

Fatal Alert

On September 3, 2014, at approximately 9:50 a.m. a worker was crushed by the counter weight crank assembly of a pump jack on an oil well production site. The worker was in the beginning stages of changing out the motor of the pump jack and was working alone on the location waiting for the delivery of the motor so it could be installed. The pump jack was in operation as the worker drove up on the well site. The counter weight crank assembly was about 9 feet long, and rotated around a pivot point and made a complete revolution on the order of every 6 seconds along the length of the frame of the pump jack. As the end of the counterweight passes bottom-dead center, the end of the assembly was about 3 inches off the concrete pad that supports the pump jack. At some point shortly after the worker arrived on location, it appeared that the worker approached the area alongside the pump jack where the assembly rotated and possibly slipped or fell and the worker's body was caught between the rotating pump jack arm and the concrete pad as the pump jack arm rotated toward the ground crushing the worker. The worker died at the scene from injuries sustained by the rotating counterweight assembly. The co-worker delivering the motor found the victim shortly thereafter.

Significant Factors

- A work over rig had come off the well within the last week and part of the fencing around the pump jack were not in place and various trip hazards existed in the area where the incident occurred.
- The victim had worked previously on this pump jack and had at least 4 years' experience working as a mechanic in this particular oil field.
- Both workers planned on finishing work, including the motor exchange, by noon so they could take the afternoon off.
- The worker was onsite alone for a short period at the time of the incident.
- The victim approached the unguarded area around the machinery while it was still operating and appeared to have tripped, slipped, or fell near the rotating counter weight of the pump jack and was struck by the counterweight.
- There is no indication of training records or a safety plan used for the maintenance of this or other wells.

Recommendations

- Employers should instruct workers that while working around pump jacks they should never commence work or expose themselves to moving equipment until equipment has been locked out and tagged out.
- The use of guards or a guardrail system must be installed and maintained wherever rotating equipment exposes employees to a hazard including pinch points or being struck by hazards.
- Trip hazards on the worksite must be removed or eliminated.
- A written safety plan communicating the hazards and means of eliminating hazards during well site maintenance should be in place and training provided to ensure workers can recognize the hazards and methods to be used to avoid the hazards.
- Maintenance work on well sites should not be conducted by employees working alone without permission being given by someone who understand the processes being performed.