BRITISH COLUMBIA

CORONER'S COURT OF BRITISH COLUMBIA

held at **Prince George**, British Columbia

VERDICT AT CORONER'S INQUEST

We, the Jury, having been duly sworn and serving at the inquest, commencing on June 18, 2007 at Prince George, British Columbia, and continued on the following dates June 19, 20, 21, 22, 25, 26, 27, 2007 into the death of Joseph Jules Francois Leroux find he/she came to his/her death at approximately 2000 hours on the 20 day of March AD, 2006 at or near 4km on Finlay-Philip Forest Service Road, British Columbia

MEDICAL CAUSE OF DEATH

(1) Immediate Cause of Death: a) Extensive Blunt Force and Crushing Force Injury

DUE TO OR AS A CONSEQUENCE OF

Antecedent Cause if any: b) Motor Vehicle Accident

DUE TO OR AS A CONSEQUENCE OF

Giving rise to the immediate cause (a) above, stating underlying cause last. c)

(2) Other Significant Conditions Contributing to Death:

CLASSIFICATION OF THE EVENT ☒ ACCIDENTAL ☐ HOMICIDE ☐ NATURAL ☐ SUICIDE ☐ UNDETERMINED

The above verdict certified by the Jury on the 27 day of June AD, 2007.

TOM PAWLOWSKI

Presiding Coroner's Printed Name

Presiding Coroner's Signature

TO BE COMPLETED BY PRESIDING CORONER

Age:	52	Gender:	☒ Male	☐ Female	
Date of Birth:	16 January, 1954	Native:	☐ Yes	☒ No	
Coroner's Case No.:	2006-725-0012	Post Mortem:	☒ Full	☐ External	☐ None
Police File No.:	2006-543	Toxicology:	☒ Yes	☐ No	
Police Department:	Mackenzie RCMP	Identification Method:	☒ Visual	☐ Other	(specify below)
Court Reporter:	A. Siemens	Identified by:	Les Avery, coworker		
Phone:	250-614-4681	Premise of Injury:	Finlay-Philip Forest Service Road		
		Premise of Death:	Finlay-Philip Forest Service Road		

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VERDICT AT CORONER'S INQUEST

FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST

INTO THE DEATH OF

Leroux	Joseph Jules Francois
SURNAME	GIVEN NAMES

INTRODUCTION

This inquest into the death of Joseph Jules Francois Leroux commenced at 0930 hours on June 18, 2007, at the Prince George Courthouse in Prince George, and continued on June 19 through 27, 2007. Mr. John Orr was counsel to the coroner. Mr. J. Edward Gouge and Ms. Darcie Suntjens appeared on behalf of the Attorney General of British Columbia, representing the Ministry of Forests and Range. Mr. Scott Nielsen and Ms. Tricia Auton appeared on behalf of the Workers' Compensation Board of British Columbia. Mr. Andrew King and Mr. Ron Corbeil represented the United Steelworkers. Deputy Sheriff Lindquist took charge of the jury and recorded the following exhibits:

1. 26 Photographs of Accident Site
2. Photograph of Speed Limit Sign
3. Copy of Registration of Death
4. Copy of Birth Certificate
5. Curriculum Vitae of Dr. Tsang, Pathologist
6. Autopsy Summary
7. Toxicology Report
8. CVSE Inspection Report
9. Mackenzie Forest District Recreation Map (South Area)
10. Ministry of Forests and Range, March 22, 2006 Memo
11. Canfor Safe Driving Procedures, December 2005
12. Canfor Safe Driving Procedures, April 2005
13. 4 Aerial and Ground-level Photographs
14. Generic WCB Letter to Forestry Companies
15. WCB Compliance Strategy Pilot Letter
16. Photo of Signage on Finlay-Philip FSR
17. WorkSafeBC Inspection Report
18. Abitibi's Rules of the Road
19. Legislative Provisions Excerpts
20. Ministry of Forests and Range Volume Graphs
21. Forest and Range Practices Act Excerpts
22. Photographs of Must-Call Signs
23. Copy of Violation Ticket
24. Provincial Enforcement Initiative Summary
25. You Are the Key Pamphlet
26. Drugs of Abuse Pamphlet

27. BC Forest Safety Council Information Package
28. BC Forest Safety Council Top 10 Rules of the Road
29. #2 Mackenzie Forest District Recreation Map (South)

The following witnesses gave evidence:

