

KENORA, ONTARIO, CANADA



## KENORA MINING SERVICES

Sector Profile



KENORA, ONTARIO, CANADA



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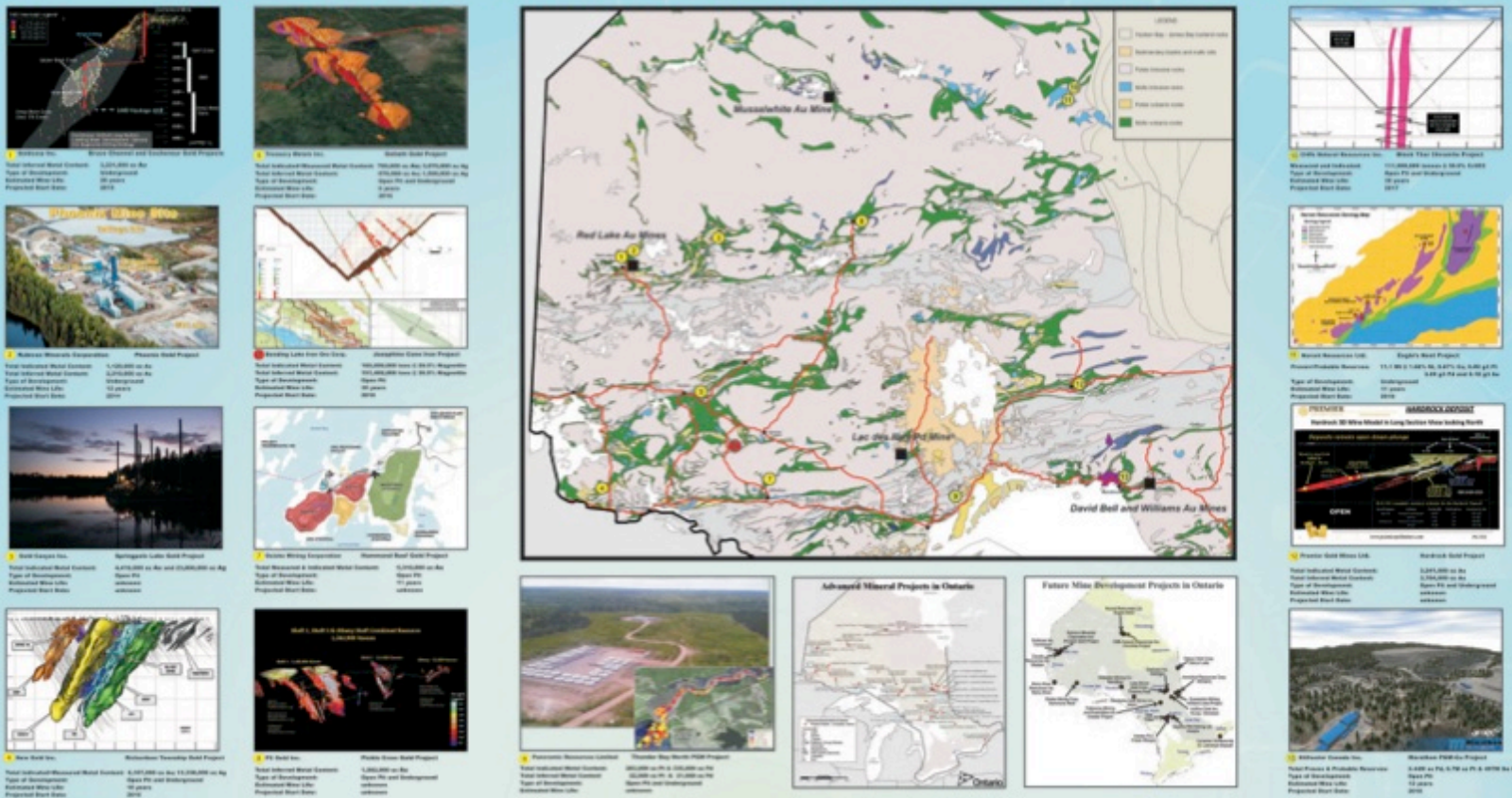


**Lake of the Woods**  
BUSINESS INCENTIVE CORP.  
A Community Futures Development Corporation



## Mining is at Our Core

### POTENTIAL FUTURE PRODUCERS: SUCCESS OF SUSTAINED EXPLORATION ACTIVITY



## Table of Contents

<b>A HUB OF MINING SERVICES BUSINESSES IN KENORA</b>	<b>5</b>
<b>MINES AND EXPLORATION PROJECTS IN THE REGION</b>	<b>7</b>
<b>MAP OF MINING ACTIVITY NEAR KENORA</b>	<b>8</b>
MATURE PROJECTS NEAR KENORA	10
OTHER MATURE PROJECTS IN THE REGION	13
GRANITE QUARRIES NEAR KENORA	14
RESOURCES FOR EVALUATION AND EXPLORATION	16
RESOURCES FOR ADVANCED EXPLORATION, DEVELOPMENT, AND PRODUCTION	18
<i>Mining Services</i>	18
<i>Industrial Sites</i>	19
<i>Transportation Infrastructure</i>	21
<i>Housing</i>	22
<i>Electric Power</i>	24
<i>Kenora Labour Force</i>	25
<i>Available Labour Force</i>	26
<i>First Nations Labour Force</i>	26
<i>Capacity for Training and Workforce Development</i>	26
<i>Kenora Wages for Mining Occupations</i>	27
<i>Aboriginal Relations</i>	29
<b>SERVING THE MINING SECTOR BEYOND NORTHWESTERN ONTARIO</b>	<b>31</b>
<b>OTHER RESOURCES FOR THE MINING INDUSTRY</b>	<b>32</b>
<b>OUTSTANDING QUALITY OF LIFE</b>	<b>34</b>
<b>APPENDIX A: ELECTRIC POWER IN KENORA AND THE NORTHWEST</b>	<b>35</b>
<b>APPENDIX B BUSINESS FACTOR COSTS</b>	<b>39</b>
<i>Endnotes</i>	42



## A Hub of Mining Services Businesses In Kenora

Kenora is located in the heart of the mineral-rich Canadian Shield, on the western edge of Northwestern Ontario, in close proximity to Manitoba to the east and Ontario's Ring of Fire to the west. In Ontario and Manitoba there are several mines and exploration projects that are in close proximity to Kenora, including:

- ✓ **Nine (9) active mines**, including several gold mines, one palladium mine, a cesium mine, and granite quarries,
- ✓ **Nine (9) mature exploration projects** that contain economic mineral reserves and are estimated to move from exploration to production by 2018,
- ✓ **Six (6) developed exploration projects** that contain mineral resources and are developed beyond the prospecting stage but are not considered mature enough to move into production within the very near future, and
- ✓ An ever-changing number of other early-stage exploration projects that are not near the development phase but represent a high level of activity for prospecting, evaluation, and exploration expenditures.

Kenora businesses are well equipped to meet many of the needs of the mining sector across all phases of the mining sequence. Companies engaged in exploration activities spent an estimated **\$754 million** in Ontario in 2013, much of which was spent on projects in Northwestern Ontario.<sup>i</sup> Exploration spending in nearby Manitoba was over **\$73 million** and spending in Saskatchewan exceeded **\$411 million** in 2013.

To meet the needs of early-stage exploration companies, the City of Kenora has created the **Kenora Mining Services Directory** that serves as a quick-reference guide to help exploration companies identify local service providers in services ranging from equipment rental to engineering services to temporary accommodations and other services (see box to the right for a list of service categories).

As exploration projects progress, mining firms continue to make major expenditures on services, labour force, and industrial construction to develop and operate mines. Mature exploration projects, such as the Separation Rapids Lithium Project located 57 kilometers north of Kenora, can have a large impact on Kenora's mining services businesses as the mine is developed and moves into operations. A similar mine operated by the owner of the Separation Rapids Project has annual expenditures ranging from **\$12 million to \$30 million** per year, and up to 27 per cent of these expenditures are made to Aboriginal and local vendors.<sup>ii</sup> Beyond the opportunities to support local mines, Kenora's mining services sector is well-suited to support long-term investment of billions of dollars in Ontario's Ring of Fire.

In addition to a nexus of businesses that provide services to the mining sector, Kenora offers several advantages as a hub for operations and processing of mined ore. These include:

### Capabilities of Kenora Businesses for Serving Early-Stage Evaluation and Exploration

- ✓ Engineering services
- ✓ Structural steel and fabrication services
- ✓ Heavy civil engineering construction services
- ✓ Industrial and commercial construction services
- ✓ Transportation services (car, truck, rail, and helicopter)
- ✓ First Nations land management services
- ✓ Land development consulting services
- ✓ Equipment rental
- ✓ Heavy equipment rentals (incl. generators, excavators, loaders, construction trailers, etc.)
- ✓ Hotels
- ✓ Catering and food services
- ✓ Safety supplies

See the **Kenora Mining Services Directory** for a list of companies in each category.

- ✓ **An Available and Skilled Labour Force:** Kenora's highly-skilled workforce is comprised of a working age population (age 25-64 years) of over 8,500 workers and Kenora is located within the Treaty #3 Area, home to 26 First Nations communities that have a combined population of approximately 25,000.
- ✓ **Strong Capacity for Workforce Training and Development:** The Northwest Training and Adjustment Board (NTAB) has launched an aggressive strategy to prepare a mining workforce to meet the labour force needs of all stages of exploration, development, and active mine operations. Seven Generations Education Institute ([www.7generations.org](http://www.7generations.org)) is a strategic partner for skills training, recruitment, placement, and workforce development for Aboriginal People in the region and has been the recipient of large grants for mining workforce development. Confederation College's Lake of the Woods Campus is also a key partner for developing Kenora's skilled labour force.
- ✓ **Transportation Capacity:** Kenora is conveniently located near the U.S. border and only 200 kilometers from the Winnipeg International Airport. The region boasts of an excellent transport infrastructure, including access to major highways and rail lines across Canada and into the United States. The Kenora international airport is an all-weather capable (IFR) facility, open 24-hours, seven days a week and Bearskin Airlines provides scheduled air service to Kenora as well as to over 16 towns and cities across the region. Air charter service offers 24-hour all weather access to anywhere in North America.
- ✓ **Transportation Choices:** Companies operating in Kenora enjoy the flexibility of accessing either the CN or CP rail lines, which are located within 30 kilometers of one another in Kenora. This ensures efficient transport of products processed in Kenora to seaports in Thunder Bay and on the Pacific Coast as well as other markets across the continent.
- ✓ **Shovel-Ready Industrial Parks and Sites:** Mining firms looking for shovel-ready industrial parks can choose from three serviced industrial parks and sites ready for development as well as other sites that are owned by the City, the Kenora Airport Authority, or privately held.
- ✓ **Over 6,500 Housing Units:** Kenora can meet a portion of the housing needs for the region's mining companies. The City is committed to ensuring adequate housing is available to serve Kenora's diversified economy.
- ✓ **Electric Power Capacity:** Kenora is located at a point in the Northwestern Ontario power system that has several advantages. These include nearby generation and transmission redundancy that reduces the risk of power outages that have affected mines in other locations in the Northwest, costing mines millions while they wait for power to be restored.

