



Preliminary Ignition Investigation Report

Ignition Database Index:	1332
Electric Incident Investigation (EII) Number:	N/A
Assigned Attorney:	N/A
HAWC Incident Name:	N/A
Suspected Point of Origin Near PG&E Facilities:	Tree limb fell and landed on conductor and phone line near pole SAP ID 100088215
PG&E Facilities Possibly Attributable:	Primary conductor
CPUC Reportable?	No
Date & Time of Incident:	August 30, 2021 at 1630 hours
Latitude/Longitude	[REDACTED]
Street Address:	Near [REDACTED]
City:	Penn Valley
County:	Nevada
PG&E Division:	Sierra
High Fire Threat District:	N/A
Fire Index Area:	330
Fire Potential Index (FPI) Rating:	R4
Was there a PSPS event at the time of ignition?	N/A
Asset Type Involved:	Primary conductor
Circuit:	15313-2105, Narrows 2105
Circuit Protection Zone:	Narrows 2105 LR2216
Nominal Voltage:	21kV
Lead Agency/Agency Having Jurisdiction:	Cal Fire
Fire Size:	Fire was limited to tree limb
Fire Containment Status:	100%
FAS Field Remarks:	Responded to wire down outage from fire dept. Approximately 15ft oak tree limb had fallen onto line and hung up touching the phone at the same time. When I arrived the tree limb was smoking and had some burn marks on it. Applied water to limb and removed tree limb from line. No damage to infrastructure and no fire on the ground.
HAWC Notification (epage, Incident Report):	N/A
Injuries / Fatalities / Property Damage:	N/A
Weather Conditions:	Hot day, 96.9F
Estimated Wind:	Winds were sustained at 6.7 MPH out of the South-Southwest with gusts up to 15.5 MPH.
Red Flag Warning (RFW):	No RFW was in effect at time of incident

High Wind Warning (HWW):	No HWW was in effect at time of incident
Media Attention:	N/A
911 Standby Relief Time:	27 minutes
OIS #:	1458498
ILIS #:	21-0111318
FAS #:	T005382339
EII Ignition Investigator & Phone:	[REDACTED]

Executive Summary

On August 30, 2021 at approximately 1630 hours, PG&E was notified by Cal Fire of a vegetation related outage near ██████████ in the City of Penn Valley. The incident occurred on the Narrows 2105 12kV Overhead Distribution circuit in a Non-High Fire Threat District (Non-HFTD). (See Figure 1).

Meteorology data pulled from the MesoWest weather observation site approximately 0.56 miles north of the incident indicates it was a hot day at 96.9F. The winds were sustained at 6.7 MPH with gusts up to 15.5 MPH. At the time of the incident there was no ongoing Public Safety Power Shutoff (PSPS) event (See Figure 2).

The troubleman is the PG&E first responder that arrived on scene at 1752 hours. Upon the troubleman's arrival, he noticed Cal Fire was leaving the scene for a reported structure fire. The troubleman observed a smoking tree limb that was approximately 15-feet in length still resting on both the conductor and phone line. The troubleman applied water to the tree limb and then removed from the powerlines.

No Electric Corrective (EC) notification tags were created for this incident. The only identifiable damage at the incident location was the approximate 6-inch burn mark left on the tree limb (See Figure 3 and 4).

The PG&E engineering team confirmed that the Narrows 2105 had the Enhanced Power Line Safety Settings (EPSS) enabled during the date of the incident. The Hot Line Tag (HLT) EPSS was enabled on July 29, 2021 and the Fast Trip Setting (FTS) EPSS was enabled on September 21, 2021. Engineering determined that this was an HLT EPSS outage in which a high impedance fault caused a force-out to Fuse 7197. Engineering also determined that because the tree limb was contacting both the conductor and phone line that this was a Line to Ground (LG) fault.

The Vegetation Management (VM) team conducted a post-incident investigation at approximately 1845 hours. VM concluded that the alive, mature subject 75-foot tall valley oak tree had a partial failure of a 5-inch diameter overhanging branch. Additionally, VM did not observe any burn marks on the ground to support that a ground ignition ever occurred (See Figure 5).

