



## **MONETA PORCUPINE MINES INC.**

### Annual Information Form

For the year ended December 31, 2012

This Annual Information Form (“AIF”), for Moneta Porcupine Mines Inc. (“**Moneta**” or the “**Company**”), is prepared with an effective date of March 28, 2013, unless otherwise indicated. Other continuous disclosure documents, including the Company’s press releases and quarterly and annual reports are available through its filings with the securities regulatory authorities in Canada at [www.sedar.com](http://www.sedar.com) (“**SEDAR**”) and are also available on the Company’s website [www.monetaporcupine.com](http://www.monetaporcupine.com).

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## **1 FORWARD-LOOKING/SAFE HARBOUR STATEMENT AND FAIR DISCLOSURE STATEMENT**

This AIF may contain certain forward looking statements concerning the future performance of Moneta Porcupine Mines Inc. (“Moneta” or the “Company”) business, its operations and its financial performance and condition, as well as management’s objectives, strategies, beliefs and intentions. These forward-looking statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management’s expectations. Forward-looking statements include estimates and statements that describe the Company’s future plans, objectives or goals, its ability to access capital, the speculative nature of mineral exploration and development, fluctuating commodity prices, competitive risks and reliance on key personnel, and include words to the effect that the Company or management expects a stated condition or result to occur. This list is not exhaustive of the factors that may affect any of the Company’s forward-looking statements. Statements relating to estimates of reserves and resources and preliminary economic assessments (PEA) are also forward-looking statements as they involve risks and assumptions, including but not limited to assumptions with respect to future commodity prices and production economics, that the reserves and resources described exist in the quantities and grades estimated and are capable of economic extraction. Forward-looking statements may be identified by such terms as “believes”, “anticipates”, “expects”, “estimates”, “may”, “could”, “would”, “will”, or “plan”. All forward-looking information is inherently uncertain and subject to risks, uncertainties, and a variety of assumptions to address future events and conditions. These and other factors should be considered carefully and readers should not place undue reliance on the Company’s forward-looking statements. The Company does not undertake to update any forward-looking statement that may be made from time to time by the Company or on its behalf, except in accordance with applicable securities laws.

This AIF should be read in conjunction with the AIF for 2011 and prior years for additional information. All currency amounts are expressed in Canadian dollars (\$) unless otherwise noted.

## **2 INCORPORATION OR ORGANIZATION OF THE ISSUER**

Moneta Porcupine Mines Inc. was incorporated under the Business Corporations Act (Ontario) on October 14, 1910. Moneta’s head office is located at 65 Third Avenue, Timmins, Ontario, P4N 1C2.

Moneta’s public documents may be accessed at [www.sedar.com](http://www.sedar.com). For further information on Moneta, please visit our website at [www.monetaporcupine.com](http://www.monetaporcupine.com) or email us at [info@monetaporcupine.com](mailto:info@monetaporcupine.com).

Moneta has two wholly-owned subsidiaries: Wounded Bull Resources Inc., incorporated pursuant to the laws of the State of Nevada; and 508825 Ontario Ltd., incorporated pursuant to the laws of the Province of Ontario.

Moneta owns 50% of the common shares of 2025369 Ontario Inc. (50% owned by Geodex Minerals Inc. originally incorporated pursuant to the laws of the Province of Ontario to hold the former mineral rights for the Potter-Stock Project.

## **3 GENERAL DEVELOPMENT OF THE BUSINESS**

Moneta is in the business of exploring for mineral resources and acquires mineral exploration properties from time to time through staking, joint ventures and purchases. During the last three years, Moneta has concentrated on mineral exploration in the Timmins, Ontario region, focusing primarily on gold exploration properties, and significantly reducing resources allocated to base metal properties for which it continues to seek purchasers or joint ventures.

Moneta holds a 100% interest in 5 core gold and 4 base metal projects all within the Abitibi Greenstone Belt in Ontario and Quebec with excellent infrastructure including access roads, water, electricity, and mills. The gold projects are strategically located on or along the Destor Porcupine Fault Zone (“Destor”), one of the key structural features in the Abitibi Greenstone belt in Ontario. The Destor is associated with most of the historic gold production in the region, including significant producing gold mines now operated by Porcupine Gold Mines

(Goldcorp), Lake Shore Gold, Brigus Gold, and St Andrew Goldfields.

Moneta's land position is one of the best, and is the fourth largest, in the world class Timmins Camp – after three gold producers – including a commanding position in the emerging Golden Highway Camp with cumulative 4.3 million ounces of gold resources (all categories) in six main zones defined to date (Southwest Zone, Gap Zone, Windjammer South, Windjammer Central, Windjammer North, 55 Zone).

Moneta's exploration and development strategy is currently focused on its *Golden Highway Project*. Exploration expenditures over the last three years have been \$3,067,024 in 2012, \$5,094,039 in 2011, and \$4,872,803 in 2010, reflecting significant advancement of the *Golden Highway Project*.

The Company is leveraged to exploration, with very low overhead and fixed costs and one of the highest ratios of dollars raised to exploration dollars spent in the ground of any junior explorer. It is operated by a strong technical and management team which maintains a low-cost Timmins-based exploration operation with its own field office, rolling stock and equipment, and proprietary drill core logging and storage facility (core shack).

General development of the business over the last three years is listed below:

- In December 2012, the Company completed a brokered private placement financing and issued 15,392,077 flow-through common shares at \$0.35 for gross proceeds of \$5,387,227 and 10,307,885 common shares at \$0.26 per share for gross proceeds of \$2,680,050, for aggregate gross proceeds of \$8,067,277. A cash commission of \$281,953 was paid to the Underwriters. In addition, broker compensation options were issued entitling the Underwriters to purchase up to 1,079,998 common shares of the Company at a price of \$0.28 per common share for eighteen months following closing or June 21, 2014. The \$5,387,227 in structured flow through gross proceeds was issued at a 35% premium to the trailing average of the stock price at the time.
- On November 1<sup>st</sup> 2012, Moneta reported the results, by way of a press release, of a Preliminary Economic Assessment on the updated NI 43-101 Mineral Resource Estimate covering six gold zones on the *Golden Highway Project*.

The (combined) NI 43-101 Mineral Resource Estimate and PEA technical report was authored by P&E Mining Consultants Inc. and filed on SEDAR December 12, 2012.

The PEA indicates a pre-tax Net Present Value of \$748 million (5% discount rate), 24.4% internal rate of return, and a 4.1 year payback period.

Life of mine potentially economic metal production was 3.8 million ounces gold with 92% recovery. Pre-production capital costs were \$607 million with a processing facility throughput of 25,000 tonnes per day ("tpd"), and a life of mine average cash costs of \$607 per ounce gold.

The average diluted mill head grade was 1.11 g/t gold with an average annual production of 288,000 gold ounces, and a 12 year mine life;

- On October 25<sup>th</sup> 2012, Moneta reported, by way of press release, an updated NI 43-101 Mineral Resource Estimate of **4.3 million ounces gold (all categories)** [1,091,000 indicated (@ 1.09 g/t) and 3,204,000 inferred (@ 1.20 g/t)] on the *Golden Highway Project*.

Gold resources increased by 55% to 3.2 million ounces inferred from the previous resource estimate of 2.1 million ounces (January 16, 2012).

The updated resource included three new gold zones (Windjammer Central, Windjammer North, Gap Zone) in addition to the previously modelled zones (Southwest Zone, Windjammer South, 55 Zone).

- In March 2012, the Company completed a brokered private placement financing and issued 10,000,000 common shares at \$0.30 per share for gross proceeds of \$3,000,000. A cash commission of \$297,882 was paid to the Underwriters. In addition, broker compensation options were issued entitling the Underwriters to purchase up to 700,000 common shares of the Company at a price of \$0.30 per common share until March 2014.
- On January 16, 2012 Moneta filed on SEDAR a NI 43- 101 Resource Estimate and preliminary pit modelling for the Southwest Zone, Windjammer South, and 55 Zones. Results were previously released December 1, 2011 by press release. P&E Mining Consultants Inc. calculated a near-surface NI 43-101 resource of 1,071,000 indicated (@ 0.99 g/t) and 2,069,000 (@ 1.35 g/t) inferred ounces of gold. This includes both “in-pit” and “out-of-pit” resources for the three zones;
- In April 2011, the agreement between Moneta and Amador Gold Corporation (“Amador”) went into default and subsequently was cancelled with arrangements to return the properties to Moneta completed in January 2012. The original agreement with Amador was entered into and announced in March 2008, covering the sale of the Kamiskotia base metal project (Godfrey and Jamieson Townships), Loveland Nickel (Loveland Township), and Fripp (Fripp Township) for staged cash payments totalling \$500,000 and 1.35 million shares over three years. The properties host nickel, copper, and zinc mineralization;
- In March 2011, the Company issued 11,428,571 common shares on a structured flow-through basis at \$0.49 per share for aggregate gross proceeds of \$5,600,000 and 2,857,143 common shares at \$0.35 for aggregate gross proceeds of \$1,000,000. The financing has been completed on a ‘structured’ charity flow-through basis whereby two hard dollar institutional investors held the full 14,285,714 common shares for \$6.6 million upon closing of the financing;
- In October 2010, Moneta completed a non-brokered private placement financing (“Placement”) and issued 7,500,000 Units at \$0.20 per Unit for aggregate gross proceeds of \$1,500,000. Each Unit was comprised of a one common share and one common share purchase Warrant. Each Warrant entitles the holder to purchase one common share at an exercise price of \$0.35 for a term of eighteen months following the closing of the Placement.

### 3.1 Significant Acquisitions

Moneta has not undertaken any significant acquisitions in the last three years.

## 4 DESCRIPTION OF THE BUSINESS

Moneta Porcupine Mines Inc. is a resource exploration and development company incorporated pursuant to the laws of the Province of Ontario on October 14, 1910. The Company is a former gold producer but has no properties currently in production and no production revenues at the present time.

Moneta is a “reporting issuer” in the Canadian provinces of Ontario, Alberta and Quebec. The Company’s common shares trade on the Toronto Stock Exchange (“TSX”) under the symbol ME, on the United States OTC market under the symbol MPUCF, and the Berlin Stock Exchange, the Xetra, and Frankfurt Stock Exchange under the symbol MOP.

Moneta’s primary focus is gold exploration in Porcupine Camp and Golden Highway Camp (collectively referred to as “**Timmins Camp**”) is one of the most prolific gold-producing areas in the world with over 75 million ounces of gold produced primarily from some 26 mines, each of which generated more than 100,000 ounces.

Moneta holds a 100% interest in 5 core gold projects strategically located on or along the Destor Porcupine Fault Zone (“**Destor**”), one of the key structural features in the Abitibi Greenstone belt in Ontario, with excellent infrastructure including access roads, water, electricity, and mills. Most historic production in the region is

associated with the Destor, with significant resources and producing mines now operated by Porcupine Gold Mines (Goldcorp) and several others in production, including Lake Shore Gold, Brigus Gold, and St Andrew Goldfields.

Moneta's land position for gold exploration is one of the best, and is the fourth largest, in the world class Timmins Camp – after three gold producers – including a commanding position in the emerging *Golden Highway Camp* with **4.3 million ounces of gold resources** (all categories) in six main gold zones (Southwest Zone, Gap Zone, Windjammer South, Windjammer Central, Windjammer North, 55 Zone).

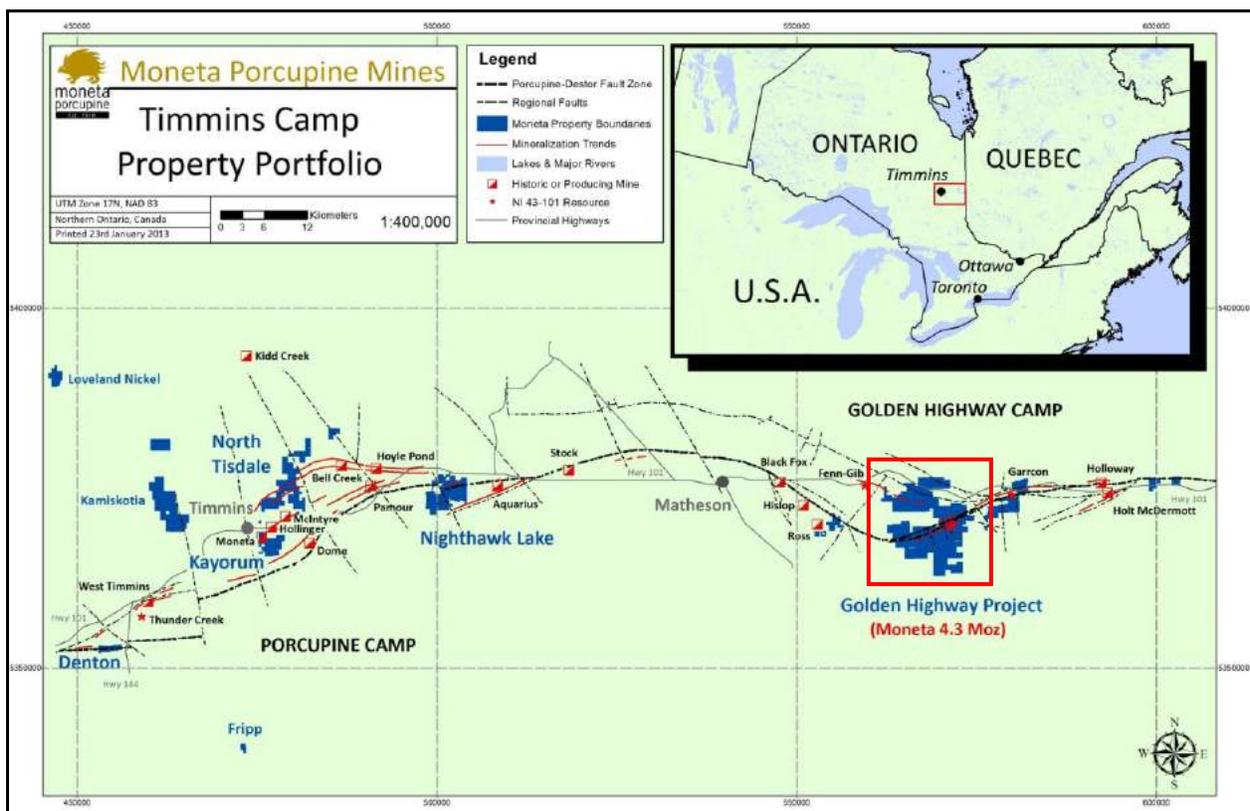


Figure I: Moneta's Key Gold Exploration Properties

## 5 PROPERTY SUMMARY AS AT DECEMBER 31, 2012

Moneta has interests in 1,227 claim units each approximately 16 hectares in area (total area ~20,000 hectares) in the form of mining patents, leases and staked claims. Certain claim units in unsurveyed and out of province townships may be larger or smaller than the standard 16 hectares (40 acres).

Moneta has kept current the applicable mining taxes payable on patented and leased claims. Mining Leases that have expired after 21 years have been successfully renewed for an additional 21 years. Also, adequate exploration expenditures have been incurred and filed for unpatented (staked) claims resulting in banked exploration assessment credits which are appropriately allocated to all contiguous unpatented claims to maintain them in good standing. Moneta's mineral properties are in good standing.

