

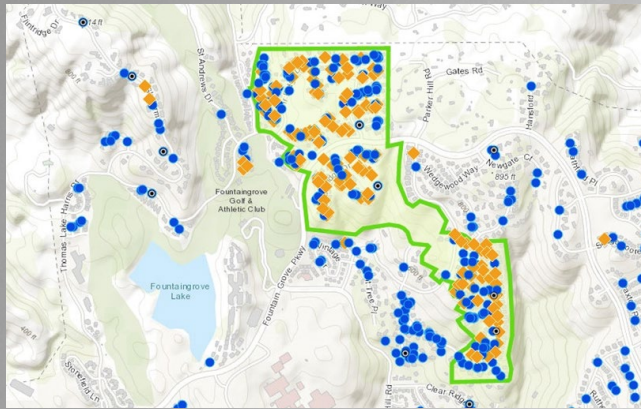


Drinking Water Contamination after a Fire

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ENVIRONMENT

Rare toxic cocktail from Camp Fire is poisoning Paradise water. It could cost \$300 million to fix.

BY TONY BIZJAK

APRIL 18, 2019 02:20 AM

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After Deadly Wildfire, a New Problem for Santa Rosa: Contaminated Water

The Northern California city suffered one of the deadliest fires in state history. In the aftermath, it now confronts a costly pollution problem likely caused when melted plastic pipes released chemicals into the water supply.

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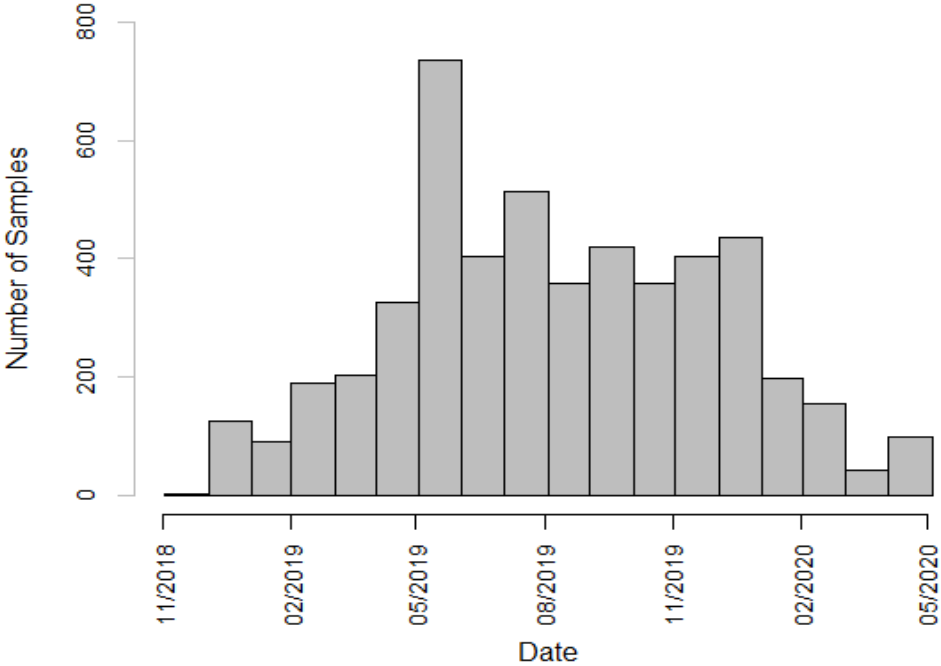
Chemicals in the Water

