



Preliminary Ignition Investigation Report

Ignition Database Index:	20240869
Electric Incident Investigation (EII) Number:	N/A
Incident Name:	Kanaka – 05 Jul 2024
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	2024-07-05 @ 19:18
Street Address:	
City:	Jamestown
County:	Tuolumne
Latitude/Longitude:	
State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)	SRA
PG&E Division:	Yosemite
High Fire Threat District (HFTD):	Tier 2
High Fire Risk Area (HFRA):	Yes
EPSS Buffer:	No
Fire Index Area (FIA):	320
Fire Potential Index (FPI) Rating: FIA	R4
Fire Potential Index (FPI) Rating: Circuit	R4
Was there a PSPS event at the time of ignition?	No
Suspected Initiating Event:	Vegetation
Failure Driver:	Contact from object
Failure Sub-driver:	Contact – Vegetation
Circuit:	PEORIA 1701
Circuit Protection Zone:	PEORIA 170190090
Nominal Voltage:	0 – 750V
Pole SAP Equipment ID:	101030403
Subject to PRC 4292 Veg Pole Clearance:	Yes
PG&E Equipment associated with ignition:	Conductor – Secondary
EPSS enabled at time of ignition?	Yes
Fault Type:	Line to Ground
Wire Down (Primary)?	No
Lead Agency/Agency Having Jurisdiction:	CAL FIRE
Fire Size:	0.26-9.99 acres

FAS Field Remarks:	"oak tree fell into streetlight wire, broke wire started veg fire, opened jumpers to de energize transformer"	
HAWC Summary:	"Fire units responded to 13006 Kanaka Rd, tier 2. Kanaka IC states forward progress stopped at 1.8 acres. Outage OIS #2506592 impacting 1 customer on the EPSS enabled PEORIA 1701. Unplanned outage with Tman on site and no notes in ODT. EPSS Alert sent at 2025 hours. SIPT did not respond. No Everbridge message sent. No incident report, no preliminary fire report. Notifications made to HAWC Ops. Closing barring any significant change in the situation."	
Injuries / Fatalities / Property Damage / Media Attention:	0 / 0 / 1 / 0	
Weather Conditions:	Temperature: 98.8°F Relative Humidity: 23% Wind Speed: 5.0 mph out of the WNW Wind Gust: 9.5 mph Weather observation site approximately 3.2 miles west of the Incident Location.	
Red Flag Warning (RFW) / High Wind Warning (HWW):	No / No	
911 Standby Relief Time:	7 minutes	
OIS #:	2506592	
ILIS #:	24-0084451	
FAS #:	T006439917	
TOTL #:	N/A	
Assigned Attorney:	N/A	
Ignition Investigator & Phone:	██████████	██████████
	██████████	██████████

Executive Summary

On July 5, 2024, at 1950 hours, CAL FIRE notified PG&E of a vegetation fire and wires down at 13006 Kanaka Drive¹ in Jamestown, California. Concurrently, a PG&E Troubleshooter overheard CAL FIRE radio messages and proceeded to the reported address.² While enroute, the troubleshooter observed CAL FIRE at [REDACTED] [REDACTED] (“Incident Location”, Figure 1 and Figure 2) near the EPSS-enabled, two-phase Peoria 1701 17kV Overhead Distribution Circuit (Figure 3) located within a Tier 2 HFTD and HFRA. Upon arrival, the troubleshooter observed CAL FIRE clearing the vegetation fire; the charred remains of a fallen tree (“Incident Tree”, Figure 4); burn marks, removed siding, and a melted electrical meter on the east exterior wall of a structure on the property (“Incident Structure”, Figure 5); and a single phase insulated service drop (“Incident Span”, Figure 2 **Error! Reference source not found.**) broken and on the ground, still energized, between wood pole SAP ID 101030403 (“Incident Pole 1”, source side) and a wood light pole (“Incident Pole 2”, load side). The Incident Tree appeared to have struck the down guy to Incident Pole 1, causing the Incident Span to break at the load-side connection to Incident Pole 2 (Figure 6).

At 2030 hours, the troubleshooter opened jumpers two poles source side of Incident Pole 1, de-energizing the Incident Span and one customer. At 2100 hours, the troubleshooter reported to the Distribution Control Center (“DCC”) that the electrical panel and meter on the Incident Structure were damaged by the fire and would require repair and inspection before power could be restored.³ At 2114 hours, the troubleshooter connected a generator to the Incident Structure, restoring power to one customer.

