

Manitoba Exploration & Development Review

2025-2026

An Official Publication of the Manitoba Prospectors and Developers Association Inc.

- A history of copper in Manitoba
- Arctic Gateway Group is building a new future for Churchill and beyond
- Drones and the hunt for the elephant's tail
- Foremost Clean Energy finds success by employing dual-commodity strategy



**MANITOBA PROSPECTORS
AND DEVELOPERS
ASSOCIATION**

Bulk Fuel Delivery Large/Oversize Freight Ice Strip Landings Last Minute Shipments

FROM THOMPSON TO WHEREVER YOU NEED TO BE



Whether it's for industry, infrastructure, or community, our Thompson base has the capacity to deliver your cargo where it needs to be.

📞 1-844-633-6294

✉️ cargo@northstarair.ca

🌐 northstarair.ca



Published by

DEL Communications Inc.

Suite 300, 6 Roslyn Road

Winnipeg, MB R3L 0G5

www.delcommunications.com

President

DAVID LANGSTAFF

david@delcommunications.com

Editor

LYNDON McLEAN

lyndon@delcommunications.com

Advertising Sales Manager

DAYNA OULION

Advertising Sales

BRENT ASTROPE

GARY BARRINGTON

ANTHONY ROMEO

Creative Director / Design

KATHLEEN CABLE

©Copyright 2025.

Manitoba Exploration &

Development Review.

All rights reserved. The contents of this publication may not be reproduced by any means, in whole or in part, without the prior written consent of the publisher.

Publications mail agreement #40934510

Return undeliverable

Canadian addresses to:

DEL Communications Inc.

Suite 300, 6 Roslyn Road

Winnipeg, MB R3L 0G5

All mining and exploration property information presented in this publication is prepared by DEL Communications Inc. Descriptions of, or references to, mining and exploration properties within this publication do not imply endorsement of such properties by the Manitoba Prospectors and Developers Association Inc. (MPDA). The MPDA makes no warranty as to the completeness, timeliness or accuracy of any of the data included in this publication. All information conveyed by this publication is provided to readers for their own evaluation of such information. This publication could include technical inaccuracies or typographical errors.

Any reliance on the information contained in this publication is solely at the reader's own risk. MPDA specifically disclaims all warranties, express implied or otherwise, including without limitation, all warranties of merchantability and fitness for a particular purpose. In no event will MPDA be liable for any direct, indirect, special or consequential damages, or any other damages, whatsoever, for any use of, or reliance on, information provided by this publication, including without limitation any lost opportunity or profits, even if MPDA is expressly advised of, or otherwise aware of, the possibility of such damages, whether in an action of contract, negligence, tort or otherwise.



Communications Inc.

PRINTED IN CANADA 10/2025

In this issue

Message from the MPDA president, Honourable MaryAnn Mihychuk.....	5
A Message from Premier Wab Kinew	6
Message from the Honourable Jamie Moses, Minister of Business, Mining, Trade and Job Creation.....	7
Critical Minerals Short Courses	8
Benefits of joining the MPDA.....	9
Mineral dispositions.....	10
MPDA Member Properties.....	12
Upcoming events.....	14
2025 Reconciliation Gala & Forum.....	16
Manitoba Minerals Week 2025: Celebrating copper	17
September lunch presentation with Cole Stocki.....	18
Critical Minerals Short Courses highlight one of the fastest-growing areas of Canada's mineral industry.....	19
Bill Gallagher headlines MPDA 2026 Gala	20
History of copper in Manitoba	21
Reclaiming the North: How Arctic Gateway Group is building a new future for Churchill and beyond.....	22
Foremost Clean Energy leverages uranium partnership and Manitoba Gold-Lithium Program.....	26
The hunt for the elephant's tail	30
Automated measurement of clays for better mine planning	32
Grid sets sight on two upcoming drill programs in southeastern Manitoba	34
Take control of your facility's energy use.....	36
Cost-efficient electrical infrastructure: Practical innovations from Adria Power Systems	38
First Peoples Development Inc. helps bridge labour market gaps.....	40
Index to advertisers.....	42



PRESIDENT'S MESSAGE

HONOURABLE MARYANN MIHYCHUK

PRESIDENT, MANITOBA PROSPECTORS AND DEVELOPERS ASSOCIATION

I am delighted to write the *Manitoba Exploration & Development* President's Message as the 2025 President of the Manitoba Prospectors and Developers Association (MPDA). It is both an honour and a privilege to serve in this role for the past five years.

MPDA member companies want to work in jurisdictions with certainty, timeliness, and clarity of the rules. If this is not the framework, companies and their investments will move elsewhere – which is why Manitoba has fallen to 12 out of 13 jurisdictions in expected exploration investment and the Fraser Institute rankings drop to 26th.

The association supports the

Manitoba government, which has begun a new approach to Indigenous participation with the proposed Manitoba Crown Indigenous Corporation (MCIC). The concept is aimed at enhancing Indigenous governance and economic participation in major projects within Manitoba, focusing on resource equity and Treaty rights. This includes mineral exploration and development.

And with the Government of Canada's attempts to speed up approval processes and timelines for major projects and critical minerals, companies see some hope.

The Manitoba Prospectors and Developers Association is a

member-driven organization and the most active mineral association in the province. It plays a key role in raising public awareness about the sector and fostering engagement through speaker events, training courses, and high-profile initiatives like the Mineral Sector Gala. This year, the MPDA celebrated copper during Manitoba's Minerals Week and Hudson Bay, which is a national major copper producer.

Manitoba is home to 30 of the 34 minerals on Canada's Critical Minerals List, including silica, lithium, graphite, nickel, cobalt, copper, and rare earth elements.

Founded in 1982, the MPDA is a non-profit organization representing over 224 members involved in mineral exploration and development across Manitoba. It's the voice of small businesses in the exploration, supply, and service sectors.

The MPDA is committed to building a robust and inclusive critical mineral sector in Manitoba. With continued collaboration and innovation, Manitoba's mineral industry is poised to be a key contributor to both the provincial economy and Canada's broader critical mineral supply chain.

We are working hard toward building a strong, inclusive, and robust critical mineral sector in Manitoba. ✕

WORKING TOGETHER, MAKING THINGS BETTER
pinchin.com | 1.855.PINCHIN

Smart Solutions, New Heights

- **Baseline Environmental Studies to Support Permitting and EAs** (Groundwater, Surface Water, Terrestrial and Aquatic Biology)
- **Closure Planning and Design**
- **Water Management Support** (Hydrogeology, Hydrology, Water Balances, Water Treatment)
- **Groundwater, Surface Water, and Soil Assessment & Remediation**
- **Feasibility Studies Environmental Support**
- **Geotechnical Assessments and Design**
- **Hazardous Materials Assessment and Abatement** (Asbestos, Metals, Mould)
- **Occupational Health and Safety**

CONTACT AN EXPERT: P: 1.855.746.2446 | E: info@pinchin.com

© 2025 PINCHIN

PINCHIN

Visit our Website!



WE SELL SOLUTIONS™





WINNIPEG
KAMLOOPS
EDMONTON
SASKATOON
FLIN FLON
SNOW LAKE
THOMPSON
RED LAKE
THUNDER BAY
MISSISSAUGA

 PROUDLY CANADIAN

 MATERIALS

 EQUIPMENT

 CONTRACTING

www.multicretesystems.com
sales@multicretegroup.com
(204) 262-5900






*Powering the Future
with Manitoba's
Critical Minerals.
Responsibly.*

Learn more at vale.com/basemetals





**PREMIER
OF MANITOBA**

Legislative Building
Winnipeg, Manitoba R3C 0V8
CANADA

A MESSAGE FROM THE PREMIER

On behalf of the Province of Manitoba, I'm happy to provide a message of welcome for the 2025 Manitoba Exploration & Development Review Magazine.

Manitoba is quickly growing into a leader of sustainable critical mineral extraction. Our government is leaning into this potential and building up Manitoba's critical mineral and mining industry in a responsible way that will benefit everyone in our province. Last year, we released our Securing Our Critical Mineral Future strategy, which provides a roadmap to stand up critical minerals projects faster while respecting the environment and forming strong Indigenous partnerships. This strategy is our guide as we continue to work to be a good partner with the mining sector and to make Manitoba an attractive place for investment.

We know that collaboration with Indigenous Nations, the private sector, and organizations like the MPDA is the foundation of success, and we're already seeing results. Earlier this year we stood with Marcel Colomb First Nation, Mathias Colomb Cree Nation and Alamos Gold to break ground on a new gold mine near Lynn Lake that will create hundreds of jobs and grow our economy.

Thank you for the important work MPDA does to support and grow Manitoba's mineral development. Let's keep working together to extract Manitoba's valuable critical minerals and get those minerals to market in a safe and sustainable way.

***The Honourable Wab Kinew
Premier of Manitoba***

MESSAGE FROM THE **HONOURABLE JAMIE MOSES**

Minister of Business, Mining, Trade and Job Creation



Today we're witnessing a renewed sense of possibility in Manitoba's mining industry. With rich mineral resources and growing global demand for critical minerals, our province is well-positioned to play a leading role in the clean energy transition.

Our government is focused on creating the right conditions for responsible growth. That means supporting exploration, improving permitting, and strengthening partnerships with First Nations and Métis. We're committed to a modern, transparent approach that respects our Duty to Consult and upholds the highest environmental and social standards.

Through the Manitoba Mineral Development Fund, we've supported over 100 projects, investing over \$20

million to create jobs, build partnerships, and unlock new opportunities – especially in northern communities. We've also launched a new strategy, Securing Our Critical Mineral Future, to guide long-term growth and ensure Indigenous participation at every stage of development.

To support this work, we've established a Critical Mineral Office and a new Mining Advisory Council that brings together voices from across the sector. And through the Manitoba Geological Survey, we continue to invest in the foundational research that drives discovery.

We're proud of what's been achieved, and even more excited about what's ahead. Thank you for your continued partnership in building a strong, sustainable future for Manitoba's mining industry. ✖



Power Your Operations with Perimeter Aviation

When time is money, trust Perimeter Aviation to keep your mining operations moving. With over 60 years of experience and a fleet of over 40 aircraft, we provide reliable, flexible charter and scheduled passenger services to remote locations across Manitoba and Northern Ontario. Whether it's crew rotations, equipment transport, or urgent deliveries, we can provide customized options to meet your needs.

