

PROVINCE OF BRITISH COLUMBIA  
 Ministry of Justice  
 Emergency Management BC / Office of the Fire Commissioner

FIRE REPORT - **STRUCTURE**

INCIDENT NUMBER: **NMH 2017 04 05 05 01**

Location of Incident: **2940 MUSEUM RD  
 MCBRIDE BC V0J2E0**

# of Occupants (At time of fire): **0**      # of Injured: **0**      # of Deaths: **0**      Total Dollar Loss Estimate: **\$21**

Related to Wildland Interface Fire: **NO**      Property Value: **\$21**      Content Value: **\$21**      Total Value at Risk: **\$21**

**Code Name :      Code Description**

PROPERTY COMPLEX : 6900 INDUSTRIAL MANUFACTURING  
 PROPERTY CLASSIFICATION : 6210 SAWMILL, PLANING MILL, WOOD PRODUCTS MILL - INCLUDES THE MAN  
 GENERAL CONSTRUCTION : 4000 NON-COMBUSTIBLE CONSTRUCTION - EXPOSED STEEL  
 BUILDING HEIGHT : 0020 2 STORIES ABOVE GRADE  
 GROUND FLOOR AREA : 4000 1001 TO 2500M2 (10765 - 26910FT2)  
 YEAR OF CONSTRUCTION : 0000 CANNOT BE DETERMINED  
 MANUAL FIRE PROTECTION : 4000 EXTINGUISHER ONLY  
 OUTSIDE FIRE PROTECTION : 7000 FIRE DEPARTMENT ONLY  
 SPRINKLER PROTECTION : 7000 NO SPRINKLER PROTECTION  
 AUTOMATIC FIRE ALARM SYSTE : 1000 NO FIRE ALARM SYSTEM  
 SMOKE ALARM OPERATION : 0000 ALARM OPERATION CANNOT BE DETERMINED  
 INITIAL DETECTION : 7000 VISUAL SIGHTING OR OTHER MEANS OF PERSONAL DETECTION (E.G. S  
 TRANSMISSION OF ALARM : 1000 911  
 FIRE SERVICE : 2000 VOLUNTEER/PAID-ON-CALL FIRE DEPARTMENT ONLY  
 INCIDENT : 1000 FIRE - FIRE DEPARTMENT ATTENDED  
 ACTION TAKEN : 3000 EXTINGUISHED BY FIRE DEPARTMENT  
 METHOD OF FIRE CONTROL : 4500 65MM/77MM (2 1/2"/3") HOSE -2 OR MORE HAND LINES  
 FIRE ORIGIN, LEVEL : 3000 GROUND FLOOR, GRADE LEVEL OR GRADE TO 3M (10FT)  
 FIRE ORIGIN, AREA : 6100 MACHINERY ROOM - INCLUDES ELEVATOR MACHINERY ROOM, ENGINE  
 RO  
 EXTENT OF FIRE : 6000 EXTENDED BEYOND PROPERTY OF ORIGIN  
 EXTENT OF DAMAGE : 6000 EXTENDED BEYOND BUILDING OF ORIGIN  
 IGNITING OBJECT : 6100 MOTOR, 1HP & OVER - INCLUDES MOTOR FORMING AN INTEGRAL PART  
 FUEL OR ENERGY : 6000 ELECTRICITY  
 FORM OF HEAT : 0000 CANNOT BE DETERMINED  
 MATERIAL FIRST IGNITED : 0000 CANNOT BE DETERMINED  
 ACT OR OMISSION : 4900 MECHANICAL/ELECTRICAL FAILURE/MALFUNCTION - UNCLASSIFIED (DE

Investigating Officer  
 OWENS, RICK

LAFC Badge #

Telephone

250-819-2231

ReportDate

2017-05-26

Ministry of Justice  
Emergency Management BC / Office of the Fire Commissioner

(PRODUCT/EQUIPMENT)  
INCIDENT NUMBER: **NMH 2017 04 05 05 01**

---

LOG #	: 175404		
ITEM TYPE	: MOTOR - ELECTRICAL - SMALL		
ITEM DESCRIPTION	:		
MAKE	:	CERT. AGENCY1	:
MODEL	:	CERT. AGENCY2	:
YEAR	:	CERT. AGENCY3	:
LICENSE NO.	:	CERT. AGENCY4	:
SERIAL NO.	:	CERT. AGENCY5	:
MAKE	:		

