



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

August 13, 2021

Dear Ken Nikiforuk:

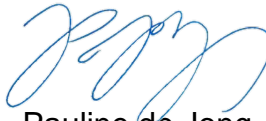
**Information Request No. 2: Application to Abandon
the Cameron N-06 Well (ACW-2021-SOG-N-06-WID2067)**

On August 9, 2021 the Office of the Regulator of Oil and Gas Operations (OROGO) received the response to Information request No. 1 from Strategic Oil and Gas Ltd. (Strategic) for the Cameron N-06 (WID 2067) 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 Cameron N-06 well, as set out in the attached Information Request No. 2.

Please send your written responses and any associated correspondence to Peter Lennie-Misgeld, Senior Advisor, Legislation and Policy at oro.go@gov.nt.ca or through OROGO's secure file transfer site on or before 4:00 p.m. on August 30, 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 oro.go@gov.nt.ca.

Sincerely,

Pauline de Jong
Regulator

Encl. Information Request No. 2
c Duncan MacRae, Director, Alvarez & Marsal Canada ULC

Strategic Oil and Gas Ltd.
Application for an Approval to Alter the Condition of a Well
Cameron N-06 Well (ACW-2021-SOG-N-06-WID2067)
Information Request # 2

2.1 Existing Bridge Plug Pressure Test

Preamble:

The updated well abandonment program submitted by Strategic on August 9, 2021 for the Cameron N-06 well does not fully describe contingency procedures in the event the pressure test of the existing permanent bridge plug at 1357 mKB (step 30) confirms a failure of plug integrity.

Step 30 of the updated well abandonment program states that OROGO will be notified as soon as possible in the event of a casing integrity issue indicated by a failed pressure test of the existing bridge plug at 1375 mKB.

Sept 32 references landing tubing at +/-1355 MKB or 1350 mKB if a new bridge plug were to be installed in preparation for circulating cement. OROGO is unable to determine if the new bridge plug would be installed regardless of a casing integrity issue identified during Step 30 of the well abandonment program.

Request:

Please submit an updated well abandonment program, as one complete consolidated document, that includes the following information:

- Detailed contingency procedures which account for the need to conduct alternative operations in the event that casing integrity issues are encountered (e.g. pressure test failure of the existing permanent bridge plug at 1357 mKB).

2.2 Casing Integrity

Preamble:

The updated well abandonment program submitted by Strategic on August 9, 2021 for the Cameron N-06 (WID 2067) well includes the *Cameron N-06 Casing Integrity Report* (originally submitted to OROGO by Strategic on April 10, 2015) and the *Analysis of Failed Production Casing, Cameron M-74 (WID 2063)* (originally submitted to OROGO by Strategic on March 12, 2015).

Both the Cameron M-74 well and Cameron N-06 well have the J55 production casing known to be prone to failure as a result of sulphide stress cracking and embrittlement at the ERW seam from H₂S exposure.

The *Cameron N-06 Casing Integrity Report* focuses mainly on the caliper test, which showed minimal internal corrosion throughout the logged interval. This test does not fully address the risk of failure of the existing J55 production casing caused by exposure to H₂S.

The updated N-06 well abandonment program does not adequately define or address the potential risks associated with the known casing integrity issues of the J55 production casing, such as:

- Possible casing failure during proposed well operations;
- Possible challenges to effective isolation of all oil and gas bearing zones, discrete pressure zones and potable water zones; and
- Possible challenges to the prevention of formation fluid from flowing through or escaping from the wellbore.

Request:

Please submit an updated well abandonment program, as one complete consolidated document, that includes the following information:

- Procedures and equipment necessary to assess casing integrity and ensure safe operations;
- Emergency procedures in the event of a casing failure that provide a comprehensive approach to securing the well to ensure worker and public safety and preventing and/or limiting environmental impact;

- Notification procedures and reporting guidelines that will be used in the event of any casing integrity issues and/or casing failures during abandonment operations; and
- Procedures that will be used to apply for a variation in the well approval should one be required due to any casing integrity issues and/or casing failures during abandonment operations.