was identified from this external examination and supported by witness photographs. (Photo log, photo 14ch0482-9514 zoom)

Internal Examination

14 February

A brief internal examination was carried out on the evening of the 14 February.

16 February

Due to elevated fire activity during the day of the 15 February, my involvement with the Early Valley Road fire investigation and the ongoing suppression activities on this site, only a preliminary Internal examination consisting mainly of photographs was carried out on the 16th of February at 17:30.

General Origin Area

24 February

An examination of the General Origin Area commenced on the 24 February.

In attendance during this examination were; Orion investigator Ken Legat (Fire Investigation Services), IAG investigators [REDACTED] (Corporate Risk Limited), Detective Craig Farrant from Christchurch police and a police photographer.

Terms of engagement and police involvement were discussed. Police agreed to secure the General Origin Area of the Marley Hill Fire. Terms of engagement confirmed the National Rural Fire Authority as the lead agency and in charge of scene.

We entered the head/advancing side of the run working our way back to the Specific Origin Area. We worked both sides of the run identifying flank/lateral transition zones and gradually narrowed this in.

From there the advancing head fire indicators were identified, flagged and photographed. The main indicators in the predominant gorse and bracken consisted of cupping on the gorse stems which were blunt and rounded off from the advancing fire. Tips were burnt off from the advancing fire among the finer bracken fuels, indicating the origin side. The distribution of white ash on the origin side, (facing the oncoming fire) was also observed.

There was one main run, moving in a southerly direction. The main fire run indicators were obvious with total foliage removal. Flagging of lateral/flanking, and main run indicators continued, working back to the Specific Origin Area.

Entry was made into the Specific Origin Area, where we identified an area where the fires direction of spread was first influenced by wind and available fuel. Micro Indicators brought us to area of about 1 meter in diameter. This area was flagging and photographed.

Due to the effects of fire suppression, we were unable to determine an exact Point of Origin or reduce the size of the Specific Origin Area to less than approximately 1m in diameter.

Within this specific origin area, residual materials out of context with the surrounding fuel types were identified, bagged and handed to police as evidence for further investigation.

(see Photo log for directional indicator photos)

Area of origin
 General
 Specific or Point

The Specific Origin Area was narrowed down to an area within 1m of Waypoint E 1570934 N 5171447. This area can be described as “60 meters below the Summit Road carpark and 6 meters above the forestry block”. (Photo log, photo DJ10095)

Main fire runs

There was one initial run on the evening of the 13th of February, moving in a southwesterly direction (Appendix 1, Map 2). A series of secondary ignitions and subsequent fire runs occurred around 13:30 hours on the 15th of February from under the gondola chairlift line and were caused by molten material falling from chairlifts that were on fire and still moving. These fire runs moved in a westerly direction towards Worsleys spur.

These new ignitions are not being investigated separately as new fire starts as they have occurred as a consequence of the Marley Hill first ignition. I.E they are a progression of the Marley Hill fire much like a spot fire would contribute to fire spread. (Appendix 1 Map 5)

Spot fires

No spot fires were identified in the general origin area. As the fire developed on the 15th, short-range spotting was widespread.

Indicated cause

From the site examinations, photos and witness reports, the following hypotheses were formed.

1. That ember transfer from the Early Valley Road fire has started a spot fire in this location.
2. The fire was deliberately lit.

No positive indication of cause was determined at this stage, however, as part of the scene examination police were aware that it was suspicious.

PART 4: FIRE SPREAD AND BEHAVIOUR

Weather Factors At the time of the Port Hills fires the underlying fire danger due primarily to very low monthly rainfall was very high. As recorded by the Christchurch Airport weather station, February received only 20mm of rain, less than half of the historical average. In the 30 days prior to the fires only 20mm of rain had fallen with less than 3mm falling in the 20 days prior to the fires. Grass curing varied across the Port hills however was considered to be 80% and above and 100% in many places.

Averaging the indices/codes from three representative local weather stations within a 20km radius of Port Hills, Bottle Lake, Christchurch Aero and Motukarara, , paints the following Fire Weather picture on the day the fires started, Monday the 13th of February 2017: (Appendix 2)

Fine Fuel Moisture Code. (FFMC)	87	Duff Moisture Code. (DMC)	65
Drought Code. (DC)	555	Build Up Index. (BUI)	100

Due to the close proximity of the Sugar Loaf weather station, (approximately 1km from the ignition site), the following weather values apart from wind speed have been used. (Wind speed measured at Sugar Loaf is taken 120 meters above ground, so wind speed data from the following reports has been used. *Port Hills Fire Development Chronology 2017. J Cowan (Final Draft), Engineering Meteorology, Aurecon report.* [REDACTED] (Appendix 8 and 9)

There were no fire ground readings taken at the fire ground by responders near or during the time of ignition.

Wind direction has been taken from photos taken within minutes of the fire becoming visible.

Temp C	RH %	Wind km/hr	Wind Dir
19	38	20-40	NE

From the above average indices gained from multiple weather station and then using the above weather readings for the site of ignition we get an approximate hourly adjusted set of Fire Weather Indices as follows.

FFMC	DMC	DC	ISI	BUI	FWI
87	65	555	8	100	26

The Fine Fuel Moisture Code (FFMC) wasn't relatively high due to a good RH recovery (99%) the night before. A hint of rain (0.2mm) was recorded in several local weather stations but not from Sugar Loaf.

To help determine the possibility of ember transfer from the Early Valley Road fire starting the Marley Hill fire, expert opinions were sought from Engineering Meteorology Aurecon and from SCION rural fire research. These can be summarised as follows:

Engineering Meteorology Aurecon

Given the weather readings and modeling it is very unlikely that the Marley hill fire is related to the Early Valley Road fire. (Appendix 8)

Scion Rural Fire Research.

Given the weather data collected and analysed it is considered that the likelihood of the Marley Hill fire being caused by a spotfire from the Early Valley fire is low. (This report does not take into consideration photos taken from the Marley Hill fire and suggests that along with meteorological data that they be factored in.) (Appendix 7)

How the above readings and indices relate to the potential fire cause hypotheses are as follows.

1. Ember transfer from the Early Valley Road fire. -

Taking into consideration the conclusions from the subject matter experts and ourselves, the photos showing the smoke direction and spread of both fires, (Photo log, Image 1) the lack of any significant spotting in the early stages of the Early Valley fire and the findings of this investigation, we have concluded that this fire was not caused by ember transfer from the Early Valley Rd fire.

2. The fire was deliberately lit.-

The weather around the time of ignition would have made it relatively easy for a fire to be started with some form of sustained heat source such as a lighter or other similar device.

Fuel Factors

The fuel in and around the area of origin was around 60% to 80% cured ungrazed grass, scattered gorse around 1.8 m high and Bracken fern around 0.6m high. It must be noted that there are some areas around the SOA that were quite damp, green and sheltered/shaded by the forestry block. (Photo log, photo 17ch0482-9521)

How the fuel factors relate to the potential fire cause hypotheses are as follows;

1. Ember transfer from the Early Valley Road fire. -

These fuels in this location could have been ignited by ember transfer, however, the above comment regarding damp areas and a lesser grass curing level must be considered. We note that no evidence of any spot fires were found in the General Origin Area.

2. The fire was deliberately lit. -

The presentation and type of fuel in the Specific Origin Area would have ignited easily with some form of sustained heat source such as a lighter or other similar device.

Topographical Factors

The Specific Origin Area (SOA) is 60m below Summit Road on a north facing uphill 10 deg slope. (Av slope). A north facing aspect is considered to be warmer and dryer than other aspects as such it would have been more conducive to any form of ignition than other aspects. It should be noted however that this Specific Origin Area was shaded by the adjacent pine trees and was not as dry as other more exposed sites in this location.

This slope factor had a significant effect on the initial fire runs by multiplying the forward rate of spread by a factor of 1.6. (Appendix 1, Map 3)

Burn and Char Patterns

As described and photographed in the external and internal examinations.

Fire Behaviour

Influenced by the same hot dry windy conditions as the Early Valley Road some 5km away, this fire escalated quickly burning uphill through 1.8-meter-high gorse, scrub, bracken and 60% to 80% cured grass and backing down hill to the northeast into a pine plantation.

Fire behaviour predictions are as follows.

- **Ungrazed grass-** 0.6m high, 70% cured, wind of 20km/hr, temp 19°C, RH 38% and 10 deg slope- F-ROS is calculated at 800m/hr (13m/min) with flame length of 3m. Fuel load is around 9 t/ha and HFI is 3600kw/m. B-ROS is calculated at 10m/hr.
- **Gorse-** 1.8m high, wind of 20km/hr, temp 19°C, RH 38% and 10 deg slope- F-ROS is calculated at 3000m/hr with flame length of 11m. Fuel load is around 34 t/ha and HFI is 50000kw/m. B-ROS is calculated at 70m/hr.
- **Pine mature-** Wind of 20km/hr, temp 19°C, RH 38% and a negative 10 deg slope- F-ROS is calculated at 90m/hr with flame length of 2m. Fuel load is around 26 t/ha and HFI is 1200kw/m

By assessing the fire behaviour from photos taken within minutes of the fire becoming visible it is likely that the initial rates of spread and intensity were lower than the above predictions. This is likely to be from a lessor windspeed given the ignition area is sheltered from the pines and a lower Fine Fuel Moisture Code from the damper areas.

**Witness
Statements/
Observations**

See Witness Identification Log for personal contact details. (Appendix 10)

The main witness interviews/statements were obtained by the New Zealand Police, on behalf of the investigation team. We have dozens of statements and photos that were offered up by members of the public and/or were obtained via interviews. Copies of these have not been included in this report but are kept on file.

The following are a summary of some points that may be considered of interest and the source of the relevant photos and videos.

Witness 1- 19:09. This witness captured the first visual recordings taken at 19:09 from a good vantage point around 1km away. Saw fire in its very early stages, noticed the fire as “faint smoke” coming out of the trees. This witness also reports seeing a person acting suspiciously immediately after they saw faint smoke, run out of the trees, across the road, then back across the road and back into the shrubbery in the same direction they were initially seen. (Photo log, photos 190939, 190954)

Witness 2- 19:09. This witness was with Witness 1 and pointed out the person acting suspiciously to Witness 1. This witness is noted in a statement as using binoculars to view the suspicious person.

Witness 3- 19:11. This witness was the first caller to 111. Fire is reported as smoke only, so had only just become visible.

Witness 4- This witness was contacted by police regarding video footage of the fire in its early stages and also regarding a Facebook post that talks about a person lighting the fire. (We do not have a copy of the police report into this interview)

Witness 5- This witness took photos of the fire in its very early stages. (Photo log, photos 1487340494063, 1487340494063 (1))

Conclusions- From viewing the photos and videos provided by these witnesses it is clear they saw the fire in its very early stages. The photos strongly support the exclusion of an ember transfer event starting the Marley Hill fire. Police are investigating the reports of a suspicious person.

PART 5: VISUAL AND PHYSICAL EVIDENCE

- Visual Images** Photos and videos were taken by this investigation team, the NZ Police and members of the public. Photos were taken from the ground and aurally using helicopters and drones. All photos and videos are stored in Fire and Emergency New Zealand's database. A sample of the more relevant photos are attached in the photo log- Appendix 3.
- Physical Site Evidence** Exhibits held by the police.
- Unidentified items found in the Specific Origin Area by the investigation team, given to the police for security and identification in the result that arson was suspected. (No results have been provided at this time) Photo Log, Photos 518-6367, 518-6372)

PART 6: ORIGIN AND CAUSE

Determination of the Specific Origin Area. Witness statements, photos, videos, burn and char patterns all lead us back to a Specific Origin Area of origin within 1m of waypoint E 1570934 N 5171447. This area can be described as “60 meters below the Summit Road carpark and 6 meters above the forestry block” around 600m to the southwest of the sign of the kiwi.

Elimination/ explanation of possible causes

Causes that were eliminated or identified:

1. Refraction/magnification – No glass bottles or reflective items were present in the Specific Origin Area (SOA).
 2. Lightening - No lightening was detected by MetService in this location around or before the time of ignition.
 3. Incendiary devices- No evidence of an incendiary device or fireworks were found in the SOA. 2 x unexplained ash/residue samples were given to police
 4. Accelerants- No evidence of accelerants was found in the SOA.
 5. Cigarettes- No cigarette remains, matches or other sources of open flame were found in the Specific Origin Area. Given this area was some 36m from the closest track or easy access point and the humidity was above the threshold for cigarette ignitions, any cigarette ignitions are highly unlikely.
 6. Spontaneous combustion- No evidence of spontaneous combustion was found in the Specific Origin Area.
 7. Miscellaneous causes- No evidence of any other ignition source or activities including burn offs/rubbish fires.
 8. Children- No recent evidence that children have played or frequented the area were found in the Specific Origin Area.
 9. Ember Transport- as per above, plus the visual evidence obtained from photos and video we have concluded that this fire was not started by ember transport.
 10. Incendiary/Arson- Although no evidence of arson was identified in the SOA, arson by its very nature is often hard to identify. Given the occurrence of other suspicious fires within the area including the Early Valley Road fire and given the lack of any other possible cause, this is the probable cause of this fire.
-

Cause or most likely cause of fire

Given the evidence available and identified as part of this investigation it is our conclusion that:

As no cause was determined, this fire must be categorized as 'undetermined'. It is however probable that it was deliberately lit. This conclusion has come about due to;

- the lack of any ignition source or probable cause other than being deliberately lit,
- the identification of several incendiary fires within the Halswell area in the month before this blaze. These fires are not all of the same modus operandi but show that arsons do occur in this area. (Appendix 5, Incendiary Fires Report)
- the sighting of a person acting suspiciously in the immediate area of the fire just after it was detected and,
- the occurrence of the suspicious Early Valley Road Fire less than 1.5 hours before this fire.

We acknowledge that a lack of evidence is not evidence enough to categorize this fire as 'incendiary' and as such our determination must stay as undetermined until/or if new evidence is found. (NFPA 19.6.5.1)

Conclusions

We know that to completely prove a fire's cause, we need to identify the first fuel ignited, the heat source and the event that brought them together. For this fire we know what the first fuels are, we know there were no possible heat sources permanently on site and found no evidence of an introduced heat source, thus we were unable to categorically define the event that would have brought them together.

We do know however that there must have been a heat source, it wasn't permanently on site and it left little or no evidence that was found by this investigation. We also know that the event that introduced the heat source to the fuels also left little or no evidence that was found.

What are we left with? The only logical explanation is that someone deliberately lit the fire and left the scene. We do have witness's that saw a person on site acting suspiciously, we do have another fire that was probably deliberately lit occurring less than 2 hours before in a nearby location and we do know that arson fires have occurred in this area and:

- Are often set in multiples,
- May occur on the same day,
- Typically occur in close proximity to each other,
- Sites are easily accessed by roads or trails,
- Roadside fire sets are the most common
- Fires that have no evidence of an ignition source

(Guide to Wildland Fire Origin and Cause Determination. National Wildfire Coordinating Group 2016)

Every one of these points has been met by this fire!

Overlaying the above evidence (available to these investigators) with a lack of any obvious ignition source typical with arson fires and the occurrence of the suspicious Early Valley Road fire on the same day, we are left with the conclusion that this fire was probably started by human hands.

Recommendations

That Police consider continuing the investigation into the cause of this fire as it's probable to have been deliberately lit and as such the statutory responsibility for the investigation would lie with the police.

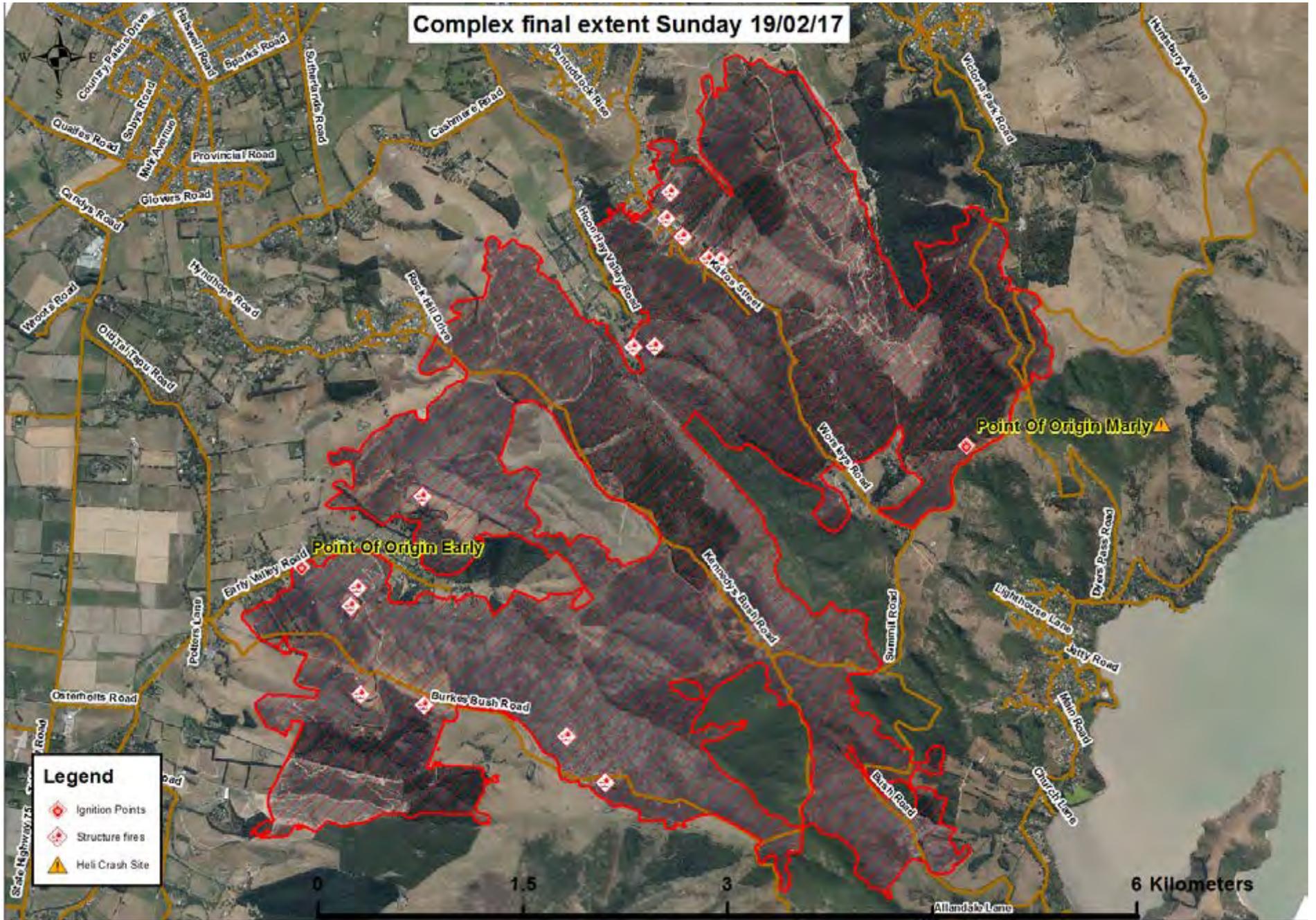
Investigation and report completed by:

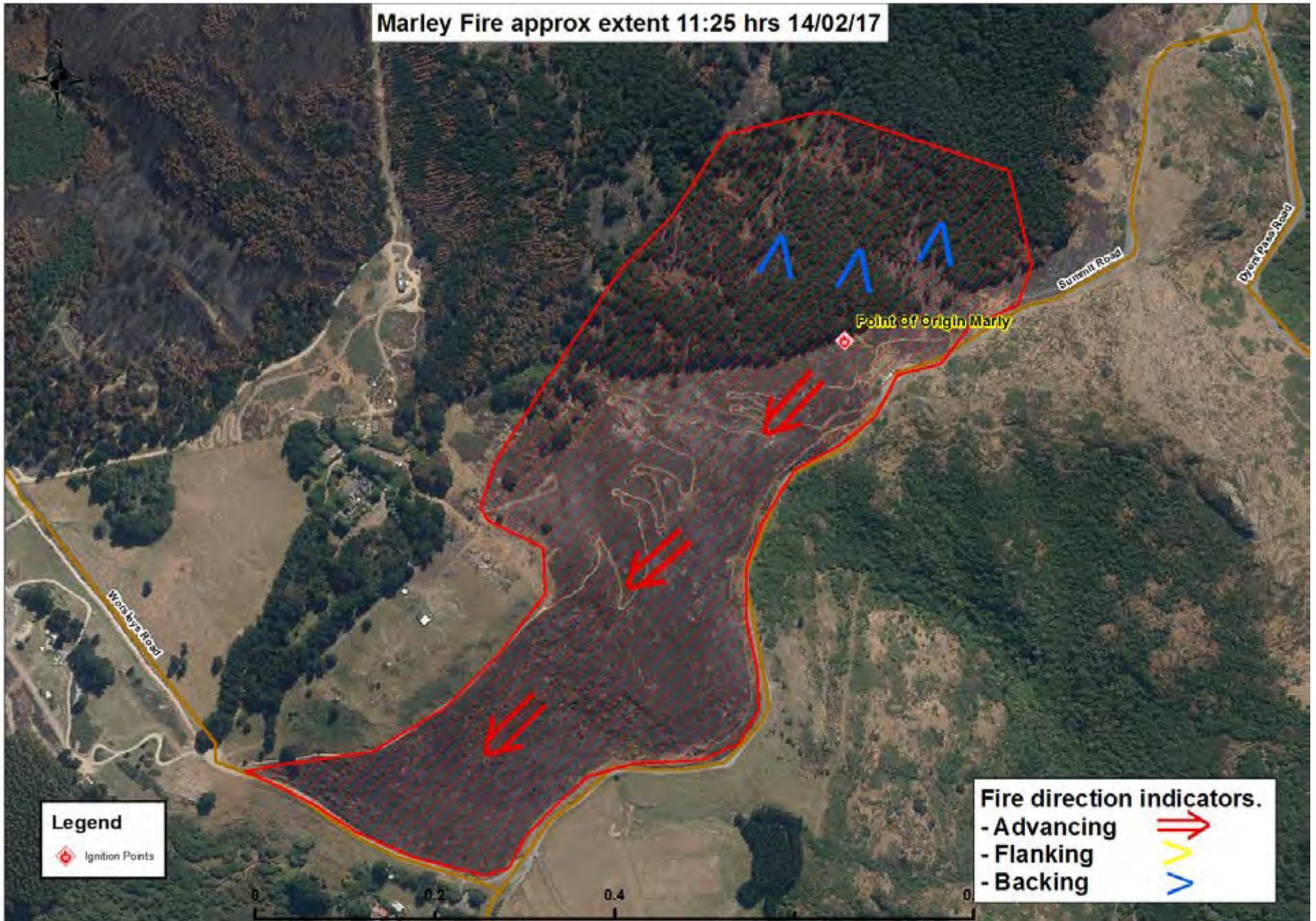
Name

Lead Investigator- Graeme Still
Principal Rural Fire Officer
Otago District
Region 5
Fire and Emergency New Zealand
Phone [REDACTED]

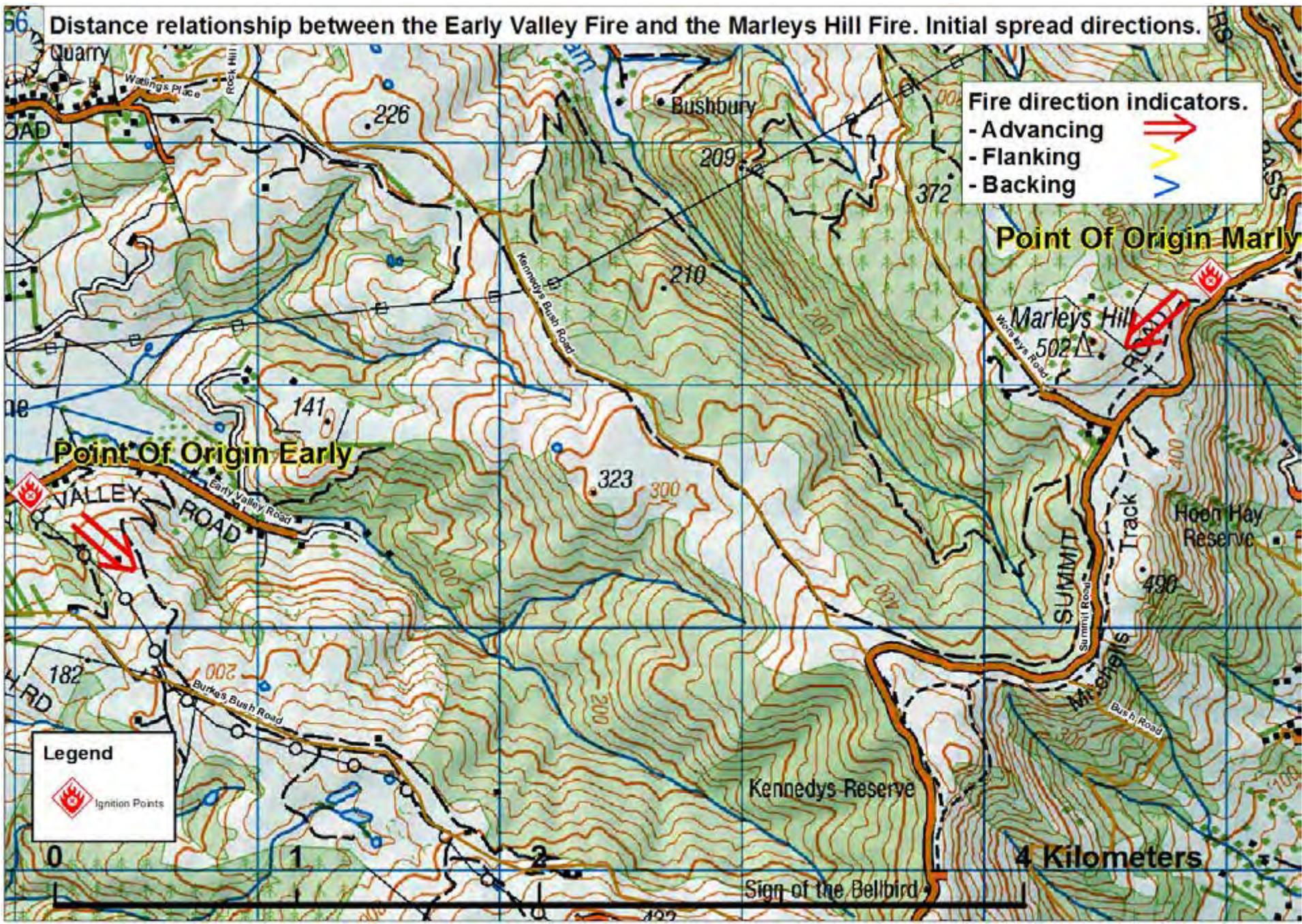
Supporting Investigator- Jamie Cowan
Wildfire Management Specialist/Wildfire Investigator
Wildfire Management NZ.
Phone [REDACTED]

Appendix 1 MAPS. Map 1. Overview Map





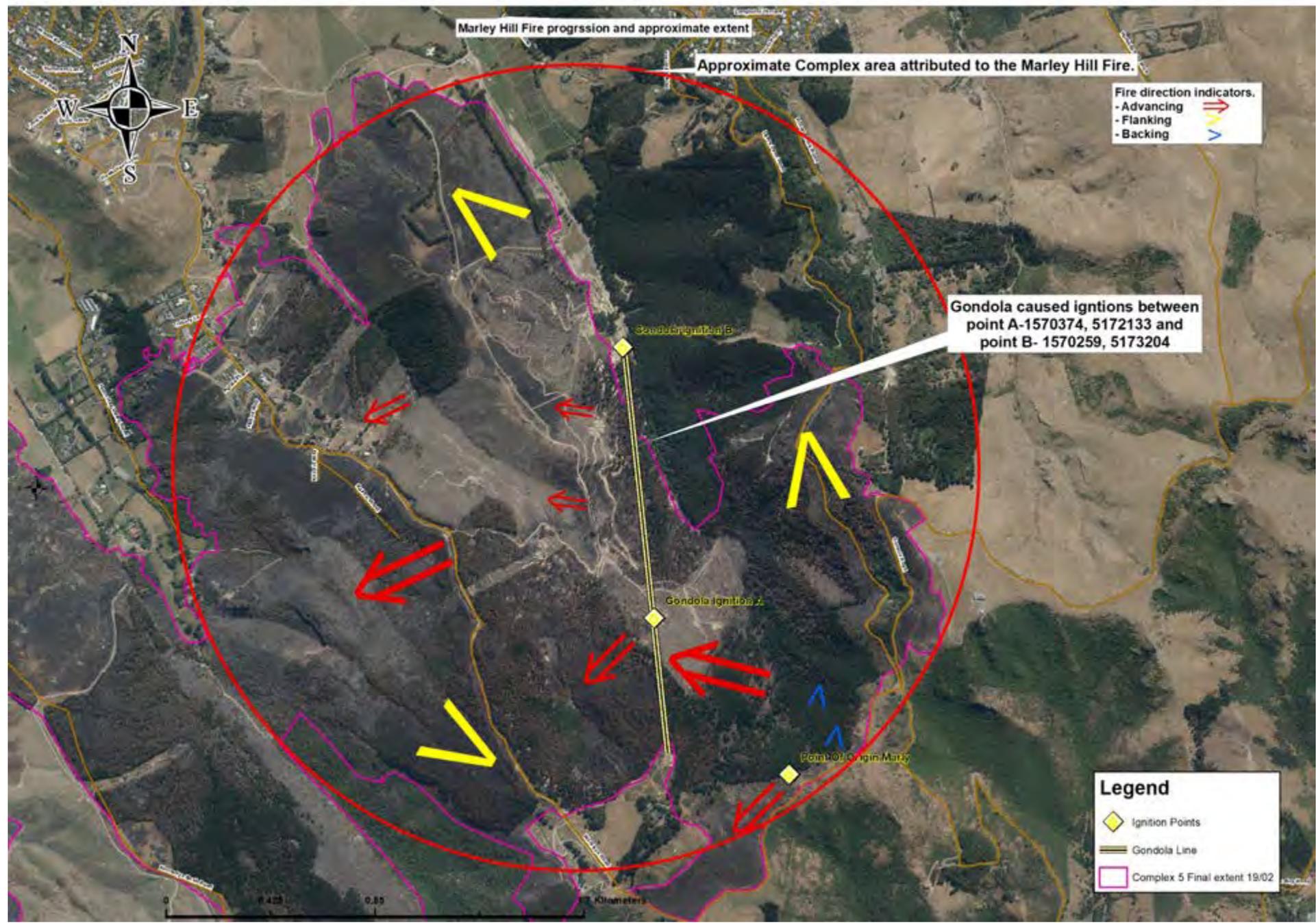
Map 3. Marley Hill Topographical Map and relationship to the Early Valley Road fire.



