



# CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION SAN LUIS OBISPO UNIT

635 North Santa Rosa Street San Luis Obispo, CA 93405

# VENTURA COUNTY FIRE DEPARTMENT

165 Durley Avenue Camarillo, CA 93010

# INVESTIGATION REPORT

CASE NUMBER:

17CAVNC103156

CASE NAME:

**THOMAS** 

DATE:

December 4, 2017

INCIDENT TYPE:

Wildland Fire

INCIDENT INVESTIGATORS:

Christine SAQUI, Fire Investigator - VCFD

Aimin ALTON, Firefighter (PM) - VCFD
Dennis BYRNES, Fire Captain — CAL FIRE
Gregg DELAROSA, Senior Deputy — VCSO
Jace CHAPIN, Battalion Chief — CAL FIRE
Ryan MILLER, Firefighter — VCFD
Steven DEAN, Fire Investigator — USFS
Tom CRASS, Fire Captain-Specialist — CAL FIRE
Patrick KELLEY, Fire Captain — VCFD

Alex LOMVARDIAS, Special Agent – USFS
Brian KINSLEY, Firefighter – VCFD
Jay SNODGRASS, Fire Captain Investigator - SBCOFD
Jon BERGH, Fire Investigator – VCFD
Ken RUSSELL, Fire Captain-Specialist – CAL FIRE
Marshall HATCH, Fire Investigator – VCFD
Shannan HARRIS, Fire Captain-Specialist – CAL FIRE

# 1 - VIOLATIONS:

g

# Penal Code § 192

Manslaughter is the unlawful killing of a human being without malice. It is of three kinds:

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

# Penal Code § 452

A person is guilty of unlawfully causing a fire when he recklessly sets fire to or burns or causes to be burned, any structure, forest land or property.

- (a) Unlawfully causing a fire that causes great bodily injury is a felony punishable by imprisonment in the state prison for two, four or six years, or by imprisonment in the county jail for not more than one year, or by a fine, or by both such imprisonment and fine.
- (b) Unlawfully causing a fire that causes an inhabited structure or inhabited property to burn is a felony punishable by imprisonment in the state prison for two, three or four years, or by imprisonment in the county jail for not more than one year, or by a fine, or by both such imprisonment and fine.
- (c) Unlawfully causing a fire of a structure or forest land is a felony punishable by imprisonment in the state prison for 16 months, two or three years, or by imprisonment in the county jail for not more than six months, or by a fine, or by both such imprisonment and fine.
- (d) Unlawfully causing a fire of property is a misdemeanor. For purposes of this paragraph, unlawfully causing a fire of property does not include one burning or causing to be burned his own personal property unless there is injury to another person or to another person's structure, forest land or property.

# Health & Safety Code § 13001

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

# Public Resources Code § 4421

A person shall not set fire or cause fire to be set to any forest, brush, or other flammable material which is on any land that is not his own, or under his legal control, without the permission of the owner, lessee, or agent of the owner or lessee of the land.

# General Order 95, 31.1: Design, Construction and Maintenance

Electrical supply and communication systems shall be of suitable design and construction for their intended use, regard being given to the conditions under which they are to be operated, and shall be maintained in a condition which will enable the furnishing of safe, proper and adequate service.

#### 2 - SUMMARY:

2

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

1

On Monday, December 4, 2017, at approximately 6:23 PM, a phone report of a wildland fire was called into the Ventura County Fire Department (VCFD) Fire Station 20. Fire Captain Tony SALAS took the phone call. While on the phone, Station 20 was toned out for a wildland fire in the area of 1681 Dickenson Drive. While enroute in VCFD Engine 20 (E20) SALAS and crew observed a wildland fire in Anlauf Canyon. This is in the same geographical area as the phone-in report received at VCFD Station 20 regarding a wildland fire near Thomas Aquinas College. E20 arrived on scene, confirmed the wildland fire, reported to dispatch the fire was approximately 50 acres and requested a second alarm. The fire was located in a canyon above Steckel Park. SALAS observed strong winds in the area and the fire racing down canyon toward Highway 150. E20 was unable to engage in fire suppression due to extreme fire conditions. SALAS assumed command of the fire and directed incoming resources into the fire. At approximately 7:30 PM, VCFD dispatched a reported wildland fire in the area of Koenigstein Road and Highway 150, this fire was determined by investigators to be a separate fire (identified as the KOENIGSTEIN fire) not associated with the THOMAS fire.

The THOMAS fire continued to burn out of control. On Tuesday, December 5, 2017, at approximately 1:00 AM, the THOMAS and KOENIGSTEIN fires merged into one and both fires were referred to as the THOMAS fire. Collectively, the THOMAS fire and the KOENIGSTEIN fire consumed 281,893 acres of mixed wildland and 1343 structures destroyed/damaged. One civilian fatality and one fire fighter fatality occurred as a result of these two fires. The fire was fully controlled on Wednesday, January 10, 2018.

The assigned fire investigation team (IT) determined the THOMAS fire occurred when energized power lines came into contact (phase to phase) with each other between two power poles, emitting molten aluminum particles onto the surrounding dry vegetation. The IT documented, photographed and collected sections and parts associated with the involved power lines. The power lines and equipment

1	3 - SUSPECT:
2	

3 S-1 Southern California Edison (SCE)

4 Corporate Headquarters

9200 Oakdale Avenue, 9th Floor

6 Los Angeles, CA 91311

7 Phone: (888) 848-4754

Process Service Agent - SCE

10 Cristina LIMON

LE80 (Rev. 7/2011)



1	4 – VI	CTIMS & WITNESSES:
2		
3	VICTI	MS:
4		
5	V-1	Virginia PASOLA
6		Civilian
7		
8		
9		
10		For further information pertaining to PASOLA contact Ventura County Medical
11		Examiner's Office at (805) 641-4400 (reference report #1501-17).
12		
13	V-2	Cory IVERSON
14		Fire Apparatus Engineer – CAL FIRE
15		
16		
17		
18		For further information pertaining to IVERSON contact Ventura County Medical
19		Examiner's Office at (805) 641-4400 (reference report #1539-17).
20		
21	Othe	r Victims:
22		For a conduct that of your attenue which are tained demand or burned attrictures
23		For a complete list of properties which sustained damage or burned structures
24		during the THOMAS and/or KOENINGSTEIN fires (see attachment #4). This list
25		may or may not include damaged land and other miscellaneous burned
26		properties.
27		
28		
29		
30		

## WITNESSES:

W-1 David DOLLAR



Fire originated on his property, can testify to seeing fire surrounding his property, and sustained damage to vegetation, barn and other property. DOLLAR recalled the power was interrupted approximately 15 minutes prior to receiving a phone call from his son Chris DOLLAR, notifying him of the fire. DOLLAR was on his property with two employees from Carbon California approximately two hours prior to the fire. Also DOLLAR'S vehicle was inspected by the investigation team (see attachment #5).

W-2 Chris DOLLAR



C. DOLLAR can testify to receiving a phone call from Juan GAMEZ Jr. and telling C. DOLLAR there was a fire behind his parents' house, Chris was also present when DOLLAR was interviewed (see attachment #5).

W-3 Matt DOLLAR



M. DOLLAR is the son of DOLLAR and can testify to being present when DOLLAR was interviewed (see attachment #5).

1	W-4	Dori Thompson CLARKE
2		Owner of THOMPCO
3		
4		
5		
6		Can testify to sending three of her employees up to the Timber Oil Lease
7		(Carbon California) the day the THOMAS fire occurred. CLARKE provided
8		documentation of what her employees did and time they arrived and left on the
9		oil lease (see attachment #6).
10		
11	W-5	Alberto NUNEZ
12		THOMPCO Employee
13		
14		
15		
16		NUNEZ can testify to working for THOMPCO and was with Jesus VALENZUELA
17		and John TAIT working at the Timber Oil Lease (Carbon California) the day of
18		the fire and arrived at the lease at approximately 7:30 AM, and left at
19		approximately 3:00 PM (see attachment #6).
20		
21	W-6	John TAIT
22		THOMPCO Employee
23		
24		
25		
26		TAIT can testify to working for THOMPCO and was with Jesus VALENZUELA
27		and NUNEZ working at the Timber Oil Lease (Carbon California) the day of the
28		fire and arrived at the lease at approximately 7:30 AM, and left at approximately
29		3:00 PM (see attachment #6).

W- 7	Jesus VALENZUELA
	THOMPCO Employee

VALENZUELA was working for THOMPCO and was with NUNEZ and TAIT working at the Timber Oil Lease (Carbon California) the day of the fire.

VALENZUELA arrived at the lease at approximately 7:30 AM, and left at approximately 3:00 PM. The THOMPCO vehicle VALENZUELA was utilizing the day of the THOMAS fire, was inspected by the investigation team (see attachment #6).

#### W-8 Richard RUDMAN

Can testify to maintaining the radio towers in Anlauf Canyon. RUDMAN was on the property the afternoon prior to the fire starting. RUDMAN experienced strong winds at the radio tower prior to the start of the THOMAS fire. RUDMAN provided the DATA logs of power outages the day of the THOMAS fire to the IT (see attachment #7).

W-9	Peter	RIOUX
VV-3	L E I E I	NIOUN

Can testify to being the Operation Supervisor at Saint Thomas Aquinas College, and placed the fire within DOLLAR'S property in a canyon above his house before 6:30 PM. RIOUX called VCFD Fire Station 20 prior to them being dispatched by Ventura County Fire Communication Center and advised them of the fire. RIOUX took pictures of the fire and provided them to the IT (see attachment #8).

# W-10 Brian DICKENSON

Can testify to calling 911 reporting the THOMAS fire. DICKENSON lives in Santa Paula and saw the fire in the area of Anlauf Canyon. DICKENSON is one of the first 911 reporting parties for the THOMAS fire (see attachment #49).

# W-11 Tony SALAS



SALAS can testify to receiving a phone call from Peter RIOUX reporting the fire in the area of Anlauf Canyon. SALAS was the Fire Captain on the first arriving VCFD Fire Engine 20, SALAS was the first Incident Commander and saw the fire coming from DOLLAR'S property (see attachment #9).

