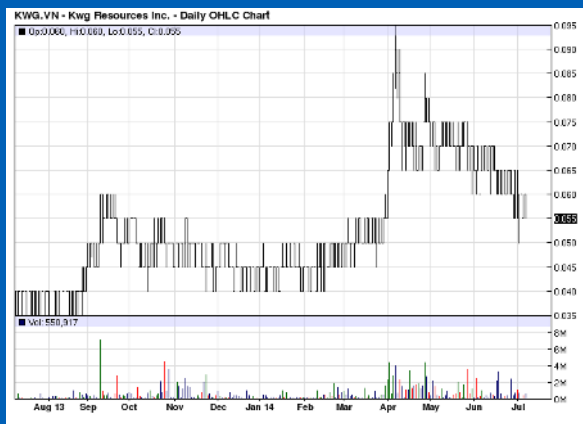


KWG:TSX-V **\$0.055** (07/09/14)  
 Recommendation: **Speculative BUY**  
 Target Price: **\$0.20**  
 Risk Rating: Speculative

## KWG Resources Inc.

### KWG Stock Chart



## *A New Technology for a New Chromite District: The New King of the Ring?*

### Highlights:

- We are initiating our coverage on KWG Resources with a \$0.20 target price and Speculative BUY rating.
- KWG is an exploration company with interests in the highly-prospective Black Horse and Big Daddy chromite deposits in the McFaulds Lake area of the Ring of Fire ("ROF") district in northwestern Ontario.
- More importantly, KWG recently secured control of two provisional U.S. patent applications and underlying intellectual property for the production of chromium-iron alloys directly from chromite ores and concentrates ("the Chromium IP"), which we believe represents a potential breakthrough technology that could be the key to unlocking the ROF.
- The Chromium IP process uses natural gas as its energy source which compares favourably to existing ferrochrome technology that is more energy-intensive as it uses electricity as its energy source and operates at higher temperatures.
- We believe that KWG's most important initiative should be advancing the commercialization of this new Chromium IP process. We believe that KWG should bring in an existing ferrochrome or integrated steel producer with a strong balance sheet as a strategic partner to more quickly advance the commercialization process.
- Secondly, the Company needs to rationalize its option to acquire an 80% interest in the Black Horse chromite deposit into a clear path to owning 100% in order to negotiate with potential strategic partners.
- Lastly, KWG needs to leverage its Railway Claims in working with the Ontario government, First Nations and other ROF stakeholders to advance the development of the transportation and other ROF infrastructure.
- Between the Black Horse and Big Daddy deposits, KWG's share of attributable chromite resources is approximately 54.3 billion lb Cr<sub>2</sub>O<sub>3</sub>, of which 90% are currently inferred resources.
- Our valuation is based on the conceptual development of the Black Horse deposit into a mine/mill/pipeline/reduction plant operation that ramps up beginning in 2021 to full annual production of one million tonnes of Cr-Fe alloys by 2024 with a 22-year operating life thereafter.
- Our Black Horse project capex estimate is \$1.527 billion with annual sustaining capex of \$30 million and an IRR of 21.0%.
- We haven't including any value for the Chromium IP or the Railway Claims in our valuation but believe that they represent important 'currency' in attracting a strategic partner and negotiating with the Ontario government and First Nations.
- As of March 31st, the Company had approximately \$4.2 million in cash.
- We believe that KWG shares are currently inexpensive relative to the Company's attributable chromite resources with an enterprise value per lb of Cr<sub>2</sub>O<sub>3</sub> of \$0.0007. Viewed another way, a \$1,000 investment in KWG shares provides the investor with control of approximately 1.27 million lb of Cr<sub>2</sub>O<sub>3</sub> resources, albeit the majority of which are inferred at this time.
- Our \$0.20 target price is based on 20% of our 2014E 10% DCF NAVPS is \$0.51 and a 20% discount to our "in-production" 2024E 10% DCF NAVPS of \$1.04.
- Investment risks in acquiring KWG shares include not being able to commercialize the Chromium IP process, not obtaining the final Chromium IP patents, being unable to secure a strategic partner and other ROF stakeholders such as governments and First Nations not being able to agree on infrastructure development.

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 jturner@popecompany.com

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COMPANY OVERVIEW

Summary

We are initiating research coverage on **KWG Resources (KWG:TSX-V; Rated Speculative BUY; \$0.20 Target Price)**. This report provides an introduction to KWG, an exploration company with interests in the highly-prospective Black Horse and Big Daddy chromite deposits in the McFaulds Lake area of the Ring of Fire ("ROF") district in northwestern Ontario, as shown in Figure 1.

More importantly, KWG recently secured an Agreement to acquire control of two provisional U.S. patent

Figure 1: Relative Performance of Domestic vs. Imported Chinese Iron Ore Prices

Source: KWG Resources Inc.



applications and the underlying intellectual property rights for the production of chromium-iron ("Cr-Fe") alloys directly from chromite ores and concentrates (the "Chromium IP"). The new process uses natural gas as an energy source compared to electricity, which is used by conventional ferrochrome submerged-arc furnace ("SAF") technology. Initial laboratory bench-

scale testing at the XPS Consulting and Testwork Services Process Support ("XPS") facilities in Falconbridge, Ontario has been successful and demonstrated, amongst other things, that the unit energy consumption with the new Chromium IP process could potentially be significantly lower than conventional ferrochrome smelting.

Our report also provides an update on the status of infrastructure development in the ROF and KWG's relationships with its partners in the Black Horse and Big Daddy chromite deposits. Our valuation is based on the conceptual development of the Black Horse deposit as an underground mine that feeds a reduction plant that we assume eventually ramps up to annual production of one million tonnes of Cr-Fe alloy products. Lastly, we have included a series of appendices containing reference material that addresses the background of KWG's involvement in the ROF, chromite geology in the ROF, a chromium market overview, ferrochrome technology overview, KWG management and Board and the First Nations stakeholders.

Chromium IP

The new Chromium IP process is based on the technology to produce direct-reduced iron ("DRI") briquettes for use in steel-making but at a higher temperature than used in DRI production. At present, the new process uses natural gas, a suitable solid carbon reductant and an accelerant to reduce the green chromite pellets at atmospheric pressure and at a temperature starting at approximately 900°C and rising to approximately 1,200°C in less than an hour's time. The rate of metallization of the chromite pellets is approximately 85% in tests so far but indications are that it could be higher. However, the trade-offs in terms of raw material and energy consumption, residence times and metallization rates

haven't been optimized. We would note that the natural gas supplies carbon and hydrogen as reducing agents and potentially reduces the amount of solid carbon reductant required compared to existing ferrochrome technology.

The minimization of the amount of solid carbon reductant, including carbon electrodes, and the absence of flux additives are important to note as these materials contribute deleterious elements such as phosphorous and sulphur. These elements can exceed desirable levels set by downstream steelmakers and result in penalties. Metallurgical testing to-date has shown that the Black Horse and Big Daddy chromite deposits are relatively low in phosphorous, which potentially positions the resulting Cr-Fe alloy as a product of choice for blending with stainless steel scrap and other metal units with higher phosphorous levels.

We believe that the Chromium IP process compares very favourably with the SAF technology that is the basis for existing ferrochrome production. The conventional SAF process requires up to 4 MWh of electric power per tonne of FeCr and operating temperatures typically in the 1,700°C range. The most energy-efficient ferrochrome smelting technology is Glencore's Premus process that has power consumption in the 2.2- 2.4 MWh range based on pelletizing and partial metallization ahead of charging the SAF. By way of comparison, the industry-standard energy consumption to produce one tonne of direct-reduced iron is 10.4 gigajoules or approximately 10 million BTUs ("mmBTU") of natural gas. We realize that the Chromium IP process will consume more natural gas than standard DRI applications because of the higher operating temperatures but this remains to be quantified on a commercial scale. That being said, 10 mmBTU is approximately the amount of natural gas required to generate 1 MWh of electricity (before transmission cost, losses and tariffs) compared to the 2.2-4.0 MWh required per tonne of ferrochrome. We would note that natural gas is relatively inexpensive in northern Ontario compared to electricity costs both here and in South Africa where the majority of the fully-integrated global ferrochrome producers are located. As well, the Chromium IP process could potentially reduce capital cost requirements, largely due to its lower operating temperatures. Finally, the SAF process produces a significant amount of carbon monoxide, slag and, potentially, in semi-closed furnace operations, hexavalent chromium (a carcinogen), which represent comparative environmental negatives relative to the Chromium IP process.

### ***The Railway Claims***

KWG's wholly-owned Canada Chrome Corporation ("CCC") subsidiary controls a 93-claim block (the "Railway Claims") contained within the approximate 330 km long corridor leading from the ROF south to the town of Nakina, Ontario. The Railway Claims are so-named because they follow a north-south sand ridge over the majority of the corridor that represents the most significant resource of aggregates and quarry rock for constructing either a north-south railway or road into the ROF.

### ***Chromite Resources***

KWG's interest in the Black Horse chromite deposit is held through its Koper Lake Option Agreement with **Bold Ventures Inc. (BOL:TSX-V; Not Rated)** under which KWG has an option to earn an 80% interest in the Black Horse deposit in conjunction with Bold's option to acquire a 100% interest in the Koper Lake Project from **Fancamp Exploration Ltd (FNC:TSX-V; Not Rated)**. In order for KWG to earn its Koper Lake interests, it must fund 100% of Bold's earn-in and option payments, including securing a positive feasibility study for a mineral deposit within the Koper Lake Project.

The most advanced work to date at the Koper Lake Project is the initial inferred resource for the Black Horse deposit, which has been traced along 0.6 km on strike and has a down-dip extent of approximately 1 km from approximately 350 m below surface to 1.4 km deep. The updated inferred resource was calculated at a 20% Cr<sub>2</sub>O<sub>3</sub> cut-off grade and stands at 77.2 million tonnes grading 35.1%

Cr<sub>2</sub>O<sub>3</sub> containing approximately 59.7 billion lb of Cr<sub>2</sub>O<sub>3</sub>, of which 47.8 billion lb is KWG's share if its option with Bold is completed.

KWG's interest in the Big Daddy chromite deposit is held through its Big Daddy JV Agreement with **Cliffs Natural Resources Inc. (CLF:NYSE; Not Rated)**. KWG and Cliffs became joint-venture partners in the Big Daddy JV in March, 2012. KWG holds a 30% interest in the Big Daddy JV with Cliffs owning the remaining 70%. Under the terms of the JV, KWG has access to the Big Daddy deposit and has the right to drill the deposit and use the core for a bulk sample for metallurgical testing at XPS. However, at present, KWG remains in court with Cliffs over Cliffs' request for access to the Railway Claims as part of its plans to construct a road to its Black Thor deposit. As such, KWG declined to consent to Cliffs' proposed use of the Railway Claims because the Company has no interest in the Black Thor deposit and wouldn't benefit from future chromite production. Cliffs then sought an easement over the Railway Claims as well as an order to dispense with KWG's consent. The Mining and Lands Commissioner declined to grant that order and Cliffs appealed that decision to Divisional Court which heard arguments on June 16<sup>th</sup> and 17<sup>th</sup> and has reserved its decision. Otherwise, Cliffs has largely exited the ROF with the recent sale of its exploration camp to **Noront Resources Ltd. (NOT:TSX-V; Not Rated)** and the write-down of its investment in the region.

The Big Daddy deposit has been traced over 1.2 km along strike and down to a depth of 490 m. The deposit is covered by 7-17 m of overburden and appears amenable to both underground and open pit mining, although it is unclear if the latter could be permitted in the ROF. The measured and indicated resources for Big Daddy are 23.3 million tonnes grading 32.1% Cr<sub>2</sub>O<sub>3</sub> and 5.8 million tonnes grading 30.1% Cr<sub>2</sub>O<sub>3</sub>, respectively, for total M&I resources of 29.1 million tonnes grading 31.7% Cr<sub>2</sub>O<sub>3</sub> that contain approximately 20.3 billion lb of Cr<sub>2</sub>O<sub>3</sub>, of which 6.1 billion lb is KWG's share. There are also inferred resources of 3.4 million tonnes grading 28.1% Cr<sub>2</sub>O<sub>3</sub> that contain approximately 2.1 billion lb Cr<sub>2</sub>O<sub>3</sub>, of which 0.6 billion lb is KWG's share. All the Big Daddy resources were calculated using a 20% Cr<sub>2</sub>O<sub>3</sub> cut-off grade.

### **Corporate Information**

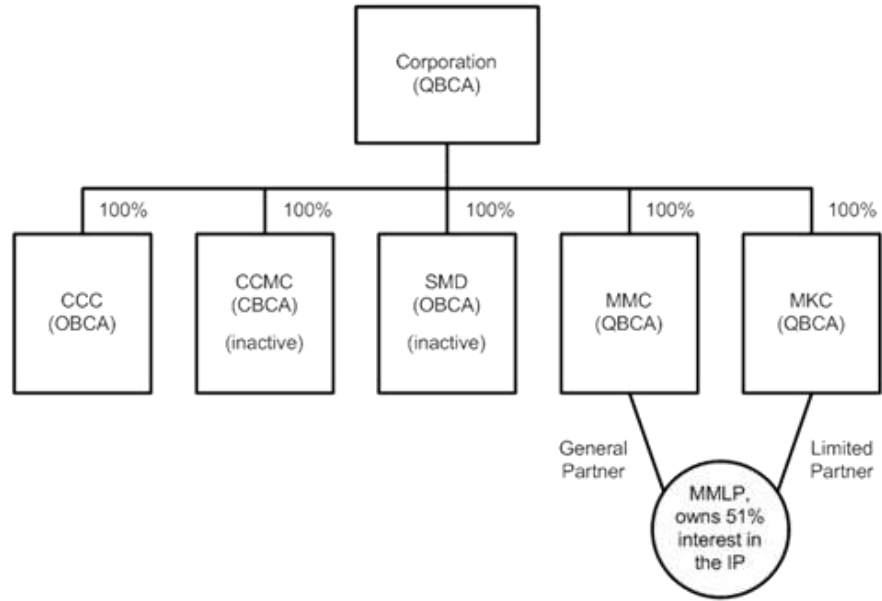
KWG Resources Inc. common shares trade on the TSX Venture Exchange under the symbol "KWG" and there are 777.5 million common shares outstanding and 994.5 million fully-diluted shares outstanding. KWG's largest shareholder is Cliffs with approximately 14.4%, followed by management and directors with approximately 2.5%. Management includes Mr. Frank C. Smeenk, President & Chief Executive Officer, Mr. Thomas E. (Ted) Masters, Chief Financial Officer, Mr. M. J. (Mo) Lavigne, Vice President - Exploration and Development, and Ms. Luce Saint-Pierre, Corporate Secretary. The Board of Directors consists of Mr. Smeenk, Mr. Douglas Flett, Mr. Donald Sheldon, Ms. Cynthia Thomas and Mr. Thomas Pladsen.

KWG Resources Inc. was originally incorporated in 1937 in Quebec under the name Kewagama Gold Mines (Québec ) Limited (NPL). On November 16, 1988, the Corporation was continued under Part 1A of the Companies Act (Quebec) under the name Kewagama Gold Mines (Quebec) Ltd./Les mines d'or Kewagama (Quebec) Ltee. On August, 26, 1991, the Corporation's name was changed to KWG Resources Inc. / Ressources KWG inc. by Certificate of Amendment. On February 29, 2012, the Corporation's articles and by-laws were amended to align with new amendments to Quebec corporate law. The registered and head office of the Corporation is located at 600 de Maisonneuve West, Suite 2750, Montréal, Quebec, H3A 3J2. The Corporation has an office at 141 Adelaide Street West, Suite 420, Toronto, Ontario, M5H 3L5.

KWG's wholly-owned subsidiaries are Canada Chrome Corporation ("CCC"), which was incorporated under the Business Corporations Act (Ontario) (the "OBCA") on February 20, 2009; Canada Chrome Mining Corporation ("CCMC"), which was incorporated under the Canada Business Corporations Act ("CBCA") on June 4, 2010; SMD Mining Corporation was incorporated under the OBCA on January 16, 2008; Métallurgie Muketi Commandité inc./ Muketi Mettallurgical GP Inc. ("MMC") which was incorporated under the Business Corporations Act (Quebec) ("QBCA") on April 2, 2014 and Métallurgie Muketi KWG-Commanditaire inc. / Muketi Metallurgical KWG-LP Inc. ("MKC"), which was incorporated under the QBCA on April 2, 2014. MMC and MKC are the general partner and limited partner, respectively, of Muketi Mettallurgical LLP ("MMLP"), a Delaware limited partnership created on April 8, 2014 which holds the Chromium IP. Figure 2 shows the relationships between KWG and its subsidiaries.

Figure 2: KWG Corporate Structure

Source: KWG Resources Inc. 2013 Annual Information Form – June 3, 2014





## INVESTMENT THESIS

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### *Conclusions and Recommendation*

We believe that KWG's new Chromium IP process for direct-reduction of chromite ores and concentrates represents a potential breakthrough technology that could be the key to unlocking the Ring of Fire. As such, we believe that KWG has reached a critical point in its development on several fronts. Most importantly is the need to commercialize its new Chromium IP process, which we believe will require bringing in a strategic partner with a strong balance sheet. Secondly, the Company needs to rationalize its option to acquire an 80% interest in the Black Horse chromite deposit into a clear path to owning 100% in order to improve its negotiating position with potential strategic partners.

Lastly, KWG needs to leverage its Railway Claims in working with the Ontario government, First Nations and other ROF stakeholders to advance the development of the transportation and other infrastructure necessary to open up commercial access to the ROF region. Ideally, we believe that the best transportation solution would be to extend the existing Provincial Highway 599 which provides year-around access for the Mishkegoogamang First Nation south of Pickle Lake to the east along the north of the Albany River towards the ROF and link in other First Nations communities. Once the ROF has east-west road access, a north-south transportation corridor could be constructed along the Railway Claims going south to Nakina with a slurry pipeline for transporting chromite concentrate running in parallel.

We believe that establishing a strategic partnership with an existing ferrochrome producer or steel mill with sufficient funding capacity is a logical development path, even if it means surrendering the majority interest in its chromite resources. We believe that the potential energy savings from the new Chromium IP process, KWG's current chromite resources and ownership of the Railway Claims are attractive incentives to potential partners. We believe that securing a strategic partnership will provide the funding necessary to advance the development of KWG's assets. We believe that it will also begin the transition of KWG from an explorer to a minority developer to a royalty company and result in a re-rating of KWG shares as investors see a clearer path to unlocking the value of its ROF chromite resources.

We believe that KWG shares are currently inexpensive relative to the Company's share of its underlying chromite resources of approximately 54.3 billion lbs, albeit the majority of which are inferred resources. Nonetheless, KWG's EV is currently pricing in these chromite lbs at \$0.0007 per lb Cr<sub>2</sub>O<sub>3</sub>. Another way to view this valuation metric is that \$1,000 invested in KWG shares represents owning largely inferred in-situ resources of approximately 1.27 million lb Cr<sub>2</sub>O<sub>3</sub>.

We believe that KWG shares offer both the short-term re-rating potential of securing a strategic partner but also the longer term investment in attractive, high-grade chromite resources, albeit with many hurdles on the path to development. We have based our valuation on the conceptual development of the Black Horse deposit with commercial production beginning to ramp up in 2021.

Our \$0.20 target price is based on 40% of our 2014E 10% DCF NAVPS is \$0.51 and a 20% discount to our "in-production" 2024E 10% DCF NAVPS of \$1.04. We are initiating coverage with a Speculative BUY.

### ***A New Technology and a New Partner***

Despite chromite discoveries beginning in 2008, the ROF remains largely a blank canvas waiting for a development picture to emerge. We believe that the new Chromium IP process represents a breakthrough technology that could potentially represent a systemic shift downwards in the global ferrochrome cost curve because of much lower power consumption compared to existing ferrochrome technology. As well, the main source of heat generation with the Chromium IP process is natural gas, which is relatively inexpensive in northern Ontario compared to electricity costs in South Africa where the majority of the fully-integrated global ferrochrome producers are located. As such, we believe that the prospect of participating in the Chromium IP commercialization process should entice either an integrated steel or ferrochrome producer with a strong balance sheet to become a strategic partner with KWG. We believe that such a strategic partner is both logical and necessary in order to fund, and more quickly advance, the commercialization of the Chromium IP process.

We believe that the issues facing KWG in developing the Black Horse deposit are significant. One of the Company's earn-in requirements is securing a positive feasibility study for a mineral deposit within Fancamp's Koper Lake Project. However, in order to complete a feasibility study for the Black Horse deposit, a transportation and infrastructure solution is necessary in order to establish a mining operation. Additionally, KWG needs to significantly scale up the Chromium IP process to at least a demonstration plant scale that would sufficiently establish commercial viability for feasibility study requirements. We would note that lower-value chromite direct-shipping ores and concentrates could be shipped to ferrochrome producers in the interim if the transportation infrastructure were available, leading the way for at least an initial positive feasibility study.

Cliffs could have been that strategic partner. However, Cliffs has largely exited the ROF and is currently embroiled in a proxy contest with activist shareholder Casablanca Capital LP that wants to replace the Board and management. Casablanca has stated, amongst other things, that Cliffs should spin out its international assets, including its ROF properties, into "Cliffs International" as a separate resource company. We would note that Cliffs' iron ore assets, including its Bloom Lake mine, are much more significant at this time than the ROF assets and would likely be the driver in a sale event. As a result, the ultimate ownership of Cliffs' 70% interest in the Big Daddy JV remains unclear, as is the future potential for capital funds to be raised for developing the Big Daddy deposit.

In any case, we believe that it is also logical for KWG to bring in a strategic partner from a mining perspective. We also believe that the strategic partnership should be modeled on the partnerships that **Adriana Resources Inc (ADI:TSX-V; Rated Speculative BUY; \$1.25 Target Price)** and **New Millennium Iron Corp. (NML:TSX; Rated Speculative BUY; \$1.50 Target Price)** have with Wuhan Iron & Steel (Group) Corp ("WISCO") and Tata Steel Ltd., respectively. While these partnerships aren't exactly the same, both are based on Adriana and New Millennium vending in their interests in their iron ore deposits in return for a minority ownership stake. As well, the minority partner is either carried to some extent for capital costs or is provided with a secondary short-term loan to make project cash calls to avoid excessive equity dilution. In both cases, the majority partner is responsible for arranging the project debt financing. Additionally, WISCO and Tata became significant shareholders of Adriana and New Millennium, respectively.

