

Date of Issue: October 2017

Affected Publication: API Specification 17J, *Specification for Unbonded Flexible Pipe*, Fourth Edition, May 2014

Addendum 1

Page 2, Section 2, the following shall be added:

ASTM D1141, *Standard Practice of the Preparation of Substitute Ocean Water*

Page 53, Section 6.2.4.6, change:

The tensile armors shall be subject to testing to confirm that the potential hydrogen evolution resulting from cathodic charging does not result in hydrogen embrittlement. The testing shall be conducted on degreased wire samples immersed in deaerated seawater (minimum 3 % NaCl) with the maximum negative cathodic potential applied. The wire shall be stressed to at least the maximum utilization level expected in service. The cathodic charging shall be applied for a minimum duration of 150 h. Post-test examination shall be conducted to confirm that no blistering or cracking of the wire sample has occurred.

to:

The tensile armor wires shall be tested to confirm that the potential hydrogen evolution resulting from cathodic charging does not result in hydrogen embrittlement. The testing shall be conducted on degreased wire samples immersed in aerated synthetic seawater that conforms to ASTM D1141, with a maximum negative cathodic potential applied per the manufacturer's specification.

NOTE The default value of the maximum negative potential is -1100 mV measured against the Ag/AgCl reference electrode.

The wire shall be stressed to its maximum utilization level expected in service. The cathodic charging shall be applied for a minimum duration of 150 h. Post-test examination shall be conducted, and the acceptance criterion shall be that no blistering or cracking of the wire sample has occurred.