

CAL FIRE



**CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
Sonoma-Lake-Napa Unit
1199 Big Tree Road
St. Helena CA, 94574**

INVESTIGATION REPORT

CASE NUMBER: 17CALNU010046

CASE NAME: Atlas

DATE: October 8, 2017

INCIDENT TYPE: Wildland Fire

INCIDENT INVESTIGATOR: Russell West
Fire Captain Specialist
Sonoma-Lake-Napa Unit

1 **1 - VIOLATIONS:**

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3 **Health and Safety Code 13001:** Every person is guilty of a misdemeanor who, through
4 careless or negligent action, throws or places any lighted cigarette, cigar, ashes, or
5 other flaming or glowing substance, or any substance or thing which may cause a fire,
6 in any place where it may directly or indirectly start a fire, or who uses or operates a
7 welding torch, tar pot or any other device which may cause a fire, who does not clear
8 the inflammable material surrounding the operation or take such other reasonable
9 precautions necessary to insure against the starting and spreading of fire.

10

11 **Public Resource Code 4293:** Except as otherwise provided in Sections 4294 to 4296 ,
12 inclusive, any person that owns, controls, operates, or maintains any electrical
13 transmission or distribution line upon any mountainous land, or in forest-covered land,
14 brush-covered land, or grass-covered land shall, during such times and in such areas
15 as are determined to be necessary by the director or the agency which has primary
16 responsibility for the fire protection of such areas, maintain a clearance of the respective
17 distances which are specified in this section in all directions between all vegetation and
18 all conductors which are carrying electric current:

19

20 (a) For any line which is operating at 2,400 or more volts, but less than 72,000 volts,
21 four feet.

22

23 (b) For any line which is operating at 72,000 or more volts, but less than 110,000 volts,
24 six feet.

25

26 (c) For any line which is operating at 110,000 or more volts, 10 feet.

27

28 In every case, such distance shall be sufficiently great to furnish the required clearance
29 at any position of the wire, or conductor when the adjacent air temperature is 120
30 degrees Fahrenheit, or less. Dead trees, old decadent or rotten trees, trees weakened
31 by decay or disease and trees or portions thereof that are leaning toward the line which

1 may contact the line from the side or may fall on the line shall be felled, cut, or trimmed
2 so as to remove such hazard. The director or the agency which has primary
3 responsibility for the fire protection of such areas may permit exceptions from the
4 requirements of this section which are based upon the specific circumstances involved.
5

6 **Public Resource Code 4421:** A person shall not set fire or cause fire to be set to any
7 forest, brush, or other flammable material which is on any land that is not his own, or
8 under his legal control, without the permission of the owner, lessee, or agent of the
9 owner or lessee of the land.

10
11 **Penal Code 192 (b):** Manslaughter is the unlawful killing of a human being without
12 malice.

13
14 (b) Involuntary—in the commission of an unlawful act, not amounting to a felony; or in
15 the commission of a lawful act which might produce death, in an unlawful manner, or
16 without due caution and circumspection. This subdivision shall not apply to acts
17 committed in the driving of a vehicle.

1 **2 - SUMMARY:**

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3 On October 8, 2017, at approximately 9:51 PM, a vegetation fire was reported to CAL
4 FIRE, St. Helena. The reporting party stated the fire was located near 3183 Atlas Peak
5 Road in the community of Napa, California. Local and state fire suppression resources
6 responded. Fire units contained the fire on November 17, 2017. The fire burned 51,624
7 acres, damaged 783 structures, and destroyed 120 structures. 6 fatalities resulted from
8 the fire.

9
10 Following my origin and cause investigation I, Russell WEST, determined the fire to be
11 the result of multiple starts. For identification purposes only, the fires were separated by
12 the names Atlas 1 and Atlas 2.

13
14 The Atlas 1 fire was caused when a large tree fell to the ground, breaking a conductor,
15 and causing multiple fires to start below.

16
17 The Atlas 2 fire was caused when a tree branch broke free from a tree, struck a
18 conductor causing a nearby insulator to break, causing multiple fires to start below.

1 **3 - SUSPECT:**

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3 S-1 Pacific Gas & Electric Corporation

4 77 Beale Street

5 San Francisco, CA 94105

6 (415) 973-2277

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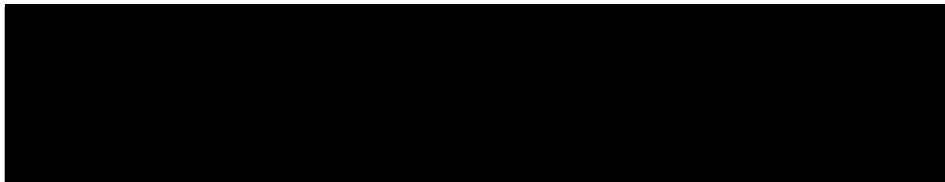
30

31

1 **4 – VICTIMS:**

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3 The Atlas fire burned approximately 51,624 acres. The fire damaged 783 structures,
4 destroyed 120 structures, and resulted in 6 fatalities (See attachment 30 for CAL FIRE
5 report on damaged and destroyed structures).

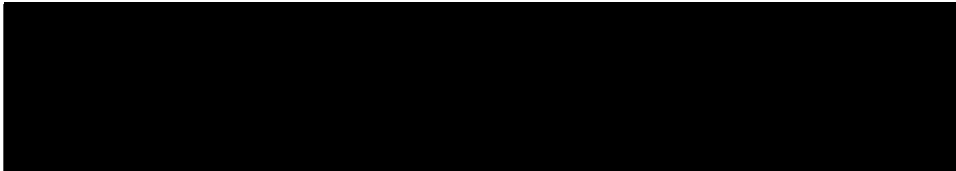
6
7 V-1 Sara RIPPEY



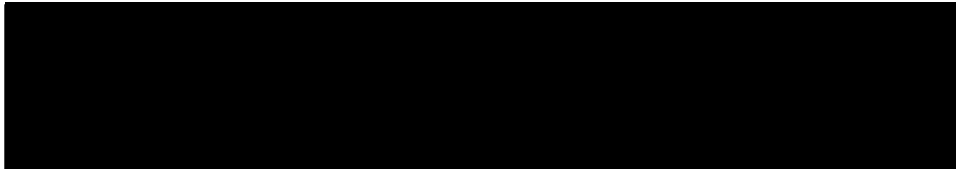
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12 V-2 Charles RIPPEY II



