A production tank fire occurred at the Carris 1-14H-11 in Pittsburg County, OK. After interviewing the injured party and reviewing all evidence, it appears a static spark was created when a flowback operator attempted to open an aluminum thief hatch on a 300 bbl fiberglass tank. Natural Gas flowing into the top of the fiberglass tank caused the generation of static electricity. The flowback operator sustained second degree burns between the mid-forearm and mid-bicep area of his left arm. His mustache, eyelashes, eyebrows and sideburns were singed during the event.

Facts and Findings:
➢ Static electricity can be generated when high velocity/volume gas is flowed into a fiberglass tank.
➢ No gas buster system was utilized on the flowback operation.
➢ The contract flowback operator was exposed to large volumes of natural gas when he climbed the stairway and accessed the tank landing.
➢ During high line pressure events, high pressure natural gas could be routed back to a non-pressure rated fiberglass production tank creating a risk similar to the flowback operation.

Recommendations:
➢ Bond the thief hatches to the landing rails and the blow down line or water dump line.
➢ Train exposed employees on the need to ground themselves to the steel handrail prior to touching a potentially electro statically charged thief hatch.
➢ Conduct a risk assessment and decide whether or not flowing into non-pressure rated fiberglass production tanks is an acceptable risk.
➢ Train personnel to not gauge production tanks while gas is actively flowing into the tank.