



Government of
Northwest Territories

Unlocking our Potential

THE NORTHWEST TERRITORIES IS OPEN FOR BUSINESS



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The Northwest Territories
Says
Thanks

NEW FRONTIERS FOR EXPLORATION

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(Page 3) Pioneers of the NWT Diamond Industry whose finds helped to unlock the NWT's diamond potential (L to R) Gren Thomas, Harry Dobson, Chuck Fipke, Jim Pounds (accepting on behalf of the late Bob Gannicott), and John Macdonald (accepting on behalf of Randy Turner).

The Honourable Wally Schumann

MINISTER OF INDUSTRY,
TOURISM AND INVESTMENT,
GOVERNMENT OF THE
NORTHWEST TERRITORIES



MESSAGE FROM THE MINISTER

In November, the Northwest Territories celebrated 25 years of diamonds in our territory (see page 3). Rightfully so — our diamond industry has pushed us to the cutting-edge of the global commodities world and set the model for responsible, inclusive, prosperous resource development.

It cannot, however, change the more sobering story reflected in the TSX ticker.

There's no denying that the commodities industry is in a tough spot right now. And it is clear explorers in our vast, untapped cache of land are feeling the squeeze.

With our mining and exploration industries employing the highest private sector share of our citizens, our government is also feeling the squeeze; and we cannot afford to sit idle and wait for the storm to pass.

As you'll read, we've set to work on modernizing our regulatory framework, highlighting finds which should excite explorers, and looking to the bountiful minerals in our territory which can power the clean technology of the future.

But we're going beyond what you'll find here.

We're putting our heads together to find ways to provide the most competitive landscape possible for mining and exploration. Our people need good paying jobs, and we're going to support them and the investments that make these jobs possible.

The important thing to remember is that we've been here before, and we've come out on top. This time will be no different. And here's why.

Our territory has the distinct advantage of having the vast and varied supply of minerals needed to satisfy the anticipated rise in metal demand; the political stability investors need to ensure security of their capital; and the well-demonstrated support for the industry held by our people.

There are few jurisdictions in the world that can boast this combination at their baseline. And I am confident that in the spirit of partnership, we're going to find ways to make it even better.

Enjoy the stories within, and please get in touch. We're always interested in hearing questions, concerns, and ideas from those interested in helping us *Unlock Our Potential*.

The Northwest Territories Says Thanks

25 YEARS OF DIAMONDS IN CANADA'S NORTHWEST TERRITORIES





Aboriginal Election

At a gala event, accented with diamond inspired sculptures, speeches and giveaways, the NWT and Nunavut Chamber of Mines and Government of the Northwest Territories (GNWT) capped a year of celebrations in November, marking 25 years of diamonds in the territory.

A dazzling example of its unique approach to relationship-building in the mining and exploration industries, the sold-out event saluted the contributions of diamond mines, Aboriginal governments, and early explorers alike in the territory's economic evolution.

Many of the biggest names in northern exploration, politics, and business leadership were on hand to partake in the celebration which also served to conclude the 2016 edition of the Yellowknife Geoscience Forum - the NWT's largest annual convention and tradeshow.

"We've spent a lot of 2016 spreading our message of recognition for all that diamonds have brought the NWT," says Hon. Wally Schumann, Minister of Industry, Tourism and Investment for the

GNWT. "We wanted to bring the major players together to provide something tangible as a token of our appreciation."

RECOGNIZING LEADERSHIP

For the pioneers whose discoveries are the foundation of today's NWT mines, this token was a key-shaped crystal presented by NWT Premier Bob McLeod, who said they were representative of the economic potential unlocked by these finds.

"We've spent a lot of 2016 spreading our message of recognition for all that diamonds have brought the NWT"

Awards were also presented to representatives from each of the operating mines in recognition of their contributions; and to representatives from the Aboriginal governments who have worked tirelessly to ensure their communities realized maximum benefits of the diamond mines.

A DEFINING ECONOMIC MOMENT

The awards were accompanied, of course, by speeches and Premier McLeod kicked off the remarks with a salute to diamond pioneers.

"Over my 30 years in public service to this territory, I've seen few moments as defining to our economy as (the discovery of diamonds) at Lac de Gras 25 years ago," McLeod said.

"It was a moment made possible by the commitment of the geoscientists who braved unforgiving tundra for a find anything but guaranteed; the constitution of financiers who poured millions into the idea of North American diamonds; and the entrepreneurial spirit of a few that came to benefit thousands." Premier McLeod redoubled on the territory's commitment to fostering a supportive exploration environment.

A PERSONAL STORY

Minister of Education, Culture and Employment Alfred Moses was up next, praising the diamond mine operators for the billions in economic opportunity, millions in community investment, and

Left: Aboriginal Government Representatives accept their awards with Premier McLeod.
All photos by Bill Braden



thousands of jobs they have collectively committed to the territory.

While his message of thanks was delivered on behalf of industry minister Wally Schumann, Moses offered a personal story of how the mines contributed to his own success.

"Before I joined public life, I applied my education at Diavik Diamond Mine as a Health and Wellness Officer," Moses said. "It was an opportunity to further develop my skills in a dynamic, high-paying job."

"And there are thousands just like me. Thousands who have operated machines, pored over engineering plans, and provided hospitality services to our mines; even more who have benefitted from jobs in logistics, construction, and mine services," he added.

It was a powerful example of why the NWT continues to demonstrate a political commitment to mining.



"Over my 30 years in public service to this territory, I've seen few moments as defining to our economy as (the discovery of diamonds) at Lac De Gras 25 years ago."