Water Contamination: Two Problems

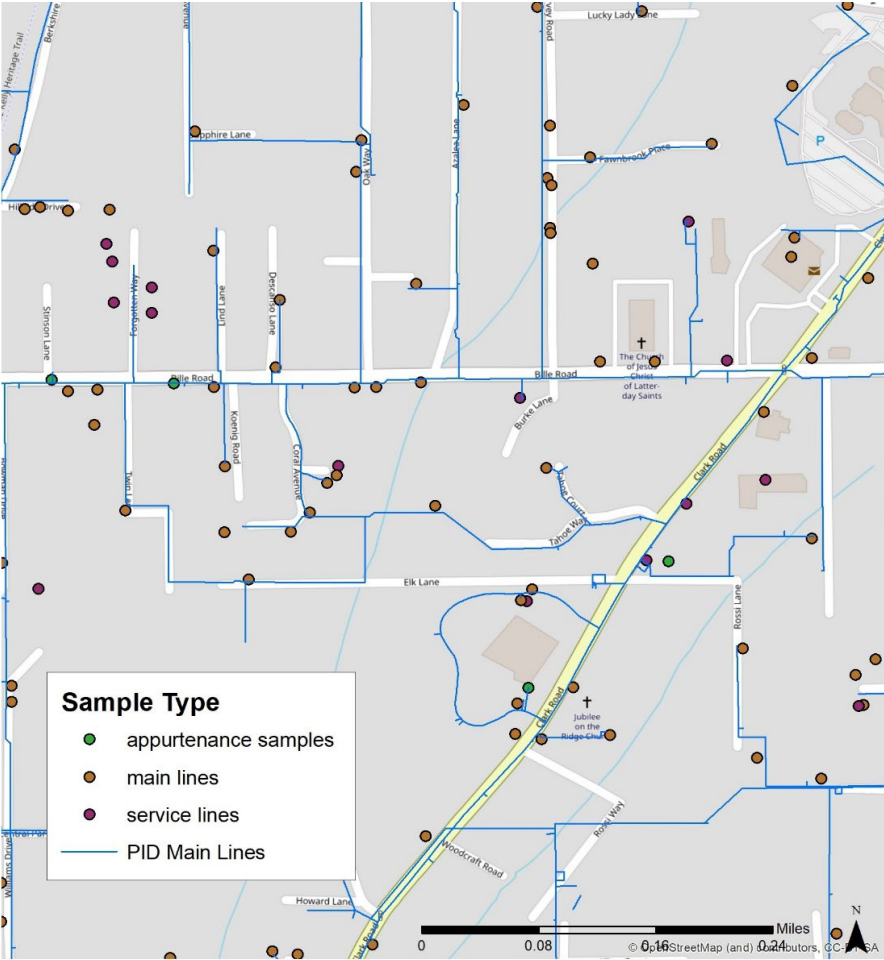
- Excessive sediment contamination
 - Potential microbial contamination
 - Boil water advisory
- VOC contamination
 - Benzene, methylene chloride
 - Smoke in de-watered service lines
 - Need to flush lines repeatedly
 - Replace severely contaminated lines
 - Do not drink, shower, or use this water



