

TABLE OF CONTENTS

Message from the Regulator	2
The Regulator	3
Mandate	3
Jurisdiction	3
Responsibilities	4
Delegations and Appointments	4
The Office of the Regulator of Oil and Gas Operations	5
Role	5
Strategic Plan	5
Staff	6
Location	6
2022-2023 Activities	7
Applications	7
Inspections	. 11
Orders	11
Incident Response	.12
Other Initiatives	13

MESSAGE FROM THE REGULATOR

I am pleased to present this Annual Report on the activities of the Office of the Regulator of Oil and Gas Operations (OROGO) in 2022-2023. This is the ninth OROGO annual report since the office was established on April 1, 2014.

It was an exceptional year for OROGO. 55 wells were safely abandoned in 2022-2023, representing two-thirds of the suspended wells in our jurisdiction. This significant reduction is due to the deadlines for well abandonment established in the *Well Suspension and Abandonment Guidelines and Interpretation Notes*, first issued in 2017 and updated in 2022.



Pauline de Jong, Regulator, OROGO (Credit: Angela Gzowski)

The OROGO team rose to the challenge of this substantial increase in operations. OROGO exceeded its service standards for processing applications while simultaneously conducting the most inspections of suspended wells and active operations in a year since 2014 to promote safety and the protection of the environment.

I am honored to work with such dedicated professionals.

I also want to acknowledge the important contributions of our service agreement partners, the Alberta Energy Regulator and the Canada Energy Regulator, to our success this year.

2022-2023 also saw the return of in-person events where OROGO connects with community members, operators, and other stakeholders. It is a pleasure to renew those relationships and share what we've been working on for the past few years. I look forward to more opportunities for sharing and learning in the future.



THE REGULATOR

MANDATE

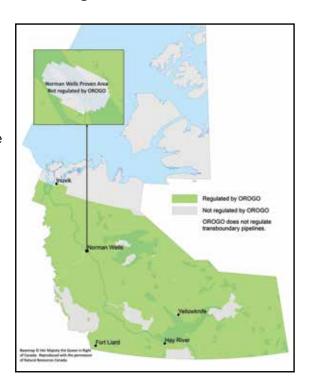
The Regulator is designated by the Commissioner in Executive Council under the *Oil and Gas Operations Act* (OGOA).

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), except for 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.

CREE

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.

DELEGATIONS AND APPOINTMENTS

Delegations

Section 8 of OGOA allows the Regulator to delegate any of its powers under OGOA.

In 2022-2023, the Regulator delegated the authority to approve changes to or deviations from the work or activities authorized under a Well Approval to Mike Martin, Chief Safety Officer and Chief Inspection Officer, from January 3 to March 31, 2023.

The PRA allows the Regulator to delegate its 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 the PRA in 2022-2023.

Appointments

Pauline de Jong was designated as the Regulator on August 2, 2020.

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

Mike Martin, Senior Technical Advisor, was appointed Chief Safety Officer effective June 26, 2020.

Mike Martin, Senior Technical Advisor, was appointed Chief Conservation Officer effective December 10, 2021, to August 2, 2022. Brian Heppelle, Senior Technical Advisor, was appointed Chief Conservation Officer effective August 2, 2022, to November 14, 2022. Mike Martin, Senior Technical Advisor, was appointed Chief Conservation Officer effective November 14, 2022.



Brian Heppelle, Senior Technical Advisor, was appointed Safety Officer effective June 26, 2020, to November 14, 2022. Brandon Bradbury, Technical Specialist, was appointed Safety Officer effective December 20, 2022.

Brian Heppelle, Senior Technical Advisor, was appointed Conservation Officer effective June 26, 2020, to August 2, 2022. Mike Martin, Senior Technical Advisor, was appointed Conservation Officer effective August 2, 2022, to November 14, 2022. Brandon Bradbury, Technical Specialist, was appointed Conservation Officer effective December 20, 2022.

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 its 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

To enhance certainty and predictability in our actions and in regulatory decisions.



To promote accessibility and transparency in our work.



To build and maintain resilient working relationships.



To grow oil and gas regulatory capacity in the Northwest Territories.