1	VV-12	Steve SWINDLE
2		
3		
4		
5		SWINDLE can testify to being the Fire Apparatus Engineer on the first arriving
6		VCFD Engine 20 (see attachment #9).
7		
8	W-1 <u>3</u>	Steve BUCKLES
9		
0		
11		
12		BUCKLES can testify to being the Firefighter on first arriving VCFD Engine 20
13		(see attachment #9).
14		
15	W-14	Juan GAMEZ Sr.
16		
17		
18		Can testify to seeing the fire in Anlauf Canyon and taking pictures of the fire.
19		GAMEZ sent a multimedia message service image to his son Juan GAMEZ Jr.
20		(see attachment #10).
21		
22	W-15	Juan GAMEZ Jr.
23		
24		
25		GAMEZ Jr. can testify to receiving a phone text message picture from his father
26		GAMEZ of a fire near DOLLAR'S house. GAMEZ Jr. called C. DOLLAR and
27		advised him there was a fire near his parents' house (see attachment #10).
28		
29		
30		

1	W-16_	Robert FROST
2		
3		
4		
5		
6	-	Can testify to leasing the property from DOLLAR for his cattle. FROST received
7		a phone call from GAMEZ stating there was a fire on DOLLAR'S property (see
8		attachment #11).
9		
10	W-17	Mel LOVO
11	_	Fire Captain VCFD
12		
13		
14		
15		LOVO can testify to being on Copter 8, and being the first arriving helicopter.
16		LOVO took video upon arrival (see attachment #12).
17		
18	W-18	Ken WILLIAMS
19	_	Ventura County Sheriff's Department
20		
21		
22		
23		WILLIAMS can testify to being the Pilot on Copter 8 with Fire Captain LOVO
24		(see attachment #12).
25		
26		
27		
28		
29		
30		

1	W-19	Randy GILBERT
2	_	Firefighter, VCFD
3		
4		
5		
6	-	GILBERT can testify to being on the second arriving helicopter (Copter 7).
7		
8	W-20	Leila THAYER
9		
0		
11		
2		Can testify to calling 911 and seeing the fire from Highway 150 near Steckel
13		Park (see attachment #13).
14		
15	W-21	Tammy GARCIA
16		
17		
18		
19	•	Can testify to driving on Highway 150 at approximately 6:30 PM, on Monday,
20		December 4, 2017. GARCIA saw the fire on the east side of Highway 150 and
21		took photos and videos (see attachment #13).
22		
23	W-22	2 Lindsey MOORE
24		
25		
26		
27	-	Can testify to driving on Highway 150 with her mother GARCIA at approximately
28		6:30 PM, on Monday, December 4, 2017. MOORE saw the fire on the east side
29		of Highway 150 (see attachment #13).
30		

1	W-23	Martin HAGGARD
2		
3		
4		
5		Can testify to calling 911 and seeing the fire from Thomas Aquinas College
6		(see attachment #13).
7		
8	W-24	Rose LEMON
9		
10		
11		
12		Can testify to calling 911, smelling smoke and seeing the fire from Steckel Park
13		(see attachment #13).
14		
15	W-25	Jeanette RICHARD
16		
17		Can testify to calling 911 and seeing a red glow from Thomas Aquinas College
18		(see attachment #13).
19		
20	W-26	Bill ALLEN
21		
22		
23		
24 		Can testify to calling 911 and seeing the fire from Highway 126
25		(see attachment #13).
26		
27		
28		
29 30		
SH		

1	W-27	Jorge MONZADA
2		
3		
4		
5	-	Can testify to receiving seven photos and forwarding the photos to the THOMAS
6		IT (see attachment #14).
7		
8	W-28	Alexandra PRICE
9		
10		
11		
12		Can testify to receiving a phone call from her friend Susan at approximately 6:30
13		PM, who told her about the THOMAS fire. Susan was aware of the fire from a
14		phone fire alert app. PRICE and her husband drove to an advantage point and
15		described the fire to be on DOLLAR'S property (see attachment #15).
16		
17	W-29	Ray PRICE
18		
19		
20		
21		Can testify to being with his wife, A. PRICE, during the start of the THOMAS fire
22		on DOLLAR'S property (see attachment #15).
23		
24		
25		
26		
27		
28		
29		
30		

1	W-30	Tiarzha TAYLOR
2		
3		
4		
5		
6		
7		Can testify to seeing and taking photographs of the THOMAS fire
8		(see attachment #16).
9		
10	W-31	Earl BROCK
11		
12		
13		
14		
15		
16		Can testify to observing the THOMAS fire to the south and taking photos of the
17		fire (see attachment #17).
18		
19	W-32	Michael MCLEAN
20		
21		
22		
23		Can testify to being the President of Saint Thomas Aquinas College, resides on
24		the property and was there at the time of the fire. MCLEAN received text
25		messages from Robert GOYETTE and RIOUX stating there was a fire one-half
26		mile south and east of the college (see attachment #18).
27		
28		
29		

TUI BERG

> Can testify to being the Facilities Manager for Saint Thomas Aquinas College, and was on the property at the time of the fire. RIOUX called TULBERG and told him about the fire. TULBERG showed the investigation team the photos he received from RIOUX of the THOMAS fire (see attachment #19).

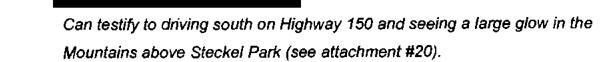
# W-34 John GOYETTE



Can testify to being employed at Saint Thomas Aquinas College and was at the property at the time of the fire. His son Robert GOYETTE notified him of the fire at 6:27 PM (see attachment #20).

# W-35 Maria GOYETTE





1	W-36	Robert GOYETTE
2		
3		
4		
5		Can testify to being a student at Saint Thomas Aquinas College and was
6		standing near his dormitory, looked south and saw the fire at approximately 6:27
7		PM, GOYOTTE alerted his father, J. GOYETTE about the fire (see attachment
8		#20).
9		
10	W-3 <u>7</u>	Stephen SMITH
11		
12		
13		
14		Can testify to seeing smoke and then fire coming over ridge from the direction of
15		Anlauf Canyon (see attachment #21).
16		
17	W-38	Patricia MOREHART
18		
19		
20		
21		Can testify to receiving a phone call from her neighbor notifying her of the fire.
22		MOREHART observed the fire coming towards her house from Anlauf
23		Canyon area, called M. MOREHART telling him to return home because of the
24		fire (see attachment #22).
25		
26		
27		
28		

1	W-39	Martin MOREHART
2		
3		
4		
5		Can testify to leaving his house at approximately 6:20 PM, and receiving a phone
6		call from P. MOREHART at approximately 6:40 PM, telling him to return because
7		of a large fire (see attachment #22).
8		
9	W-40	Paul HERNANDEZ
10		
11		
12		HERNANDEZ can testify to seeing the fire in the hills above Steckel Park.
13		HERNANDEZ believed the fire was near the DOLLAR'S house and observed no
14		fire in the direction of flare stack (see attachment #23).
15		
16	W-41	Noel HERNANDEZ
17		
18		
19		Can testify to receiving a phone call from his son P. HERNANDEZ, notifying him
20		of the fire, and seeing the fire near DOLLAR'S house (see attachment #23).
21		
22	W-42	Nicholas BROUWER
23		
24		
25		
26		BROUWER can testify to standing by his son Jason BROUWER'S gate at
27		Santa Paula. BROUWER left his sons house on Monday,
28		December 4, 2017, at approximately 5:15 PM, and did not see any fire (see
29		attachment #24).

1	W-43	Jason BROUWER
2		
3		
4		J. BROUWER and N. BROUWER were standing at his gate on Monday,
5		December 4, 2017, at approximately 5:15 PM, and did not see any fire (see
6		attachment #24).
7		
8	W-44	Troy HENDERSON
9		
10		
11		
12		Can testify to seeing smoke and then fire from his deck with friend Char
13		WARINNER, and can remember the flare stack was not lit at the time of the fire
14		HENDERSON is the first 911 reporting party for the THOMAS fire (see
15		attachments #25 and #49).
16		
17	W-45	Christine LAW
18		
19		
20		
21		LAW'S home is located at the west entrance of DOLLAR'S property. LAW can
22		testify to initially observing the fire coming out of the canyon above DOLLAR'S
23		house and over the ridge towards her home (see attachment #26).
24		
25		
26		
27		
28		
29		
30		

1	W-46	Charles LAW
2		
3		
4		
5		LAW'S residence is located at the west entrance of DOLLAR'S property. Mr.
6		LAW can testify to his wife seeing the fire from their kitchen. Initially Mr. LAW
7		observed the fire coming out of the area around DOLLAR'S house and over the
8		ridge towards his home (see attachment #26).
9		
10	W-47	Frank SCHREINER
11		
12		
13		
14		
15		SCHREINER is the General Manager of the Ventura Ranch KOA, east of Stecker
16		Park. SCHREINER can testify he was not at the KOA at the time of the fire (see
17		attachment #27).
18		
19	W-48	RAMANDA (This is his full legal name)
20		
21		
22		
23		RAMANDA can testify to observing the fire when it approached the KOA

RAMANDA can testify to observing the fire when it approached the KOA Campground. RAMANDA was told about the fire from an unknown party who knocked on his RV door, RAMANDA was at Birch space #33 (see attachment #27).

27 28

24

25

26

29

1	W-49	Terry BELL
2		
3		
4		
5	_	BELL is an off-duty Santa Paula Fire Apparatus Engineer, BELL can testify he
6		was home with his family at the time of the fire. BELL was alerted about the fire
7		from a phone app. (Pulse Point), then saw the fire from his kitchen door (see
8		attachment #28).
9		
10	W-50	Tanner CARPENTER
11		
12		
13		
14		CARPENTER resides on the DOLLAR'S property. CARPENTER was not home
15		at the time of the fire. CARPENTER was driving westbound on Highway 126,
16		observed the fire in Mud Creek Canyon from Highway 126/ Hallock Road at
17		approximately 6:53 PM (see attachment #29).
18		
19	W-51	Mike RIEDER
20		
21		
22		Can testify to seeing smoke in a canyon below the flare stack (see attachment
23		#30).
24		

26

27

28

29

147.50	8.81-		400
VV-D/	MARK	ALVER	AUU



Can testify to seeing the glow from the THOMAS fire from Highway 126 and Highway 150 (see attachment #31).

8

1

2

3

4

5

6

7

#### W-53 Todd HABILSTON



HABILSTON can testify to being a partner in the company (Carbon California) and is unaware there was a missing plastic 55-gallon barrel containing methanol. HABILSTON called several people within Carbon and all were unaware of where the missing barrel was (see attachment #32).

