

Unlocking our **Potential**



NOVEMBER 2022

NWT Heads Mine-to-Motor **RARE EARTH SUPPLY CHAIN**

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Government of
Northwest Territories



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**NORTHWEST TERRITORIES
GEOLOGICAL SURVEY**

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*Cover photo:
A sheet of native copper (a critical mineral in Canada) on Victoria Island,
NWT. These copper occurrences originally form as a vein that infill a crack
in the rocks, then much later a portion of the copper vein is pushed up by
freeze-thaw actions. Photo: NWT Geological Survey*

Hon. Caroline Wawzonek
MINISTER OF INDUSTRY,
TOURISM AND INVESTMENT
NORTHWEST TERRITORIES



MESSAGE FROM THE MINISTER

The release of this edition of the Unlocking Our Potential Magazine will align with the 2022 Yellowknife Geoscience Forum which, this year, marks its 50th anniversary.

A lot has changed since that first gathering of science and industry in 1972. The event has grown. It has changed. It has evolved; and so too has the Northwest Territories.

One thing that has not changed is the importance of research and exploration. Geoscience has, and will continue to be, the all-important trail blazer for our resource industries.

This edition of UOP examines the geoscience behind our territory's evolving focus on critical minerals. You'll find that story on page 10.

Meanwhile, our cover story celebrates another first for NWT mining.

With the official opening of Vital Metal's Rare Earth Extraction Facility in Saskatoon, the NWT is now the first link in an independent mine-to-motor supply chain that

will see NWT rare earth elements processed for use in Germany's auto manufacturing industry.

Today's mining industry is changing; and the Northwest Territories is building on its history of exploration, proven geoscience and mining success to take it to the next level.

With the exploration and development of critical minerals, investments in geoscience, modernized legislation, new infrastructure development, and the evolution of ESG, we will continue to see strong partnerships formed, new commodities mined and more products produced.

These are the foundations of the GNWT's vision for a strong resource sector – one that we are positioning to be prosperous through a modern and uniquely northern approach to development; one that is ready to welcome the mineral industry of tomorrow – whatever it may hold.

NWT Heads Mine-to-Motor RARE EARTH SUPPLY CHAIN

“Resource availability, technology, market demand and global - and therefore political - interest are coming together to create a positive climate for investment.”

It was another first for the Northwest Territories mining sector as Vital Metals unveiled its multimillion-dollar rare earth processing facility in Saskatoon in September.

With it, the NWT-based Nechalacho Mine, the first rare earth element mine in Canada, also took its place as the all-important first link in an international mine-to-motor supply chain that will see NWT rare earths processed in Saskatoon for use in German-made electric vehicles.

Over 200 leaders representing the global rare-earth industry gathered for a Rare Earth Summit cosponsored by the Canadian Chamber of Commerce's Critical Minerals Council, Vital Metals, and the Saskatchewan Research Council; and staged to celebrate Vital's success in establishing a responsibly sourced supply chain of rare earths for friends and allies.



Hon. Caroline Wawzonek, Minister of Industry Tourism and Investment, Government of the Northwest Territories.

PHOTO: Vital Metals/Bill Braden

Among them, Government of the Northwest Territories' Industry and Finance Minister Caroline Wawzonek who, with representatives from 11 Canadian and international jurisdictions, posed with a symbolic supply chain to mark the event.

“This is a pivotal time for the NWT,” the Minister noted. “Resource availability, technology, market demand and global -and therefore political - interest are coming together to create a positive climate for investment.

The new Saskatoon facility will process ore from the NWT into a high purity, mixed rare earth carbonate. This product will be exported to REEtec in Norway and to Ucore in the United States for separation into individual magnetic rare earth metals.



Vital
METALS

CHEETAH
RESOURCES

Cover photo: RARE EARTH SUMMIT DRUMMERS from the Yellowknives Dene First Nation helped celebrate the unveiling of Vital Metals' new 3,000 square-meter Saskatoon Rare Earth Processing Facility in September. Their performance was part of the Rare Earth Summit in Saskatoon, where the plant will process concentrate from the Nechalacho Mine southeast of Yellowknife.

Left to right: Ethan Sundberg, Gordie Liske, Randy Baillargeon, Paul Betsina, Blake Baillargeon, Cody Drygeese

Cover photo credit: Cheetah Resources/billbradenphoto



So far, the 3,087-square-metre facility in Saskatoon, built at a cost of more than \$20 million, has received 1,500 tonnes of REE rocks mined at Nechalacho.

Located in an industrial complex, the processing facility is in an area earmarked to become a REE hub that will include a \$55-million REE processing plant funded by the Saskatchewan government and owned and operated by the Saskatchewan Research Council.

In 2023, the first batch of mixed REE concentrate, produced from

Vital's facility, will be stored in 45 gallon containers and shipped off to REEtec's rare earth separation plant in Norway. There, the individual REEs will be separated from each other and processed into bars and sent on to vehicle-makers.

By 2025, Nechalacho aims to produce 25,000 tonnes of concentrate a year.

As government and industry dignitaries toured the new Vital Metals facility, the NWT celebrated its part in the historic event by showcasing its investment potential,

Spectacular tourism attractions and rich Indigenous cultures and traditions.

Meanwhile, the unmistakable sound of drummers from the Yellowknives Dene First Nation, the first in Canada to lead mining operations in their traditional territory at the Nechalacho project, provided a fitting northern soundtrack to the event.



LINKING THE GLOBAL RARE EARTH SUPPLY CHAIN

By linking a ceremonial chain representing the global rare earth supply chain, Vital Metals CEO Russell Bradford (centre with tie) and guests officially unveiled Vital's Saskatoon Rare Earth Processing Plant on Sept 20. Joining Mr. Bradford were officials of four levels of governments in Canada, Indigenous and Metis stakeholders, and guests representing four nations in Vital's rare earth supply chain.

From left: Aaron Carroll, First Secretary, Australian High Commission in Canada; Kimberly Lavoie, Director General, Natural Resources Canada; Dr. Abdul Jalil, ADM, Prairies Canada; Mayor Charlie Clark, City of Saskatoon; Hon. Caroline Wawzonek, NWT Minister of Industry, Trade and Investment; Chief Ed Sangris, Yellowknives Dene First Nation; Ron Hyggen, Treaty 6 representative; Russell Bradford, Interim CEO, Vital Metals Ltd.; Hon. Jeremy Harrison, Saskatchewan Minister of Trade and Export Development; Milton Tootoosis, Metis representative; Heather Quale, Honourary Norwegian Consul; Yvonne Denz, Canadian German Chamber of Industry and Commerce; Andrew McIntyre, US Dept of State Consulate General – Calgary.

PHOTO: Vital Metals/Bill Braden

NEWS BRIEFS

JUNE 28, 2022

Women In Mining, Canada's leading organization for the promotion and empowerment of women in mining and affiliated industries, establishes an official presence in the Northwest Territories.

The NWT Chapter is formalized in a Yellowknife luncheon event that features a panel presentation from leading women in the NWT's mining community as well as an opening address from the NWT government's Minister responsible for both mining and the status of women, Hon. Caroline Wawzonek.

"NWT communities have a ready population of smart, hardworking, community-driven individuals - that just happen to be women," she notes. "Our territory is rich in resource potential, but none of it is as great as the potential that exists for young women to join our mineral and exploration sector – and to enrich it with their talents, minds, skills and vision."

JULY 14, 2022

Sixteen projects receive incentive-funding from the Government of the Northwest Territories to advance grassroots and advanced exploration projects in the NWT. In total, 11 corporate and five prospector projects split \$1.3 million in funding from the government's Mining Incentive Program.

Introduced in 2014 to stimulate and sustain mineral exploration activities vital to a healthy mining industry, the incentive program annually leverages private sector investment at approximately a 3-1 ratio.

JULY 26, 2022

The NWT's Minister of Industry Tourism and Investment, Caroline Wawzonek speaks to the importance of developing Arctic infrastructure at the 31st Annual Summit of the Pacific Northwest Economic Region (PNWER).

"Canada's leading economic provinces did not get to where they are today without the support of federal investment and private investors," she tells delegates. "The North is in a similar position of opportunity today."

"This is a pivotal time. Resource availability, technology, market demand and global -and therefore political - interest are coming together to create a positive climate for investment. Investments in infrastructure are needed – and possibly owed - to the people who call Canada's North their home. They require industry, business and government together to consider and address common issues and challenges; and to work collaboratively to find and implement solutions."

JULY 31, 2022

A three-month public engagement process concludes on how mining royalties will be managed under the Northwest Territories Mineral Resources Act. Input received from the public will be captured alongside that of Indigenous governments, industry and other stakeholders as officials work to develop the regulations that will support the NWT's new legislation.

The review of the NWT's royalty regime is the first by the NWT government since assuming the management and administration for its own lands and resources in 2014.

In the NWT, resource royalties are shared among the Government of Canada, the Government of the Northwest Territories, and Indigenous governments.

AUGUST 22-27,
2022

With the declaration of Mining Week in the Northwest Territories, the Government of the Northwest Territories joins the NWT and Nunavut Chamber of Mines, and the NWT's mining community to celebrate the importance of mineral exploration and development to the economy, communities and NWT people.

From metals like zinc, lead, and gold to diamonds and now critical minerals, the Northwest Territories has a proud legacy – almost a century's worth and counting – of continuous mining. It is a proud part of the NWT's heritage and future; and foundational to the future growth and diversification of its economy.

JULY 18, 2022

In a launch event, celebrating the origin of its stones, Diamonds de Canada welcomes the NWT's trademark polar bear diamond out of hibernation, unveiling a limited collection of 16,000 polar bear diamonds, a number that reflects the current population of polar bears in Canada.

Through its origin and certification process, the Polar Bear provides consumer confidence that they are purchasing a diamond from Canada; known for its socially-responsible mining practices. They also happen to be the finest diamonds produced.

The Yellowknife launch comes on the heels of a promotional event in June at the JCK show in Las Vegas attended by some 30,000 jewellery professionals.

SEPTEMBER 30,
2022

Invest Canada's North, the partnered marketing approach by government and industry to connect global investors with projects in Canada's North, will continue.

In addition to its online digital presence, the initiative features forums on mineral investment opportunities in Canada's North hosted by sector experts and well-known mining experts; plus a Media Centre featuring interview opportunities for mineral exploration and mining companies, government officials, Indigenous governments and development corporations, Industry partners and financial and investment influencers.

Largely funded by Canada's Northern Economic development Agency (CanNor), Invest Canada's North has evolved as a foundation for the NWT's participation at the annual gathering of the Prospectors & Developers Association of Canada (PDAC) in Toronto.

OCTOBER 6,
2022

The Government of the Northwest Territories launches a pilot program to fund capacity building initiatives for Indigenous governments and organizations ready to take on a greater role in the NWT resource sector.

Indigenous Capacity Building Program will help position them to do this.

Community leaders have long identified the need to participate from the beginning, in mineral exploration and development projects. Funding from the -

Early comprehensive and coordinated engagement between Indigenous governments, Indigenous organizations and industry is key to advancing mineral exploration and development in a responsible and timely manner.

IN SEARCH OF RIFTS

Canada's first rare earth mine is the result of a geological rift and the keen eye of a young geologist. .

Canada's first rare earth mine is the result of a geological rift and the keen eye of a young geologist.

Nearly 30 years ago Chris Pedersen went out prospecting about 110 kilometres southeast of Yellowknife, between the Dene communities of Dettah and Lutselk'e.

While others had noted promising rocks there in the 1970s, Pederson is the one credited with the 1983 discovery of deposits now at the heart of the Nechalacho rare earth mine, operated by the Yellowknife-based Cheetah Resources Corp.

Today, Pedersen is Cheetah's chief geologist.

The project comprises two principal deposits located at Thor Lake, eight kilometres north of the Hearne Channel on Great Slave Lake.

Back when Pedersen first saw potential in the rocks around Thor Lake, there was little interest in the REEs.

"They used to call them the underappreciated elements," said Pedersen, adding that wasn't until the demand for colour televisions increased that interest in REEs began to take off.

To its credit, Nechalacho is really a "giant" deposit, Pedersen says. "It's got all the right chemistry. This particular one happened to be very rich in rare earth elements."

That's due to geologic processes that concentrated much of the rare earths at depth, and then, through tectonic plate movements combined with the movement of molten rock or magma through the Earth's crust, brought them to near the surface during the Proterozoic era, some 2.2 billion years ago.

"The target zone for mining at Nechalacho — which now features an open-pit operation at the North T Zone — is basically "super-concentrated" in REEs near the upper part "Other zones are deeper down which can be extracted in the future," Pederson says.

A plus for the Nechalacho deposits is that they are clean, he notes, with virtually no radioactive heavy element, like uranium and thorium, which are found only in low concentrations.

"There is a bit of thorium, but even when it's concentrated in the ore, even as a concentrate, the little thorium that is there is below actionable levels, below any concern for public health," Petersen says.

"It's a very clean deposit by any mine standards."

Most of the rock containing the REEs is quartz, which is basically pure silica, "so there are really not any deleterious elements that need to be handled," he adds.

Other areas of the Northwest Territories are also thought to have undergone rifting, although evidence of that history is often obscured by younger plate tectonic events. Geologists can be challenged to identify these areas and their rift-related rocks with good potential for critical mineral deposits, like at Nechalacho.

These days the NWT Geological Survey is working to build its knowledge about the presence of REEs and other critical minerals and metals— 31 in all, increasingly sought for their role in clean energy technology.

These critical minerals and metals also include tin, copper, lithium, nickel and zinc.

John Ketchum, Director of the N.W.T. Geological Survey, says his department is building on historic knowledge and previous mapping projects to respond to an escalation of interest in the NWT's potential for rare earths and critical minerals.

"People 20 years ago were looking for diamonds," Ketchum said. "Today it's more focused on the critical minerals. Fortunately, the location of previously-noted critical mineral occurrences or 'showings'

"People 20 years ago were looking for diamonds," Ketchum said. "Today it's more focused on the critical minerals. Fortunately, the location of previously-noted critical mineral occurrences or 'showings' hasn't changed and that helps us to understand where to go back to and take a closer look".

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Praising the detailed map work done by geological surveys, Pederson believes there's "absolutely potential in an area as vast as the NWT for more REE deposits.

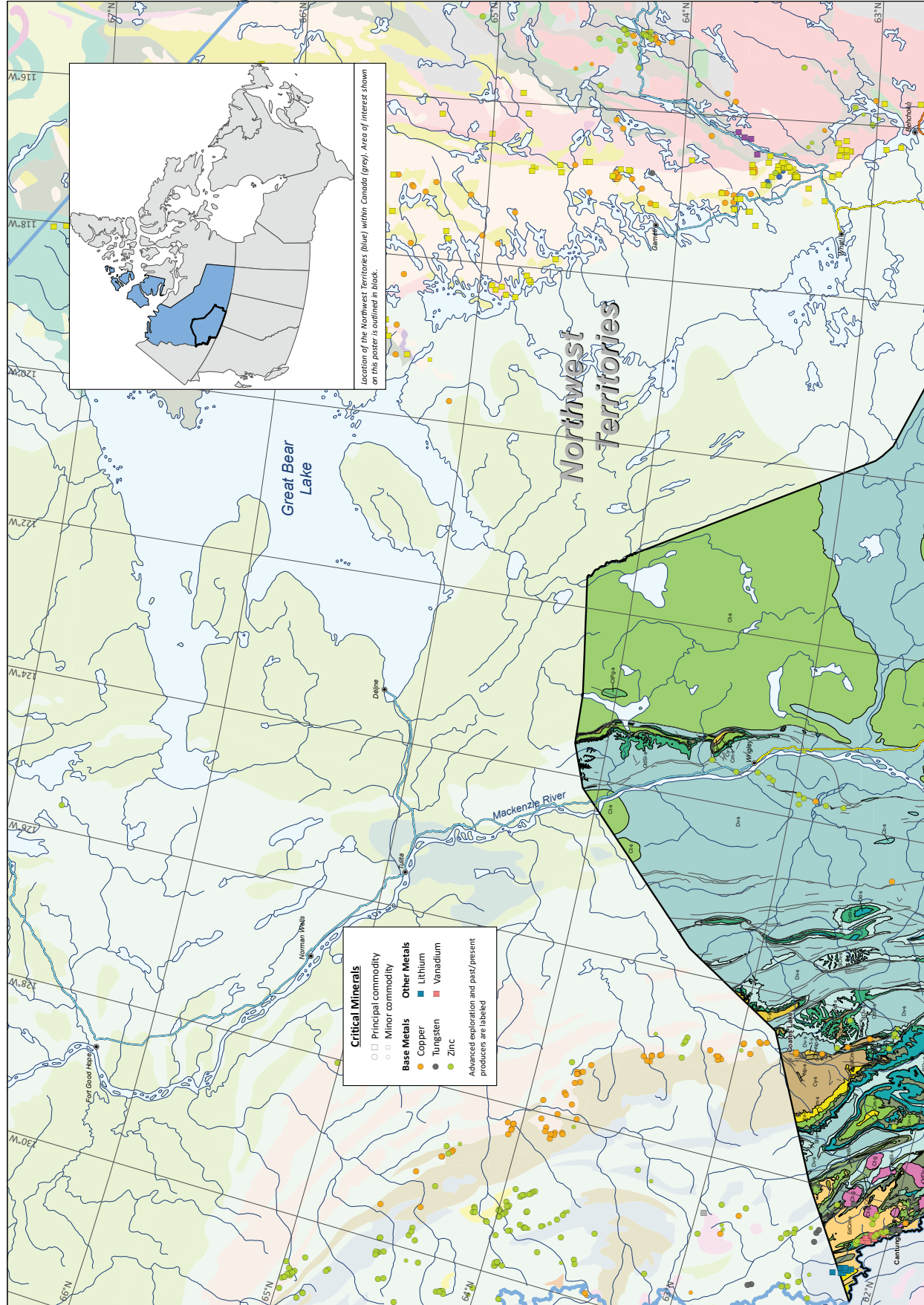
"You're looking for these unusual geological areas, this rifting," he says. "If they said here's another rifting area, people like me would be out there in a heartbeat."

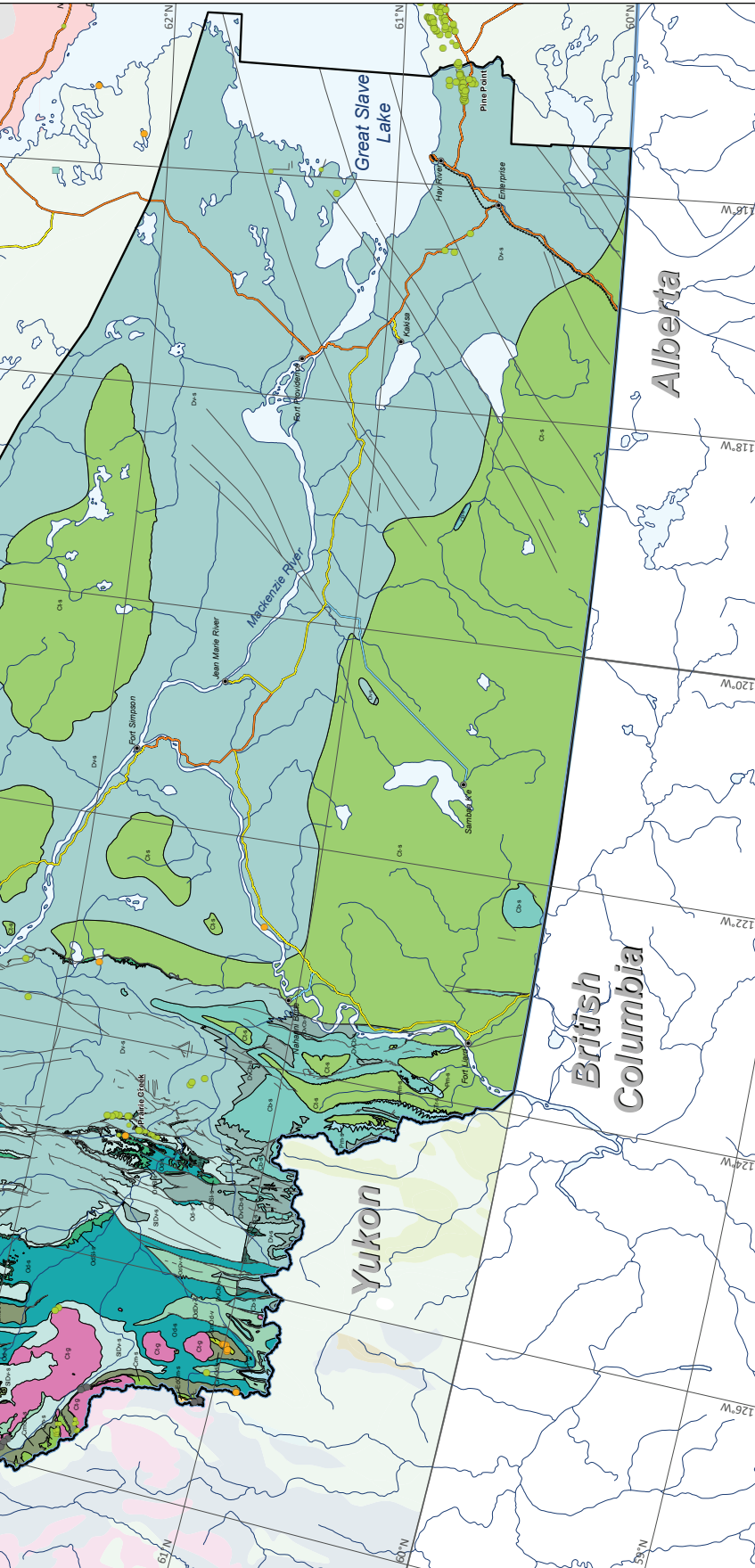
Photo credit: Chris Pedersen, Chief Geologist, Cheetah Resources/billbradenphoto



**Critical mineral showings and generalized geology of the
Dehcho region, Northwest Territories**

Government of
Northwest Territories





Poster has been modified from:
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 GEOLOGICAL SURVEY**

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 Survey, NW Open Report 2016-005. 2 pages in Adobe
 PDF format. <https://doi.org/10.46887/2016.005>

Legend

Young Rocks

Mesozoic to Cenozoic
 C20+4 Cretaceous to Paleogene sedimentary rocks
 C20+3 Cretaceous granitoid rocks
 C20+2 Cretaceous sedimentary rocks
 C20+1 Triassic sedimentary rocks

Mesozoic
 C20+4 Cretaceous granitoid rocks
 C20+3 Cretaceous sedimentary rocks
 C20+2 Triassic sedimentary rocks

Paleozoic
 P20+3 Permian sedimentary rocks
 P20+2 Carboniferous sedimentary rocks
 P20+1 Devonian to Carboniferous sedimentary rocks
 P20+0 Devonian sedimentary rocks
 P20+4 Silurian to Devonian sedimentary rocks

Old Rocks

Proterozoic
 P10+3 Silurian sedimentary rocks
 P10+2 Ordovician to Devonian sedimentary rocks
 P10+1 Cambrian to Silurian sedimentary rocks
 P10+0 Cambrian to Ordovician sedimentary rocks
 P10+4 Proterozoic to Paleozoic
 P10+3 Cambrian to Cambrian sedimentary rocks
 P10+2 Cambrian to Cambrian sedimentary rocks
 P10+1 Cambrian to Cambrian sedimentary rocks
 P10+0 Cambrian to Cambrian sedimentary rocks

Proterozoic
 P10+3 Neoproterozoic sedimentary rocks
 P10+2 Ediacaran sedimentary rocks
 P10+1 Cryogenian sedimentary rocks
 P10+0 Tonian sedimentary rocks

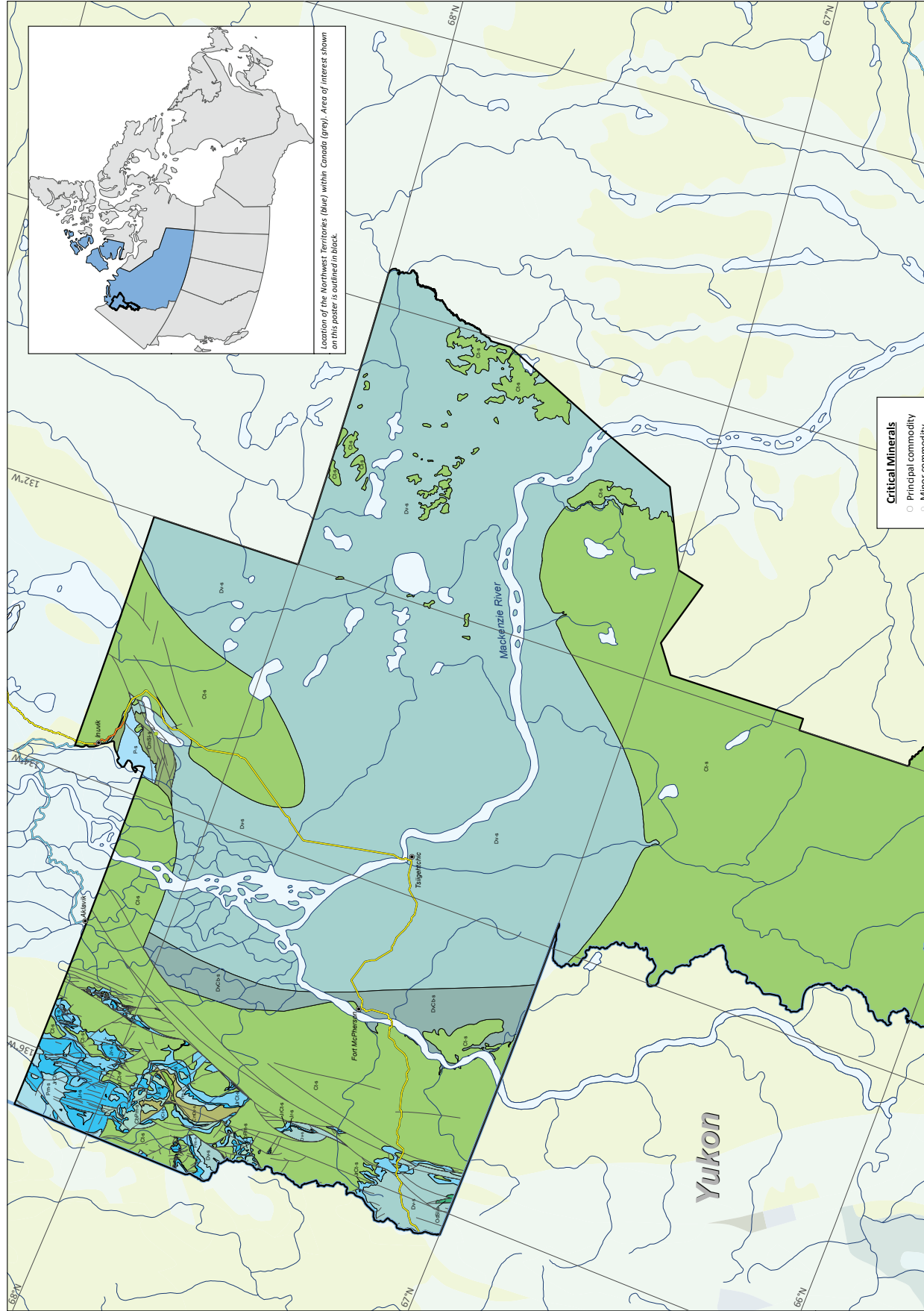
Roads
 Paved, all season
 Unpaved, all season
 Unpaved, winter
 Railroad
 Geological faults
 Northwest Territories border
 Area of interest
 Community

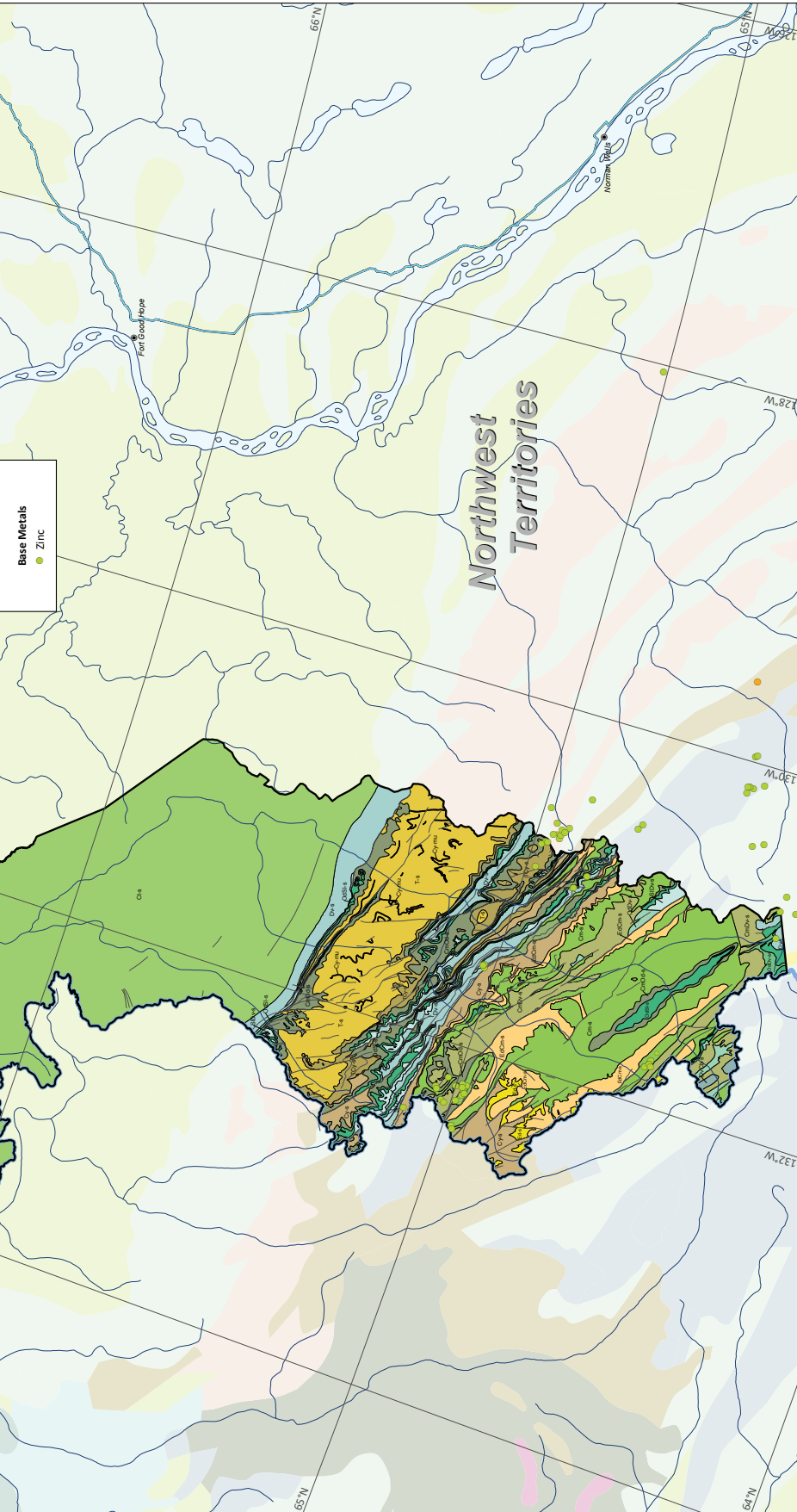
NOTES
 Some level of metamorphic grade is inherent in most rocks. "Metamorphic" is
 included as a rock type if it was originally classified as such.



Critical mineral showings and generalized geology of the Gwich'in settlement area, Northwest Territories

Government of Northwest Territories





NORTHWEST TERRITORIES GEOLOGICAL SURVEY

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Open Government Data, 2022. Accessed in 2022 at: <https://open.canada.ca/en>. Contains information licensed under the Open Government License - Canada.

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- Roads**
 - Paved, all season
 - Unpaved, all season
 - Unpaved, winter
- Geological faults**
- Northwest Territories border**
- Area of interest**
- Community**

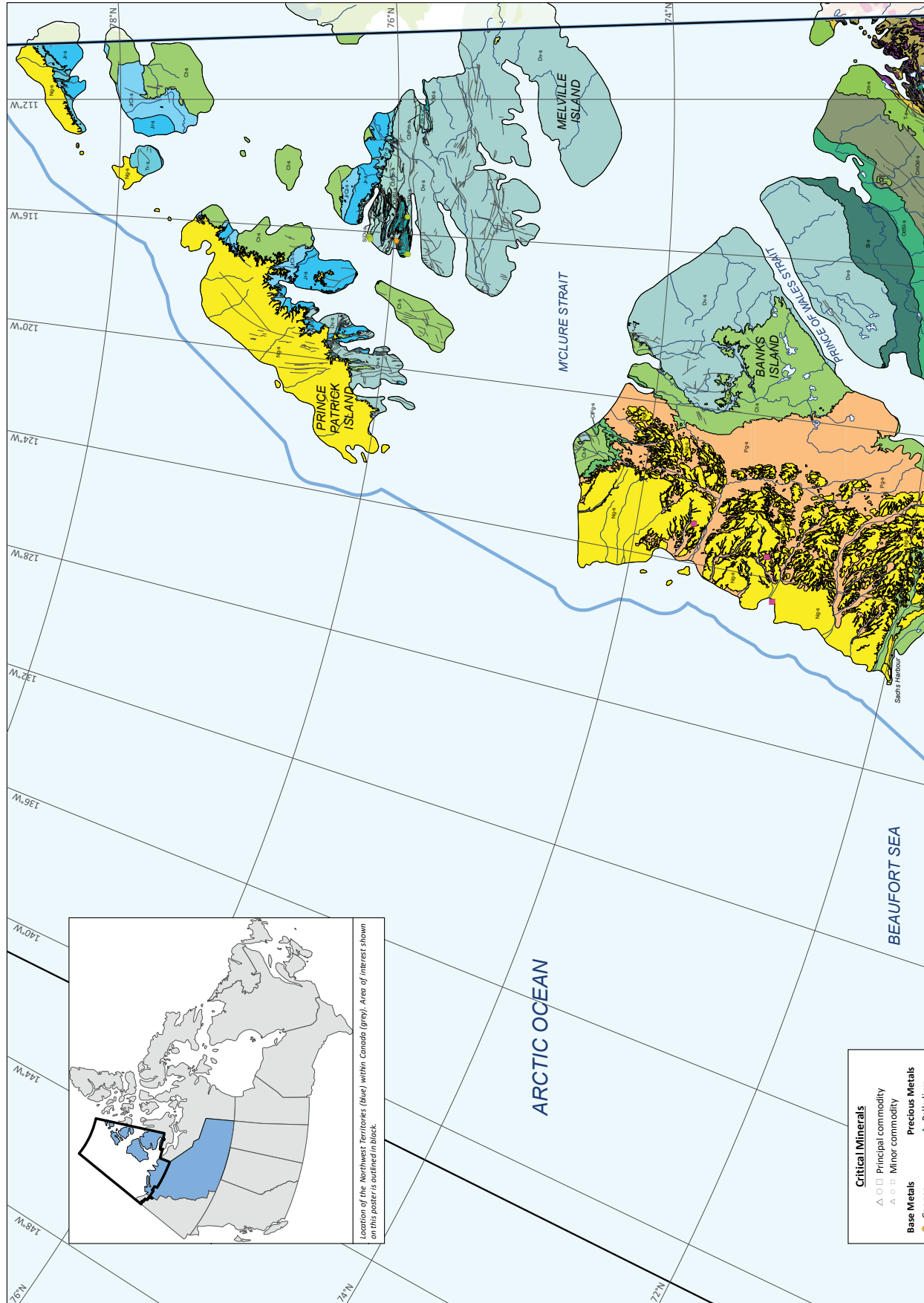
- Proterozoic**
 - P-4 Proterozoic sedimentary rocks
 - E-4.4 Eoarchean sedimentary rocks
 - E-4.3.4 Eoarchean mafic and ultramafic intrusives rocks
 - C-4.3 Cryogenian sedimentary rocks
 - T-4.3.4 Tonian to Cryogenian sedimentary rocks
 - T-4.3.4.4 Tonian sedimentary rocks

- Old Rocks**
 - Ordovician to Devonian mixed sedimentary and volcanic rocks
 - Ordovician to Devonian sedimentary rocks
 - Ordovician to Silurian sedimentary rocks
 - Cambrian to Devonian sedimentary rocks
 - Cambrian to Silurian sedimentary rocks
 - Cambrian to Ordovician sedimentary rocks
 - Cambrian sedimentary rocks
 - Proterozoic to Paleozoic
 - Ediacaran to Cambrian sedimentary rocks

- Young Rocks**
 - Mesozoic
 - Cretaceous sedimentary rocks
 - J-4.3.4 Jurassic sedimentary rocks
 - J-4.3.4.4 Jurassic sedimentary rocks
 - Paleozoic
 - Permian sedimentary rocks
 - Carboniferous to Permian sedimentary rocks
 - Devonian to Carboniferous sedimentary rocks
 - Devonian sedimentary rocks
 - Silurian to Devonian sedimentary rocks

NOTES:
Some level of metamorphic grade is inherent in most rocks. "Metamorphic" is included as a rock type if it was originally classified as such.

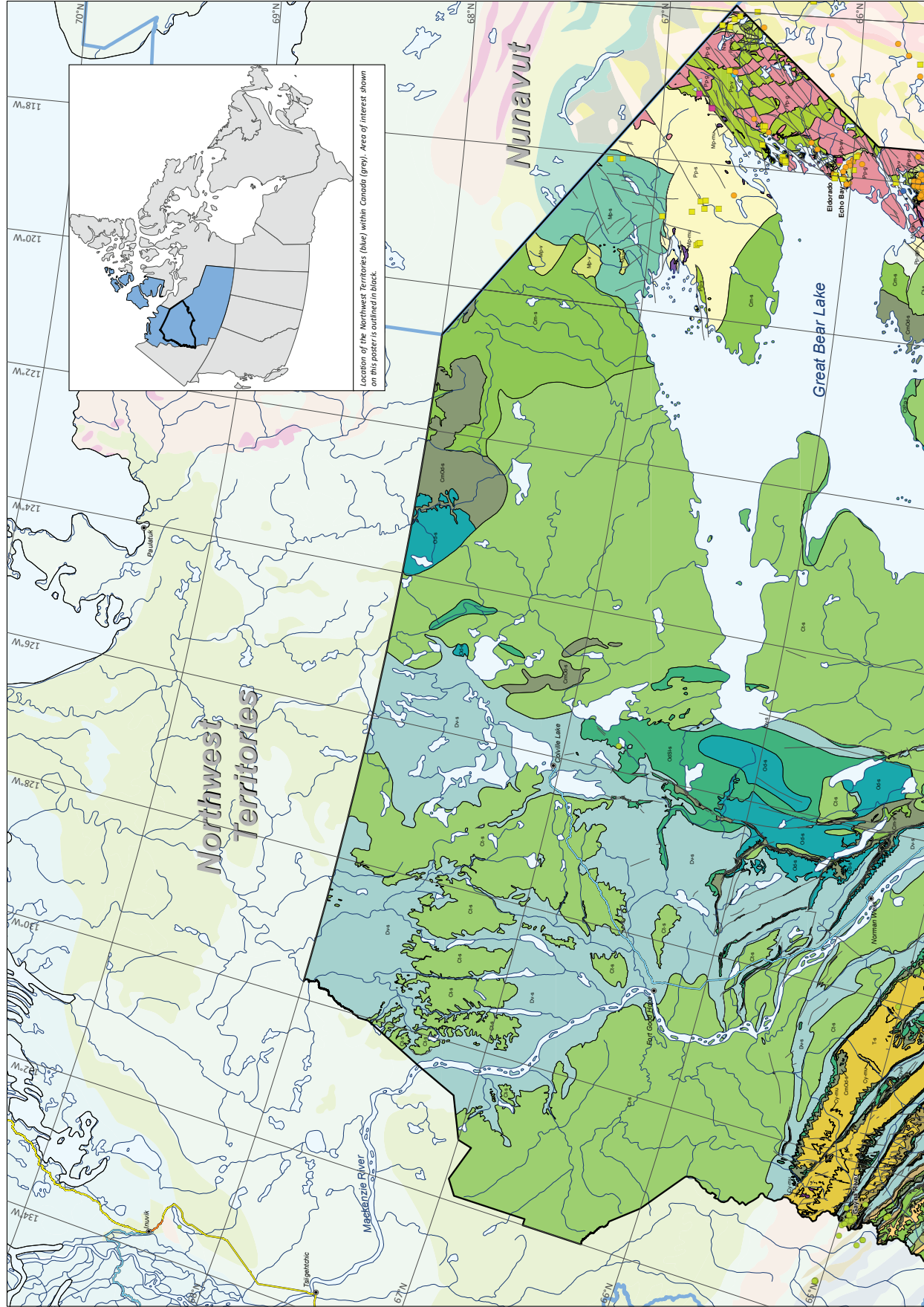
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Critical mineral showings and generalized geology of the Inuvialuit settlement area, Northwest Territories





Critical mineral showings and generalized geology of the Sahtu settlement area, Northwest Territories