Map 4. Marley Hill Map and relationship to the gondola line ignitions.



Map 5. Marley Hill progression and extent.



Appendix 2 Fire Weather

NRFA Regional Daily Observed Summary Table for Canterbury																
Canterbury																
Canterbury Monday, 13 February 2017																
STATION NAME	FOREST	SCRUB	GRASS	FFMC	DMC	DC	ISI	BUI	FWI	TEMP	RH	DIR	WSP	RN24	GC%	STAT
Hanmer	L	V	M	69	21	292	1.6	36	3.9	20.5	52	291	19	7.0	85	Aut
Balmoral	E	E	V	87	52	549	11.9	84	32.6	21.5	43	303	30	1.2	95	Aut
Lees Valley	M	V	M	74	32	253	1.6	49	4.7	17.5	46	001	15	3.2	65	Aut
Ashley	H	E	H	87	43	310	6.9	64	19.4	19.2	65	191	18	0.4	80	Aut
Oxford	H	E	H	86	56	393	5.5	83	18.8	16.2	68	195	15	0.2	70	Aut
Gleanaan Station	L	V	M	61	16	154	1.7	25	3.1	16.8	59	261	27	14.0	60	Aut
Snowdon	L	L	L	45	16	222	0.1	27	0.1	12.8	80	-	10	7.5	50	Sub
Bottle Lake	H	E	M	87	68	704	4.4	109	18.5	18.6	63	217	9	0.0	75	Aut
Forest Plains	M	E	H	84	52	400	3.5	78	12.9	15.7	77	189	12	0.6	90	Aut
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Christchurch Aero	E	E	H	87	70	500	10.1	104	32.3	17.5	64	200	26	0.0	75	Aut
Hakatere	M	E	M	73	35	327	4.5	55	13.0	17.5	44	333	37	7.4	70	Aut
Burnham	M	E	M	85	57	477	4.0	88	15.3	15.5	74	171	12	0.4	80	Aut
Mount Somers	L	L	L	48	10	145	0.2	18	0.2	12.3	82	032	11	5.6	40	Aut
Motukarara	H	E	H	86	58	462	5.7	88	20.1	14.1	70	170	17	0.2	70	Aut

Photo 190939– Witness 1 photo at 19:09:39 hours. Marley Hill fire just visible as faint smoke.

Photo 190954– Witness 1, photo at 19:09:54 hours. Marley Hill fire just visible, just 15 seconds after the first photo.

Image 1– From *Port Hills Fire Development Chronology Report. J Cowan 2017 (DRAFT)* showing smoke column directions.

Photo 1487340494063– Witness 5, photo Marley Hill fire early stages

Photo 1487340494063 (1)– Witness 5, photo Marley Hill early stages

Photo 14ch0482-9514 (zoom) – Marley Hill Fire General Origin Area (Note Carpark, walking and mountain bike trails)

Photo 518-6323– Mountain Bike track reference signage

Photo 14ch0482-9521 – Marley Hill Fire, General Origin Area showing green/damper conditions and shelter/shading from forestry block.

Photo DJI-0089– Specific Origin Area, flagged.

Photo DJI-0095– Specific Origin Area, flagged.

Photo 518-6357– Specific Origin Area, main runs

Photo 518-6359– Specific Origin Area

Photo 518-6367– Specific Origin Area, unidentified ash or residue 1

Photo 518-6372– Specific Origin Area, unidentified ash or residue 2

Photo 190939– Witness 1 photo at 19:09:39 hours. Marley Hill fire just visible as faint smoke.



Photo 190954– Witness 1, photo at 19:09:54 hours. Marley Hill fire just visible, just 15 seconds after the first photo.



Image 1– From *Port Hills Fire Development Chronology Report*. J Cowan 2017 (DRAFT) showing smoke column directions.

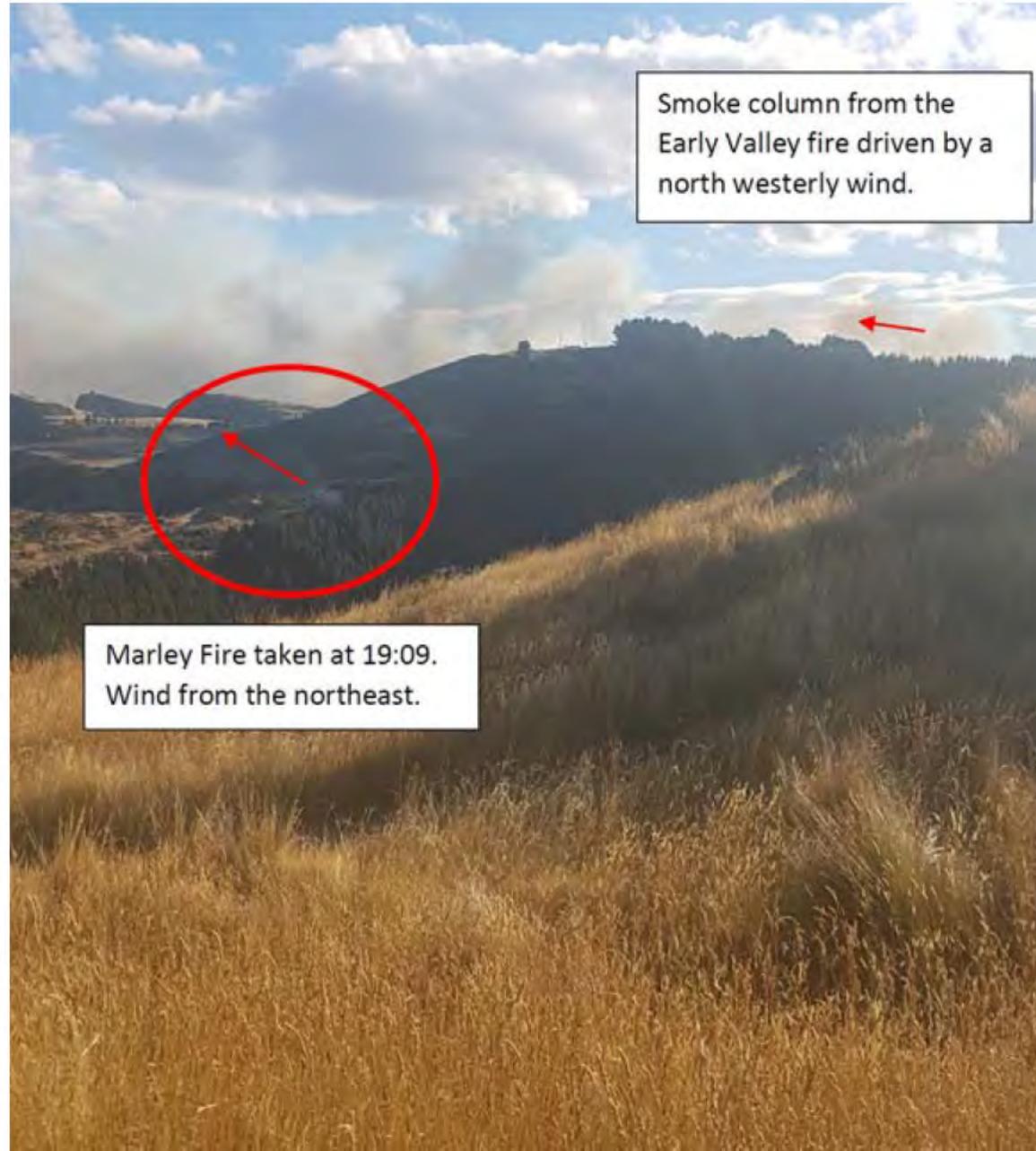


Photo 1487340494063– Witness 5, photo Marley Hill fire early stages



Photo 1487340494063 (1)– Witness 5, photo Marley Hill early stages



General Origin Area

Photo 14ch0482-9514 (zoom) – Marley Hill Fire General Origin Area (Note Carpark, walking and mountain bike trails)



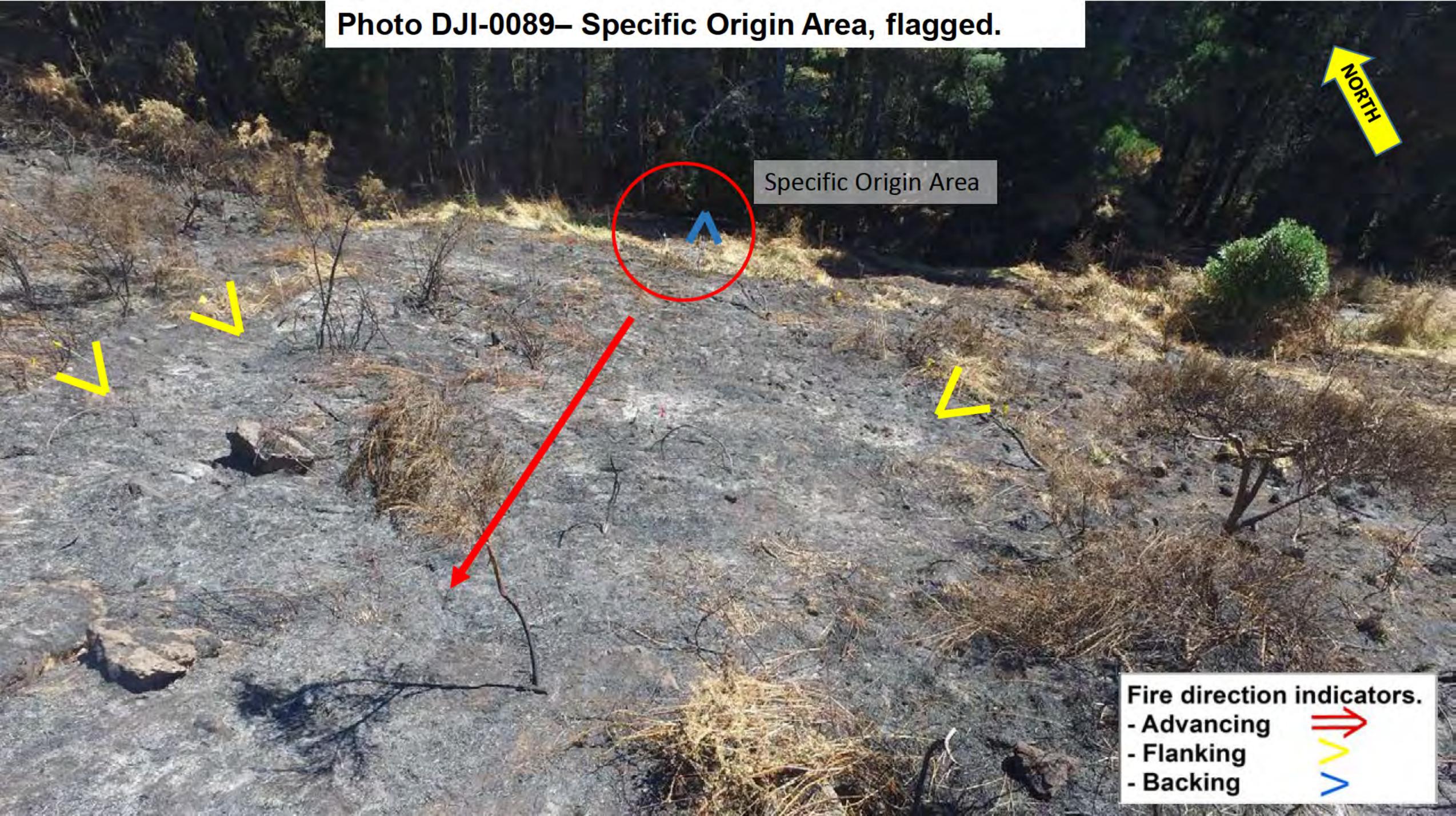
Photo 518-6323– Mountain Bike track reference signage



Photo 14ch0482-9521 – Marley Hill Fire, General Origin Area showing green/damper conditions and shelter/shading from forestry block.



Photo DJI-0089– Specific Origin Area, flagged.

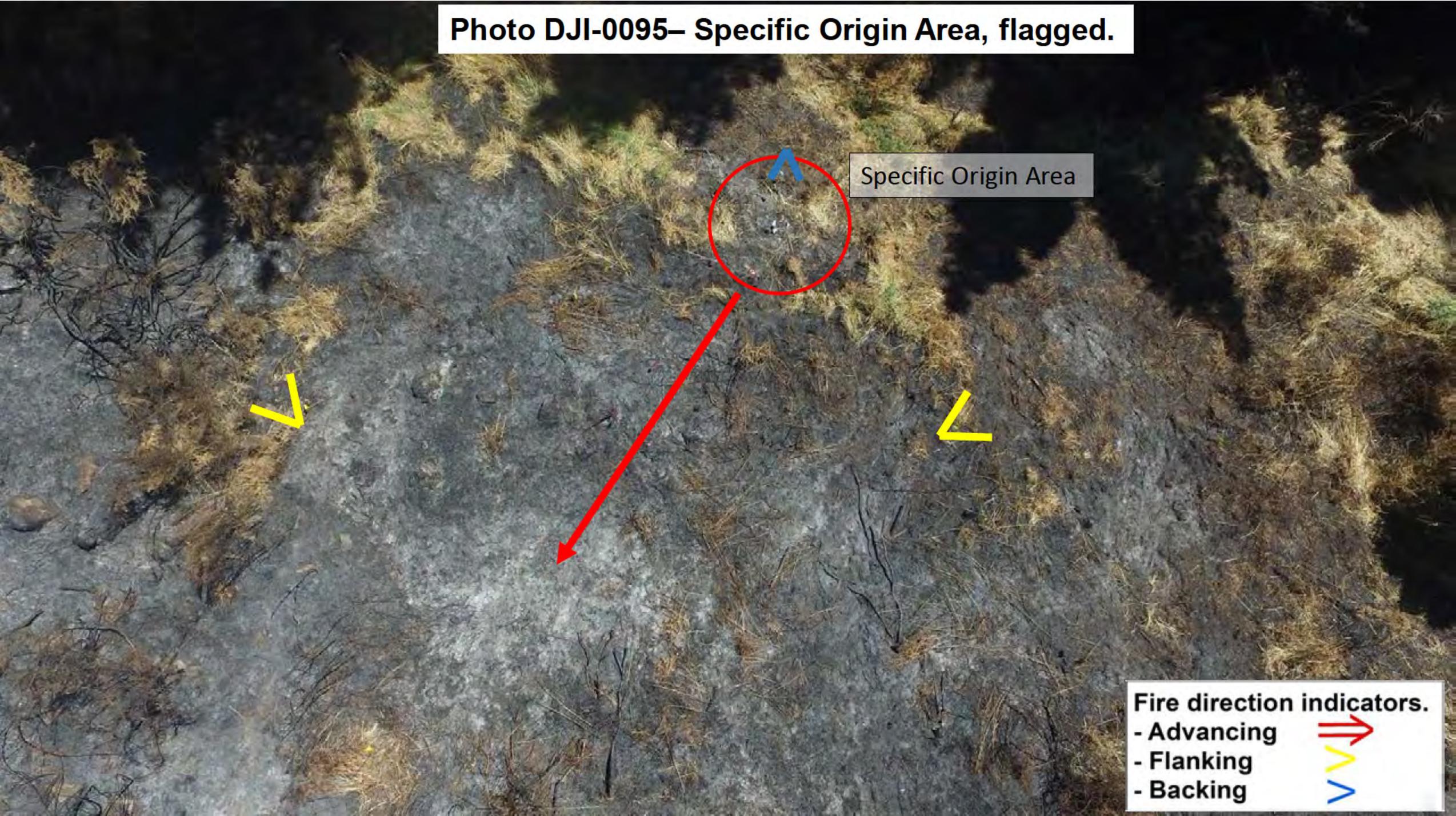


Specific Origin Area

NORTH

Fire direction indicators.
- Advancing 
- Flanking 
- Backing 

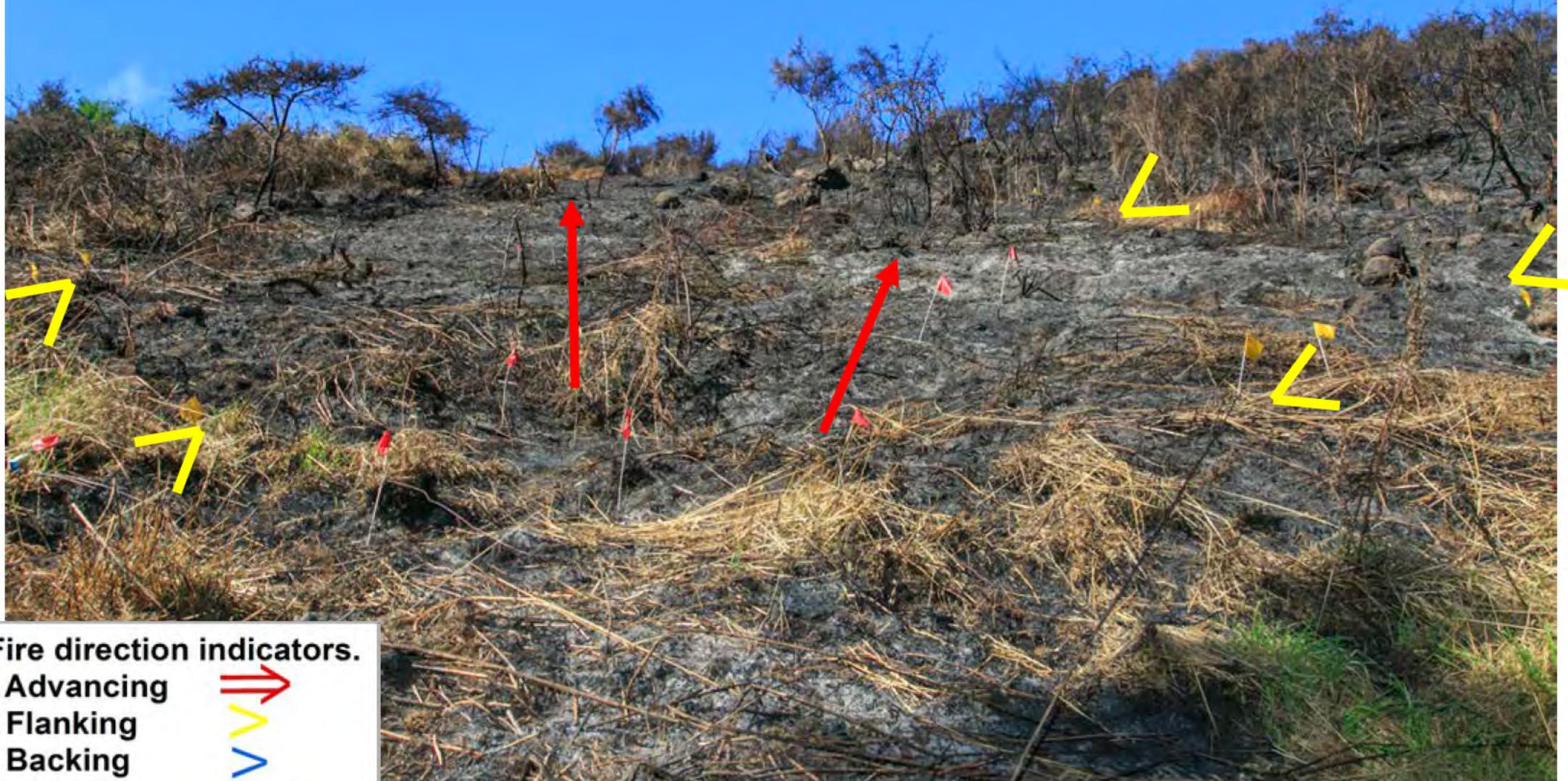
Photo DJI-0095– Specific Origin Area, flagged.



Specific Origin Area

Fire direction indicators.
- Advancing 
- Flanking 
- Backing 

Photo 518-6357– Specific Origin Area, main runs



Fire direction indicators.
- Advancing 
- Flanking 
- Backing 

Photo 518-6359– Specific Origin Area



Specific Origin Area

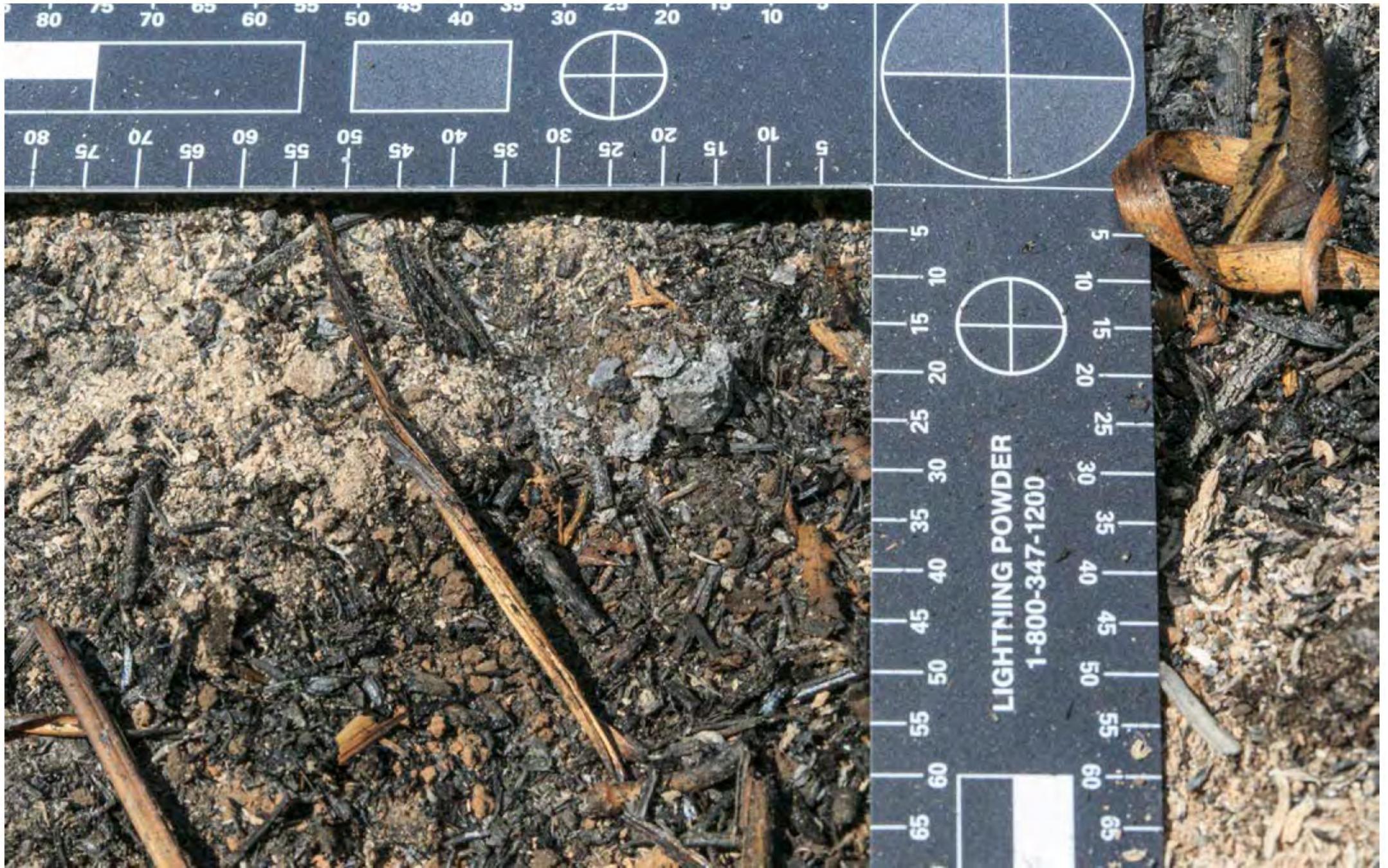
Fire direction indicators.

