

Charles Stalnaker

“Nitro” Charlie’s best friend was nitroglycerine.

That made for lonely work since one mistake could lead to death. Stalnaker knew the risks. He’d inherited his job because his predecessor, “Shorty” Glass, blew himself up.

A true loner, Stalnaker trusted no one and made his own nitroglycerine. He never drank on the job and he never lost his concentration.

Oil well shooters practiced an intricate and simple art. If a well was stubborn about producing, a shooter would send down a torpedo made of galvanized tin filled with nitroglycerine. A copper wire would then lower a “bomb” to the top of the torpedo to set off the charge. The explosion would crack the subsurface rock so the oil could flow. Most of Turner Valley’s oil had to be coaxed from under a thick layer of limestone.

Stalnaker’s plant in Shelby, Montana, was the closest source of nitro, so he would bring it across the border in a specially equipped truck. One border guard wanted to see what Stalnaker was transporting and threatened to shoot the lock off his trunk. “Go ahead,” said Stalnaker, “but wait until I get over the hill!”

Shooting Wells

Shooting oil wells meant using nitroglycerine to break up hard rock formations so the oil could flow.



Charles Stalnaker pouring nitroglycerine down torpedo tube inside oil rig
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Most wells required between 20 and 60 quarts of nitroglycerine, but each well was different. Charlie Stalnaker's largest explosion was in Turner Valley where he used 1,015 quarts of liquid nitroglycerine on a well.

Torpedoes made of galvanized tin were filled with nitroglycerine and lowered using a winch mounted on the back of the shooter's truck.

A bomb used to set off the charges, shooters used the more risky "open shot" method. A squib, or tin tube containing a small stick of dynamite and detonating cap, was connected to a length of fuse. This was lit before the squib was dropped into the well.

Born: 1891 – Died: 1979

Additional Resources

- **Alberta Energy Regulator | Resource, Stories with Energy**
<https://www.aer.ca/providing-information/news-and-resources/news-and-announcements/stories/talk-about-your-oil-booms>
- **Canadian Museum of History**
<https://www.historymuseum.ca/cmhc/exhibitions/hist/phase2/mod8e.html>

Our Collections

Glenbow Museum

<https://www.glenbow.org>

Glenbow Western Research Centre | Glenbow Library and Archives

<https://libguides.ucalgary.ca/glenbowlibraryandarchives>

Glenbow Library and Archives | Digital Collection

<https://digitalcollections.ucalgary.ca/asset-management/2R340826N9XM?WS=PackagePres&Flat=1>