

PAC_256.07.204

 USDA Forest Service	Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)				Incident Number		9652378				
					Incident Date		7/29/2022				
LOCATION											
Fire Name		Dispatch #		Account Code		Region		Forest			
McKinney		CA-KNF-6177		P5PX2F22		05		05			
Origin Location: geographical landmarks, highways, roads, trails, etc.				Township		Range		Section			
1137 McKinney Creek Road, Klamath River, CA				46N		9W		16			
				Latitude (D – M' – S")		Longitude (D – M' – S")					
				41		49		52		-122 53 44	
JURISDICTION											
USFS Only		Identify Other Agency(s)				Lead Origin & Cause Investigator		Est. Suppression Cost			
Yes						Green Wildland Fire Investigation Team		UNK			
EVENT SEQUENCE											
Estimated Time of Ignition				Time Fire Reported				Time Origin Protected			
Mo.	Day	Year	HHMM	Mo.	Day	Year	HHMM	Mo.	Day	Year	HHMM
07	29	2022	1330	07	29	2022	1412	06	30	2022	1400
Who Investigation Team				Who b6 & b7C				Who LEI			
FIRE BEHAVIOR											
Estimated Acres		Fuel Type @ Ignition Area		Weather Observer		Date		Time			
60,379		Needle Litter/Grass		b6 & b7C		7/29/22		1500			
Slope %		Aspect: N E S W		Elevation		Weather Station		Date			
10		W		2,000		Collins Baldy		7/29/22			
								Temp			
								RH			
								Wind Dir			
								Wind Speed			
								6			
CAUSE DETERMINATION CODE: (PS) = POSSIBLE, (PR) = PROBABLE, (EX) = EXCLUDED (EXPLAIN IN NARRATIVE)											
EX	Lightning		(Detection Method)								
No evidence to support Lightning as a cause.											
EX	Equipment Use		(Exhaust, Brake Shoe, Mechanical, Friction, Aircraft, Vehicle Fire, Other)								
No evidence to support Equipment Use as a cause.											
EX	Smoking		(Tobacco, Other)								
No evidence to support Smoking as a cause.											
EX	Campfire		(Cooking, Warming, Ceremonial, Other)								
No evidence to support Campfire as a cause.											
EX	Debris Burning		(Land, Slash, Refuse, Other)								
No evidence to support Debris Burning as a cause.											
EX	Railroad		(Ignition Activities Associated with Railroad Companies)								
No evidence to support Railroad as a cause.											
EX	Incendiary		(Ignition Component / Material First Ignited)								
No evidence to support Incendiary as a cause.											
EX	Children		(Ignition Activities Associated with Children; 12- years and younger)								
No evidence to support Children as a cause.											
PR	Miscellaneous		(Blasting, Structure, Fireworks, Welding, Cutting, Grinding, Pest Control, Power Line, Glass, Target Shooting, Spontaneous Combustion, Other)								
Nothing within the Miscellaneous category was discovered or present at the time of ignition, except Power Lines											
Cause Determined: State brief reason & explain in the narrative					Cause Undetermined: State brief reason & explain in the narrative						
Power Lines											
AUTHORED BY		b6 & b7C		Date		8-15-2022		Submitted to			
								b6 & b7C			
								Date			
								8-16-2022			
ATTACHMENTS - IF INCLUDED		LE Incident Report		☒		Supplemental Reports		☒			
		Fire Stat Report		☐		Sketches / Diagrams		☒			
						Maps		☒			
						Photographs		☒			
						Other		☒			

 USDA Forest Service	Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)				Incident Number		9652378	
					Incident Date		7/29/2022	
(CODE: S – SUBJECT, W – WITNESS, V – VICTIM, RP – REPORTING PARTY, O – OTHER)								
Name (Last, First, Middle)				Alias		DOB	Race	Gender
RP b6 & b7C						b6 & b7C	b6 & b7C	M
Address (Home)				Phone (Home)		Hair Color	Eye Color	SSN
b6 & b7C				b6 & b7C				
Address (Business) (Tax Identification Number if Required)				Phone (Work)		Height	Weight	License / ID
Name (Last, First, Middle)				Alias		DOB	Race	Gender
Address (Home)				Phone (Home)		Hair Color	Eye Color	SSN
Address (Business) (Tax Identification Number if Required)				Phone (Work)		Height	Weight	License / ID
Name (Last, First, Middle)				Alias		DOB	Race	Gender
Address (Home)				Phone (Home)		Hair Color	Eye Color	SSN
Address (Business) (Tax Identification Number if Required)				Phone (Work)		Height	Weight	License / ID
VEHICLE INFORMATION (CODE: D – DAMAGED, E – EVIDENCE, I – IMPOUND, S – SUBJECT W – WITNESS, O – OTHER)								
	License Number		State	VIN	Year	Make	Style	Other Information
	License Number		State	VIN	Year	Make	Style	Other Information
	License Number		State	VIN	Year	Make	Style	Other Information
	License Number		State	VIN	Year	Make	Style	Other Information
INSURANCE INFORMATION (HOME, AUTO, LIABILITY, OTHER)								
Insurance Company		Policy Number		Insurance Agent		Address		Phone Number

 USDA Forest Service	Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)	Incident Number	9652378
		Incident Date	7/29/2022
SYNOPSIS (DATE, FIRE NAME, ESTIMATED ACRES, LOCATION, JURISDICTION); (ESTIMATED COST, DAMAGE; PROPERTY / RESOURCE); (CAUSE; DETERMINED / UNDETERMINED)			
On July 29, 2022, the McKinney Fire ignited on private property and quickly spread onto United States Forest Service (USFS) lands. To date, the McKinney Fire has burned approximately 60,379 acres of private and public lands. Per CAL FIRE, as of August 15, 2022, the fire has claimed the lives of four people, destroyed 185 structures, damaged an additional 11 structures, and caused 11 fire personnel and civilian injuries.			
DETAILS OF INVESTIGATION: (INITIAL REPORT, INITIAL ATTACK, INITIAL INVESTIGATION, FIRE BEHAVIOR ANALYSIS, STATEMENTS, ORIGIN EXAMINATION, CAUSE DETERMINATION)			
July 29, 2022, Forecasted Weather The forecasted weather from the National Weather Service called for very hot temperatures with low relative humidity and a slight chance for afternoon and evening thunderstorms across inland areas into Saturday. The forecast called for maximum temperatures of 105-110 in the valleys and 85-90 on the ridges, with a minimum relative humidity of 10-15 percent. Valleys and lower slopes would have light winds of 5 to 8 Miles Per Hour (MPH), then becoming west to northwest winds 5 to 8 MPH. The Haines Index was forecasted as a 6, and there was a 10 percent chance of wetting rain (Attachment 1, Weather Forecast). July 29, 2022, Interview with [b6 & b7C] On July 29, 2022, Law Enforcement Officer (LEO) [b6 & b7C] responded to the McKinney Fire, which had ignited at 1137 McKinney Creek Road, in Klamath River, California. At approximately 5:40 PM, LEO [b6 & b7C] met with [b6 & b7C]. [b6 & b7C] said he walked outside his house and observed a column of smoke near the base of his hill and called Yreka Dispatch around 2:12 PM. According to [b6 & b7C] no one was down in that area of [b6 & b7C], it was 108 degrees, and everyone was inside trying to stay cool. [b6 & b7C] drove his [b6 & b7C] to the fire and began suppression efforts. [b6 & b7C] estimated the fire was ten feet off the road and a quarter to a half-acre in size, but it was further up the hill. After five or ten minutes, Forest Service resources began arriving on scene. [b6 & b7C] walked up the hill to see how far the fire had burned and returned to his [b6 & b7C] and drove to his pond and facilitated a water source. Prior to the fire, [b6 & b7C] received an email from Pacific Power, advising they may turn off the power due to fire conditions. On July 28, 2022, the power had gone out around 8:00 PM, and on July 29, 2022, the power was restored around 4:30 AM. [b6 & b7C] said a few years ago, Pacific Power found a tree leaning into one of the wires and it was arcing, so they sent someone out to deal with it (Attachment 2, [b6 & b7C] 7/29/2022 MOI). July 29, 2022, Interview with [b6 & b7C] at the Fire On July 29, 2022, LEO [b6 & b7C] spoke with Engine [b6 & b7C] at the scene of the McKinney Fire. [b6 & b7C] said the fire was backing down from the power pole (169600) area towards McKinney Creek Road and flanking both left and right, uphill away from the road. [b6 & b7C] estimated the fire size when he arrived to be a quarter to three-quarters of an acre. [b6 & b7C] observed fire burning in the top of power pole 169600 and the cross arms were intact (Attachment 3, [b6 & b7C] 7/29/2022 MOI).			

July 29, 2022, Interview with Pacific Power Lineman b6 & b7C

On July 29, 2022, LEO's b6 & b7C and b6 & b7C spoke with Pacific Power lineman b6 & b7C near Walker Bridge and Klamath River Road. According to b6 & b7C there had been a power outage in the same area the previous day and other linemen responded to the outage area. b6 & b7C said the whole circuit was on super safe mode and spoke about power pole 169600 burning up. Although the forest floor was burning all around the power pole, b6 & b7C recalled the bottom of the power pole was not burning and he did not see fire climbing up pole 169600.

b6 & b7C spoke about re-energizing the powerlines at 4:30 AM, saying, it's set on super sensitive mode, something happened to the circuit, they came and patrolled it, took their fault data, and didn't find anything. The first outage was 9:30 PM last night, then at about 4:00 AM, they finished their patrol, turned on the circuit and hung out until about 6:30 AM. They have fault data on all their reclosers, they patrol and have engineers that take the calculations and tell them the approximate location of the fault, then they come out and look at every piece of the line (Attachment 4, b6 & b7C 7/29/2022 MOI).

July 30, 2022, General Origin Area Secured

On July 30, 2022, Special Agent (SA) b6 & b7C met with LEO b6 & b7C and travelled to 1137 McKinney Creek Road, where the fire was first reported. When SA b6 & b7C and LEO b6 & b7C arrived, they used bright orange surveyors' tape to flag off an approximate one-acre area suspected of being the General Origin Area (GOA). SA b6 & b7C also captured photographs of the powerline infrastructure in the vicinity of the suspected GOA (Attachment 5, SA b6 & b7C 7/30/2022 MOA).

July 31, Interview with Air Attack 05

On July 31, 2022, LEO b6 & b7C travelled to the Siskiyou County Airport and met with b6 & b7C on Air Attack 05. b6 & b7C provided seventeen digital images to LEO b6 & b7C which were taken on July 29, 2022, when they responded to the McKinney Fire. The series of photographs, captured between 2:28 PM and 4:20 PM, depict various angles of the smoke column during the initial stages of the incident as seen from the air (Attachment 6, LEO b6 & b7C 7/31/2022 MOA).

July 31, 2022, Preliminary Origin and Cause Investigation Initiated

On July 31, 2022, SA's b6 & b7C, and b6 & b7C, LEO's b6 & b7C, and b6 & b7C and Fire Prevention Technician (FPT) b6 & b7C, hereinafter "Investigation Team," on July 31, 2022, travelled to the location where the McKinney Fire was initially reported on July 29, 2022, at 2:12 PM. Upon arrival, the Investigation Team parked at the remnants of a structure and surrounding outbuildings, which appeared to be the location of the residence at: 1137 McKinney Creek Road in Klamath River, California.

The Investigation Team walked to a fence line that primarily stretched northeasterly, mid slope on the hillside, and above the location where the fire was first reported and observed. Below the fence line, the fuels consisted of primarily grass pasture with intermixed star thistle and scattered oak trees. Above the fence line, consisted of mixed conifer stands, oak trees and light brush. The Investigation Team traversed the fence line to the northeast, while LEO b6 & b7C oriented the group with a series of photographs previously obtained from Air Attack 05 personnel b6 & b7C, when he first arrived on scene of the fire.

The Investigation Team approached a small draw, which ran northwesterly on the terrain, where clear macro-scale fire pattern indicators suggested the fire had advanced uphill beyond the fence line to the northwest. Macro-scale fire pattern indicators observed included needle freeze with the needles and branches pointing to the north/northwest, suggesting that the wind was blowing from the south as the flaming front progressed through the area. Most of the canopies were either scorched or completely torched, indicating more extreme fire behavior typically seen in an advancing fire.

The Investigation Team continued along the fence line to the northeast, where they encountered another small draw running northwesterly. Within this draw lay several metal irrigation pipes. In this area, fire pattern indicators suggested the fire had spread lateral, across the hillside to the northeast. Those fire pattern indicators included grass stems oriented with the grass head pointing to the southwest, indicating fire progressed from southwest to northeast. Protection around rocks in the area was observed and when lifted, displayed a clear line of burnt vegetation on the southwest side with unconsumed fuels on the east side, indicating fire progressed from west to east. Protection on grass clumps was also observed, where all the grass heads were consumed except for a few still standing on the northeast side, indicating fire progressed from southwest to northeast.

The Investigation Team continued down a spur ridge to the southeast, where they encountered another fence line with handline and hose lay on the east side of the fence. The soil and ground fuels had been drug to the east side of the handline along with the hose lay, indicating the fire was burning on the west side of the handline and hose lay when they were constructed. It should be noted, it is common for ground fuels to be drug to the opposite side of the handline from the fire, so fuel loading does not occur on the edge of the handline where the fire is located, thus the handline does not become compromised from taller flames. The same is common for the hose lay, so the hose does not become compromised from the fire.

The Investigation Team continued down the handline on the spur ridge where orange flagging had been previously strung around the suspected GOA. Lateral fire progression indicators were observed, which suggested the fire burned across the slope, towards the handline and to the north. Those fire pattern indicators included grass stems and sooting/staining, and less intense fire behavior. Continuing down the handline, the Investigation Team came to a stretch of power lines that ran north to south and one power pole (169600) in particular south of the handline. The cross members of the power pole 169600 were damaged and had significantly lowered on the pole, however remained suspended off the ground. The pole displayed charring from the base of the pole to the top, on the uphill side. The conductors also remained suspended in the air as well. Above power pole 169600, a macro-scale angle of char on the trunk of a pine tree was observed. The angle of char was higher on the uphill side and lower on the downhill side, the angle was also steeper than the slope indicating fire had advanced uphill.

The Investigation Team continued to McKinney Creek Road along the bottom of the fire when it was first observed. There was a steep cutbank on the west side of the road that displayed backing fire pattern indicators near the top of the cut bank. There was an angle of char present on the trunk of several trees where the angle was level on the uphill side and a tall linear scorch on the downhill side, indicating fire backed down towards the road and a "vortex flame wrap" was created on the downhill side, indicating wind had caused the linear scorch on the downhill side, possibly from a wind shift. In the same area, there was a hose lay where several sections had been burned through, presumably this hose lay was placed along the initial southern flank of the fire during initial attack. About one hundred feet to the south another hose lay was headed uphill from the road.

The Investigation Team walked up hill along that hose lay and observed several sections of burnt hose. The hose lay was presumably a second effort to contain the southern flank of the fire. The Investigation Team continued up a small spur ridge to the west where a transition zone and evidence of lateral fire progression to the south was observed. There was less fuel consumption in that area with one or two foot tall scrub oaks, with their leaves still intact and minimal scorch. Continuing uphill, angle of char on the trunks of several trees was observed, indicating the fire advanced uphill. SA **b6 & b7C** and LEO **b6 & b7C** continued around to the area where they first encountered the handline and completed a clockwise walk around the suspected GOA of the fire. SA **b6 & b7C** returned to the southwestern area of the suspected GOA and observed heavy sooting/staining on the northern side of multiple rocks, indicating the fire advanced from north to south, near the southwest side of the suspected GOA (**Attachment 7, SA **b6 & b7C** 7/31/2022 MOA**) (**Attachment 8, SA **b6 & b7C** 7/31/2022 MOA**) (**Attachment 6, LEO **b6 & b7C** 7/31/2022 MOA**) (**Attachment 9, FPT **b6 & b7C** 7/31/2022 MOA**).

August 1, 2022, Origin and Cause Investigation Continued

On August 1, 2022, Special Agent's [b6 & b7C] and [b6 & b7C], Law Enforcement Officer [b6 & b7C] and Fire Prevention Technician [b6 & b7C] returned to the previously identified GOA, which is located at Global Positioning System (GPS) coordinates 41°49.868', -122°53.747'. It should be noted, it appeared there was precipitation in the area, as the white ash observed the previous day displayed a grey color and looked compacted, rather than fluffy. In fact, light precipitation was occurring when they arrived and continued throughout the day.

SA [b6 & b7C] and LEO [b6 & b7C] had previously conducted a clockwise circle around the GOA, so they conducted a counterclockwise circle around the GOA observing macro-scale fire pattern indicators. SA [b6 & b7C] and FPT [b6 & b7C] conducted their circles as well. As SA [b6 & b7C] and LEO [b6 & b7C] walked up the right flank handline, a pine tree was observed on the north side of the handline, the tree trunk bent over the handline and the canopy of the tree lay on the ground on the south side of the handline within the GOA. The canopy and trunk of the tree within the GOA displayed minimal fire effects, in fact, the canopy appeared green in color, with no obvious scorch. SA [b6 & b7C] and LEO [b6 & b7C] continued up the handline and observed angle of char on the trunk of a pine tree above the powerlines, where the angle of char was higher on the uphill side and lower on the downhill side, with the angle steeper than the slope, indicating fire had advanced uphill at that point.

As SA [b6 & b7C] and LEO [b6 & b7C] rounded the northwest corner and walked the western edge of the GOA, staining/sooting on multiple rocks was observed, with the sooting/staining on the downhill, or easterly facing side, indicating fire had progressed from east to west. Foliage freeze was observed on the leaves of several oak trees where the leaves were frozen, pointing southwesterly, indicating the wind was blowing from the northeast when fire progressed through the area.

As SA [b6 & b7C] and LEO [b6 & b7C] continued around the southwest corner of the GOA and to the south, heavy sooting/staining on the northeast side of rocks outside the GOA was observed, indicating fire advanced from northeast to southwest at that point. In the interior of the GOA, angle of char on several oak trees was observed, indicating fire advanced from east to west. Continuing toward McKinney Creek Road, and southeast of the aforementioned oak trees, a stretch of one or two foot tall scrub oaks, with their foliage still intact was observed, indicating minimal fire behavior in that area, displaying the characteristics of a transition zone and a shift from advancing fire to lateral fire progression. Once at McKinney Creek Road, SA [b6 & b7C] and LEO [b6 & b7C] walked north and completed their counterclockwise circle (Attachment 10, SA [b6 & b7C] 8/1/2022 MOA) (Attachment 11, SA [b6 & b7C] 8/1/2022 MOA) (Attachment 12, LEO [b6 & b7C] 8/1/2022 MOA) (Attachment 13, FPT [b6 & b7C] 8/1/2022 MOA)

August 1, 2022, General Origin Examination

After Special Agent's [b6 & b7C] and [b6 & b7C], Law Enforcement Officer [b6 & b7C] and Fire Prevention Technician [b6 & b7C], hereinafter "Investigation Team," on August 1, 2022, completed their circles of the GOA, they decided to begin processing the GOA from the southwest corner, utilizing red pin flags to identify advancing fire pattern indicators, yellow pin flags to identify lateral fire pattern indicators and blue pin flags to identify backing fire pattern indicators. The Investigation Team progressed mostly from southwest to northeast while zigzagging across the slope, northwest to southeast in a crescent shape.

On the south side of the GOA, the Investigation Team identified an advancing run originating from a small draw with lateral fire progression beneath. The advancing fire progressed from northeast to southwest and the lateral fire progressed from north to south. On the north side of the draw, fire progressed from southeast to northwest and transitioned to advancing fire progression, travelling uphill from east to west. On the west side of the GOA, the Investigation Team identified lateral fire progression from east to west, transitioning to advancing fire progression in the same direction. It should be noted, SA [b6 & b7C] observed the fire seemed to have burned with greater intensity in the areas under Pine and Fir trees where needle cast fuel loading would be present. In the areas under Oak trees, where leaf litter fuel loading would be present, it appeared the fire burned with less intensity. In all, it appeared fire would

advance through the needle cast and slow when it progressed into the leaf litter, transitioning from advancing to lateral fire progression.

The Investigation Team identified a prominent advancing run towards the center of the GOA, which ran primarily easterly to westerly. North of that advancing run, the Investigation Team identified lateral fire pattern indicators, suggesting the fire progressed from south to north. As the Investigation Team continued their origin examination, they began to zig-zag across the slope, downhill from west to east, towards the powerlines and McKinney Creek Road. In the draw on the south side of the GOA the Investigation Team observed several cut trees. One had the tree still affixed to the stump, with considerable charring on the cut portion of the stump, indicating the stump had been cut prior to the fire occurring. The other stumps displayed a small amount of charring on the cut portions, however the cuts appeared old and were absent of any saw dust or shavings that would have been left behind if recently cut, indicating they had been cut prior to the fire occurring.

Continuing their examination, SA [b6 & b7C] discovered a small, deceased bird within the timbered area immediately adjacent to and west of the powerline easement. LEO [b6 & b7C] and SA [b6 & b7C] examined the bird, noting, the bird was lying on its side near the base of several small trees. The bird's feathers appeared to be primarily intact, but some of the wingtips and tail feathers appeared to contain a minimal amount of scorching or charring. The bird's skull appeared to be hollow, and several insects were observed crawling on the bird's feathers. LEO [b6 & b7C] picked the bird up to examine the ground beneath the bird's body. When LEO [b6 & b7C] picked the bird up, he noted that the carcass was not stiff and that it still contained some flexibility. The surface fuels underneath the bird's carcass were burnt, while the feathers that were touching the surface fuels were not. LEO [b6 & b7C] placed the bird back in its original position and placed a lime green flag next to the bird's carcass.

South of the power pole, grass stem indicators were present, with the head of the stems pointing northerly, indicating fire backed from north to south at that point. Along the cutback above McKinney Creek Road, backing indicators were observed suggesting the fire backed from west to east. On a small slope above the powerlines and bent tree previously described, SA [b6 & b7C] and SA [b6 & b7C] observed sooting/staining on the northeastern side of multiple rocks, suggesting the fire progressed from northeast to southwest. In all the main fire progression appeared to be uphill in a west-southwesterly direction.

