



Subject: Testing program 34/10-3

Based on logs and available core data in the zones of interest the following test intervals and -procedures are proposed:

- Perforating : 4 in. casing gun, 4 sh/ft.
- Test string : 3½ in tubing with APR and RTTS tools.
- Recorders : 1 temperature and 2 pressure recorders on string. 2 (3) pressure recorders on wireline to be hung in Otis xn-nipple.
- Shut in : All shut-in operations will be bottomhole. (If sand is believed to be present in test-string, bottomhole shut-in will be avoided.)
- Cushion : Full string with drillwater.

Procedures

DST no. 1 : 1990-1995 m ISF/SONIC

Objectives : Obtain watersamples.
Reservoir pressure and temperature.
Estimation of productivity and sand-strength.

- Procedures :
- 1 : Initial flow: 2-5 bbls recovered or 5 mins flow.
 - 2 : Initial shut in: 1 hr.
 - 3 : Second flow: Flow to surface, clean up and flow at a stabilized rate until clean formation fluid is produced. Surface sampling. Increase rate in steps until sand is produced at surface.

- 4 : If sand is produced, decrease flow rate in order to obtain sand-free production prior to bullheading.
- 4a: Build-up. If sand is not produced at maximum rate perform a bottom hole shut in.
- 5 : End test.

DST no. 2 : 1935-1940 m ISF/SONIC.

Objectives : Obtain fluid samples.
Reservoir pressure and temperature.
Estimation of productivity and sand-strength.

- Procedures :
- 1 : Initial flow: As for DST no. 1.
 - 2 : Initial shut in: As for DST no. 1.
 - 3 : Second flow: Flow to surface, clean up and stabilize flow for surface sampling.
 - 4 : Bottom hole sampling.
 - 5 : Third flow: Increase rate in steps until sand is produced at surface.
 - 6 : Optional bottomhole shut in with build-up: If sand is not produced at maximum rate perform a bottom hole shut in.
 - 7 : Fourth flow: If sand is produced to surface during third flow reduce the rate until sand free production is obtained.
 - 8 : Build-up. Bottom hole shut in.
 - 9 : Optional bottomhole sampling: If samples taken earlier is thought not to be representative another run of bottomhole samples will be made.
 - 10 : End test.

DST no. 3 : 1895-1900 m ISF/SONIC.

Objectives : Estimation of productivity and sandstrength.
Obtain fluid samples. Reservoir pressure and temperature.

Procedures : As for DST no. 2.

Sand production : Possible sand production to surface will be monitored carefully during all tests.

Sampling

- : - Separator oil and gas samples (2 sets) will be taken at each flow period.
- Stabilized oil and water production will be samples.
- Unless it violates the safety of the operations, two bottomhole samples (run in tandem) will be run if hydrocarbons in reasonable amount is produced.
- Draeger Multiges Detector tests for CO_2 and H_2S will be made during each flow period.