No Enhanced Vegetation Management (EVM) work was performed within 1/8 mile radius of the incident location (See Figure 6). The last recorded routine inspection for the subject tree was on February 16, 2021 with a worked date of March 22, 2021 that involved trimming sprouts along the trunk. The next planned inspection of the oak tree is scheduled in February 2022 under Work Request #XNSI1001186.

Ignition Impact

This incident on August 30, 2021 resulted in an ignition that was limited to the failed tree limb that landed on the power lines. PG&E facilities and assets were not damaged. The incident caused an outage that affected 9 customers for a total of 1062 customer minutes. There were no reported injuries, property damage or media attention.

This report is preliminary and based on available information as of **January 25, 2022**; event data is subject to change based upon subsequently discovered information.

Sequence of Events

August 30, 2021

- 1630 Hours: Fuse 7197 opened, First No Light (FNL)
- 1637 Hours: Troubleshooter dispatched
- 1752 Hours: Troubleshooter arrived on scene
- 1828 Hours: Fuse 7197 closed and power restored

Corrective Notification Associated with Ignition

No EC tags were created for this incident.

Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	121394622	Pending EC tag is to assess woodpecker damage and repair pole top split for SAP ID 100088215	E	May 25, 2021	May 25, 2021
COE Notification	N/A				
LC Notification	N/A				
Veg Work Order	XNSI1001186	Pending		March 22, 2021	February 2022

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

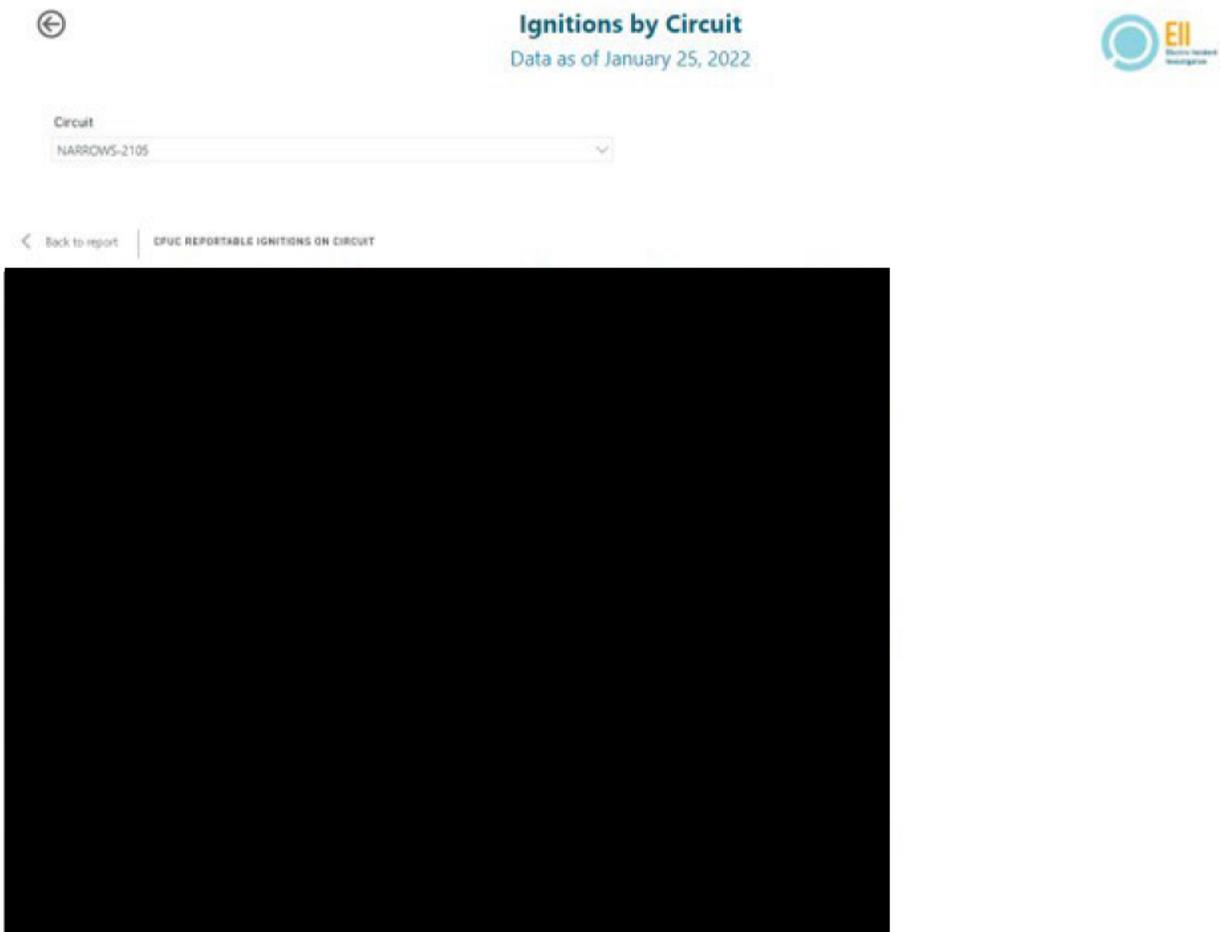
Asset Info & Recent Inspections and Tests