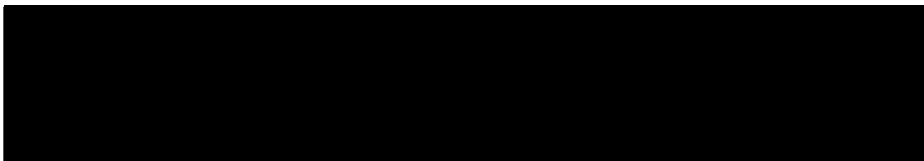
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17 V-3 Edward STONE



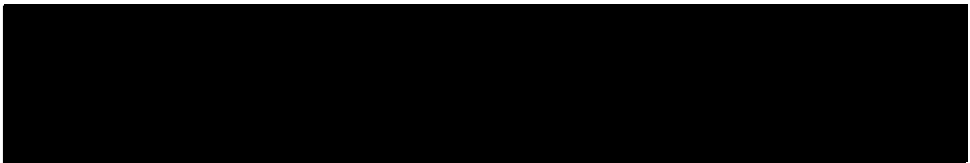
21
22 V-4 George CHANEY



26
27 V-5 Sally LEWIS

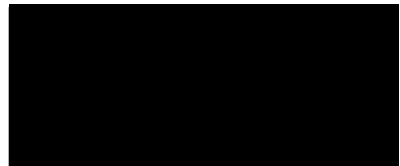


1 V-6 Teresa SANTOS



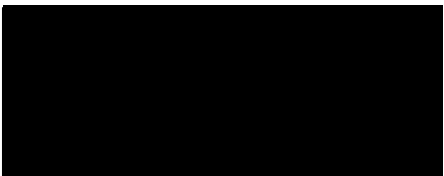
6 **WITNESSES:**

7 W-1 David CAUL



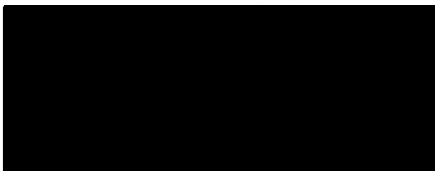
11 The original 911 caller of the fire.

13 W-2 Stewart FUNK



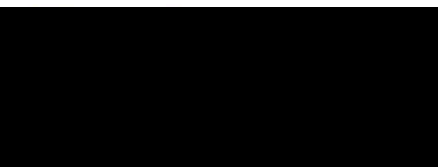
17 Lives north of CAUL and is a witness to the fire on October 8th 2017.

19 W-3 Michael PARMENTER



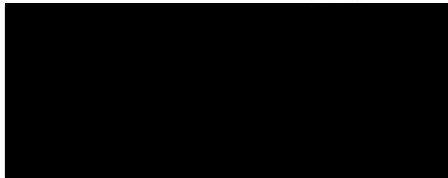
23 Owner of property where the battery, speaker box, and speaker wire were
24 located.

26 W-4 Scott GOLDIE



30 Saw the fire burning on both sides of Atlas Peak Road south of the Circle R
31 Ranch entrance.

1 W-5 Patrick ELLIOTT-SMITH



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5 Provided a photograph of the property at 4069 Atlas Peak Road taken on
6 October 9th, 2017.

7
8 W-6 Dave KAROLY

9 California Department of Forestry and Fire Protection Land Surveyor (LIDAR)
10 1300 U Street
11 Sacramento, CA 94244
12 (916)324-1644

13
14 W-7 Dan GREGORY

15 California Department of Forestry and Fire Protection Land Surveyor (LIDAR)
16 300 U Street
17 Sacramento, CA 94244
18 (916)323-1044

19
20 W-8 Jeff GAWRONSKI

21 California Department of Forestry and Fire Protection Land Surveyor (LIDAR)
22 1300 U Street
23 Sacramento, CA 94244
24 (916)323-1044

25
26 W-9 Garrett JACKSON

27 California Department of Forestry and Fire Protection Land Surveyor (LIDAR)
28 1300 U Street
29 Sacramento, CA 94244
30 (916)323-1044

31

1 W-10 Mark RHODES
2 Electrical Engineer
3 3460 Zion Canyon Ct.
4 Pleasanton, CA 94588
5 (925)922-1674
6

7 W-11 Jim NOLT
8 Electrical Engineer
9 107 Blue Canyon Way
10 Folsom, CA 95630
11 (916)988-2256
12

13 W-12 Mark PORTER
14 Arborist
15 6111 Alhambra Ave
16 Riverside, CA 92505
17 (909)816-8733
18

19 W-13 Peter LEUZINGER
20 Forester
21 California Department of Forestry and Fire Protection
22 1199 Big Tree Road
23 St. Helena, CA 94574
24 (707)967-1400
25

26 W-14 Jan SEARS
27 Pilot
28 California Highway Patrol
29 601 North 7th Street
30 Sacramento, CA 95811
31 (916)843-3000

1 W-14 Todd LABADIE
2 Flight Officer
3 California Highway Patrol
4 601 North 7th Street
5 Sacramento, CA 95811
6 (916)843-3000
7

8 **INVESTIGATORS:**

9 W-14 Jeremy WARD
10 Fire Investigator
11 California Department of Forestry and Fire Protection
12 118 S. Fortuna Boulevard
13 Fortuna, CA 95540
14 (707)725-4413
15

16 W-15 Mark HILLSCOTTER
17 Fire Investigator
18 California Department of Forestry and Fire Protection
19 1809 Fairlane Road
20 Yreka, CA 96097
21 (530)842-3516
22

23 W-16 Matt GILBERT
24 Fire Investigator
25 California Department of Forestry and Fire Protection
26 785 Mountain Ranch Road
27 San Andreas, CA 95249
28 (209)754-3831
29
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31

1 W-17 Michael KEATING
2 Fire Investigator
3 California Department of Forestry and Fire Protection
4 697 Highway 36
5 Susanville, CA 96130
6 (530)257-4171

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1 **5 - EVIDENCE:**

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3 A series of photographs were taken and are included in the attachments section.

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5 See the attached evidence log (LE-75e) for a listing of evidence collected see
6 attachment 21 and 22.

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8 All documentation provided by PG&E was booked into evidence in the Sonoma-Lake-
9 Napa Unit evidence storage under incident number (17CACNR000307).

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1 **6 – CONDITIONS:**

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3 During the first burning period the fire grew to over 20,000 acres. The rate of spread
4 was from a number of factors. Remote Automated Weather Station (RAWS) located in
5 Napa (N38.474872, W122.264800) recorded a northerly wind influence was present for
6 the majority of the period, recorded wind gusts peaked at 32 mph, winds averaged 8.8
7 mph, and relative humidity averaged 23% with a minimum recording of 15%. Extreme
8 fire behavior was observed with critical rates of spread, high flame lengths, and long
9 range spotting. During the first burning period, the Sonoma-Lake-Napa Unit had
10 numerous similar major fires burning in multiple counties.

