BRITISH COLUMBIA

Ministry of Public Safety and Solicitor General

VERDICT AT CORONER'S INQUEST

File No.: 2007:302:0008

An Inquest was held at Sechelt Courthouse, in the municipality of Sechelt

In the Province of British Columbia, on the following dates August 11th, 12th, 13th, 14th, 15th, 2008

before Tom Pawlowski, Presiding Coroner,

into the death of DIXON MERRILL 51 ☒ Male ☐ Female
(Last Name, First Name) (Age)

and the following findings were made:

Date and Time of Death: March 21, 2007 at approximately 2300 hours

Place of Death: Princess Royal Reach, Jervis Inlet near Sechelt, British Columbia
(Location) (Municipality/Province)

Medical Cause of Death

(1) Immediate Cause of Death: a) Severed Brain Stem Dislocation

DUE TO OR AS A CONSEQUENCE OF

Antecedent Cause if any: b) Blunt Force Injury due to Rapid Deceleration

DUE TO OR AS A CONSEQUENCE OF

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

(2) Other Significant Conditions Contributing to Death: Speed, alcohol impairment, restricted visibility

Classification of Death: ☒ Accidental ☐ Homicide ☐ Natural ☐ Suicide ☐ Undetermined

The above verdict certified by the Jury on the 15th day of August AD, 2008.

TOM PAWLOWSKI
Presiding Coroner's Printed Name

Presiding Coroner's Signature

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FINDINGS AND RECOMMENDATIONS AS A RESULT OF THE INQUEST INTO THE DEATH OF

FILE NO.: 2007:302:0008

DIXON	MERRILL BRADY
SURNAME	GIVEN NAMES

PARTIES INVOLVED IN THE INQUEST:

Presiding Coroner: Tom Pawlowski

Inquest Counsel: John Orr

Court Reporting/Recording Agency: Verbatim Words West Ltd

Participants/Counsel: Workers' Compensation Board/R. Mark Powers/James McJannet

The Sheriff took charge of the jury and recorded 20 exhibits. 19 witnesses were duly sworn in and testified.

PRESIDING CORONER'S SUMMARY:

The following is a brief summary of the circumstances of the death as set out in the evidence presented to the jury at the inquest. This summary is presented 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 21, 2007, at approximately 2300 hours, a crew boat carrying four occupants collided with the shoreline at Princess Royal Reach in Jervis Inlet. At the time of the collision, the boat was operated by Merrill Brady Dixon. Mr. Dixon sustained injuries which were almost instantly fatal. The other occupants of the boat also sustained injuries which varied in the degree of severity.

Mr. Dixon was not the crew boat's regular operator. He was employed by the Sechelt Indian Band as a watchman and maintenance worker at a logging camp operated by the Band at Deserted Bay in Jervis Inlet. His duties consisted of preventative maintenance of equipment and facilities, and also included patrol and monitoring of the camp area.

The Sechelt Band rented the camp facilities to logging companies. In March of 2007, the camp was utilized by a crew from Tsuadi Forest Products Ltd.

On the morning of March 21, 2007, an employee of Tsuadi Forest Products embarked on a sea voyage in a small work boat used for log booming operations. The boom boat operator had been asked by the principal of Tsuadi Forest Products, to take the boom boat, also known as a sidewinder, from a site near Sechelt and to sail it to the Deserted Bay camp.

The boom boat operator estimated that because of the great distance involved, the journey would not be completed during daylight hours. He had a flashlight but the boat was not equipped with navigation lights for travel during periods of reduced visibility. There was no navigational equipment onboard and no flares for emergency signaling. There was no discussion between the boat operator and his employer about equipment requirements and no detailed trip planning took place. The sidewinder was equipped with a windscreen and a small canopy but this configuration left the operator exposed to elements. The

VHF radio installed on the boat was programmed with frequencies used by another logging operation. The operator was given a handheld VHF radio with Tsuadi's frequencies but testified that he did not know which channels to use.

