



NWT OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS



ANNUAL REPORT 2017-2018

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Message from the Regulator



Photo: GNWT

Louis Sebert, GNWT Regulator

I am pleased to present this Annual Report on the activities of the Office of the Regulator of Oil and Gas Operations (OROGO) for 2017-2018.

Transparency continues to be a priority in the regulation of oil and gas activities in the Northwest Territories. This year the *Geophysical Reporting Guidelines and Interpretation Notes* came into effect,

providing clarity and transparency with respect to the requirements for reporting on geophysical operations and the public disclosure of that information. OROGO also launched a new, easier to use website, and made significant progress in making well history information and other files available to the public electronically.

OROGO staff visited communities large and small across the territory to discuss the regulatory process, and to engage northerners on oil and gas matters. The Well Watch program continues to be a significant part of this engagement, with interest being shown across the territory and an early success story in taking action on the Jean Marie River B-48 well.

OROGO continues to benefit from the ongoing technical assistance provided by the Alberta Energy Regulator and the National Energy Board under service agreements in place since devolution. Both organizations continue to support OROGO's capacity-building initiatives and to provide technical expertise to OROGO's efforts to promote safety, protection of the environment, and conservation of the oil and gas resource.

I look forward to another successful year as OROGO continues to enhance the ways we regulate oil and gas activities to keep people safe and protect the environment where we live and work.

Message from the Executive Director

I am pleased to offer this Annual Report on the activities of the Office of the Regulator of Oil and Gas Operations (OROGO) for fiscal year 2017-2018.

The lull in new oil and gas exploratory activity within the area we regulate persisted this past year. Despite this, the important work of regulating existing oil and gas activity, primarily maintenance and abandonment-related activities, continues. OROGO is making use of this opportunity to improve the ways in which it regulates and to maintain readiness for an upswing in the oil and gas sector.

In a significant development related to the downturn in activity, in December 2017, OROGO received the first annual report from Imperial Oil Resources Limited (IORL) concerning progress toward a decision to construct the Mackenzie Gas Project. The requirement to report was a condition of the extension of the Operations Authorization granted by OROGO in June 2016 to allow governments, rights-holders and the public to better plan for the future. IORL's report confirmed that the proponents have decided not to proceed with the project at this time and to dissolve the joint venture.

A key focus for OROGO has been ensuring that the approximately 90 suspended wells within our jurisdiction are compliant with regulatory requirements and that wells with no foreseeable prospect of production are safely abandoned within a reasonable timeframe. OROGO anticipates that operator compliance with the *Well Suspension and Abandonment Guidelines and Interpretation Notes* issued in February of last year will drive an increase in applications to conduct well suspension and abandonment activities over the next several years.

In February 2018, the Regulator issued *Geophysical Reporting Guidelines and Interpretation Notes*. These requirements were finalized after a consultative process that included Aboriginal and public governments, oil and gas companies, and the public. The guidelines clarify



Photo: Angela Gzowski

James Fulford, Executive Director, OROGO

what geophysical reports must include and ensure that the information OROGO collects is useful to those who access it: government geoscientists, other oil and gas companies, and the general public. The guidelines also set out how OROGO will administer the confidentiality requirements applicable to these reports.

OROGO has made further advances in its ongoing efforts to forge resilient relationships with other oil and gas regulators and jurisdictions. Of note this year, OROGO was invited to participate as a member of the Western Regulators Forum, a collective of oil and gas regulators from the provinces of British Columbia, Alberta and Saskatchewan, along with the National Energy Board. The Forum provides an opportunity for members to share regulatory approaches and to collaborate in areas of mutual interest. I am also happy to announce the recent conclusion of a Memorandum of Understanding with the Government of Yukon on oil and gas regulatory matters. It focuses on collaboration on transboundary matters.

In closing, I wish to thank OROGO's small group of dedicated staff members who, together, made OROGO's successes possible over the past year. It remains my privilege to work with you as we carry out this important work on behalf of the public.