11
12 **Fire Behavior**

13
14 Extreme fire behavior was observed during the first and into the second operational
15 period. Flame lengths in excess of 100 feet were observed. The conditions exceeded
16 fire suppression capabilities, and crews moved to life safety mode assisting with
17 evacuations. The fire traveled in a southerly direction. The fire reached the Silverado
18 Country Club area of rural Napa (approximately 4 miles) within the first two hours after
19 ignition.

20
21 **Weather**

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23 Below are the weather readings from the RAWS locate in Napa (N38.474872,
24 W122.264800) on October 8th and 9th 2017. The RAWS is located approximately 4.5
25 miles north of the origin area of the fire.
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Atlas Peak California

Daily Summary for

October 8, 2017

Hour of Day	Total Solar Rad. ° ly.	Ave. Wind V. Dir. Max. mph Deg mph	Air Temperature Mean Deg. F.	Fuel Temperature Mean Deg. F.	Fuel Moisture Mean Percent	Relative Humidity Mean Percent	Dew Point Deg. F.	Wet Bulb Deg. F.	WCI/ HI ' Deg. F.	Total Precip. inches
1 am	0.0	4.0 32 10.0	63.0	60.0	6.3	43	40	50		0.00
2 am	0.0	5.0 26 8.0	63.0	60.0	6.8	45	41	51		0.00
3 am	0.0	6.0 34 12.0	62.0	59.0	7.0	43	39	49		0.00
4 am	0.0	4.0 68 13.0	61.0	58.0	7.1	39	36	48		0.00
5 am	0.0	5.0 48 16.0	61.0	58.0	7.1	36	34	47		0.00
6 am	0.3	6.0 49 13.0	62.0	58.0	7.3	35	34	47		0.00
7 am	9.4	5.0 4 12.0	65.0	62.0	7.2	29	32	48		0.00
8 am	26.8	8.0 359 14.0	65.0	68.0	7.2	29	32	48		0.00
9 am	43.3	7.0 18 20.0	69.0	74.0	6.4	23	30	49		0.00
10 am	56.9	10.0 12 21.0	71.0	77.0	6.0	21	29	49		0.00
11 am	65.3	9.0 28 21.0	74.0	84.0	5.3	14	22	49		0.00
12 pm	68.5	10.0 20 23.0	74.0	84.0	4.7	13	20	48		0.00
1 pm	66.5	10.0 31 19.0	74.0	84.0	4.2	13	20	48		0.00
2 pm	58.8	10.0 30 21.0	74.0	83.0	3.9	14	22	49		0.00
3 pm	46.2	8.0 11 20.0	73.0	81.0	3.6	14	21	48		0.00
4 pm	30.3	5.0 5 18.0	71.0	76.0	3.5	15	21	47		0.00
5 pm	12.3	8.0 344 16.0	67.0	67.0	3.5	16	19	45		0.00
6 pm	0.4	9.0 0 19.0	64.0	62.0	3.7	16	17	43		0.00
7 pm	0.0	13.0 1 26.0	65.0	62.0	3.7	16	18	44		0.00
8 pm	0.0	11.0 29 32.0	64.0	62.0	3.7	15	15	43		0.00
9 pm	0.0	13.0 21 30.0	62.0	60.0	3.7	17	17	42		0.00
10 pm	0.0	13.0 14 28.0	62.0	59.0	3.9	16	15	42		0.00
11 pm	0.0	17.0 7 31.0	61.0	59.0	3.9	15	13	41		0.00
12 am	0.0	14.0 18 32.0	60.0	58.0	3.9	16	14	41		0.00

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Atlas Peak California

Daily Summary for

October 9, 2017

Hour of Day	Total Solar Rad.	Ave. Wind	Dir.	Max. Wind	Air Temperature	Fuel Temperature	Fuel Moisture	Relative Humidity	Dew Point	Wet Bulb	Total Precip.
Ending at L.S.T.	° ly.	mph	Deg	mph	Mean Deg. F.	Mean Deg. F.	Mean Percent	Mean Percent	Deg. F.	Deg. F.	inches
1 am	0.0	14.0	15	29.0	60.0	58.0	3.9	16	14	41	0.00
2 am	0.0	14.0	29	30.0	60.0	57.0	3.9	16	14	41	0.00
3 am	0.0	15.0	27	34.0	59.0	57.0	3.9	16	13	40	0.00
4 am	0.0	13.0	4	32.0	59.0	56.0	4.0	16	13	40	0.00
5 am	0.0	9.0	20	25.0	58.0	55.0	4.1	17	13	40	0.00
6 am	0.3	7.0	27	19.0	57.0	54.0	4.0	17	13	39	0.00
7 am	8.7	8.0	46	20.0	61.0	59.0	4.1	16	15	41	0.00
8 am	26.2	7.0	54	19.0	65.0	66.0	4.3	15	16	44	0.00
9 am	43.0	8.0	62	21.0	68.0	72.0	4.2	14	17	45	0.00
10 am	55.7	6.0	43	16.0	70.0	78.0	4.0	13	17	46	0.00
11 am	63.7	5.0	10	12.0	74.0	85.0	3.7	12	18	48	0.00
12 pm	67.2	5.0	72	12.0	75.0	87.0	3.3	11	17	48	0.00
1 pm	64.3	4.0	56	10.0	77.0	90.0	3.1	11	19	49	0.00
2 pm	49.4	5.0	70	11.0	74.0	83.0	3.1	12	18	48	0.00
3 pm	27.8	4.0	92	7.0	72.0	77.0	3.0	15	22	48	0.00
4 pm	11.1	5.0	180	11.0	69.0	70.0	3.1	18	24	47	0.00
5 pm	2.0	11.0	210	14.0	67.0	65.0	3.2	17	21	45	0.00
6 pm	0.1	10.0	230	19.0	65.0	63.0	3.2	18	20	44	0.00
7 pm	0.0	13.0	226	16.0	64.0	61.0	3.4	21	23	45	0.00
8 pm	0.0	13.0	223	16.0	63.0	60.0	3.6	21	22	44	0.00
9 pm	0.0	11.0	222	16.0	62.0	60.0	3.7	24	25	44	0.00
10 pm	0.0	6.0	248	10.0	63.0	58.0	3.9	28	29	46	0.00
11 pm	0.0	5.0	320	7.0	63.0	59.0	4.2	26	28	46	0.00
12 am	0.0	3.0	333	6.0	62.0	58.0	4.4	24	25	44	0.00

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1 **7 – EQUIPMENT:**

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3 Pacific Gas and Electric Corporation Power Equipment and American Telephone and
4 Telegraph communication lines were located in the origin area and collected as
5 evidence.