Contact our dedicated team today, to learn why we're your trusted partner.

CONNECTING HORIZONS

PERIMETER.CA | 1-800-665-8986





CRITICAL MINERALS SHORT COURSES

Register for an intense short course. Our courses offer an in-depth understanding of the critical mineral sector.

COURSES:



Manitoba Rules and Regulations (1 day)

- Business and Finance (1 day)
- Environmental Monitoring/Guardians (1 day)
- Prospecting/Geological Assistants (1 day)

ONE DAY COURSE PRICE:

- MPDA Member: \$175.00 +GST
- Non-Member: \$225.00 +GST



Assiniboia Downs



(204) 806-5092



www.mpda.ca



Courses: 9am-5pm.



Gala Dinner: 6pm-9pm.

**REGISTER
NOW**

APRIL 9, 2025





MANITOBA PROSPECTOR
AND DEVELOPERS
ASSOCIATION

About the MPDA

The Manitoba Prospectors and Developers Association (MPDA) is an advocacy group focused on improving the state of mineral exploration in Manitoba.

MPDA is committed to supporting the minerals sector and furthering the goals of companies and individuals working within it. Our collective objective is to develop productive and efficient ways of working with our industry and community partners so that Manitoba becomes one of the most attractive places to invest in the mineral business.

BENEFITS OF JOINING THE MPDA

Join the leading voice of the mineral exploration and development sector in Manitoba!

Becoming a member is a great way to network, learn about key topics affecting the industry, and help shape the future of Manitoba's mineral exploration and extraction industries. Membership unlocks access to MPDA events, networking, and short courses. The work of the association, including its advocacy activities and programs, is funded solely from revenues derived from member fees and from our events.

Visit <https://mpda.ca/membership-drive/> to join today.

Student, individual, and corporate memberships are available.



**JOIN A TEAM THAT IS BUILDING
THE FUTURE OF MINING**



**We are
Hiring**
join our team

**JOB OPPORTUNITIES
IN THE FOLLOWING FIELDS:**

- Underground Miners
- Technical and Engineering
- Skilled Trades
- Various Office Positions



Scan the QR code
to learn more or visit:

www.dumasmining.com/careers/opportunities/

2025-2026 Manitoba Mineral Dispositions

Mining Claims

0905144 B.C. Ltd.	Eden Gold Corporation	Mock, Harv
1000078824 ONTARIO INC.	Fawley, Kevin	Mount Morgan Resources Ltd.
10059846 Manitoba Ltd.	Foremost Clean Energy Ltd.	MUMIN, RASHID
10197729 Manitoba Inc.	Fowler, Brian	NiCan Limited
10197729 Manitoba Inc.	GARRY THORNE	NIKOLAY BASHAEV
10215825 Manitoba Ltd.	GEORGE M. NYKULAIK	Northern Uranium Corp
1911 Gold Corporation	GLOBAL NICKEL INC.	Opekar, Margaret
4058667 MANITOBA LTD	GOLDEN POCKET RESOURCES LTD.	OZIAS THERIAULT
55 North Mining Inc.	Goldpath Resources Corp.	Pedruchny, Fred
5918139 MANITOBA INC.	GOSSAN RESOURCES LIMITED	PETER C. DUNLOP
7268425 Manitoba Limited	GRANDVIEW GOLD INC.	PFS Interpretations Ltd.
A. SEDLEY (BOB) TURNER	Greenvein Resources Corp	Qmc Quantum Minerals Corp.
ACME Lithium	Grid Metals Corp.	RICHARD H. MASSON
Adia Resources Inc.	HAROLD WESTDAL	Rodway, Kim
Altius Royalty Corporation	HALO RESOURCES LTD.	Satori Resources Inc
Alamos Gold Inc.	HARLEY SPENCE DAVY	SHAUN SPELLISCY
ANDREW SCARTH	Hudbay Minerals Inc.	Silex
AURIGA GOLD CORP.	IAN SCARTH	Snow Lake (Crowduck) Ltd.
Bashaev, Svetlana	K2 Resources Inc.	Softrock Minerals Ltd.
Big Ridge Gold Corp.	KENNETH MARLIN KLYNE	StOnge, Andre
BISHOPSGATE EXPLORATION LTD.	Kenorland Minerals North America Ltd.	STRIDER RESOURCES LIMITED
BOB SOUTHERN	KG Exploration (Canada) Inc.	T2 Metals Corp
BWR Exploration Inc.	KoBold TNB Holdings, Inc.	TANTALUM MINING CORPORATION OF CANADA LIMITED
Callinex Mines Inc.	Lakewinn Resources Corp	Tasic Graphite Ltd.
CANALASKA URANIUM LTD.	Le Léannec, Luc	TIBERIUS GOLD CORP.
Canickel Mining Limited	Leeuwin Metals Canada Ltd.	TODD MCCRACKEN
CANMINE RESOURCES CORPORATION	LESavage, STEPHEN	TORCH RIVER RESOURCES LTD.
CanWhite Sands Corp.	Linklater, Jody	Trevali Mining (Maritimes) Ltd.
CBSGeoscience	Lithium Canada Development Inc.	VALE CANADA LIMITED
COLTAN MINES LIMITED	Lodestar Battery Metals Corp.	VMS VENTURES INC.
Core Nickel	Lotz, Jason	Voyageur Mineral Explorers Corp
Critical Discoveries	Love, Karen	W.S. FERREIRA LTD.
CROSS LAKE MINERAL EXPLORATION INC.	Lytwyn, Chris	Willeson Metals Corp.
DAVE MEEK	MASKWA NICKEL CHROME MINES LIMITED	WILLIAM C. HOOD
DLM GOLD VENTURES INC	Mathur, Shilika	Wolfden Resources Corporation
Drysdale, Jonathan	Metal Energy Corp.	Wynex Resources Inc
Dusessoy, William	Mid-Canada Alliance	
	Minnova Corp.	

2025-2026 Manitoba Mineral Dispositions

Mineral Exploration Licenses

ANGLO AMERICAN EXPLORATION
(CANADA) LTD.

Callinex Mines Inc.

CANALASKA URANIUM LTD.

Conduit Nickel Inc.

Core Nickel

1155327 B.C. Ltd.

DG Resource Management Ltd.

Exiro Minerals Corporation

GARRY THORNE

Grid Metals Corp.

Hudbay Minerals Inc.

Integral Metals Corp

Kenorland Minerals North America Ltd.

Kopore (WA) Pty Ltd

Leeuwin Metals Canada Ltd.

Northern Uranium Corp

Plethora Exploration Corp.

Poehlman, Tania

SHAUN SPELLISCY

Stuhini Exploration Ltd.

Mineral Leases

GLOBAL NICKEL INC.

GOLDEN POCKET RESOURCES LTD.

HALO RESOURCES LTD.

Alamos Gold Inc.

ATOMIC ENERGY OF CANADA

TANTALUM MINING CORPORATION
OF CANADA LIMITED

VALE CANADA LIMITED

Callinex Mines Inc.

Hudbay Minerals Inc.

Minnova Corp.

1911 Gold Corporation

Voyageur Mineral Explorers Corp

PADCOM

Core Nickel

10197729 Manitoba Inc.

McFarlane Lake Mining Limited

Canickel Mining Limited

5918139 MANITOBA INC.

MPDA MEMBER PROPERTIES

THE FALCON/WEST HAWK/STAR LAKE GOLD-PRODUCING PROPERTIES ARE AVAILABLE FOR SALE OR OPTION



The property covers 397 hectares of contiguous claims north of Highway 1 at Falcon Lake, MB, situated west of West Hawk Lake and just south of Star Lake.

The location is 140 kilometres east of Winnipeg and 50 kilometres west of Kenora, ON. [Fig. 1].

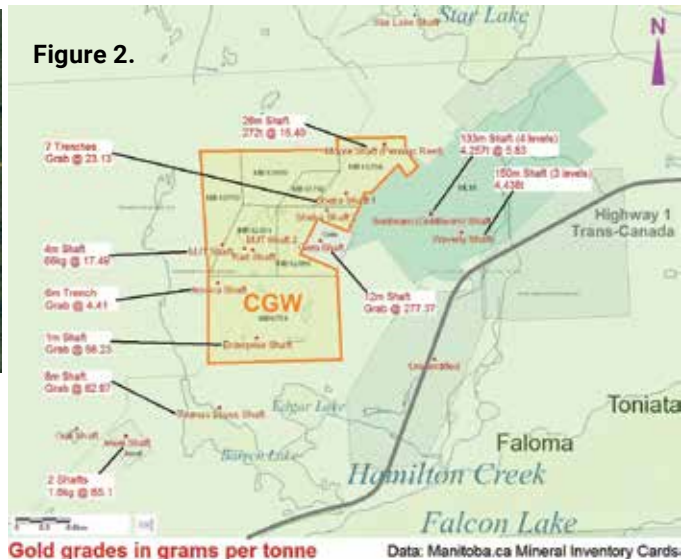
The property is underlain by Archean Age metavolcanic/metasediment rocks that have been intruded by a multi-phased intrusive complex grading from quartz monzonite to granodiorite/diorite to gabbro on its outer limits (widely known as the Falcon Lake Intrusive Complex).

Mineralization is associated with breccia pipes, as at the nearby Sunbeam and Waverly shafts.

Infrastructure of power, major highways, forestry roads, and cellular communication throughout the property add to the skilled population base.

The seven claims have eight mine shafts as illustrated with historical gold production listed in grams per tonne [Fig.2].

The property was discovered in 1890 and produced Manitoba's first gold bar in 1913.



In 1980, a High Resolution Horizontal Magnetic Gradient was compiled, and an XDS VLF-EM Airborne Survey was completed in 2008.

In 2025, aerial mapping (LiDAR and RGB imagery) was completed by TGI using a professional grade drone with LiDAR and photogrammetric camera sensors.

Combining historical assessment reports with the latest technology, the entire area is being mapped via a geological sampling program to verify mineralization locations using XRF technology and certified fire assays.

This work will continue throughout 2025 and 2026.

All results, past and current technology reports, and visits to the site are available to all interested parties.

Contact George Nykulaik by email at gmn55@yahoo.com.



Fig.1 Location of the property.

THE HADASHVILLE SOUTH PROPERTY IS FOR SALE AND/OR OPTION

Location: about 120 kilometres southeast from Winnipeg.