Around 4:45 PM, heavier and more consistent precipitation occurred, rendering fire effects difficult to identify and the Investigation Team concluded their examination. SA [b6 & b7C] and FPT [b6 & b7C] arrived at the GOA a short time later and all investigators were on McKinney Road. LEO [b6 & b7C] noticed a kink or bend in the lower conductor travelling through the GOA near the northeast corner and the handline. SA [b6 & b7C] also noticed a section of what appeared to be charring on the upper conductor in the same general area (Attachment 10, SA [b6 & b7C] 8/1/2022 MOA) (Attachment 11, SA [b6 & b7C] 8/1/2022 MOA) (Attachment 12, LEO [b6 & b7C] 8/1/2022 MOA) (Attachment 13, FPT [b6 & b7C] 8/1/2022 MOA) (Attachment 14, FPT [b6 & b7C] 8/1/2022 MOA).

August 2, 2022, Interview with [b6 & b7C]

On August 2, 2022, LEO [b6 & b7C] conducted an interview with [b6 & b7C] at the GOA. According to [b6 & b7C], he was working at the Oak Knoll Fire Station the evening of July 28, 2022, when the power went out. The power was restored on the morning of July 29, 2022, at approximately 4:50 AM. Later in the day, [b6 & b7C] heard the dispatch alert of a possible vegetation fire in Klamath River, CA. [b6 & b7C] and his engine crew got in their fire engine and an additional dispatch alert advised there was a vegetation fire on McKinney Creek Road. They responded from the Oak Knoll Fire Station to McKinney Creek Road. They arrived on scene approximately 5-7 minutes later and observed a couple vehicles on their way. There was a red volunteer fire engine [b6 & b7C] already on scene and one individual [b6 & b7C] with a hose approximately 30-40 feet up the right flank. The fire was on top of the cut bank and had not burned to McKinney Creek Road yet.

The temperature was over 100 degrees, winds were 2-5 MPH, maybe 10 MPH, coming up canyon, to the southwest.

b6 & b7C crew parked at the left flank and anchored into the roadway and started a hose lay up the left flank. The fire was backing towards McKinney Creek Road, just chunking along. The fire had burned to the cut Oak tree, up the original left flank along the burned hose. The center of the fire was black, the fire was backing down towards the road with 2–3-inch flame lengths and the main fire progression was to the south-southwest. The Klamath Hotshots arrived and began constructing handline on the right flank, while b6 & b7C continued suppression efforts on the left flank. At some point a spot fire occurred on the right flank and b6 & b7C pulled a hose down the road and up the right flank to extinguish it.

Sometime later, possibly 30-60 minutes, a representative from the power company arrived on scene. b6 & b7C noticed the powerlines and that the smoke was under them. b6 & b7C also noticed the power pole and walked to it, noticing the crossarm was fully intact. At the top of the pole there was a small open flame that was smoldering. There was no other fire on the pole, however, the uphill side of the pole had charring on it from the top of the pole to the bottom. There was also some smoke coming from the area of the pole and the crossarm, but no open flame, which he referred to as the "crotch."

b6 & b7C didn't recall observing any overhead vegetation on the right flank and he did not know if power company personnel went up the hill into the fire area. According to b6 & b7C, there haven't been an alarming number of fires in the area and there wasn't any lightning prior to the start of the McKinney Fire, however, thunder cells did begin to come into the area, and after several hours after the start of the fire, lightning began (Attachment 15, b6 & b7C 8/2/2022 MOI).

August 2, 2022, Interview with b6 & b7C

On August 2, 2022, LEO b6 & b7C conducted an interview with b6 & b7C at the GOA. According to b6 & b7C the power was out the night before the fire, at about 9:00 PM and came back on the morning of the fire [7/29/22] around 4:45 AM. b6 & b7C had received an email the day before the fire at 2:34 PM, from Pacific Power stating the power was going to be shut down due to fire safety. The day of the fire, b6 & b7C was doing office work in his house trying to stay cool. He did not notice any sort of interruption to the power or a brown out prior to the fire. b6 & b7C did not observe any brown outs or flickering either. b6 & b7C stepped outside to have a cigarette, saw the column of smoke, and called Yreka Dispatch. The column was going straight up, and b6 & b7C didn't notice any wind.

b6 & b7C drove his b6 & b7C to the smoke and parked near the right flank. b6 & b7C used his hand line to suppress the right flank of the fire and scouted the fire. Soon after USDA Forest Service fire suppression resources began arriving, the fire spread was light to moderate and more active on the uphill side.

Earlier in the day, b6 & b7C thought he smelled smoke but didn't see anything. A couple years prior, a person from Pacific Power stopped at b6 & b7C house asking to use the phone because there was a tree touching the powerlines and arching. b6 & b7C went down and saw a tree leaning into the wire and arching. According to b6 & b7C that occurred in the same area of the GOA. b6 & b7C went on to explain that the little trees will just bend over, and he used the tree that was bent over in the GOA as an example. According to b6 & b7C the trees bending over is a common occurrence in the area. b6 & b7C didn't observe any direct link between vegetation and the powerlines the day of the fire and he didn't recall seeing any other people in the area when the fire occurred (Attachment 16, b6 & b7C 8/2/2022 MOI).

August 2, 2022, General Origin Examination Continued

Later in the day on August 2, 2022, Special Agent's b6 & b7C and b6 & b7C began identifying fire pattern indicators where they concluded the previous day. SA's b6 & b7C and b6 & b7C observed lateral fire pattern indicators on a small slope above the powerlines in the form of sooting/staining on the northeastern side of the rocks, indicating fire progressed from northeast to southwest. On the east side of the fire, on top of the cutbank, SA's b6 & b7C and b6 & b7C identified protection on remaining vegetation, where the vegetation displayed more damage on the west and northwest facing side, suggesting the fire burned from west to east or northwest to southeast. On the north side of the fire along the

handline, SA [b6 & b7C] observed several grass stems, where the heads of the grass stems were pointing south, indicating fire backed from south to north. In all, the fire pattern indicators suggested the fire progressed away from the area where the pine tree was bent over the fire line, with the canopy laying in the GOA, and the overall intensity of the fire in this area appeared to be minimal (Attachment 17, SA [b6 & b7C] 8/2/2022 MOA) (Attachment 18, SA [b6 & b7C] 8/2/2022 MOA) (Attachment 48, SA [b6 & b7C] 8/15/2022 MOA).

August 2, 2022, Interview with Klamath Hotshot Crew

On Tuesday August 2, 2022, investigators interviewed members of the Klamath Interagency Hotshot Crew (IHC), present during the initial attack suppression efforts on the day the McKinney Fire began.

IHC [b6 & b7C] said he drove up McKinney Creek Road past the fire to assess nearby structures. The fire was above the road on a bench, and not yet to the road. [b6 & b7C] informed [b6 & b7C] that he was going to take over as incident commander. [b6 & b7C] was observed by IHC [b6 & b7C] at the right flank of the fire, taking suppression action with a live reel hose. [b6 & b7C] placed a pin indicator on his phone of their location at 2:21 PM, approximately 9 minutes after the initial dispatch.

IHC [b6 & b7C], entered the right flank of the fire and began scouting ahead of the crew. [b6 & b7C] stayed with the crew and observed 1-to-3-foot flame lengths along the right flank and backing into the wind. The fire had not reached the tree canopy and the winds were described as light, upslope, with the smoke blowing away from them. The Klamath IHC sawyer teams began cutting line, and as they made their way under the power lines, there was fire in the cross bar of the pole, and they realized the cross bar on the pole would fall soon due to fire damage.

During the interview the IHC crew members walked to a spot on the hand line where they first encountered the fires edge on the right flank, observing a small slumped over Ponderosa Pine leaning over the hand line in an arch shape, crossing over the hand line. All crew members stated the tree was not in that position when they walked up the line (Attachment 19, Klamath IHC 8/2/2022 MOI).

August 3, 2022, Specific Origin Examination

On August 3, 2022, SA's [b6 & b7C] and [b6 & b7C] LEO [b6 & b7C] and FPT's [b6 & b7C] and [b6 & b7C] returned to the McKinney Fire GOA. SA [b6 & b7C] and SA [b6 & b7C] used fluorescent green surveyors flagging to mark a rectangle shaped area, approximately 20 feet in width, oriented west to south, and 100 feet in length, running south to north. This area was identified as the Specific Origin Area (SOA). The SOA encompassed the right-of-way area for the powerlines and utility easement. SA's [b6 & b7C] and [b6 & b7C] LEO [b6 & b7C] and FPT's [b6 & b7C] and [b6 & b7C] hereinafter "Investigation Team," on August 3, 2022.

The Investigation Team utilized the perpendicular lane search technique to continue identifying fire pattern indicators. The grid began at the south side of the SOA, working from a southerly to northerly direction. The high side of the grid was uphill to the west, and the low side was to the east, near the cut bank adjacent to McKinney Creek Road. The width of each grid lane was approximately 24", unless otherwise noted. The Investigation Team worked side by side overlapping each other as they searched each grid lane. Each grid lane was visually observed, using magnification as necessary, marking fire pattern indicators with the corresponding pin flag color. After completion of the visual examination, a magnet was employed to search for ferrous metals. Some of the grids were also excavated using hand tools when necessary. The length of each grid lane was measured before creating the next grid lane. The following are the findings for each grid lane:

1. 13'4" length, 4 backing fire pattern indicators were identified all suggested fire progressed in a southerly direction. 1 curling, 1 staining, 1 cupping. 1 footprint was observed in the western corner.
2. 13'4" length. 3 fire pattern indicators were identified. 1 lateral, 2 backing. The lateral indicator was cupping, and the two backing indicators was a grass head and protection. All suggested fire progressed in a south to

- southeast direction. Footprints were observed in the west and east corners of the grid lane.
3. 13'7" length, 7 fire pattern indicators were observed. 3 laterals, 4 backing. The lateral indicators were staining/sooting which suggested the fire progressed in a southwesterly direction, and the 4 backing indicators consisted of staining/sooting and grass heads, suggesting the fire progressed in a south to southeasterly direction. Several footprints were observed in the west and east and center of the grid lane.
 4. 13'7" length. 8 fire pattern indicators were observed. 3 advancing indicators displaying a degree of damage and protection, suggesting the fire progressed in a southwesterly direction. 5 backing indicators consisting of protection, staining/sooting, suggesting the fire progressed in a south to southeasterly direction. A footprint was observed in the west corner.
 5. 14'6" length. 8 backing indicators observed consisting of staining/sooting suggesting the fire progressed in a south to southeasterly direction. One of the backing indicators consisting of a grass stem, suggested the fire moved in a northerly direction. Remnants of a stump hole was present in the west corner, and footprints were observed in the east corner.
 6. 15' length. 2 lateral fire pattern indicators were observed consisting of protection and staining, suggesting the fire moved in a southwesterly direction. 3 backing indicators were identified consisting of staining and sooting, suggesting the fire progressed in a southerly direction. Footprints were identified in the west and east corners. Evidence item 1 and 2 were identified and collected. Remnants of a stump hole was also present.
 7. 15' length. 3 lateral fire pattern indicators consisting of staining suggesting the fire progressed in a south to southwesterly direction. 3 backing indicators were observed consisting of staining, suggesting the fire moved in a southeasterly direction. 2 backing indicators consisting of staining suggesting the fire moved in a northerly direction.
 8. 16' length. 1 advancing indicator consisting of staining and protection was identified suggesting the fire moved in a southwest direction. 3 backing indicators consisting of staining and protection, suggesting the fire progressed in a south to southeasterly direction. Remnants of a stump hole was also present in the western portion of the lane.
 9. 16' length. 1 backing indicator consisting of a grass head suggesting the fire moved in a northeasterly direction. 1 lateral indicator consisting of staining, suggesting the fire moved in a southwesterly direction. 2 backing indicators consisting of protection, suggesting the fire moved in an easterly direction. Evidence item 3 collected. A stump hole was present in the western portion of the grid.
 10. 16'10" length. 2 backing indicators consisting of grass heads suggesting the fire moved in a southeasterly direction. Evidence items 4(A-D) collected.
 11. 17' 1" length. 1 backing indicator consisting of cupping, 2 backing indicators consisting of grass heads, 1 backing indicator consisting of protection and 1 lateral indicator consisting of advancement, all suggesting the fire moved in a southeasterly direction. Evidence items 5 (A-C) collected. Power pole # 06246009 was in this grid lane.
 12. 17' length. 2 lateral and 1 advancing indicator's consisting of staining, suggesting the fire progressed to the southwest, and 1 backing indicator consisting of staining, suggesting the fire moved to south. Evidence item 6 was collected.
 13. 17'2" length. 5 advancing indicators consisting of staining, grass heads, cupping, and angle of char, and 4 lateral indicators consisting of staining and grass heads, suggesting the fire moved in a westerly direction. 2 backing indicators consisting of grass heads and protection, suggesting the fire moved to the east.
 14. 17'1" length. 2 advancing, 3 lateral indicators consisting of staining, grass heads, and cupping, suggesting the fire moved in a westerly direction. Evidence items 7 and 8 were collected.
 15. 17'2" length. 6 lateral indicators consisting of staining, protection, and grass heads, suggesting the fire moved in a westerly direction. Evidence items 9 and 10 were collected.
 16. 17'2" length. 3 advancing indicators consisting of staining and protection, suggesting the fire moved to the west. 2 lateral indicators consisting of grass heads, suggesting the fire moved to the east and south. Evidence items 11 and 12 were collected. A stump hole was in the western corner (Attachment 20, SA ^{b6 & b7C} 8/3/2022 MOA) (Attachment 21, SA ^{b6 & b7C} 8/3/2022 MOA) (Attachment 22, FPT ^{b6 & b7C} 8/3/2022 MOA) (Attachment 23, FPT ^{b6 & b7C} 8/3/2022 MOA).

August 4, 2022, Specific Origin Area Examination Continued

On August 4, 2022, SA's [b6 & b7C] and [b6 & b7C] LEO [b6 & b7C] and FPT's [b6 & b7C] and [b6 & b7C] returned to the McKinney Fire SOA. A short time later, SA [b6 & b7C] arrived and assisted in the grid search. SA's [b6 & b7C], and [b6 & b7C] LEO [b6 & b7C] and FPT's [b6 & b7C] and [b6 & b7C] hereinafter "Investigation Team," on August 4, 2022.

The perpendicular lane search technique continued with the Investigation Team identifying fire pattern indicators. The grid search began at Lane 17. The width of each grid lane was approximately 24", unless otherwise noted. The Investigation Team worked side by side overlapping each other as they searched each grid lane. Each grid lane was visually observed, using magnification as necessary, marking fire pattern indicators with the corresponding pin flag color. A magnet was employed to search for ferrous metals and some grids were excavated using hand tools when necessary. The following are the findings for each grid lane:

17. 17'2" length. 3 lateral indicators consisting of staining and protection, suggesting the fire moved in a west to southwesterly direction. 5 backing indicators consisting of grass heads, staining, and protection suggesting the fire moved in an easterly direction.
18. 17'6" length. 6 lateral indicators consisting of staining and protection, suggesting the fire moved in a west to southwesterly direction. 4 backing indicators consisting of a grass head, cupping, staining, and protection suggesting the fire moved in an eastern direction. Evidence item 13 was collected.
19. 17'8" length. 8 lateral and 1 backing indicators consisting of cupping, staining, protection, and curling, suggesting the fire moved in a southerly and westerly direction. Evidence item 14 was collected.
20. 17'10" length. 5 lateral and one backing indicator consisting of staining, protection, and degree of damage suggesting the fire moved in a southerly and westerly direction. 1 lateral indicator consisting of staining, suggested the fire moved to the east. Evidence item 15 was collected.
21. 17'9" length. 6 lateral indicators consisting of angle of char, staining, and protection, suggesting the fire moved in a south to southwesterly direction. 3 backing indicators consisting of staining and a grass head with fire movement in a northerly and easterly direction.
22. 17'11" length. 5 lateral indicators consisting of protection, staining, and degree of damage suggesting the fire progressed in a west to southwesterly direction. 2 lateral indicators consisting of protection and staining suggesting the fire moved in a southeasterly direction. 1 backing indicator consisting of staining, suggesting the fire moved in an easterly direction.
23. 18'2" length. 1 advancing indicator showing angle of char suggesting the fire moved up the slope to the west. 7 lateral indicators consisting of staining and cupping showed the fire moving primarily to the southwest and east. 1 backing indicator consisting of protection, suggesting the fire moved to the southeast.
24. 18'2" length. Unreliable indicators due to a stump hole in the western side of the grid. 2 lateral indicators consisting of staining suggesting the fire moved to the southwest. 1 lateral staining indicator suggesting the fire moved to the northwest. 1 lateral staining indicator suggesting the fire moved to the south. 2 backing staining indicators suggesting the fire moved in an easterly direction.
25. 18'5" length. 3 lateral indicators consisting of angle of char, staining, and protection suggesting the fire moved in a westerly direction. 3 lateral indicators consisting of a grass head and staining, suggesting the fire moved in an easterly direction. 2 backing indicators consisting of staining, suggesting the fire moved to the east.
26. 18'6" length. 3 lateral indicators consisting of a grass head, staining and protection, suggesting the fire moved in a southwesterly direction. 5 staining backing indicators suggesting the fire moved in an easterly direction.
27. 18'7" length. 6 lateral indicators consisting of a grass head, staining, and protection, suggesting the fire moved in southwesterly direction. 6 backing indicators consisting of staining and protection, suggesting the fire moved in an easterly direction. A footprint was observed in the western portion of the grid lane.
28. 18'10" length. A large stump hole was present in the western portion of the grid. 1 lateral indicator consisting of staining showed the fire progressed in a westerly direction above the stump hole. 2 lateral

- indicators consisting of staining and protection, suggesting the fire moved to the southwest. 4 backing indicators consisting of staining and protection, suggesting the fire moved to the east.
29. 19'1" length. A large stump hole was present in the western portion of the grid. 1 advancing indicator consisting of staining and protection, suggesting the fire moved to the west. 7 lateral indicators consisting of a staining, and protection, suggesting the fire moved primarily to the south and west. 3 backing indicators consisting of a grass head, staining, protection, and cupping, suggesting the fire moved in an easterly direction.
 30. 19'3" length. 5 lateral indicators consisting of staining, protection, and angle of char, suggesting the fire moved in a south to southwesterly direction. 3 backing indicators consisting of staining and protection suggesting the fire moved in an easterly direction.
 31. 19'5" length. A footprint was observed in the western portion of the grid lane. 6 lateral indicators consisting of staining and protection, suggesting the fire moved in a south westerly direction. 5 backing indicators consisting of staining and protection suggesting the fire moved in an east to southeast direction. 1 staining backing indicator suggesting the fire moved to the north.

The SOA examination ended with grid lane 31, when the Investigation Team reached the bent over tree in the SOA. For the Investigation Team to continue with their examination, the tree would have to be raised. The Investigation Team elected to leave the tree in place and scan the SOA using Light Detection and Ranging (LIDAR) prior to manipulating the tree (Attachment 24, SA [b6 & b7C] 8/4/2022 MOA) (Attachment 25, SA [b6 & b7C] 8/4/2022 MOA) (Attachment 26, FPT [b6 & b7C] 8/4/2022 MOA) (Attachment 27, FPT [b6 & b7C] 8/4/2022 MOA).

August 5, 2022, Specific Origin Area LIDAR Scan

On August 5, 2022, at approximately 9:30 AM, SA [b6 & b7C] setup a FARO laser scanner to capture the McKinney Fire specific origin area (SOA). The FARO laser scanner uses Light Detection and Ranging (LIDAR), which is a remote sensing method that uses light in the form of a pulsed laser to measure ranges to the Earth.

SA [b6 & b7C] scanned the SOA starting at the northern end and working clockwise, 360 degrees. SA [b6 & b7C] captured twenty-five scans (001-025) approximately 100% of the SOA. At approximately 4:45 PM, SA [b6 & b7C] finished the scanning of the SOA and departed the area (Attachment 39, SA [b6 & b7C] 8/5/2022 MOA).

August 6, 2022, Specific Origin Area Examination Complete

On August 6, 2022, SA's [b6 & b7C], and [b6 & b7C] LEO [b6 & b7C] and FPT's [b6 & b7C] and [b6 & b7C] returned to the McKinney Fire SOA. The investigators used a series of ropes, webbing and ratchets to lift the bent Ponderosa Pine off the ground and suspended it approximately 4 feet above the SOA. SA's [b6 & b7C] and [b6 & b7C] left the area after the Ponderosa Pine was elevated. SA's [b6 & b7C] and [b6 & b7C] LEO [b6 & b7C] and FPT's [b6 & b7C] and [b6 & b7C] hereinafter "Investigation Team," on August 6, 2022, continued with the perpendicular lane search technique to identify fire pattern indicators.