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8 - PROPERTY:

The Atlas fire originated on the following properties:

Atlas 1

APN: 032-550-031

Address: 3683 Atlas Peak Road

Napa, CA 94558

This property is located on the Circle R Ranch on Atlas Peak Road.

Atlas 2

APN: 032-550-024

Address: 3683 Atlas Peak Road

Napa, CA 94558

This property is located on the Circle R Ranch on Atlas Peak Road.

For a list of properties damaged or destroyed refer to the CAL FIRE report on damaged and destroyed structures (See attachment 30).

1 **9 - NARRATIVE:**

2

3 **On October 8, 2017**

4 At approximately 9:51 PM, a vegetation fire was reported to CAL FIRE, St. Helena. The
5 reporting party stated the fire was located near 3183 Atlas Peak Road in the community
6 of Napa, California. Local and state fire suppression resources responded.

7

8 During the time the fire was reported multiple other fires were being reported across the
9 Sonoma-Lake-Napa Unit. The northern part of the state was under a red flag warning.

10

11 Initial responding resources were unable to make access up Atlas Peak Road due to
12 the fire's intensity and numerous downed trees and conductors blocking the roadway.

13

14 I, Russell WEST responded to the incident from Santa Rosa, California. While
15 responding to the fire I heard the Atlas incident commander (Atlas IC) requesting
16 additional resources and evacuations along Atlas Peak Road. As I was driving on
17 Highway 121 at the Sonoma and Napa County border, I could see a large glow across
18 the valley in the direction of Atlas Peak Road.

19

20 I arrived at the fire at approximately 11:00 PM. I started to make access up Atlas Peak
21 Road. As I reached the intersection of Atlas Peak Road and Hillcrest Drive I could see
22 numerous structures on fire along the roadway. I continued to drive up Atlas Peak Road
23 from Hillcrest Drive. I came across firefighters attempting to cut a large tree blocking the
24 entire roadway at the 2400 block of Atlas Peak Road. I heard Atlas IC calling for
25 additional evacuations. I realized I was not going to be able to reach the origin of the fire
26 and with numerous structures in the fires path, I decided to assist with evacuations. I
27 continued to assist with evacuations throughout the night and into following morning.

28

29 **On October 9, 2017**

30 At approximately 9:00 am, I met with CAL FIRE Investigator Mark HILLSCOTTER.

31 HILLSCOTTER attempted to call the original 911 caller of the fire but was unsuccessful.
LE80 (Rev. 7/2011)

1 HILLSCOTTER and I drove up Atlas Peak Road from Monticello Road. As we drove up
2 Atlas Peak Road we looked at the macro fire pattern indicators. The indicators I saw
3 included, without limitation to, protection, angle of char, sooting, and staining. The fire's
4 progression was from the north to the south. HILLSCOTTER and I continued
5 northbound on Atlas Peak Road looking at the fire pattern indicators.

6
7 HILLSCOTTER and I reached the original 911 caller's address [REDACTED].
8 The fire pattern indicators showed the fire progressed from the north to the south.
9 HILLSCOTTER and I continued up (north) Atlas Peak Road from [REDACTED] Atlas Peak
10 Road.

11
12 HILLSCOTTER and I reached the address of [REDACTED] Atlas Peak Road. The fire pattern
13 indicators presented an area of low intensity burning, transitioning into high intensity
14 and head fire from the south to the north. HILLSCOTTER and I continued to look at fire
15 pattern indicators in the area.

16
17 The area HILLSCOTTER and I identified was in a vineyard south the address of [REDACTED]
18 Atlas Peak Road. Within the vineyard, HILLSCOTTER and I located a car battery sitting
19 on the ground at the base of a row of vines. The battery had a speaker box connected
20 to it with "jumper cable" style connectors ([REDACTED] Atlas Peak Road Evidence Collection
21 IMG_0001.JPG). The speaker box was attached to a metal post in the row of vines
22 ([REDACTED] Atlas Peak Road Evidence Collection IMG_0002.JPG). A second speaker box
23 was attached to the first speaker box by speaker wire and was connected to the vine
24 approximately 100 feet away ([REDACTED] Atlas Peak Road Evidence Collection
25 IMG_0007.JPG). The speaker wire connecting the two speakers was lying on the
26 ground, unprotected ([REDACTED] Atlas Peak Road Evidence Collection IMG_0009.JPG).
27 Approximately 30 feet from the 1ST speaker box, the speaker wire was completely
28 severed. Next to the severed end of the wire was a length of wire approximately 4
29 inches in size ([REDACTED] Atlas Peak Road Evidence Collection IMG_0011.JPG). The section
30 of wire was heavily damaged and had exposed wire in multiple sections. Next to the
31 wire beyond the severed section was burned vegetation. Adjacent to the wire was a

1 section of "weed wacker" twine ([REDACTED] Atlas Peak Road Evidence Collection
2 IMG_0015.JPG). The twine appeared to be fresh and did not appear to be damaged by
3 the elements. The vegetation around the vines was minimal and had been cut low to the
4 ground. The vegetation appeared to have been freshly cut.

5
6 I flagged off the vineyard to prevent anyone from entering the area and disturbing the
7 fire pattern indicators. I also called Brothers in Law Security to provide 24 hour security
8 of the vineyard. I waited until security arrived before HILLSCOTTER and I left for the
9 evening.

10
11 **On October 10, 2017**

12 At approximately 8:00 AM HILLSCOTTER and I returned to [REDACTED] Atlas Peak Road.
13 HILLSCOTTER and I walked around the area multiple times both clockwise and counter
14 clockwise. HILLSCOTTER and I placed colored pin flags next to fire pattern indicators.
15 The fire pattern indicators I observed included without limitation, white ash, sooting,
16 staining, protection, angle of char, stem fall. We placed colored pin flags next to the fire
17 pattern indicators. The different colored pin flags represented red for advancing, white
18 for items of interest, yellow for lateral or transition movements and blue for backing.

19
20 **On October 11, 2017**

21 I talked to the original 911 caller (David CAUL). CAUL told me the following in
22 summary: he was at his house located at [REDACTED] the night the fire
23 started. He was worried about his power pole leaning so he walked outside to look at it.
24 At approximately 9:35 PM he saw a "reddish-orange" glow to the north of his residence,
25 approximately one mile away. Within approximately 15 seconds the glow grew in size
26 and a smoke cloud began to form above the glow. At approximately 9:58 PM CAUL
27 called 911 to report the fire. CAUL also told me he had a power outage at his house at
28 approximately 9:35 PM, and he said the power was restored approximately 5 minutes
29 later. CAUL provided me the one picture he took and a written statement (See
30 Attachment 2).