The Regulator

Mandate

The Regulator is designated by the Commissioner in Executive Council under the *Oil and Gas Operations Act* (OGOA). The Minister of Justice was designated as the Regulator, effective February 22, 2016.

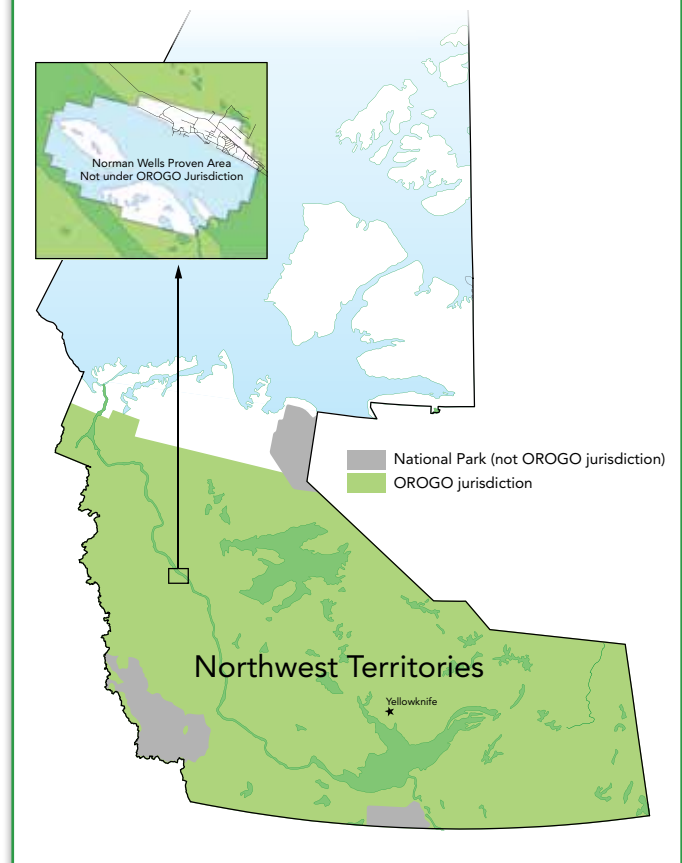
The Regulator's mandate is to regulate the exploration for and exploitation of oil and gas resources for the primary purposes of ensuring human safety, environmental protection and the conservation of those resources. The Regulator's mandate does not include promoting oil and gas-related development.

The Regulator's activities are governed by OGOA, the *Petroleum Resources Act* (PRA) and the regulations under those Acts as well as the *Mackenzie Valley Resource Management Act*.

Jurisdiction

The Regulator has jurisdiction for the regulation of oil and gas works and activities in the onshore Northwest Territories (NWT), with the exception of the Inuvialuit Settlement Region and lands that were not transferred from the Government of Canada to the Government of the Northwest Territories with devolution on April 1, 2014. Within these boundaries, the Regulator has jurisdiction over oil and gas activities on Aboriginal settlement lands as well as other private lands.

OROGO Jurisdiction under the *Oil and Gas Operations Act*



Responsibilities

The Regulator is responsible for:

- Considering applications for and issuing Operations Authorizations (including geophysical operations authorizations);
- Considering applications for and issuing well approvals for activities, including drilling, re-entry, work overs, completion, recompletion, suspension and abandonment of a well or part of a well;
- Inspecting active and historic oil and gas facilities;
- Responding to incidents and spills at regulated oil and gas facilities;
- Considering applications for and issuing Significant Discovery Declarations and Commercial Discovery Declarations; and
- Issuing Operating Licences.



Photo: OROGO

Ikhl Pipeline, Inuvik, June 2017

Delegations and Appointments

Delegations

OGOA allows the Regulator to delegate his powers to issue Operating Licences, Operations Authorizations and Well Approvals, including the consideration of safety factors and the determination of the nature and amount of proof of financial responsibility (security) required.

The Regulator has delegated these powers to the Chief Conservation Officer, a decision-maker appointed by the Regulator under OGOA.

The PRA allows the Regulator to delegate his powers to issue Significant Discovery Declarations and Commercial Discovery Declarations. These delegations are made on a case-by-case basis.

No new delegations were made under OGOA or the PRA in 2017-2018.

Appointments

Section 4 of OGOA requires the Regulator to appoint a Chief Conservation Officer and a Chief Safety Officer.

James Fulford, Executive Director, was appointed Chief Conservation Officer, effective June 16, 2014.

Brian Heppelle, Senior Technical Advisor, was appointed Chief Safety Officer, effective February 23, 2015.

The Regulator also appointed Ed Hardy, Technical Specialist, as Safety Officer, effective October 11, 2017.

The Office of the Regulator of Oil and Gas Operations

Role

The role of the Office of the Regulator of Oil and Gas Operations (OROGO) is to support the Regulator in carrying out his statutory responsibilities under OGOA and the PRA.

Strategic Plan

OROGO's strategic plan, established in 2016-2017, sets out its mission, vision and strategic objectives.

Mission

We regulate oil and gas activities to keep people safe and protect the environment where we live and work.

Strategic Objectives



Enhance certainty and predictability in our actions and in regulatory decisions.



Promote accessibility and transparency in our work.



Build and maintain resilient working relationships.



Grow oil and gas regulatory capacity in the Northwest Territories.

Vision

OROGO is a respected and effective regulator grounded in the values of Northerners.

Staff

Six staff members make up OROGO: the Executive Director; the Office Administrator; the Senior Advisor, Legislation and Policy; the Senior Technical Advisor; the Manager, Information Office; and the Technical Specialist.

In the summer of 2017, OROGO hired its first summer student, Aidan Healy. Aidan supported the Manager, Information Office, with the transfer and review of records from the National Energy Board.

OROGO welcomed Ed Hardy to the position of Technical Specialist in October 2017 on a transfer assignment from the Worker's Compensation and Safety Commission. In March 2018, Pauline de Jong resumed the responsibilities of Senior Advisor, Legislation and Policy.

OROGO receives technical advice and support from the National Energy Board and the Alberta Energy Regulator through service agreements, which can be found on OROGO's website at www.oro.go.gov.nt.ca/ service-agreements. OROGO is also able to access support from other regulators or consultants as may be required.

Location

OROGO's offices are located on the 4th floor of the Northwest Tower in Yellowknife. The public is invited to visit us during working hours, between 8:30 am and 5:00 pm daily on weekdays, except statutory holidays.



The OROGO Team, September 2017. From left to right: Kristen Cameron (Manager, Information Office), Donna Schear (Office Administrator), Mischa Malakoe (Technical Specialist), James Fulford (Executive Director), Brian Heppelle (Senior Technical Advisor) and Tara Naugler (Senior Advisor, Legislation and Policy).

2017-2018 Activities

Applications

In 2017-2018, OROGO received and processed:

- Four applications to amend conditions of well approvals and operations authorizations;
- Four core sample requests covering six wells; and
- All annual reporting requirements for continued compliance, including production reports, environmental reports and safety reports.

OROGO also accepted the annual report from Imperial Oil Resources Limited on progress toward a “Final Decision to Construct”, in December 2017, for the authorization applicable to the Mackenzie Gathering System component of the proposed Mackenzie Gas Project. The proponents have decided to dissolve the joint venture and are not pursuing the project further at this time.

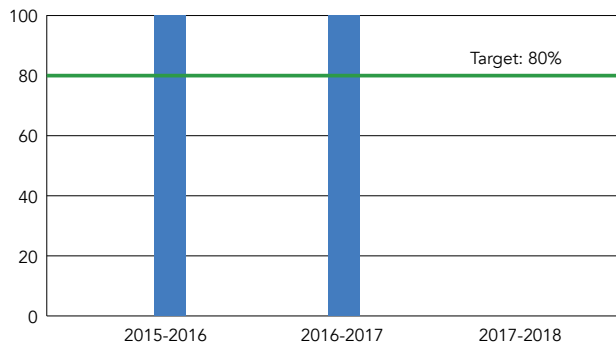
The *Well Suspension and Abandonment Guidelines and Interpretation Notes* came into effect on February 1, 2017, establishing requirements for suspended and abandoned wells under OROGO’s jurisdiction and deadlines for the safe abandonment of inactive wells. In early 2017-2018, OROGO reviewed 91 suspended wells for compliance with the guidelines.

Approximately one-third of the suspended wells were found to be non-compliant with the guidelines. OROGO sent notifications to operators of these wells in August 2017. The operators have until August 2019 to bring the wells into compliance by either re-suspending or abandoning them.

Operators of suspended wells that were found to be in compliance with the guidelines have until January 31, 2023, to bring them back into production or abandon them. In order to manage the volume of applications expected, operators must provide a plan for their activities to OROGO by January 31, 2021.

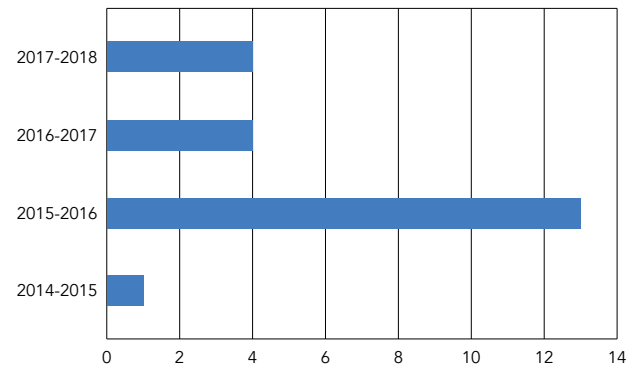
OROGO is expecting a significant increase in well approval applications for the 2018-2019 and 2019-2020 winter work seasons as the *Well Suspension and Abandonment Guidelines and Interpretation Notes* are operationalized.

Applications Processed Within Service Standard (%)



Since 2015-2016, OROGO has processed all applications for Operations Authorizations and Well Approvals within the timeframes established in its service standards. No such applications were received in 2017-2018.

Inactive Wells Safely Abandoned



Oil and gas wells safely abandoned under OROGO jurisdiction since April 1, 2014.



Photo: Angela Gzowski

Kristen Cameron (Manager, Information Office) and Jamie Fulford (Executive Director)

Inspections

OROGO's inspection activities in 2017-2018 fell into two categories:

- On-site inspections of authorized oil and gas activities; and
- Review of operator inspections of suspended wells.

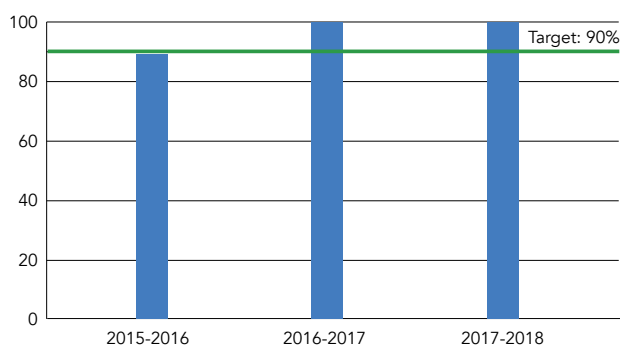
Field season summary inspection reports from 2017 onwards are available on OROGO's public registry.

OROGO staff conducted three site visits in 2017-2018, including inspections of all authorized activities.

The Oil and Gas Drilling and Production Regulations also require operators to regularly monitor and inspect their suspended wells to ensure they are in good condition and are not leaking. In 2017-2018, OROGO received inspection reports from the operators responsible for ongoing monitoring of suspended

wells. OROGO staff reviewed all of these reports and followed up with operators to address any potential issues, which may involve applying to OROGO for permission to conduct remedial work, to re-suspend or to abandon the well in question.

Inspections Completed as Scheduled (%)



Since 2015-2016, OROGO has completed all inspections as scheduled with the exception of one inspection in 2015-2016, which was cancelled due to poor weather conditions.

Incident Response

Oil and gas incidents are reported to the Regulator in two ways. If the incident results in a spill over a certain threshold from OROGO-regulated facilities or pipelines, the incident must be reported through the NWT-Nunavut Spill Line, which then routes the information to OROGO. All incidents must also be reported directly to OROGO through a dedicated 24/7 phone line, even if the incident results in a spill below the threshold or is a non-spill incident or a near miss.

OROGO continues to participate in the NWT-Nunavut Spills Working Group, a group of agencies that have signed the NWT-Nunavut Spills Working

No oil and gas incidents were reported to OROGO in 2017-2018.

Agreement. In keeping with OROGO's strategic goals of growing northern capacity and building resilient working relationships, OROGO has coordinated and funded the delivery of a workshop for Working Group participants on developing effective interagency emergency response exercises as well as initiating planning of future exercises in the NWT.



Photo: OROGO

Other Initiatives

Promoting Open and Transparent Regulation

OROGO continues to focus on increasing the openness and transparency of the oil and gas regulatory system. This work is shaped by section 91 of the *Petroleum Resources Act* (PRA), which places significant limits on the type of information that OROGO can make available about the applications it receives and its interactions with operators.

On May 10, 2016, the Regulator approved OROGO's *Information Disclosure Guidelines*. The objective of the guidelines is to encourage transparency by obtaining advance permission from applicants to disclose as much information relating to an application as possible, while maintaining each operator's right to confidentiality under section 91 of the PRA. All applications to the Regulator for Operation Authorizations and approvals must include a completed and signed *Information Disclosure Consent Form*.

In 2016-2017 and 2017-2018, all applicants for authorizations consented to publicly disclose the details of their applications.

OROGO also requests all operators conducting a hydraulic fracturing operation to fill out a form consenting to the disclosure of information related to hydraulic fracturing operations. Disclosure can include the well name and identifiers, the well total vertical depth and data on the hydraulic fracturing operations such as the fracture data, the total water volume, hydraulic fracture fluid ingredients, and the combinations and concentrations of chemicals. The information provided by operators who have consented is then posted on FracFocus.ca, a website established to provide public information on hydraulic fracturing for participating Canadian jurisdictions.



Photo: Angela Gzowski

Donna Shear (Office Administrator)

Making Information Available

OROGO is a repository for information collected during oil and gas activities, and maintains an Information Office that makes non-privileged (non-confidential) information about oil and gas activities in the Regulator's jurisdiction publicly available. This data is particularly valuable to companies and researchers evaluating oil and gas potential, and can be accessed by contacting the Information Office.

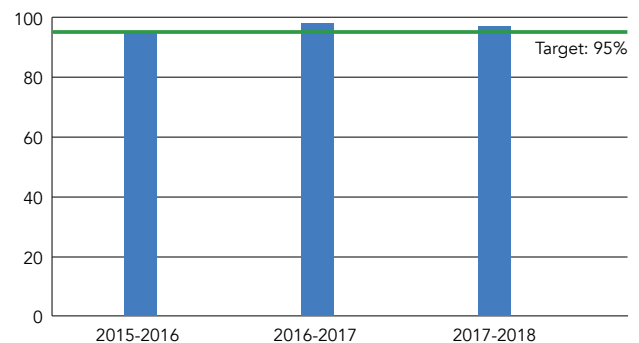
OROGO is increasingly able to make this information available in electronic form, which improves its usefulness for industry, researchers and other stakeholders. OROGO continues to work with the NEB to digitize and transfer these important information resources. When complete, OROGO will have a digital library of well and geophysical information dating back to the 1920s that will be more accessible to all users.

OROGO can provide electronic access to 95% of its well history reports and 50% of its seismic program reports.

