





38° BEAM ANGLE
FEIT
ELECTRIC
PAR3875/10KLED/2(L)
10.5W/3000K/750lm
120VAC 60Hz 152mA UL#E330072
C^UL^US
LISTED
LED LAMP
4BP5
145-18-24
SUITABLE
DO NOT
WARM



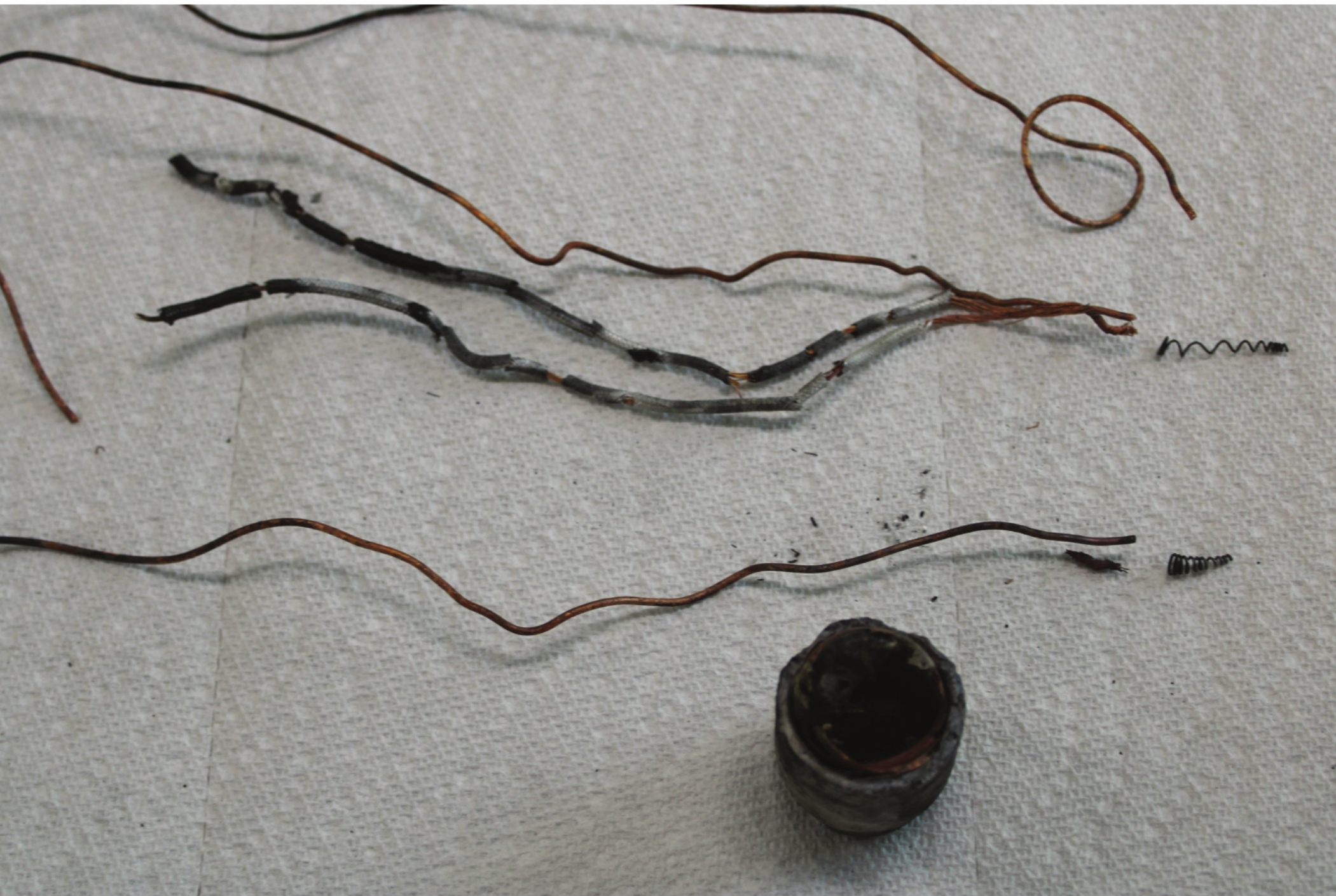


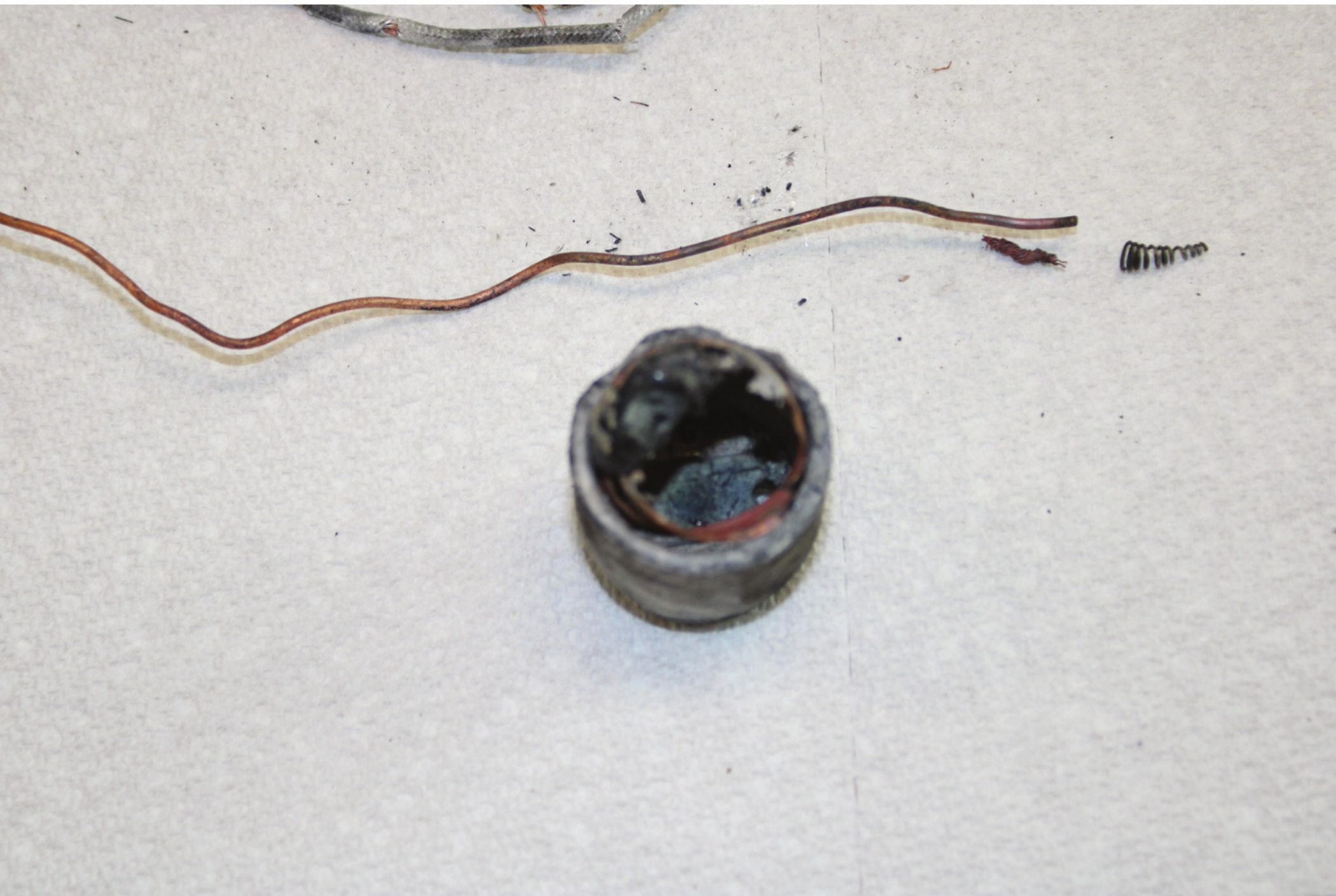






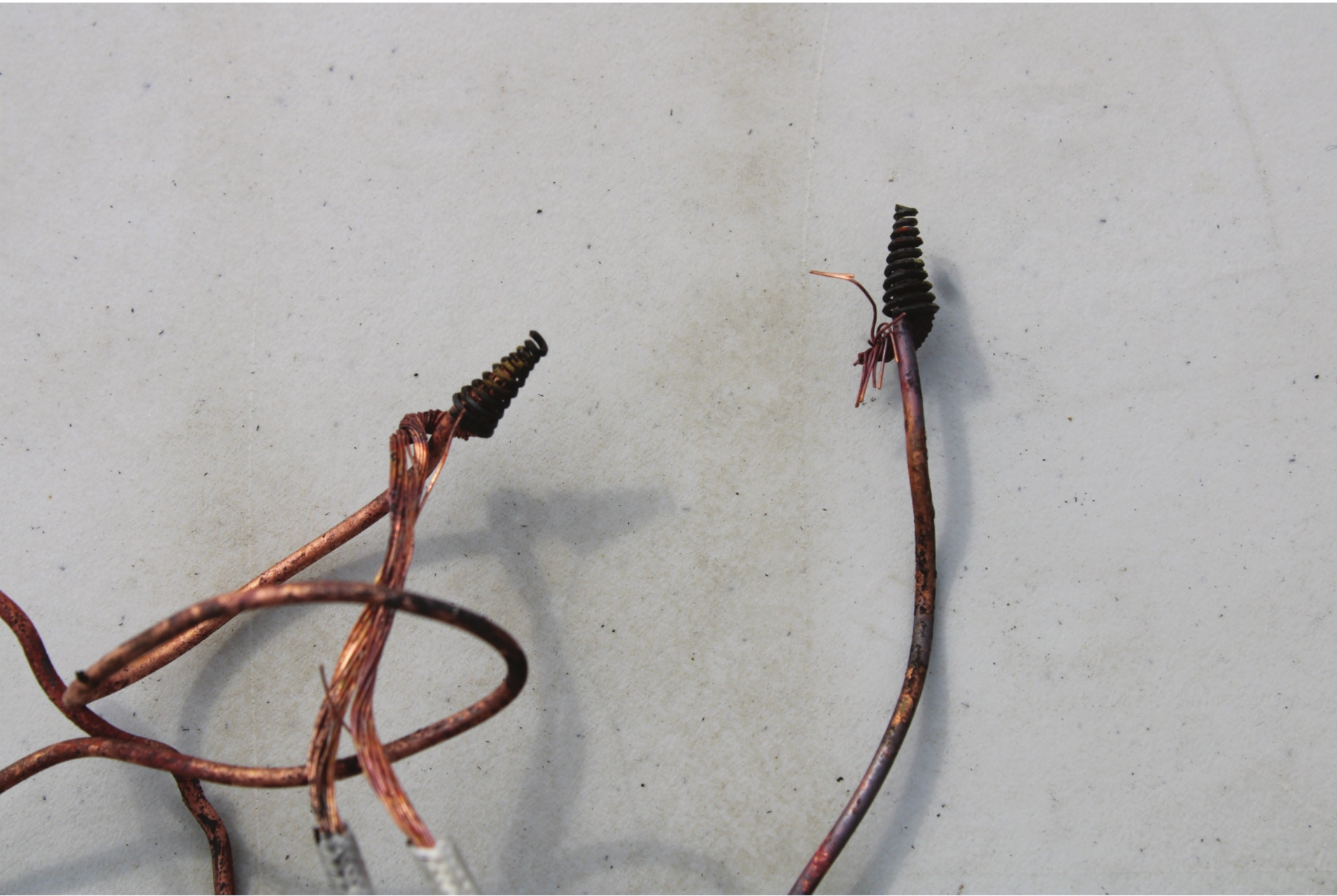


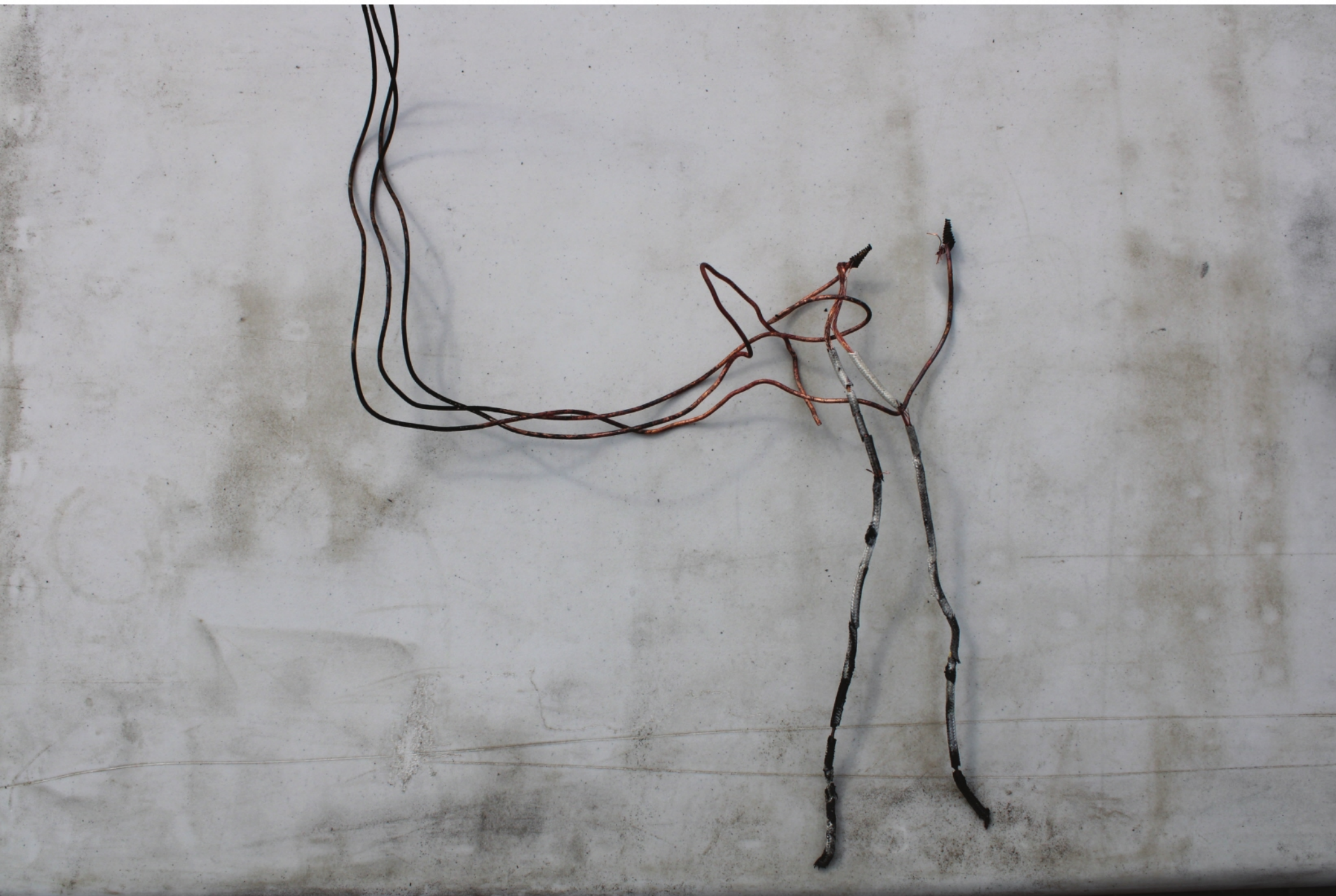






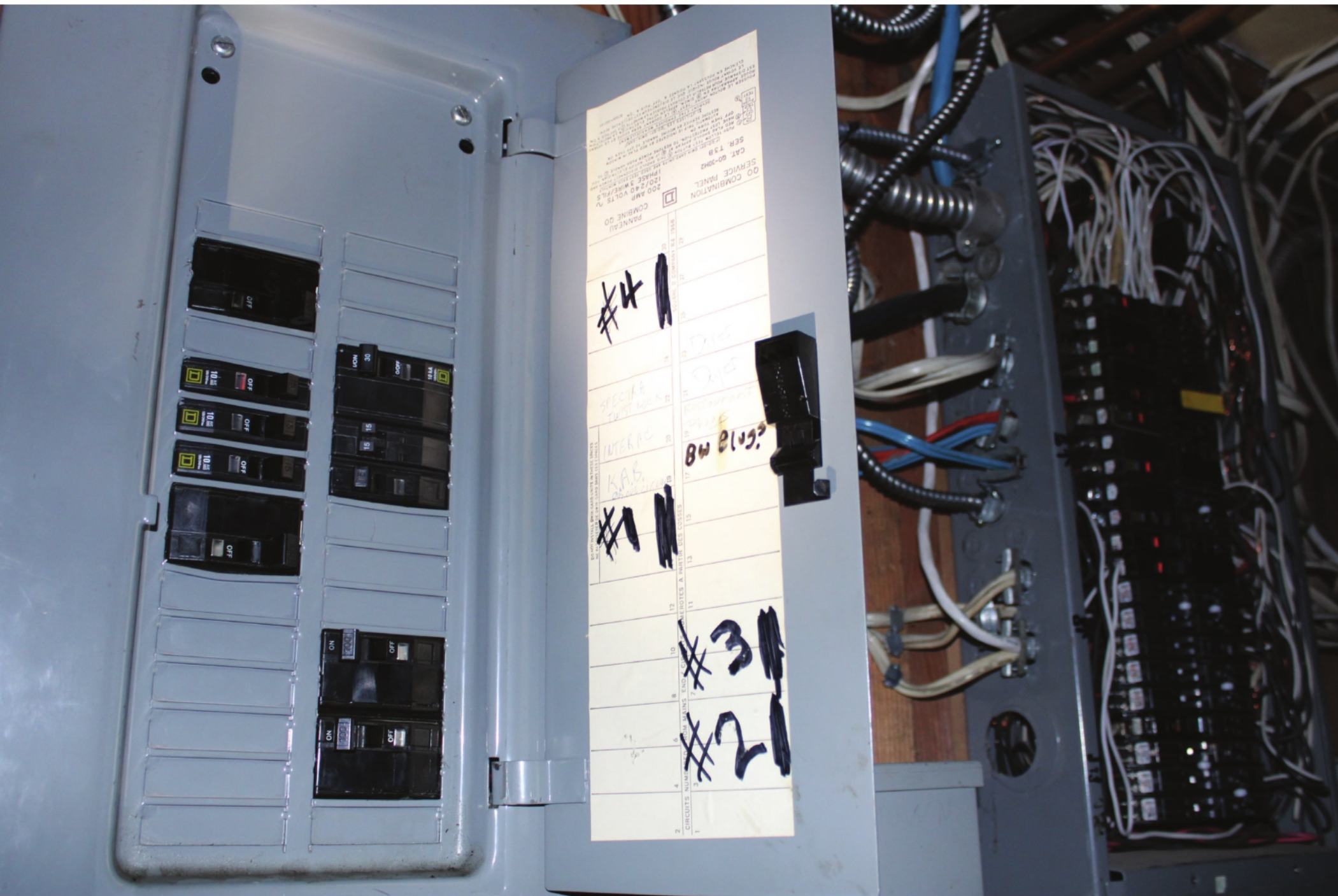














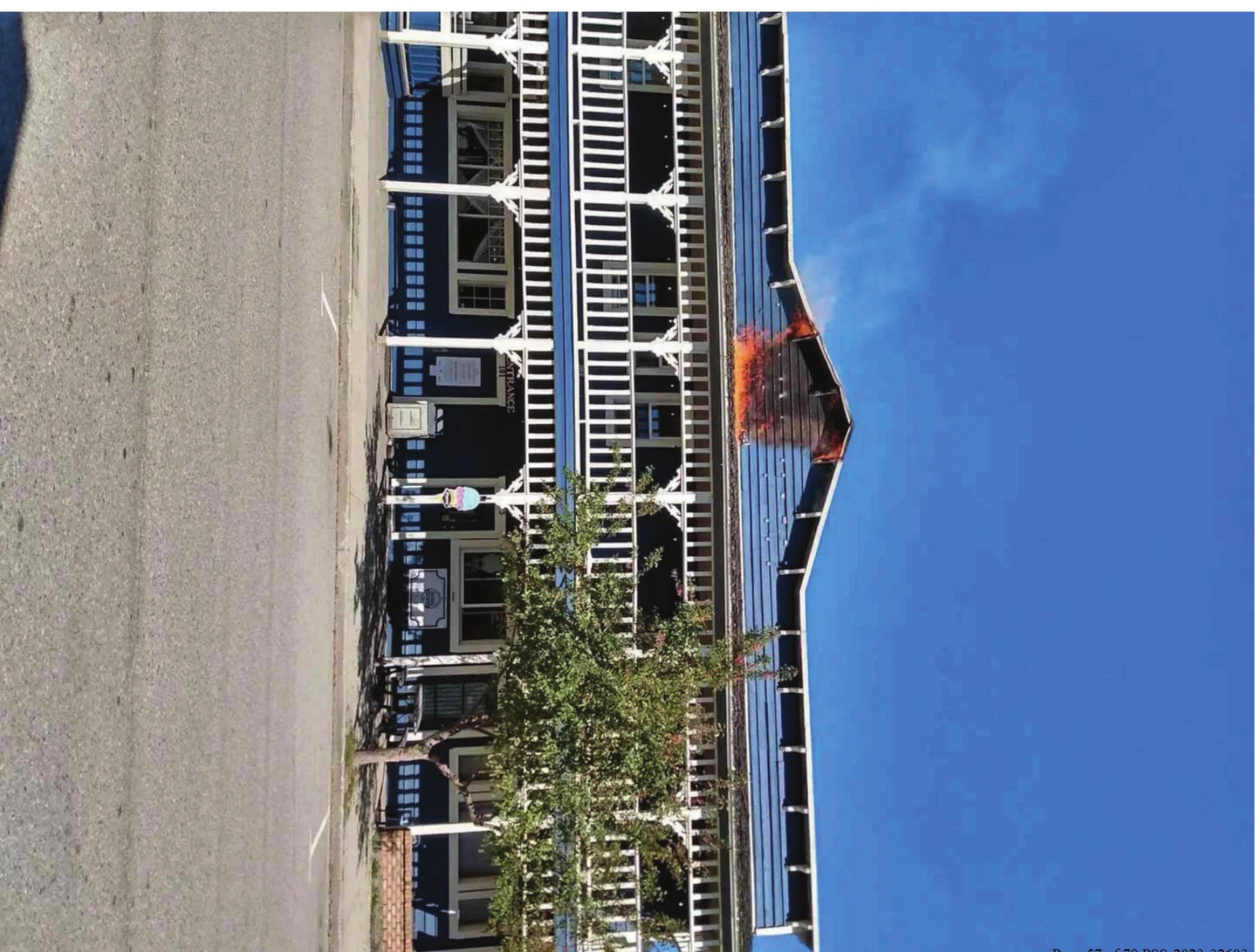
























PROVINCE OF BRITISH COLUMBIA
 Ministry of Justice
 Emergency Management BC / Office of the Fire Commissioner

FIRE REPORT - **STRUCTURE**INCIDENT NUMBER: **VSA 2023 09 15 13 01**

Location of Incident: **101 4TH STREET
 SALMO BC V0G1Z0**

of Occupants (At time of fire): **20** # of Injured: **0** # of Deaths: **0** Total Dollar Loss Estimate: **\$200,000**

Related to Wildland Interface Fire: **NO** Property Value: **\$6,900,000** Content Value: **\$4,600,000** Total Value at Risk: **\$11,500,000**

Code Name : **Code Description**

PROPERTY COMPLEX : 3300 HOTEL, MOTEL, LODGE, HOSTEL, BOARDING HOUSE, DORMITORY
 PROPERTY CLASSIFICATION : 5190 FOOD, BEVERAGE SALE - UNCLASSIFIED (DESCRIBE)
 GENERAL CONSTRUCTION : 2000 PROTECTED COMBUSTIBLE CONSTRUCTION - WOOD PROTECTED BY PLAST
 BUILDING HEIGHT : 0020 2 STORIES ABOVE GRADE
 GROUND FLOOR AREA : 4000 1001 TO 2500M2 (10765 - 26910FT2)
 YEAR OF CONSTRUCTION : 0021 1921 TO 1945
 MANUAL FIRE PROTECTION : 4000 EXTINGUISHER ONLY
 OUTSIDE FIRE PROTECTION : 1000 PUBLIC HYDRANT PROTECTION & FIRE DEPARTMENT
 SPRINKLER PROTECTION : 3000 COMPLETE SPRINKLER PROTECTION - UNSUPERVISED, LOCAL ALARMS O
 AUTOMATIC FIRE ALARM SYSTE : 3000 FIRE ALARM SYSTEM - OFF-SITE MONITORING AGENCY
 SMOKE ALARM OPERATION : 5000 ALARM ACTIVATED - OCCUPANT ACTION UNKNOWN
 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 : 5700 COMPRESSED AIR FOAM SYSTEMS
 FIRE ORIGIN, LEVEL : 8000 ROOF LEVEL - INCLUDES CONCEALED ROOF SPACE, ATTIC
 FIRE ORIGIN, AREA : 7800 AWNING, CANOPY
 EXTENT OF FIRE : 7000 CONFINED TO ROOF/ATTIC SPACE
 EXTENT OF DAMAGE : 7000 CONFINED TO ROOF/ATTIC SPACE
 IGNITING OBJECT : 6900 ELECTRICAL EQUIPMENT - UNCLASSIFIED (DESCRIBE)
 FUEL OR ENERGY : 6000 ELECTRICITY
 FORM OF HEAT : 6000 HOT OBJECT - DIRECT HEAT BY CONDUCTION OR RADIATION, NO DIRE
 MATERIAL FIRST IGNITED : 1000 ROOF COVERING - WOOD
 ACT OR OMISSION : 4900 MECHANICAL/ELECTRICAL FAILURE/MALFUNCTION - UNCLASSIFIED (DE

Investigating Officer	LAFC Badge #	Telephone	ReportDate
HEARN, DAVID	1462	250-505-7675	2023-09-16

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FIRE REPORT - **STRUCTURE** (NARRATIVE)INCIDENT NUMBER: **VSA 2023 09 15 13 01**

Remarks:

EYE WITNESS AND EARLY PICTURES SHOW FLAMES COMING FROM THE CANOPY OVER THE OUTSIDE VERANDA ON THE 4TH STREET SIDE OF THE BUILDING. ON INVESTIGATION, IT APPEARS THAT THERE WERE ELECTRICAL WIRES IN THE SUSPECTED AREA OF ORIGIN. THE FIRE WAS CONTAINED TO THE OUTSIDE (1982 EXTERIOR RENOVATION) FA?ADE OF THE BUILDING, AND NEVER ENTERED THE ACTUAL STRUCTURE. THE OLD 1932 STUCCO BENEATH THE FA?ADE KEPT THE FIRE FROM ENTERING THE BUILDING.

Investigating Officer	L AFC Badge #	Telephone	ReportDate
HEARN, DAVID	1462	250-505-7675	2023-09-16

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FIRE REPORT - **STRUCTURE** (NAMES)INCIDENT NUMBER: **VSA 2023 09 15 13 01**

Name no. : 1
Name : MIRKO, JOHN
Address :

Name Status : BUSINESS OWNER
Phone **s.22**

Claims Adjuster Name :
Claims Adjuster Firm :
Claim Number :
Insurance Company :
Policy Number :

LOSS ESTIMATES:

Property Loss : \$200,000

Content Loss : \$0

Total Loss : \$200,000

REMARKS:

Investigating Officer : LAFB Badge #
HEARN, DAVID : 1462

Telephone :
250-505-7675
ReportDate :
2023-09-16



Office of the Fire Commissioner

Fire investigation Report

- * Report of Suspicious Fire - Provide Incident and PFR Numbers
- * **X** Request for Fire Investigation
- * Other Assistance Requested - Specify Below
- * Advisory Only

FIRES Incident # VSA202309151301
Provincial Fire Report # 3/08/23
Emergency Coordination Centre Task # 23-7190
RCMP File # 2023-4871

Report Received Date: 2023-09-16

Time: Via email, received at 0551 hours

Call Taken By: Dave Boreen

From: David Hearn

Purpose of Investigation: Requested by Fire Chief David Hearn to assist in determining origin and cause of a fire that occurred at the Salmo Hotel

Date of Incident: 2023-09-15

Time: 1306 hours

Address: 101 4th Street, Salmo BC

Region: 3

Coordinates: 49° 11' 41.96" N 117° 16' 43.92" W

Date(s) of Investigation: 2023-09-18

Time on Scene: 1041 Hours

Time Off Scene: 1503 Hours

Scene Secured: Yes

Name: Selkirk Security

Contact #: 250-368-3190

Type of Fire: Structure

Type of Structure: 2 storeys above grade, Type 5 construction

Property Use: Main floor level Occupancy A2, pub/restaurant; Upper-level Occupancy C, apartments

Type of Vehicle: N/A

Description of Fire Loss Type(s): Fire loss contained to exterior 2nd level walkway and roof

Estimated \$\$ Loss: \$200,000

Estimated \$\$ Saved: \$10,000,000 Salmo Hotel and contents - 1,500,000 Adjacent Pharmacy building and contents.

Owner's Name(s): John Mirko

Contact #: s.22

Owner's Address:

Occupied: Yes

of Occupants: Approximately 12 patrons and staff, 2 tenants

displaced

Tenant(s): Names not available

Contact #:

Injuries or Deaths: No injuries or deaths as a result of this fire.

Other Agencies Involved:

- **Technical Safety BC**, Kyle Tracey, Electrical Safety Officer. 250-426-9607 kyle.tracey@technicalsafetybc.ca

Fire Department: Salmo Fire Department

Contact #: 250-357-2425

Incident Commander: Austin Anderson

Contact #: 250-357-2425

LAFC: David Hearn

Badge #: 1462

Contact #: 250-505-7675

Date of Response: 2023-09-15

Time: 1306

Date on Scene: 2023-09-15

Time: 1317

Date off Scene: 2023-09-15

Time: 1911

Method of Extinguishment: Master stream, multiple hose lines, CAFS

Weather at Time of Fire:

Temp: ~25C

Wind: ~3KM

Precipitation: 0

R.C.M.P.: Constable Trevor Freeburn

Contact #: 250-357-2212

Witness(es):

- s.22

Contact #: s.22

-

Contact #:

Statement(s): This investigator did not take any statements; any statements that were conducted are held with the fire department.

Video Availibale: The Fire Chief holds a video of the fire in its early stages, the video also shows the initial suppression activities.

Photographs Available: Yes

Additional Information:

Electrical components removed from the scene were released to Michael Richards of Advanced Investigative Solutions (AIS) on September 21st, 2023.