- Advancing 
- Flanking 
- Backing 

Photo 518-6367– Specific Origin Area, unnatural fuel arrangement



Photo 518-6372– Specific Origin Area, unidentified ash or residue



Appendix 4- ICAD Report

SMS Incident Report

29/03/2017 17:55:52

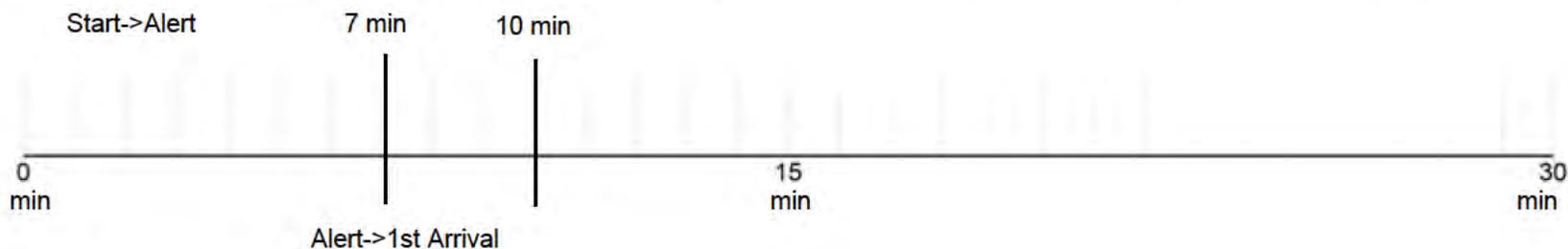
Summary

CAD Number	F2245689	Status Closed
Station	Governors Bay Volunteer Fire Brigade	
Incident Started	13/02/2017 19:11:54	Incident Ended 16/02/2017 01:58:05
Incident Type	1312: Vegetation Fire (specify Area of Vegetation burnt)	
Common Name		
Address	SUMMIT ROAD GOVERNORS BAY	
Alarm Method	111 Telephone	Alarm Level 1
PFA Number		
Zone	343310	
Map Grid E	1571025	Map Grid N 5171421
First Caller	[REDACTED]	First Caller Contact [REDACTED]
Incident Closed	16/02/2017 01:58:05	
Report Completed	14:18, Sat 18 Mar 2017 by Andrew Norris	

Responses

Call Sign	Type	Station Alert	Enroute Time	Arrival Time	Departed
GOVE331	P1	19:15:34 13 Feb 2017	19:15:34 13 Feb 2017	19:22:29 13 Feb 2017	02:28:10 15 Feb 2017
GOVE3326	SV	19:16:48 13 Feb 2017	19:16:48 13 Feb 2017	19:22:48 13 Feb 2017	08:04:11 15 Feb 2017
VICT1811	WT	19:15:53 13 Feb 2017	19:29:07 13 Feb 2017	19:39:43 13 Feb 2017	01:56:27 16 Feb 2017
WAIN321	P1	19:32:33 13 Feb 2017	19:34:12 13 Feb 2017	19:50:13 13 Feb 2017	19:44:35 15 Feb 2017
LYTT291	P1	19:32:28 13 Feb 2017	19:37:21 13 Feb 2017	19:53:48 13 Feb 2017	01:26:44 14 Feb 2017
BURN9111	WT	19:34:46 13 Feb 2017	19:38:04 13 Feb 2017	20:11:25 13 Feb 2017	20:35:03 13 Feb 2017
LINC4111	WT	20:36:21 13 Feb 2017	20:36:21 13 Feb 2017	21:00:40 13 Feb 2017	20:41:36 15 Feb 2017
BROO3111	WT	19:32:31 13 Feb 2017	19:38:46 13 Feb 2017	21:29:25 13 Feb 2017	21:38:18 15 Feb 2017
CHRISTCH2	OF	21:53:52 13 Feb 2017	21:53:52 13 Feb 2017	22:11:23 13 Feb 2017	22:57:31 15 Feb 2017
WEST9571	RP	22:23:24 13 Feb 2017	22:23:25 13 Feb 2017	22:23:26 13 Feb 2017	00:12:22 14 Feb 2017
GOVE3311	WT	22:23:24 13 Feb 2017	00:09:21 14 Feb 2017	00:13:36 14 Feb 2017	02:38:00 15 Feb 2017
LINC4126	SV	22:23:24 13 Feb 2017	00:11:08 14 Feb 2017	00:30:50 14 Feb 2017	19:58:58 15 Feb 2017
STAL231	P1	01:05:11 14 Feb 2017	01:08:11 14 Feb 2017	01:31:05 14 Feb 2017	21:39:46 15 Feb 2017
BOTT1711	WT	22:23:24 13 Feb 2017	05:52:29 14 Feb 2017	06:24:02 14 Feb 2017	19:20:51 15 Feb 2017
ADDI221	P1	23:38:20 14 Feb 2017	23:41:09 14 Feb 2017	23:58:18 14 Feb 2017	13:49:56 15 Feb 2017
CHRI2111	WT	00:24:08 15 Feb 2017	00:25:35 15 Feb 2017	01:21:35 15 Feb 2017	18:24:21 15 Feb 2017

HARE261	P1	02:19:53 15 Feb 2017	02:22:09 15 Feb 2017	02:46:15 15 Feb 2017	10:04:59 15 Feb 2017
SOCK257	PR	22:23:24 13 Feb 2017	02:18:47 15 Feb 2017	03:49:02 15 Feb 2017	10:11:45 15 Feb 2017
REGION4B	OF	22:23:24 13 Feb 2017	02:37:08 15 Feb 2017	03:49:12 15 Feb 2017	11:19:07 15 Feb 2017
ROLL4211	WT	03:38:22 15 Feb 2017	03:43:52 15 Feb 2017	04:13:00 15 Feb 2017	21:37:09 15 Feb 2017
ROLL4226	SV	22:23:24 13 Feb 2017	08:04:58 15 Feb 2017	08:50:41 15 Feb 2017	09:50:06 15 Feb 2017
CHRI214	PM	22:23:24 13 Feb 2017	09:42:53 15 Feb 2017	09:47:12 15 Feb 2017	10:03:54 15 Feb 2017
WOOL241	P1	09:18:06 15 Feb 2017	09:18:55 15 Feb 2017	09:57:35 15 Feb 2017	14:10:34 15 Feb 2017
CHRISTCH1	OF	22:23:24 13 Feb 2017	23:53:36 13 Feb 2017	11:19:24 15 Feb 2017	16:06:52 15 Feb 2017
CHRI2118	CUHU	11:09:03 15 Feb 2017	11:10:38 15 Feb 2017	11:46:56 15 Feb 2017	21:30:25 15 Feb 2017
WEST9511	WT	22:23:24 13 Feb 2017	22:23:25 13 Feb 2017	12:21:14 15 Feb 2017	15:24:38 15 Feb 2017



Elapsed Times

Call Sign	Start To Alert	Alert To Arrival	Start To Arrival	Start To Departed
GOVE331	00:03:40	00:06:55	00:10:35	31:16:16
GOVE3326	00:04:54	00:06:00	00:10:54	36:52:17
VICT1811	00:03:59	00:23:50	00:27:49	54:44:33
WAIN321	00:20:39	00:17:40	00:38:19	48:32:41
LYTT291	00:20:34	00:21:20	00:41:54	06:14:50
BURN9111	00:22:52	00:36:39	00:59:31	01:23:09
LINC4111	01:24:27	00:24:19	01:48:46	49:29:42
BROO3111	00:20:37	01:56:54	02:17:31	50:26:24
CHRISTCH2	02:41:58	00:17:31	02:59:29	51:45:37
WEST9571	03:11:30	00:00:02	03:11:32	05:00:28
GOVE3311	03:11:30	01:50:12	05:01:42	31:26:06
LINC4126	03:11:30	02:07:26	05:18:56	48:47:04
STAL231	05:53:17	00:25:54	06:19:11	50:27:52
BOTT1711	03:11:30	08:00:38	11:12:08	48:08:57
ADDI221	28:26:26	00:19:58	28:46:24	42:38:02
CHRI2111	29:12:14	00:57:27	30:09:41	47:12:27
HARE261	31:07:59	00:26:22	31:34:21	38:53:05
SOCK257	03:11:30	29:25:38	32:37:08	38:59:51
REGION4B	03:11:30	29:25:48	32:37:18	40:07:13
ROLL4211	32:26:28	00:34:38	33:01:06	50:25:15
ROLL4226	03:11:30	34:27:17	37:38:47	38:38:12

Caution: The information contained in this report is subject to the provisions of the Official Information Act 1982 and the Privacy Act 1993. Neither the information nor the report should be released to any person outside the NZ Fire Service or the National Rural Fire Authority without prior approval

CHRI214	03:11:30	35:23:48	38:35:18	38:52:00
WOOL241	38:06:12	00:39:29	38:45:41	42:58:40
CHRISTCH1	03:11:30	36:56:00	40:07:30	44:54:58
CHRI2118	39:57:09	00:37:53	40:35:02	50:18:31
WEST9511	03:11:30	37:57:50	41:09:20	44:12:44

Notifications

Date	Time	Party Notified
13 Feb 2017	19:16:23	RFO CHCH CC PAGED RE VICT1811
13 Feb 2017	19:19:58	RFO CHCH CITY (DAN WOODS) ACK PAGE
13 Feb 2017	19:21:28	RFO DOC CANTY PAGED
13 Feb 2017	19:23:40	DOC CANTERBURY ACK PAGE
13 Feb 2017	19:29:10	RFO DOC CANTY PAGED SITREP
13 Feb 2017	19:31:54	ALPINE HELICOPTERS PHONED
13 Feb 2017	19:34:47	RFO DOC CANTERBURY PAGED
13 Feb 2017	19:37:02	MRF ACK PAGE (TIM MITCHELL)
13 Feb 2017	19:39:54	RFO DOC ACK PAGE
13 Feb 2017	20:27:20	EVACUALTING WORSLEY
13 Feb 2017	20:33:19	RFO DOC CANTY PAGED SITREP
13 Feb 2017	21:24:05	NIWA FORCASTER
13 Feb 2017	21:55:19	ORION
14 Feb 2017	15:45:33	IC ROB HANDS
14 Feb 2017	16:13:41	ROB HANDS IC UPDATED
14 Feb 2017	23:40:22	PAGED AREA CHCH RE BRIGADES RESPONDING AGAIN
14 Feb 2017	23:43:52	AREA CHCH BERRY AND REGION4 BALMER BOTH ACK PAGE KEEP UPDATED
15 Feb 2017	02:08:34	FIRECOM SM RANG SOCKBURN RE HEADING TO GOVERNORS BAY
15 Feb 2017	02:09:12	FIRECOM SM RANG CHCH SSO ON CELLPHONE GIVEN UPDATE
15 Feb 2017	02:11:05	FIRECOM SM RANG HAREWOOD FIRE STATION HEADINHG TO GOVERNORS BAY
15 Feb 2017	02:17:42	AREA CANTERBURY BERRY
15 Feb 2017	02:18:36	REGON 4B BALMER ACK PAGE WILL RING AREA CHCH BERRY AND IS RESPONDING'
15 Feb 2017	02:21:09	PAGED REGION 4 DUTY RE LATEST SITUATION
15 Feb 2017	02:39:59	FIRECOM SM LIAISED WITH CHRI2111 HEAD TO GOVERNORS BAY FIRE STATION
15 Feb 2017	02:47:31	REGION 4 TUREK ACK PAGE
15 Feb 2017	03:15:16	PAGED CFO/DCFO LINCOLN RE CREW FOR LINC4111
15 Feb 2017	03:20:26	PAGED CFO LINCOLN ORGANISING CREW FOR LINC4111
15 Feb 2017	03:38:25	CITY STATION SSO - REPLACEMENT CREW
15 Feb 2017	20:23:36	RANG EOC RE HELO OPS PAUL DEVLIN FLYING AT THE MOMENT
15 Feb 2017	20:23:49	RANG PAUL DEVLIN CELLPHONE WITH MESSAGE

15 Feb 2017	20:25:29	PAGED RFO CHCH DUTY FOR PAUL DEVLIN TO CONTACT RIWAI RE HELO OPS DYERS PASS
15 Feb 2017	20:32:16	PAGED AREA CANTERBURY RE UPDATE FROM WARREN HUNT
15 Feb 2017	21:27:39	RFO DEVLIN RUNG TO ADVISE INTO VICTORIA PARK, HE HAS EVACUATED FAMILY BUT
15 Feb 2017	22:29:37	EOC SELWYN ADVISED OF SITUATION RE TOWER FOR INFO
16 Feb 2017	01:55:18	RFO CCC PAGED TO CONTACT COMS RE LOCATION OF VICT1811

Message Log

Time	Message
19:13:02	INC INFO: FIRE IN AREA
19:13:03	** ELOI search completed at 13/02/17 19:13:03 - 1 result
19:13:05	** LOI search completed at 13/02/17 19:13:05
19:13:56	CALLER ADVISES DEFINATELY SEPARATE FIRE
19:14:52	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:14:52	INC INFO: FIRE SEEN POSS NEAR SIGN OF BELLBIRD
19:14:52	- VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
19:14:52	Caller Address = [REDACTED] HUNTERS ROAD, DIAMOND HARBOUR, CHRISTCHURCH CITY, Call Source
19:14:52	= 111Inc InfoFIRE SEEN POSS NEAR SIGN OF BELLBIRD, Event Source = Fire 111
19:14:52	End of Duplicate Event data
19:15:34	Unit GOVE331 [K1 : PROCEEDING TO INCIDENT]
19:15:49	Duplicate Event:Location = SUMMIT RD,CASHMERE,CHRISTCHURCH CITY: @SIGN OF THE
19:15:49	KIWI, Type = VEG - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source
19:15:49	= 111Inc InfoFIRE IN TREELINE, Event Source = Fire 111
19:15:50	INC INFO: FIRE IN TREELINE
19:15:50	End of Duplicate Event data
19:16:24	APPROX 300M FROM SIGN OF KIWI
19:16:49	Unit GOVE3326 [K1 : PROCEEDING TO INCIDENT]
19:17:33	Duplicate Event: CHRISTCHURCH CITYCross Street 1SUMMIT RDCross Street 2DYERS
19:17:33	PASS RD, Type = VEG VEGETATION FIRE, Subtype = default, Caller Name =
19:17:33	CHRISTCHURCH CITY COUNCIL, Caller Ph Number = [REDACTED], Caller Address =
19:17:33	TELECOM CELLULAR 027, BLENHEIM, MARLBOROUGH DISTRICT, Call Source = 111Alarm
19:17:33	Level1Inc InfoSCRUB FIRE, Event Source = Fire 111
19:17:34	SUMMIT RD HEADING SOUTH FROM SIGN OF THE KIWI
19:17:34	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
19:17:34	INC INFO: FIRE VISIBLE
19:17:34	- MINOR, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoFIRE VISIBLE,
19:17:34	500M ROUND THE CORNER - SEE THE SMOKE
19:17:34	Event Source = Fire 111
19:17:34	TOP OF MCVICKERS PINE FOREST

19:17:34 INC INFO: SCRUB FIRE
19:17:34 ** ELOI search completed at 13/02/17 19:17:15 - 1 result
19:17:34 ##
19:17:34 ** LOI search completed at 13/02/17 19:17:17
19:17:34 CALLER IS [REDACTED]
19:17:34 ##
19:17:34 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:17:34 INC INFO: SMOKE IN VICINITY
19:17:34 - VEGETATION FIRE, Caller Name = ACTRIX NETWORKS LIMITED, Caller Ph Number =
19:17:34 [REDACTED], Caller Address = [REDACTED] THE TERRACE, GOVERNORS BAY, CHRISTCHURCH CITY,
19:17:34 Call Source = 111Inc InfoSMOKE IN VICINITY, Event Source = Fire 111
19:17:34 End of Duplicate Event data
19:17:35 End of Duplicate Event data
19:17:35 ** Cross Referenced to Event # F2245694 at: 13/02/17 19:17:35
19:17:35 End of Duplicate Event data
19:17:43 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:17:43 - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number =
19:17:43 [REDACTED], Caller Address = [REDACTED] ANDERSONS ROAD, CHARTERIS BAY, CHRISTCHURCH
19:17:43 CITY, Call Source = 111Inc InfoTWO FIRE ON SUMMIT RD, Event Source = Fire 111
19:17:44 INC INFO: TWO FIRE ON SUMMIT RD
19:17:44 MULTIPLE SUBSCRIBERS FOR CALLER NUMBER [REDACTED]. TESA LOOKUP RECOMMENDED.
19:17:44 End of Duplicate Event data
19:17:54 Duplicate Event:Location = DYERS PASS RD,/SUMMIT RD,CASHMERE,CHRISTCHURCH CITY,
19:17:54 FLYING NUN MOUNTAIN BIKE TRACK
19:17:54 INC INFO: SCRUB FIRE
19:17:54 Type = VEG - VEGETATION FIRE, Call Source = 111Inc InfoSCRUB FIRE
19:17:54 End of Duplicate Event data
19:18:03 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:18:03 CALLER LOOKING THROUGH BINOCULARS FROM DIAMOND HARBOUR
19:18:03 - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
19:18:03 INC INFO: SMOKE SHOWING
19:18:03 Caller Address = [REDACTED] STODDART TERRACE,, Call Source = 111Inc InfoSMOKE SHOWING ,
19:18:03 FEW HUNDRED METERS FROM SIGN OF THE KIWI
19:18:03 Event Source = Fire 111
19:18:03 INC INFO: SMOKE SHOWING
19:18:03 End of Duplicate Event data
19:18:08 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller Ph
19:18:08 Number = [REDACTED], Call Source = 111, Event Source = Fire 111
19:18:09 INC INFO:
19:18:09 End of Duplicate Event data

19:18:36 Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
19:18:36 Type = VEG - VEGETATION FIRE, Caller Name = SNAP LIMITED, Caller Ph Number =
19:18:36 [REDACTED], Caller Address = [REDACTED] LNP FICT,, Call Source = 111Inc InfoSCRUB FIRE,
19:18:36 Event Source = Fire 111
19:18:37 INC INFO: SCRUB FIRE
19:18:37 End of Duplicate Event data
19:19:39 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:19:39 - VEGETATION FIRE, Caller Name = SNAP LIMITED, Caller Ph Number = [REDACTED],
19:19:39 Caller Address = [REDACTED] LNP FICT,, Call Source = 111Inc InfoSCRUB FIRE, Event
19:19:39 Source = Fire 111
19:19:40 2 KM WEST THE SIGN OF THE KIWI
19:19:40 INC INFO: SCRUB FIRE
19:19:40 End of Duplicate Event data
19:19:48 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:19:48 INC INFO: FIRE IN VICINITY
19:19:48 - VEGETATION FIRE, Caller Name = [REDACTED] -, Caller Ph Number = [REDACTED], Call
19:19:48 Source = 111Inc InfoFIRE IN VICINITY , Event Source = Fire 111
19:19:48 End of Duplicate Event data
19:20:24 INC INFO: SCRUB FIRE
19:20:24 Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
19:20:24 Type = VEG - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source =
19:20:24 111Inc InfoSCRUB FIRE, Event Source = Fire 111
19:20:24 End of Duplicate Event data
19:20:25 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:20:25 INC INFO: SMOKE IN AREA
19:20:25 - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source = 111Inc
19:20:25 InfoSMOKE IN AREA, Event Source = Fire 111
19:20:25 End of Duplicate Event data
19:20:36 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller
19:20:36 Name = ORION NZ LTD, Caller Ph Number = [REDACTED], Caller Address = TELECOM
19:20:36 CELLULAR 027, BUCKLANDS BEACH, AUCKLAND CITY, Call Source = 111, Event Source =
19:20:36 Fire 111
19:20:37 INC INFO:
19:20:39 End of Duplicate Event data
19:20:40 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
19:20:40 - MINOR, Caller Name = PREPAID/TELECOM, Caller Ph Number = [REDACTED], Caller
19:20:40 Address = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Call Source = 111Inc
19:20:40 InfoFIRE VICINITY, Event Source = Fire 111
19:20:41 DIRECTLY BEHIND THE NEW ADVENTURE PARK
19:20:41 INC INFO: FIRE VICINITY

19:20:42 End of Duplicate Event data
19:20:45 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:20:45 - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED]
19:20:45 Call Source = 111Inc InfoSMOKE SHOWING , Event Source = Fire 111
19:20:46 INC INFO: SMOKE SHOWING
19:20:47 End of Duplicate Event data
19:21:22 Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
19:21:22 INC INFO: SCRUB FIRE
19:21:22 Type = VEG - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source =
19:21:22 111Inc InfoSCRUB FIRE, Event Source = Fire 111
19:21:22 End of Duplicate Event data
19:21:48 //BROWN//
19:22:30 Unit GOVE331 [K88 : PROPERTY SMALL]
19:22:42 Unit GOVE331 [K88 : PROPERTY SMALL]
19:22:49 Unit GOVE3326 [K2 : IN ATTENDANCE AT INCIDENT]
19:22:56 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:22:56 - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
19:22:56 Caller Address = [REDACTED] MAIN ROAD, ALLANDALE, CHRISTCHURCH CITY, Call Source =
19:22:56 111Inc InfoFIRE ON THE HILL, Event Source = Fire 111
19:22:57 INC INFO: FIRE ON THE HILL
19:22:57 End of Duplicate Event data
19:23:48 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:23:48 INC INFO: FIRE VICINITY
19:23:48 - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
19:23:48 Caller Address = [REDACTED] BAYVIEW, CASS BAY, CHRISTCHURCH CITY, Call Source = 111Inc
19:23:48 InfoFIRE VICINITY, Event Source = Fire 111
19:23:48 End of Duplicate Event data
19:23:52 INC INFO: SCRUB FIRE
19:23:52 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:23:52 - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
19:23:52 Caller Address = TELECOM CELLULAR 027, PALMERSTON NORTH, PALMERSTON NORTH CITY,
19:23:52 Call Source = 111Inc InfoSCRUB FIRE, Event Source = Fire 111
19:23:52 End of Duplicate Event data
19:25:04 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:25:04 INC INFO: FIRE IN VICINITY
19:25:04 - VEGETATION FIRE, Caller Name = VODAFONE NEW ZEALAND LTD, Caller Ph Number =
19:25:04 [REDACTED], Caller Address = [REDACTED] TAIMANA LANE, DIAMOND HARBOUR, CHRISTCHURCH CITY,
19:25:04 Call Source = 111Inc InfoFIRE IN VICINITY , Event Source = Fire 111
19:25:04 End of Duplicate Event data
19:25:46 INC INFO: FIRE SEEN FROM CHARTERIS BAY

19:25:46 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
19:25:46 - MINOR, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
19:25:46 Caller Address = [REDACTED] BAYVIEW ROAD, CHARTERIS BAY, CHRISTCHURCH CITY, Call Source
19:25:46 = 111Inc InfoFIRE SEEN FROM CHARTERIS BAY, Event Source = Fire 111
19:25:47 End of Duplicate Event data
19:26:05 Unit GOVE331 [KC : UNIT CALLING]
19:27:04 Unit GOVE331 [SITREP :] DCFO WEAVER UP THE HILL APPROX 50M BY 20M NEED ANOTHER
19:27:04 TANKER
19:27:55 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
19:27:55 INC INFO: FIRE SEEN
19:27:55 - MINOR, Caller Name = [REDACTED], Caller Ph Number = [REDACTED], Caller
19:27:55 Address = TELECOM CELLULAR 027, KARORI, WELLINGTON CITY, Call Source = 111Inc
19:27:55 InfoFIRE SEEN, Event Source = Fire 111
19:27:55 End of Duplicate Event data
19:28:12 INC INFO:
19:28:12 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller Ph
19:28:12 Number = [REDACTED], Call Source = 111, Event Source = Fire 111
19:28:12 End of Duplicate Event data
19:29:07 Unit VICT1811 [K1 : PROCEEDING TO INCIDENT]
19:29:43 Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
19:29:43 INC INFO: SMOKE IN THE AREA
19:29:43 Type = VEG - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source =
19:29:43 111Inc InfoSMOKE IN THE AREA, Event Source = Fire 111
19:29:43 End of Duplicate Event data
19:31:08 Unit GOVE331 [KP : PRIORITY MESSAGE] MP3 MT3 AND HELO FIRE 50M FRONT BURNING
19:31:08 UPHILL AT SIGN OF KIWI
19:31:21 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller
19:31:21 INC INFO:
19:31:21 Name = [REDACTED], Caller Ph Number = [REDACTED], Caller Address
19:31:21 = [REDACTED] BAYVIEW ROAD, CHARTERIS BAY, CHRISTCHURCH CITY, Call Source = 111, Event
19:31:21 Source = Fire 111
19:31:21 End of Duplicate Event data
19:31:56 ** Requirement PUMP added for alarm level 1
19:32:01 Unit GOVE331 [KC : UNIT CALLING]
19:32:04 ** Requirement TORT added for alarm level 1
19:32:08 ** Requirement TORT added for alarm level 1
19:32:14 Unit GOVE331 [KC : UNIT CALLING]
19:32:16 ** Recommended unit WAIN321 for requirement PUMP (>9.2 km)
19:32:16 CFO NORRIS REQUIRE HELO
19:32:16 ** Recommended unit LYTT291 for requirement ADHOC PUMP (>6.4 km)

