Rheological Curve of Spent SL-VDA

Test No.1:

Test Temp:
250° F (120°C)

Self-diverting Acid Formulation:
8% SL-VDA Viscoelastic Surfactant + 2% SL-CRI Acid Inhibitor for VDA only + 20%HCL

Reacted Acid Formulation:
Take sufficient amount of calcium carbonate powder to react with SL-VDA Viscoelastic Surfactant acid entirely (pH value more than 6). The curves are as follows:
Test No.2:

Test Temp:
212° F (100°C)

Self-diverting Acid Formulation:
8% SL-VDA Viscoelastic Surfactant + 2%SL-CRI Acid Inhibitor for VDA only + 20%HCl

Reacted Acid Formulation:
Take sufficient amount of calcium carbonate powder to react with SL-VDA Viscoelastic Surfactant acid entirely (pH value more than 6). The curves are as follows:
Test No.3:

Test Temp:
203° F (95°C)

Self-diverting Acid Formulation:
8%SL-VDA Viscoelastic Surfactant +2%SL-CRI Acid Inhibitor for VDA only +20%HCL

Reacted Acid Formulation:
Take sufficient amount of calcium carbonate powder to react with SL-VDA Viscoelastic Surfactant acid entirely (pH value more than 6). The curves are as follows:
Test No. 4:

Test Temp:
176° F (80°C)

Self-diverting Acid Formulation:
8%SL-VDA Viscoelastic Surfactant + 2%SL-CRI Acid Inhibitor for VDA only + 20%HCL

Reacted Acid Formulation:
Take sufficient amount of calcium carbonate powder to react with SL-VDA Viscoelastic Surfactant acid entirely (pH value more than 6). The curves are as follows:
Test No.5:

Test Temp:
158° F (70°C)

Self-diverting Acid Formulation:
8%SL-VDA Viscoelastic Surfactant +2%SL-CRI Acid Inhibitor for VDA only +20%HCL

Reacted Acid Formulation:
Take sufficient amount of calcium carbonate powder to react with SL-VDA Viscoelastic Surfactant acid entirely (pH value more than 6). The curves are as follows: