

MINING, ENERGY AND MANUFACTURING

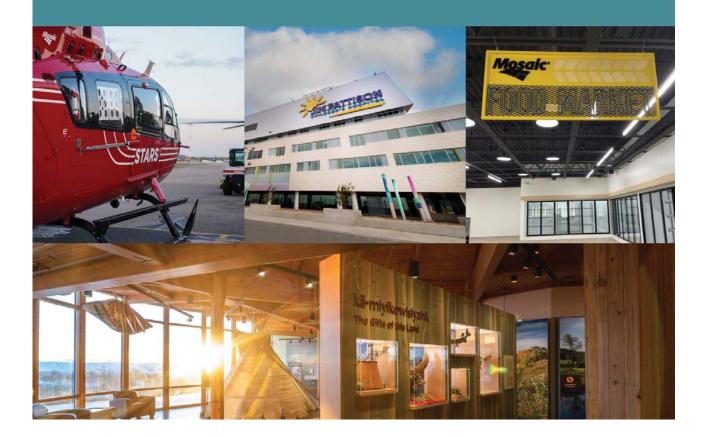






Investing in Community

Mosaic invests \$7 million annually through local partnerships that support food, water and sustainability, healthcare and education in Saskatchewan.



Esterhazy's Lawrence Berthelet returns home to Mosaic

BY ASHLEY BOCHEK

Mining has always been part of Lawrence Berthelet's life. He grew up the son of a miner at Esterhazy, started his career in the potash mine at Esterhazy, and recently returned to the company as vice-president of potash. We spoke with him recently about his career. The full interview follows:

Tell me a little bit about vour career.

"I grew up in Esterhazy and then went to the University of Saskatchewan. I got a Bachelor of Chemical Engineer-ing degree. I came back right away to work at Mosaic as a process engineer at K2. I was there for about seven years and then I went and worked out in the chemical industry, and then I went and worked out in the chemical industry, I worked for a company called Grace Dearborn, we made water treatment chemicals. At that point I took more of a management role in my career rather than a technical track. Although, when you are an engineer, the techni-cal ability obviously is your foundation and it follows you even as you progress either in the technical ranks or management ranks. From Dearborn, I went to work for the sodium sulphate plant in Chaplin. From there I went back to a manufacturing job at National Manufacturing. I worked there for seven years. I was a VP of Ops there at the end of my tenure. We made builders' hardware, we mackaged hardware products. we made fasteners there. Worked inter for seven Veens. I was a VP of Ops Inter at the end of my tenure. We made builders' hardware, we packaged hardware products, we made fasteners there. It was a very interesting business and very different from mining, but lots of similar ideas in terms of lean manu-facturing and standardized set-ups. There was some re-ally cool crossover. Inventory management I learned a lot about too. It was a really cool job and I would have stayed there forever, but we eventually sold to our larg-est competitor and then I went back to mining. I worked at Agrium for about five years underground as a mine manager. That is where I got some good underground ex-perience. Then, I went to the EPCM game, Engineering Procurement and Construction Management with AMEC at the time. I worked on the big project expansions that were going on in the 2004-2011 period, where there were lots of expansions. Then, I went back to school and got an MBA (Master of Business Administration) at the U of S at 49 years old. After, I went to work for a SNC Lavalin and opened an office in Saskatoon. I opened that office, and opened an office in Saskatoon. I opened that office, hired all the employees, and worked there for a few years. Then, I got called back to Mosaic to work on the K3 proj-ect. After that, I got called away to go work in Russia. ect. After that, I got called away to go work in Russia. I worked for a big fertilizer company called EuroChem and I was the head of the mining division. It was a great job. Iloved the people, the project, I was back in an opera-tions role, so I really enjoyed that. Then of course, Rus-sia went and invaded Ukraine and that brought that idea to a screeching halt, so I came home for awhile. Then, I went and worked on a junior mining project in Germany and we were just finishing up our prefeasibility study on that project when the Mosaic opportunity came up. I was happy to come back home and hopefully finish my career working for Mosaic again, where it all started. I am very happy to be back with such a great company and it is such a great province. a great province

When you worked with AMEC did you work on some of the new shafts around here?

of the new shafts around here? I worked on the expansion at Allen, I was the engineer-ing manager and I worked on Cory when they commis-sioned the red plant. When I was back at K3, we were about 1,200 feet in and I finished sinking those shafts and lining them, doing the underground development, con-verting the north headframe to a producing headframe with a man material cage in it. Then, I left before they finished the south headframe. I put in the conveyors, I think both conveyors were done by the time I left. Then, my cood friend Bernie Boutin finished off the south headmy good friend Bernie Boutin finished off the south head-frame. That project was completed in about 2022 and I left toward the middle of 2020.

Why did you choose mining, and did you always think you were going to be involved in mining? That is a great question. I remember being in grade 12 and my uncle was an accountant. He had a commerce de gree from the U of S, and I really liked my uncle and I thought I would be just like him. Then, I got to thinking I don't know if I can sit in an office all day and put numbers in tiny boyes. I don't think I would be harve. I realized I in this boxes, I don't think I would be happy. I realized I need to be outside and I need to see things being built. I liked to be involved and roll up my sleeves, that kind of stuff. At the last moment, I switched to engineering. I was always good at math, I had no trouble with math, physics, and chemistry, so I switched to engineering. I remember



Lawrence Berthelet

distinctly making that career choice when I really started to think about what accounting actually entailed. That is no slight to accountants, and I still love my uncle, but I am glad I am an engineer and not an accountant, I'll just say that.

What is a process engineer? You said you were a pro-cess engineer when you started with Mosaic.

A process engineer looks after the ore that comes up from under the ground, we crush it, grind it, screen it, and then separate the stuff we want from the stuff we don't want. There is a whole science around those operations like crushing and grinding, floatation, heavy media, crystallization, how all those process pieces work, how the equipment works, the dryers work, the cyclones, ev-erything, how it all works to be able to recover the maxi-mum amount of what you are after from the ore. That media in the to proceed process or proceed is his. really is what a process engineer's job is

Growing up in Esterhazy, was mining always a pos-sibility when you thought about your future? Absolutely. My dad worked for the mine in 1959, when

Absolutely. My dad worked for the mine in 1959, when it started. He started in construction there. Then, he even-tually went to work for IMC when they started operat-ing. He worked there his whole career. My sisters worked there for their careers. Mining was always an option for us and we were really exposed to mining and Esterhazy is a really good example certainly for continuous soft rock mining. It is not hard rock mining that you would find in Sudbury, Northern Ontario or Quebec. It is soft rock min-ing hengue use mine it with explicit user because ing because we mine it with continuous boring machines, but the rest of the pieces are the same like the hoisting, the conveyances, the power systems, and conveyor sys-tems underground, lots of the ancillary equipment. It is the same. It truly is a good example of what a real full mine looks like. Just the difference between hard rock and rock read. soft rock

What are some of the challenges of soft rock mining? We look at the ground from surface with 3D seismic. It is basically a mid energy wave goes down and acous-tically measures how it bounces back and then we can tell from those different readings what is down there. We are lucky in Saskatchewan because we have a lot of wide open space where we can set up and do 3D seismic. We also have a good continuous or body with some good reflectors in the way the geology is set up, so it really tells us what is down there and we can get by with a minimal amount of bore holes. Then, from there we can put a mine plan together and decide how to mine it and avoid the areas where we know could be low grading or could cause us issues with respect to flooding from above because us issues with respect to flooding from above because there are water bearing formations above our mining seam. The other thing that you have to remember about Esterhazy in particular, is the ore body is probably the highest grade, the most minable ore body in the world, and I have worked most of the other operations in the world. The fact that it is homogenous, prairie evaporates, it's a big lake that evaporated, and deposited our sylva-nite ore evenly, and allows it to mine large rooms, which improves our productivity. The other thing to remember

in soft rock mining is, however you are going to excavate, you have to make sure that your ground holds up geo-technically. We mine our rooms knowing that we have a good layer of salt above us that is hard and competent, we will bridge across the pillars we leave behind and make it to for activate that our and not sure our force subsidiance. it safe to extract the ore and not cause surface subsidence. If you over extract you will sort of crack your mine up and it will flood or you can cause some real grief in sub-sidence of the surface. That happens to the Germans and Russians quite a bit.

What does your new job entail as Vice-President of

What does your new job entail as Vice-President of Potash at Mosaic? Ilook after the operations piece. We have four facilities. Of course Esterhazy is the flagship, we have Colonsay, which we are currently operating as a swing plant based on demand so it is up and down based on variability in demand. We have Belle Plaine of course, which is our big-gest solution mine in the world. It's a very, very efficient operation that has run since the '60s and is a big part of our production. Then, we have Carlsbad in New Mexico where we make 600 tons of a K-Mag product, so potas-sium magnesium blended product down there which is a bit of a specialty product. bit of a specialty product.

You started with Mosaic way back and were there when K3 was under construction, and you're back in a senior position with Mosaic now, I am just wonder-

when KS was inder construction, and your back in a senior position with Mosaic now, I am just wonder-ing how much has the Esterhazy mine changed over the years from when you first started? When I started in 1986, it was just when the waterflow started and I started on water inflow, then went to pro-cess engineer. We fought that water for 35 years, but it has changed in the fact that Mosaic made the \$3 billion com-mitment to building the K3 mine and then decoupling the two mills, K1 and K2, from the old K2 mine workings and getting the ore delivered from K3 on 11 kilometer con-veyors so that we could have a mine that didn't have wa-ter flooding issues and we didn't have to spend all that money on pumping water and of course, the safety of our employees was paramount. They committed to another generation of mining in the area by building a whole sep-arate K3 mine which can supply the two mills through those two conveyors safely and efficiently. That is the big change. change.

What do you see in your future working in Potash?

Well, I do see retirement in my future. For the indus-try, I see more use of technology and automation to put people as far away as possible from areas where there is risk. Underground mining is always risky so, all the pot-ash companies are working toward developing systems of automation where the miner can operate apart from the mining face. We employ automation for efficiency, but also for safety.