This sector profile provides information on mining projects that are in all stages of exploration, development, and operation in the region as well as information on mining services and resources available in Kenora. We invite you to explore all that Kenora offers to support the mining sector in Northwestern Ontario, in Manitoba, and beyond.

## Mines and Exploration Projects in the Region

The region surrounding Kenora has experienced heightened exploration and development activity in recent years and is also home to several active producing mines. Using the mine classifications defined in regional studies<sup>iii</sup> the following four classes of mines have been identified in the region:

- **Active Mines** are mines that are currently in the extraction and production phase. In the immediate vicinity, two mines are currently active: The Nelson Granite Quarries and the Al Miner Quarry. Other Active Mines are located to the east of Kenora including two gold mines (Musselwhite Gold Mine and Red Lake Gold Mine) and one palladium mine (Lac des Iles Palladium Mine). To the west in Manitoba, two gold mines are in operation (the Hinge-007 Gold Mine and the Rice Lake Gold Mine, both located near Bissett Manitoba), and one cesium mine (the Tanco Cesium Mine, located near Lac du Bonnet, MB). Red Lake Gold Mine is in operation at Red Lake, north of Kenora.
- **Mature Exploration Projects** are projects that contain economic mineral reserves and are estimated to move from exploration to production by 2018 and have released a positive pre-feasibility study. Located just north of Kenora, the Separation Rapids Project is a lithium (petalite) – tantalum project that is being developed by Avalon Rare Earth Metals. Other mature exploration projects in the region include the Rainy River Gold Project, located approximately 200 kilometers south of Kenora, which has released a feasibility study and economic analysis as it progresses toward development. The Seymouville Frac Sand Project located 288 km northwest of Kenora, and the Makwa Mine Project (Nickel, Copper and Platinum Group Metals) located 176 kilometers northwest of Kenora. In addition, five other mature exploration projects are located in the region including two near Red Lake, and one near Dryden.
- **Developed Exploration Projects** are projects that are not considered mature enough to move into production within the very near future (i.e. within the next five years). These projects do contain a mineral resource but are developed beyond the prospecting stage. The Cameron Lake Gold Project is located east of Sioux Narrows about 90 kilometers away from Kenora. In addition, there are five other developed exploration projects in the region.
- **Other Exploration Projects** are projects that are not near the production phase but have substantial budgets and are multi-phase exploration projects. These projects change often as new prospecting activity occurs. There are at least 17 Other Exploration Projects in the Kenora and Red Lake Districts.





### **Active Mines**

- 1 Nelson Granite – Four Quarries
- 2 Musselwhite Gold Mine
- 3 Red Lake Gold Mines
- 4 Lac des Illes Palladium Mine
- 5 Nelson Granite – 6 Quarries
- 6 Al Miner Quarry – Granite
- 7 Hinge-007 Gold Mine
- 8 Rice Lake Gold Mine
- 9 Tanco Mine – Cesium

### **Mature Exploration Projects**

- 10 Bending Lake Iron Project
- 11 Bruce Channel Deposit and Cochenour Gold Projects
- 12 Hammond Reef Gold Project
- 13 Rainy River Gold Project
- 14 Phoenix Gold Project
- 15 Goliath Gold Project
- 16 Separation Rapids Project: Lithium (Petalite) - Tantalum
- 17 Makwa Mine– Nickle, Copper, Platinum Group Metals (PGM)
- 18 Seymouville Frac Sand Project

### **Developed Exploration Projects**

- 19 Madsen Gold Project
- 20 Cameron Lake Gold Project
- 21 Springpole Lake Gold Project
- 22 Griffith Iron Ore Project
- 23 Pickle Crow Gold Project
- 24 Eagle Island Iron Ore Project

### **Other Exploration Projects**

#### **(in Kenora District and Red Lake District)**

- 25 Abitibi Mining Corporation – Gold Exploration
- 26 Bayfield Ventures Limited – Gold Exploration
- 27 Benton Resources Corporation – Gold Exploration
- 28 Houston Lake Mining Inc. – Gold Exploration
- 29 Hudson River Minerals Ltd. - Gold Exploration
- 30 Kings Bay Gold Corporation – Gold Exploration
- 31 Laurentian Goldfields Ltd. – Gold Exploration
- 32 Manitou Gold Inc. – Gold Exploration
- 33 Mineral Mountain Resources Ltd. – Gold Exploration
- 34 Q-Gold Resources Ltd. – Gold Exploration
- 35 Opawica Explorations Inc. – Copper and Gold Exploration
- 36 Champion Bear Resources Ltd. –  
Copper-Nickel-PGE Exploration
- 37 International Lithium Corp. – Rare Earth Metal Exploration
- 38 Halo Resources Inc. - Gold Exploration
- 39 Hy Lake Gold Inc. – Gold Exploration
- 40 Mega Precious Metals Inc. – Gold Exploration
- 41 Redstar Gold Corp. – Confederation Minerals Ltd. –  
Iron Exploration



## Mature Projects Near Kenora

### Separation Rapids Project: Lithium (Petalite) - Tantalum<sup>iv</sup>

**Avalon Rare Earth Metals began work on the Separation Rapids Project in October 2011, located approximately 57 kilometers north of Kenora.** The Pre-Feasibility study was announced in April 2012. In 2013, Avalon began application for construction permits at the site and in 2014 the company will perform a site risk assessment. Activities at the site in 2013 included general site work, retrieving and processing mineral samples, and investigating the regulatory and infrastructure requirements. Work originally began on this project in 1998 with exploration drilling, followed by the completion of a National Instrument 43-101 compliant Prefeasibility Study in 1999 by Micon International, which was subsequently updated in 2002.

Separation Rapids is host to one of the largest “Complex-type” rare metal pegmatite deposits in the world - the “Big Whopper Pegmatite.” This deposit is open to depth and along strike, implying potential for a long-life mining operation. The key mineral of interest is petalite, a lithium mineral which is preferred by manufacturers of zero-thermal-expansion glass, clay cookware and ceramic glazes. The most familiar consumer applications are Corningware® cookware and Ceran® glass-ceramic stovetops. However, there is also potential for production of by-products of tantalum and high purity feldspars. Currently, the only petalite producer outside of China is Bikita Minerals in Zimbabwe.

Avalon has engaged a European industrial minerals research organization with extensive experience in the processing of lithium-bearing ores for the glass and ceramics industry to further develop the process flowsheet for concentrating petalite from the ore. In addition, Micon International has been re-engaged as technical consultant to produce a capital cost estimate to build a 110 tonne per day demonstration plant in Kenora, once the process flowsheet is finalized.



#### About Avalon Rare Metals Inc.

Avalon Rare Metals Inc. is a mineral development company focused on rare metal deposits in Canada. Its 100%-owned Nechalacho Deposit, Thor Lake, NWT is exceptional in its large size and enrichment in the scarce 'heavy' rare earth elements, key to enabling advances in clean technology and other growing high-tech applications. With a positive feasibility study and environmental assessment completed, the Nechalacho Project remains the most advanced potential large new source of heavy rare earths in the world outside of China, currently the source of most of the world's supply. Avalon is adequately funded, has no debt and its work programs are progressing. Social responsibility and environmental stewardship are corporate cornerstones.





The current plans call for the ore to be mined initially in a quarry operation, eventually transitioning to an underground mining operation as the production increases. Crushed ore would be transported by truck to a processing facility in or near Kenora to make a high purity petalite concentrate. Several sites in the Kenora area are being considered for the processing facility. The concentrate would then be shipped from Kenora to customers in Europe, Asia or the US. Other minerals present, notably feldspar, have potential to create additional by-product revenue.

Once the process flowsheet is established, and firm commitments received from prospective customers, Avalon expects to aggressively advance the project. This will include re-starting the permitting process, determining the optimum location for demonstration plant and production facility, identifying sources of capital for financing, and moving forward to production. Avalon hopes to be able to begin the permitting process in 2014.

### Proven Commitment for Aboriginal and Local Business Development

Avalon has a strong relationship with Wabaseemoong Independent Nations (WIN), on whose traditional lands the Separation Rapids Project exists. In May 2013, the Memorandum of Understanding between Avalon and WIN was renewed. Avalon has established successful partnerships with other Aboriginal communities on similar projects. In the company’s flagship Nechalacho Project in the NWT, Avalon actively seeks to hire Aboriginal workers and monitor and report performance in this area. Of the workers at the Nechalacho Project in the NWT, on average 65% are Aboriginal. In addition contracts awarded to Aboriginal vendors in on the project have accounted for up to 16 per cent of annual expenditures at the site and added to over \$7.3 million in expenditures in 2010-2013. Avalon also contracts with local vendors, spending an additional \$5 million with local vendors in the same period (Table 1).

Table 1 Avalon Rare Earth Expenditures by Vendor Group at Nechalacho Project in NWT

	2013		2012		2011		2010	
	%	\$ Amount	%	\$ Amount	%	\$ Amount	%	\$ Amount
Aboriginal Vendors	6%	999,426	7%	2,123,233	14%	2,265,463	16%	1,963,078
Local Vendors	4%	610,138	6%	1,819,914	8%	1,294,550	11%	1,349,616
Other Vendors	90%	14,724,326	87%	26,388,749	78%	12,621,863	73%	8,956,542
<b>TOTAL</b>		<b>16,333,890</b>		<b>30,331,895</b>		<b>16,181,875</b>		<b>12,269,235</b>

Source: Avalon Sustainability Report, 2013

## Rainy River Gold

New Gold ([www.newgold.com](http://www.newgold.com)) is engaged in developing the Rainy River project, an advanced-stage gold project situated in Richardson Township, approximately 200 kilometers south of Kenora and 65 kilometres northwest of Fort Frances. The project contemplates a 21,000 tonne per day processing rate from a combination of open pit, underground and stockpiled ore. The project is expected to produce over 225,000 ounces of gold annually, at below industry average costs.