The grid search began at Lane 32. The width of each grid lane was approximately 24", unless otherwise noted. The Investigation Team worked side by side overlapping each other as they searched each grid lane. Each grid lane was visually observed, using magnification as necessary, marking fire pattern indicators with the corresponding pin flag color. A magnet was employed to search for ferrous metals and some of the grids were excavated using hand tools when necessary. The following are the findings for each grid lane:

32. 19'7" length. 6 lateral indicators consisting of staining and protection, suggesting the fire moved in a west to southwesterly direction. 1 backing indicators consisting of staining, and protection suggesting the fire moved in an easterly direction.
33. 19'6" length. 1 advancing indicator consisting of angle of char, and 7 lateral indicators consisting of

- staining and protection suggesting the fire moved in a west to southwest direction. 2 backing indicators consisting of a staining, and protection suggesting the fire moved in an eastern direction.
34. 19'7" length. 2 lateral staining indicators suggesting the fire moved in a southwesterly direction. 3 staining/protection indicators suggesting the fire moved to the north. 1 staining, protection lateral indicator suggesting the fire moved to the east. 5 backing indicators consisting of staining, protection, suggesting the fire moved in a south easterly direction.
 35. 19'1" length. 5 lateral staining/protection indicators suggesting the fire moved to the southwest. 6 backing and one backing indicator consisting of staining, protection, and degree of damage suggesting the fire moved in a southerly and westerly direction. 1 lateral indicator consisting of staining, suggested the fire moved to the east.
 36. 19'1" length. 3 lateral indicators consisting of staining, protection, and degree of damage, suggesting the fire moved to the south and west. 6 backing indicators consisting of staining and protection, with fire movement in an easterly direction.
 37. 18'7" length. 8 lateral indicators consisting of protection, staining, and degree of damage suggesting the fire progressed in a west to southwesterly direction. 3 backing indicators consisting of degree of damage, staining, and protection showing the fire moved to the north. 4 staining backing indicators suggesting the fire moved to the east.
 38. 18'5" length. 7 backing indicators consisting of staining, degree of damage, cupping, and protection, suggesting the fire moved to the south and east. 2 staining and protection lateral indicators suggesting the fire moved to the west. 1 staining/protection lateral indicator showing the fire moved to the southeast.
 39. 18'2" length. 4 staining/protection backing indicators suggesting the fire moved to the east. 7 lateral indicators consisting of staining, protection, and degree of damage suggesting the fire moved in a westerly and southerly direction.
 40. 18'3" length. 4 lateral indicators consisting of staining and protection suggesting the fire moved in a southerly direction. 2 lateral indicators consisting of staining and protection suggesting the fire moved in a northwesterly direction. 3 backing indicators consisting of staining, suggesting the fire moved to the east. 1 grass head backing indicator showed the fire moved to the north. Pieces of bark from the tree raised out of the SOA were observed in this grid.
 41. 18' length. The western portion of the grid was unreliable due to a stump hole. 4 staining backing indicators suggesting the fire moved in an easterly direction. 1 grass head backing indicator suggesting the fire moved to the northwest. 1 staining lateral indicator suggesting the fire moved to the northwest, and 1 staining lateral indicator suggesting the fire moved to the south. 1 staining lateral indicator suggesting the fire moved to the southwest. Pieces of bark from the tree raised out of the SOA were observed in this grid.
 42. 17'10" length. The western portion of the grid was unreliable due to a stump hole. 2 staining lateral indicators suggesting the fire progressed to the west. 3 lateral indicators consisting of staining and protection, suggesting the fire moved to the south. 2 backing indicators consisting of staining and protection suggesting the fire moved to the east.
 43. 17'11" length. 4 lateral indicators consisting of staining, and degree of damage, suggesting the fire moved to the west and south. 4 grass head backing indicators suggesting the fire moved to the north. 1 staining backing indicator suggesting the fire moved to the north. 2 backing indicators consisting of cupping and protection suggesting the fire moved to the east.
 44. 17'8" length. 8 backing indicators consisting of degree of damage, protection, staining, angle of char, curling, and grass heads, all suggesting the fire moved in a northerly direction. A stump hole was observed in the eastern corner of the grid.
 45. 18' length. A stump hole was observed in the eastern corner of the grid. 7 backing indicators consisting of angle of char, staining, protection, and cupping all suggesting the fire moved in a northerly direction. A footprint was noted in the northeastern portion of the grid. Evidence item 17 was observed and collected adjacent to the grid lane to the east.
 46. 17'5" length. Extensive suppression activity was observed in the middle of the grid lane. 1 lateral cupping indicator was observed suggesting the fire moved in a westerly direction. 4 backing indicators consisting

- of staining, protection, and angle of char, suggesting the fire moved in a northerly direction.
47. 17'1" length. Extensive suppression activity was observed in the middle of the grid lane. 7 backing indicators consisting of degree of damage, protection, angle of char, and sooting, all suggesting the fire moved to the north.
 48. 16'11" length by 36" width. Extensive suppression activity was observed in the middle of the grid lane. 4 backing indicators consisting of a grass head, protection, degree of damage, and cupping, all suggesting the fire moved to the north. Footprints were observed in the eastern portion of the grid.

After completing the SOA Examination, SA [REDACTED] used large metal stakes with orange flagging to create two Reference Points (RP), labeled RP1 and RP2. RP1 was driven into the ground in the middle of the west side of the SOA, and RP2 was driven into the ground in the middle of the north side of the SOA.

While inspecting the bent Ponderosa Pine tree, a broken branch was discovered, resulting in a small two or three-inch stub with a portion of the break displaying charring. LEO [REDACTED] observed a pine branch laying just outside the east side of the SOA, in the vicinity of the bent pine tree. The branch was laying on top of burnt vegetation on the east side of the powerline easement. The foliage of the branch was still intact and did not display fire effects, indicating it had fallen after the fire had consumed the ground fuels. The branch was retrieved and compared to the stub on the tree, which seemed there was a possibility it may have originated from that portion of the tree. The break on the branch displayed charring and other portions of the branch displayed small, sporadic charring marks. The location of the branch was measured from the established RP's and collected [E-17] (Attachment 28, SA [REDACTED] 8/6/2022 MOA) (Attachment 29, SA [REDACTED] 8/6/2022 MOA) (Attachment 30, FPT [REDACTED] 8/6/2022 MOA) (Attachment 31, FPT [REDACTED] 8/6/2022 MOA) (Attachment 32, LEO [REDACTED] 8/6/2022 MOA) (Attachment 40, SA [REDACTED] 8/6/2022 MOA).

August 7, 2022, General Origin Area LIDAR Scan

On August 7, 2022, at approximately 8:30 AM, SA [REDACTED] met LEO [REDACTED] at the McKinney Fire general origin area (GOA) check point. LEO [REDACTED] stated that no one had entered the GOA after the Investigation Team left the day before.

At approximately 9:00 AM, SA [REDACTED] setup a FARO laser scanner to capture the McKinney Fire general origin area (GOA). SA [REDACTED] scanned the GOA starting at the northern end and worked towards the south. At approximately 11:00 AM, SA [REDACTED] and CAL FIRE Prevention [REDACTED] arrived at the GOA. CAL FIRE [REDACTED] is a drone pilot and captured the GOA and electrical equipment, using his agency assigned drone, for the Wildland Fire Investigation Team (see [REDACTED] MOA). At approximately 1:20 PM, SA [REDACTED] and Prevention [REDACTED] departed the GOA.

At approximately 11:50 AM, LEO [REDACTED] and FPT [REDACTED] arrived at the GOA to capture pictures of the Ponderosa Pine that was leaning in the Specific Origin Area (SOA) (see [REDACTED] MOA). At approximately, 1:45 PM, LEO [REDACTED] and FPT [REDACTED] departed the GOA.

At approximately 1:50 PM, SA [REDACTED] continued to scan the GOA. SA [REDACTED] captured fifteen scans (001-015), approximately 30% of the GOA. At approximately 3:00 PM, SA [REDACTED] left the GOA because of high winds (Attachment 41, SA [REDACTED] 8/7/2022 MOA) (Attachment 45, LEO [REDACTED] 8/7/2022 MOA).

August 8, 2022, General Origin Area LIDAR Scan

On August 8, 2022, at approximately 8:15 AM, SA [REDACTED] met LEO [REDACTED] at the McKinney Fire general origin area (GOA) check point. LEO [REDACTED] stated that no one had entered the GOA after the Investigation Team left the day before. At approximately 8:20 AM, SA [REDACTED] observed the GOA to be in the same condition as the previous day.

At approximately 8:30 AM, SA [b6 & b7C] setup a FARO laser scanner to capture the McKinney Fire general origin area (GOA). SA [b6 & b7C] continued to scan the GOA where he had left off the previous day. SA [b6 & b7C] captured twenty-four scans (016-039) approximately 100% of the GOA. At approximately 2:30 PM, SA [b6 & b7C] finished scanning the GOA and departed the area (**Attachment 42, SA [b6 & b7C] 8/8/2022 MOA**).

August 9, 2022, Expert Analysis of the Tree

On August 9, 2022, SA [b6 & b7C] LEO's [b6 & b7C] and [b6 & b7C] and FPT [b6 & b7C] escorted Arborist [b6 & b7C] to the GOA. [b6 & b7C] performed examinations on several trees within the GOA at the request of investigators. According to LEO [b6 & b7C] compared the branch that was seized as evidence [E-17] to the broken stub on the bent tree in the SOA, and concluded the branch was a similar species and was likely the same branch that had been separated. After examining the bent tree, [b6 & b7C] concluded, it was 5.5 inches in Diameter Breast Height (DBH) and approximately 56 feet 4.5 inches in length. Other points of interest located on the tree were a broken branch that was measured at 46 feet 6.5 inches from soil base. The last point of interest measured was a branch with significant char marks with the pine needles completely burned off, which was measured at 41 feet 6.5 inches from soil base. The tree was about 40 years old and in fair to poor health with poor structure. [b6 & b7C] specified the tree was noticeably slender for its height, which may have been a contributing factor for its bend or slump (**Attachment 33, LEO [b6 & b7C] 8/9/2022 MOA**) (**Attachment 34, FPT [b6 & b7C] 8/9/2022 MOA**).

August 11, 2022, Interview with [b6 & b7C]

On August 11, 2022, LEO [b6 & b7C] and FPT [b6 & b7C] proceeded to the USFS Oak Knoll station. There, they met with Engine 315 [b6 & b7C]. LEO [b6 & b7C] learned through LEO [b6 & b7C] that [b6 & b7C] may have observed an issue with the powerlines as he arrived at scene during initial attack. Considerate of [b6 & b7C] LEO [b6 & b7C] decided not to audio record the interview. Instead, FPT [b6 & b7C] captured notes throughout the interview process. Also present during the interview was [b6 & b7C] advised LEO [b6 & b7C] and FPT [b6 & b7C] that he recalled seeing "sparks" falling from the powerlines shortly after Engine 315 passed [b6 & b7C] (**Attachment 46, LEO [b6 & b7C] 8/11/2022 MOA**).

August 11, 2022, Expert Analysis of the Power Line Infrastructure

On August 11, 2022, [b7A] conducted an extensive examination of the powerline infrastructure throughout the GOA and SOA, beginning with the powerline conductors suspended over the right flank. [b7A] observed a notable amount of charring and sooting on the eastern phase. On the western phase, in the same general area, they discovered a notable "kink" (or bend) in the powerline. They stated that the kink in the powerline was likely caused by rapid contact with another object. Noting the flat spots and shine visible on the braided aluminum of the western phase, the [b7A] representatives believed contact could have been made with the telecommunications line when the infrastructure failed. Also on the western phase, just north of the kink, they discovered a small amount of charring and staining. The charring and staining on the western phase appeared to be older than the charring and sooting observed on the eastern phase. One of the [b7A] representatives noted the amount of sun damage visible on the charring on the western phase, which was not present on the charring on the eastern phase.

[b7A] offered to take LEO [b6 & b7C] into the bucket of their truck to provide a closer look of the conductors. LEO [b6 & b7C] captured a series of digital images of the powerline conductors to depict the various charring, sooting and abnormalities that were discovered on each phase. LEO [b6 & b7C] also noted what appeared to be ash and/or organic material, including one prominent fragment of bark visible on the eastern conductor within the area where the charring was discovered. Throughout the process, LEO [b6 & b7C] operated the digital camera and FPT [b6 & b7C] recorded notes on the contents of each digital image.

After LEO [b6 & b7C] captured the photographs, he was taken back to the ground and the investigators concluded it would be best to preserve the delicate material and the fire effects discovered on the eastern conductor. [b7A] then returned to the eastern conductor and wrapped an approximate 12-foot section in bubble wrap and tape.

After the evidence on the eastern conductor was preserved, [b7A] proceeded to the utility pole with the broken crossarm to conduct an examination. [b7A] noted no flashing, staining, pitting, or charring on the insulators or the attached conductors and explained to the investigators that it immediately appeared that none of the equipment on the crossarm displayed signs of failure. The investigators inquired with [b7A] the possibility of wildlife coming in contact with the insulators or conductors and the ignition potential from such contact. [b7A] again explained that an event such as that, would typically display signs of failure, which the conductors and insulators did not. After [b7A] completed their examination of the utility pole and crossarm, they proceeded to the utility pole lying on the ground to the north of the GOA. [b7A] noted that, just south of the fiberglass crossarm that was still intact, each of the conductors contained at least one splice. [b7A] explained that splices were commonly used to reconnect conductors when a section of a conductor is repaired or replaced (Attachment 46, LEO [b6 & b7C] 8/11/2022 MOA).

August 12, 2022, General Origin Area and Evidence Viewing

On August 12, 2022, at approximately 9:00 AM, SA's [b6 & b7C] briefed representatives of PacifiCorps and Insurance companies before they were given the opportunity to inspect the McKinney Fire GOA. SA [b6 & b7C] recorded a by-name roster of the individuals that entered the taped off approximate one-acre area that encompassed the GOA. SA [b6 & b7C] advised the group of representatives, that upon entering this area, to not touch or manipulate the tree that was bowed over tree in the SOA or utility equipment. Also, SA [b6 & b7C] stated that investigators would not be providing details of the McKinney Fire investigation. This group of individuals included the following:

[b6 & b7C] private investigator
 [b6 & b7C] survey crew
 [b6 & b7C] survey crew
 [b6 & b7C] EE
 [b6 & b7C] EE
 [b6 & b7C] utility NM
 [b6 & b7C] private investigator
 [b6 & b7C] attorney
 [b6 & b7C] arborist
 [b6 & b7C] private investigator
 [b6 & b7C] PacifiCorps
 [b6 & b7C] NV5
 [b6 & b7C] NV5
 [b6 & b7C]
 [b6 & b7C] private investigator
 [b6 & b7C] private investigator
 [b6 & b7C] private investigator (arrived about 2:30 pm)
 [b6 & b7C] private investigator (arrived about 2:30 pm)
 [b6 & b7C] private investigator (arrived about 2:30 pm)
 [b6 & b7C] private investigator (arrived about 2:30 pm)

During this day, SA's [b6 & b7C] and [b6 & b7C] LEO's [b6 & b7C] and [b6 & b7C] and FPT [b6 & b7C] monitored the representatives within the GOA. SA [b6 & b7C] monitored all representatives that entered the taped-off area within the SOA where the "bowed-over" tree was. SA [b6 & b7C] observed that the tree was not moved or manipulated from its

position, which was elevated with ropes over the SOA. At approximately 5:30 PM, all representatives had departed the one-acre taped off area (**Attachment 47, SA [REDACTED] 8/12/2022 MOA**).

August 13, 2022, General Origin Area and Evidence Viewing

On August 13, 2022, SA's [REDACTED] and [REDACTED] LEO [REDACTED] and FPT [REDACTED] monitored the representatives within the GOA. SA [REDACTED] recorded a by-name roster of the individuals that entered the taped off approximate one-acre area that encompassed the GOA. SA [REDACTED] monitored all representatives that entered the taped-off area within the SOA where the "bowed-over" tree was. SA [REDACTED] observed that the tree was not moved or manipulated from its position, which was elevated with ropes over the SOA. At approximately 5:30 PM, all representatives had departed the one-acre taped off area.

August 14, 2022, Evidence Collection and Viewing

On August 14, 2022, at approximately 8:00 AM, SA's [REDACTED] and [REDACTED], LEO's [REDACTED], and FPT's [REDACTED] and [REDACTED] arrived at the SOA of the McKinney Fire. SA [REDACTED] and FPT [REDACTED] were assigned to document and log the evidence removal.

At approximately 9:00 AM, the evidence removal began at the McKinney Fire GOA. The evidence collection was recorded as it was collected and inventoried near the U-Haul truck. A U-Haul truck was used to load and transport the evidence. SA [REDACTED] was the driver of the U-Haul truck and evidence custodian. Investigators used plastic garbage bags to separate the Ponderosa Pine tree from the dirt on the ground. Arborist [REDACTED] assisted in the removal of the tree along with investigation personnel. [REDACTED] rigged a series of ropes to support the tree as it was cut into sections. [REDACTED] cut the pine tree using a hand saw. [REDACTED] started at the top and worked it back to just above soil level. [REDACTED] used numbered metal tags in a consecutive number sequence, and spray paint to mark and document the orientation of the tree. Once a section of tree was tagged and cut, it was carried by hand and laid on plastic garbage bags in the evidence viewing area. Below are the itemized findings for the collection of the pine tree:

Evidence item 18 was the top section of the pine tree, containing most of the crown still intact. This section of tree was marked with metal tag #775.

Evidence item 19 was the next section of the pine tree cut. This section of tree was marked with metal tags #776 at one end and #777 at the other.

Evidence item 20 was the next section of the pine tree, marked with metal tags #778 at one end and #779 at the other.

Evidence item 21 was the next section of pine tree, marked with metal tags #780 at one end and #781 at the other.

Evidence item 22 was the last next section of pine tree, marked with metal tags #782 at one end and #783 at the other.

The next items of evidence collected were sections of the Pacific Power conductors and the Siskiyou Telephone utility line. [REDACTED] assisted in the removal of the Pacific Power conductors and the Siskiyou Telephone utility line, along with fire investigation personnel. The sections of line were labeled with numbered metal tags that were in consecutive number sequence. The metal tags were also marked at each end identifying the north and south orientation. Below are the itemized findings for the collection of the Pacific Power conductors and Siskiyou Telephone utility line:

Evidence item 23 was a section of the western conductor, approximately 10 feet in length, marked with metal tags #324 at one end, and #325 at the other. This section was protected using bubble wrap and tape and stored in a 4" diameter PVC tube that was capped at both ends.

Evidence item 24 was a section of the western conductor, approximately 10 feet in length, marked with metal tags #326 at one end, and #327 at the other. This section was protected using bubble wrap and tape and stored in a 4" diameter PVC tube that was capped at both ends.

Evidence item 25 was a section of the western conductor, marked with metal tags #328 at one end, and #329 at the other. This section was rolled by hand into a coil and secured with tape.

Evidence item 26 was a section of the eastern conductor, approximately 13 feet in length, marked with metal tags #334 at one end, and #335 at the other. This section was protected using bubble wrap and tape and stored in a 4" diameter PVC tube that was capped at both ends.

Evidence item 27 was a section of the eastern conductor, marked with metal tags #336 at one end, and #337 at the other. This section was rolled by hand into a coil and secured with tape.

Evidence item 28 was a section of the Siskiyou Telephone utility line, approximately 10 feet in length, marked with metal tags #338 at one end, and #339 at the other. This section was protected using bubble wrap and tape and stored in a 4" diameter PVC tube that was capped at both ends.

Evidence item 29 was a section of the Siskiyou Telephone utility line, approximately 10 feet in length, marked with metal tags #340 at one end, and #341 at the other. This section was protected using bubble wrap and tape and stored in a 4" diameter PVC tube that was capped at both ends.

Evidence item 30 was a section of the east powerline conductor, marked with metal tags #332 at one end, and #333 at the other. This section was rolled by hand into a coil and secured with tape.

Evidence item 31 was a section of the western conductor, marked with metal tags #322 at one end, and #323 at the other. This section was rolled by hand into a coil and secured with tape.

Evidence item 32 were pieces of yellow plastic dislodged during the removal of the southern crossarm assembly. These pieces were collected and placed in a brown paper evidence bag.

Evidence item 33 was the southern crossarm assembly affixed to the power pole located within the SOA. The conductor on the western portion of the crossarm was marked with metal tags #320 at one end, and #321 at the other. In between the metal tags was an insulator affixed to the crossarm. The conductor on the eastern portion of the crossarm was marked with metal tags #330 at one end, and #331 at the other. In between the metal tags was an insulator affixed to the crossarm. The crossarm was protected using bubble wrap and tape.

Once all the evidence was collected and marked, it was laid out on the ground oriented in the position as it existed between the power poles before being collected. The same was done for the Ponderosa Pine tree. This was done to facilitate an Evidence Viewing.

After the evidence viewing, investigators loaded the evidence into the back of the U-Haul truck. Evidence items 18 and 19 were suspended using rope to secure and protect the tree canopy from damage during transportation. SA [REDACTED] b6 & b7C created a sketch for the collection of the conductors and utility line and took pictures of the sketch and all the inventoried property sheets, utilizing his government issued cell phone Axon Capture application, and uploaded to Evidence.com. SA [REDACTED] b6 & b7C and FPT [REDACTED] b6 & b7C completed the evidence documentation. SA [REDACTED] b6 & b7C

released the McKinney Fire GOA at approximately 1:00 PM (Attachment 49, SA [REDACTED] 8/14/22 MOA) (Attachment 51, SA [REDACTED] 8/14/22 MOA) (Attachment 52, FPT [REDACTED] 8/14/22 MOA) (Attachment 53, FPT [REDACTED] 8/14/22 MOA) (Attachment 54, LEO [REDACTED] 8/14/22 MOA).

Conclusion

The McKinney Fire was reported by [REDACTED] on July 29, 2022, at 2:12 PM. Fire personnel arrived on scene and began to suppress the fire. One of the fire suppression resources that responded was the Klamath IHC, who constructed handline on the right flank of the fire. Investigators began arriving and collecting witness statements and gathering information, one of those witnesses was [REDACTED] who walked LEO [REDACTED] up the right flank explaining the fire size when he arrived. Thunder cells developed in the area later in the evening, creating downbursts and extreme fire behavior, resulting in the fire becoming out of control.

Investigators established a GOA located [REDACTED] at 1137 McKinney Creek Road, Klamath River, California. Investigators examined the GOA and established an SOA in the eastern portion of the GOA. The SOA was approximately 100 feet in length, 20 feet in width and consumed a large portion of a powerline easement. Within and suspended above the SOA, was power pole 169600 owned by Pacific Power, as well as two conductors and a utility line. Also present within the SOA was a pine tree which had bent over into the SOA, while the trunk of the tree was on the north side of the handline, which was originally constructed to contain the fire by the Klamath IHC. The canopy of the tree displayed minimal fire effects, in fact the tree displayed only isolated fire effects on several branches and one branch in particular missing, even though it lay on burned vegetation. The stub of the missing branch displayed charring and was resting on the ground. A broken branch was located in the vicinity, however just beyond the SOA boundary. It appeared the branch may have come from the bent pine tree and might be the missing branch. The break of the branch displayed charring, while the foliage remained intact, even though it lay on burned vegetation. The branch also displayed sporadic charring on portions of the limb. The fact that the canopy of the tree and the foliage of the branch were mostly unburned, indicated they had come to rest after the fire had progressed through the area. Investigators also observed a portion of isolated charring on one of the suspended conductors in the area of the bent pine tree, along with a slight kink in the other suspended conductor in the same vicinity.

Witness accounts from several Klamath IHC members advised the tree was not in that position when they constructed handline soon after the fire was reported. Bodycam footage from LEO [REDACTED] when he arrived on scene at approximately 5:40 PM, showed the tree bent over with the tip of the foliage touching the ground, however the tree was mostly still elevated off the ground. When investigators established the SOA, the canopy was completely on the ground, indicating the tree continued to bend toward the ground. An interview with [REDACTED] revealed, he recalled seeing "sparks" falling from the powerlines shortly after his engine passed [REDACTED]. An interview with [REDACTED] revealed a couple years prior, a tree bent, leaned into the powerline and was arcing. [REDACTED] used the same bent pine tree in the SOA as an example.

After examining the bent pine tree, Arborist [REDACTED] concluded, it was 5.5 inches in DBH and approximately 56 feet 4.5 inches in length. Other points of interest located on the tree were a broken branch that was measured at 46 feet 6.5 inches from soil base. The last point of interest measured was a branch with significant char marks with the pine needles completely burned off, which was measured at 41 feet 6.5 inches from soil base. The tree was about 40 years old and in fair to poor health with poor structure. [REDACTED] specified the tree was noticeably slender for its height, which may have been a contributing factor for its bend or slump.