Continued on page B6 🖙



Saskatchewan Mining Week: May 26 - June 1, 2024 Critical Careers for Saskatchewan's Critical Minerals





SMA Mining Association saskmining.ca @saskminingassoc in f 🙆 🕅





Morris Interactive and Cowessess First Nation awarded Canadian Institute of Mining Indigenous Partnership Award

The Canadian Institute of Mining (CIM) has awarded the first-ever CIM Indigenous Partnership Award to Cowessess First Nation and Morris Interactive for their collaboration on Morris Interactive 's Digital Transformation in Potash Mining (DTIPM) program which is delivered in partnership with The Mosaic Company. The award recognizes a "significant, ongoing contribution to the advancement of Indigenous reconciliation in the mining sector" and celebrates the collaboration to deliver a program of this nature in the potashindustry.

sector" and celebrates the collaboration to deliver a program of this nature in the potash industry. The DTiPM program was developed to give participants the knowledge, confidence, and skills to join and prosper within the potash industry. The program facilitates an extensive networking opportunity between students and industry employers, including The Mosaic Company. Since the onset, the program has achieved a success rate of over 83% in connecting graduates to employment or further education. The program has established a reputation built upon student success and outcomes, leading to a recent student recruitment pursuit that resulted in over 2,200 Indigenous applicants.

that resulted in over 2,200 Indigenous applicants. The program was piloted on Cowessess First Nation in 2022 through a partnership hat included Cowesses First Nation, The Mosaic Company, and Morris Interactive. Following this successful pilot, Mosaic committed \$1,000,000 to further the sustainability of the program over 5 years. "Thank you to the Canadian Institute of Mining for recognizing this innovative partnership and the program's impressive track record," says Lawrence Berthelet, Mosaic's Vice President of Operations – Potash. "Mosaic's investment in the DTiPM demonstrates our commitment to increasing representation in our workforce and advancing economic reconciliation in Saskatchewan."



From left: Rob Knibbs, Barry Sparvier, Benjamin Williamson, Mathew Cey, and a representative from CIM who presented the awards at the CIM Connect 2024 Awards Gala.



Benjmain Williamson and Barry Sparvier



Thank-you to Mosaic and Nutrien for your continued support in purchasing mine-ready underground vehicles!



Morris Interactive and Cowessess First Nation awarded Canadian Institute of Mining **Indigenous Partnership Award**

Continued from Page B4 Covessess First Nation. "It is an honour to receive the CIM Indigenous Partnership Award with Morris Interac-tive and Mosaic. The DTiPM program has benefited the community and all Nations with the training opportuni-ties and careers in the potash industry," says Barry Spar-vier, Director of Employment for Cowessess First Nation. The CIM Indigenous Partnership Award represents a major accomplishment and symbolizes the benefit of Indigenous Rights Holders, industry, and represents of holders working alongside one another to create life-changing outcomes for the students. "We're fortunate for the relationship we have with the Cowessess First Nation and The Mosaic Company. We bring our strengths and people to the table with one common goal in mind; con-necting graduates to meaningful employment within the industry," says Morris Interactive's CEO, Mathew Cey. The future looks bright as the sixth rendition of the program is slated to return to Cowessess First Nation in Awardt 6000 unders it oll hoccurs.

program is slated to return to Cowessess First Nation in August of 2024, where it all began.

About Morris Interactive

Founded in 2003, Morris Interactive is an award-win-ning consulting firm that has been working with orga-nizations to develop their people and their businesses. Morris Interactive believes their people and their rela-tionships are what drive business growth and success. They collaborate with clients of all sizes across multiple inductive including activatives mining oil and conindustries including agriculture, mining, oil and gas, construction, education, financial services, software, public sector, and healthcare, as well as with over 210

Indigenous and Metis organizations. The Digital Transformation in Potash Mining program was initially piloted by Morris Interactive on Cowessess First Nation in 2022, which was funded by IMII. Following the initial delivery. The Mosaic Company announced a long-term investment of 1 million dollars to partner with Morris Interactive and expand the program to more Indigenous students over the following five years.

About The Mosaic Company

The Mosaic Company produces and delivers millions of tonnes of responsibly produced potash and phos-phate fertilizers from mine to market—nutrients that are vital to feed crops that feed people everywhere—and serves farmers in 60 countries by increasing crop yields and improving nutrition for people and animals. Mosaic



From left: Mathew Cey, Barry Sparvier, Benjamin Williamson, and Rob Knibbs at the CIM Connect 2024 Awards Gala

pursues their mission to help the world grow the food it needs responsibly and sustainably. They are committed to being good stewards of the environment by reduc-ing our water use and greenhouse gas emissions, being

good neighbors through strong partnerships with local communities, and being a more diverse and inclusive company where every person feels valued and appreci-

B5



Construction Management

- **₩** Structural Steel
- 👽 Electrical
- ¥ Mechanical
- ¥ Earthworks
- 😼 Site Services
- V Underground Services

- ¥ Contingent Labour
- ¥ Equipment Rentals
- **V** Safety Supplies
- **Water Treatment Operations**
- Vater/Vacuum Truck Hauling
 - ¥ Hydrovac Services



Employment program makes an impact on Cowessess

BY RYAN KIEDROWSKI LOCAL JOURNALISM INITIATIVE REPORTER

A highly successful pre-employment program geared toward the mining industry is making big waves on one local First Nation. The Canadian Institute of Mining awarded the inaugural CIM Indigenous Partnership Award to Cowessess First Nation and Morris Interactive.

Award to Cowessess First Nation and Morris Interactive. The program from Morris Interactive—Digital Trans-formation in Potash Mining—is eight weeks in duration, giving participants what they need to confidently enter the potash industry. "I'm trying to be humble about it, but it is quite an honour to be picked as the very first awarded in this area," said Barry Sparvier, Director of Employment at Cowessess First Nation. "We're honoured to be to be a part of Morris Interactive's pilot project to start with, and then the success that it's had with ourselves and others— it's just unbelievable! I went to the awards presentation in Vancouver on Monday night, and it really made me realize what we've done, what we've participated in. It's progress within the reconciliation of our nation and partprogress within the reconciliation of our nation and part-nerships with institutes that can help our people. That's what it's proven to me.

'It's progress within the reconciliation of our nation and partnerships with institutes that can help our people.'

> —Barry Sparvier, Director of Employment at Cowessess First Nation

The DTiPM program ran as a pilot on Cowessess FN back in 2022 in partnership with Morris Interactive and The Mosaic Company. Since then, two of the five cohorts run by DTiPM have been on Cowessess FN, and Sparvier noted that of the 18 participants in total, 15 are ac-tively working in the potash industry. The next intake at Cowessess FN will begin in late August with seats for 12

people. "The industry is changing, evolving," Sparvier told the World-Spectator. "With this program, I think it's getting

these students ready for the evolution of the industry,

A huge attraction to the program is more than just

A huge attraction to the program is more than just landing a job, it's setting the stage for a lucrative career with training close to home that could mean getting a job in Esterhazy or Rocanville. "We have eight weeks of classroom setting, and we have different speakers from the industry coming in," Sparvier explained, noting that former students of the program and current employees in the potash industry comprise some of those guests. In fact, Sparvier noted his son—an engineer with Mosaic for 12 years—is one of those speakers.

his son—an engineer with Mosaic for 12 years—is one of those speakers. "He's so excited about his job. He really spreads the ex-citement to the students," Sparvier continued. "The last two weeks are actually done underground at Mosaic in different areas. Just to give them a taste of it and to show them what it's going to be like."

The DTiPM program boasts an 83 per cent success rate in linking graduates with employment or further educa-tion, and the future looks bright thanks to a million-dol-lar investment from Mosaic—cementing five more years.

Esterhazy's Lawrence Berthelet returns home to Mosaic

S Continued from page B3

What have you learned over your career working in potash?

I have learned that the best mines in the world are right here. Canada supplies around 40% of the world's potash supply from some of the best ore bodies in the world. Our disadvantage, of course, is that we are landlocked and we have to get to a port. So, we compete with Russians, Belar-ussians, a little bit with the Germans, because they have better access to ports and lower maintenance costs, those type of things. At balance, we all compete pretty well. I have learned that the resource we have is world-class and the people we have are world-class and our position in the industry is important and respected, not just for the companies that benefit in terms of profit, but for the community. The communities, the resources, the taxes we oromunity. The communities, the resources, the faxes we pay, the spinoff businesses with jobs and everything that the resource provides. I am proud to be part of a group that works to help the world grow the food it needs. Fer-tilizer is an important commodity. All commodities are important and they all have their place, but fertilizer and food are very important. People need to eat before they need to put gas in their car. Fertilizer provides that ability for us to feed a growing population and a hungry world. I learned little old Esterhazy and Saskatoon on the world scale, are super important to the world in terms of food production and food security. That is something I have learned as I travelled the world the last few years, I am always proud to say I am from Saskatchewan and that I work in the fertilizer industry. It is something I can really be proud of.

really be proud of.

Do you think people understand how important potash is for this region/area?

That is a really good question too. For us, our soil consistency or soil requirements we don't actually need much K (potassium) and that is what potash is, is the KCl, but certainly the corn and soybeans folks in the Western but certainly the corn and soybeans folks in the Western US need it, so from a customer point of view I think farm-ers definitely understand the value that we bring. I won-der though, whether or not the general public realizes the International impact that potash in Saskatchewan has in the world. It is a great point, and I think we try to do a job of educating people to understand that we work in a country where investment is stable, and people want to invest in Canada because for the most part the regulation and the stable government are good for investment, but I don't think they realize how important is to the world. and the stable government are good for investment, but I don't think they realize how important is to the world, especially potash mining in terms of delivering that prod-uct. We can do a better job of communicating that. When you compare the things that we do and we do correctly, especially in the area of environmental and ESG (Envi-ronmental Sustainability and Governance), we operate at the highest level and still compete with jurisdictions that dear't presents at the highest level

don't operate at the highest level. People can be proud of the way we mine and the bal-ance between resource, tax, profit, and the attention to the environment, and of course for the safety of our employees which again is not the same standard kept through the rest of the world in our industry and I know this first hand.