CONSISTENT PARTICIPATION

The final thank-yous were saved for the Aboriginal governments who regularly work with the mines and the development corporations which have spawned businesses to serve their needs.

It was a reminder of the high level of participation in responsible resource

development Aboriginal governments in the NWT have demonstrated throughout active production.

"FIRE INTO ICE"

Punctuating the evening was the man himself: Charles Fipke, the renegade geologist who struck kimberlite with his partner Stu Blusson near Lac de Gras back in 1991, bringing the largest staking rush in a generation to Canada's North.

His keynote presentation highlighted the trials, tribulations, and triumphs of exploration in the NWT in his trademark colourful style.

Central to the entire celebration was the theme of support and gratitude offered by the territorial government.

"Tonight, the Northwest Territories says thank you," said Premier McLeod in his introductory remarks; an enviable takeaway for operators, investors, and explorers the world over.

Q+A: YELLOWKNIFE CORE SAMPLE FACILITY

Project lead speaks on industrial, scientific benefits of the new facility

Core samples are important assets for mineral explorers and curious scientists. They hold millions of years in geological information and are ground zero for identifying mineral deposits.

The Government of the Northwest Territories (GNWT) is developing a space in the NWT capital where more than 100 kilometres of drill core collected over decades will be stored for public use.

We sat down with the GNWT project lead Scott Cairns, Manager of Mineral Deposits and Bedrock Mapping for the Northwest Territories Geological Survey (NTGS), to talk about the space, and what it could mean for industry and science in the NWT.

Q: When will the site be open?

A: The site is planned to open to the public in the summer of 2017. The building is ready to go and the materials will be organized and in place by that point.

Q: How does a facility like this benefit industry?

A: Drilling is expensive. The cost works out to, at minimum, \$100 per metre and costs can rise in more complicated areas. Having a cache of drill samples from past exploration activities provides readily available mineral samples of known mineral deposits so companies can easily examine the material for things that may have been missed, out of reach, or outside the scope of the original projects at low cost.

Q: Where are the core samples sourced?

A: We've worked with industry and scientific partners over many years to source these samples. We provide incentives like exploration work credits for companies who contribute samples to the collection.

Q: Are there any examples of companies in the NWT using samples on new opportunities?

A: There are two that come to mind immediately. TerraX, the most advanced gold exploration project in the territory currently, used collected core samples as a tool to inform their approach to exploring the area around Yellowknife. There were plenty of samples collected from the numerous past-producing mines around the city. The second is DEMCO Ltd.'s exploration project near Great Bear Lake. They analyzed the remnants from the Terra silver project with a different, multi-mineral frame rather than the silver-centric approach taken by the original explorers – and have been getting some really exciting results.

Q: What kinds of mineral deposits will be represented at the space?

A: Name a type of mineral deposit and the facility will likely have it. Of particular note, the facility will have the world's largest publicly available collection of kimberlite. While we're obviously best known for diamonds in the NWT, there is also a huge variety of other deposits with a wide range of minerals. We'll be working to build a fully representative collection of NWT mineral deposits as we move forward. The facility will now centralize and formalize the process of accessing these materials.



Q: What other benefits could you see coming from the facility?

A: It's a pretty unique facility in its size and scope – and a huge point of interest for world-class scientists and explorers. The focus on maintaining an extensive geological record has already piqued the interest of world-renowned geologist Graham Pearson, for example, who currently has a Ph.D. candidate, Stefan Poitras, working under his tutelage on NWT research. Mr. Poitras has developed an entirely new way of radiodating diamonds. Focusing high-end earth science on the North can only improve the quality and quantity of information for both industry and public audiences. In the case of science, more is always better.

THE TESLA CONNECTION

Cobalt, Lithium and Canada's far North

Nestled in the wilderness off Great Slave Lake's shores in Canada's Northwest Territories is the secluded, subarctic First Nations community of Whatì, population 492. Caribou, gray wolves and black bears roam. There are no all-season roads.

Nearly 3000 kilometres away in the arid flats of Sparks, Nevada, population 90,264, Tesla is constructing Gigafactory 1, an industrial juggernaut which will one day build enough batteries to power 500,000 Tesla vehicles each year. The factory alone will employ more than 13 times Whatì's population.

Two locations could seldom have more differences, but they have a connection: cobalt.

UNSUNG HERO OF THE ELECTRIC REVOLUTION

Cobalt is the little known component to Lithium-ion batteries poised to power the clean, green machines of the future. Near Whatì, there are literally tonnes of it – along with Fortune Minerals' NICO – a mine project just waiting for investment and market movement.

Gigafactory 1 on its own will require at least 7000 additional tonnes of cobalt each year, nearly equal to the total annual production of China, the world's second largest producer.

And, with demand increasing exponentially, Tesla has committed to sourcing its cobalt entirely from North America, further restricting supply.

The NWT presents a politically stable, near-untouched opportunity for investors, both in the advanced-stage NICO project and for further exploration as demand continues to grow with the proliferation of electric vehicles.



A SECOND LIFE FOR LITHIUM?

Cobalt isn't the only metal found in the NWT on the precipice of a demand spike. There are also lithium possibilities.

With many confirmed showings, lithium exploration in the NWT dates back to the 1970s. While there are no advanced-stage projects, the expected spike in demand already has some major players rethinking their approach.

"Now is the time. If there was ever a time, now is the time," Adrian Lamoureux told CBC last year of efforts to build a lithium mine in the NWT. His company, 92 Resources, also acquired a tract of land at Hidden Lake, north of Yellowknife for exploration. Government geologists have also been working to identify lithium deposits in the area.