Synopsis:

From physical findings, photographs, and video evidence, the area of origin for this fire is on the exterior Alpha wall, below the roof peak, and just above the roof that covers the 2nd floor walkway. The point of origin is an electrical light fixture and outlet box which was externally mounted against the wall and immediately next to the cedar shake shingles which covered the roof. Cause of the fire appears to be internal heating of the electrical device which ignited the cedar shake roof and the exterior wall coverings.

Background:

I received an email from Salmo Fire Chief David Hearn requesting assistance with a fire investigation for a fire that occurred at the Salmo Hotel. I called and spoke with Chief Hearn regarding his request. He had suspicions that it may be electrical in nature, and he would like the OFC to help determine origin and cause. Approval was given to me by my supervisor, Assistant Deputy Fire Commissioner Makar, to attend and assist in the investigation.

The building is a Type 5 construction 2 storey structure with a pub/restaurant on the main floor, and apartments on the 2nd floor. The basement area is used for general storage. The entire building is sprinklered and has a functioning fire alarm system. The building was originally built in the 1932, and the exterior renovations which changed the exterior facade to include the wood siding and covered walkway occurred in the 1982. Renovations that were currently taking place included painting of the exterior façade.

As this fire occurred early Friday afternoon in the downtown core, there were many witnesses and multiple sources of photographs and videos posted on social media streams.

s.22 indicated that the electrical fixture in question was on all the time, and that the area was quite warm, so much so that there was heat caused discolorations on sign lettering that were near the light fixture. s.22 was asked about the controls for the exterior light fixtures, s.22 was unaware of their location or even how the lights were controlled.

Investigation Process:

At 0700 PST I contacted Technical Safety BC and gave them a brief synopsis of the incident and asked that an electrical inspector be assigned and attend the fire scene. At 0842 I received confirmation that electrical safety officer Kyle Tracey would attend.

I arrived at the Salmo Firehall at 0942 PST. Here I met with Fire Chief David Hearn and Deputy Fire Chief Sean Horton to get a briefing of the incident, and to review pictures and video of the fire incident as it progressed. The pictures start early in the incipient fire stage and clearly show the fire development.

I arrived at the fire scene at approximately 1015 PST, I was accompanied by Fire Chief David Hearn and Deputy Fire Chief Horton. The scene was secure with fencing and an on-site security person. The scene security had been maintained since the fire department left the scene.

My investigation started by photographing and making observations of the exterior of the building. These are my observations:

- **Alpha Side** – Extensive fire damage to the roof structure covering the 2nd floor exterior walkway. Complete burn through of the roof structure in the middle section. Charring on all the wooden siding situated above the walkway roof. Siding and window trim below the walkway roof was only damaged directly below the location of the burn through on the roof. Ground floor exterior components showed no fire damage. The only broken window was on the second floor below the burn through, this was damaged by the fire department. (*For reference see IMG_0603*).
- **Bravo Side** – Extensive fire damage to the 2nd floor walkway roof structure and the siding above that at the A/B corner. One broken window on the 2nd floor, this window was broken by the firefighters to make access to the walkway. (*Refer to IMG_604*)
- **Charlie Side** – Unremarkable, façade is original stucco exterior. All windows and doors are intact. (*Refer to IMG_0606*)
- **Delta Side** – Unremarkable, not able to be viewed completely due to close proximity to the adjacent pharmacy building.

My investigation moved to the interior of the structure, these are my observations:

- **Basement** – No fire damage located in the basement. 3 electrical panels are located in the basement, from my observations I could not see that any of the breakers had tripped due to electrical faults.

- **Main Floor** – No fire damage located on the main floor interior. The main floor was the location for the pub/restaurant, office, kitchen, and other storage areas.
- **Upper Floor** – The upper floor was the location for apartments, 2 of these apartments were occupied at the time of the fire. The interior of the 2nd floor did not sustain any fire damage, smoke and water damage is minimal.

Based on photographs, video, and physical burn indicators, I believe that the area of origin is located on the Alpha side exterior, approximate centre of the building, and above the roof covering the walkway.

I moved my investigation to the area of origin to locate the point of origin, and cause of the fire. These are my observations:

- Remnants of electrical wiring is located at this location (*Refer to photograph IMG_0628*). From pre-fire photographs (*Refer to photograph i0000010(1)*) and witness statements there was a light fixture located here.

These are my observations of this possible ignition source:

- 2 of the 4 conductors from the fixture were not located.
- Coloring of the conductors, that were contained within the same electrical box, was not the same. The building conductors that were still attached to the fixture wiring had a clean bright gold appearance. The building conductor that was missing the fixture wiring, had a blue/gray appearance. (*Refer to photograph IMG_0635*)
- The only component of the fixture that could be located within the debris was 1 porcelain bulb socket, any other remains of the electrical box and fixture could not be located within the fire debris.
- To get a better understanding of the fixture and the wiring configuration I removed and examined the fixture from the Bravo side of the building (*Refer to photograph IMG_0648*). These fixtures were installed at the same time and from photographs appeared to be the same type of fixture. These are my observations:
 - Cast aluminum, all weather, exterior mounted electrical box. Not all holes were plugged, which would allow moisture into the box, potentially effecting the wiring and connections within the box.
 - The fixture was a cast aluminum 2 head flood light type of fixture. The bulbs were FEIT LED flood bubs. The bulbs were indicated for exterior use. Orientation of the fixture heads were pointed in an upward direction which could allow moisture to enter the socket assembly.

- In an attempt to locate the electrical source for these light fixtures, the building wiring was traced back to an electrical junction box located under the siding on the Bravo side (*Refer to IMG_0564*). The installation did not meet electrical code standards.
- No other ignition sources could were located in the area of origin.

Conclusion:

This investigation was focused on a fire start that was located at 101 Fourth Street, Salmo British Columbia. The approach utilized throughout this investigation, by this investigator, is incorporated in the scientific method as defined by NFPA 921.

From my investigation into the origin and cause of this fire I believe the fire was accidental in nature. Based on the evidence discovered it is in my opinion that years of internal heating within the light fixture lowered the ignition temperature of the adjacent roof and wall coverings substantially enough to ignite those materials. Observations found within the exemplar light fixture and other areas of electrical installation, indicate workmanship and conditions that over time would result in high resistance wiring connections causing excessive heating of those components. The fire cause determination for this incident is ruled accidental at this time but may change if additional evidence is brought forward.