1. Cst. J. Kalke, RCMP
2. William Florell, BC Ambulance Service
3. Dr. K. Tsang, Pathologist
4. Dr. W. Martz, Toxicologist
5. R.G. Leatham, Commercial Vehicle Safety and Enforcement Branch
6. Knut Herzog, Engineering Officer, Mackenzie Forest District
7. Brian Long, Driver
8. Les Avery, Driver
9. Mike Ackerman, Driver
10. Rocky Avery, Driver
11. Daniel Budd, Driver
12. Gene Gratton, Manager, Loretta J. Decoteau
13. Alan Humphries, General Manager, Duz Cho Logging Ltd.
14. Ron Hunter, Occupational Safety Officer, WorkSafeBC
15. Wayne Lewis, Woodlands Manager, Abitibi-Consolidated Company of Canada
16. John Moreland, Woodlands Manager, Canadian Forest Products Ltd.
17. Dave Francis, Manager, Mackenzie Forest District
18. Steve Webb, Woodlands Manager, BC Timber Sales Prince George
19. Tim Mergen, C&E Operations Manager, Mackenzie Forest District
20. Rick Publicover, Executive Director, Central Interior Logging Association
21. Stan Wheeldon, President, Prince George Truckers Association
22. MaryAnne Arcand, Director, Forestry TruckSafe
23. Keith Playfair, Chair, Forestry TruckSafe

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PRESIDING CORONER'S COMMENTS

The following is a brief synopsis of the issues reviewed during the inquest. The purpose of these comments is to assist the reader to more fully understand the Verdict and Recommendations of the jury. It is not intended to be considered evidence nor is it intended in any way to replace the jury's verdict.

On March 20, 2006, Joseph Jules Francois "Frank" Leroux died when the loaded logging truck he was driving left the traveled portion of the road and crashed at the bottom of the embankment. The incident took place at 4.3 kilometres on the Finlay-Philip Forest Service Road near Mackenzie at approximately 2000 hours.

At the time of the incident, Mr. Leroux was employed by a small trucking business owned by Loretta J. Decoteau. The operation consisted of two trucks and was managed by Mrs. Decoteau's husband, Gene Gratton. The proprietorship contracted its services to Duz Cho Logging Ltd, a logging contractor operating in the Mackenzie area. Duz Cho harvested timber on behalf of Canadian Forest Products Ltd (Canfor) and Abitibi Consolidated of Canada (Abitibi).

Mr. Gratton was based out of Armstrong but he made visits to Mackenzie every six to eight weeks, to provide supervision and perform maintenance and repairs on the trucks. Mr. Gratton testified that his drivers were issued with vehicle maintenance sheets and were responsible for conducting routine maintenance such as changing oil and lubrication. The drivers were also responsible for daily pre-trip inspections including adjustment of brakes. The vehicles underwent required commercial vehicle inspections every six months.

Mr. Leroux was hired as a temporary replacement driver when Decoteau's regular employee went on holidays. Mr. Leroux had 18 years of log hauling experience and was in search of work following a recent lay-off. He was recommended to Mr. Gratton by the previous employer, Alan Humphries, General Manager of Duz Cho Logging.

After a telephone conversation on March 4, 2006, followed by a meeting with Mr. Gratton, it was agreed that Mr. Leroux would start work on March 6th. Mr. Gratton stayed in Mackenzie for four days and met with Mr. Leroux on three occasions, to review the driver's progress. He was satisfied with Mr. Leroux's performance. A copy of Canfor's rules of the road was carried in the truck and Mr. Gratton reviewed the rules with Mr. Leroux in one of their meetings. Two nights before the incident, Mr. Leroux had informed him that he had problems with trailer brakes. This was attributed to freezing up and Mr. Gratton was informed by Mr. Leroux that he had resolved the problem himself. Mr. Leroux was told to take the vehicle to a mechanic if he experienced any additional problems. Mr. Gratton believed that the brakes were in good condition as he recently replaced them, on January 15th, with the help of his regular driver. He stated that Mr. Leroux did not say anything about electrical outages or shorting out in their nightly meetings although he did mention a problem with lights. Mr. Ackerman, another truck driver, indicated that the stakes used to contain the logs on Mr. Leroux's truck leaned out excessively, creating a wider load and making it more difficult to maneuver the vehicle. Mr. Gratton stated that the stakes become bent with use and the remedy is to straighten them out periodically.

The Finlay-Philip Forest Service Road (FSR) is owned by the Province of British Columbia. Industrial users are given authorization to use the road under a road use permit issued by the Ministry of Forests and Range (the Ministry). It is a

radio assisted road which means that truck drivers utilize radios to announce their location to other road users. The use of radios is required by section 5(1) of the *Forest Service Road Use Regulation* which states:

> 5(1) A driver on a forest service road who uses a 2-way radio to communicate with other drivers on the road must announce, in accordance with any road markers posted at intervals along the road,
> (a) his or her position, and
> (b) the branch of the road being traveled, if the radio's signal can be received on more than one adjacent branch of the road.