The Company's gold projects are located in the *Porcupine Camp* and *Golden Highway Camps* (see Figure I above). Base metal properties in the *Porcupine Camp* include Kamiskotia (Zn-Cu), Fripp (Cu), and Loveland Nickel (Ni-Cu), as well as the Kelly Lake (Ni-Cu-PGM) deposit near Belleterre, Quebec.

Only the *Golden Highway Project* includes certain non-core joint ventures. All claims are 100%-owned by Moneta

except for the non-core properties subject to joint venture agreements, all of which have vested. These are various participating interests with St Andrew Goldfields including the 2 part *Garrison* (Moneta 50% / St Andrew 50% on staked and Moneta 8.78% / St Andrew 91.22% on patented units) and *Barnet* (Moneta 50% / St Andrew 50%) Joint Ventures, the *Dymont 3* Joint Venture (Moneta 75% / St Andrew 25%), the *Guibord* Joint Venture (Moneta 25% / St Andrew 75%), and 2 patent groups in Holloway and Marriott Townships (Moneta 17.56% / St Andrew 82.44%).

## 5.1 Land Tenure

Ontario staked mining claims require annual assessment credits or optional cash in certain circumstances of \$400 per claim unit and these obligations are met by distributing suitable banked assessment credits originally generated by completing and filing eligible exploration work. When mining claims are not contiguous, local expenditures may be necessary to keep those claims in good standing. Mining patents and mining leases are subject to a provincial mining tax on an annual basis and may include surface rights with associated taxes. Leases have 10 or 21 year terms and are renewable subject to certain criteria under the Mining Act. Quebec claims require a \$1,000 payment or work equivalent on a 2 year anniversary cycle.

## 5.2 Drilling, Sampling, Analysis and Security

Drilling in 2012 totalled 13,282 metres and was carried out by Bradley Bros. Drilling (Timmins, ON and Rouyn-Noranda, PQ) and Norex Drilling (Timmins, ON). Primary analytical work has been by Laboratoire Expert Inc. (Rouyn-Noranda, PQ) with check/duplicate analyses by Activation Labs (Timmins/Ancaster, ON).

Drill assay results are reported using drilled widths and gold values that may include averaged initial, second cuts, and metallic assays.

Historical drilling and geological data is sourced from government assessment and company files and considered indicative of geology and mineralization. Assay results may not be reliable. Core sizes range from AQ to NQ.

More recent drill programs since 1986 have used primarily BQ and NQ sized core with some HQ as determined by drilling situations and program design. Results from these programs are believed reliable with the inclusion of extensive duplicates and metallic analyses when warranted. Relationships between the sample length and the true thickness of the mineralized intercepts may not be well understood due to data density, multiple vein orientations, folding, and changes in drill dip and azimuth. Significant current intersections have been summarized under the project area drilling.

Moneta's drill core samples are prepared at the company's core logging and storage facility, a gated area outside Timmins where all core, pulps and rejects from post 1986 drilling is stored. A permanent insulated building, suitable for winter operations, is available for core logging and sample preparation including diamond saws, office area and core logging and display areas.

Sample lengths are determined by the geological logging with samples ranging from 0.20 to 1.5 metres in length. Typical sample lengths are 0.5 to 1.0 metres. All mineralized sections of drill core considered significant are split using a diamond saw after being marked and tagged with one-half being retained as a reference sample and the other being used for assay purposes as directed by the project geologist and "Qualified Person". Sample intervals and corresponding sample numbers are entered into the standardized core log sheets by computer. The samples selected for assay are individually bagged and shipped by bonded commercial carrier from secure lockups, to Laboratoire Expert in Rouyn-Noranda, Quebec, or other labs as required.

Typically core samples are dried, crushed by jaw crusher and further reduced to approximately 6 to 10 mesh using a roll crusher. The jaws and rolls are cleaned with a wire brush and air jet and processing barren material. A Jones riffle is used to take a 300-400-gram sub-sample for pulverizing. The remaining reject portion is bagged and stored. After reducing a nominal -100 or -200 mesh with a pulverizer, the sample is thoroughly blended and sent to the

fire assay department. A 1-assay ton portion (29.166 g) is used for fire assaying. This process results in a particle of gold that, in the normal assay method, is weighed (gravimetric).

For geochemical analysis or where lower detection is required, the gold is dissolved and determined by Atomic Absorption Spectrophotometry. This is done after collecting the precious metals with a fire assay fusion.

For metallic gold assays, the total sample is dried if necessary, crushed and pulverized, then screened using a 100 mesh screen. The -100 mesh portion is mixed and assayed in duplicate by fire assay gravimetric finish as well as all of the +100 mesh portion. All individual assays are reported as well as the final calculated value.

Repeat or check assays are done regularly on original pulp and occasionally on second pulp prepared from the stored reject. Standard pulps and blanks are also used for control samples. Selected samples, determined on the basis of showing significant variability, defining zones, or having noted visible gold during logging, are reprocessed using metallic assay methodologies. Up to 15% of pulps displaying a range of values are re-assayed by other laboratories (Activation Labs or Swastika) as checks using internal standards. Rejects and pulps are stored for any additional analytical work.

### **5.3 Risk Factors**

The following is a brief description of the certain risk factors Moneta's operations and industry which may have a material impact on its financial performance, business and operations.

### **5.4 Mineral Exploration and Development Activities**

The business of mineral exploration and extraction involves a high degree of risk. Few properties that are explored are ultimately developed into production and there is a risk that none of the Company's properties will ultimately be developed into productive mines. Unusual or unexpected formations, formation pressures, seismic activity, fires, power outages, labour disruptions, flooding, explosions, rock bursts, cave-ins, landslides, variations in grade, deposit size, density and other geological problems, hydrological conditions, metallurgical and other processing problems, mechanical equipment performance problems, the unavailability of materials and equipment including fuel, unanticipated transportation costs, unanticipated regulatory changes, unanticipated or significant changes in the costs of supplies including, but not limited to, petroleum, and adverse weather conditions and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and possible legal liability, are other risks involved in extraction operations and the conduct of exploration programs. Although Moneta carries liability insurance with respect to its mineral exploration operations, it may become subject to liability for damage to life and property, environmental damage, cave-ins or hazards against which it cannot insure or against which it may elect not to insure.

### **5.5 Uncertainty of Mineral Resources**

The figures for mineral resources and reserves stated in this AIF, or in the documents incorporated by reference, are estimates and no assurance can be given that the anticipated tonnages and grades will be achieved or that the indicated level of recovery will be realized. Market fluctuations and metal prices may render resources uneconomic.

The Company's mineral projects are in the exploration stage. Until mineral resources on these exploration properties are categorized as "mineral reserves" under NI 43-101, the known mineralization at these projects is not determined to be economic. The Company's ability to put these properties into production will be dependent upon the results of further drilling and evaluation. There is no certainty that expenditure made in the exploration of the Company's mineral properties will result in identification of commercially recoverable quantities of ore or that mineral reserves will be mined or processed profitably. Such assurance will require completion of final comprehensive feasibility studies and, possibly, further associated exploration and other work that concludes a

potential mine at each of these projects is likely to be economic.

#### **5.6 Current Global Financial Condition**

Current global financial conditions have been characterized by increased volatility. Several financial institutions have either gone into bankruptcy or have had to be rescued by governmental authorities. Access to public financing has been negatively impacted by both the rapid decline in value of sub-prime mortgages and the liquidity crisis affecting the asset-backed commercial paper market. These factors may impact the ability of the Company to obtain equity or debt financing in the future on terms favourable to the Company. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. If such increased levels of volatility and market turmoil continue, the Company's operations could be adversely impacted and the trading price of its common shares may be adversely affected.

#### **5.7 Fluctuation of Mineral Prices**

The price of gold and other base and precious metals has fluctuated widely in recent years. Gold prices are subject to significant fluctuations and are affected by a number of factors which are beyond the control of the Company. Such factors include, but are not limited to, interest rates, foreign exchange rates, inflation or deflation, fluctuation in the value of the United States dollar and foreign currencies, global and regional supply and demand, and the political and economic conditions of major gold-producing countries throughout the world. Future significant gold price declines may result in material write-downs of the Company's mineral properties and deferred costs.

#### **5.8 Currency fluctuations**

Currency fluctuations may affect the costs the Company incurs in its operations and may affect the Company's operating results and cash flows. Gold is sold throughout the world based principally on the United States ("US") dollar gold price. The Company's financial assets and liabilities and operating costs are principally denominated in Canadian dollars. The Company has no US dollar hedging program due to its minimal exposure to financial gain or loss as a result of US dollar foreign exchange fluctuations against the Canadian dollar.

#### **5.9 History of Net Losses**

To date, the Company has not recorded any significant revenues from operations. The Company has no properties in current production and no production revenues at the present time. Fees are earned from the rental of its core shack facility, core storage, and from management fees as the operator of joint venture exploration programs. In addition, royalty income is generated by an Idaho perlite operation.

There can be no assurance that significant losses will not continue in the near future or that the Company will be profitable in the future. The Company's operating expenses and capital expenditures may increase in subsequent years as consultants, personnel and equipment associated with advancing exploration and development of its mineral properties. The Company expects to continue to incur losses unless and until such time as it enters into commercial production and generates sufficient revenues to fund its continuing operations. The development of the Company's properties will require the commitment of substantial resources. There can be no assurance that the Company will generate any revenues or achieve profitability.

The ability of the Company to continue operations is dependent upon obtaining the necessary financing to complete the exploration and development of its properties and/or the realization of proceeds from the sale of its properties.

#### **5.10 Possible Loss of Interests in Mineral Properties**

Moneta must spend certain minimum amounts on mineral exploration to satisfy ongoing assessment work

required on staked claims as well mining taxes on patented and leased claims. Moneta is not the operator in most of its current non-core joint ventures, and may be required to contribute its share of ongoing expenditures in order to maintain its ownership interest. Moneta may lose a portion or all its interest in certain mineral properties if it fails to make such payments or expenditures on a timely basis. Moneta may not be able to obtain the necessary licenses or permits to conduct exploration and development operations on its mineral properties, and may not realize any benefits from its exploration activities on such properties.

#### **5.11 Title Risks**

Moneta holds an interest in its properties through mining leases, and patented and staked mining claims administered by Provincial governments under their respective Mining Acts. Certain disputes may arise with mining claims such as disputes over title and over the precise area and location of such claims. There is no guarantee that title will not be challenged or impaired. Although title to its material properties have been reviewed by the Company, no assurances can be given that there are no title defects affecting the properties. Title insurance generally is not available for mining claims in Canada and the Company's ability to ensure that it has obtained secure claim to individual mineral properties may be severely constrained. There may be challenges to the title of the properties in which the Company may have an interest, which, if successful, could result in the loss or reduction of the Company's interest in the properties. Moneta has not conducted surveys of all of the claims in which it holds direct or indirect interests, therefore, the precise area and location of such claims may be in doubt. Accordingly, the properties may be subject to prior unregistered liens, agreements, transfers or claims including native land claims, and title may be affected by, among other things, undetected defects. In addition, Moneta may be unable to conduct work on the properties as permitted or to enforce its rights with respect to its properties.

#### **5.12 Environmental Risks**

Mining operations have inherent risks and liabilities associated with pollution of the environment and the disposal of waste products occurring as a result of mineral exploration and development. Laws and regulations involving the protection and remediation of the environment and the governmental policies for implementation of such laws and regulations are constantly changing and are generally becoming more restrictive. Moneta cannot give any assurance that, notwithstanding its precautions, breaches of environmental laws, even inadvertent, or environmental pollution will not materially and adversely affect its financial condition and its results from operations. Previous mining operations may have caused environmental damage at certain of Moneta's properties. It may be difficult or impossible to assess the extent to which such damage was caused by Moneta or by the activities of previous operators, in which case, any indemnities and exemptions from liability may be ineffective. There is no assurance that future changes in environmental regulation, if any, will not adversely affect the Company's operations. Environmental hazards may exist on the properties on which the Company holds interests which are unknown to the Company at present and which have been caused by previous or existing owners or operators of the properties.

#### **5.13 Risks Associated with Joint Venture Agreements**

Moneta's interests in certain JV properties may, in certain circumstances, become subject to the risks normally associated with the conduct of joint ventures. In the event that any of its properties become subject to a joint venture, the existence or occurrence of one or more of the following circumstances and events could have a material adverse impact on the profitability or the viability of its interests held through joint ventures, which could have a material adverse impact on business prospects, results of operations and financial condition: (i) disagreements with joint venture partners on how to conduct exploration; (ii) inability of joint venture partners to meet their obligations to the joint venture or third parties; and (iii) disputes or litigation between joint venture partners regarding budgets, development activities, reporting requirements and other joint venture matters.

#### **5.14 Risks Relating to Statutory and Regulatory Requirements**

There is no assurance that all permits which may be required for future exploration or development will be

obtainable on reasonable terms or on a timely basis, or that such laws and regulations would not have an adverse effect on any project which the Company may undertake. Failure to comply with applicable laws, regulations and permits may result in enforcement actions there-under, including the forfeiture of claims, orders issued by regulatory or judicial authorities requiring operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or costly remedial actions.

### **5.15 Competition**

The Company competes with other gold exploration and development companies. The business is intensely competitive and many other gold companies have greater financial and technical resources and experience. Such competition may result in the Company being unable to acquire desired properties, recruit or retain qualified employees, or acquire the capital necessary to fund its operations and explore and develop its properties. The Company's inability to compete with other gold exploration and development companies could have a material adverse effect on the Company's results of operations.

### **5.16 Dependence on Key Management and Employees**

The success of the operations and activities of Moneta is dependent to a large extent on the efforts and abilities of its management and outside consultants. Investors must be willing to rely to a significant extent on management's discretion and judgment, as well as the expertise and competence of outside consultants. The Company does not have in place formal programs for succession of management and training of management, nor does it hold key person insurance on these individuals. The loss of one or more of these key employees or contractors, if not replaced, could adversely affect the Company's profitability, results of operations and financial condition.

### **5.17 Market Price of Securities**

There can be no assurance that an active and sustainable market for the securities of the Company. Securities of junior exploration companies have experienced substantial volatility in the past. The price of the securities of the Company is likely to be significantly affected by short-term changes in commodity prices and other precious metal prices or other mineral prices.

### **5.18 Market Price Volatility**

The market price of securities of many junior exploration companies, particularly those that are not yet in commercial production like Moneta, have experienced a high level of price and volume volatility in recent years and have experienced wide fluctuations in prices which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that future fluctuations in price will not occur.

