



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

November 1, 2022

Dear John Hawkins:

Decision: Application for Well Approval (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 from Paramount Resources Ltd. (Paramount) to abandon the Liard M-25 well (WID1867).

OROGO also received Paramount's responses to information requests as follows:

Information Request No. 1 – received on August 26, 2022; and
Information Request No. 2 – received on October 19, 2022.

The Regulator, designated under section 121 of the *Oil and Gas Operations Act* (OGOA), may issue a Well Approval under section 10(4) of that Act. On August 2, 2020, the Commissioner in Executive Council designated me as the Regulator under section 121 of OGOA.

I have reviewed Paramount's description of its proposed activity and find that the application demonstrates that this activity will be conducted safely, without waste and without pollution, in compliance with the *Oil and Gas Drilling and Production Regulations*. Therefore, Paramount's application is approved, subject to the terms contained in the attached Well Approval.

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Paramount must post a copy of the attached Well Approval in a clearly visible location at the work site.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Pauline de Jong', written in a cursive style.

Pauline de Jong
Regulator

Encl. Well Approval ACW-2022-PAR-M-25-WID1867

WELL APPROVAL


Subject to the terms listed below, well approval **ACW-2022-PAR-M-25-WID1867** is granted under Section 10 of the *Oil and Gas Operations Act* and Part 2 of the *Oil and Gas Drilling and Production Regulations* to

Company Name	Operating Licence #
Paramount Resources Ltd.	NWT-OL-2014-014
Responsible Officer	Operations Authorization #
John Hawkins, Director Asset Management	2620-D-12-23/2520-D-12-4

for

Well Name and Well ID#	
Liard M-25 (WID1867)	
Type of Work	Region
Abandonment	Dehcho

This approval expires on **November 1, 2023**.

Issued at	Issued on
Yellowknife, Northwest Territories	November 1, 2022
Issued by	Signature
Pauline de Jong, Regulator	

Additional Terms

1. Paramount Resources Ltd. shall cause the approved work and activities to be conducted in accordance with the requirements of the *Oil and Gas Operations Act* and the *Oil and Gas Drilling and Production Regulations*, as well as any other acts or legislation as may apply.
2. Paramount Resources Ltd. shall cause the approved work and activities to be conducted in accordance with any guidelines or interpretation notes issued by the Regulator under section 18 of the *Oil and Gas Operations Act*.
3. Paramount Resources Ltd. shall cause the approved work and activities to be conducted in accordance with the specifications, standards and other information referred to in its application dated August 15, 2022, and subsequent submissions.
4. Paramount Resources Ltd. shall request approval from the Regulator prior to undertaking any change to or deviation from the authorized work or activities, including but not limited to key personnel, the safety plan, the environmental protection plan and contingency plans.
5. Paramount Resources Ltd. shall complete pre-abandonment gas migration (GM) testing between August and September 2022, as described in section 4A of the *Well Suspension and Abandonment Guidelines and Interpretation Notes*. Paramount Resources Ltd. shall submit a report of GM testing results to the Regulator within 30 days of conducting the testing. Should analysis of the methane be required to determine the thermogenic source, Paramount Resources Ltd. must notify OROGO with an anticipated timeframe to submit the analytical results.
6. Paramount Resources Ltd. shall request a variation to this well approval from the Regulator if it intends to conduct controlled venting and flaring as a part of well kill operations as outlined in Step 3 of the Wellbore Abandonment Program. The request for variation should include the maximum daily flow rate and daily duration of the flaring or venting and should be submitted no later than December 15, 2022. Any flaring or venting not approved by the Regulator shall be reported to OROGO as an incident under section 75 of the *Oil and Gas Drilling and Production Regulations*.
7. Paramount Resources Ltd. shall request a variation to this well approval from the Regulator if it intends to use a coiled tubing unit to remove the permanent bridge plug set at 75.0 mKB (Step 8 of the Wellbore Abandonment Program). The request for variation should comply with the Regulator's decision on the use of coiled tubing units to remove shallow wellbore plugs issued on October 28, 2022 and should be submitted no later than December 15, 2022.
8. Paramount Resources Ltd. shall notify OROGO of and demonstrate, to the satisfaction of the Regulator, the location of the cement top prior to commencing remedial cementing, as outlined in Step 22 and Appendix 1 of the Wellbore Abandonment Program.
9. Paramount Resources Ltd. shall notify the Regulator of each interval targeted for remedial cementing prior to perforation by sending an email to orogo@gov.nt.ca that includes the depth and anticipated time frame operations will occur. Following completion of each

remedial cementing interval, Paramount Resources Ltd. must provide detailed results on the operations including feed rate and cement volume.

10. Paramount Resources Ltd. shall provide all staff and contractors for this program with its Emergency Response Plan and the OROGO 24-hour Incident Reporting phone number (867-445-8551) prior to commencing any work or activity.
11. Paramount Resources Ltd. shall notify OROGO at least 10 days prior to the start of approved operations.
12. Paramount Resources Ltd. shall submit to OROGO certificates and inspection documents for any service rig, well control and associated equipment (including boilers) at least 10 days prior to the rig commencing work.
13. Paramount Resources Ltd. shall submit to OROGO an updated operator contact list for this program prior to any work or activity.
14. Paramount Resources Ltd. shall submit to OROGO a Daily Report outlining all activities undertaken for each day of the operation under this well approval no later than 10:00 a.m. the following day.
15. Paramount Resources Ltd. shall submit to OROGO a completed Change of Well Status form 30 days after the service rig release date or when the operation has been successfully completed.