When your kid goes to work for a Canadian fertilizer manufacturing company they are going to be safe, they are going to be working to provide a noble product, and they are going to be working for a company that is going

be constantly trying to improve their environmental footprint.

Mosaic obviously plays a big role in Saskatchewan, but how big of a part does it play to you personally in

your life? Since I was born I was eating off a potash paycheck. My dad worked there for his whole career. The potash industry has played a super important role in my and my family's life forever, for as long as I have been around. I was born the same year they started in K1 and I have been around these people my whole life and I am happy to be. I have learned a lot being around it. It has been a huge rola in the surgest of my around and success in my family. role in the success of my career and success in my family

What do you see as the future in the potash industry

I think the potash is in a good shape in Southeast Sask. I think the potash is in a good shape in Southeast Sask. I think we are rolling with the recoil from the Russian invasion of Ukraine and the upset in the world market that caused. These thing happen cyclically in our fertilizer market. We always tend to overcorrect and the market takes a little bit of time to react, but I think with the good takes a little bit of time to react, but I finisk with the good and efficient operation of existing mines and the commit-ment to productivity that we all have—we and Nutrien, and eventually BHP will all continue to thrive for genera-tions because the ore bodies are so big and the demand will be there forever. I think the stability will continue. I think Jansen brings us to the next level.

When a new guy joins your hockey team and you know he is good and you have to suck it up and skate faster, you know the whole team improves. A rising tide raises all ships, and I think BHP's contribution to the industry will help us all.





Eye Exams, Glasses, Contact Lenses & Laser Surgery Referrals

Public geoscience investment drives exploration spending

The Government of Saskatchewan is investing \$10 million over ten years into the Saskatchewan Geological Survey's (SGS) Public Geoscience Initiative. This initia-tive is a key tool in driving mineral exploration activities and reducing mining investment risk in the province. It will allow the SGS to undertake new critical mineralsfocused geoscience programs and continue to provide industry with high-quality public data to make more in-formed investment decisions.

"The Government of Saskatchewan is committed to supporting the jobs and growth that nearly 13,000 min-ing and exploration workers have come to rely on," En-ergy and Resources Minister Jim Reiter said, "The funding for the Public Geoscience Initiative will strengthen the information available for industry to target develop-ment and bring more investment dollars into the province

This initiative reaffirms Saskatchewan's commitment to being one of the best places in the world to invest in mining and critical minerals. Launched last year, Securing the Future: Saskatchewan's Critical Minerals Strate-gy lays out four goals for growing our province's mining industry. The Public Geoscience Initiative will support all four of the strategy's goals:

 Including increasing the province's share of Cana-dian mineral exploration spending; • Doubling the number of critical minerals being pro-

duced;

Growing Saskatchewan's production of potash, ura-nium and helium; and
Establishing Saskatchewan as a rare earth element

 Establishing Saskatcheven as a fact case.
model of public geoscience resources in Saskatchewan has been invaluable to our exploration ef-forts," Appia Rare Earths & Uranium Corp. CEO Tom Drivas said. "These resources have provided us with critical data and insights that have helped reduce risks, improve invastment opnortruities and allowed us to improve investment opportunities and allowed us to target our exploration activities more effectively, increas-ing the likelihood of making significant discoveries."

"The continued investment in our mining industry by government is why Saskatchewan remains a world-lead ing destination for mining investment," Saskatchewan Mining Association President and CEO Pam Schwann said. "I hear from our members regularly that the prov-ince's competitive incentive programs and high-quality geoscience data are the main reasons why they chose to do business in Saskatchewan."

Saskatchewan is a leading destination globally for mining investment. In 2023, the province's mining in-dustry saw nearly \$13 billion in mineral sales, estimated dustry saw nearly \$13 billion in mineral sales, estimated to account for over 20 per cent of the Canadian total, the second highest of any province. Saskatchewan is also projected to lead the country in mining investment in 2024, with mineral resource development spending of nearly \$6 billion, - almost one-quarter of the national to-tal. Increasing production and diversifying our critical minerals and mining sector will ensure Saskatchewan continues to lead the way in sustainable development and remains on track to meet our Growth Plan goals. and remains on track to meet our Growth Plan goals.

Manitoba provides funding and forms partnerships to drive mineral development forward

The Manitoba government continues to strategically fund mineral development projects through the Manitoba Mineral Development Fund (MMDF) and undertake consultation and engagement to sup-port a thriving mineral development sector, Economic Development, Investment, Trade and Natural Resources Minister Jamie Moses announced today ahead of Manitoba Minerals Week, May 20 to 24. "Manitoba is rich with critical miner-

"Manitoba is rich with critical miner-als, giving us the opportunity to grow the economy and create good jobs for Mani-tobans, while making the province a low-carbon leader in the world," said Moses. "Our government is making strategic in-vestments and developing a critical min-erals strategy that will capitalize on that opportunity, while ensuring economic

prosperity and reconciliation in northern and rural Manitoba.

and rural Manitoba." The Manitoba government is provid-ing \$1.38 million to nine mineral devel-opment projects through the MMDF. The MMDF provides funding for economic development and mining projects that create Indigenous partnerships, increase local employment and stimulate invest-ment in northern Manitoba. Manitoba was just named one of the top 10 most at-tractive mining iurisdictions in the world. tractive mining jurisdictions in the world, the minister noted.

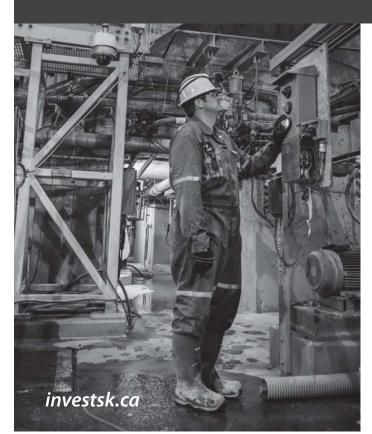
"Mineral development is an economic horse in Manitoba," said Chuck David-son, president and CEO, Manitoba Cham-bers of Commerce and chair of the Manitoba Mineral Development Fund board. "It provides increased opportunities for partnerships and development along with employment opportunities that will strengthen and greatly benefit communi-ties in the north and across the province.

ties in the north and across the province. Supporting and investing in projects that contribute to sustainable mineral devel-opment will help position Manitoba as a leader in the mineral sector." The funding provided to the nine proj-ects is expected to create a total of 58 short- and long-term jobs in northern Manitoba, as well as the formation of 10 community and Indigenous partner-ships, the minister said.

ships, the minister said. "The MMDF support to CBSGeosci-ence Ltd. allows a small, private compa-ny to apply leading-edge technology to an exciting project in an established min-ing camp that normally would be beyond our financial capacity," said Dr. Chris Beaumont-Smith, president, CBSGeosci-ence Ltd. "We are grateful to the MMDF technical committee for its recognition of

The federal government has identi-fied 31 minerals as critical for promoting green energy and sustainable economic success. Manitoba, which is sixth on the Fraser Institute Annual Survey of Mining Companies' Investment Global Attrac-tiveness Index, has 29 of these 31 critical minerals. Critical minerals are crucial for Manitoba's growth as a low-carbon lead-er and are essential to developing clean technologies, energy storage systems electric vehicles and other technologie systems that advance net-zero targets, noted the minister.

Fueling our communites



This Saskatchewan Mining Week, we're recognizing the hardworking individuals shaping the industry's success.

The mining sector employs more than 12,800 Saskatchewan residents and brought in nearly \$13 billion in mineral sales last year.

We're proud to host an innovative sector that fuels economic growth and supports classrooms, care and communities in our province.



Scan the OR code to learn more.



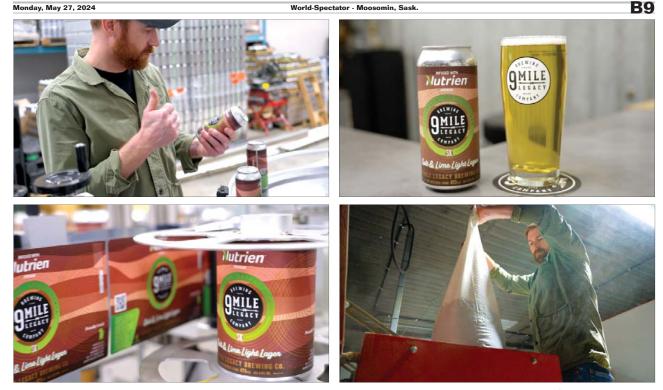
Nutrien

We're proud to be a part of **feeding 10 billion people** around the world by 2050.

But more than anything, we're proud to be from Saskatchewan.







Nutrien and 9 Mile Legacy Brewing Co. brew up the first-ever potash-flavored beer Attendees at the SMA Supply Chain Forum enjoyed the exclusive and innovative beer made with Saskatchewan barley and Nutrien potash

Imagine flavoring beer with potash. Sounds unusual, right? Yet, potash's minerality compliments light, limey lagers perfectly, and attendees at the recent annual Saskatchewan Mining Association (SMA) Supply Chain Fo-rum were able to taste (what we believe) is the first-ever potash-flavored beer.

Made in collaboration with 9 Mile Legacy Brewery based in Saskatoon, the inventive beer combined Sas katchewan barley grown and malted in the province with food-grade potash sourced from Nutrien's Cory potash mine

"Potash salt is used in beer quite a bit as a yeast nutri-ent or to modify water chemistry, but this might be the first time it's used as a flavoring adjunct," says Shawn Moen, CEO and Co-Founder, 9 Mile Legacy Brewing Co. "We get excited about collaborations where both parties are contributing knowledge and where we can learn from one another, and it's been fun to work with Nutrien to breathe life into what this concept should be."