All New Gold sites actively participate in and support community-building and economic diversification initiatives. New Gold seeks opportunities to support community organizations and activities with a special focus on encouraging local entrepreneurship to promote diversified, sustainable economic prosperity. In 2012, New Gold invested nearly \$4.2 million in community investments and projects, donations and sponsorships, a 20% increase from 2011.



### Rainy River Development

<b>Status:</b>	Development	
<b>Location:</b>	65 km NW of Fort Frances, ON	
<b>Ownership (2014):</b>	100% New Gold	
<b>Reserves<sup>(1)</sup>:</b>	Gold	3.8 million ounces
	Silver	9.4 million ounces
<b>Resources<sup>(2)</sup>:</b>	Gold	6.2 million ounces
	Silver	14.6 million ounces
<b>Projected Start Date</b>	2016	16 year mine life

<sup>(1)</sup> Proven and Probable Mineral Reserves, shown on 100% basis

<sup>(2)</sup> Measured and Indicated Resources are inclusive of Mineral Reserves

(Excludes Inferred Resources), shown on 100% basis

Source: NewGold.com





## Other Mature Projects in the Region

### **Goliath Gold Project (Ontario) - Gold**

Located 20 kilometers east of Dryden, Ontario, Treasury Metals Inc. is developing the Goliath Gold Project that is projected to start operations in 2015-2016. The estimated life of the open pit and underground mine is nine years. Treasury Metals is advancing through the Canadian permitting process to begin production at its open-pit gold mine and 2,500 tonne per day processing facility. Subsequent underground operations will be developed in the latter years of mine life and will be funded from the project's initial cash flow. Results of 2013 drilling program have defined high-grade near-surface intersections, indicating significant upside potential for both resource and project economics.

### **Makwa (Manitoba) – Nickel, Copper, Platinum Group Metals (PGM).**

In southeastern Manitoba, Mustang Minerals Corp. is moving forward with exploration and development on its Makwa deposit near Lac du Bonnet, and is conducting exploration at the nearby Mayville property. Mustang is re-evaluating the feasibility of developing both deposits by commissioning a scoping study with processing infrastructure planned at the Mayville site. The Makwa deposit comprises a NI 43-101-compliant resource of 9.855M tonnes in the Probable category. The deposit contains 0.541 per cent nickel, 0.113 per cent copper, and 0.433 gpt platinum group metals (PGM). Mustang recently released a revised resource estimate for the Mayville deposit, increasing the resource to 24.3M indicated tonnes grading 0.45 per cent copper and 0.19 per cent nickel (0.69 per cent copper equivalent).

### **Rice Lake and Hinge Gold Mines (Manitoba) - Gold**

Manitoba producer San Gold has continued gold exploration in 2013 and has improved operational performance due to exploration success at its Rice Lake and Hinge mines in Bissett. The development of high-grade, near-surface deposits, has allowed San Gold to embark on a multi-year production expansion, targeting sustainable annual production of more than 100,000 ounces of gold. San Gold produced a record 85,000 ounces of gold in 2012 and 100,000 ounces in 2013. San Gold has consistently maintained an aggressive exploration program, completing over 220,000 metres of diamond drilling during the 2012 fiscal year.

### **Seymourville Frac Sand Project (Manitoba) - Sand**

These nine, contiguous, silica sand quarry leases (428 hectares) (ha) are located southeast of Seymourville, Manitoba and owned by Claim Post Resources Inc. In 2014, the company first intends to confirm the results of previous drilling by the Manitoba government and Gossan. The results had outlined two zones of silica sand, from five to 15 metres (m) thick and >400 m and >600 m long, in 41 of 60 drill holes. American Petroleum Institute (API) test work on the sand showed its suitability for the production of good quality white frac sand in the 8,000-to-10,000 pounds per square inch (psi) compressive strength range. Next, Claim Post plans to complete a NI 43-101 report and scoping study – Preliminary Economic Assessment (PEA); and then carry out discussions with Hollow Water First Nation, and the villages of Manigotogan and Seymourville.

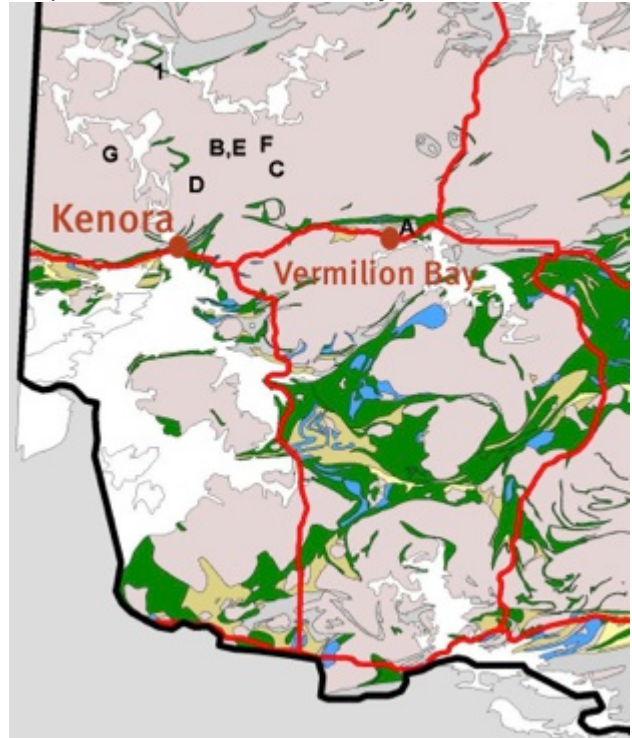


## Granite Quarries Near Kenora

Kenora is located in one of the world's largest granite resources, the Canadian Shield, and the Kenora area is home to Nelson Granite Ltd.

([www.nelsongranite.com](http://www.nelsongranite.com)), a producer of granite from several quarries in the area. In 2013, Nelson Granite operated year-round production from six established stone quarries in the Kenora District (Map 1). At these sites, Nelson produces unique and highly desirable porphyritic granite colours such as Vermilion, Shepody, Canadian Mahogany, Canyon Red, Pine Green and Crystal Gold. Nelson's 50,000 sq. ft. manufacturing centre is located in Vermilion Bay where the company produces a variety of products such as bases for bronzes, memorials and items for the construction and landscaping industry.

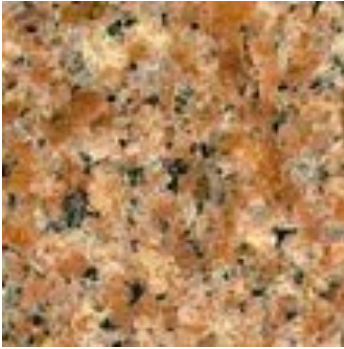
Map 1 Nelson Granite Quarry Sites



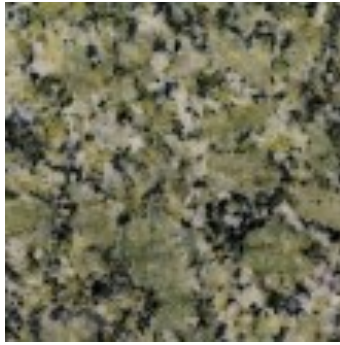


## Granite Mined in Kenora

**(A) Docker Township quarry** is located 10 km southwest of the town of Vermilion Bay (Sold as Morning Rose or Vermilion Pink)



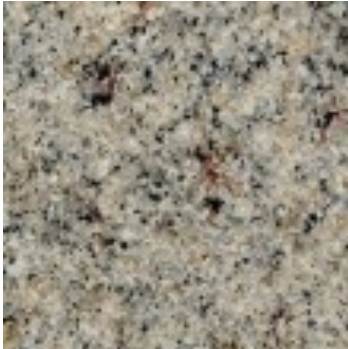
**(B) Forgotten Lake quarry** is located approximately 35 km north of Kenora. (Sold as Pine Green)



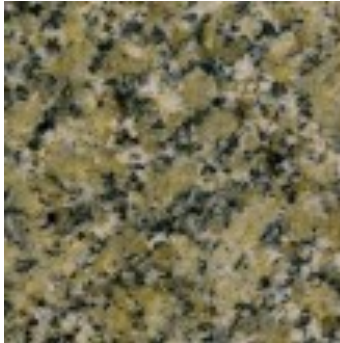
**(C) Red Deer Lake quarry** is located approximately 40 km northeast of Kenora (Sold as Red Deer Brown or Canadian Mahogany)