Ownership: 100pre cent by 7268425 MB Ltd.

Size: approximately 3,000 hectares.

Access: excellent road access via HWY #1 and after PR # 503.

Previous work: extensive soil and biogeochemical sampling.

Expected commodities to be found: Au, Zn, Sr, Mn.

Contact information: Mr. Nikolay Bashaev 1-204-489-1490;

bnick15@outlook.com ✖

At Hudbay, our mission extends beyond mining – we're shaping a more sustainable future.



Our company-wide commitments include reducing greenhouse gas (GHG) emissions by 50% by 2030 and achieving net-zero by 2050.

Our Manitoba Business Unit is leading the charge in sustainable practices, implementing innovations like battery-electric equipment and achieving significant reductions in emissions and freshwater usage.

With nearly 100% of our total indirect energy in Manitoba coming from renewable sources, we continue to pioneer responsible mining, evaluating reprocessing tailings to recover critical minerals, and reducing our environmental footprint.

Through these efforts, we ensure that our operations contribute to a greener economy while safeguarding the communities and environments where we operate.

HUDBAY



**Ice Road and Drill Pads | Ground Penetrating Radar Ice Testing
Land Based Road and Swamp Clearing | Exploration Services**

www.BIGICEServices.ca

UPCOMING *Events*



Critical Minerals Short Courses

Date: Wednesday, November 5, 2025

Location: The Viscount Gort Hotel

Register for an intense short course. Take your skills to the next level and benefit from mineral resource exploration and development. Our courses offer in-depth understanding of the sector.

Holiday Reception

Date: Thursday, December 11, 2025

Location: Chop Restaurant

Join us for our Holiday Reception this December as we celebrate the season with friends, colleagues, and community. Enjoy festive cheer, light refreshments, and great company.

Annual General Meeting

Date: Wednesday, February 25, 2026

Join us for the Manitoba Prospectors and Developers Association's Annual General Meeting (AGM). This is an opportunity for members to help shape the direction of MPDA. The meeting will also include the election of the new board of directors. Your voice matters, be part of the Conversation!

Critical Minerals Short Courses

Date: Thursday, April 9 - Friday, April 10, 2026

Location: Assiniboia Downs, Winnipeg

Register for an intense short course. Take your skills to the next level and benefit from mineral resource exploration and development. Our courses offer in-depth understanding of the sector.

Critical Minerals Gala 2026

Date: Thursday, April 9, 2026

Location: Assiniboia Downs, Winnipeg

Join us all day celebrating reconciliation efforts in Manitoba.

Sponsorship opportunities

MPDA provides different event sponsorships for all events like the Critical Minerals Gala, Critical Minerals Short Courses, Quarterly Lunch Presentations, Holiday Reception, AGM. These opportunities offer exposure and engagement with industry professionals and members. ✕

Tel: 204-277-5218 Fax: 204-277-5521

BISSETT
At the centre of the
Rice Lake Greenstone Belt
Since 1911
The Best Place in Manitoba to Explore for Gold
Bissett Community Council
Mayor and
Council

www.bissettcc.com E-mail: bissettcc@gmail.com

UNITED STEELWORKERS
USW
UNITY AND STRENGTH FOR WORKERS
Local 6166
Welcome to Steelworker Country

Lynn Lake Gold Project

Alamos Gold is proud to be investing in Manitoba through the Lynn Lake Gold Project. With a 27-year mine life, a Mineral Reserve base of 3.3 million ounces, and exploration upside across a large, underexplored greenstone belt, Lynn Lake is positioned to deliver long-term value.

Designed with low greenhouse gas emission intensity, the project reflects our commitment to responsible development. Just as importantly, we are working alongside local communities—creating jobs, supporting businesses, and investing in opportunities that will strengthen the region for generations to come.



For more information visit lynnlake.alamosgold.com.



ALAMOS GOLD INC.

TSX:AGI | NYSE:AGI



**JOIN A TEAM THAT IS BUILDING
THE FUTURE OF MINING**



We are
Hiring
join our team

**JOB OPPORTUNITIES
IN THE FOLLOWING FIELDS:**

- Underground Miners
- Technical and Engineering
- Skilled Trades
- Various Office Positions



Scan the QR code
to learn more or visit:

www.dumasmining.com/careers/opportunities/

2025 Reconciliation Gala & Forum



The 2025 Reconciliation Gala & Forum, held on Thursday, April 10th, 2025, was hosted at the Assiniboia Downs, the event brought together industry leaders, Indigenous communities, government officials, and stakeholders to strengthen partnerships and advance reconciliation in Manitoba's mineral sector.

The day began with the Forum, where participants had the opportunity to learn more about Manitoba's exploration and mineral sector.

The evening transitioned into the Reconciliation Gala, a celebration of collaboration and progress. The highlight of the night was the presentation of

the Indigenous Reconciliation Award, which this year was proudly presented to Arctic Gateway Group. The award recognized their achievements and commitment to reconciliation in Manitoba, advancing economic development.

The MPDA remains committed to fostering dialogue, supporting partnerships, and promoting initiatives that benefit both the mineral sector and Indigenous communities across the province.

For more information about MPDA's initiatives and upcoming events, visit www.mpda.ca. ✖

SEPTEMBER LUNCH PRESENTATION WITH COLE STOCKI



On September 18, 2025, MPDA hosted the September Lunch Presentation with Cole Stocki at the Golden Boy in the Manitoba Legislative Building. The event brought together government officials, MLAs, Deputy Ministers, and their assistants, and MPDA members of the mineral exploration sector.

Cole shared insights from his work experience in Manitoba's exploration sector, highlighting both the successes and opportunities for improvement within the

industry. His thoughtful perspective sparked meaningful discussion on how Manitoba can continue to strengthen its position in mineral exploration and development.

MPDA extends sincere thanks to Cole Stocki, our sponsor Tria Products, and to all who attended the lunch presentation.

For more information on upcoming MPDA events, visit www.mpda.ca. ✖

MANITOBA MINERALS WEEK 2025: *Celebrating Copper*

On Tuesday, May 13th, we celebrated Manitoba Minerals Week 2025, shining a spotlight on copper.

This year's event was a success thanks to the incredible support of our Lobby Day sponsors, Tria Products and Hudbay Minerals, whose dedication helped us showcase the importance of mineral exploration to all Manitobans.

Sponsors had the unique opportunity to meet directly with Manitoba's political leaders and decision-makers, making their voices heard at the heart of our province. The day continued into the evening at the Legislative Reception, where our members had the opportunity to engage with government officials and other sector companies. ✕





PROVINCE OF MANITOBA

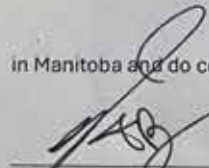
PROCLAMATION

- WHEREAS** critical minerals, metals, and petroleum are part of our everyday life and contribute to our high standards of living; and
- WHEREAS** the mineral and petroleum industries are Manitoba's second-largest primary resource industry, with a production value of \$2.6 billion in 2023, employing over 3,895 workers and generating millions of dollars more throughout the value chain; and
- WHEREAS** it is important to recognize the rich history of our resource communities, and the strong-willed, self-reliant residents who are the backbone of the mineral industry, especially in the north, who have willingly taken on the challenges needed to build and sustain an industry and community; and
- WHEREAS** it is necessary to promote public awareness of the benefits and impacts of the mineral resource industry and its products through education and access to information so that Manitobans can make informed decisions; and
- WHEREAS** it is important to recognize the significant improvements the mineral industry is making in economic reconciliation, environmental management, emergency response preparedness, and occupational health and safety; and
- WHEREAS** Geoscience plays a key role in the research and development that leads to the production of many critical minerals and metals used in daily life, which are essential for a low-carbon economy and green energy transformation; and
- WHEREAS** by encouraging partnerships between government, Indigenous peoples, industry, labour, and communities, we can make Manitoba the most effective, technologically advanced, environmentally and socially responsible mineral and petroleum resource developer in Canada, while respecting and incorporating the traditional knowledge and rights of First Nations; and
- WHEREAS** upholding our treaty obligations to First Nations, and Metis is essential in all aspects of resource development, ensuring that Indigenous communities are partners in decision-making, land stewardship, and the equitable sharing of the benefits derived from the land, in line with our commitments to economic reconciliation; and
- WHEREAS** Manitoba Minerals Week is an opportunity to celebrate the contribution that our mineral and petroleum endowment and the related industries make to the Manitoba economy and the people of Manitoba,

NOW THEREFORE BE IT KNOWN THAT WE, the undersigned, do hereby proclaim the week of Sunday May 18 to Saturday May 24, 2025 as

MANITOBA MINERALS WEEK

in Manitoba and do commend its thoughtful observance to all citizens of our province.


The Honourable Wab Kinew
Premier of Manitoba


Honourable Jamie Moses
Minister of Business, Mining,
Trade and Job Creation

CRITICAL MINERALS SHORT COURSES HIGHLIGHT ONE OF THE FASTEST- GROWING AREAS OF CANADA'S MINERAL INDUSTRY

The MPDA hosted the Critical Minerals Short Courses on September 17–18, 2025, at the Viscount Gort Hotel in Winnipeg. The two-day program brought together Indigenous communities and exploration sector professionals for an exciting opportunity to learn, connect, and build skills in one of the fastest-growing areas of Canada's mineral industry.

Led by instructors Carl Braun, Cole Stocki, and MaryAnn Mihychuk, the courses blended in-person and online learning, with two of the three sessions offered virtually to increase accessibility. Participants gained practical knowledge on exploration, development, and the role of critical minerals in shaping Manitoba's economic future.

The positive feedback highlighted the value of creating education opportunities, reconciliation, and workforce development.

MPDA looks forward to building on this success and continuing to provide training that supports both industry growth and Indigenous participation in Manitoba's mineral future.

Thank you to our sponsors, MEIA and the Province of Manitoba, for their generous support in making this event possible.

For more information on upcoming MPDA courses and initiatives, visit www.mpda.ca. ✕



 **MPDA** Manitoba Prospectors and Developers Association

CRITICAL MINERALS SHORT COURSES

Register for an intense short course. Our courses offer an in-depth understanding of the critical mineral sector.