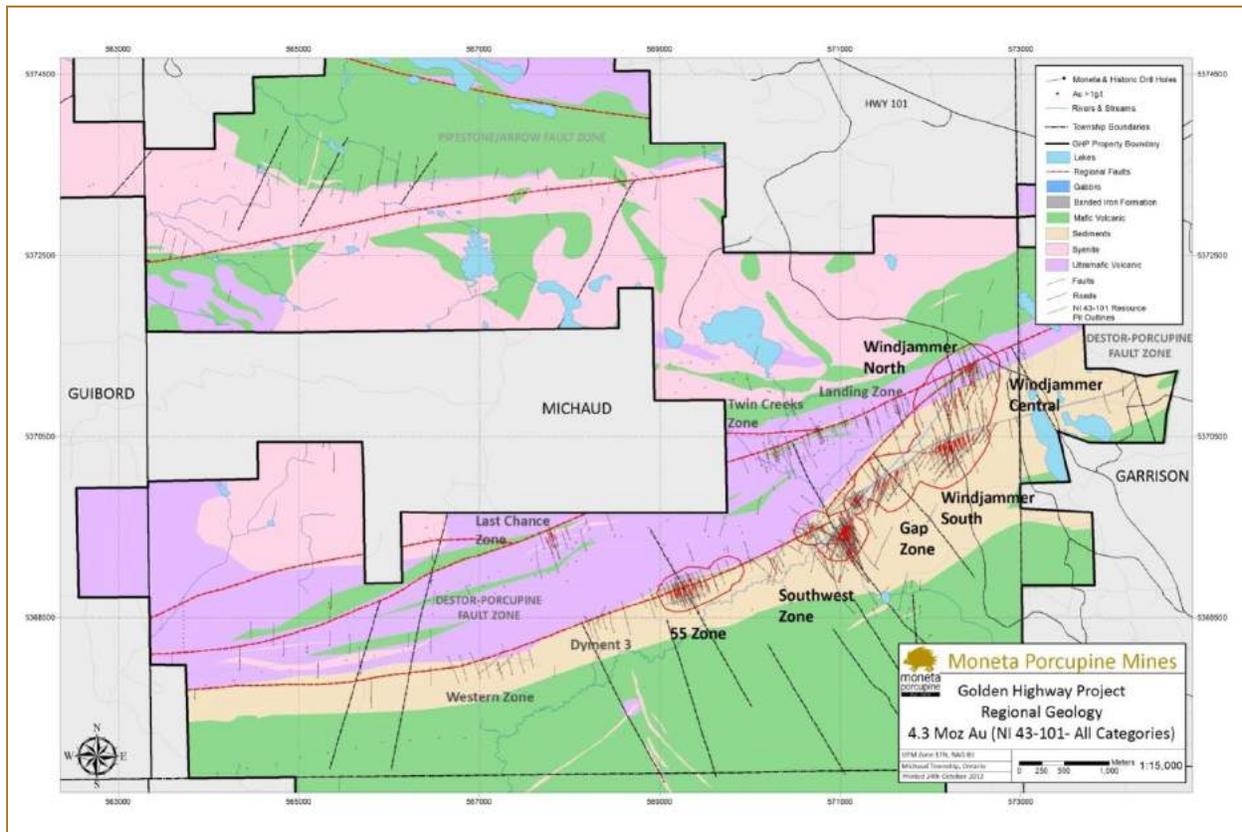
## **6 GOLDEN HIGHWAY PROJECT**

### **6.1 Introduction**

Moneta's primary gold exploration and resource development focus is the 100% owned *Golden Highway Project* or *Golden Highway* which contains a largely contiguous land package of 692 claim units or approximately 10,600 hectares, and is centered in Michaud Township, 100 km east of Timmins, Ontario along Highway 101, a major all-season route.

The *Golden Highway* currently hosts eleven distinct gold-bearing zones (namely Windjammer Central, Windjammer South, Gap Zone, Southwest Zone, 55 Zone, Dymont 3, Western Zone, Windjammer North, Landing Zone, Twin Creeks Zone, and Last Chance Zone) along with numerous gold intersections along a 12km mineralized corridor which contains two highly prospective geological settings: a northern corridor with sheared mafic and ultramafic volcanic units and syenitic intrusive complexes; and a southern corridor defined by Timiskaming sediments

containing banded iron formation (BIF) and in contact with volcanics.



**Figure II - Golden Highway Project: Geology and Main Gold Zone Locations**

Detailed technical information, primarily on exploration and resource work completed on the *Golden Highway* is available on SEDAR and referenced as follows;

- Technical Report, Updated Mineral Resource Estimate and Preliminary Economic Assessment of the Golden Highway Project; report by P&E Mining Consultants Inc., dated December 11<sup>th</sup>, 2012.
- Technical Report and Resource Estimate on the Windjammer South, Southwest Zone and 55 Zone, Golden Highway Project Michaud and Garrison Townships North-eastern Ontario, Canada, report by P&E Mining Consultants Inc., dated December 1<sup>st</sup>, 2011.
- Technical Report on the Windjammer Project, Matheson, Ontario, Updated NI 43-101 report by D. George Cargill, Ph.D. P.Eng., of Cargill Consulting Geologists Limited, dated March 30<sup>th</sup>, 2009.
- Technical Report on the Windjammer Project, Michaud and Garrison Townships, Ontario, Initial NI 43-101 report dated July 28<sup>th</sup>, 2008, by D. George Cargill, Ph.D. P.Eng., of Cargill Consulting Geologists Limited;
- 2003-2004 Drilling Report on the Michaud Gold Property Michaud Township, Ontario, by Henry M. Meixner, P.Geo., dated April 8, 2004, filed by Moneta on SEDAR April 22, 2005;
- 2002 Drilling Report on the Michaud Gold Property Michaud Township, Ontario by Henry M. Meixner, P.Geo., dated March 28, 2003;

- Geological Report on the Michaud Gold Property Michaud Township, Ontario, by Henry M. Meixner, P.Geo. , dated November 5, 2001;

The *Golden Highway* hosts a NI 43-101 Mineral Resource Estimate and Preliminary Economic Assessment (“PEA”) (December 2012) authored by P&E Mining Consultants Inc. based on 1,091,000 indicated (@ 1.09 g/t) and 3,204,000 (@ 1.20 g/t) inferred ounces of gold, as outlined below:

TABLE 1: MINERAL RESOURCE ESTIMATE <sup>(1), (2), (3), (4), (5), (6), (7), (8), (9), (10)</sup>							
Mining	Cutoff Grade (g/t)	INDICATED			INFERRED		
		Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)
In Pit	0.37	30,000,000	1.01	977,000	71,627,000	0.86	1,971,000
Out of Pit	2.00	1,080,000	3.29	114,000	11,684,000	3.28	1,233,000
Combined*	0.37 / 2.00	<b>31,080,000</b>	<b>1.09</b>	<b>1,091,000</b>	<b>83,311,000</b>	<b>1.20</b>	<b>3,204,000</b>

\* Open pit mineral resources are reported at a cut-off grade of 0.37 g/t gold and underground mineral resources are reported at a cut-off grade of 2.00 g/t gold.

1. The mineral resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
2. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the estimated Mineral Resources will be converted into Mineral Reserves.
3. Assay composites were capped up to 35 g/t based on geo-statistical support for each zone.
4. A modeling cut-off grade of 0.25 g/t Au was only used to create a three-dimensional wireframe for subsequent interpolation.
5. A block model was created with 10x10x10 metre blocks using inverse distance cubed grade interpolation.
6. Indicated Mineral resources were classified with a 35 metre search radius and a minimum of two drill holes.
7. A bulk density of 2.79 t/m<sup>3</sup> was used for all tonnage calculations.
8. A gold price of **US\$1,200/oz** and an exchange rate of US\$1.00 = C\$1.00 was utilized in the Au cut-off grade calculations of 0.37 g/t for open pit and 2.0 g/t for out of pit.
9. Open pit mining costs were assumed at C\$1.60/t for mineralized material, C\$1.60/t for waste rock and C\$1.25/t for overburden, while out of pit mining costs were assumed at C\$59/t, with process costs of C\$11/t, G&A of C\$2.00/t, and a 93% metallurgical recovery.
10. Totals in the table may not sum due to rounding.

PEA highlights are summarized as follows:

- Life of mine metal production of **3.8 million ounces gold with 92% recovery**;
- Processing facility throughput of 25,000 tonnes per day ("tpd");
- Life of mine average cash costs of \$607 per ounce gold;
- Average diluted mill head grade of 1.11 g/t gold;
- Average annual production of 288,000 gold ounces;
- 12 year mine life;
- No royalties or encumbrances on the Project.

TABLE 2: ECONOMIC SENSITIVITY TO GOLD PRICE					
Gold Price (US\$)	BASE CASE:				
	\$1,350	\$1,400	\$1,500	\$1,600	\$1,700
Net Present Value (\$ millions)	<b>748</b>	858	1,080	1,301	1,523
Internal Rate of Return (%)	<b>24.4</b>	26.8	31.3	35.5	39.5

Payback period	4.1	3.7	3.3	2.9	2.6
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Additional Resource and PEA details are outlined in Section 6.8 below.

## 6.2 Property Description and Location

*Golden Highway* is located in northeast Ontario within NTS block 42 A/09 and consists of a large contiguous mining claims package concentrated in Guibord, Michaud, Barnet, and Garrison Townships with additional property interests in Hislop, Guibord, Holloway, and Marriott Townships. The project currently encompasses 692 claim units comprised of staked (515 claim units), leased (101 claim units), and patented (76 claim units) mining rights totalling approximately 10,600 hectares. Two leases (79 units) and all the patents (22 units) in Michaud Township include surface rights. Of the total claim units, 402 cover the Moneta controlled portion and resources of the GHP centred in Michaud Township.

All claims are 100%-owned by Moneta except for the few of joint ownership and those subject to Joint Ventures. Included is the St Andrew (former Newmont) Joint Venture in Holloway and Marriott Townships in which Moneta holds a 17.56% interest and in Garrison Township an 8.78% interest. St Andrew also has a vested 50% interest in the Barnet JV in Barnet Township and the Garrison JV as well as 50% ownership of 4 staked claim units also in Garrison Township. Moneta has a 75% interest in the Dymont 3 property with St Andrew holding the balance. In Guibord Township Moneta holds a 25% interest in the Guibord JV with St Andrew also holding the balance.

Current NI 43-101 gold resources are not encumbered by underlying royalties.

Other underlying (minor) royalties are limited to the following claims:

- 10% NPI on a 12 claim unit block in Michaud Township;
- 0.5% NSR on a 27 claim unit block in Michaud Township;
- 0.5% NSR on 52 claim units in Garrison Township and 0.5% NSR on 76 units in Barnet Township, both part of the St Andrew JV;
- advance royalty of \$5,000 (annual) on *Turner Lake* (10 claim units) which began in 2008;
- 2% NSR and advance royalty \$1,200 (annual) on *Dymont 3* (3 claim units, 75% interest with remaining 25% interest owned by St Andrew).

A listing and details of Moneta's staked claims is available from the Ontario Mining Recorder.

Moneta is not aware of any environmental liabilities or First Nations issues within the *Golden Highway* area and of any restrictions beyond those covered by existing legislation and regulation with respect to exploration and development including potential tailings and disposal sites.

## 6.3 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The *Golden Highway* property lies approximately 35 kilometres east along Highway 101 from Matheson, Ontario and is accessed southerly over an extensive network of logging and drilling roads of varying quality.

The climate is typical of northeastern Ontario with below freezing temperatures (-5<sup>0</sup> to -40<sup>0</sup> C) from November to April and brief periods of hot weather in the summer from 10<sup>0</sup> to 30<sup>0</sup> C. Precipitation averages 80 centimetres a year, with a substantial portion falling in the form of snow averaging 2.4 metres per year.

A skilled labour force for mining and exploration is available in Matheson, Kirkland Lake and Timmins. Timmins and Kirkland Lake are also major supply and service centers for the mining industry. Communications and power are available along Highway 101 and cell phone coverage extends to the property. Moneta is not aware of any restrictions beyond those covered by existing legislation and regulation with respect to potential mine, tailings, and disposal sites should future development take place.

Exploration, including drilling operations, is possible throughout the year although some areas are better accessed during the winter. Topography is generally flat with less than 25 metres of relief. The southern portion of the property is swampy whereas the northern and eastern portion, overlain by sands and outwash from the Munro Esker, has higher relief. Outcrop is rare and located in the centre of the Michaud Parcel and to the southeast marking the southern limit of the Pike River valley. The south to south-western area is primarily muskeg and generally poorly drained by the Pike River and its tributaries. Vegetation consists of low stands of black spruce, alder in the wetter areas, with birch, poplar and pine in drier sandy areas.

## 6.4 History

### *Golden Highway Property*

The first recorded claims in the area were staked in 1944 as a consequence of an Ontario Department of Mines report which suggested that the Destor Porcupine Fault/Deformation Zone passed through the core Moneta property (patents) in Michaud Township. Various portions of the property have been held by a succession of companies since that time.

In 1946 Moneta and Mining Corporation of Canada formed a joint venture on the 42 patents in Garrison, Holloway, and Marriott Townships which have seen various changes of ownership and percentage interests. Moneta is currently in joint venture with St Andrew Goldfields on these 3 claim groups and has a residual 8.78% interest in Garrison and a 17.56% interest in Holloway and Marriott.

Prior to 1998, Moneta held a northern parcel of claims called the *Michaud Parcel*, and a southern block of claims under option from Nufort Resources Inc., known as the Nufort Leases. Moneta's land position was primarily acquired through staking and by a series of joint venture agreements in the late 1980s. Subsequent to 1998, Moneta assumed a 100% interest in both the Michaud Parcel and the Nufort Leases, extinguishing all underlying encumbrances. In 2004, Acrex vested in a portion of the Nufort Leases by meeting earn-in requirements and both companies formed the Michaud Joint Venture. Also in 2004, the Perry Lake property was staked (68 claim units) and two properties were optioned – Turner Lake (10 claim units) and Dyment 3 (3 claim units). In 2006, an additional 10 claim units were staked adjoining the Perry Lake block to the north.

In 2007, Moneta acquired Newmont's interest in the Windjammer Property consisting of 22 claim units in 2 mining leases. Moneta also staked an additional 3 units in 2008 and in 2009 acquired 3 claim units in Guibord through a property swap with St Andrew, for a total of 67 claim units under the *Golden Highway*.

In 2009 Moneta acquired the 50% Acrex ownership interest in the Michaud Joint Venture ground ("Michaud JV") for \$1 million, and terminated the Michaud JV. The Michaud JV covered 68 claim units located in the southern portion of Michaud Township.

A total of 8 claim units were acquired in Michaud Township by purchase (4) and staking (4) in 2010.

In 2011 Moneta staked an additional 2 claim units in Michaud Township and successfully renewed three mining leases within the Golden Highway project for a further 21 years. A fourth mining lease was renewed in 2012, also for 21 years.

### *Exploration*

The *Golden Highway* has seen extensive exploration work including geophysical surveys, overburden drilling, and diamond drilling programs since 1945. Historical programs have been detailed in previous technical reports available on SEDAR. The following is a summary of more recent and relevant work completed since 2007 when Moneta acquired the Windjammer Mining Leases and began expanded and sole risk exploration programs aimed at resource definition and expansion. It was also shortly thereafter in 2009, when Moneta dissolved the Michaud Joint Venture and acquired the 50% Acrex ventures share.

In November 2007, Moneta acquired Newmont's operating interest Windjammer and, subsequently, in December 2007, completed three drill holes totalling 988 metres on Windjammer South to audit historical (Noranda) data and facilitate an initial NI 43-101 resource estimate by Cargill. that resulted in a 154,000 ounce (2.1 million tonnes @ 2.3 g/t, 1.0 g/t cutoff) inferred gold resource. The report recommended a follow-up infill drill program.