**(D) Redditt quarry** is located approximately 20 km north of Kenora (Sold as Winter Birch or Bimini)



**(E) Second Mountain quarry** is located approximately 35 km north of Kenora (Sold as Crystal Gold)



**(F) Shepody quarry** is located approximately 45 km north of Kenora (Sold as Shepody)



**(G) The Al Miner quarry** is separate from Nelson but operates in the same area.

See Map 1 for Quarry Location

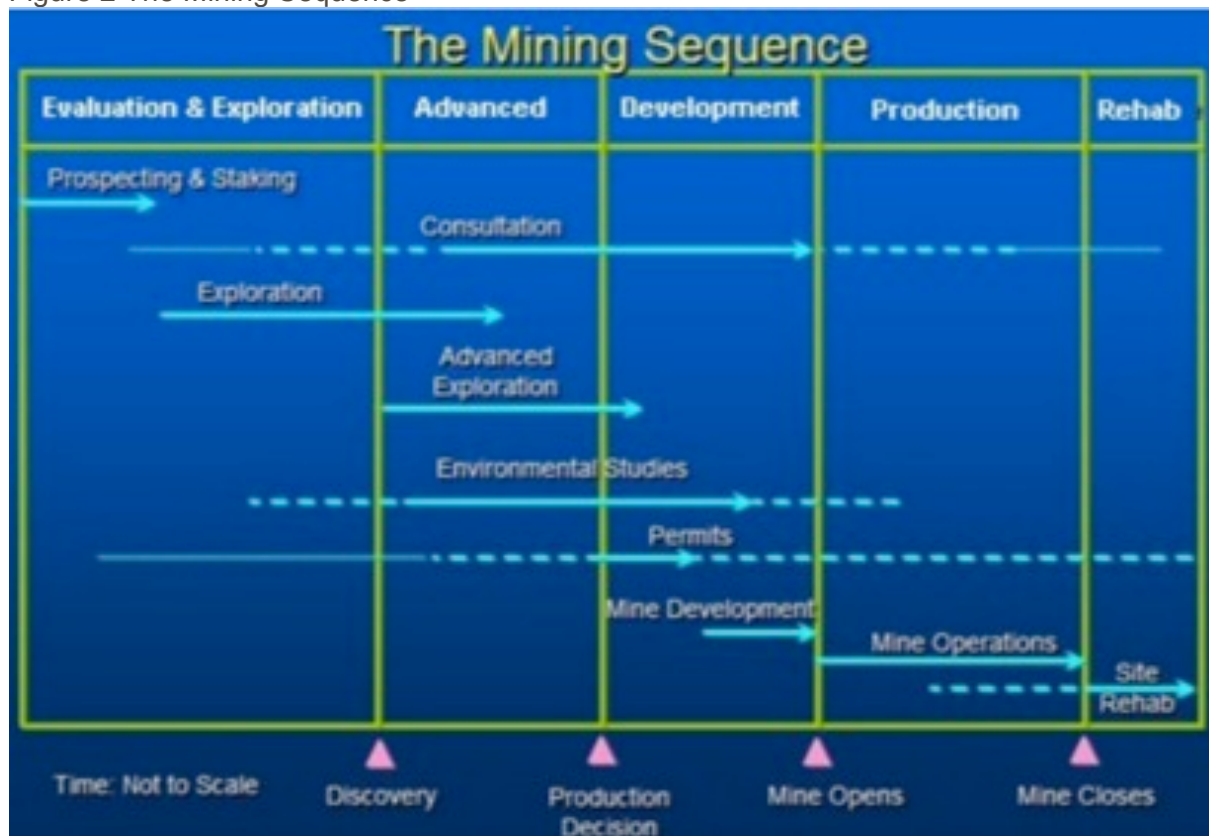
## Red Lake Gold Mines



## Kenora's Resources Support the Mining Sequence

There are five distinct phases that characterize the mining sequence and Kenora's businesses and infrastructure is well equipped to support each phase.

Figure 2 The Mining Sequence



Source: Craig Ravnaas, MNM

## Resources for Evaluation and Exploration

During the evaluation and exploration phases, mining companies carry out activities as diverse as geophysical surveys, airborne surveys, land evaluation, claim staking, prospecting, grid establishment, overburden removal to expose sample bedrock, sample removal, and diamond drilling. Businesses and organizations in Kenora are well equipped to supply the equipment, transportation services, hospitality services, and other services required for these activities.

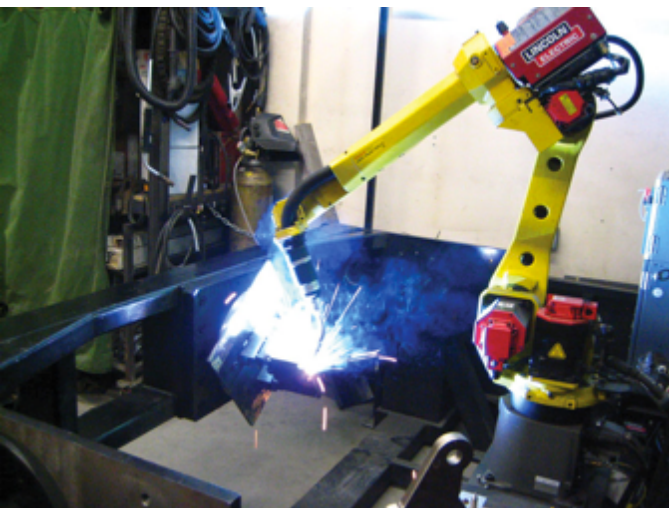
The City of Kenora has created a **Kenora Mining Services Directory** that prospectors and exploration companies can use to easily find local service providers, including:

- ✓ Engineering services
- ✓ Structural steel and fabrication services



- ✓ Heavy civil engineering construction services
- ✓ Industrial and commercial construction services
- ✓ Transportation services (car, truck, and helicopter)
- ✓ First Nations land management services
- ✓ Land development consulting services
- ✓ ATV equipment rental
- ✓ Heavy equipment rentals
- ✓ Hotels
- ✓ Catering and food service

Through its **Inuit Partnership, Forest Helicopters (foresthelicopters.com)** has spent the summers of 2012/13 in Nunavut working with AREVA Resources and CAMECO Corporation supporting their exploration projects. The Kiggavik Project (AREVA) is gearing up to enter the mining stage and Forest Helicopters provided a large part of the mission through external load work (moving portable drilling units) and general transport of people and goods. Forest has also been a regular provider of services to Goldcorp, Rainy River Resources (New Gold), and Northern Superior Resources.<sup>1</sup>



### Fero Robotic Welding Solutions

(Ferometalcraft.com) serves the mining industry through design and manufacture of custom robotic welding fixtures that offer ultimate flexibility and reliability. The company provides bolt-in and flexible robotic welding framework systems as well as complete turnkey packages, where the welding cell and components are all integrated at the company's Kenora facility. The programming, weld development and run off is performed in house before it reaches the mining site. Along with onsite support, robotic welding systems by Fero help mining clients to produce high quality parts within hours of installing the cell.

Federal, provincial, and local governments are strongly supportive of the mining sector in the region and the **Kenora Mining Services Directory** also includes contacts for the Ministry of Northern Development and Mines (MNDM) Resident Geologist Program Office for the Kenora District, which is located in Kenora. The mining information office of Grand Council Treaty #3 is located in Kenora and can assist with establishing relationships with First Nations communities.

## Resources for Advanced Exploration, Development, and Production

### Mining Services

Once a discovery is made, mining companies begin processes for consultation, more advanced exploration, and environmental studies. When a production decision is made, companies then move into the development phase, when the developer applies for permits and develops the mine site. During these phases, Kenora businesses are able to provide services to support advanced exploration activities and development activities through:

- ✓ Bulk sampling
- ✓ Construction services to support underground ramps and workings
- ✓ Public and Aboriginal consultation and land use planning
- ✓ Engineering services
- ✓ Environmental assessments and approvals
- ✓ Fabrication
- ✓ Negotiation of benefits agreements with First Nations and other communities
- ✓ Remote camp services
- ✓ Removal of overburden



Having previously completed projects for Goldcorp, **LBE Group ([www.lbegroup.ca](http://www.lbegroup.ca))** is one of Kenora's suppliers to the mining industry.

LBE Group is one of six engineering companies across Ontario, Manitoba, and Saskatchewan that have the Association of Energy Engineer's International designations of Certified Energy Manager, Certified Measurement and Verification Professional and Certified Demand Side Manager.

LBE Group has helped mining and forestry companies to manage their energy by providing energy management plans, process energy optimization, and preliminary and detailed energy engineering studies for the OPA. This optimizes operating costs by optimizing energy, allowing energy for expansion.



## Moncrief Construction

North of Red Lake, Ontario, Rubicon Minerals is building a mine and Kenora-based **Moncrief Construction** ([moncriefconstruction.ca](http://moncriefconstruction.ca)) is blasting granite and building an all-weather road so Rubicon can get there and get back. With big trucks moving big rocks, Rubicon relies on Moncrief as a specialist in all-weather road construction for remote and difficult terrain.

Goldcorp's Red Lake, Ontario, mining operation is also expanding, creating demands more power. Moncrief Construction is upgrading hydro lines to bring that power by erecting utility poles in difficult and hard-to-reach terrain. When the pole can not be put in place by road, the helicopter is Moncrief's solution for precision lifting and placement. Moncrief has the workforce and the experience to get the job done.

## Industrial Sites

The City of Kenora is a major landowner and has several land holdings that can be developed for use by mining companies. There is also a large amount of privately held land available for sale. Mining firms looking for shovel-ready industrial parks can choose from three industrial sites ready for development, including:

- **A privately held 80-acre former mill site:** The site currently has four buildings with approximately 200,000 sq. ft. of space.
- **Jones Road Industrial Park:** Developed in conjunction with the Weyerhaeuser Kenora TimberStrand® mill servicing corridor, the 245-acre park offers municipal sewer and water services, natural gas service, communications infrastructure, and excellent road access for companies wanting to co-locate with the Weyerhaeuser TimberStrand® mill. The park is located 1 kilometer from the Trans-Canada highway and offers spur access to the Canadian Pacific Railway mainline.
- **Kenora Airport Industrial Park:** The Kenora airport site offers direct access to the IFR rated Kenora Municipal Airport. The 60-acre park offers fast access to either air or ground transportation and is located 1 kilometer from the Canadian Pacific Railway mainline. Sites are available for long-term lease.



Figure 3 Airport Industrial Park



Figure 4 Jones Road Industrial Park Sites

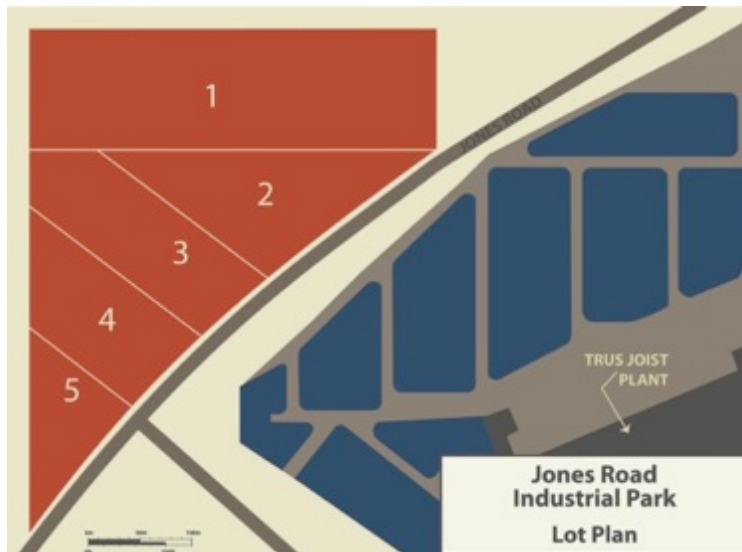


Table 2 Jones Road Industrial Park Sites: Size and Original Price

Lot Number	Size in Acres	Price
1	10.9	\$150,000*
2	4.5	\$85,000*
3	1.7	\$65,000*
4	2.2	\$75,000*
5	2.4	\$75,000*

\*Note: Lot values may be subject to price fluctuation, based on current market conditions.  
 For more information about revised Jones Road Industrial Park site boundaries or prices, please contact Jennifer Findlay, Economic Development Officer [jfindlay@kenora.ca](mailto:jfindlay@kenora.ca) (807) 467-2127.

