

Using CO2 Tracer Technology in GAPL Well Evaluation and Application

Kelly Mason
Clint Mason
Kaizen Well Solutions Ltd.
cmason@kaizenws.com

OBJECTIVES/SCOPE:

Developing an effective GAPL (Gas Assisted plunger lift) project requires a good understanding on the existing gas lift valve design and, performance and condition. We show examples of how well tracer can identify injection point, volumes at each point and tubing velocities through out the tubing string. This allows you to put the plunger lift at the best point in the tubing. By understanding the well inject profile you can understand the velocities through out the well and indicate if you can land your BH spring lower than your current injection point in the wellbore and still successfully cycle a plunger

METHODS PROCEDURES, PROCESS:

The presentation explains the Well tracer technology and shows examples from wellbores and flow data We compare flowing velocities and show the effective landing position of the plunger lift bottom hole assembly to maximize landing depth.

RESULTS, OBSERVATIONS, CONCLUSIONS:

By understanding by understanding this flowing profile you can reduce the trial-and-error factors around GAPL installations and take advantage of opportunities to land plunger below injection point if the well velocity will support it.

Summary

Well Tracer injects Co2 into the gas lift injection stream, the technology monitors returns and with that data we can provide injection gas entry point depths, port equivalent size and velocities at various tubing points through out the string. This allows us to provide the best position for the Bottom hole spring assembly to maximize GAPL performance.