Info / Inspection	Most Recent Date	Findings
Install Date:	January 1, 2004	Western Red Cedar, Class 2
Inspection:	May 25, 2021	Woodpecker damage and vegetation nearby. Vegetation did not present abnormal conditions. EC tag 121394622 created to address woodpecker damage.
Patrol:	N/A	
Corrective History:	March 15, 2016	EC tag 111500825 was created to repair woodpecker damage for pole SAP ID 100088215. Repairs were completed on November 2, 2017.
Arial Inspection Records:	October 19, 2019	Aerial inspection of area near pole SAP ID 100088215. Taken from Sharper Shape (See Figure 7).
VM Inspection:	March 22, 2021	Last completed work date. Tree is alive. There is a planned inspection for February 2022 with Work Request XNSI1001186.
Equipment Test:	N/A	
Pole Intrusive Test:	January 6, 2017	Passing results for pole SAP ID 100088215 but with the following: Fair pole top and pole bottom condition with wood strength testing at 100% 
WSIP Inspection:	N/A	

*Incident Location: Near pole SAP ID: 100088215

Frequency of Occurrence

The cause of the ignition that occurred on August 30, 2021 on the Narrows 2105 is attributed to vegetation contact. Below is the ignition history for the Narrows 2105. There are a total of six ignitions that are due to vegetation contact since the 2015 year. The remaining identified fires included another six that were due to PG&E equipment failure and one from animal nesting.



Index No#	Create Date	Fire Size	Suspected Initiating Event	HFTD	Fire Latitude	Fire Longitude
20150057	05/09/2015	0.26-9.99	Equipment - PG&E	Tier 2	39.23	-121.25
20150126	06/12/2015	<0.25	Vegetation	Tier 2	39.23	-121.16
20150265	08/08/2015	<3 meters of linear travel	Equipment - PG&E	Tier 2	39.20	-121.21
20160235	08/13/2016	<0.25	Equipment - PG&E	Tier 2	39.20	-121.21
20160289	09/13/2016	<3 meters of linear travel	Equipment - PG&E	Non-HFTD	39.19	-121.18
20170096	06/15/2017	<0.25	Vegetation	Tier 2	39.23	-121.24
20170172	07/05/2017	0.26-9.99	Vegetation	Tier 2	39.21	-121.23
20180480	07/14/2018	<0.25	Vegetation	Tier 2	39.21	-121.20
20180655	08/10/2018	<0.25	Equipment - PG&E	Tier 3	39.21	-121.21
20180705	08/24/2018	0.26-9.99	Equipment - PG&E	Tier 2	39.17	-121.28
MIT20180030	10/14/2018	<3 meters of linear travel	Vegetation	Tier 2	39.25	-121.16
20200658	06/23/2020	<3 meters of linear travel	Vegetation	Tier 2	39.21	-121.21
20200904	07/29/2020	0.26-9.99	Contact - Animal - Nest	Tier 2	39.22	-121.24