## Transportation Infrastructure

Kenora is located on the Trans Canada Highway and has southbound connections to the US at three border crossings. Kenora is one of the few locations in Canada that offers access to both CP and CN Rail lines. The CP main line runs through Kenora and CN national main line has a switching yard 30 kilometers north of the city. The Kenora Airport offers 24-hour service, seven days a week. A single well-maintained runway is 5,800 foot in length, capable of landing a 737 size aircraft. Bearskin Airlines provides scheduled air service to Kenora as well as to other regional airports including:

- Lynn Lake
- The Pas
- Flin Flon
- Winnipeg
- Red Lake
- Sioux Lookout
- Dryden
- Fort Frances
- Thunder Bay
- Kapuskasing
- North Bay
- Sudbury
- Timmins
- Sault Ste Marie
- Ottawa
- Kitchener/  
Waterloo areas

Three Canada-US border crossings are located within 500 km of Kenora: Fort Frances, ON-International Falls, MN; Rainy River, ON-Baudette MN; and Thunder Bay, ON-Grand Portage, MN.

Table 3 Regional Border Crossings

Border Crossing	Distance from Kenora
Fort Frances, ON / International Falls, MN	215 Km
Rainy River, ON / Baudette, MN	230 Km
Thunder Bay, ON / Grand Portage, MN	480 Km

Table 4 Travel Distances to Selected Cities

City	Kilometres	Miles
Dryden, Ontario	120	75
Winnipeg, Manitoba	209	130
Brandon, Manitoba	432	268
Duluth, Minnesota	476	296
Thunder Bay, Ontario	489	304
Minneapolis, Minnesota	689	428
Regina, Saskatchewan	791	492
Saskatoon, Saskatchewan	1,000	621
Edmonton, Alberta	1,524	947
Calgary, Alberta	1,546	961
Toronto, Ontario	1,853	1,151
Vancouver, British Columbia	2,511	1,560

Source: Google Maps

## Housing

Kenora can meet a portion of the housing needs for mining companies as they progress into the advanced exploration, development, and mine operations phases. There is a total stock of over 6,500 housing units, including 350 apartments in Kenora. Rents on private apartments in have been below the regional average in 2012 and 2013, averaging \$719 per month in October 2013. The market



has tightened in 2013, with the vacancy rate of apartments in Kenora dropping to a low vacancy rate of 3.4 per cent. Housing starts in 2011-2013 years have focused mainly on single-family homes with a total of 45 housing starts in 2011-2013 and 47 completions in the same time period. There is ample room for growth in the rental market with only seven starts on rental properties in 2012 and no starts in 2013.

The City of Kenora has initiated a process to evaluate options and spur additional investment in housing stock that can serve the growing mining industry as well as Kenora's growing tourism industry and other sectors. Options under consideration include incentives for R3 development on city owned property, CIP designated areas for residential projects, entrance into funding arrangements with senior levels of government to construct additional housing, and potentially rezoning of selected areas. The City is committed to the growth of a diversified economy that includes the mining sector and will continue to evaluate and determine the best options to assure that housing is available to meet demand.

Table 5 Housing Stock, Kenora Census Agglomeration 2011

	Total Housing	Owner Occupied	Renter Occupied
Total - Structural type of dwelling	6,515	4,655	1,865
Single-detached house	5,100	4,350	750
Apartment, building that has five or more stories	250	15	235
Movable dwelling	-	-	-
Other dwelling*	1,165	280	885
Semi-detached house	160	70	85
Row house	70	50	20
Apartment, duplex	340	105	240
Apartment, building that has fewer than five stories	580	55	525

Source: National Household Survey \*Note: Includes semi-detached house, row house, apartment or flat in a duplex, apartment in a building that has fewer than five stories and other single-attached house.



Table 6 Rental Market Private Apartments - Comparable Markets

Centre	Average Rents (\$)				Universe of Apartment Units				Vacancy Rate (%)			
	Oct-10	Oct-11	Oct-12	Oct-13	Oct-10	Oct-11	Oct-12	Oct-13	Oct-10	Oct-11	Oct-12	Oct-13
Bracebridge T	792	827	853	835	272	273	273	291	2.9	2.6	5	3.7
Elliot Lake CA	532	531	553	571	1262	1271	1258	1255	8.7	8.6	12.3	15.5
Gravenhurst T	785	821	821	840	233	231	231	240	4.4	3.6	3.9	3.9
Huntsville T	832	843	852	854	312	308	303	309	4.4	4.9	3.4	4.0
<b>Kenora CA</b>	<b>694</b>	<b>693</b>	<b>710</b>	<b>719</b>	<b>360</b>	<b>354</b>	<b>357</b>	<b>357</b>	<b>3.9</b>	<b>5</b>	<b>5.5</b>	<b>3.4</b>
North Bay CA	759	737	790	811	3126	3133	3096	3053	2.1	3.9	2.7	3.6
Sault Ste. Marie CA	656	668	705	743	4617	4680	4658	4669	1.2	1.1	1.5	1.6
Temiskaming Shores CA	576	596	612	638	371	380	372	341	1.0	2.0	5.0	0.6
Timmins CA	694	735	776	782	1551	1541	1532	1527	1.7	1.8	0.8	3.4
West Nipissing M	615	637	628	651	363	377	370	384	5.8	3.4	1.2	4.8
<b>Average</b>	<b>681</b>	<b>688</b>	<b>724</b>	<b>748</b>					<b>2.6</b>	<b>3.0</b>	<b>3.2</b>	<b>4.0</b>

Source: Rental Market Report - Ontario Highlights

Table 7 Kenora Housing Starts and Completions 2011-2013

	Single			Semi			Row			Apt & Other		
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Starts by Dwelling Type	9	24	12	0	8	0	0	4	0	0	7	0
Completions by Dwelling Type	20	18	9	0	8	0	0	4	0	10	0	0
	Freehold			Condominium			Rental			Total		
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Starts by Intended Market	9	36	12	0	0	0	0	7	0	9	43	12
Completions by Intended Market	20	30	9	10	0	0	0	0	0	30	30	9

Source: CMHC (Starts and Completions Survey)



## Electric Power

Electric power is critical to mines and processing facilities. While there is a need to expand the electric power generation, transmission, and distribution systems in Northwestern Ontario, within the existing network, Kenora is located at a point in the system that has several advantages. These include nearby generation and transmission, helping to reduce the risk of power outages that have affected mines in the Northwest. The Northwest's power supply is partially isolated from Ontario's east and as a result power outages and system-wide voltage reductions that have affected the East have not impacted Kenora.

The Common Voice Northwest Energy Task Force (ETF) has estimated that 22 planned mines in Northwestern Ontario, combined with all other new and pre-existing sources of electric loads, will create a requirement a total load of 1,600 MW of power in the northwest by 2020. Federal and Provincial governments recognize that timely availability of a connection to the electrical grid is a key determinate of the viability of any of the new mines and are evaluating options to increase the level of power generation as well as infrastructure for transmission and distribution of electricity throughout the northwest.

Kenora is ideally located within the transmission system and the distribution system for Northwestern Ontario and also has two current power generation assets nearby. For transmission, the east-west tie line connecting Manitoba to Northeastern Ontario (with a current capacity<sup>vi</sup> of 350 MW) runs between Manitoba and Kenora. At Kenora, it splits, running transmission lines south to Fort Frances and east to Dryden. The two transmission lines rejoin at Anikokin and then continue east to Thunder Bay and beyond (See Appendix A for a map). Two hydro generating systems are located just north of Kenora: The Caribou station with 87 MW and the Whitedog hydro station with 68 MW. These systems supply Kenora with power that continues on the grid to other communities across Northwestern Ontario.

Kenora's location on the main transmission and distribution systems protects the city from outages that can occur in more northern communities such as Red Lake. Outages in October of 2012 meant that the Municipality of Red Lake experienced an unscheduled 37 hour electrical power outage due to a fault on the E2R transmission line. As a result, Goldcorp in Balmertown was affected by the outage, which cost the company \$5.9 million. Similarly, in 2011, a forest fire wiped out the distribution line serving Pickle Lake. It took crews 10 days to restore power to Pickle Lake and Musselwhite Mine (to its north).

*Appendix A contains a description of the power generation, transmission, and distribution system in Northwestern Ontario and discusses issues related to power reliability in some parts of the Northwest. Electric and natural gas costs in Kenora are highlighted in Appendix B. Kenora also offers reliable electric service that can expand to meet most any commercial or manufacturing need.*

## Kenora Labour Force

### Future Demand

Kenora is located within the Kenora District Census Division and is also in close proximity to the Rainy River District. The Mining Industry HR Council estimates that the Kenora District and Rainy River District to the south of Kenora will have combined hiring requirements of between 3,460 and 4,410 workers between 2012 and 2022. Even in a contracting environment, the net change in employment for the two regions combined is expected to increase by 410 workers between 2012 and 2020. If markets support an expansion in the mining sector, the net increase in employment could be as high as 1,120.

Table 8 Northwestern Ontario Districts

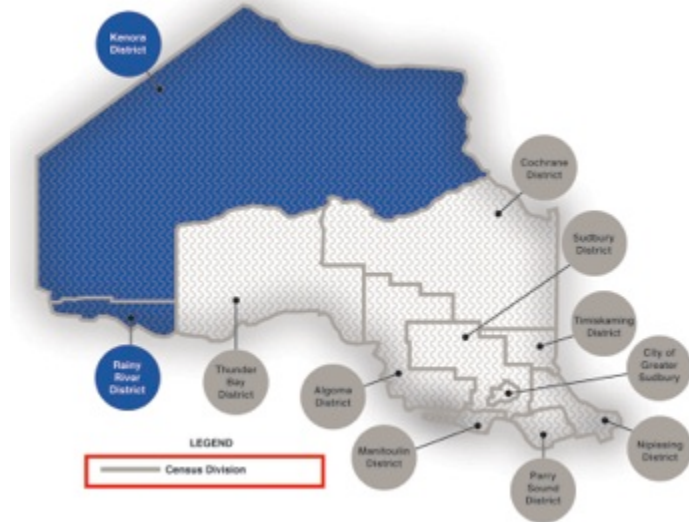


Table 9 Cumulative Regional Hiring Demand Forecast 2012-2020: Kenora and Rainy River Districts

Change in Employment	Net Change in Employment	Replacements		Cumulative Hiring Requirements
		Retirements	Non-Retirement Separations	
<b>Kenora District</b>				
Contractory	690	1,360	1,000	3,050
Baseline	890	1,410	1,020	3,290
Expansionary	1,060	1,440	1,040	3,550
<b>Rainy River District</b>				
Contractory	(280)	390	260	410
Baseline	(110)	440	330	640
Expansionary	60	460	330	860
<b>Combined</b>				
Contractory	410	1,750	1,260	3,460
Baseline	780	1,850	1,350	3,930
Expansionary	1,120	1,900	1,370	4,410

Source: Kenora and Rainy River Districts Mining Hiring Requirements Forecast, Mining Industry Human Resources Council 2012



## Available Labour Force

The City of Kenora has a population of over 15,300 and is located within the Treaty #3 Area, home to 21 First Nations communities that have a combined population of approximately 25,000. Kenora's highly skilled workforce is comprised of a working age population (age 25-64 years) of over 8,500 workers. Approximately 13% of workers have a trades certificate or diploma (over 1,100 workers), 22% have attained college education and 34% have completed some university education, a Bachelor's degree or higher degree. Labour availability in Kenora is above the average for Ontario. Among persons employment income in Kenora, 48.7% worked full year, full time in 2010 compared to 52.2% in Ontario.