In 2008, a drill program totaling 6,914 metres in 21 holes, was completed by Moneta on the Windjammer South Zone. Subsequently an updated NI 43-101 resource estimate was completed by Cargill, resulting in a 305,379 indicated (7.79 Mt @ 1.22 g/t Au) plus 211,951 inferred (5.83 MT @ 1.13 g/t Au) ounce gold resource based on a cut-off of 0.7 g/t Au.

Also in 2008, the Michaud Joint Venture completed an 8-hole, 2,449 metre drill program, on the 55 Zone primarily to increase drill data density and provide input for future resource modelling with 27 drill holes completed.

During 2009, Moneta commissioned a tuned gradient Induced Polarization ("IP") survey with several detailed sections on the eastern area of the *Golden Highway Project* in order to better define the exploration potential of the Windjammer property.

The 2009 drill program completed drilling on the Windjammer South and North Zones, as well as a drill profile across the sedimentary unit separating them and known as Windjammer Central. Three drill holes (1,388 m) were completed on Windjammer North to assess the historical Noranda work, intersecting extensive alteration with gold mineralization similar to the historical data. Four holes were drilled on Windjammer South (2,069 m) of which one was continued northerly as part of the drill profile with two additional holes (1,015 m). In Windjammer South two drill hole extensions (281 m) were also completed.

In 2010, exploration focused on the 55 Zone and Southwest Zone. 55 Zone drilling consisted of 36 drill holes (9,559 m) providing a significant basis for future resource calculations. Southwest Zone drilling lead to the expansion and discovery of several new and deeper gold zones, including the 162 Zone, 267 Zone, 269 Zone and 273 Zone. Several mother holes with numerous wedges and single drill holes totalling 27 holes (22,905 m) were completed. Two holes (982 m) were also completed on Windjammer South.

Also in 2010 a 3D downhole IP and EM survey was undertaken on the Southwest Zone to delineate areas of potential alteration zones and sulphide enriched gold mineralization.

An extensive drill program consisting of 24,687 metres in 61 drill holes or drill hole wedges was undertaken in 2011. Drilling was completed on the Southwest Zone, Gap Zone, Windjammer South, and Windjammer Central. This drilling supported a new NI 43-101 Mineral Resource Estimate for the three main *Golden Highway* gold zones (Southwest Zone, Windjammer South, and 55 Zone.) These contain combined near-surface NI 43-101 resources (December 1<sup>st</sup>, 2011) as calculated by P&E, of 1,071,000 indicated (@ 0.99 g/t) and 2,069,000 (@ 1.35 g/t) inferred ounces of gold.

2011 exploration also began testing some property wide targets generated by a comprehensive structural review completed in early 2011. These target areas include the Pipestone/Arrow Fault (2,475 metres in 9 drill holes) within a mafic volcanic/syenite setting, along the Destor from the Twin Creek Zone to Windjammer North within a mafic-ultramafic volcanic/sedimentary setting, and selected areas in the southwest of the property in both ultramafic/mafic volcanics with associated syenite or in sediments along the volcanics.

## **6.5 Regional Geology**

The *Golden Highway Project* is located in the western Archean Abitibi Greenstone Belt, comprised of mafic to ultramafic volcanic assemblages which contain or are bounded by sedimentary basins. Syn-volcanic to post-tectonic felsic to ultramafic intrusives are common in the volcano-sedimentary assemblage. Late Proterozoic dykes cut all units.

The Abitibi Greenstone Belt in this region can be subdivided into 3 main stratigraphic groups: the Kidd-Munro (north), Porcupine (central) and the Kinojevis (south). The Kidd-Munro Group consists primarily of ultramafic and iron tholeiite. The Porcupine Group is composed of sediments including sandstone, siltstone, conglomerate and iron formation. The Kinojevis Group is characterized by Mg and Fe rich basalts overlying the Porcupine sediments. The contacts between these groups are usually defined by major structures such as the Destor. This regional deformation zone is a key geological feature hosting numerous and geologically varied gold deposits in this part of the Abitibi Greenstone Belt.

Within and around Michaud Township, three sequences of strata are predominant, together with an alkalic intrusive suite of plutons, consisting of syenite, monzonite and granite. All rock types have been metamorphosed to greenschist facies.

The oldest sequence consists of mafic to ultramafic flows or intrusions that are variously textured as well as being schistose. The ultramafics occur north of the Destor. Moderate to intense chlorite, talc and carbonate alteration is present. Interlayered with ultramafic flows are basalts that are massive to brecciated and occasionally pillowed. The basaltic komatiites and komatiites form a significant component of this sequence that may be disconformable or in fault contact with the overlying mafic volcanics or younger Timiskaming sediments. The mafic to intermediate volcanics are the most extensive assemblage exhibiting a variety of volcanic flows with lesser tuffs, and tuff breccias.

Younger rocks consist of a sequence of chemical metasedimentary rocks which include iron formation (oxide, sulfide, silicate (chert) and graphite facies) that may be a discrete sub-unit of the Timiskaming sediments. Timiskaming sediments include greywackes, conglomerates, mudstones and siltstones. They appear to reflect a fault bounded half-graben grading from a hematite-chert iron formation (BIF) southwards into conglomerate, pyritiferous greywackes and fine sandstones. The greywacke is typically green-grey, fine-grained, massive to well bedded. Some argillite beds have been intersected. Coarse grained to conglomeratic greywacke is present throughout and is grey to pink-grey, medium grained and well bedded with 15% sub-angular to sub-rounded lithic fragments. This unit is from 500 to 900 metres thick.

The BIF comprises three distinct zones of very fine grained and prominently bedded jasper, magnetite, or hematite iron formation often interbedded with centimetre to metre bedded greywacke beds. The rock is typically strongly silicified and hematized. Pyrite is present locally in concentrations of 5% to 10% as veins and fine disseminations. This unit is typically 10 to 100 metres thick.

The property straddles the Destor, the most prolific gold-bearing structure in this part of the belt, and numerous splays associated with it. In the vicinity to the east, are St Andrew Goldfields Holloway and Holt Mines and Northern Gold's Golden Bear Project (Garrison Twp.). In addition to the Destor, other documented structures in the Michaud Township area are the Pipestone/Munro/Contact faults/splays trending northwest then east, north of the Destor with Lakeshore Gold's Fenn-Gib deposit, and the Arrow Fault trending east-west. On a local scale, numerous faults have been interpreted from core and geophysical interpretations with minor strike displacements – slip displacements remain unknown. These faults can typically be east-westerly and at high angles to the Destor. Folds are not well defined, however, multiple BIF horizons and changes in dip from drill information suggests isoclinal folds of unknown scale in the Timiskaming sediments and BIF.

## **6.6 Property Geology**

The core project area is best described as the North and South corridors representing the Destor Porcupine Fault Zone (“Destor”) primarily in Michaud and western Garrison Townships. These are two distinct geological settings containing the bulk of known gold mineralization discovered to date with the Northern corridor a volcanic setting in contrast to the sedimentary setting of the Southern corridor.

The volcanics hosting the Destor cross the property (*Michaud Parcel, Windjammer and Turner Lake*) as the Northern corridor, a 4.5 km. long, variably altered and deformed sequence of intercalated komatiites and tholeiitic basalts, generally bounded by talc-chlorite schists except to the east and south where Timiskaming-type

metasediments are found. The basalts are traceable along most of the Destor across the property, and, generally, when altered and quartz carbonate veined, host numerous gold zones such as *Twin Creek, Miller, Landing, and Windjammer North* as well as scattered higher-grade gold intercepts.

To the north (*Perry Lake* property), the volcanics associated with the Munro Fault as it splays off the Destor to the northwest, are less well understood. Limited drilling has established an alternating sequence of Mg and Fe tholeiites. Untested stratigraphy is found along the ultramafic volcanics defining the Munro Fault and the eastern extension of the known altered volcanics and in contact to the south by phases of the Emens Lake (Central Michaud) syenite complex. The Arrow and a portion of the Pipestone Faults, a regional east-west structure, follow this contact. Limited drilling in the syenite and syenite contact area, has returned scattered low-to moderate grade gold values.

Parallels to the setting and mineralization (Lightning Zone type) of the Holloway Mine, approximately 20 kilometres east along the Destor, have been found within the volcanics of the project area. Lightning Zone type mineralization is hosted in pyritic sericite/albite altered variolitic Fe tholeiite in contact with ultramafics.

Previous gold intersections throughout the property, some historical and isolated, include geological settings such as that of the *Last Chance Zone* (pyritic albitized syenite along the Destor) and *Last Chance Extension* (tectonized pyritic and potassic altered syenite) northwest of the *Southwest Zone*.

To the south, the *Southern Corridor* is well defined by the belt of Timiskaming sediments trending along the volcanic of the Destor and includes the main gold zones discovered to date on the property. This corridor has a strike length of approximately 12 kilometres crossing Michaud and continuing north-easterly into Garrison Townships hosting the *Western, 55, Dymont 3, Southwest, Gap, Windjammer South, and Windjammer Central* gold Zones. The sediments consist of a series of alternating sandstone and greywacke units with subordinate argillite and conglomerate. Conglomerate is typically found along the south contact of a chert-hematite-magnetite iron formation. This oxide facies iron-formation may contain intercalated greywacke and is much more massive to the east while to the west it thins quickly containing primarily hematite. The sediments are bounded to the north by the dominantly ultramafic volcanics sequence locally altered to talc chlorite schist and green carbonate.

In addition to the importance of the Destor and its associated splays and similar orientated structures, additional interpretive work has identified northwest to north trending cross structures believed to play a significant role in localizing gold mineralizing systems. Many of the recently drilled significant quartz and quartz carbonate veins and vein zones reflect similar orientations to these higher angle structures/faults.

## 6.7 Target Mineralization

Several gold mineralization settings have been discovered and are being explored in the *Golden Highway*:

- Mineralization hosted by altered ultramafic and mafic volcanic rocks occurs along the Destor. This includes the *Perry Lake* property, *Twin Creeks to the Landing Zones*, and *Windjammer North* (collectively the *North Zones*). Typically, the zones in volcanics exhibit quartz carbonate veining in high strain zones usually silicified and carbonatized with subordinate hematite, sericite, and albite. Calcite is commonly replaced by ankerite which can also define an alteration halo enclosing the main structures. Gold values may be erratic and are typically associated with 2% to 5% very fine pyrite and occasional visible gold has been noted. Of particular interest in this setting is the Lightning Zone (Holloway Mine) style of mineralization consisting primarily of a massive or pervasive quartz-albite-pyrite alteration core surrounded by intensely foliated sericite-ankerite schists. Gold is associated with fine grained clustered pyrite averaging 5-10% occurring in albitic stringers, veinlets and fine disseminations.
- Mineralization associated with clastic sediments and/or banded oxide facies iron formation in the *Southern Corridor* as known principally in the *Windjammer Central, Windjammer South, Gap Zone, and Southwest Zones*. Also included are the *55 Zone, Dymont 3* and *Western Zones*. Variably intense silicification, ankeritization, and sericitization with hematization is common within mineralized zones that

may also exhibit local brecciation and fractures filled by quartz-pyrite stringers, quartz and quartz-carbonates veins up to several metre widths, and extensive stockworks. Elevated gold values have been found in these mineralized breccia zones and several vein orientations documented reflecting the complexities of this mineralization. Dominant vein and vein zone orientations are both shallow extensional and steeper northwest to north trending. Sulphidization of the iron formation in contact with vein systems and brecciation frequently results in significantly elevated high grade mineralization.

- Mineralization hosted by syenite is found in the lower of two porphyritic syenite intrusives in contact with variably altered ultramafic and mafic rocks on the south side of the Destor (*Last Chance Zone*). The syenite has a bleached and albitized core enveloped by a hematized zone. Scattered clots and disseminations of pyrite up to 5% are common. Gold is concentrated in zones of narrow quartz carbonate stringers. Less pervasively altered but tectonized syenite has now been documented as the *Last Chance Extension Zone*, where a wide contact zone to the ultramafics is a microfractured breccia with abundant disseminated and stringer pyrite with scattered and only weakly anomalous gold values.

## 6.8 NI 43-101 Mineral Resource Estimate and Preliminary Economic Assessment (PEA)

An updated NI 43-101 Mineral Resource Estimate was completed on the *Golden Highway* and reported by way of press release on October 25, 2012. Readers seeking additional details to those disclosed here are directed to the (combined) NI 43-101 Mineral Resource Estimate and Preliminary Economic Assessment report filed on SEDAR on December 11, 2012.

In addition to the Southwest Zone, Windjammer South, and 55 Zones, the updated Mineral Resource Estimate now includes the Gap Zone, Windjammer Central, and Windjammer North. There were 21,000 metres of drilling completed since the previous Resource Estimate and 19,375 metres of historical drilling on these three new gold zones.

The Golden Highway boasts a 12 km long gold system hosted in sediments. This sedimentary hosted gold mineralization tends to have more predictable lower grade continuity amenable to open pit mining as opposed to the historical Timmins production which has been primarily from narrow(er) higher grade veins within deformed volcanic host rocks.

2012 drilling continued to confirm this predictable sedimentary geology with low gold grade variability. Table 2 below illustrates little variation in tonnage or contained ounces at varying cutoff grades for the in-pit and out-of-pit gold resources:

With a 2012 focus on 100m step-out drilling along strike and in three dimensions, the updated resource estimate represents an Inferred Mineral Resource Estimate increase of 55% to 3.2 million ounces from the previous Resource Estimate of 2.1 million ounces. The 2012 and historical drill programs were highly successful in adding 1.2 million indicated and inferred ounces at a discovery cost under \$5 per ounce.

P&E concluded that there remains significant potential to further develop existing and additional gold resources on the Golden Highway. This potential exists both within the Whittle optimized pit shells, as well as outside the pit shells along strike and to depth over the 12 km of similar and favourable geological setting. P&E has proposed recommendations including additional drilling to expand and upgrade the resource categories of the current Resource Estimate, additional metallurgical tests, and continuing environmental baseline studies initiated in Q4 2011.

Updated NI 43-101 Mineral Resource Estimate (October 2012) highlights using US\$1,200/ounce gold, include:

- In-Pit and Out-of-Pit Mineral Resource Estimate:
  - Indicated: **1,091,000** ounces (31.1 Mt at 1.09 g/t Au); **plus**
  - Inferred: **3,204,000** ounces (83.3 Mt at 1.20 g/t Au);

- The Mineral Resource Estimate increased by **55%** to 3.2 million ounces inferred from the previous Resource Estimate of 2.1 million ounces (December 1, 2011 press release);
- The original Southwest Zone pit dimensions have been optimized in this resource update;
- Resource remains open in all directions for further expansion.

The following table summarizes the Mineral Resource Estimate breakdown into *Indicated* and *Inferred* resources:

<b>TABLE 1: MINERAL RESOURCE ESTIMATE</b> (1), (2), (3), (4), (5), (6), (7), (8), (9), (10)							
<b>Mining</b>	<b>Cutoff Grade (g/t)</b>	<b>INDICATED</b>			<b>INFERRED</b>		
		<b>Tonnes</b>	<b>Au (g/t)</b>	<b>Au (oz)</b>	<b>Tonnes</b>	<b>Au (g/t)</b>	<b>Au (oz)</b>
In Pit	0.37	30,000,000	1.01	977,000	71,627,000	0.86	1,971,000
Out of Pit	2.00	1,080,000	3.29	114,000	11,684,000	3.28	1,233,000
Combined*	0.37 / 2.00	<b>31,080,000</b>	<b>1.09</b>	<b>1,091,000</b>	<b>83,311,000</b>	<b>1.20</b>	<b>3,204,000</b>

\* Open pit mineral resources are reported at a cut-off grade of 0.37 g/t gold and underground mineral resources are reported at a cut-off grade of 2.00 g/t gold.