As a next step in the commercialization process, XPS has developed a bench-scale test plan to optimize the processing parameters and define the conditions for piloting. KWG will use the upcoming summer drilling season to complete sufficient core drilling to provide at least 10 tonnes of representative drill core samples to support pilot plant testing ("piloting"). XPS can facilitate the piloting of the process and provide technical expertise and direction as needed. We believe that as the XPS piloting of the Chromium IP process progresses, the next decision will likely be the selection of a strategic partner, if that hasn't occurred already. Ideally, the strategic partner will have industrial-scale facilities for completing pilot plant and "in-plant" testing of the new process when a sufficiently large bulk sample



Ojibway First Nations communities that are part of the 20 First Nations communities that are stakeholders in the ROF. This Agreement allows these communities to negotiate can be extracted and transported from KWG's chromite deposits. The piloting will be used to better understand the thermodynamics and kinetics of scaling up the new process progressively for commercial implementation. Management has indicated that the Company has retained a consultant to lead their search for a strategic partner and that discussions are well-advanced with companies such as Glencore, Samancor, Outokumpu, WISCO, Tata Steel, Thyssen Krupp, Baosteel and Jindal Steel (India). We have not included any royalty or licensing contribution from the Chromium IP patents in our valuation but view them as a 'currency' for securing a strategic partner.

### ***Transportation Solution***

The global chromite ore and concentrate market was approximately 30 million tonnes in 2013 and the global production of FeCr was approximately 10.8 million tonnes. Even if the ROF captured 20% of this market, we don't believe that the estimated 5-6 million tonnes per year ("mtpy") of 45% Cr<sub>2</sub>O<sub>3</sub> concentrate or 8-9 mtpy of 30% Cr<sub>2</sub>O<sub>3</sub> ore are sufficiently large enough volumes of material to merit the construction of a new rail line to access the ROF. A railway could be used to transport a larger volume of lower grade chromite ores but most of the reported chromite resources to-date have grades between 20%-45% Cr<sub>2</sub>O<sub>3</sub>, indicating that there are likely decades before the mining of <15% Cr<sub>2</sub>O<sub>3</sub> ores would be justified. We would note that in February, 2013, CN suspended their feasibility study for a third rail line in the Labrador Trough on behalf of a half-dozen emerging iron ore developers in part because these developers could only commit to between 20 million to 30 million tonnes of annual volume. In addition, a railroad into the ROF likely wouldn't provide rail access to all of the First Nations communities in the region as spur lines would be very expensive relative to the volume of goods that would travel to and from these communities.

Ideally, we believe that the best transportation solution would be that the existing Provincial Highway 599 which provides year-around access for the Mishkegoogamang First Nation south of Pickle Lake should be extended east along the north bank of the Albany River to link in the Marten Falls, Webequie and Neskantaga First nations that are the closest communities to the ROF. Appendix G contains details of the 20 First Nations communities that are stakeholders in the ROF. Some of these communities such as Constance Lake First Nation currently have all-weather access and a number such as Weenusk First Nation are so isolated that being part of the all-weather road network doesn't make sense at this time.

The east-west road network could then be used to bring construction materials to the ROF mines and the construction of the north-south transportation corridor to Nakina. A north-south road could then be constructed that, amongst other things, would allow an adjacent pipeline(s) to be built for transporting chromite concentrate. This solution would provide for easy access to the pipeline(s) for construction and maintenance as well as making the road safer for First Nations communities by freeing the road of heavy truck traffic and the resulting pollution from diesel fuel and fumes.

### ***The Ontario Government, First Nations and Infrastructure Funding***

We believe that the continuity provided by the election of a majority Liberal government in Ontario sets the stage for the meaningful advancement of Impact and Benefit Agreements with the First Nations communities in the region as well as securing a transportation infrastructure solution. Last November the Ontario government announced its intention to create a development corporation ("Devco") to bring together the various stakeholders in the ROF. The Liberals had previously pledged \$1 billion in ROF funding and during the election made this commitment unconditional with no requirement for matching Federal funds. Devco would develop, construct, finance, operate and maintain the infrastructure necessary to open up the ROF as well as allow First Nations to have year-around road access to southern communities.

Last March, the Ontario government signed a Regional Framework Agreement with Matawa First Nations Management (“MFNM”). MFNM is a regional tribal council that represents nine Cree and Ojibway First nations communities that are part of the 20 First nations communities that are stakeholders in the ROF. This Agreement allows these communities to negotiate with the Ontario government both individually and as a group while recognizing the proportional impacts from development on each community. For its part, MFNM had previously retained Mr. Bob Rae, former Federal Liberal leader and Ontario Premier, as their Chief Negotiator with Ontario government.

Last April, the Ontario government announced that the Ontario Northland Transportation Commission (“ONTC”) was to be rejuvenated with new strategic investments. During the recent provincial election, KWG proposed its Northland Development Corporation Bill that would essentially see ONTC become Devco but as a non-share capital corporation similar to an Airport or Port Authority (the “Transportation Authority”) instead of a Crown corporation. KWG has proposed that the Transportation Authority could then be governed by northern residents beginning with the members of the MFNM. The Transportation Authority could examine the potential for extending ONTC’s rail assets from Hearst, Ontario to access the ROF region.

We would note that the Transportation Authority/ONTC could take advantage of the government’s credit rating in raising funds to develop the necessary infrastructure. The chromite deposits in the ROF are of sufficient size and are in close enough proximity to support a centralized concentrator with an operating life measured in decades. We’re forecasting the Black Horse mine and concentrator to have an operating life of 25 years but fully expect the concentrator to operate much longer based on run-of-mine (“ROM”) ore being delivered from other deposits such as Big Daddy. As such, we believe that the toll revenues from KWG and other mining companies for the use of the Transportation Authority’s infrastructure into the ROF would support the issuing of long term bonds, possibly with maturities as long as 40 years. We believe that these long term bonds would be attractive to pension and infrastructure investment funds and that the Transportation Authority’s access to the capital shouldn’t be a significant issue. The Ontario government has previously pledged \$1 billion in funding for the ROF but may find that utilizing its credit rating to support ONTC issuing bonds, or buying those bonds for secondary distribution, may be a more efficient way to raise capital. As such, we believe that some form of partnership between the mining industry, First Nations and the Ontario government will be required in order to advance the ROF and that utilizing a Transportation Authority model as the vehicle for that partnership and funding merits further study.

### ***The Railway Claims***

With respect to the ROF infrastructure, KWG controls the Railway Claims that follow a regional north-south sand ridge and provide a strategic source of supply of aggregates and quarry rock for the construction of either a railroad or road network to open up all-year access to the ROF. Given that the ROF is mainly low-lying muskeg and bog, the Railway Claims essentially lock up the majority of the local aggregate resources along the potential north-south road/rail corridor. We believe that this strategic value is best demonstrated by Cliffs’ current appeal of a decision last September denying Cliffs the right to construct a road over a portion of the Railway Claims in order to access its Black Thor chromite deposit.

As a result, we believe that the Railway Claims provide KWG with additional ‘currency’ in negotiating with both potential strategic partners but also with the Province of Ontario and First Nations communities in adopting a strategy to open up access to the ROF. As well, the Railway Claims position KWG as the natural consolidator of the Bold and Fancamp interests in the Koper Lake Project. As it stands, in order for KWG to earn its 80% interest in the Black Horse deposit, the Company must pay Fancamp \$15 million and can elect to do so using KWG shares on behalf of Bold, thereby making Fancamp a significant KWG shareholder. We believe that it is in the interests of all three companies to re-negotiate their respective option agreements such that KWG emerges with a clear path to owning 100%

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of the Black Horse deposit. This would likely involve issuing additional KWG equity and royalties to Bold and Fancamp but would strengthen KWG's negotiating position.

### ***A New Royalty Company***

Under a scenario where KWG gives up majority interest in its chromite deposits in return for a carried minority interest, the eventual cash dividends from the project become a type of after-tax royalty payment, net of ongoing sustaining capital expenditures. As well, granting Chromium IP licenses to other companies in the ROF as well as globally would also yield licensing fees and other royalty income. We haven't factored any future value for the potential Chromium IP royalties but believe that, beyond 'currency' for bringing in a strategic partner, these represent very attractive 'blue sky' upside for KWG shareholders. As a result, we see KWG transitioning from an exploration company to a minority developer to a royalty company over the course of commercializing the Chromium IP process and bringing its chromite resources into production.

## CORPORATE SNAPSHOT: KWG RESOURCES INC.

## KWG Resources Inc.

Note: All numbers are in CAD millions unless otherwise noted

<b>Recommendation</b>		<b>Ticker:</b>	KWG
Rating:	Speculative BUY	2014E 10% DCF	
12-Month Target:	\$0.20	Project NAVPS:	\$0.51
Projected Return:	363.6%	Fiscal Year-End:	Dec 31st

**Investment Thesis** - We believe that KWG's new Chromium IP process for direct-reduction of chromite ores and concentrates represents a potential breakthrough technology that could be the key to unlocking the Ring of Fire. As such, we believe that KWG has reached a critical point in its development on several fronts. Most importantly is the need to commercialize its new Chromium IP process. Secondly, the Company needs to rationalize its option to acquire an 80% interest in the Black Horse chromite deposit into a clear path to owning 100% in order to negotiate with potential strategic partners. Lastly, KWG needs to leverage its Railway Claims in working with the Ontario government, First Nations and other ROF stakeholders to advance the development of the transportation and other infrastructure necessary to open up commercial access to the ROF region. Ideally, we believe that the best transportation solution would be to extend the existing Provincial Highway 599 which provides year-around access for the Mishkegoogamang First Nation south of Pickle Lake to the east along the north bank of the Albany River towards the ROF and link in other First Nations communities. Once the ROF has east-west road access, a north-south transportation corridor could be constructed along the Railway Claims going south to Nakina with a slurry pipeline for transporting chromite concentrate in parallel.

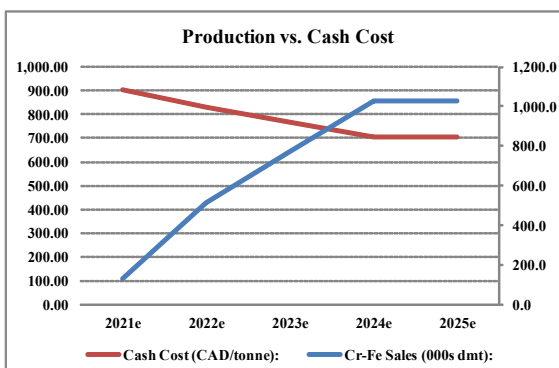
**Key Attributes** - We assume that KWG brings in a strategic partner that owns 70% of the Black Horse deposit that would be put into production. We assume that KWG would retain the remaining 30% interest on a carried basis through to the completion of a bankable feasibility study and the commercialization of the Chromium IP process. Additionally, we assume that the strategic partner provides KWG with a \$100 million revolving line of credit with which to make cash calls to fund its equity contributions ahead of commercial production. We assume that there will be a 70/30 debt/equity project financing structure, that the debt is repaid from 60% of the cash dividends and that the debt coupon is 8%. In addition to the revolving line of credit, we have assumed that the majority of KWG's warrants and options from 2014, 2016 and 2017 are exercised at prices between \$0.10-\$0.14 per share for total proceeds of approximately \$19.8 million. Additionally, we have assumed that KWG will issue a total of 178.6 million common shares between 2014-2022 at an average price of \$0.17 per share for gross proceeds of \$30.4 million. Our valuation is based on the conceptual development of the Black Horse deposit as an underground mine with a concentrator to produce a chromite concentrate slurry that is pumped via a pipeline to a reduction plant located near Nakina. We are assuming a four-year ramp up of chromite ore production from 2,500 tpd to 10,000 tpd to match the staged construction of four reduction modules with capacity of 250,000 tonnes per year ("tpy") each for a total of 1 million tpy of Cr-Fe alloy products. We are assuming that the concentrator will be on surface and at full production would produce approximately 2.2 million tpy of chromite concentrate grading 45% Cr<sub>2</sub>O<sub>3</sub> from approximately 3.6 mtpy of ROM ore grading 30% Cr<sub>2</sub>O<sub>3</sub>. We are forecasting capital costs to build the mine/concentrator, pipeline and reduction plant at \$1.527 billion and annual sustaining capital costs of \$30 million with an after-tax IRR of 21.0%. Our steady-state operating cost estimate is approximately \$702 per tonne and we are using a long-term FeCr price of US\$1.00 per lb Cr.

**Investment Risks** - Investment risks in acquiring KWG shares include not being able to commercialize the Chromium IP process, not obtaining the final Chromium IP patents, being unable to secure a strategic partner and other ROF stakeholders such as governments and First Nations not being able to agree on infrastructure development.

Reserves & Resources (millions of tonnes)	Ore	Contained		Attributable	
		Cr <sub>2</sub> O <sub>3</sub>	Cr <sub>2</sub> O <sub>3</sub>	Ownership	Cr <sub>2</sub> O <sub>3</sub>
Black Horse <sup>1</sup> Inferred	77.2	35.10%	27.1	80%	21.7
Big Daddy M&I	29.1	31.70%	9.2	30%	2.8
Big Daddy Inferred	3.4	28.10%	1.0	30%	0.3
Total M&I	29.1	31.70%	9.2	30%	2.8
Total Inferred	80.6	34.80%	28.1	78%	21.9

<sup>1</sup> 80% ownership is subject to delivering a feasibility study to optionor

Operating Summary	2021e	2022e	2023e	2024e	2025e
FeCr Sales (000s dmt):	128.3	513.0	769.5	1,026.0	1,026.0
Cr Grade (%):	60.0%	60.0%	60.0%	60.0%	60.0%
FeCr Price (C\$/Tonne):	1,470	1,470	1,470	1,470	1,470
Cash Cost (C\$/tonne):	905	831	769	702	702



## Pope &amp; Company Research

July 10, 2014

Analyst: Jay Turner, P.Eng.

<b>Market Statistics</b>		<b>Date:</b>	Jul 9/14
Reporting Currency:	CAD	Basic Shares (mln):	777.5
Last Close:	\$0.055	FD Shares (mln):	994.5
52-Week Hi/Low:	\$0.09/\$0.035	4-Week Average	
Market Cap (mln):	\$42.8	Daily Volume:	854,172
Enterprise Value (mln):	\$38.6	Net Debt:	(4.2)
Dividend:	\$0.00	Dividend Yield:	0.0%

Financial Statistics	2013a	2014e	2015e	2016e	2017e
Cash:	6.2	2.1	4.0	12.3	15.6
Working Capital:	7.6	3.7	5.6	13.8	15.4
Current Ratio (x):	29.2	8.4	12.3	29.1	32.2
Total Debt:	0.0	0.0	0.0	0.0	0.0
Common Equity:	42.9	41.7	44.6	53.9	56.4
Book Value (CAD):	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06
Price/Book (x):	0.9	1.0	1.0	0.9	0.9
Debt/(Debt+Equity) (%)	0.0	0.0	0.0	0.0	0.0
ROE (%):	-6.8%	-5.3%	-4.5%	-3.4%	-3.3%
ROIC (%):	-6.8%	-5.3%	-4.5%	-3.4%	-3.3%

Note: All numbers in CAD millions unless otherwise noted

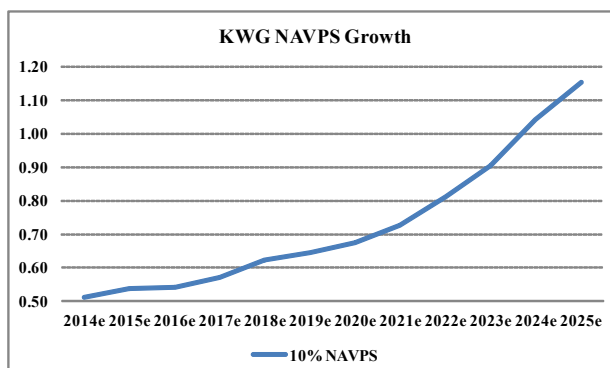
Financings/Cashflow	2013a	2014e	2015e	2016e	2017e
Shares Issued (mln):	45.6	45.0	50.0	92.6	43.2
Ave. Issue Price (C\$):	0.05	0.10	0.10	0.12	0.10
Gross Proceeds:	2.3	4.5	5.0	11.2	4.4
Operating Cashflow <sup>1</sup> :	(2.4)	(2.0)	(1.8)	(1.8)	(1.8)
Capex:	(4.1)	(2.1)	(1.0)	(1.0)	(1.0)
Free Cashflow:	(6.5)	(4.1)	(2.8)	(2.8)	(2.8)
CFPS (C\$):	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Changes to Work Cap:	(0.6)	(0.2)	0.0	0.0	1.8
Investing Cashflow:	(4.0)	(2.1)	(1.0)	(1.0)	(1.0)
Financing Cashflow:	2.2	0.1	4.7	11.1	4.4
Net Change in Cash:	(4.9)	(4.1)	1.9	8.3	3.3
<b>Quarterly</b>	<b>Q1/14a</b>	<b>Q2/14e</b>	<b>Q3/14e</b>	<b>Q4/14e</b>	<b>Q1/15e</b>
EPS:	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

<sup>1</sup> Operating cashflow before working capital changes

Note: All numbers in CAD millions unless otherwise noted

10% NAVPS (millions of CAD)	2014e	2015e	2016e	2017e	2018e
NPV Operating CF:	425.5	470.0	518.8	572.5	631.6
NPV Capex:	(61.7)	(65.7)	(71.3)	(77.4)	(84.2)
NPV Free Cashflow:	363.8	404.2	447.5	495.1	547.4
Less: Long Term Debt:	0.0	0.0	0.0	0.0	5.0
add: NPV Interest Exp.:	16.8	18.5	20.3	22.4	24.6
Working Capital	3.7	5.6	13.8	15.4	17.1
Net Asset Value:	384.3	428.3	481.6	532.8	584.1
Per Share:	0.51	0.54	0.54	0.57	0.62

10% NAVPS (millions of CAD)	2019e	2020e	2021e	2022e	2023e
NPV Operating CF:	697.0	771.7	856.6	952.1	1,057.5
NPV Capex:	(91.6)	(66.3)	(32.6)	(9.0)	(8.9)
NPV Free Cashflow:	605.4	705.5	824.0	943.1	1,048.6
Less: Long Term Debt:	40.0	72.5	100.0	105.0	100.0
add: NPV Interest Exp.:	26.7	26.1	23.0	17.3	10.6
Working Capital	12.6	6.5	6.7	5.2	2.3
Net Asset Value:	604.7	665.6	753.7	860.5	961.5
Per Share:	0.65	0.67	0.73	0.81	0.91



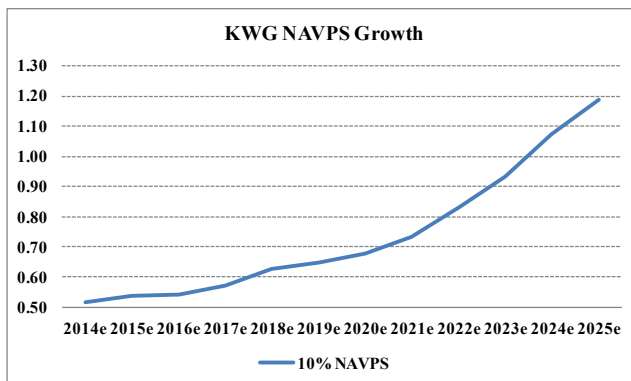
## VALUATION

Our valuation for KWG shares is based on a net asset value (“NAV”) approach applied to the discounted cash flow (“DCF”) valuation of our conceptual model for developing the Black Horse deposit. We are forecasting that has a budget of \$1.527 billion in capital expenditures (“capex”) and an after-tax IRR of 21%. We are using a long-term FeCr price of US\$1.00 per lb Cr, or US\$1,323 per tonne or \$1,470 per tonne. Please refer to Figures 9 and 10 for our detailed operating and capital cost assumptions. Figure 3

shows our NAV per share forecasts for KWG and Chart 1 shows our forecast NAVPS growth going out to 2025.

Chart 1: KWG NAVPS Growth

Source: Pope & Company Research



Our 2014E 10% DCF NAV sensitivity for FeCr reference pricing is an approximate \$105 million increase in our NAV forecast for each US\$100 per tonne increase and vice-versa. With respect to operating costs, an approximate \$90 million decrease in our NAV forecast for each \$100 per tonne increase in our unit operating costs per tonne Cr-Fe alloy produced and vice-versa.

The differences in the two sensitivities are partially exchange rate-driven but also our revenue sensitivity is subject to a 3% gross metal royalty (“GMR”) that results in an effective price change of US\$97 per tonne whereas the operating cost sensitivity has no similar deduction.

Figure 3: KWG Net Asset Value Forecasts

Source: Pope & Company Research

10% DCF NET ASSET VALUE (C\$ Millions except per share)	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
NPV Operating Cashflow:	424.3	468.6	517.3	570.9	629.8	695.0	769.6	854.2	949.5	1,054.7	1,157.0	1,222.2
NPV Capex:	(61.7)	(65.7)	(71.3)	(77.4)	(84.2)	(91.6)	(66.3)	(32.6)	(9.0)	(8.9)	(8.8)	(8.6)
NPV Free Cashflow:	362.6	402.9	446.0	493.4	545.6	603.5	703.3	821.6	940.5	1,045.8	1,148.3	1,213.6
less: Long Term Debt:	0.0	0.0	0.0	0.0	5.0	40.0	72.5	100.0	105.0	100.0	50.0	5.0
add: NPV Interest Expense:	17.9	19.7	21.7	23.8	26.2	28.4	28.1	25.1	19.6	13.2	6.5	3.1
Working Capital:	3.7	5.6	13.8	15.4	17.1	12.6	6.5	6.7	5.2	2.3	1.8	11.8
Net Asset Value:	384.2	428.2	481.5	532.6	584.0	604.5	665.4	753.4	860.3	961.2	1,106.5	1,223.5
Per Share:	0.51	0.53	0.54	0.57	0.62	0.65	0.67	0.73	0.81	0.91	1.04	1.15

Management expectations are that the GMR pool would also be shared by First Nations and we estimate the pre-tax 2014E 10% DCF NPV of these GMR payments at the 100% project-level at approximately \$237 million and the total undiscounted pre-tax royalty payments of approximately \$1.06 billion over our forecast 25-year mine life. Management indicated that expectations are that First Nations will also get revenue-sharing with the various levels of government from the taxes generated by the project, which we estimate at \$4.55 billion over the 25-year mine life. We would note that this tax pool could be larger if the concentrator becomes a toll-processing facility after the Black Horse deposit is mined out.