Vision

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

GWICH'IN

Aii Khaii akoo ts'àt Nan Tl'àt Guk'àtr'ìnaatii kat (OROGO) nits'òo khaii gòo nan tl'àt hàh goo'aii danh tthak lòo nan diinagòo'ee gwà'àn tthak gwjįzrii hàh gwintl'àntr'ahkaii jì' geenjit guk'àndehtr'inaatìh.

STAFF

OROGO's staff complement consists of four positions: the Executive Director, the Senior Technical Advisor, the Technical Specialist, and the Regulatory Information Officer.

In December 2022, Brandon Bradbury joined the OROGO team as Technical Specialist and, in January 2023, Ekaterina Nagui joined the OROGO team as Regulatory Information Officer. In November 2022, Brian Heppelle, Senior Technical Advisor, left the OROGO team.

OROGO receives technical advice and support from the Canada Energy Regulator and the Alberta Energy Regulator through service agreements. OROGO can also access support from other regulators or consultants.

LOCATION

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



The OROGO Team, April 2023: Mike Martin (Chief Safety Officer and Chief Conservation Officer), Pauline de Jong (Executive Director), Ekaterina Nagui (Regulatory Information Officer), and Brandon Bradbury (Safety Officer and Conservation Officer). (Credit: Angela Gzowski)



2022-2023 ACTIVITIES

APPLICATIONS

In 2022-2023, OROGO received:

- 1 application for an Operations Authorization;
- 53 applications for Well Approvals;
- 80 applications to vary an existing Operations Authorization or Well Approval;
- 2 core sample requests;
- 1 application for information to be kept confidential under section 22(2) of OGOA; and
- All annual reporting requirements for continued compliance including production reports, environmental reports, and safety reports.

2022-2023 saw a considerable increase in the number of well operations completed, primarily in the winter 2023 operating season. Well abandonments continue to be driven by the *Well Suspension and Abandonment Guidelines and Interpretation Notes* (the Guidelines), which came into effect on February 1, 2017. The Guidelines establish requirements for suspended and abandoned wells under OROGO's jurisdiction and deadlines for the safe abandonment of inactive wells.



Manifold, Cameron Hills, March 2023. (Credit: OROGO)

INUINNAQTUN

Uqhuryuaplu Gaasiliiplu Aulapkiayiit Munaqhiiyiita Havakviat (OROGO) hapkunanik munaqhivaktuq uqhuryuaplu gaasiliiplu hulilukaarutait aulatdjutainniklu ihuangnikkut aanningniattukkut nunaplu immaplu itdjuhiit ihumagittiaqhugit, uqhuryuaqarvigigamikkik gaasiiliiqarvigiigamikiklu munarittiaqhugit atungniit pivaktut.

Appiqhuutiqaruvit ilihimattiarumaguvitluunniit hapkuninga, una takuurvia qaritauyakkut pulaanginiarialik: www.orogo.gov.nt.ca

2022-2023 Applications Received

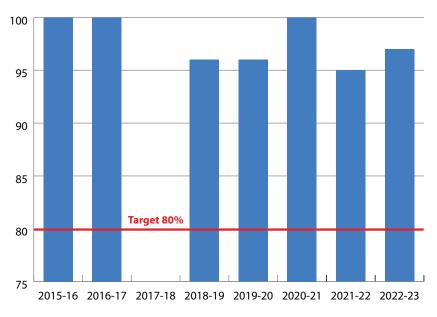
Type of Application	Application #	Purpose	Region
Operations Authorization	OA-2022-001-AC	Well Abandonment	Gwich'in
Well Approval	ACW-2021-SUN-A-67-WID1555	Well Abandonment	Sahtú
Well Approval	ACW-2021-SUN-M-47-WID1476	Well Abandonment	Sahtú
Well Approval	ACW-2021-SUN-N-18-WID0790	Well Abandonment	Dehcho
Well Approval	ACW-2021-SUN-O-35-WID1600	Well Abandonment	Sahtú
Well Approval	ACW-2022-MGM-B-23-WID1998	Well Abandonment	Sahtú
Well Approval	ACW-2022-MGM-C-34-WID1995	Well Abandonment	Sahtú
Well Approval	ACW-2022-MGM-E-35-WID2021	Well Abandonment	Sahtú
Well Approval	ACW-2022-MGM-I-78-WID2089	Well Abandonment	Sahtú
Well Approval	ACW-2022-MGM-M-17-WID1970	Well Abandonment	Sahtú
Well Approval	ACW-2022-PAR-2K-29-WID1980	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-2M-25-WID2008	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-3K-29-WID1999	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-B-41-WID1733	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-C-02-WID1857	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-F-25A-WID1621	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-K-29A-WID2030	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-M-25-WID1867	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-N-65-WID1833	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-O-15-WID1834	Well Abandonment	Dehcho
Well Approval	ACW-2022-PAR-O-80-WID1866	Well Abandonment	Dehcho
Well Approval	ACW-2022-SOG-2F-73-WID2025	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-B-25-WID1756	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-E-07-WID2042	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-F-73-WID1992	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-F-75-WID1971	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-I-10-WID1492	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-I-74-WID1792	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-J-04-WID2034	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-L-44-WID1743	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-M-31-WID1122	Well Abandonment	South Slave
Well Approval	ACW-2022-SOG-M-74-WID2063	Well Abandonment	South Slave
Well Approval	ACW-2023-AC-G-04-WID1915	Well Abandonment	Gwich'in
Well Approval	ACW-2023-PAR-N-65-WID1833	Well Abandonment	Dehcho
Well Approval	ACW-2023-SOG-2H-03-WID2073	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-2M-73-WID2026	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-A-03-WID2047	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-A-05-WID0376	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-B-08-WID1732	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-C-19-WID1767	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-C-74-WID1939	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-C-75-WID1793	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-D-49-WID1973	Well Abandonment	South Slave