17 18

13

14

15

16

#### W-54 Matthew ZEIER

Oil Lease Operator (Technician), CARBON California

20

19



Can testify to being at the Timber oil lease at approximately 1:45 PM, the day of the fire, and leaving at approximately 3:45 PM. On ZEIER'S way down the hill, he saw DOLLAR, PRICE and FERNANDEZ also on their way down the hill. ZEIER can testify to the activities at the Carbon California Timber Oil Lease in Anlauf Canyon on Monday, December 4, 2017 (see attachment #32).

28



1	W-55	Michael DEAN Jr.
2		Field Operations Supervisor, Carbon California
3		
4		
5		
6		Can testify to Carbon California activities at the Timber Oil Lease/Anlauf Canyon
7		on Monday, December 4, 2017, and operation of Carbon flare stack (see
8		attachment #32).
9		
10	W-56	Scott PRICE
11		
12		
13		
14		Can testify to being on DOLLAR'S property the day of the fire and leaving the
15		property at approximately 5:00 PM. PRICE can also testify to the condition of
16		the oil well units and equipment at the Timber Oil Lease Carbon California (see
17		attachment #32).
18		
19	W-57	Curtis FERNANDEZ
20		
21		
22		
23		Can testify to being with DOLLAR and PRICE on DOLLAR'S ranch one and a
24		half hours prior to the THOMAS fire (see attachment #32).
25		
26		
27		
28		
29		
20		

1	W-58	Kelly BROWN
2		Well Site Manager, Carbon California
3		
4		
5		
6	•	Can testify to sending three workers from THOMPCO to work on pipe within the
7		Timber Oil lease (Carbon California) property (see attachment #32).
8		
9	W-59	James BRADEY
10		Owner of Coastline Technologies
11		Coastline Technologies
12		
13		
14		
15		Can testify to not seeing the missing barrel of methanol since Monday,
16		November 27, 2017 (see attachment #33).
17		
18	W-60	Daniel CLARKE
19		
20		
21		
22	ı	Can testify to the examination of the Carbon California Oil Facility (see
23		attachment #34).
24		
25	W- <u>61</u>	Nathan PAPE
26		
27		
28		
29		PAPE can testify to the examination of the Carbon California Oil Facility and how
30		the facility operates (see attachment #34).

1	W-62	Mark STEINHILBER
2		Department of Conservation Division of Oil, Gas and Geothermal Resources
3	_	Facilities Program Manager
4		
5		
6		
7		Can testify to conducting a visual inspecting on the Timber Oil Lease (Carbon
8		California), (see attachment #35).
9		
10	W-63	Bruce WEIHS
11		Department of Conservation Division of Oil, Gas and Geothermal Resources
12		Facilities Program Manager
13		
14		
15		
16		Can testify to speaking with SAQUI.
17		
18	W-64	Eric WEATHERBEE
19		Ventura County APCD
20		
21		
22		
23		Can testify to providing documents pertaining to public records regarding
24		Carbon California Facility (see attachment #36).
25		
26		
27		
28		
29		
30		

1	W-65	Kirby ZOLULA
2		Ventura County APCD
3		
4		
5		
6		Can testify to providing documents pertaining to public records regarding
7		Carbon California Facility (see attachment #36).
8		
9	W-66	Dan FERCY
10		Ventura County APCD
11		
12		
13		
14		Can testify to providing documents pertaining to public records regarding
15		Carbon California Facility (see attachment #36).
16		
17	W-67	Michael F. EVANS
18		Owner, RIDGEWAY, Inc.
19		
20		
21		
22		Can testify to Ridgeway contractors had not been to the Timber Canyon Oil
23		Lease since mid-November (see attachment #37).
24		
25		
26		
27		
28		
29		
30		

1	W-68	Tom HUNTER
2	_	COMSAT Teleport
3		
4		
5		
6		HUNTER can testify to being employed by COMSAT, and providing electronic
7		copies of teleports that recorded two separate power events. The data was
8		provided to the IT (see attachment #38).
9		
10	W-69	Guy WHITE
11		Director, Teleport Engineering & Operation
12		
13		
14		
15		Can testify to overall COMSAT operations and engineering including commercial
16		power supply. WHITE showed the IT and explained the power event that was
17		recorded on Monday, December 4, 2017, at approximately 6:17 PM (see
18		attachment #38).
19		
20	W-70	Dean BERN
21		COMSAT Senior Electronics Technician
22		
23		
24		
25		Can testify to power loss, logging the event, providing detailed reports to USFS
26		Alex LOMVARDIAS and seeing fire approaching COMSAT Teleport (see
27		attachment #38).
28		
29		
30		

1	W-71	Howard WISNIEWSKI
2		COMSAT Station Engineer
3		
4		
5		
6		Can testify how COMSAT logging systems works related to COMSAT.
7		The Power interruption and power loss electronic documentation was provided to
8		the IT (see attachment #38).
9		
10	W-72	Paul PIMENTEL
11	_	Southern California Edison Representative
12		
13		
14		
15		
16		PIMENTEL was in the GOA when the first span of power lines was taken down
17		by Southern California Edison (SCE) employees.
18		
19	W- 73	3 Julie OLIN
20		Southern California Edison Representative
21		
22		
23		
24		CLIFF and in the COA subsequence of account lines were taken down by SCE
25		OLIN was in the GOA when spans of power lines were taken down by SCE
26		employees (see attachment #39).
27		
28		
29		
30		

1	W-74	Joshua Edward HUNTER
2		Southern California Edison Employee
3		
4		
5		
6		
7	W-75	Rick MCCOLLUM
8	_	Southern California Edison Representative
9		
10		
11		
12		MCCOLLUM was in the GOA when the second spans of power lines were taken
13		down by SCE employees (see attachment #40).
14		
15	W-76	Koko TOMASSIAN
16		Utilities Engineer
17		California Public Utilities Commission
18		
19		
20		
21		Can testify to inspecting SCE power equipment.
22		
23	W-77	Ryan ISHIKAWA
24		Utilities Engineer
25		California Public Utilities Commission
26		
27		
28		
29		Can testify to inspecting SCE power equipment.

1	W-78	Christine SAQUI
2		Fire Investigator – VCFD
3		
4		
5		
6	-	Can testify to being the lead fire investigator.
7		
8	W-79	Aimin ALTON
9		Firefighter – VCFD
10		
11		
12		
13		Can testify to assisting with the fire investigation, data collection and analysis.
14		
15	W-80	Gregg DELAROSA
16	_	Deputy – VCSO
17		
18		
19		
20		Can testify to assisting with the fire investigation.
21		
22	W-81	Jace CHAPIN
23		Battalion Chief - CAL FIRE
24		
25		
26		
27	•	Can testify to assisting with the fire investigation.
28		
29		
30		

LE80 (Rev. 7/2011)

1	W-82	Ryan MILLER
2		Fire Investigator – VCFD
3		
4		
5		
6		Can testify to assisting with the fire investigation.
7		
8	W-83	Steven DEAN
9		Fire Investigator – US Forest Service
10		
11		
12		
13		Can testify to assisting with the fire investigation.
14		
15	W-84	Tom CRASS
16		Fire Captain-Specialist – CAL FIRE
17		
18		
19		
20		Can testify to assisting with the fire investigation.
21		
22	W-85	Alex LOMVARDIAS
23		Fire Investigator – US Forest Service
24		
25		
26		
27		Can testify to assisting with the fire investigation
28		
29		

1	W-86	Brian KINSLEY
2		Fire Fighter – VCFD
3		
4		
5		
6		Can testify to assisting with the fire investigation.
7		
8	W-87	Jay SNODGRASS
9		Fire Captain Investigator – SBCOFD
10		
11		
12		
13		Can testify to assisting with the fire investigation and coordinated the origin and
14		cause investigation. SNODGRASS wrote the origin and cause (O&C) report
15		(see attachment #2).
16		
17	W-88	Jon BERGH
18	_	Fire Investigator – VCFD
19		
20		
21		
22		Can testify to assisting with the fire investigation.
23		
24	W-89	Kenneth RUSSELL
25		Fire Captain-Specialist – CAL FIRE
26		
27		
28		
29		Can testify to assisting with the fire investigation.

1	W-90	Marshall HATCH
2		Fire Investigator – VCFD
3		
4		
5		
6	•	Can testify to assisting with the fire investigation.
7		
8	W-91	Shannan HARRIS
9	_	Fire Captain-Specialist – CAL FIRE
10		
11		
12		
13	•	Can testify to assisting with the fire investigation.
14		
15	W-92	Patrick KELLY
16	_	Fire Captain – VCFD
17		
18		
19		
20		Can testify to assisting with the fire investigation.
21		
22	W-93	Eric WATKINS
23		Assistant Chief – CAL FIRE
24		
25		
26		
27		Can testify to transporting evidence from the THOMAS fire to Fresno, and being
28		the liaison between the investigation team and Southern California Edison.
29		

1	W-94	Dennis BYRNES
2		Fire Captain – CAL FIRE
3		
4		
5		
6		Can testify to assisting with the fire investigation and scene security (see
7		attachment #51).
8		
9	W-95	Patrick WALKER
10		Fire Fighter – CAL FIRE
11		
12		
13		
14		Can testify to providing scene security (see attachment #51).
15		
16	W-96	Sal KUTKUT
17		KT Security Service
18		
19		
20		
21		Can testify to providing 24 hour scene security (see attachment #51).
22		
23		
24		
25		
26		
27		
28		
29		
30		

1	W-97	James "Jed" DEGRAFF
2		Technical Services Section
3		Senior Land Surveyor – CAL FIRE
4		
5		
6		
7		Can testify to using LiDAR in the area identified by the IT. The LiDAR team can
8		explain how LiDAR functions and interpret the data collected (see attachment
9		<b>#59</b> ).
10		
11	W-98	Dave KAROLY
12		Technical Services Section
13		Survey Party Chief – CAL FIRE
14		
15		
16		
17		Can testify to using LiDAR in the area identified by the IT. The LiDAR team can
18		explain how LiDAR functions and interpret the data collected (see attachment
19		#59).
20		
21	W-99	Garrett JACKSON
22		Technical Services Section
23	_	Transportation Surveyor – CAL FIRE
24		
25		
26		
27		Can testify to using LiDAR in the area identified by the IT. The LiDAR team can
28		explain how LiDAR functions and interpret the data collected (see attachment
29		#59).
30		

W-1	100	.lim	NO	Т
V V -	1111	JIIII	141/	

2 Electrical Engineer
3 4 5

NOLT assisted with the visual inspection of the Edison Power equipment within the THOMAS fire (see attachment #63).

