



NWT OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS

Office of the Regulator of Oil and Gas Operations

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Ken Nikiforuk, Operations Consultant
Strategic Oil and Gas Ltd.
C/O Alvarez & Marsal Canada ULC
SUITE 1100, 250 - 6th AVE SW
CALGARY AB T2P 3H7

July 8, 2021

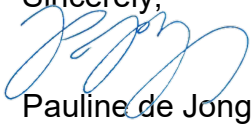
Dear Ken Nikiforuk:

**Information Request No. 1: Application to Abandon
the Cameron B-38 Well (ACW-2021-B-38-WID2002)**

On July 5, 2021, the Office of the Regulator of Oil and Gas Operations (OROGO) received a well abandonment program from Strategic Oil and Gas Ltd. (Strategic) for the Cameron B-38 well (WID 2002) well.

OROGO has reviewed the information provided by Strategic and requires additional information in order to complete its review of Strategic's application to abandon the B-38 well, as set out in the attached Information Request No. 1.

Please send your written responses and any associated correspondence to Peter Lennie-Misgeld, Senior Advisor, Legislation and Policy at oroogo@gov.nt.ca or through OROGO's secure file transfer site on or before 4:00 p.m. on July 21, 2021. 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.

Sincerely,

Pauline de Jong
Regulator

Encl. Information Request No. 1
Safety Bulletin OROGO-SB-01

c Duncan MacRae, Director, Alvarez & Marsal Canada ULC

Strategic Oil and Gas Ltd.
Application for an Authorization to Alter the Condition of a Well
Cameron B-38 Well (ACW-2021-SOG-B-38-WID2002)
Information Request No. 1

1.1 Shallow Wellbore Plug

PREAMBLE:

The Well Abandonment Program submitted by Strategic on July 5, 2021 for the Cameron B-38 (WID 2002) well identifies a shallow wellbore plug (21mKB) with a 15m cement plug. The procedures do not address safety risks associated trapped pressure below a shallow wellbore plug during removal operations.

On April 23, 2021 the Chief Safety Officer issued safety bulletin [OROGO-SB-01](#) outlining the operational requirements, including equipment, assessments and reporting, for the removal of a wellbore plug when the wellbore cannot be safely killed by over balancing the plug, including a margin of safety, with weighted fluid and the drill string.

REQUEST:

Please submit an updated Well Abandonment Program that includes procedures, equipment, assessments, and reporting that comply with all the requirements identified in Safety Bulletin OROGO-SB-01.

1.2 Pressure Test for Casing Integrity

PREAMBLE:

The Well Abandonment Program submitted by Strategic on July 5, 2021 for the Cameron B-38 (WID 2002) well identifies conducting a casing pressure test in step 8 prior to the removal of the shallow wellbore plug.

Based on the reported location of the shallow wellbore plug (21 mKB) and the 15m cement plug, this pressure test would only verify the casing integrity from 0 mKB to 6 mKB.

Following removal of the shallow wellbore plug, the procedures do not identify a casing pressure test that would verify casing integrity from 0 mKB to Plug Back Total Depth (PBSD).

REQUEST:

Please submit an updated Well Abandonment Program that includes procedures to complete casing pressure testing for the entire wellbore from 0mKB to PBTD.

1.3 Surface Abandonment

PREAMBLE:

The Well Abandonment Program submitted by Strategic on July 5, 2021 for the Cameron B-38 (WID 2002) well does not include re-installation of the wellhead prior to surface abandonment operations. Re-installation of the wellhead is required to secure the wellbore prior to surface abandonment operations.

REQUEST:

Please submit an updated Well Abandonment Program that describes for securing the wellbore prior to surface abandonment operations.

Safety Bulletin: Shallow Wellbore Plugs

INTRODUCTION

Some historical suspension operations used shallow wellbore plugs (plugs at approximately 50 mKB). These plugs must be milled out during well abandonment or reactivation programs. Milling out these plugs can pose significant safety risks because the operator cannot properly kill the well with a weighted fluid or assess actual pressures beneath the plug prior to downhole intervention.

The Office of the Regulator of Oil and Gas Operations (OROGO) regulates the safety of oil and gas operations by requiring operators to submit:

- Safety plans (for the Regulator's approval);
- Well-specific suspension and abandonment procedures (for the Regulator's approval);
- Investigation reports for any safety incidents or accidents; and
- Incident status reports.

This safety bulletin lists the factors and requirements operators must address for any wellbore plug that does not allow the wellbore to be safely killed by over balancing the plug, including a margin of safety, with weighted fluid and the drill string. These factors and requirements must be also be addressed in cases where such a wellbore plug is suspected, but not confirmed, to be present based on historical records.

BACKGROUND

During abandonment and suspension operations within OROGO's area of jurisdiction in the Northwest Territories, milling out of a shallow wellbore plug has caused loss of well control, jacking of the tubing string, uncontrolled releases of gas and a serious lost time injury that could have resulted in death.

AGGRAVATING FACTORS

- Unavailable or incomplete historical information on previous well interventions and monitoring;
- Inability to measure any real time potential pressures under the plug;
- Lack of adequate hazard identification, hazard assessment and control measures; and
- Use of unsecure pressurized hoses and equipment during milling operations.

If you would like this information in another official language, contact us at (867) 767-9097.

REQUIREMENTS

As of April 23, 2021, all Well Approval applications submitted to OROGO for wellbore interventions must include the following information where any wellbore plug is identified or suspected, requires removal and cannot be over balanced with a combination of weighted fluid and weight on string.

- **Risk Assessment and Well Control:**
 - The operator must assume reservoir pressure is present below the plug.
 - If the combination of kill fluid density and weight-on-bit (drill string) does not overbalance the estimated reservoir pressure at the actual plug depth, a snubbing unit is required.
- **Engineering Controls:**
 - Snubbing units must be installed before starting milling operations for the removal of any applicable wellbore plug. The snubbing unit must remain in place until the plug has been removed and pressures equalized or the well bore sufficiently killed with weighted fluid.
- **Administrative/Elimination:**
 - Before milling out the wellbore plug, operators must conduct and record an on-site risk assessment and hazard analysis of the task. This should include, but not be limited to:
 - i. Identifying hazards and mitigations if pressure is found;
 - ii. Reviewing blow out preventer and evacuation procedures;
 - iii. Inspecting and securing the rig, hoses and other equipment that may encounter pressures from the wellbore;
 - iv. Identifying danger zones and ensuring only essential staff are present and safely positioned to avoid the identified potential hazards in the immediate work area during the milling operations; and

- v. Alerting the medic to be on standby and ensuring they are present for all steps above.

- **Reporting:**

- Operators must submit to OROGO at orogo@gov.nt.ca:
 - A record of the risk assessment and hazard analysis for the operation, as described above, no less than an hour before it begins; and
 - A summary of the operations related to the milling of the plug within an hour of its completion.
- Operators must report all incidents and near misses as soon as circumstances permit, as required under the [Oil and Gas Drilling and Production Regulations](#), to OROGO at 867-445-8551.

Notes:

1. The operator must still comply with any other applicable Act, Regulation or other regulatory requirement, including those of the NT/NU Workers Safety and Compensation Commission.
2. The operator must bring any conflict between this bulletin and its internal policies to the attention of OROGO in its application for a Well Approval. The conflict must be addressed to the satisfaction of the Chief Safety Officer before the Regulator issues the Well Approval.



Michael W. Martin
Chief Safety Officer
Office of the Regulator of Oil and Gas Operations
www.orogo.gov.nt.ca