The launch of the beer was targeted specifically for the SMA Supply Chain Forum, to provide local suppliers—

whose ingenuity, resourcefulness, and integrity are key to Nutrien's business-the exclusive opportunity to try this innovative product first-hand.

Nutrien has been involved since the inception of both the SMA Supply Chain Forum and Indigenous Min-ing Supply Chain Gathering. These annual events are a great opportunity for Nutrien's procurement, operations, great opportunity for Nutrien's procurement, operations, maintenance and projects teams to connect with its sup-pliers, strengthen relationships and learn about what's happening across the mining sector. With between 70 to 80 percent of Nutrien's potash business unit spend being with local Saskatchewan suppliers, and a target of at least 25 percent of its local spend to have an impact within the Indigenous communities by 2025 (which has already been overgeded). Nutrien a plice on its curplicer to partner and exceeded), Nutrien relies on its suppliers to partner and collaborate with its teams to safely produce the potash that feeds the world.

"We thought this beer could be a fun way to showcase a new way to use such an important crop nutrient besides a key component in fertilizer," says Josh Dodd, Director, Procurement, Potash. "For 9 Mile Legacy to get creative and find a delicious way to bring potash into a beer and for us to be able to share it exclusively at the SMA Sup-ply Chain Forum, with the suppliers and Nutrien teams who were integral in our ability to produce it was very exciting.

exciting." "These are always great projects to be part of," says Garrett Pedersen, COO and Head Brewer, 9 Mile Legacy Brewing Co. "When I'm brewing with new and interest-ing ingredients, I end up going down a rabbit hole deter-mining whether something is safe to consume, the pos-sibility of creating it from a brewing perspective, and if it will present well in the glass. Innovation has always been a massive part of 9 Mile Legacy Brewing and these types of projects make it feel like day one in the brewery all over avain."

From field to glass, the collaboration between 9 Mile Brewing Co and Nutrien proudly completes its journey within Saskatchewan, supporting the local economy. suppliers and community while celebrating the rich ag-ricultural heritage in the province. Stay tuned for more updates

The mining, energy and manufacturing industries are vital to our province.



Thank you for investing in Saskatchewan!





Daryl Harrison MLA for Cannington 306-443-4400 canningtonconstituency@sasktel.net

Warren Kaeding PAg. MLA for Melville-Saltcoats 306-7<u>28-3881</u> warrenkaedingmla@sasktel.net



Travis Keisig MLA for Last Mountain-Touchwood 306-334-3444 lastmountaintouchwood.mla@sasktel.net

Steven Bonk MLA for Moosomin 306-435-4005 stevenbonkmla@sasktel.net

Nutrien and Sask Polytechnic partnership empowers young women to explore diverse career paths

B10

Originally from Guatemala, Judith (Judy) Lopez-Paz immigrated to Canada at a young age with dreams of becoming a nurse. However, her path took an un-expected turn during her middle school years when she discovered her passion for trades. "I knew I wanted to go into the trades, but I wasn't sure which trade to choose," Lopez-Paz recalls. To explore her options and gain in-sight into various trade opportunities, Lopez-Paz participated in Saskatchewan Polytechnic's WITT Powered by Orano exploratory workshops in Rocanville. These workshops, hosted in partnership women aged 15 to 19 to different trades and encourage them to consider a career and encourage them to consider a career in this traditionally male-dominated field. Female professionals from underrepre-sented trades at the Nutrien Rocanville site volunteered their time to share their

site volunteered their time to share their experiences and inspire the next genera-tion of female tradespeople. The workshops, held in the local curling rink, provided hands-on training using tools from the WITT training unit. Partici-pants learned the safe use of power tools in correntive and autentities of index prein carpentry and automotive, gained prac-tical knowledge in electrical and plumbing and delved into the world of welding and and a desire to find her true calling, fully immersed herself in the program. The sup-port system provided by WITT gave her the strength, comfort and inspiration to pursue the trades.

pursue the trades. "I was the only girl in my high school to participate in the WITT weekend cours-es," Lopez-Paz shares. "WITT helped me learn more about trades and choose in-dustrial mechanics as my field of study at Sask Polytech. I want to keep learning and growing, and industrial mechanics allows me to be a Jack-of-all-trades." Without hesitation, Lopez-Paz enrolled in Sask Polytech's Industrial Mechan-ics certificate program immediately after completing high school. This comprehen-



sive program equips students with pracsive program equips students with pac-tical, hands-on training to install, repair, overhaul, and maintain industrial ma-chinery and mechanical equipment. With high demand for industrial mechanics, also known as millwrights, in various industries such as energy, manufacturing, milling, power generation and chemical plants, Lopez-Paz is well-positioned for a successful career.

successful career. Lopez-Paz is one of two women current-ly in Sask Polytech's Industrial Mechan-ics certificate program. "It's nice to have a companion in class. It's great to have someone to relate to, struggle with and get strength from. Hayley and I have become great friends. We know our strengths and uvachnesses and halv each other out. The weaknesses and help each other out. The guys in our class are also very support-

Neil Dielschneider has been an Industrial Mechanics instructor at Sask Polytech for over two decades. "I have seen more and more women join the Industrial Me-chanics program, which is great," he says. "It's good to see more diversity in the program. The male students are welcom-ing and the female students are excelling alongside their peers." As she hones her skills and works on

As she hones her skills and works on large machinery, Lopez-Paz aspires to be-come a journeyperson in the future. "It's exciting to work with my hands. I've had the opportunity to work on numerous in-teresting projects at Sask Polytech," she shares enthusiastically. Lopez-Paz's advice to aspiring trades-nearble comparish women in the set states.

people, especially women, is to ask ques-tions, seize every opportunity to learn and explore various courses. "I am a woman of color, I am an immigrant, and I am working in the trades. I want to encourage oth-er women to take trades courses and learn new skills. Even if it's not the perfect fit, you will acquire valuable skills that will benefit you in the future."

Lopez-Par's parents are incredibly sup-portive of her chosen path, recognizing the significance of their daughter breaking



stereotypes and working in a male domi-nant trade. "My parents think it's very cool. They are proud to have their daugh-ter represent the Latin American commu-

ter represent the Latin American commu-nity in industrial mechanics." "I'm thrilled that Judy has enrolled in the Industrial Mechanics program," says Allison Zerr, WITT program head. "Al-though industrial mechanics training wasn't part of our WITT weekend work-obers in Beccanville. shops in Cocarville, we were fortunate to have a female millwright from Nutrien as a mentor. She shared information about her experience and the skills needed to be a millwright. This underscores the signifia ninwight. This differences the signifi-cance of providing WITT programming in rural and remote regions and the pivotal role of female mentors in trades. I'm hap-py that WITT was able to help Judy choose a career in the trades " career in the trades

Sask Polytech's WITT program contin-ues to empower women like Judy Lopez-Paz, creating a more inclusive and diverse workforce in the trades. Through hands-on training, mentorship and support, WITT is paving the way for a new genera-tion of skilled tradespeople.

and apply for the one

that is right for you.





Mosaic stresses importance DTiPM program Hopson happy that program has been recognized

BY KEVIN WEEDMARK The Canadian Institute of

Mining (CIM) has awarded the first-ever CIM Indigenous Partnership Award to Cowessess First Nation and Morris Interactive for their collaboration on Morris Interactive's Digital Transformation in Potash Mining (DTiPM) program which is delivered in partnership with The Mosaic Company. The award recogning contribution to the advancement of Indigenous reconciliation in the mining sector" and celebrates the collaboration to deliver a program of this nature in the potash industry. The program facilitates an extensive networking opportunity between students and industry employ-

The program facilitates an extensive networking opportunity between students and industry employers, including The Mosaic Company. Since the onset, the program has achieved a success rate of over 83% in connecting graduates to employment or further education.

education. The program was piloted on Cowessess First Nation in 2022 through a partnership that included Cowessess First Nation, The Mosaic Company, and Morris Interactive. Following this successful pilot, Mosaic committed \$1,000,000 to further the sustainability of the program over five years.

Tyler Hopson with Mosaic explains how the program and the partnership came about.

came about. "The first version of the program came about from a grant that Morris Interactive got from the International Minerals Innovation Institute (IMII)," says Hopson. "They're based in Saskatoon and we're members of the IMII—us and some of the larger mining companies in Saskatchewan.

"They had got the fund-



ing to try out this new concept of Indigenous focus on potash mining and to raise awareness and participation with Indigenous people. So with some of the funding through IMII, we would have participated there, and then more specifically they decided to host the very first course at Cowessess which is close to way and our constribu-

Cowessess which is close to you and our operation. "They had approached us and said, The course training is happening at Cowessess but we need to go to a mine site so that we can actually show students in person what they're learning, what we're talking about, and then they get a little bit of hands-on experience.'

work practicum at Esterhazy. That all went really well and I think it was a great experience for the students and program but also for our staff on site.

"They had the funding for the one time, sort-of pilot, and from there they wanted to do it again with getting such a positive response.

"So back in 2022, about two years ago, we agreed to fund the program for five years to continue and replicate what had been done at Cowessess and also since that time they've started to alternate their locations a little bit. So they now do some in Saskatoon and they've done practicums at our Colonsay mine or they come back to Cowessess or our Esterhazy area and do the work term at Esterhazy. "So that's kind of where

it has evolved to now in the third year of the agreement. It's just been great to see the program grow and continue to have such great success." How many students can

riow many students can the program accommodate?

"They keep their class size fairly small just so they can give that class the best quality of education," says Hopson. "So each course is usually somewhere around 12 to 15 students at a time and they are running around four classes a year now. The demand definitely exceeds what they can accommodate—the number of people who are interested is more than they can currently train but it's great that there's such an interest in the program."

in the program." Hopson says the program is a win-win for both Mosaic and the people who get involved.