Avalon Advanced Materials, owner of the Nehchalacho Rare Earth Elements deposit 100 kilometres east of Yellowknife, is also jumping on the wagon.

"[Nehchalacho] actually has known lithium occurrences on it and we're considering spending a little time looking at that, possibly as a potential

lithium asset as well as rare earth," Avalon president Don Bubar also told the CBC. "There's going to be a need for lots of new producers to serve this market."

EXPLORATION FOR THE FUTURE

With a vast, largely unexplored land and dozens of showings of lithium and cobalt, the NWT is an attractive locale with massive potential to fulfill future demand.

Beyond the rocks, it's a jurisdiction with proven public support for the mining sector. Last year, an Abacus Data survey commissioned by the NWT and Nunavut Chamber of Mines found eight in 10 residents felt positively about mining and exploration.

"Our supportive populace is one of many unique propositions we can offer companies looking to invest," notes NWT Minister of Industry, Tourism and Investment Wally Schumann.

Demand will only continue growing as more electric vehicles and other battery-bearing devices hit the market – and the NWT is well positioned to provide the supply.

NEWSBRIEFS

COMMERCIAL PRODUCTION RAMPS UP AT GAHCHO KUE

The world's largest new diamond project is nearing full-scale commercial production in Canada's Northwest Territories (NWT).

Gahcho Kué mine, a De Beers-operated joint venture with Mountain Province Diamonds, is the NWT's fourth diamond mine. It officially opened its doors on September 20, 2016 to fanfare from the global mining community.

The project is forecast to provide a \$6.7 billion boost to the Canadian economy, including a \$5.3 billion economic contribution to the NWT over a 12-year mine life.

The mine is expected to complete its ramp-up to commercial production by the end of the first quarter of 2017.

NEW SECONDARY DIAMOND INDUSTRY PARTNERSHIP ANNOUNCED

Diamond manufacturing in the NWT is poised to grow as an agreement with a powerful new entrant was announced in December.

The Government of the Northwest Territories (GNWT) has approved Almod Diamonds Ltd. as an NWT Diamond Manufacturer (ANDM), with production expected to begin in the first half of 2017.

Almod's agreement with the GNWT includes access to 10 per cent of NWT rough diamonds for manufacturing purposes, access which all operating mines have signed on to. With the world-

renowned quality of NWT diamonds, this is a significant benefit.

Almod's operations, as laid out in the business plan submitted to the GNWT's Department of Industry, Tourism and Investment, will include 10 full-time positions in Yellowknife — eight in manufacturing and two in administration.

Polished diamonds will be sold through Almod's affiliate, Diamonds International. The organization markets heavily to the international cruise ship industry, with locations in many high-traffic ports around the globe.

INDUSTRY MINISTER PITCHES NWT AT MINES AND MONEY

The world-renowned Mines and Money Conference and Tradeshow arrived on North American soil for the first time in September last year, and the NWT delegation did not disappoint.

Minister of Industry, Tourism and Investment Wally Schumann spoke to the audience at Toronto's Ritz Carlton Hotel pitching the unique benefits of investing in NWT minerals.

Schumann centred the discussion on the NWT's world-class mineral supply, policy stability and local public and political support for the industry.

On supply, Minister Schumann outlined the territory's well-known caches of gold and diamonds, and the lesser-known deposits of copper, silver, iron, tungsten, zinc, nickel, lead, lithium, cobalt and rare earths.

"We have the right kind of supply," Schumann said. "With rising demand for rare earths and metals, the search is on for new

supply sources to power the clean economy of the future."

"The Northwest Territories is well positioned to provide this much-needed diversity in supply."

On stability, Schumann highlighted the long-term policy and political certainty of the NWT, contrasting with other resource-rich jurisdictions prone to rapid changes in political climate.

On support, the Minister detailed the entrenched political backing of mining in the NWT, the strong public support recently demonstrated in a public opinion survey, and the efforts of government to foster a competitive investment and operating environment.

Schumann concluded by praising the expertise and drive of those within the mining sector and inviting investors, explorers and operators to meet with him.



MINING MATTERS VISITS SECOND NWT REGION

Students in the NWT's Dehcho region were the latest to receive a valuable introduction to the mining sector late last year.

Mining Matters, a program which educates students about the basics of mining, was presented by the GNWT Department of Industry, Tourism and Investment's Client Services and Community Relations Unit (CSCR).

The nationally recognized curriculum uses practical in-class activities to demonstrate mining essentials and informative seminars to outline careers in the sector. It aims to inspire students to further their education with a view to seizing opportunities within the NWT's mining and exploration sector.

Mining Matters was also delivered to schools in the Sahtu region of the NWT in April of last year.

The program is supported by the GNWT as part of its commitment under its Mineral Development Strategy to increase community engagement and participation in the mining industry.

ITI's Client Service and Community Relations Unit serves as the consistent first point of contact within the GNWT to help industry and communities maximize economic opportunities from resource exploration and development.



NWT CABINET LOBBIES FEDS ON INFRASTRUCTURE

Premier Bob McLeod and Cabinet discussed opportunities for working with the Government of Canada during a week of successful meetings with federal ministers, Members of Parliament and Parliamentary Standing Committees in Ottawa back in November.

Infrastructure was high on the agenda, with both Premier Bob McLeod and Minister of Transportation Wally Schumann speaking on the importance of building all-weather roads through the Slave Geological Province and advancing the Mackenzie Valley Highway project to Norman Wells.