COURSES:

- NEW** Manitoba Rules and Regulations (1 day)
- Business and Finance (2 days)
- Environmental Monitoring/Guardians (1 day)
- Prospecting/Geological Assistants (1 day)

ONE DAY COURSE PRICE:

- MPDA Member: \$135.00 +GST
- MPDA Member: \$175.00 +GST
- Non-Member: \$225.00 +GST

TWO DAY COURSE PRICE:

- MPDA Member: \$185.00 +GST
- MPDA Member: \$230.00 +GST
- Non-Member: \$285.00 +GST

REGISTER NOW **NOVEMBER 5-6, 2025**

 Viscount Gort Hotel, Winnipeg
 (204) 299-4036
 www.mpda.ca



FROM COURTROOM TO TREATY TABLE: BILL GALLAGHER HEADLINES MPDA 2026 GALA



Event Details

Date: Thursday, April 9, 2026

• Location: Assiniboia Downs

• Registration: <https://mpda-108480.square.site/reconciliation-forum-and-gala>

The Manitoba Prospectors and Developers Association (MPDA) is happy to announce that Bill Gallagher, renowned author, resource lawyer, and historian will be the keynote speaker for the upcoming 2026 Gala. As a strategist, forecaster, and lawyer with the largest victory streak in Canadian history, Gallagher brings a unique perspective that spans multiple professional disciplines and decades of experience in Canada's most challenging resource management sectors.

A Strategic Mind Shaped by Real-World Experience

Bill Gallagher's career represents a combination of legal expertise,

regulatory insight, and project management across Canada's resource industries. His approach to "understanding the native interconnections, eco-activist linkages, and government responses is essential for planning successful resource strategies"

Throughout his career roles, he has gained insights and experience across different professional roles. His background as a corporate lawyer, energy regulator and treaty negotiator, provides him with insights to approach challenges in Canada's resource sector.

Gallagher's expertise spans all regions of Canada, with achievements in defusing high-

stakes conflicts and facilitating successful agreements. His career highlights include:

- **Resolving New Brunswick's "War in the Woods":** Successfully defusing native logging tensions during one of the province's most contentious forestry disputes.
- **Oil Patch Alberta eco-terrorism:** Providing strategic guidance during periods of eco-activism and operational disruption.
- **Guiding Inco's Voisey's Bay Success:** Playing a key role in guiding Inco's impact benefits agreements to successful conclusion in what has been recognized as Canada's most complex resource dispute.

Join Us for an Unforgettable Evening

The MPDA 2026 Gala promises to be an evening of exceptional insight and networking. Bill Gallagher's keynote address will offer attendees rare access to the strategic thinking that has guided some of Canada's most successful resource management outcomes. ✕



Mapping Structure? Ask us about our proprietary Digital Matrix VLF-EM!

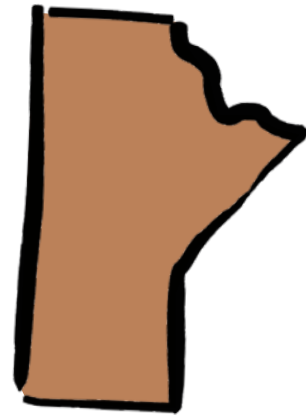
TERRAQUEST

AIRBORNE GEOPHYSICS

Horizontal Gradient Magnetics
Digital Radiometrics
Digital Matrix VLF-EM

Tel: 905.477.2800
info@terraquest.ca
terraquest.ca

History of COPPER IN MANITOBA



Copper has an important role in Manitoba's history, from Indigenous use to modern mining operations. As the world transitions into cleaner energy and sustainable development, copper continues to play a key role in Manitoba's industrial development.

Copper and Indigenous Culture

Copper was important for Indigenous culture in the region. It played an important role in Indigenous societies, as part of trade networks and also as a material with ceremonial and symbolic meaning.

Before European settlement, it was traded throughout North America. Copper tools, ornaments, and weapons have been found in archeological sites. Evidence shows that copper was used in mortuary contexts, marking social division and status within communities. Indigenous people's use of copper reflects the cultural importance in their culture.

Early Exploration

Manitoba's mineral potential began in the 1800s with fur traders and surveyors who noted valuable geological features. Gold and nickel took more importance with European interest; however, copper was never far behind.

Copper gained more demand by the late 19th and 20th centuries along with industrialization and electrification of North America. The use of copper increased in industry sectors like wiring, motors, and telecommunications.

Flin Flon: Manitoba Copper Giant

In 1915, prospectors Tom Creighton and David Collins discovered the Flin Flon copper-zinc ore. The Flin Flon discovery would transform Manitoba into a mineral powerhouse. By the late 1920s, Flin Flon attracted the attention of Hudson Bay Mining and Smelting (Hudbay Minerals), establishing large-scale operations in the region, as other mineral discoveries were made in Snow Lake and Lynn Lake (nickel).

Today, Hudbay Minerals is the third-largest producer of copper in Canada, with operations in British Columbia and Manitoba, following its acquisition of Copper Mountain Mining in 2023. The acquisition created a combined company with significant copper assets in North America and South America, positioning Hudbay as a leading Americas-focused copper miner. (www.hudbay.com)

The first productive copper mine in Manitoba was the Mandy Mine, which began operations in 1916. Discovered in 1915, it was developed by Mandy Mining Company, a subsidiary of Tonopah Mining Co. of Nevada. The mine produced copper, as well as silver, gold, and sulphides.

Flin Flon symbolized the prosperity and stability that minerals could bring to Manitoba. Thriving communities were built thanks to industry workers and their families. Mining operations created benefits like jobs and supported other industries, including transportation and manufacturing. The provincial government also benefited from tax revenues and royalties, supporting infrastructure, healthcare, and education.

Copper in the Global Energy Transition

Manitoba, with its copper, has an opportunity to become a key player in the low-carbon future supplying critical minerals to the global market. Today, modern techniques are helping geologists uncover new deposits and companies are investing in minimizing waste and environmental impacts.

Collaboration with Indigenous governments is central to the future of Manitoba's extraction sector. Combining Indigenous knowledge with modern techniques can help Manitoba to set a standard for environmental stewardship and social responsibility.

Copper has left a mark in Manitoba's history; it has shaped communities, powered economies, and is now at the forefront of the global energy transition. ✖



Reclaiming the North:

By Lyndon McLean

HOW ARCTIC GATEWAY GROUP IS BUILDING A NEW FUTURE FOR CHURCHILL AND BEYOND

On the shores of Hudson Bay, an economic renaissance is underway. It's being led not by foreign corporations or faraway governments, but by a homegrown, Indigenous-owned group with a bold

vision for sovereignty, sustainability, and trade in Canada's North.

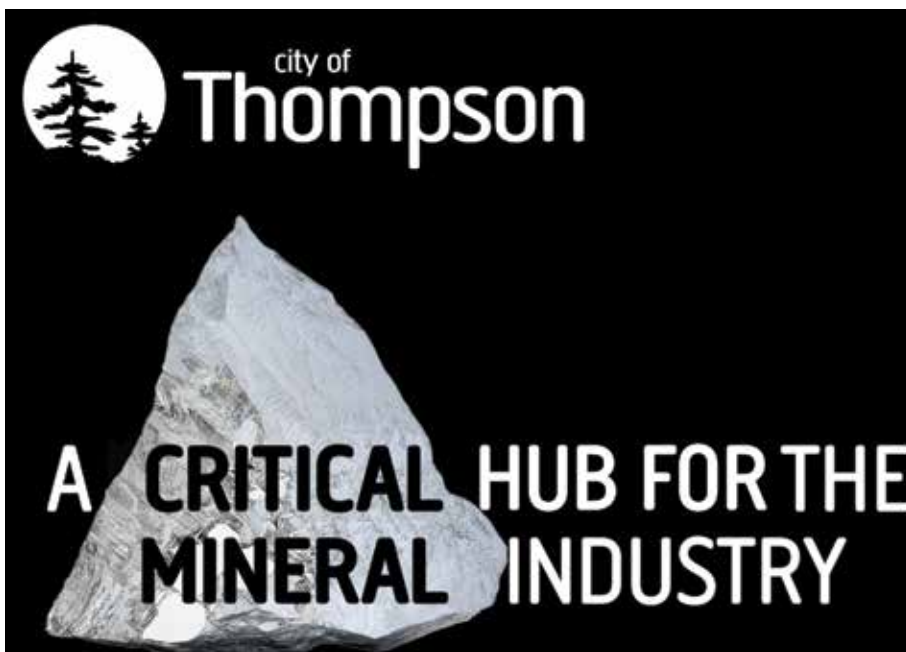
Earlier this year, Arctic Gateway Group was awarded the Indigenous Reconciliation Award at the

Manitoba Progressive Development Association gala – a recognition of both its revitalization efforts and a broader commitment to reconciliation and regional equity.

"Churchill is uniquely positioned to diversify trade, serve the country's export needs for energy, critical minerals, agriculture, energy and more, while ensuring long-term benefits for Indigenous and northern communities," says CEO Chris Avery. "This infrastructure belongs to the people of the North – and now it's being run by them, and we're grateful this work has been recognized with this award."

A Gateway reclaimed

Arctic Gateway Group owns and operates the Hudson Bay Railway, the Port of Churchill, and the Churchill Marine Tank Farm, an





interconnected system that provides a strong foundation to support trade in northern Manitoba and western Canada. It's now being transformed into a modern hub for global exports of critical minerals, agricultural goods, and more.

What sets the operation apart is not just its strategic importance, but also who owns it. The company is majority-owned by One North, a consortium of 41 First Nations and northern communities. Another 10 per cent is held in trust for the Kivalliq region of Nunavut. Arctic Gateway is not just operating in Indigenous territories – it is Indigenous.

"Our ownership won't let this infrastructure be neglected like it was in the past," Avery says. "This isn't just a railway or a port. It's part of the community."

Infrastructure that serves a bigger vision

Churchill, a remote town best known for polar bears and long winters, is home to North America's only deep-water Arctic seaport connected by rail. The Hudson Bay Railway runs from Churchill south to Gillam and then to Thompson and The Pas,

DEC
Drilling Excellence Certification

CDDA
Canadian Drilling Development Association

COR
MHCA

CJR DRILLING
DRILLING THE CORE OF CANADA

cydrilling.com



where it goes north to Flin Flon and connects south to the broader Canadian National (CN) network.