The boom boat operator's plan for the journey was to stay close to the shoreline and in case of an emergency, to try to swim to the shore. He had extensive experience in booming operations and was considered a competent sidewinder operator by his employer. He had no formal training in boat operation, navigation, marine trip planning or radio use. Testimony introduced at the inquest by several witnesses indicated that boom boats are not suitable for long journeys in open water.

Because of the length of the voyage, the boom boat had to be re-supplied with fuel along the way by Tsuadi's crew boat traveling between the logging camp and Sechelt. The weather was fair when the boom boat operator commenced his trip but by mid-afternoon, both the weather and sailing conditions deteriorated as was manifested by large waves, falling snow and poor visibility. The crew boat's operator became concerned about the boom boat operator's wellbeing. He radioed the Deserted Bay camp and indicated that he would pick-up another worker and the two of them would come back and assist the boom boat operator.

Present at the camp was Mr. Dixon and two employees of Tsuadi Forest Products: a camp manager, who was also the camp's cook, and a bucker who was also the first aid attendant at the logging operation. Mr. Dixon and the bucker had been consuming alcohol in Mr. Dixon's trailer.

When the crew boat operator arrived at the camp, he was joined on the boat by the bucker and also by Mr. Dixon who brought along a quantity of beer. All three men on board continued to consume alcohol.

The crew reached the boom boat at approximately 1900 hours. While stepping between the two vessels, the boom boat operator fell into the water. Mr. Dixon took over the controls of the boat while the other two crew members attempted to re-warm the boom boat operator with blankets and body heat. The conditions continued to deteriorate. Hampered by poor visibility, the disoriented crew was unable to find their way back to the camp. The evidence suggested that at times the boat traveled in circles and likely passed in front of the Deserted Bay camp a few times.

The camp manager heard the boat go by and attempted to guide the crew to the camp by turning on lights and sounding a horn. She also alerted the principal of Tsuadi who in turn contacted the owner of a water taxi in Egmont, asking that a boat be dispatched to locate the missing crew. The camp manager continued to maintain radio communications with the crew boat until approximately 2300 hours when suddenly the radio on the boat went silent, as the boat collided with the shoreline.

The camp manager attempted to summon help utilizing a satellite telephone and a variety of radios available at the camp. Communications were somewhat hampered as the manager was not thoroughly familiar with the radio equipment and the satellite phone reception was intermittent. Eventually, she was

able to reach a 911 operator and was subsequently patched through, at 0025 hours, to the Joint Rescue Coordination Centre in Victoria. The Centre, which coordinates search and rescue response to marine incidents, launched a massive operation involving aircraft dispatched from the Air Force base in Comox and a hovercraft from the Coast Guard's base in Richmond.

The crashed boat was located at approximately 0230 hours by the water taxi operator who subsequently transported the three survivors to Deserted Bay. The water taxi operator was able to navigate through the inlet and locate the logging camp, without difficulties, with the use of his GPS (Global Positioning System navigational instrument). From there, they were evacuated for medical treatment by the Coast Guard. Mr. Dixon's body was recovered on behalf of the coroner by officers of the Royal Canadian Mounted Police.

The postmortem examination documented blunt force head and neck injury in the form of an atlanto-occipital dislocation with associated injury to the brain stem, causing a nearly instantaneous death. The postmortem toxicological analyses showed a blood ethanol concentration of 0.14% and a vitreous fluid ethanol concentration of 0.23%. The blood alcohol reading represented the alcohol level at the time of death and was almost twice the legal limit imposed on operators of motor vehicles or vessels. As the vitreous fluid level tends to lag behind the alcohol level in the blood, the documented vitreous fluid ethanol concentration of 0.23% provided an indication as to the level of alcohol in the system some hours before the death occurred. It was consistent with consumption of alcohol in excess of ten standard size drinks over a relatively short period of time.