We assume that KWG brings in a strategic partner that owns 70% of the deposit with KWG retaining a 30% carried interest through to the completion of a bankable feasibility study and the commercialization of the Chromium IP process. We would note that KWG would likely account for its 30% minority interest on an equity income basis with the cash dividends received treated as investment income with no proportional consolidation of revenues, COGS, debt, etc. and our model reflects this assumption. Appendix H contains our financial forecasts for KWG’s corporate financial statements and Figure 11 shows our DCF analysis forecasts for 100% of the conceptual Black Horse operations.

Additionally, we assume that the strategic partner provides KWG with a \$100 million revolving line of credit with which to make cash calls to fund its equity contributions ahead of commercial production.

We are assuming that KWG doesn't receive cash compensation as part of vending in its Black Horse interests. However, we assume that the strategic partner would be responsible for funding the commercialization of the Chromium IP process, which would include constructing a demonstration plant prior to completing a bankable feasibility study. We have assigned no value for KWG's expected licensing fees and/or royalties once the Chromium IP process has been commercialized nor have we included any value for the Railway Claims. Instead, we view these assets as 'currency' for negotiating with potential strategic partners, the Ontario government and First Nations communities.

We assume that there will be a 70/30 debt/equity project financing structure, that the debt is repaid from 60% of the cash dividends and that the debt coupon is 8%. In addition to the revolving line of credit, we have assumed that the majority of KWG's warrants and options from 2014, 2016 and 2017 are exercised at prices between \$0.10-\$0.14 per share for total proceeds of approximately \$19.8 million. Additionally, we have assumed that KWG will issue a total of 178.6 million common shares between 2014-2022 at an average price of \$0.17 per share for gross proceeds of \$30.4 million. We realize that KWG's share structure has been overly diluted and that some form of consolidation is likely. Nonetheless, we have used the existing share count and subsequent equity issues to arrive at an "in-production" basic and fully-diluted shares outstanding of 1.06 billion and 1.25 billion, respectively, which is reflected in our NAVPS forecasts.

We are forecasting capital costs to build the mine/concentrator, pipeline and reduction plant at \$1.527 billion with annual sustaining capital costs of \$30 million. Our steady-state operating cost estimate is approximately \$702 per tonne of 60% Cr chromium-iron alloy. We are assuming that a third-party such as Devco builds and operates the slurry pipeline in return for a toll rate that we have included as \$14 per tonne of chromite concentrate shipped. As well, we have included a total of \$310 million in capital for the construction of all transportation infrastructure.

Our analysis indicates that the potential power cost to produce Cr-Fe alloys using a direct reduction process appears much less than traditional ferrochrome smelting. Figure 7 shows our energy calculations for both processes that indicate that the natural gas cost for a direct-reduction process would likely be between US\$50 to US\$100 per tonne of Cr-Fe alloy compared to electricity costs of between US\$115 to US\$215 per tonne of FeCr, assuming that natural gas is the fuel for power generation. We would note that this range of electricity costs doesn't factor in transmission costs and losses as well as any applicable tariffs. We are forecasting a power cost for the new Chromium IP process of \$175 per tonne of Cr-Fe alloy produced which we believe is conservative at approximately 3.5x the cost of natural gas for one tonne of DRI. Our other unit reduction cost assumption is \$400 per tonne Cr-Fe alloy produced for labour, pelletizing the chromite concentrate, the pellet binder, the solid carbon reductant, the proprietary accelerant and other consumables.

We don't believe that KWG has any meaningful comparable companies due to its new Chromium IP process and its control of the Railway Claims that provide strategic access to the ROF. While Noront has its Blackbird chromite deposit, the company has also stated that its primary goal is to put its Eagle's Nest Ni-Cu-Au-PGM deposit into production and become the first mine in the ROF. The proposed Eagle's Nest mine and the amount of base metal concentrates that would be transported out of the ROF would both be relatively small compared to the potential chromite mines being considered for the ROF overall.

The one valuation metric that we are presenting for KWG is the imputed value of its chromite resources based on its current enterprise value ("EV"), as shown in Figure 4. At its current EV, KWG shares are pricing in \$0.0007 per lb of Cr<sub>2</sub>O<sub>3</sub> resource. As well, investors who purchase \$1,000 worth of KWG shares are effectively receiving 1.27 million pounds of mainly inferred in-situ Cr<sub>2</sub>O<sub>3</sub> resources, which we believe reflects the perceived difficulties and timelines for getting into production but also the upside potential for adding value.



Figure 4: KWG Valuation Metrics

Source: Pope &amp; Company Research

KWG Cr <sub>2</sub> O <sub>3</sub> Resources, EV/Lb Cr <sub>2</sub> O <sub>3</sub> and Lbs Per \$1,000 Invested						Close Date:	Jul 9/14
KWG Share Price:		\$0.055	Cr <sub>2</sub> O <sub>3</sub> Lbs Per \$1,000 Invested:			1,269,159	
KWG Shares (millions):		777.5	KWG EV/Lb Cr <sub>2</sub> O <sub>3</sub> :			\$0.0007	
KWG EV (millions CAD):		38.6					
Resources		Millions of Tonnes	Grade Cr <sub>2</sub> O <sub>3</sub>	Contained Cr <sub>2</sub> O <sub>3</sub>	Ownership	Attributable Cr <sub>2</sub> O <sub>3</sub>	Attributable Cr <sub>2</sub> O <sub>3</sub> (billions lbs)
Black Horse <sup>1</sup>	Inferred	77.2	35.1%	27.1	80%	21.7	47.8
Black Horse <sup>1</sup>	Inferred	77.2	35.1%	27.1	80%	21.7	47.8
Big Daddy	M&I	29.1	31.7%	9.2	30%	2.8	6.1
Big Daddy	Inferred	3.4	28.1%	1.0	30%	0.3	0.6
Total M&I		29.1	31.7%	9.2	30%	2.8	6.1
Total Inferred		80.6	34.8%	28.1	78%	21.9	48.2

<sup>1</sup> 80% ownership is subject to delivering a feasibility study to optionor

## XPS SITE VISIT AND CHROMIUM IP BACKGROUND

On April 15<sup>th</sup> we visited the XPS Consulting and Testwork Services facilities ("XPS") in Falconbridge, Ontario and met with Mr. Mika Muinonen, Manager, Extractive Metallurgy, and Mr. Arthur Barnes, Principal Consultant, Extractive Metallurgy. Figure 5 shows the main XPS building in Falconbridge.

XPS originally started out as the corporate Research Centre for Falconbridge Limited before its acquisition by Noranda Inc. and then, subsequently, by Xstrata plc, which is now part of Glencore plc. XPS is now a very different organization than it was under Falconbridge and operates as a stand-alone entity from Glencore plc, although Glencore is aware of XPS's activities. XPS is its own profit centre and generates its revenues by offering a broad range of consulting and testing services in the areas of

process control, process mineralogy, plant support, materials technology and extractive metallurgy.

Figure 5: XPS Consulting and Testwork Services Centre

Source: Pope &amp; Company Research



KWG has been working with XPS since the end of 2010 in evaluating the metallurgical characteristics of both the Big Daddy and Black Horse chromite deposits. We would note that XPS has also provided its services to Cliffs and the Cliffs/KWG joint-venture on a discretionary basis. That being said, XPS doesn't have any direct interest in the technology and intellectual property it is developing on behalf of KWG,

including any patents that are eventually granted. The two Chromium IP patent applications are currently being reviewed by KWG's lawyers and are expected to be filed with U.S. authorities this

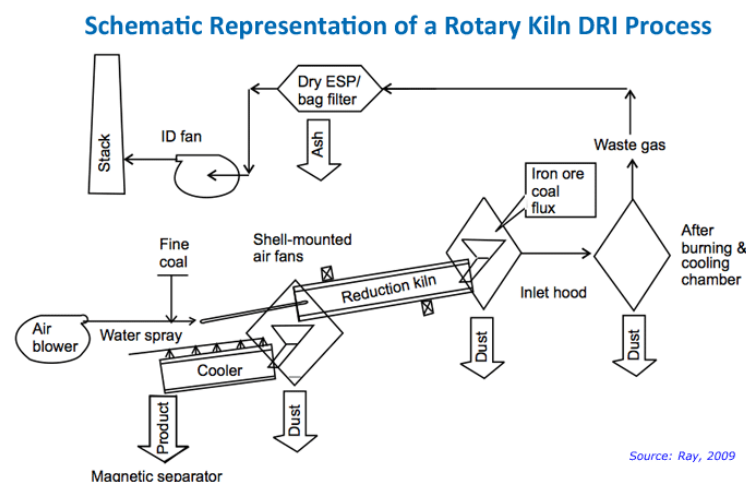
summer at which point they become patents pending with a review period that could last as long as two years.

The initial efforts on behalf of KWG were on the Big Daddy deposit and included testwork on the crushing characteristics of the Big Daddy chromite mineralization that confirmed that a suitable direct-shipping lump ore product could be produced. The crushing testwork was followed up by chemical and thermal analysis, batch smelting and thermochemical modelling. As well, in 2011 XPS completed a smelting test on samples from four drill holes that confirmed that a high carbon, high grade ferrochrome alloy could be produced grading between 58-60% Cr, 6-8% C, 1% Si and the remainder Fe. Chromium recoveries were estimated at 92-93% and the power consumption was estimated at 3.5-3.8 MWh per tonne of ferrochrome produced. A follow-up program was completed in 2012 utilizing a new pilot plant at the XPS facilities that confirmed the 2011 results. In 2013, XPS completed its first continuous pilot smelting campaign on a 1,186 kg sample of Black Horse chromite that was obtained from two drill holes completed in 2010. The ferrochrome produced during that campaign graded between 60-62% Cr, 8-10% C, <1% Si and 30-33% Fe with a Cr recovery above 95%.

While the Big Daddy and Black Horse chromite can be successfully processed to produce saleable FeCr products, the new Chromium IP process appears to offer greater energy savings, a lower greenhouse gas footprint and potentially lower capital costs per annualized tonne of capacity. The development curve for the Chromium IP is currently at the laboratory bench-scale stage at XPS. Testing to date has successfully reduced chromite ore concentrates from the Black Horse deposit into metalized Cr-Fe pellets. The new process is based on the technology to produce direct-reduced iron ("DRI") briquettes whereby the iron is reduced in its solid state with no melting and no slag phase.

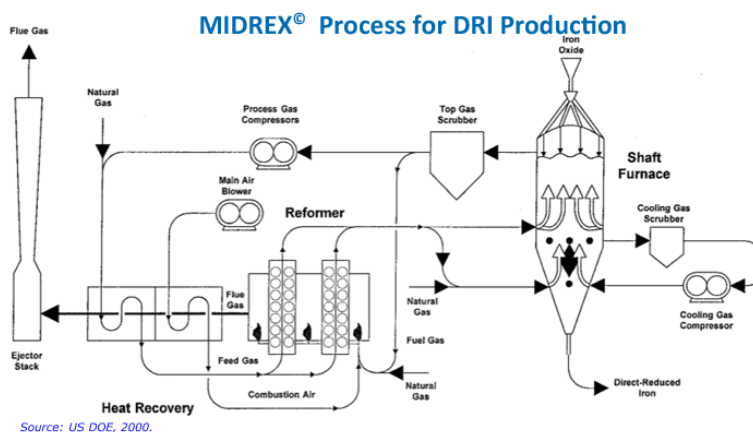
Figure 6: Direct-Reduced Iron Technology

Source: Institute for Industrial Productivity



The new Chromium IP process is based on the same principles but at a higher temperature than the 900°C-1050°C range used in DRI production. Figure 6 shows the rotary kiln and shaft reactor types of DRI technology commonly in use today.

At present, the Chromium IP process uses natural gas, a suitable solid carbon reductant and an accelerant to reduce the green chromite pellets at atmospheric pressure and at a temperature starting at approximately 900°C. At 1,200°C the reaction is complete in less than an hour's time. The rate of metallization of the chromite pellets is approximately 85% in tests so far but indications are that it could be higher. However, the trade-offs in terms of raw material and energy consumption, residency times and metallization rates haven't been optimized.



We would note that the natural gas supplies carbon and hydrogen as reducing agents and potentially reduces the amount of solid carbon reductant required compared to existing ferrochrome technology.

The minimization of the amount of solid carbon reductant, including carbon electrodes, and the absence of flux additives are important to note as these materials contribute deleterious elements such as phosphorous and sulphur. These elements can exceed desirable levels set by downstream steelmakers and result in penalties. The Black Horse and Big Daddy chromite mineralization is low in phosphorous, which potentially positions the resulting Cr-Fe alloy as a product of choice for blending with stainless steel scrap and other metal units with higher phosphorous levels.

The Chromium IP process compares very favourably with the SAF technology that is the basis for existing ferrochrome production. The conventional SAF process for chromite smelting requires up to 4 MWh of electric power per tonne of FeCr and operating temperatures typically in the 1,700°C range. The most energy-efficient ferrochrome smelting technology is Glencore’s Premus process that has power consumption in the 2.2- 2.4 MWh range based on pelletizing and partial metallization ahead of charging the SAF. In addition, the SAF process produces a significant amount of carbon monoxide, slag and, potentially, in semi-closed furnace operations, hexavalent chromium (a carcinogen), which represent comparative environmental negatives relative to the Chromium IP process.

Figure 7 shows a number of energy calculations to show the indirect relationship between the power costs for producing conventional ferrochrome using electricity and a DRI process that uses natural gas. There is no direct correlation because the electricity is generated at a centralized power generating station and transmitted to the ferrochrome smelter. This causes transmission surcharges and losses, as well as tariffs in most cases, compared to natural gas that is physically delivered to the DRI plant. Additionally, the Chromium IP process operates at a higher temperature, which will likely require more

Figure 7: Energy Calculations

Source: Pope & Company Research

<b>Energy Calculations</b>
<b>Conversion Factors and Industry Standards</b>
1 kWh = 3,414 BTUs
1 joule (J) = 0.000948451 BTU
1 tonne of DRI requires 10.4 giga-joules (GJ) (Industry Standard)
Assume natural gas price = US\$5.00 per mmBTU
Assume 32% power plant efficiency for power generation
 BTUs/tonne-DRI = 10.4 GJ *0.000948451 = 9.863890 mmBTUs
1 mmBTU = (1000000 BTU/3414)*0.32 = .0937 MWh power generated
 For DRI, Natural Gas Cost Per Tonne = 9.86389 * US\$5.00 = US\$49.32
For Power Generation, Cost per MWh = (1/0.0937) * US\$5.00 = US\$53.36 <sup>1</sup>
 <sup>1</sup> note: this price doesn't include transmission costs, losses or tariffs

natural gas per unit of alloy produced than for iron briquettes. Nonetheless, the electricity generation cost of US\$53.36 per MWh (at a US\$5.00 per mmBTU natural gas input cost) indicates a power cost of between US\$115 to US\$215 per tonne of FeCr depending on whether Glencore’s Premus process or conventional SAF technology is used and before considering power transmission costs, etc.. We would note that the coal-fired power generation typically available in South Africa is likely more expensive than natural gas. We are

forecasting a power cost for the new Chromium IP process of \$175 per tonne of Cr-Fe alloy produced which we believe is conservative at approximately 3.5x the cost of natural gas for one tonne of DRI.

The scale-up to commercial production of the Chromium IP process is not a sure thing and the timeline for development remains unclear at this time but the next steps have been identified. XPS has developed a bench-scale test plan to optimize the processing parameters and define the conditions for piloting. KWG will use the upcoming summer drilling season to complete sufficient core drilling to provide at least 10 tonnes of representative drill core samples to support pilot plant testing. XPS can facilitate the piloting of the process and provide technical expertise and direction as needed. Assuming a specific gravity of 4.0 for the chromite mineralized material and a drill rig capable of drilling HQ diameter drill core, approximately 20.0 m of drill core would weigh one tonne. Conversely, a reverse-circulation drill could be used and the cuttings collected to obtain the representative bulk sample. The piloting will be used to better understand the thermodynamics and kinetics of scaling up the new process progressively for commercial implementation.

We believe that as the XPS piloting of the Chromium IP process progresses, the next decision will likely be the selection of a strategic partner, if that hasn't occurred already. Ideally, the strategic partner will have industrial-scale facilities for completing pilot plant and "in-plant" testing of the new process. This will likely involve a bulk sample of several hundreds, if not thousands, of tonnes of chromite material. This could be done by a winter drilling program with the bulk sample material being moved from McFaulds Lake to either the railhead at Nakina or to a staging point at the end of the network of forestry roads that extends out from Pickle Lake. Assuming the in-plant test is successful, a demonstration plant of some size would likely be built near a source of natural gas and a railhead such as Nakina. The construction of this demonstration plant would likely coincide with the initial development of the underground mine.

The chromite concentrate pellet feeds produced from either the Big Daddy or Black Horse deposits have significant amounts of  $\text{Al}_2\text{O}_3$  and  $\text{MgO}$  entrained in the structure of the  $\text{Cr}_2\text{O}_3/\text{Fe}_2\text{O}_3$  crystal matrix that can't be separated by hydrometallurgical processes or conventional beneficiation. Conventional ferrochrome smelting is based on melting the furnace charge which allows the  $\text{Al}_2\text{O}_3$  and  $\text{MgO}$  to separate as slag from the ferrochrome metal. The metallization of the chrome-iron pellets produced by the Chromium IP process effectively breaks the bonds between the metalized chromium and iron and the  $\text{Al}_2\text{O}_3$  and  $\text{MgO}$ , which become gangue material requiring further separation. This is effectively the remaining 15% of the metalized pellets. The final separation can be likely be achieved by crushing the metalized pellets followed by either gravity separation of the crushed materials or other ore beneficiation techniques. The resulting metalized FeCr concentrate would then likely be dried and packaged, or possibly sintered, to become a saleable product suitable for use in making stainless steel.

## **PROVINCE OF ONTARIO, FIRST NATIONS AND ROF INFRASTRUCTURE**

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Ontario's Ministry of Northern Development and Mines has created its ROF Secretariat to work with and coordinate its efforts with all levels of government, industry and Aboriginal peoples to encourage responsible and sustainable economic development in the region. In addition, in order to advance the Province's relationship with the First Nations, the Province signed a Regional Framework Agreement ("Regional Framework"), effective March 26, 2014, with the nine members of the Matawa First Nations Management ("MFNM") tribal council that inhabit northwestern Ontario surrounding the ROF area: Marten Falls, Webequie, Neskantaga, Aorland, Constance Lake, Eabametoong, Ginoogaming, Long Lake #58 and Nibinamik First Nations. MFNM is, in turn, a member of Nishnawbe-Aski Nation, a tribal political organization representing many of the First Nations in Northern Ontario. The MFNM retained Mr. Bob Rae, former Federal Liberal Party Leader and Premier of Ontario, as their Chief Negotiator in June, 2013. In addition to the MFNM members, there are the seven members of the Mushkegowuk Tribal Council that are considered to be stakeholders in the development of the ROF: Attawapiskat, Weenusk (Peawunuk), Chapleau Cree, Fort Albany, Kashechewan, Missanabie Cree and Moose Cree First Nations. Additionally, the Mishkeegogamang, First Nation of Saugeen, Kasabonkia Lake First Nation and the Metis Nation of Ontario are also considered ROF stakeholders.

The Regional Framework establishes a community-based process for negotiation with other stakeholders and acknowledges that the development of the ROF will have differential impacts on the individual First Nations communities but that there will be an equitable approach that is proportionate to these potential impacts. The Regional Framework acknowledges that each individual First Nation will make their own decisions and that the parties desire a positive government-to-government relationship to improve the benefits and opportunities for each community while taking an environmentally-responsible approach to mineral development that is culturally respectful. The Agreement also acknowledges that the Crown has specific constitutional obligations in relation to mineral development projects that might adversely affect Aboriginal or Treaty rights and to do so in compliance with Section 35 of the Constitution Act, 1982, notwithstanding the Federal government's First Nation obligations.

Against the backdrop of the Regional Framework, the main areas being considered by the ROF Secretariat include infrastructure, environmental assessment, First Nations partnerships, exploration and development and land use planning. To this end, last November the Province of Ontario announced

its intention to create a development corporation (“Devco”) to bring together the various stakeholders in the ROF, including First Nations, mining companies and the provincial and federal governments, to advance the development of the ROF region. Devco would develop, construct, finance, operate and maintain the infrastructure necessary to open up the ROF to development as well as allow First Nations to have year-around road access to southern communities. The Ontario government has pledged \$1 billion in funding for Devco and suggested that the Federal government should offer a similar level of financial support as well given its resource development funding in other commodities and areas of Canada, including oil and gas.

Last April, the Ontario government announced that the Ontario Northland Transportation Commission (“ONTC”) was to be rejuvenated with new strategic investments. ONTC is an Agency of the Province of Ontario that was established in 1902 and is a recognized leader in promoting sustainable economic growth by establishing and operating transportation and telecommunication links throughout Northern Ontario. Ontario Northland’s operations encompass more than 1,100 km of track, including vital rail freight services into the far north, bus service to 56 communities, telecom services in 40

communities, as well as manufacturing (refurbishment) facilities. Headquartered in North Bay, ONTC’s provincially-mandated, non-commercial services include the Polar Bear Express (passenger train service between Cochrane and Moosonee), rail freight services between Cochrane and Moosonee. ONTC’s commercial services include Ontera telecommunications services, rail freight services, refurbishment services, scheduled and charter motor coach services and Bus Parcel Express. Figure 8 shows ONTC’s current rail freight services infrastructure.

During the recent provincial election, KWG proposed its Northland Development Corporation Bill that would

essentially see ONTC become Devco but as a non-share capital corporation similar to an Airport or Port Authority (the “Transportation Authority”) instead of a Crown corporation. KWG has proposed that the Transportation Authority could then be governed by northern residents beginning with the members of the MFNM. The Transportation Authority could examine the potential for extending ONTC’s rail assets from Hearst, Ontario to access the ROF region. Management believes that the ONTC railroad network could be operated as a not-for-profit business on a cost-recovery basis within a Transportation/Port Authority agency. The new portion of the railroad could benefit from the many hundreds of miles of installed track that would thus be returned to viability as a captive carrier. We believe that all of the chromite resources identified to-date in the ROF point to decades of production and that this transportation option could be viable. Under this scenario, road access to the First Nations communities would appear to be more economically and geographically feasible coming east from Mishkegoogamang along the north bank of the Albany River. This scenario would also provide a transportation solution for supplying construction materials to the ROF and the transportation corridor to be built southward from it.