1 I drove to CAUL's residence ([REDACTED]). From his residence I looked in the
2 direction he took the pictures. CAUL's residence is located south of the Circle R Ranch
3 as well as the location I located the battery, speaker wire, and speaker box.
4

5 At 1:45 PM CAL FIRE's survey team (David KARLOY and Danny GREGORY) arrived to
6 LIDAR (light imaging, detection, and ranging) the scene (See Attachment 15).
7

8 I talked to Michael PARMENTER, the homeowner at [REDACTED]
9 PARMENTER told me the following in summary: the night of the fire he said his lights
10 were flickering on and off between approximately 9:30 PM and 10:00 PM. He told me he
11 lost power at his residence, and his wife looked out the window and saw a fire burning
12 near the entrance to the Circle R Ranch. His wife showed him the fire she saw.
13 PARMENTER told me the fire was growing in size and was burning in a southern
14 direction. He woke up his tenant (Scott GOLDIE) located next door at [REDACTED]
15 Road. I asked PARMENTER when the speaker in the vineyard was installed, and he
16 told me it was put in a few weeks prior to the fire. I asked him when the last time the
17 grass was "weed wacked", and he told me it was done a few weeks prior. He told me he
18 has two part-time workers who manage the vineyard.
19

20 **On October 12, 2017**

21 I talked to Stewart FUNK. FUNK was at his residence located at [REDACTED]
22 the night the fire started. FUNK told me the following in summary: at approximately 9:30
23 PM he got home and did not see or smell any smoke. His wife walked upstairs in their
24 house and she saw a glow to the north. FUNK looked at the glow and could see it
25 beyond the house to the north of him, and he believed the address was 3369 Atlas
26 Peak Road. FUNK took two photos with his cellphone at approximately 9:58 PM (See
27 Attachment 3). FUNK also took 2 additional photos as he drove down Atlas Peak Road
28 from his residence (See Attachment 3), one at approximately 10:20 PM and one at
29 approximately 10:36 PM. FUNK provided me a picture he took of the glow
30 approximately nine minutes after first seeing the glow (See attachment 3). He said the
31 fire was moving really fast. The flames were approximately 50 feet high and burning an

1 area approximately 150 yards in size from what he could see.

2
3 CAL FIRE hired Mark RHODES to examine the battery, speaker box, and speaker wire
4 located in the vineyard at [REDACTED] Atlas Peak Road. RHODES is a certified electrical
5 engineer.

6
7 **On October 13, 2017**

8 Mark RHODES arrived to examine the battery, speaker box, and speaker wire.
9 RHODES examined the equipment and told me it was a possibility the exposed wiring
10 could have caused a fire but further examination would be needed.

11
12 **On October 15, 2017**

13 I talked to Scott GOLDIE and he told me the following in summary: On October 8, 2017,
14 at approximately 10:00 PM, PARMENTER went to his house and woke him up.
15 PARMENTER informed GOLDIE of the fire. GOLDIE got into his vehicle and attempted
16 to evacuate down Atlas Peak Road. As he passed the entrance to the Circle R Ranch
17 he saw fire on both sides of the roadway. He did not feel the roadway was safe to
18 continue down so he turned around and went back to his residence.

19
20 I talked to Patrick ELLIOTT-SMITH and he told me the following in summary: he lives at
21 [REDACTED]. On October 8, 2017, at approximately 9:30 PM, the lights went
22 out. He drove south on Atlas Peak Road to find the source for the power going out. As
23 he drove south on Atlas Peak Road from his residence he saw a glow in the distance to
24 the south. At approximately 7:00 AM the following morning, he went to PARMENTER's
25 house and took a photograph looking south towards the Circle R Ranch (See
26 Attachment 4). The area previously identified at [REDACTED] Atlas Peak Road had not burned
27 until the following day after the fire started. ELLIOTT-SMITH provided me the picture he
28 took from PARMENTER's residence (See Attachment 4).

29
30 Based on witness statements and the photograph taken by ELLIOTT-SMITH (See
31 attachment 4), I determined the battery, speaker boxes, and wiring located in the
LE80 (Rev. 7/2011)

1 vineyard at [REDACTED] Atlas Peak Road was could not be the ignition source of the Atlas Fire.
2 I believe this area was a result of a slope reversal and the fire transitioned from a
3 backing fire to a head fire burning from the south to the north. As hillsides burn, I have
4 witnessed ignitable material catch fire and roll down the hillside igniting the vegetation
5 below. I believe the area I located the battery, speaker wire, and speaker was not the
6 origin area of the Atlas Fire, but a spot fire from the main fire that burned the morning of
7 October 9, 2017.

8
9 At approximately 3:00 PM, CAL FIRE Investigator Matthew GILBERT arrived at the fire
10 to assist with the origin and cause investigation. Based off of witness statements from
11 PARMENTER and GOLDIE, GILBERT and I walked the area near the entrance of the
12 Circle R Ranch (3683 Atlas Peak Road) looking at the fire pattern indicators. The
13 indicators I saw included, without limitation, protection, staining, freezing, white ash, and
14 angle of char. The area burned presented lower fire intensity than the surrounding area.
15 GILBERT and I flagged off this area to prevent the fire pattern indicators from being
16 disturbed. The area was located adjacent to the roadway on Atlas Peak Road, south of
17 the entrance to the Circle R Ranch.

18
19 At approximately 7:00 PM, I relocated the security guard to Atlas Peak Road, south of
20 the entrance to the Circle R Ranch to provide 24 hour security.

21
22 On the evening of October 15, 2017, CAL FIRE Investigator Shawn ZIMMERMAKER
23 was contacted by the California Highway Patrol (CHP). CHP told ZIMMERMAKER they
24 were flying in one of their airplanes the night the fire started. The Flight Officer (Todd
25 LABADIE) recorded the fire from when they arrived until they left. CHP provided
26 ZIMMERMAKER a copy of the recording (See Attachment 7).

27

28 **October 16, 2017**

29 I reviewed the video CHP took on October 8, 2017. The video showed two fires burning
30 along Atlas Peak Road, south of the Circle R Ranch. One fire was just south of the
31 entrance of the Circle R Ranch and did not grow in size during the approximately 20

1 minute long video. This was the area GILBERT and I identified the day prior. The
2 second fire was south of the smaller fire and was the larger of the two fires. The larger
3 fire was burning from the north to the south, and burning multiple structures. The fire
4 was burning in a "V" pattern downhill towards the Silverado Country Club. The CHP
5 video provided a latitude and longitude of where the video was focused on.

