Edgar Bradley is a highly qualified Consulting Mechanical Engineer, specializing in RAM work (Reliability, Availability, and Maintainability) and in 2016 published a book on this subject, which included the following regarding the Piper Alpha disaster:

Page 197, Reliability Engineering – A Life Cycle Approach

There is some evidence in the form of eyewitness accounts (16 out of the 34 survivors) and alleged radio transmissions that there was a smaller explosion, and it was claimed that this fire started the initial, large fireball.

One such witness is John Barr who was supervising a diver on Piper at the time. He said he had ordered the diver to the surface 20 minutes before the incident because he had felt an explosion. In addition to him there was also the crew of the Tharos, which was roughly 500 m from Piper Alpha at the time, who claimed to have seen a smaller explosion and this is, in fact, written up in the vessel's logbook at 9.45 p.m. However this evidence was later deemed 'not necessary for the Cullen enquiry'. Finally there is Angus Kennedy, an engineer on the supply ship 'The Performer', who said they received a message from Piper Alpha claiming a 'small but manageable fire' some 20 minutes before the first explosion.

The source and location of this explosion was never established and were deemed not relevant to the final explanation for the accident. This is seen by these witnesses as a very negligent oversight of the Cullen report.