Well Approval	ACW-2023-SOG-H-03-WID1940	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-H-58-WID1975	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-I-16-WID1482	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-I-73-WID1937	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-J-62-WID1158	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-J-74-WID2032	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-K-74-WID1972	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-L-40-WID2045	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-L-47-WID1736	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-L-73-WID2033	Well Abandonment	South Slave
Well Approval	ACW-2023-SOG-M-73-WID1765	Well Abandonment	South Slave

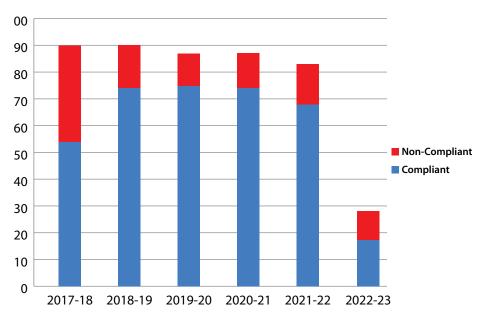
OROGO processed 95% of the operations authorizations and well approvals issued in 2022-2023 within its established service standards, well above its target of 80%.

Applications Processed Within Service Standard (%)



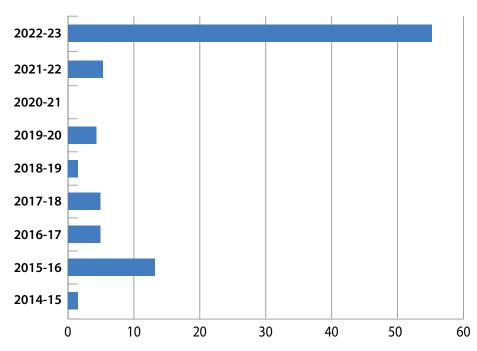
Since 2015-2016, OROGO has processed more than 80% of all applications for Operations Authorizations and Well Approvals within its established service standard.

Suspended Well Status



In 2022-2023, 4 wells changed status from compliant suspended to non-compliant suspended. 47 compliant suspended wells and 8 non-compliant suspended wells were abandoned.

Inactive Wells Safely Abandoned



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

INSPECTIONS

OROGO's inspection activities in 2022-2023 fell into two categories:

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

In 2022-23, OROGO staff conducted the following inspections of active well operations:

- 1 inspection of the Tathlina N-18 well abandonment in July 2022;
- 17 inspections of well abandonments near Fort Liard in January and February 2023;
- 1 inspection of the Jean Marie B-48 well abandonment in January 2023;
 and
- 9 inspections of well abandonments at the Cameron Hills field between January and March 2023.

OROGO staff also conducted 39 suspended well inspections and facility inspections in 2022-23, in Inuvik, near Fort Liard, and at the Cameron Hills field.