Figure 8: ONTC Rail Infrastructure

Source: ONTC Website





## THE RAILWAY CLAIMS AND ROAD/PIPELINE OPTION

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KWG will be a key player in the development of the ROF infrastructure through CCC's Railway Claims. CCC had previously commissioned a study from Tetra Tech assessing the trade-offs between the rail and road options for the 330 km corridor from Nakina to the ROF that was completed in February, 2013. The Tetra Tech study is based on an assessment by Golder Associates that provides preliminary estimates of the amount of aggregates and crushed rock that could be sourced from the Railway Claim. Golder identified 22 good material sources of which 12 were potential rock quarries containing approximately 6.4 million m<sup>3</sup> of quarry rock and 10 sources of sand and gravel containing approximately 16.4 million m<sup>3</sup> of these materials. The study also identified that these resources weren't evenly distributed along the 330 km corridor but that bedrock for the production of ballast was concentrated in the first 90 km and the last 50 km coming up from Nakina.

The only real alternatives for not utilizing the aggregates and quarry rock would be to truck similar material from the south through Nakina or by building the network south from the ROF based on underground mining and crushing of waste rock. That being said, we have not included any value for the Railway Claims in our valuation except as a 'currency' in advancing KWG's interests with bringing in a strategic partner and working with the Ontario government and First Nations communities. We would note that CCC has applied to convert the Railway Claims to mining leases so that the aggregates and quarry rock can be mined. However, Cliffs has obtained an Order to stay the lease applications which requires the Ontario government to await the outcome of Cliffs' appeal process before moving forward.

The Tetra Tech study forecast that the rail option capital cost would be approximately \$1.56 billion and have unit operating costs of \$10.50 per tonne based on 3 mtpy transported and that the road option would have capital expenditures of approximately \$1.05 billion but would have unit operating costs of \$60.78 per tonne based on a similar tonnage hauled. We would note that the construction of a third rail line in the Labrador Trough was recently studied by CN at the behest of a number of iron ore companies and annual volumes of 20 million tonnes weren't considered sufficient to make such a project economic. To put the ROF rail option in perspective, if the ROF eventually produces approximately 20% of current global production, we estimate that it would only result in shipping volumes of approximately 5 mtpy of 45% Cr<sub>2</sub>O<sub>3</sub> concentrate or 8-9 mtpy of 30% Cr<sub>2</sub>O<sub>3</sub> ore. As well, there hasn't been a second bulk commodity identified in the ROF to increase the shipping volume requirements. As such, we don't believe that the rail option can be justified based on such a relatively small shipping volume. As well, the rail option would make it harder and more expensive, due to the required spur lines, to connect all of the First Nations communities compared to a year-round road network.

We believe that the year-round road network would be an acceptable solution for First Nations communities closest to the ROF – Marten Falls, Webequie and Neskantaga First Nations - but only if the roads aren't clogged with trucks hauling chromite concentrate. Our conceptual mine model is based on mining approximately 10,000 tonnes per day ("tpd") of chromite ore that would produce approximately 6,000 tpd of concentrate that would be trucked to the reduction plant. The Tetra Tech study assumes a design load for the road option of 62.5 tonnes gross weight for the trucks so approximately 100-110 loads per day would be required, which we believe would eventually lead to traffic conflicts, and potentially accidents, between the KWG trucks and First Nations vehicles. Finally, we believe that running a significant fleet of haul trucks over time would significantly increase the road maintenance requirements and negative environmental impacts along the route, especially from diesel fumes and fuel.

Instead, we believe that the combination of a north-south road network and a slurry pipeline running along the most appropriate route into the ROF would be the best solution. Slurry pipelines are currently in use in harsh winter climates such as Siberia, Inner Mongolia and Idaho over distances up to 165 km. As well, both New Millennium and Adriana are planning on using slurry pipelines in the Labrador Trough for moving their iron ore concentrates from their mining and concentrating operations north of Schefferville, Quebec to their pelletizing operations at Pointe-Noire, Quebec. The distance from the ROF



to Nakina would be approximately 330 km, which is just over twice the distance of the currently operating cold-weather slurry pipelines but less than half the distances contemplated by Adriana and New Millennium. As well, the pipeline would likely run adjacent to the road for the most part and provide easy, quick access for maintenance in case of a leak or spill. We would note that chromite concentrate is relatively environmentally-benign as it doesn't significantly oxidize.

From an operating risk perspective, pipeline maintenance equipment could be positioned strategically along the pipeline route to reduce the travel time to a trouble spot. We characterize this as maintenance intensity and a cost issue that is a function of how much maintenance equipment is parked in preventative mode to ensure that any leak or spill is addressed before the slurry can freeze in the pipeline. We would note that New Millennium and partner Tata Steel Ltd. are proposing to let a third-party infrastructure company construct and operate their slurry pipeline and pay a toll fee of approximately \$14 per tonne to use it and we are assuming the same for KWG through Devco. Finally, we are currently forecasting Adriana and New Millennium to be in production and using their pipelines before we are forecasting KWG's start-up in 2021 so the Company may benefit from their and their consultants' experiences.

### **BLACK HORSE VS. BIG DADDY**

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There are many parallel timelines in the development of the ROF including for infrastructure to access the area and ship products to markets, the commercialization of the new Chromium IP process and obtaining environmental and First Nations approvals. As such, the choice of whether to initially mine the Big Daddy deposit or Black Horse deposit isn't an immediate concern. However, we believe that the choice of deposit is as much about the partner as about the geology since KWG has no direct option for obtaining 100% control of either deposit.

In the case of the Black Horse deposit, KWG is currently earning an 80% interest in Bold's option to acquire a 100% interest in the deposit from Fancamp. To earn its interest, KWG must provide 100% of the project funding and option payments to Fancamp, including the unknown cost of a future feasibility study. The completion and delivery of the positive feasibility study is also contingent on a clear path to commercialization of the new XPS process unless conventional ferrochrome technology is used in the study, which would be kind of self-defeating for KWG. In any case, KWG and Bold have a current combined market capitalization of approximately \$50 million and are likely too small to advance the deposit to production. As such, bringing in a strategic partner is one of KWG's options but also introduces an additional degree of uncertainty given that KWG doesn't currently have an ownership interest in the deposit, only an option on a future JV.

In the case of the Big Daddy deposit, there are currently no clear indications as to whether or not Cliffs will eventually return to the ROF as the Company is currently in a proxy contest with activist shareholder Casablanca Capital LP. The investment firm owns approximately 5.2% of Cliffs' common shares and is the Company's fourth-largest shareholder according to Bloomberg News. Casablanca wants to replace the Board and management and, amongst other things, have Cliffs spin its international assets, including its Ring of Fire properties, into "Cliffs International" as a separate resource operating and development company. As such, the ultimate ownership of Cliffs' 70% interest in the Big Daddy JV remain unclear, as is the future potential for capital funds to be raised for developing the deposit. That being said, KWG actually owns 30% of Big Daddy today as opposed to an option to earn-in and enjoys JV rights with Cliffs for access to the deposit and the right to advance development work. As well, with Cliffs' exit from the Ring of Fire, KWG's only significant ongoing funding commitments should be its plans to potentially extract a bulk sample from the property. Finally, Cliffs has previously focused on its Black Thor deposit as its first deposit to be mined, likely because it's 100%-owned with no JV constraints on decision-making or funding.

We believe that the Black Horse deposit is the best deposit for KWG to develop because of its size and grade, with the only concern being that Black Horse is significantly deeper than Big Daddy, which will likely increase unit mining costs. That being said, it's unclear if open-pit mining would be permitted in the Ring of Fire due to environmental and First Nations concerns. We would note that Noront has an underground mining operation for its Eagle's Nest Ni-Cu deposit that would include the milling operations being constructed and operated underground in order to further minimize the surface disturbance.

As such, we have used the Black Horse inferred resource as the basis for our conceptual underground mining model for KWG's valuation. That being said, we still have concerns about the work necessary to complete the options with Bold and Fancamp. We believe that the biggest hurdle for achieving an ownership interest in Black Horse will be completing the feasibility study, which by definition must include demonstrable commercially-viable solutions for the XPS process as well as the infrastructure required to open up the Ring of Fire. As such, we believe that these parallel timelines leave lots of time before KWG is required to make a decision. In the interim, the Company continues its metallurgical evaluation of both the Black Horse and Big Daddy deposits. Management has indicated that at present there have been no significant differences in the bench-scale lab testing at XPS and both the Black Horse and Big Daddy mineralized materials appear amenable to metallization by the new Chromium IP process.

### **CONCEPTUAL BLACK HORSE MINE DEVELOPMENT SCENARIO**

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We believe that KWG will successfully re-negotiate its option agreement with Bold, and indirectly with Fancamp, such that it will have a clear path to owning 100% of the Black Horse deposit. In return, KWG could issue equity and participation in an aggregate 3% GMR that we estimate has a pre-tax 2014E 10% DCF NPV of \$237 million and total royalty payments of \$1.06 billion over the life of the Black Horse mine. We believe that KWG will subsequently bring in a strategic partner on much the same terms as Adriana Resources and New Millennium Iron have done. We are assuming that KWG retains a 30% interest in the Black Horse JV and is carried financially through to the bankable feasibility stage, which essentially represents the commercialization of the Chromium IP. Additionally, the strategic partner will arrange all of the project debt financing on a 70/30 debt/equity split and will provide KWG with a \$100 million revolving credit facility which the Company can use to meet all or a large portion of its equity cash calls and avoid excessive share dilution.

We are assuming a four-year ramp up of chromite ore production from 2,500 tpd to 10,000 tpd to match the staged construction of four reduction modules with capacity of 250,000 tonnes per year ("tpy") each for a total of 1 million tpy of Cr-Fe alloy products. We are assuming that the concentrator will be on surface and at full production would produce approximately 2.2 million tpy of chromite concentrate grading 45% Cr<sub>2</sub>O<sub>3</sub> from approximately 3.6 mtpy of ROM ore grading 30% Cr<sub>2</sub>O<sub>3</sub>. We are forecasting capital costs to build the mine/concentrator, pipeline and reduction plant at \$1.527 billion and annual sustaining capital costs of \$30 million with an after-tax IRR of 21.0%. Our capital cost estimate is based on overall unit capex of approximately \$1,200 per tonne of annual installed capacity (not including our estimate for the slurry pipeline and related infrastructure) which is in line with the ferrochrome industry benchmark of US\$1,200 per tonne. We would note that the operating temperatures of the new Chromium IP process are in the 900°C-1,200°C range, which is significantly lower than the 1,700°C range for conventional ferrochrome technology. As a result, we believe that there is potential for the capital costs to be reduced because less high-temperature steel, alloys and refractories are required but this will only be determined by the further scaling up of the process. Our steady-state operating cost estimate is approximately \$702 per tonne and we are using a long-term FeCr price of US\$1.00 per lb Cr.

## Underground Mine

The conceptual Black Horse mine development would be an underground mine with as small a surface footprint as possible, similar to Noront's plans for its Eagle's Nest Ni-Cu-PGM mine. The proposed Eagle's Nest mine is forecast to produce 3,000 tpd of ore and the mill would be constructed and operated underground in the competent waste rock surrounding the deposit. In addition, Noront plans to excavate a number of "aggregate stopes" and all of the waste rock would be crushed and used as aggregate fill in constructing the roads, pads, etc. that would form the basis of the site infrastructure. During the construction phase, the Noront plan was to mine 1,500 tpd of waste due to the additional requirements for the mill excavations and then approximately 750 tpd for the mine life in order to provide crushed for further construction and road maintenance.

For our conceptual Black Horse mine at 10,000 tpd, we are assuming that the approximate 2.2 mtpy of 45% Cr<sub>2</sub>O<sub>3</sub> concentrate produced would be pumped as slurry through a pipeline that runs from the ROF to a reduction plant built at Nakina. As well, we are forecasting 1,500 tpd of development/aggregate waste mining for ongoing road maintenance and other fill requirements in the immediate area of the

**Figure 9: Black Horse Mine Operating Assumptions**

Source: Pope & Company Research

Mining & Milling Operations	Units	2021E	2022E	2023E	2024E	2025E
Production Schedule						
Mining Rate	tpd	2,500	5,000	7,500	10,000	10,000
Operating Days	days	180	360	360	360	360
Ore Mined & Milled	tonnes	450,000	1,800,000	2,700,000	3,600,000	3,600,000
Development Waste as % of Mill Feed	%	15%	15%	15%	15%	15%
Development Waste	tonnes	67,500	270,000	405,000	540,000	540,000
Mill Head Grades						
Chromite Mill Head Grade	%	30%	30%	30%	30%	30%
Chromite Mill Recoveries	%	90%	90%	90%	90%	90%
Chromite Concentrate Grade	%	45%	45%	45%	45%	45%
Chromite Concentrate Produced	tonnes	270,000	1,080,000	1,620,000	2,160,000	2,160,000
Contained Chromite	tonnes	121,500	486,000	729,000	972,000	972,000
Reduction Plant						
Chromite Concentrate Feed	tonnes	270,000	1,080,000	1,620,000	2,160,000	2,160,000
Chromite Concentrate Grade	%	45%	45%	45%	45%	45%
Reduction Recovery	%	95%	95%	95%	95%	95%
Cr as % of Cr <sub>2</sub> O <sub>3</sub>	%	67%	67%	67%	67%	67%
FeCr - Cr Grade	%	60%	60%	60%	60%	60%
FeCr Produced with 60% Cr (Implies Cr:Fe ratio of ~ 2.0 & ~ 10% gangue)	tonnes	128,250	513,000	769,500	1,026,000	1,026,000
Operating Cost Structure						
Mining Cost - Chromite Ore	\$/tonne milled	60.00	50.00	45.00	40.00	40.00
Mining Cost - Development Waste	\$/tonne milled	45.00	40.00	37.50	35.00	35.00
Milling Cost	\$/tonne milled	25.00	20.00	17.50	15.00	15.00
Administrative Overhead	\$/tonne milled	12.00	10.00	9.00	8.00	8.00
Total Mining & Milling Costs - Ore	\$/tonne milled	97.00	80.00	71.50	63.00	63.00
Total Mining & Milling Costs - Waste	\$/tonne milled	45.00	40.00	37.50	35.00	35.00
Pipeline Transportation Cost	\$/tonne conc.	14.00	14.00	14.00	14.00	14.00
Reduction Cost - Power	\$/tonne Cr-Fe	225.00	200.00	175.00	175.00	175.00
Reduction Cost - Labour, Reductants, etc.	\$/tonne Cr-Fe	500.00	475.00	450.00	400.00	400.00
FeCr Transportation Cost	\$/tonne Cr-Fe	75.00	65.00	60.00	50.00	50.00
Total Cash Cost	\$/tonne ore	340.15	305.30	280.75	254.78	254.78
Total Cash Cost	\$/tonne conc.	566.92	508.83	467.92	424.63	424.63
Total Cash Cost	\$/tonne Cr-Fe	905.47	831.42	769.39	702.36	702.36
Ferrochrome Pricing Forecast						
FeCr Price Realizations	US\$/lb Cr	1.00	1.00	1.00	1.00	1.00
FeCr Price Realizations	US\$/tonne Cr-Fe	1322.76	1322.76	1322.76	1322.76	1322.76
USD/CAD Exchange Rate		0.90	0.90	0.90	0.90	0.90
FeCr Price Realizations	\$/tonne Cr-Fe	1469.73	1469.73	1469.73	1469.73	1469.73

Black Horse mine site. We believe that a similar bulk mining method as the vertical bulk mining using blast hole stoping techniques being proposed for the Eagle's Nest mine could be used for the Black Horse mine.

Given that the Black Horse mine would be more than twice as large as the proposed Eagle's Nest mine, it seems unclear at this stage that the concentrator could be

constructed underground due to ground control concerns and the larger underground openings necessary to accommodate the larger plant. Whatever solution is chosen, the chromite ore still needs to be finely ground for the purposes of slurry transport and to serve as pellet feed for the reduction process.

We are forecasting that the construction of the underground mine, concentrator and reduction plant begins in 2019 and that commercial Cr-Fe alloy production begins in the second half of 2021 and ramps up to full production by 2024. Our capital expenditure schedule and operating cost structure reflect our staged build-out. Figure 9 shows our production forecast, forecast operating cost structure and FeCr pricing assumptions. Figure 10 shows our capital cost assumptions and Figure 11 shows our project income and operating cashflow estimates.

**Figure 10: Black Horse Mine Capital Cost Assumptions***Source: Pope & Company Research*

<b>Black Horse Project Capital Expenditure Schedule (000s CAD)</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>
<b>Direct Costs</b>						
Mine Infrastructure & Equipment	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	-
Site Infrastructure & Equipment	10,000,000	10,000,000	10,000,000	-	-	-
Concentrator	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	-
Mine Site Water Systems	10,000,000	10,000,000	5,000,000	5,000,000	5,000,000	-
Tailings Disposal	10,000,000	10,000,000	5,000,000	5,000,000	5,000,000	-
Pipeline Transport System	100,000,000	150,000,000	50,000,000	5,000,000	5,000,000	-
Reduction Plant	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	-
Electrical Power Supply	10,000,000	10,000,000	5,000,000	5,000,000	5,000,000	-
<b>Total Direct Costs</b>	<b>285,000,000</b>	<b>335,000,000</b>	<b>220,000,000</b>	<b>165,000,000</b>	<b>165,000,000</b>	<b>-</b>
<b>Indirect Costs</b>						
EPCM (7.5%)	21,375,000	25,125,000	16,500,000	12,375,000	12,375,000	-
Project Development Costs (5%)	14,250,000	16,750,000	11,000,000	8,250,000	8,250,000	-
Owner's Costs (3%)	8,550,000	10,050,000	6,600,000	4,950,000	4,950,000	-
<b>Total Indirect Costs</b>	<b>44,175,000</b>	<b>51,925,000</b>	<b>34,100,000</b>	<b>25,575,000</b>	<b>25,575,000</b>	<b>-</b>
Contingency (15%)	42,750,000	50,250,000	33,000,000	24,750,000	24,750,000	-
<b>Total Capital Cost</b>	<b>371,925,000</b>	<b>437,175,000</b>	<b>287,100,000</b>	<b>215,325,000</b>	<b>215,325,000</b>	<b>-</b>
Project Capex	371,925,000	437,175,000	287,100,000	215,325,000	215,325,000	-
Sustaining Capex	-	-	-	-	-	30,000,000
<b>Total Capex</b>	<b>371,925,000</b>	<b>437,175,000</b>	<b>287,100,000</b>	<b>215,325,000</b>	<b>215,325,000</b>	<b>30,000,000</b>
<b>Cumulative Capex</b>	<b>371,925,000</b>	<b>809,100,000</b>	<b>1,096,200,000</b>	<b>1,311,525,000</b>	<b>1,526,850,000</b>	<b>1,556,850,000</b>

**Figure 11: Black Horse Mine Financial Statement***Source: Pope & Company Research*

<b>Black Horse Operations Financial Statement (CAD Millions)</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>
<b>Income Statement</b>									
Gross Revenue	0.0	0.0	188.5	754.0	1,131.0	1,507.9	1,507.9	1,507.9	1,507.9
3% Gross Metal Royalty	0.0	0.0	5.7	22.6	33.9	45.2	45.2	45.2	45.2
Net Revenue	0.0	0.0	182.8	731.4	1,097.0	1,462.7	1,462.7	1,462.7	1,462.7
Operating Cost	0.0	0.0	116.1	426.5	592.0	720.6	720.6	720.6	720.6
EBITDA	0.0	0.0	66.7	304.8	505.0	742.1	742.1	742.1	742.1
Depreciation	0.0	0.0	4.3	23.4	42.1	65.3	66.6	67.9	69.2
EBIT	0.0	0.0	62.4	281.4	462.9	676.8	675.5	674.2	672.9
Interest Expense	0.0	0.0	30.7	61.4	61.4	56.2	33.7	5.2	0.0
Profit before taxes	0.0	0.0	31.7	220.0	401.5	620.6	641.8	669.0	672.9
Taxes	0.0	0.0	9.5	66.0	120.5	186.2	192.5	200.7	201.9
Net Income	0.0	0.0	22.2	154.0	281.1	434.4	449.3	468.3	471.0
<b>Operating Cashflow</b>									
Net Income	0.0	0.0	22.2	154.0	281.1	434.4	449.3	468.3	471.0
D,D&A	0.0	0.0	4.3	23.4	42.1	65.3	66.6	67.9	69.2
Operating Cashflow	0.0	0.0	26.5	177.4	323.1	499.7	515.9	536.2	540.2
<b>DCF NPV Calculation</b>									
Operating Cashflow	0.0	0.0	26.5	177.4	323.1	499.7	515.9	536.2	540.2
Capex	371.9	437.2	287.1	215.3	215.3	30.0	30.0	30.0	30.0
Free Cash Flow	(371.9)	(437.2)	(260.6)	(37.9)	107.8	469.7	485.9	506.2	510.2
Cumulative Cash Flow	(371.9)	(809.1)	(1,069.7)	(1,107.6)	(999.7)	(530.0)	(44.2)	462.0	972.2

### **Reduction Plant**

The conceptual reduction plant should be located near a source of natural gas and rail access in order to provide cheap energy and be able to ship the finished Cr-Fe alloy products to market. Nakina is the closest major supply centre to the ROF that offers both and we have assumed that it will be the location of the reduction plant. At the reduction plant, the chromite concentrate slurry would be de-watered, mixed with a binder, the proprietary reduction accelerant and the solid carbon reductants and pelletized. The 'green' pellets would then be fed into a natural gas-fired reduction reactor such as a rotary hearth furnace (or shaft reactor or fluid bed reactor or rotary kiln) and the chromium and iron reduced. All through the process, waste heat would be recycled and off-gases scrubbed. The metalized pellets would then be cooled and shipped to customers. Additionally, the pellets could be crushed and the metallic chromium and iron separated from the gangue material, likely using gravity separation or other ore beneficiation techniques. The metalized Cr-Fe would then be dried and packaged, or possibly sintered, for shipment to customers.