Hazard Barrier Analysis

Hazard	Failed Tree Limb				
Target	Fallen Tree Branch Contacting PG&E Assets				
Barrier	Objective	Expected Performance	Did Barrier Perform as Expected	Did Barrier Contribute to Incident	Defect
Patrol & Inspection (P&I) Records	Identify any nonconformances with poles or lines.	Inspection or patrol would identify any issues with PG&E equipment.	Inspection records indicates woodpecker damage to pole but this had no bearing on the incident.	No	None
Wildfire Safety Inspection Program (WSIP) Inspections in high fire threat districts (HFTD)	Identify any nonconformances with structures in HFTD	Inspection would identify any issue with PG&E equipment.	No WSIP inspection was performed.	No	None
Catastrophic Event Memorandum (CEMA) Inspections	Identify dead or dying trees that could fall into primary or secondary PG&E facilities	Inspection would identify any dead or dying trees and mark them for removal.	The tree was not previously listed on a CEMA inspection record.	No	None
Vegetation Management (VM) Inspection (Routine)	Identify any trees that need work	Inspection would identify any vegetation that could cause a potential hazard.	Yes. Tree exhibited no signs of defect and was last worked on March 22, 2021.	Yes	Partial failure of overhanging branch still occurred.
Enhanced Powerline Safety Settings (EPSS)	De-energize sections of the distribution grid when a fault is experienced to make the line safe.	De-energize sections of the distribution grid until restored after visual inspection.	HLT EPSS was enabled on this circuit at the time of the incident.	No	None
Enhanced Vegetation Management (EVM) Risk Inspection	Identify any trees that do not meet the state standards for minimum	Trimming overhanging limbs & branches directly above & around the lines. Targeted removal of dead & dying trees as	Tree was not in scope for EVM work	Yes	Had tree been scheduled for EVM, the overhanging branches might have

	clearance around the power lines.	well as certain species that pose an increased potential risk of falling into power lines.			been addressed prior to incident. However, this location is within a Non-HFTD area.
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Potential Next Steps

- Address pending EC tag 121394622 for woodpecker damage on pole SAP 100088215. Appears area has a history of bird activity. A prior tag in 2016 was completed for the same type of damage.

Photos and Diagrams of Events



Figure 1 - EDGIS diagram of Narrows 2105 12kV circuit.

