

U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATIONS STATUS CHANGE SUMMARY

Report:	Gas Well Blowout and Fire at Pryor Trust Well 1H-9
Recommendation Number:	2018-01-I-OK-R16
Date Issued:	June 12, 2019
Recipient:	Pason Systems Corp. (Pason)
New Status:	Closed – Acceptable Action
Date of Status Change:	July 28, 2021

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 resulted in the fatalities of 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 approximately 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, two major suppliers of electronic drilling data systems, to include alarm information with their electronic data drilling systems. This status change summary only addresses CSB Recommendation No. 2018-01-I-OK-R16 (R16) issued to Pason.

B. Response to the Recommendation

In March of 2021, Pason informed the CSB that they released a software enhancement to their Electronic Drilling Recorder (EDR) software last April that addressed all the elements of the CSB recommendation and provided the CSB with a copy of the software release notes which explained the changes that were made.

C. Board Analysis and Decision

As the changes made by Pason to its EDR software meet the intent of the CSB recommendation, the Board voted to change the status of CSB Recommendation No. 2018-01-I-OK-R16 to: "Closed—Acceptable Action."