In 2017-2018, OROGO received four different requests for electronic well information, resulting in 121 files sent, two requests for electronic seismic information, resulting in five files sent, and 116 public inquiries.

Access to well materials (cuttings, fluid samples and core samples) is also available by applying to the Information Office. These materials are located at the Geological Survey of Canada core facility in Calgary, Alberta.

Response to Public Inquiries Within Service Standard (%)



Since 2015-2016, OROGO has provided a preliminary response to at least 95% of all public inquiries within one business day.

Guidelines and Interpretation Notes

OROGO continues to seek out opportunities to provide more certainty and predictability in key areas of the regulatory process. The issuance of guidelines by the Regulator under section 18 of OGOA is one tool that can be used for this purpose.

In 2017-2018, the Regulator determined that reporting requirements for Geophysical Operations were an area that could benefit from guidance, setting out clear expectations about report content and promoting the consistent, transparent treatment of geophysical reports.

From October to December 2017, OROGO consulted and engaged the general public, operators, and public and Aboriginal governments on draft *Geophysical Reporting Guidelines and Interpretation Notes*. Following that process, OROGO developed a

summary of the consultation and engagement results that indicated how comments were addressed in the draft. The guidelines were approved by the Regulator to come into effect on February 6, 2018, and can be found on OROGO's website, along with the summary of the consultation and engagement results.

The Regulator has issued four guidelines since 2016:

- Document Submission Guidelines
- Information Disclosure Guidelines
- Well Suspension and Abandonment Guidelines and Interpretation Notes
- Geophysical Reporting Guidelines and Interpretation Notes



Campbell Lake near Inuvik, June 2017

Relationships with Other Regulators

In 2017-2018, OROGO was invited to become a member of the Western Regulators Forum (WRF), a group including its sister regulators from Saskatchewan, Alberta and British Columbia as well as the National Energy Board. The WRF focuses on facilitating the exchange of information and discussion of ideas around oil and gas regulation, collaborating on research into issues of common interest and supporting inter-organizational communications and engagement.

In late March 2018, OROGO signed a Memorandum of Agreement (MOU) with the Oil and Gas Resources Branch, Department of Energy, Mines and Resources, Government of Yukon. The MOU establishes a mechanism for collaboration, cooperation, information sharing and dialogue between the parties, with a focus on efficient and effective regulation of transboundary activities.

OROGO is particularly interested in educating other regulators on its role and activities. For example, in October 2017, OROGO presented to the National Energy Board's North and Offshore Advisory Group in Calgary and, in November 2017, OROGO presented to the Alberta Energy Regulator's Life and Learning session in Edmonton.

OROGO continues to participate actively in the NWT Board Forum and other territorial and inter-jurisdictional regulatory initiatives.

OROGO has Memoranda of Understanding with the Mackenzie Valley Land and Water Board, the Workers' Safety and Compensation Commission, the National Energy Board and the Government of Yukon.



Photo: OROGO

Outreach and Engagement

In August 2017, OROGO launched its newly improved website. The new website is more user-friendly, with easily searchable resources. The public registry on the website continues to share information on applications, responses to information requests, decisions on works and activities, notices, inspection results and other reports.

OROGO is committed to strong, respectful working relationships with Aboriginal governments and land claim bodies. In addition to formal consultation associated with the development of new guidelines, in 2017-2018, OROGO met with or presented to the Fort McPherson Renewable Resources Council, the staff of the Gwich'in Tribal Council and the Gwich'in Land and Water Board, the Chief of Jean Marie River and a Council member, and the staff and Board members of the Mackenzie Valley Land and Water Board.



Ed Hardy (Technical Specialist) and Brian Heppelle (Senior Technical Advisor), near Red Deer, Alberta, January 2018

In 2017-2018, OROGO also made a contribution to the funding of a video documentary on Sahtu Dene and Metis involvement in the construction of the Canol Project in the mid-1940s. The purpose of the contribution was to facilitate interviews with Sahtu elders who were present during the construction of the project and to help document both the positive and negative aspects of the north's first energy mega-project.