### 5 - EVIDENCE:

Evidence collection at the THOMAS fire began on Thursday, December 28, 2017, by Kenneth RUSSELL. Eight pieces of evidence (*E-1 thru E-8*) were collected on Thursday, December 28, 2017. A property receipt and chain of custody log was completed by the IT and SCE (Julie OLIN) for evidence (*see attachment #39*).

On Friday, January 5, 2018, the IT arrived at an upper area above the fire origin area to continue the investigation and collected evidence (E-9 thru E-13). A property receipt and chain of custody log was completed by the IT and SCE (Rick MCCOLLUM) for evidence (see attachment #40).

The evidence collected on Thursday, December 28, 2017, and on Friday, January 5, 2018, was tagged by both SCE and the IT with independent tracking tags and tracking numbers. All evidence (*E-1 thru E-13*) was secured and transported in a locked/unmarked CAL FIRE vehicle by Eric WATKINS. A chain of custody was completed by the IT team and WATKINS. All evidence collected on the THOMAS fire was transferred to the CAL FIRE evidence locker at Southern Region Headquarters, 1234 East Shaw Avenue, Fresno, California 93710. Evidence (*E-1 thru E-8*) was placed in the evidence locker on Tuesday, January 2, 2018, (see attachment #41). Evidence (*E-9 thru E-13*) was placed into the evidence locker on Saturday, January 6, 2018, (see attachment #42).

#### PHYSICAL EVIDENCE

Item #1 – (E-1) Section of #4 ACSR powerline spanning from Pole #1025341E, #1202085E, #3002114E, by rectifier. Section was not in contact with the ground in the Specific Origin Area (SOA). Section was from the center phase and marked with WHITE tape and tracking tags. Wire was collected by RUSSELL, logged, and property receipt given to SCE OLIN.

1	Item #2 – (E-2) Section of #4 ACSR powerline spanning from Pole #1025341E,
2	#1202085E, #3002114E, by rectifier. Section was not in contact with the ground in
3	the SOA. Section was from the west phase and marked with RED tape. Wire was
4	collected by RUSSELL, logged, and property receipt given to SCE OLIN.
5	
6	Item #3 - (E-3) Section of #4 ACSR powerline spanning from Pole #1025341E,
7	#1202085E, #3002114E, by rectifier. Section was not in contact with the ground in
8	the SOA. Section was from the east phase and marked with BLUE tape. Wire was
9	collected by RUSSELL, logged, and property receipt given to SCE OLIN.
10	
11	Item #4 - (E-4) Section of #4 ACSR powerline spanning from Pole #1025341E,
12	#1023542E. Section was not in contact with the ground. Section was from the
13	center phase and marked with WHITE tape and tracking tags. Wire was collected
14	by RUSSELL, logged, and property receipt given to SCE OLIN.
15	
16	Item #5 – (E-5) Section of #4 ACSR powerline spanning from Pole #1025341E,
17	#1023542E. Section was not in contact with the ground. Section was from the east
18	phase and marked with BLUE tape and tracking tags. Wire was collected by
19	RUSSELL, logged, and property receipt given to SCE OLIN.
20	
21	Item #6 - (E-6) Section of #4 ACSR powerline spanning from Pole #1025340E,
22	#1023541E. Section was not in contact with the ground. Section was from the west
23	phase and marked with RED tape and tracking tags. Wire was collected by
24	RUSSELL, logged, and property receipt given to SCE OLIN.
25	
26	Item #7 - (E-7) End of jumper wire from with Item #4 associated with Pole
27	#1025341E. Collected by RUSSELL, logged, and a property receipt given to SCE
28	OLIN.
29	

1	Item #8 – (E-8) Eight parallel groove connectors possibly associated with Item #6.
2	Parts relating to E-8 were recovered by the IT from SCE employees after realizing
3	the items had been removed without authorization from the IT, in violation of the
4	MOU (see attachment #54). Collected by RUSSELL, logged, and a property receipt
5	given to SCE OLIN.
6	
7	Item #9 - (E-9) Section of #4 ACSR powerline spanning from Pole #1041915E,
8	#1041913E. Section was in contact with the ground. Section was from the south
9	phase and marked with RED tape and tracking tags. E-9 was approximately 300
0	feet long. Wire was collected by BYRNES, logged, and property receipt given to
1	SCE MCCOLLUM.
2	
3	Item #10 - (E-10) Section of #4 ACSR powerline spanning from Pole #1041915E,
4	#1041913E. Section was not in contact with the ground. Section was from the south
5	phase and marked with RED tape and tracking tags. E-10 was approximately 10
6	feet long. Wire was collected by BYRNES, logged, and property receipt given to
7	SCE MCCOLLUM.
8	
9	Item #11 - (E-11) Section of #4 ACSR powerline spanning from Pole #1041915E,
20	#1041913E. Section was in contact with the ground. Section was from the center
1	phase and marked with WHITE tape and tracking tags. E-11 was approximately
22	290 feet long. Wire was collected by BYRNES, logged, and property receipt given
23	to SCE MCCOLLUM.
24	
25	Item #12 – (E-12) Section of #4 ACSR powerline spanning from Pole #1041915E,
26	#1041913E. Section was not in contact with the ground. Section was from the
27	center phase and marked with WHITE tape and tracking tags. E-10 was
28	approximately 10 feet long. Wire was collected by BYRNES, logged, and property
29	receipt given to SCF MCCOLLUM

1	Item #13 – (E-13) Section of #4 ACSR powerline spanning from Pole #1041915E,
2	#1041913E. Section was not in contact with the ground. Section was from the north
3	phase and marked with BLUE tape and tracking tags. E-13 was approximately 300
4	feet long. Wire was collected by BYRNES, logged, and property receipt given to
5	SCE MCCOLLUM.
6	
7	PHOTOGRAPHS and VIDEOS (Civilians and Fire Emergency Personnel)
8	
9	Chris DOLLAR Video (see attachment #5)
10	Peter RIOUX Photos (see attachment #6)
11	Richard RUDMAN Photos (see attachment #7)
12	Juan GAMEZ Sr. Photos (see attachment #10)
13	Mel LOVO Photos and Videos (see attachment #12)
14	Tammy GARCIA Photos and Videos (see attachment #13)
15	Jorge MONZADA Photos (see attachment #14)
16	Tiarzha TAYLOR Photos (see attachment #16)
17	Earl BROCK Photos (see attachment #17)
18	Troy HERNDERSON Photos (see attachment #25)
19	
20	All audio recordings associated with the THOMAS fire investigation (see attachment
21	#89).
22	
23	WRITTEN WITNESS STATMENT (Civilians)
24	
25	Earl BROCK (see attachment #17)
26	Matthew ZEIER (see attachment #32)
27	
28	
29	

1	PHOTOGRAPHS and VIDEOS (Investigation Team)
2	
3	HATCH Photos and Video's (see attachment #32 and #90)
4	DELAROSA Photos and Video's (see attachment #91)
5	KINSLEY Photos (see attachment 92)
6	KELLY Photos and Video's (see attachment #32 and #93)
7	SAQUI Photos and Video's (see attachment #35 and #94)
8	ALTON Photos and Video's (see attachment #95)
9	CHAPIN Photos (see attachment #96)
10	BERGH Photos (see attachment #97)
11	RUSSELL Photos (see attachment #98)
12	HARRIS Photos (see attachment #99)
13	SNODGRASS Photos and Videos (see attachment #100)
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

#### 6 - CONDITIONS:

2 3

4

5

6

7

8

9

10

11

12

1

The origin of the THOMAS fire was near the address of 16840 Anlauf Canyon Road, Santa Paula, California 93060. The origin was approximately one half mile back in the canyon on a cattle ranch. The origin was on a southwest slope Lat/Long: (N 34 25.516/W 119 03.289, elevation 1,766 feet). The origin was near the top of a small ridge top. The mouth of the canyon ends at Highway 150. The vegetation at the origin was a mixture of grass and brush. The forecasted weather for Ventura County on Monday, December 4, 2017, predicted extreme fire danger and potentially the strongest, longest duration Santa Ana wind event of the season. A red flag warning was in effect with anticipated wind gusts of up to 80 miles per hour.

13 14 15 16

Weather information for Monday, December 4, 2017, was obtained from three different remote automated weather station (RAWS) located near the communities of Piru, El Rio and Ojai in the County of Ventura, California. The Piru RAWS is approximately 14 miles east of the THOMAS fire origin at an elevation of 636 feet. The El Rio RAWS is approximately 12 miles south of the THOMAS fire origin at an elevation of 131 feet. The Oiai RAWS is approximately 10 miles northeast of the THOMAS fire origin at an elevation of 774 feet.

All three RAWS record weather hourly. The start time of the THOMAS fire was at

approximately 6:20 PM. Additionally, a lightning map was obtained with no recorded

20 21

22

23

17

18

19

lightning activity from Friday, December 1, 2017, through the start of the THOMAS fire (see attachment #43 through #45).

24

25 26

27

28 29

30

Officer Initials

THOMAS		December 4, 2017	17CAVNC103156
1	Piru RAWS		
2			
3	Date:	Monday, December 4, 2017	
4	Time:	6:00 PM	
5	Temperature:	59 degrees Fahrenheit	
6	Dew Point:	8 degrees Fahrenheit	
7	Relative Humidity:	13 percent	
8	Wind Speed:	17 to 27 miles per hour	
9	Wind Direction:	From the northeast	
10	Elevation	636 feet	
11	Latitude/Longitude	34.40426 / -118.80991	
12			
13	El Rio RAWS		
14			
15	Date:	Monday, December 4, 2017	
16	Time:	6:00 PM	
17	Temperature:	62 degrees Fahrenheit	
18	Dew Point:	7 degrees Fahrenheit	
19	Relative Humidity:	11 percent	
20	Wind Speed:	17 to 30 miles per hour	
21	Wind Direction:	From the northeast	
22	Elevation	131 feet	
23	Latitude/Longitude	34,25238 / -119.14318	
24			
25			
26			
27			
28			
29			
30			

	THOMAS	December 4, 2017	17CAVNC103156
1	Ojai RAWS		
2			
3	Date:	Monday, December 4, 2017	
4	Time:	6:00 PM	
5	Temperature:	59 degrees Fahrenheit	
6	Dew Point:	3 degrees Fahrenheit	
7	Relative Humidity:	10 percent	
8	Wind Speed:	4 to 9 miles per hour	
9	Wind Direction:	From the southeast	
10	Elevation	774 feet	
11	Latitude/Longitude	34,44804 / -119.23131	
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			

# 7 - EQUIPMENT:

The equipment associated with the cause of the THOMAS fire is owned and operated by Southern California Edison (SCE). The fire originated within the GOA established by the THOMAS fire IT. Power lines were determined to be the cause of the THOMAS fire. The power lines were inspected between several poles (see attachment #46). Within the GOA, the IT observed several areas where SCE equipment failed. The power lines were inspected within the GOA and determined by the IT to have had phase to phase contact on several spans of power lines.