## RECENT EVENTS

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On July 2<sup>nd</sup>, the Company announced the results of its June 30<sup>th</sup> Annual Meeting with the incumbent Board of Directors and management re-appointed with approximately 416 million of the 777.5 million shares outstanding having been voted on the resolutions put before shareholders. The meeting was then adjourned until July 30<sup>th</sup> at which time two special resolutions will be considered. The special resolutions include seeking to amend the Company's articles of incorporation to include the authority to issue preferred shares. Cliffs had served prior notice of its dissent and its intention to seek the re-purchase of its shares by KWG if either of the special resolutions is approved and adopted. Cliffs had previously served a similar notice of dissent if KWG acted on a shareholder resolution adopted at the last meeting to approve a change of jurisdiction so that the law governing KWG's constitution would be the federal Canada Business Corporations Act. Management has yet to act on the approved resolution. Cliffs, which is KWG's largest shareholder, also declined to nominate anyone for election to KWG's Board under its rights under their Shareholder Agreement with KWG signed in March, 2009.

On June 27<sup>th</sup>, the Company announced that, in an Order dated June 24, 2014, the Provincial Mine Recorder for Ontario confirmed that KWG was the first company to stake two 16-claim blocks after they became open on the morning of June 17, 2011. The Disputant in contesting the KWG claims, Mr. Eric Mosley, represents Noront and will have 30 days from the date of the Order to appeal. The Order followed a two-day hearing before the Mine Recorder late last April. The two claim blocks are contiguous to the southern two claim blocks of Fancamp's Koper Lake project in which KWG is earning a 80% interest from Bold Ventures, which has optioned Koper Lake from Fancamp.

On June 3<sup>rd</sup>, the Company announced that it had filed its updated resource estimate for the Black Horse chromite deposit on SEDAR. The updated NI-43-101 Technical Report had been received from its consultant, Sibley Basin Group Logical Consulting Services Ltd. The updated resource includes three new drill holes completed as part of the 2013 winter drilling program as well as the KWG-owned portion of a fourth hole that inadvertently crossed onto Noront's property. The Black Horse deposit has now been traced along 0.6 km on strike and has a down-dip extent of approximately 1 km from approximately 350 m below surface to 1.4 km deep. The updated inferred resource was calculated at a 20% Cr<sub>2</sub>O<sub>3</sub> cut-off grade and stands at 77.2 million tonnes grading 35.1% Cr<sub>2</sub>O<sub>3</sub>. Only eight drill holes have intercepted the deposit and most of these are very steep intersections that cut the deposit at oblique angles. As a result, the lateral extent of the deposit isn't clearly understood, resulting in the inferred resource classification. The deposit remains open at depth and to the northeast. The true width ranges from approximately 100 m at the south-western end to approximately 25 m in the north-eastern half. The south-western half of the deposit is predominantly layered chromitites while the north-eastern half is predominantly massive chromitite. Additional exploration is planned for this summer to advance the infill drilling with a \$3.5 million budget recommended by Sibley.

**Figure 12: Q1/14 Income Statement Variances***Source: Pope & Company Research*

Income Statement (CAD)	Reported Q1/14a	Q4/13a	Q1/13a	Q1/14a vs Q4/13a Change	Q1/14a vs Q1/13a Change
Expenses					
General & Administrative	-642,170	-553,106	-888,459	16.1%	-27.7%
Exploration Expenses	0	12,000	0	na	na
Amortization of Property & Equipment	-7,459	-7,744	-8,895	-3.7%	-16.1%
Stock-Based Compensation	-46,260	-46,260	-22,143	0.0%	108.9%
Write-down on Mineral Property Interests	0	0	0	na	na
Gain (Loss) on Foreign Exchange	-26	225	237	na	na
Gain on Mineral Property Interest Disposal	0	0	0	na	na
Other	0	0	0	na	na
Total Expenses	-695,915	-594,885	-919,260	17.0%	-24.3%
Operating Profit	-695,915	-594,885	-919,260	17.0%	-24.3%
Other Income (Expenses)					
Finance Income	78,503	-25,158	-45,544	na	na
Gain (Loss) on Revaluation of Warrant Liability	0	0	3,205	na	na
Write-Down of Receivables	0	0	0	na	na
Other	0	0	0	na	na
Total Other Income (Expenses)	79,284	-312,554	-41,558	na	na
EBT	-616,631	-907,439	-960,818	-32.0%	-35.8%
Income Taxes	0	0	0	na	na
Net Income (Loss)	-616,631	-907,439	-960,818	-32.0%	-35.8%
Per Basic Share	-0.00	-0.00	-0.00	-33.2%	-40.8%
Per Diluted Share	-0.00	-0.00	-0.00	-33.2%	-40.8%

or (\$0.00) per share compared to the Q1/13 loss of \$1.0 million or (\$0.00) per share. The major variances between the Q1/14 results and the year-ago quarter were 28% lower general and administrative3 expenses and positive financial income compared to the financial expense in Q1/13. Figure 12 shows the variances between the Q1/14 results and the prior and year-ago quarters.

On May 14<sup>th</sup>, the Company announced that its CCC subsidiary had served notice that it will make a motion to the Court of

Appeal for an order granting leave to appeal the Order of the Honourable Justice Lederer of the Ontario Divisional Court dated April 28, 2014. That Order granted the Attorney General of Ontario, on behalf of the Minister of Northern Development and Mines, up to 30 minutes to address the Divisional Court panel that heard an appeal by a subsidiary of Cliffs on June 16-17, 2014, at which time the Court reserved its decision. Cliffs is appealing the September 10, 2013 dismissal by the Mining and Lands Commissioner of Cliffs' application for an order to dispense with the consent of KWG so that an easement could be granted to allow Cliffs to build a road over the claims staked and assessed by CCC.

On May 12<sup>th</sup>, the Company announced the completion of the acquisition of a 50% interest in two U.S. provisional patent applications relating to the production of chromium iron alloys directly from chromite ores and the production of low-carbon chromium iron alloys directly from chromium concentrates (the "Chromium IP Transaction"). The Chromium IP Transaction includes the right to use these provisional patent applications to apply for additional patent applications in the U.S., Canada and the rest of the world and maintain a 50% interest in the vendor's associated intellectual property (the "Chromium IP"). KWG's and the vendor's interests in the Chromium IP will be held in a limited partnership ("LP") while a subsidiary of the Company will be the general partner in the LP. The vendor received 25 million units of KWG with each unit consisting of one common share and one common share purchase warrant with an exercise price of \$0.10 and a five-year exercise period from the closing date. In addition, KWG now has the option to acquire an additional 25% interest in the Chromium IP by issuing the vendor an additional 12.5 million units at any time within one year of the closing date ("First Option"). The remaining 25% of the Chromium IP can be acquired by KWG by issuing an additional 12.5 million units any time within one year of the First Option being exercised ("Second Option").



## INVESTMENT RISKS

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The following are the investment risks that we foresee:

**Commodity Risk:** The companies' revenues will be derived from chromium, the price of which is subject to cyclical movements and volatility.

**Geological/Reserves Risk:** Resources and anticipated additions are estimates based on the best available information. Variances from these estimates could negatively impact the valuation of projects.

**Labour Risk:** The North American mining labour pool remains very tight, with significant competition for skilled miners and tradesman. Development of KWG's chromium deposits carries the risk of not being able to find sufficient trained staff to achieve development goals in a timely manner.

**Technical Risk:** Mining and milling may be affected by unexpected events, such as equipment and/or tailings dam failures, which may result in significantly higher costs, revisions to mine plans, sterilization of reserves, or ultimate closure of the mine.

**Commercialization Risk:** There is no guarantee that the commercialization process for the Chromium IP process will be successful. This risk is partially mitigated by the fact that KWG would still be in a position to sell chromite concentrates and direct-shipping ore.

**Extreme Weather Risk:** KWG will be operating in the ROF District, which is subject to extreme cold weather conditions for much of the winter season. Winter temperatures range between -10° C to -55° C with the average January temperature -23° C and weather-related work stoppages could affect production targets and result in delayed or lost revenues.

**Shipping Risk:** At present there is no means of shipping commercial quantities of Cr-Fe products from the ROF and there is no guarantee that the ROF stakeholders will execute agreements that advance a transportation solution for the ROF.

**Country Risk:** KWG will operate in the ROF and a location in southern Ontario for the reduction plant. While there are outstanding issues between some First Nations groups in the area and the Ontario government with respect to land claims, etc., KWG has initiated discussions with the First Nations stakeholders on its development plans and KWG's community relations personnel meet regularly with community and government leaders to keep the lines of communication open and maintain transparency.

**Currency Risk:** KWG will report its earnings in Canadian dollars, but their Cr-Fe products will be priced in U.S. dollars, exposing the companies to potential currency volatility.

## APPENDIX A—KWG AND BOLD VENTURES

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In March, 2013, Bold and KWG signed the Koper Lake Option Agreement under which KWG has an option to acquire an 80% interest in chromite and 20% interest in other minerals in conjunction with Bold's four-stage option to acquire a 100% interest in Fancamp's Koper Lake Project, which hosts the Black Horse chromite deposit. Under the terms of the agreement, Bold will remain the Project operator and KWG will fund 100% of Bold's earn-in expenditures and option payments over all four stages of the Fancamp option earn-in. Last year, KWG committed to a \$2 million drill program for chromite and a \$1 million program to test a contiguous nickel target.

Drilling began in March but was briefly halted in April pending the issuance of an exploration permit by the Ontario Ministry of Northern Development and Mines under changes to the Ontario Mining Act that came into effect at that time. Drilling was again interrupted in late May when a forest fire threatened the Bold camp, which had to be evacuated. The delays in the drilling program exhausted the exploration budget and the last two holes in the program were stopped short of the target zone. These holes were capped with the casing intact in order to be completed at a later date. A total of 10 holes totaling 6,041 m of drilling were completed. In September, the initial resource for the Black Horse deposit was released showing 43.8 million tonnes of inferred resources grading 37.5% Cr<sub>2</sub>O<sub>3</sub> using a 20% Cr<sub>2</sub>O<sub>3</sub> cut-off grade.

In January, 2014, KWG announced an additional \$2 million in funding and exploration drilling at the Koper Lake Project resumed. The 5,000 m program consisted of three deep holes on the Black Horse deposit to test for down-dip extensions of the mineralization and three holes at the C-6 target, an untested gravity anomaly located about 1 km northeast of the Black Horse deposit. The program was completed at the end of March and the three Black Horse holes intersected robust widths of disseminated, semi-massive and massive chromite mineralization. In May, KWG released an updated resource estimate for Black Horse showing inferred resources of 77.2 million tonnes grading 35.1% Cr<sub>2</sub>O<sub>3</sub> at a 20% Cr<sub>2</sub>O<sub>3</sub> cut-off grade.

Bold optioned the Koper Lake Project from Fancamp Exploration under an agreement originally signed in May, 2012 that allowed Bold to earn up to 60% of the Project and then amended in January, 2013 to allow Bold to acquire up to a 100% interest under a four-stage earn-in process. The initial 50% ownership is subject to Bold making option payments to Fancamp of \$1.5 million and spending \$8 million over three years, after which a 50/50 joint-venture between Bold and Fancamp would be formed. To-date, KWG and Bold have spent \$5 million of the \$8 million Stage One work commitments. As well, KWG issued 10 million treasury shares to Fancamp in February, 2014 to satisfy the \$0.5 million option payment due before March 31, 2014, bringing the total cash payments to Fancamp to \$0.8 million and leaving a final \$0.7 million payment that must be made before March 31, 2016.

Bold can earn the next 10% by making an additional \$0.7 million option payment and delivering a positive feasibility study. Bold could then earn an additional 20% interest by paying Fancamp \$15 million in equal installments over three years. The payments are to be comprised of 50% in cash and, at Bold's option, 50% in Bold common shares at market price (or KWG shares under the KWG/Bold option). At that point, Fancamp would have a 20% carried-interest in the Project which could be purchased by Bold in return for a GMR of 2% of all metal revenues from the Project. The 2% GMR rate would stay in place until all of the capital costs of achieving commercial production have been recouped, at which point the GMR may be scaled up to 4% depending upon metal prices at the time.

## APPENDIX B—KWG AND CLIFFS NATURAL RESOURCES

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At present, KWG remains in court with Cliffs over Cliffs request for access to the Railway Claims as part of their plans to construct a road to its Black Thor deposit in the ROF. Otherwise, Cliffs has largely exited the ROF with the sale of its exploration camp to Noront and the write-down of its investment in the region. Additionally, Cliffs is currently in a proxy contest with activist shareholder Casablanca Capital LP which wants to, amongst other things, have Cliffs divest of its “international assets” that include its Ring of Fire properties. As such, the ultimate ownership of Cliffs 70% interest in the Big Daddy JV is unclear as is the future potential for capital funds to be raised for developing Big Daddy.

That being said, the next milestones for the Big Daddy JV partners will be the resolution of Cliffs’ appeal of the Commissioner’s decision not to grant an easement on the Railway Claims and whether KWG will extract a bulk sample of the Big Daddy mineralized material. These milestones are somewhat disconnected with Cliffs and KWG at odds over the Railway Claims but still moving forward in executing their Big Daddy JV.

### *Initial Successes*

KWG was exploring for diamonds in the James Bay lowlands in 2007 when Noront made its initial discovery of nickel and copper sulphide mineralization that would become its Eagle One deposit. At the time, KWG and Spider Resources had options to acquire a combined 60% interest in a 78 claim unit property from Freewest Resources that were adjacent to the Noront claims. Previous drilling in 2006 by the KWG/Spider partnership had identified layered chromitite-bearing, nickel rich peridotite that was later determined to also contain Platinum Group Metals (“PGMs”). In March, 2008, the KWG/Spider partnership began a drill program on targets located approximately 3.6 km northeast of Noront's Eagle One discovery. In May, 2008 the partners announced assay results that included significant Cr<sub>2</sub>O<sub>3</sub>, Ni and PGM values, including up to 7.5 m of 35.6% Cr<sub>2</sub>O<sub>3</sub>. In October, 2008 the partners announced additional drill results as well as preliminary metallurgical testing using drill core that demonstrated that a chromite concentrate could be produced with Cr<sub>2</sub>O<sub>3</sub> grades in excess of 40%, which is the threshold for a saleable concentrate. In total, the 2008 exploration program consisted of 19 drill holes, 14 of which targeted chromite mineralization and resulted in the delineation of the Big Daddy Chromite Deposit. The Big Daddy deposit was one of several chromite occurrences that were being drilled in the McFaulds Lake area including Noront's Blackbird #1 and # 2 deposits located 5 km to the southwest and Freewest's Black Thor discovery located 4 km to the northeast. In all, exploration up to that time had identified chromite occurrences along 14 km of strike length within the same peridotite body in what was becoming the largest “chromite camp” in North America.

### *Cliffs Enters the Ring of Fire*

In January, 2009, KWG and Cliffs signed an option agreement whereby Cliffs could acquire certain KWG securities in return for US\$3.5 million. Cliffs exercised the option in March and received approximately 50.5 million units of KWG consisting of one KWG common share and 0.44 of a warrant with an exercise price of US\$0.05 per whole warrant during the first year and US\$0.10 per whole warrant thereafter. As well, Cliffs purchased a US\$1 million convertible debenture from KWG that was subsequently converted in April into 21.1 million KWG common shares and 9.3 million warrants. The combination of the unit subscription and convertible debenture resulted in Cliffs acquiring approximately 19.9% of KWG's common shares. Cliffs and KWG also entered into a shareholder agreement outlining first refusal, pre-emptive rights and the right to nominate one KWG Director.

In July, KWG acquired a 1% NSR interest in the Black Thor, Black Label and Big Daddy deposits from Mr. Richard Nemis, Bold’s current CEO, in return for \$635,000 in cash, another \$1 million in cash within one year and issuing 15 million units consisting of one KWG common share and one warrant with an exercise

price of \$0.10. The NSR transaction wouldn't close until February, 2011 by mutual consent of KWG and the vendor when KWG issued an additional 4 million units with a deemed price of \$0.10 per common share and one warrant with an exercise price of \$0.15 in lieu of the last \$400,000 of the \$1 million cash payment.

In August, Cliffs agreed to purchase an additional 8.7 million units in order to maintain its ownership level in KWG.

In September, KWG announced that the 2005 Option Agreement between the Company, Spider Resources Inc. and Freewest Resources Canada Ltd. for the McFaulds JV had been amended. At that time, both KWG and Spider had each earned a 25% interest in the McFaulds JV and, under the amended agreement, could each earn an additional 5% by spending \$7.5 million by March 31, 2012. If either partner decided not to exercise any portion of its option, the other partner had the right to exercise the option for their own benefit. The amended option agreement also stipulated that Spider would act as the McFaulds JV operator until March 31, 2010, at which time KWG would become the operator for one year followed by Spider again being operator until March 31, 2012. The operator for the period after March 31, 2012 would be chosen by the three parties by way of majority vote.

In November, Freewest Resources was acquired by Cliffs following a hostile takeover bid for Freewest by Noront Resources. Freewest subsequently became a wholly-owned subsidiary of Cliffs and was re-named Cliffs Chromite Ontario Inc.

In early April, 2010, after KWG had become the McFaulds JV operator, the Company embarked on a scoping study for the development of the Big Daddy deposit. The scoping study would be part of the earn-in for KWG and Spider Resources and would be conducted in conjunction with a feasibility study of the construction of a rail road linking the ROF to Exton, Ontario along the Railway Claims. In May, KWG released the details of the initial NI 43-101-compliant resource estimate for Big Daddy of indicated resources of 26.4 million tonnes grading 39.4% Cr<sub>2</sub>O<sub>3</sub> and inferred resources of 20.5 million tonnes grading 37.5% Cr<sub>2</sub>O<sub>3</sub>, all at a cut-off grade of 15% Cr<sub>2</sub>O<sub>3</sub>.

Also in May, the Company announced that it had received a non-binding takeover proposal from Cliffs and had set up a special committee of independent Directors and retained a financial advisor to evaluate strategic alternatives. The Cliffs offer spurred KWG and Spider to enter into a binding agreement to merge with each company owning 50% of the merged company. At that time, the partners had earned a combined 53% interest (going to 60% by spending an additional \$10 million) in the McFaulds JV from Freewest and the combined company would have majority control over the development of the deposit. Under the terms of the merger, KWG's interests in the Railway Claims, some cash and the 1% NSR royalties granted by Freewest on the Big Daddy, Black Thor and Black Label deposits, would be transferred into KWG's wholly-owned Debut Diamonds subsidiary so that they could be distributed to the existing KWG shareholders.

At the end of May, Cliffs offered to acquire Spider Resources for \$0.13 per common share in cash and in mid-June increased this offer to \$0.165 per share before making the final increase to \$0.19 per share in cash at the end of June, 2010. KWG had matched the \$0.165 per share offer but declined to match Cliffs' final offer and, as a result, received a \$2.3 million break-fee and the proposed KWG and Spider combination was terminated on July 2nd.

In August, as the operator of the McFaulds JV, KWG proposed and received approval for a \$4 million budget for additional drilling and bulk sampling programs for the Big Daddy deposit. At the same time CCC continued soil testing on the Railway Claims.

In August, 2011, KWG announced the sale of its 1% NSR interest in the former Freewest Resources properties, including Big Daddy, to **Anglo Pacific Group PLC (YSX:APY; Not Rated)** for US\$18 million in cash.

On March 20, 2012, KWG and CCC received an Order to File from the Ontario Mining and Lands Commissioner. The Order came in response to an application made to the Minister of Natural Resources by 2274659 Ontario Inc., a subsidiary Cliffs Chromite Ontario Inc., for the grant of an easement under s.21 of the Public Lands Act. The easement sought by Cliffs would overlap and potentially encumber the Railway Claims held by CCC, which retains rights prior to any subsequent right to the use of the surface rights on these claims.

Nonetheless, KWG and Cliffs became joint-venture partners on the Big Daddy JV on March 31, 2012, which was the expiration date of the Amended and Restated Option Agreement. KWG holds a 30% interest in the Big Daddy JV through its wholly-owned subsidiary Canada Chrome Mining Corporation ("CCMC"). Cliffs owns the remaining 70% through wholly-owned subsidiaries Cliffs Chromite Ontario Inc. (formerly Freewest Resources Canada Inc.) and Cliffs Chromite Far North Inc. (formerly Spider Resources Inc.). Under the terms of the JV, KWG has access to the Big Daddy deposit and has the right to drill the deposit and use the core for a bulk sample for metallurgical testing at XPS.

In June, 2012, KWG filed the materials requested by the Ontario Mining and Lands Commissioner and the two-week hearing for Cliffs' application was held in February, 2013. On September 11, 2013, the Commissioner ordered that Cliffs' application be dismissed. Cliffs appealed the Commissioner's decision in early October, 2013. In February, 2014, KWG was advised that the Ministry of the Attorney General, on behalf of the Minister of Northern Development and Mines, would bring a motion in the Ontario Divisional Court for leave to intervene in the appeal of the Commissioner's decision. The motion for leave was heard on April 28, 2014 and the Divisional Court of the Superior Court of Justice of Ontario made an Order allowing the Attorney General up to 30 minutes to address the Divisional Court panel that is to be convened to hear the appeal of the Commissioner's decision.