The Jury heard that confusion often exists over radio procedures as individual forestry companies develop their own rules of the road and radio use protocols for drivers within their operations. The procedures tend to reflect local operating conditions and the jargon varies considerably across the province but sometimes also between different companies operating within the same geographical area. The drivers may be asked to announce the direction of their travel by calling "north/south", "up/down" or "loaded/empty". In addition, a locally adopted practice may dictate that both loaded and empty trucks announce their position or that loaded trucks call their location every one or two kilometres while the empty trucks call out when they enter a road system but otherwise remain silent. Daniel Budd stated that a system where all empty trucks call their kilometres resulted in too much radio traffic. Other witnesses, including Stan Wheeldon and Keith Playfair, provided similar opinions. Companies may alter their protocols periodically to reflect changes in traffic patterns. Individual drivers may have varying levels of understanding with regard to which protocols apply on a particular road.

Abitibi's "Driver Orientation and Log Hauling Procedures" were entered into evidence as Exhibit #18 while Canfor's "Safe Driving Procedures" from April of 2005 and December of 2005 were entered as Exhibit #12 and #11, respectively. The three sets of protocols all differed to some extent but they generally directed drivers of loaded trucks to call their kilometres at set intervals while the drivers of empty trucks were to remain silent, except when entering onto a road or when prompted by a "must-call" road sign. Changes have been made to Abitibi's rules following Mr. Leroux's death. Currently, the rules state that in a convoy situation, if a truck falls two kilometres behind the lead truck, the following truck must start calling kilometres. Also, if an empty truck is within four kilometres of a loaded vehicle, both trucks need to call kilometres. Mr. Francis, Manager of the Mackenzie Forest District testified that the Ministry can specify radio frequencies to be used on a given road but has no authority to prescribe radio protocols.

MaryAnne Arcand, Director of Forestry TruckSafe, an arm of the BC Forest Safety Council, stated that her organization is involved in the development of generic road safety rules and radio use protocols. The objective is to arrive at a set of rules which could be used throughout the province, while still allowing for local variation as dictated by local conditions.

In March of 2006, log hauling on the Finlay-Philip FSR was restricted to nightshift when lower temperatures helped minimize damage to the road which was otherwise melting during the day. The shift involved hauling two loads with a six or six and half hour turn-around times between a cutblock and the sawmill.

On March 20, 2006, the night was clear and the road surface was in good condition. Mr. Leroux left a cutblock in the Rainbow Creek area and entered the Finlay-Philip FSR. He was transporting a load of logs to Abitibi's sawmill in

Mackenzie. Upon entering the Finlay-Philip, Mr. Leroux fell in behind another loaded truck driven by Mr. Ackerman. Following an established practice, Mr. Ackerman began calling kilometres for both trucks. This procedure is designed to reduce the amount of radio calls on the road. After three more trucks joined the convoy, Mr. Ackerman was calling "loaded for five" on behalf of all five drivers. As the vehicles continued to travel down the road, Mr. Leroux continued to be the second truck in the convoy but he started falling behind. He previously mentioned having trouble with his brakes and with the electrical system. Rocky Avery who was following immediately behind Mr. Leroux noticed that Mr. Leroux's brakes were smoking. Mr. Leroux advised him that his trailer brakes were not working and consequently, he was forced to use his tractor brakes more. He most likely drove in low gear, in order to control the descent on the steeper portions of the road, without relying on the brakes. This resulted in a large gap between his vehicle and the first vehicle in the convoy.

As Mr. Ackerman reached the 2 kilometre mark, he met an empty truck, driven by Brian Long and heading in the opposite direction. Mr. Long had entered onto the Finlay-Philip FSR at the Zero kilometre mark and announced his presence over the radio at that time. He heard Mr. Ackerman call loaded at 6 kilometres so he got into a turnout at the 2 kilometre mark. As the two vehicles met, Mr. Ackerman called "Both ways at 2 kilometres" meaning that there was a loaded and an empty truck meeting at that spot. Mr. Ackerman then indicated that there were other trucks coming up behind him.

Mr. Long waited briefly at the 2 kilometre turnout but as he had heard Les Avery calling for two loaded trucks at 13 kilometre, he assumed that the next loaded truck was further away. He proceeded up the road, not realizing that Mr. Avery was driving the fourth truck of the convoy and that there were two more trucks between them. At the same time, the drivers of the loaded vehicles assumed that the empty truck would stay put, waiting for them to pass. It was approximately 2000 hours. Near the 4 kilometre mark, Mr. Long came around a bend in the road and saw Mr. Leroux's headlights. Mr. Long managed to get into a turnout and was not completely stopped when the two trucks passed each other without any contact.