Data collected from COMSAT showed a power interruption associated with SCE equipment on Monday, December 4, 2017, at approximately 6:17 PM. COMSAT data was corroborated by several pieces of video imagery obtained by the IT throughout the course of the THOMAS fire investigation (see attachment #3 and #38).

### 8 - PROPERTY:

The GOA of the THOMAS fire is located on property identified by Ventura County Assessor Parcel Numbers (APN). The GOA encompasses two different parcels, APN 400 090 025 and 400 060 065 (see attachment #47).

The GOA is on private property located at Paula, California 93060. The area within the identified APN numbers has several easement rights on an unmaintained paved road running through DOLLAR'S property. There are three ways to access DOLLAR'S property, through Anlauf Canyon Road, SENECA properties and up through Timber Canyon Road. All areas identified to access DOLLAR'S property is controlled by locked gates and barbed wire fences.

The Ventura County Assessor's Office lists the properties as 240 acres and 133.77 acre parcels. The property is owned by David and Susan DOLLAR. The property owner's address is recorded as Santa Paula, California 93060.

The THOMAS fire burned downslope in alignment with the wind threatening the cities of Santa Paula, Ventura and Ojai. The general area around the THOMAS fire is urban interface surrounded by mixed wildland.

# 9 - NARRATIVE:

On Monday, December 4, 2017, at approximately 6:25 PM, I was dispatched as a Wildland Fire Investigator by the Ventura County Fire Department (VCFD) Fire Communications Center (FCC) to a wildland fire (later identified as the THOMAS fire) located at Santa Paula, CA, 93060. Multiple reports from witnesses identified the fire in the hills northeast of Santa Paula. VCFD Engine 20, located in Upper Ojai, informed FCC they received phone calls from locals of a brush fire near the college and attached themselves to the original dispatch.

FCC originally dispatched units to 1681 Dickenson Drive, Santa Paula, CA. This was the address of an initial reporting party. While responding to the incident, FCC dispatched units to FCC advised responding units that occupants at the residence reported their home was threatened by flames, later this location was identified as David DOLLAR'S residence (see attachment #48 through #50).

I arrived at the Incident Command Post (ICP) located at Mill Park, 736 Santa Paula Ojai Road, at approximately 7:24 PM. I observed the fire growing quickly and spotting across Santa Paula Ojai Road (Highway 150). The incident required multiple fire crews from neighboring cities and county fire departments. Ventura County Sheriff's Office (VCSO) deputies, Santa Paula Police officers, and California Highway Patrol officers were also in the area assigned to mandatory evacuations. No emergency personnel were able to access 16840 Anlauf Canyon Road due to fire conditions.

Numerous residences in Anlauf Canyon, Ojai Road, and Kampgrounds of America (KOA) at Steckel Park required rescue or assistance from emergency crews and were under mandatory evacuation. CHP closed Santa Paula Ojai Road/Highway 150 to any traffic except emergency personnel and evacuees exiting.

A separate fire was reported on Koenigstein Road at approximately 7:30 PM, located approximately 3.5 miles northwest of the THOMAS fire. Because of the

prevailing wind direction, location, and reports from fire crews, it was determined this fire was unrelated to the THOMAS fire. This fire was later identified by investigators as the KOENIGSTEIN fire (see report 17CAVNC103338).

I contacted FCC requesting the first reporting parties information, I obtained Brian DICKENSON'S contact information whom I contacted at approximately 8:15 PM. DICKENSON was among the first reporting parties to the THOMAS fire. DICKENSON told me the following in summary: DICKENSON was taking out the trash when he observed a glow in the direction of Ferndale Ranch and Saint Thomas Aquinas College. DICKENSON was concerned because he knew there were residences in that area and called 911 at approximately 6:23 PM. DICKENSON described the fire as small and a single glow.

The ICP was moved to Santa Paula Fire (SPFD) Station 82, located at 114 S. 10<sup>th</sup> Street, Santa Paula, at approximately 8:30 PM. While transitioning to the second ICP location, I contacted VCFD Fire Investigator Jon BERGH. BERGH and VCFD Firefighter Brian KINSLEY met me at SPFD Station 82. We attempted to access the KOENIGSTEIN fire because access to the THOMAS fire GOA presented several safety concerns which included extreme fire behavior, unfamiliar terrain and lack of visibility.

We observed extreme fire behavior along Highway 150. During our observations, the THOMAS fire and KOENIGSTEIN fire had not merged together. At approximately 11:45 PM, while parked off the shoulder of Highway 150, I watched a flank of the THOMAS fire burn back along a west facing slope just west of Anlauf Canyon. Several electrical power poles and tree limbs along Highway 150 broke and were blocking the road as the fire burned through the area.

We waited for the fire to burn through the KOENIGSTEIN neighborhood prior to entering. The fire increased in intensity and visibility was encumbered as a result of the smoke and flames. Because of this, it was not possible to enter the KOENIGSTEIN neighborhood. Since the power lines fell across the lower section of Highway 150, we drove westbound and through upper Ojai to exit. By this time, the fire had already burned through upper Ojai and crossed Highway 150.

On Tuesday, December 5, 2017, I arrived at the Ventura County Fairgrounds at approximately 7:00 AM. The fairground was the new location of the ICP. I met with BERGH and KINSLEY, we attended the morning briefing. I met with CAL FIRE Chief John MOODY, he informed me a fire investigation team from their department would be assigned to me. Soon after, I received a phone call from CAL FIRE Assistant Chief Eric WATKINS who informed me that two investigators, CAL FIRE Battalion Chief Jace CHAPIN and CAL FIRE Fire Captain-Specialist Shannan HARRIS would be arriving later in the day.

At approximately 8:30 AM, I met with Senior Deputy Gregg DELAROSA, VCSO. DELAROSA was assigned to assist me in the investigation.

On Tuesday, December 5, 2017, at approximately 9:00 AM, I spoke with James SNODGRASS, fire investigator for Santa Barbara County Fire Department (SBFD). I requested his assistance for the investigation. SNODGRASS informed me he would be enroute and arrive by late morning.

At approximately 12:30 PM, VCFD Fire Investigator Marshall HATCH, DELAROSA, and I met SNODGRASS along an east perimeter road at Saint Thomas Aquinas College. Saint Thomas Aquinas is located at 10000 Santa Paula Ojai Road. From the college, we entered through a fenced area to access Ferndale Ranch. Traveling through numerous unmarked dirt roads and locked ranch gates, we reached an access gate to Anlauf Canyon (later determined to be part of David DOLLAR'S property).

We reached an area within the mountains southeast of the college that contained oil well equipment. Near one of the peaks, I observed compressor equipment and a flare stack off Anlauf Canyon Road. A sign near this pad read "Timber Canyon Lease, Carbon California Company, LLC, In case of emergency call:

"The fire had already burned through this area."

The flare stack was not burning off excess gases at the time. I observed a fire next to compressor equipment, approximately two feet wide by four feet high, it was contained to an area within the compressor site and burning continually. The fire was emanating directly from a ground level grate which appeared to be a type of

catch basin. I did not observe any obvious smoke emanating from this area. The flames did not appear to be spreading or enlarging. I did not observe any fire damage, such as char or melting, to the surrounding equipment.

We continued past the compressor site and drove approximately 1500 yards east. We reached the location of a radio tower. I observed the east flank of the fire burning downhill below and east of the radio tower. The wind was blowing from the east at approximately 15 – 20 miles an hour. We drove in an easterly direction out of Anlauf Canyon Road, passed through a locked ranch gate, and through Timber Canyon Road until we reached Highway 126.

We returned to the ICP and met WATKINS, CHAPIN, and HARRIS. We briefed them to the particulars associated with the THOMAS fire's potential origin. We explained the terrain, surroundings, and the difficult access due to the locked ranch gates and closure at Highway 150.

It was decided to assign BERGH, CHAPIN, CAL FIRE Fire Captain-Specialist Kenneth RUSSELL, and VCFD Firefighter Ryan Miller to the KOENIGSTEIN fire investigation and assign HARRIS and CAL FIRE Fire Captain-Specialist Tom CRASS to the THOMAS fire investigation. I planned on meeting HARRIS, CRASS, and SNODGRASS at the 76 Gas Station located off Highway 126 and Hallock Road, in Santa Paula, the following morning at approximately 8:00 AM.

On Wednesday, December 6, 2017, I arrived at the ICP at approximately 7:00 AM. I spoke with Amy FANZO, a California Resources Corporation (CRC) representative and oil lease contact, to inquire about CARBON CA COMPANY (CCC) and a contact person. She gave me a contact name and phone number of Todd HABLISTON. DELAROSA met me at the ICP and followed me to the 76 gas station in Santa Paula to meet with HARRIS, CRASS, and SNODGRASS.

At approximately 8:00 AM, it was decided that SNODGRASS would be responsible for writing the origin and cause (O&C) report for the THOMAS fire (see attachment #2).

At approximately 9:00 AM, we traveled back to Anlauf Canyon through Highway 126 and Timber Canyon Road. We observed the heel of the fire near the radio

tower the evening prior had now burned back to the bottom of the hill. The fire was burning through the orchards of a ranch on the lower half of Timber Canyon Road.

Once we accessed the oil lease, we stopped at an open dirt lot, near the CLARK tank battery. I contacted HABLISTON, who explained he was located in Colorado and he would make notifications to someone local from the CCC office to meet us. HABLISTON was aware that Scott PRICE and David DOLLAR were in Anlauf Canyon the day of the fire. HABLISTON told me they were viewing existing gas pipe lines for potential purchase from DOLLAR.

At approximately 11:00 AM, PRICE met us at the CLARK tank battery. PRICE made access to the oil lease off Highway 150. A downed power pole across a lower oil lease access road caused PRICE to walk to our location. PRICE informed us he turned off valves at a nearby compressor site on his way to our location. The compressor site was later identified as the site where we observed fire actively burning under the grates on Tuesday, December 5, 2017.

While interviewing PRICE (see attachment #32), HATCH and KINSLEY drove through the CCC site. They drove to a compressor site and observed active fire near the equipment and took video (see attachment #90). This was the same compressor site that DELAROSA, SNODGRASS, and I observed on Tuesday, December 5, 2017.

I drove down Anlauf Canyon to a residence and met David DOLLAR and his two sons, Matt and Christopher DOLLAR. DOLLAR identified himself as the property owner and was tending to his cattle and residence. DOLLAR and his wife, Susan DOLLAR, were displaced the evening of the fire (see attachment #5).

At approximately 2:45 PM, I met with VCFD Fire Captain Tony SALAS, Engineer Steve SWINDLE, and Firefighter Steve BUCKLES. We met on Highway 150/Ojai Road, near East Sulphur Mountain Road. We stood on the shoulder of the road while SALAS described what he observed that evening. SALAS pointed towards Anlauf Canyon and DOLLAR's residence and stated as they drove south on Highway 150, he initially observed flames within Anlauf Canyon. SALAS described the fire as "well established" (see attachment #9).

HARRIS, SNODGRASS, CRASS, DELAROSA, and I established our Investigation Team (IT) for the THOMAS fire. United States Forest Service Fire Investigator (USFS) Steve DEAN, HATCH, KINSLEY, VCFD Fire Captain Patrick KELLEY and CAL FIRE Fire Captain Dennis BYRNES joined the IT.

Due to the totality and complexity of the THOMAS fire, the IT decided to focus our team member efforts in Origin and Cause (O&C) and Intelligence/Interview (INTEL). The IT debriefed daily information collected with regard to O&C and INTEL.

The THOMAS fire scene was secured by BYRNES, CAL FIRE Firefighter II Patrick WALKER and KT Security Services. They shared the responsibilities of scene security (see attachment #51).

On Thursday, December 7, 2017, the IT began reviewing the list of Reporting Parties (RP) to 911 and initiated contact (see attachment #52). The IT requested VCFD GIS and Mapping Services to produce aerial maps of the area of the THOMAS fire.

The IT interviewed multiple witnesses throughout the investigation. Some witnesses took photographs with their cell phones and were voluntarily escorted back to the area where they first saw fire. The maps were used to help witnesses identify the location where they witnessed the fire or took photographs/videos. The IT had them point to where they observed the fire, while the IT took daytime comparison photographs.

On Friday, December 8, 2017, I requested FCC produce a list of THOMAS fire RP's in order to organize and plainly see a list of RP's. FCC Supervisor Michael DICKERSON worked on preparing a spread sheet of the RP's. The IT obtained video footage via email from VCSO Office of Emergency Services (OES). The video footage is taken from a camera located at an OES facility on Torrey Peak (see attachment #3).

The IT traveled to the KOA, located east of Steckel Park and southwest of Anlauf Canyon. We spoke to Frank SCHREINER, KOA General Manager, and RAMANDA, the onsite manager. SCHREINER was not at the KOA at the time of the fire, but

RAMANDA was. RAMANDA took us to space #33, where he was the evening of the fire (see attachment #27).

We then met with Alexandra PRICE at the east end of KOENIGSTEIN Road (see attachment #15).

Additional interviews conducted on this day also included Richard RUDMAN (see attachment #7), Tanner CARPENTER (see attachment #29), and John, Robert, and Maria GOYETTE (see attachment #20).

On Friday, December 8, 2017, USFS Special Agent Alex LOMVARDIAS arrived to assist in the investigation. LOMVARDIAS was briefed on the previous week's findings and sequence of events. The IT interviewed COMSAT employees and collected any relevant information that their equipment recorded in relation to the THOMAS fire (see attachment #38).

We received the RP list from JR TENBROOK, CAD Manager at FCC. The list contained the first 309 RP's to the THOMAS fire. The list of callers were in chronological order, with available contact information and location of their call. Because the fire became well established within the canyon relatively early, a decision was made to contact the first 20 callers on the list. That would capture the first 16 minutes of the fire being witnessed. The goal was to obtain pertinent information/data associated with these callers (see attachment #52).

On Saturday, December 9, 2017, the IT traveled to Saint Thomas Aquinas College and met with Peter RIOUX, a faculty member of Saint Thomas Aquinas College. RIOUX was an RP to the THOMAS fire and had called VCFD Fire Station 20 prior to them receiving the initial dispatch from FCC (see attachment #8). Later that day we met with VCFD Fire Captain Mel LOVO at the Santa Paula Airport. LOVO was Copter Manager on Copter 7 the evening of the THOMAS fire (see attachment #25). At approximately 6:00 PM, I spoke with Fire Engineer Terry BELL at Santa Paula Fire Station 81. BELL lives on Mupu Road at the bottom of Anlauf Canyon Road (see attachment #28).

On Monday, December 11, 2017, the IT established two private and secured classrooms at the VCFD Regional Training Center (RTC), Camarillo, as home base

and offices. VCFD Firefighter Paramedic Aimin ALTON joined the investigation as a Technical Specialist to assist with office management, image and data analysis (see attachment #3).

As requested by the IT, on Wednesday, December 13, 2017, the VCSO Unmanned Aircraft Systems (UAS) Team flew an area of interest in the THOMAS fire (see attachment #91). Simultaneously, a CAL FIRE Light Imaging, Detection and Ranging (LiDAR) team was surveying the same area (see attachments #2 and #59).

On Thursday, December 14, 2017, the IT analyzed the information from the VCSO OES video camera. The video captured bright flashes of light at Anlauf Canyon (see attachment #3).

I contacted the Division of Oil, Gas, and Geothermal Resources (DOGGR) to inquire about CCC's facilities and asked that an engineer from their office meet with the IT to do a site review at the Timber Canyon facility. Engineering Geologist Eric HEATON, of DOGGR, met with the IT at the oil facility in Anlauf Canyon. HEATON advised the IT, his specialty was not related to the daily operations of oil well facilities, therefore he would request that a Senior Engineer with a background in oil field safe practices would be better suited and would contact us.

At approximately 3:00 PM, I received a phone call from Bruce WEIHS, a Senior Engineer and Supervisor with DOGGR. WEIHS informed me that their program does not oversee the flare stack system of the oil wells. WEIHS advised me to contact Air Pollution Control District (APCD).

On Friday, December 15, 2017, the IT did a reconnaissance flight in a helicopter to view the overall fire area in Anlauf Canyon, take photographs of the oil lease site around their GOA, and to look for a missing plastic drum. The drum was previously located at the compressor site and had contained methanol. Its location was unknown and thought to have blown down the canyon (see attachment #100).

On Monday, December 18, 2017, the IT retrieved raw video footage from Patrick MAYNARD, OES.

1 Or 2 surve

On Tuesday, December 19, 2017, SCE sent their LiDAR team to the GOA to survey the area of interest and their equipment. The IT requested SCE to lower their power lines when they had completed their LiDAR survey.

At approximately 3:45 PM, the IT boarded a helicopter for a reconnaissance flight over Anlauf Canyon and the CCC oil lease (see attachment #95).

On Wednesday, December 20, 2017, SCE lowered several spans of power lines. The IT walked the conductors for examination purposes (see attachment #2).

On Thursday, December 21, 2017, I met Mark STEINHILBER, Facilities Program Manager at DOGGR, at VCFD fire station 50 at approximately 7:40 AM. The IT briefed STEINHILBER on our previous findings at the compressor site located at the CCC oil facilities in Anlauf Canyon. The IT took him to the compressor site and flare stack. STEINHILBER examined the site's compressors and flare stack. This interview and examination was video recorded by the IT (see attachment #35). We departed the oil lease site at approximately 2:00 PM.

On Friday, December 22, 2017, I contacted the Ventura County Counsel. I forwarded them an example of a preservation letter for an electric company. I asked they draft a similar letter and address it to SCE (see attachment #53).

On Saturday, December 23, 2017, the VCSO UAS team returned to the GOA to record another area of interest. A CAL FIRE LiDAR team was also on scene to survey (see attachments #2 and #59).

On Tuesday, December 26, 2017, IT gave SCE permission to send their LiDAR team to the GOA to survey their equipment, while IT was present and continued to secure and preserve the scene.

On Wednesday, December 27, 2017, SCE LiDAR team concluded their examination. SCE lowered another section of power lines for the IT. The IT proceeded to examine the power lines and collect evidence (see attachments #2 and #39).

At approximately 1:35 PM, I spoke to Dan FERCY, APCD. FERCY told me the following, in summary: The APCD does oil field inspections that relate to equipment that would have adverse effects to the air quality. Flare stacks at oil facilities are

considered "control devices" as they burn excess gases. One flare is operational and permitted at CCC. Every year the flare stack and other equipment are inspected. Written violations can be imposed upon the company if not in compliance and minor violations were noted (see attachment #36).

FERCY was not familiar with the chemical, methanol, being used at the facility.

FERCY suggested I speak with Kerby ZOLULA, also with APCD, since ZOLULA has more technical information pertaining to oil field practices.

FERCY continued to tell me, the oil lease belonged to CRC before it was purchased by CCC. Prior to CRC, it was owned by VINTAGE PETROLEUM.

At approximately 3:00 PM, the IT allowed the California Public Utilities

Commission (CPUC) to conduct their preliminary investigation within the GOA. At approximately 3:00 PM, I met with Southern California Edison (SCE) Rick

MCCOLLUM and Julie OLIN, both SCE Claims Investigators near the GOA.

MCCOLLUM confirmed the circuit identity in our GOA was named the "CASTRO circuit." MCCOLLUM further stated at 6:41 PM, their substation reported a remote automatic recloser alert to their system.

On Thursday, December 28, 2017, I spoke with Bruce WEIHS, Senior Engineer with DOGGR. WEIHS informed me I may make a public records request for inspection records for CCC. I placed an official request via email for notices of violations and inspection records (see attachment #35).

At approximately 11:15 AM, I spoke to Eric WEATHERBEE, APCD.

WEATHERBEE has been inspecting oil lease facilities in the area for the past 20 years. WEATHERBEE confirmed CCC recently purchased the lease from CRC. They acquired it less than one year ago. WEATHERBEE told me CCC is an east coast based company and were not very familiar with west coast standards. Therefore, they received a few minor violations initially (see attachment #36). Since then, CCC has corrected the violations and have remained in good standing.