Area of Origin: Exterior, Alpha side of the building above the 2nd floor walkway roof, below the peaked wall section.

Point of Origin: Exterior light fixture located directly below the wall peak and mounted immediately next to the walkway roof.

Igniting Object: Exterior light fixture ignited the exterior siding and cedar shakes on the walkway roof.

Office of the Fire Commissioner

F.S.A. Assigned: Dave Boreen

Contact: dave.boreen@gov.bc.ca

Telephone: 250-421-1623

Signed:



Date:

2023-10-10

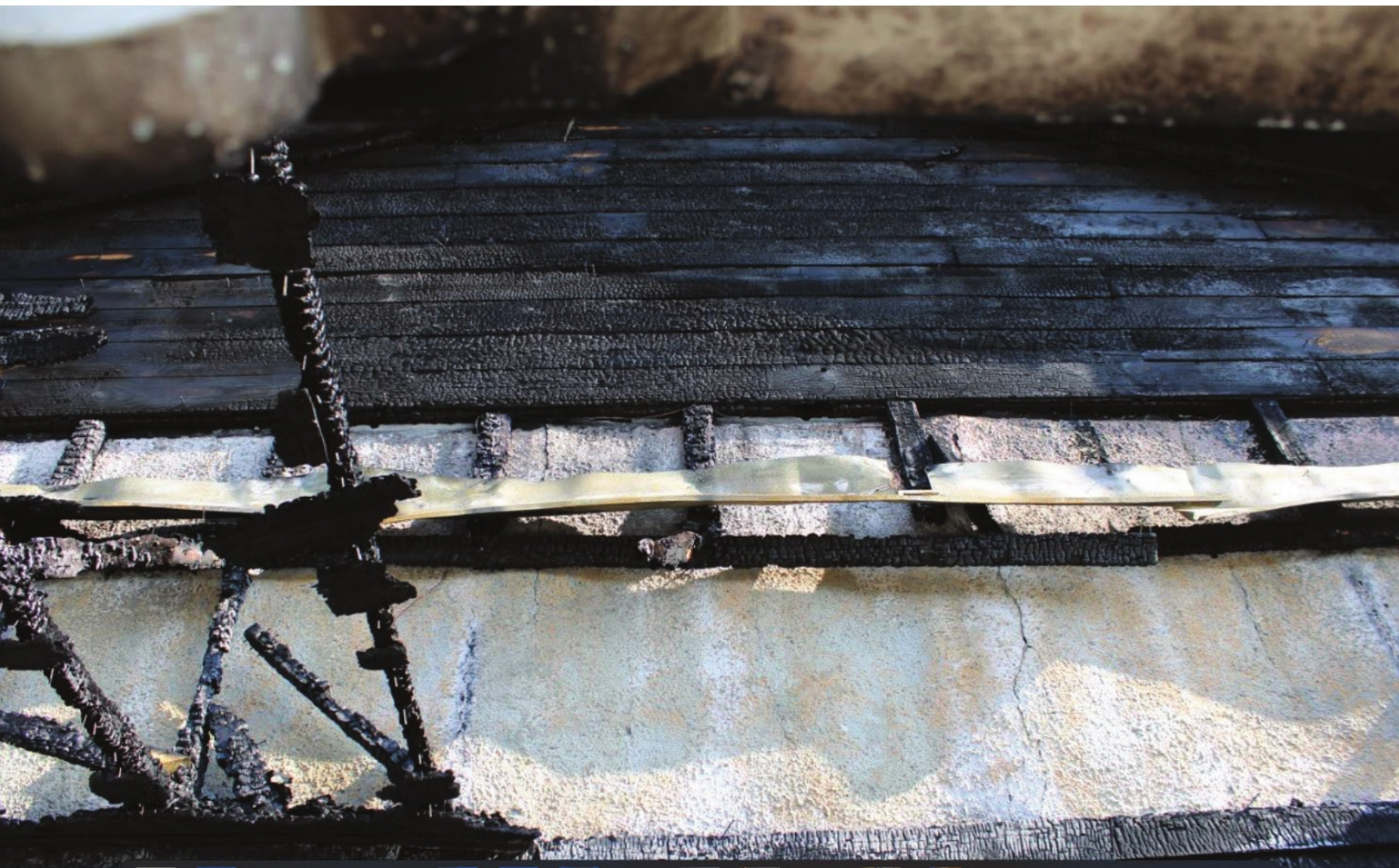
Fire Service Advisor
Office of the Fire Commissioner
Emergency Management B.C