The *Oil* and *Gas Drilling* and *Production Regulations* require operators to regularly monitor and inspect their suspended wells to ensure they are in good condition and are not leaking. In 2022-2023, OROGO received 93 inspection reports, including gas migration testing reports, from the operators responsible for ongoing monitoring of suspended wells. OROGO staff reviewed all these reports and followed up with operators to address any potential issues. The status of 4 wells changed from compliant suspended to non-compliant suspended based on the results of inspections.

ORDERS

The Regulator did not issue any orders in 2022-2023.

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.

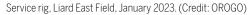
Activities in 2022-2023 resulted in a total of 6 incidents reported to OROGO. No near-misses were reported. The reports required under the *Oil and Gas Drilling and Production Regulations* were received and reviewed by OROGO.

2022-2023 Incidents

Incident #	Nature of the Incident
INC-2023-001-SOG-OA-2018-003	Injury
INC-2023-002-IMP-OA-2021-004	Spill
INC-2023-003-IMP-OA-2021-004	Injury
INC-2023-004-SOG-OA-2018-003	Injury
INC-2023-005-SOG-OA-2018-003	Spill
INC-2023-006-SOG-OA-2018-003	Safety Equipment Failure

In October 2022, OROGO participated in an Emergency Response Plan tabletop exercise for the Ikhil project, near Inuvik.







OTHER INITIATIVES

Promoting Open and Transparent Regulation

OROGO continues to focus on increasing the openness and transparency of the oil and gas regulatory system.

In 2022-2023, OROGO presented on its:

- Activities to promote safe operations at the Petroleum Safety Canada annual conference in May 2022;
- Role in closure and reclamation at the Virtual MVRMA Closure and Reclamation Workshop in June 2022; and
- Roles and responsibilities in oil and gas resource management to the Mackenzie Valley Environmental Impact Review Board in February 2023.

In 2022-2023, OROGO facilitated:

- Meetings between the receiver for Strategic Oil & Gas Ltd, the Mackenzie Valley Land and Water Board, and the Department of Lands to discuss the abandonment of the Cameron Hills field;
- Pre-operations planning meetings with Suncor, Canadian Natural Resources Limited, Imperial Oil Ltd., and Paramount Resources Ltd., bringing in the Mackenzie Valley Land and Water Board and inspectors from the Department of Lands and the Department of Environment and Natural Resources; and
- Weekly operations update meetings with Suncor, Canadian Natural Resources Limited, Imperial Oil Ltd., the receivers for Strategic Oil & Gas Ltd., and Paramount Resources Ltd., as well as their contractors, and inspectors from the Department of Lands and the Department of Environment and Natural Resources.

In May 2022, OROGO renewed its participation in FracFocus.ca. FracFocus.ca provides the public with information about the composition of the hydraulic fracturing fluid used by oil and gas companies, along with other information on hydraulic fracturing, groundwater and surface water protection, and related oil and gas activities in Canada.

Making Information Available

OROGO is a repository for information collected during oil and gas activities. Information about oil and gas activities in the Regulator's jurisdiction is available on OROGO's website or by contacting the Information Office at orogo@gov.nt.ca.

In 2022-2023, OROGO received:

- 14 requests for well information, resulting in 235 well history files downloaded;
- 1 request for geophysical information, resulting in files for 9 programs downloaded; and
- 65 other public inquiries.

2022-2023 Regional Breakdown of Files Provided by OROGO in Response to Information Inquiries

Region	Seismic Files*	Well Files	Total
Dehcho	-	207	207
Sahtú	-	24	24
Gwich'in	-	4	4
Unspecified	9	-	9
Total	9	235	244

^{*} As seismic programs can be large and often cross land claim boundaries, they are not identified by their region.



Hydro-cutting a wellhead, Cameron Hills, March 2023. (Credit: OROGO)



Access to well materials (cuttings, fluid samples and core samples) is also available by applying to the Information Office. Two requests to sample these materials were received in the 2022-2023 fiscal year. These materials are located at the Geological Survey of Canada core facility in Calgary, Alberta.

In keeping with its objective of accessibility, OROGO places a high priority on responsiveness to public inquiries. In 2022-2023, OROGO responded to 65 public inquiries, all but 2 within one business day, well within its service standards.

100
99
98
97
96
Target 95%
95
94
93

Response to Public Inquiries Within Service Standards (%)

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

2015-16 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23

Guidelines and Interpretation Notes

Section 18 of OGOA authorizes the Regulator to issue guidelines and interpretation notes about the application and administration of OGOA and its regulations.