WEATHERBEE identified CCC as Permit #00939. CCC is permitted to operate two pieces of combustion equipment, one of which is the "glycol reboiler" and the other as the flare stack. The reboiler separates oil, gas, and water. In addition,

there are two engines located at the site; a "Waukesha" engine, at the EP Clark facility, which acts as standby power for the vapor recovery and an Ingersoll Rand engine, which is for on-going operations.

WEATHERBEE confirmed I may request a public records request through their website. The request would include the transfer of ownership, last five years of application materials and permits, and enforcement reports. On Thursday, December 28, 2017, at approximately 2:00 PM, I sent an official request for the above items.

At 2:25 PM, I spoke to Kerby ZOLULA, APCD. ZOLULA told me the following, in summary: Methanol is typically injected into a natural gas line as an inhibitor. It acts as "freeze protection" because there is water present in natural gas. APCD does not need to permit the use of methanol, as CCC only uses a small amount of it (see attachment #36).

I contacted HABLISTON, CCC Partner. I requested a representative meet us to download equipment data. HABLISTON scheduled a technician from PROCTEK to arrive Tuesday, January 2, 2018, at 9:00 AM.

On Friday, December 29, 2017, the IT went out to search for and collect surveillance video that would capture any activity within the GOA. A portion of the IT met with PRICE at 9:30 AM, and ZEIER at 11:45 AM, at the CCC compressor site for interviews and to review the equipment (see attachment #32).

At approximately 10:00 AM, the IT made contact with personnel at 300 E. Esplanade Drive, Oxnard. The building is a high-rise building, known as the tower, near Highway 101.

At 300 E. Esplanade Drive, we met with Quentin SESSYL, Post
Commander/Security for Allied Universal Security Services. Topa Management
Company manages the building and uses Allied Universal as contracted security.
We were told a surveillance camera is posted on the roof of the building, next to a helicopter pad, pointing towards the northeast.

IT reviewed the video from Monday, December 4, 2017, and time stamped at approximately 6:17 PM. We observed two separate flashes that are consistent with

arc flashes. The flashes we observed on the video appear to be within the GOA that was established for the THOMAS fire. We collected the videos on a thumb drive (see attachment #3).

At approximately 3:00 PM, the IT continued to the StorHouse Storage Center (SSC), located at 3201 West Fifth Street, Oxnard. This location is along the south perimeter of Oxnard Airport runway. We met with Marc HERMANN and Tony DUENAS, Operations Manager. Their storage facility has a high definition security system installed.

SSC retained video from the evening of the fire which captured similar footage the Esplanade tower had, but from a slightly different angle. The SSC video matched the flashes seen in the previous surveillance video. The video footage was collected on a thumb drive (see attachment #3).

On Tuesday, January 2, 2018, at approximately 9:40 AM, the IT met with Renzo NAVARRETE, from ProcTek, and PRICE, of CCC. We traveled to the compressor site in Anlauf Canyon. NAVARRETE downloaded gas meter data from the equipment.

While at the compressor site, we re-examined the area where flames were observed after the THOMAS fire traveled through there. Closer examination of the enclosed grate and catch basin revealed a pipe was located under the metal mesh grate. After following the pipe's flow, it was determined natural gas was flowing from the compressor. After speaking to PRICE, PRICE confirmed he had closed a valve that controlled the natural gas that fed the fire emitting from the grate. PRICE recalled doing that on Wednesday, December 6, 2017, which was also the day of our first interview with him. Once the valve was closed, the fire went out. The valve that was closed came out of a "suction" intake at the first stage compressor.

We then went to CCC's office located at 12720 Ojai Santa Paula Road, Ojai. At this location, NAVARRETE downloaded additional data from their server. Data was downloaded on to a thumb drive, utilized by the IT, and printed for this report (see attachment #32).

3

19

20

21

22

23

24

25

26

27

28

29

30

On Wednesday, January 3, 2018, after analyzing all collected video (TORREY, TOPA, STORHOUSE, R&R PIPELINE, CLARK GAS) and estimated triangulations, 2 the IT determined there were two distinct separate flash locations (eastern and western) approximately one and a half miles apart. These flashes occurred nearly 4 5 simultaneously and appeared to be on the same circuit. The IT determined these were areas of interest. IT inspected both areas of interest and observed physical 6 7 evidence associated with the triangulated eastern flashes. The physical evidence observed (power lines) was consistent with phase to phase arcing. The video and 8 9 physical evidence showed the THOMAS fire GOA was not in the location of the 10 eastern flashes. Physical evidence at the triangulated western flashes had already been observed and collected by the IT during the O&C investigation on Thursday, 11 12 December 28, 2017. The IT determined physical evidence on the power lines associated to the eastern flashes were connected to the same circuit as the power 13 lines associated to the western flashes (CASTRO Circuit). Based on extensive 14 analysis of video evidence, the IT determined the start of the THOMAS fire was a 15 result of the western flashes. The IT collected the physical evidence relating to the 16 17 eastern flashes on Friday, January 5, 2018. 18

On Wednesday, January 3, 2018, a preservation letter was drafted by the Ventura County Counsel to address SCE records and equipment. I signed the letter, addressed it to SCE with attention to MCCOLLUM, and had Kim BEECHAM, VCFD front receptionist, mail it via FedEx at approximately 9:40 AM. Pick up was scheduled for later that same day with tracking number 8028-9397-6654 (see attachment #53).

Investigators were initially dispatched to the THOMAS fire on Monday, December 4, 2017. IT was unable to access what was later determined to be the Overall Fire Area (OFA) due to fire conditions. The OFA was secured on Wednesday, December 6, 2017, determined to be approximately 230 acres. Ultimately, the IT narrowed the GOA to approximately 22 acres. Throughout the course of the THOMAS fire investigation, the IT were able to independently corroborate the GOA through O&C and Intel. The THOMAS fire GOA was released on Friday, January 5,

2018 (see attachments #2 and #3).

On Monday, January 29 and Tuesday, January 30, 2018, I returned to the THOMAS fire site to view SCE crews lower and remove power line equipment (see attachment #55).

On Tuesday, May 29 through May 31, 2018, Investigators from CAL FIRE and VCFD met with Jim NOLT, Professional Engineer (PE). The IT utilized NOLT on several occasions throughout the course of the Thomas fire investigation to evaluate the electrical system within the OFA and GOA. We reviewed SCE data that was submitted to us on April 6, 2018, NOLT created a timeline of events that occurred associated with the Castro circuit on Monday, December 4, 2017.

On Wednesday, October 24, 2018, we received a report created by NOLT (see attachment #63). The IT reviewed NOLT's report and concluded it further corroborated the IT's final hypothesis.

On Saturday, November 17, 2018, we added documents received per our request from SCE dated Friday, October 26, 2018. The response letter and documents from SCE are in regards to the Thomas fire investigation report are pertaining to meter No. 254000-004308 and 222-931684. We still have yet to receive the data requested in its entirety (see attachment #64).

## **OPINIONS & CONCLUSIONS:**

The following opinions and conclusions were based on supporting documentation, supplemental reports, statements made to investigators, audio/video recordings, CAD reports obtained from dispatch centers, and evidence found while conducting the origin and cause investigation.

Skies were clear with no thunderhead or cloud build-up observed. There was no evidence located within the GOA consistent with lightning strikes or fire resulting from a lightning strike. A lightning detection map was printed and confirmed there was no recent lightning activity in the area. Based upon the weather data, I eliminated a lightning caused fire (see attachment #43).

There are no campgrounds in the area where the GOA is located. The area is not typically used for camping and did not have campfire rings, campsites, piled material typically associated with a campfire, or indications of any campfires near the GOA. The fire occurred on private property. DOLLAR told the IT he never has fires on his property of any type. Based upon the lack of the above items, I eliminated a campfire caused fire.

The IT did not observe or locate any cigarette butts or other smoking paraphernalia within the GOA. All people who had access to the DOLLAR ranch the day of the THOMAS fire were interviewed and stated they do not smoke. Based upon the above facts the IT eliminated smoking as a potential cause of the fire.

Ventura County APCD had a burn ban in effect which prohibited debris burning. There were no burn barrels, piles of trash, or signs of burn barrels being used to conduct debris burning located near the GOA. Additionally, the IT did not observe any of the previously mentioned items during a perimeter search of the area, eliminating debris burning as a potential cause of this fire.

There was no evidence of items typically associated with an intentionally set fire was observed/located within the GOA. The inaccessibility to the DOLLAR ranch, which is controlled by locked gates and fences is not consistent with that of a person who commits the crime of arson. Additionally, all persons who had access to the DOLLAR ranch the day of the THOMAS fire were vetted, and if needed, alibis were corroborated eliminating incendiary as a potential cause of the fire.

There was no indication of equipment use in the GOA prior to the IT arriving to the incident. During the investigation, the IT examined the GOA and observed no signs of motorized equipment recently used within the general vicinity. The IT did not observe any disturbed soils, or any area where equipment had been used. The GOA is not located along public roads. The nearest road is an unmaintained paved road that traverses through the DOLLAR property. The only people that have access to the DOLLAR property is the DOLLAR family, oil lease representatives, a cattle rancher (Robert FROST) who leases a portion of the DOLLAR ranch, and a radio station representative (Richard RUDMAN) who maintains an antenna on the

DOLLAR property. Vehicles operating on the DOLLAR ranch the day of the THOMAS fire were all evaluated/inspected by the IT. The IT obtained current registration and insurance information for all vehicles in question. The last vehicle on the DOLLAR ranch the day of the fire was owned and operated by RUDMAN who exited the lower gate toward Highway 150 approximately one hour prior to the fire. There was no mention by DOLLAR of any vehicles in and or around the property at the time the THOMAS fire started. Additionally, the IT saw no signs of Off Highway Vehicle (OHV) use in the area. No catalytic converter particulates were located within the GOA. Based upon the above facts, I eliminated equipment as a potential cause of the subject fire.

There are no railroads or railways within Anlauf Canyon, therefore I eliminated railroad equipment as a cause of the subject fire.

There were no toys, forts, or evidence of any activities associated with children playing with fire near the GOA. The only known juveniles in the area were at the KOA campground located approximately one and one half miles southwest of the GOA. The DOLLAR ranch is remote and has locked gates and fencing at all access points to the property. Based on the above facts playing with fire was eliminated as the cause of the fire.