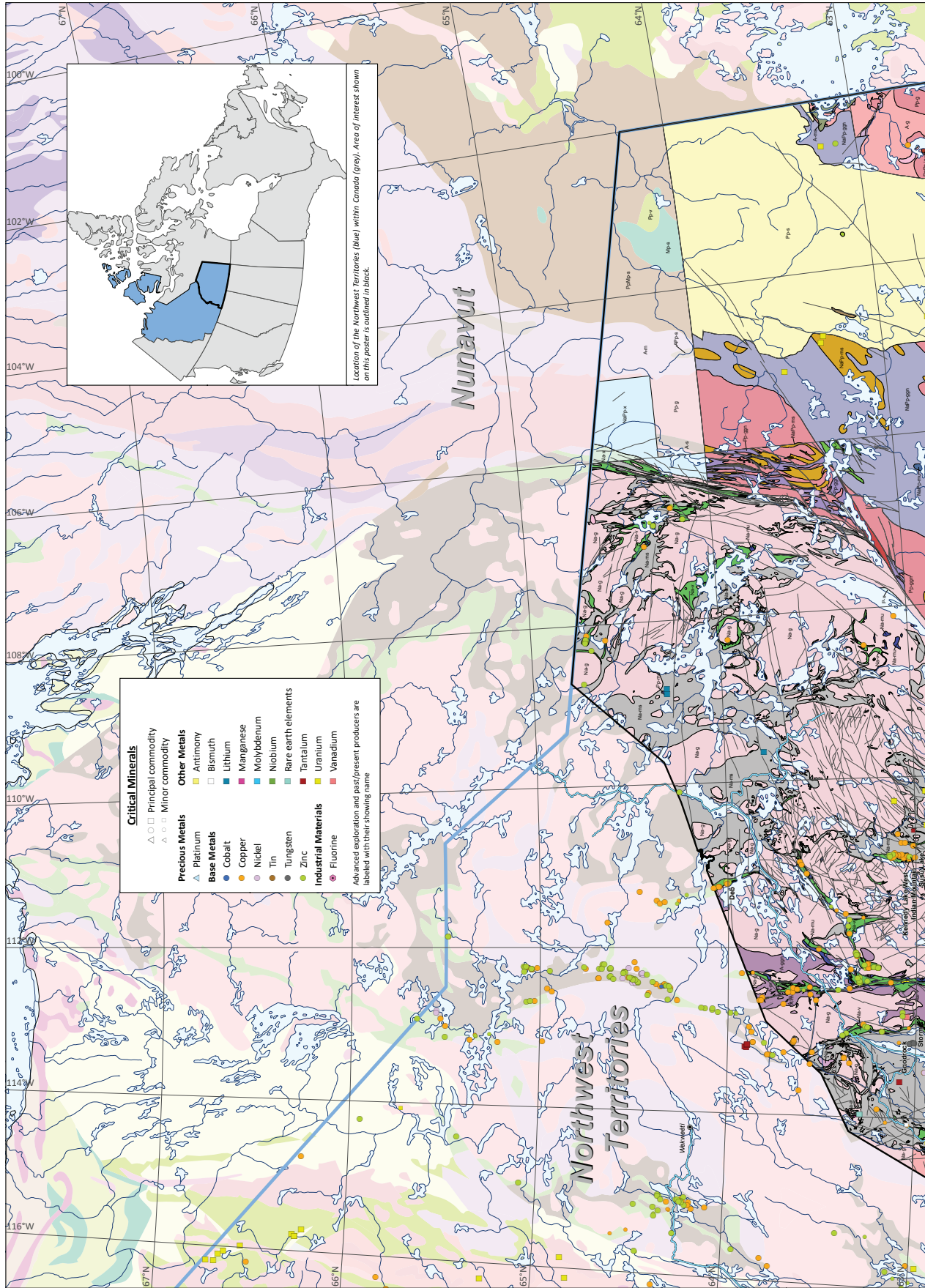
Government of Northwest Territories



Critical mineral showings and generalized geology of parts of the South Slave and North Slave regions, Northwest Territories



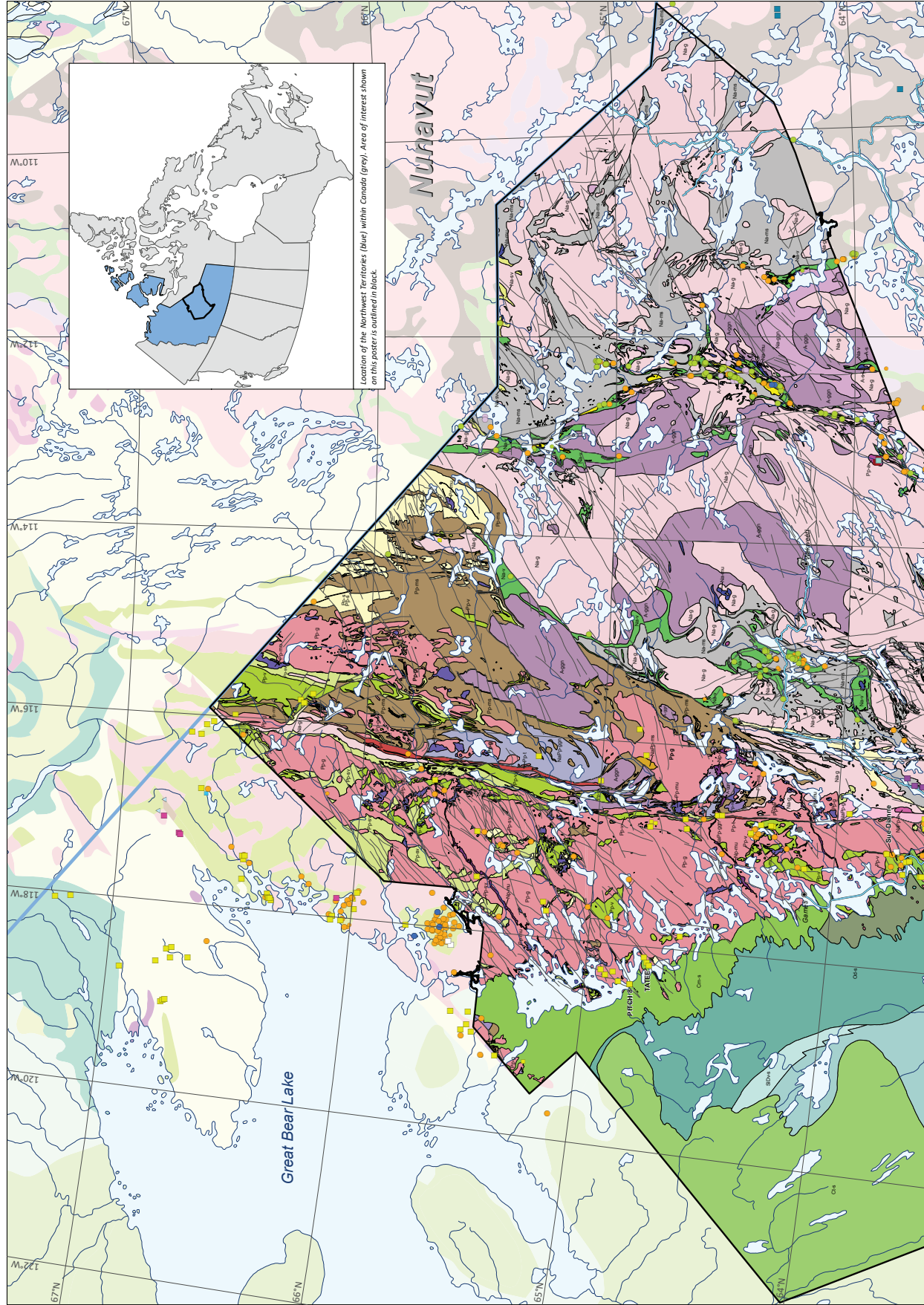
Government of Northwest Territories





Critical mineral showings and generalized geology of the Wek'èezhii resource management area, Northwest Territories

Government of
Northwest Territories



5

FIVE THINGS

The Northwest Territories (NWT) is more than just open for business. It's ready to do business better, with an eye on the future both in terms of global demand for particular resources but also the expectation for meaningful social licence.

We look forward to discussing and pursuing opportunities for investment and growth with investors and visionaries that are ready to work and partner with us.

HERE'S A FIVE-PART CHECKLIST IF YOU'RE THINKING OF GETTING INTO MINERAL EXPLORATION IN THE NORTHWEST TERRITORIES:

1

Reach out to the **NWT's Client Service and Community Relations (CSCR)** unit; the first point of contact within the Government of the NWT.

At the CSCR office in Yellowknife, you can connect with "resource pathfinders," who will guide you in navigating engagement and regulatory aspects linked to development projects. The CSCR's goal: to connect industry, communities and governments for mutually beneficial working relationships.

"The CSCR unit can assist you with getting quickly connected to the right people, at the right place and the right time," says Mike Byrne, a resource pathfinder with experience

in the NWT mineral exploration industry.

Clients are sometimes referred to the CSCR or they reach out, "or sometimes we reach out to them," Byrne notes.

"We can explain how the regulatory regime in the NWT works, the need for early engagement with residents, particularly Indigenous governments, groups and communities."

The unit's role must be "fairly unique," he observes, because we gets a lot of compliments from people who say they have never encountered that level of service before.

2

Visit the **Mining Recorder's Office** that administers the NWT's sub-surface mineral tenure and issues prospector's licences, prospecting permits, mineral claims, claim tags, claim maps and mineral leases.

"Basically we are the single point of contact for anyone who wants to prospect for the purpose of staking mineral claims because, to do that legally, you need a prospecting license," says Mining Recorder Jessica Bos.

The Mining Recorder's Office approves about 170 licenses every year, which require annual renewal.

"If you want to explore, this is the place to come, and we're here to help you," Bos promises.

3

Get to know the **N.W.T.'s regulatory regime**.

Spoiler alert; if you find the NWT regulatory regime is "complex" and "uniquely intricate," you're not alone.

It comprises a network of resource management boards, governments and other organizations, in which each have their role to play, depending on where you want to work in the territory.

