From: Terran Bernhard
To: DST_JUS_OROGO; Pauline DeJong; Mike Martin; Brandon Bradbury
Cc: Dale Duffy; Jason Tymo; James Ireland
Subject: Variation 9 to ACW_2019-001-CNRL-P-16-WID1976
Date: August 15, 2023 3:37:25 PM

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Hi Pauline,

After reviewing the caliper log ran on P-16, CNRL has determined that the casing expansion tool was functioning properly during operations. Casing expansion operations on this well have not fixed the intermediate casing flow and the average rate has been just above 3m3/day. After reviewing options for the next remedial attempt, CNRL is planning the following operations starting on August 28th, 2023:

1. Move in Service Rig and associated services
2. Run in hole with packer on tubing to 2740mKB. Set packer and pressure test down packer to determine if pressure shows response on vent nanny. If a response is shown on the vent nanny, then the source is below the packer and we will continue the steps below. If no response, we will continue moving the packer up the hole and pressure testing to see where the pressure affects the vent. There was a response when initially pressure testing the entire wellbore so this process will help determine specifically where the micro-annulus flow is coming from.
3. Pull tubing

Follow Approved Program Appendix 2 for the following steps:

4. Move in Wireline unit
5. Perforate 2740-2742mKB
6. Run and set retainer at 2735mKB
7. Pressure test retainer to 7MPa for 10 minutes
8. Perform cement squeeze
9. Cap retainer with 15 meters of cement
10. Monitor SCVF and determine next steps

After performing the Cement squeeze, CNRL will determine the success by monitoring the vent nanny and will communicate with OROGO on the next planned interval if required.

If any of the above steps need to be altered due to finding a different source on the packer run, CNRL will contact OROGO for a Variance.

Let me know if you have any questions or need anything else.

Thanks,

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