



Results of Commission's 2018 Aerial Leak Detection Survey

The BC Oil and Gas Commission (Commission) recently completed an aerial survey of 103 decommissioned oil and gas wells in the Fort St. John area and found two sites requiring repair.

As part of a mandate to ensure the integrity of decommissioned wells, the survey, conducted in October 2018, used a laser-based methane detection array mounted on the underside of a helicopter which completed multiple passes over the decommissioned wells.

The surveyed wells were randomly selected and included open-hole abandonments, cased-hole abandonments, and wells with a previous history of surface casing vent flows which were repaired at time of well abandonment. The methane detection algorithm was set to the highest level of sensitivity to ensure even small methane leaks would be identified.

The two emitting sites were subsequently inspected in person by Commission staff. The source of the emissions at one location was identified as a pipeline riser with trace levels of methane escaping as a result of the pipeline not being properly isolated. The source of the emissions at the other location is confirmed as an abandoned well leak. Both permit holders have been notified that repairs are required under the Pipeline Regulation and the Drilling and Production Regulation, respectively.

This is the second year the Commission has undertaken this innovative leak detection method, which is an efficient and cost-effective way to inspect wells that are remote or otherwise difficult to access.

The 2018 survey builds on the success of a program completed by the Commission in 2017, discussed in [Information Bulletin 2017-01](#), when the technology's suitability to detect leaks from decommissioned wells was confirmed. The Commission intends to continue this program annually, focusing on different areas throughout northeastern British Columbia.

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