## First Nations Labour Force

The First Nations communities in the region are growing and partnerships with First Nations communities can help to meet the needs of both mining companies and First Nations. Mining companies operating in the region have a history of establishing successful and mutually beneficial partnerships with First Nations, which has helped mining companies to develop business opportunities as well as meet hiring requirements.

## Capacity for Training and Workforce Development

The **Northwest Training and Adjustment Board (NTAB)** ([www.ntab.on.ca](http://www.ntab.on.ca)) has launched an aggressive strategy to prepare a mining workforce to meet the labour force needs of all stages of exploration, development, and active mine operations. In addition to monitoring the labour force needs of the mining sector in Kenora and Rainy River Districts, the NTAB promotes careers in mining through publications like Pathways to Employment in Mining 2014, a guide that helps local workers to understand the careers available in the mining industry. In addition, Aboriginal education partners and community colleges help to prepare workers with the skills needed in the mining industry.

## Seven Generations Education Institute

([www.7generations.org](http://www.7generations.org)) is a strategic partner for skills training, recruitment, placement, and workforce development for bands in the region and has been the recipient of large grants for mining workforce development. Seven Generations was established in 1985 as a consortium between the 10 bands of the Rainy Lake Tribal Area, with the goal of improving the economic status of band members and maintaining traditional cultural and linguistic values. The institution is based in Fort Frances, Ontario and operates satellite campuses in Thunder Bay and Kenora. Seven Generations is skilled at developing new programs in partnership with community colleges or universities, employers, government and other stakeholders. Programs are available to people from all walks of life, and are designed to instill a sensibility toward the cultural heritage and societal issues faced by First Nations and Aboriginal peoples.



**Confederation College** is also a key partner for developing Kenora’s skilled labour force. Confederation is a community college based in Thunder Bay, Ontario, and has its Lake of the Woods Campus in Kenora. The college serves approximately 3,400 full time students across a 550,000 square kilometer area in Northwestern Ontario. Regional campuses are located in the communities of Dryden, Fort Frances, Kenora, Geraldton, Marathon, Red Lake, Sioux Lookout and Wawa. The campus in Kenora offers a variety of postsecondary options designed to meet the education and training needs of workers in the Kenora area. Programs offered by the college range from full-time postsecondary diploma and certificate programs to continuing education or general interest courses as well as contract specialized training for workers with various skill requirements.



### Kenora Wages for Mining Occupations

Labour wage rates in Kenora are reasonable enough to support mine development, operations of active mines, or ore processing. The median employment income was \$50,822 for workers employed full-time full-year, similar to the median for Ontario (\$50,116). Kenora is a growing community that has prioritized expansion of a diversified economy to ensure jobs for local residents. Unlike many communities in the region that have a single-industry focus with a captive labour market, Kenora’s diversified growth strategy offers mining employers a stable and growing labour force. Kenora’s complementary focus on the forestry sector, tourism sector, mining sector, boating sector and other industries ensures that Kenora has a base of highly skilled workers who can meet the needs of employers.

Because the forestry, mining and manufacturing sectors in Kenora share a labour force, Tables 11 contains wage comparisons for selected occupations in each sector.

Table 10 Wages for Selected Mining Occupations, Kenora, Ontario, Canada

Population with earnings who worked full-time full-year	Kenora Labour Force	Median Earnings		
		Kenora	Ontario	Canada
<b>Industrial, electrical and construction trades</b>	300	52,768	50,348	49,983
<b>Administrative and financial supervisors and administrative occupations</b>	270	43,867	48,182	45,758

Table 11 Low, Median, and High Wages - Northwestern Ontario, Selected Occupations

	Low	Median	High
<b>Mining Occupations</b>			
Supervisors, Mining and Quarrying (NOC 8221-B)	\$17.48	\$31.00	\$50.00
Underground Production and Development Miners (NOC 8231-B)	\$15.00	\$28.30	\$40.00
Logging Machinery Operators (NOC 8241-B)	\$19.50	\$23.20	\$27.61
Underground Mine Service and Support Workers (NOC 8411-C)	\$10.25	\$32.17	\$41.97
Landscaping and Grounds Maintenance Labourers (NOC 8612-D)	\$10.25	\$14.00	\$24.00
Mine Labourers (NOC 8614-D)	\$15.70	\$20.63	\$29.75
Labourers in Mineral and Metal Processing (NOC 9611-D)	\$12.00	\$18.00	\$25.00
<b>Occupations for the Manufacturing Sector</b>			
Motor Vehicle Assemblers, Inspectors and Testers (NOC 9482-C)	\$14.75	\$30.00	\$35.00
Painters and Coaters – Industrial (NOC 9496-C)	\$13.77	\$19.39	\$31.25
Contractors and Supervisors, Carpentry Trades (NOC 7215-B)	\$12.50	\$19.00	\$38.00
Contractors and Supervisors, Mechanic Trades (NOC 7216-B)	\$16.78	\$28.00	\$44.74
Machinists and Machining and Tooling Inspectors (NOC 7231-B)	\$14.50	\$23.00	\$30.87
<b>Occupations in the Forestry and Mills Sector</b>			
Supervisors, Logging and Forestry (NOC 8211-B)	\$14.33	\$22.38	\$30.01
Logging and Forestry Labourers (NOC 8616-D)	\$12.00	\$19.06	\$25.00
Pulping Control Operators (NOC 9233-B)	\$11.75	\$24.00	\$30.86
Pulp Mill Machine Operators (NOC 9432-C)	\$23.85	\$26.38	\$30.86
Papermaking and Finishing Machine Operators (NOC 9433-C)	\$10.50	\$16.73	\$26.32
Lumber Graders and Other Wood Processing Inspectors and Graders (NOC 9436-C)	\$13.00	\$18.40	\$25.36
Labourers in Wood, Pulp and Paper Processing (NOC 9614-D)	\$12.75	\$24.07	\$26.87

Source: Working In Canada Wage Report

## Kenora Economic Development is a One-Stop Location for Workforce Development

There are several job training and skills development resources available to employers that can offset labour costs through wage subsidies, internships, placements, and other programs. Kenora's economic development office has created an education and employment committee that is tasked with helping employers access all of the programs available. Contact the city's economic development officer, Jennifer Findlay, to learn about the programs that can save costs for your business.



## Aboriginal Relations

The Kenora District extends east from the Manitoba border to Savant Lake and south to the International Border. It encompasses the towns of Kenora, Vermilion Bay, Dryden, Ignace, Sioux Lookout, Savant Lake and Fort Frances, and a number of First Nation communities of Treaty 3 affiliation. There are 26 bands within the Grand Council Treaty #3 (GCT3), located in the red-shaded area in Figure 5 (See also Table 13).

Located in Kenora, the Territorial Planning Unit of GCT3 addresses a broad scope of services for the mining industry. The scope includes:

- ✓ Building on existing relationships of all Parties
- ✓ Enhancing understanding of the Parties' perspectives on and approaches to economic development, and management in the natural resources sector
- ✓ Recognizing GCT3 and its member communities' connection to the land
- ✓ Encompassing only those matters that fall within the mandates of the participating Ontario ministries which may affect or be of interest to GCT3 and its member communities
- ✓ Building the Parties' capacities through information sharing and education on natural resources development through "Knowledge Forums" and other initiatives
- ✓ Exploring common interests and facilitating pragmatic approaches to economic development and management in natural resources sector and planning processes in GCT3 territory in Ontario.

### For More Information, Contact:

Cheryl Becker  
Mining Information Officer  
Email: [cheryl.becker@treaty3.ca](mailto:cheryl.becker@treaty3.ca)

Figure 5 Treaty Councils of Northern Ontario





Table 12 Links to First Nations within Treaty #3 Tribal Council

First Nation	Band #	Tribal Council
<u>Big Grassy</u>	124	Anishinaabeg of Kabapikotawangag Resource Council
<u>Big Island (Anishnaabeg of Naongashiing)</u>	125	Anishinaabeg of Kabapikotawangag Resource Council
<u>Couchiching (Fort Frances)</u>	126	Pwi-Di-Goo-Zing-Ne-Yaa-Zhing Advisory Services
<u>Eagle Lake</u>	148	Bimose Tribal Council
<u>Grassy Narrows</u>	149	Bimose Tribal Council
<u>Lac Des Milles Lac</u>	189	Bimose Tribal Council
<u>Lac La Croix</u>	127	Pwi-Di-Goo-Zing-Ne-Yaa-Zhing Advisory Services
<u>Lac Seul</u>	205	Independent First Nations Alliance
<u>Naicatchewenin</u>	128	Pwi-Di-Goo-Zing-Ne-Yaa-Zhing Advisory Services
<u>Nigigoonsimikaaning (Red Gut FN)</u>	129	Pwi-Di-Goo-Zing-Ne-Yaa-Zhing Advisory Services
<u>Northwest Angle No. 33</u>	151	Anishinaabeg of Kabapikotawangag Resource Council
<u>Northwest Angle No. 37</u>	152	Anishinaabeg of Kabapikotawangag Resource Council
<u>Ochiichagwe'babigo'ining (Dalles)</u>	147	Unaffiliated
<u>Onigaming</u>	131	Anishinaabeg of Kabapikotawangag Resource Council
<u>Rainy River</u>	130	Pwi-Di-Goo-Zing-Ne-Yaa-Zhing Advisory Services
<u>Saugeen (Savant Lake)</u>	258	Windigo First Nations Council
<u>Seine River</u>	132	Pwi-Di-Goo-Zing-Ne-Yaa-Zhing Advisory Services
<u>Shoal Lake No 39 (Iskatewizaagegan)</u>	154	Bimose Tribal Council
<u>Shoal Lake No. 40</u>	155	Bimose Tribal Council
<u>Stanjikoming</u>	133	Pwi-Di-Goo-Zing-Ne-Yaa-Zhing Advisory Services
<u>Wabaseemoong (Whitedog)</u>	150	Bimose Tribal Council
<u>Wabauskang</u>	156	Bimose Tribal Council
<u>Wabigoon Lake</u>	157	Bimose Tribal Council
<u>Washagamis Bay (Obashkaandagaang)</u>	235	Bimose Tribal Council
<u>Wauzhushk Onigum (Rat Portage)</u>	153	Anishinaabeg of Kabapikotawangag Resource Council, <a href="http://www.akrc.on.ca">www.akrc.on.ca</a>
<u>Whitefish Bay (Naotkamegwanning)</u>	158	Bimose Tribal Council

