Recommendation Text:

Design the Pason electronic drilling data system so that alarm information, including alarm set points, alarm activation log, alarm horn status (on or off), and alarm system status (on or off) is provided to customers.

Board Status Change Decision:

A. Rationale for Recommendation

On January 22, 2018, a blowout and rig fire occurred at Pryor Trust 0718 gas well number 1H-9, located in Pittsburg County, Oklahoma. The fire killed five workers, who were inside the driller’s cabin on the rig floor. They died from thermal burn injuries and smoke and soot inhalation. The blowout occurred about three-and-a-half hours after removing drill pipe (“tripping”) out of the well. The cause of the blowout and rig fire was the failure of both the primary barrier—hydrostatic pressure produced by drilling mud—and the secondary barrier—human detection of influx and activation of the blowout preventer—which were intended to be in place to prevent a blowout.

As a part of its investigation, the U.S. Chemical Safety and Hazard Investigation Board (CSB) determined that Pason supplied the electronic drilling data system for the Pryor Trust well drilling rig, but no alarm data was included as a part of the data package supplied to the driller. As this data could provide valuable insight into alarm performance, providing the basis for improving alarm management for drilling contractors, the Board issued recommendations (e.g., 2018-01-I-OK-R16 and R18) to Pason and National Oil Well Varco, the two major suppliers of electronic drilling data systems, to include alarm information with their electronic data drilling systems. This status change summary only addresses the recommendation issued to Pason (e.g., R16).

B. Response to the Recommendation

In August 2019, Pason informed the CSB that it was developing an alarm log for end users that provides the information recommended by the CSB in its report and that it planned to include it in the release of Pason’s EDR 20.1 software update during the first quarter of 2020.

C. Board Analysis and Decision

Based on the above response from Pason, the Board voted to change the status of CSB Recommendation No. 2018-01-I-OK-R16 to: “Open—Acceptable Response or Alternate Response.”