August 20th 2009

PRA trial treatment report

Objective: To trial PRA product on Long Clawson C1 and C2 production wells to reduce time scale between well intervention work caused by paraffin wax build up in 2 3/8" production tubing and reduce down time.

History: Long Clawson C1 and C2 wells were drilled in the early 1990's for crude oil production, the wells are produce from sand stone formations circa 3000'bgl via a rod pump system to onsite storage tanks with a surface flowing pressure of 10psi, annulus fluid level 2800'bgl. The wells have to be hot water washed, de-waxed on a 4-6 weekly routine to keep production tubing clear of wax build up to prevent production rods from standing up in wax. In between hot wash routine if the wells are shut down for a few hours there is an 80% chance of the wells standing in wax when restarted.

Treatment: The wells were treated with 45 gallons (per well) of PRA 9th June 2009, the PRA was pumped into the annulus and then returned via production tubing utilising the rod pump system, 4 hours circulation time.

Results: Long Clawson C1 was last hot watered prior to treatment on the 27th April 2009 and Long Clawson C2 on the 3rd June 2009.
After treatment no production increase or decrease was noted on either well. The wells have been producing post PRA treatment, to date, 10 weeks with no production problems or hot water de-wax treatments being carried out, over the 10 week period the wells have been shut down due to electrical power cuts for a 2 hour period and then a 3 hour period were the wells were restarted with out any waxing issues.

Conclusion: The test is to continue to determine duration requirements between PRA treatments and then retreat wells and continue tests.

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