The section of the road where the two vehicles passed had been snow ploughed to approximately nine metres in width but it suddenly narrowed to approximately six metres. Mr. Leroux's front wheel caught the snow shoulder at the narrowing point, causing the vehicle to veer off to the side and continue down the embankment. The truck then came to an abrupt stop, with the force of the collision causing the trailer and the load of logs to crush the cab. Observations made at the scene did not indicate any attempts at braking.

Mr. Long was still in the turnout when he was passed by another loaded truck, driven by Rocky Avery who announced that someone had gone off the road. Mr. Avery stated that he had been following approximately 0.5 kilometre behind Mr. Leroux and he estimated his speed on that section of the road at 70 kilometres per hour.

Mr. Long, along with other drivers walked down the embankment to check on Mr. Leroux's wellbeing. They found no signs of life. Emergency services arrived at the scene at approximately 2040 hours. Cst. Kalke of the Mackenzie RCMP observed that Mr. Leroux was pinned by the steering wheel inside the crushed cab. Mr. Leroux was not wearing a seatbelt.

William Florell was one of the two paramedics who attended the incident scene. He examined the body, finding no pulse and no signs of respiration. He documented a flail chest and an open pneumothorax. Mr. Leroux was declared deceased and no life-saving procedures were initiated at any point.

A postmortem examination was conducted by Dr. Katherine Tsang at the Prince George Regional Hospital on March 23, 2006. The autopsy revealed fractures of the sternum and both clavicles, as well as multiple rib fractures. Also noted was a laceration of the left upper lobe of the lung and a complete transection of the aorta, involving the descending portion distal to the origin of the left subclavian artery. Dr. Tsang testified that given the severity of the injuries, attempts at cardiopulmonary resuscitation in the field would have been futile. There was no evidence of a natural disease process that would have caused or contributed to this death. Dr. Tsang testified that the cause of death was extensive blunt and crushing force trauma secondary to a motor vehicle incident. Routine alcohol and drug tests were ordered. A summary of the autopsy report was entered as evidence (Exhibit #6).

Interpretation of toxicology results was provided by Dr. Martz, Scientific Director at the Provincial Toxicology Centre. Dr. Martz testified that the toxicological examination of the blood collected from the pleural cavity documented presence of tetrahydrocannabinol and its metabolite. The metabolite was also documented in the urine. The toxicology report was entered into evidence. (Exhibit #7). The relevant toxicological findings were as follows:

Blood (Pleural)	Ethyl Alcohol	Not Detected
Blood (Pleural)	Cocaine	Not Detected
Blood (Pleural)	Benzoylecgonine	Not Detected
Blood (Pleural)	Tetrahydrocannabinol	0.002 mg/L
Blood (Pleural)	11-Carboxytetrahydrocannabinol	0.02 mg/L
Urine	Cocaine	Not Detected
Urine	Benzoylecgonine	Not Detected
Urine	11-Carboxytetrahydrocannabinol	0.003 mg/L

Dr. Martz testified that tetrahydrocannabinol, the active ingredient of marijuana, was present at a low level and the finding was consistent with prior administration of a marijuana cigarette by an infrequent user who had consumed cannabis in the hours before the incident. He also testified that marijuana has an adverse effect on driving and concentration and suggested that it had a contributory effect in this case.

Mike Ackerman testified that Mr. Leroux used marijuana, although he did not know him to use it while at work. Mr. Budd also corroborated this, stating that he heard of Mr. Leroux's use of marijuana, although he did not have first hand knowledge.

The Jury heard from Keith Playfair, Chair of Forestry TruckSafe, a program of the British Columbia Forest Safety Council. The Council was established in the fall of 2004 as a not-for-profit society dedicated to promoting forest safety. Mr. Playfair stated that substance abuse had been identified as an issue in the forest industry but not enough is known about the extent of the problem or whether, in fact, it is a problem.

The Council commissioned Rick Publicover to conduct a review of research on the subject area. Mr. Publicover, currently the Executive Director of the Central Interior Logging Association and former Director of the BC Council on Substance Abuse, offered his opinion that substance abuse in forestry is a significant issue. He stated that not much research has been done to date on the extent of the problem in the forestry workplace specifically, but that substance abuse is pervasive in the society, as documented in Canadian addiction surveys. At the same time, forestry has been identified as one of the high risk sectors by an Alberta survey of substance use among workers. He said that forestry employees work in circumstances that are conducive to substance abuse, such as isolation, long work hours and distance from support networks. Mr. Publicover stated that employers can develop positive strategies for assisting workers in dealing with substance abuse issues, but while some companies are doing an excellent job, others are not. Mr. Publicover stated that there is a need to conduct research on the extent of the substance abuse problem in forestry. He indicated that the BC Forest Safety Council would be the most effective catalyst for this work.

