



NWT OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS

Office of the Regulator of Oil and Gas Operations

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John Hawkins  
Director, Asset Management  
Paramount Resources Ltd.  
SUITE 2800, 421 – 7 AVE SW  
CALGARY AB T2P 4K9

October 5, 2022

Dear John Hawkins:

**Information Request No. 2:**  
**Liard M-25 Well Abandonment (ACW-2022-PAR-M-25-WID1867)**

On August 15, 2022, the Office of the Regulator of Oil and Gas Operations (OROGO) received a complete application to Alter the Condition of a Well (ACW) from Paramount Resources Ltd. (Paramount) for the abandonment of the Liard M-25 well (WID1867) in the Fort Liard area of the Northwest Territories.

OROGO has reviewed the information provided by Paramount in its original application and in response to Information Request No. 1 and requires additional information to complete its review of Paramount's ACW application, as set out in the attached Information Request No. 2.

Please send your written responses and any associated correspondence to OROGO at [oroogo@gov.nt.ca](mailto:oroogo@gov.nt.ca) or through OROGO's secure file transfer site, on or before 4:00 pm on October 19, 2022. If you are unable to respond within this timeframe or have any questions, please contact OROGO at 867-767-9097 or by email at [oroogo@gov.nt.ca](mailto:oroogo@gov.nt.ca).

Sincerely,

Pauline de Jong  
Regulator

Encl. Information Request No. 2

**Information Request No. 2**  
**Liard M-25 Well Abandonment**  
**ACW-2022-PAR-M-25-WID1867**

**2.1 Level I Well**

**Preamble:**

Page 1 of the revised abandonment program submitted on August 26, 2022, indicates that the Liard M-25 well produces a mixture of H<sub>2</sub>S (0.5%) and CO<sub>2</sub> (20%). Section 2 of the *Well Suspension and Abandonment Guidelines and Interpretation Notes* (Guidelines) indicates that acid gas wells are Level I wells and defines acid gas wells as wells that produce any amount of H<sub>2</sub>S and CO<sub>2</sub>.

Section 6A of the Guidelines contains abandonment requirements for Level I wells which differ from the requirements for Level II wells. The revised abandonment program submitted on August 26, 2022, refers to the requirements for a Level II well.

**Request:**

Submit an updated well abandonment program that meets the requirements of the Guidelines for Level I wells.

**2.2 Remedial Cement Squeezes**

**Preamble:**

Step 22 of the revised abandonment program submitted on August 26, 2022, states “based on existing logs interpretation, perform remedial squeezes as required for hydraulic isolation”. No contingency steps for conducting remedial cement squeezes are provided.

If the program remains as submitted, and remedial cementing is required, Paramount would have to submit a revised well abandonment program and a request to vary its well approval before proceeding with remedial cementing. This may delay the well abandonment operation.

**Request:**

To avoid delays in the operation, submit an updated well abandonment program that includes contingency steps for remedial cement squeezes.

### **2.3 Signed Well Abandonment Program**

**Preamble:**

The revised abandonment program submitted on August 26, 2022, is not signed off as reviewed and approved.

**Request:**

Submit an updated well abandonment program that is signed by the appropriate reviewer and approver.