**PG&E Utility Fire Potential Index Ratings
Valid for 08/30/2021**

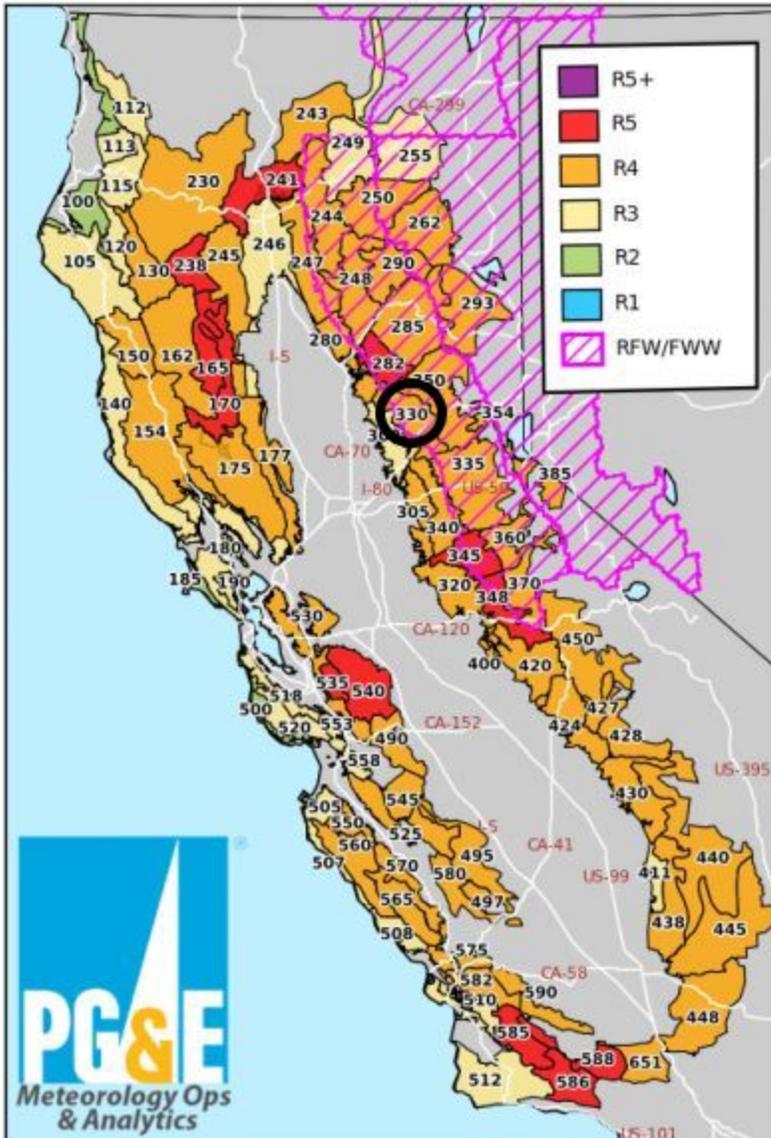


Figure 2 – This ignition occurred in Fire Index Area (FIA) 330. However, there were no Red Flag Warning (RFW) or High Wind Warning (HWW) in effect on this date.



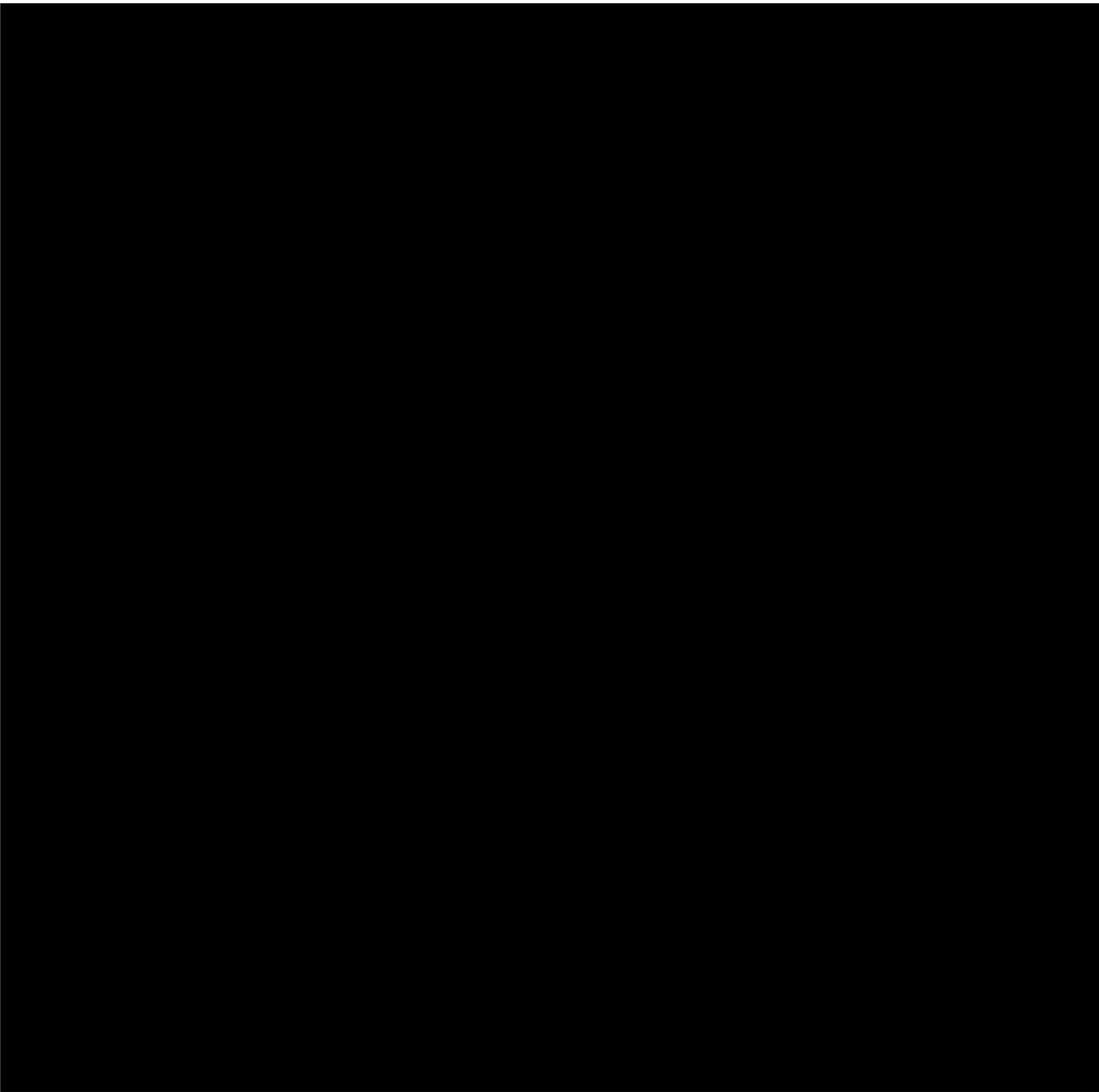
Figure 3 – Point of tree limb failure. Photo taken by Vegetation Management.