The inspection of Mr. Leroux's vehicle was carried out on March 22, 2006, by Gordon Leatham, an inspector from the Commercial Vehicle Safety and Enforcement branch who provided testimony at the inquest. The CVSE Post-Crash Vehicle Inspection Report was admitted into evidence (exhibit #8). The report documented the damage to the 1998 Kenworth T800 tractor and the 1999 Manac three-axle hayrack trailer. It showed that tires were in good condition. Examination of the braking system documented that Axle 1 showed extensive collision damage consisting of a torn-off right pot and left tie rod. Excessive slack travel was documented on both sides of Axle 2, on the left side of Axle 3 and the right side of Axle 5. Axle 3 had both pushrods out of adjustment, past 90 degrees while the left Axle 5 pushrod angle was past 90 degrees in the released position. Further, the brake chambers on Axle 4 were of different sizes. The report concluded that the vehicle did not meet the standards set out in the *Motor Vehicle Act* and *Regulations*, due to excessive pushrod angles and different brake chamber sizes. Mr. Leatham indicated that had the vehicle undergone an inspection prior to the incident, the driver would have been required to make brake adjustments before being allowed to continue. He indicated that such adjustments could be performed in ten minutes. Poorly adjusted brakes would have been less effective. The testimony of drivers including Rocky Avery and Daniel Budd suggested that even though brake adjustment should be a part of the daily pre-trip inspections, this is often not done.

The Jury heard that in spite of challenges associated with driving log hauling trucks on industrial roads, there is no specialized training or certification requirements for forestry drivers. According to Daniel Budd, these challenges have been exacerbated in recent years as there are more trucks on the road. The trucks are no longer transporting timber to the closest mill but are hauling longer distances to different locations. As there is a general shortage of forestry drivers, one often encounters new drivers or drivers who are new to a particular area and not familiar with the road. Mr. Budd suggested that new drivers should not be sent on the road on their own for the first time. Currently, other than a Class 1 licensing requirement, there are no legislative or regulatory provisions that require forestry-specific driver training.

MaryAnne Arcand testified that the BC Forest Safety Council is working toward log truck driver training and certification. As part of this effort, discussions have taken place with the Insurance Corporation of British Columbia regarding log truck driver endorsement over and above Class 1 licensing requirements. It is anticipated that an apprenticeship consisting of driving with an experienced driver would also be involved in the training and certification program.

Mr. Hunter stated that Mr. Leroux's load was likely between 55 and 56 tons, as the review of print-outs from the scale showed that Mr. Leroux typically hauled loads in that range. The Jury heard that off-highway loads tend to be much heavier than highway loads but there are no clear guidelines with regard to what constitutes a safe load. Mr. Wheeldon stated that off-highway loads tend to be between 54 and 56 tons but may be as heavy as 65 tons. Mr. Long stated that since mills pay by the ton of wood delivered, sometimes there is a tendency to overload, which affects braking power. Mr. Lewis stated that Abitibi is aiming at 52 ton loads, with 56 ton loads being the maximum. Abitibi drivers are not compensated for weight above 56 tons, to prevent overloading. Mr. Humphries confirmed these weight limits but stated that in his opinion even 56 tons was too heavy. Mr. Moreland stated that Canfor is trying to reduce the load to 54 tons. He also added that lowering of load limits may result in vehicles traveling faster and a higher number of trucks on the road.

Mr. Herzog, the Engineering Officer at the Mackenzie Forest District, testified that a forest service road is a road with multiple users designated as such by the Minister or the District Manager. FSRs are commonly used to access timber, for mine exploration or by non-industrial users such as hunters and other recreationists. The public uses these roads without having to contribute to maintenance. The Mackenzie Forest District contains approximately 1,700 kilometres of forest service roads, in addition to more than 18,000 kilometres of road permit or cutblock roads and 4,000 kilometres of non-status roads.

Like numerous other FSRs, the Finlay-Philip was built by one of the licensees, in this case, a precursor to Canfor. Mr. Herzog testified that forest roads may have varying widths and there are no legislated requirements as to their dimensions. Whether a road is six or eight metres wide, would depend on its use, as determined by the licensee building and maintaining the road. The Ministry has a role in reviewing road design but only as it pertains to stumpage appraisal.