For decades, the port thrived as a grain shipping hub, at one point moving as much as 800,000 tons of western Canadian grain annually. But after a shift to American ownership in the 1990s, which did see initial success, the rail and port infrastructure fell into neglect. In 2017, the rail line washed out and remained inoperable for 18 months, cutting off northern communities from essential supplies.

“Back then, the profits went south to the U.S.,” Avery said. “There was no reinvestment. It was about extraction, not development. Now the profits stay in Manitoba, and the communities that rely on the railway the most are the communities that form AGG’s ownership group.”

Since acquiring the assets, Arctic

Gateway has restored the railway – reducing travel times by 10 per cent, enabling faster shipments of both passengers and goods, and doubling the weekly freight traffic on the railway. This year, the company is also turning its focus to the long-neglected port, fixing critical elements like the wharf face and deck, as well as building more storage capacity, to prepare for a new generation of trade.

A new era of exports: Minerals, agriculture, and sovereignty

With the global push for renewable energy and advanced technology, critical minerals like lithium and rare earth elements have become central to Canada’s national strategy. Arctic Gateway is positioning itself as a key artery in that supply chain.

Last August, the company exported 10,000 tons of critical mineral concentrate from Manitoba to

Europe. This year, it expects to double that number and is tripling its storage capacity in Churchill to keep pace with demand.

“We’ve had great conversations with customers,” Avery says. “They want to ship, but they need to know the minerals are protected from the elements, so we’re investing in storage now.”

While critical minerals are the star, agricultural products remain central to Churchill’s future. Potash, a key fertilizer and industrial mineral, is also in play – though handling it will require new infrastructure. Avery describes Arctic Gateway as “a startup with a legacy,” working to modernize while still understanding the full needs of its evolving customer base.

“We’re building the foundation,” he notes. “Once that’s in place, we can grow into containers, potash, whatever our customers need.”

Arctic sovereignty meets economic opportunity

The economic implications extend beyond Churchill. Arctic Gateway estimates its work could support over 5,500 direct and indirect jobs across Canada and drive more than \$1 billion in economic activity. If the federal government moves forward with its Churchill Plus plan, which



NORSEMAN SUPPLY.CA

Core Boxes – Racks • Geology Equipment
Staking – Line Cutting • Exploration Personnel • Drill & Helicopter Pads

204-668-3700

WHILE CRITICAL MINERALS ARE THE STAR, AGRICULTURAL PRODUCTS REMAIN CENTRAL TO CHURCHILL'S FUTURE.

includes an upgraded railway, year-round icebreaking, Port investments, an Energy Corridor, and more, the economic return to Manitoba and Canada would be even greater. But for Avery, the real value lies closer to home.

"We want to provide real jobs for Indigenous and northern youth – jobs where they can stay in their communities, raise families, and thrive," he says. "If you have to move to the city just to make ends meet, that's not everybody's idea of prosperity. We're trying to change that."

Avery also notes that Arctic Gateway's infrastructure is essential to Canada's northern sovereignty. The region's airport has a 9,200-foot runway capable of handling any aircraft in the world. The tank farm fuels communities and aviation alike, providing a critical logistics base in a rapidly changing Arctic.

"With geopolitical tensions where they are, this infrastructure gives Canada flexibility," Avery says. "It's not just about trade; it's about sovereignty."

A new oath, built locally

Support from the federal and provincial governments has been instrumental, according to Avery. Their willingness to invest in Churchill signals a shift in how the North is valued – not as a periphery, but as a gateway.



"Manitoba is a maritime province in every way that counts," Avery says. "And Churchill gives us access to markets in Europe, the Middle East, Africa, even South America."

Meanwhile, trade with Nunavut's Kivalliq region is increasing. Last year, three vessels departed Churchill with goods ranging from construction materials to trucks bound for remote Arctic

communities. Arctic Gateway expects that number to grow.

Ultimately, Arctic Gateway is betting that local control, combined with long-term vision, can turn Churchill into a global hub once again – this time, on Indigenous terms.

"We're open for business," Avery says. "And we're building something that finally benefits the people who live here." ✕



INDUSTRY LEADERS IN SPECIALIZED DRILLING & DRILLSIDE INNOVATION

DGI
GEOSCIENCE

MAJOR
Drilling

KORE
GEOSYSTEMS

FOREMOST CLEAN ENERGY LEVERAGES URANIUM PARTNERSHIP AND MANITOBA GOLD-LITHIUM PROGRAM IN DUAL-COMMODITY STRATEGY

The transition to clean energy requires a diverse mix of critical minerals, and Foremost Clean Energy (NASDAQ: FMST, CSE: FAT) is building a leading position in this new economy. While its roots are in lithium, the company's vision has expanded to include the foundational metal for nuclear power: uranium. This strategic evolution led to a landmark partnership with Denison Mines Corp. (TSX: DML, NYSE American: DNN), a premier uranium developer with a \$3.5 billion market cap, giving Foremost an option to earn up to a 70 per cent interest in 10 uranium exploration properties in the world premier uranium district, Athabasca Basin. To reflect this expanded, multi-commodity focus, the company recently changed its name from Foremost Lithium to Foremost Clean Energy.

However, expanding into Saskatchewan has not meant neglecting high-potential assets in Manitoba. With gold prices soaring near \$3,900 USD per ounce and bullish forecasts pointing to \$5,000 by 2026, Foremost has strategically turned its attention back to its exciting, 100 per cent-owned Jean Lake Gold-Lithium Property in Snow Lake. The company is now executing a dual-commodity drill program, with rigs turning simultaneously at Jean Lake in Manitoba and at its Murphy Lake Uranium Project in Saskatchewan, providing shareholders with leveraged exposure to two of the hottest markets in the mining sector.

A dual-commodity strategy for maximum impact

This parallel drilling strategy is a core part of Foremost's value-creation model. While the primary goal is to become a significant uranium explorer in the Athabasca Basin, its 100 per cent ownership of Jean Lake provides a unique advantage.

"Our new and current shareholders may be invested in

Foremost for its uranium potential," says Jason Barnard, President and CEO of Foremost Clean Energy. "But by simultaneously advancing a high-grade gold asset that we already own outright, we are using the gold market's incredible momentum to build a stronger, better-funded company. Every metre drilled at Jean Lake de-risks that asset and adds immediate potential value. We're delivering catalysts on two fronts."

Building on a foundation of high-grade discovery in Manitoba

The 2,476-acre/1,002 Jean Lake property is located near the historic mining centre of Snow Lake, within the prolific Flin Flon-Snow Lake greenstone belt of the Canadian Shield. This world-class geological terrain is renowned for its significant gold endowment and is just miles away from Hudbay Minerals' core operating area, which has produced more than 1 million ounces of gold at its Lalor Mine.

The current 2,500-metre diamond drill program is designed to expand on the exceptional results from the 2022-2023 campaign, which confirmed significant mineralization with highlights including:

Gold

- 7.50 g/t on over 7.66 m including 3.28 ounces per ton gold over 0.48 m;
- 11.27 g/t Au over 2.75 m including 91.8 g/t Au over 0.32 m

Lithium

- 1.26 per cent Li₂O over 3.35 metres

Figure 1 (top of next page) illustrates location of the 2022-2023 lithium and gold intersected gold and drill holes.

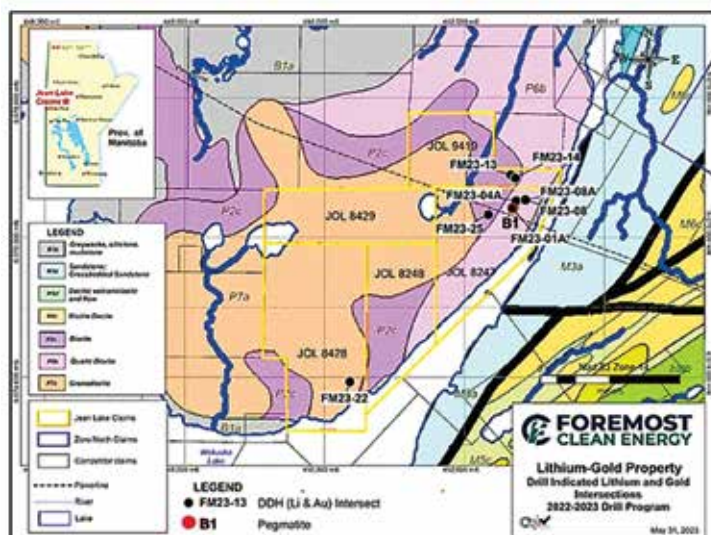


Figure 1. Lithium and Gold Intersections Drill Holes.

Planned drilling will follow up on these strong results, assessing the potential for additional gold mineralization at depth along and aims to delineate and expand the near-surface B1 spodumene-bearing pegmatite.

A strong foundation in Manitoba's snow lake region

Jean Lake is a cornerstone of Foremost's broader presence in Manitoba. Its four core "Lithium Lane" projects – Zoro, Jean Lake, Peg North, and Grass River – spans over 43,000 acres (17,513 hectares). This portfolio includes the Zoro Property, which hosts a maiden inferred resource on Dyke 1 of 1,074,567 tonnes at 0.91 per cent Li_2O , and remains open in all direction for further resource building. To date, pegmatite dykes that have been discovered at Zoro exhibit excellent grades and drill-indicated widths up to 1.4 per cent over 49.8 m demonstrating the district-scale potential of its land package.

This portfolio has garnered strong support from the Province of Manitoba, evidenced by an aggregate of \$900,000 in grant funding from the Manitoba Mineral Development Fund (MMDF).

“Foremost stands as a reputable company that has achieved remarkable advancements on their properties in Manitoba,” says Edward Suzuki, Program Manager at the MMDF. “They are widely recognized for their substantial geological potential in terms of valuable mineral deposits. Through their diligent efforts, they have successfully identified and defined their lithium

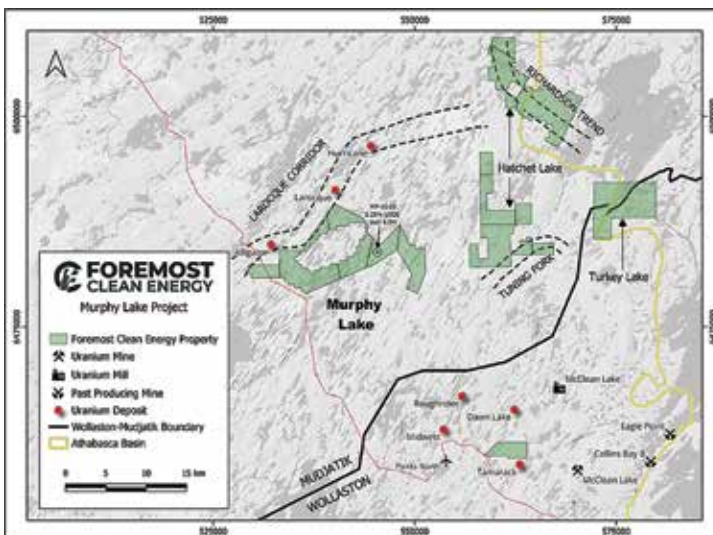


Figure 2. Murphy Lake South Property – Regional Map.

resources, clearly showcasing the significance of these essential minerals."