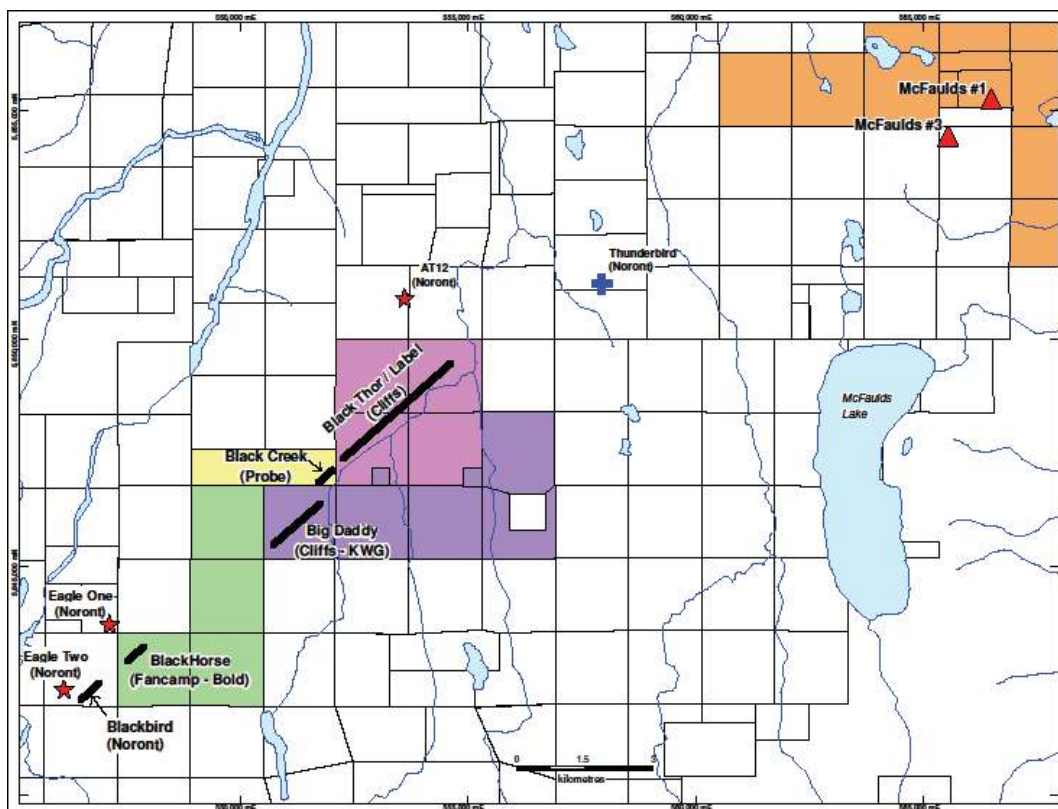
On May 14, 2014, KWG announced that its CCC subsidiary had served notice that it will make a motion to the Court of Appeal for an order granting leave to appeal the Order of the Divisional Court's Order with respect to the Attorney General of Ontario. That application was abandoned.

## APPENDIX C— BLACK HORSE AND BIG DADDY GEOLOGY AND RESOURCES

The ROF district is located at the western edge of the James Bay Lowlands, which is a large, poorly-drained area encompassing a 400 km wide band to the west of James Bay that is locally underlain by unconsolidated clays on top of which lies mostly muskeg and bog with very little outcrop. As such, airborne geophysical data and diamond drilling have been used to identify the underlying geologic environments. Both the Big Daddy and Black Horse deposits are located within the Sachigo greenstone belt of the Oxford-Stull Domain of the Sachigo Subprovince. The Sachigo greenstone belt is shaped in a west-facing arc that runs for approximately 100 km and is between 5 km to 25 km wide. This greenstone belt contains a series of significant mafic to ultramafic intrusions that have caused doming of the greenstone rocks. Subsequent metamorphism has resulted in mantle-derived magmatic mafic/ultramafic layered intrusions running approximately 60 km along the margin of the granodiorite that defines the Ring of Fire Intrusion. The Ring of Fire Intrusion hosts an apparent "jewel box" of base and precious metals deposits including nickel-copper-PGE, copper-zinc, titanium-vanadium and gold as well as the eight chromite deposits that been identified to-date. KWG has interests in two of these chromite deposits - Big Daddy and Black Horse - and Figure 13 shows where these deposits are located in the McFaulds Lake area of the ROF district.

**Figure 13: Chromite Deposits in the McFaulds Lake Area**

Source: KWG Resources NI 43-101  
Technical Report—May 28, 2014



The chromite deposits are located across a 13 km narrow dyke complex that is referred to as the McFaulds Lake Sill. The Sill is thought to be up to 1,000 m thick and is generally steeply-dipping to the south-east but in parts has been completely overturned and dips deeply to the north-west. The Big Daddy deposit is located at the north-eastern portion of the Sill and the Black Horse deposit is located approximately 3 km to the south-west. Both deposits are stratiform chromite deposits and are characterized by similar geologic environments defined by upper olivine-poor and lower olivine-rich units. The chromite typically occurs in the upper portion of the olivine-rich unit as a layered progression of disseminated, semi-massive and massive chromite. The massive chromite can be up to 100 m thick and the contact with the upper olivine-poor unit can be very sharp with the  $\text{Cr}_2\text{O}_3$  grades going from ~40% to <1% within as little as a centimetre. The silicate minerals present within the Sill have undergone significant alteration in the presence of water to form serpentine, talc and chlorite. The logging of diamond drill core has shown that the depositional sequence from the top to the bottom of these



deposits typically consists of gabbro, pyroxenite, massive chromite, semi-massive to disseminated chromite contained in peridotite and dunite. The Kemi deposit in Finland is considered to be the closest comparable deposit but the McFaulds Lake chromite deposits are also similar to stratiform chromite complexes in the Bushveld in South Africa, the Great Dyke in Zimbabwe, Sukinda in Orissa, India and Ipuera in Brazil.

### Resources

On May 13, 2014, KWG released an updated resource estimate for the Black Horse deposit, which has now been traced along 0.6 km on strike and has a down-dip extent of approximately 1 km from approximately 350 m below surface to 1.4 km deep. The updated inferred resource was calculated at a 20% Cr<sub>2</sub>O<sub>3</sub> cut-off grade and stands at 77.2 million tonnes grading 35.1% Cr<sub>2</sub>O<sub>3</sub>. Only eight drill holes have intercepted the deposit and most of these are very steep intersections that cut the deposit at oblique angles. As a result, the lateral extent of the deposit isn't clearly understood, resulting in the inferred resource classification. The deposit remains open at depth and to the northeast. The true width ranges from approximately 100 m at the south-western end to approximately 25 m in the north-eastern half. The south-western half of the deposit is predominantly layered chromitites while the north-eastern half is predominantly massive chromitite.

In June, 2012, KWG released its resource estimate for the Big Daddy deposit, which has been traced over 1.2 km along strike and down to a depth of 490 m. The deposit is near surface, covered by 7-17 m of overburden, and appears amenable to both underground and open pit mining, although it is unclear if the latter could be permitted in the ROF. That being said, the measured and indicated resources for Big Daddy are 23.3 million tonnes grading 32.1% Cr<sub>2</sub>O<sub>3</sub> and 5.8 million tonnes grading 30.1% Cr<sub>2</sub>O<sub>3</sub>, respectively, for total M&I resources of 29.1 million tonnes grading 31.7% Cr<sub>2</sub>O<sub>3</sub>. There are also inferred resources of 3.4 million tonnes grading 28.1% Cr<sub>2</sub>O<sub>3</sub> and all resources were calculated using a 20% Cr<sub>2</sub>O<sub>3</sub> cut-off grade.

Figure 14 shows the combined resources for Black Horse and Big Daddy.

Figure 14: KWG Resource Statement

Source: KWG Resources Reports,  
Pope & Company Research

Reserves & Resources (millions of tonnes)		Ore	Cr <sub>2</sub> O <sub>3</sub>	Contained Cr <sub>2</sub> O <sub>3</sub>	Ownership	Attributable Cr <sub>2</sub> O <sub>3</sub>
Black Horse <sup>1</sup>	Inferred	77.2	35.10%	27.1	80%	21.7
Big Daddy	M&I	29.1	31.70%	9.2	30%	2.8
Big Daddy	Inferred	3.4	28.10%	1.0	30%	0.3
Total M&I		29.1	31.70%	9.2	30%	2.8
Total Inferred		80.6	34.80%	28.1	78%	21.9
<sup>1</sup> 80% ownership is subject to delivering a feasibility study to optionor						

APPENDIX D—CHROMIUM MARKET AND USES OVERVIEW

We don't publish a formal supply/demand outlook for the chromium market but, according to the International Chromium Development Association, global production of chromite ore and concentrate production in 2013 was approximately 30 million tonnes, as shown in Figure 15. Global production of ferrochrome of all types was approximately 10.8 million tonnes. We would note that the scrap factor in the stainless steel market distorts the market because the chrome in the scrap makes FeCr consumption opaque. Nonetheless, each 1 million tonnes of Cr-Fe alloy produced from the ROF equates to capturing approximately 9% of the global market and we don't think it's likely that the ROF would ultimately end with much more than 20% of this market. The ratio of the amount of 30% Cr<sub>2</sub>O<sub>3</sub> ore necessary to

produce one tonne of 60% Cr chromium-iron alloy is approximately 3.6 tonnes based on 90% recovery from the ore to produce a 45% Cr<sub>2</sub>O<sub>3</sub> concentrate that is metalized with 95% recovery.

As far as ferrochrome pricing, pricing has recovered from last March and currently sits at US\$2.53 per kg or US\$1.15 per lb and the 52-week low is US\$1.98 per kg or US\$0.90 per lb. Figure 16 shows the nine year price curve. We are forecasting a long-term

ferrochrome price of US\$1.00 per lb which, at a 0.90 USD/CAD exchange rate, equates to approximately \$1,470 per tonne of 60% Cr chromium-iron alloy.

Chromium is the 13th most common element in the world and an essential raw material for the production of stainless steel. Chromium metal is produced almost entirely from chromite, which is a chromium oxide or Cr<sub>2</sub>O<sub>3</sub> that occurs in solid crystal solution with iron (FeCr<sub>2</sub>O<sub>4</sub>), magnesium (MgCr<sub>2</sub>O<sub>4</sub>) and aluminum (FeAl<sub>2</sub>O<sub>4</sub>). Chromite is typically formed by metamorphic processes triggered when magma intrudes into the Earth's crust to form mafic-ultramafic complexes. The applications in which chromium is used are segregated by the range of Cr<sub>2</sub>O<sub>3</sub> grades, SiO<sub>2</sub>

grade and Cr:Fe ratio and are referred to as metallurgical, chemical and refractory (which includes foundry). Figure 17 shows the specific parameters for each designation and Figure 18 below details the various uses of chromite ores and ferrochrome.

Figure 15: Global Chromite Production  
  
Source: The International Chromium Development Association

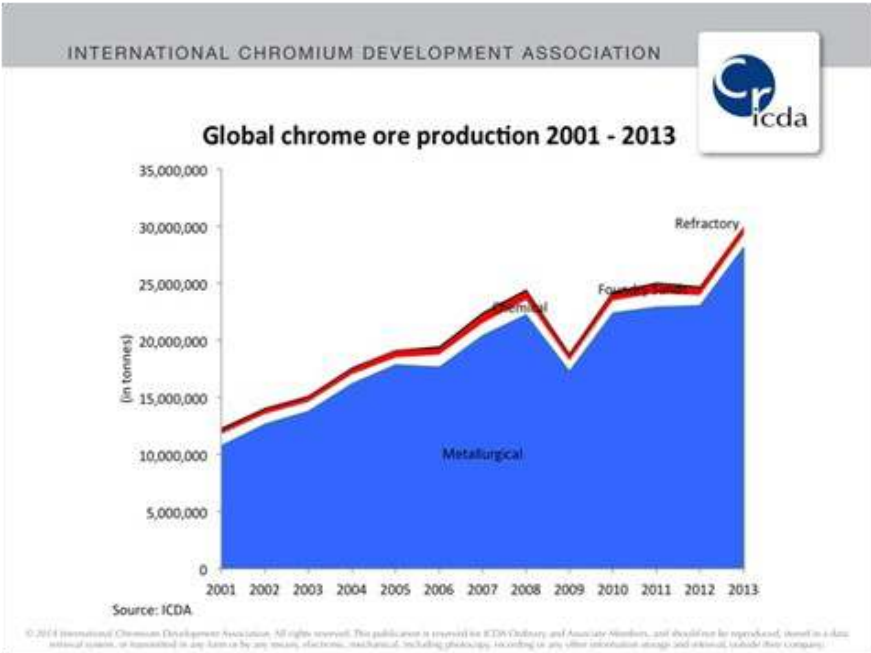
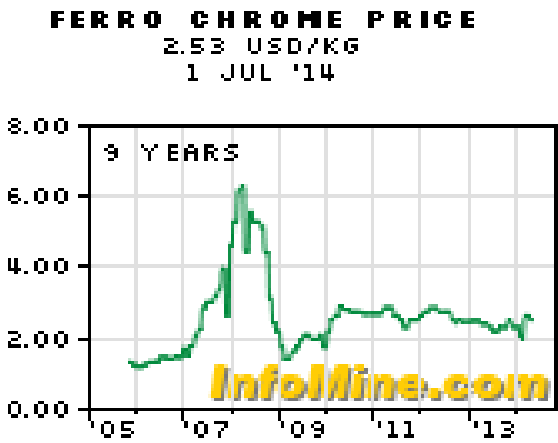


Figure 16: Ferrochrome Price Chart

Source: InfoMine



Metallurgical Grade

Metallurgical-grade chromite is the principal use of chromium and is centered in the production of stainless steel, specialty steels and non-ferrous alloys and accounts for approximately 90% of global chromite consumption. The chromite ore is reduced by pyrometallurgical processes to produce ferrochrome, or charge chrome, which is then added to steel and iron melts. Chromium is the additive that gives stainless steel its anti-corrosive properties as well as increasing hardness. The chromium protects the steel from corroding by instantly forming a thin layer of chromium-oxide layer on the surface as soon as the cooled steel comes into contact with oxygen. The oxidized layer also makes the surface inert to chemical reactions and instantly reforms if the stainless steel is scratched. Stainless steel describes a range of steel products that contain chromium with a minimum Cr content of 11-12% but can be as high as 30% Cr. One of the best known grades of stainless steel is Series 304, which

is also known as 18/8 stainless where the 18 is the % Cr and the 8 is the % Ni.

Figure 17: Chromite Use Specifications

Source: Noront Resources Ltd. NI 43-101 Technical Report, May 4, 2012

	Metallurgical Grade	Chemical Grade	Refractory Grade	Foundry Grade
Cr <sub>2</sub> O <sub>3</sub> (%)	>46	>44	30-40	44
Cr:Fe	>2:1	>1.5	2-2.5:1	na
SiO <sub>2</sub> (%)	<10	<3.5	6	<4

In addition to stainless steel, ferrochromium alloys are used to produce specialty products including carbon steel, bearing and high-speed steel, tool steels, cast iron, super alloys and welding materials. The cast iron alloys utilize chromium to increase corrosion resistance and hardness and are used for pumps, valves, pipes, rolls and wear plates. In addition, chromium metal is used in industries such as aviation, gas, petrochemical and nuclear where resistance to wear and high temperatures are required.

Figure 18: The Uses of Chrome Ore

Source: The International Chromium Development Association



Chemical Grade

Chemical-grade chromite is mainly used to produce sodium chromate by calcining chromite with soda ash in a rotary kiln. The sodium chromate is then used to produce dichromates of sodium, ammonium and potassium as well as chromic acid, chromic oxide and chromium sulphate. The main chemical use is in the form of chromium

sulphate in the leather tanning industry. The next largest use is in the electro-plating industry and for pickling plastics. In addition, chromium chemicals are an important raw material in the production of pigments and pure chromium oxide produces a high quality refractory.

Refractory and Foundry Grades

When used in refractory applications, the chromite is usually beneficiated to produce a fine concentrate with a low SiO<sub>2</sub> content, typically about 0.7%. As well, the combined grades of Cr<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub> should be at least 57%. Chromite is often combined with magnesia to produce ‘mag-chrome’ refractories and bricks that are used in copper, lead and zinc smelting and refining. In the ferrous industries, the increasing use of electric arc furnaces has resulted in much lower use of mag-chrome refractories but they are still used in steel-making ladles, argon-oxygen decarburisers and in tap-hole plugging. The cement, lime and glass industries also use mag-chrome bricks in rotary kilns but the potential for the

oxidised bricks to release hexavalent chromium, a known carcinogen, has made many companies phase out their use, especially in Europe and North America.

In the foundry industry, refractory chromite in granular form is referred to as chromite sand. The chromite sand is used for both ferrous and non-ferrous castings due to its properties that include its 2,150°C melting point, high density, thermal conductivity and the bloating of FeO as it is oxidized into  $\text{Fe}_2\text{O}_3$  and  $\text{Fe}_3\text{O}_4$ , which helps seal the mold.

### ***Other Uses of Chrome***

Chrome metal is produced by either an aluminothermic process using chrome oxide or an electrolytic process using ferrochromium or chromic acid. Chrome metal of at least 99% purity is used in the production of specialty and super alloys where low iron content is required. These alloys are used in the aeronautic, petroleum, turbine, petrochemical and chemical industries. Chrome metal powder is used for producing welding electrodes and cored wire, aluminum briquettes and master alloys.

## APPENDIX E— FERROCHROME TECHNOLOGY AND PRODUCTION PROCESSES

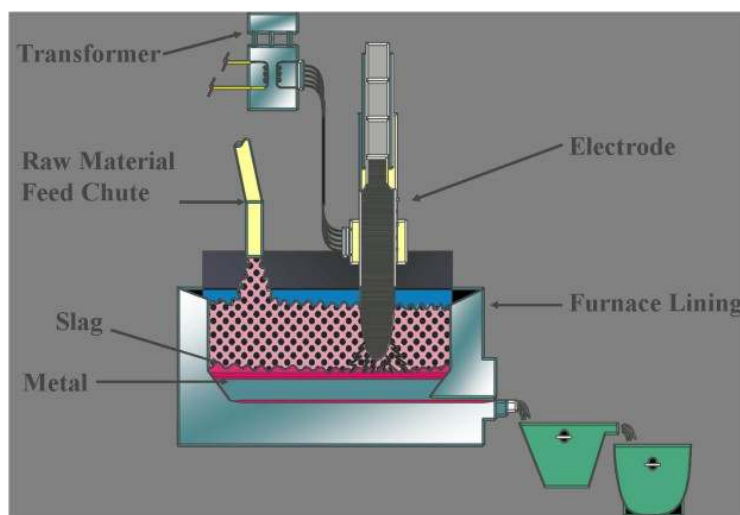
The new Chromium IP process appears to offer improvements over all of the existing ferrochrome processes that are based on SAF technology, most importantly with respect to lower energy consumption. As well, SAF technology utilizes carbon electrodes as well as solid carbon reductants and fluxes in the furnace charge. These additives contain deleterious elements such as phosphorous and sulphur that may trigger penalties if concentrations in the resulting FeCr exceed end-user specifications. The Chromium IP also offers the potential for lower capital costs and a smaller environmental footprint beyond the basic energy savings. All of these factors indicate that the Chromium IP process potentially should have significantly lower operating costs relative to the existing pyrometallurgical processes. There are currently four main primary variations of the SAF technology used for the production of ferrochrome. These are the conventional process, the Outokumpu process, the DC Arc process and Glencore's Premus process, which uses pelletizing, pre-heating and partial metallization in order to lower energy consumption.

### *The Conventional Process*

The conventional process is the simplest of the four. A mixture of chrome ore, reductants and flux is fed into an open SAF with a minimum of pre-processing, including not pre-heating the furnace charge material. The furnace off-gases are cleaned in a bag plant before being vented into the atmosphere, with no heat recovery or utilization of carbon monoxide as a fuel to improve the energy balance. The chrome metal and slag are tapped from the furnace for further processing. The molten metal is typically cast in ingots which are then crushed, sized and packaged to customer requirements. The main advantages of the conventional process are it has the lowest capital costs of the four processes and is very flexible with respect to the raw materials that can be used in the process. The main disadvantages are that it is the least environmentally-friendly process and has the lowest efficiencies. Conventional processes for producing ferrochrome typically consume approximately 4 MWh of electricity. Figure 19 shows the conventional ferrochrome process.

Figure 19: Conventional Ferrochrome Process

Source: M. Visser, "An Overview of the History and Current Operational Facilities of Samacor Chrome"



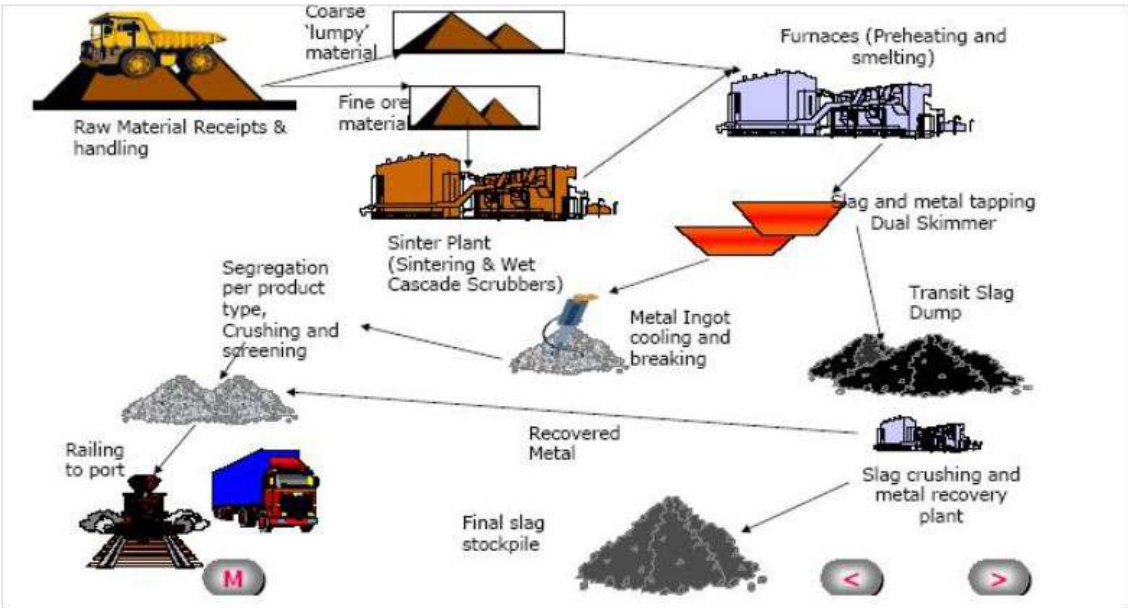
### *The Outokumpu Process*

With the Outokumpu process, the chrome ore is finely ground and the resulting slurry is de-watered and the resulting chrome concentrate is mixed with a binding agent such as bentonite clay and then pelletized. The pellets are then sintered and air-cooled before being stockpiled. The pellets are reclaimed and the combined with the fluxes before the entire mixture is then heated in a preheater located adjacent to the closed SAF. The pre-heated raw materials are then mixed with

reductants such as coke before being charged into the closed SAF. The furnace off-gas is captured and cleaned in wet scrubbers and, with its high carbon monoxide content, used as a fuel in the preheating process. The main advantages of the Outokumpu process are that the use of sintered pellets and pre-heating reduces the overall energy requirements, the use of the furnace off-gas as a fuel is more environmentally-friendly and the overall chromium recoveries are improved. From an energy consumption perspective, the Outokumpu process consumes approximately 3.2 MWh of electricity per tonne FeCr after factoring in the energy re-capture from using the off-gases as fuel. Figure 20 shows the unit operations of the Outokumpu process.