Mr. Francis, Mackenzie Forest District Manager, stated that even though there are no legislated standards for forestry roads, a long term use road will be designated as a forest service road and there are discussions on how it needs to be constructed. The roads are built by licensees and later turned-over to the government. Maintenance of the roads by the permit holders must be carried out to a standard which allows the integrity of the road to be maintained.

In the case of the Finlay-Philip FSR, the main licensee and road use permit holder, responsible for road maintenance, is Canfor. If a secondary user begins to utilize the road, then that user must enter into a road maintenance agreement with Canfor and contribute financially to road maintenance activities. The Ministry does not monitor road use agreements and is not privy to the details of such agreements. Mr. Herzog testified that as a district engineer, he does not supervise maintenance on a forest service road, although he does conduct inspections of bridges and major culverts.

Mr. Webb, Woodlands Manager for BC Timber Sales (BCTS) Prince George Business Area stated that BCTS is an independent organization within the Ministry of Forests and Range, operating at arm's length from the Operations division. The role of BCTS is to market timber at market price. BCTS issues tenures and manages approximately 20 percent of the provincial allowable annual cut. Timber sale licences are allocated through a bidding process.

Canfor's forest licence in the area had been in place since the 1960s. Mr. Moreland, Woodlands Manager at Canadian Forest Products, stated that Canfor was the primary user of the Finlay-Philip road and was responsible for road

maintenance. Mr. Lewis, Woodlands Manager for Abitibi Consolidated testified that Abitibi purchased two timber sale licences from BC Timber Sales in 2005 and started logging in the Rainbow-Philips area in November. A road use permit for the Finlay-Philip FSR was issued to Abitibi in order to allow the company to haul logs from its timber sale operations. Abitibi was required to enter into a road maintenance agreement with Canfor. Under the terms of this agreement, Abitibi was to compensate Canfor for its portion of road maintenance costs. Safety was not part of the road use agreement specifically. However, Canfor's rules of the road were included as an appendix to the document.

Mr. Moreland stated that a road use agreement deals with maintenance. As part of the agreement, the two permit holders had to work-out what kind of traffic volume they would have on the road. Canfor's supervisor had a discussion with Abitibi regarding what the expected number of loads to be and then signed the agreement. There was no formal assessment, however, with regard to how many loads the road could handle. Mr. Moreland testified that Canfor was not consulted about impact on the existing road user when the timber sale was allocated. Similarly, Canfor would have no control over how many loads per day a timber sale holder would have on the road.

Mr. Francis stated that the Ministry has difficulty predicting what the traffic volumes will be at any one time due to variables such as weather or business practices of a licensee. The Ministry has some authority to regulate radio use under section 5 of the *Forest Service Road Use Regulation*.

Mr. Francis informed the Jury that as a District Manager, he authorizes forest and range activities within the Mackenzie Forest District. When required, he is responsible for making enforcement decisions in relation to contravention of forest practice regulations. He also authorizes forest road use through a permit process.

Section 115 of the *Forest Act* states that a person who has the right to harvest timber under one of the specified licences, including a timber sale licence, may apply to the district manager for a road use permit to use a forest service road. This section also states that the district manager must grant to an applicant a road use permit to use a forest service road if satisfied that use of the road by that person will not adversely affect authorized users of the road or compromise a forest stewardship plan or forest development plan. Mr. Francis stated that if a primary user was to demonstrate that there was a conflict with existing use, a permit application could be refused.

Mr. Francis testified that the Ministry does not do its own assessments when authorizing road use by additional industrial users. Accordingly, when Abitibi was issued its timber sales, there was no road use impact assessment conducted. Mr. Francis testified that in such cases, it would be up to the primary user to identify issues. Mr. Francis stated that the Finlay-Philip FSR in the past experienced peak traffic volumes in excess of 90 truck loads per day. In March of 2006, the peak volumes were at 70 truck loads per day. He also stated that the Ministry has no legal authority to reduce the number of vehicles on a road. Mr. Herzog testified that the Finlay-Philip FSR should be able to handle 90 loads per day.

Mr. Les Avery stated that when additional traffic is introduced to a road system, the new drivers bring a level of confusion. Mr. Hunter stated that a risk assessment on a road system would consist of an evaluation of the road and how many loads it can handle. He added that risk assessments must reflect changing conditions such as winter versus summer road width.

Section 3 of the *Forest and Range Practices Act* requires that holders of forest licences prepare forest stewardship plans which demonstrate how the licensee will address government set objectives. These objectives are listed in the *Act* and include soils, visual quality, timber, forage and associated plant communities, water, fish, wildlife, biodiversity, recreation resources, resource features and cultural heritage resources. Mr. Francis stated that employee safety is not one of the management objectives listed under the *Forest and Range Practices Act*. The government must approve forest stewardship plans prior to any harvesting of timber or construction or roads.