[REDACTED] examined the powerline infrastructure within the GOA and SOA and observed a notable amount of charring and sooting on the eastern phase. On the western phase they discovered a small amount of charring and staining. The charring and staining on the western phase appeared to be older than the charring and sooting observed on the eastern phase. Ash and/or organic material, including one prominent fragment of bark was visible on the eastern conductor within the area where the charring was discovered. One of the [REDACTED] representatives noted the amount of sun damage visible on the charring on the western phase, which was not present on the charring on the eastern phase. This could possibly be

the location ^{b6 & b7C} observed the tree on the powerline a couple years prior. ^{b7A} conducted an examination of the power pole equipment and noted no flashing, staining, pitting, or charring on the insulators or the attached conductors and explained to the investigators that it immediately appeared that none of the equipment on the crossarm displayed signs of failure.

Based on the facts and circumstances provided to the investigators, they developed a hypothesis that the bent pine tree was standing more upright prior to the fire. Based on ^{b6 & b7C} assessment and measurement of the tree, it appears the tree was tall enough to contact the powerline. The tree slowly bent over, leaning into the powerline and at some point, created an ignition source. Hot embers fell to the ground and ignited the ground fuels below. At some point the tree came free of the powerline and slumped to the ground and eventually ended in its final resting place. No other ignition sources were discovered within the SOA and all other cause categories were excluded as a possible cause; thus, Powerlines is the probable cause of the McKinney Fire.

It should be noted, numerous individuals were identified, who entered the SOA prior to it being identified as such. These individuals were both USDA Forest Service and Pacific Power employees. It should also be noted, investigators developed and tested this hypothesis with the facts and circumstances provided at the completion of this report and investigators reserve the right to further test or change their hypothesis if other facts or circumstances are presented at a later date.

Cause Determination

Lightning - Lightning is discharged static electricity associated with thunderstorm activity. Lightning is typically a series of short bursts approximately two inches in diameter, lasting for about one-half second. These lightning discharges include cloud-to-ground strikes which are in the range of 100 million volts, 200,000 amperes, and 54,000 °F. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 197, (2016). The circumstances indicating a possible lightning strike as a cause includes recent electrical storm (hours/days/weeks) activity in the area, the presence of indicators of sleepers and holdovers, scarring on trees or snags, precipitated sap, needle shower, ballistic penetration of adjoining vegetation by needles and small twigs or splinters, blow-holes at base of tree, fulgurites, and splintered wood or vegetation. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 197, (2016).

According to a STRIKEnet Report, STRIKEnet verified there were ZERO cloud-to-ground lightning strokes detected within 10 miles of the GOA of the McKinney Fire, between July 6, 2022, at 2:12 PM and July 29, 2022, at 2:12 PM. Although one witness heard thunder the night before the fire occurred, no lightning strikes were observed. Other witnesses confirmed no lightning activity in the area prior to the fire. No blow holes were observed within the SOA grid examination. No strike trees were observed within the GOA or SOA of the McKinney Fire. For these reasons, Lightning can be excluded as a cause. (Attachment 35, Strikenet Report) (Attachment 36, ^{b6 & b7C} MOI) (Attachment 37, ^{b6 & b7C} MOI).

Equipment Use - Wildland fires resulting from the operation of mechanical equipment excluding railroads. Types of mechanical equipment range from heavy construction to small portable engines. Equipment use caused fires may be viewed in five parts; 1. Exhaust system particles, 2. Friction and sparks, 3. Fuel, lubricant, fluids, 4. Mechanical breakdown or other malfunction 5. Radiant or conductive heat transfer. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 215, (2016).

The SOA location of the McKinney Fire was approximately 30 feet from McKinney Creek Road and on top of a steep cut bank. Rendering, ignition from a vehicle travelling on McKinney Creek Road unlikely, and exhaust particles lofting over the cutbank unlikely as well. No vehicle or heavy equipment impressions, or evidence of their presence was observed within the GOA or SOA. There were three cut trees about 30 feet above the SOA, which appeared to have been cut by chainsaw, however, after closer examination of the trees, the cuts appeared old in nature, and the area was absent of any saw dust or shavings. The trees also

resided outside the SOA. No other evidence of equipment use was discovered within the SOA of the McKinney Fire. For these reasons, Equipment Use can be excluded as a cause.

Smoking - Wildfires caused by smoking activities or accoutrements, including matches, cigarettes, cigars, pipes, illegal substances, etc. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 207, (2016). To effectively assess the probability of a cigarette as a competent ignition source, consider the following; physical characteristics of the cigarette, environmental factors, physical placement factors. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 207, (2016). Cigarette ignition factors are; 0% RH, Start Likely, 10% RH, Start Possible, 18% RH, Start Unlikely and 22% RH, No Start. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 208, (2016). Environmental factors include; finely particulated fuel bed, loose fuel arrangement, fine dead fuel moisture (FDFM) less than 14%, 80 oF + ambient temperature, microclimate location (temperature at ground level vs. temperature at higher level), Relative Humidity (RH) of 22% or less. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 208, (2016).

According to the Collins Baldy RAWs at 1:00 PM, the ambient temperature was 90 degrees, and the Relative Humidity (RH) was 16 percent. According to the NWCG Handbook with an RH of 10-18 percent, an ignition by cigarette is possible. Environmental factors to include are a finely particulated fuel bed in a loose arrangement and an ambient temperature of 80 degrees or higher. Although the ambient temperature was above 80 degrees, and the SOA did contain some finely particulated fuels, the SOA lacked a consistent finely particulated fuel bed such as uniform dead grass arrangement, rendering the fuel bed insufficient to ignite from a discarded cigarette. It should be noted, the elevation of the Collins Baldy RAWs is above 5,000 feet and the elevation of the GOA is 2,000 feet, it's likely there was an elevated ambient temperature and a diminished RH at the GOA. Also, no smoking activities or accoutrements were discovered within the SOA. For these reasons, Smoking can be excluded as a cause. (Attachment 38, RAWs Data) (Attachment 1, Forecasted Weather).

Camp Fire - Any fire kindled for warmth, cooking, light, religious or ceremonial purpose. Campfires may occur at any location. Responsible parties may include hunters, campers, anglers, hikers or transients (homeless). Regulations often address attendance, clearance, and periods of use, suppression tools, and proper extinguishment. Violations of these regulations often result in escaped fires. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 202, (2016).

No evidence of a Camp Fire was found in the GOA or SOA of the McKinney Fire. No designated or dispersed camp sites were observed in the area. For these reasons, Camp Fire can be excluded as a cause.

Debris Burning - Wildland fires caused by debris burning activities including residential (pile, barrel, hazard reduction) and industrial (logging operations, land clearing, agricultural, forestry, right-of-way hazard reduction, or other controlled burning). "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 211, (2016).

The SOA of the McKinney Fire was located within the easement of powerlines. Though there were several trees within the GOA that displayed chainsaw cuts, the cuts in themselves appeared old in nature. No saw dust or shavings were present in the area, indicating any sort of right-of-way clearing that could result in debris burning would have occurred a considerable time prior to the fire. No evidence of debris burning was discovered within the GOA or SOA of the McKinney Fire. For these reasons, Debris Burning can be excluded as a cause.

Railroad - Fires caused by any railroad operations, personnel, rolling stock and can include track and right-of-way maintenance. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 229, (2016). Railroad structures such as trestles, bridges, and ties, are included in this category of fire cause. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 229, (2016). General railroad ignition factors include; exhaust carbon, brake shoe particles, track maintenance, right-of-way maintenance, dynamic grid failure, signal flares, wheel slip, wheel bearing failure (hotbox) and transients.

"NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 230, (2016).

No railroads reside within the McKinney Fire GOA or SOA. For this reason, Railroad can be excluded as a cause.

Incendiary - Wildfires deliberately or maliciously set with the intent to damage or defraud. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 215, (2016). **Arson**: The intentional and wrongful burning of someone else's property or one's own property (as to fraudulently collect insurance). (Garner, 2009) "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 299, (2016). **Incendiary**: Deliberately and unlawfully set fire to property. (Garner, 2009) "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 299, (2016). These terms are often used interchangeably.

Due to the location of the SOA in relation to McKinney Creek Road, an individual with deliberate or malicious intent to damage or defraud, would most likely park a vehicle on the road, exit and walk up the hill to the SOA and intentionally set the fire. If this were the case, it is more plausible the individual would ignite the fire on the roadways edge to limit the exposure of potentially being seen. If an individual were to intentionally throw a device out of a moving vehicle, it is unlikely the device would travel uphill, through the tree line and land in the SOA, rather it is more likely the device would land closer to the roadway and ignite the vegetation. No evidence of a device or other instruments of arson were discovered within the SOA, rendering the only other option as a "hot set", where someone used an open flame to ignite the fire, leaving behind no evidence. However, the location of the SOA to the roadway suggests this is unlikely for the reasons described above, thus, Incendiary can be excluded as a cause of the fire.

Children - Wildfires started by persons 12 years of age or younger. The child may be motivated by normal curiosity and use fire in experimental or play fashion. Matches or lighters are the most frequent ignition source. It often involves multiple children. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 243, (2016).

No evidence of Children was discovered within the GOA or SOA of the McKinney Fire. There are no parks, tree forts, etc. in the area. No reports of Children in the area were uncovered during the investigation. For these reasons, Children can be excluded as a cause.

Miscellaneous - Wildfires that cannot be properly classified under other standard causes. Some of these are listed below but can include other ignition sources that are not listed. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 245, (2016).

Powerlines: The category of powerlines includes all electrical equipment associated with the production, transmission, and use of electricity. The electrical grid or system for the transmission, distribution, and service of customers forms a complex web and is governed by regulations. The transmission of electricity has long been recognized as having an inherent danger above and beyond typical hazards. Early electrical distribution systems caused numerous fires, better engineering and prevention efforts have reduced the number. Powerlines are an ignition source that can lead to major fires, as many of the conditions that contribute to system faults and failures coincide with extreme fire behavior. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 245, (2016).

A bent or slumped over Ponderosa Pine tree was located adjacent to the northeast corner of the SOA. The base of the Ponderosa Pine tree was located outside the SOA, with the canopy of the pine tree resting on the ground within the SOA. The Ponderosa Pine tree was 5.5 inches in Diameter Breast Height (DBH) and approximately 56 feet 4.5 inches in length. The Ponderosa Pine tree was about 40 years old and in fair to poor health with poor structure. The Ponderosa Pine tree was noticeably slender for its height, which may have been a contributing factor for its bend or slump.

Above the Ponderosa Pine tree canopy resting within the SOA, two powerlines exist (an eastern phase and a western phase). An examination of the conductors above the area of the slumped over

Ponderosa Pine tree revealed charring and sooting on the eastern phase. On the western phase [b7A] discovered a small amount of charring and staining. The charring and staining on the western phase appeared to be older than the charring and sooting observed on the eastern phase. Ash and/or organic material, including one prominent fragment of bark was visible on the eastern conductor within the area where the charring was discovered.

A hypothesis was developed suggesting the bent Ponderosa Pine tree was standing more upright prior to the fire and was tall enough to contact the powerline. The tree slowly bent over, leaning into the powerline and at some point, created an ignition source. Hot embers fell to the ground and ignited the ground fuels below. At some point the tree came free of the powerline and slumped to the ground and eventually ended in its final resting place. For these reasons, Powerlines is the Probable Cause of the McKinney Fire.

Fireworks: Fireworks may be classified in several different ways depending upon the jurisdiction. Most fireworks will fall into one of three categories, ground based and hand-held, aerial, or explosive. Fireworks are known to cause major property damage annually including fires to both wildland and structures. Used in an unsafe manner, fireworks can discharge burning material into flammable vegetation. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 263, (2016).

There was no evidence of fireworks found in the GOA and SOA, including packaging, fuses, matches, mortar tubes or the remains of spent fireworks. There were no reports of fireworks being seen or heard in the area. For these reasons, Fireworks can be excluded as a cause.

Firearms and Ammunition: Black powder discharge, tracer, incendiary, solid copper and copper jacketed and various types of ammunition are capable of causing wildfires through the discharge of hot materials or mechanical sparks caused when a bullet strikes a hard object and fragments, creating hot particles which land in the dry fuels. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 266, (2016).

No evidence of firearms was discovered within the GOA or SOA. The area of the GOA and SOA reside within a utility easement, and private property. It is an area highly unlikely to have target shooting activities. [b6 & b7C], did not mention hearing the noise of gunshots or firearms activity. For these reasons, Firearms and Ammunition use can be excluded as a cause.

Exploding Targets: Exploding targets detonate upon impact of the projectile, sending out hot particles. Exploding targets are typically a mixture of more than one compound which is generally not considered an explosive until combined. Exploding targets come commercially manufactured in either low or high velocity types. Homemade versions are also being used with similar effects. Once mixed, the compounds form an explosive device. Wildland fire investigators working a scene which may include an exploding target should use caution when handling, collecting, packaging and storing residue or devices. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 270, (2016).

There was no evidence of exploding targets being used in the GOA or SOA. The area of the GOA and SOA reside within a utility easement, and private property. It is an area highly unlikely to have target shooting activities. [b6 & b7C], did not mention hearing the noise of gunshots or noises of an explosion common with this type of activity. For these reasons, Exploding Targets can be excluded as a cause.

Cutting, Welding, and Grinding: These types of ignitions are normally caused by an industrial or agricultural operation, but may also result from an individual or residential activity. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 274, (2016).

There was no evidence of Cutting, Welding and/or Grinding in the GOA or SOA. Metal wire was

located within the SOA; however, they did not appear to be used for welding activities, rather likely discarded wire from powerline maintenance. For these reasons, Cutting, Welding, and Grinding can be excluded as a cause.

Spontaneous Heating: Certain fuels will self-heat and ignite spontaneously when conditions support a combination of biological and chemical processes. This action is most likely to occur after periods of warm humid days in decomposing piles of organic material such as hay, grains, feeds, manure, sawdust, wood chip piles, and piled peat moss. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 277, (2016).

The environmental conditions and fuels needed to support such a cause were not present within the GOA or SOA. The ground consisted of sporadic fuels consisting of needle cast and patchy grass within the SOA, and the relative humidity was reported in the teens and single digits. For these reasons, Spontaneous Heating can be excluded as a cause.

Coal Seam Fires: Coal seams may be ignited by lightning, wildfires, or other ignition sources. Fires typically burn slowly along the seam and may resurface when seam nears the surface which cracks, and oxygen is introduced to the burning seam. These fires are dangerous to investigate as the burning coal seam may lie just under the surface. Coal seam fires may be visible in the winter with steam plumes and random bare patches in the snow from underground heating. Patches of dead vegetation may also be a tip that underground heating from a coal seam fire is taking place. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 282, (2016).

Coal Seams do not exist within the McKinney Fire GOA or SOA. For these reasons, Coal Seam Fires can be excluded as a cause.

Electric Fences: Fires originating from electric fences used to contain domestic animals. Rapid electric pulse cycle does not allow fuel to cool down. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 283, (2016).

Investigators did observe what appeared to be old fencing of some kind on the outer perimeter of the GOA. The fencing was not an electric fence and showed signs of rust and disarray. For these reasons, Electric Fences can be excluded as a cause.

Refraction (Reflection): The sun's rays can be focused to a point of intense heat if concentrated by certain glass or shiny objects. This refraction or reflection process bends light rays, similar to that which occurs through a magnifying glass. The shiny, concave end of a metal-can may focus sunlight, but its short focal distance makes the potential as a possible cause highly unlikely. Fires started by these items are extremely rare occurrences; however, objects possessing these characteristics recovered from the specific origin Area may need to be carefully examined to determine their fire starting potential. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 285- 286, (2016).

No evidence of Refraction was discovered within the GOA or SOA of the McKinney Fire. No evidence of Refraction was discovered within the grid examination of the SOA, for these reasons, Refraction can be excluded as a cause.

Blasting: Fires started by flaming debris associated with blasting activities. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 286, (2016).

There were no reports of Blasting in the area or sounds resembling Blasting. No evidence of Blasting was discovered within the GOA or SOA of the McKinney Fire, for these reasons, Blasting can be excluded as a cause.

Flares: Fires resulting from commercial, industrial, or military flares. Compound is usually a mixture of sawdust, wax,

sulphur, strontium nitrate, and potassium perchlorate. Flares burn at approximately 3600°F. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 287, (2016).

No evidence of Flares was discovered within the GOA or SOA of the McKinney Fire, for these reasons, Flares can be excluded as a cause.

Oil and Gas Fires: Fires associated with the recovery and pumping of oil and gas products in the wildland. Flare pit and stack fires are among some types of oil and gas fires which may be encountered in the wildland environment. Flare pit and stack operations are designed to burn off excess or unwanted petroleum by-products. Occasionally these will start fires from direct flame impingement, the igniter flare or stack particles. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 290, (2016).

No evidence of Oil and Gas Fires was discovered within the GOA or SOA of the McKinney Fire, for these reasons, Oil and Gas Fires can be excluded as a cause.

Flying Lanterns: Flying lanterns are miniature hot air balloons made from paper or plastic, bamboo or lightweight wood, and wire with a solid fuel package. Homemade lanterns may use plastic garbage sacks. Originating in Asia and called happiness balloons or wish balloons their use has spread around the world and they are commonly used during weddings or other celebrations. Experimentation by young adults or teenagers is commonly associated to fires caused by flying lanterns, particularly if homemade. Manufacturers claim that the paper is treated with a fire retardant but many are not. Flying lanterns can travel miles away from release site and are capable of reaching several thousand feet in altitude. Multiple lanterns may be released at a single time. Releases typically occur during nighttime hours for full visual effect, but can also be deployed during daytime activities. Note: Oregon has classified flying lanterns as fireworks and banned them from use within the state. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 293, (2016).

There were no reports of Flying Lanterns observed in the area and no evidence of Flying Lanterns were found within the GOA or SOA of the McKinney Fire, for these reasons, Flying Lanterns can be excluded as a cause.

Wind Turbines: Wind turbines use wind flow to generate electrical energy and are increasingly being placed into the wildland environment. Where more than one wind turbine is located in the same area, the term wind farm may be used. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 295, (2016).

There are no Wind Turbines within the GOA of the McKinney Fire. For this reason, Wind Turbines can be excluded as a cause.

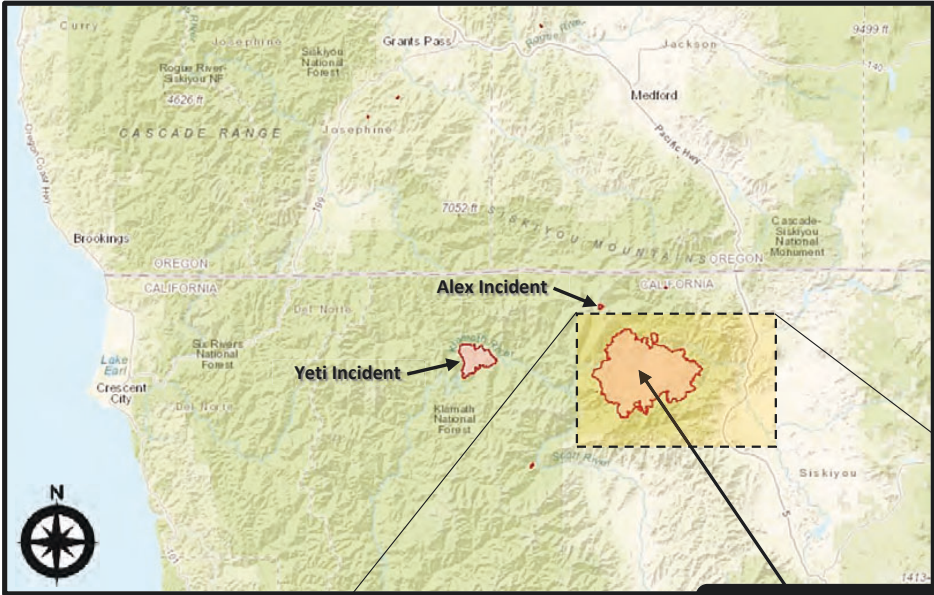
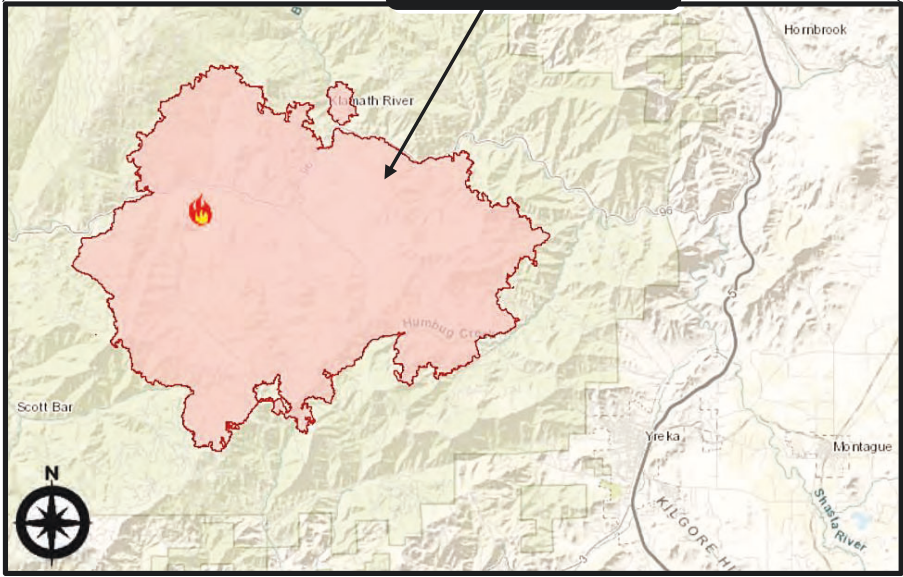
Home Outdoor Wood Burning Furnaces: Referred to as outdoor wood furnaces or outdoor wood boilers, these devices can be modern manufactured models or homemade. They can be used to heat a structure by way of connecting to a central heating unit and/or are used to provide hot water. Either way, the furnace operates by burning firewood and may be burning wood even in the warmer parts of the year if it is being used to heat water also. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 296, (2016).