## Serving the Mining Sector Beyond Northwestern Ontario

While the mining industry in Northwestern Ontario offers good upside growth potential, there are plentiful opportunities for mining services companies in Kenora to serve a large national and international market. In 2013, Ontario accounted for less than a quarter (22 per cent) of planned mining exploration expenditures in Canada. Total exploration expenditures in Ontario were \$754 million in 2013. Mining exploration expenditures in Saskatchewan have grown over by 23 per cent between 2011 and 2013, reaching \$411.5 million in 2013. Planned mining exploration expenditures in Manitoba in 2013 were \$73.2 million and planned mining expenditures to the north in Nunavut were \$312.7 million.<sup>vii</sup>

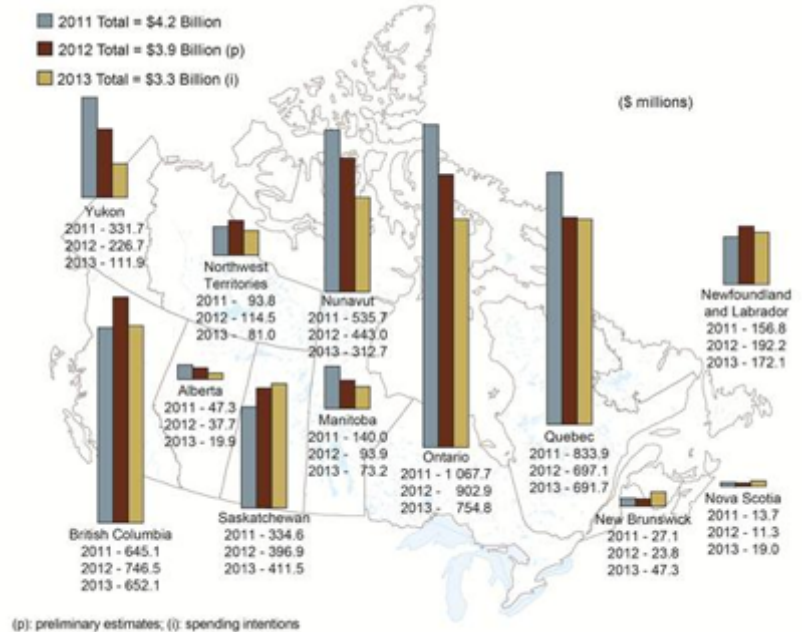
### Strategic Export Marketing Program

The Strategic One-on-One Export Marketing Program (SEMP) is funded by the Province of Ontario through the Ministry of Northern Development and Mines (MNDM) and is being delivered by Ontario's North Economic Development Corporation (ONEDC). SEMP has been designed to fit the varied needs of mining supply and services companies looking to enhance their export potential. Working directly with an international advisor, the program offers:

- Up to six months of customized 'one-on-one' consultation
- A confidential, two-day workshop with your company's senior management team
- Three one-day marketing and sales seminars designed to help you plan and select the right tools for your export development strategy.

Contact Scott Rennie, Project Manager, for more information:  
[scott.ennie@sudbury.ca](mailto:scott.ennie@sudbury.ca)

Figure 6 Exploration and Deposit Appraisal Expenditures by Province and Territory, 2011-2013



Source: Mineral Exploration and Deposit Appraisal Expenditures in Canada: Focus on Advanced Projects Continued in 2012 and Into 2013, (NR Can, March 2013)



## Other Resources For the Mining Industry

In addition to Kenora's strategic assets, there are several supporting resources that help mining services businesses to be successful in Kenora.

### The Northern Ontario Heritage Fund Corporation (NOHFC)

The Northern Ontario Heritage Fund Corporation ([www.nohfc.ca](http://www.nohfc.ca)) offers multiple funding programs designed to help municipalities, entrepreneurs and businesses build, expand and grow. Key Programs include:

#### **Northern Business Opportunity Program - Small Business Start-up Projects:**

Through this program, NOHFC offers contributions to eligible project costs related to the start-up of a business that creates jobs in Northern Ontario include, but are not limited to leasehold improvements, new or used equipment, training costs incurred with third parties, information and communications technology investments, and marketing costs. NOHFC assistance will be in the form of a conditional contribution and will generally not exceed 50% of eligible project costs up to a maximum of \$200,000.

#### **Northern Business Opportunity Program - Business Expansion Projects**

Existing businesses in Ontario that intend to expand and/or retain their operations within Northern Ontario to improve competitiveness, grow revenues and create jobs in the tourism or manufacturing sector can access this program. NOHFC assistance will generally not exceed 50% of eligible project costs up to a maximum of \$1 million per project. In exceptional circumstances, the NOHFC may consider exceeding the \$1 million maximum on a case-by-case basis. Up to 30% of the NOHFC funding may be in the form of a conditional grant with the remainder in the form of a repayable loan. Where a conditional grant is not provided the NOHFC may consider incentive term loans on a case-by-case basis.

#### **FedNor Northern Ontario Development Program**

Since April 2006, the FedNor Northern Ontario Development Program ([Fednor.gc.ca](http://Fednor.gc.ca)) has approved more than **\$237 million** in support of 1,205 projects that support community economic development, business growth and competitiveness, and innovation in Northern Ontario. FedNor provides financial support to viable projects led by businesses, municipalities, First Nations, and other organizations and institutions. Funding is available for projects that improve productivity, reach new markets, facilitate access to capital, foster investment, encourage entrepreneurship and cultivate industry collaboration.

## Financial Resources

The Lake of the Woods Business Incentive Corporation (LOWBIC) ([www.lowbic.on.ca](http://www.lowbic.on.ca)) is a Community Futures Development Corporation that offers several financial programs and services to support small business growth, including assistance in gaining access to capital for small and mid-sized business and social enterprises.

Figure 7 LOWBIC Services

Loans	Guarantees	Equity Investments	Other Services
<p>Up to \$150,000 with competitive interest rates and varying amortization times for the following purposes:</p> <ul style="list-style-type: none"> <li>✓ Business Start-up</li> <li>✓ Business Expansion</li> <li>✓ Existing Business Acquisition</li> <li>✓ Purchase of Assets</li> <li>✓ Working Capital</li> <li>✓ Consolidation of Business Debt</li> </ul>	<p>LOWBIC can also offer financing in the form of an operating line guarantee. For an annual fee of 2% of the guarantee, we will pledge our funds as security.</p>	<p>Funds in the form of equity participation may be provided by LOWBIC to incorporated businesses. The funds invested must assist in the creation or maintenance of permanent or part time jobs in the area.</p>	<p>LOWBIC's Business Development component provides business advisory services, individual mentoring, group presentations, workshops, seminars, business plans, banking proposals, and is a delivery agent for the Self-Employment Assistance Program offered from Human Resources Development Canada.</p>

Source: LOWBIC

In addition to larger banks, two small business lending organizations have branch offices in Kenora that serve entrepreneurs and local businesses. **Copperfin Credit Union** ([www.copperfin.ca](http://www.copperfin.ca)) works with business owners in Kenora to create flexible solutions to meet banking, borrowing and investment needs. **Business Development Bank of Canada** ([www.bdc.ca](http://www.bdc.ca)) enables the success of Canadian entrepreneurial businesses in all industries, all economic cycles, and all markets by providing:

- Financing to protect cash flow
- Consulting services to improve profitability
- Subordinate Financing, a mix of debt and equity financing to share the risks and rewards
- Venture Capital, for expertise and know-how to build your business
- Securitization, to help finance vehicles and equipment
- Smart Tech, to businesses make information and communications technology

## Outstanding Quality of Life

In addition to the resources that support the mining sector, Kenora offers a high quality of life. Kenora is North America's Premier Boating Destination. We are the connection to Lake of the Woods and its 14,522 islands. Through our events and amenities we celebrate our history and build our future. We love our lake; we are its stewards and we nurture its pristine environment.

Lake of the Woods is a summertime private recreation destination for an estimated 20,000 cottagers who have been coming to the region for over a century to enjoy Lake of the Woods and other smaller lakes and rivers in the area. Year-round outdoor sports and entertainment events compliment the pristine natural environment enjoyed by residents. Excellent schools and community amenities make Kenora a preferred place of residence for mining sector executives and senior managers and the city's investment in itself has made Kenora one of the most vibrant cities in Northwestern Ontario. Ongoing investment has made it considerably easier for employers to recruit workers from outside the region to Kenora.

**“The investments Kenora has made in itself has made it easy to recruit new people to Kenora. And once they're here, they want to stay.”**

**– Bill Bill Candline, Plant Manager  
Kenora Timberstrand**





## Appendix A: Electric Power in Kenora and the Northwest<sup>viii</sup>

### Generation

Northwestern Ontario relies on two different methods of generation and two equally different methods of moving electricity from one point to another. Electric power is generated through hydraulic generation (dams and run of the river) and on thermal and co-generation (Atikokan and Thunder Bay Generating Stations as well as a gas generator near Beardmore and the output from co-gen facilities at area paper mills).<sup>ix</sup> There are a number of renewable generators in the region, however, as they only operate when their source of energy is available (wind and sun) they are not taken into consideration when planning the overall system. All generators, with the exception of the Atikokan GS and the Dorion Wind Farm, introduce electricity into the grid at 115 kv. This output is delivered directly to end users through the 115 kv distribution<sup>x</sup> system of Hydro One.

