

Sarah Andrews 1995 **Tensleep**. Signet

Let me tell you, a woman is not a common sight on a drilling rig. The oil boom of the 1970s opened the way for a few of us to find jobs as mudloggers and even roughnecks, and the exploration companies that contract the drilling jobs had just begun to send women out as geologists and engineers when the crude oil price collapse of the 1980s brought the disaster of massive layoffs. I was lucky to get work, however intermittent, and in four years, the only women I'd met on the rigs were one tough roughneck, a courier who'd come to pick up drill core, and a rookie engineer at a field office. So we're still rare as hen's teeth in the oil patch, and the men for the most part still look on us as aliens, or perhaps as some sort of third gender, like we can't bake pies or have babies like the girls they marry.

So the day Alix Chadwick arrived from Denver, things were in a bit of an uproar up on the rig, and I was catching more than the usual amount of flak. I tried to avoid everyone, but to get my drill cuttings samples, I had to keep going up on the rig.

The drilling mud that is pumped down the inside of the drill string to lubricate the drilling and lift the rock cuttings back up the bore hole is drawn from a holding pit the size of a small swimming pool. To get to where the drilling mud flushes out of the bore hole, I had to cross the parking yard, climb about a dozen feet up a steel staircase to the level of the drilling floor, pass through the doghouse (the metal shed where the men keep their coveralls and where they go to warm up) on the side of the rig and through the Dutch door that opens onto the drilling floor, dodge around the great rotating drill pipe that extends through the top of the borehole and then climb out onto the catwalk that runs around the outside of the canvas windbreak surrounding the drilling floor. There the mud gushes out over a sieve called a shale shaker. The boys were pretty excited and, shall we say, noticing me more than usual. It was like running the gauntlet.

I tried going around the other way, taking the short cut through the pipe yard and up the back stairs by the skids where the draw works pull the pipe off the storage racks, but one of the hands was doing maintenance of some sort on those stairs.

We were drilling at about four thousand feet depth by then, making maybe ten feet an hour, and I was catching a cuttings sample every five feet and taking them back to my trailer, where I'd examine them and note the findings in my log....

...I grabbed a piece of blue chalk and marked the drill pipe five feet above where it emerged from the drilling floor, holding the chalk at chin level as the pipe turned. The drilling brake would lower the drill pipe through the floor a millimeter at a time, letting the bit grind into the earth at a measured rate, and when my blue chalk reached the floor, I'd know it was time to catch another sample.... (p: 18-20).

As I leaned over the shale shaker on the catwalk on the side of the rig to catch the sample for 4380 feet, the sun rose over the distant badlands,...

I walked back along the catwalk to the drilling floor, where business went on as usual, the great Kelley bushing turning the drill string under the power of the deafening motors. The upper end of the drill string fed slowly through the Kelley bushing—a two-foot wide by one-foot tall doughnut of metal turned by the rig motors—as the bit, thousands of feet of drill pipe beneath my feet, gnawed steadily into the earth, chattering now and then as it hit hard spots. The entire rig, with its 120-foot-tall derrick, its five diesel-electric motors, its

monstrous draw works, its thirty-foot-long doghouse warming hut, and its web of railings, catwalk, and ladders, vibrated steadily in the still morning air (p. 34).

The peculiar suite of grinds and squeals that heralds the connection of a new stand of pipe to the drill string brought me crashing back from the Pennsylvanian Era into the present day. Automatically, I marked the log, recording the connection. *Ninety more feet of pipe in the hole. How boring. What a bad pun.* Presently the sound of the motors changed again as the Kelley bushing started to turn the pipe again.

Then a scream of metal snapped me to attention. I jumped up and ran to the door. Outside, the rig's guy wires lashed violently. The derrick trembled. I saw the roughneck named Emo hurrying down the ladder from the derrick, shouting something I couldn't quite make out. I hurried onto the rig.

I found Johnny and Frank encased in a terse debate. Not much was being said but a whole lot was being communicated. They stared bitterly at the Kelley bushing, which lay motionless, indicating that the drill string was at a standstill. I collared Wayne, who muttered something like, "That f--in' mud."

Right, Ed was running a strange mud. That, and the fact that there was an emergency right after a pipe connection—a time when the drill string would have been hanging dead still in the hole without moving for several minutes—told me that the mud must have dropped its solids from suspension while the pumps were shut down for the pipe connection. The solids had set up like concrete, freezing the bit, and Frank had found this out the hard way when he started the Kelley bushing turning again to turn the drill string. I found out later, by asking Johnny, that the elasticity of the four-and-a-half thousand feet of drill string had absorbed three rotations of the Kelley bushing before its torque translated to the bottom, at which point something had broken free with a violent snap. ...

Frank put his big hands on the brake. He bowed his head. There was nothing for it, no way to find out if the string had broken except to start the Kelley bushing turning again, and the longer he waited, the more firmly the mud would imprison the bit. His shoulders tightened as he gingerly eased off the brake. The Kelley bushing turned once, twice, three times, four. The weight on the bit held steady. Frank caressed the brake, his eyes closed. All was well (p. 42-43).