Continued on Page B17



> Site Development> Mining Industry

Earth Moving
Oilfield Lease Work

Dwight 306-745-7608 Michael 306-743-7877 • Marc 306-743-7243

Langenburg, SK www.djmillerandsons.com • www.djanimikii.com

Calcium Chloride

Brooks 32

- Drilling fluids
- Heavy kill fluid
- Dust suppression
- Concrete accelerant
- Naturally clear brine
- Minimal to zero sediment
- High density brine
- Blends well with other brines and additives
- Effective in low temperature environments
- Unique blend due to temperature and pressure

www.nscminerals.com



ΗΔΤCΗ

Innovating all that we do

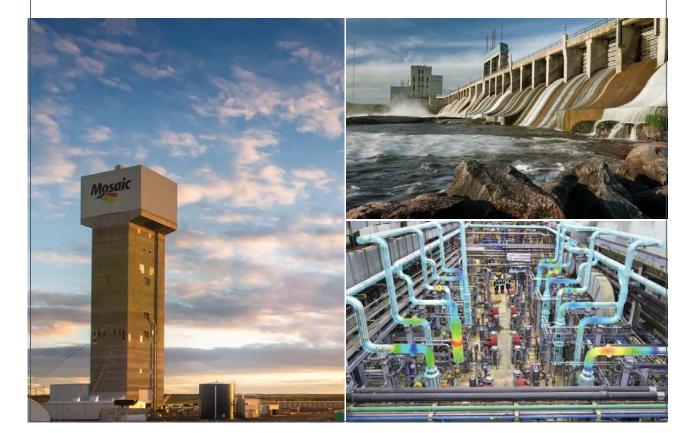
Market constraints and the widespread adoption of rapidlymaturing technology are transforming industries of every kind. Harder to access resources, combined with increased pressure from stakeholders to operate more efficiently, with less impact on the environment are driving us all to make significant changes.

Your needs are changing rapidly. So are your expectations of your partners to provide new solutions to your toughest challenges. Like you, we are passionately committed to the pursuit of a better world through positive change.

By partnering with you, we develop better ideas. We deliver innovative solutions that drive your assets to world-class levels of performance.

Meeting demands for safety, reliability, performance, and productivity.

Learn more at hatch.com.



Nutrien employees exceed volunteer target of 25,000 hours by 2025



- 0

Nutrien employees volunteered more than 26,700 hours, represent-ing a 52 percent increase over 2022. Striving to contribute meaningfully to the com-munities globally and lo-cally where we operate, Nutrien set an ambitious volunteer target in 2020 for employees: achievfor employees: achiev-ing 25,000 hours by 2025. Progress against the tar-get has been measured in every sustainability report since.

Nutrien recognizes that employees can make a meaningful difference their communities through volunteering. The Employee Volunteer Program enables eligible employees to take up to three paid volunteer days during work hours and through our Employee Matching Gift Program they can earn reward dollars for eligible charities if volunteering outside of

connect with Nutrien's connect with Nutrien's purpose in a way that is important personally but also has meaning in the community. Whether it's coaching children's sport teams or packing hampers at the local food hampers at the local food bank, the need for volun-teers is great," said Renee Glushyk, Manager, Com-munity Relations & Investment.

Organizations are often understaffed; non-profits and charities need people to volunteer in the community to help them to be able to achieve their objectives and mission.

"Having sat on a number of volunteer boards. I know the commitment it takes to support our com-munities in such a capacity. I am thankful to work for a company like Nu-

Serving Southeast Saskatchewan for 40 Years

trien that supports em-ployees and their com-munities by rewarding volunteer efforts such as board duties, actioning on our purpose of Feed-ing the Future," said Tim Faveri, Vice President, Sustainability & Stake-balder Poletione holder Relations. "There is a lot of sci-

entific research about volunteering and the intrinsic benefits that a person gets from help-ing someone else. It's the rush of endorphins, feeling a sense of purpose and the positive impacts on mental and physical wellbeing. Through volunteering employees can connect with others from the company and com-munity that they might not already know," says Renee.





WE DEPEND ON ALL OUR NATURAL RESOURCES TO **BENEFIT AND SUSTAIN OUR STANDARD OF LIVING**



1-866-249-4697 • www.drrobertkitchen.ca

B13

Resources huge in Souris-Moose Mountain



B14

Souris-Moose Mountain MP Dr. Robert Kitchen.

by Ryan Kiedrowski

LOCAL JOURNALISM INITIATIVE REPORTER Our province has many amazing features including a wealth of natural resources beneath our feet. While oil, coal and pot-ash have been utilized for several decades, exciting developments are being made for materials used in alternative forms of ensouris-Moose Mountain MP Dr. Robert Kitchen believes ought to be further ex-plored, especially given the opportunity in

"We have the geothermal plant that's been being looked at in Torquay and in the brine that comes out of that, there's a huge amount of lithium in there," he said. "As well, my understanding is there's large amounts of lithium in the Stoughton area, which is a product that is needed. You look at graphite and all the minerals that are out there that are needed for solar panels. Those are things that we have a high amount of in the ridings had we have a high another in the the riding and those are hings we need to take and utilize where they're appropriate, instead of importing them from dictator-led countries around the world that treat their citizens with total disregard."

Taking a global perspective, marketing the resources found in Saskatchewan makes both economic and ethical sense, according to Kitchen.

"Germany's had to go back to coal-based power and they want LNG—we have natu-ral gas in Saskatchewan which could be exported to Germany and yet instead of that, we have this present government that sends back parts to the Russians such that they can export their natural gas to Germany." he said. "Yet, you have Russia and their illegal invasion of Ukraine and we want to turn around and say 'that's okay' yet we won't use our own natural gas where we can use LNG and ship that over to that part of the world. It just makes no sense."

Kitchen also listed a crucial resource that he values most of all—the people in his rid-ing, and the fortunate opportunity he has to meet with them to learn of their successes and concerns.

"The ability to communicate and get out and about with my constituents is very important to me," Kitchen said. "Whether that's up in Moosomin and surrounding area—Rocanville, Fairlight, etc. Getting into those areas to communicate and hear from them. I this is merbably the biscret heave them I think is probably the biggest bonus of what we've done over the past year. I can't thank my constituents enough for that opportunity to sit there and talk with them and hear not only the positives, but also the executives. negatives. "There have been a fair number of nega-

tives that we were wanting to change and we will continue to push on that to try and make certain that when we get that opportu-nity to have an election that we make those

nity to have an election that we make those changes," he expanded. When asked of the largest challenge he's heard over the past year from constituents, Kitchen pointed toward the high cost of liv-ing and the impact that has on everyone. "Ultimately, I think that the big things ob-viously are the huge inflationary costs that have happened on all Canadians," he said. "Whether that is rent, whether that is grocer-ies, those are huge impacting items on Canaies, those are huge impacting items on Cana-dians. As we move forward, those are things that definitely we want to see curtailed and brought down; bringing down the prices of our food, bringing down the price of home

heating. Likewise, the inflationary cost for rental and even housing markets have esca-lated quite exponentially." Part of the solution is one Kitchen's col-

Part of the solution is one vitation of the leagues all seem to agree on, that of getting rid of the Carbon Tax entirely. Such an action may not be realized unless there is a change in the federal government, but for now, Kitchen says MPs will continue to prompt

changes to the tax as it currently stands. "We've said for the longest time, we will axe that carbon tax, that's what we want to do," he said. "Obviously, we want to become government, we're going to take ev-ery step we can between now and then to do ery step we can between now and then to do things to try and pressure this government to at least axe the tax, whether that is on people for simple little exemptions on their home heating. This Liberal government has created that exemption for the East Coast, but not for our constituents in Souris-Moose Mountain. We want to make certain that we exempt that tax, because by exempting that tax, that puts money back in your pocket. It's not only that tax that's being escalated, but there's a GST on top of that tax. So again, you take away that tax, the GST is gone, the tax is gone, that money is now in your pock-et and you can decide what you think is best and when you think is best and where you think it's best to spend that money

While the next federal election could be as far away as Oct. 2025, Kitchen sees change

far away as Oct. 2025, Kitchen sees change as an opportunity heading into 2024. "The big opportunity that I see and want to see is that election," he said. "That's the biggest thing—to get to that election and find a way to defeat this government. The unfortunate part is that you have an NDP-supported government and that gives the Liberals so many aspects of things. That's a huge challenge to try and bring them down, but that's the number one goal is to see us defeat this present government." defeat this present government.



Providing practical engineering and project management services to the potash mining industry



A proud partner, *driving* the Mining and Energy industries of southern Saskatchewan with our North American footprint.



YOUR LOCAL HAULIER READY **TO SERVE YOUR BULK** TRANSPORTATION NEEDS.





LANGENBURG, SK

306-743-2332

ROCANVILLE, SK 306-645-2112

In Saskatchewan: **Multilateral well drilling program introduced** Oil production target 600,000 barrels a day

BY RYAN KIEDROWSKI LOCAL JOURNALISM INITIATIVE REPORTER

The provincial government is looking to entice increased multi-lateral drill-ing in Saskatchewan with a new incentive program. The innovative drilling method allows for more of the oil reser-

method allows for more of the oil reser-voir to be access from a single well, and with the incentive program, it could see an increase of 200 more wells drilled in Saskatchewan each year. "The intention is to encourage invest-ment in this new type of drilling. We've seen some uptake in Saskatchewan, but not to the extent that we would hope and certainly not to the extent that we've seen in Alberta," explained Eric Warren, Executive Director of Energy Policy for the ministry.