The Slave Geological Province road would provide unprecedented all-weather access to an area with mineral potential similar to Ontario's legendary Abitibi Belt, opening a

new frontier in exploration for a massive, varied cache of minerals.

The Mackenzie Valley Highway project would open the Sahtu region to lower-cost exploration for mineral and petroleum resources, presenting new opportunities for industry and the people of the region.

Both projects fit within the findings of the Canada Transportation Act Review Panel's final report, which recommends federal investment in these northern transportation corridors in order to bring Canadian products to the global marketplace.

The GNWT consistently seeks partnerships with the Government of Canada to fund projects advancing Canada's economic fortunes in the North.



FOXFIRE DIAMOND ON DISPLAY AT THE SMITHSONIAN

From the Barren Lands of the NWT to the immaculate halls of the legendary Smithsonian in Washington, D.C., the Foxfire Diamond has come a long way from its two-billion-year home amongst the kimberlite at Lac de Gras.

The 187.6 carat diamond that sent shockwaves around the world upon its unveiling in 2015 is now on public display at the Smithsonian's National Museum of Natural History through February 16, 2017.

This is the first time the diamond — originally extracted at Diavik Diamond Mine northeast of Yellowknife — has been shown in public.

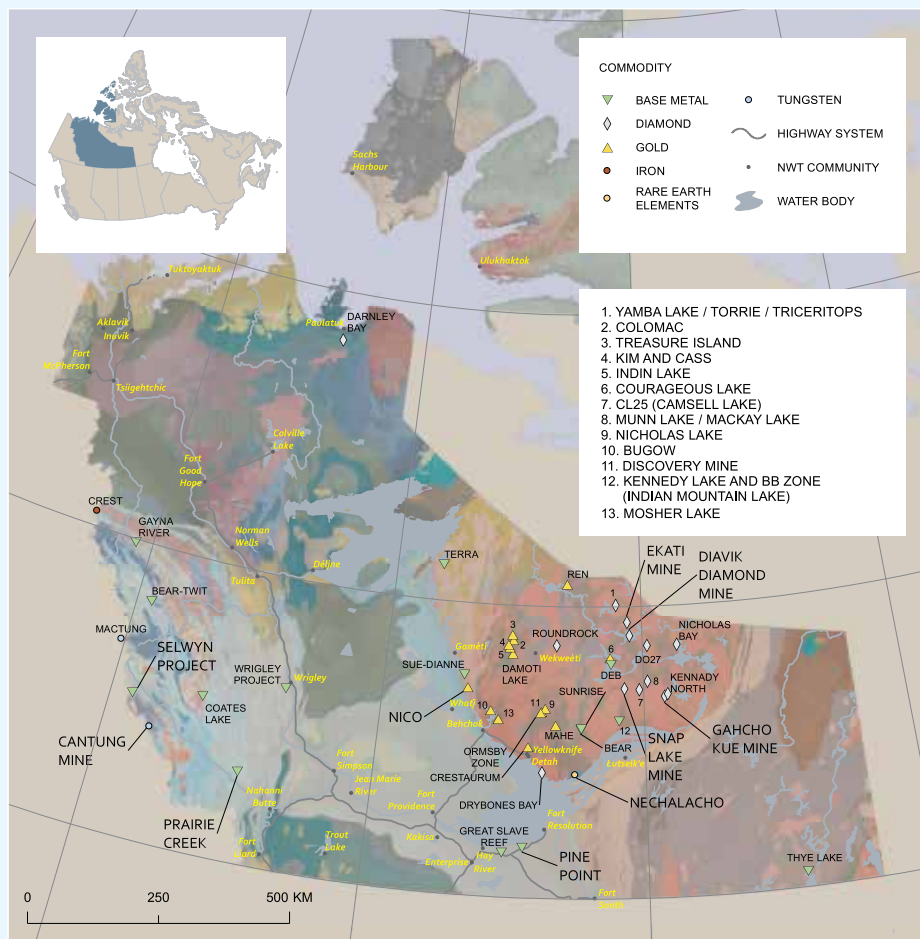
Its discovery was significant as diamonds of this size were not believed to exist in North America.

The diamond's very existence is remarkable, as a diamond of this size should technically not have survived the crushing process. Its uncommonly flat shape was its saving grace.

This extraordinary diamond is a testament to the well-known quality of NWT diamonds, demonstrated by the jurisdiction's position as fifth largest producer by quantity, but third-place producer by value.