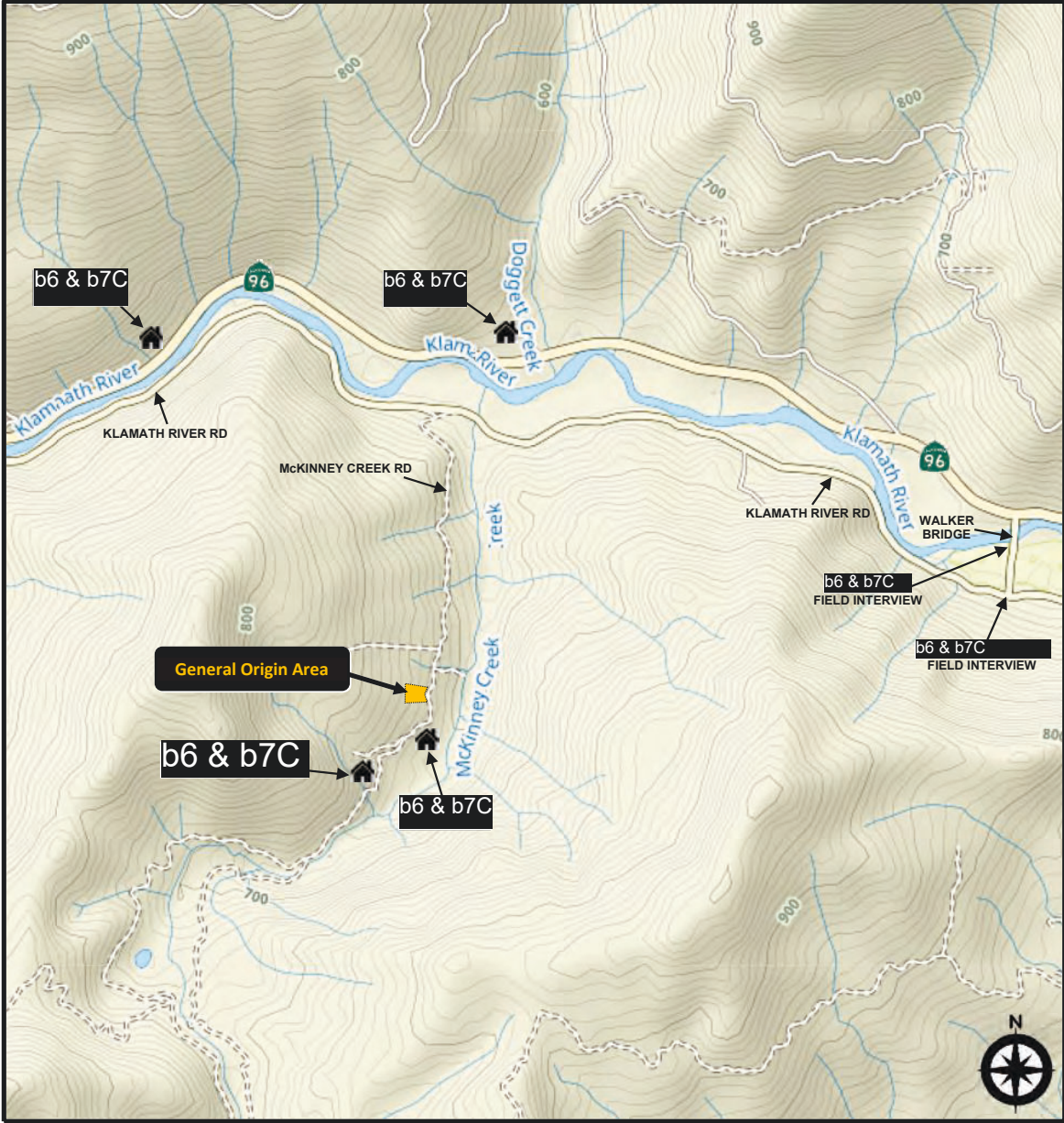
There were no items under this cause category discovered within the GOA or SOA of the McKinney Fire. For this reason, Home Outdoor Wood Burning Furnaces can be excluded as a cause.

Structures: Fire spreading to the wildland due to failures or activities associated with a structure. "NWCG Handbook", PMS 412, NFES 1874, Chapter 6, page 296, (2016).

There were no structures discovered within the GOA or SOA of the McKinney Fire. For this reason, Structures can be excluded as a cause.

SA	b6 & b7C	Date: _____
SA	b6 & b7C	Date: _____
LEO	b6 & b7C	Date: _____
SA	b6 & b7C	Date: _____
FPT	b6 & b7C	Date: _____
FPT	b6 & b7C	Date: _____

 USDA Forest Service		Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)						Incident Number		22-05-9652378	
								Incident Date		7/29/2022	
Fire Name CA-KNF-006177-McKINNEY INCIDENT – Sketch: Overview of Incident Location											
Latitude		N 41°		49'		52"		Longitude		W 122° 53' 44"	
Datum		WGS84									
FIRE SCENE SKETCH (INCLUDE SCALE, TITLE, AUTHOR, NORTH ARROW, DATE AND TIME)											
 McKINNEY INCIDENT CA-KNF-006177 Klamath National Forest Siskiyou County Incident Information As of 8/15/2022: Location of Origin: Klamath River, Siskiyou County, CA Start Date: July 29, 2022 Size: 60,392 acres (current as of 8/15/2022, 5:40 PM) Percent Contained: 95% Cause: Under Investigation Resources Assigned: 1,175 Source: https://inciweb.nwcg.gov/incident/8287/ 											
SCALE		NOT TO SCALE		AUTHOR		b6 & b7C		DATE		8/15/2022	
TIME		1900									

 USDA Forest Service		Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)						Incident Number		22-05-9652378									
								Incident Date		7/29/2022									
Fire Name CA-KNF-006177-McKINNEY INCIDENT – Sketch: General Area / Locations of Interest																			
Latitude		N 41°		49'		52"		Longitude		W 122°		53'		44"		Datum		WGS84	
FIRE SCENE SKETCH (INCLUDE SCALE, TITLE, AUTHOR, NORTH ARROW, DATE AND TIME)																			
																			
SCALE		NOT TO SCALE		AUTHOR		b6 & b7C		DATE		8/9/2022		TIME		2330					

 USDA Forest Service		Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)						Incident Number		22-05-9652378									
								Incident Date		7/29/2022									
Fire Name		CA-KNF-006177-McKINNEY INCIDENT																	
Latitude		N 41°		49'		52"		Longitude		W 122°		53'		44"		Datum		WGS84	
FIRE SCENE SKETCH (INCLUDE SCALE, TITLE, AUTHOR, NORTH ARROW, DATE AND TIME)																			
SEE ATTACHED: GENERAL ORIGIN SKETCH SPECIFIC ORIGIN SKETCHES (3 total) EVIDENCE COLLECTION SKETCH LEGEND																			
SCALE		NOT TO SCALE		AUTHOR				DATE				TIME							

 USDA Forest Service		Wildland Fire Origin and Cause Supplemental Incident Report (Reference FSH 5309.11, Chapter 20)	Incident Number 9652378
			Incident Date 7/29/2022
ATTACHMENT LIST			
ATTACHMENT No.	DESCRIPTION		PAGE INTRODUCED
1	Weather Forecast		3
2	b6 & b7C	7.29.2022 MOI	3
3	b6 & b7C	7.29.2022 MOI	3
4	b6 & b7C	7.29.2022 MOI	4
5	SA	b6 & b7C 7.30.2022 MOA	4
6	LEO	b6 & b7C 7.31.2022 MOA	4
7	SA	b6 & b7C 7.31.2022 MOA	5
8	SA	b6 & b7C 7.31.2022 MOA	5
9	FPT	b6 & b7C 7.31.2022 MOA	5
10	SA	b6 & b7C 8.1.2022 MOA	6
11	SA	b6 & b7C 8.1.2022 MOA	6
12	LEO	b6 & b7C 8.1.2022 MOA	6
13	FPT	b6 & b7C 8.1.2022 MOA	6
14	FPT	b6 & b7C 8.1.2022 MOA	7
15	b6 & b7C	8.2.2022 MOI	8
16	b6 & b7C	8.2.2022 MOI	8
17	SA	b6 & b7C 8.2.2022 MOA	9
18	SA	b6 & b7C 8.2.2022 MOA	9
19	Klamath IHC 8.2.2022 MOI		9
20	SA	b6 & b7C 8.3.2022 MOA	10
21	SA	b6 & b7C 8.3.2022 MOA	10
22	FPT	b6 & b7C 8.3.2022 MOA	10
23	FPT	b6 & b7C 8.3.2022 MOA	10
24	SA	b6 & b7C 8.4.2022 MOA	12
25	SA	b6 & b7C 8.4.2022 MOA	12
26	FPT	b6 & b7C 8.4.2022 MOA	12
27	FPT	b6 & b7C 8.4.2022 MOA	12
28	SA	b6 & b7C 8.6.2022 MOA	14
29	SA	b6 & b7C 8.6.2022 MOA	14
30	FPT	b6 & b7C 8.6.2022 MOA	14
31	FPT	b6 & b7C 8.6.2022 MOA	14
32	LEO	b6 & b7C 8.6.2022 MOA	14
33	LEO	b6 & b7C 8.9.2022 MOA	15
34	FPT	b6 & b7C 8.9.2022 MOA	15
35	Strikenet Report		20
36	b6 & b7C	MOI	20
37	b6 & b7C	MOI	20
38	RAWS		21

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Instructions for filling out the FS-5300-45, Wildland Fire Origin and Cause Supplemental Incident Report**LOCATION**

Fire Name: The fire incident name assigned to the individual fire. If several fires have been combined into a Complex, use the individual name of the fire rather than the Complex name. There may be several independent investigations for the various individual fires within a Complex, each requiring an individual O&C report.

Dispatch #: The alpha-numeric designator used by dispatch for the State-County-Year-WildCad # (e.g. CO-MLX-2013-246)

Account code – the “P code” assigned to the fire.

REGION: Two digit Region identifier (e.g. 01)

FOREST: Two digit Forest identifier (e.g. 08)

DISTRICT: The single or two digit District identifier (e.g. 3 or 50)

STATE: Two letter alpha identifier of the State (e.g. AZ)

COUNTY: Spell out the county name.

ORIGIN LOCATION: Use common geographical names and road numbers that would allow the reader to locate the general fire location on a map.

TOWNSHIP/RANGE/SECTION/ ¼ SECTION: Example 39N, 1W, 18

MERIDIAN/DATUM: Enter the meridian used for the Township and Range reference and enter the datum used for the latitude and longitude reference (e.g. NMPM/NAD83)

JURISDICTION

USFS ONLY: Enter “yes” or “no” based on the land ownership burned by the fire. If the fire burned onto non-National Forest System land enter “no” and then fill in “**IDENTIFY OTHER AGENCY(S)**” with the State or local agency having concurrent jurisdictional responsibility for the fire investigation.

LEAD ORIGIN & CAUSE INVESTIGATOR: Title and name of the lead Forest Service O&C Investigator.

EST. SUPPRESSION COST: Estimated total suppression costs. This includes Forest Service and assisting agencies’ costs. This information can generally be obtained from Incident Business Management Team or IC.

INJURIES/DEATHS: Number of serious injuries or deaths as a result of the fire.

EVENT SEQUENCE

ESTIMATED TIME OF IGNITION: An estimate based on factors such as the time of the initial report, the fire behavior, and the O&C investigation. The “**WHO**” is the name of the individual making the estimate.

TIME FIRE REPORTED: The time of the first report of the fire. The “**WHO**” is the name of the individual who first reported the fire.

TIME ORIGIN PROTECTED: The time and date the actual origin area was secured, either by fire crews or investigators.

TIME ORIGIN RELEASED: The time and date the actual origin area investigation was complete and the area was opened to the public or other investigators.

FIRE BEHAVIOR

ESTIMATED ACRES: Estimated total acreage at fire containment, or at time of report.

FUEL TYPE @ IGNITION AREA, MATERIAL FIRST IGNITED: e.g. grasses, pine needles, duff

WEATHER OBSERVER (ON SCENE): Name of the individual who took weather readings or weather observations at time closest to ignition of fire. Generally is a person with the initial attack crew.

SLOPE: Percent slope at the specific origin area.

ASPECT N E S W: Direction the specific origin area is facing.

ELEVATION: Elevation of the specific origin area.

WEATHER STATION: DATE, TIME, TEMP, RH, WIND DIR, WIND SPEED: Name of the closest Remote Automated Weather Station (RAWS) and the readings from the RAWS at the time closest to the estimated time of ignition.

CAUSE DETERMINATION

Use a two letter identifier for the level of certainty for each of the nine cause categories listed. The level of certainty is based on the definitions used in NFPA 921, 4.5.1. Explain the determination (PS, PR, EX) in detail for each of the nine categories.

It is not necessary to go into detail on the ignition sources that are clearly not possible. This is based on the investigation results and/or the absence of the cause at the origin (e.g. no railroad in the origin area). The form expands to accept unlimited narrative in each of the nine cause categories blocks.

PS = POSSIBLE: At this level of certainty, the hypothesis can be demonstrated to be feasible but cannot be declared probable. If two or more hypotheses are equally likely, then the level of certainty must be “possible.” Describe how you “tested” each hypothesis.

PR = PROBABLE: This level of certainty corresponds to being more likely true than not. At this level of certainty, the likelihood of the hypothesis being true is greater than 50%. Describe how you “tested” the hypothesis and arrived at a determination of probable.

EX = EXCLUDED: A determination of “excluded” should be used if the cause is not possible or probable.

CAUSE DETERMINED: Either this field or the “cause undetermined” field should be filled out; not both. State the actual cause and give a brief summary explaining the cause.

CAUSE UNDETERMINED: Give a brief summary of why the cause is “undetermined.” An undetermined fire cause may later be changed to “cause determined” if new evidence becomes available.

SUBJECT/WITNESS/VICTIM/REPORTING PARTY/OTHER: Self-explanatory.

VEHICLE INFORMATION: Self-explanatory

EVIDENCE/PROPERTY INFORMATION:

Use evidence/property on form FS-5300-48 and FS-5300-49 and attached to FS 5300-45. (Law Enforcement and Investigation Inventory of Seized or Impounded Property).

INSURANCE INFORMATION:

The cost of fire suppression and resource damages can often be recovered by ASC-Claims through Homeowners, Automobile, or Umbrella policies of the individual or company who caused the fire. Include as much of this information as available.

SYNOPSIS:

(DATE, FIRE NAME, ESTIMATED ACRES, LOCATION, JURISDICTION); (ESTIMATED COST, DAMAGE; PROPERTY / RESOURCE); (CAUSE; DETERMINED / UNDETERMINED): Give a brief, one or two paragraph summary of the fire, including information on each of the items listed in this heading.

DETAILS OF INVESTIGATION:

(INITIAL REPORT, INITIAL ATTACK, INITIAL INVESTIGATION, FIRE BEHAVIOR ANALYSIS, STATEMENTS, ORIGIN EXAMINATION, CAUSE DETERMINATION: Provide a detailed write-up of the fire origin and cause investigation, including but not limited to how and when the fire was initially reported, who reported it, who it was reported to; provide details on who responded on the initial attack, both citizens and initial fire crew response, and describe the suppression actions they took that are relevant to the origin investigation.

Describe in detail the methodology used by the qualified fire investigator(INVF) for the investigation of the General Origin Area, the Specific Origin Area, and the Ignition Area of the fire. Also include details in this section about on scene weather data, lightning data, 911 call logs, and RAWS information as it relates to the origin and cause determination. Reference and attach documents, statements, and photographs as needed. Include information about the fire behavior as it relates to the ignition factors and origin determination. Attach the report of the Fire Behavior Analyst (FBAN) if used or referenced. Describe in detail the cause determination: how did the heat source come in contact with the materials first ignited, what were the ignition factors (e.g. windy conditions, burning without proper clearances, no screen on burn barrel, inadequate spark arrestor, etc.).

FIRE SCENE SKETCH

(INCLUDE SCALE, TITLE, AUTHOR, NORTH ARROW, DATE AND TIME): Insert the fire scene sketch or diagram on this page. The document can be scanned and inserted electronically at this location in the form.

PHOTO LOG

DATE: The date the photographs were taken.

CAMERA: The camera model used to take the photographs (e.g. Nikon D100).

PHOTOGRAPHER: The name of the person taking the photographs. If there are multiple photographers, consider using a separate page for the additional photographer(s).

IMAGE NO: Enter the original image number assigned by the camera (e.g. DSC_0171). If the image number is “renamed” by the author include that in the “Description” section.

DESCRIPTION: Enter a description of what the photograph is showing. If the photograph is showing a fire pattern indicator include the indicator category, the item depicted, and the fire vector (e.g. Protection, pine cone, Advancing).

DIRECTION OF PHOTO (COMPASS): Enter the compass direction the camera is facing when the picture was taken (e.g. N, ENE, SW, etc).

.DISCUSSION...It will be very hot inland in the afternoons and evenings with very low relative humidities and late afternoon and early evening breezes through Saturday. There is a slight chance for afternoon and evening thunderstorms across inland areas through Saturday, with a slight chance for storms continuing Saturday night. The chance for thunderstorms will increase across the area on Sunday with scattered thunderstorms possible across Siskiyou County northward into the Siskiyou, eastern Jackson County, the Southern Oregon Cascades and much of Klamath County. Winds will be breezy to gusty, especially east of the Cascades and near storms. On Monday, temperatures will trend lower and expect a continued slight chance for thunderstorms, mainly from the Cascades east.

Western Klamath

.Today...

- * Sky/weather.....Sunny until 1500, then partly cloudy with a slight chance of showers. Patchy smoke until noon. Haze.
- * Max temperature.....105-110 valleys and 85-90 ridges.
- * Min humidity.....10-15 percent.
- * 20-foot winds.....
- * Valleys/lwr slopes...Light winds becoming east 5 to 6 mph in the late morning, then becoming west to northwest 5 to 8 mph late in the afternoon.
- * Ridges/upr slopes...Northeast winds 5 to 8 mph.
- * Haines index.....6 or (high).
- * LAL.....1.
- * Chc of wetting rain (.10 in)...10 percent.
- * Chc of wetting rain (.25 in)...2 percent.

.TONIGHT...

- * Sky/weather.....Partly cloudy. A slight chance of showers and thunderstorms until midnight. Haze.
- * Min temperature.....70-75.
- * Max humidity.....35-50 percent valleys and 30-35 percent ridges.
- * 20-foot winds.....
- * Valleys/lwr slopes...Northwest winds 5 to 8 mph in the evening becoming light.
- * Ridges/upr slopes...North winds 5 to 8 mph shifting to the east 5 to 6 mph after midnight.
- * Haines index.....6 or (high).
- * LAL.....2.
- * Chc of wetting rain (.10 in)...0 percent.
- * Chc of wetting rain (.25 in)...1 percent.

.SATURDAY...

- * Sky/weather.....Sunny. Haze. A slight chance of showers and thunderstorms after 1500.
- * Max temperature.....100-110 valleys and 85-90 ridges.
- * Min humidity.....15-25 percent.
- * 20-foot winds.....
- * Valleys/lwr slopes...Light winds becoming west 5 to 8 mph in the afternoon.
- * Ridges/upr slopes...Southeast winds 5 to 6 mph shifting to the west 5 to 8 mph in the afternoon.
- * Haines index.....6 or (high).
- * LAL.....2.
- * Chc of wetting rain (.10 in)...0 percent.
- * Chc of wetting rain (.25 in)...0 percent.

.EXTENDED...
 .SATURDAY NIGHT...Partly cloudy with a slight chance of showers and thunderstorms. Lows around 70. South winds 5 to 8 mph.
 .SUNDAY...Partly cloudy. A chance of showers and thunderstorms in the afternoon and evening. Highs 85 to 95. Southwest winds 5 to 8 mph.
 .MONDAY...Not as warm. Partly cloudy. Lows 60 to 65. Highs 80 to 90. Southwest winds 5 to 8 mph.
 .TUESDAY...Mostly clear. Lows 55 to 65. Highs 75 to 85. Southwest winds 5 to 8 mph.
 .WEDNESDAY...Mostly clear. Lows 55 to 60. Highs 75 to 85.
 .THURSDAY...Mostly clear. Lows 55 to 60. Highs 75 to 85.

EASTERN KLAMATH

.Today...
 * Sky/weather.....Sunny until 1500, then partly cloudy with a slight chance of showers. Patchy smoke until noon. Haze.
 * Max temperature.....100-105 valleys and 85-90 ridges.
 * Min humidity.....9-15 percent.
 * 20-foot winds.....
 * Valleys/lwr slopes...East winds 5 to 8 mph.
 * Ridges/upr slopes...East winds 5 to 8 mph.
 * Haines index.....6 or (high).
 * LAL.....1.
 * Chc of wetting rain (.10 in)...0 percent.
 * Chc of wetting rain (.25 in)...0 percent.

.TONIGHT...
 * Sky/weather.....Partly cloudy. A slight chance of showers and thunderstorms until midnight. Haze.
 * Min temperature.....65-70.
 * Max humidity.....30-45 percent.
 * 20-foot winds.....
 * Valleys/lwr slopes...Northwest winds 5 to 10 mph shifting to the west after midnight.
 * Ridges/upr slopes...North winds 5 to 10 mph.
 * Haines index.....6 or (high).
 * LAL.....2.
 * Chc of wetting rain (.10 in)...0 percent.
 * Chc of wetting rain (.25 in)...0 percent.

.SATURDAY...
 * Sky/weather.....Partly cloudy until 0900, then sunny until 1500, then partly cloudy. Haze.
 * Max temperature.....95-100 valleys and 85-90 ridges.
 * Min humidity.....9-15 percent.
 * 20-foot winds.....
 * Valleys/lwr slopes...Light winds becoming south 5 to 10 mph in the afternoon.
 * Ridges/upr slopes...Southeast winds 5 to 6 mph shifting to the south 5 to 10 mph in the afternoon.
 * Haines index.....5 or (moderate).
 * LAL.....1.
 * Chc of wetting rain (.10 in)...0 percent.
 * Chc of wetting rain (.25 in)...0 percent.

.EXTENDED...
 .SATURDAY NIGHT...Partly cloudy with a slight chance of showers

and thunderstorms. Lows 60 to 70. West winds 5 to 8 mph.
.SUNDAY...Partly cloudy. A slight chance of showers and
thunderstorms in the afternoon and evening. Highs 85 to 95.
Southwest winds 6 to 10 mph.
.MONDAY...Not as warm. Partly cloudy with a slight chance of
showers and thunderstorms. Lows 55 to 65. Highs 80 to 90.
Southwest winds 6 to 10 mph.
.TUESDAY...Mostly clear. Lows 50 to 60. Highs 75 to 85. Southwest
winds 6 to 10 mph.
.WEDNESDAY...Mostly clear. Lows 50 to 55. Highs 75 to 85.
.THURSDAY...Mostly clear. Lows 50 to 55. Highs 75 to 85.