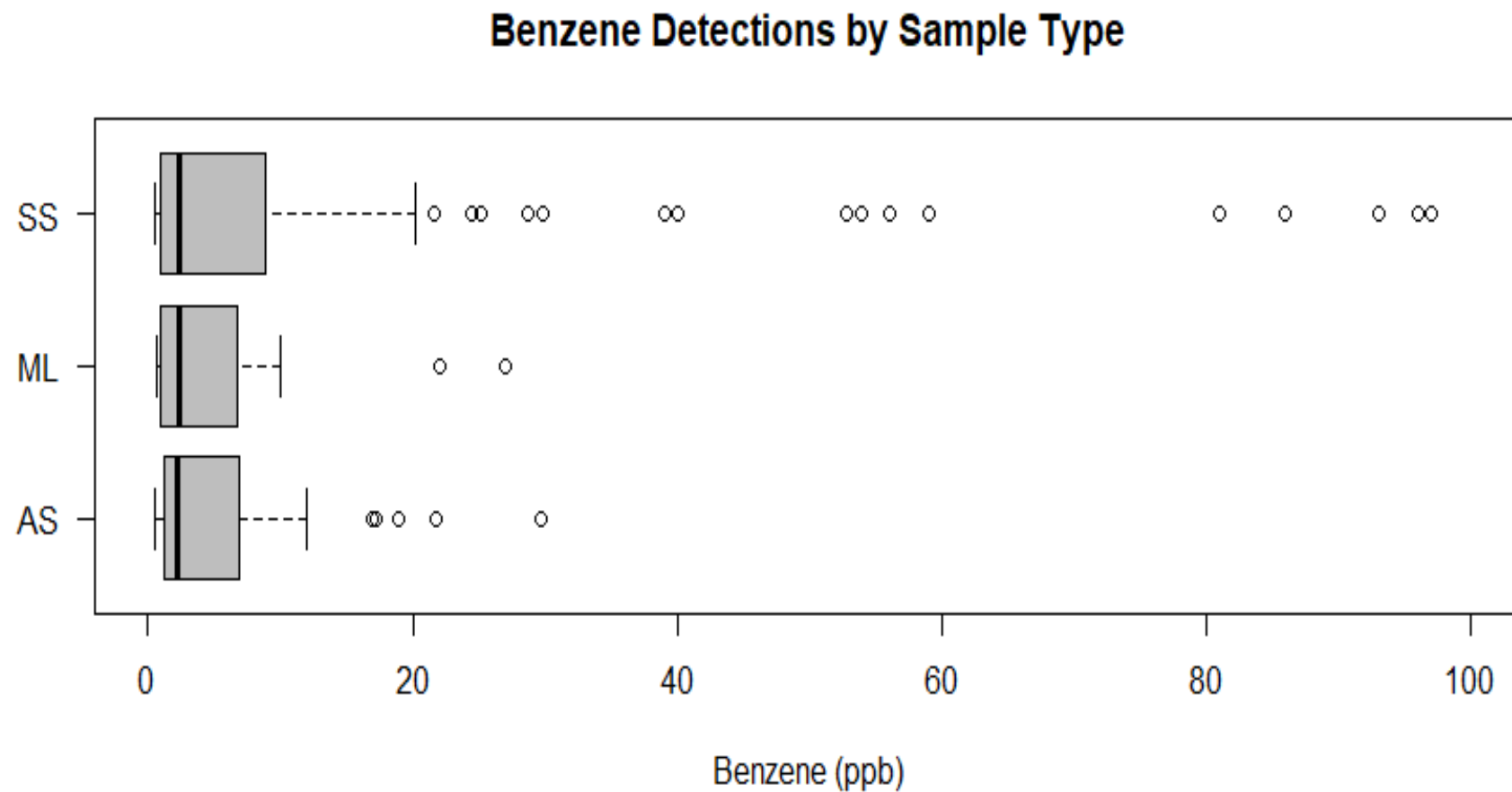
Sampling Summary: 2018 Camp Fire



- Total samples:
- 2391 main lines
 - 2217 service lines
 - 448 "appurtenances"