Seen in Alberta, explained Elic Waitel, Executive Director of Energy Policy for the ministry. "The goal of the program is really to create a competitive royalty environ-ment for the drilling of these wells and try to see some of that capital deployed here in Saskatchewan, and ultimately to increase oil production towards the provinces growth plan target of 600,000 barrels per day." The volumetric incentive will see a maximum of 2.5 per cent royalty rate up to a set volume of initial production, then reverting to the standard rate. "The intent there again is to just im-prove the economics, improve the attrac-tiveness of making these kinds of invest-ments relative to how the royalty regime treats these wells in Alberta," Warren said

"It is a response to the higher capital

The program is a pplicable to new mul-tilateral wells drilled on or before April 1, ending on the same date in 2028, and is application based. Qualifying wells are set against the criteria in place before ap-

"The new incentive program for multi-lateral drilling opens up significant new drilling investment opportunities in Sas-katchewan for Cenovus," said Jon McK-

enzie, Cenovus Energy CEO. "It aligns with our focus to strategi-cally build our integrated position in the Lloydminster region and we anticipate it will have positive impacts for provincial employment as well as new production growth. We are pleased to see govern-ment focus on creative ways to bring more investment to Saskatchewan."

More opportunity for the southeast

To visualize what's happening un-der the ground with multi-lateral wells, Warren used the examples of pitchforks

Warren used the examples of pitchforks and fishbones. "There's two types of multilateral wells that we're talking about, one is sort of a pitchfork style, where you have a num-ber of laterals extending off of the the wellbore," he explained. "Any number of configurations up to eight legs, and even more. The second is a fishbone type multilateral, where they're extending a whole bunch of smaller radiating legs off of the main hore in a horizontal fashion." of the main bore in a horizontal fashion."

Warren believes multi-lateral drilling techniques will open up more potential in the Saskatchewan portion of the Bak-ken formation, and also the the more challenging Frobisher and Midale for-



A pumpjack in Southeast Saskatchewan.

mations.

"We expect to see this deployed all we expect to see this deployed an across the oil producing regions in the province," he said. "Thinking about the southeast in particular, in the Bakken, it's really about extending the boundar-ies of the Bakken in terms of the ability to produce some of that oil economically. Now with this multilateral type of drilling, you're able to exploit some of those reserves.

So it's pushing the edges, the boundar-ies of the Bakken. There's also opportuni-

ies of the Bakken. There's also opportuni-ties in the Bakken where you have these water bearing formations above or below the pay zone that you're targeting." Historically, the Bakken has seen fracking operations halt due to encoun-tering water-bearing formations. "This technology allows you to go in and exploit some of those places as well," Warren said. "Certainly, we'll see some incremental production there." Warren also noted the Frobisher and Midale formations with thin pay zones

Midale formations with thin pay zones stacked on top of each other; a difficul-ty using traditional drilling methods. Multi-lateral technology now makes those reserves viable.

"We've done some projections inter-nally around the number of multilateral wells that we're expecting to see drilled over the life of the program, ranging from 100 to 200 per year," Warrren said. "Hearing from industry after the launch of this program, we're hopeful that we might be able to surpass those number "

numbers.

With a spike in production naturally comes more jobs—a welcome sign to the second-largest oil producing jurisdiction in Canada

'The competition for capital invest-



ment is fierce and Saskatchewan's plan to modernize the royalty regime to recog-nize the use of new drilling technologies provides the right policy environment to attract investment to the province," Canadian Association of Petroleum Producers President and CEO Lisa Baiton said

"A more competitive royalty frame-work will help unlock valuable oil re-sources in Saskatchewan and will, in turn, create more jobs and additional revenues for the government and municipalities."

The oil sector in Saskatchewan currently supports more than 26,000 job



Trust our journeyman carpenters, certified foam applicators, and concrete experts with your next project

CONCRETE CARPENTRY

om

Making changes to your farm?

- Expanding farmable land
- Fixing drainage issues
- Land use changes
- Fencing

These are all high risk activities when it comes to pipeline safety.

You may not think you live near a pipeline, but are you 100% sure?

Prevent pipeline incidents by finding out what's below, BEFORE you start your work.

Visit *www.clickbeforeyoudig.com* to request a locate at least 3 days prior.

Safety can be that simple.



Mosaic stresses importance DTiPM program Hopson happy that program has been recognized

S Continued from Page B11

"For a long time now, we've been trying to find ways to work with First Nations communities around our sites. Historically the number of First Nations people work-ing in the potash industry has been fairly low, and we know that there's definitely interest as you can see in this program, but people didn't always have maybe the right avenue, or know how to get involved

or understand what the opportunities are. "So this program really, by coming out to a community in the Esterhazy area, offering the training and then tailoring it to an Indigenous community, I think just opens so many doors and it is helping to make our workforce more diverse and more reflective of the areas that we operate in.

He says it's meaningful for the program to receive the CIM Indigenous Partnership Award.

Award. "It's really quite an honour I think for the program to be recognized in this way," he says. "Canadian Institute of Mining is a national organization so for a local pro-gram to get that recognition on a national stage is pretty huge. It's very significant and it just shows how unique that pro-gram is—we actually aren't aware of any similar program anywhere else in Canada so it's pretty great that that innovation is coming from our own backvard and that coming from our own backyard and that we're finding a creative solution and a way to deliver it here at home."

Do some of the people who have gone through the program end up working in the mining industry? "Yes, we've hired a number of people

who are graduates of the program right into our operations, as much as we can

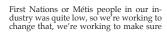
at any given time," says Hopson. "Or in at any given time, says Hopson. Or in other cases, they're going on to work for some of our suppliers or other businesses in the mining industry." Will Mosaic be expanding their five-year commitment?

year commitment? "We haven't really started that con-versation just yet. We're about halfway through the first round of our first five years so we'll definitely start to have those conversations," says Hopson, "We haven't made that commitment just yet but I think that so far the program is seeing a lot of success and bringing some great results." Indigenous engagement is not new to Mosai

Mosaic. "We have been working to invest direct-ly into communities for the last number of years," says Hopson. "We've sponsored things like home building courses on some First Nations, we helped Ochapowace First Nation to renovate their school and "We in the last the curve last poor area First Nation to renovate their school and their industrial arts lab several years ago, we sponsor cultural programming and things like pow wows across the province on a regular basis and we have a goal to get 15 per cent of all of our Saskatchewan procurement or supplier spend by 2025 with Induscours businessor. So work out with Indigenous businesses. So we're get-ting closer and closer to that goal. Last year we worked with 32 Indigenous owned businesses in Saskatchewan and that was about \$45 million of work with those com-

about \$45 minior of work with those con-panies, just for one example." Why is Indigenous engagement impor-tant to Mosaic? "I think it should be important to all

businesses, and making sure that we are truly representative of the places that we operate in is important," says Hopson. "Like I said, historically the number of



that we're being as inclusive as possible, and that all of the communities around our operations benefit, not just some."





To advertise in the World-Spectator's Fall Mining, Energy and Manufacturing feature contact Sunnette or Kara at 306-435-2445 or email world spectator@sasktel.net

April oil and gas public offering nets \$15.4 million

The Government of Saskatchewan's Crown petroleum and natural gas public offering, held on Tuesday, April 2, 2024, has raised \$15,454,748.02 in revenue for the prov-ince, with the Estevan area generating the most cashflow. Of the 147 parcels posted for this sale, 123 parcels re-ceived acceptable bids, which covered 16,065.020 hectares.

Six parcels received bids that were rejected as unaccept-able after a technical review, and no bids were submitted for the remaining 18 parcels. The Estevan area brought in the most revenue,

\$13,795,439.18 for 84 leases and two exploration licenses covering 9,797.237 hectares.

Following that, the Lloydminster area brought in \$1,425,234.16, generated from bids on 32 leases totaling 4,841.643 hectares.

Meanwhile bids in the Kindersley area generated \$234,074.68 in revenue.

Hummingbird Energy Inc. made the highest bonus Stummingpird Energy inc. made the nignest bonus bid and highest dollars-per-hectare bid in this offering -\$2,200,000 for a 193.711-hectare lease prospective for oil in the Frobisher Beds in the Estevan area, northeast of Mi-dale. The bid works out to \$11,357.12 per hectare. The two exploration licenses in this offering were awarded to Crescent Point Energy Corp. One license to-

taling 1,416.372 hectares received a bid of \$2,114,416.78, or \$1,492.84 per hectare. The second license totaling 675.971 hectares received a bid of \$1,009,116.55, also \$1,492.84 per hectare.

These exploration licenses are located in the Estevan area, northeast of Lampman, and are prospective for oil in the Bakken Formation.

This is the first of six scheduled public offerings this fiscal year. The first oil and gas public offering last fiscal year generated \$11,113,459,75 in revenue.

The next scheduled date for a public offering in Saskatchewan is June 4, 2024.

Sask top province for energy sector competitiveness

Saskatchewan is the most attractive jurisdiction in Canada for oil and gas investment, according to the Fra-ser Institute's 2023 Canada-U.S. Energy Sector Competi-

ser Institute's 2023 Canada-U.S. Energy Sector Competi-tiveness Survey. Overall, Saskatchewan ranked third in the survey out of 17 competing jurisdictions. "Saskatchewan continues to assert itself as a reliable energy investment jurisdiction," Energy and Resources Minister Jim Reiter said. "Our government will continue to fight for, and support, the jobs and growth that 26,000 energy workers and their families in Saskatchewan have come to rely on. Wa lock forward to further improving come to rely on. We look forward to further improving our investment attraction in the years to come."

The province is the highest-ranked province and the only Canadian region to break the top five, with Alberta and British Columbia coming in ninth and 15th, respecand British Columbia coming in ninth and 15th, respec-tively. This continues the province's upward growth among jurisdictions in Canada and the United States (US) after ranking sixth in 2022, and 11th the year prior. The Fraser Institute annually ranks US and Canadian provinces following a survey of senior executives in the upstream oil and gas sector. Respondents scored Sas-katchewan favourably in areas relating to regulations, about taxiton infractatucture and security.

labour, taxation, infrastructure, and security. Saskatchewan also ranked first in Canada for mining

investment attractiveness, according to the Fraser Insti-tute's Annual Survey of Mining Companies: 2022. The province is home to occurrences of 23 of the 31 critical minerals on Canada's list and the world's largest de-

ininerals on Canada's list and the world's largest de-posits of potash and high-grade uranium. Total mineral sales for fiscal 2022 surpassed \$19 billion. Promoting Saskatchewan's quality and sustainable energy products, as well as maintaining an attractive business climate, will ensure that Saskatchewan re-mains on track to meet its 2030 Growth Plan goals of increasing oil production by 25 per cent to 600,000 bar-rels per day.