Select Mineral Deposits of the Northwest Territories, Canada

PROJECT NAME	COMMODITY	STATUS	PROJECT OWNER / MANAGER	WEBSITE AND/OR E-MAIL ADDRESS	*RESOURCE CATEGORY	**TOTAL RESOURCE	*** GRADE
DIAMIK DIAMOND MINE	Diamond	producer	60% Rio Tinto / 40% Dominion Diamond Corp.	www.diamik.ca	Prv + Prb	18.7 Mt	2.8 ct/t
EKATI MINE	Diamond	producer	89.9% Dominion Diamond Corp. ; 11.1% Stewart Blusson	www.ddcorp.ca	Prv + Prb	71.3 Mt	1.56 ct/t
GAHCHO KUE MINE	Diamond	ramping up production	51% De Beers Canada Inc.; 49% Mountain Province Diamonds Inc.	www.angloamerican.com	Prb	33.8 Mt	1.54 ct/t
SNAP LAKE MINE	Diamond	production suspended; care and maintenance	De Beers Canada Inc.	www.angloamerican.com	Prb	5.7 Mt	1.26 ct/t
CANTUNG MINE	Tungsten	production suspended; care and maintenance	North American Tungsten Corp. / Government of Canada	www.natungsten.com	Prb	1.82 Mt	0.81% WO ₃
NECHALACHO	Rare Earth Elements, Beryllium	drilled; Advanced Project	Avalon Advanced Materials Inc.	www.avalonadvancedmaterials.com	Prv; Prb	3.68 Mt; 10.9 Mt	1.73% TREO (0.47% HREO); 1.69% TREO
NICO	Cobalt, Bismuth, Gold	drilled; Advanced Project	Fortune Minerals Ltd.	www.fortuneminerals.com	Prv + Prb	33 Mt	1.03 g/t Au, 0.11% Co, 0.14% Bi
PRAIRIE CREEK	Zinc, Lead, Silver	drilled; Advanced Project	Canadian Zinc Corp.	www.canadianzinc.com	Meas + Ind	8.7 Mt	9.5% Zn, 8.9% Pb, 136 g/t Ag
SELWYN PROJECT	Zinc, Lead, Silver	drilled	Selwyn Chihong Mining Ltd.	www.selwynchihong.com	Ind	185.6 Mt	5.20% Zn, 1.79% Pb
BUGOW	Gold	drilled	Aurora Geosciences (Pending)	www.silverrangeresources.com	~	70,000 t	10.29 g/t
CAMP	Gold	drilled	Crown Land	miners@gov.nt.ca	~	46,400 t (N Zone); 11,840 t (S Zone)	13.7 (N Zone); 12 g/t (S Zone)
COLOMAC	Gold	past producer	Nighthawk Gold Corp	www.nighthawkgold.com	Inf	36.973 Mt	1.65 g/t
COURAGEOUS LAKE	Gold	past producer	Seabridge Gold Inc.	www.seabridgegold.net	Prv; Prb	12.3 Mt; 78.8 Mt	2.41 g/t; 2.17 g/t
CRESTAURUM	Gold	past producer	TerraX Minerals Inc.	www.terraxminerals.com	~ Ind + Inf	145,150 t	7.54 g/t
DAF	Gold	minor past producer	Walter Humphries	walth@internorth.com	~	3,500 t	30.4 g/t
DAMOTI LAKE	Gold	drilled	Nighthawk Gold Corp.	www.nighthawkgold.com	Meas + Ind	40,600 t	26.17 g/t
DISCOVERY MINE	Gold	past producer	Tyhee N.W.T. Corp.	www.tyhee.com	~	206,897 t	22.62 g/t



LEGEND

* **RESOURCE CATEGORY:** Indicated (Ind); Inferred (Inf); Measured (Meas); Proven Reserve (Prv); Probable Reserve (Prb); Historic (non-compliant) ~; Preliminary Sample Result (Prelim)