Figure 8 Generators in Northwestern Ontario<sup>xi</sup>



## Distribution

There are two distinct systems to move electricity around the Northwest: (1) transmission at 230 kv and (2) distribution at the lower 115 kv rate. Northwestern Ontario's loads are all on the 115 kv system, being supplied by generation that is directly connected to that 115 kv system. The 115 kv system was originally built to connect those customers to generation located within the area and it was not until the 1970's that the 230 kv system was installed. Excess MWs are transferred up to the 230 kv system through auto transformers located in Kenora, Dryden, Fort Frances, Atikokan, Thunder Bay and Marathon.

Figure 9 115 KV Distribution System  
(arrows show direction electrons can and do move as required)



## Transmission

Transmission at 230 kv is the system that moves energy between jurisdictions rather than delivering it directly to customers. Very few generators produce electricity at the 230 kv rate<sup>xii</sup>. The east-west tie line connecting Manitoba to Northeastern Ontario (with a current capacity<sup>xiii</sup> of 350 MW) is the transmission system in the region. There is a minor 115 vk distribution connection (100 MW) to Minnesota at Fort Frances. The one exception to both generation or supply and the movement of electricity is when energy is obtained from outside of the region at times when the local generators are not able to supply the required amount of power or when surplus energy is sent out of the region.

Figure 10 Northwestern Ontario Transmission System





## Three Approaches to Power Delivery in Northwestern Ontario

There are three different approaches to the delivery of energy in the Northwest.

1. The lower tier serves Kenora and the other urban area of the region with significant distribution and transmission assets, including the ability to easily absorb new load. Outages are infrequent in this area.
2. The mid tier represents an area with intermittent supply. The Municipalities of Ear Falls, Red Lake, Pickle Lake and Greenstone are served by what is called a radial line. This 115 kv circuit dead ends at each of the most northern communities and when there is an interruption the community(s) between the point of disruption and the end of the line are without power, sometimes for many days. One such disruption in 2012 affected the operations of Goldcorp in Balmertown. The cost of this outage to Goldcorp was \$5.9 million.<sup>xiv</sup>
3. The third or top tier includes all of the First Nation Reserves that are powered through local diesel generation. This includes reserves north of Ear Falls, Pickle Lake and Greenstone as well as those in the vicinity of Lake Nipigon.

## Appendix B Business Factor Costs

### Electric Service Costs in Kenora

Table 13 Electricity Costs - Hydro One Networks (May 2013)

<b>Business Customers (More than 50 kW)</b>	
As a small business customer who typically uses more than 50 kilowatts (kW) on average per month, you are set up with a meter(s) capable of reading both kWh and kW.	
Rate Classification 750	Urban Demand
First kWh per month (adjusted usage) 750	7.8 _/kWh
Additional kWh (adjusted usage) 750-250,000	9.1 _/kWh
Delivery Fixed charge	32.32 \$/month
Delivery Volume charge	6.720 \$/kW
Delivery Volume charge (adjusted usage)	3.12 \$/kW***
Regulatory Fixed charge	0.25* \$/month
Regulatory Volume charge (adjusted usage)	0.56 _/kWh
Debt Retirement charge (metered usage)	0.70** _/kWh
Additional	Time-of-Use: Off-Peak: 6.7_ ; Mid-Peak: 10.4_ ; On-Peak: 12.4_ ; Electricity - over 250,000 kWh/year wi
Notes: * If you've enrolled with a retailer, the \$0.25 standard supply service administration charge will be deducted from the Regulatory charges on your bill. ** Communities of Bancroft, Campbellford and Eganville have their own specific rates for the Debt Retirement Charge. They are as follows: Bancroft = 0.66_ per kWh; Campbellford = 0.49_ per kWh; and Eganville = 0.60_ per kWh. *** Retail transmission rates shown have been adjusted for line losses.	

Table 14 Electricity Costs - Kenora Hydro Electric Corporation Ltd. the City of Kenora (May 2013)

<b>General Service 50 to 4,999 kW</b>	
All services other than those designated as residential service, municipal street lighting service. This includes combination type services where a variety of uses are made of the same service by the Customer (e.g. General Service less than 50 kVA combined with residential service). Subclasses would be: Demand less than 50 kVA - (100A @ 120/208V; 100A @ 120/240V, 60A @ 347/600V); Demand equal to 50 kVA, up to 500 kVA - (1600A @ 120/208V; 600A @ 347/600V; 600A @ 120/240V); Demand equal to 500 kVA, up to 5,000 kVA - (greater than 1600A @ 120/208V OR greater than 600A @ 347/600V and service from the 44 kV distribution system). For new installations, demand sizing is based on the main switch size in amps converted to kVA.	
Monthly Service Charge	\$516.91
Distribution Volumetric Rate	1.6470 \$/kW
Additional Distribution Charge: Rate Rider for Disposition of Deferral/Variance Accounts (2012) - effective until October 31, 2013 -0.4084 \$/kWh; Rate Rider for Disposition of Global Adjustment Sub-Account (2012) - effective until October 31, 2013, applicable only for Non-RPP Customers -0.2265 \$/kWh; Rate Rider for Disposition of Deferral/Variance Account (2013) - effective until April 30, 2014 -0.7384 \$/kWh; Rate Rider for Disposition of Global Adjustment Sub-Account (2013) - effective until April 30, 2014 Applicable only for Non-RPP Customers 0.6350 \$/kWh; Rate Rider for Disposition of Deferred PILs Variance Account 1562 _ effective until October 31, 2013 -0.4585 \$/kWh; Rate Rider for Recovery of Lost Revenue Adjustment Mechanism (LRAM) / Shared Savings Mechanism (SSM) Recovery (2012) _ effective until October 31, 2013 0.0230 \$/kWh.	
Regulatory Asset Recovery	Market Price
Retail Transmission Rate - Network Service Rate	2.4457 \$/kW
Retail Transmission Rate - Line and Transformation Connection Service Rate	0.5175 \$/kW
Wholesale Market Service Rate	0.0044 \$/kWh
Rural Rate Protection Charge	\$0.007/kWh
Standard Supply Service - Administrative Charge (if applicable)	\$0.25
Additional Regulation and Other Charge (if applicable)	Rural Rate Assistance: 0.0012 \$/kWh
<a href="http://www.ontarioenergyboard.ca">Source: www.ontarioenergyboard.ca</a>	



## Natural Gas Costs

### Union Gas Limited

Rate 301-Small Volume General Firm Service: Any customer in Union's Fort Frances, Western, Northern or Eastern Zones who is an end user whose total gas requirements at that location are equal to or less than 50,000 m3 per year.

Charges	Rate: 01-Jul-13 (effective date)
Total Gas Supply Charge	16.3241
Delivery, First: 100	9.7243 /m <sup>3</sup>
Next 200	9.1998 /m <sup>3</sup>
Next 200	8.8271 /m <sup>3</sup>
Next 500	8.4851 /m <sup>3</sup>
All over 1,000	8.2026 /m <sup>3</sup>
Monthly Charge	21

Rate 310-Large Volume General Firm Service Any customer in Union's Fort Frances, Western, Northern or Eastern Zones who is an end-user whose total firm gas requirements at one or more Company-owned meters at one location exceed 50,000 m3 per year.

Charges	Rate: (effective date)
Total Gas Supply Charge	15.837
Delivery, First: 1,000	7.6984 /m <sup>3</sup>
Next 9,000	6.2848 /m <sup>3</sup>
Next 20,000	5.4786 /m <sup>3</sup>
Next 70,000	4.9625 /m <sup>3</sup>
All over 100,000	3.0073 /m <sup>3</sup>
Monthly Charge	70

## Endnotes

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<sup>i</sup> Mineral Exploration and Deposit Appraisal Expenditures in Canada: Focus on Advanced Projects Continued in 2012 and Into 2013, (NR Can, March 2013)

<sup>ii</sup> Avalon Rare Metals Inc., Management Discussions and Analysis, May 31, 2013.

<sup>iii</sup> See Thunder Bay Mining Readiness Strategy

<sup>iv</sup> The property hosts two primary pegmatites - the Big Mack and Zone Eleven. These pegmatites consist of a mixture of the rare-elements of petalite (lithium), tantalum and tin. Petalite is an important ore of lithium prized for its mineralogical properties. The mineral is a lithium aluminum silicate (simply lithium feldspar) which contains 4.9% lithium oxide. It is especially valuable in imparting thermal shock resistance and has almost zero expansion when heated above 700C. Products with 60%+ petalite can take direct flame and rapid water cooling without failure – stove tops and kitchen ware. It's environmentally friendly. Requires less energy in manufacturing and produces reusable glass containers. Other lithium uses is found in pharmaceutical products and in batteries

<sup>v</sup> Forest Helicopters is a regular service provider to the mining/exploration community. The company has been involved with Airborne Geophysical Surveys, one of the first steps taken in exploration of minerals.

They also provide general transport to and from remote and unprepared landing sites for the purpose of staking mining claims. Line cutting and ground geophysics may be carried out where helicopters are used for access to various locations of the property held. Once a "Target" is identified their aircraft are used to transport helicopter portable drilling units and supplies which further investigates the target to determine if a significant mineralization exists.

<sup>vi</sup> The OPA is proposing to expand the East West Tie to 650 MW. This expansion is currently expected to be in service by 2018

<sup>vii</sup> Mineral Exploration and Deposit Appraisal Expenditures in Canada: Focus on Advanced Projects Continued in 2012 and Into 2013, (NR Can, March 2013)

<sup>viii</sup> Information on Northwestern Ontario's Electric Supply is provided by Common Voice Northwest Energy Task Force (ETF).

<sup>ix</sup> Resolute Forest Products in Thunder Bay and Fort Frances

<sup>x</sup> Even though the 115 is considered a transmission level, because it is used to distribute the power to all of our NWO customers, to be stepped down for further distribution we will refer to it as Distribution throughout this document.

<sup>xi</sup> Map provided by Common Voice Northwest Energy Task Force (ETF)

<sup>xii</sup> Atikokan GS and the new Dorion Wind Farm supply to the grid at 230 kv

<sup>xiii</sup> The OPA is proposing to expand the East West Tie to 650 MW. This expansion is currently expected to be in service by 2018

<sup>xiv</sup> Estimate provided by the Common Voice Northwest Energy Task Force (ETF)