# **January 21, 2018**

Crew members from the Patterson-UTI Drilling Company had been drilling a gas well for over a week under the direction and supervision of Red Mountain Operating, LLC (or RMO) in Pittsburg County, Oklahoma.

### 6:48 PM

Crew members started to remove the drill pipe from the wellbore. During this operation, called 'tripping,' mud is pumped into the well to replace the volume of drill pipe being removed.



### 1:12 AM

The next day, January 22nd, the crew started the operation to remove the drill pipe from the vertical section of the well.

But during the vertical removal, drilling crew members found that the drill pipe being removed had not drained and still contained mud.

The Patterson crew attempted to pump a weighted "slug" of mud into the drill pipe to push the mud out of the drill pipe, but this was not successful as the drill pipe was plugged.



# **January 22, 2018**

## BETWEEN 7:57 AM AND 8:35 AM,

while the drilling crew was testing the equipment, the mud pits gained 107 barrels of mud.

Mud pit gains are an indication there could be a gas influx in the well, pushing mud out of the well and into the rig's mud pits.

## 8:35 AM

With testing complete, the bottom hole assembly was removed from the well. At that time, a crew member observed mud flowing up out of the open blowout preventer stack.

### 8:36 AM

A minute later, mud blew upwards out of the



well. The mud and gas from the well ignited, causing a large fire.

## 3:36 PM

The Patterson crew stopped drilling, because they planned to remove the drill pipe from the well and change the drill bit.



The well was a 'horizontal well' with a vertical section and a lateral section.



### 10:30 PM

The end of the drill pipe had been removed from the lateral section and reached the top of the curve in the well. The Patterson crew then pumped what is known as a "pill" of weighted fluid into the well, designed to prevent gas from flowing into the well below the pill.

### 6:10 AM

The crew continued the tripping operation and by 6:10 am, the drill pipe and "bottom hole assembly" - including the drill bit - were completely removed, and the blind rams on the well's blowout preventer were closed.



### 7:57 AM

The blind rams were reopened so that a new bottom hole assembly could be lowered into the well.

### 8:09 AM

Mud was pumped through the bottom hole assembly to test the new equipment.

Five people were killed. The blowout continued for hours, until a well control services company was able to successfully shut in the well around 4:00 pm.