USDA
Forest Service

MEMORANDUM OF INTERVIEW
(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

2. NATURE OF INVESTIGATION

McKinney Creek Fire

3. NAME OF PERSON INTERVIEWED (Last, First, Middle)

b6 & b7C

4. SOCIAL SEC. NO.

- -

5. DOB

b6 & b7C

6. SEX

F

7. HOME ADDRESS (St., City, State, ZIP Code)

b6 & b7C

8. DRIVER'S LIC. NO.

b6 & b7C

9. PHONE (H) (Area Code)

b6 & b7C

10. EMPLOYMENT (Occupation and Location)

11. PHONE (W) (Area Code)

() -

12. LOCATION OF INTERVIEW

Walker Creek Bridge Rd/Klamath River Road

13. NAME OF OFFICER CONDUCTING INTERVIEW

b6 & b7C

14. OTHERS PRESENT

b6 & b7C

15. STARTED

Date

Time

ENDED

Date

Time

16. REMARKS

On July 29, 2022 I responded to the report of a wildfire on McKinney Creek Road near Klamath River, CA.

While enroute I observed a smoke plume rising from the McKinney Creek area. I turned off HWY 96 onto Walker Creek Road and as I started to turn onto the Klamath River Road I observed two women standing next to two parked vehicles at the intersection of Klamath River Road and Walker Bridge Road.

I rolled down the window and asked if I was headed in the right direction and the older woman, whom I later identified as b6 & b7C, stated the fire was up McKinney Creek Road and had started b6 & b7C and b6 & b7C again stated that the fire started b6 & b7C and I asked how the fire started.

b6 & b7C then looked at b6 & b7C and said, "Should I tell him?" b6 & b7C shook her head in the negative, in response.

b6 & b7C asked a second time, "Should I tell him what happened?", and b6 & b7C looked directly at b6 & b7C and said, "No."

The women approached my vehicle and b6 & b7C stated the fire was b6 & b7C. b6 & b7C stated she had seen the smoke and I asked b6 & b7C where she lived and she stated at b6 & b7C. b6 & b7C stated she had observed smoke across b6 & b7C and described a power pole in the area of the smoke.

I then exited my vehicle and started my body camera and recorded a conversation with the two women. I briefly spoke with b6 & b7C before speaking with b6 & b7C. Both women had the odor of alcohol on their breath and I observed b6 & b7C holding a can of beer, at times.

Initially, it seemed as though b6 & b7C and b6 & b7C may have known some details about the cause of the fire when I initially contacted them. In furtherance of my investigation I continued questioning b6 & b7C about her initial response that indicated they did not want to tell me how the fire started. b6 & b7C then responded that the fire had caused anxiety and that she and b6 & b7C had just been discussing that the powerlines may be the cause. Then, upon being questioned by me, b6 & b7C stated she wasn't sure if she should tell me that the powerlines were at fault because she did not want to make that accusation.

b6 & b7C stated the power had gone out the night before around 8pm and then came back on around 415-430am.



USDA
Forest Service

MEMORANDUM OF INTERVIEW
(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

b6 & b7C stated b6 & b7C called her at 212pm that day and told there was a fire and to gather her belongings and leave. b6 & b7C stated she saw smoke and gathered her things and left down McKinney Creek Road.

Interview was recorded as Axon Body 3 Video 2022-07-29 1827 X60A2323Q.

17. OFFICER'S SIGNATURE

18. WITNESS' SIGNATURE *(If Applicable)*

NOTE: This document is for OFFICIAL USE ONLY. It and its contents are not to be distributed outside your agency, nor duplicated, without prior approval of the USDA, Forest Service, Law Enforcement and Investigations.

Previous Editions are Obsolete



USDA
Forest Service

MEMORANDUM OF INTERVIEW
(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

2. NATURE OF INVESTIGATION

McKinney Creek Fire

3. NAME OF PERSON INTERVIEWED (Last, First, Middle)

b6 & b7C

4. SOCIAL SEC. NO.

- -

5. DOB

b6 & b7C

6. SEX

M

7. HOME ADDRESS (St., City, State, ZIP Code)

b6 & b7C

8. DRIVER'S LIC. NO.

9. PHONE (H) (Area Code)

b6 & b7C

10. EMPLOYMENT (Occupation and Location)

11. PHONE (W) (Area Code)

() -

12. LOCATION OF INTERVIEW

b6 & b7C

13. NAME OF OFFICER CONDUCTING INTERVIEW

b6 & b7C

14. OTHERS PRESENT

15. STARTED

Date

Time

ENDED

Date

Time

16. REMARKS

On 7-29-2022 I responded to a fire at 1137 McKinney Creek Road. At approximately 540pm I approached b6 & b7C where the fire started. I recorded an approximate 50 minute video on body camera labeled Axon Body 3 Video 2022-07-29 2040 X60A2323Q.

I introduced myself to b6 & b7C and asked if I could speak with him. b6 & b7C agreed.

I asked b6 & b7C how the fire started. b6 & b7C stated he did not know how the fire started.

b6 & b7C stated he walked b6 & b7C and saw a smoke near the base of b6 & b7C and called 911 at 212pm.

b6 & b7C stated he b6 & b7C

I asked b6 & b7C if anyone was running a chainsaw or cutting firewood or shooting guns and he said no and that everyone was inside. b6 & b7C stated he didn't see anything and that the hillside was on fire. b6 & b7C stated that powerlines do come up through that area but they keep them pretty clean.

I asked b6 & b7C if he was the first to see the fire and he said yes. I asked him to walk the fire with me to show me where the fire was and wasn't when he first saw it. I asked if anyone else had been in the area and he said he was the first on scene. b6 & b7C stated it was about ten feet off the road and he estimated it was about 1/4 to a 1/2 acre but it was farther up the hill and he was feeling pretty confident that it was going to be pretty contained.

I asked b6 & b7C if anyone was working down there or if there were any vehicles and b6 & b7C said no and then said it was hotter than blue blazes.

b6 & b7C

b6 & b7C stated that he couldn't believe this happened.

I reconfirmed that b6 & b7C saw the fire at approximately 2pm and that he called dispatch and then b6 & b7C to put water on it and b6 & b7C affirmed that.

I again asked b6 & b7C if anyone was running a chainsaw or cutting firewood or running a chainsaw and he said no. b6 & b7C stated everyone was inside and trying to stay cool.



USDA
Forest Service

MEMORANDUM OF INTERVIEW
(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

b6 & b7C pointed out the b6 & b7C
When b6 & b7C exited he came outside and stood b6 & b7C and stated this is where he was when he saw it. He stated I came out here, it was right here, a plume of smoke, and that's when I went in and called it in.

I observed a string trimmer nearby and asked if he had used it today and he stated he used it the day before around the pond area.

I asked b6 & b7C if he, or anyone in his family or any he knew was working down it that area yesterday or today and b6 & b7C replied no. I asked if he used the weedeater in that area and b6 & b7C said no. I asked if he had heard any chainsaws or gunshots or grinding and he said no.

I asked b6 & b7C if if he or someone he knew or someone in his family started it would he tell me and he replied absolutely and that he had nothing to hide.

b6 & b7C then show me his cell phone and said he called it in at 212pm and stated that was 2 minutes after he saw it.

b6 & b7C stated he may have seen it sooner but because it was so hot he had been staying inside.

b6 & b7C stated b6 & b7C is normally parked right in front of his home.

I said you saw the smoke, you call it in and then you jump in b6 & b7C to go put water on it, then what does b6 & b7C do? b6 & b7C replied b6 & b7C called b6 & b7C and that b6 & b7C lives b6 & b7C and they got everything together, got the animals together and took off and I don't know where they're at.

I asked him if he what his guess or gut was telling him and he stated all he could think of was powerlines. And then he stated maybe someone threw a cigarette out the window.

On the walk down to the driveway and road b6 & b7C pointed out b6 & b7C

b6 & b7C

b6 & b7C stated it was 108 degrees at his house when the fire started.

I followed b6 & b7C down McKinney Creek Road and we stopped just below a little red sign with a 20 on it, he pointed up the hill and stated this is pretty much were it started. The area he gestured to included a power pole labeled 169600. b6 & b7C stated it was burned pretty much were it is now and higher. (24:25 minute mark on video)

I pointed out a rise in the hill and asked if the fire was past that and b6 & b7C stated he believed so. b6 & b7C pointed out where he parked and stated that is where he got his hard line out and got as much as he could near the bottom. b6 & b7C stated the Forest Service showed up pretty quick approximately 5-10 minutes later.

b6 & b7C stated after Forest Service showed up he was fairly optimistic and he walked up the flank to see how far the fire had burned.

I reconfirmed that when b6 & b7C first showed up prior to the Forest Service showing up that the fire had not burned across a little drainage to the south of the little red 20 sign and he said yes.

I then followed b6 & b7C up a well defined fireline on the right flank and we stopped approximately 100' up and b6 & b7C stated I think it was those powerlines man.

I asked b6 & b7C if he walked all the around the fire or if he walked up the flank and back down the same flank and he said he went up and down the same flank. I asked b6 & b7C what the fire behavior was while still in the timbered area and he said it wasn't that bad and the flame lengths were about 1 foot high.



USDA
Forest Service

MEMORANDUM OF INTERVIEW
(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

As we continued up the right flank we came to a fence that was down and b6 & b7C stated he thought he walked over the fence.

As we approached the meadow b6 & b7C stated he thought that was about as high as he went. b6 & b7C stated the fire was about to this point and was in a nearby oak tree. b6 & b7C then stated maybe it had gone a little bit further.

b6 & b7C stated he was the first one to walk up this high along the flank. b6 & b7C stated when he went back down he talked to the Forest Service to let them know what he saw and what he was doing and then took b6 & b7C up to his pond to set it up for a water source.

I asked b6 & b7C if he had spoken to b6 & b7C since he left and he said no.

I asked if he or someone he knew accidentally started it would he tell me and he said yes I would, yes I would, it wasn't me. b6 & b7C stated b6 & b7C could vouch for him since they were in the house together since probably 5am. I asked again if they had done any work down in that area and b6 & b7C said no and that he had not been down there in months. I asked about shooting guns or fireworks and b6 & b7C said no and that he had no idea how it started.

I told b6 & b7C I noticed he smoked and asked if he took a walk this morning and he said no. I asked if anyone else lived on the property and he said there was b6 & b7C but they had been gone for a few days.

I asked if anyone else had visited or been on the property at all and b6 & b7C said no.

b6 & b7C said a few years before Pacific Power had found a tree leaning into one of the wires and it was arcing and they sent someone out to deal with it. b6 & b7C stated it was his guess that a tree hit the wire and arced.

b6 & b7C stated he was working on the computer and b6 & b7C was watching TV today. b6 & b7C stated the power had gone out the night before around 8pm. b6 & b7C stated they had received an email from Pacific Power stating they might do that due to fire conditions and b6 & b7C assumed that's why it went out. b6 & b7C stated the power went back on about 430am that morning. I asked if b6 & b7C noticed any kind of brownout or any change in voltage or spikes and he said no.

I asked when he got to the fire if he noticed any arcing or pops or explosions and b6 & b7C said no.

I asked if anyone had been hanging in the area the last few days or weeks and b6 & b7C said no. b6 & b7C stated there is traffic up and down the road every now and again.

I let b6 & b7C know I gave b6 & b7C my business card and phone number and that I was available 24 hours a day.

17. OFFICER'S SIGNATURE

18. WITNESS' SIGNATURE (If Applicable)

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	USDA Forest Service	MEMORANDUM OF INTERVIEW <i>(Reference FSH 5309.11)</i>	1. CASE NUMBER 22-05-9652378
2. NATURE OF INVESTIGATION McKinney Creek Fire			
3. NAME OF PERSON INTERVIEWED <i>(Last, First, Middle)</i> b6 & b7C		4. SOCIAL SEC. NO. - -	5. DOB b6 & b7C
		6. SEX F	
7. HOME ADDRESS <i>(St., City, State, ZIP Code)</i> b6 & b7C		8. DRIVER'S LIC. NO. b6 & b7C	9. PHONE (H) <i>(Area Code)</i> b6 & b7C
10. EMPLOYMENT <i>(Occupation and Location)</i> 		11. PHONE (W) <i>(Area Code)</i> () -	
12. LOCATION OF INTERVIEW Walker Creek Bridge Road/Klamath River Road		13. NAME OF OFFICER CONDUCTING INTERVIEW b6 & b7C	
14. OTHERS PRESENT 		15. STARTED Date Time ENDED Date Time Date Time	
16. REMARKS On 7-29-22 while responding to the McKinney Creek Fire I stopped and spoke with two women who were parked at the intersection of Walker Bridge Road and Klamath River Road approximately 2 miles below the fire. A brief summary of an interview with b6 & b7C is recorded on MOI 7-29 b6 & b7C. I recorded this interview with b6 & b7C which was recorded as Axon Body 3 Video 2022-07-29 1852 X60A2323Q. b6 & b7C stated she and b6 & b7C said that b6 & b7C came inside and said there was smoke down McKinney Creek and he said to her to pack up and leave. b6 & b7C stated b6 & b7C, then called 911 immediately and then left. b6 & b7C stated she couldn't tell the distance of the initial smoke she saw. b6 & b7C stated the smoke was initially dark in color and then was white. b6 & b7C stated she called b6 & b7C and told her that there was smoke and to pack up and leave. b6 & b7C stated she saw the smoke and retrieved her valubles, important papers and a computer. b6 & b7C described, while leaving the area, seeing flames at a power pole on her property. b6 & b7C also recalled the pasture was on fire.			
17. OFFICER'S SIGNATURE 		18. WITNESS' SIGNATURE <i>(If Applicable)</i> 	
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CONSENT TO SEARCH

(Reference FSH 5309.11)

1. DATE

7-29-22

2. TIME

1915

3. LOCATION

b6 & b7C

I, **b6 & b7C**, having been informed of my constitutional right not to have a search of the person and/or property hereinafter mentioned without a search warrant, and of my right to refuse to consent to such a search, hereby authorize

b6 & b7C

LEO, USFS

and

USFS

(Print Name, Title and agency of officers/agents)

(Titles of Officers or Agents and Agency)

to conduct a complete a search of my person and/or property located at :

b6 & b7C

These (officers or agents) are authorized by me to take from my premises any letters, papers, materials, or other property which they may desire.

This written permission is being given by me to the above-named persons voluntarily and without threats or promises of any kind.

SIGNED

b6 & b7C

b6 & b7C

WITNESSES:

(Signature)

(Signature)

b6 & b7C

Print Name

Print Name

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FS-5300-21(05/03)



USDA
Forest Service

MEMORANDUM OF INTERVIEW
(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

2. NATURE OF INVESTIGATION

McKinney Creek Fire

3. NAME OF PERSON INTERVIEWED (Last, First, Middle)

b6 & b7C

4. SOCIAL SEC. NO.

- -

5. DOB

/ /

6. SEX

M

7. HOME ADDRESS (St., City, State, ZIP Code)

8. DRIVER'S LIC. NO.

9. PHONE (H) (Area Code)

b6 & b7C

10. EMPLOYMENT (Occupation and Location)

USFS Firefighter

11. PHONE (W) (Area Code)

() -

12. LOCATION OF INTERVIEW

McKinney Creek Road

13. NAME OF OFFICER CONDUCTING INTERVIEW

b6 & b7C

14. OTHERS PRESENT

15. STARTED

Date

Time

ENDED

Date

Time

LEO b6 & b7C

16. REMARKS

On 7-29-22 at approximately 459pm I spoke with US Forest Service firefighter b6 & b7C at the scene of the McKinney Creek Fire near Klamath River, California. The interview was recorded on body camera as Axon Body 3 Video 2022-07-29 1959 X60A2323Q.

b6 & b7C described when he arrived the fire was backing down from the power pole area downhill towards McKinney Creek Road. He also described that the fire was flanking both left and right uphill away from the road.

b6 & b7C stated he observed fire at the top of the power pole (169600) and the crossarm at the top of the power pole was still intact.

b6 & b7C stated he estimated the size of the fire to be 1/4 to 3/4 acres in size based on his vantage spot from McKinney Creek Road.

b6 & b7C stated he it appeared the insulators were still intact and wires were still on the insulators on power pole (169600).

17. OFFICER'S SIGNATURE

18. WITNESS' SIGNATURE (If Applicable)

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USDA
Forest Service

MEMORANDUM OF INTERVIEW
(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

2. NATURE OF INVESTIGATION

McKinney Fire

3. NAME OF PERSON INTERVIEWED (Last, First, Middle)

b6 & b7C

4. SOCIAL SEC. NO.

- -

5. DOB

/ /

6. SEX

7. HOME ADDRESS (St., City, State, ZIP Code)

8. DRIVER'S LIC. NO.

9. PHONE (H) (Area Code)

b6 & b7C

10. EMPLOYMENT (Occupation and Location)

PacifiCorps

11. PHONE (W) (Area Code)

() -

12. LOCATION OF INTERVIEW

Klamath River Road/Walker Bridge Road

13. NAME OF OFFICER CONDUCTING INTERVIEW

Officers **b6 & b7C** and **b6 & b7C**

14. OTHERS PRESENT

15. STARTED

Date

Time

ENDED

Date

Time

7/29/22

7/29/22

16. REMARKS

USFS SA **b6 & b7C** typed and summarized the following interview based on USFS Officers **b6 & b7C** and **b6 & b7C** body-worn camera video recordings (Axon_Body_3_Video_2022-07-29_1857_X60A1073W and Axon_Body_3_Video_2022-07-29_1902_X60A2323Q).

The following is a summary of an interview between USFS Law Enforcement Officers **b6 & b7C** and **b6 & b7C** and PacificaCorps employee **b6 & b7C**. **b6 & b7C** advised officers he was employed with PacificaCorps as a lineman. At the time, the McKinney Fire was burning approximately two miles away off of McKinney Creek Road. At the time, **b6 & b7C** was parked along Klamath River Road, near Walker Bridge Road when officers stopped to speak with him.

b6 & b7C advised officers that he had learned of the fire at 2:21 pm. His "GF" had called him after learning of the fire through a radio scanner. **b6 & b7C** indicated there had been a power outage in the same area during the previous night and that other linemen had responded to the power outage area. **b6 & b7C** later provided a business card for the "GF" which displayed the name: **b6 & b7C**.

Officer **b6 & b7C** had recently spoke with people that had just evacuated the property where the fire started. These people had informed Officer **b6 & b7C** that their power had gone out the previous night and that the power had been turned back on that morning at approximately 4:15-4:30 am. When Officers brought this up, **b6 & b7C** stated something to the effect of, "this might be tied to it" and described how the whole circuit was on super safe mode and proceeded to show officers the area of these power lines on his electronic tablet computer. **b6 & b7C** focused on a particular power pole discussing how this particular pole was burning up (which officers later learned to be the same pole located within the general origin area). **b6 & b7C** described having just been at the site of the fire and said the sign was still on the power pole, that the number on the power pole was 169600. **b6 & b7C** recalled that although the forest floor all around the power pole was burning, the bottom of the power pole was not burning nor did he recall seeing fire climbing up the pole. **b6 & b7C** said that he spoke with the IC and then described briefly departing the scene to get ahold of someone on the radio. **b6 & b7C** said that when he returned, he watched the top arm of this power pole break.

Regarding the re-energizing of powerlines at 4:30 a.m., **b6 & b7C** said, "it's set on super sensitive mode, so something happened to the circuit, we came down, we patrolled it, we took our fault data, didn't find anything, we're working 24 hours a day, the first outage was 9:30 last night, then at about 4:00 a.m. we finished our patrol, came hot with the circuit, hung out until about 6:30. I left to go to sleep last night about 9:35 and they told me about it, and when I came in this morning about 5:30 to cover Yreka, they had closed it about an hour ago. So we've got fault data on all of our reclosures and we patrol and we have engineers that take the calculations and tell us approximately where its at and



USDA
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(Reference FSH 5309.11)

1. CASE NUMBER

22-05-9652378

then its usually like square miles and then we come out in full force and drive around and look at every piece of line before we come back. I was not out here last night, this is the first time I've been out here. I just came down here and de-engerized the line because of the fire." Officer b6 & b7C asked if any of the power employees were around when the fire started to which b6 & b7C replied, "I don't know when it started. I have not talked to the IC yet." b6 & b7C included that the other linemen were resting and would be back to work at 6:00 p.m. and added, "I'm gonna let those guys sleep, because we're working 16 hours a day right now."

Officer b6 & b7C asked, "do you know who was out here this morning?" b6 & b7C replied, "I don't know. All that stuff is documented, they've got recordings of all the stuff we say on the radio, they've got recordings of our arrival times, it's just like you guys, everything is recorded, everything we say."

At about this point, b6 & b7C dispatch began speaking to b6 & b7C over his vehicle radio. The following is a summary:

Dispatch: "I'm being asked to ask you to take pictures of that pole, 169600, especially at the base of the pole, if you get a chance and its safe to do so."

b6 & b7C: "Copy that, photos of the world..."

Dispatch: "Yes sir, I'm gonna have you send them directly to b6 & b7C wants them. I have a phone number if you want to write it down." Dispatch then gave b6 & b7C a phone number of b6 & b7C and said this phone number was for b6 & b7C (last name unclear).

b6 & b7C "So I'm sending them (pictures) to b6 & b7C?" Dispatch advised that was correct and that b6 & b7C would then forward them to b6 & b7C

b6 & b7C gave officers his cell number as b6 & b7C. b6 & b7C advised that the IC of the fire was b6 & b7C.

At that point, Officer b6 & b7C realized the connection and stated that he knew b6 & b7C, to which b6 & b7C stated, "Yeah, that's b6 & b7C, I just talked to him, he's up there (IC of the fire)."

Note: earlier in the conversation, b6 & b7C stated he had not talked to the IC when officers asked him when the fire had started. This portion of the conversation had followed when officers asked b6 & b7C if he knew which lineman had responded that morning and if any linemen had been present when the fire ignited. In addition to b6 & b7C stating he did not know the names of the linemen that had responded, b6 & b7C also said that he had not talked to the IC and did not know when the fire had started. However, when the topic changed, b6 & b7C advised that he had just been to the fire and had met with b6 & b7C, the IC.

Shortly after this interview concluded, Officer b6 & b7C drove to the site of the fire. Officer b6 & b7C observed that b6 & b7C had returned to the fire as he saw b6 & b7C standing in the fire area near power pole 169600. This was the power pole that b6 & b7C dispatch services had asked him to take photographs of for b6 & b7C and the same power pole that officers later realized was within the general origin area.