The company's commitment to Manitoba is also demonstrated through local partnerships. The Jean Lake program is being conducted with Manitoba-based contractors, including Rodren Drilling (Winnipeg), Gogal Air (Snow Lake) for helicopter support, and Moss Line Cutting (Snow Lake) for drill pad preparation, ensuring local economic benefits.

Concurrent Uranium Program in the world-class Athabasca Basin

While drilling advances at Jean Lake, Foremost is concurrently executing an eight-hole, 2,500-metre diamond drill program at its Murphy Lake South Uranium Property in Saskatchewan. This program is testing high-priority targets for unconformity-style uranium mineralization, following up on historic results from its partner, Denison Mines. The Murphy property is in a highly prospective area of the Athabasca Basin, adjacent to the Larocque Lake Conductive Corridor, host to IsoEnergy's Hurricane Deposit, one of the world's highest-grade published indicated uranium resources of 48.6Mlbs U₃O₈ at 34.5 per cent U₃O₈ and inferred resource of 2.7Mlbs at 2.2 per cent U₃O₈ (figure 2 above).

A strategic partnership for a stronger future

Foremost's partnership with Denison Mines is a cornerstone of its growth strategy. The agreement not only provides a path to ownership of a large, prospective

THIS PORTFOLIO HAS GARNERED STRONG SUPPORT FROM THE PROVINCE OF MANITOBA, EVIDENCED BY AN AGGREGATE OF \$900,000 IN GRANT FUNDING FROM THE MANITOBA MINERAL DEVELOPMENT FUND (MMDF).

uranium land package but also made Denison Foremost's largest shareholder, with an approximate 19 per cent equity position. This significant investment underscores Denison's belief in the Foremost team and provides the company with best-in-class technical expertise, financial support and corporate guidance.

Foremost Clean Energy (NASDAQ: FMST, CSE: FAT) is committed to being a responsible explorer in both Manitoba and Saskatchewan. With two active drill programs underway, targeting two of the world's most

sought-after commodities, the company is positioned for exciting transformative period offering a unique front-row seat to potential discoveries in both gold and uranium.

For further information, please visit www.foremostcleanenergy.com.

Forward-Looking Statements: This article contains forward-looking statements. Investors are cautioned that any such statements are not guarantees of future performance and that actual results may differ materially from those in the forward-looking statements. ✕

PROVIDING MINING SOLUTIONS ACROSS THE NORTH

CHARTER SERVICES:

PASSENGER FLIGHTS
CARGO
FUEL HAULS

SCHEDULED FLIGHTS:

PASSENGER FLIGHTS
CARGO

WWW.CALMAIR.COM

BUSINESSDEVELOPMENT@CALMAIR.COM



A satellite with large blue solar panels and a silver cylindrical body is shown in the upper right corner. To its right is a faint white line-art diagram of a building or industrial structure.

**AME
ROUNDUP.**

Minerals for a Changing World

January 26 - 29, 2026

Vancouver Convention
Centre East

Registration Now Open

roundup.amebc.ca

THE HUNT FOR THE ELEPHANT'S TAIL

By Nikolay Bashaev, P.Geo

During recent years, the Canadian mining industry encountered a quite new challenge: most areas with rock exposed on the surface had already been visited, mapped, and sampled. This situation created some difficulties in additional exploration for all participants in the business. To overcome this problematic situation, different methods of exploration started to be developed by various companies. Our company, 7268425 MB Ltd, decided to take part in this unique activity and also began to develop a new exploration technique that can be used not only by companies but also by prospectors.

In the past, prospectors played a very important role in all phases of exploration. They were the first people to set out into the bush to find something special that could later be turned into a mine. So many mines in the world were discovered thanks to prospectors. In recent decades, however, this activity has been on the decline due to a number of factors. Unfortunately, there are not many young people involved in prospecting across Canada today. We can discuss why this is and how to overcome it, but that would probably be another article.

In the last 15 years, several new methods and techniques have been introduced in exploration, such as high-resolution satellite data, ambient noise seismology, fibre optic sensors in boreholes, and more. During the same period, the use of UAVs (drones) for various purposes in mining also became widespread. The main objective of using drones in mining is to obtain a variety of scientific data. These devices are used for LiDAR mapping, magnetic and radiometric geophysical surveys, DEM (digital elevation modelling), etc. Drones with multispectral and hyperspectral sensors help productively in the search for areas with various commodities such as gold, lithium, copper, etc.



Fig.1. Example of the colored vegetation anomaly.

One of the most common areas of application for drones is geophysical survey. Conventional aeroplanes and helicopters usually require an airfield of considerable size to maintain their operations. As they are controlled by pilots, it's almost impossible for them to maintain the correct line spacing. In contrast, drones do not require much space for take-off and landing, and the ability of UAVs to fly tight lines at lower altitudes isn't comparable to that of conventional aircraft due to programming.

Because of the drone's advantageous features – such as reasonable price, ability to take off and land in areas with very narrow spacing, and instant data transmission

– our company decided to use it for our grassroots project in southern Manitoba. The main purpose of the drone deployment was to find a colored biogeochemical anomaly (Figure 1) and, if such an anomaly was found, to take samples from the surrounding area. Since our site is located under a thick layer of glacial sediments, we took two types of samples – geochemical soil samples and biogeochemical vegetation samples. The combination of the two sampling methods gave us a broader range of interpretations for data that could potentially lead to the discovery of mineral deposit covered by a 30- to 40-metre-thick overburden. The application of the biogeochemical method makes it possible to evaluate the economic potential of regions where there is no exposed substrate. From the geochemical point of view, growing above-ground vegetation can be an extension of the bedrock covered by sediments. The chemical composition of plants and trees can provide important information about the presence of mineralisation in terrains densely covered by sediments.

The search for a new mineral deposit can be compared to the search for a hidden elephant. Under normal

conditions, the search for the hidden elephant (a new mineral deposit) begins with the identification of its tail (outcrop with mineralisation), which lies somewhere on the surface. Once the tail is found, this is often the first step in finding an elephant (a new mineral deposit). In the case of our project, we are looking for the tail of an elephant buried under 30 or 40 metres of ground. After spending several years in the same region, we were finally able to identify an area where all three anomalies such as coloured vegetation, soil and biogeochemistry occurred simultaneously. Now only the last step is missing – drilling the newly discovered anomaly.

Years ago, prospectors struggled through the bushes to find an outcrop of significant mineralisation. Today, this situation is almost impossible. Most of such outcrops were already found. However, if our technique, which consists of the following steps – fly drone, find coloured biogeochemical anomaly, sample anomaly, drill anomaly, make discovery – proves to be successful, it will allow prospectors to get back on track and make new initial discoveries. ✕

THE POWER OF PEOPLE, FOR OVER 65 YEARS

www.MacintyreMining.com



ALEX MACINTYRE & ASSOCIATES LTD.
MINING CONTRACTORS

1390 Government Road West Box 517 Kirkland Lake, ON P2N 3J5 | Telephone: 705.567.6663 | Fax: 705.567.4925



AUTOMATED MEASUREMENT OF CLAYS FOR BETTER MINE PLANNING

By Victoria Martinez and Lucinda Wood for the Saskatchewan Research Council

Whether in oil sands, kimberlites or lithium minerals, it's important to understand the presence of active clay minerals that can cause serious issues in many mills and tailings facilities once in operation. For projects where clay minerals are present, a better analytical approach is needed to more quickly and accurately identify and quantify these minerals.

In response to this, experts at SRC's Pipe Flow Technology Centre™ have developed an Automated Measurement Platform (AMP) that provides accurate, reliable, and quick measurement of clay minerals on site.

Many processes are affected by the active clays present and so it is important to be able to quantify them as

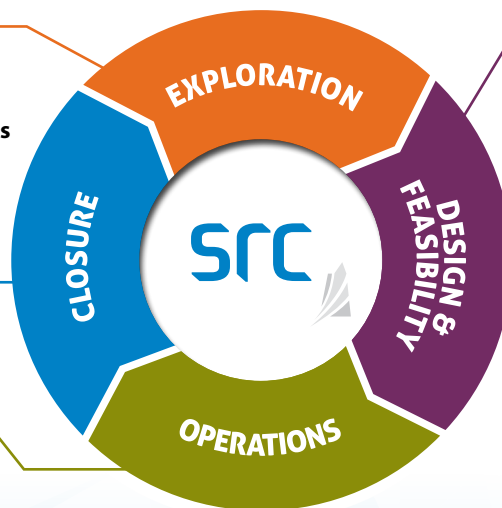
Quality services for every stage of your mining project

src.sk.ca/mining
workwithus@src.sk.ca

- **Geoanalytical testing** and automated mineralogy
- **Environmental analytical services** for testing water, soil, vegetation and biota
- **Automated** clay analysis

- **Closure** planning
- **Remediation** solutions

- **Plant performance** diagnostics and optimization
- **Air quality** monitoring



- **Sensor-based sorting** amenability
- **Energy assessments**, including renewables
- **Minerals processing** testwork and piloting

Visit our booth at the
 Central Canada Mineral
 Exploration Convention
 Nov. 3-4, 2025

Lithium | Potash | Base Metals | Precious Metals

early as possible. Activity in clays is determined by how those clays interact with cations in the environment – known as cation exchange capacity (CEC). Depending on what clays are present in an ore, the activity or CEC can vary, ranging from small in “inactive” clays, such as kaolinite, to very large in “active or swelling” clays, such as smectite.

Particularly where there’s a solid-liquid separation process or slurry pumps, the quantity of clay minerals present and their CEC can lead to significant operational problems.