Figure 20: The Outokumpu Process

Source: O. Naiker and T. Riley, "Xstrata Alloys in Profile"

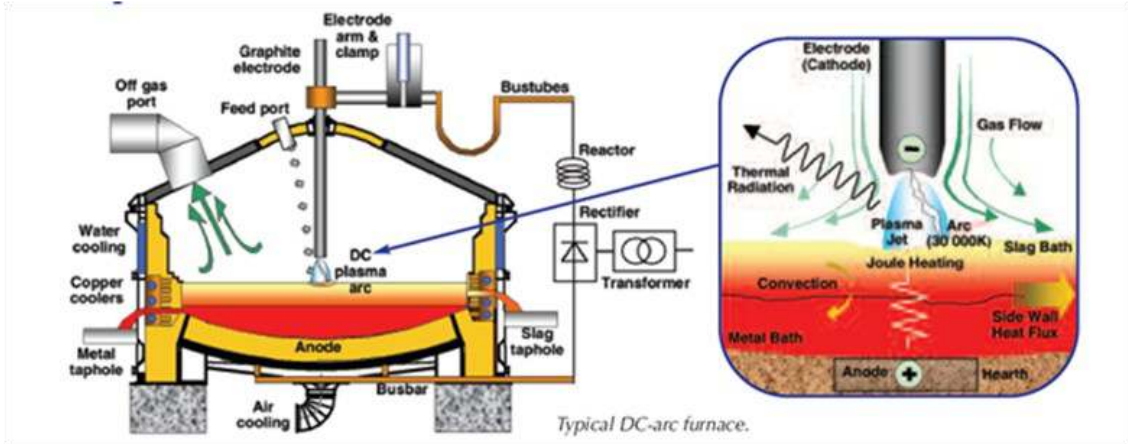


**The DC Arc Furnace Process**

The DC Arc furnace process uses a single solid carbon electrode to produce a DC arc to an anode at the bottom of the furnace. The arc is typically an open one but can be semi-submerged. Raw materials are charged directly into the furnace or by using a hollow electrode. The main advantage of this process is that it can use any of the raw materials available, including 100% chromite fines, with minimal or no pre-processing required. As well, chromium recoveries with this process are very high and it is more environmentally-friendly than the conventional process. Figure 21 shows the schematics of the DC Arc

Figure 21: The DC Arc Furnace Process

Source: [www.pythongroup.ca](http://www.pythongroup.ca)



Furnace process.

**The Premus Process**

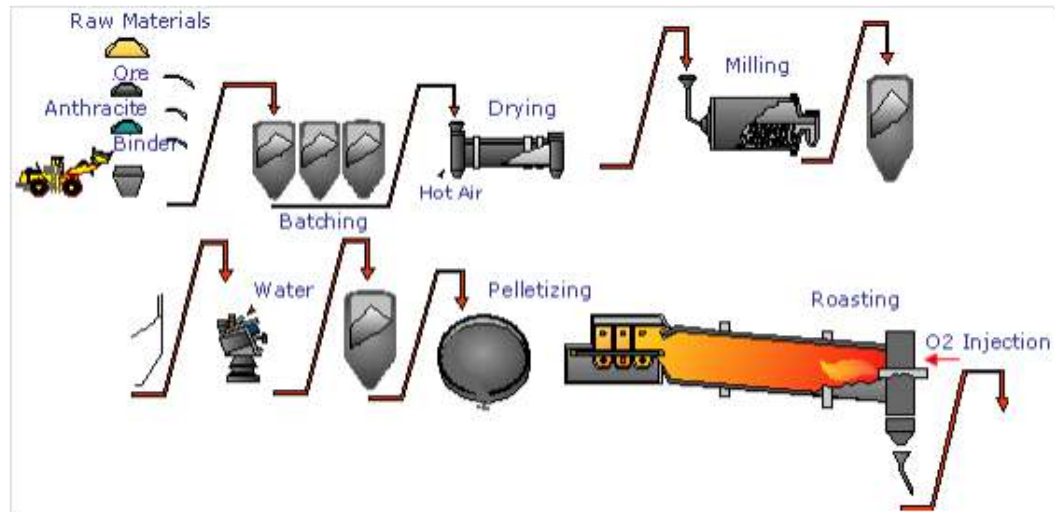
The Premus process was developed by Xstrata and is the process that results in the highest degree of pre-reduction of chrome and iron prior to being charged into the furnace. The typical raw materials are chromium fines, bentonite and a reductant such as anthracite which are dry milled and pelletized. The pellets are pre-heated before being fed into rotary kilns where the partial metallization in the order of 30%-40% of the chrome and iron takes place. The partially-metallized pellets are then hot charged into a closed SAF. The SAF off-gases are collected and cleaned in venturi scrubbers and then used as a fuel



source in order to further reduce the energy requirements. The Premus process requires relatively large initial capital costs and a high degree of operational control is required in order to ensure optimal process performance. That being said, the Premus process has the lowest capital cost per annualized tonne of capacity and the lowest power consumption at between 2.2-2.4 MWh per tonne compared to the Outokumpu and DC Arc processes. Figures 22 and 23 show the unit operations in the Premus process.

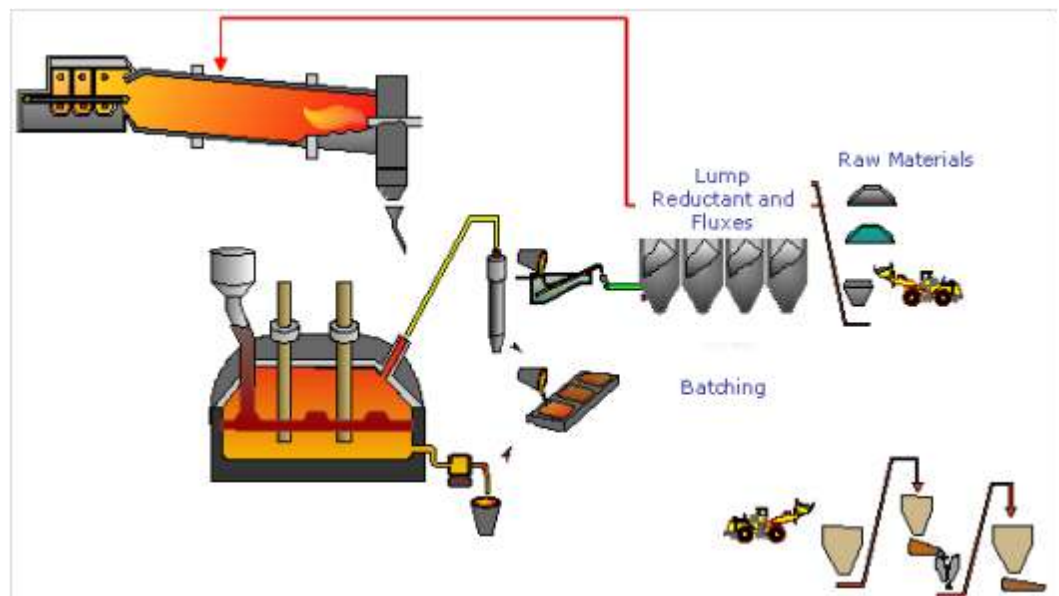
**Figure 22: The Premus Process—Pelletizing and Pre-Reduction**

**Source: O. Naiker, "The Development and Advantages of Xstrata's Premus Process"**



**Figure 23: The Premus Process—Smelting**

**Source: O. Naiker, "The Development and Advantages of Xstrata's Premus Process"**



## APPENDIX F— MANAGEMENT AND DIRECTOR PROFILES

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The following are the management and Directors of KWG and their backgrounds:

**Mr. Frank C. Smeenk - Director, President & Chief Executive Officer.** Frank earned his B.A. and LL.B. degrees at the University of Western Ontario and was admitted to The Law Society of Upper Canada in 1976. He left the practice of law to join the resource industry in 1987 and has served as Executive Director of Deak Resources Corporation and as Chairman and CEO of both MacDonald Mines Exploration Limited and MacDonald Oil Exploration Limited, when they were both active in exploring their various concessions in the Republic of Cuba. He has been a director of numerous resource companies including Northfield Capital Corporation, Northfield Minerals Inc., NFX Gold Inc., Genoil Inc., Nuinsco Resources Limited, Perrex Gold Inc., Conquest Resources Limited and Armistice Resources Limited. He is currently the Managing Director of Fletcher Nickel Inc. In 1998 Frank was first elected a Director of KWG and became its Chief Executive Officer in 2004.

**Mr. Thomas E. (Ted) Masters - Chief Financial Officer.** Ted graduated from the University of Toronto with an Honours B.A. in 1983. He became a Chartered Accountant in 1987 and is currently the managing partner of the accounting firm of Palmer Reed where he has been employed for the past 25 years. He has extensive experience with the auditing of public companies and is well versed in establishing and maintaining operational and financial policies and procedures. Ted was appointed as Chief Financial Officer of KWG Resources Inc. in September of 2009.

**Mr. M. J. (Moe) Lavigne - Vice President - Exploration and Development.** As a native of Timmins, Moe's career in the mining industry began during high-school. As a student from 1974 to 1982, he worked for mining companies in a wide range of duties from underground miner, to open pit geological technician. However most of his summers were spent in a tent, as an explorationist. He obtained a H.BSc. in Geology from Brock University in 1979 and a M.Sc. in Geology at McMaster University in 1983. In 1983, he joined the Ontario Geological Survey conducting research on gold deposits. In 1984 he became the Resident Geologist for the Red Lake District and transferred to Thunder Bay in 1988. Subsequent to becoming a mineral exploration consultant in 1997, he was engaged by North American Palladium Ltd. As their exploration manager, he was responsible for planning and executing the company's property acquisition, surface exploration, and resource expansion program in the Lac des Iles area. This program has delineated over 10 million ounces of palladium at the Lac des Iles mine site. In May of 2001, Moe became North American Palladium's Vice President of Exploration. In 2004 he joined Galantas Gold Corporation in Northern Ireland as Vice-President and Director and played a key role in bringing its gold mine to production. In 2007 he was appointed president of East West Resource Corporation. Moe was appointed Vice-President of Exploration & Development for KWG Resources Inc. in August of 2009.

**Ms. Luce Saint-Pierre - Corporate Secretary.** Ms. Luce L. Saint-Pierre is a member of the Quebec Order of CPA and of the Quebec Bar Association. Ms. Saint-Pierre has been Secretary of KWG Resources Inc. since January 1996 and was Chief Financial Officer from June 1999 until February 2002. Ms. Saint-Pierre has worked for 15 years (1972-1987) for a national accounting firm where she served as partner for seven years. She completed her law degree from 1989 to 1992 and was admitted to the Bar in 1994.

**Mr. Douglas Flett - Director.** Douglas M. Flett, J.D., graduated from the University of Windsor Law School in 1972 and was called to the Ontario Bar in 1974. He practiced in his own commercial law firm until 1996 when he retired from the law for a new career in the mining industry. He has been a Director of KWG Resources Inc. since 2006 and served on various committees during that time. He is a past Director of Kenora Prospectors & Miners Ltd., and is past President and currently a Director of Fletcher Nickel Inc. and a Director of Debuts Diamonds Inc. He continues to be a member of the Law Society of Upper Canada.

**Mr. Donald Sheldon - Director.** Donald Sheldon is the Executive Officer of Sheldon Huxtable Professional Corporation, a Toronto-based law firm, and has been advising mining companies for over 30 years. Currently, Mr. Sheldon serves as Director of Champion Iron Mines , Carlisle Goldfields Ltd., Fletcher Nickel Inc. and of Crown Gold Corporation (all resource exploration corporations). He is the Chief Executive Officer and Director of Metalcorp Limited (a resource exploration corporation) and as well as an officer or director of several private companies including Secretary of The Temagami Iron Corporation (a resource exploration corporation). Mr. Sheldon has extensive experience in the areas of corporate finance, mergers and acquisitions, securities law, corporate governance and regulatory compliance.

**Ms. Cynthia Thomas - Director.** Cynthia Thomas has more than 28 years of banking and mine finance experience, and currently acts as principal of Conseil Advisory Services Inc. ("Conseil"), an independent financial advisory firm specializing in the natural resource industry which she founded in 2000. Recent mandates include providing strategic advisory services to Bluefish Energy Corporation, Mercator Minerals, Luna Gold, Aquila Resources. Prior to founding Conseil, Ms. Thomas worked with Bank of Montreal, Scotiabank and ScotiaMcLeod in the corporate and investment banking divisions. Ms. Thomas holds a Bachelor of Commerce degree from the University of Toronto and a Masters in Business Administration from the University of Western Ontario. She was formerly a Director of PolyMet Mining Corp. and is currently Chair and Director of Victory Nickel Inc., Director of Nautilus Minerals Inc. and a Director and Chair of the Audit Committee for Ferrinov Inc., a private corporation.

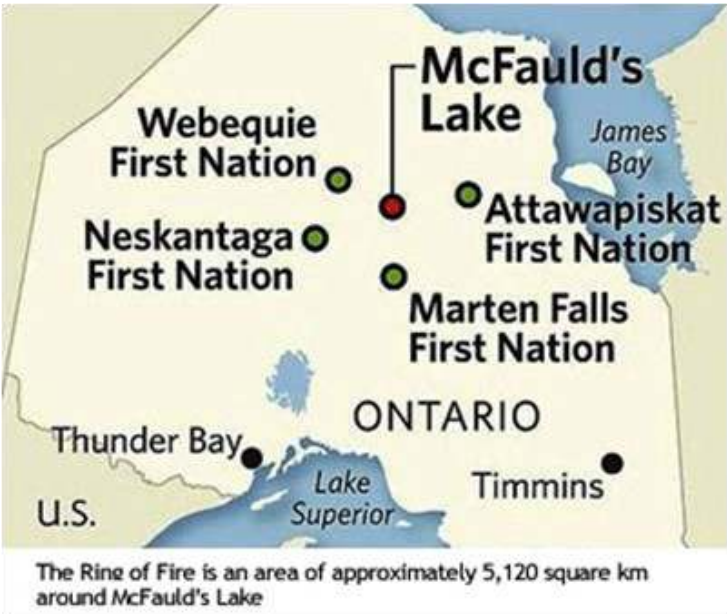
**Mr. Thomas Pladsen - Director.** Chief Financial Officer of Atacama Pacific Gold Corporation, a public gold exploration and development company since September 2010. Prior to that, private businessman from July 2009 to August 2010, and Chief Executive Officer of Andina Minerals Inc., a public gold exploration and development company from January 2005 to July 2009.

APPENDIX G— FIRST NATIONS COMMUNITIES

There are nine Ojibway and Cree First Nations communities that make up the Matawa First Nations Management ("MFNM"), a tribal council that was established in 1988 as "a grouping of bands with common interests who voluntarily join together to provide advisory and/or program services to member bands." The members are: Marten Falls (Ogoki Post), Webequie First Nation, Neskantaga First Nation, Aorland First Nation, Constance Lake First Nation, Eabametoong First Nation, Ginoogaming First nation, Long Lake #58 First Nation and Nibinamik First Nation. All of the MFNM members are signatories of the Regional Framework Agreement signed with the Province of Ontario that became effective as of March 26, 2014. In addition to the MFNM members, there are seven members of the Mushkegowuk Tribal Council that are considered to be stakeholders in the development of the ROF: Attawapiskat, Weenusk (Peawunuk), Chapleau Cree, Fort Albany, Kashechewan, Chapleau Cree, Missanabie Cree and Moose Cree First Nations. Other First Nations that have been identified as ROF stakeholders include the Mishkeegogamang First Nation, First Nation of Saugeen, Kasabonkia Lake First nation and the Metis Nation of Ontario. Figure 24 shows several of the communities that are closest to the ROF district. The

Figure 24: First Nations ROF Communities in the ROF District

Source: [www.ginoogaming.ca](http://www.ginoogaming.ca)



following descriptions and history of these First Nations has been provided by their community websites or Wikipedia as noted.

**Matawa First Nations Management Members**

**Marten Falls First Nation**

Marten Falls First Nation, which is also known as Ogoki Post, is located 100 air miles north of Nakina at the junction of the Ogoki and Albany Rivers. The community of Marten Falls First Nation has a membership of 650 plus, with half of the population residing in Marten Falls and half living off reserve. Marten Falls First Nation is only accessible

year round by air service with flights that operate in from Nakina with an airport that is operated and administered by the Ministry of Transportation. Since 2009, the Marten Falls First Nation electrification/ power system has been serviced and administered by Ontario Hydro Remotes. Marten Falls operates a seasonal winter road solely used for bringing in bulk freight such as construction materials and fuel. The community at times barges larger materials using the Kabinagami, Kenogami, and Albany River systems pending sufficient precipitation. Marten Falls has a variety store, a gas/fuel retail business, the Marten Falls Band Office, Muskeg Thunder Clinic, water treatment and sewage system, community hall, teacherage and seniors apartments. Marten Falls also operates its own local school and education program that oversees funding for secondary and post secondary students. The Ogoki Inn and Contractors Cabin can be rented with the band administration office.

Marten Falls First Nation consider themselves, the most northern of peoples that are part of the Algonkin (Ojibwa) peoples, who share the same language, culture and customs as far as the Ottawa River to the east, Michigan and Minnesota to the south and Manitoba to the west. Marten Falls peoples refer themselves in their own language as Anishnabek.

Source: ([www.martenfallsfirstnation.ca](http://www.martenfallsfirstnation.ca))

### **Webequie First Nation**

Webequie is located on the northern peninsula of Eastwood Island on the Winisk Lake, 540 kilometers north of the city of Thunder Bay, or 450 kilometers north of the town of Sioux Lookout. Access is only by air or a seasonal winter road. There is no year-round road access. The nearest year-round road access is the town of Pickle Lake, 250 km to the southwest, or the town of Nakina, 320 km to the southeast.

Charter air service to Webequie is available from both of these communities.

The people of Webequie originate from all over Northwestern Ontario, and permanent residence in the community is officially recorded as far back as circa 1800, and verbal history goes back to the early eighteenth century. Families of current residents range for many hundreds of miles, but are most prevalent within a 250 mile range. Webequie has always been a traditional meeting and gathering place known throughout all of Northern Ontario. It remains to this day one of the better hunting and fishing areas in the province of Ontario. Because of its traditional origins, to this day Webequie has familial ties to most Northwestern Ontario communities.

Source: [www.webequie.ca](http://www.webequie.ca)

### **Neskantaga First Nation**

Neskantaga First Nation (formerly known as Lansdowne House Indian Band) is a remote Oji-Cree First Nation community in the northern reaches of the Canadian province of Ontario, situated along the shores of Attawapiskat Lake in the District of Kenora. The First Nation is a signatory to Treaty 9 (originally as part of the Fort Hope Band) and has reserved for itself the 831.50 hectares (2,054.7 acres) Neskantaga Indian Reserve, containing the main community of Lansdowne House Indian Settlement, also known as Lansdowne House, Ontario. Associated with the Neskantaga First Nation is the Summer Beaver Indian Settlement, which is shared with Nibinamik First Nation. The Lansdowne House is linked to the rest of Ontario by the Lansdowne House Airport, and by winter roads and ice roads to points south, via the Northern Ontario Resource Trail. As of November of 2011, there is a total registered population of 414 people, of whom 304 people live on their own reserve.

Source: [http://en.wikipedia.org/wiki/Neskantaga\\_First\\_Nation](http://en.wikipedia.org/wiki/Neskantaga_First_Nation)

### **Aorland First Nation**

Aorland is an Ojibwa and Oji-Cree First Nation in the Canadian province of Ontario, located in the Thunder Bay District approximately 20 kilometres west of Nakina. Their community, the Aorland Indian Settlement, have Indian reserve status, though the settlement itself is not a reserve, and in 2006 had a population of 325 members.

Located along the Canadian National Railway line, the community was originally named after the Arrow Land and Logging Company, which operated in the area from 1933 to 1941. Aorland First Nation's members are former members of the Long Lake 58 First Nation, Long Lac 77 First Nation (now Ginoogaming First Nation), Fort Hope First Nation (now Eabametoong First Nation), Marten Falls First Nation, and Fort William First Nation. In 1972, the settlement briefly was recorded as Aorland 83 Indian Reserve. Aorland is policed by the Nishnawbe-Aski Police Service, an Aboriginal based service

Source: [http://en.wikipedia.org/wiki/Aorland\\_First\\_Nation](http://en.wikipedia.org/wiki/Aorland_First_Nation)

### **Constance Lake First Nation**

Constance Lake First Nation (CLFN) is a progressive and rapidly growing community of 1,470 Members of Ojibway and Cree ancestry with approximately 820 living on reserve. We are located on the scenic shores of Constance Lake near Hearst, Ontario and are readily accessible by way of Highway 11. We are a progressive and active community that encourages, supports and promotes local business development, job creation and economic development as keys to our success. Constance Lake First Nation reserve lands are 7,686 acres (3,110 hectares) in size. Local wildlife is abundant and includes

moose, rabbit, beaver, muskrat, mink, marten and lynx and an abundance of fish including pike, trout, whitefish, pickerel and perch populate our many lakes, rivers and streams. Large stands of birch, poplar, jack pine and cedar can be found throughout the area.

Constance Lake First Nation is primarily the successor of the English River First Nation, which was considered an off shoot of the Albany Band by the commissioners at the time of signing and conclusion of Treaty 9.

Source: [www.clfn.on.ca](http://www.clfn.on.ca)

### **Eabametoong First Nation**

The community of Eabametoong First Nation (Fort Hope) is situated on the north shore of Eabamet Lake, which is part of the Albany River Drainage basin. Located 360 kilometers north of Thunder Bay; the nearest road/railway town is Armstrong, 155 km southwest. Eabamet is 362-air km North of Thunder Bay; 347-air km Northeast of Sioux Lookout; & 217-air km northwest of Geraldton. Local roads are maintained by the First Nation, while the airport and main streets are maintained by the Ontario Ministry of Transportation. Community transportation is provided by private vehicles. As of 2007 the total membership of the Eabametoong First Nation is 2190 Indian registry. Approximately 1300 members live on-reserve and 890 members live off-reserve. Total population living on reserve does not include non-band members (i.e. teachers, nurses, and people from other reserves).