** **TOTAL RESOURCE:** tonnes (t); million tonnes (Mt); kilograms (kg)

*** **GRADE:** grams per tonne (g/t); carats per tonne (ct/t)

PROJECT NAME	COMMODITY	STATUS	PROJECT OWNER / MANAGER	WEBSITE AND/OR E-MAIL ADDRESS	*RESOURCE CATEGORY	**TOTAL RESOURCE	*** GRADE
GAB	Gold	drilled	Aurora Geosciences (Pending)	miners@gov.nt.ca	~	27,215 t	10.63 g/t
INDIN LAKE	Gold	drilled	Nighthawk Gold Corp.	www.nighthawkgold.com	~	214,000 t	16.46 g/t
JAX LAKE	Gold	drilled	Pelican Minerals Inc.	www.pelicanminerals.com	~	36,287 t	14.1 g/t
KIM AND CASS	Gold	drilled	Pine Cliff Energy Ltd.	www.pinecliffenergy.com	~	448,950 t	7.37 g/t
MAHE	Gold	drilled	Silver Pursuit Resources Ltd.	www.silverpursuit.ca	~	156,840 t	17.28 g/t
MON	Gold	past producer	New Discovery Mines Ltd.	dave@drwgcl.com	PP	10,070 t	10 g/t
MOSHER LAKE	Gold	drilled	Lane Dewar, M. Magrum, T. Teed	lanedewar@lincast.com	~	500,765 t	2.81 g/t
NICHOLAS LAKE	Gold	drilled	Tyhee Gold Corp.	www.tyhee.com	Meas + Ind	1.109 Mt	6.87 g/t
ORMSBY ZONE	Gold	drilled	Tyhee Gold Corp.	www.tyhee.com	Meas	7.339 Mt	1.59 g/t
REN	Gold	drilled	Lane Dewar/M. Magrum	lanedewar@lincast.com	~	1.8 Mt	10 g/t
SLEMON	Gold	drilled	Crown Land	miners@gov.nt.ca	~	31,751 t	6.8 g/t
TREASURE ISLAND	Gold	drilled	Nighthawk Gold Corp.	www.nighthawkgold.com	~	105,400 t	14.09 g/t
AFRIDI LAKE	Diamond	drilled	Crown Land	miners@gov.nt.ca	Prelim	511.3 kg	46 diamonds; 4 macros
BLUE ICE / VICTORIA ISLAND	Diamond	drilled	Crown Land	miners@gov.nt.ca	Prelim	934 kg	172 diamonds
CL 25 (CAMSELL LAKE)	Diamond	drilled	Canterra Minerals Corp.	www.canterraminerals.com	Prelim	350.4 kg	221 diamonds; 9 macros
CROSS PROPERTY	Diamond	drilled	Stornoway Diamond Corp.	www.stornowaydiamonds.com	Prelim	2.4 t	7 diamonds
DARNLEY BAY	Diamond	drilled	Darnley Bay Resources Ltd.	www.darnleybay.com	Prelim	533.1 kg	65 diamonds; 2 macros
DRYBONES BAY / MUD LAKE	Diamond	drilled	David Smith	eastarm@gmail.com	Prelim	10 t (Drybones); 100 t (Mud Lake)	97 macros; 11 macros
HOAM	Diamond	drilled	Olivut Resources Ltd.	www.olivut.ca	Prelim	TBD	6 diamonds
KENNADY NORTH	Diamond	drilled	Kennady Diamonds Inc.	www.kennadydiamonds.com	Prelim	433 t	2.02 ct/t
MUNN LAKE / MACKAY LAKE	Diamond, Gold	drilled	Zimtu Capital Corp. / DG Resource Management	www.dgrm.co	Prelim	42 kg	14 diamonds; 2 macros
NICHOLAS BAY	Diamond	drilled	Crown Land	miners@gov.nt.ca	Prelim	127.7 kg	1,174 diamonds; 6 macros
RANCH LAKE	Diamond	drilled	Mike Magrum	mike.magrum@gmail.com	Prelim	855 kg	266 diamonds; 46 macros
ROUNDROCK	Diamond	drilled	Stornoway Diamond Corp.	www.stornowaydiamonds.com	Prelim	134.2 kg	19 diamonds; 6 macros
WO / DO27	Diamond	drilled	72.1% Peregrine Diamonds Ltd.; 17.6% Archon Minerals Ltd.; 10.3% DHK Diamonds Inc.	www.pdiam.com	Ind	19.5 Mt	0.94 ct/t
YAMBA LAKE / TORRIE / TRICERITOPS	Diamond	drilled	Arctic Star Exploration Corp.	www.arcticstar.ca	Prelim	83.6 kg	68 diamonds; 6 macros
BEAR	Silver, Zinc (Pb,Au)	drilled	Silver Bear Mines Inc.	www.silverbearmines.ca	~	1.136 Mt	5.1% Zn, 2.2% Pb, 336g/t Ag, 0.6g/t Au (M zone)
BEAR-TWIT	Lead, Zinc (Ag, Cu, Sb, Cd)	drilled	Eagle Plains Resources Ltd.	www.eagleplains.com	~ Inf	7.26 Mt - 9 Mt	5.4% Zn, 2.6% Pb, 17.1 g/t Ag
COATES LAKE / REDSTONE	Copper, Silver	drilled	Copper North Mining Corp.	www.coppernorthmining.com	~ Inf	33.6 Mt	3.92 % Cu, 9 g/t Ag
CREST	Iron	drilled	Crest Exploration Limited (Chevron Canada Ltd.)	www.chevron.ca	~ Inf	5.6 billion tonnes	47.2% Fe
DEB	Copper, Zinc (Ag)	drilled	Seabridge Gold Inc.	www.seabridgegold.net	~ Inf	1.01 Mt	0.83% Cu, 2.96% Zn, 21.9 g/t Ag
GAYNA RIVER	Zinc, Lead	drilled	Eagle Plains Resources Ltd.	www.eagleplains.com	~ Inf	1.07 Mt	4.51% Zn-Pb
GREAT SLAVE REEF	Zinc, Lead	drilled	Tamerlane Ventures Inc.	www.ksvadvisory.com	Prv (R-190 deposit)	647,000 t	12.47% Zn, 6.10% Pb
INDIAN MOUNTAIN LAKE (KENNEDY LAKE AND BB ZONE)	Zinc, Silver, Copper, Lead	drilled	Panarc Resources Ltd.	www.panarc-resources.com	~ (BB Zone)	879,964 t	9.5% Zn, 0.7% Pb, 116.5 g/t Ag
PINE POINT	Zinc, Lead	past producer	Tamerlane Ventures Inc.	www.ksvadvisory.com	Prv	10 Mt	2.25% - 5.8% Zn + 1% - 3.1% Pb
SUE-DIANNE	Copper, Silver, Gold	drilled	Fortune Minerals Ltd.	www.fortuneminerals.com	Ind	8.44 Mt	0.8%Cu, 3.2 g/t Ag, 0.07 g/t Au
SUNRISE	Silver, Zinc, Lead, Copper, Gold	drilled	Silver Standard Resources Inc.	www.silverstandard.com	Ind	1.5 Mt	262 g/t Ag, 2.39% Pb, 5.99% Zn, 0.08% Cu, 0.67 g/t Au
TERRA	Silver, Copper, Bismuth, Gold	past producer	DEMCo Ltd.	www.denendehinvestments.ca	~	27,769 t; (+ 453,592 t tailings)	1028 g/t Ag; (+ 0.5% Ni, 0.5% Cu in tailings)
THYE LAKE (NICKEL KING)	Nickel, Copper, Cobalt	drilled	Strongbow Exploration Inc.	www.strongbowexploration.com	Ind (Main Zone)	11.1 Mt	0.4% Ni, 0.1%Cu, 0.018% Co
TURNBACK LAKE	Zinc, Lead, Copper, Silver	drilled	Teck Resources Ltd.	www.teck.com	~ Inf	910 tons per vertical foot	2% Cu, 6% Zn, 1.5% Pb, 102.84 g/t Ag
WRIGLEY PROJECT	Lead, Zinc	drilled	Devonian Metals Inc.	www.devonianmetals.com	Inf	3.978 Mt	7.34% Zn, 2.02% Pb, 12.71 g/t Ag
BIG (MURPHY)	Lithium	drilled	Erex International Ltd.	thanphambc@gmail.com	~ Inf	7.15 Mt	1.47% Li ₂ O
MACTUNG	Tungsten	drilled	Government of the NWT, ITI	www.nwtmining.com	Ind	33 Mt	0.88% WO ₃



Two regions; two new stories for NWT kimberlite

More than a half-century ago, R.G. Blackadar and R.L. Christie unwittingly kicked off the hunt for diamonds in Canada's North.