The key is knowing who to contact and what information you need to present. This is where the Client Service and Community Relations unit can help; and can speed things up exponentially."

Remember northerners are supportive, for the most part, of major infrastructure and resource projects; but this social license is grounded in the regulatory regime that takes into account many of the issues important to the local population like environmental protection, traditional knowledge and Indigenous rights.

It may require some upfront investment but, arguably, it serves to provide the very definition of a secured investment.

4

Check in with the **NWT Geological Survey**, the main source of geological information for the NWT.

The Survey works to advance geoscience knowledge of the NWT by conducting and publishing geoscientific research, analysing mineral and energy resources and permafrost, offering digital data, and providing education and outreach services.

Other services include a geological library with client work space, assistance with information requests, field research support, and co-supervision of university student research projects.

The Survey also delivers the territory's Mining Incentive Program, which can help to offset some of the costs and risks associated with mineral exploration.

Eligible prospectors can apply for exploration grants of up to \$25,000, while eligible corporate applicants may apply for exploration grants of up to 60 per cent of eligible expenses to a maximum of \$240,000.

5

Last but not least, there's another friend to help you in the **NWT and Nunavut Chamber of Mines**: the territorial industry association.

"We can provide new members with advice on who they should talk before they start work, and who can help them if they run into problems," said Tom Hoefer, the chamber's executive director. "All jurisdictions are different, and we can help them get up to speed more quickly in ours. Our offices can also provide a base from which they can work."

Today's chamber is even more important today than in the past, Hoefer notes, and there has been a "sea of change" in how mining companies work with the environment and with communities, particularly Indigenous communities, over the past 25 years.

Regulations have improved, but so too have mines' approaches and performance.

"And how many know that mining today is the largest private sector employer of Indigenous people in Canada? I'm proud to say that the NWT has always been a leader on that front."

ADD THESE CONTACTS TO YOUR PHONE

Client Service and Community Relations

Tel: 1-867-767-9208
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THE NWT CONSIDERS REMEDIATION

Is it possible to develop a remediation economy in the Northwest Territories in the next 30 years? As the Government of the Northwest Territories ponders ways to grow and diversify the NWT economy, even in the face of anticipated mine closures, it's a question they are working to answer.

A study by Ottawa-based Stratos, an ERM Group company, is offering some insight to the potential that may exist.

It estimates that remediation activities in the NWT could be worth approximately \$4.2B over the next 30 years with just-under 90% of spending likely to occur in the next 15. The annual spend is estimated to be roughly \$250M per year

for the next 15 years, generating approximately \$129M per year in GDP to the NWT in that timeframe.

By comparison, mining and oil and gas extraction in the NWT generated \$1.5B in GDP for 2019 and \$1B in GDP for 2020.

Remediation activities could support approximately 700 FTEs (full-time equivalent positions) per year for roughly 15 years. For context, there were 3,300 people employed across 'trades, transport and equipment operators and related occupations' positions in the NWT in 2019.

By today's count, 500 sites in the NWT need assessment, remediation and/or long-term monitoring. While a remediation economy would likely

be driven by large projects, and predominantly related to resource extraction projects including those in the oil and gas sector, smaller individual opportunities exist within communities.

Now, the NWT government wants to hear what NWT residents and businesses think; and what it can do, if anything, to ensure northerners are positioned to capitalize on these opportunities in a way that will keep the benefits in the North.

One thing is for certain, the successful closure of mine sites and the remediation of contaminated and abandoned sites is an opportunity to establish critical and transferrable skills that will be beneficial to the natural resource sector in the long term.

Photo credit: NWT Mine Training Society/billbradenphoto



LAST WORD

Build Critical Minerals Plan on Legacy Infrastructure: NWT

Cheetah Resources' Nechalacho property in the Northwest Territories (NWT) is one of very few distinctions on Canada's map of critical mineral projects.

It is the only rare earth element mine in Canada, (only the second in North America) and the first link in an international mine-to-motor supply chain that will see NWT rare earths processed for use in German-made electric vehicles.

Moreover, it is the first project in Canada that has seen an Indigenous company leading mining operations in its own traditional territory.

Yet, as the Government of Canada sets out to develop a national critical minerals strategy founded largely in Indigenous reconciliation, the Northwest Territories is at risk of being left behind.

That's even as five additional projects are entering early mining and advanced explorations phases; and have the potential to position the Northwest Territories as a pivotal North American Critical Mineral supplier.

There is cobalt, gold, bismuth and copper at Fortune Minerals Ltd.'s NICO Project. Osisko's Pine Point Mining Camp promises to deliver zinc and lead. There is zinc as well as silver at Norzinc Ltd.'s Prairie Creek Project. The Hidden Lake Lithium Property is host to numerous Lithium-bearing spodumene pegmatite dykes for Foremost Lithium Resources and Technology Ltd. and Fireweed Zinc's Mactung Tungsten project is one of the largest and highest grade Tungsten deposits in the world.

While buyers are lining up to purchase the NWT's critical minerals, the aspiration for most is that their production will come from 100 per cent green energy. Ironically, NWT mines set to supply the elements essential to a net-zero economy today are still, themselves, primarily dependent on diesel for vehicles, power generation and heating.

With a commitment of federal investment, the NWT's Taltson hydro-electric facility could be expanded to meet the need for green energy in much of the NWT's mining industry (while also reducing emissions and the prohibitive costs of today's carbon tax). Furthermore, the introduction and construction of new infrastructure, including transportation corridors, is a known commodity in increasing the appeal for exploration and development.

But while, half of the 31 minerals considered critical to domestic, industry, national security and emissions reduction can already be found within the NWT, infrastructure investments that would serve to unlock this critical potential are not considered in Canada's Critical Minerals Strategy.

On the other hand, the federal government must be commended for bringing Indigenous governments, businesses, communities and individuals to the table in the development of its national plan.

And here again, the NWT can be a leading contributor.

The NWT, perhaps more than any other Canadian jurisdiction has set itself apart for its understanding of the important relationship between resource development and socio-economic wellbeing. The NWT model is at the forefront of Indigenous participation in mining, exploration, and development in Canada - and likely globally - leading the way with resource royalty sharing, socio-economic and benefit agreements, regulatory co-management, and collaborative legislation development.

Northern and Indigenous businesses and companies have evolved and grown to service the NWT's three world-class diamond mines providing jobs, business opportunities, education, and training.

This made-in-the-NWT service sector, and the mines and projects they support reflect the Indigenous cultural values of their communities - and, in doing so, are working to build and strengthening the social fabric of the territory.

A collaborative model for resource development has emerged. It sets the territory apart from global competitors - and makes it a great place to invest and do business.

This is a pivotal time for the NWT. Resource availability, technology, market demand and global -and therefore political - interest are coming together to create a positive climate for investment.

The market for critical minerals needed for the green energy transition is set to grow exponentially.



Powering the future!

Government of
Northwest Territories

Canada's Northwest Territories holds world-class potential to help create the clean energy the world needs. Our wealth of battery minerals – rare earth elements, cobalt, nickel, lithium, copper, vanadium and graphite – can move us forward. Let's get connected and power the future.

- Low-risk investment jurisdiction*
- Wide range of early and advanced stage projects seeking investment
- Modernized mining legislation in progress to improve processes, increase certainty
- Strong resident support and indigenous engagement in mining sector
- New transportation infrastructure to improve access to mineral resources

**4th of 85 jurisdictions - Mining Journal 2018 World Risk Report*

Unlocking our Potential

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