OROGO continued to expand its public interactions in 2017-2018 with notifications on social media, printed materials in all NWT official languages and ads in northern publications. OROGO staff met regularly with operators on a one-on-one basis. OROGO also engaged with its stakeholders, in part by participating in:

- The Arctic Energy and Emerging Technologies conference in Inuvik;
- The Geoscience Forum in Yellowknife;
- The Arctic Oil and Gas Symposium in Calgary;
- The GNWT's Resource and Energy Development Information (REDI) sessions in Inuvik and Hay River;
- The annual meeting of GNWT petroleum-related divisions in Yellowknife; and
- Meetings with the staff from various regions of the Department of Lands in Inuvik and Yellowknife.

For the fourth consecutive year, OROGO has published an Annual Report for tabling in the Legislative Assembly. While this is not a requirement of the legislation, OROGO sees this as an effective way to share information about its work and maintain accountability to the public and legislators.



Photo: OROGO

Aidan Healy (Summer Student) and Brian Heppelle (Senior Technical Advisor), Inuvik, July 2017

Capacity Building

OROGO continues to enhance its own capacity to regulate oil and gas activities as well as to promote oil and gas regulatory capacity building across northern organizations.

OROGO staff participated in formal and informal learning opportunities throughout the year, including:

- Spills readiness training;
- Job-shadowing field compliance activities of other regulators;
- Incident Command System (ICS) training;
- The Professional Petroleum Data Management Symposium;
- Society of Exploration Geophysicists online training;
- The Certificate in Tribunal Administrative Justice program through the Foundation of Administrative Justice; and
- Energy Safety Canada (formerly Enform) Training.

OROGO has established a tradition of making training and educational events available to others. In 2017-2018, OROGO organized:

- H2S Alive training for OROGO staff and staff of other regulators and government departments in conjunction with Yellowknife firm Haztech;
- A public workshop on seismic activity resulting from hydraulic fracturing, in conjunction with the Geoscience Forum, presented by Honn Kao of the Geological Survey of Canada (Natural Resources Canada) and Ryan Schultz of the Alberta Geological Survey (Alberta Energy Regulator); and
- A standard first aid course focused on the oil and gas industry for OROGO staff and staff of other regulators and government departments.



Photo: OROGO

Brian Heppelle (Senior Technical Advisor) and
Jamie Fulford (Executive Director), Inuvik, July 2017

Well Watch Program

OROGO established the Well Watch Program in August 2016 to further engage with NWT communities on old, abandoned well sites. The program is designed to encourage local land users to report concerns with historic, abandoned well sites to OROGO so that any risks can be identified and assessed.

In June 2017, OROGO staff presented to members and staff of the Fort McPherson Renewable Resources Council, and had the opportunity to talk about Well Watch on the community radio station. In September 2017, OROGO staff attended the site of the Jean Marie River B-48 Well for further gas migration

testing conducted by the operator responsible for the well. Members of the Jean Marie River First Nation also had the chance to visit the well site. OROGO continues to receive interest from communities about the program and further briefings are planned.

OROGO is working with the operator of the first well requiring repair identified through the Well Watch Program to ensure the community's concerns are addressed and regulatory compliance is achieved.



Photo: OROGO

Jean Marie River, September 2017



NWT OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS

Contact Information

Office of the Regulator of Oil and Gas Operations (OROGO)
Government of the Northwest Territories
P.O. Box 1320
Yellowknife NT X1A 2L9
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Email: orogo@gov.nt.ca
Website: www.orogo.gov.nt.ca

OROGO Information Office

Phone: 867-767-9097 Ext. 78004
Email: orogo@gov.nt.ca

Incident Response

NWT Spill Line: 1-867-920-8130 (Phone); 1-867-873-6924 (Fax)
OROGO Incident Response Line (24/7): 1-867-445-8551

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