The collision scene investigation conducted by the RCMP West Coast Marine Services team concluded that the crew boat was traveling at a high rate of speed, of approximately 25 to 30 knots, when it collided with the shoreline, resulting in extensive structural damage to the 8.9 metre long vessel. The investigation also documented that the onboard GPS was in active mode but the screen displayed numerous track lines recorded during previous trips and the clutter of the display made it impossible to locate the shoreline. Finally, the RCMP investigation concluded that the crew boat was used as a commercial vessel, but it had not been registered and had not undergone the required Transport Canada safety inspection.

The bucker testified that he did not know how to clear the GPS display of previous track marks. He had no training in the use of GPS or other navigational equipment. The witness had previously enrolled in a Power Squadron course, but did not complete it as it was difficult to accommodate the course work while working out of logging camps. He had operated boats for Tsuadi Forest Products, as well as for other companies, and it was his experience that it is not uncommon for boat operators in the logging industry to operate vessels without formal training. He testified that on the night of the incident, the crew was lost in the storm and panic set-in.

The regular crew boat operator did not have any formal training or certification in boat operation and relied on knowledge passed on to him by his grandfather and father. He testified that he did not know

how to clear the GPS display and did not have any GPS or radar training and instead, relied on his knowledge of the inlet. He normally traveled by sight, being able to recognize mountains and other features in times of good visibility. He testified that while larger companies may have designated boat operators who are trained and certified, it is challenging for smaller companies to ensure the same.

The principal of Tsuadi Forest Products testified that prior to the incident he had full confidence in the crew boat operator's boating skills which were passed from generation to generation of fishermen and marine travelers familiar with Jervis Inlet. He was not aware of boat registration, inspection, and crew certification requirements. The witness stated that the GPS was a new instrument onboard the boat and the crew was not versed in its use. He testified that in the aftermath of the fatal incident, his company registered with SAFE Companies program administered by the B.C. Forest Safety Council and hired a qualified supervisor who also holds a Small Non-Pleasure Vessel Operator Proficiency (SVOP) certificate and radio operator's Restricted Operator's Certificate (ROC).

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DIXON	MERRILL BRADY

Pursuant to Section 38 of the Coroner's Act, the following recommendations are forwarded to the Chief Coroner of the Province of British Columbia for distribution to the appropriate agency:

JURY RECOMMENDATIONS:

To: Jim Lawson
Director, Marine Safety
Transport Canada
Pacific Region
620 - 800 Burrard Street
Vancouver, B.C. V6Z 2J8

1. It is recommended that Transport Canada make improvements to communications in coastal inlets.

Coroner's Comments: The jury heard that British Columbia's inlets are the lifelines of many coastal communities and while many of them, including Jervis Inlet, support a high frequency of both recreational and industrial marine traffic, critical marine communications in those waters are not well supported by communications infrastructure. Boaters experience failing reception when utilizing cellular or satellite telephones and even the effectiveness of two way radios may be limited due to scarcity of repeater sites and resultant poor coverage. The jury heard that installation of radio repeaters at locations such as the back of Jervis Inlet would improve emergency radio communications and marine safety.

2. It is recommended that Transport Canada require all commercial passenger carrying vessels to be equipped with Electronic Position Indicating Radio Beacon (EPIRB).

Coroner's Comments: The jury heard that an Electronic Position Indicating Radio Beacon is an effective means for communicating distress. However, the evidence introduced at the inquest indicated that an EPIRB is not required on all commercial vessels. Depending on boat dimensions, some vessels, including those utilized in various forestry operations to carry worker-passengers, may not be required to carry an EPIRB under the current regulatory regime.

To: Tanner Elton, CEO/ Executive Officer
B.C. Forest Safety Council
Suite 200 - 1055 West Hastings St.
Vancouver, BC V6E 2E9

3. It is recommended that the BC Forest Safety Council be empowered to ensure formal training for all commercial boat operators as per Transport Canada regulations.