6
7 GILBERT and I walked the area where the second, larger fire was located in the CHP
8 video. I saw fire pattern indicators including, without limitation, sooting, staining, angle of
9 char, protection, and freezing. The second area was approximately 1/8 mile south of the
10 smaller fire's location. The area was located behind a locked gate. For identification
11 purposes, I separated and called the southern fire on Atlas Peak Road "Atlas 1" and the
12 northern fire "Atlas 2".

13
14 GILBERT and I continued walking Atlas 1 looking at fire pattern indicators. I identified
15 an area approximately 100 feet by 100 feet in size which I determined to be the General
16 Origin Area (GOA). The area was located approximately 100 feet away from the
17 roadway and behind a locked gate.

18
19 We continued to look at fire pattern indicators. We located an area approximately 50
20 feet by 30 feet in size, determined to be the Specific Origin Area (SOA). We observed
21 and placed colored pin flags next to fire pattern indicators. The different colored pin
22 flags represented red for advancing, white for items of interest, yellow for lateral or
23 transition movements, and blue for backing.

24
25 Within the SOA, I observed a large tree lying on its side (See Atlas 1 Origin Photo
26 IMG_0011.JPG). The tree had communication lines underneath it. The communication
27 lines were under tension and connected to both power poles on either side of the
28 downed tree. I observed one conductor above the downed tree still connected to power
29 poles on either side of the downed tree (See Atlas 1 Origin Photos IMG_0058.JPG and
30 IMG_0103.JPG). I observed the second conductor tangled in the down tree and was
31 broken into multiple sections (See Atlas 1 Origin Photo IMG_0019.JPG). The damaged

1 conductor was in contact with multiple Madrone trees. The Madrone trees had unusual
2 fire pattern indicators. The Madrone trees had charring on the branch collar of the trees
3 but not where the branches extended. In some locations the branches burned off of the
4 trunk and fell to the ground (See Atlas 1 Origin Photo IMG_0085.JPG - IMG_0087.JPG).
5 The branches and trunk only had damage where the branch connected to the tree trunk.
6 One section of the Madrone tree had the conductor draped over a branch approximately
7 10 feet above the ground. That branch had severe charring only in the area where the
8 conductor was located (See Atlas 1 Origin Photo IMG_0096.JPG). On the side of the
9 trunk leading up to the conductor was a deep split in the trunk of the tree. The split went
10 from the ground up to the area the conductor was located (See Atlas 1 Origin Photo
11 IMG_0120.JPG).

12
13 I looked at the ends of the broken conductor. I saw beading on the ends of sections of
14 the damaged conductor (See Atlas 1 Origin Photo IMG_0065.JPG). The beading
15 indicated to me the conductor was energized when it came to rest. In the areas I
16 observed the beading, I saw metal "slag" on the ground (See Atlas 1 Origin Photo
17 IMG_064.JPG). The metal "slag" indicated to me the conductor was energized when it
18 came to rest. I also saw a large fulgurite on the ground with a small piece of conductor
19 sticking out of it (See Atlas 1 Origin Photo IMG_0114.JPG). The fulgurite indicated to
20 me the conductor was energized when it came in contact with the ground.

21
22 I walked the section of conductors to the north and the south of the damaged
23 conductors. I did not locate any other compromised electrical distribution system
24 components.

25
26 GILBERT and I went to the fire identified as Atlas 2. We walked the area looking at fire
27 pattern indicators. Fire pattern indicators I observed included without limitation, sooting,
28 staining, protection, freezing, white ash, and angle of char. We identified an area
29 approximately 300 feet by 50 feet in size we determined to be the GOA. The GOA was
30 located adjacent to Atlas Peak Road on the Circle R Ranch property and below
31 conductors and communication lines.

1 We continued to look at fire pattern indicators. We observed and placed colored pin
2 flags next to fire pattern indicators. The different colored pin flags represented red for
3 advancing, white for items of interest, yellow for lateral or transition movements, and
4 blue for backing. We located an area approximately 100 feet by 50 feet in size,
5 determined to be the SOA.

6
7 Within the SOA I observed one of the two conductors was damaged at the power pole
8 directly to the north of the SOA. The conductor insulator had broken off the power pole
9 to the north of the SOA. The conductor was suspended approximately 20 feet in the air.

10 The conductor sagged below the communication line and crossed over it at two
11 locations (See Atlas 2 Origin Photo IMG_0079.JPG). I observed a communication line
12 on the ground broken into two pieces (See Atlas 2 Origin Photos IMG_0102.JPG and
13 IMG_0104.JPG). The communication line broke mid span between two power poles.
14 The communication line was still attached to the poles to the north and south of the
15 broken line. To the south of the power pole was a connection box. The communication
16 line had been stretched, and all of the lines were disconnected. This indicated to me the
17 communication line was under extreme tension and was pulled from the box. I observed
18 the second communication line was still suspended in the air and attached to the poles
19 on either side of the SOA. I walked the span of communication line suspended above
20 the SOA. I saw the plastic sheathing to the communication lines was melted in multiple
21 locations and had the aluminum protector exposed (See Atlas 2 Origin Photo

22 IMG_0089.JPG). I observed a large tree branch broken and suspended in the tree's
23 canopy approximately 10 feet above the ground (See Atlas 2 Origin Photo
24 IMG_0054.JPG). The tree branch was suspended in the air above the SOA. I saw the
25 location where the tree branch broke from the tree. The tree branch was connected to
26 the tree above the conductors before the branch failed. I observed charring on a tree
27 approximately 8 feet in the air (See Atlas 2 Origin Photo IMG_0062.JPG). The charring
28 in the tree was at the "V" of two branches (See Atlas 2 Origin Photo IMG_0063.JPG).

29 The tree did not have any fire damage from the ground leading up to the charring, nor
30 did it have fire damage above the charring. I looked at where the conductors crossed
31 the communication lines. I observed the messenger wires around the communication

1 lines were completely severed (See Atlas 2 Origin Photo IMG_0067.JPG).

2
3 **October 17, 2017**

4 CAL FIRE's survey team arrived at scene to LIDAR the area of origin identified as Atlas
5 2 (See Attachment 17).

6
7 CAL FIRE hired Mark PORTER, a certified arborist, to examine the trees located within
8 the SOA of Atlas 1 and Atlas 2.

9
10 PORTER arrived at the fire to look at the damaged trees.