Mr. Francis testified that the primary design of most forestry roads is based on an 80 kilometres per hour speed limit. In places, the speed limit is set at 60 kilometres per hour, as determined by engineering staff. The authority to post signage on forestry roads is outlined in the *Forest Service Road Use Regulation*. Signs can be posted by Ministry of Forests and Range officials or authority to post signs can be given to a road permit holder.

The Jury heard that excessive speed can be a problem on forestry roads. Mr. Moreland indicated that some drivers may speed through certain sections and subsequently wait at the bottom of the road so as not to arrive under the official cycle times. Mr. Humphries suggested that there should be more speed limits on the roads. Mr. Lewis indicated that Track Star, a vehicle position and movement monitoring system, has been considered by Abitibi for the purpose of monitoring truck movements but that it was problematic due to poor geographical coverage available.

Mr. Playfair indicated that speed signs are posted on some roads but not on others. Further, there is a lack of consistency with regard to the type of signs that are posted on forestry roads. He stated that some signs are simply painted by someone with a paint can. He suggested that standardization of signage and radio protocols is critical as drivers move around throughout the province. Mr. Webb also stated that it would be beneficial to standardize markings and their placement on the road. Mr. Hunter stated that the general public using forestry roads must be taken into consideration when designing a traffic control system and that standardization of signage could be incorporated into regulations.

The Jury heard from witnesses such as Mr. Long and Mr. Playfair that speed limits are not enforced on forestry roads. Mr. Humphries testified that with respect to the Finlay-Philip, drivers tend to speed when they get to the bottom section of the road.

Mr. Francis stated that the Ministry has responsibility for the structural integrity of the road but that in terms of employee behaviour, the responsibility for safety lies with the employer and agencies such as the RCMP, in relation to substance abuse issues, and WorkSafeBC, in relation to radio protocols. Section 4 of the *Forest Service Road Use Regulation* sets limits on the speed of travel on forest service roads while section 5 governs the use of radios. The legislation provides the Ministry with authority to enforce the regulations. Accordingly, Ministry's staff has participated in speed compliance enforcement with the RCMP. Mr. Francis testified that his staff does not have the same level of training as the police.

Mr. Mergen, Manager of Compliance and Enforcement at the Mackenzie Forest District testified that his unit is involved in inspections of timber marking, truck load dimensions, road maintenance and protection of riparian resources and soils. The unit has also worked with the RCMP, monitoring speed compliance. Mr. Mergen stated that enforcement on the Finlay-Philip FSR had not been a high priority as that road did not present the same level of risk as some other roads in the area. Consequently, his staff had not monitored speed or radio protocols in relation to that road. Mr. Mergen stated

that Compliance and Enforcement was limited by resources and the unit was in need of equipment such as a radar gun and related training.

The Jury heard from a number of witnesses on the subject of compliance with radio and road use procedures. Mr. Long stated that while most drivers follow procedures, some do not. He stated that Mr. Leroux did not like to use the radio and did not call kilometres. Mr. Long stated that he had not heard of anyone being disciplined for not using radio procedures properly.

Mr. Mergen stated that when his department takes enforcement steps, the actions may consist of verbal or written warnings and violation tickets under the *Offence Act*. He testified that prior to the fatal incident, Mr. Leroux had been found to be in contravention of the *Forest Service Road Use Regulation* in relation to oversize loads. Oversize loads are considered a safety issue. A verbal warning and a written warning ticket were issued to him in regards to these two separate incidents (Exhibit #23). These actions were not communicated to his employers.

Mr. Moreland testified that Canfor's Woods Supervisor and Foreman monitor radio use and have the ability to discuss inappropriate use of radios with drivers hauling their timber. It would be up the Duz Cho Logging, who contracted the drivers, to follow-up on the issue. Mr. Moreland stated that Canfor was the primary user on the Finlay-Philip, for the purpose of carrying out maintenance, but was not designated the primary contractor within the meaning provided by the *Workers' Compensation Act*. Excerpts from the *Act* were entered into evidence (Exhibit 19). Section 118 of the *Act* states that at a workplace where employees of two or more employers are working at the same time, the prime contractor is the contractor or person designated as such under a written agreement reached with the owner of the workplace. Prime contractor is responsible for coordinating all workplace activities in relation to occupational health and safety. Mr. Moreland stated that the designation of primary contractor would place on the primary road user the responsibility for safety of users without parallel authority to enforce the rules.