Coroner's Comments: The jury heard about general lack of awareness regarding boat crew training and certification requirements for commercial operations. Witness testimonies also indicated that it may be difficult for workers in some areas to gain access to boat operation training courses and that courses are sometimes cancelled due to low enrollment.

Further, the jury heard that the BC Forest Safety Council is an organization dedicated to promoting forest safety through programs and initiatives including the Forest Supervisor Training and Faller Training and Certification Programs. The Council is also an important source of safety related information. Extending the range of workforce development initiatives by promoting the training of boat operators to appropriate standards would further advance the overall safety of forest workers.

4. It is recommended that the BC Forest Safety Council ensure that crew transportation on land and water be included in SAFE Companies audits.

Coroner's Comments: The jury heard that the BC Forest Safety Council is an organization dedicated to promoting forest safety through programs and initiatives such as the SAFE Companies program which establishes health and safety standards that forestry companies need to meet in order to obtain SAFE certification. The jury heard about the widespread acceptance of SAFE Companies within the forest industry and the potential that this program has for effecting change within the industry. Referencing the issue of crew transportation safety within the SAFE Companies audit framework has the potential for highlighting the importance of safe crew transport as an element of overall worker safety.

To: Roslyn Kunin, Chair
Workers' Compensation Board of British Columbia (WorkSafeBC)
PO Box 5350 Stn Terminal
Vancouver, BC V6B 5L5

5. It is recommended that the Workers' Compensation Board ensure compliance with Transport Canada regulations requiring Small Vessel Operator Proficiency (SVOP) certificate.

Coroner's Comments: The jury heard that under the current regulatory regime, the operators of certain small commercial vessels, such as many of those typically used in support of logging operations, are required to hold Small Vessel Operator Proficiency (SVOP) certificates. SVOP certificates are obtained following successful completion of a Transport Canada approved SVOP training course.

Evidence pointing to lack of proper training in the operation of small vessels and the use of navigational equipment figured prominently in the testimonies. The jury also heard that non-compliance with training and certification requirements might not be limited to this particular incident.

Further, the jury heard that Transport Canada is limited in its capacity to monitor and ensure compliance with small commercial vessel regulations, particularly in cases where these vessels have not been registered or licensed by their owners, as was the case with the two vessels involved in this incident. The jury heard that commercial vessels are considered workplaces. Under the provisions of the Occupational Health and Safety Regulation, employers are responsible for providing a safe workplace and for ensuring that the operator training in navigation and ship safety are acceptable to the Workers' Compensation Board.

6. It is recommended that all Forest Licence holders ensure that all contractors operating on their land and facilities be properly trained and licensed if operating commercial vessels for work or crew transport.

Coroner's Comments: The jury heard that Tsuadi Forest Products Ltd was involved in contract work for a major licensee operating in the area. Witness testimony indicated that the forest licensee reviewed certain components of Tsuadi's health and safety program but this assessment did not include a review of crew training or certification related to boat operations.

7. It is recommended that the Workers' Compensation Board require employers to ensure that their employees who use VHF radios be certified under the Transport Canada Restricted Operator Certificate (ROC).

Coroner's Comments: The jury heard that the workers involved in this incident experienced difficulties using radios and that the marine VHF radios were not utilized effectively to seek assistance. None of the workers received any formal training in radio use and none held radio operator's certification.

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To: Band Council
Sechelt Indian Band
Box 740
Sechelt, B.C. V0N 3A0

8. It is recommended that the Sechelt Indian Band publish a regular bulletin advertising training courses and funding available.

Coroner's Comments: The jury heard that the operators of the vessels involved in this incident were not appropriately trained or certified and lacked the skills necessary to utilize navigational equipment. The jury heard that courses required by Transport Canada are available through approved boat safety educators but these courses tend to be expensive. It is difficult for workers in some areas to access boat operation training and those courses are sometimes cancelled due to low enrollment. The jury also heard that assistance and funding for training programs may be available to Aboriginal candidates through programs such as those administered by the First Nations Employment Society (FNES).