1. The mineral resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
2. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the estimated Mineral Resources will be converted into Mineral Reserves.
3. Assay composites were capped up to 35 g/t based on geo-statistical support for each zone.
4. A modeling cut-off grade of 0.25 g/t Au was only used to create a three-dimensional wireframe for subsequent interpolation.
5. A block model was created with 10x10x10 metre blocks using inverse distance cubed grade interpolation.
6. Indicated Mineral resources were classified with a 35 metre search radius and a minimum of two drill holes.
7. A bulk density of 2.79 t/m<sup>3</sup> was used for all tonnage calculations.
8. A gold price of **US\$1,200/oz** and an exchange rate of US\$1.00 = C\$1.00 was utilized in the Au cut-off grade calculations of 0.37 g/t for open pit and 2.0 g/t for out of pit.
9. Open pit mining costs were assumed at C\$1.60/t for mineralized material, C\$1.60/t for waste rock and C\$1.25/t for overburden, while out of pit mining costs were assumed at C\$59/t, with process costs of C\$11/t, G&A of C\$2.00/t, and a 93% metallurgical recovery.
10. Totals in the table may not sum due to rounding.

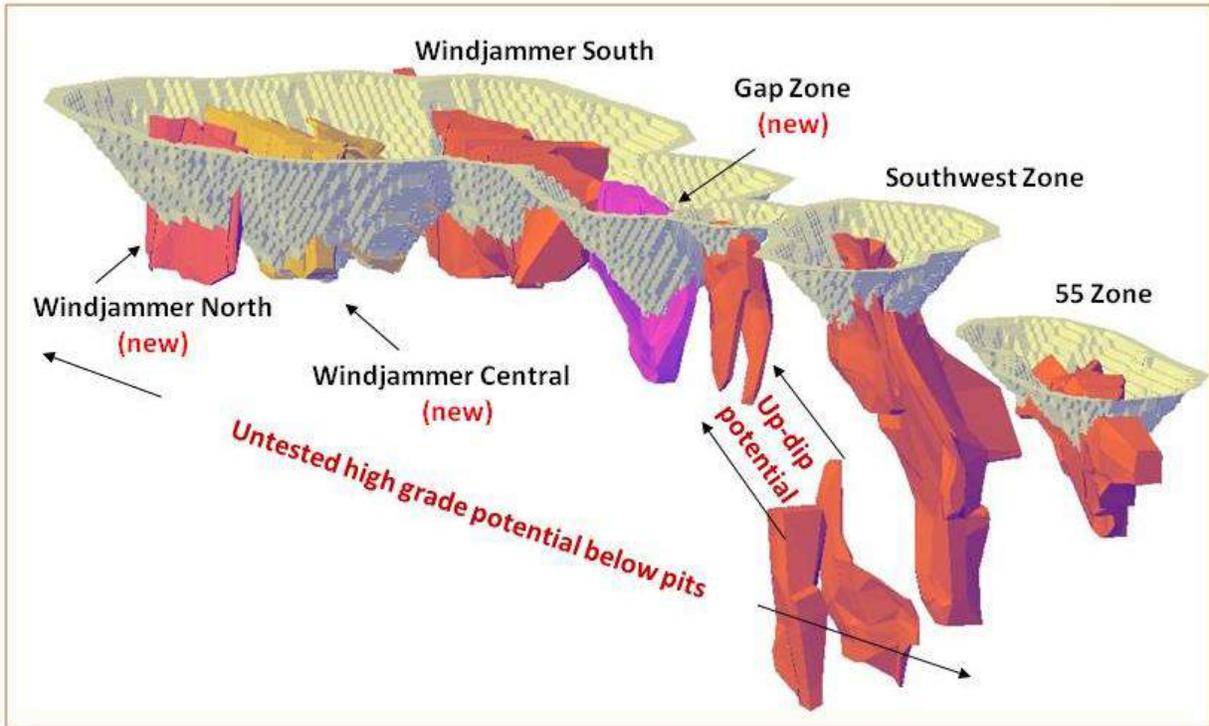


Figure III - Golden Highway Project: Schematic Resource Domains & Pit Shells looking East

Tables of varying cutoff grade sensitivity for in-pit and out of pit gold resources are as follows:

TABLE 2: IN-PIT RESOURCE CUTOFF SENSITIVITY						
Cutoff Grade (g/t)	INDICATED			INFERRED		
	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)
0.80	12,708,000	1.65	673,000	26,853,000	1.37	1,185,000
0.60	18,518,000	1.35	802,000	41,724,000	1.13	1,516,000
0.50	22,672,000	1.20	875,000	52,702,000	1.01	1,708,000
0.40	28,144,000	1.05	954,000	66,689,000	0.89	1,910,000
<b>0.37</b>	<b>30,000,000</b>	<b>1.01</b>	<b>977,000</b>	<b>71,627,000</b>	<b>0.86</b>	<b>1,971,000</b>
0.35	31,160,000	0.99	990,000	74,954,000	0.83	2,010,000
0.30	34,853,000	0.92	1,029,000	84,038,000	0.78	2,105,000

TABLE 3: OUT OF PIT RESOURCE CUTOFF SENSITIVITY						
Cutoff Grade (g/t)	INDICATED			INFERRED		
	Tonnes	Au (g/t)	Au (oz)	Tonnes	Au (g/t)	Au (oz)
2.50	670,000	3.94	85,000	7,401,000	3.89	925,000
2.20	880,000	3.56	101,000	9,805,000	3.51	1,106,000
<b>2.00</b>	<b>1,080,000</b>	<b>3.29</b>	<b>114,000</b>	<b>11,684,000</b>	<b>3.28</b>	<b>1,233,000</b>
1.80	1,277,000	3.07	126,000	13,889,000	3.06	1,367,000
1.50	1,789,000	2.67	153,000	18,801,000	2.69	1,626,000

### Preliminary Economic Assessment (PEA)

A Preliminary Economic Assessment ("PEA") was completed on the *Golden Highway* and reported by way of press release on November 1, 2012. Readers seeking additional details to those disclosed here are directed to the (combined) NI 43-101 Mineral Resource Estimate and Preliminary Economic Assessment report filed on SEDAR on December 11, 2012.

The PEA incorporated the NI 43-101 Mineral Resource Estimate (press release October 25, 2012) of 31.1 Mt at 1.09 g/t Au indicated plus 83.3 Mt at 1.20 g/t Au inferred and demonstrated robust economics in establishing a new gold mine and mill complex on the property.

Pre-tax Net Present Value is **\$748 million** (5% discount rate), with a **24.4%** internal rate of return, and 4.1 year payback period using **US\$1,350** gold price. A gold price sensitivity table follows:

TABLE 1: ECONOMIC SENSITIVITY TO GOLD PRICE					
Gold Price (US\$)	BASE CASE: \$1,350	\$1,400	\$1,500	\$1,600	\$1,700
Net Present Value (\$ millions)	<b>748</b>	858	1,080	1,301	1,523
Internal Rate of Return (%)	<b>24.4</b>	26.8	31.3	35.5	39.5
Payback period	<b>4.1</b>	3.7	3.3	2.9	2.6

#### PEA Highlights:

- Life of mine metal production of **3.8 million ounces gold with 92% recovery**;
- Processing facility throughput of 25,000 tonnes per day ("tpd");
- Life of mine average cash costs of \$607 per ounce gold;
- Average diluted mill head grade of 1.11 g/t gold;
- Average annual production of 288,000 gold ounces;
- 12 year mine life.
- No royalties or encumbrances on the project.

#### Areas of upside potential include:

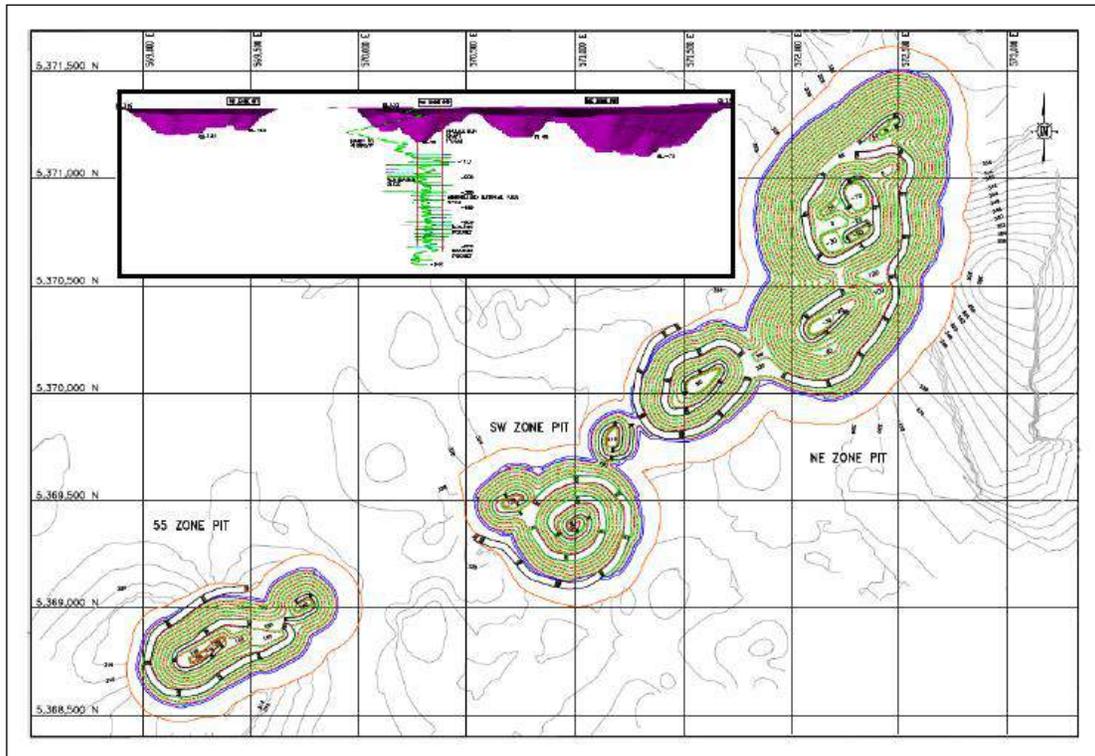
- Four additional gold zones on the property outside NI 43-101 resource;
- Undrilled areas within the conceptual pits;
- Potential below current constrained pits - similar to Southwest Zone;
- Exploration potential within 12km of strike of the Property.

The PEA assumes that both open pit and underground mining methods would be used for resource extraction. Potentially economic open pit portion of the resources have been calculated assuming a dilution of 6% and a material loss of 2%. Potentially economic underground portion of the resources have been calculated assuming a dilution of 15% and a material loss of 10%.

#### Mining

The PEA is based on a processing facility of 25,000 tpd of blended feed from open pit and underground operations. The open pit is designed as a conventional surface mining operation producing at an average rate of 22,500 tpd. The underground mining is designed as bulk tonnage mining operation producing at an average rate of 2,500 tpd.

The open pit scenario includes development of a large Southwest Zone, Gap and Windjammer (South/Central/North) pit and smaller 55 Zone pit. The underground portion is scheduled to be in full production by way of ramp in the second year of operations, accessing over 1.3 million ounces of bulk underground gold resources. Development of a shaft is scheduled for year 2, to be funded from operating cash flow.



**Figure IV - Golden Highway Project: Plan and Longitudinal View of Conceptual PEA Mining Design**

### **Infrastructure**

The Project significantly benefits from world-class infrastructure, services and available skilled labor in the Timmins Camp. The project site is located 25km east of Matheson and is accessible year-round from paved provincial Highway 101 and a network of gravel and sand logging roads.

The *Golden Highway* mill and mine site is ideally located and characterized by outcrop and shallow overburden to the immediate southeast of the main open pit. Along the east and northeast perimeter of the open pits, esker ridges form natural containment dykes for at least two sides of a tailings management facility. These nearby eskers contain significant quantities of coarse gravel and small boulder material, ideal for road upgrades and infrastructure construction materials.

The labour force for the construction and operation of this project are anticipated to be drawn from Kirkland Lake, Timmins, Matheson and nearby Quebec communities. The labour pool in this area is highly experienced in both construction and mining operations, requiring less training than many other remote or non-mining locations.

Power is to be supplied by a 10 km long transmission line connecting to the provincial grid.

The reader is cautioned that the PEA is preliminary in nature as it includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves and there is no certainty that the PEA will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability. The PEA was prepared under the supervision of Mr. Eugene J. Puritch, P. Eng., of P&E Mining Consultants Inc., Independent Qualified Persons, as defined by National Instrument 43-101.

## 6.9 Metallurgical Testing and Specific Gravity

During 2012, the Company completed a metallurgical testing program, with SGS Laboratories (formerly Lakefield), on the six gold zones (Southwest Zone, Gap Zone, Windjammer South, Windjammer Central, Windjammer North, and 55 Zone) included in the updated NI 43-101 Mineral Resource Estimate on *Golden Highway*. The objective of the program was to assess gold recoveries and grindability of the individual zones, which directly influence project economics. Highlights from the results include:

- Recoveries of up to 96.4% Au for the 55 Zone, Gap Zone, Windjammer Central/South/North and Southwest Zone;
- Recoveries are consistent across all zones and suggest that the mineralization can be processed by one standardized milling method;
- The current metallurgical leach results are consistent with historical testing completed on the Southwest Zone by Barrick Gold and Windjammer North and South by Newmont Canada.

In 2012, Specific Gravity (SG as t/m<sup>3</sup>) measurements were undertaken to support the updated NI 43-101 Mineral Resource Estimate and PEA on *Golden Highway*. A total of 350 lithological samples were analyzed, representing both mineralized and un-mineralized host rocks for all six gold zones. The average SG value was confirmed as 2.79, slightly better than the 2.74 value used in the December 2011 NI 43-101 Mineral Resource Estimate.

Additional metallurgical work has been recommended as the project advances and improves the current resources.

## 6.10 Exploration Programs (2012)

Exploration in 2012 remained focused on the *Golden Highway* with the completion of a drill program designed to expand the potential gold resources primarily of the three gold zones not previously included in the prior (December 2011) NI 43-101 resource estimate.

A total of 13,285 metres of diamond drilling were completed in the Southwest Zone, Gap Zone, Windjammer South, Windjammer Central, and the 55 Zone. Drilling focused on near-surface bulk tonnage gold mineralization to support an updated Resource Estimate by systematically testing along strike, to depth, and adjacent to the December 2011 NI 43-101 modelled open pit shells to expand gold resources and test possible linkage of pits.

Additional work in 2012 on the *Golden Highway* consisted of magnetic data modelling by an independent consultant using several mathematically driven parameters and algorithms. This has refined several structural targets which remain to be drill tested both within the greater resource corridor and adjacent across the property.