The name Fort Hope comes from long ago when the fur trade was booming in northern Ontario. Hudson Bay Company built a trading post by the lake because the main form of transport was by canoe. This was back in the year 1890. The trading post was abandoned in the 1960's but later, a new store was built on reserve overlooking the lake. Nothing remains of the old trading post but it would have been nice if it was. Two churches were built at the old bay site, Roman Catholic Church and the Church of England. The original churches are still standing and the cemetery is still in use today. The site referred to as "Old bay" or "Old Fort Hope" is 6 km southwest of the reserve across Eabamet Lake.

Source: [www.eabametoong.firstnation.ca](http://www.eabametoong.firstnation.ca)

### **Ginoogaming First Nation**

Ginoogaming First Nation (formerly the Long Lake 77 First Nation) is a small Anishnawbe (Ojibway) First Nation located in Northern Ontario, located approximately 40 km east of Geraldton, Ontario, Canada, on the northern shore of Long Lake, immediately south of Long Lake 58 First Nation and the community of Longlac, Ontario. As of September, 2006, our total registered population was 773 people, of which 168 residing on-reserve. The community is within the boundaries of the territory described by the James Bay Treaty of 1905 - Treaty No. 9.

Source: [www.ginoogaming.ca](http://www.ginoogaming.ca)

### **Long Lake #58 First Nation**

Long Lake #58 First Nation is situated along Highway 11 along the northeast shore of Long Lake and adjacent to the town of Longlac. Nestled between lakes and dense forests, Long Lake is a place of breathtaking beauty. Our heritage, culture and spirit are imprinted here in these natural settings. Since time immemorial our people have hunted moose and bear in the vast forests, gathered wild berries and natural medicines in the wilderness, fished in the lakes and streams and travelled seasonally in the fast flowing rivers within our watershed.

Source: [www.longlake58fn.ca](http://www.longlake58fn.ca)



**Nibinamik First Nation**

Nibinamik is a small remote community in Northwestern Ontario about 500km north of Thunder bay ON. Canada. It has a population of 480+ Community Members. Nibinamik First Nation, also known as Summer Beaver Band, is a small Oji-Cree First Nation in Northern Ontario, located on the Summer Beaver Settlement that is connected to the rest of the province by its airport, and a winter/ice road that leads to the Northern Ontario Resource Trail. In October 2009, Nibinamik First Nation had a registered population of 440 people, of which only 28 were located in the Summer Beaver Settlement.

Source: [www.nibinamik.ca](http://www.nibinamik.ca)

**Mushkegowuk Tribal Council Members****Attawapiskat First Nation**

The community of Attawapiskat is located 52 degrees north and 82 degrees west. It has a land area of 1.32 km and is located along the Attawapiskat River, 5 kilometers inland from the James Bay coastline. It's an isolated community, which has Timmins as the nearest urban center located approximately 500 km south. It is situated approximately 160 km north of Moosonee.

Attawapiskat is an isolated First Nation located in Kenora District in northern Ontario, Canada, at the mouth of the Attawapiskat River at James Bay. The traditional territory of the Attawapiskat First Nation extends beyond their reserve up the coast to Hudson Bay and hundreds of kilometres inland along river tributaries. The community is connected to other towns along the shore of James Bay by the seasonal ice road/winter road constructed each December. Attawapiskat is the most remote northerly link on the 310 km long road to Moosonee.

Source: [www.mushkegowuk.com](http://www.mushkegowuk.com), [wikipedia.org](http://wikipedia.org)

**Weenusk (Peawunuk) First Nation**

Weenusk First Nation is a Cree First Nation in the Canadian province of Ontario. In September, 2007, its total registered population was 516. Weenusk First Nation was an independent member of the Nishnawbe Aski Nation but now have joined the Mushkegowuk Council, a regional tribal council, who is also a member of NAN.

Weenusk First Nation's reserve is the 5,310 hectare Winisk Indian Reserve 90 located north of the 55° latitude in the Hudson Bay Lowlands almost directly north of the ROF. Associated with the reserve is their Winisk Indian Settlement also known as Peawanuck, which also holds reserve status. Originally, the Weenusk First Nation was located within their reserve, but they were forced to move 30 km (19 mi) southwest to Peawanuck when on May 16, 1986, spring floods swept away much of the original settlement, which had been located 6 km (4 mi) upriver from Hudson Bay.

Source: [http://en.wikipedia.org/wiki/Weenusk\\_First\\_Nation](http://en.wikipedia.org/wiki/Weenusk_First_Nation)

**Chapleau Cree First Nation**

Chapleau Cree First Nation is a Mushkegowuk Cree First Nation located by Chapleau Township, Sudbury District, Ontario, Canada. The First Nation have the 108.1 hectares (267 acres) Chapleau 75 Indian Reserve and the 1,016.8 hectares (2,513 acres) Chapleau Cree (Fox Lake) Indian Reserve. In 2006, their on-reserve population was 92.

Source: [http://en.wikipedia.org/wiki/Chapleau\\_Cree\\_First\\_Nation](http://en.wikipedia.org/wiki/Chapleau_Cree_First_Nation)

**Fort Albany and Kashechewan First Nations**

Fort Albany and Kashechewan First Nations are communities in the Cochrane District in northeastern Ontario situated on the southern and northern shores of the Albany River, respectively. Both are only accessible by air or by winter road. Old Fort Albany, which was on an island between the two modern day communities, became separated into Anglican and Roman Catholic sections. Then the Roman Catholic mission, and the Roman Catholic portion of the community, moved to the current site of modern day Fort Albany (on the southern shore). The Anglican portion of the community some years later moved to the current site of Kashechewan. Up until the 1970s Fort Albany and Kashechewan shared the same chief and council. In the 1970s they came to have separate Band Councils. Fort Albany and Kashechewan are treated as separate bands, and function as separate Bands today. New Fort Albany is mostly a Roman Catholic community, while Kashechewan is mainly Anglican.

Source: [http://en.wikipedia.org/wiki/Fort\\_Albany\\_First\\_Nation](http://en.wikipedia.org/wiki/Fort_Albany_First_Nation)

**Missanabie Cree First Nation**

The traditional territory of the Missanabie Cree is centred in and around Missinaibi Lake, Dog Lake, and Wabatongushi Lake in northern Ontario. Our membership is scattered across Canada, with many members located in Northern Ontario communities. In partial settlement of a long-standing land claim against the province of Ontario, the Missanabie Cree First Nation has recently signed an agreement with the province of Ontario, whereby fifteen (15) square miles of land will be transferred to the Missanabie Cree First Nation. The land will be held in fee simple, until the process of reserve creation under the federal Additions to Reserve (ATR) policy is completed and the transfer lands are designated a reserve for the use and benefit of the Missanabie Cree.

Source: [www.missanabiecree.com](http://www.missanabiecree.com)

**Moose Cree First Nation**

The Moose Cree First Nation (formerly known as Moose Factory Band of Indians) is a Cree First Nation in northern Ontario. Their traditional territory is on the west side of James Bay. The nation has two reserves: Factory Island 1 (the northern two-thirds of Moose Factory Island); and Moose Factory 68, a tract of land about 15 km upstream on the Moose River covering 168.82 square kilometres (65.18 sq mi).

Source: [http://en.wikipedia.org/wiki/Moose\\_Cree\\_First\\_Nation](http://en.wikipedia.org/wiki/Moose_Cree_First_Nation)

**Taykwa Tagamou First Nation (formerly New Post)**

The Taykwa Tagamou Nation has two reserves. One is located 14 km west of the Abitibi Canyon Hydro Generation Station between Cochrane and Moosonee. This reserve was set aside for hunting, trapping, and other activities and has not served as the principal settlement location. A new reserve was created in the early 1980s to provide a settlement location for the Taykwa Tagamou Nation. In 1984, a new reserve was created approximately 20 km west of Cochrane.

The Taykwa Tagamou Nation was known as the New Post First Nation for many years. It received this name because the community had been associated with a Hudson's Bay Company post located on the Abitibi River, near the location of the first reserve. This remains of this post, known as New Post, can be found near the mouth of the New Post Creek where it ends up in the Abitibi River. The Taykwa Tagamou Nation participated actively in trade with the Hudson's Bay Company and provided a key location in the trade from the interior of the Moose River Basin to Moosonee on James Bay. You can learn more about the community history in the History section.

The modern community has more than 400 registered members who continue to practice the traditions and lifestyle of our ancestors, while also making their way in the modern economy.

Source: [www.taykwatagamounation.com](http://www.taykwatagamounation.com)

### **Other First Nations ROF Stakeholders**

#### **Mishkeegogamang First Nation**

Mishkeegogamang is located about 500 km northwest of Thunder Bay, Ontario, and about 30 km south of Pickle Lake, Ontario around the area where the Albany River meets Lake St. Joseph. Provincial Highway 599 passes through Reserves 63A and 63B, making the community accessible year-round. Today, just over 900 people live on its two reserves, while about 500 live off the reserve, either on Crown Land or in other communities.

The traditional territory of the Mishkeegogamang Ojibway extends to the north, south, east and west, beyond the boundaries of Reserves 63A and 63B. The traditional territory is made up of the communities of the Main Reserve, Bottle Hill, Poplar Heights, Sandy Road, Doghole Bay, Rat Rapids, Cedar Rapids, Ten Houses, Eric Lake, Ace Lake, Metcalfe, Pashkokogan, Mile 50, Fitchie Lake, Mile 42, Mile 29, Menako, and the shores of Lake St. Joseph. Mishkeegogamang changed back to its real name from "Osnaburgh" on November 15, 1993 by Band Council Resolution. The Sucker, Loon, Caribou, Sturgeon, and Bear clans are represented among Mishkeegogamang members.

Source: [www.mishkeegogamang.ca](http://www.mishkeegogamang.ca)

#### **First Nation of Saugeen**

The Saugeen First Nation is located on the shores of the beautiful Lake Huron at the base of the Bruce Peninsula about 2 miles northeast of Southampton and approximately 18 miles west of Owen Sound on Highway 21. Saugeen First Nation is conveniently located within 2 to 3 hours of major centers such as Toronto, Barrie, Kitchener, London and Sarnia.

Saugeen First Nation is the primary political successor apparent to the Chippewas of Saugeen Ojibway Territory. Chippewas of Saugeen Ojibway Territory, also known as the Saugeen Ojibway Nation Territory, is the name applied to Chippewas of Nawash Unceded First Nation and Saugeen First Nation as a collective. The collective First Nations are Ojibway (Anishinaabe) peoples located on the eastern shores of Lake Huron on the Bruce Peninsula in Ontario, Canada. Though predominantly Ojibway, due to large influx of refugees from the south and west after the War of 1812, the descendants of the Chippewas of Saugeen Ojibway Territory also have ancestry traced to Odawa and Potawatomi peoples.

Source: [www.saugeenfirstnation.ca](http://www.saugeenfirstnation.ca); [http://en.wikipedia.org/wiki/Saugeen\\_First\\_Nation](http://en.wikipedia.org/wiki/Saugeen_First_Nation)

#### **Kasabonkia Lake First Nation**

Kasabonika Lake First Nation is located 448 kilometres northeast of Sioux Lookout, Ontario and along the Asheweig River. We are a remote First Nation, accessible by air and by winter road. Kasabonika Lake First Nation is a member of the Shibogama First Nations Tribal Council and the Nishnawbe Aski Nation - Treaty No.9. The Band membership of Kasabonika Lake is approximately 914 people in total, of which the on-reserve population is 866.

Source: [www.kasabonikafirstnation.com](http://www.kasabonikafirstnation.com)

### **The Metis Nation of Ontario**

Prior to Canada's crystallization as a nation, a new Aboriginal people emerged out of the relations of Indian women and European men. While the initial offspring of these Indian and European unions were individuals who simply possessed mixed ancestry, subsequent intermarriages between these mixed ancestry children resulted in the genesis of a new Aboriginal people with a distinct identity, culture and consciousness in west central North America – the Métis Nation.

Today, based on the pursuit of the above mentioned vision and principles, MNO has built an impressive province-wide governance structure which includes: an objectively verifiable, centralized registry of over 15,000 Métis citizens; approximately 29 Chartered Community Councils across the province which represent Métis citizens at the local level; a provincial governing body that is elected by ballot box every four years; an Annual General Assembly where regional and provincial Métis leaders are required to report back to Métis citizens yearly between elections; a charitable foundation which promotes and support Métis culture and heritage (Métis Nation of Ontario Cultural Commission); and, an economic development arm (Métis Nation of Ontario Development Corporation).

In addition, the MNO has built an accountable, results-based provincial delivery structure to meet the socio-economic needs of its citizens and communities. Currently, the MNO delivers programs and services to its citizens through these branches: Healing and Wellness; Education and Training; Infinite Property Services; Lands, Resources and Consultation; and Economic Development. Through these various branches, the MNO maintains 30+ service delivery access points across the province, administers over \$20 million annually and employs over 150 personnel across the province.

Source: [www.metisnation.org](http://www.metisnation.org)

**APPENDIX H – KWG FINANCIAL STATEMENTS**

<b>Income Statement (Millions CAD)</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
Expenses												
General & Administrative	(2.1)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Share in Strategic Partnership Profit (Loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	56.4	58.3
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Expenses</b>	<b>(2.2)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>10.9</b>	<b>54.4</b>	<b>56.3</b>
<b>Operating Profit</b>	<b>(2.2)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>(2.0)</b>	<b>10.9</b>	<b>54.4</b>	<b>56.3</b>
Other Income (Expenses)												
Finance Income	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other - Interest Expense on Strategic Partner Revolver	0.0	0.0	0.0	0.0	(0.4)	(3.2)	(5.8)	(8.0)	(8.4)	(8.0)	(4.0)	0.0
<b>Total Other Income (Expenses)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.2</b>	<b>(0.2)</b>	<b>(3.0)</b>	<b>(5.6)</b>	<b>(7.8)</b>	<b>(8.2)</b>	<b>(7.8)</b>	<b>(3.8)</b>	<b>0.2</b>
<b>EBT</b>	<b>(2.2)</b>	<b>(2.0)</b>	<b>(1.8)</b>	<b>(1.8)</b>	<b>(2.2)</b>	<b>(5.0)</b>	<b>(7.6)</b>	<b>(9.8)</b>	<b>(10.2)</b>	<b>3.1</b>	<b>50.5</b>	<b>56.5</b>
Income Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Income (Loss)</b>	<b>(2.2)</b>	<b>(2.0)</b>	<b>(1.8)</b>	<b>(1.8)</b>	<b>(2.2)</b>	<b>(5.0)</b>	<b>(7.6)</b>	<b>(9.8)</b>	<b>(10.2)</b>	<b>3.1</b>	<b>50.5</b>	<b>56.5</b>
Per Basic Share	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	0.00	0.05	0.05
Per Diluted Share	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	0.00	0.04	0.05

<b>Cash Flow Statement (Millions CAD)</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
Cash Flow from Operating Activities												
Net Income (loss)	(2.0)	(1.8)	(1.8)	(1.8)	(2.2)	(5.0)	(7.6)	(9.8)	(10.2)	3.1	50.5	56.5
Adjustments For:												
Amortization of Property & Equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stock-Based Compensation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Operating Cashflow Before Working Capital Changes</b>	<b>(2.0)</b>	<b>(1.8)</b>	<b>(1.8)</b>	<b>(1.8)</b>	<b>(2.2)</b>	<b>(5.0)</b>	<b>(7.6)</b>	<b>(9.8)</b>	<b>(10.2)</b>	<b>3.1</b>	<b>50.5</b>	<b>56.5</b>
Per Basic Share	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	0.00	0.05	0.05
Net Change in Non-Cash Working Capital Balances	(0.2)	0.0	0.0	1.8	0.0	(0.5)	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Cash Used by Operating Activities</b>	<b>(2.1)</b>	<b>(1.8)</b>	<b>(1.8)</b>	<b>(0.1)</b>	<b>(2.2)</b>	<b>(5.5)</b>	<b>(7.6)</b>	<b>(9.8)</b>	<b>(10.2)</b>	<b>3.1</b>	<b>50.5</b>	<b>56.5</b>
Cash Flow from Financing Activities												
Share Capital Issued	0.1	5.0	0.0	0.0	0.0	0.0	10.0	10.0	5.0	0.0	0.0	0.0
Share and Warrant Issue Expenses	(0.0)	(0.3)	(0.1)	(0.0)	0.0	0.0	(0.6)	(0.6)	(0.3)	0.0	0.0	0.0
Strategic Partner Equity Revolver	0.0	0.0	0.0	0.0	5.0	35.0	32.5	27.5	5.0	(5.0)	(50.0)	(50.0)
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Cash Provided by Financing Activities</b>	<b>0.1</b>	<b>4.7</b>	<b>11.1</b>	<b>4.4</b>	<b>5.0</b>	<b>35.0</b>	<b>41.9</b>	<b>36.9</b>	<b>9.7</b>	<b>(5.0)</b>	<b>(50.0)</b>	<b>(50.0)</b>
Cash Flows from Investing Activities												
Expenditures on Exploration & Evaluation Projects	(2.1)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)
Equity Funding Requirements	0.0	0.0	0.0	0.0	0.0	(33.5)	(39.3)	(25.8)	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Cash Used by Investing Activities</b>	<b>(2.1)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(34.5)</b>	<b>(40.3)</b>	<b>(26.8)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(1.0)</b>	<b>(1.0)</b>
<b>Net Change in Cash &amp; Cash-Equivalents</b>	<b>(4.1)</b>	<b>1.9</b>	<b>8.3</b>	<b>3.3</b>	<b>1.8</b>	<b>(5.0)</b>	<b>(6.1)</b>	<b>0.2</b>	<b>(1.5)</b>	<b>(2.9)</b>	<b>(0.5)</b>	<b>5.5</b>
Cash & Cash-Equivalents - Start of Period	6.2	2.1	4.0	12.3	15.6	17.3	12.3	6.2	6.4	4.9	2.0	1.5
Cash & Cash-Equivalents - End of Period	2.1	4.0	12.3	15.6	17.3	12.3	6.2	6.4	4.9	2.0	1.5	6.9

**APPENDIX C: KWG FINANCIAL STATEMENTS**

<b>Balance Sheet (Millions CAD)</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
<b>Assets</b>												
<b>Current Assets</b>												
Cash & Cash-Equivalents	2.1	4.0	12.3	15.6	17.3	12.3	6.2	6.4	4.9	2.0	1.5	6.9
Receivables	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marketable Securities	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Current Assets</b>	<b>4.1</b>	<b>6.0</b>	<b>14.3</b>	<b>15.9</b>	<b>17.6</b>	<b>12.6</b>	<b>6.5</b>	<b>6.7</b>	<b>5.2</b>	<b>2.3</b>	<b>1.8</b>	<b>7.2</b>
<b>Non-Current Assets</b>												
Property & Equipment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mineral Property Interests	38.0	39.0	40.0	41.0	42.0	76.5	116.8	143.6	144.6	145.6	146.6	147.6
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Non-Current Assets</b>	<b>38.0</b>	<b>39.0</b>	<b>40.0</b>	<b>41.0</b>	<b>42.0</b>	<b>76.5</b>	<b>116.8</b>	<b>143.7</b>	<b>144.7</b>	<b>145.7</b>	<b>146.7</b>	<b>147.7</b>
<b>Total Assets</b>	<b>42.2</b>	<b>45.1</b>	<b>54.3</b>	<b>56.9</b>	<b>59.6</b>	<b>89.1</b>	<b>123.3</b>	<b>150.4</b>	<b>149.9</b>	<b>147.9</b>	<b>148.5</b>	<b>154.9</b>
<b>Liabilities &amp; shareholders' Equity</b>												
<b>Current Liabilities</b>												
Trade & other Payables	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Current Liabilities</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Non-Current Liabilities</b>												
Strategic Partner Equity Revolver	0.0	0.0	0.0	0.0	5.0	40.0	72.5	100.0	105.0	100.0	50.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Non-Current Liabilities</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>5.0</b>	<b>40.0</b>	<b>72.5</b>	<b>100.0</b>	<b>105.0</b>	<b>100.0</b>	<b>50.0</b>	<b>0.0</b>
<b>Total Liabilities</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>5.5</b>	<b>40.0</b>	<b>72.5</b>	<b>100.0</b>	<b>105.0</b>	<b>100.0</b>	<b>50.0</b>	<b>0.0</b>
<b>Shareholders' Equity</b>												
Share Capital	25.3	30.0	41.2	45.5	45.5	45.5	54.9	64.3	69.0	69.0	69.0	69.0
Warrants	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Contributed Surplus	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Retained Earnings	0.3	(1.5)	(3.4)	(5.2)	(7.5)	(12.5)	(20.2)	(30.0)	(40.3)	(37.2)	13.4	69.8
<b>Total Shareholders' Equity</b>	<b>41.7</b>	<b>44.6</b>	<b>53.9</b>	<b>56.4</b>	<b>54.1</b>	<b>49.1</b>	<b>50.8</b>	<b>50.4</b>	<b>44.9</b>	<b>47.9</b>	<b>98.5</b>	<b>154.9</b>
<b>Total Liabilities &amp; Shareholders' Equity</b>	<b>42.2</b>	<b>45.1</b>	<b>54.3</b>	<b>56.9</b>	<b>59.6</b>	<b>89.1</b>	<b>123.3</b>	<b>150.4</b>	<b>149.9</b>	<b>147.9</b>	<b>148.5</b>	<b>154.9</b>



## IMPORTANT DISCLAIMERS

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### **Company Specific Disclosures**

1. Pope & Company Limited may have a position in the securities mentioned herein and may make purchases and/or sales of these securities from time to time in the open market or otherwise. At time of issue of this report, Pope & Company Limited held in the aggregate less than 1% of the outstanding shares (of any class of equity securities) of this issuer.
2. This research report applies to the Common voting shares.

### **Stock Ratings**

**SPECULATIVE BUY:** The stock is expected to provide a total return in excess of 20% over the current trading price over the next 12 months; however, there is material event risk associated with the investment.

**BUY:** The stock is expected to provide a total return in excess of 15% over the current trading price over the next 12 months.

**HOLD:** The stock is expected to provide a total return of 0% to 15% over the current trading price over the next 12 months.

**SELL:** The stock is expected to provide a negative total return over the next 12 months.

**Ratings Distribution:** Pope & Company currently publishes research on four issuers and three are rated as a speculative buy and one buy. Pope & Company currently has suspended its research coverage on a 5<sup>th</sup> issuer.

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