COMMENTS :  
INDUSTRIAL ELECTRIC MOTOR DRIVING A HYDRAULIC PUMP

---

Investigating Officer	L AFC Badge #
OWENS, RICK	

Telephone	ReportDate
250-819-2231	2017-05-26

---

**Remarks:**

IN TALKING TO THE MILL SHIFT SUPERVISOR THE ONLY THING OUT OF THE NORM ON THE LAST SHIFT WAS THE ONE ELECTRIC MOTOR WHICH WAS SMOKING AND VERY HOT AT THE END OF THE SHIFT. HE ADVISED THEY DISCHARGED A FIRE EXTINGUISHER AT THE MOTOR AND SHUT OFF THE BREAKER. APPROXIMATELY 1.5 HOURS LATER IT WAS STILL VISIBLY SMOKING AND AS HE WAS FINISHED FOR THE DAY ASKED THE JANITOR TO CHECK ON IT LATER. APPARENTLY THE JANITOR NOTICED IT STILL SMOKING WHEN HE LEFT, APPROXIMATELY 1.5 HOURS BEFORE THE FIRE BEING DISCOVERED BY A DRIVER PICKING UP HIS SEMI TRUCK IN THE YARD AT APPROXIMATELY 0500 HOURS. THERE WAS APPARENTLY ANOTHER SEMI DRIVER IN THE YARD A 1/2 HOUR BEFORE AND DID NOT NOTICE THE FIRE OR SMOKE. WITH THE INFORMATION AVAILABLE AT THE TIME OF THE INVESTIGATION IT APPEARS THE MOST PROBABLE CAUSE OF THIS FIRE WAS THE OVERHEATED ELECTRICAL MOTOR. (MECHANICAL FAILURE) IT SHOULD BE NOTED THAT THE INVESTIGATORS COULD NOT REACH THE ELECTRIC MOTOR OR HYDRAULIC PUMP FOR HANDS ON EXAMINATION BECAUSE OF SAFETY CONCERNS REGARDING THE STRUCTURAL INSTABILITY AT THE POINT OF ORIGIN. THE MILLS STRUCTURAL INTEGRITY AFTER THE FIRE WAS INSPECTED BY PROFESSIONAL ENGINEER ARCHIE MCLEAN WHO DEVELOPED A SAFETY PLAN IDENTIFYING WHERE WE COULD SAFELY ENTER FOR INVESTIGATION AND AREAS WHICH WERE RESTRICTED. IN THIS INCIDENT WE COULD SAFELY GET WITHIN ABOUT 3 METERS OF THE POINT OF ORIGIN.

---

Investigating Officer  
OWENS, RICK

LAFC Badge #

Telephone  
250-819-2231

ReportDate  
2017-05-26

PROVINCE OF BRITISH COLUMBIA  
Ministry of Justice  
Emergency Management BC / Office of the Fire Commissioner

FIRE REPORT - **STRUCTURE** (NAMES)

INCIDENT NUMBER: **NMH 2017 04 05 05 01**

Name no. : 1  
Name : s.22  
Address : 638 2940 MUSEUM RD  
MCBRIDE BRITISH COLUMBIA V0J2E0

Name Status : BUSINESS OWNER  
Phone : s.22

Claims Adjuster Name : 1. DANIELS , GARRY  
Claims Adjuster Firm : 1. MAXWELL CLAIMS SERVICE  
Claim Number :  
Insurance Company :  
Policy Number :

LOSS ESTIMATES:

Property Loss : s.21

Content Loss : s.21

Total Loss : s.21

REMARKS:

Investigating Officer  
OWENS, RICK

L AFC Badge #

Telephone

250-819-2231

ReportDate

2017-05-26





# Kamloops Office

Thompson/Okanagan



**Fire Investigation**  
**BKB Cedar Manufacturing**  
**2940 Museum Road, Mc Bride, B.C.**  
**April 05, 2017**

**FSA Rick Owens**

✓  
✓

Still under investigation by other agency: No  
Photos taken: Yes OFC

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



## Fire Investigation Report

MOTI

Office of the Fire Commissioner

Incident No. **1704050501**  
RCMP File # **2017-142**

P.F.R. No. **04/17-001**

Date of Report April 5, 2017

Report Received RCMP

Time 0510

Investigated By FSA Rick Owens, RCMP, McBride Fire Chief David Hruby

Location of Fire 2940 Museum Rd., McBride, BC (BKB Cedar Manufacturing)

Property Classification Post & Rail sawmill

Date of Fire April 05, 2017

Time of Alarm 0510

	<u>Name</u>	<u>Address</u>	<u>Telephone</u>
Owner	s.22		
Occupier	s.22		
Witness	RCMP to interview staff		