On July 9, 2024, Vegetation Management (“VM”) patrolled the Incident Location and observed approximately 1.5 acres of burned grass and trees, and exterior fire damage at the southeast corner of the Incident Structure (Figure 5). VM reported that the Incident Tree was an interior live oak at least 50 feet tall that failed mid-trunk toward Incident Pole 1. VM reported that the Incident Tree was green at the time of failure, with rot present within the trunk and where large limbs tore out, however, it is unclear whether the defects would have been visible during the time of inspection in March 2024. The same day, VM performed an extent of condition patrol, observed no trees out of compliance, and marked seven trees for removal that exhibited fire damage or rot indicators.

A weather station located 3.2 miles west of the Incident Location recorded a temperature of 98.8°F, relative humidity of 23%, with sustained winds of 5.0 miles per hour (mph), and wind gusts up to 9.5 mph out of the west-northwest direction at the time of the incident. Meteorology indicated the actual Fire Potential Index (FPI) rating was R4.

This information is preliminary, and all times, customer numbers, and measurements mentioned in this report are approximate. If Law-Claims receives a claim exceeding \$50K and is able to verify that the amount includes labor and materials only, the incident would be re-evaluated for Electric Incident Report (“EIR”) reportability.

System Protection Analysis

The Peoria 1701 17kV circuit was equipped with EPSS-enabled devices, and EPSS settings were enabled at the time of the incident. No protection devices operated automatically in response to the wire down, as the Incident Span was a service drop.

¹ Address reported by CAL FIRE based on call recording ID #5930027.

² Based on a conversation with the troubleshooter on August 14, 2024.

³ No EC notifications were created for this incident.

Ignition Impact

The incident ignited an approximately 1.5 acre vegetation fire, which was extinguished by CAL FIRE. The incident resulted in an outage that affected one customer for a total duration of approximately 44 minutes.

Sequence of Events

July 5, 2024

- 1950 hours – CAL FIRE reports vegetation fire with powerlines down to PG&E. Troubleshooter overhears a CAL FIRE radio message and heads toward Incident Location.
- 1959 hours – Troubleshooter dispatched; troubleshooter already at the Incident Location.
- 2030 hours – Troubleshooter opens jumpers two poles source side of Incident Pole 1, impacting service to one customer.
- 2100 hours – Troubleshooter reports that the fire caused damage to the customer's meter that will require replacement and inspection before the customer can be re-energized.
- 2114 hours – Troubleshooter added generator, restoring power to the impacted customer.
- 2127 hours – Troubleshooter departed the Incident Location.

Corrective Notification Associated with Ignition

No EC notifications were created in response to this incident.⁴

Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	128911612	Replace decayed crossarm; tighten framing hardware; repair conductor skinned close to neutral	B	May 28, 2024	June 28, 2024
COE Notification	N/A				
LC Notification	N/A				
Veg Work Order	N/A				

Please note this may not include pending major program or project work at the incident location.

Asset Info & Most Recent Inspections and Tests

Source Side Structure*	SAP ID: 101030403	
Info / Inspection	Most Recent Date	Findings
Install Date:	2002	
Inspection:	July 19, 2022	Woodpecker damage; Liquid in fuse too low
	June 6, 2021	None
Patrol:	March 5, 2024	None

⁴ According to PG&E Customer Care and Billing, the damaged meter was replaced on July 6, 2024.

Corrective History:	November 22, 2023	Fuse replaced (EC 124117530)
Aerial Inspection Records:	May 22, 2024	Crossarm is woodpecker damaged and decayed
VM Inspection:	March 5, 2024	None
EVM Inspection:	N/A	-
Equipment Test:	N/A	-
Pole Intrusive Test:	February 4, 2014	Pass
WSIP Inspection:	April 3, 2019	None

*Incident Pole 1

Hazard Barrier Analysis:

Hazard	Vegetation	Sub-Hazard	Fallen Tree
Target	Downed secondary conductor from fallen tree in Tier 2 HFTD causing a 1.8-acre fire and customer property damage		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See ICF Codes)	Opportunity
Barriers that Positively Affected Ignition			
Covered Overhead Secondary and Insulated Service Drop Cable Document 015195, TD-9100B-009	Expected Performance: Limit surface area of live wire and prevent or reduce ignition Observed Performance: Barrier performed as expected	A1B2C3D1 – Ineffective at reducing all fault energy	Use of covered conductor likely reduced the size of the ignition
Barriers that were Assessed as Opportunities			
Service Breakaway Disconnect for Overhead Services TD-041010-B004	Expected Performance: Disconnect line from pole to prevent wire breaking. Observed Performance: Barrier did not exist.	A4B2C1D2 – Program limited to certain conductors	May have prevented the ignition event by preventing the line from remaining energized when tree made contact


Potential Next Steps / Associated CAP Items:


No next steps were identified as a result of this investigation.


Single Line Diagram




LEGEND

 Substation

 Fuse

 Line Recloser

 Area of Interest

Photos and Diagrams of Events

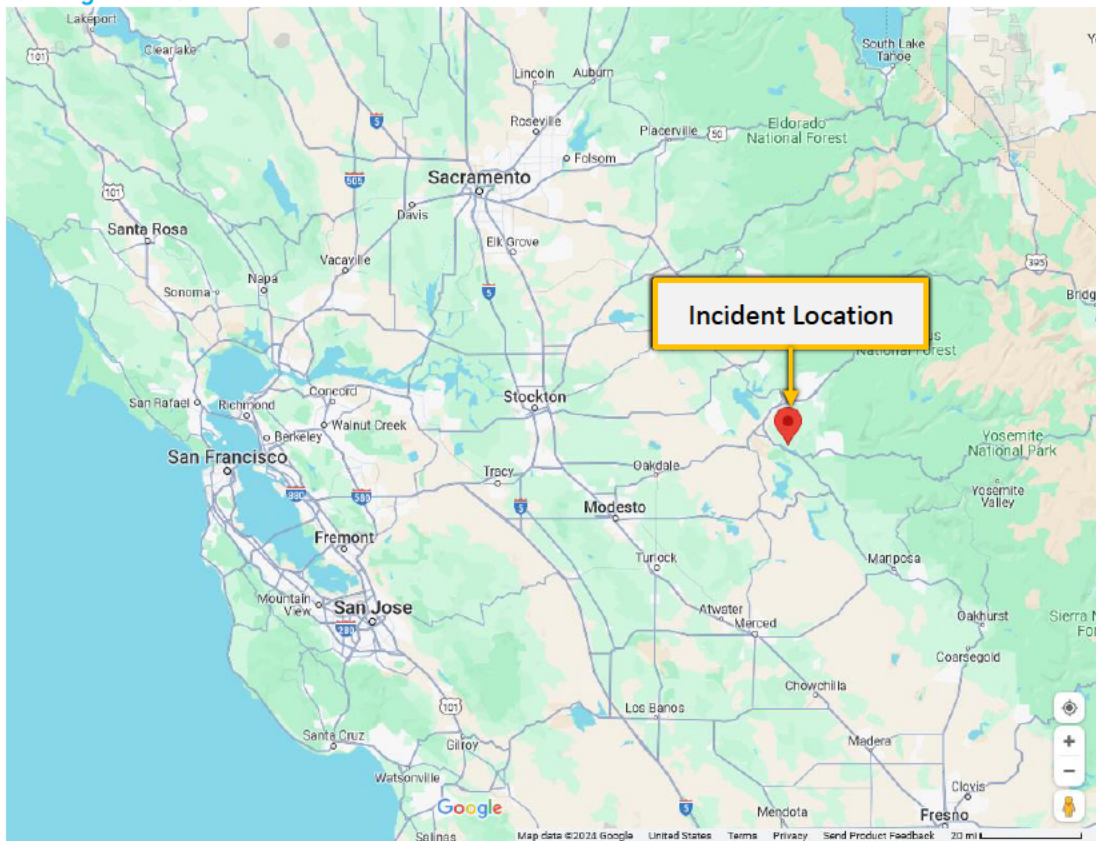


Figure 1. Map indicating the Incident Location (map data provided by Google, accessed July 25, 2024).

