Alkine Sour Water Corrosion Calculation for Asset ID k

Asset Name/ID
k

H2S concentration in system
It is suggested to determine NH4HS value with ionic process models. However, approximate values may be calculated from API 581 Table 2.B.7.1
1.40 wt%

NH3 concentration in system
It is suggested to determine NH4HS value with ionic process models. However, approximate values may be calculated from API 581 Table 2.B.7.1
4.00 wt%

NH3 concentration in system
Determine the concentration of the H2SO4 present in this equipment/piping. If analytical results are not readily available, it should be estimated by a knowledgeable process engineer
2.10 wt%

Stream Velocity
The vapor phase velocity should be used in a two-phase system. The liquid phase velocity should be used in a liquid full system.
5.00 m/s

%mol H2S in the system
1.40 %

System pressure
Fill the Total system pressure psia
120.00 psia

H2S partial pressure
Fill the Total system pressure KPa
26.00 psia

Baseline CR mm/yr
0.11 mm/yr

Baseline CR mpy
4.33 mpy

Adjusted CR mm/yr
0.17 mm/yr

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Adjusted CR mpy
6.82 mpy

Corrosion Damage Morphology
General thinnig