Increased investments strengthen Sask's mining and energy sectors

The 2024-25 Budget included supports for Saskatchewan's world-class natural resource industries through strategic investments in geoscience, oil and gas, and critical minerals.

cal minerals. "Saskatchewan's energy and mining sectors continue to drive our strong and growing economy," Energy and Resources Minister Jim Reiter said. "We will ensure that Saskatchewan remains one of the best places in the world to invest in exploration and resource development." This year's budget includes \$10.0 million in funding over 10 years for the Public Geoscience Initiative. This investment will increase exploration to support the prov-increase.

More funding will also be allocated to two existing pro-grams in addition to making room for a specific focus on critical minerals:

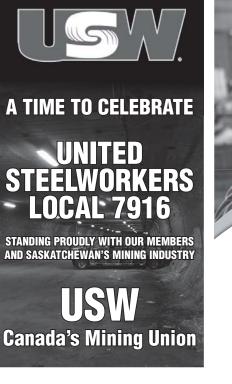
The existing Oil and Gas Processing Investment Incen-tive has been extended to 2029, and an additional \$130.0 million will now support this program as well as the newly created Critical Mineral Processing Investment Incen-

The existing Saskatchewan Petroleum Innovation In-The existing Saskatchewan Petroleum Innovation In-centive has also been extended to 2029, and an additional \$70.0 million will support this program, along with a newly created program called the Saskatchewan Critical Minerals Innovation Incentive. Saskatchewan is also introducing a new multilateral well drilling program to grow incremental oil production in the province. These programs support the Growth Plan goal of increasing oil production by 25 per cent to 600,000 barrels per day.

goal of increasing oil production by 25 per cent to 600,000 barrels per day. At the same time, Saskatchewan continues to focus on regulatory excellence to maintain a reliable and competitive business environment. Over the coming year, work will continue to ensure a compliance management framework that is clear and consistent, and will modernize field inspections and incident reporting. More than 50,000 Saskatchewan residents are employed

in the mining and energy sectors, contributing to a strong and growing economy that benefits everyone in the province







Birtail Sioux funded for unique trades program

BY RYAN KIEDROWSKI LOCAL JOURNALISM INITIATIVE REPORTER

It's an intense but effective initiative promising to pro-pel participants from having no experience in the trades to being job ready—all in under two weeks. That's the goal of a new study being funded by the federal government on the Birdtail Sioux Dakota Nation to the tune of \$352,500, part of a larger announcement on March 6 that saw Indigenous Natural Resource Part-nerships devote a total of \$10.4 million to seven mining projects.

"Government, over the last two decades, has done a projects. "Government, over the last two decades, has done a pretty darn good job of training up Indigenous people and getting them ready for the workforce and the work environment," said Greg Farney, co-founder of Straight Talk Advisory and Training. "The one thing that we've all failed at is we haven't got the workforce ready for the Indigenous people."

Indigenous people." STAAT is partnering with BSDN to implement the Indigenous STARS (Strategic Training and Recruitment Solutions) program, which has a target goal of reaching out to 80 Indigenous communities across the three prairie provinces

Farney is no stranger to BSDN and has partnered with

"We've been working with Birdtail for close to 15 years, probably. So we understand each other, and they agreed to be the sponsor. So we submitted (the proposal to government), it took about six months and then got the

funding," he said. "Birdtail was a natural fit because of their location in Manitoba," Farney explained. "They're right on two mainline corridors being the TranCanada as well as En-bridge's right-of-way. They're right on the corridors of the north-south transmission lines that are projects tak-ing a basis in Manitok. If a vary complex computing the the north-south transmission lines that are projects tak-ing place in Manitoba. It's a very small community, but they've been very proactive, getting engaged both from an employment as well as business perspective in the project." Recognizing the need for more people working in the trades is not a new concept, and with a large number of current workers close to retirement, the number of job

openings will only continue to grow. Some numbers Farney has come across estimates a need for upwards of

"One of the big elements is identifying how many peo-ple are out there that want to be involved in the trades," Farney said. "How many people have meaningful employment opportunities at the end of it, which the stats show there should be more than enough." With the need for meaningful employment established,

more than enough room to accommodate an influx of new and motivated workers, plus funding for a program to train them, it was time to link all the pieces together with action.

"So you have this massive opportunity between what the industry needs and what First Nations and Indige-nous communities can bring to the industry, but no one's talking to each other," Farney remarked. The cost of training was another huge barrier as traditional methods can easily run thousands of dollars just to become certi-fied in a particular field. fied in a particular field.

"Unfortunately, what most people don't realize is, if you decide to go to be a bulldozer operator right now, you fork out the \$25,000, no one's going to hire you to be an operator right out of the gate," Farney said. "You have to be a greaser and an oiler and all that stuff for six months before they put you on the equipment. So there's a lot of misunderstanding."

Enter Indigenous STARS and its fast-paced, hands-on

Enter Indigenous STARS and its fast-paced, nanos-on approach. "Through our experience, to get a person ready to be an entry-level labourer, for an industrial work environ-ment, that takes about 12 days," Farney said, walking through what a typical training day would look like. "Very intense days. We treat the training as if it's a work-day. So you're out of bed bright and early at 6 am. You're at the at the training camp for 7:30 that starts off with a tailgate meeting—like it would in any industrial situa-tion. You're going to learn about what's going to happen that day, what safety hazards to be wise to, all those types that day, what safety hazards to be wise to, all those types of things. Then we spend about 20 per cent of our time

in theory, talking in a classroom environment about what tools are going to be used, what things are going to hap-pen, learning how to do heavy lifts, things like that. And then going out for the balance of the day, hands on full size equipment."

size equipment." The fast-paced training program has already been test-ed in other places, effectively posting people in fulfilling careers and changing lives in the process. For BSDN, that means trained carpenters, electricians and plumbers not only being established close to home, but the potential to fill another job shortage in the process. Farney pointed to major turnaround and maintenance projects at large-scale facilities such as Suncor (who were looking for 14,000 workers in a turnaround last year). They're short-term, require skilled individuals, and a lot

They're short-term, require skilled individuals, and a lot of them.

"You can imagine when you're trying to find 6,000 pipefitters for six weeks, it's pretty tough," he said, not-ing that current recruitment brings this skilled labour from overseas instead of hiring within Canada. Utilizing people trained and ready to work through Indigenous STARS for these projects would add bonus income to their already established careers, perhaps even coincid-ing with a slower season. Given all the pieces aligning, BSDN is certainly poised

for great future opportunities

SAPARA'S DRUG MART R PharmaChoice R Esterhazy, SK Ph. (306) 745-6662

Monday - Saturday 9am - 5:30pm

To Mosaic, Nutrien, our local manufacturing businesses and their employees:

Thank you for your hard work and contributions to our community and for your continued support.





Mining Resources

www.umres.ca



We value the continued support of Mosaic and its employees. Celebrate your success during Saskatchewan Mining Week!

306-745-3893 400 Main Street, Esterhazy, SK









Check out



across the area!

Check out JOB LISTINGS

55

across the area!

B19

Esterhazy K3 recognized with industry award

EV RYAN KIEDROWSKI LOCAL JOURNALISM INITIATIVE REPORTER Continued innovation is the key to streamlining processes and improving safety. The K3 mine in Esterhazy has proven that once again with some spe-cialized engineering, earning them a 2023 EHS Process Excellence Award. Through Mosaic's Risk Reduction pro-gram, employees bring their ideas for a safer workplace forward, with almost 300 risk reduction projects finished last year alone.

alone

alone. "In 2023, our dedicated employees com-pleted 299 risk reduction projects, adding to the impressive 4,350 projects accom-plished since 2019," noted a recent press release announcing the excellence award. "Today, we highlight three impactful proj-ects from 2023 that align with our goal of achieving zero incidents." For K3, the spotlight innovation was a headframe drawbridge that has been proven to increase safety. "We are happy the drawbridge made

"We are happy the drawbridge made some of our tasks more accessible and safer for employees," said David Steiger, Senior Manager of Mine Operations at K3

Senior Manager of Mine Operations at K3 Esterhazy. "Winning this award will help spread awareness of this project throughout the company, the entire potash sector, and other industries. We are very proud to work for a company that's dedicated to improving the safe execution of our daily work."

improving the safe execution or our gainy work." The mine has twin shafts delving over 3,000 feet into the earth. Each shaft is cov-ered by headframes more than 300 feet above ground. The north shaft brings ore to the surface, transports people and equipment while the south shaft is strictly for moving one. for moving ore. "To maintain the integrity of the Blair

ropes, located in the north shaft and

which carry personnel to and from un-derground operations, employees needed to grease and inspect them every three months," the release explained. "That re-quired working over the shaft opening to access the arms".

What the Esterhazy team did was in-stall a drawbridge electrically lowered by a tugger/winch system. This covers the

The twin shafts at Esterhazy's K3. shaft area opening while allowing access to the Blair ropes and electrical interlocks were added to ensure the cage doesn't contact the drawbridge while in the low-ered pocition

contact the drawbridge while in the low-ered position. "Clint Hollingshead, Superintendent of Production - K3 Esterhazy, originally thought a drawbridge would benefit Mo-saic's K3 shaft," Steiger explained. "The installation began in early 2023, with the team overseeing the shaft contributing in-put to the overall design. Rhys Hatherly, Supervisor of Production - K3 Esterhazy, was instrumental in the execution of the

was instrumental in the execution of the project.