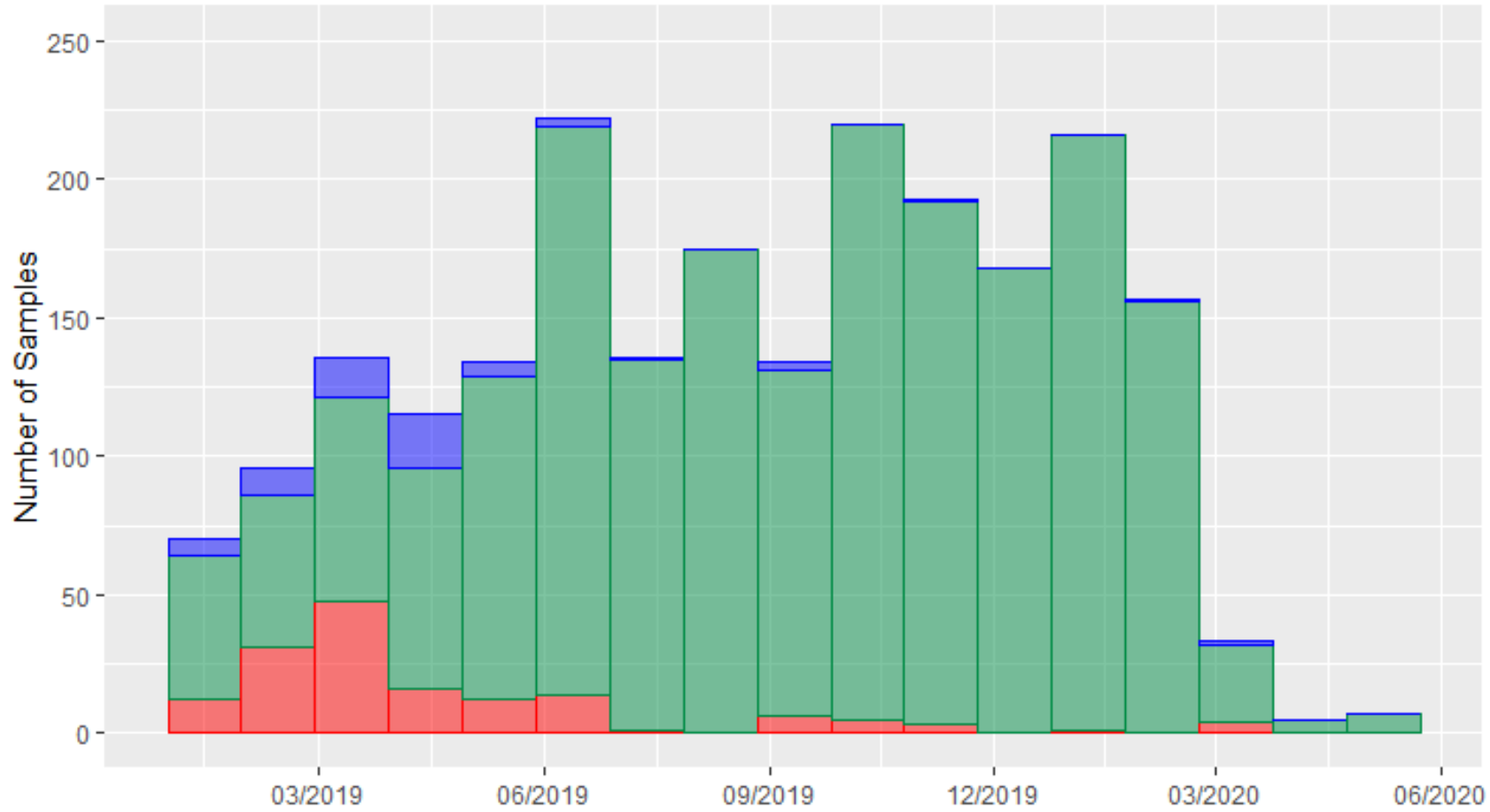


Paradise, California Benzene Results



Benzene Detections in Service Laterals by Sampling Date

■ In Compliance, Benzene Detect under the MCL ■ In Compliance, ND for Benzene ■ Out of Compliance



Contaminated Service Line Water Sample

- 32 compounds associated with PVC pyrolysis
- 28 compounds associated with polyethylene pyrolysis
- 55 compounds associated with burning of biomass and waste