The two geologists mapped a basic intrusive on Somerset Island, Nunavut in 1963, - a full decade before the release of the landmark paper "Kimberlite from Somerset Island" by Roger Mitchell and P. Fritz in 1973.

That was the paper that fixed the gaze of diamond giant De Beers on Canada's North in the earliest push for North American diamond exploration.

Explorers from De Beers and the many juniors who followed began at the Peuyuk (Inuktitut for "Beautiful") kimberlite at Somerset, snaked west to the Mackenzie Delta, then down the Mackenzie River to Fort Simpson in the NWT's Dehcho region, finally swinging east to Lac de Gras where the best-known story began with Stu Blusson and Chuck Fipke's staking victory, and continues today with advanced exploration by the likes of Kennady Diamonds.

But what if something was missed along the way? Recent research suggests there may be some new stories to follow in NWT diamond exploration.

NEW FRONTIERS FOR EXPLORATION

REACHING INTO A HAYSTACK, FINDING THE NEEDLE

The first story lies in the Central Dehcho region.

As the last major area of exploration before attention turned to Lac de Gras, the potential of the Dehcho region was deemed unworthy of much fuss.

But in 2003, Olivut Resources drilled in the region and struck kimberlite. Upon analysis, the junior reported finding two diamondiferous kimberlite pipes.

While these two pipes ultimately proved uneconomical, it marked the beginning of renewed scientific interest in the region.

The Northwest Territories Geological Survey (NTGS), a division of the

Government of the Northwest Territories, was tasked with building knowledge of the geology of the region.

"We did fieldwork in 2003, 2005 and 2008 to get a better idea of the area's mineral potential," explains Scott Cairns, Manager of Mineral Deposits and Bedrock Mapping. "We took stream sediment and till samples from the area and spent some time analyzing the samples."

The results were promising, with many indicator minerals pointing to the presence of kimberlite and then, shockingly, an intact diamond.

"First off, the discovery of a diamond in this kind of testing is incredibly rare," says Barrett Elliott, Diamond Geologist with NTGS. "It's like finding the eye of a needle



in a haystack. The region was mostly unexplored and we were basically testing areas to build some baseline knowledge in support of land use questions.”

On the more conventional end, Cairns and Elliott worked with University of Alberta Ph.D candidate Stephane Poitras, a student of Dr. Graham Pearson, the Canada Excellence Research Chair in Arctic Resources. Poitras handled the microanalysis necessary to characterize the indicator minerals.

The findings were striking, with almost all analyzed minerals plotting within a relatively low temperature range that favors the presence of diamonds in kimberlite bodies.

“Old and cold, that’s what you look for in your indicator minerals if you want to find diamonds — otherwise they’ll have just changed to graphite.”

“Old and cold,” Cairns quips. “That’s what you look for in your indicator minerals if you want to find diamonds. Otherwise they’ll have just changed to graphite.”

LAC DE GRAS REDUX?

The findings were compared with testing done in the Lac de Gras area directly downstream from the diamond mines that put the NWT on the map and the heart of the famed Slave Geological Province.

“The kimberlite indicator minerals found in the Central Dehcho are as supportive of economic kimberlites as those in the Lac de Gras area,” Elliot says. “It’s particularly impressive when you consider that we’re comparing what’s essentially a blind test with an area driving the fifth highest annual diamond production worldwide.”

Stefan Poitras’ research is ongoing, with other results expected to be announced at the International Kimberlite Conference in 2017.

Perhaps as exciting as the geology is the comparative accessibility of the region. “Some of our samples were collected only a few hundred

yards from the [all-season] highway,” Cairns says. “As any explorer knows, public road access can cut costs in big ways.”

While there is still work to be done, the newly-advanced scientific knowledge, positive preliminary results and stunning find of an intact diamond all point to good things in the Central Dehcho.

KIMBERLITE IN THE FAR NORTH?

Farther north, Banks Island is another NWT area that may have been overlooked.

The remote island is part of Canada’s Arctic Archipelago in the Beaufort Sea. Muskoxen outnumber people by a factor of more than 600.

Studies by the Geological Survey of Canada suggest there could be a kimberlite field on the island.

“They were able to recover kimberlite indicator minerals in their samples,” Cairns says, “and the results are, once again, quite promising.”

OLD AND COLD

While the process is in early stages, this Geo-mapping for Energy and Minerals (GEM) initiative of Natural Resources Canada potentially points to an undiscovered, geographically unique kimberlite field on Banks or western Victoria Island.

Preliminary data collected from a network of teleseismic stations (measuring natural earthquake activity) by Dr. Pascal Audet and Dr. Andrew Schaeffer from Carleton University, in partnership with the NTGS, suggests that the right geological conditions for creating diamonds may exist deep in the earth beneath Banks Island. Although more work remains to be done, this is indeed promising for diamond exploration in the region.