### Other Agencies Involved

Fire Chief David Hruby	PO Box 428 McBride, BC	(250) 569-3117
RCMP Cpl Kyle Ushock	PO Box 497 McBride, BC	(250) 569-7220
RCMP Cpl. Jason Nash	PO Box 159 Valemount, BC	(250) 566-4466
Worksafe Ray Harper	Work Safe BC, Prince George	(250) 640-0344
BC Safety Authority advised		

## INTRODUCTION

April 5, 2017 Cpl Jason Nash of the Valemount RCMP detachment requested the assistance of an Office of the Fire Commissioner (OFC) fire investigator to help them investigate a mill fire near McBride, BC. FSA Rick Owens out of the Kamloops OFC office was assigned the investigation and drove up to McBride on the evening of April 5. April 6, 2017 at 0830 FSA Owens met with the Fire Chief and RCMP representatives at the McBride

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501

detachment to be briefed. After a short meeting/overview we attended the scene and conducted the fire investigation with following findings noted below.

## SUMMARY OF FINDINGS

**A. Area of Origin** The fire was first noticed with smoke coming from inside the mill.

**B. Point of Origin** The Fire Chief advises that the fire was wind driven and reported to be approximately 1/3 of the way down the mill. This area is consistent with an area that the mill shift supervisor identified as having an electric motor overheating/smoking at the end of the shift.

**C. Source of Heat** Overheated industrial electric motor driving a hydraulic pump.

**D. Material First Ignited** It would appear the motor overheated and ignited combustible/flammable materials including hydraulic oil from the burned hoses and oil storage tank feeding the mill log splitters and machinery.

**E. Act or Omission** In talking to the mill shift supervisor the only thing out of the norm on the last shift was the one electric motor which was smoking and very hot at the end of the shift. He advised they discharged a fire extinguisher at the motor and shut off the breaker. Approximately 1.5 hours later it was still visibly smoking and as he was finished for the day, asked the janitor to check on it later. Apparently the janitor noticed it still smoking when he left, approximately 1.5 hours before the fire being discovered by a driver picking up his semi truck in the yard at approximately 0500 hours. There was apparently another semi driver in the yard ½ before and did not notice the fire or smoke.

With the information available at the time of the investigation it appears the most probable cause of this fire was the overheated electrical motor. (Mechanical failure)

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501

It should be noted that the investigators could not reach the electric motor or hydraulic pump for hands on examination because of safety concerns regarding the structural instability at the point of origin. The mills structural integrity after the fire was inspected by Professional Engineer Archie McLean who developed a safety plan identifying where we could safely enter for investigation and areas which were restricted. In this incident we could safely get within about 3 meters of the point of origin.

(As in rural area RCMP responsible for filling out and submitting the OFC statistical report)



**Photo # 1** “A” Side of building - Chip pile to the right is an exposure fire and started after the mill was already burning.

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #2** “A” Side of building closer to “B” side

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #3** “B” Side of the mill - Main infeed where logs are feed into the mill.

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #4 “B”** Side- Main log deck/ infeed where logs are feed into the mill.



# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #5** “C” Side of the building (Back) Additional wood on outside of building added to fire load.

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #6** Roof line damage above area of origin which was on grade level - this is above 2<sup>nd</sup> story - main mill operations floor.

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #7 "C"** Side of building - Metal cladding. Top row was clear fibreglass to let in natural lighting and in most cases has melted away.

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #7** “D” side of building -  
Conveyor to chip pile



**Photo #8** Water tank empty over the winter.  
Mill not sprinklered - No FD water supply.



**Photo #9** “D” Side looking towards “B” side

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #10** “D” Side looking towards “B” side - Stairs at office area - 2<sup>nd</sup>/main working floor

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo 11** “D” Side looking towards “B” side part way in the building

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo 12** “D” End looking towards the Side looking towards “C” side part way in the building

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #13** two-thirds the way down looking from D side - Looking towards "C" (back wall) 4 separate stairs going up to main deck - one on each end and two spaced in between the two end stairs.



## FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #14** Another example of heat damage to both lower and upper decks & equipment.

## FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #15** Looking towards “C” side or back wall - Access point for hydraulic tank and motors.

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501



**Photo #16** Hydraulic oil tank - electric motors and pumps - area of origin

# FIRE INVESTIGATION REPORT

PFR # 04/17-001

Incident # 1704050501

\*



**Photo #17** Area above Hydraulic oil tank/electric motors/pumps. High heat- metal buckling

Rick Owens Fire Service Advisor  
Thompson/Okanagan/Cariboo Region

Pc: RCMP McBride Detachment