19:32:16	** Recommended unit BROO3111 for requirement ADHOC TORT (>23.7 km)
19:32:16	** No recommendation for requirement ADHOC TORT
19:32:41	AL: PAGING ACK RECEIVED FROM STATION 3429 at 13/02/17 19:32:40
19:32:43	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:32:43	INC INFO: FIRE IN VICINITY
19:32:43	- VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoFIRE
19:32:43	IN VICINITY, Event Source = Fire 111
19:32:43	End of Duplicate Event data
19:32:44	AL: PAGING ACK RECEIVED FROM STATION 3431 at 13/02/17 19:32:44
19:33:05	Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
19:33:05	INC INFO: FIRE TO RIGHT OF SUGAR LOAF
19:33:05	Type = VEG - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number =
19:33:05	[REDACTED], Caller Address = TELECOM CELLULAR 027, OAMARU, WAITAKI DISTRICT,
19:33:05	Call Source = 111Inc InfoFIRE TO RIGHT OF SUGAR LOAF , Event Source = Fire 111
19:33:05	End of Duplicate Event data
19:34:13	Unit WAIN321 [K1 : PROCEEDING TO INCIDENT]
19:34:22	Unit GOVE331 [SITREP :] FIRE THREATENING POWERLINES GOVE331 FILLING UP AT SIGN
19:34:22	OF KIWI TANKS
19:35:17	AL: PAGING ACK RECEIVED FROM STATION 3491 at 13/02/17 19:35:17
19:36:25	.
19:37:03	.
19:37:22	Unit LYTT291 [K1 : PROCEEDING TO INCIDENT]
19:38:04	Unit BURN9111 [K1 : PROCEEDING TO INCIDENT]
19:38:47	Unit BROO3111 [K1 : PROCEEDING TO INCIDENT]
19:39:43	Unit VICT1811 [K2 : IN ATTENDANCE AT INCIDENT]
19:40:15	RFO DOC RESPONDING AN RFO TO SCENE
19:46:38	Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
19:46:38	Type = MIN - MINOR, Caller Ph Number = [REDACTED], Call Source = 111Inc
19:46:38	InfoSMOKE IN THE AREA, Event Source = Fire 111
19:46:39	INC INFO: SMOKE IN THE AREA
19:46:39	End of Duplicate Event data
19:50:13	Unit WAIN321 [K2 : IN ATTENDANCE AT INCIDENT]
19:50:27	Unit WAIN321 [KP : PRIORITY MESSAGE]
19:51:04	**
19:51:06	Unit WAIN321 [KP : PRIORITY MESSAGE] LARGE AMOUNTS OF TRAFFIC POLICE REQUIRED
19:51:17	****
19:51:19	FIR2POL
19:51:24	TRAFFIC CONTROL REQUIRED
19:51:40	LARGE AMOUNTS OF PEOPLE/VEHICLES GETTING IN THE WAY OF RESPONDING APPLIANCES ON

19:51:40 THE SUMMIT ROAD
19:51:41 DOC HAVE DISPATCHED APPLIANCE FROM RANGIORA WITH RFO [REDACTED] IS CONTACT
19:51:41 FROM DOC
19:51:43 **
19:51:43 RRRR
19:53:10 ..
19:53:48 Unit LYTT291 [K2 : IN ATTENDANCE AT INCIDENT]
19:54:42 INC INFO: SMOKE IN THE AREA
19:54:42 Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
19:54:42 Type = VEG - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source =
19:54:42 111Inc InfoSMOKE IN THE AREA, Event Source = Fire 111
19:54:43 End of Duplicate Event data
19:55:11 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller Ph
19:55:11 INC INFO:
19:55:11 Number = [REDACTED], Call Source = 111, Event Source = Fire 111
19:55:11 End of Duplicate Event data
19:55:26 Unit GOVE331 [KP : PRIORITY MESSAGE]
19:55:56 Unit GOVE331 [SITREP :] APPOINTED SAFETY OFFICER
19:56:04 ** Event P028500764 transferred from NZP/CR to NZP/CU as P028500764 at 13/02/17
19:56:04 19:56:04
19:56:05 INC INFO: SCRUB FIRE ON THE FLYING NUN MOUNTAIN TRACK
19:56:05 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:56:05 - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source = 111Inc
19:56:05 InfoSCRUB FIRE ON THE FLYING NUN MOUNTAIN TRACK, Event Source = Fire 111
19:56:05 End of Duplicate Event data
19:56:18 Unit GOVE331 [COMCEN COM : MESSAGE] BROOKLANDS TANKER AND BURNHAM TANKER
19:56:18 RESPONDING (ACK)
19:56:57 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
19:56:57 INC INFO: FIRE IN VICINITY
19:56:57 - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoFIRE
19:56:57 IN VICINITY , Event Source = Fire 111
19:56:57 End of Duplicate Event data
20:03:11 RFO DARREN WOODS ADVISES ADDITIONAL TANKERS ARE AVAILABLE NOW AND CAN
DEPART
20:03:11 WITHIN 10 MINUTES IF REQUIRED
20:03:59 Unit BROO3111 [KC : UNIT CALLING]
20:04:46 Unit BROO3111 [SITREP :] LOCATION DETAILS (DETAILS PASSED)
20:05:25 Unit GOVE331 [KC : UNIT CALLING]
20:06:27 Unit GOVE331 [SITREP :] VICT1811 LOCATION? (INFO PASSED)
20:11:25 Unit BURN9111 [K2 : IN ATTENDANCE AT INCIDENT]

20:16:23	.
20:16:50	CHI21 - NEEDS SYERS/SUMMIT ROAD BLOCKED
20:18:30	.
20:18:47	10 QUARRYS LANE - HAS A POOL
20:18:48	.
20:21:06	** Cross Referenced to Event # P028501000 at: 13/02/17 20:21:06
20:25:09	IS WORSLEY ROAD EVACUATING>
20:25:32	Unit GOVE331 [KC : UNIT CALLING]
20:26:23	Unit GOVE331 [SITREP :] 6 DELIVERIES IN USE. AREA OF APPROX 400 BY 400 SQUARE
20:26:23	M AND 1 HELO IN USE NO HOUSES BEING EVACUATED
20:27:15	WORSLEY NOT EVACUATING
20:28:34	.
20:28:51	SRWV2 - TO SUMMIT/DYERS
20:31:14	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller
20:31:14	INC INFO:
20:31:14	MULTIPLE SUBSCRIBERS FOR CALLER NUMBER [REDACTED]. TESA LOOKUP RECOMMENDED.
20:31:14	Name = [REDACTED] Caller Ph Number = [REDACTED], Caller Address = [REDACTED] BUXTONS
20:31:14	ROAD, LYTTELTON, CHRISTCHURCH CITY, Call Source = 111, Event Source = Fire 111
20:31:14	End of Duplicate Event data
20:33:21	.
20:33:56	DOC SMOKE CHASER WITH 2 FF AND 4WD FROM RANGIORA RESPONDING
20:35:04	Unit BURN9111 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
20:36:00	.
20:36:22	Unit LINC4111 [K1 : PROCEEDING TO INCIDENT]
20:36:27	2 MALES WALKING INTO THE PATH OF THE FIRE - CHI21 WALKING INTO GET THEM BACK
20:48:24	CHA 10-2 SELWYN EOC
20:49:38	EOC IS AT DISTRICT COUNCIL
20:49:59	** LOI search completed at 13/02/17 20:49:59
20:50:14	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
20:50:14	INC INFO: FIRE IN VICINITY
20:50:14	- VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoFIRE
20:50:14	SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY
20:50:14	IN VICINITY , Event Source = Fire 111
20:50:14	End of Duplicate Event data
20:50:15	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller
20:50:15	Name = ACCOUNTING INFO LIMITED, Caller Ph Number = [REDACTED], Caller Address =
20:50:15	TELECOM CELLULAR 027, OAMARU, WAITAKI DISTRICT, Call Source = 111, Event Source
20:50:15	= Fire 111
20:50:16	INC INFO:
20:50:16	End of Duplicate Event data

20:50:23	Duplicate Event:Location = SUMMIT RD,/DYERS PASS RD,CASHMERE,CHRISTCHURCH CITY,
20:50:23	Type = MIN - MINOR, Caller Name = TELECOM/PREPAID, Caller Ph Number =
20:50:23	[REDACTED], Caller Address = TELECOM CELLULAR 027, KARORI, WELLINGTON CITY,
20:50:23	Call Source = 111Inc InfoFIRE AT SIGN OF THE KIWI, Event Source = Fire 111
20:50:24	INC INFO: FIRE AT SIGN OF THE KIWI
20:50:24	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
20:50:24	INC INFO: FIRE HAS GONE OVER THE LYTTELTON SIDE
20:50:24	- VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
20:50:24	Caller Address = [REDACTED] EMERSON CRESCENT, DIAMOND HARBOUR, CHRISTCHURCH CITY, Call
20:50:24	Source = 111Inc InfoFIRE HAS GONE OVER THE LYTTELTON SIDE, Event Source = Fire
20:50:24	111
20:50:24	End of Duplicate Event data
20:50:24	End of Duplicate Event data
20:54:57	Unit GOVE331 [KC : UNIT CALLING]
20:55:10	Unit GOVE331 [KC : UNIT CALLING]
20:56:09	Unit GOVE331 [SITREP :] DCFO WEAVER STILL SEMI IN CHARGE OF FIRE AT THE MOMENT
20:56:09	HELI HITTING IT AS WELL AT THE MOMENT
20:57:51	RRRR
21:00:41	Unit LINC4111 [K2 : IN ATTENDANCE AT INCIDENT]
21:03:31	.
21:03:40	CHA - AT EOC, SELWYN COUNCIL
21:03:52	CHI23 TO HACKTHORNE/DYERS
21:05:55	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Caller
21:05:55	INC INFO:
21:05:55	Name = TELECOM/PREPAID, Caller Ph Number = [REDACTED], Caller Address = TELECOM
21:05:55	CELLULAR 027, KARORI, WELLINGTON CITY, Call Source = 111, Event Source = Fire
21:05:55	111
21:05:55	End of Duplicate Event data
21:07:40	INC INFO: FIRE IN VICINITY
21:07:40	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
21:07:40	- MINOR, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoFIRE IN
21:07:40	VICINITY, Event Source = Fire 111
21:07:40	End of Duplicate Event data
21:08:33	CALLER ADVISING FIRE IN VICINITY OF DYERS PASS ROAD.
21:09:43	.
21:09:53	CHI23 - DYERS PASS/HACKTHORNE
21:11:27	Duplicate Event: DYERS PASS RD CHRISTCHURCH CITYCross Street 1VICTORIA PARK
21:11:27	RDCross Street 2SUMMIT RD, Type = VEG VEGETATION FIRE, Subtype = default, Call
21:11:27	Source = 111Alarm Level1Inc InfoFIRE IN VICINITY
21:11:28	End of Duplicate Event data

21:11:28 FIRE MOVING AWAY FROM SUGARLOAF
21:11:28 INC INFO: FIRE IN VICINITY
21:11:28 ** LOI search completed at 13/02/17 20:55:06
21:11:28 ** ELOI search completed at 13/02/17 20:55:06 - 1 result
21:11:28 CALLER SAID BETWEEN SUGARLOAF AND VICTORIA PARK CASHMERE
21:11:28 THINKS ITS BEEN BURNING FOR ABOUT 10 MINS
21:11:29 ** Cross Referenced to Event # F2245775 at: 13/02/17 21:11:29
21:15:30 .
21:15:43 WEATHER FORCAST REQUIRED
21:17:10 .
21:18:18 MODERATE BREEZE 7MILS FROM NORTHWEST, 16 DEGREES ZERO PRECIPATION
21:18:23 2200-0100
21:23:33 Unit GOVE331 [KC : UNIT CALLING]
21:23:35 Unit GOVE331 [COMCEN COM : MESSAGE] CIVIL DEFENSE WANT TO KNOW IF THEY NEED TO
21:23:35 ADVISE LOCALS TO EVACUATE AS MANY RESIDENTS ARE ASKING ABOUT IT. CAN YOU
ADVISE
21:23:35 IF FIRE IS TRACK DOWN TOWARDS THEM? (STAND BY HAVING A MANAGEMENT MEETING)
21:23:53 .
21:23:59 *****
21:24:17 @2124
21:24:39 Unit GOVE331 [SITREP :] CFO NORRIS. STILL FIGHTING FIRE. ON ORIGINAL SIDE OF
21:24:39 SUMMIT ROAD. HAS NOT JUMPED. NO NEED TO EVACUATED DOWN THE HILL AT THIS STAGE.
21:24:39 STILL WORKING WITH MULTIPLE DELIVERIES. LOOKING TO HAND OVER TO RURAL FIRE IN
21:24:39 THE NEXT FEW HOURS.
21:25:13 Unit GOVE331 [SITREP :] FUEL TRAILER NOT NEEDED AT THIS STAGE.
21:25:18 INC INFO: FIRE IN VICINITY
21:25:18 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
21:25:18 - VEGETATION FIRE, Caller Name = TELSTRACLEAR LTD, Caller Ph Number =
21:25:18 [REDACTED], Caller Address = [REDACTED] BARRINGTON STREET, SOMERFIELD, CHRISTCHURCH
21:25:18 CITY, Call Source = 111Inc InfoFIRE IN VICINITY , Event Source = Fire 111
21:25:18 End of Duplicate Event data
21:27:20 Unit GOVE331 [KC : UNIT CALLING]
21:27:50 Unit GOVE331 [SITREP :] CAN WE GET AN ON DUTY EXEC TO THIS JOB
21:29:26 Unit BROO3111 [K2 : IN ATTENDANCE AT INCIDENT]
21:36:24 Unit GOVE331 [KC : UNIT CALLING]
21:36:41 Unit GOVE331 [K45 : COMMAND RESPONSIBILITY CHANGED TO - NAME] CFO NORRIS
21:37:09 Unit GOVE331 [SITREP :] CAN YOU CONFIRM EXEC RESPONING (NOT AT THIS STAGE)
21:39:24 Unit GOVE331 [SITREP :] FIRE CURRENTLY BURNING UNCONTAINED STILL CREWS
21:39:24 WORKING TO PREVENT IT JUMPING SUMMIT ROAD. CURRENTLY ABOVE SUMMIT ROAD
BURNING

21:39:24	TOWARDS MARLEYS HILL. FIRE IS BURNING IN MCVICARS PLANTATION WOULD BE GOOD IF WE
21:39:24	CAN GET A REP FROM THERE ON SITE. CREWS WITHDRAWN FOR SAFETY REASONS.
21:39:24	CONCENTRATING ON SUMMIT ROAD FLANK. IF WE CAN CONTAIN THAT WE WILL MOVE TO THE
21:39:24	SOUTHERN FLANK BURNING UP MARLEYS HILL. WE ARE DOING EVAC OF HOUSES ON SUMMIT
21:39:24	ROAD AND WORSLEYS ROAD.
21:45:06	.
21:45:25	SRWV2 FREE FROM DYERS PASS ROAD
21:45:27	.
21:45:32	NIWA FORECAST - NOW TILL 0600 SUSTAINED WIND FROM NW 20-30KPH WINDS MAY TEND W
21:45:45	TO WNW CLOSER TO 0600 WIND GUSTS TO 65 KPH TO MIDNIGHT AFTER MIDNIGHT 45-55 KPH
21:45:58	0600 - MIDDAY SUSTAINED WIND W TO WNW 20-30 KPH WIND GUST 45 -55 KPH....NB
21:46:16	70 KPH AROUND 1400 (NOTE THIS IS OUTSIDE FORECAST REQUEST
21:53:53	Unit CHRISTCH2 [K1 : PROCEEDING TO INCIDENT]
21:54:04	Unit GOVE331 [KC : UNIT CALLING]
21:54:12	Unit GOVE331 [KC : UNIT CALLING]
21:54:46	Unit GOVE331 [K11E : ELECTRICAL AUTHORITY REQUIRED] POWER LINES ON FIRE
21:58:00	ORION ETA 20-30 MINS
22:01:59	Unit BROO3111 [K2 : IN ATTENDANCE AT INCIDENT]
22:07:22	.
22:08:00	Unit LYTT291 [SITREP :] CAN LYTT291 CHECK RE THE REAPEATER ON WORSLEYS ROAD
22:09:13	SRWV2 - CLEARING HOUSES ON EARLY VALLEY ROAD
22:09:22	Unit LYTT291 [COMCEN COM : MESSAGE] DISTANCE FROM REPEATER? (ROUGHLY 200M
22:09:22	INVESTIGATING WATER SOURCE)
22:11:24	Unit CHRISTCH2 [K2 : IN ATTENDANCE AT INCIDENT]
22:11:39	Unit GOVE331 [COMCEN COM : MESSAGE] CFO NORRIS TO CONTACT SO WEST VIA PHONE (ACK
22:11:39	WILL COME BACK WITH SITREP AFTER THAT)
22:15:42	Unit GOVE331 [KC : UNIT CALLING]
22:16:34	Unit GOVE331 [KC : UNIT CALLING]
22:17:45	Unit GOVE331 [COMCEN COM : MESSAGE] NOTHING HEARD BRUCE JANE FROM DOC TO RESPOND
22:17:45	TO THIS LOCATION TO TALK TO CFO NORRIS
22:18:37	INC INFO: FIRE IN VICINITY
22:18:37	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
22:18:37	- MINOR, Caller Ph Number = [REDACTED] Call Source = 111Inc InfoFIRE IN
22:18:37	VICINITY, Event Source = Fire 111
22:18:37	End of Duplicate Event data
22:19:35	.
22:20:05	RFO DOC CANTY PAGED RE BRUCE JANE REQUEST
22:20:51	RUNG [REDACTED] HE TRIED TO GET TO THE SCENE, WAS STOPPED FROM

22:20:51	GETTING THRU.
22:20:55	.
22:21:13	**
22:23:26	Unit WEST9571 [K2 : IN ATTENDANCE AT INCIDENT]
22:26:49	10/1'D
22:30:02	.
22:30:04	XXXXX
22:30:06	MERGE
22:30:07	XXXX
22:30:09	.
22:30:31	Duplicate Event: DYERS PASS RD CHRISTCHURCH CITY CASHMERE HILLS, Cross Street 1
22:30:31	= WESTENRA TCE, Cross Street 2 = HACKTHORNE RD, Type = 1F ASSIST
22:30:31	FIRE/AMBULANCE/TRAFFIC, Subtype = 2, Caller Name = STIRLING/EDWARD KAWHIA,
22:30:31	Caller Ph Number = [REDACTED], Caller Address = [REDACTED] SELWYN RD, LYTTLETON, Call
22:30:31	Source = PHONE, Alarm Level = 1, Headline = INFMT CAN SEE LOTS OF SMOKE COMING
22:30:31	FRMO CASHMERE HILLS, Event Source = *555
22:30:32	HEADLINE: INFMT CAN SEE LOTS OF SMOKE COMING FRMO CASHMERE HILLS
22:30:32	TD NOW
22:30:32	** LOI search completed at 13/02/17 20:20:18
22:30:32	SMOKE IS COVERING LYTTLETON AT THE MOMENT
22:30:32	RRRR.
22:30:32	INFMT WORRIED IT IS GETTING BIGGER AND COMING FOR CASHMERE
22:30:32	** Event P028501000 transferred from NZP/CR to NZP/CU as P028501000 at 13/02/17
22:30:32	20:20:31
22:30:32	C/T CANT FIND A 1F EVT
22:30:32	IN RELATION TO THIS ON CARD
22:30:32	FIRE SERVICE ATTENDING.
22:30:32	THAMNKS
22:30:32	** Cross Referenced to Event # P028500764 at: 13/02/17 20:21:06
22:30:32	INFMT ADVISED AS ABOVE
22:30:32	NNNN
22:30:32	XXXXMERGEXXXX
22:30:33	End of Duplicate Event data
22:30:34	Duplicate Event: CHRISTCHURCH CITY, Cross Street 1 = SUMMIT RD, Cross Street 2 =
22:30:34	GEBBIES PASS RD, Type = 2I INFORMATION, Subtype = 2, Caller Name = UK/ERU,
22:30:34	Caller Ph Number = [REDACTED], Caller Address = TRAFFIC MANAGEMNT, Call Source
22:30:34	= PHONE, Alarm Level = 1, Headline = VEH HAS GONE THROUGH A TRAFFIC STOP FOR THE
22:30:34	FIRE, Event Source = Police 111
22:30:35	TD NIL
22:30:35	HEADLINE: VEH HAS GONE THROUGH A TRAFFIC STOP FOR THE FIRE

22:30:35 ** LOI search completed at 13/02/17 22:15:35
22:30:35 L,AST SEEN DOT: NORTH ON SUMMIT ROAD FROM THE CLOSURE
22:30:35 MOT: [REDACTED]
22:30:35 NO REGO NUMBER OBTAINED
22:30:35 .
22:30:35 NIL DIRECT OBS NOW
22:30:35 INFT WILL BE IN AREA SO WILL KEEP OBS AND CALL BACK IF IT COMES OUT AGAIN
22:30:35 NNNN
22:30:35 SES3 ADVISED
22:30:35 XXXXMERGEXXXX
22:30:36 End of Duplicate Event data
22:30:37 ** Cross Referenced to Event # P028501811 at: 13/02/17 22:30:37
22:30:38 Duplicate Event: NULL CHRISTCHURCH CITY @DIAMOND HARBOUR, Cross Street 1 = RANUI
22:30:38 CR, Cross Street 2 = HUNTERS RD, Type = 2P PUBLIC RELATIONS, Subtype = 2, Caller
22:30:38 Name = ALBERT, Caller Ph Number = [REDACTED], Caller Address = MARITIME OPS
22:30:38 CENTRE, Call Source = PHONE, Alarm Level = 1, Headline = SMOKE SEEN AND PLASTIC
22:30:38 SMELL , Event Source = SCC AES
22:30:39 TD 10MINS
22:30:39 HEADLINE: SMOKE SEEN AND PLASTIC SMELL
22:30:39 CALL CAME FROM A [REDACTED] - NIL CONTACT DETAILS
22:30:39 RRRR
22:30:39 MIKE HAD CALLED MARITIME OPS CENTRE TO REPORT THIS
22:30:39 IS CURRENTLY ON A MOORING IN PURAU BAY
22:30:39 ..
22:30:39 FIRE SERVICE DEALING WITH LARGE FIRE NEAR TAI TAPU.
22:30:39 ..
22:30:39 LARGE PALL OF SMOKE DRIFTING EAST.
22:30:39 SMOKE IS REPORTED AS TO THE WEST OF PURAU BAY AND SOUTH OF DIAMOND HARBOUR
22:30:39 *RGR
22:30:39 ** Cross Referenced to Event # P028499797 at: 13/02/17 20:38:25
22:30:39 ** Event P028501150 transferred from NZP/CR to NZP/CU as P028501150 at 13/02/17
22:30:39 20:38:32
22:30:39 ADVISED IS RELATED TO A LARGE FIRE
22:30:39 NNNN
22:30:39 ** LOI search completed at 13/02/17 20:39:03
22:30:39 XXXXMERGEXXXX
22:30:40 End of Duplicate Event data
22:30:42 ** Cross Referenced to Event # P028501150 at: 13/02/17 22:30:42
22:46:05 CHI21 STILL TRYING TO LOCATE A BLUE VEHICLE THAT WENT THRU THE CORDON
22:51:10 NIL SIGN OF VEHICLE

22:51:20	HEADING BACK TO SIGN OF KIWI
23:09:25	Unit LINC4111 [KC : UNIT CALLING]
23:10:05	Unit LINC4111 [SITREP :] GET GOVE331 TO TALK TO US ON SMOKO
23:13:17	Unit GOVE331 [COMCEN COM : MESSAGE] CAN YOU LIAISE WITH LINC4111
23:17:28	Unit WEST9571 [K2 : IN ATTENDANCE AT INCIDENT]
23:19:22	Unit GOVE331 [KC : UNIT CALLING]
23:20:52	Unit GOVE331 [SITREP :] PEOPLE WILL NEED TO HEAD TOWARD GEBBIES PASS
23:31:33	Unit GOVE331 [COMCEN COM : MESSAGE] HOW HAVE THE EVACUATIONS BEEN CONDUCTED?
23:31:33	SELF EVACUATION? AND HOW MANY HOUSE HAVE BEEN EVACUATED?
23:33:03	Unit GOVE331 [SITREP :] WE WENT KNOCKING ON DOORS. ABOUT 5 HOUSES INCLUDING
23:33:03	THE 1 FARM AT THE TOP. NO 100% SURE AT THIS STAGE THOUGH
23:46:57	Unit GOVE331 [KC : UNIT CALLING]
23:48:04	Unit LINC4111 [KC : UNIT CALLING]
23:48:36	Unit GOVE331 [SITREP :] CFO NORRIS. FIRE BURNING ACTIVLY ON SEVERAL FRONTS.
23:48:36	ATTEMPTING TO HAND OVER TO RFO JANE FROM DOC. CAN YOU ADVISE POL THAT IS WE ARE
23:48:36	UNABLE TO CONTAIN FIRE IN THE NEXT 30MIN AND IT JUMPS SUMMIT ROAD WE WILL HAVE
23:48:36	TO EVAC GOVERNORS BAY. IF THEY CAN POSSIBLY START TO PREP FOR THAT. NOT NEEDED
23:48:36	AT THIS STAGE THOUGH
23:53:37	Unit CHRISTCH1 [K1 : PROCEEDING TO INCIDENT]
23:53:48	POLICE ADVISED AS PER POSS EVACUATIONS OF GOVERNORS BAY
23:53:59	Unit WEST9571 [KC : UNIT CALLING]
23:54:24	Unit WEST9571 [SITREP :] VEHICLE AND CREW WILL BE AT THIS FIRE OVER NIGHT
23:57:31	UPDATE FROM SES
23:57:39	REPORTS CIVIL DEFENCE HAVE STOOD THEM DOWN
23:59:33	** Event P028500764 transferred from NZP/CU to NZP/CR as P028500764 at 13/02/17
23:59:33	23:59:33
00:07:07	Unit GOVE331 [KC : UNIT CALLING]
00:07:34	Unit GOVE331 [SITREP :] CFO NORRIS K45 PRFO JANE OF DOC
00:09:03	Unit GOVE331 [SITREP :] HAVE MADE GOOD PROGRESS STOPPING FIRE AT SIGN OF KIWI.
00:09:03	EVAC OF GOVERNORS BAY LOOKS UNLIKELY. HOPE TO RELEASE LYTTTELTON AND GOVERNORS
00:09:03	BAY PUMPS IN THE NEXT 30 MIN BUT TANKERS WILL REMAIN (DO YOU REQUIRE GOVE3311 AS
00:09:03	WELL) AFFIRM THEY ARE NEEDED HERE.
00:09:21	Unit GOVE3311 [K1 : PROCEEDING TO INCIDENT]
00:09:30	Unit CHRISTCH1 [K6 : ON TELEPAGER]
00:10:04	Unit GOVE3311 [COMCEN COM : MESSAGE] FULL LOAD OF WATER AND 5 MIN AWAY
00:10:10	Unit GOVE3311 [K1 : PROCEEDING TO INCIDENT]
00:11:08	Unit LINC4126 [K1 : PROCEEDING TO INCIDENT]
00:12:23	Unit WEST9571 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]

00:13:19	^
00:13:24	*****
00:13:37	Unit GOVE3311 [K2 : IN ATTENDANCE AT INCIDENT]
00:13:48	@0010HRS UPDATE FROM FIRE..... MADE GOOD INROADS WITH SUMMIT RD FIRE
00:13:59	AT THIS STAGE EVAC OF GOV BAY.....UNLIKELY
00:14:00	^
00:14:10	SCB5 ADVISED DCC
00:15:37	*****
00:24:22	Unit GOVE331 [KC : UNIT CALLING]
00:25:00	Unit GOVE331 [SITREP :] DCFO WEAVER BEEN NOTIFIED BY ELECTRICITY AUTHORITY.
00:25:00	POWER IS NOW OFF ON THE POWER LINES THAT HAVE BEEN INVOLVED IN FIRE
00:30:50	Unit LINC4126 [K2 : IN ATTENDANCE AT INCIDENT]
00:31:47	Unit LINC4126 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
01:05:39	AL: PAGING ACK RECEIVED FROM STATION 3423 at 14/02/17 01:05:39
01:08:11	Unit STAL231 [K1 : PROCEEDING TO INCIDENT]
01:10:08	Unit WAIN321 [KC : UNIT CALLING]
01:10:38	Unit WAIN321 [SITREP :] LEAVING SCENE
01:10:47	Unit WAIN321 [K10 : RECOMMISSIONING]
01:26:45	Unit LYTT291 [K3 : ON RT OUTSIDE NORMAL TURNOUT AREA]
01:31:06	Unit STAL231 [K2 : IN ATTENDANCE AT INCIDENT]
01:41:10	Unit GOVE331 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
01:46:28	Unit GOVE3326 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
01:49:45	Unit CHRISTCH2 [K6 : ON TELEPAGER]
01:50:46	Unit CHRISTCH2 [SITREP :] STAL231 WILL BE HERE APPROX 90 MINS AND SUPPLIED BY
01:50:46	TANKERS ... FIRE WILL THEN BE HANDED OVER TO BRUCE JANE FROM DOC
04:11:52	Unit STAL231 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
04:21:21	Unit LINC4111 [K3 : ON RT OUTSIDE NORMAL TURNOUT AREA]
04:24:01	Unit BROO3111 [KC : UNIT CALLING]
04:31:47	Unit BROO3111 [K3 : ON RT OUTSIDE NORMAL TURNOUT AREA]
05:52:30	Unit BOTT1711 [K1 : PROCEEDING TO INCIDENT]
06:24:02	Unit BOTT1711 [K2 : IN ATTENDANCE AT INCIDENT]
06:51:42	FROM A NORRIS GOVE3311....HAS A RELIEF CREW ORGANISED FOR THE TANKER AT 8AM (CFO
06:51:42	NORRIS AWARE)
06:53:09	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
06:53:09	- MINOR, Caller Name = PREPAID/SPARK, Caller Ph Number = [REDACTED], Caller
06:53:09	Address = TELECOM CELLULAR 027, MOUNT WELLINGTON, AUCKLAND CITY, Call Source =
06:53:09	111Inc InfoSMOKE IN THE AREA , Event Source = Fire 111
06:53:10	INC INFO: SMOKE IN THE AREA
06:53:10	End of Duplicate Event data

07:14:55 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
07:14:55 - VEGETATION FIRE, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoSCRUB
07:14:55 FIRE NEAR CASS PEAK , Event Source = Fire 111
07:14:56 INC INFO: SCRUB FIRE NEAR CASS PEAK
07:14:56 End of Duplicate Event data
07:18:01 **
07:18:21 RFO DOC CANTERBURY PAGED FOR UPDATE
07:27:00 **
07:29:01 BACKING FOREST FIRE INTO ADVENTURE PARK. 3 HELOS OPERATING 2 CITY COUNCIL
07:29:01 TANKERS GOVERNORS BAY AND
07:29:19 **
07:29:56 [REDACTED]
07:29:59 **
07:53:51 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
07:53:51 - VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number = [REDACTED],
07:53:51 Caller Address = [REDACTED] CHURCH LANE, ALLANDALE, CHRISTCHURCH CITY, Call Source =
07:53:51 111Inc InfoFIRE NEAR THE GOLF BALL , Event Source = Fire 111
07:53:52 INC INFO: FIRE NEAR THE GOLF BALL
07:53:52 End of Duplicate Event data
11:08:11 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = ADV
11:08:11 INC INFO: SMOKE ON THE HILLS
11:08:11 - ADVISED, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoSMOKE ON
11:08:11 THE HILLS , Event Source = Fire 111
11:08:11 End of Duplicate Event data
11:13:17 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = MIN
11:13:17 - MINOR, Caller Ph Number = [REDACTED], Call Source = 111Inc InfoSMOK IN AREA,
11:13:17 Event Source = Fire 111
11:13:18 INC INFO: SMOK IN AREA
11:13:18 End of Duplicate Event data
11:16:07 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
11:16:07 - VEGETATION FIRE, Caller Name = CANTERBURY DISTRICT HEALTH BOARD, Caller Ph
11:16:07 Number = [REDACTED], Caller Address = 97 CASHMERE ROAD, CASHMERE, CHRISTCHURCH
11:16:07 CITY, Call Source = 111Inc InfoFIRE IN THE AREA , Event Source = Fire 111
11:16:08 INC INFO: FIRE IN THE AREA
11:16:08 End of Duplicate Event data
13:52:17 XXX
14:04:13 INC INFO: SMOKE SHOWING ON THIS SIDE OF HILL
14:04:13 Duplicate Event:Location = WALKWAY,GOVERNORS BAY,CHRISTCHURCH CITY, Type = ADV -
14:04:13 ADVISED, Caller Name = VODAFONE NEW ZEALAND LTD, Caller Ph Number = [REDACTED],
14:04:13 Caller Address = [REDACTED] MAIN ROAD, GOVERNORS BAY, CHRISTCHURCH CITY, Call Source =

14:04:13 111Inc InfoSMOKE SHOWING ON THIS SIDE OF HILL , Event Source = Fire 111

14:04:13 End of Duplicate Event data

15:02:08 Duplicate Event: SUMMIT RD SELWYN DISTRICTCross Street 1WORSLEYS RDCross Street

15:02:08 2GEBBIES PASS RD, Type = ADV ADVISED, Subtype = default, Caller Name =

15:02:08 [REDACTED] Caller Ph Number = [REDACTED], Caller Address = [REDACTED] CHURCH LANE,

15:02:08 ALLANDALE, CHRISTCHURCH CITY, Call Source = 111Alarm Level1Inc InfoPLUMES OF

15:02:08 SMOKE SHOWING IN VICINITY, Event Source = Fire 111

15:02:09 INC INFO: PLUMES OF SMOKE SHOWING IN VICINITY

15:02:09 ** LOI search completed at 14/02/17 14:54:24

15:02:09 ** ELOI search completed at 14/02/17 14:54:24 - 1 result

15:02:09 3 DIFFERENT PLUMMES OF FIRE IN AREA

15:02:09 CORRECTION PLUMMES OF SMOKE IN AREA

15:02:09 JANIE

15:02:09 CALLER WILL CALL BACK IF SAHE CAN SEE FLAMES OR FIRE GETS CLOSER

15:02:09 ** Event Priority changed from 2 to 9 at: 14/02/17 15:01:20

15:02:09 ** Event Type changed from VEG to ADV at: 14/02/17 15:01:20

15:02:10 End of Duplicate Event data

15:02:10 ** Cross Referenced to Event # F2246239 at: 14/02/17 15:02:10

15:05:50 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = ADV

15:05:50 - ADVISED, Caller Name = BLUE SUN (NZ) LIMITED, Caller Ph Number = [REDACTED],

15:05:50 Caller Address = TELECOM CELLULAR 027, SOUTH DUNEDIN, DUNEDIN CITY, Call Source

15:05:50 = 111Inc InfoSMOKE IN THE ADVENTURE PARK , Event Source = Fire 111

15:05:51 INC INFO: SMOKE IN THE ADVENTURE PARK

15:05:51 End of Duplicate Event data

15:35:38 ** Event Type changed from FIR2POL to 1F(2) at: 14/02/17 15:35:38

15:45:33 INC INFO: SCRUB FIRE IN OTNETAHI RESERVE

15:45:33 Duplicate Event: SUMMIT RD SELWYN DISTRICTCross Street 1WORSLEYS RDCross Street

15:45:33 ** ELOI search completed at 14/02/17 15:43:01 - 1 result

15:45:33 2GEBBIES PASS RD, Type = VEG VEGETATION FIRE, Subtype = default, Caller Name =

15:45:33 [REDACTED], Caller Ph Number = [REDACTED], Caller Address = TELECOM CELLULAR

15:45:33 ** LOI search completed at 14/02/17 15:43:03

15:45:33 Duplicate Event:Location = SUMMIT RD,KENNEDYS BUSH,SELWYN DISTRICT, Type = VEG -

15:45:33 027, PALMERSTON NORTH, PALMERSTON NORTH CITY, Call Source = 111Alarm Level1Inc

15:45:33 InfoSCRUB FIRE IN OTNETAHI RESERVE , Event Source = Fire 111

15:45:33 INC INFO: FLAMES FROM ONETAHI RESERVE

15:45:33 VEGETATION FIRE, Caller Name = [REDACTED] Caller Ph Number = [REDACTED],

15:45:33 Caller Address = [REDACTED] CHURCH LANE, ALLANDALE, CHRISTCHURCH CITY, Call Source =

15:45:33 111Inc InfoFLAMES FROM ONETAHI RESERVE, Event Source = Fire 111

15:45:33 End of Duplicate Event data

15:45:33 *

15:45:33 IS AWARE AND IS ON THE RADAR
15:45:33 *
15:45:34 End of Duplicate Event data
15:45:35 ** Cross Referenced to Event # F2246288 at: 14/02/17 15:45:35
16:12:49 Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
16:12:49 - VEGETATION FIRE, Caller Name = [REDACTED] Caller Ph Number = [REDACTED],
16:12:49 Caller Address = TELECOM CELLULAR 027, WELLINGTON CENTRAL, WELLINGTON CITY, Call
16:12:49 Source = 111Inc Info300M FIRE FRONT ON THE GOV BAY SIDE , Event Source = Fire
16:12:49 111
16:12:50 INC INFO: 300M FIRE FRONT ON THE GOV BAY SIDE
16:12:50 MULTIPLE SUBSCRIBERS FOR CALLER NUMBER [REDACTED]. TESA LOOKUP RECOMMENDED.
16:12:50 End of Duplicate Event data
16:13:32 .
16:13:46 MORE CALLS FROM GOVS BAY
16:13:49 .
16:35:53 ** Cross Referenced to Event # F2246318 at: 14/02/17 16:35:53
17:33:14 Unit GOVE3311 [KC : UNIT CALLING]
17:33:48 Unit GOVE3311 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
17:34:03 Unit GOVE3311 [SITREP :] BEEN GIVEN PERMISSION TO LEAVE
19:48:27 Unit BOTT1711 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
21:37:17 ****
21:37:19 ****
21:37:44 VERY ACTIVE FIRE IN MARLEYS HILL CURRENTLY. IS WITHIN CONTROL AREA. THERE WILL
21:37:44 BE CALLS AS IT IS VERY EASY TO SEE.
21:37:48 ****
21:38:01 RFO DOC BARRY HUNT IS CONTACT ON SCENE [REDACTED]
21:38:19 BARRY IS ON SCENE ALL NIGHT LOOKING AFTER THE FIRE NEAR MARLEYS HILL
21:38:23 ****
22:23:32 FLARE UP REPORTED NEAR ADVENTURE PARK. PASSED ONTO RFO BARRY HUNT. THEY ARE
22:23:32 CURRENTLY ON SCENE AT THE FLARE UP
23:15:13 ****
23:15:41 FIRE TRACKING DOWN THE HILL INTO GOVERNORS BAY REPORTED AS GROWING IN SIZE BY
23:15:41 MULTIPLE RESIDENTS
23:15:47 RFO BARRY HUNT GOING TO INVESTIGATE
23:16:12 RFO BARRY HUNT ALSO PUT THROUGH TO CFO GOVERNORS BAY (ANDREW NORRIS) FOR
23:16:12 FURTHER
23:16:12 INFO
23:16:16 ****
23:24:22 BARRY HUNT ADVISES OF A LARGE BREAKAWAY FIRE AT CASS PEAK. MAY CALL FOR
23:24:22 FURTHER
23:24:22 RESOURCES BUT WILL GET BACK TO US

23:25:43	CFO GOVERNORS BAY IS CHECKING ON THE FIRE TRACKING DOWN TOWARDS GOERNORS BAY
23:25:50	****
23:25:59	RRRR
23:37:50	BARRY HUNT REQUESTING 2 PUMPS 1 TANKER TO SUMMIT ROAD
23:39:21	AL: PAGING ACK RECEIVED FROM STATION 3422 at 14/02/17 23:39:21
23:39:27	AL: PAGING ACK RECEIVED FROM STATION 3433 at 14/02/17 23:39:27
23:40:11	*
23:40:23	*\
23:41:09	Unit ADDI221 [K1 : PROCEEDING TO INCIDENT]
23:43:53	*
23:43:57	Unit GOVE331 [K1 : PROCEEDING TO INCIDENT]
23:45:29	Unit GOVE3326 [K1 : PROCEEDING TO INCIDENT]
23:45:35	Unit GOVE3311 [K2 : IN ATTENDANCE AT INCIDENT]
23:46:27	Unit GOVE3311 [KC : UNIT CALLING]
23:47:13	Unit GOVE3311 [K1 : PROCEEDING TO INCIDENT]
23:51:48	Unit GOVE331 [K2 : IN ATTENDANCE AT INCIDENT]
23:53:22	Unit GOVE3326 [K2 : IN ATTENDANCE AT INCIDENT]
23:53:56	Unit GOVE3311 [K2 : IN ATTENDANCE AT INCIDENT]
23:58:19	Unit ADDI221 [K2 : IN ATTENDANCE AT INCIDENT]
00:07:04	Unit GOVE331 [KC : UNIT CALLING]
00:08:41	Unit GOVE331 [SITREP :] SO LOCKYER..GRASS FIRE..ASSISTING DOC..USING 4 HP
00:08:41	DELS..3311 HAS GONE TO SIGN OF THE TAKAHE TO REFILL....USING ADDINGTONS WATER
00:23:26	Unit GOVE331 [KC : UNIT CALLING]
00:23:51	Unit GOVE331 [SITREP :] 2111 TO RESPOND
00:25:36	Unit CHRI2111 [K1 : PROCEEDING TO INCIDENT]
00:32:57	Unit CHRI2111 [KC : UNIT CALLING]
01:11:42	Unit GOVE331 [KC : UNIT CALLING]
01:12:39	Unit GOVE331 [SITREP :] ASSISTING DOC..TRYING TO STOP THE FIRE JUMPING THE
01:12:39	ROAD.. USING 2 HP DEL AND ADDI221 USING DECK MONITOR
01:21:36	Unit CHRI2111 [K2 : IN ATTENDANCE AT INCIDENT]
02:05:26	Unit CHRI2111 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
02:07:37	*
02:08:35	*
02:09:13	*
02:11:05	*
02:17:43	*
02:18:37	*
02:18:48	Unit SOCK257 [K1 : PROCEEDING TO INCIDENT]
02:20:21	AL: PAGING ACK RECEIVED FROM STATION 3426 at 15/02/17 02:20:21

02:20:55	*
02:21:10	*
02:22:09	Unit HARE261 [K1 : PROCEEDING TO INCIDENT]
02:24:19	*****
02:24:28	STAL231 COVER MOVE TO SOCKBURN STATION
02:24:30	**
02:25:11	Unit GOVE331 [KC : UNIT CALLING]
02:25:32	Unit GOVE331 [STOP : MESSAGE] DOC HAS ADVISED US TO STAND DOWN
02:28:12	Unit GOVE331 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
02:35:27	Unit REGION4B [KC : UNIT CALLING]
02:35:39	*
02:35:50	Unit CHRI2111 [K1 : PROCEEDING TO INCIDENT]
02:36:02	FROM RFO DOC BARRY HUNT - FIRE IS 200METRES FROM SIGN OF THE KIWI - NW WINDS
02:36:02	30KNOTS
02:36:04	*
02:36:08	HAS ENOUGH TANKERS
02:36:10	FOR NOW
02:36:11	*
02:36:41	FIRECOM SM LIAISED WITH SOCK257 SPEAK WITH RFO HUNT IF NOT REQUIRED AT SUMMIT
02:36:41	ROAD HEAD INTO GOVERNORS BAY
02:36:42	*
02:37:08	Unit REGION4B [K1 : PROCEEDING TO INCIDENT]
02:38:01	Unit GOVE3311 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
02:38:16	FIREOCM SM LIAISED WITH HARE261 SPEAK WITH RFO HUNT IF NOT REQUIRED AT SUMMIT
02:38:16	ROAD HEAD INTO GOVERNORS BAY
02:38:19	*
02:39:59	*
02:41:06	***
02:42:04	RFO DOC (CRAIG) ADVISES REQUIRE THE ROADCLOSURE PUSHED BACK TO HACKTHORNE RD AND
02:42:04	MAIN RD GOVERNORS BAY
02:42:07	***
02:46:16	Unit HARE261 [K2 : IN ATTENDANCE AT INCIDENT]
02:47:32	*
02:47:57	Unit ADDI221 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
02:48:03	FRM RFO DOC FIRE IS VERY ACTIVE AND WITHIN 4-500M OF SIGN OF THE KIWI
03:00:27	Unit CHRI2111 [K9 : OFF RT - STATE LOCATION]
03:01:42	Unit CHRI2111 [K1 : PROCEEDING TO INCIDENT]
03:02:18	*
03:02:29	FROM REGION 4 BALMER NEED THE LARGE TANKER HERE NOW

03:02:31	AL: PAGING ACK RECEIVED FROM STATION 3431 at 15/02/17 03:02:31
03:02:39	SENDING CHRI2111, BROOKLANDS AND LINCOLN
03:03:21	*
03:03:32	RANG EOC SELWYN NO RESPONSE
03:03:35	*
03:03:55	EXTERNAL ALERT ACTIVATED ON LINC4111
03:03:57	*
03:11:58	Unit BROO3111 [K1 : PROCEEDING TO INCIDENT]
03:12:28	Unit BROO3111 [K1 : PROCEEDING TO INCIDENT]
03:13:05	Unit BROO3111 [KC : UNIT CALLING]
03:13:45	***
03:14:07	RFOSELW2 AT EARLY VALLEY ROAD ADVISES LINC4111 TANKER AVAILABLE BUT NOT CREWED
03:14:59	*
03:15:42	Unit CHRI2111 [K2 : IN ATTENDANCE AT INCIDENT]
03:15:48	Unit CHRI2111 [K2 : IN ATTENDANCE AT INCIDENT]
03:15:59	RFOSELW2 HAS ANOTHER RURAL TANKER AVAILABLE IF REQUIRED
03:20:28	*
03:23:15	Unit HARE261 [KC : UNIT CALLING]
03:23:19	Unit HARE261 [K2 : IN ATTENDANCE AT INCIDENT]
03:34:39	***
03:34:47	LINC4111 FULL OF WATER (FROM LINC CFO - CREW LEAVING
03:35:04	STATION SHORTLY TO UPLIFT
03:35:08	***
03:38:04	AAC BALMER PHONES IN AND REQUESTS RELIEF CREW FOR CHRI2111
03:39:22	Unit LINC4126 [SITREP :] HEADING TO PICK LINC4111 UP NOW
03:40:28	Unit LINC4126 [K1 : PROCEEDING TO INCIDENT]
03:41:29	RURAL TANKER THAT IS AVAILABLE AT EV RD WILL FOLLOW LINC4111 UP TO SUMMIT RD
03:41:30	**
03:43:52	Unit ROLL4211 [K1 : PROCEEDING TO INCIDENT]
03:48:22	Unit LINC4111 [K1 : PROCEEDING TO INCIDENT]
03:49:02	Unit SOCK257 [K2 : IN ATTENDANCE AT INCIDENT]
03:49:13	Unit REGION4B [K2 : IN ATTENDANCE AT INCIDENT]
03:54:16	Unit REGION4B [SITREP :] 4 DELS 4 HAND HELDS OFF HARE261 AND SOCK257 BEING FED
03:54:16	BY TANKERS..HOLDING FIRE BELOW SUMMIT RD..HAVE REQUESTED FROM ROB HANDS THAT WE
03:54:16	NEED HELO SUPPORT HERE AT EARLIEST LIGHT..
04:02:06	Unit BROO3111 [K2 : IN ATTENDANCE AT INCIDENT]
04:13:00	Unit ROLL4211 [K2 : IN ATTENDANCE AT INCIDENT]
04:24:23	Unit BROO3111 [KC : UNIT CALLING]
04:27:48	Unit BROO3111 [SITREP :] IOC HAREWOOD ADVISES WE ARE TO GO TO GOVERNORS BAY.

04:27:48	CAN YOU CONFIRM THIS IS OK? ... AAC BALMER REQUESTED YOU TO SUMMIT ROAD, CHECK
04:27:48	WITH HIM
04:35:41	Unit BROO3111 [KC : UNIT CALLING]
04:37:24	Unit BROO3111 [SITREP :] WE HAVE CONFIRMED WITH AAC BALMER WE ARE REQUIRED ON
04:37:24	THE SUMMIT ROAD
05:05:23	Unit GOVE3326 [K2 : IN ATTENDANCE AT INCIDENT]
05:25:37	Unit LINC4126 [K7 : AT NORMAL STATION]
05:25:44	Unit LINC4111 [K2 : IN ATTENDANCE AT INCIDENT]
05:40:46	Unit CHRI2111 [KP : PRIORITY MESSAGE]
06:36:52	** Cross Referenced to Event # P028515181 at: 15/02/17 06:36:52
07:13:34	Unit HARE261 [KP : PRIORITY MESSAGE]
07:14:32	Unit HARE261 [SITREP :] ATTACH ANOTHER PUMP
07:15:02	AL: PAGING ACK RECEIVED FROM STATION 3422 at 15/02/17 07:15:02
07:16:13	Unit ADDI221 [K1 : PROCEEDING TO INCIDENT]
07:16:57	COVERING UNIT WOOL241 DISPATCHED TO STATION SOCKBURN
07:16:57	D0730061
07:32:31	Duplicate Event: VICTORIA PARK RD CHRISTCHURCH CITYCross Street 1LONGHURST
07:32:31	TCECross Street 2DYERS PASS RD, Type = VEG VEGETATION FIRE, Subtype = default,
07:32:31	Caller Name = [REDACTED], Caller Ph Number = [REDACTED], Caller Address =
07:32:31	[REDACTED] LINCOLN ROAD, ADDINGTON, CHRISTCHURCH CITY, Call Source = 111Alarm Level1Inc
07:32:31	InfoCALLER LOOKING IN THE DISTANCE SEE SMOKE , Event Source = Fire 111
07:32:32	** ELOI search completed at 15/02/17 07:30:35 - 1 result
07:32:32	INC INFO: CALLER LOOKING IN THE DISTANCE SEE SMOKE
07:32:32	** LOI search completed at 15/02/17 07:30:36
07:32:32	[REDACTED]
07:32:33	** Cross Referenced to Event # F2246665 at: 15/02/17 07:32:33
07:32:33	End of Duplicate Event data
07:38:35	Unit ADDI221 [K2 : IN ATTENDANCE AT INCIDENT]
08:01:58	Unit HARE261 [COMCEN COM : MESSAGE] 3 HELOS TAKING OFF NOW AND THE 2 FF"S ARE
08:01:58	MAKING THEIR WAY UP IN PRIVATE VEHICLES
08:04:13	Unit GOVE3326 [K7 : AT NORMAL STATION]
08:04:59	Unit ROLL4226 [K1 : PROCEEDING TO INCIDENT]
08:07:48	Unit BOTT1711 [K1 : PROCEEDING TO INCIDENT]
08:07:56	Unit BOTT1711 [K1 : PROCEEDING TO INCIDENT]
08:17:23	Unit BOTT1711 [K2 : IN ATTENDANCE AT INCIDENT]
08:25:52	Unit LINC4111 [K2 : IN ATTENDANCE AT INCIDENT]
08:36:00	Unit CHRISTCH2 [K1 : PROCEEDING TO INCIDENT]
08:50:45	Unit ROLL4226 [K2 : IN ATTENDANCE AT INCIDENT]
08:59:23	Unit CHRISTCH2 [K2 : IN ATTENDANCE AT INCIDENT]
09:18:56	Unit WOOL241 [K1 : PROCEEDING TO INCIDENT]

09:20:46	COVERING UNIT STAL231 DISPATCHED TO STATION SOCKBURN
09:20:46	D0730061
09:42:54	Unit CHRI214 [K1 : PROCEEDING TO INCIDENT]
09:45:47	Unit REGION4B [KC : UNIT CALLING]
09:46:21	Unit REGION4B [K45 : COMMAND RESPONSIBILITY CHANGED TO - NAME] AAC CRAWFORD
09:47:13	Unit CHRI214 [K2 : IN ATTENDANCE AT INCIDENT]
09:50:08	Unit ROLL4226 [K7 : AT NORMAL STATION]
09:51:45	Unit WOOL241 [KC : UNIT CALLING]
09:57:36	Unit WOOL241 [K2 : IN ATTENDANCE AT INCIDENT]
10:03:56	Unit CHRI214 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
10:04:34	Unit HARE261 [KC : UNIT CALLING]
10:05:00	Unit HARE261 [K10 : RECOMMISSIONING]
10:11:46	Unit SOCK257 [K7 : AT NORMAL STATION]
11:08:41	Unit CHRISTCH1 [K1 : PROCEEDING TO INCIDENT]
11:10:39	Unit CHRI2118 [K1 : PROCEEDING TO INCIDENT]
11:19:08	Unit REGION4B [K6 : ON TELEPAGER]
11:19:25	Unit CHRISTCH1 [K2 : IN ATTENDANCE AT INCIDENT]
11:19:33	Unit CHRISTCH1 [K2 : IN ATTENDANCE AT INCIDENT]
11:46:57	Unit CHRI2118 [K2 : IN ATTENDANCE AT INCIDENT]
11:53:41	Unit CHRISTCH1 [KC : UNIT CALLING]
11:54:59	Unit CHRI2118 [K44 : COMMAND OR CONTROL POINT ESTABLISHED - OIC AND LOCATION]
11:54:59	COMBINING WITH ROLLESTON EOC
11:58:06	Unit CHRISTCH1 [SITREP :] ALSO COMBINING WITH DOC
12:11:04	Unit CHRI2118 [KC : UNIT CALLING]
12:11:28	Unit CHRI2118 [K44 : COMMAND OR CONTROL POINT ESTABLISHED - OIC AND LOCATION]
12:11:28	SUMMIT COMMAND
12:21:15	Unit WEST9511 [K2 : IN ATTENDANCE AT INCIDENT]
13:03:42	Unit WAIN321 [K1 : PROCEEDING TO INCIDENT]
13:06:31	Unit CHRI2118 [KC : UNIT CALLING]
13:06:39	Unit CHRI2118 [KC : UNIT CALLING]
13:08:51	Unit CHRI2118 [SITREP :] AAC CRAWFORD CURRENTLY AGGRESSIVELY WORKING WITH 4
13:08:51	FORESTRY DELIVERIES ALONG FLANK OF FIRE WITH DOC AND RURAL COLLEAGUES - ALL
13:08:51	RESOURCES COMMITTED
13:15:47	Unit STAL231 [K1 : PROCEEDING TO INCIDENT]
13:30:04	INC INFO: FLAMES GETTING BIGGER
13:30:04	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = VEG
13:30:04	- VEGETATION FIRE, Caller Name = [REDACTED], Caller Ph Number =
13:30:04	[REDACTED], Caller Address = TELECOM CELLULAR 027, STOKE, NELSON CITY, Call
13:30:04	Source = 111Inc InfoFLAMES GETTING BIGGER, Event Source = Fire 111
13:30:04	End of Duplicate Event data