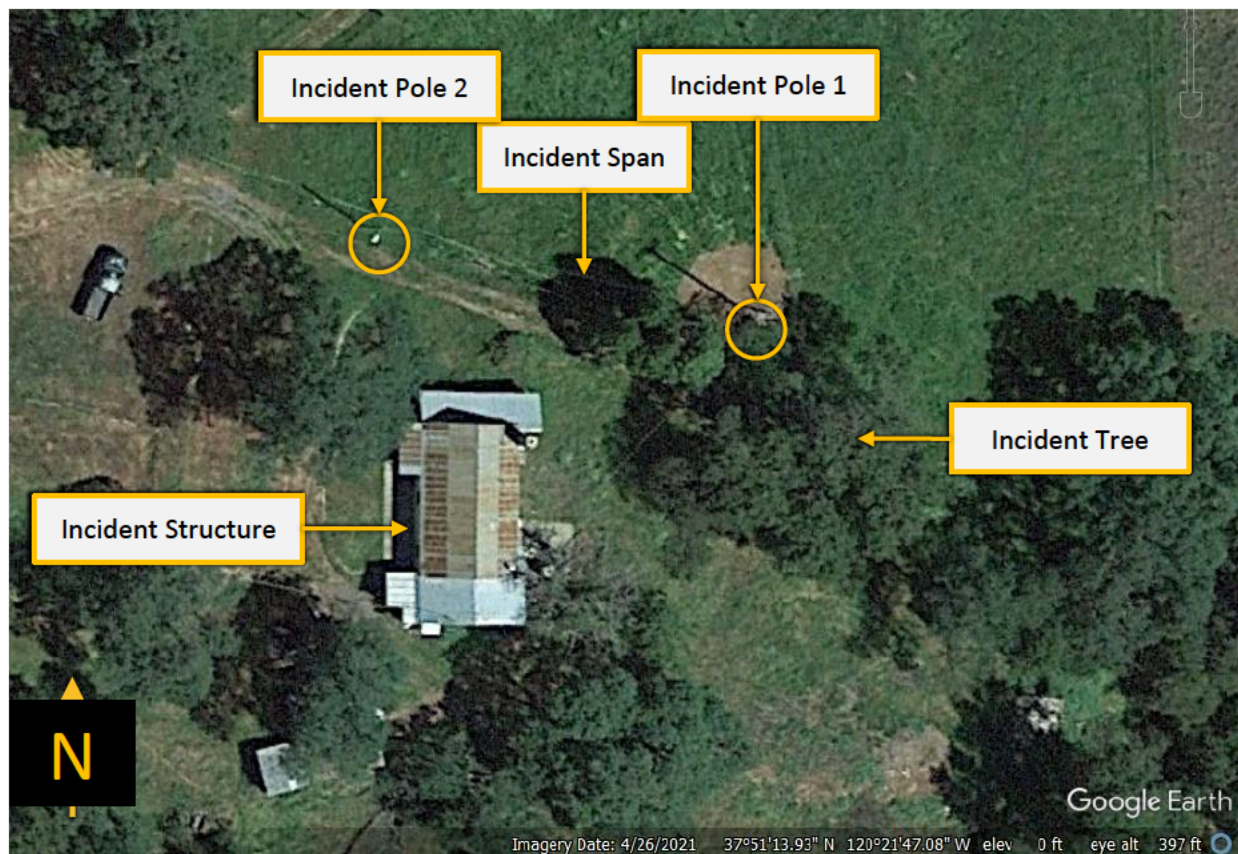


Figure 2. Publicly available overhead image of the Incident Location showing the Incident Span, Incident Pole 1, Incident Pole 2, Incident Tree, and Incident Structure (image from April 2021, provided by Google Earth, accessed August 5, 2024).