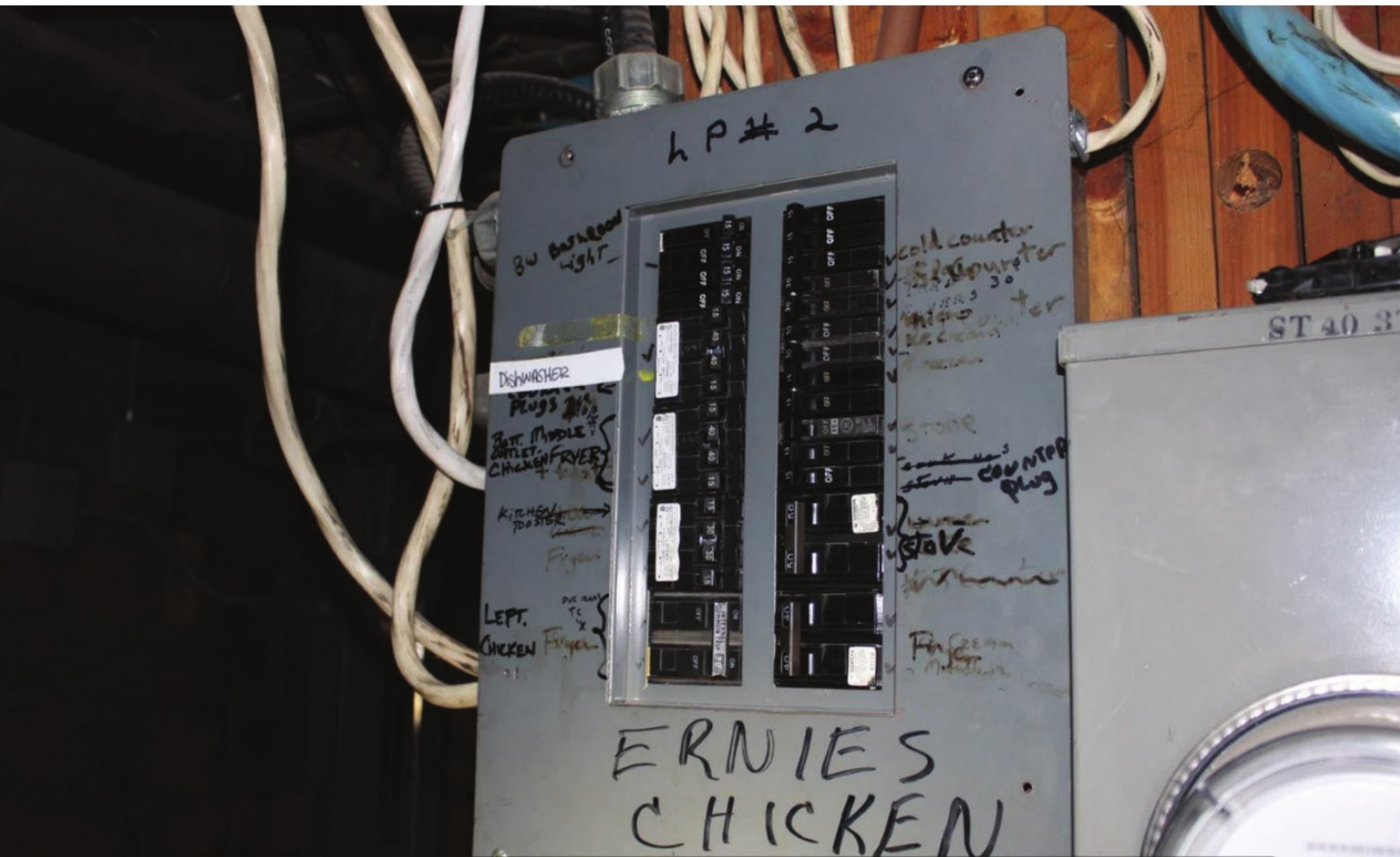
PHOTO LOG SHEET

Incident Location 101 4TH STREET SALMO BC, SALMO HOTEL
Incident Date 15-Sep-23
Incident FIRES # VSA202309151301

Photographer All IMG files are taken by Dave Boreen

Photo #	Photograph Description
i0000010.gif	Fire development A side - Facebook Photo provided by Fire Chief
i0000010.jpg	Fire development A side - Facebook Photo provided by Fire Chief
i0000010(1)	Fire development A side - Facebook Photo provided by Fire Chief
i0000010(2)	Fire development A side - Facebook Photo provided by Fire Chief
i0000010(3)	Building before façade upgrades - provided by Fire Chief
i0000010(4)	Building before façade upgrades - provided by Fire Chief
i0000010(5)	Fire development A side - Facebook Photo provided by Fire Chief
i0000010(6)	Fire development A side - Facebook Photo provided by Fire Chief
IMG_0561	wiring connection with missing conductors
IMG_0562	wiring connection with all conductors intact
IMG_0564	B wall ashowing junction box that feeds A&B light fixtures
IMG_0565	B wall ashowing junction box that feeds A&B light fixtures
IMG_0566	B wall ashowing junction box that feeds A&B light fixtures
IMG_0603	A side of building
IMG_0604	B side of building
IMG_0605	C side of building
IMG_0606	C side of building
IMG_0607	A side, looking up at the point of origin POA
IMG_0608	A side, looking up at the POA - zoomed photo
IMG_0609	Looking at walkway roof from A/D corner
IMG_0610	closer POA showing char and material loss to strucural members
IMG_0611	POA and wiring remains
IMG_0612	char and material loss to rafter near POA
IMG_0613	A side char and POA
IMG_0614	material loss from POA to A/D corner
IMG_0615	material loss from POA to A/B corner
IMG_0616	electrical panel as found
IMG_0617	cover for electrical panel as found
IMG_0618	electrical panel for suites-as found
IMG_0619	electrical panel for suites-as found
IMG_0620	electrical panel - as found
IMG_0621	electrical panel - as found
IMG_0622	panel index for IMG_0621
IMG_0623	char near POA showing wiring that fed light fixture
IMG_0624	POA and wiring remains
IMG_0625	Debris on walkway, POA to A/B corner
IMG_0626	Char and pattern on walkway wall, A side
IMG_0627	close view of remnant wiring at POA
IMG_0628	close view of remnant wiring at POA
IMG_0629	close view of remnant wiring at POA
IMG_0630	close up view of wiring once removed, background is my work table
IMG_0631	close up view of wiring once removed, background is my work table
IMG_0632	close up, comparing conductors
IMG_0633	close up, comparing conductors
IMG_0634	close up, comparing conductors
IMG_0635	close up comparing conductors - black background
IMG_0636	close up comparing conductors - black background
IMG_0637	close up comparing conductors - black background, good view of heat discoloraton
IMG_0638	close up comparing conductors - black background, good view of heat discoloraton
IMG_0639	close up, comparing conductors
IMG_0640	close up, comparing conductors, blurry image
IMG_0641	close up, comparing conductors, cleaner image
IMG_0642	connections with marrette connections removed
IMG_0643	connections with marrette connections removed
IMG_0644	connections with marrette connections removed
IMG_0645	led bulb from exemplar fixture
IMG_0646	led bulb from exemplar fixture
IMG_0647	led bulb from exemplar fixture
IMG_0648	exemplar fixture with electrical box, wiring intact
IMG_0649	view into socket of exemplar fixture, appears to be corrossion of connections
IMG_0650	view into 2nd socket of exemplar fixture
IMG_0651	exemplar electrical box showing missing plugs
IMG_0652	exemplar electrical box showing missing plugs
IMG_0653	wiring and recovered porcelain light socket
IMG_0654	recovered light socket - blurry
IMG_0655	recovered light socket





1	TOOL ROOM	ROOM-LIGHTS	2
3	BAR-DIMMER-LIGHTS	PLUGS	4
5	T. ROOM PLUGS	FANS	6
7	ROOM-PLUGS	WOMANS-LIGHTS	8
9	STAT-LIGHTS	BASE-LIGHTS	10
Pushmatic		ELECTRI-CENTER	
11		Boiler-LIGHTS	12
13			14
15			16
17			18
19			20

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