13:32:20	Unit WAIN321 [K2 : IN ATTENDANCE AT INCIDENT]
13:49:58	Unit ADDI221 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
13:52:44	Unit STAL231 [K2 : IN ATTENDANCE AT INCIDENT]
13:59:56	Unit LINC4111 [KC : UNIT CALLING]
14:02:56	Unit CHRI2118 [KC : UNIT CALLING]
14:03:42	Unit CHRI2118 [SITREP :] RELIEF CREWS RELIEVED - AGGRESSIVE ATTACK ON FLANK
14:04:59	Duplicate Event: BENGAL DR CHRISTCHURCH CITYCross Street 1NEHRU PLCross Street
14:04:59	2DELHI PL, Type = NE NON EMERGENCY, Subtype = default, Caller Ph Number =
14:04:59	[REDACTED], Call Source = 111Alarm Level1Inc InfoSMOKE COMING OVER HILL, Event
14:04:59	Source = Fire 111
14:05:00	End of Duplicate Event data
14:05:00	INC INFO: SMOKE COMING OVER HILL
14:05:00	** LOI search completed at 15/02/17 14:04:03
14:05:01	** Cross Referenced to Event # F2247059 at: 15/02/17 14:05:01
14:05:18	Unit WOOL241 [KC : UNIT CALLING]
14:07:27	Unit BROO3111 [KC : UNIT CALLING]
14:10:36	Unit WOOL241 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
15:01:12	Unit CHRI2118 [KC : UNIT CALLING]
15:04:42	Unit CHRI2118 [KC : UNIT CALLING]
15:04:51	Unit CHRI2118 [KC : UNIT CALLING]
15:05:51	Unit CHRI2118 [SITREP :] ALL PARTYS RURAL FIRE HAS WITHDRAWN DUE TO SAFETY -
15:05:51	NZFS CONTINUING AGGRESSIVE ATTACK WITH DELIVERIES
15:06:17	COVERING UNIT KAIA407 DISPATCHED TO STATION
15:06:17	TERMINAL: D0730061
15:06:35	COVERING UNIT RANG761 DISPATCHED TO STATION ST ALBANS
15:06:35	D0730061
15:42:30	Unit CHRI2118 [KC : UNIT CALLING]
15:42:55	DO NOT NEED EXTRA RESOURCE AT THE MOMENT
15:43:06	Unit CHRISTCH1 [KP : PRIORITY MESSAGE]
15:43:47	DO YOU HAVE AVL ON THE WORSLEY RD RESOURCES - AFFIRM
15:46:28	Unit CHRISTCH1 [KP : PRIORITY MESSAGE]
15:46:46	Unit CHRISTCH1 [KP : PRIORITY MESSAGE]
15:48:04	Unit CHRISTCH1 [KC : UNIT CALLING]
16:06:27	Unit CHRISTCH1 [KC : UNIT CALLING]
16:22:11	CHCH1 PASSED SITREP - ATTACHED TO WORSLEY RD
16:27:49	Unit CHRI2118 [KC : UNIT CALLING]
16:58:51	Unit CHRI2118 [COMCEN COM : MESSAGE] CAN YOU ASK AC STACKHOUSE IF HE REQUIRES
16:58:51	ANOTHER DIGGER
17:16:02	Unit CHRI2118 [KC : UNIT CALLING]
17:17:00	Unit CHRI2118 [SITREP :] CONTACT POLICE WE HAVE A POLICE CAR PARKED ON DYERS

17:17:00	RD SOUTH OF SIGN OF THE KIWI UNDER THREAT OF FIRE
17:25:59	Unit CHRI2118 [KC : UNIT CALLING]
17:26:54	Unit CHRI2118 [SITREP :] ALL VEHICLES OFF DYERS PASS RD IMMEDIATELY
17:29:55	Unit CHRI2118 [KP : PRIORITY MESSAGE]
17:30:51	Unit CHRI2118 [KP : PRIORITY MESSAGE] WE ARE RELOACTING WILL BE DOWN FOR A
17:30:51	WHILE UNTIL RE-ESTABLISHED
17:44:55	Unit CHRI2118 [KC : UNIT CALLING]
17:45:40	Unit CHRI2118 [SITREP :] MOBILE HEADING WEST ON DYERS PASS RD - WILL ADVISE
17:45:40	WHEN SET UP
17:46:36	Unit CHRI2118 [SITREP :] ASSEMBLY WILL BE AT SIGN OF TAKAHE
18:17:19	Unit CHRI2111 [COMCEN COM : MESSAGE] PASS ON TO CHCH2118 THAT CHRI211 HAVE HAD A
18:17:19	MESSAGE VIA SIMOC FROM THE ADVENTURE PARK THAT THEY HAVE 1 HOUR OF WATER
18:17:33	Unit CHRI2111 [SITREP :] ACK - THAT MESSAGE HAS BEEN PASSED ON
18:23:09	Unit CHRI2118 [COMCEN COM : MESSAGE] WE ONLY HAVE ONE CAREER RELIEF CREW
18:23:09	AVAILABLE AT THIS STAGE
18:23:33	Unit CHRI2118 [SITREP :] ACKNOWLEDGED MESSAGE RE ONE PAID RELIEF CREW
18:25:13	FM AREA CRAWFORD CURRENTLY LOCATED SIGN OF THE
18:25:31	TAKAHE ASST CRAWFORD GONE UP THE HILL TO MAKE AN ASSESSMENT TO SEE IF WE WILL
18:26:09	HEAD BACK UP THE HILL TO REESTABLISH UP THERE NEED TWO CAREER CREWS TO
18:26:23	RELIEVE
18:26:23	THE TRUCKS ON WORSLEYS ROAD - CHRI2111 IS GOING TO WORSLEYS ROAD NOW
18:36:57	Unit STAL231 [K7 : AT NORMAL STATION]
18:52:51	*
18:53:32	████████ FROM KORDIA RANG IN ██████████ HAVE BEEN INFORMED FIRE IS HEADING TOWARDS
18:53:32	SUGARLOAF NEED CONFIRMATION DUE TO EQUIPEMENT THERE
18:53:33	*
18:59:19	** Cross Referenced to Event # P028514461 at: 15/02/17 18:59:19
18:59:23	** Cross Referenced to Event # P028434916 at: 15/02/17 18:59:23
19:01:35	Unit LINC4126 [K1 : PROCEEDING TO INCIDENT]
19:04:13	Unit CHRI2118 [COMCEN COM : MESSAGE] CFO LAMB WOOD PATCHED THROUGH TO AAC
19:04:13	GREG
19:04:13	CRAWFORD CELL
19:05:49	Unit CHRI2118 [SITREP :] WAIN321 IS RELIEVING CREW ON GOVES BAY AAC CRAWFORD
19:05:49	IS ASSESS WHERE WE WILL RE LOCATE TO K11P CROWD CONTROL ROAD BLOCK SIGN OF
19:05:49	THE
19:05:49	TAKAHE
19:06:30	..
19:07:07	FIR2POL POLICE REQ FOR CROWD CONTROL AT THE ROAD BLOCK AT THE SIGN OF THE
19:07:33	TAKAHE
19:07:33	RRRRR
19:07:45	FIRE SHIFT MANAGER LIASED WITH POLICE SENIOR WHO ARE ARRANGING STAFF
19:08:47	** LOI search completed at 15/02/17 19:08:47

19:08:49	CRP44 10/2
19:09:10	** Event Type changed from FIR2POL to 1F(2) at: 15/02/17 19:09:10
19:09:18	Unit CHRI2118 [K11P : POLICE REQUIRED] FOR CROWD CONTROL
19:13:39	Unit LINC4126 [K2 : IN ATTENDANCE AT INCIDENT]
19:20:56	Unit BOTT1711 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
19:22:21	.
19:22:37	ROAD IS BEING CLOSED UP BY COUNCIL
19:22:45	ASSISTED FIRE IN MOVING PEOPLE ON
19:23:10	CRP44 10/3 NOW
19:43:38	*
19:43:59	████████ FROM KORDIA IS HEADING TO THE CORDON TO LIAISE WITH OIC RE SUGARLOAF AND
19:43:59	POTENTIAL ISSUES
19:44:00	*
19:44:37	Unit WAIN321 [K9 : OFF RT - STATE LOCATION]
19:45:29	Unit WAIN321 [SITREP :] WE ARE AT GOVERNORS BAY FIRE STN AVAIALBE FOR TURNOUT
19:59:00	Unit LINC4126 [K7 : AT NORMAL STATION]
20:20:16	Unit LINC4111 [KC : UNIT CALLING]
20:22:06	*
20:22:17	FROM SSO BUTLER 200 METRE FRONT AT SUMMIT ROAD\
20:22:23	NEED HELO OPS URGENTLY
20:22:33	POTENTIAL TO TAKE OUT SUGARLOAF
20:22:35	*
20:23:35	Unit ROLL4211 [SITREP :] FUELING POINT IS 100M UP WORESLEYS RD PAST THE POLICE
20:23:35	CORDON
20:23:36	*
20:23:50	*
20:25:30	*
20:27:35	Unit ROLL4211 [K2 : IN ATTENDANCE AT INCIDENT]
20:31:09	FROM WARREN HUNT - LIAISING WITH PAUL DEVLIN HELOS ABOUT TO SHUT DOWN - HE IS
20:31:09	WATCHING THE FIRE FROM THE AIR AND THEY ARE HOPING IT WILL STOP THERE
20:31:11	*
20:32:03	*
20:32:17	*
20:40:20	Unit LINC4111 [KC : UNIT CALLING]
20:40:52	Unit LINC4111 [KC : UNIT CALLING]
20:41:37	Unit LINC4111 [K0 : NOT AVAILABLE] K0 DUE TO PUMP FAILURE - WE HAVE A MECHANIC
20:41:37	APPROX 1 HOUR AWAY
20:42:28	Unit CHRI2118 [SITREP :] PASS TO POLICE - ██████████ ██████████
20:42:28	HEADING UP DYERS PASS RD
20:42:29	.

20:42:44	FIR2POL - [REDACTED] - JUST PASSED SUMMIT COMMAND
20:42:44	UNIT
20:42:45	.
21:04:04	Unit CHRI2118 [SITREP :] DCFO CRAWFORD FIRE HAS JUMPED SUMMIT ROAD AND GOING INTO VICTORIA PARK
21:04:04	INTO VICTORIA PARK
21:14:56	FROM AC BOERE JUMPED DYERS PASS RD BELOW SIGN OF KIWI AND ABOVE TOP ENTRANCE TO
21:14:56	VICTORIA PARK
21:15:09	ANY RURAL CREWS IN AREA SHOULD BE EVACUATED
21:22:37	RICHARD SMART ADVISES 1500 LITRE DIESEL TANK AT SUGAR LOAF SHOULD FIRE REACH THAT FAR, BELIEVES CONCRETE WALLED AND POSSIBLY CORRUGATED IRON ROOF, REPEATER
21:22:37	SHED ITSELF CONCRETE 2 STORIED WITH BRIDGE CARRYING CABLES TO TOWERM ASHPHALTED
21:22:37	AREA AROUND PARTS
21:27:39	WAS GOING TO RETURN OVER NIGHT, WILL MAKE ALTERNATIVE ARRANGEMENTS NOW
21:30:27	Unit CHRI2118 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
21:36:10	**
22:23:12	POLICE CONCERNED ABOUT THE RADIO REPEATER SITE AT THE BOTTOM OF THE VICTORIA PARK DOG PARK (NOT SUGAR LOAF)
22:23:12	
22:25:01	[REDACTED]
22:25:01	[REDACTED]
22:25:52	AAC CRAWFORD ADVISED OF SITUATION AND ADVISED THAT NZFS RESOURCES RELOCATING TO
22:25:52	WORSLEYS RD, ADVISED TO RING RFO DEVLIN
22:26:13	AND OFFERED SUGGESTIONS SUCH AS FOAM BLANKET ETC
22:26:42	RFO DEVLIN SAID FIRE HEADING AWAY FROM THIS REPEATER TOWARDS SUGARLOAF IF ANY
22:26:47	THING
22:26:58	SIGNIF FIRE BEHAVIOUR CHANGE WOULD NEED TO HAPPEN
22:27:18	POLICE COMS HAVE UNIT SAYING FIRE WITHIN 800M AND HEADING IN DIRECTION OF TOWER LINC417 SENT TO INVESTIGATE
22:27:24	LINC417 SENT TO INVESTIGATE
22:27:43	** Cross Referenced to Event # F2247392 at: 15/02/17 22:27:43
22:33:21	INC INFO: FIRE BELIEVED TO BE CLOSE TO SUGAR LOAF
22:33:21	Duplicate Event:Location = SUMMIT RD,GOVERNORS BAY,CHRISTCHURCH CITY, Type = ADV - ADVISED, Caller Name = PREPAID/PREPAID, Caller Ph Number = [REDACTED], Caller Address = TELECOM CELLULAR 027, BLENHEIM, MARLBOROUGH DISTRICT, Call Source = 111Inc InfoFIRE BELIEVED TO BE CLOSE TO SUGAR LOAF, Event Source = Fire 111
22:33:21	End of Duplicate Event data
22:57:32	Unit CHRISTCH2 [K4 : ON RT INSIDE NORMAL TURNOUT AREA]
00:55:33	** Cross Referenced to Event # F2247149 at: 16/02/17 00:55:33
01:54:52	*

01:57:30	UNIT WEST9571 RESPONSE TIME [NULL] ADJUSTED TO
01:57:30	UNIT WEST9571 RESPONSE TIME [NULL] ADJUSTED TO
01:57:30	UNIT WEST9511 RESPONSE TIME [NULL] ADJUSTED TO
01:57:58	UNIT BOTT1711 ALERT TIME [NULL] ADJUSTED TO
01:57:58	** Assigned Result Code: VEG, Detailed Event Type: 1300, Qualifier 1: Q1,
01:57:58	Qualifier 2:
01:57:59	UNIT CHRISTCH1 ALERT TIME [NULL] ADJUSTED TO
01:57:59	UNIT BOTT1711 ALERT TIME [NULL] ADJUSTED TO
01:57:59	UNIT BOTT1711 ALERT TIME [NULL] ADJUSTED TO
01:57:59	UNIT CHRI214 ALERT TIME [NULL] ADJUSTED TO
01:58:00	UNIT CHRISTCH2 ALERT TIME [NULL] ADJUSTED TO
01:58:00	UNIT GOVE3311 ALERT TIME [NULL] ADJUSTED TO
01:58:00	UNIT GOVE331 ALERT TIME [NULL] ADJUSTED TO
01:58:01	UNIT GOVE3326 ALERT TIME [NULL] ADJUSTED TO
01:58:01	UNIT GOVE3311 ALERT TIME [NULL] ADJUSTED TO
01:58:01	UNIT GOVE3326 ALERT TIME [NULL] ADJUSTED TO
01:58:02	UNIT LINC4111 ALERT TIME [NULL] ADJUSTED TO
01:58:02	UNIT LINC4111 ALERT TIME [NULL] ADJUSTED TO
01:58:02	UNIT LINC4126 ALERT TIME [NULL] ADJUSTED TO
01:58:02	UNIT LINC4126 ALERT TIME [NULL] ADJUSTED TO
01:58:03	UNIT REGION4B ALERT TIME [NULL] ADJUSTED TO
01:58:03	UNIT ROLL4226 ALERT TIME [NULL] ADJUSTED TO
01:58:03	UNIT LINC4126 ALERT TIME [NULL] ADJUSTED TO
01:58:04	UNIT WEST9571 ALERT TIME [NULL] ADJUSTED TO
01:58:04	UNIT SOCK257 ALERT TIME [NULL] ADJUSTED TO
01:58:04	UNIT WEST9511 ALERT TIME [NULL] ADJUSTED TO
01:58:05	UNIT WEST9571 ALERT TIME [NULL] ADJUSTED TO

Incident

CAD Number	F2245689
Incident Reporter	Andrew Norris
Incident Controller	CFO Andrew Norris
Distance Travelled (km)	4
Delay In Receiving Call	

Property Details

Occupant	
Building Owner	
General Property Use	Conservation, Recreation park, Reserve

Special Property Use Reserve
Purpose Group

Actions

Persons Reported Trapped

Evacuation Status Fully evacuated

Action Prior 1

Action Prior 2

Action Taken Extinguishment only: Includes isolating fuel/power supply

Civilians

Civilians Rescued

Civilians Extricated

Civilians Assisted

Civilians Evacuated 0

Origin

Location

Level

Equipment Used

Quantity	Equipment
12	Forestry pack
33	Forestry hand tools, Shovels, Beaters, Chainsaw, Scrub bar
9	Helicopter
6	Rural water carrier
3	Rural smoke chaser
1	Monitor (deck)

Equipment Involved

Equipment Involved

Year

Make

Model

Fire

Arrival Condition

Heat Source Unable to classify

Termination Stage

First Object Ignited	Grass (living or dead)		
First Object Material	Grass		
Second Object Ignited	Scrub (living or dead)		
Second Object Material	Gorse, Scrub		
Indicated Cause	Unlawful		
Certainty of Cause			
Age of Person	Unknown		
Ethnicity	Unknown		
Gender			
FAIP Service Offered	No	FAIP Service Accepted	No

Vegetation

Gorse Area	m ²	Forest Danger	5
Grassland Area	m ²	Grassland Danger	5
Native Forest Area	m ²	Scrubland Danger	5
Exotic Forest Area	900000 m ²		
Scrub Area	60000 m ²	BUI	86.6071464208
Tussock Area	m ²	DC	456.5198667757
Wetland Area	m ²	DMC	56.7647403344
Crop Area	m ²	FFMC	90.9024536388
Total Vegetation Area	960000 m ²	FWI	58.7604439068
		ISI	29.3867806474
Map Grid N	5171421		
Map Grid E	1571025	Wind Speed	10km/hr
		Wind Direction	321'
Closest Weather Station	Motukarara (MTK)	Rainfall	0mm
Fire Season Status	Prohibited	Humidity	34%
Rural Fire Permit	N	Temperature	25'C

Comments

3/18/2017 2:18:10 PM

Reporter Comments

This is the Marleys hill fire that spread to join the Early Valley Road fire to become the Port Hills Complex fires

Andrew Norris

Appendix 5- Incendiary Fires Report

Incendiary fire calls Christchurch Fire Area 13 Feb 2016 – 13 Feb 2017

447

Suspicious fire calls on 13 February 2017 in Christchurch Metro Fire Area

1. F2245450 1445 hrs – Addington School, 21 Brougham St – Vehicle fire
2. F2245759 2013 hours Suburbs Rugby Football Club 99 Mathers Rd, Hoon Hay – structure – (hall)

Fire Calls – Incendiary close to Point of fire origin Early Valley Road fire in the month before

1. F2228605 18 January 2017 2232 hrs – [REDACTED] Milns Rd, Halswell – Structure (Shed)
2. F2232715 24 January 2017 2054 Hrs – [REDACTED] Milns Rd, Halswell – Structure (house minor damage)
3. F2233438 26 January 2017 0118 hrs – William Brittan Ave, Halswell – Vehicle fire
4. F2234110 26 January 2017 2330 hrs – Oaklands School 37 Cunningham Place, Halswell – Rubbish skip
5. F2234130 27 January 2017 0123 Hrs – Nicholls Rd, Halswell – Structure (house – offenders apparently identified)
6. F2240522 5 February 2017 2307 hrs – [REDACTED] Kennedys Bush Rd, Halswell – vegetation (Nikau palm)
7. F2241758 8 February 2017 0358 hrs [REDACTED] Wales St, Halswell – vehicle fire

Appendix 6- Terms Of Reference

Page 1 of 3

1. Incident Name	2. Rural Fire Authority	Terms of Reference
Early Valley Road (F2245608)	Selwyn District	
3. Location and Summary of the Incident		
The fire start was reported via 111 as a scrub fire at 17744 per the NZFS ICAD system.		
4. Names & contact details of key personnel		
Douglas Marshall Principal Rural Fire Officer		

This document is the National Rural Fire Authority approved and recommend template for use in NZ Wildfire Investigation. It is intended to provide RFAs and fire investigators with the guidelines to using a best practise chronological process of fire investigation reporting.



5. Agreed Terms of Reference

1. Before entering the Fire Ground
 - report to the Incident Controller or Principal Rural Fire Officer on all aspects of the fire investigation
 - receive a briefing on the circumstances of the fire and any safety measures that are in place
 - obtain a current Incident Action Plan (IAP)
 - ensure that personal protective clothing is worn at all times while on the fireground
2. Determine the Origin and Cause of the Fire including:
 - taking steps initially to secure the scene
 - identify cause and point of origin
 - thorough documentation and collation of evidence
 - record and photograph burn and char patterns
 - describe the path of fire travel
 - report on the impact of the fire on property and the environment
 - fire behaviour
 - canvass witnesses
 - thoroughly document a description of the general area and point of origin of the fire
 - secure and document factual evidence on the cause or most likely cause of the fire
 - assist the police as appropriate and necessary as
 - I note that a second fire in the area is also being investigated and that there may be a linkage between the 2 fires
3. Advise the Rural Fire Authority when:
 - Specialists or other experts are required i.e. electrical engineer. Please engage them as you see appropriate. Please also assist the Police where necessary/appropriate to establish cause
 - requesting the police if arson is suspected or other criminal activity is suspected
 - offences under the Forest and Rural Fires Act 1977 relating to the lighting of fires are determined
 - a formal interview is required with a person
 - the need to engage with insurance and other investigators as part of the investigation process
 - if you decide that peer reviews are appropriate as part of finalising your report

4. Completion:

- provide a comprehensive written report on all aspects of the investigation as per the National Rural Fire Authority template.
-

6. Specific Exclusions:

The terms of reference do not include:

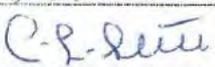
- Talking or discussing the fire origin or cause with the news media or anybody not entitled to such information
- The carrying out of formal interviews or taking of formal statements (not to be confused with canvassing witnesses)

7. Authorised By:

Agency Selwyn District
 Name Douglas Marshall
 Position PRFO
 Signature 
 Time/Date 1500 14/2/17

Agency Contact: Douglas
 Contact Ph: 

8. Accepted by Wildfire Investigator

Name FRANKIE SILL
 Signature 
 Time/Date 14/2/17

Ph: 

1. Incident Name	2. Rural Fire Authority	Terms of Reference
Early Valley Road (F2245608)	Selwyn District	
3. Location and Summary of the Incident		
<p>The fire start was reported via 111 as a scrub fire at 17744 per the NZFS ICAD system. Known fire start locations area Early Valley Rd and near the Summit Rd Carpark at Marley's Hill</p>		
4. Names & contact details of key personnel		
<p>██████████ Operations Manager Department of Conservation</p>		



5. Agreed Terms of Reference

1. Before entering the Fire Ground

- report to the Incident Controller or Principal Rural Fire Officer on all aspects of the fire investigation
- receive a briefing on the circumstances of the fire and any safety measures that are in place
- obtain a current Incident Action Plan (IAP)
- ensure that personal protective clothing is worn at all times while on the fireground

The investigator must be accompanied while on the fire ground by fire fighter with unit stds 3285 for safety purposes

2. Determine the Origin and Cause of the Fire including:

- taking steps initially to secure the scene
- identify cause and point of origin
- thorough documentation and collation of evidence
- record and photograph burn and char patterns
- describe the path of fire travel
- report on the impact of the fire on property and the environment
- fire behaviour
- canvass witnesses and take statements (except where the Crimes Act is involved)
- thoroughly document a description of the general area and point of origin of the fire
- secure and document factual evidence on the cause or most likely cause of the fire
- assist the police as appropriate and necessary as
- I note that a second fire in the area is also being investigated and that there may be a linkage between the 2 fires – determine whether there is a link between the two fires e.g. ember transfer or arson.

3. Advise the Rural Fire Authority when:

- Specialists or other experts are required i.e. electrical engineer. Please engage them as you see appropriate. Please also assist the Police where necessary/appropriate to establish cause
- requesting the police if arson is suspected or other criminal activity is suspected
- offences under the Forest and Rural Fires Act 1977 relating to the lighting of fires are determined
- a formal interview is required with a person
- the need to engage with insurance and other investigators as part of the investigation process
- if you decide that peer reviews are appropriate as part of finalising your report

4. Completion:

- provide a comprehensive written report on all aspects of the investigation as per the National Rural Fire Authority template.
-

6. Specific Exclusions:

The terms of reference do not include:

- Talking or discussing the fire origin or cause with the news media or anybody not entitled to such information
- Anything that falls under the Crimes Act, such as arson, will handed over to the NZ Police
- -

7. Authorised By:

Agency Department of Conservation
 Name [REDACTED]
 Position Operations Manager
 Signature [REDACTED]
 Time/Date 22-2-2017

Agency
Contact: [REDACTED]

Contact Ph: [REDACTED]

8. Accepted by Wildfire Investigator

Name GRAEME STILL
 Signature G. Still
 Time/Date 22-2-2017

Ph: [REDACTED]

2017 Port Hills Fire Complex

Fire Weather Analysis for Approximate Time of Fire Ignitions

Issued: 22 February 2017, 1730hrs

Prepared by: [REDACTED], Scion Rural Fire Research

Requested by: Graeme Still, Rural Fire Investigator & Tim Mitchell (Nation Rural Fire Authority), at Selwyn District Council, Christchurch, Incident Control Point.

Task: Determine the weather conditions for the two fire starts on Monday, 13th February 2017, from the surrounding weather stations. Specifically wind directions as they influenced likely fire spread direction between the hours of 1830 – 1900, to help determine whether or not the Early Valley Rd Fire was likely to send ash and embers towards the Marleys Hill area of fire origin.

Accompanying evidence:

1. Attached Excel spread sheet containing raw data (RAW tab) downloaded from the nearest weather stations and sorted data (SORTED (2,3) tabs). Weather station data was obtained from the following databases: Fire Weather System¹ (NIWA), MetConnect² (MetService, Lyttelton Port of Christchurch), CliFlo (NIWA)³, and public weather stations from Weather Underground⁴.
2. Fire Growth Simulation Model. Using 15-minute time intervals, and three scenarios from the nearest representative weather stations (Christchurch Aero and Sugarloaf (MetConnect), Lincoln (CliFlo), and Motukarara (FWSYS)) to model likely fire spread direction, and thus possible direction of fire convection column movement (Images 2 – 7).