11
12 PORTER looked at the downed tree on the Atlas 1 fire. He said the tree has multiple
13 defects and concluded that it should have been identified as a hazard tree and removed
14 (refer to attachment 12 for more details). He looked at the marking on the downed tree
15 and he was unsure of what the exact marking meant (See Atlas 1 Origin Photo
16 IMG_0007.JPG). Other trees in the area were marked; however they did not have
17 similar markings. The paint used on the other tree's markings was similar in color (See
18 Atlas 1 Origin Photo IMG_0116.JPG). The vegetation below the trunk of the tree had
19 what appeared to be spray over from the paint when it was applied to the tree (See
20 Atlas 1 Evidence Collection Photo IMG_034.JPG). I believe the marking was applied to
21 the tree after it had fallen. For full report completed by PORTER see attachment 12.

22
23 PORTER looked at the tree and the broken tree branch at the Atlas 2 fire. PORTER
24 said that the tree branch broke at a codominant stem and that the tree had visible
25 defects. For full report completed by PORTER see attachment 12.

26
27 Peter LEUZINGER arrived and conducted an evaluation of the subject trees.
28 LEUZINGER is a CAL FIRE employee and a Registered Professional Forester.
29 LEUZINGER looked at the tree located on Atlas 1. LEUZINGER said the tree failed at
30 the base of the tree. LEUZINGER said the wood at the base of the tree was "spongy"
31 and that there were signs of root rot. The Madrone tree showed signs of being

1 energized with electricity. LEUZINGER looked at the tree at Atlas 2. LEUZINGER said
2 the tree appeared healthy although it did show signs of repeated pruning that could
3 have contributed to the failure of the branch. For full report completed by LEUZINGER
4 see attachment 18.

5
6 **October 18, 2017**

7 CAL FIRE hired Jim NOLT to examine the electrical system located in the SOA of both
8 Atlas 1 and Atlas 2 Fires. NOLT is a certified electrical engineer.

9
10 NOLT arrived and conducted an evaluation of the electrical system.

11
12 NOLT started his examination on Atlas 2. NOLT looked at the damaged conductor, its
13 placement suspended in the air, and contact with the communication line (See Atlas 2
14 Origin Photo IMG_0079.JPG). NOLT looked at the damaged communication line on the
15 ground (See Atlas 2 Origin Photo IMG_0090.JPG). NOLT was unsure if the melted
16 plastic on the communication line lying on the ground was from fire damage or being
17 charged with electricity from the conductor coming in contact with it. NOLT looked at the
18 broken ends of the communication line lying on the ground (See Atlas 2 Origin Photo
19 IMG_0102.JPG and IMG_0111.JPG). NOLT said the break was from a tension break.
20 NOLT had GILBERT and I stretch out the communication line to see where the break
21 would have happened in the span. After laying out the line, the break placement was at
22 the tree with the charring at the "V" of two branches (See Atlas 2 Origin Photo
23 IMG_0063.JPG). NOLT looked at the tree branch suspended in the tree canopy (See
24 Atlas 2 Origin Photo IMG_0054.JPG). NOLT saw burn marks on the bottom of the tree
25 branch where the branch came in contact with the conductor after breaking free from
26 the tree (See Atlas 2 Evidence Collection IMG_0032.JPG). NOLT looked at the
27 communication line still suspended in the air. NOLT said the melting down the south
28 side on the line from the broken conductor was from the communication line being
29 energized from the conductor failing and coming in contact with the communication line
30 (See Atlas 2 Origin Photo IMG_0085.JPG). NOLT said it is possible for the

31 communication line to become energized without tripping a fuse and killing power to the
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1 conductor. For full report completed by NOLT see attachment 14.

2
3 NOLT examined the scene of Atlas 1. NOLT looked at the conductor span and saw the
4 beading on the downed conductor, slag from the melted conductor, and the fulgurite
5 with the piece of conductor sticking out of it (See Atlas 1 Origin Photo IMG_0068.JPG).
6 NOLT said the damage was caused from the conductor being energized when it came
7 in contact with the ground. NOLT looked at the transformer on the power pole to the
8 south of the downed conductor. NOLT said the fuses were tripped on the transformer
9 (See Atlas 1 Origin Photos IMG_0104.JPG and IMG_0105.JPG). NOLT said it is
10 possible that Pacific Gas & Electric Corporation (PG&E) tripped the fuses prior to
11 GILBERT and I identifying the area as a potential origin of the fire. NOLT also said the
12 fuses were for the power to the drop line and would not have killed power to the
13 conductors to the north of the power pole. For full report completed by NOLT see
14 attachment 13.

15
16 CAL FIRE's survey team (Jeff GAWRONSKI and Garrett JACKSON) arrived at scene to
17 LIDAR the area of origin identified as Atlas 1 (See Attachment 16).

18
19 **October 19, 2017**

20 GILBERT and I arrived at Atlas 2 to collect evidence. We met with representatives from
21 American Telephone & Telegraph (AT&T), PG&E, and California Public Utility
22 Commission (CPUC). We photographed and collected 18 items. AT&T assisted with the
23 collection of communication lines and PG&E assisted with the collection of the
24 conductors. A total of 18 items were collected as evidence from the Atlas 2 fire (See
25 attached evidence log for a complete list of items collected: Attachment 22).

26
27 **October 20, 2017**

28 GILBERT, Michael KEATING, and I arrived at Atlas 1 to collect evidence. We met with
29 representatives from PG&E and CPUC. We photographed and collected 22 items.
30 PG&E assisted with the collection of the conductors. A total of 22 items were collected
31 as evidence from Atlas 1 (See attached evidence log for a complete list of items

1 collected: Attachment 21).

2
3 Fire units contained the fire on November 17, 2017. The fire burned approximately
4 51,624 acres, damaged 783 structures, and destroyed 120 structures. The fire also
5 resulted in 6 fatalities.

6
7 In the months following the fire, multiple requests were made to PG&E for
8 documentation. All of the documents provided by PG&E were collected and booked into
9 evidence in the CAL FIRE, Sonoma-Lake-Napa Unit evidence storage under incident
10 number (17CACNR000307).

11
12 PG&E provided records of their vegetation inspections in the area of Atlas 1 and Atlas 2
13 (See attachment 36). The records identified numerous locations where inspections were
14 conducted. The document has a last modified date of January 13, 2017. To me this
15 indicates the area had vegetation inspected on that date or at least identified as having
16 work done in the past. Until PG&E provides more information about this document, I am
17 unable to determine if the downed tree located at Atlas 1 or the broken tree branch at
18 Atlas 2 were identified in this document.