Mr. Lewis stated that Abitibi has logging road supervisors on roads within its operating areas. These supervisors can impose fines and suspensions to drivers. Monitoring compliance with radio protocols is part of their function. There were no formal reports of radio misuse in 2006. Mr. Lewis testified that a supervisor would be on the Finlay-Philip FSR three or four days per week. The supervisors do not monitor radios at night during night hauling operations.

The Jury heard that some areas of the province have benefited from having road marshals who monitor activities on forest roads with focus on safety. Mr. Playfair pointed to Canfor's Prince George operations where, in his opinion, implementation of the road marshal position resulted in prevention of fatalities. The marshal in that area worked for a road use committee. Both Mr. Wheeldon and Ms. Arcand stated that road marshal programs should be driven by the industry.

At the end of their deliberations, the Jury classified this death as accidental and put forward a series of recommendations to the Office of the Chief Coroner for dissemination.

Tom Pawlowski, Presiding Coroner

BRITISH COLUMBIA

CORONER'S COURT OF BRITISH COLUMBIA

held at **Prince George**, British Columbia

VERDICT AT CORONER'S INQUEST

FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST

INTO THE DEATH OF

Leroux	Joseph Jules Francois
SURNAME	GIVEN NAMES

RECOMMENDATIONS OF THE JURY

To: Honourable Rich Coleman
Minister of Forests and Range
PO Box 9049
Stn Prov Govt
Victoria, BC
V8W 9E2

1) We recommend that BC Timber Sales should be required to conduct risk assessments when allocating timber sales; such risk assessments should include study of impacts on road safety and take into consideration operations involving existing road users.

2) We recommend that the Ministry of Forests and Range work towards standardization of forest road signage including the location and format of kilometre markers, must-call signs and signs indicating the location of pullouts.

3) We recommend a District Manager should be required to conduct an assessment of road user safety or be satisfied that such a risk assessment has been completed prior to issuing any road use permit.

4) We recommend a District Manager should be required to ensure that, if a road use agreement is required, a condition of the road use permit should be that road safety is addressed in the road use agreement.

5) We recommend that the Compliance & Enforcement staff be required to notify the road use committee and/or the primary road user of all instances of non-compliance with laws, regulations and rules of the road, including information related to written and verbal warnings issued to drivers.

6) We recommend that worker health and safety and road user safety, be included as an objective in all forest stewardship plans.

7) We recommend that adequate resources be provided to Compliance & Enforcement to ensure that adequate level of enforcement, including road safety focused enforcement, is carried out on forest roads.

8) We recommend that the Ministry of Forests and Range consider developing safety focused standards for the engineering, construction and maintenance of resource roads as well as assess the standards and upgrade accordingly.

To: Douglas Enns
Chair, Board of Directors
WorksafeBC
PO Box 5350 Stn. Terminal
Vancouver, BC
V6B 5L5

9) We recommend that WorkSafeBC commission an engineering study to assess safe load limits for off-highway trucks and prescribe such load limits in the Occupational Health and Safety Regulations.

10) We recommend that WorkSafeBC make it a requirement that the primary road user on a multi-employer forest road establish the position of an unbiased Road Marshall or Truck Foreman to monitor road safety including road maintenance and snow ploughing, radio protocol compliance and compliance with speed limits and other rules of the road.

11) We recommend that WorkSafeBC conduct a study to test the feasibility of requiring the installation and utilization of truck tracking and monitoring devices for the purpose of road use compliance.

12) We recommend that WorkSafeBC, in conjunction with the RCMP, coordinates and implements a minimum of two resource road checks per logging season per forest district in regard to drug and alcohol abuse.

13) We recommend that WorkSafeBC notify all forest employers and remind them of their responsibility in regard to their employees' safety that it is from home to home not just within a specified work area, such as a forest service road or a logging site.

To: Tanner Elton
CEO/ Executive Director
BC Forest Safety Council
Suite 200-1055 West Hastings Street
Vancouver, BC
V6E 2E9

14) We recommend that the BC Forest Safety Council continue to work, and expedite its efforts towards the development of a standardized radio use protocols throughout the province.

15) We recommend that the BC Forest Safety Council work on education of truck drivers about the compliance with requirements of pre-trip inspections, brake adjustments and seatbelt use.

16) We recommend that the BC Forest Safety Council move the issue of substance misuse in the forest industry to the forefront of their agenda.

To: Paul Taylor
President & CEO
Insurance Corporation of British Columbia
151 West Esplanade
North Vancouver, BC
V7M 3H9

17) We recommend that the Insurance Corporation of BC implement a forestry endorsement for commercial drivers and to include a 50 hour ride along time in a commercial logging truck prior to receiving the endorsement.