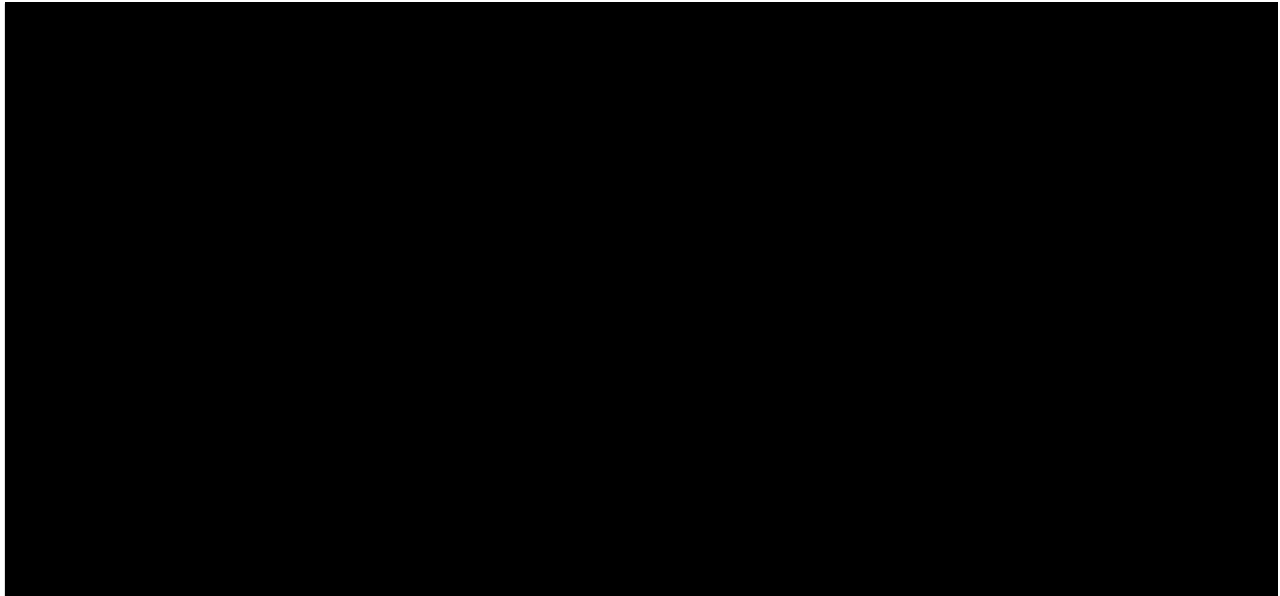


Figure 3. EDGIS map of Incident Circuit Segment.

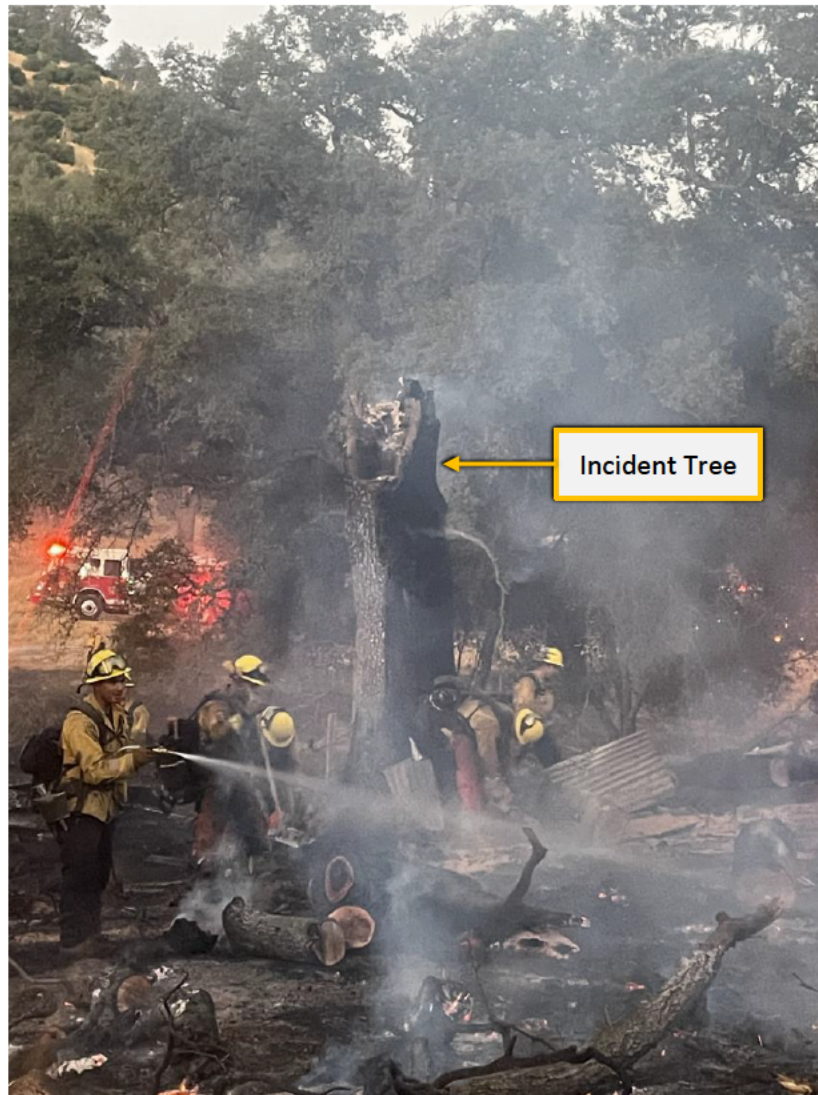


Figure 4. Incident photo showing the remaining trunk of the Incident Tree and CAL FIRE spraying the charred ground with water (taken July 5, 2024).