### *Southwest Zone*

The Southwest Zone consists of three main blocks displaced from each other by late northwesterly to north-northwesterly faulting. The Central Block (CB) has been displaced southwesterly from 200 to 150m relative to the East Block (EB) and West Block (WB). There are currently 3 main deeper gold zones including the 162 Zone in the immediate CB iron formation contact and hanging wall, the 273 Zones in the EB iron formation hanging wall, and the 267 Vein Zone found 200m into the hanging wall and off the CB iron formation contact. The deeper zones of the Southwest Zone have defined the deeper and higher grade potential of the gold system and contribute significantly to the underground and “out-of-pit” updated resource estimate.

Two drill holes were completed during 2012 within the 2011 NI 43-101 Resource Estimate pit shells of the *Southwest Zone*.

MSW12-296 tested the southeast in-pit area for additional gold mineralization intersecting 1.33 g/t over 8.20 metres and 1.97 g/t over 9.00 metres while MSW12-302 drilled in the southwest pit portion returned no significant mineralization. The values intersected in MSW12-296 in the southeast pit area occur in a more complex faulted area and potentially may be related to the deeper Southwest Zone mineralization with additional drilling required.

The southwest pit area is the hanging wall of the main southwest dipping structure that defines the western limit of the Central Block mineralization and well into the hanging wall of the West Block iron formation to the north.

The updated December 2012 Resource Estimate and PEA were supported by an optimized pit shell for the Southwest Zone which was reduced to 300 metres vertical from 550 metres vertical with a favourable reduction in the strip ratio.

In addition to resource expansion drilling underway in 2013, several priority exploration targets and areas have been defined from structural and geophysical modelling. Exploration drilling in 2012 included testing an interpreted structural and geophysical anomaly north of the Southwest Zone in volcanics. Drilling intersected highly altered and structurally complex mafic to ultramafic volcanics cut by numerous felsic dykes confirming the interpretation. Extensive quartz and quartz-carbonate stringers and local veining with elevated pyrite returned values of 0.74 g/t over 1.95m in an area of felsic dykes in MSW12-297, and several gold values such as 0.80 g/t over 0.77m in MSW12-298. Exploration drilling to depth and easterly closer to, and in the nearby main north-northwest structure, remains to be completed.

### *Gap Zone*

The Gap Zone is located between the Southwest Zone (East Block) and Windjammer South and is now included in the updated 4.3Moz NI 43-101 Resource Estimate (October 25<sup>th</sup>, 2012). The Gap mineralization currently covers 450 metres of strike along the south iron formation contact in the immediate hanging wall sediments, and along a north-westerly trending and steep southwesterly dipping cross structure with an associated vein system. Previous highlights included 1.04g/t over 117.1m with 5.15g/t over 14.3m (MSW11-283).

The 2012 drill program targeted the main corridor and the NW structure both north and south of the iron formation with six drill holes completed to develop internal modeling of mineralization domains. Drilling was highly successful with significant gold values recently reported along the iron formation towards Windjammer South (MSW12-301, MSW12-304, MSW12-306) and within the zone (MSW12-295A). Gold mineralization was also confirmed along the NW structure immediately north of the main iron formation (MSW12-300, MSW12-303).

MSW12-295A intersected zones that include 1.04g/t over 55.0m with 5.52g/t over 4.0m, 1.49 g/t over 7.0m, and 1.21 g/t over 6.65m. MSW12-301, drilled to the east, returned 1.14g/t over 39.0m including 1.98g/t over 6.0m, and 1.17 g/t over 46.0m including 1.63 g/t over 11.4m. MSW12-304 intersected several zones in sequence including 0.82 g/t over 12.29m, 0.70 g/t over 15.15m, 0.69 g/t over 18.12, and 0.89 g/t over 34.69m. MSW12-306 was drilled southerly through the iron formation and at the southern contact intersected 1.12 g/t over 14.4m

MSW12-300 tested the north contact of the iron formation west of the historical drilling by Barrick and intersected 4.32 g/t over 1.2m. MSW12-303 targeted the NW trending cross structure within the northern portion of the iron formation which is generally more interfingered with sediments, and returned 0.78 g/t over 25.5m including 0.99 g/t over 14.3m.

The eastern extension of the Gap zone was tested with three drill holes to establish mineralization limits and potential connectivity to Windjammer South. Drilling was highly successful with significant gold values found along the iron formation towards Windjammer South (MSW12-305, MSW12-307, and MSW12-308). MSW12-305 intersected zones that include 1.08g/t over 10.4m, 0.94g/t over 38.0m including 2.27g/t over 6.42m. MSW12-307, drilled between and above MSW12-301 and MSW12-304, returned two broad zones of 0.74g/t over 52.0m (including 1.17g/t over 21.49m) and 0.76g/t over 30.59m (including 1.05g/t over 14.7m). MSW12-308 intersected 0.77g/t over 30.2m with a higher grade core of 1.12g/t over 10.6m.

The drill program also targeted the deeper extensions of the northwest cross-structure near the volcanic-sedimentary contact. One new drill hole and one drill hole extension were completed. Drill hole MSW12-309 tested the northwesterly continuation of the NW cross-structure near the volcanic-sedimentary contact. Drilling did not reach the target contact and no significant gold values were reported. MSW11-291A was extended to test for mineralization at greater depth in the Gap Zone. In addition to the previous 4 intercepts in MSW12-291A, four

more zones were intersected between 600 and 900 metres below surface. These include 14.19 g/t Au over 1.5 metres, 1.33 g/t Au over 42.0 metres with 1.88 g/t Au over 26.0 metres, 1.38 g/t Au over 21.0 metres with 2.98 g/t Au over 4.7 metres, and 0.94 g/t Au over 27.0 metres with 7.37 g/t Au over 1.0 metre. The occurrence of multiple gold zones with both high and low grade components confirms the potential for large and higher grade zones in this target area similar to those discovered at depth in the Southwest Zone.

Drilling has expanded and confirmed the continuity of the Gap Zone mineralization and highlighted its expansion and grade potential to depth.

### *Windjammer*

Drilling on Windjammer in the 1980s by Noranda (58 holes) defined two separate gold zones, Windjammer South and Windjammer North. Windjammer was acquired in 2007 and is in both Garrison and Michaud Townships immediately adjacent and contiguous to the eastern Golden Highway Project.

Drilling to date has defined Windjammer Central as a third gold zone hosted in the sediments north of the main Windjammer South iron formation and south of the Windjammer North volcanics along the volcanic-sedimentary contact. Additional potential remains in those areas peripheral to Windjammer North and Windjammer South as well as easterly within the sediments.

### **Windjammer North**

Windjammer North is located one kilometre north of Windjammer South on the northern boundary of the Destor and is on strike with Moneta's North Zone (Last Chance, Twin Creek, Miller and Landing Zones) which has returned erratic but encouraging gold intersections including 11.3 g/t over 3.7 metres, 20.6 g/t over 1.2 metres, 8.6 g/t over 2.5 metres, 13.0 g/t over 3.1 metres and 13.0 g/t over 1.8 metres.

In total, this area represents an under-explored strike length of 4.5 kilometres. Windjammer North has been defined by 21 drill holes over 400 metres along strike with intersections including 6.37 g/t over 5.9m core length. Mineralization occurs in altered ultramafic to mafic volcanics or altered mafic volcanics consisting of quartz carbonate veining in high strain zones with carbonate, silica, fuchsite, and sericite alteration, and as auriferous, strongly carbonatized, sericitized, and pyritized, mafic volcanic rocks.

Moneta undertook preliminary modeling in 2009 and completed a three hole (1,388 m) drill program to assess the historical Noranda work. Extensive alteration with gold mineralization was intersected, all similar to the historical data in drill holes MWJ09-26/27/28 drilled grid north to south and continued into the sediments that are now part of Windjammer Central. Windjammer North has now been incorporated into the updated NI 43-101 Resource Estimate and PEA.

### **Windjammer Central**

Windjammer Central is hosted in a large 500 metre wide sedimentary sequence located between Windjammer North and the iron formation of Windjammer South. Gold mineralization has been intersected near surface in wide intervals in the sediments along the volcanic contact. The gold mineralization is similar to the adjacent Windjammer South gold resource and is in the footwall of the steeply northerly dipping volcanics of the Destor Porcupine Fault Zone and Windjammer North gold zone. Windjammer Central is included as a significant new zone in the updated October 25<sup>th</sup>, 2012 Resource Estimate.

Windjammer Central has been systematically drill tested in 2012 near surface on 100m horizontal and vertical drill hole spacing both along the volcanic/sedimentary contact over a 750 metre strike length, extending up to 350 metres southerly in the footwall sediments and to a depth of 350 metres. Previously reported drill highlights included MWJ11-51 (0.97 g/t over 22 m or 0.72 g/t over 57 m), MWJ11-53 (1.02 g/t over 73 m or 0.76 g/t over 140 m), MWJ11-55 (0.94 g/t over 54 m including 1.42 g/t over 26 m), and MWJ11-57 (1.06 g/t over 22.0 m or 0.72 g/t over 55 m).

MWJ12-60 stepped 100m to the west from MWJ11-55 targeting mineralization at the volcanic/sedimentary contact intersecting 0.71g/t over 59.0m including 1.01/t over 23.0m, and 0.85 g/t over 33.0m including 0.99 g/t over 20.0m. Similarly MWJ12-61 stepped out 100m to the east from MWJ11-55 and intersected 0.69g/t over 21.9m including 1.21g/t over 6.5m and 1.03/t over 11.4m in the contact area. MWJ12-65 stepped out 100m to the west from MWJ12-60 and at the contact intersected an alteration zone with 1.09g/t over 18.0m. MWJ12-69, drilled at shallow elevation in the sediments between MWJ12-60 and MWJ11-55, intersected 1.83 g/t over 10.0m including 8.81 g/t over 1.0m.

MWJ12-66, MWJ12-68, and MWJ12-71, stepped along the volcanic/ sedimentary contact further to the east of the gold zone. MWJ12-66 intersected 1.33g/t over 7.8m, and 0.81g/t over 7.3m, MWJ12-68 returned 35.86g/t over 0.5m and MWJ12-71 intersected 0.64g/t over 7.0m and 0.81g/t over 6.0m. MWJ12-72 filled a significant data gap in the deeper and central portion of Windjammer Central mineralization in the sedimentary-volcanic contact area, intersecting 0.96g/t over 20.0metres and 0.89g/t over 14.45m all within a wider zone of 0.66g/t over 153.4m.

Drill hole MWJ12-74 intersected 0.94g/t over 12.0m including 1.62g/t over 6.0 metres. MWJ12-75 encountered three distinct zones of 0.70g/t over 67.0m, 0.72g/t over 18.0m, and 0.83g/t over 17.45m within a broad mineralized zone of lower grade material. MWJ12-76 intersected 0.83g/t over 9.28m and 0.73g/t over 35.0m including 0.97g/t over 21.0 metres. MWJ12-77 intersected 1.01g/t over 6.0m, and 1.03g/t over 28.0m including 1.96g/t over 12.0 metres. MWJ12-78 intersected 0.80g/t over 42.1m and 0.56g/t over 33.0m.

MWJ12-79 intersected shallow and wide low grade gold mineralization of 0.69 g/t Au over 40.0 metres including 1.11 g/t Au over 13.0 metres and deeper 1.58 g/t Au over 3.0 metres in the southeastern portion of Windjammer Central.

Further drilling within Windjammer Central is planned to continue to refine the PEA and test the limits to the mineralization of this large and pervasive gold system characterized by wide lower grade zones enhanced with higher grade intervals.

### **Windjammer South**

Previous drilling on Windjammer South identified several gold-bearing zones within a mineralized system currently known to extend for 500 metres along strike to a depth of 350 metres with a moderate dip to the southeast and open both along strike and to depth. Windjammer South closely resembles the style of mineralization in the nearby Southwest Zone where gold mineralization is typically hosted by fine quartz stringers and veining found within variably altered (hematite, silica, ankerite, and sericite) Timiskaming sediments forming the hanging wall to a thick banded oxide facies iron formation with potential for sulphidization.

Drilling in 2011 resulted in significant resource expansion at shallow depths particularly in the more southerly hanging wall of the iron formation and along its strike, including westerly into the Gap area between Windjammer South and the East Block of the Southwest Zone. Wider spaced drilling (100m step-outs) in the hanging wall sediments was undertaken with mineralization, in the form of both stockwork and high grade quartz veins, being intersected in all drill holes.

2012 drilling focused on the Windjammer South potential 2011 "in-pit" northerly resource expansion which overlaps with testing the southern portion of the Windjammer Central sediments. MWJ12-62 and MWJ12-63 were drilled on very wide 200m spacing along the north contact of main Windjammer South iron formation while MWJ12-64 stepped 200m west.

MWJ12-62 intersected 1.46g/t over 6.3m and 0.69/t over 23.0m in the northern and deeper portion of the hole, north of the Windjammer South iron formation and into Windjammer Central. MWJ12-63 intersected patchy low grade alteration with no significant results. The western most hole MWJ12-64/64A intersected unaltered greywacke with no significant assay values. Untested potential remains both north and south of the iron formation in the eastern and southern areas of the conceptual Windjammer South open pit.

### *55 Zone*

With the completion of the 2010 drill program, a total of 64 drill holes (19,393 metres) were drilled in the *55 Zone* by Moneta (36 holes), the Michaud Joint Venture (10 holes), Acrex (13 holes), and Lac Minerals (Barrick) (5 holes). Significant and multiple gold mineralized veins and vein alteration zones were intersected defining a mineralized system currently extending for over 350 metres along strike. The system is within a corridor of variably altered Timiskaming sediments along ultramafics of the Destor immediately to the north. Scattered narrow syenite dykes have also been intersected within this window. The northern contact was typically marked by narrow hematite and magnetite variably developed iron formation while the southern limit is a relatively unaltered and intercalated purplish hematitic iron formation/chloritic greywacke-sandstone sequence.

The 55 Zone contains a combination of quartz and quartz/carbonate/feldspar stringers, veins and stockworks with variable orientations. The altered wall rock is predominantly and pervasively sericitized and ankeritized with pyrite 3% to 5% and up to 10% locally. The 2010 drilling targeted the higher grade series of northerly dipping and stacked (en echelon) laminated quartz veins with widths up to 3 metres and frequently associated with brecciation. Additional high grade mineralization was found to occur in the northern iron formation when intersected by these vein systems resulting in local sulphidization of the iron formation.

Three holes were completed in early 2012 targeting the eastern extension of the zone as a follow-up to the 2011 NI 43-101 Resource Estimate. Two holes M55-12-37 and 39 were completed on a 100m stepout profile, the third hole, M55-12-38 is an additional 100m stepout. Best gold mineralization was intersected in hole M55-12-37 with 1.05g/t over 14.0m including 2.24g/t over 5.0m associated with a felsic dyke, a common feature in the central part of the zone. The other two holes intersected patchy and weak alteration with no significant gold values.

The current drilling indicates a moderate and approximately 100m extension of the zone to the east centered around a felsic porphyry dyke system as seen previously within the zone. The mineralized system now extends for over 450 metres along strike, still within the corridor of variably altered Timiskaming sediments along ultramafics of the Destor immediately to the north.

Currently “in-pit” and “out-of-pit” resource expansion opportunities are being evaluated as drill targets for both the sulphidized iron formation and quartz vein zone style of gold mineralization along strike and to depth.