In 2022-2023, the Regulator issued revisions to the *Well Suspension and Abandonment Guidelines and Interpretation Notes*.





Casing expander tool, Liard East Field, February 2023. (Credit: OROGO)

Relationships with Other Regulators

OROGO prioritizes building and maintaining resilient working relationships with other regulators. It participates in organizations that bring regulators from different jurisdictions together, as well as establishing direct, one-on-one relationships through Memoranda of Understanding and other tools.

OROGO participates actively in the NWT Board Forum, which met in February 2023. The NWT Board Forum brings together resource management organizations in the territory and strives to improve and maintain effective lines of communication between its members and to resolve common issues and share expertise.

OROGO is a member of the Western Regulators Forum (WRF), which focuses on facilitating the exchange of information and discussion of ideas about oil and gas regulation, collaborating on research into issues of common interest and supporting inter-organizational communications and engagement. The WRF includes representation from Saskatchewan, Alberta, and British Columbia, as well as the Canada Energy Regulator. In 2022-2023, OROGO participated in WRF workshops on methane emissions and on Indigenous reconciliation, diversity, and inclusion. OROGO also participated as an observer in the WRF project on strategic use of standards.



Doug Doan (Gwich'in Renewable Resources Board), Tanya MacIntosh (Sahtu Land and Water Board), Paul Dixon (Sahtu Land and Water Board), Brian Chambers (Canada Energy Regulator), and Pauline de Jong (Executive Director, OROGO) at the NWT Board Forum in Yellowknife, February 2023. (Credit: NWT Board Forum)

In 2022-2023, OROGO continued its participation as a member of the Interstate Oil and Gas Compact Commission (IOGCC). OROGO's International Affiliate membership in the IOGCC allows it to participate on committees, join in oil and gas studies and access international best practices. Seven other Canadian provinces and territories are IOGCC International Affiliates.

OROGO also participates in FracFocus.ca, CAMPUT (a non-profit organization of Canada's energy and utilities regulators) and the Professional Petroleum Data Management Association (PPDM).

Outreach and Engagement

OROGO participated in several community outreach and stakeholder engagement activities in 2022-2023, including:

- The GNWT's Resource and Energy Development Information (REDI)
 Inuvik event in October 2022;
- The Geoscience Forum in November 2022;
- The annual meeting of GNWT departments involved with petroleum related initiatives in February 2023; and
- The Arctic Energy and Resources Symposium in March 2023.

OROGO continues to work with communities through the Well Watch Program, which encourages local land users to report concerns with historic, abandoned well sites so that they can be assessed, and any identified risks can be addressed. OROGO did not receive any inquiries about potential well sites of interest in 2022-2023.





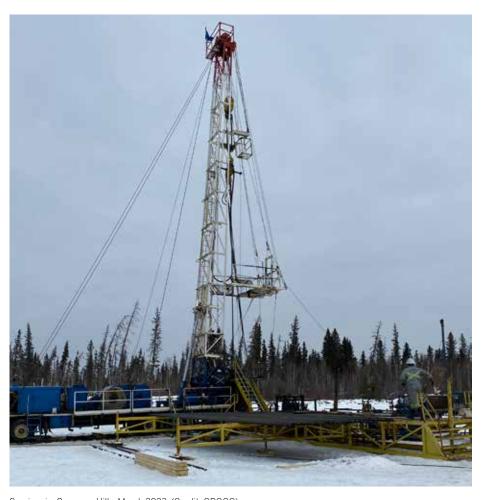


Capacity Building

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

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

- In-field inspection training with the Alberta Energy Regulator;
- Information security training offered by the GNWT;
- A workshop on Finding, Assessing and Abandoning or Repurposing Orphan and Idle Wells offered through the IOGCC; and
- · Living Well Together training offered by the GNWT.



 $Service\ rig, Cameron\ Hills, March\ 2023.\ (Credit:\ OROGO)$





Coiled tubing rig, Cameron Hills, February 2023. (Credit: OROGO)





CRCGO

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 PO Box 1320 Yellowknife NT X1A 2L9

Phone: **867-767-9097**Email: **orogo@gov.nt.ca**Website: **www.orogo.gov.nt.ca**

OROGO Information Office

Phone: **867-767-9097**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, please contact (867) 767-9097.