Figure 4 – Broken tree limb with burn mark. Photo taken by the troubleman.



Figure 5 – Pole SAP ID 100088215 and the valley oak tree in view. Also shown is the failed tree limb after it was removed from the powerlines. Photos taken by Vegetation Management.



by Vegetation Management.

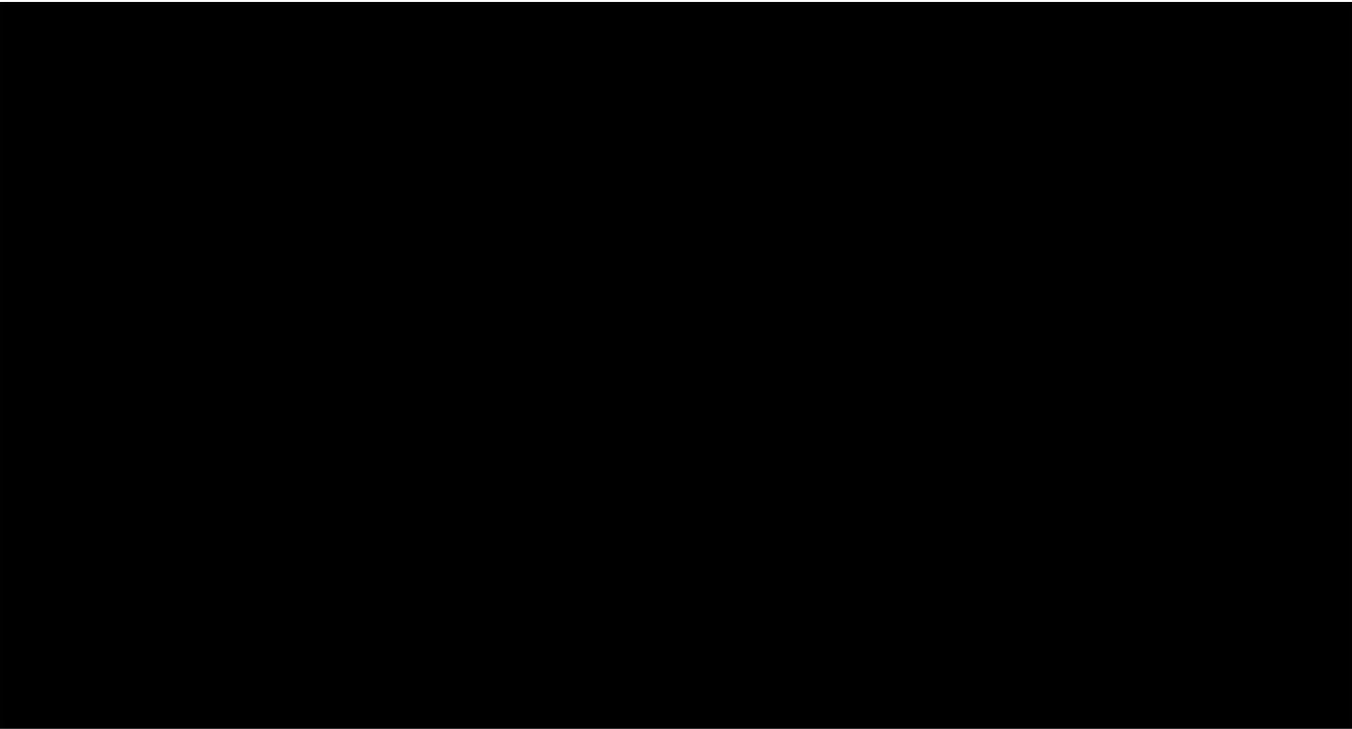


Figure 7 – Aerial view of Pole SAP ID 100088215 on October 19, 2019. Taken from Sharper Shape.

Attachments

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



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