The County of Ventura has a strict ordinance not allowing the use of fireworks within the County. No witnesses reported seeing, or hearing any indication of the use of fireworks. The area where the fire occurred is on private property and is not open to the public. Additionally, no persons who had access to the DOLLAR ranch the day of the THOMAS fire observed anyone lighting fireworks or heard sounds typically associated with use of fireworks. During the examination of the GOA, no remnants of fireworks were located. Based upon the above facts, fireworks were eliminated as a potential cause of the fire.

No signs of cutting, welding or grinding of metal was noted during the course of the investigation. Therefore, I eliminated this as a potential cause of the fire.

There were no reports of anyone engaging in recreational shooting activities prior to the fire. DOLLAR does have a shooting area established on his property, but

DOLLAR told the IT nobody has utilized the shooting area for two months. All people who had access to the DOLLAR ranch were interviewed and stated they did not hear or witness anyone engaged in recreational shooting. Therefore, I eliminated shooting as a potential cause of the fire.

During the examination of the GOA, the IT did not locate any broken glass or glass bottles. The fire occurred approximately one and a half hours after sundown. Based upon these facts glass refraction was eliminated a caused of the fire.

Spontaneous combustion was excluded as a potential cause. No evidence of mulch or organic material was located within the GOA that had the ability to spontaneously combust. There was no evidence of mulch or organic material piles hay or grass in the GOA. Spontaneous combustion was eliminated a cause of the fire.

The Timber Canyon Lease owned and operated by CCC was located along the east perimeter of the OFA. A flare stack was located within the Timber Canyon lease, approximately three quarters of mile from the perimeter of the GOA. The IT did not observe any indications of a malfunction in, on or immediately around the flare stack. The IT obtained security video footage revealing the flare stack was not actively burning at the time the THOMAS fire started (see attachment #3). The IT did observe a fire burning within the CCC compressor site. Interviews with oil field professionals and observed burn patterns indicate this fire was secondary to the THOMAS fire and contained to the compressor site. The IT determined the cause of the compressor site fire was a result of ember cast from the THOMAS fire that ignited the natural gas. Based on the above facts, I was able to eliminate flare stacks or a fire originating within the oil facility as a potential cause of the THOMAS fire.

Due to portions of the DOLLAR ranch being utilized as cattle grazing land, the IT evaluated fencing in the OFA and GOA. The IT did not locate or observe any electrical fencing, and noted only barbed wire fencing on subject property.

Therefore I eliminated electric fences as a potential cause of the fire.

My experience and knowledge of conducting fire investigations, includes instances where power lines producing heat/sparks in a receptive fuel bed, has the potential for igniting a low intensity, slow developing incipient fire dependent on wind. Weather conditions and low fuel moistures contributed to the ignition and rapid extension of the THOMAS fire. During the course of the investigation, the IT collected many pieces of evidence/data substantiating the determination of an electrical event. The IT utilized the collected data to triangulate the multiple arc flashes as well as the fire during its initial growth.

The facts and circumstances revealed during the course of the investigation indicate the fire was caused by a phase to phase contact within a receptive fuel bed. The IT's O&C, Intel, collection and evaluation of evidence concluded that the power lines owned and operated by SCE were the cause of the THOMAS fire (see attachment #2 and #3).

Based on my training, knowledge, experience, observations at scene, consultation with other fire investigators, expert opinions, data analysis and the elimination of other causes through the scientific methodology, I determined the fire occurred when a phase to phase contact arced ejecting molten metal particles onto dry ground vegetation.

19 20

14

15

16

17

18

21

22 23

24

25

26

27

28 29

30

Signature

Christine SAQUI

Fire/Arson Investigator

Ventura County Fire Department

Date

1	10 - ATTACHMENTS:
2	
3	1 - NFIRS
4	2 - Origin and Cause
5	3 - Data Collection and Analysis
6	4 - DINS
7	5 - Witnesses 1 thru 3, D. DOLLAR, C. DOLLAR, M. DOLLAR
8	6 - Witnesses 4 thru 7, Dori CLARKE, A. NUNEZ, J. TAIT, J. VALENZUELA
9	7 – Witness 8, R. RUDMAN
10	8 – Witness 9, P. RIOUX
11	9 - Witnesses 11 thru 13, T. SALAS, S. SWINDLE, S. BUCKLES
12	10 - Witnesses 14 & 15, J. GAMEZ Sr., J. GAMEZ Jr.
13	11 - Witness 16, R. FROST
14	12 - Witnesses 17 & 18, M. LOVO, K WILLIAMS
15	13 - Witnesses 20 thru 26, L. THAYER, T. GARCIA, L. MOORE, M.
16	HAGGARD, R. LEMON, J. RICHARD, B. ALLEN
17	14 - Witness 27, J. MONZADA
18	15 - Witnesses 28 & 29, A. PRICE, R. PRICE
19	16 - Witness 30, T. TAYLOR
20	17 - Witness 31, E. BROCK
21	18 - Witness 32, M. MCLEAN
22	19 - Witness 33, C. TULBERG
23	20 - Witnesses 34 thru 36, J. GOYETTE, M. GOYETTE, R. GOYETTE
24	21 - Witness 37, S. SMITH
25	22 - Witnesses 38 & 39, P. MOREHART, M. MOREHART
26	23 - Witnesses 40 & 41, P. HERNANDEZ, N. HERNANDEZ
27	24 - Witnesses 42 & 43, N. BROUWER, J. BROUWER
28	25 - Witness 44, T. HENDERSON
29	26 - Witnesses 45 & 46, Christine LAW, Charles LAW
30	27 - Witnesses 47 & 48, F. SCHREINER, RAMANDA

1	28 - Witness 49, T. BELL
2	29 - Witness 50, T. CARPENTER
3	30 - Witness 51, M. RIEDER
4	31 - Witness 52, M. ALVERADO
5	32 - Witnesses 53 thru 58, T. HABILSTON, M. ZEIER, M. DEAN Jr.,
6	S. PRICE, C. FERNANDEZ, K. BROWN
7	33 - Witness 59, J. BRADEY
8	34 - Witnesses 60 & 61, Daniel CLARKE, N. PAPE
9	35 - Witness 62, M. STEINHILBER
10	36 - Witness 64 - 66, E. WEATHERBEE, K. ZOLULA, D. FERCY
11	37 - Witness 67, M. EVANS
12	38 - Witnesses 68 thru 71, T. HUNTER, G. WHITE, D. BERN, H.
13	WISNIEWSKI
14	39 - Witness 73, J. OLIN
15	40 - Witness 75, R. MCCOLLUM
16	41 - Chain of Custody, Thursday, December 28, 2017 (LE-76)
17	42 - Chain of Custody, Friday, January 5, 2018 (LE-76)
18	43 - Forecasted Weather (National Weather Service)
19	44 - Local Weather Report (RAWS)
20	45 - Lightning Detection Map
21	46 - SCE Map of Equipment in the GOA
22	47 – Ventura County Assessor Parcel Number
23	48 - VCFD Incident Detail Report and 911 Audio
24	49 - CHP CAD and 911 Audio
25	50 - VCSO Incident Detail Report and 911 Audio
26	51 - Scene security
27	52 - Reporting Parties contact list
28	53 – SCE preservation letter
29	54 - SCE/CAL FIRE MOU
30	55 - SAQUI Supplemental report for Monday, January 29, 2018

1	56 - SCE Provided Data (3 binders)
2	A - SCE Response Letter, April 4, 2018
3	B – Wakefield Substation, DNA History Plot and Data
4	C - CASTRO Circuit Maps
5	D - RAR0179 Graph and Data
6	E - Pole Data pages 12 - 31
7	F - Interruption Log Sheet for RAR1228
8	G - RAR1228 Graph and Data
9	H - RAR1228 Cycle Graphic Display
10	<ul> <li>Maintenance records and trouble reports</li> </ul>
11	J - Maintenance records, pages 709 - 710
12	K – Maintenance records, pages 711 – 713
13	L - Maintenance records, pages 714 - 747
14	M - Maintenance records, pages 748 - 765
15	N - Event data log, pages 933 - 935
16	O - Pole Data, pages 696 - 700
17	P - Meter 1684 Events/Exceptions Detail Report, pages 1242 - 1243
18	Q - Meter 35324 Event Data, pages 685 - 692
19	R - Meters 6053 and 65411 Event Data, pages 673 - 681
20	S - Meter 376309 Event Data, pages 682 - 684
21	T - 2014 Tree Service, pages 32 - 228
22	U - 2015 Tree Service, pages 229 - 449
23	V – 2016 Tree Service, pages 450 – 672
24	W- 2017 Compliance Trees in Collector, pages 855 – 923
25	X – 2017 Compliance Prescriptions in Collector, pages 733 – 854
26	Y - Interruption Log Sheets, pages 4 - 10
27	57 – Additional Information Requests to SCE and Replies, June 15, 29, 2018
28	58 - SCE Thomas Letter, June 15, 2018
29	59 – LiDAR
30	60 – SCE provided data July 13, 2018

	THOMAS	December 4, 2017	17CAVNC103156
1	61 –	LAW All Electric meter data request (SCE)	
2	62 –	Carbon All Electric meter data request (SCE)	
3	63 –	JHNOLT Associates Project Status Memorandum	
4	64 –	SCE provided data, October 26, 2018	
5	65 –		
6	66 –		
7	67 –		
8	68 –		
9	69 –		
10	70 –		
11	71 –		
12	72 –		
13	73 –		
14	74 –		
15	75 –		
16	76 –		
17	77 –		
18	78 –		
19	79 –		
20	80 –		
21	81 –		
22	82 –		
23	83 –		
24	84 –		
25	85 –		
26 27	86 – 87 –		
28	88 –		
29		Disk of Audio Interviews	
30		HATCH case Photos and Video	
90	30 –	15 I) OH GOOD HOLD WHA FINDS	

	THOMAS	December 4, 2017	17CAVNC103156
1	91 – DELAROSA Case Videos		
2	92 - KINSLEY Case Photos		
3	93 - KELLEY Case Photos and Videos		
4	94 - SAQUI	Case Photos	
5	95 – ALTON	Case Photos	
6	96 - CHAPIN Case Photos		
7	97 – BERGH	Case Photos	
8	98 - RUSSE	LL Case Photos	
9	99 – HARRIS	S Case Photos	
10	100 - SNODG	RASS Case Photos	
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			