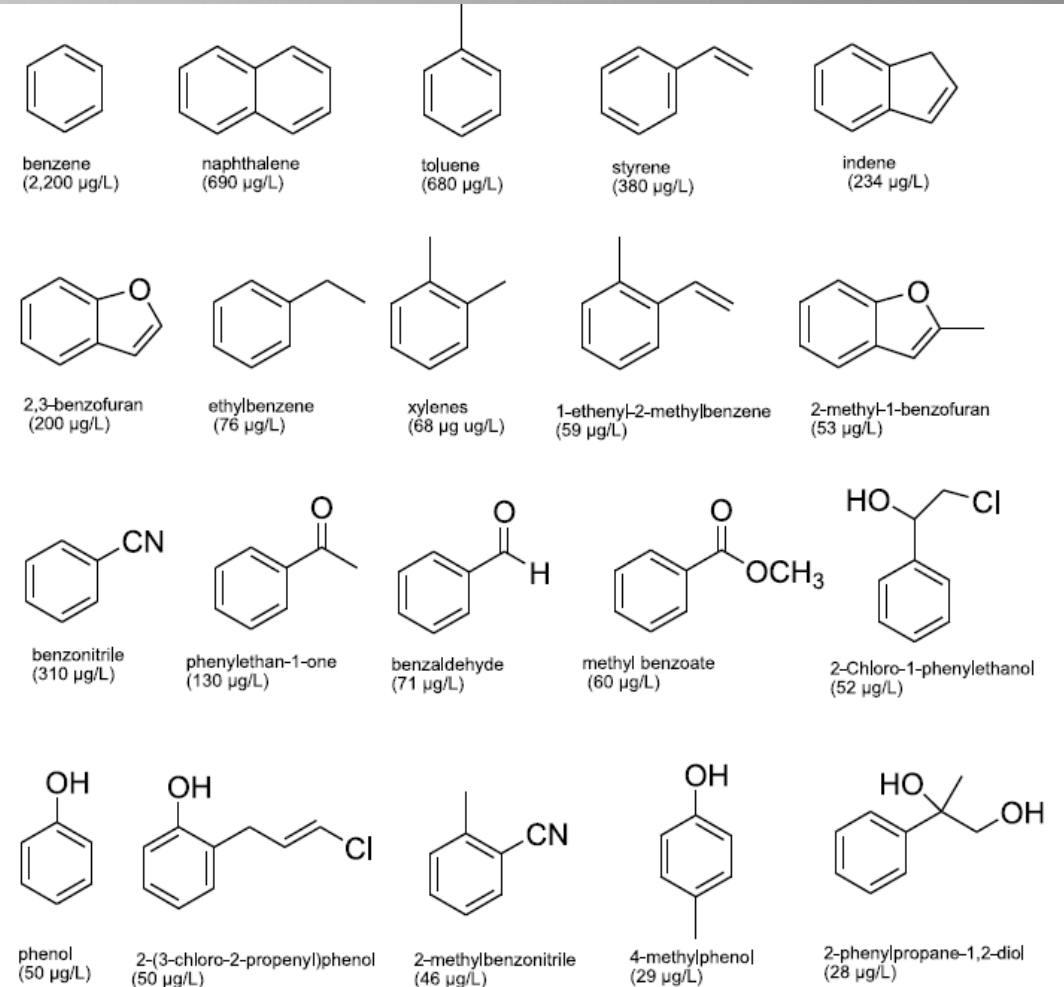
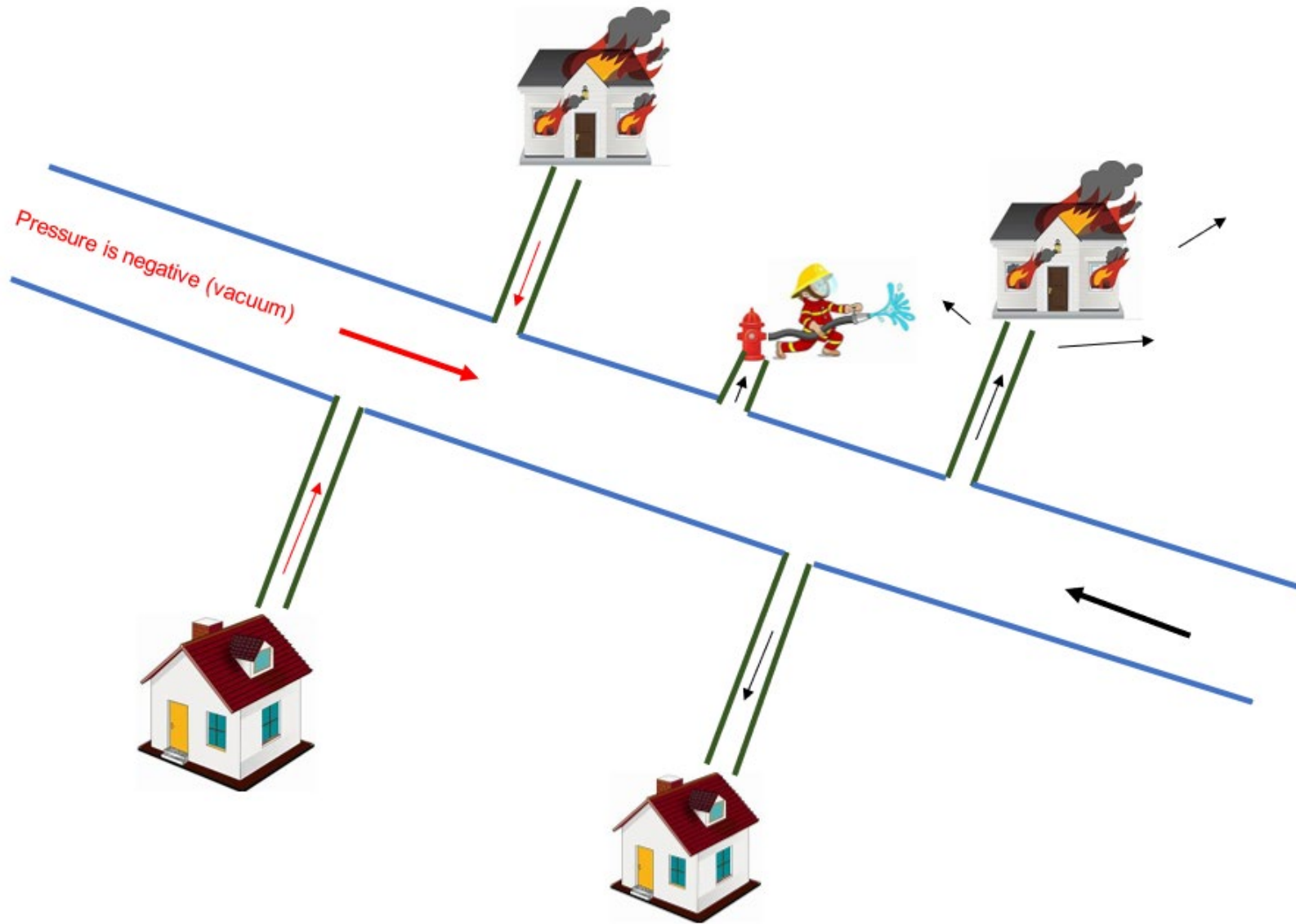


Figure 4. Principal VOCs and SVOCs detected in the service line water sample from the 2018 Camp Fire.



So what happened?

Figure: State Water Resources Control Board Division of Drinking Water