Weather Analysis:

In total, the analysis of the nearest weather stations that are potentially representative of wind conditions over the fire area includes 21 weather stations (Image 1 and table 1):

- 2 FWSYS RAWs: Bottle Lake Forest, Motukarara
- 3 CliFlo EWS: Lincoln, Diamond Harbour, Christchurch
- 4 Metconnect (private): Christchurch Aero, Sugarloaf, CQ Breakwater, J3
- 11 weather underground (public): refer to table overleaf

Prometheus, Fire Growth Model (FGM) analysis:

- **Time step intervals:** 15min
- **Duration:** 8 hrs
- **Early Valley Rd POI:** -43.617358 °, 172.579316° (Monday 13.02.2017, 1735)
- **Marleys Hill POI:** -43.609276°, 172.639786° (Monday, 13.02.2017, 1900)
- Hourly weather obtained from the nearest wx stations (Motukarara, Chch Aero, Lincoln, Sugarloaf)
- Van Wagner hourly FFMC calculation method
- Current fuel types from LCDB4.1
- Grass curing default of 60% changed to 100%
- No fuel patches
- Addition of roads, drive ways and tracks as barriers to spread (10m, 7m, 5m, 2m, 1m, 0.5m)
- Assumption that no suppression undertaken

¹ <http://docs.niwa.co.nz/eco/fwsys/index.html>

² <http://www.metconnect.co.nz/>

³ <https://cliflo.niwa.co.nz/>

⁴ <https://www.wunderground.com/personal-weather-station/dashboard?ID=ICANTERB238#history>



Image 1: Weather station locations.

Table 1: Nearest weather stations and proximity / representativeness for the two points of ignition (POI).

DATABASE	Station	Altitude (m)	closer to Early Valley	closer to Marley Hill
CliFlo	Christchurch, Kyle St Ews	8	YES	YES
CliFlo	Lincoln, Broadfield Ews	15	YES	
MetConnect/FWSYS	CHCH aero	31	YES	YES
FWSYS	Motukarara	15	YES	
Weather underground	Burkes Bush ISELWYN9	284	YES	
Weather underground	Lincoln. ICANTERB322	9	YES	
Weather underground	Lincoln. ICANTERB159	7	YES	
Weather underground	Lincoln. ICANTERB24	10	YES	
Weather underground	Lincoln. ILINCOLN50	9	YES	
Weather underground	TaiTapu. ICANTERB317	1	YES	
CliFlo	Diamond Harbour Ews	119		YES
FWSYS	BottleLake	3		YES
MetConnect	LPC CQ Breakwater	0		YES
MetConnect	LPC Inner Harbour J3	0		YES
MetConnect	Sugar Loaf	497		YES
Weather underground	Cashmere. ICANTERB318	34		YES
Weather underground	Cashmere. ICASHMER2	67		YES
Weather underground	Huntsbury. ICANTERB224	79		YES
Weather underground	Huntsbury2. ICANTERB406			YES
Weather underground	Summit Rd. ICANTERB238	384		YES
Weather underground	Westmoreland. ICANTERB409	11		YES

Results:

Early Valley Road Fire

Between the hours of 1830 – 1900, wind directions observed at representative weather stations were:

- NW, NNW or N.

Marleys Hill/Summit Rd Fire

Between the hours of 1830 – 1900, wind directions observed at representative weather stations were inconsistent across stations, with variable winds summarised below or in tables 2 - 5.

Between 1830 – 1840:

- 7 out of 12 weather stations observed NE
- 2 out of 12 stations observed NW
- 3 out of 12 stations observed W, WSW or WNW

Between 1840 – 1850:

- 5 out of 11 weather stations observed NW
- 2 out of 11 stations observed WNW or WSW
- 3 out of 11 stations observed NE
- 2 out of 11 stations observed SE (these two stations have notes about it either being recently set up or the wind vane being out by 20 – 40 degrees, recommend disregarding this data)

Between 1850 – 1900:

- 3 out of 11 weather stations (all private) observed NW
- 5 out of 11 stations observed W, or SW or WNW
- 3 out of 11 stations observed NE

Discussion:

Initially, at or around the time of ignition, a W or WSW wind direction would have been required to push the Early Valley fire's convection column and any resulting ember transport towards the Marleys Hill fire's suspected POI. As the Early Valley fire developed and spread upslope, an increasingly SW or WSW wind direction would have been required.

However, these conclusions are made only on the basis of observed surface wind directions near the ground where wind measurements are made (typically 10m or less above the ground). It is possible that wind directions varied at different heights in the atmosphere, meaning that lower and upper parts of the Early Valley fire's convection column were leaning in different directions. There is a significant elevation difference between the two points of origin (325 m).

It is believed that some early reports from the fires indicated that they may have been influenced by different wind directions, with the Early Valley fire spreading to the E or SE (i.e. by W or NW winds) and the Marleys Hill fire to the S or SW (by N or NE winds). It is not unusual in the Christchurch area for the easterly sea breeze to push in under the nor'westerlies, especially near the coast.

It is also possible that the initial spread of the fires, and therefore of their convection columns was influenced by topography. The spread of the Early Valley fire soon after ignition was upslope towards the Summit Rd near Kennedys Bush, with the fire crossing the road on either side of the radar dome (Airways). This is generally in a SE direction under the influence of the reported NW winds. There may also have been some funnelling of the winds up Early Valley/Lansdowne Valley, turning winds more westerly and taking the fire into an Easterly direction.

Prometheus modelling of the Early Valley fire tends to confirm that the likely spread of this fire under all four weather station scenarios investigated was upslope in a generally SE direction, and well to the south of the Marleys Hill POI, despite somewhat varying wind direction inputs. This spread direction across all four scenarios is remarkably consistent, although the spread rate and distance over the 8 hr projection period varies, most likely as a result of different wind speeds and/or possible wind direction-slope interactions.

Photographs and/or timelapse video may be available to confirm the direction of the Early Valley and Marleys Hill smoke and fire spread directions. However, these were not consulted in this case. Alternatively, a more detailed analysis of air observations (e.g. at Christchurch Aero), and/or modelling of atmospheric conditions at the time of the fires could provide better information on likely wind directions and speeds at different heights in the atmosphere over the fire area.

Interestingly, there are also no known reports of spotting occurring during the fires, and certainly not of medium or long range spotting which would be required to transport embers distances of the order of the 3-5 km from the early part of the Early Valley fire run to the suspected Marleys Hill area of origin. However, given the fuel types involved, including pine plantations which have been known to “throw” embers these sorts of distances, and terrain configurations present within the fireground which included ridges that could act as ember lifting-off points, the occurrence of spotting cannot be discounted under the extreme weather and fire behaviour conditions observed during the Early Valley upslope fire runs.

If spotting were to have occurred, fire intensities and convection column development reported during these upslope fire runs would have been sufficient to carry embers up the column. Observed winds speeds from the majority of stations, especially those at higher altitudes (e.g. Sugarloaf), would likely have been sufficient to carry any embers the required distance. Relative humidities were also low and likely sufficient to allow an ember to continue smouldering, while FFMCS were also high indicating that dry fine fuels were likely to have been receptive to ignition from such an ember providing direct contact was made.

Conclusion:

Based on the somewhat simplistic analyses undertaken here, it is considered that the likelihood of the Marleys Hills fire being caused by a spotfire from the Early Valley fire is low. This conclusion is based on:

- the fact that the prevailing wind directions from the vast majority of representative weather stations during the period of the initial run of the Early Valley fire and observed ignition of the Marleys Hill fire were not from the WSW or SW wind direction required;
- the initial runs of the Early Valley fire were upslope and likely further to the south of Marleys Hill;
- there is no other evidence or reports of spotfires in the vegetation along the 4.95 km distance between the two area of origins to suggest that medium- to long-range spotting, as would have been required here, occurred during the initial run of the Early Valley fire.

However, it is also not possible to totally eliminate spotting/ember transport as a potential source, as the extreme fire behaviour, convection column development, strong winds, relative humidity, fuel types and terrain present, and likely dryness of fine dead surface fuels all indicate that spotting could have been possible.

More conclusive evidence of smoke column spread direction and possible differences between surface and upper-level wind directions may be available from photographs and/or time lapse video or upper atmosphere measurements. More detailed meteorological advice or modelling (e.g. from NIWA, MetService or University of Canterbury’s Geography Dept.) could also provide more definitive insights.

Table 2: Nearest weather stations for the Early Valley points of ignition (POI).

Time	Database	Station	Temp (°C)	Humidity (%)	Wind speed	Wind direction
6:00 pm	Clifflo	Christchurch, Kyle St Ews	25.1	26	18.7	WNW
6:00 pm	Clifflo	Lincoln, Broadfield Ews	22.9	43	26.6	NW
6:00 p.m.	FWSYS	CHCH aero	23.8	31	12.97	W
6:00 p.m.	FWSYS	Motukarara	22.3	27	32.76	NW
6:00 p.m.	FWSYS	BottleLake	18.1	65	9.72	SE
7:00 p.m.	FWSYS	BottleLake	20.1	38	11.16	W
7:00 p.m.	FWSYS	CHCH aero	21.3	32	29.65	WNW
7:00 p.m.	FWSYS	Motukarara	20.3	32	33.48	NW
7:00 pm	Clifflo	Lincoln, Broadfield Ews	20.6	50	27.7	NW
7:00 pm	Clifflo	Christchurch, Kyle St Ews	23	30	17.3	NW

Table 3: Nearest public weather stations (Weather Underground) for the Early Valley points of ignition (POI).

Time	Database	Station	Temp (°C)	Humidity (%)	Wind speed	Wind direction
6:30 p.m.	W.underground	Lincoln. ICANTERB322	23	30	23.3 kph	North
6:36 p.m.	W.underground	Lincoln. ICANTERB322	22.8	30	34.1 kph	NNW
6:29 p.m.	W.underground	Lincoln. ICANTERB159	22.1	37	13 kph	WNW
6:34 p.m.	W.underground	Lincoln. ICANTERB159	21.7	37	14.3 kph	North
6:39 p.m.	W.underground	Lincoln. ICANTERB159	21.5	38	16.3 kph	WNW
6:29 p.m.	W.underground	Lincoln. ICANTERB24	23.2	29	21.9 kph	NW
6:34 p.m.	W.underground	Lincoln. ICANTERB24	22.9	29	18.3 kph	NNW
6:39 p.m.	W.underground	Lincoln. ICANTERB24	22.1	29	13.4 kph	NW
6:31 p.m.	W.underground	TaiTapu. ICANTERB317	21.7	38	4.7 kph	North
6:36 p.m.	W.underground	TaiTapu. ICANTERB317	21.3	39	1.4 kph	NNW
6:41 p.m.	W.underground	TaiTapu. ICANTERB317	20.9	41	13 kph	NNW
6:41 p.m.	W.underground	Lincoln. ICANTERB322	22.6	31	27 kph	North
6:44 p.m.	W.underground	Lincoln. ICANTERB159	21.2	39	17.7 kph	North
6:44 p.m.	W.underground	Lincoln. ICANTERB24	22.1	30	15.8 kph	NW
6:46 p.m.	W.underground	TaiTapu. ICANTERB317	20.8	41	14.3 kph	NNW
6:47 p.m.	W.underground	Lincoln. ICANTERB322	22.4	31	21.6 kph	NW
6:48 p.m.	W.underground	Lincoln. ILINCOLN50	22.2	39	10 kph	NNW
6:49 p.m.	W.underground	Lincoln. ICANTERB159	20.9	39	6.4 kph	NNE
6:49 p.m.	W.underground	Lincoln. ICANTERB24	21.8	32	18.3 kph	NW
6:52 p.m.	W.underground	TaiTapu. ICANTERB317	20.8	42	3.2 kph	NNW
6:54 p.m.	W.underground	Lincoln. ICANTERB24	21.7	32	13.4 kph	NNW
6:54 p.m.	W.underground	Lincoln. ICANTERB159	20.8	41	14.3 kph	WNW
6:55 p.m.	W.underground	Lincoln. ICANTERB322	22.1	32	18 kph	NW
6:57 p.m.	W.underground	TaiTapu. ICANTERB317	20.8	42	6.4 kph	NNW
6:59 p.m.	W.underground	Lincoln. ICANTERB159	21.1	41	4.7 kph	NNW
6:59 p.m.	W.underground	Lincoln. ICANTERB24	22	30	15.8 kph	NNW

Table 4: Nearest weather stations for the Marleys Hill points of ignition (POI).

Time	Database	Station	Temp (°C)	Humidity (%)	Wind speed	Wind direction
6:00 pm	MetConnect	LPC CQ Breakwater	16	77	40.74	ENE
6:00 pm	MetConnect	LPC Inner Harbour J3	18	52	22.22	NE
6:00 pm	MetConnect	Sugar Loaf	18	34	72.23	NW
6:00 pm	Clifflo	Diamond Harbour Ews	16.6	64	23.8	NE
7:00 p.m.	FWSYS	BottleLake	20.1	38	11.16	W
7:00 pm	Clifflo	Diamond Harbour Ews	17.2	59	11.2	NE
7:00 pm	MetConnect	LPC CQ Breakwater	21	42	20.372	NW
7:00 pm	MetConnect	LPC Inner Harbour J6	22	38	14.816	NW
7:00 pm	MetConnect	Sugar Loaf	18	38	62.968	NW

Table 5: Nearest public weather stations (Weather underground) for the Marleys Hill points of ignition (POI).

Time	Station	Temp (°C)	Humidity (%)	Wind speed	Wind direction
6:29 p.m.	Huntsbury2. ICANTERB406	20.9	45	13.4 kph	West
6:31 p.m.	Huntsbury. ICANTERB224	22.1	44	6.4 kph	NE
6:31 p.m.	Cashmere. ICANTERB318	23.3	39	3.2 kph	NNE
6:31 p.m.	Cashmere. ICASHMER2	23.3	39	3.2 kph	NNE
6:31 p.m.	Westmoreland. ICANTERB409	24.4	34	13.2 kph	WSW
6:32 p.m.	Summit Rd. ICANTERB238	19	40	24.5 kph	WNW
6:34 p.m.	Huntsbury2. ICANTERB406	20.9	41	6.4 kph	NE
6:37 p.m.	Cashmere. ICANTERB318	23	32	1.4 kph	NE
6:37 p.m.	Cashmere. ICASHMER2	23	32	1.4 kph	NE
6:37 p.m.	Summit Rd. ICANTERB238	18.7	44	24.5 kph	NE
6:37 p.m.	Huntsbury. ICANTERB224	21.7	47	6.4 kph	NW
6:39 p.m.	Huntsbury2. ICANTERB406	20.9	37	23 kph	NW
6:43 p.m.	Summit Rd. ICANTERB238	19.1	44	27 kph	NE
6:43 p.m.	Huntsbury. ICANTERB224	22.3	44	17.7 kph	NW
6:43 p.m.	Cashmere. ICANTERB318	22.9	31	6.4 kph	SE
6:43 p.m.	Cashmere. ICASHMER2	22.9	31	6.4 kph	SE
6:44 p.m.	Huntsbury2. ICANTERB406	21	35	46 kph	NW
6:46 p.m.	Westmoreland. ICANTERB409	24.3	34	11.9 kph	WSW
6:48 p.m.	Huntsbury. ICANTERB224	21.4	37	40.2 kph	NW
6:49 p.m.	Cashmere. ICANTERB318	22.6	32	4.7 kph	NNE
6:49 p.m.	Cashmere. ICASHMER2	22.6	32	4.7 kph	NNE
6:49 p.m.	Summit Rd. ICANTERB238	18.6	45	30.6 kph	NW
6:49 p.m.	Huntsbury2. ICANTERB406	21.1	36	37 kph	WNW
6:54 p.m.	Huntsbury. ICANTERB224	20.9	36	24.1 kph	SW
6:54 p.m.	Summit Rd. ICANTERB238	18.7	37	42.8 kph	WNW
6:55 p.m.	Cashmere. ICANTERB318	22.1	34	9.7 kph	NE
6:55 p.m.	Cashmere. ICASHMER2	22.1	34	9.7 kph	NE
7:00 p.m.	Huntsbury. ICANTERB224	20.7	38	32.2 kph	West
7:00 p.m.	Summit Rd. ICANTERB238	18.4	37	25.6 kph	West

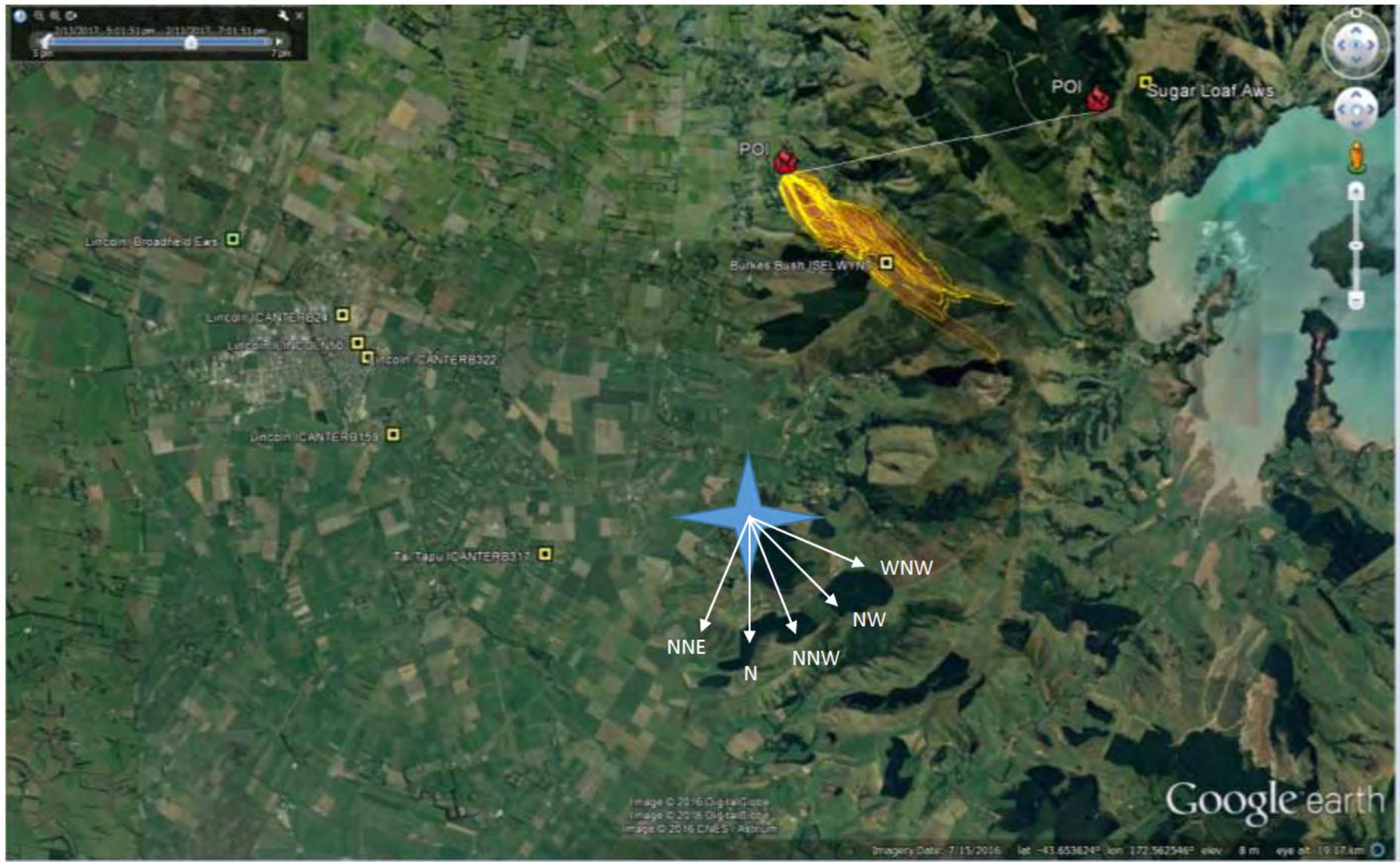


Image 2: Contains four FGM. Typical wind direction from Early Valley between 1830 -1900 hrs.

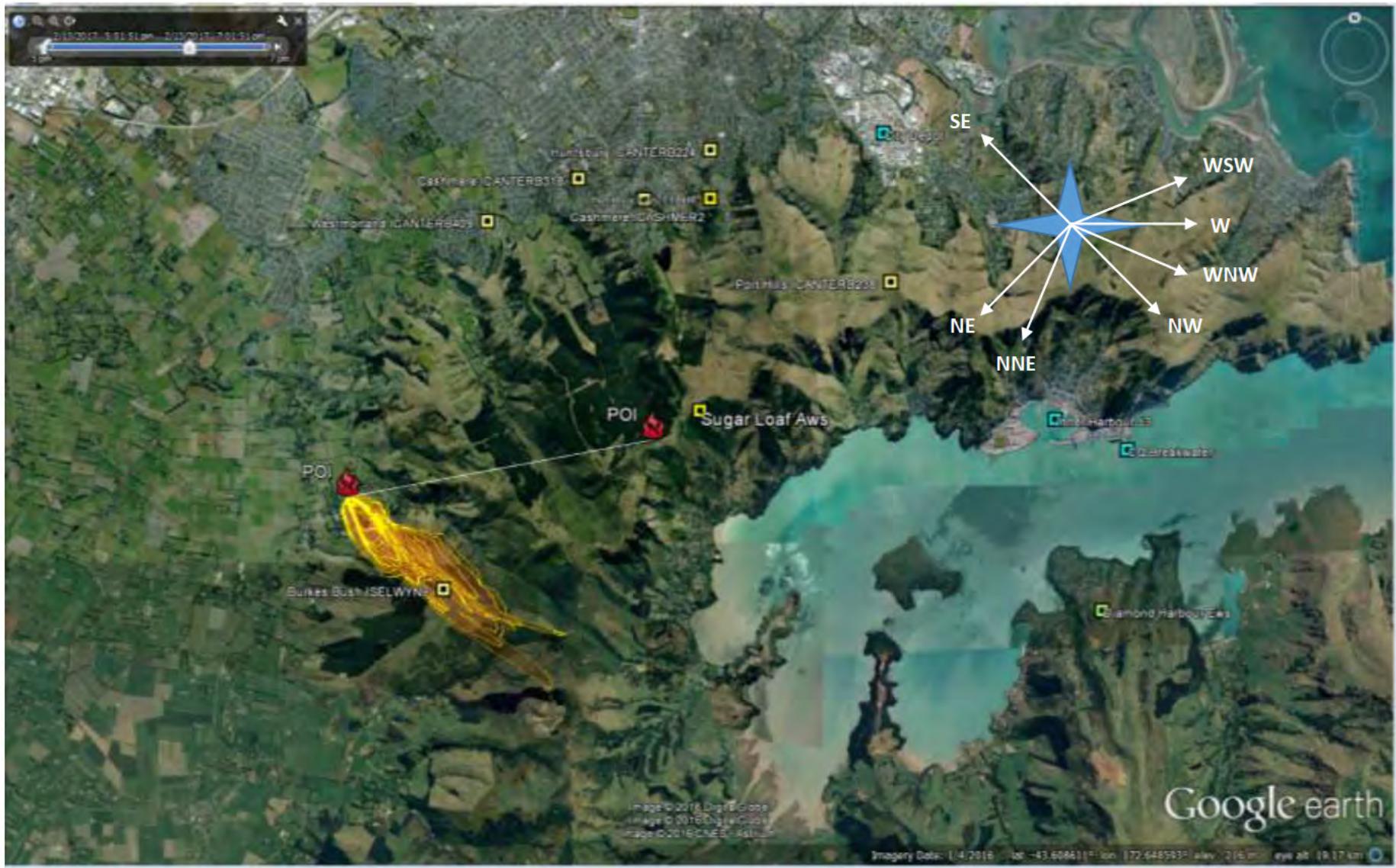


Image 3: Contains four FGM. Typical wind direction from Marleys Hill between 1830 -1900 hrs.

Results: Fire Growth Model, Prometheus Simulations

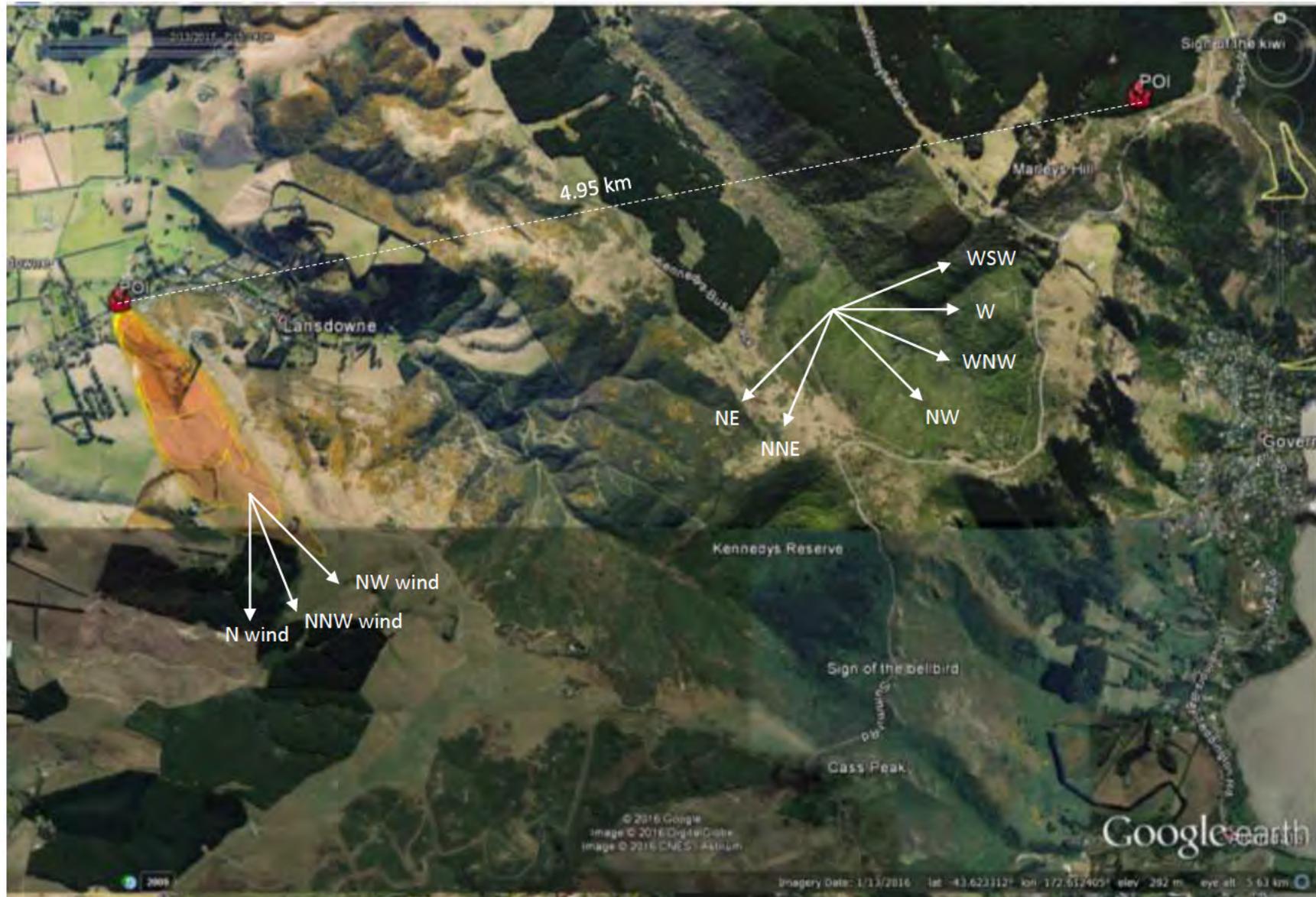


Image 4: Highlighting location of two sources of ignition and the FGM Scenario: Lincoln weather (CliFlo) from 1735 – 1915hrs.