“As soon as a mine has an active clay in it, there’s probably going to be a problem, and it’s going to be a big problem,” says SRC Research Scientist Jennifer Bentz, who works at the Pipe Flow Technology Centre™. “It can cause a shutdown or a stop to production to fix the issue or clean it up, so it is important to be able to identify and quantify the presence of clays during exploration or mine planning before they hit the plant. ”

In certain applications, active clays are beneficial. Foundries, for example, use active clays and a compound mixture called “green sand” to form the molds used for metal casting. Active clays are also used in cat litter because of their exceptional absorbent and clumping properties, and in water and soil treatments to adsorb contaminants from the environment, such as heavy metals, organics, industrial dyes and radioactive isotopes.

They can also be used as liners for landfills, tailings ponds, and heap leach processes due to their very low permeability, which prevents contaminants from escaping into the environment.

Whether a challenge or benefit, it’s important to measure clays

Individual clays are difficult to measure because they are small and share a similar crystal structure to each other, despite significant differences in CEC.

This means that many of the traditional analytical methods used to measure them (e.g., X-Ray Diffraction [XRD], Fourier Transform Infrared Spectroscopy [FTIR], Short-Wave Infrared Reflectance Spectroscopy [SWIR], and particle size) require intensive sample preparation to get accurate data, sophisticated equipment and robust chemometric models to resolve overlapping patterns.

Furthermore, these are typically not available on site and need to be sent out to external laboratories.

And this is where SRC’s AMP comes into play. The AMP combines automation and a tailored spectroscopic analytical technique to make on-site measurements of CEC using a cationic dye simpler, faster and more precise.

Applications for other measurements

SRC is also looking at applications for the AMP beyond clay measurement. The AMP can also be configured to perform other analytical measurements, including pH, conductivity or water hardness along with the CEC value.

“We can really tailor it to perform a wide range of automated analytical measurements,” Bentz says. “It just takes beta testing, and making sure all the sequencing within the platform happens in the right order and that it’s optimized for the client.”

This is a condensed version of a longer article. To read the full article, visit <https://www.src.sk.ca/blog>. ✖



info@adventureair.ca
204-345-8322
www.adventureair.ca



MAIN BASE: LAC DU BONNET
*Subbase locations in Manitoba and Ontario include
 St. Andrews, Churchill, Bissett, Red Lake and Pickle Lake*
Diverse fleet – Pilatus, Caravans, Otters
**Types of Work – Specialized charter services required for
 crew rotations, fuel hauls, cargo movements, surveys.**
Aircraft can be positioned for contracts throughout Canada.



GRID SETS SIGHT ON TWO UPCOMING DRILL PROGRAMS IN SOUTHEASTERN MANITOBA



Grid Metals is focused on critical metals exploration and development in southeastern Manitoba and expects to be drilling two critical metals projects this Fall. The company plans to conduct a cesium-focused drill program at its Falcon West project, which is bisected by the Trans-Canada Highway, and to test a potential high-grade nickel/copper target at its Makwa project.

At Falcon West, Grid has been hard at work understanding the cesium potential of the project after another junior exploration company, Power Metals, has received considerable investor attention for its Case Lake cesium project in northeastern

Ontario. Cesium is very rare and niche critical mineral and has a number of significant industrial applications, including petroleum exploration, defense, aerospace, and next-generation solar panel technology. Cesium products command exceptional pricing with cesium carbonate trading for up to USD\$190,000/tonne. It's also a unique metal in the sense that the scale of economic deposits is on the order of tens of thousand of tonnes, not million of tonnes. Grid has received a drill permit for the project and expects to be drilling this October. Based on historical drill results, including 2.2 m at 15.0 per cent Cs2O and 3.2 m at 4.6

A PERMIT HAS BEEN SUBMITTED TO DRILL TEST PAVO, AND A 2,500 M DRILL PROGRAM IS EXPECTED THIS FALL.

per cent Cs2O within 25 m from surface, Grid's modelling suggests the potential to outline a globally significant near-surface cesium resource.

In December 2024, Grid Metals announced an option and joint venture agreement with Teck Resources Limited to explore and develop the Makwa nickel project with a focus on the discovery of a Tier 1 magmatic nickel-copper-PGM-cobalt deposit. Since signing the deal, an aerial geophysical program has been completed, and a new grassroots nickel sulfide surface discovery has been announced at Pavo. The Pavo Anomaly is in a previously unexplored part of the property, and initial fieldwork led to the discovery of semi-massive nickel sulfide at surface (up to 1.1 per cent nickel in grab samples). A permit has been submitted to drill test Pavo, and a 2,500 m drill program is expected this Fall.

Grid believes success at either of the two aforementioned drill programs would be extremely well received by the market and can't wait to get the drill bits turning! ✖

PROSPECTORS & DEVELOPERS ASSOCIATION OF CANADA



MARCH 1-4
2026

**Don't miss
the world's
premier mineral
exploration and
mining convention**

- **27,000+** attendees
- **400+** hours of programming
- **1,300+** exhibitors
- Delegates from **125+** countries
- Meet investors & senior executives
- Unrivaled networking

pdac.ca/convention | Toronto, Canada

Teck

**Diamond
Sponsor**





STRATEGIC SAVINGS: TAKE CONTROL OF YOUR FACILITY'S ENERGY USE

In today's ever-evolving industrial landscape, it can be challenging to plan your future activities, investments, and costs. Managing your own operations while keeping an eye on the external environment is more than a full-time job — and you're doing it all with expenses at the forefront. With so much to consider at once, energy efficiency may be the last thing on your mind.

However, it's because of all these considerations that it's essential to reframe your priorities and put energy efficiency at the top of your list. It's a crucial resource for addressing concerns related to environmental and economic sustainability. Taking an "energy efficiency first" approach is an investment with guaranteed returns through bill savings, lower operational costs, and improved productivity. By addressing inefficiencies now, you'll benefit for years to come.

The good news is that you don't have to pursue this approach alone. Efficiency Manitoba is here to empower you to take control of your energy use and costs. By offering financial incentives, professional training, and ongoing support, they can help you implement sustainable energy practices that reduce your costs and contribute to a greener future.

How Efficiency Manitoba's Strategic Energy Manager Initiative can help

Efficiency Manitoba's Strategic Energy Manager Initiative is dedicated to supporting large industrial companies that are interested in taking a strategic approach to reducing energy consumption within the organization. This program supports organizations with financial incentives to offset the cost of hiring and maintaining a full-time dedicated energy manager. This on-site energy manager will be solely committed to identifying energy and cost saving opportunities in your organization and

developing a Strategic Energy Management Plan. Through their guidance and expertise, you can take the burden of leading energy efficiency initiatives off your shoulders and keep rising energy costs from impacting your bottom line.

What is a Strategic Energy Management Plan?

With Efficiency Manitoba's help, your dedicated energy manager will be responsible for putting together a Strategic Energy Management Plan, which is a formal energy reduction strategy for your facility. This plan will outline annual savings targets and potential energy-saving projects. As your organization progresses through the program, your energy manager will continue to receive coaching, training, and support to build their expertise and update your Plan annually.

Efficiency Manitoba will assist the energy manager throughout the entire process and facilitate collaboration across your organization, ensuring everyone is involved in creating a culture of conservation.

Program benefits and supports

The Strategic Energy Manager Initiative provides the following supports:

- A fully funded, professionally led Strategic Energy Management Workshop, bringing your facility together as a team and facilitating a collective approach to identifying and implementing energy-saving opportunities
- Ongoing coaching and funding for approved training courses, such as Certified Energy Manager training, to help your energy manager build their expertise
- An enhanced incentive structure for large capital projects on top of the standard Efficiency Manitoba offer incentives

- Extra incentives for low-cost and no-cost projects that don't fall under the existing Efficiency Manitoba offers, ensuring you're rewarded for taking additional steps to optimize your energy use
- Access to Efficiency Manitoba's extensive Equipment Lending Library, allowing your energy manager to borrow instruments and logging tools to better understand your organization's energy use
- Access to a variety of marketing materials, templates, and tips to communicate energy-saving initiatives in your organization and encourage employee involvement

By leveraging Efficiency Manitoba's extensive supports, your facility will be well-positioned to achieve substantial energy savings and meet sustainability targets.

Successful savings, by the numbers

Since its launch in 2023, Efficiency Manitoba's Strategic Energy Manager Initiative has already seen impressive results. Several large industrial organizations throughout Manitoba are participating in the program, including Boeing, McCain Foods, Malteurop, StandardAero, Winpak, the Royal Canadian Mint, Magellan, and Cenovus. Each of these organizations is benefiting from the extensive financial and technical support offered through the program, helping them cut costs and reduce their environmental impact.

The proof of the program's success is in the numbers. To date, this program has helped these industrial facilities achieve electricity savings of 12.5 gigawatt-hours (GWh) and natural gas savings of over 5.2 million m³. These savings, which is equivalent to the energy use of approximately 2,730 homes in Manitoba, also saves these organizations a combined \$1,427,611 in annual energy costs. That's money that can be reinvested to enhance profitability, boost operational resilience, and strengthen long-term competitiveness.

Project feature: Cenovus

Cenovus is Efficiency Manitoba's newest participant in the Strategic Energy Manager Initiative, having joined in April 2025. However, their commitment to energy efficiency goes much further back. Their Minnedosa-based ethanol plant has already participated in several Efficiency Manitoba offers, including their Custom Energy Solutions Program, Business Lighting Program, and Feasibility Studies.

"We've had great experiences working with Efficiency Manitoba, and we're looking forward to building on that momentum," said Rajesh Gupta, Energy Manager and Senior Technical Advisor at Cenovus. "Their Strategic

Energy Manager Initiative supports our ongoing efforts to reduce our plant's energy consumption."

After joining the program, Cenovus held its Strategic Energy Management Workshop in June. "It was a great first step to get buy-in from all our employees and make this a team effort we can all be proud of," said Rajesh.

As their energy manager continues to identify opportunities for the plant to reduce its electricity and natural gas consumption, Cenovus has already initiated some lower-cost energy-saving projects. They're also implementing an ISO 50001 energy management system that goes above and beyond the program requirements.

"I've been impressed with the support Efficiency Manitoba provides through this program," continued Rajesh. "Their team is always ready to support us as we work through our energy reduction strategy. I'm excited to see how much our plant can save as the program progresses."