306.435.2445

included reducing the requirement for fall arrest around the shaft; no longer needarrest around the shaft; 'no longer need-ing the fall arrest equipment while work-ing on the ropes; less time to grease and electromagnetically test the ropes; and the new measure also meets Saskatchewan Mines Regulation 9-7 - Shaft Obstructions. "We have had nothing but positive feedback from the employees," Steiger said. "The employees who work in this area also provided valuable input in the design and construction." Given the innovative solution the team at K3 came up with. Steiger noted that

at K3 came up with, Steiger noted that there is potential for other Mosaic facili-ties to adapt this idea to their operations.







Above and below: The drawbridge that is electrically lowered by a tugger/winch system. This covers the shaft area opening while allowing access to the Blair ropes.





world_spectator@sasktel.net



www.world-spectator.com

Treaty Land Entitlement transfer of mineral rights for Cowessess First Nation

Nearly 1542 hectares (3811 acres) of Crown mineral rights will be transferred to Cowessess First Nation under the Cowessess Treaty Land Entitlement (TLE) Settlement Agreement.

"Transferring mineral rights to Cowessess First Nation marks another milestone in Saskatchewan's commitment to Treaty duties and economic reconciliation," Minister Responsible for First Nations, Métis Relations and North-ern Affairs Don McMorris said. "Saskatchewan is blessed with resources and these agreements ensure that all communities are benefitting from our province's growth." Acquiring new reserve lands through successful TLE

agreements supports community growth and traditional land use. This transfer is part of the province's continued commitment to TLE settlement agreements, aimed at ensuring that First Nation communities receive the land promised to them under historical Treaties. Under the Natural Resources Transfer Agreement, 1930, Saskatch-ewan has a constitutional obligation to assist the federal

government with this promise. The TLE agreements provide First Nations with entitle-ment monies to purchase land anywhere in the province on a "willing buyer-willing seller" basis and add it to their reserves

Under the terms of TLE agreement, all undisposed pro-

BEST WESTERN PLUS

vincial Crown minerals underlying lands purchased by the First Nation are to be transferred at no cost to the Gov-

ernment of Canada for purposes of reserve creation. Since 1992, the provincial and federal governments have committed \$687 million for TLE settlements in Sas-katchewan. Approximately 888,806 acres have been trans-

Forred, with 1.48 million acres outstanding. The Ministry of Government Relations coordinates and manages the provincial implementation of the TLE agreements between Canada, Saskatchewan, and 36 First Nations. The recent transfer to Cowessess First Nation underscores Saskatchewan's commitment to economic reconciliation and the fulfillment of Treaty obligations.

The province continues to work collaboratively with First Nation communities to fulfill land entitlement agreements and support community growth and development. For more information on Treaty Land Entitlement, please visit saskatchewan.ca.

BACKGROUND:

The Mineral Order in Council stipulates the transfer of nearly 195 hectares (480 acres) of Crown mineral rights to Cowessess First Nation upon the surface attaining reserve status.

Approximately, 76,303.02 reserve acres have been cre-

ated to date under the TLE Agreement. Under Section 5.04 of the TLE Agreements, the Govern-ment of Saskatchewan is required to transfer undisposed Crown minerals to the Government of Canada at no cost. The minerals transferred will be held by His Majesty the King in the right of Canada for the use and benefit of Cowessess First Nation.

Saskatchewan has transferred more acres to reserve status under our TLE agreements than any other province in Canada







PROUD to have supplied the concrete for the Mosaic Esterhazy K3 south headframe during its continuous pour this fall

Over the past years, Crushrite has been proud to be involved in the economic growth of Southeast Saskatchewan as a concrete provider to the following major projects:

- Nutrien Mill 1 Refurbishment
- Nutrien Brine Pond Expansion
- Nutrien Self-Generation Station Caissons
- Esterhazy Mosaic K-3 Construction
- Esterhazy Mosaic K-2 Expansion
- Spy Hill Generating Station
- Red Lily Wind Farm, Moosomin Rocanville Potash Corp Scissors Creek Headframe Structure
- Rocanville Potash Corp Pre-Expansion Project
- Over 89 Slipform Inland Grain Terminals across Saskatchewan, Alberta & Manitoba and 95 Total Slipform projects

| Slipforming | Mining Applications Contracting Bin Pads | Flatwork | Basement Foundations Aggregate Sales and Delivery

1-800-300-7776 Esterhazy | Moosomin www.crushrite.com



tags@sasktel.net | Esterhazy, SK

Committed to our communities, devoted to our employees and responsible stewards of the environment. Today, tomorrow, always.

For over 150 years, Westmoreland has been part of the fabric of the energy industry, navigating significant challenges and continually emerging as an industry leader. We provide jobs for hard working folks, invest in local schools and community enhancements, and provide a valued resource to generate power for homes and businesses. Westmoreland has demonstrated a commitment to sound safety and environmental stewardship practices at our mines, and continues to position itself to be an integral part of the multi-faceted energy future.

WESTMORELAND MINING LLC

www.westmoreland.com

B21



Government efforts to cut emissions failing amid growing demand for petroleum

A data gift arrived in our inboxes the other day. The U.S. Energy Information Administration (EIA) just released an update on all things energy-related. The report includes an interesting table with current estimates and forecasts for elabel particular communicar

interesting table with current estimates and forecasts for global petroleum consumption. Why is this information thought-provoking? Because with all the talk of energy transitions, governments pouring vast sums of taxpayer money into an ever-growing array of pro-grams to reduce greenhouse gases (GHGs), a proliferation of new energy regulations, and the desperate promises of politi-cians about painless, steep cuts in GHGs, one would expect that the demand for petroleum and other liquid fuels (PLFs) should be in freefall. In fact, the opposite is true. As the EIA report shows, worldwide consumption of PLFs is rising steadily and is expected to continue on an upward path—likely for another decade at least.

at least.

at least. In 2023, global consumption of PLFs was seven percent higher than in 2015, when the Paris climate agreement was inked. Last year, PLF consumption was virtually the same as in 2019 (right before the pandemic). Looking to 2025, the EIA sees continuing increases in worldwide demand for petroleum and other liquid fuels. None of this should be surprising. The "dense" energy provided by fossil fuels is the oxy-gen of economics and occupies a central place in the history of economic and human devel-opment. Indeed, "combustion, that is, rapid oxidation of carbon and hydrogen in biomass and fossil fuels, has been the dominant energy conversion since the early stages of human evolution," according to Canadian energy scholar Vaclav Smil. But a scenario of higher and still increasing consumption of PLFs is likely to confuse peo-ple who have been digesting the statements and promises of politicians in a hurry to reduce

ple who have been digesting the statements and promises of politicians in a hurry to reduce

pie who have been digesting the statements and promises of politicians in a nurry to reduce GHGs. The forecast for Canada is no different than that for the world. Consumption of PLFs is increasing here, albeit more slowly than the global numbers. For example, in 2020, there was a marked dip in fossil fuel consumption amid the economic shutdowns resulting from the pandemic. Then, as the worst of the pandemic receded, Canada recorded a significant jump in consumption of PLFs—up by 11 percent—on par with the increase eaen at the global level. Why so, one might ask? Outsized population growth, for one thing, with the knock-on impact this has on the demand for housing and personal transportation. Statistics Canada shows a 10 percent increase in the number of people in our country since 2017—an astounding fact on its own. Canadians rely on personal vehicles to get to work, take the kids to school, grocery shopping, recreation, vacations, etc. We also ship goods across and throughout our 9.985 million square kilometre country—the second biggest in the world—mostly using heavy-duty trucks and rail. A majority of existing and new personal and commercial vehicles in Canada rely on gasoline and diesel. The reality is that all personal and goods transportation based cars and trucks represented 97 percent of all registered road motor vehicles. Of these, multipurpose cars, and trucks weighing less than 4.5 tonnes (a proxy weight for personal vehicles), show large increases in numbers—almost double the pace of population growth.

SANDBLASTING & COATING Prairie Blasting & Coating Ltd. Virden, MB 204-748-2864 E-mail: prairieblast@amail.com NACE Level III Inspector on Staff Oilfield Plural Component **Spray Units** Tanking Linings > & Exteriors Potable Water Supply Coatings External Pipeline Coatings Structural Steel/ **Heavy Equipment** Parkland CPAP

Services Inc Saluting the Mining, Energy and Manufacturing Industries for the huge role they play in our region!

Find us on Facebook

Monday to Friday, 9 a.m. to 4 p.m.

621 Main Street, Moosomin SK • Phone: 306-434-5864 www.parklandcpap.ca • Email: moosomin@parklandcpap.ca



continues to rise and probably will for some time, even as governments implement policies intended to accelerate the shift to hybrid and electric vehicles. The story is not much different in our own province of Brit-

ish Columbia. In 2017, 98 percent of all registered vehicles weighing less than 4.5 tonnes used gasoline and diesel for locomotion. In 2022, the share was down only slightly to 95 percent. Yes, there has been some movement towards elec-tric, hybrid, and plug-in hybrid cars, but not in an order of magnitude way or sufficient to cause a significant drop in the

demand for PLFs. The lesson from the EIA report and the latest Canadian data on energy use is clear: while the energy system is moving, incrementally, away from fossil fuels, the process will take far longer than many assume. Fossil fuels have been the core of economic, industrial, and human activity for generations

That isn't going to change because of the proclamations and sometimes ill-considered pol-icy interventions engineered by politicians or the frantic lobbying of environmental activists.

Jock Finlayson is Chief Economist with the Independent Contractors and Businesses Association and Denise Mullen is Director of Environment, Sustainability and Indigenous Relations with the Business Council of British Columbia



714 Main Street | Moosomin, SK

306-435-2445

world_spectator@sasktel.net

pectator

Feeding the future starts with safety.

Safety is our first priority. At Nutrien, we're working to help farmers around the world produce enough food for a growing population. To do that, we focus on keeping our workers safe, healthy and secure every day.



www.nutrien.com