-End of Memorandum-

17. OFFICER'S SIGNATURE

18. WITNESS' SIGNATURE (If Applicable)

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	USDA Forest Service	MEMORANDUM OF ACTIVITY	CASE NUMBER:
			22-05-9652378
TYPE OF ACTIVITY:			DATE:
McKinney Fire			
NARRATIVE:			
(MOA written on 8/1/22): On July 30, 2022, I met with USFS Law Enforcement Officer [REDACTED] regarding the McKinney Fire that had ignited the previous day. Officer [REDACTED] informed me of multiple interviews that he had conducted during his response to the McKinney Fire. Officer [REDACTED] informed me that he had inspected the area around the McKinney Fire and met with several people that resided on the property where the McKinney Fire had started. Officer [REDACTED] included that, at some point, the fire behavior became unsafe and that he and other officers needed to depart the McKinney Creek Road area.			
On July 30, 2022, at approximately 2:00 p.m., USFS Law Enforcement Officers [REDACTED] and [REDACTED] established a security check point located near the junction of Walker Bridge Road and Klamath River Road. At the time, the Klamath River Road was impassable due to downed trees crossing the road. A short time later, USFS Officers [REDACTED] and I drove past the security check point, continuing down the Klamath River Road. Officers cleared and cut downed trees from the road in order to create motorized access. These officers and I then drove to the property where the McKinney Fire was first reported (1137 McKinney Creek Rd. Klamath River, CA). Using bright orange flagging, the officers and I taped off an area approximately one-acre in size- a relatively squared-shaped area along McKinney Creek Road in order to preserve the scene where the general origin area would be located.			
I observed this rural private property located at 1137 McKinney Creek Rd. to be mostly destroyed by the fire. I was advised there had been residential structures present prior to the fire. There were no people present.			
(Continued this MOA on 8/6/22): Also, on this day, I took 31 photographs. The first two photographs were associated with a Chevy pickup that had been parked along the Klamath River Road, near the Walker Bridge. It was later determined that this pickup was associated with a local citizen who was attempting to save his horses from the fire and not associated with the property where the fire originated. Additionally, just beyond this pickup, we had come across large downed trees that blocked motorists from driving any closer to the origin, later determined to be approximately 1 mile further out this road system off of McKinney Creek Road. On this same day, I noticed that utility lines were running through the area along McKinney Creek Road, in the same general area as the general origin area. Although the origin and cause investigation of this fire was just beginning, I decided that I should photograph power poles and their corresponding pole numbers to show their physical presence and the shape they were in at this time, just in case this fire further damaged and/or destroyed the power poles and utility lines before investigators could complete the origin and cause investigation.			
[REDACTED]			
OFFICER'S NAME/ID #:	OFFICER'S SIGNATURE:	DATE:	
[REDACTED]	[REDACTED]		
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b6 & b7C

07/30/2022 16:00













07/30/2022 16:17



07/30/2022 16:17













07/30/2022 16:21



07/30/2022 16:27



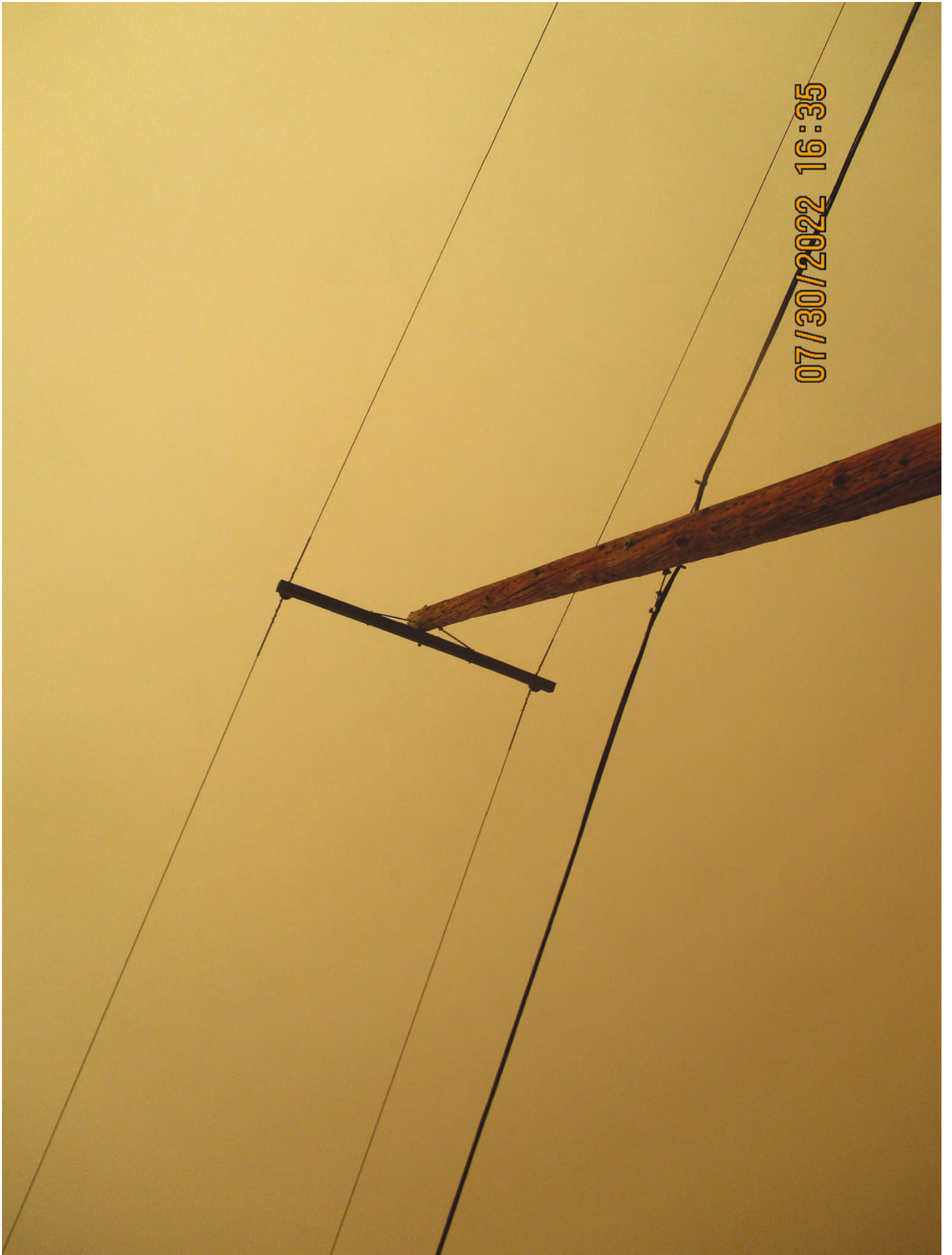




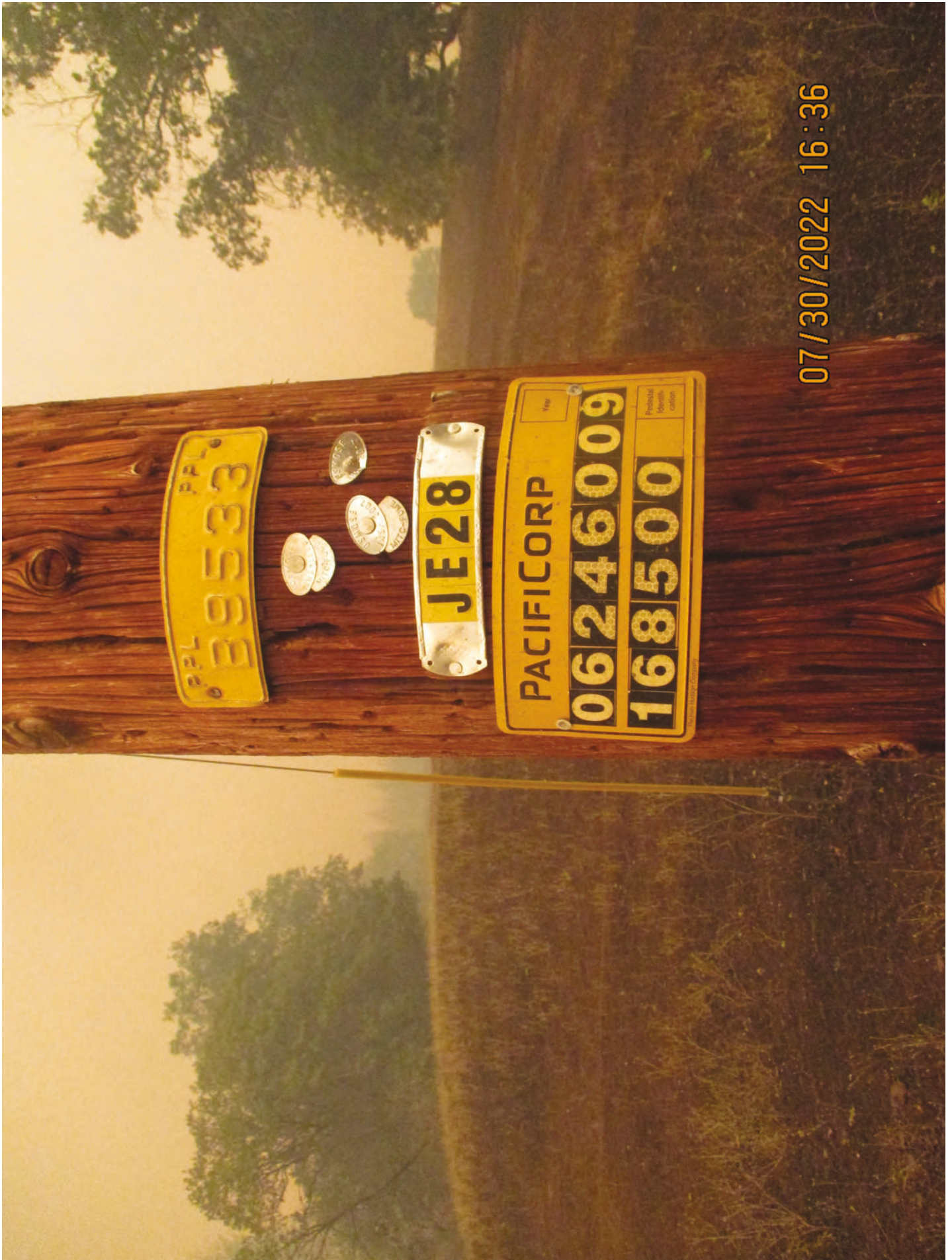




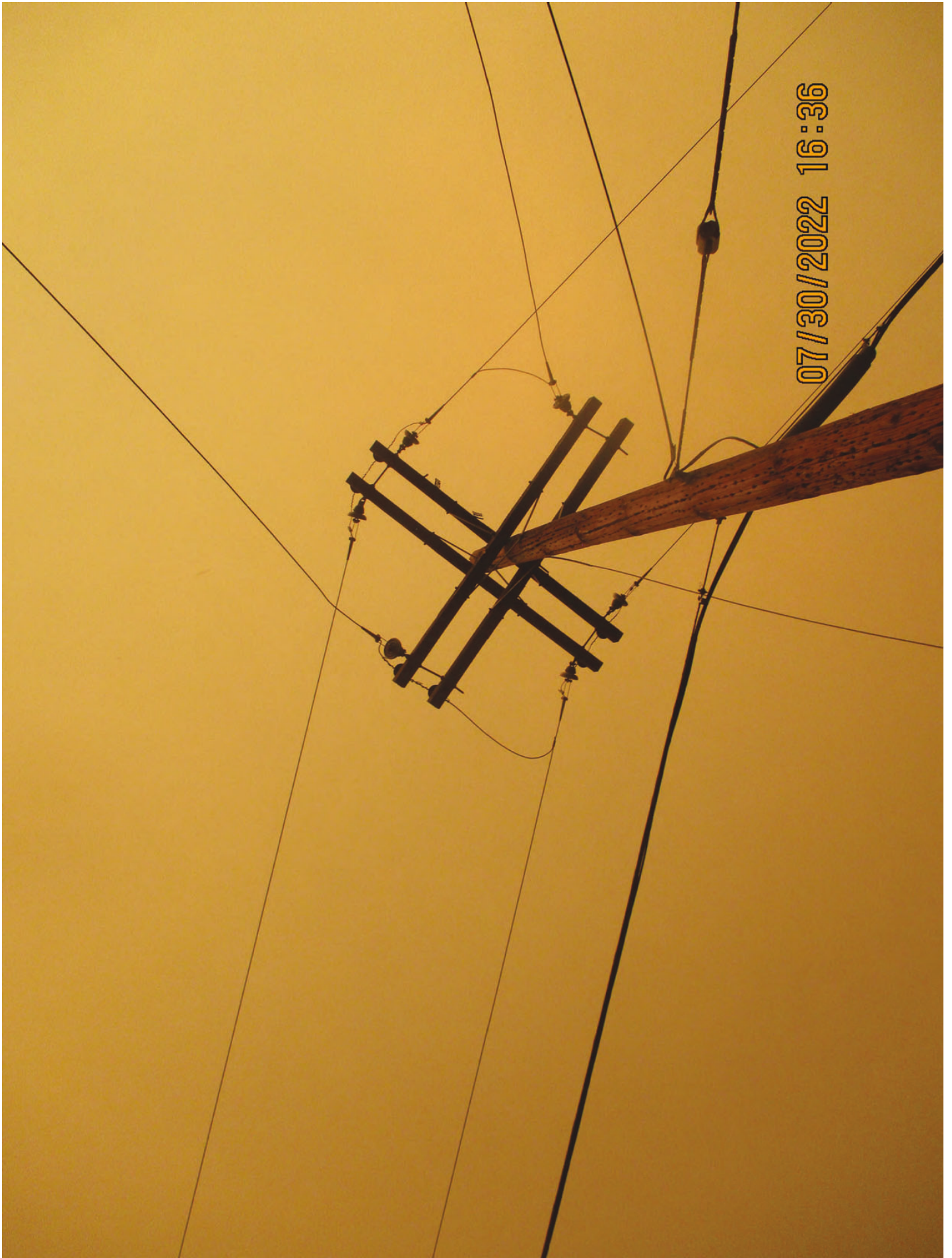








07/30/2022 16:36













	USDA Forest Service	CASE NUMBER:
TYPE OF ACTIVITY: NF Mc Inney Fire		DATE: / /
NARRATIVE: On Sunday, July 1, [REDACTED], United States Forest Service USFS Law Enforcement Officer LEO [REDACTED], was assigned to the Wildland Fire Investigation Team (FIT) responsible for conducting the origin and cause investigation of the Mc Inney Fire, an extended attack wildland fire incident which originated within the Lamath National Forest NF of Siskiyou County, California CA, initially detected in the Mc Inney Cree area on the afternoon of Friday, July [REDACTED]. On Sunday, July 1, [REDACTED], LEO [REDACTED] met with USFS Special Agent SA [REDACTED], USFS SA [REDACTED], and USFS LEO [REDACTED] at the NF Headquarters office in Yreka, CA to receive an initial briefing on the origin and cause investigation. LEO [REDACTED] was tasked with obtaining the aerial imagery captured by the air attack platform during the initial stages of the incident. LEO [REDACTED] travelled to the Siskiyou County Airport and met with [REDACTED], lead aerial observer on Air Attack. [REDACTED] provided seventeen (17) digital images to LEO [REDACTED] via the AirDrop feature on their cellular devices. The AirDrop feature was used to preserve the metadata contained within each image. The series of photographs, captured between [REDACTED] PM and [REDACTED] PM, depict various angles of the smoke column during the initial stages of the incident as seen from the air. The photographs that [REDACTED] provided would later be used to confirm the location of the general origin area (GOA) that was previously identified by initial attack resources. LEO [REDACTED], LEO [REDACTED], SA [REDACTED], SA [REDACTED] and USFS Fire Prevention Technician FPT [REDACTED] travelled to 11 Mc Inney Cree Road, in Lamath River, California, the address that was provided when the fire was initially reported. Escorted by LEO [REDACTED] the investigators arrived at the burnt remains of what appeared to be structures and outbuildings situated along the southern edge of a large open pasture. LEO [REDACTED] explained that the GOA was adjacent to Mc Inney Cree Road, within the tree line along the northern edge of the pasture, and that the fire had initially advanced from northeast to southwest. The investigators parked near the remains of the structure and proceeded on foot to the northwest, upslope to an unimproved dirt road extended to the northeast, north, and northwest, adjacent to a fence line. The large open pasture was east of the road and the entire fence line. The pasture consisted primarily of grasses and star thistle, but mature oak trees and patches of berry bushes were scattered throughout the area. Upslope and west of the fence line was a forested area, which consisted primarily of brush and mixed conifers. The vegetation on both sides of the road and fence line were significantly damaged by fire. As the investigators continued north along the dirt road, LEO [REDACTED] used the series of photographs that were provided by [REDACTED] to orient the investigators. In two of the photographs (BVLN [REDACTED] and F D 11 [REDACTED]) a moderate amount of open flame was visible in a small drainage along the road, just east of the fence line. The macro scale fire pattern indicators visible in the drainage suggested the fire had advanced upslope and to the west, across the road. As they continued along the road, LEO [REDACTED] identified an area that exhibited signs of extreme heat, where the vegetation had been nearly completely consumed. Using the same two photographs (BVLN [REDACTED] and F D 11 [REDACTED]), LEO [REDACTED] identified the area where a large amount of open flame		



is visible on the west side of the road. The open flame appeared to be the group torching of a brush field and a large, standing pine tree. The foliage of the pine tree had been completely consumed, and only the stalks of the brush remained. It was evident that the fire had progressed from an area further to the east/northeast.

The investigators continued to the northeast, where a series of metal pipes were lying along the terrain and extended to the southeast. The fire pattern indicators in this area suggested that the fire had progressed laterally from the pasture and into an adjacent drainage to the north. Just south and southeast of the drainage was another barbed wire fence line. The fence line extended primarily northwest and southeast. Adjacent to the fence line, on its east/northeast side, was a fire control line.

While the vegetation on both the east and west sides of the fire control line was burned, LEO [b6 & b7C] noticed that the ground fuels and mineral soil had been pulled from west to east, indicating that the fire was burning on the west side of the control line as it was being constructed. It is a common practice for fire suppression crews to pull flammable materials away from the fire opposite side of the control line to ensure that the flammable materials do not sustain combustion as the flames reside near the control line. LEO [b6 & b7C] observed fire hoses extended along the control line as well. LEO [b6 & b7C] noted that the fire hoses were primarily lying on the east side or eastern edge of the control line. It is common practice for fire suppression crews to install hose lays on the opposite side of fire control lines as the fire, so as not to compromise the integrity of the fire hose. This was another indication that the main fire was burning on the west side of the control line as the hose lay was being installed.

The investigators proceeded downslope to the southeast and south as they continued down the control line. A short distance later, LEO [b6 & b7C] encountered a long strip of fluorescent orange surveyor's flagging tape which extended to the east along the control line this was the northwestern corner of the orange flagging perimeter. LEO [b6 & b7C] explained that the orange flagging tape had been previously installed to indicate the approximate fire area when it was first observed by fire suppression crews. In the areas to the south of the orange flagging and fire control line, LEO [b6 & b7C] observed lateral fire progression indicators, including grass stems, sooting and staining on rocks, and angles of char on boles of trees consistent with less intense fire behavior. The macro scale fire pattern indicators further to the south of the control line indicated that the fire progressed with higher intensity to the south and southwest. The angles of char and angles of scorch visible on most of the trees suggested that the fire advanced from within the timber and into the pasture to the southwest. LEO [b6 & b7C] reviewed several of the other photographs provided by [b6 & b7C] IMG [redacted], IMG [redacted] 1, IMG [redacted], IMG [redacted], and IMG [redacted] to confirm the direction of the smoke column as well. According to the photographs, at [redacted] PM, the smoke column appeared to be originating from within the timbered area to the west of McKinney Cree Road and blowing primarily to the southwest, over the pasture and towards the structures. The fire pattern indicators observed throughout the same area appeared to be consistent with the smoke direction as viewed from the air.

As the investigators continued downslope along the control line, they arrived at a powerline infrastructure that appeared to be significantly damaged. The powerline infrastructure consisted of what appeared to be two, parallel electrical phases which extended primarily north and south above a bundle of telecommunications lines. The powerline infrastructure was adjacent to McKinney Cree Road to the west, and approximately 1 to [redacted] feet higher than the road surface. A utility pole was standing approximately [redacted] feet south of the control line. The utility pole exhibited a significant amount of charring on its entire west side from the ground all the way to the top of the pole. The crossarm of the utility pole exhibited a significant amount of charring as well, and the crossarm



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appeared to be broken or damaged. The crossarm was hanging significantly lower than where it was expected to be secured near the top of the pole. While the crossarm appeared to be broken in half, each portion appeared to be suspended above the ground. Each of the electrical phase and insulator configurations still appeared to be intact and attached to each portion of the crossarm. It appeared that the entire crossarm was being suspended above ground by the telecommunications line where the telecommunications line was still secured to the utility pole. LEO [b6 & b7C] explained that a utility employee reported observing the crossarm fail and fall after he utility employee arrived at scene. LEO [b6 & b7C] added that the crossarm had since fallen even lower and that he had captured photographs of the earlier position of the crossarm. Looking to the south, LEO [b6 & b7C] observed the next utility pole upslope along the infrastructure. The southern utility pole was still standing and appeared to be mostly undamaged. Looking to the north, LEO [b6 & b7C] observed the telecommunications lines lying on the ground just north of the control line, and the electrical phases were tangled within the tree canopies as they extended north. It appeared that the northern utility pole was damaged or destroyed and lying on the ground.

In the area to the west of the utility pole with the broken crossarm, LEO [b6 & b7C] observed various macro scale fire pattern indicators which suggested the fire progressed from east to west, or northeast to southwest, upslope. There were visible angles of char on the boles of several of the trees. The angles of char were higher on the uphill side and lower on the downhill side, and the angles were primarily steeper than the slope. These were all indications that suggested the fire had advanced from an area near the powerline infrastructure or easement.

The investigators continued down the control line approximately 100 feet, to where the control line intersected with the western edge of McInney Cree Road this was the northeastern corner of the orange flagging perimeter. South of the control line, a steep cutbank separated McInney Cree Road from the powerline easement. The cutbank displayed backing fire pattern indicators from the top of the cutbank to the ditch at the western edge of the road. Angles of char were present on the boles of several trees, and a significant amount of foliage was still present in each of the canopies. The fire pattern indicators visible between the powerline easement and the edge of the road, along the cutbank, indicated that the fire had backed downhill from the powerline easement above. Just south of the cutbank was a small rectangular wooden sign displaying the number "1" on it. The sign was affixed to a metal T post which was standing out of the ground at the edge of the road. The sign and post exhibited significant charring and staining. Just west of the "1" sign, the burnt remains of white fire hose and associated couplings were visible upslope and to the west, south, and southeast as it encompassed the bowl-like feature of a small drainage ditch. LEO [b6 & b7C] explained that previous interviews with first at scene fire resources revealed that the hose lay was installed along the southern left flank of the fire during initial attack. LEO [b6 & b7C] also explained that the vegetation within and south of the bowl-like drainage ditch was still green and unburned when he arrived at scene.

