Gas Well Deliquification Breakout Session

Trouble-shooting Chemical Systems

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Breakout Session Details

Explore Issues Associated With Chemical Use For Deliquification

Number of Attendees = 25

2:3 Mix Operators / Vendors

Vendors included specialty chemical, chemical manufacturers (base) and capillary

Duration of Session – 1 hour 15 minutes
Primary Discussion Points

• What is the Industry doing to replace 2-butoxyethanol?
  • Two suppliers indicated that they have developed replacement co-solvents with lower environmental risk

• What challenges does the Industry face in deliquifying horizontal wells?
  • Limits on placing capillary out into the lateral
  • Concerns over sand trapping capillary
  • Laterals landed with toe-up profile will greatly help
Primary Discussion Points

• What are the challenges associated with chemical deliquification of high condensate ratio wells?
  • Still looking for magic bullet
  • Many foamers used for lifting condensate are very cost prohibitive

• Has the Industry seen corrosion issues with 625 alloy in capillary strings?
  • There have been some issues with corrosion in welds (particularly in cap strings manufactured in Germany and China)
  • Use of nitrogen generation units has caused some pitting due to oxygen
Primary Discussion Points

- Should there be Industry standards for the tests used to qualify chemicals for capillary injection?
  - ASTM, API?
  - Standard test methods exist for qualifying products for use in umbilicals
  - Should BHA be included in test procedures?
  - Several volunteers to reach out to API on path forward
Summary

• Primary issues with chemicals used for dequification continue to be:
  • Horizontal wells
  • Lifting condensate
  • Environmental issues
  • Capillary use

• Should This Session Be Repeated in the Future
  • Yes
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