### *Other Golden Highway Properties and Exploration*

#### **Guibord**

Moneta’s Guibord land position of 26 claim units (14 staked and 12 patented), located near the former Ross Mine, is subject to the Guibord JV with St Andrew (75% interest). St Andrew’s program in Q4 2009 completed 1,719 metres of drilling in 6 holes targeting structural and geophysical features including the Destor Porcupine Fault /Deformation Zone (“Destor”) crossing the north-easterly portion of the property. Best results were in hole MHG09-01 returning 3.18 g/t gold over 7.5 metres including 10.18 g/t gold over 1.5 metres from the hanging wall of the Destor. Follow-up work has been recommended. No additional work has been completed in 2012.

#### **Barnet**

Moneta entered into an agreement (2002) with St Andrew on certain properties in the Michaud and Barnet Townships to form the Barnet JV with St Andrew vested at 50% interest. No work was completed in 2012 on the property.

#### **Garrison**

In Garrison, St Andrew had completed the option (2007) and became vested with a 50% operating interest. No further work was undertaken in 2012 on the Garrison JV.

## 7 PORCUPINE CAMP

Several projects constitute Moneta’s activities in the Porcupine Gold Camp where Moneta continues to maintain a large land holding. Camp gold properties are North Tisdale, Nighthawk Lake, Kayorum, and Denton-Thorneloe. No exploration work was carried out in 2012 on the Nighthawk, Kayorum, and Denton-Thorneloe properties. Additional properties are historical base metal projects and include Loveland Nickel, Kamiskotia, and Fripp. The under explored nature, higher gold and recovering base metal prices with new activity in the immediate areas, has enhanced these properties’ strategic value with gold remaining as the Company’s focus.

Several companies are actively exploring adjacent properties including those along the Destor and Pipestone Fault zones, and within the core historical Timmins camp. Porcupine Gold Mines (Goldcorp) is deepening Hoyle Pond and pursuing additional gold mineralization in sediments, as well as moving ahead with development of the major Hollinger open pit project adjacent to Moneta’s former mine and Kayorum property. Lake Shore Gold continues to advance their development and exploration programs on both the Bell Creek and Timmins West complexes.

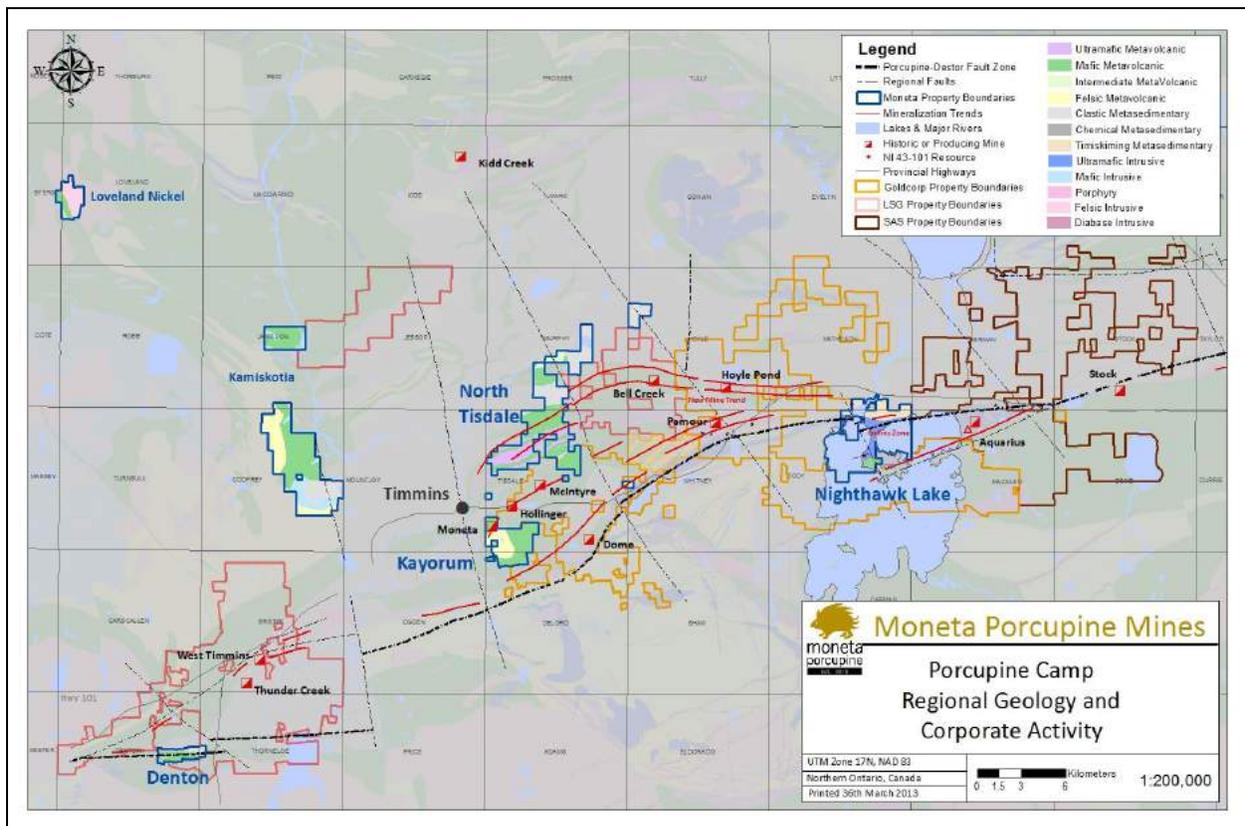


Figure IV – Porcupine Camp Projects

### 7.1 NORTH TISDALE

#### Introduction

Moneta maintains a large land holding in north Tisdale Township. The under-explored nature of the property, higher gold price and new activity in the immediate area has enhanced these properties’ strategic value in the search for gold mineralization along the highly prospective "New Mine Trend".

### *Property Description and Location*

North Tisdale consists of 40 patented, 9 leased, and 121 unpatented mining claim units for a total of 170, located in Tisdale, Murphy and Hoyle Townships, all north of Timmins and covering approximately 2,700 hectares. The property can be subdivided into four general areas, West Tisdale, North Tisdale, Murphy/Hoyle and Porcupine Prime. All claims are 100%-owned by Moneta subject to underlying encumbrances as follows; 32 single unit patents with a 2% NSR, one four-unit patent with a 10% NPI, nine staked units with a production royalty of \$1/ton, 51 staked units with a 15% NPI, eight staked units with a 2% NSR, and three staked units with a 1% NSR. A listing of the staked claims is available from the Ontario Mining Recorder.

Several patented surface rights are also owned by Moneta, specifically, lands adjoining and containing the core logging facility (approximately 13 hectares), those with underlying aggregate royalties (approximately 60 hectares), and 16 hectares within the Porcupine Prime block.

### *Accessibility, Climate, Local Resources, Infrastructure and Physiography*

*North Tisdale* is easily accessible by vehicle and is located within the (greater) City of Timmins approximately six kilometres north along Highway 655 from the Highway 101 intersection. An extensive network of trails and old roads provides excellent access in an area that is primarily sand covered with local. Drilling operations are possible throughout the year although some areas are better accessed during the winter.

Climate is typical of northeastern Ontario with below freezing temperatures ( $-5^{\circ}$  to  $-40^{\circ}\text{C}$ ) from November to April and brief periods of hot weather in the summer from  $10^{\circ}$  to  $30^{\circ}\text{C}$ . Precipitation averages 80 cm. a year, with a substantial portion falling in the form of snow averaging 2.4 metres per year.

Topography is generally flat with less than 25 metres of relief. The greatest relief is due to extensive sand and aggregate operations. The western and eastern portions of the property have swampy sections. Vegetation is comprised of spruce, alder, birch, poplar and pine.

A skilled labour force for mining and exploration is available in Timmins, a major supply and service centre for the mining industry. Communications and power are available along Highway 655 and cell phone coverage extends to the property. Potential milling, tailings and disposal sites are already available should future development take place.

### *History*

Historical work has been previously documented by subgroups within the project area. More recent work since 1995 is as follows on the consolidated property. Unless otherwise indicated, all drill intersections are drilled widths.

### *Consolidated Project Area Work*

A portion of the property was optioned by Placer Dome in 1995. In 1996, line-cutting as well as 144.7 line-km of magnetic and 131.0 line-km of electromagnetic (HLEM) surveys were completed detecting eleven conductors. Follow-up drilling consisted of seven diamond drill holes totalling 1,667 metres to test stratigraphy and numerous geophysical targets. Results included 1.99 g/t gold over 1.18 metres (including 10.0 g/t Au over 0.22 metres) from within "grey zone" altered mafic volcanics intercalated with graphitic argillite.

During 1997, Pentland Firth Ventures Ltd. and Moneta pooled their respective mining claims and formed a joint venture. A regional and property-scale data compilation of previous work was completed to delineate potential drill targets for gold mineralization. Field work included line-cutting and magnetic surveys over a portion of the Pentland lands. Higher potential portions of the property were selectively covered with Mobile Metal Ion (MMI) soil geochemical surveys. One 350-metre diamond drill hole was completed, targeting a MMI gold anomaly and intersecting intervals of "grey zone" altered mafic volcanics. Although no significant gold values were encountered in this drilling host stratigraphy and alteration was confirmed.

In 2002, a stripping, drilling, and blasting sampling and lab work program was undertaken by Leo Alarie & Sons Ltd. (“Alarie”) testing the mafic and ultramafic volcanics in West Tisdale for their development potential of a quarry for high-specification aggregates. Results were positive for coarse fraction concrete stone. Alarie advanced the quarry development with permitting, site design, and stakeholder consultations into 2006. No further work was completed and the property returned to Moneta.

In 2003, Moneta Porcupine completed two IP profiles on ground in Murphy Township immediately to the north of the North Tisdale Project area, testing for west-southwest trending structures and graphitic argillite units within the sediments. No new geological features were delineated.

In 2004, Moneta completed two diamond drill holes totalling 536 metres designed to test mafic/ultramafic/argillite (often graphitic) contacts and complete or expand geological sections. No significant gold mineralization or alteration was intersected.

In 2004/2005, the project area was traversed by a seismic profile line under the Discovery Abitibi Initiative along much of Highway 655 and onward to the south through Timmins, passing through Murphy and Tisdale Townships. The data was released in 2005 and detailed follow-up modelling tied into the geological drill profiles has been proposed that may reveal deep-seated fault systems parallel to the Destor and help define the architecture of the Porcupine Gold Camp.

In 2005, a diamond drill hole (281 metres) was completed in central Tisdale Township testing the extension of graphitic argillite/mafic volcanic stratigraphy for gold mineralization potentially analogous to that of the Owl and Bell Creek deposits. The target stratigraphy was intersected with no significant results.

In 2006, diamond drilling (299 metres) in North Tisdale and IP/ground magnetic surveys in West Tisdale were completed. West Tisdale is the under-explored western portion of the property where historically 3.96 g/t over 0.3 metres was intersected in a quartz-tourmaline vein. The geophysics program consisted of line-cutting a 19.5 km. grid with 100-metre spaced north-south gridlines turned off an east-west baseline. A pole-dipole IP and ground magnetic survey was completed and several IP anomalies and magnetic high trends (interpreted as ultramafic volcanics) were identified.

In 2007 a diamond drill hole (350 metres) was completed on strike west northwest of the 2006 IP survey area. This drill hole closed a data gap intersecting intercalated mafic and ultramafic volcanics with barren ultramafic volcanics intersected.

In 2008 a diamond drill hole (359 metres) was completed undercutting a Placer Dome 1996 drill hole in the southern prospective horizon that had intersected low but anomalous gold values including a narrow vein returning 10.0 g/t over 0.22 metres. No significant gold mineralization was intersected.

In 2009, a 374 metre drill hole was completed on the northernmost mafic volcanic stratigraphy north of the previously defined targets to test a MMI (Mobile Metal Ion) soil geochemical anomaly potentially associated with grey zone type alteration previously established 400 metres on strike to the east. No significant mineralization was intersected.

In 2010 a two hole 787 metre shallow drill program was completed, testing a shallow interpreted WSW trending structure along an ultramafic/mafic volcanic contact (North Tisdale) and a NW structure (Prime). Structures were defined and quartz and quartz-carbonate veining intersected. There were no significant gold values.

In 2011, a deep penetrating Quantec “Titan 24” Induced Polarization (IP) and Magneto-telluric (MT) survey was completed on two north-south profiles with final interpretation completed in Q1 2012 outlining several deeper anomalies.

## *Geological setting*

### **Regional Geology**

*North Tisdale* is in the Porcupine Gold Camp within the western part of the Abitibi Greenstone Belt, typically comprised of mafic to ultramafic volcanic assemblages which contain or are bounded by sedimentary basins. Syn-volcanic to post-tectonic felsic to ultramafic intrusives are abundant in the volcano-sedimentary assemblage.

The majority of the rock types underlying the Timmins area are Archean in age. Metavolcanic rocks have been subdivided into two groups, the Deloro and Tisdale assemblages. The Deloro Group is largely composed of calc-alkaline metavolcanics, primarily andesitic and basaltic flows in the lower part, and dacitic flows and, dacitic/rhyolitic pyroclastics towards the top of the sequence. Iron formation is common at or near the top of the group. Most of the Deloro Group is confined to a large domal structure located in the southern part of the area. A major change in volcanism marks the beginning of the younger Tisdale Group. The basal formations are largely made up of ultramafic to mafic komatiitic flows, which are overlain by a thick sequence of tholeiitic basalts. The top of the group is composed primarily of calc-alkaline, dacitic volcanoclastics. Metasedimentary rocks, including interlayered wacke, siltstone and conglomerate are interpreted to be coeval with the upper part of the Deloro Group and all of the Tisdale Group. This turbidite sequence, together with a thin sequence of overlying fluviatile sediments, has been referred to as the Porcupine Group. Small quartz-feldspar porphyry intrusions, possibly of subvolcanic origin, intruded into a restrictive stratigraphic interval of the Tisdale mafic flows.

A major structural break, the Destor, trends northeast across the area, but is south of the property. North of the Destor, two periods of folding have been interpreted; an original north trending series of folds which have been refolded about an east-northeast axis. The main axis of the later folding is delineated by the Porcupine Syncline.

Virtually all of the gold production (70 million ounces) in the area has been from quartz carbonate veins in metavolcanic/metasedimentary rocks and quartz stringers in porphyries north of the Destor in the Tisdale Group. Most of the auriferous veins tend to be controlled by anticlinal fold axis.

### **Property Geology**

The area is underlain by the lower portion of the favourable Tisdale Assemblage stratigraphy and most of the magnesian tholeiitic rocks of the Tisdale Group and the lower formation (mainly sediments) of the Porcupine Group, all on the north limb of the isoclinal North Tisdale Anticline. Recent government field work, compilation and interpretation has confirmed that the property is underlain by an east-west trending belt of intercalated (tholeiitic) mafic volcanics and minor (komatiitic) ultramafic volcanic flows and variably graphitic argillites. Much of the property is covered by overburden (5 to 50 metres).

