



SAFETY ALERT - #03-2006

INCIDENT WITH MISMATCHED HAMMER UNIONS

RELEASE DATE: DECEMBER 22, 2005

Function: Completions	Incident Date: December 8, 2005
Location: Onshore	Location Detail: Wellsite
Incident Type: Near miss	Country and Region: Canada, NW Alberta

Note: On September 20, 2005, the Petroleum Industry Training Service (PITS) and the Canadian Petroleum Safety Council (CPSC) combined their operations to become *Enform*.

Description of Incident:

A well-testing crew had rigged in their equipment on a wellsite. The high-pressure flowline was 35 mPa working pressure with 2-inch (5.1 cm) fig 602 hammer unions. A pressure test of the high-pressure flowline was begun using a fluid pump truck. The crew was using a 70/30 water/methanol mix for the hydro test. A low-pressure test was completed to 1.4 mPa, and everything held 100 percent. At the next stage of the pressure test, the pressure was to go up to 35 mPa. At approximately 27 mPa, the line failed. Upon inspection of the line failure, it was discovered that a changeover had blown off at the hammer union connection, which was located inside the line heater building. The changeover that failed was a 1-foot (0.3 m) pup with a 602 thread and a 1502 wing. The failure happened where the 2-inch 1502 wing was connected to a 2-inch 602 thread. The changeover was removed and replaced with a proper 2-inch 602 pup joint.

Cause:

Mismatched hammer unions - A 1502 wing half was connected to a 602 thread half.

Contributing Factors:

1. There was an improper identification process for changeovers.
2. There was no formal written policy for colour coding of equipment (i.e., changeovers).
3. There was no formal communication to supervisors and employees regarding the colour coding of equipment
4. Not all crew members were familiar with identifying different pressure ratings and sizes of hammer unions.

Preventative Measures:

1. Review and revise the identification process for hammer union changeovers. Develop a formal policy for identification. Communicate this policy and standard to operations managers, field supervisors, and operators, and train and educate them in the policy and standard, too.
2. Update the pre-flow checklist to include more details regarding the high-pressure flowline (i.e., hammer-union size confirmation, changeover identification, etc.).
3. Raise this mismatched hammer union issue through PSAC, as this has been an industry issue for many years.

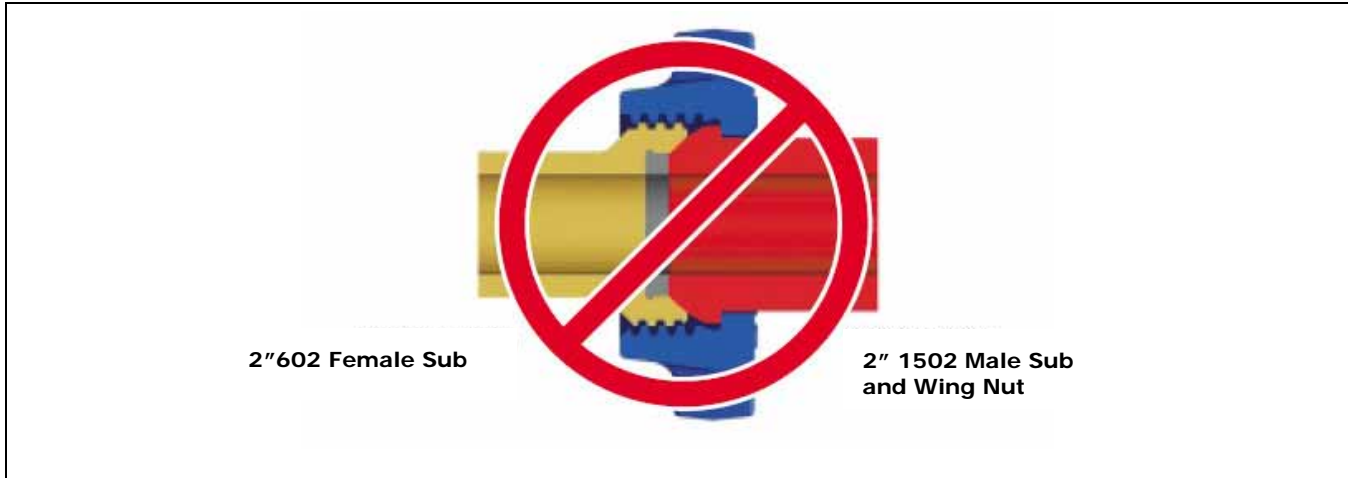
SAFETY ALERT - #03-2006

INCIDENT WITH MISMATCHED HAMMER UNIONS

RELEASE DATE: DECEMBER 22, 2005

PAGE 2 OF 2

Illustration:



DISCLAIMER:

This Safety Alert is designed to prevent similar incidents by communicating the information at the earliest possible opportunity. Accordingly, the information may change over time. It may be necessary to obtain updates from the source before relying upon the accuracy of the information contained herein. This material is presented for information purposes only. Managers and supervisors should evaluate this information to determine if it can be applied to their own situations and practices.