



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

January 25, 2023

Dear John Hawkins:

Decision: Application for Well Approval (ACW-2023-PAR-N-65-WID1833)

On January 23, 2023, the Office of the Regulator of Oil and Gas Operations (OROGO) received a complete application from Paramount Resources Ltd. (Paramount) for the re-entry, logging and re-abandonment of the Arrowhead N-65 well (WID1833).

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.

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

Sincerely,

Pauline de Jong
Regulator

Encl. ACW-2023-PAR-N-65-WID1833

WELL APPROVAL

Subject to the terms listed below, well approval **ACW-2023-PAR-N-65-WID1833** 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	OA-2020-001-PAR

for

Well Name and Well ID#	
Arrowhead River N-65 (WID1833)	
Type of Work	Region
Abandonment	Dehcho

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

Issued at	Issued on
Yellowknife, Northwest Territories	January 25, 2023
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 and/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 January 23, 2023, 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 notify OROGO of and demonstrate, to the satisfaction of the Regulator, the location of the cement top prior to completion of wellbore and surface abandonment. Notification must include the results and interpretation of the completed cement bond log as outlined in Step 19 (rig version) or 16 (rigless version) of the Wellbore Abandonment Program.
6. 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 the Supplement – Cement Squeeze Procedure to the Wellbore Abandonment Program. Notification must include the results and interpretation of the completed cement bond log as outlined in Step 19 (rig version) or 16 (rigless version) of the Wellbore Abandonment Program, including proof of ground water isolation as required by section 6B of the *Well Suspension and Abandonment Guidelines and Interpretation Notes*.
7. Paramount Resources Ltd. shall notify the Regulator of each interval targeted for remedial cementing upon completion of the cement bond log run in Step 19 (rig version) or 16 (rigless version) of the Wellbore Abandonment Program 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 include detailed results on the operations including feed rate and cement volume.
8. 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.
9. Paramount Resources Ltd. shall notify OROGO at least 10 days prior to the start of approved operations.

10. Paramount Resources Ltd. shall submit to OROGO certificates and inspection documents for any service rig, well control and associated equipment (including boilers), including the B Pressure Certified Welder referenced in Step 10 of both Wellbore Abandonment Programs, at least 10 days prior to the rig commencing work.
11. Paramount Resources Ltd. shall submit to OROGO an updated operator contact list for this program prior to any work or activity.
12. Paramount Resources Ltd. shall submit updated versions of both Wellbore Abandonment Programs to OROGO with corrected year references on pages 1 and 5.
13. Paramount Resources Ltd. shall notify OROGO of its intent to proceed with rigless operations or service rig operations 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.
16. Paramount Resources Ltd. shall install an abandoned well sign that meets the requirements of section 6E of the *Well Suspension and Abandonment Guidelines and Interpretation Notes* (revised May 25, 2022) during Step 30 (rig version) or 35 (rigless version) of the approved well abandonment program.