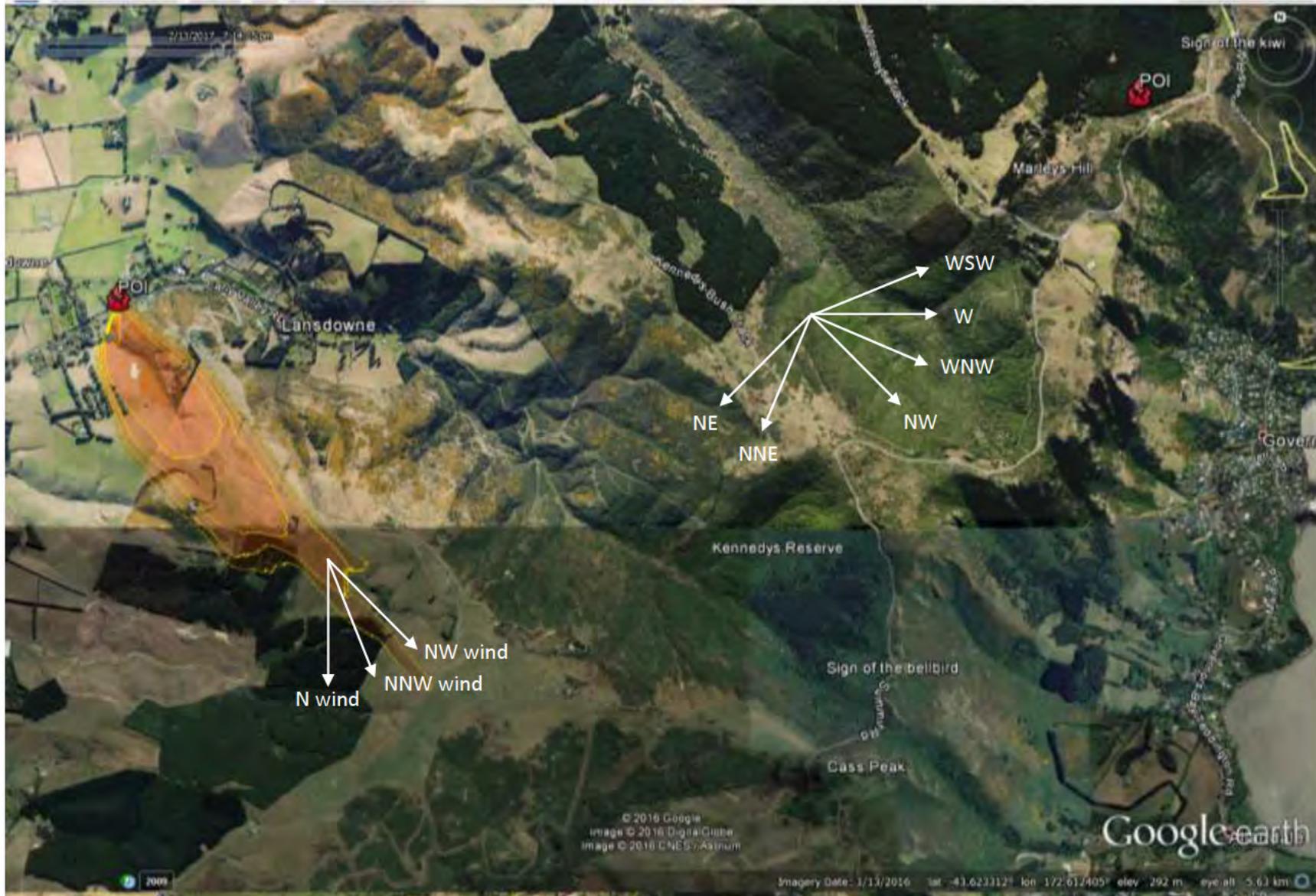


Image 5: Highlighting location of two sources of ignition and the FGM Scenario: Motukarara weather (FWSYS) from 1735 – 1915hrs.

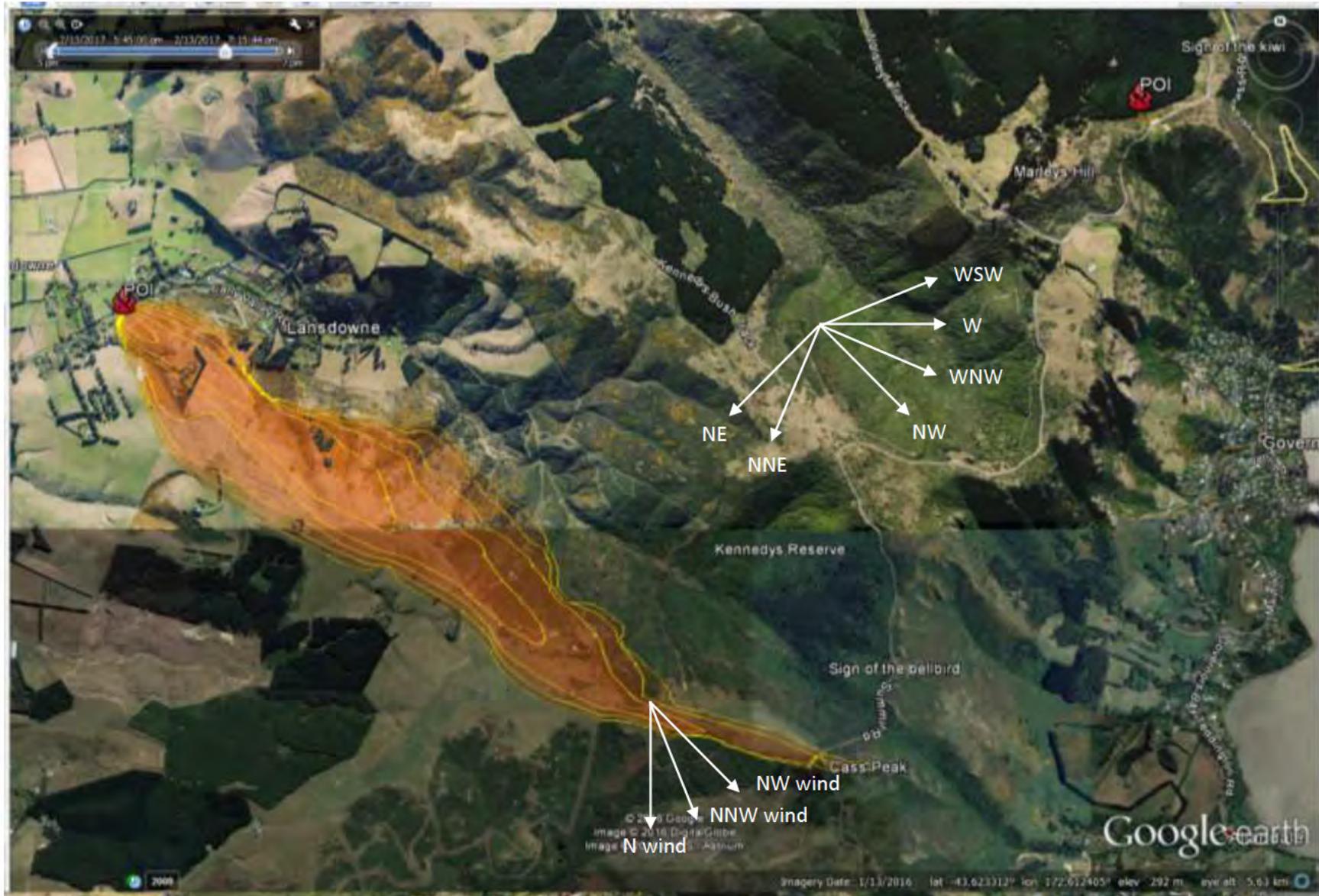


Image 6: Highlighting location of two sources of ignition and the FGM Scenario: Christchurch (MetConnect) from 1735 – 1915hrs.



Image 7: Highlighting location of two sources of ignition and the FGM Scenario: Sugarloaf (MetConnect) from 1735 – 1915hrs. Unlikely to spot into Marleys based on data from weather stations nearest to/representative of Early Valley.

Appendix 8- Engineering Meteorology Report

Engineering Meteorology

aurecon

To	Graeme Still, Darrin Woods	From	[REDACTED]
Copy		Reference	Port Hills fire complex
Issued date	10 March 2017	Pages (including this page)	4
Subject	Port Hills fire wind assessment for Monday 13 Feb 2017 (Rev 1)		

The aim of this report is to provide information on wind conditions in the vicinity of the Port Hills fire complex primarily around 6:30 to 7 pm on Monday 13 February. It is understood that this is approximately the time that the Marley Hill fire started.

General weather situation

Figures 1 and 2 show the surface pressure maps for 7 am and 7 pm NZDT Monday 13 Feb 2017. Low pressure had crossed the South Island earlier in the morning. A west-northwest flow had become established over the South Island during the day. While the west-northwest flow was reasonably strong, a low level northeast flow (with lower temperatures and higher humidity) persisted at locations nearer the coast and at lower elevations until into the evening. This northeast wind was likely driven by lower pressures inland (an orographic trough) and by a sea breeze effect. By 7 pm the west-northwest flow was established across the wider Lyttelton Harbour and Port Hills area.

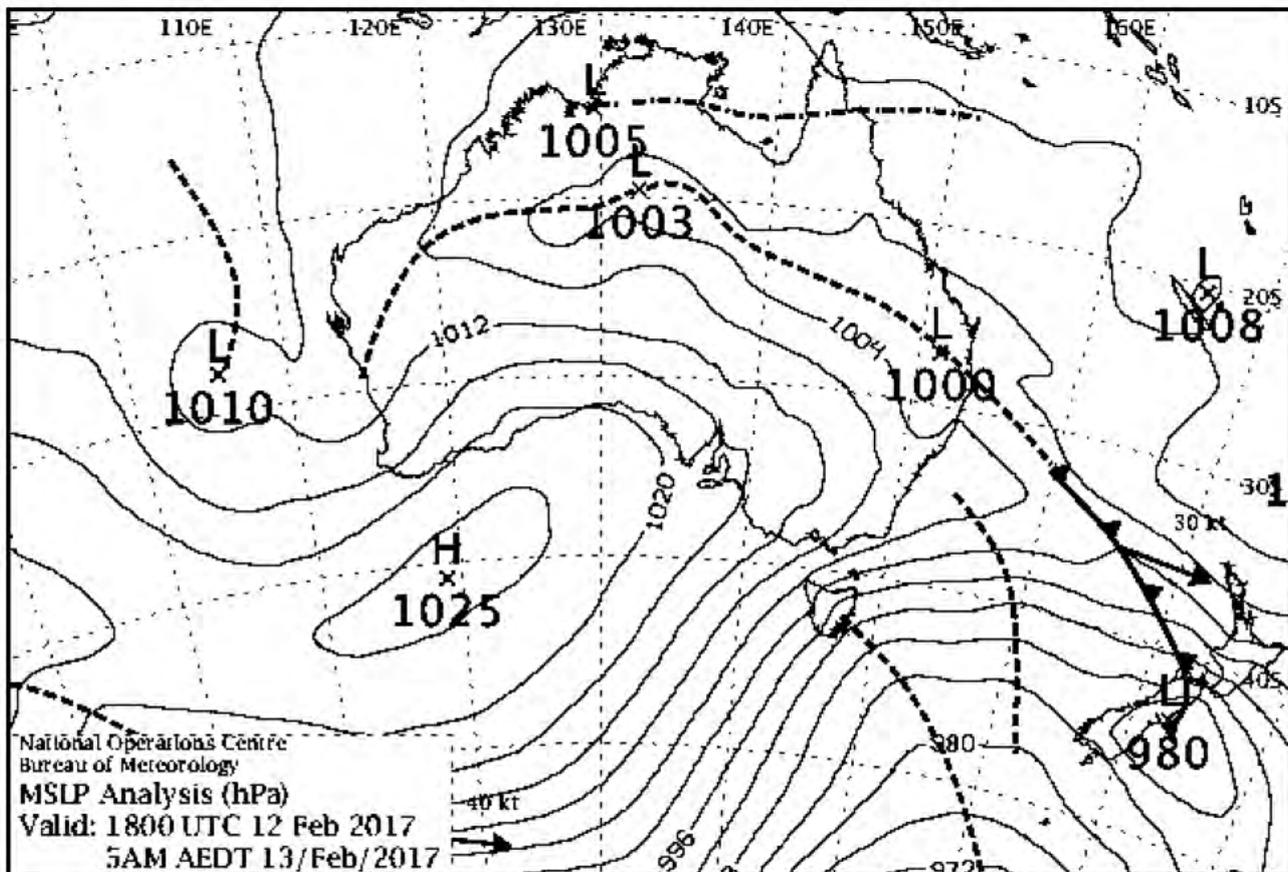


Figure 1: Surface pressure map at 7 am Mon 13 Feb

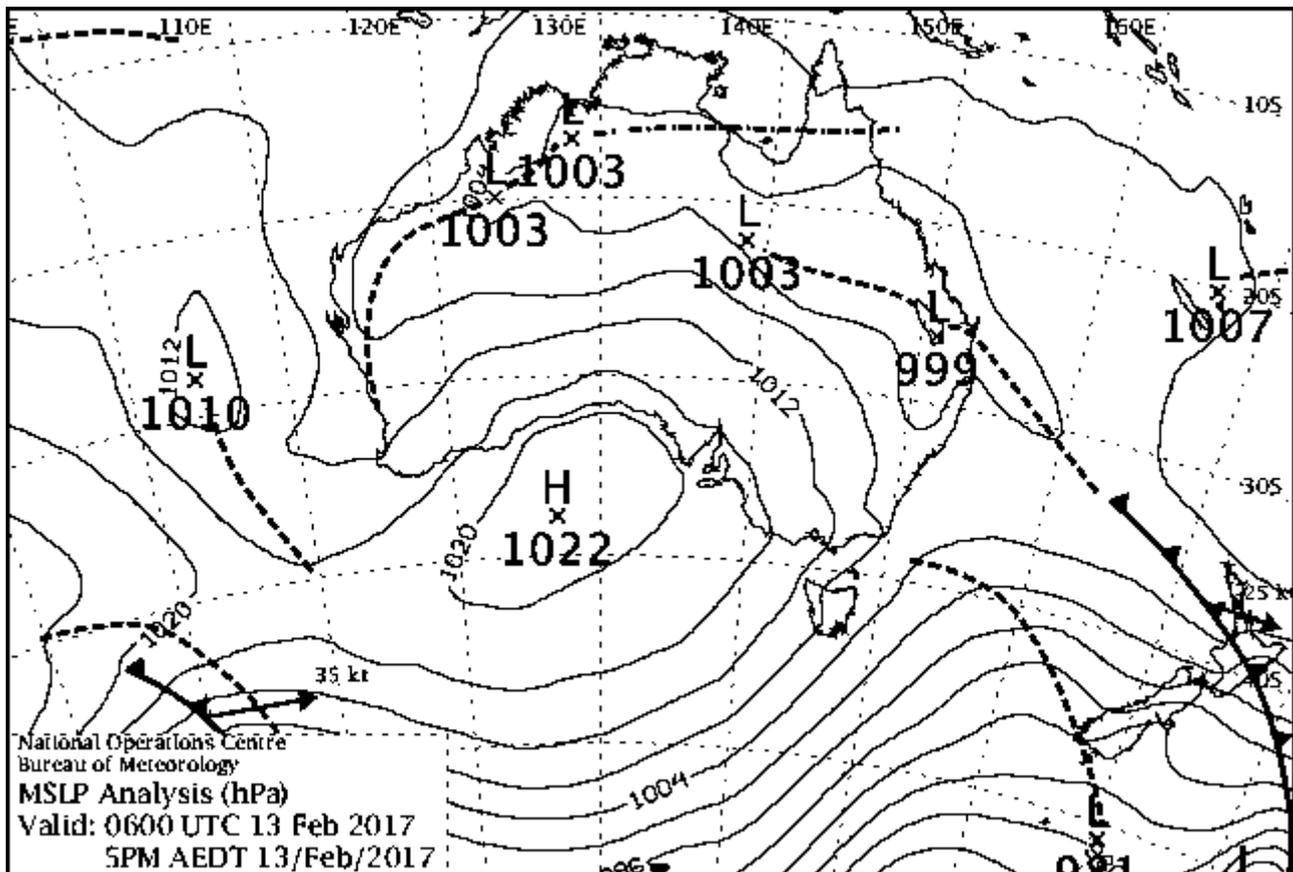


Figure 2: Surface pressure map at 7 pm Mon 13 Feb

Available wind data/information

Wind data was provided by CCC/NRFA for Sugar Loaf, Lyttelton, Christchurch Airport, Le Bons Bay, and Motukarara. The data from Sugar Loaf was checked against data obtained directly from MetService. (Note that Sugar Loaf data is recorded at the top of the tower which is 120 m above ground level, or about 600 m above mean sea level.) Other wind data/information was obtained from NIWA sites in the vicinity, and also from the public station network. It is acknowledged that the public data is less reliable and is therefore treated with caution.

Based on the available wind data/information, Figure 3 shows the likely wind flow across the map area around 6:30 to 7 pm Monday 13 February 2017. At this time northeast wind was confined to Lyttelton Harbour east of Lyttelton, and over far eastern parts of the city. Northwest winds were established in other areas by this stage.

We also used our weather simulation capability to model the weather conditions over the Port Hills at high resolution. The model was consistent with observations with west-northwest winds established over the Port Hills fire locations.

Based on all the information obtained, there is high confidence that winds were from the west-northwest direction at both the Early Valley Road fire and at the Marley Hill fire site in the 6:30 to 7 pm period. It is estimated that mean wind speeds were between 30 to 40 km/h at around 10 m above ground level at this time, with the higher speeds at higher elevations. Wind speeds at the top of Sugar Loaf at this time were averaging 60-70 km/h from about 300 degrees (or west-northwest).

The photo taken from near the Sign of the Kiwi (link below) indicated that winds are from the west-northwest in the Marley Hill area soon after the fire had started.

<http://www.stuff.co.nz/national/89536703/no-evidence-christchurchs-port-hills-fires-were-deliberately-lit-canterburys-top-cop-says>



Figure 3: The arrows show the most likely wind direction at 6:30 to 7 pm Mon 13 February. The green area shows the likely path of smoke/ash/embers at this time.

Conclusions

Figure 3 shows the relative positions of the Early Valley Road fire and the Marley Hill fire (red line). The general Early Valley Road area is to the west-southwest of Marley Hill. The most likely path of smoke/ash/embers is shown by the green shaded area which is generally directed towards Governors Bay/Allandale direction and to the south of Marley Hill. The topography was not expected to significantly influence the direction of smoke/ash/embers.

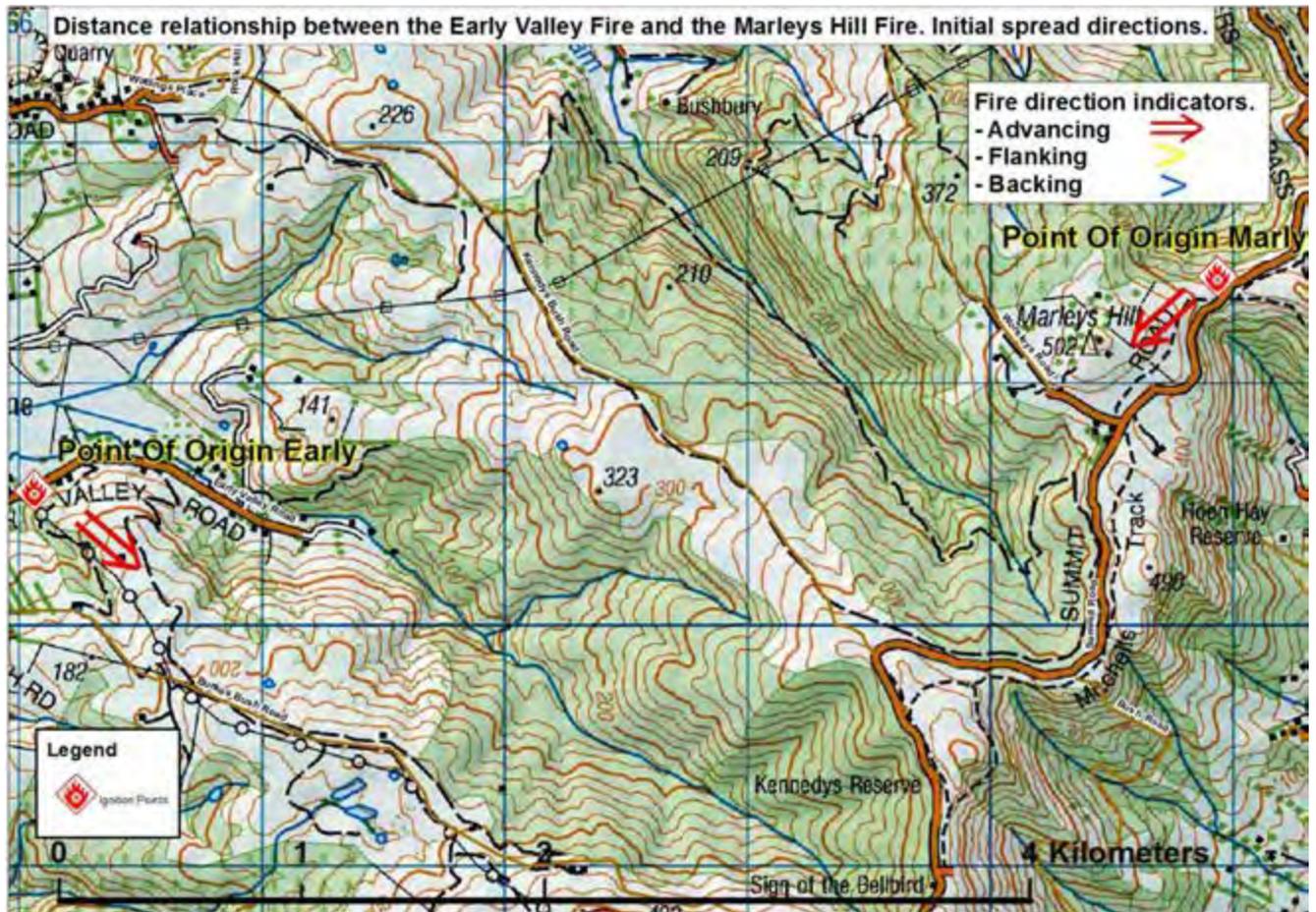
Based on the findings of this analysis, it is very unlikely that the fire at Marley Hill is related to the Early Valley Road fire.

Appendix 9- Excerpt from Port Hills Fire Development Chronology (J Cowan)

Marleys Hill Fire

- 9) At 19:11 hours a second wildfire fire was reported around 5km away to the east-northeast on Summit road.

Map 1 – Shows the distance relationship and initial spread directions of the two fires.



- 10) This fire was below Summit Road and under the same hot dry windy conditions (differing wind direction) as the early Valley fire it escalated quickly burning uphill and up wind to the southwest through gorse and 80% to 90% cured grass, and back down hill to the northeast into a pine plantation.

- 11) Fire behaviour predictions based on an uncalibrated scenario using data from the Christchurch Aero weather station as follows. The initial Head Fire Intensity (HFI) is calculated to have been around 300 to 1000kw/m² with a Rate of Spread (ROS) of 1 to 5m/min (0.06 to 0.3km/hr) in the grass fuels. HFI 3,000 to 15,000 kw/m² with a ROS of 1 to 10m/min (0.06 to 0.6km/hr) in the gorse fuels. HFI 500 to 2,500kw/m² with a ROS of 0.5 to 1m/min (0.03 to 0.06 km/hr) in the pine fuels.



(Uncalibrated prediction using data from the Christchurch Aero weather station. Image supplied by Scion Rural Fire Research)

- 12) The start of the Marleys Hill fire was captured by this photo taken at 19:09. The smoke column from the Early Valley fire is visible in the background.



13) Marleys Hill Fire in the minutes after it started actively burning.



- 14) The contributing factors to the speed and intensity of the initial Marleys Hill fire runs were:
- a) Daily Fire Weather (Sugarloaf) : FFMC 84, DMC 56, DC 461, ISI 6.8, BUI 86, FWI 22.5
 - b) Hourly Fire Weather at 1900 (Sugarloaf): FFMC 85.3, DMC 56, DC 461, ISI 24.9, BUI 88, FWI 49,
 - c) Estimated weather: Temp: 19.6 C , RH: 38% , Wind speed: 18 – 40 km/hr
 - d) Slope: Av 10 degrees (over first 500m)
 - e) Fuel: Gorse and 90% cured grass
 - f) Eastern flank was harder to suppress due to fuel and access.
- 15) Both fires continued to run into the evening with helicopters and ground crews working on containment. At approximately 21:00 hours the helicopters stood down (lack of light) on the Early valley fire, by this stage it had travelled around 3km, covered 230ha, damaging 3 homes and destroying another. Two more houses were now surrounded by flames and within the next few hours one was destroyed and the other damaged. The fire was still running up the ridge to the south east and flanking to the north and south into pasture, gorse and pine plantations (See Map 2). By 10:00 hours the following morning (Tuesday, 14 February) the Early Valley fire had reached the top of the ridge, crossed Summit road (08:00 to 09:00) and was backing down towards Governors Bay (See Map 3).

Appendix 10. Witness Identification Log

Witness 1- First visual recordings and observations of suspicious person

[REDACTED]

Witness 2- With Witness 1 and pointed out suspicious person

[REDACTED]

Witness 3- first caller to 111

[REDACTED]

Witness 4 – Local resident, Facebook posts

[REDACTED]

Witness 5- Local resident, photos of the fire in its early stages

[REDACTED]