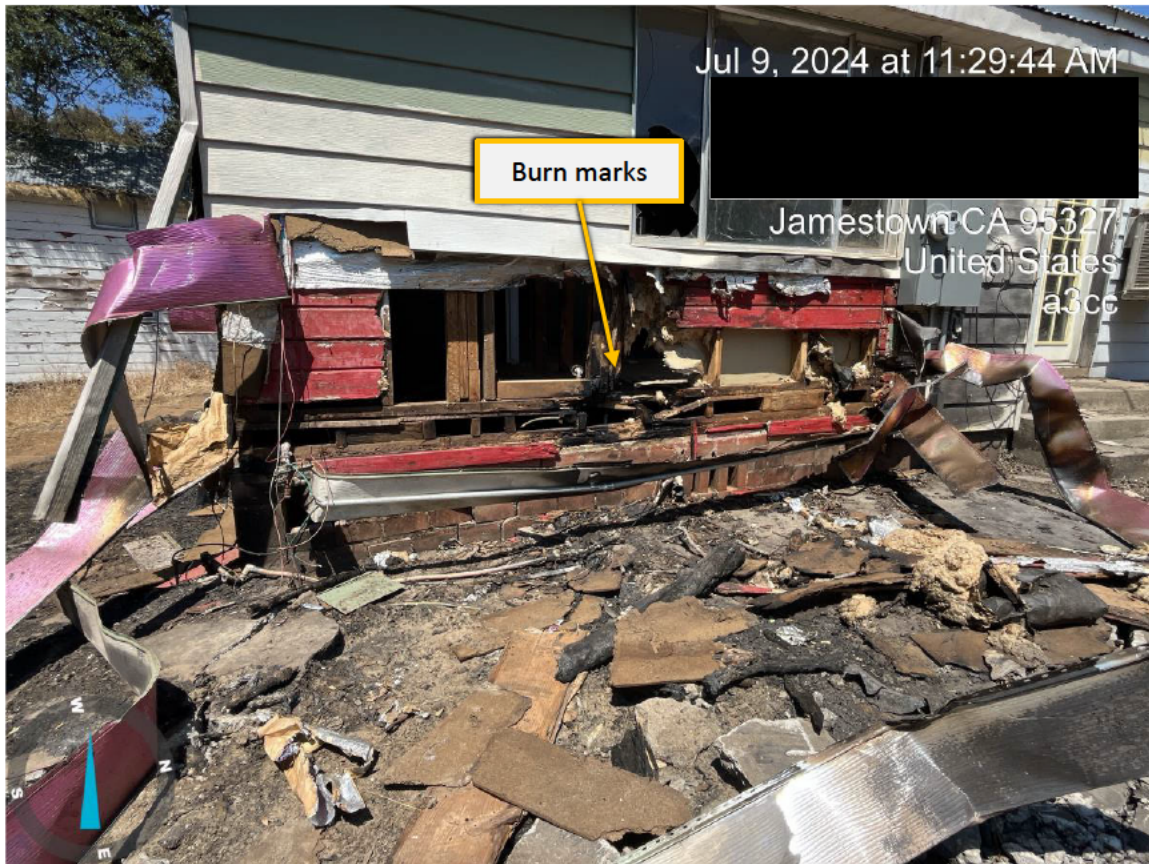


Figure 5. Vegetation Management Incident Report. Photo shows the southeast corner of the Incident Structure with a section of siding removed and evidence of burn marks (taken July 9, 2024).