The investigators continued south along McInney Cree Road until they reached the southeastern corner of the orange flagging perimeter. From there, the investigators traversed upslope to the west. LEO [b6 & b7C] observed several more sections of damaged and destroyed fire hose, couplings, nozzles, and the remains of what appeared to be charred hose packs scattered throughout the area. LEO [b6 & b7C] believed this to be an additional attempt by fire suppression crews to contain the southern flank of the fire during initial attack. Continuing upslope to the west, the investigators crossed underneath the powerline infrastructure again. Across a small drainage to the north, and just upslope from the powerline easement, LEO [b6 & b7C] observed several felled trees. The trees' one



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deciduous and two conifers displayed chainsaw cuts on each of their boles. The chainsaw cuts appeared to be made near breast height. LEO [b6 & b7C] noted that at least two of the chainsaw cuts appeared to contain charring, which indicated that the cuts may have been made prior to their exposure to fire. FPT [b6 & b7C] noted that the height of each of the chainsaw cuts was unusual and not a common practice in fire suppression felling operations. The investigators noted their observations and would further examine the trees when appropriate.

Continuing upslope and to the west and northwest, macro scale fire pattern indicators were visible in the canopies and on the boles of several of the trees throughout the area. The angles of scorch visible in the canopies were higher to the southwest and lower on the northeast. The angles of char on the boles of the trees appeared to exhibit similar features. Some free lying was observed as well, with the oak leaves and/or pine needles fallen and pointing to the south, southwest, and west. These macro scale fire pattern indicators were observed near the end of the orange flagging tape this was the southwest corner of the flagging perimeter. The macro scale fire pattern indicators observed throughout this entire area suggested that the fire advanced from north/northeast to south/southwest, originating from an area further to the north.

As the investigators traversed the terrain to the northwest and north, LEO [b6 & b7C] observed fire pattern indicators consistent with lateral fire progression and transition zones. Less consumption of ground fuels was observed in these areas, with small scrub oaks scattered throughout the area that still had foliage intact. Vast patches of star thistle, although damaged by fire, remained primarily intact as well. Grass stems and grass stem heads were visible. Several of the stems were lying on the ground pointing in various directions, but most of the grass stems and grass stem heads were pointing primarily to the south, southeast, or southwest. Regardless of direction, the micro scale fuels observed throughout the entire area indicated less intense fire behavior commonly observed in areas of lateral fire progression. The macro scale and micro scale fire pattern indicators throughout this area suggested that the fire progressed laterally from east/southeast to west/northwest. After examining the area north of the southwest corner of the orange flagging perimeter, LEO [b6 & b7C] arrived at the northwest corner of the perimeter, which concluded the clockwise examination of the suspected GOA.

Once the examination was completed, SA [b6 & b7C] secured the remaining portion of the GOA the western/southwestern portion with orange flagging tape. SA [b6 & b7C] obtained global positioning system GPS coordinates of each of the four corners of the GOA as well and would later install them over Google Earth aerial imagery. The investigators then returned to their vehicles and departed the area.

END OF REPORT

OFFICER'S NAME ID :	OFFICER'S SIGNATURE:	DATE:
[b6 & b7C]	[b6 & b7C]	/1/

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	USDA Forest Service	CASE NUMBER: 22-05-9652378
MEMORANDUM OF ACTIVITY TYPE OF ACTIVITY: McKinney Fire		DATE: 7/31/2022
NARRATIVE: On July 31, 2022, Special Agent (SA) b6 & b7C was assigned to the McKinney Fire as a member of an investigation team, designated to investigate the origin and cause of the fire. On the same day, SA b6 & b7C, SA b6 & b7C, Law Enforcement Officer (LEO) b6 & b7C, LEO b6 & b7C and Fire Prevention Technician (FPT) b6 & b7C travelled to the location where the fire was initially reported on July 29, 2022, at 2:12 PM. Upon arrival, they parked at the remnants of a structure and surrounding outbuildings, which appeared to be the location of the residence at 1137 McKinney Creek Road in Klamath River California. They walked to a fence line which primarily stretched northeasterly, mid slope on the hillside, and above the location where the fire was first reported and observed. Below the fence line, the fuels consisted of primarily grass pasture with intermixed star thistle, and scattered Oak trees. Above the fence line, consisted of mixed conifer stands, Oak trees and light brush. They traversed the fence line to the northeast, while LEO b6 & b7C oriented the group with a series of photographs previously obtained from Air Attack personnel b6 & b7C, when he first arrived on scene of the fire. They approached a small draw, which ran northwesterly on the terrain, where clear macro-scale fire pattern indicators suggested the fire had advanced uphill beyond the fence line to the northwest. Macro-scale fire pattern indicators observed included needle freeze with the needles and branches pointing to the north/northwest, suggesting that the wind was blowing from the south as the flaming front progressed through the area. Most of the canopies were either scorched or completely torched, indicating more extreme fire behavior typically seen in an advancing fire. They continued along the fence line to the northeast, where they encountered another small draw running northwesterly. Within this draw, lay several metal irrigation pipes. In this area, SA b6 & b7C observed fire pattern indicators suggesting the fire had spread lateral, across the hillside to the northeast. Those fire pattern indicators included grass stems oriented with the grass head pointing to the southwest, indicating fire progressed from southwest to northeast. SA b6 & b7C also observed protection around rocks in the area and when lifted, displayed a clear line of burnt vegetation on the southwest side with unconsumed fuels on the east side, indicating fire progressed from west to east. SA b6 & b7C also observed protection on grass clumps, where all the grass heads were consumed except for a few still standing on the northeast side, indicating fire progressed from southwest to northeast. They continued down a spur ridge to the southeast, where they encountered another fence line with handline and hose lay on the east side of the fence. SA b6 & b7C noticed that the soil and ground fuels had been drug to the east side of the handline along with the hose lay, indicating the fire was burning on the west side of the handline and hose lay when they were constructed. It should be noted, it is common for ground fuels to be drug to the opposite side of the handline from the fire, so fuel loading does not occur on the edge of the handline where the fire is located, thus the handline does not become compromised from taller flames. The same is common for the hose lay, so the hose does not become compromised from the fire. They continued down the handline on the spur ridge where orange flagging had been previously strung around the area witnesses first observed the fire. SA b6 & b7C observed lateral fire progression indicators, which suggested the fire burned across the slope, towards the handline and to the north. Those fire pattern indicators included grass stems, sooting/staining, and less intense fire behavior. Continuing down the handline, they came to a stretch of power lines which ran north to south and one power pole in particular south of the handline. The cross members of the power pole were damaged and had significantly lowered on the pole, however remained suspended off the ground. The pole was charred from the ground to the top, on the uphill side. The distribution lines also remained suspended in the air as well. Above the power pole, SA b6 & b7C observed a macro-scale angle of char on the trunk of a Pine tree. The angle of char was higher on the uphill side and lower on the downhill side, the angle was also steeper than the slope indicating fire had advanced uphill.		



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They continued to McKinney Creek Road along the bottom of the fire when it was first observed. There was a steep cutbank on the west side of the road which displayed backing fire pattern indicators near the top of the cut bank. There was an angle of char present on the trunk of several trees where the angle was level on the uphill side and a tall linier scorch on the downhill side, indicating fire backed down towards the road and a "vortex flame wrap" was created on the downhill side, indicating wind had caused the linier scorch on the downhill side, possibly from a wind shift. In the same area, there was a hose lay where several sections had been burned through, presumably this hose lay was place along the initial southern flank of the fire during initial attack. About one hundred feet to the south another hose lay was headed uphill from the road.

The investigators walked up hill along that hose lay and observed several sections of burnt hose. The hose lay was presumably a second effort to contain the southern flank of the fire. They continued up a small spur ridge to the west and SA [b6 & b7C] observed a transition zone and evidence of lateral fire progression to the south. There was less fuel consumption in that area with one- or two-foot-tall scrub oaks with their leaves still intact and minimal scorch. Continuing uphill, SA [b6 & b7C] observed angle of char on the trunks of several trees indicating the fire advanced uphill. SA [b6 & b7C] continued around to the area where he first encountered the handline and completed a clockwise walk around the suspected General Origin Area (GOA) of the fire.

SA [b6 & b7C] returned to the southwestern area of the suspected GOA and observed heavy sooting/staining on the northern side of multiple rocks, indicating the fire advanced from north to south near the southwest side of the suspected GOA. SA [b6 & b7C] utilized the Axon Capture application on his government issued cell phone to record multiple photographs during his examination, which were later uploaded to evidence.com under case number 22-05-9652378.

Refer to SA [b6 & b7C] 7/31/2022 photographs in evidence.com



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(Image depicts Google Earth photo with the green line as the approximate route of travel and the yellow spears indicating the approximate corners of the suspected GOA)

OFFICER'S NAME/ID #:

b6 & b7C

OFFICER'S SIGNATURE:

b6 & b7C

DATE:

8/1/2022

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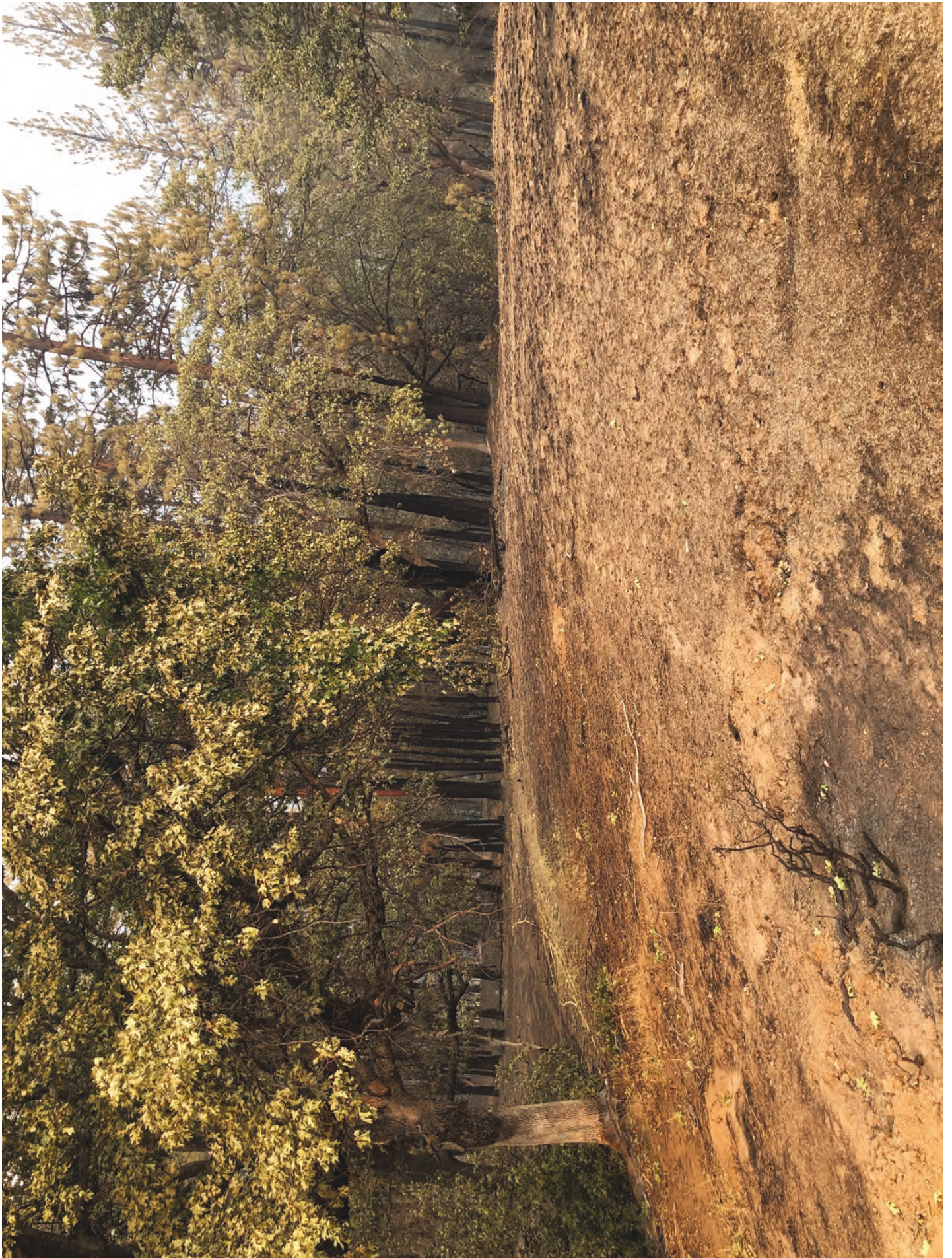












	USDA Forest Service	CASE NUMBER: 22-05-9652378
MEMORANDUM OF ACTIVITY		
TYPE OF ACTIVITY: McKinney Fire	DATE: 07/31/2022	
NARRATIVE:		
On July 31, 2022 I spoke to b6 & b7C who is the individual that took the aerial photographs from the USFS Air Attack plane during the initial response to the McKinney Fire. b6 & b7C agreed to meet with USFS Officer b6 & b7C. At approximately 3:40 p.m., USFS Officers b6 & b7C and b6 & b7C, USFS Fire Prevention Technician b6 & b7C, USFS Special Agent b6 & b7C and I arrived at 1137 McKinney Creek Rd. At this time, I observed the bright orange flagging still strung tight around the perimeter of the scene. I met with USFS officers that had been securing the scene since the previous day and was advised that the scene had not been disturbed. We hiked around the heel of the fire while periodically pausing to discuss fire pattern indicators, our location in relation to aerial photographs taken the previous day, and eventually arrived near the flagged-off area that was approximately one-acre in size. We continued to hike around the area in both directions while discussing fire pattern indicators. We agreed, based on the Air Attack aerial photographs, witness interviews, and fire pattern indicators, that the general origin area of the McKinney Fire was located within our area previously protected with the orange flagging. Prior to departing, I reinforced the roadside flagging (orange) with yellow crime scene tape. We also strung yellow crime scene tape across McKinney Creek Road just south of the general origin area and just north of the general origin area. At approximately 6:20 p.m., we departed the scene. At that time, USFS Officers b6 & b7C, and b6 & b7C remained in order to continue to secure the scene.		
OFFICER'S NAME/ID #: b6 & b7C	OFFICER'S SIGNATURE: b6 & b7C	DATE:
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TYPE OF ACTIVITY:		DATE:	
McKinney Fire		07/31/2022	
NARRATIVE:			
0700 to 1230: Travel to McKinney Fire from Spooner Summit Station on the Lake Tahoe Basin Management Unit. 1235: Check in to McKinney Fire and meet with Investigation Team 1235 to Appx. 1500: Review of 911 call log, review of LEO interview videos and notes 1500 to 1700: Arrive on scene of origin area and begin orientation of site and property in the surrounding area. Began overall walk around of origin area, comparing time stamp photos from Air Attack, to current burn patterns on the ground. Identified power lines in the area, and talked about witness statements, first on scene actions, and photo log pictures. 1700 to 1800: Continued the walk around of the origin area. One pass was made clockwise around the origin area, and one counter clockwise. At approximately 1750 I assisted in reinforcing the scene with additional flagging. 1800 to Appx. 1830: More flagging was placed to close off the area and road access to further secure. All Investigation Team personnel departed the scene.			
OFFICER'S NAME/ID #:	OFFICER'S SIGNATURE:	DATE:	
b6 & b7C	b6 & b7C	08/01/2022	
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	USDA Forest Service	MEMORANDUM OF ACTIVITY	CASE NUMBER:
			22-05-9652378
TYPE OF ACTIVITY:			DATE:
McKinney Fire			8/1/2022
NARRATIVE:			
On August 1, 2022, Special Agent (SA) [b6 & b7C], SA [b6 & b7C], Law Enforcement Officer (LEO) [b6 & b7C] and Fire Prevention Technician (FPT) [b6 & b7C] travelled to the previously identified General Origin Area (GOA) of the McKinney Fire, which is located at Global Positioning System (GPS) coordinates 41°49.868', -122°53.747'. When they arrived in the area, they checked in with LEO [b6 & b7C] who was stationed on Forest System Route (FSR) 46N45 (McKinney Creek Road) to protect the GOA. They continued to the GOA and entered the crime scene flagging surrounding the GOA at approximately 1:33 PM. It should be noted, it appeared there was precipitation in the area as the white ash observed the previous day displayed a grey color and looked compacted, rather than fluffy. In fact, light precipitation was occurring when they arrived and continued throughout the day.			
SA [b6 & b7C] had previously conducted a clockwise circle around the GOA, so SA [b6 & b7C] conducted a counterclockwise circle around the GOA observing macro-scale fire pattern indicators. As SA [b6 & b7C] walked up the right flank handline, he noticed a Pine tree where the trunk of the tree was located on the north side of the handline, the tree trunk bent over the handline and the canopy of the tree lay on the ground on the south side of the handline within the GOA. The canopy and trunk of the tree within the GOA displayed minimal fire effects, in fact, the canopy appeared green in color, with no obvious scorch. SA [b6 & b7C] continued up the handline and observed angle of char on the trunk of a Pine tree above the powerlines, where the angle of char was higher on the uphill side and lower on the downhill side, with the angle steeper than the slope, indicating fire had advanced uphill at that point.			
As SA [b6 & b7C] rounded the northwest corner and walked the western edge of the GOA, he observed staining/sooting on multiple rocks, with the sooting/staining on the downhill, or easterly facing side, indicating fire had progressed from east to west. SA [b6 & b7C] also observed foliage freeze¹ on the leaves of several Oak trees where the leaves were frozen, pointing southwesterly, indicating the wind was blowing from the northeast when fire progressed through the area.			
SA [b6 & b7C] continued around the southwest corner of the GOA and continued to the south. In this area, he observed heavy sooting/staining on the northeast side of rocks outside the GOA, indicating fire advanced from northeast to southwest at that point. In the interior of the GOA, SA [b6 & b7C] observed angle of char on several Oak trees indicating fire advanced from east to west. Continuing toward McKinney Creek Road, and southeast of the aforementioned Oak trees, SA [b6 & b7C] observed a stretch of one or two-foot-tall scrub oaks with their foliage still intact, indicating minimal fire behavior in that area, displaying the characteristics of a transition zone² and a shift from advancing fire to lateral fire progression. Once at McKinney Creek Road, SA [b6 & b7C] walked north and completed his counterclockwise circle.			
Once all investigators completed their circles of the GOA, they decided to begin processing the GOA from the southwest corner, utilizing red pin flags to identify advancing fire pattern indicators, yellow pin flags to identify lateral fire pattern indicators and blue pin flags to identify backing fire pattern indicators. They progressed mostly from southwest to northeast while zigzagging across the slope, northwest to southeast in a crescent shape.			

¹ Foliage freeze, in the advancing and lateral areas, takes place when leaves and small stems are heated, tend to become soft and pliable, and easily bent in the direction of the prevailing wind or drafts created by the fire. They often remain pointed in this direction (freeze), as they cool and stiffen following the passage of the flame front.

² Area of directional change based on variations in intensity.



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On the south side of the GOA, they identified an advancing run originating from a small draw with lateral fire progression beneath. The advancing fire progressed from northeast to southwest and the lateral fire progressed from north to south. On the north side of the draw, fire progressed from southeast to northwest and transitioned to advancing fire progression, travelling uphill from east to west. On the west side of the GOA, they identified lateral fire progression from east to west, transitioning to advancing fire progression in the same direction. It should be noted, SA **b6 & b7C** observed the fire seemed to have burned with greater intensity in the areas under Pine and Fir trees where needle cast fuel loading would be present. In the areas under Oak trees, where leaf litter fuel loading would be present, it appeared the fire burned with less intensity. In all, it appeared fire would advance through the needle cast and slow when it progressed into the leaf litter, transitioning from advancing to lateral fire progression.

They identified a prominent advancing run towards the center of the GOA which ran primarily easterly to westerly. North of that advancing run, they identified lateral fire pattern indicators, suggesting the fire progressed from south to north. As they continued their origin examination, they began to zig-zag across the slope, downhill from west to east, towards the powerlines and McKinney Creek Road. In the draw on the south side of the GOA they observed several cut trees. One had the tree still affixed to the stump, with considerable charring on the cut portion of the stump, indicating the stump had been cut prior to the fire occurring. The other stumps displayed a small amount of charring on the cut portions, however the cuts appeared old and were absent of any saw dust or shavings that would have been left behind if recently cut, indicating they had been cut prior to the fire occurring. Just below the stumps, a small, deceased bird was observed, which appeared to have been present for some time as the skull was visible, indicating it had decomposed.

South of the power pole, grass stem indicators were present, with the head of the stems pointing northerly, indicating fire backed from north to south at that point. Along the cutback above McKinney Creek Road, backing indicators were observed suggesting the fire backed from west to east. On a small slope above the powerlines and bent tree previously described, SA **b6 & b7C** and SA **b6 & b7C** observed sooting/staining on the northeastern side of multiple rocks, suggesting the fire progressed from northeast to southwest. In all the main fire progression appeared to be uphill in a west-southwesterly direction.

Around 4:45 PM, heavier and more consistent precipitation occurred, rendering fire effects difficult to identify and the investigators concluded their examination. SA **b6 & b7C** and FPT **b6 & b7C** arrived at the GOA a short time later and all investigators were on McKinney Road. LEO **b6 & b7C** noticed a kink or bend in the lower conductors travelling through the GOA near the northeast corner and the handline. SA **b6 & b7C** also noticed a section of what appeared to be charring on the upper conductor in the same general area. Once those observations were verbalized, SA **b6 & b7C** also observed the kink or bend and the suspected charring. At approximately 6:30 PM, all personnel left the area and checked out with LEO **b6 & b7C**. SA **b6 & b7C** utilized his Axon Capture application on his government issued cell phone to record photographs during their examination, which were later uploaded to evidence.com under case number 22-05-9652378.

Refer to SA **b6 & b7C** 8/1/2022 photographs in evidence.com
Refer to SA **b6 & b7C** 8/1/2022 MOA
Refer to FPT **b6 & b7C** 8/1/2022 MOA
Refer to LEO **b6 & b7C** 8/1/2022 MOA

OFFICER'S NAME/ID #:

b6 & b7C

OFFICER'S SIGNATURE:

b6 & b7C

DATE:

8/2/2022

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