19
20 PG&E provided a document titled "Atlas Fire_DRU 41_10-23-17_v2" in a Microsoft
21 Excel format (See attachment 35). The document identifies an outage on the Pueblo
22 1104 circuit that supplies Atlas Peak Road. The outage was reported at 9:32 pm on
23 October 8, 2017.

24
25 PG&E provided a document titled "Atlas Incident Description & Factual Summary" (See
26 Attachment 37). The document identified smart meters "downstream" of the origin areas
27 having a series of power on/off events from 9:17 PM to 10:00 PM.

28
29 The California Public Utilities Commission released their report stating an electrical
30 incident occurred at the location of Atlas 1 and Atlas 2 (See attachments 24 and 25)

1 The Pacific Gas and Electric Corporation released their report stating an electrical
2 incident occurred at the location of Atlas 1 and Atlas 2 (See attachments 33 and 34)

3
4 **Fire Cause Class Exclusion:**

5
6 I conducted a fire cause class exclusion and was able to eliminate all causes except
7 electrical equipment.

8
9 Arson: I did not locate any ignition devices, or other evidence to support arson as the
10 cause of the Atlas 1 or Atlas 2 fires. I eliminated arson as a cause of the fires.

11
12 Campfire: There were no signs of a campfire or campsite in or near the SOA's of Atlas 1
13 or Atlas 2. I eliminated campfire as the cause of the fires.

14
15 Debris Burning: There was no evidence that supports debris burning as the cause of the
16 Atlas 1 or Atlas 2 fires. I eliminated debris burning as the cause of the fires.

17
18 Equipment: I did not locate any equipment in the area of Atlas 1 or Atlas 2. I did not
19 locate any evidence to support equipment was being used in the area of the fire's
20 origins. I eliminated equipment as the cause of the fires.

21
22 Lightning: I did not observe lightning or cumulus cloud development in the area of the
23 fires. No signs of recent lightning strikes were observed. I am unaware of any lightning
24 caused fires in the area of the fire in the two prior months. I eliminated lightning as the
25 cause of the fires.

26
27 Playing with Fire: No evidence of playing with fire was located in the SOA's of Atlas 1 or
28 Atlas 2. No tree forts, toys, bicycle, or signs of children were playing in, or near the
29 SOA's. I excluded playing with fire as the cause of the fires.

30
31 Railroad: I am not aware of any active railroads in the area of the fires. I did not see
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1 any railroad related vehicles or equipment near the fires. I excluded railroad as the
2 cause of the fires.

3
4 Smoking: I did not locate any cigarettes or items for smoking in the SOA's. I eliminated
5 smoking as the cause of the fires.

6
7 Vehicle: I did not locate any evidence a vehicle was the cause of the fires. I eliminated
8 vehicle as the cause of the fires.

9
10 Other/Miscellaneous: No other causes for the fires were located including but not limited
11 to shooting, spontaneous combustion, and refraction. I excluded other/miscellaneous
12 as the cause of the fires.

13
14 **Conclusion:**
15 Based on my education, training, witness statements, expert's evaluations, and
16 evidence documented above, I formed opinions about the origin and cause of the Atlas
17 Fire. The Atlas Fire originated from two fires identified above as "Atlas 1" and "Atlas 2".

18
19 It is my opinion the Atlas 1 originated when a large tree fell to the ground. While falling,
20 the tree came in contact with a conductor and broke it free from the power pole. The
21 conductor fell to the ground causing a fire to start in multiple locations.

22
23 It is my opinion the Atlas 2 Fire originated when a large tree branch broke free from a
24 tree and struck a conductor below. The contact with the conductor caused a nearby
25 insulator to break. The conductor fell and came in contact with the communication lines
26 below. The conductor energized the communication lines causing one communication
27 line to fail and fall to the ground. The second communication line remained suspended
28 in the air. The second communication line remained energized and melted the plastic
29 covering in multiple spots along the span. The sequence of events caused multiple fires
30 to start below the conductor and communication lines.

1 The Atlas 1 and Atlas 2 Fires ultimately burned together along with the Stag Fire
2 (17CALNU012240) becoming the Atlas fire and later the Southern LNU Complex
3 (17CALNU010105), burning 51,624 acres, damaging 783 structures, and destroying
4 120 structures. The fire also resulted in 6 fatalities.

5
6 I reserve the right to amend or augment my opinion if new pertinent information is
7 provided to me or if discovered by me at a later date.

8 ***END OF REPORT***

9

10

11

12

13

14



15

Russell West, #2893

16

Fire Captain Specialist

17

1199 Big Tree Road

18

St. Helena CA 94574

19

(707)964-1400

20

21

22

23

24

25

26

27

28

29

30

10 - ATTACHMENTS:

1. Interagency Report of Incident Dispatch Action
2. Written Statement and Photograph from David CAUL
3. Photos Taken by Stewart FUNK
4. Photo Taken by ELLIOTT-SMITH
5. █████ Atlas Peak Road Photographs
6. █████ Atlas Peak Road Evidence Collection Photographs
7. CHP Aircraft Video Taken on October 8, 2017
8. Atlas 2 Origin Photographs
9. Atlas 2 Evidence Collection Photographs
10. Atlas 1 Origin Photographs
11. Atlas 1 Evidence Collection Photographs
12. Report Completed by Mark PORTER
13. Report Completed by Jim NOLT for Atlas 1
14. Report Completed by Jim NOLT for Atlas 2
15. LIDAR for █████ Atlas Peak Road
16. LIDAR for Atlas 1
17. LIDAR for Atlas 2
18. Report Completed by Peter LEUZINGER
19. Photographs Taken by Matthew GILBERT
20. LE-71 from Matthew GILBERT
21. Evidence Log for Atlas 1 (LE-75e)
22. Evidence Log for Atlas 2 (LE-75e)
23. Aerial Origin Photographs
24. CPUC Report for Atlas 1
25. CPUC Report for Atlas 2
26. ECC Transcripts for East Frequency on October 8, 2017
27. ECC Transcripts for East Frequency on October 9, 2017
28. ECC Transcripts for Napa County Fire Frequency on October 8, 2017
29. ECC Transcripts for West Frequency on October 9, 2017

30. CAL FIRE Report on Damaged and Destroyed Structures
31. LE-71 From Michael KEATING
32. LE-71 From Mark HILLSKOTTER
33. PG&E Report for Atlas 1
34. PG&E Report for Atlas 2
35. PG&E Outage Report for the Origin Area on the Night of October 8, 2017
36. PG&E Vegetation Management Records
37. PG&E Atlas Incident Description & Factual Summary
38. LE-71 From Shawn ZIMMERMAKER