“The work is definitely in early stages,” Cairns says, “but any new kimberlite field could mean new opportunities for savvy explorers.”

It would be a unique stake in a small location with little space for competition and an established airport; all positive for explorers looking for the next big find in Canada’s North.

VISIBLE GOLD FIND PIQUES INTEREST IN YELLOWKNIFE

Who says nothing big happens in training?

Old-timers know Yellowknife as “the city where the gold is paved with streets” but none would reasonably expect to find some in a pothole.

Cue Adam Gordon, 23, who signed up for the NWT Mine Training Society, TerraX and Government of the Northwest Territories (GNWT)-sponsored prospector training course last summer.

He all but did just that!

“I was walking (along the TerraX exploration property where the two-day course took place) to the spot where we’d all planned to regroup,” Gordon says. “I noticed some quartz and broke it with my hammer. When I showed it to the prospector onsite, he confirmed it was gold!”

Finding visible gold is extraordinarily rare under any circumstance, but especially within the context of an introductory two-day course. Gordon and everyone onsite were thrilled by the shocking find.

The rich course area in which the gold was found is part of the Ranney Trail portion of TerraX’s lease, named for William Ranney —





Pamela Strand

*DIRECTOR, MINERAL RESOURCES DIVISION,
GOVERNMENT OF THE NORTHWEST TERRITORIES*

a prospector who owned a cabin in the area and operated a small gold mine for some time.

It's noted in Blue Lake and Rocky Shore: A Field Guide to Special Natural Areas in the Yellowknife Region by well-known biologist and storyteller Jamie Bastedo as an excellent place to view the unique geology of the Yellowknife area.

It's this unique geology and historical production which continue to bring explorers and prospectors to the Yellowknife region 12 years after production ended at the iconic Con Mine. For TerraX spokesperson David Connelly, it's a mark of the area's continuing potential. "It backs up a lot of the beliefs we were working with when we began exploring in the area in 2013," he says.

The find reinforces TerraX's sponsorship of the prospecting courses which, Connelly explains, have long-term benefits for industry as well. "We love to see so many taking part in the courses," Connelly says. "There's a lot of ground out there — way more than we could ever cover ourselves.

"There's the potential for these students to head out, stake their own claims, and maybe even draw our own eyes towards their work. It's a symbiotic relationship."

As for the astute student who found the gold? He plans to do just that. "I'm excited to have a better idea of what goes into prospecting," Gordon says. "Next summer, I'm considering going out prospecting, maybe staking a claim; that's definitely an interest."

Northerners pride themselves on being innovative and resilient in the face of challenges; we call it our northern spirit.

From the brave early explorers negotiating the unforgiving tundra with limited resources, to the incredible engineering feats of our modern operators, the NWT resource economy is built on innovation.

This ingenuity extends beyond the cutting-edge advances in cold weather construction and ice roads for which we are world famous; and is a point of pride for those of us who work in partnership with industry innovators who push safe, responsible resource development to the next level every day. Each of the NWT mines is a prime example of this.

Diavik Diamond Mine, and operator Rio Tinto, have taken big steps in pushing renewable energy in their operations. They lead the field in using wind energy to power camp operations, which reduces reliance on diesel significantly. Their innovative engineering is also world-renowned, and has won international awards for dike design at the A21 expansion.

Our longest-running mine Ekati and its operators at Dominion Diamonds are pioneering driver fatigue detection technology. They use eye movement monitoring to provide automated guidance and stimulation to drivers, which has helped reduce the risk of accidents on site — so much so that it is now serving as a model worldwide. As well, Dominion has transformed waste management and segregation of waste products in Canada's North, involving

biodegradable product use and compost of organic waste.

De Beers' Snap Lake Mine brought underground diamond mining to Canada on the strength of cutting-edge water-management techniques and engineering. Gahcho Kué, the world's largest new diamond mine, boasts cutting-edge facilities, safety equipment, and environmental protection infrastructure on site.

On the exploration side, Avalon Advanced Materials' industry-leading use of renewables was recognized with the Best Use of Renewables in Mine Exploration award at the World Congress of Energy and Mines' Renewables in Mining and Energy event in 2016. Their work with hybrid solar-diesel battery power has provided a model for exploration companies to operate their camps at lower environmental and economic cost.

Our government, our industry and our people have always worked to overcome the unique geographic, demographic and environmental challenges of Canada's North. Today, as we're challenged by uncertainty in the global commodity market, we continue to seek paths and solutions to invest in the innovation that will address these challenges and position the NWT as a global leader in the next commodity cycle.

As a small and developing jurisdiction we know we have our work cut out for us, but we're excited to face this challenge with the same innovative northern spirit that built our current resource economy and to share our work with industry and governments in Canada and around the world.



NWT RESIDENTS WANT **NEW MINES**

Results from a territory-wide survey conducted by a national research company show that NWT residents favour more mining activity.

86% believe a strong mining sector is vital to the long-term health of the NWT economy

83% say regulation of the mining sector works well **82%** would like to see more mining projects in the NWT

8 in 10 people have positive feeling about mining and mineral exploration companies operating in the NWT.

To learn more about the NWT's world-class resources visit: nwtmining.com • nwtpetroleum.com • nwtgeoscience.ca

THE SURVEY WAS CONDUCTED BY ABACUS DATA AND COMMISSIONED BY THE NWT AND NUNAVUT CHAMBER OF MINES AND THE MINING ASSOCIATION OF CANADA.



Unlocking our **Potential**

NORTHWEST TERRITORIES MINERALS AND PETROLEUM