Coming soon: Strategic energy management cohorts

Efficiency Manitoba's Strategic Energy Manager Initiative is ideal for large industrial facilities that use more than 20 GWh of electricity every year. However, plenty of industrial organizations use less than this. That's why they're introducing a new Strategic Energy Management Cohorts initiative, which is aimed at facilities using at least two GWh of electricity annually.

Instead of funding a single energy manager, this new program will bring multiple medium-sized organizations together to participate in a shared energy efficiency experience. Participants will still have access to workshops, coaching, technical support, and bonus incentives, offering many of the same benefits as the Strategic Energy Manager Initiative. Keep your eyes peeled in the coming months for an announcement about the launch of this exciting program!

Start saving energy today

If you're a larger industrial facility with a commitment to continuous improvement, innovation, and energy efficiency, Efficiency Manitoba wants to help you reach your financial and sustainability goals. Get in touch with their team by emailing energymanager@efficiencyMB.ca; they'll help you determine if participating in one of their Strategic Energy Management offers is the best next step on your facility's path to energy efficiency.

To learn more about Efficiency Manitoba's Industrial programs and other energy efficiency technologies, visit efficiencyMB.ca/industrial. ✖



COST-EFFICIENT ELECTRICAL INFRASTRUCTURE: PRACTICAL INNOVATIONS FROM ADRIA POWER SYSTEMS

By Adria Power Systems

In today's mining and industrial environments, controlling costs while ensuring operational reliability is more critical than ever. Electrical infrastructure plays a central role in both capital expenditure and day-to-day efficiency. At Adria Power Systems, we specialize in engineering robust, integrated, and field-proven solutions that deliver measurable savings across the life of a project.

One standout in our product lineup is the StarterSkid®. This all-in-one low-voltage distribution skid combines motor starters, variable frequency drives (VFDs), MCCs, and PTOs in a single, rugged enclosure. By eliminating the need for separate electrical equipment often field assembled on metallic struts, the StarterSkid® significantly reduces construction time, on-site wiring,

and commissioning costs. It comes preconfigured, prewired, and comprised of isolated compartments, allowing for safe load connections with minimal downtime. The result: a cost-effective solution that simplifies infrastructure and accelerates deployment.

When it comes to underground mine development, the MineMaxr® is an economic game changer. This robust PTO panel integrates a voltage booster that elevate the voltage to compensate for long cable runs – solving one of the most common energy losses in underground operations. In many cases, it enables up to 600 additional meters of mine development before a new electrical room is required. That means delayed capital investments and more flexible planning without compromising power quality or safety.

AS THE MINING INDUSTRY SHIFTS TOWARD ELECTRIFICATION, ENERGY MANAGEMENT BECOMES A MAJOR OPERATIONAL PRIORITY.

Cable durability is another key factor in minimizing downtime and replacement costs. That's where Adria's RigRunner® SHD-GC extensions stand out. Their molded connectors are 100 per cent water-resistant, a vital feature in wet or flooded underground environments. Built to handle the rough handling typical in mining operations, these cables are also backed by Adria's full-service repair program – from diagnostic evaluation to certified restoration. This extends the life of your assets and lowers your total cost of ownership.

As the mining industry shifts toward electrification, energy management becomes a major operational priority. Adria addresses this shift with its high-capacity charging solutions: the Libertas® single-output charger (up to 500 kW) and the Hydra® multi-output system (up to five MW, with up to 20 outputs). These centralized systems simplify charging infrastructure for electric

vehicles and battery-powered equipment. Fewer charging stations means lower installation costs, reduced cabling, and more efficient energy use – all while preparing your site for future electrification goals.

At Adria Power Systems, we believe that true cost efficiency is achieved not just through competitive pricing, but through smart design, rugged engineering, and comprehensive support. Our solutions are developed with real-world field conditions in mind, ensuring they perform when and where it matters most.

For operations seeking to reduce electrical infrastructure costs without compromising performance, Adria offers more than equipment – we offer a partnership built on trust, innovation, and proven results.

Adria Power Systems – A Partner You Can Trust. ✖

The Adria Power Systems logo is in the top left corner of the image. The main image shows a large, red and grey industrial charging unit in a dark, underground mine setting. The unit has a red door with a control panel and is surrounded by various cables and equipment. The scene is dimly lit, with some light reflecting off the unit's surfaces.

**YOUR TRUSTED PARTNER
FOR YOUR MINE POWER.**

FIRST PEOPLES DEVELOPMENT INC. IS HELPING BRIDGE LABOUR MARKET GAPS

First Peoples Development Inc. (FPDI) is a Manitoba non-profit organization that facilitates partnerships to develop and deliver training to employment programs.

Knowing that Manitoba has the second highest Indigenous population in Canada, ensuring that employment, skills and earning gaps are reduced is an important goal of FPDI. First Nations learners' success affects us all in a positive way. FPDI is at the forefront of this success.

FPDI manages the federally funded Indigenous Skills Employment Training (ISET) program which includes but is not limited to job start-up, career exploration, upskilling, wage subsidy, certificate programs, apprenticeship training, and post-secondary programs. Since 2010, and the onset of FPDI's administration of ISET, 38,162 participants were trained, 14,516 participants were employed, and 7,018 participants returned to school or remained in school.

At the core of FPDI's facilitation process is their partnership with 28 First Nations. Together, they build capacity to plan and invest in training activities based on varied community priorities to build stronger communities. Serving as an information, student and employee conduit, FPDI helps employers find wonderful candidates to meet their needs in a competitive environment. FPDI has a smart job board that connects employers to candidates through a skills matching platform, at no cost to employers.

Programs offered by FPDI vary widely from skilled trades, electrical, welding, plumbing, heat and frost

insulators, bricklayers, construction craft workers, heavy duty technicians, carpentry, heavy equipment operators, to degree programs such as practical nursing, and technology courses, such as robotics and drone programs. Through this training, FPDI provides real opportunities for participants to affect their economic future as well as their families and communities.

Under the FPDI umbrella, there are other programs that are not First Nations-oriented and are open to all qualified Manitobans: the LauncHER into Trades, a women in trades project; the previous Apprenticeship Support Project, which assisted employers to hire Level 1 apprentices; a Labour Market Initiative-Employer Survey pilot in partnership with the federal government; the Tech for Seniors project, and many other initiatives.

FPDI also partners with educational institutions and employers to customize training that meet labour market demand and employer needs.

FPDI identifies and develops other ventures to promote job opportunities. Most recently, FPDI saw a need for food services in the Inkster Industrial Park area. At the Winnipeg Free Press building near Mountain and Fife, there was a vacant café which is now home to the FPDI Café, where you can get delicious meals prepared by two graduates of a line cook program. The line cook program was a partnership between FPDI and the Manitoba Tourism Education College.

There are so many ways that FPDI bridges existing gaps in the labour market. To learn more, go to: <https://fpdinc.ca/program/>. ✕

AT THE CORE OF FPDI'S FACILITATION PROCESS IS THEIR PARTNERSHIP WITH 28 FIRST NATIONS. TOGETHER, THEY BUILD CAPACITY TO PLAN AND INVEST IN TRAINING ACTIVITIES BASED ON VARIED COMMUNITY PRIORITIES TO BUILD STRONGER COMMUNITIES.



Facilitating partnerships to develop and deliver training to employment programs.



**Customized
Training**



**Real
Opportunities**



**Stronger
Communities**



*Discover
more*
fpdinc.ca



LMI
EMPLOYER
SURVEY

Canadian Employers

Receive a **\$50 gift card**
Be entered for a chance to win **\$10000**

www.fpdinc.ca/program/employer-survey
*one survey per business

Draw date is December 18

*Participate
today!*



Canada

Index to advertisers

Adria Power Systems.....	39	Multicrete Group of Companies.....	5
Adventure Air.....	33	Norseman Supply.....	24
Alamos Gold Inc.....	15	Northstar Air.....	IFC
Alex MacIntyre & Associates Ltd.....	31	Perimeter Aviation.....	7
Big Ice Services.....	13	Pinchin Ltd.	4
Calm Air.....	28	Saskatchewan Research Council.....	32
Cyr Drilling International.....	23	Stockholm Precision Tools.....	OBC
Dumas Mining.....	9	Terraquest.....	20
Efficiency Manitoba.....	IBC	Thompson Economic Development.....	22
First Peoples Development Inc.....	41	Town of Bissett.....	14
Hudbay Minerals Inc.	13	United Steelworkers Local 6166.....	14
Major Drilling.....	25	Vale.....	5
Manitoba Chambers of Commerce.....	42		



**FUNDING
NORTHERN
POSSIBILITIES**



SCAN ME

**For more information on the
Manitoba Mineral Development
Fund visit our website:
mmdf.ca**

An initiative of 



DEL Communications Inc.
SUITE 300, 6 ROSLYN ROAD, WINNIPEG, MANITOBA, CANADA
www.delcommunications.com

**DEL Communications Inc.
YOUR KEY TO SUCCESS.**

**WE OFFER OUTSTANDING PERSONAL
SERVICE AND QUALITY IN THE AREAS OF:**

- Creative Design
- Advertising sales
- Trade Publications
- Video Production & Editing
- Qualified Sales & Editorial Team



HELPING MINERAL AND MINING BUSINESSES SAVE

We work with mineral and mining businesses in Manitoba to help identify significant energy-saving opportunities.

Our programs offer financial incentives and technical support for various industrial technologies including:

- Compressed air
- Pumps, fans, and blowers
- VFDs for fans and pumps
- Industrial refrigeration
- Waste heat recovery
- Steam and water boiler systems
- Other process systems



GET IN TOUCH TO START SAVING

customsolutions@efficiencyMB.ca

efficiencyMB.ca/industrial | 1-844-944-8181

Scan the QR code
for more details.





Stockholm
Precision Tools



Every Structural Log Counts at the Core Shack

Auditable and traceable structural logging
is now possible with **StructMaster™**

StructMaster™ streamlines structural logging, ensuring consistency, accuracy, and minimizing human error.

Fully integrated with the SPT Ecosystem, it delivers complete data traceability and quality assurance, from rig setup to the core shack.

DRILL RIG
ALIGNMENT



DIRECTIONAL
SURVEY



CORE
ORIENTATION



STRUCTURAL
LOGGING



CLOUD SYNC
ECOSYSTEM



sales@sptab.com
sptab.com

Request your free trial today.