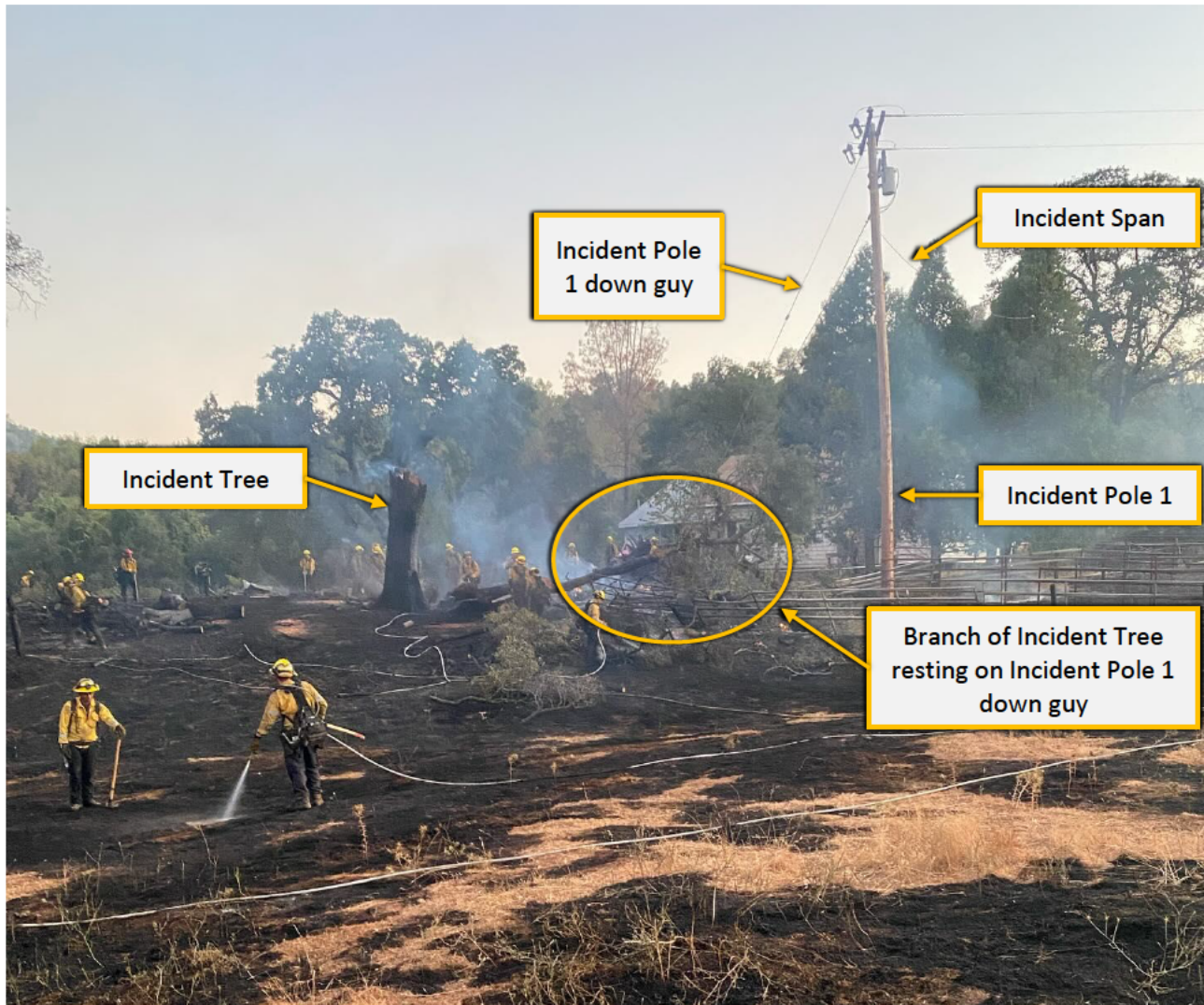
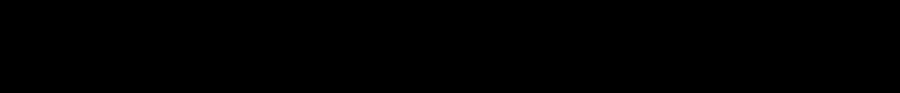


Figure 6. Publicly available incident photo showing Incident Tree, branch of the Incident Tree resting on an Incident Pole 1 down guy, Incident Pole 1, and Incident Span posted to the Tuolumne County Fire Department's social media account (posted July 9, 2024; accessed August 29, 2024).

Attachments

Attachments and references can be located in the ESA folder, located below:



END OF REPORT