### **Target Mineralization**

Gold mineralization is hosted mainly within quartz-sulphide-carbonate stockwork zones occupying porphyry/mafic/ultramafic/graphitic argillite contacts and/or structural zones. Although portions of the property may host the potential for an extension of the Hollinger-McIntyre gold system to the northeast and the western extension of the Pipestone Fault system, the primary target remains the western extension of the Bell Creek-Owl Creek setting as this stratigraphy crosses the central portion of the property.

Historical gold intersections are generally associated with grey-zone alteration and graphitic argillite with anomalous gold tenors. Two target areas within this stratigraphy have been defined in the northern and southern parts of Con VI, with the latter containing best gold values of 2.44 g/t over 3.05 metres, 1.32 g/t over 4.12 metres and 1.54 g/t over 1.52 metres. On strike to the west of this zone, drilling by Placer Dome (1996) intersected 1.99 g/t gold over 1.18 metres including a narrow quartz vein returning 10.0 g/t over 0.22 metres. More recent drill holes along strike to the east and north-south across the greater target stratigraphy returned no significant gold values.

### *Exploration Program*

The North Tisdale property is currently being reviewed for target areas requiring drilling to greater depth. These areas are expected to be found primarily in the central portion of the property where the “New Mine Trend” and its host volcanics are believed to cross trending west-southwest.

To advance this targeting, a Q4 2011 deep penetrating Quantec “Titan 24” Induced Polarization (IP) and Magneto-telluric (MT) survey was completed on two north-south profiles. Larger scale lithological features were carried to depths beyond the current drilling and more subtle anomalies were identified as potential drill targets in the final interpretation completed in 2012.

In addition, 2012 seismic modelling was completed to expand the property’s potential for targets below surface. Areas of potential structural interest are related to several flat lying structures as well as high angle structures. The projection of these deeper targets to surface requires further work including assessing any correlation to existing drilling data.

The West Tisdale area continues to be an area of interest with untested targets from the 2006 IP/mag ground survey indicating a central east-westerly trending series of IP anomalies. These appear to be offset by faulting towards the west and the historical McMahon shaft and Pentland diamond drill hole with known quartz-carbonate veining and grey zone alteration. Historical overburden drilling anomalies are also concentrated south of this IP trend.

## **7.2 NIGHTHAWK LAKE PROJECT**

### *Summary*

The *Nighthawk Lake* property is located at the eastern end of the *Porcupine Camp* on Nighthawk Lake approximately 30 km east of Timmins primarily in Cody and Matheson Townships and consists of both patented (31), leased (6) and staked (96) claim units for a total of 133 claim units (~2,130 hectares).

The property is within a “mini gold camp” defined primarily by gold mineralization along the Nighthawk Break, a prominent splay off the Destor Porcupine Fault/Deformation Zone. The project is along the Destor, immediately north of the Nighthawk Break hosting Goldcorp’s Nighthawk Mine and several other gold zones, as well as St Andrew’s Aquarius Mine.

Moneta’s 1997-2010 drilling resulted in several gold intersections of economic merit (up to 9.54 g/t gold over 5.75 metres) over a strike length of 700m that define the Collins Zone. The gold mineralization is hosted within a moderately northerly dipping broad zone of highly altered ultramafic volcanics in contact with overlying Timiskaming sediments and is similar to the nearby Aquarius Mine consisting of quartz stringers within green carbonate alteration zone.

### *Exploration Program*

#### **Collins Patents**

The Collins Zone area remains a priority project target. In Q4 2010, a structural review was completed on the mineralization identifying east-west and north-northwest structures, both north and northeast dipping. A follow-up drill program consisted of 3 holes for a total of 709 metres with final results received in Q1 2011. No additional exploration work has been undertaken in 2012.

With renewed activity in the area, the Company is evaluating the potential expansion of the higher grade within the zone to support a near- surface bulk tonnage gold resource given the style of gold mineralization, proximity to milling infrastructure, and potentially favourable zone geometry.

### 7.3 DENTON THORNELOE PROPERTY

#### *Summary*

The *Denton-Thorneloe* property is a 16 claim unit mining lease located in the emerging West Timmins gold area driven by Lakeshore Gold's mine development and discoveries. The property is less than 5km to the southwest with known gold mineralization to the north and on strike to the west.

Although known primarily for its two historical nickel zones discovered by Hollinger in 1958-60, a gold exploration strategy is being developed given its location along the Destor and documented veining, strong shearing and alteration. Several anomalous gold values were intersected in past Hollinger and Falconbridge drilling that focused on nickel mineralization. The 2009 IP program in combination with the historical ground magnetic survey has effectively mapped the property geology and generated several priority targets potentially relevant for gold mineralization.

#### *Exploration*

The geophysics and drilling to date indicate continued potential for economic nickel mineralization as well as untested gold potential. No exploration work has been completed in 2012.

### 7.4 KAYORUM AND MONETA MINE PROPERTY

#### *Summary*

The *Kayorum* property is found within the City of Timmins and is located immediately south and southwest of the Hollinger Mine (65.8 Mt @ 0.29 oz/t for 19.3 Moz gold production to depth of 1,662 metres) site and includes the former Moneta Mine. The property consists of 52 claim units (46 patented and 6 leased) located immediately south and southwest of the Hollinger mine and is a consolidation of several historical properties. The former Moneta Mine (314,829 tons @ 0.47 oz/t for 149,250 oz.) occupies the northwest portion of the property.

The adjacent Hollinger Mine project has completed advanced permitting, feasibility, and consultation stages. Development of a multiphase 200-250 metre deep open pit is proceeding by Porcupine Gold Mines (Goldcorp) with haulage infrastructure completed. The project is based on a 2010 resource of 3.47Mozs and 782,000 oz reserve. Exploration drill programs have also identified several underground mining opportunities by ramp to -400 metres and existing underground infrastructure for both the Hollinger (Millerton) and McIntyre (Central Porphyry Zone) mines.

Since 1990, several exploration programs have been completed under option agreements with Cogema, Cameco, and Placer Dome (Goldcorp). No exploration work was undertaken on the Kayorum Project in 2012.

#### *Moneta Mine*

The Moneta Mine is located in the NW portion of the property and mined the continuation of Hollinger Mine veining across the property boundary. Despite several exploration phases from 1911 to 1935 little mineralization of interest was found. Notable is a 1931 surface drill hole intersection of 1.23 oz gold over a core length of 9.9 feet. Mineralization occurs near the contacts between a pillowed and amygdaloidal flow, and a massive coarse grained leucoxene flow, with black shale along both contacts of the these mafic rocks. The ore zone consists of heavy sulphide replacement of brecciated pillowed flows with visible gold observed often associated with brown sphalerite, all in a quartz-carbonate matrix.

In 1936, a 10,590 foot drill program defined a high grade vein that led to rapid underground development of the Moneta Mine by 1938. Production ceased in 1943 after production of 149,250 oz gold from 314,829 tons at an average grade of 0.47 oz/t. Mine infrastructure included a shaft to 1492 feet and 6 levels of development and mining.

In late 2010 Moneta initiated a geological, mining, and structural review compiled into a 3D model, in order to assess the brownfields potential of the former mine and its immediate area. Additional work was completed in 2011 to facilitate a closure plan for the Ministry of Northern Development and Mines as outlined below.

### Geology

The Kayorum Property is located within the Abitibi Greenstone Belt in the Porcupine Gold Camp which hosts gold deposits such as the Hollinger, McIntyre and Dome. These deposits are generally comprised of single or multiple gold bearing quartz-carbonate veins with or without albite, tourmaline, sericite, pyrite and other sulphides and native gold within folded mafic volcanic host rocks that have also been altered with carbonate, sericite, albite, and pyrite. Gold occurs in both the veins and the wallrock. Deposits are typically spatially associated with quartz-feldspar porphyry stocks and dykes that have been localized along a major structural break such as the Destor-Porcupine Fault.

The mafic volcanic stratigraphy in the core of the camp has been divided into the Deloro and Tisdale Group, with the Tisdale comprised of four formations, the Northern, Central, Vipond and Gold Centre. Narrow intervals of interflow sediments are formed within and at the contacts of these formations, and veins are often localized on these horizons. The Dome Mine is located mainly within the Vipond Formation, and the Hollinger-McIntyre Mines are mainly within the Central Formation. The Krist felsic volcanoclastic unit overlies the Tisdale Group.

Within the Kayorum Property, the Central, Vipond, Gold Centre and Krist Formations are exposed. This stratigraphy shows complex folding patterns, having been influenced by the Porcupine Syncline, the South Tisdale Anticline, and the Kayorum Syncline.

### Exploration

Pursuant to an Order received from the Mining and Lands Commissioner related to the Company's historic Moneta Mine, the Company undertook necessary steps and submitted a mine closure plan in 2011. The Ministry of Northern Development and Mines ("MNDM") provided comments on the closure plan in November 2011. The Company submitted an amended closure plan in December 2011 addressing the minor comments. The MNDM provided further comments on the amended closure plan in February 2012. The Company responded by submitting a proposal to resolve the minor outstanding issues and the MNDM responded with further comments in July 2012. No provision was made in the financial statements as the Company is in discussions with the MNDM to close this matter.

The Company engaged a geotechnical consultant to prepare the mine closure plan, identify and evaluate the former mine hazards, and provide direction on an appropriate geotechnical program.

The geotechnical program, completed in 2011, required a compilation of available historical materials to identify hazards related to the former mine workings, ground penetrating radar surveying to help locate subsurface changes potentially related to voids, detailed diamond drilling to assess bedrock conditions (523 metres in 15 drill holes), and progressive rehabilitation of identified hazards by capping a fill raise and small historical shaft.

Although beyond the scope of work required by the Order, the Company elected to complete progressive rehabilitation of certain mine hazards, where feasible.

Residual ore was identified within and adjacent to the mine workings and there is untested potential for additional mineralization to depth and along strike as well as on other property areas.

## **7.5 PORCUPINE CAMP: BASE METAL PROJECTS**

Moneta hold a 100% interest in base metal projects consist of a combination of 138 staked, 56 leased, and 1 patented claim units in Loveland, Godfrey, Jamieson, and Fripp Townships. These claims (Loveland Nickel, Kamiskotia, and Fripp) were subject to a purchase and sale agreement in 2008 however the purchaser defaulted and elected to return the claims in good standing to Moneta in Q4 2011.

Historical work up to the mid 1970's on Loveland Nickel by Hollinger Gold Mines outlined nickel-copper mineralization with a non NI43-101 compliant historical resource estimate of 422,000 tons grading 0.71% Ni and 0.42% Cu. Mineralization is primarily associated with quartz diabase intrusive in intermediate to mafic volcanic flows and intrusives. Potential for additional mineralization remains high given the recent success on the immediately adjacent property to the northwest.

Historical zinc and copper mineralization is also known on the Kamiskotia property. Gold potential is not well understood but appears to be primarily associated with grey zone alteration in mafic volcanics as well as with felsic intrusives in sediments that are believed to represent northerly fault displaced West Timmins camp stratigraphy.

The Fripp copper zone was originally found by Hollinger Gold Mines and is estimated to contain a non NI 43-101 compliant historical resource of 55,000 tons grading 2% copper. The zone is hosted by mafic intrusives (diorite, quartz diorite and quartz gabbro). Additional work is required on this shallow mineralization.

The Company continues to evaluate options, including option or sale to interested parties or exploration itself to test the mineralization potential.

## **8 QUEBEC BASE METAL PROJECT**

Moneta continues to maintain the Kelly Lake Ni-Cu-PGM deposit in good standing (13 claim units).

## **9 CAPITAL STRUCTURE**

The Company is authorized to issue an unlimited number of Class A Preferred shares, Class B Preferred shares, Common shares, and Non-voting shares. Class A Preferred shares are entitled to preference as to the payment of dividends and distribution of the remaining property of the Company on dissolution over Class B Preferred shares, Common shares and Non-voting shares. Class B Preferred shares are entitled to preference as to the payment of dividends and distribution of the remaining property of the Company on dissolution over Common shares and Non-voting shares. The Non-voting shares shall rank equally with Common shares in all respects except that the holders are not entitled to vote at shareholder meetings.

The issued and outstanding share capital at December 31, 2012 is 193,472,382 (2011: 157,752,419) Common shares.

## 10 MARKET FOR SECURITIES

The Company's common shares trade on the Toronto Stock Exchange ("TSX") under the symbol ME, on the United States OTC market under the symbol MPUCF, and the Berlin Stock Exchange, the Xetra, and Frankfurt Stock Exchange under the symbol MOP. Moneta's share trading on the Toronto Stock Exchange for 2012 is presented in the table below:

Month	Price Range			Volume
	High	Low	Close	
December	0.32	0.25	0.29	263,300
November	0.28	0.22	0.26	372,700
October	0.25	0.21	0.24	220,300
September	0.25	0.18	0.23	178,400
August	0.19	0.13	0.19	175,600
July	0.18	0.14	0.16	70,500
June	0.21	0.16	0.16	76,100
May	0.22	0.17	0.19	67,600
April	0.27	0.18	0.22	134,600
March	0.36	0.23	0.27	230,800
February	0.39	0.28	0.35	497,700
January	0.34	0.18	0.29	422,500

## 11 DIRECTORS AND OFFICERS

The following are Moneta's officers and directors:

Name, Place of Residence and Position with Corporation	Principal Occupation	Period Served as a Director	Common Shares Beneficially Owned or Controlled	% of voting Common Shares
Warren Bates, P. Geo. <sup>(1)(2)(3)</sup> Toronto, Ontario (Canada) Director	Senior Vice President, Exploration of Pelangio Exploration Inc.	Since June 16, 2009	132,353	0.07%
Richard Boulay, B.Sc. Calgary, Alberta, (Canada) Interim CFO and Director	Chairman of Latin American Minerals	Since June 11, 2010	2,223,000	1.15%
Alex D. Henry, C.A. <sup>(1)(2)(3)</sup> Toronto, Ontario (Canada) Director	Principal of Hampton-Metrix Capital Partners Inc.	Since June 25, 2005	3,225,000	1.67%
Ian C Peres, CA Toronto, Ontario (Canada) President & CEO and Director	President and Chief Executive Officer	Since August 7, 2008	4,477,222	2.31%
Patricia Sheahan <sup>(1)(2)(3)</sup> Toronto, Ontario (Canada) Director	Independent director to TSX-listed mining companies	Since May 22, 2011	69,500	0.04%

<sup>(1)</sup> Member of the Audit Committee

<sup>(2)</sup> Independent Director

<sup>(3)</sup> Member of Compensation Committee

Other information, including information on the remuneration of senior executives and interests of insiders in material transactions are presented in the 2013 Management Information Circular available on SEDAR.

## **12 LEGAL PROCEEDINGS**

### *Order to file closure plan on Moneta Mine*

Pursuant to an Order received from the Mining and Lands Commissioner related to the Company's historic Moneta Mine, located on the Company's Kayorum project, the Company undertook necessary steps and submitted a mine closure plan in 2011. The Company's geotechnical consultant prepared the mine closure plan to identify and evaluate the former mine hazards and provided direction on geotechnical drilling completed by the Company during 2011. Although beyond the scope of work required by the Order, the Company elected to complete progressive rehabilitation of certain mine hazards, where feasible. The Ministry of Northern Development and Mines ("MNDM") provided comments on the closure plan in November 2011. The Company submitted an amended closure plan in December 2011 addressing the minor comments. The MNDM provided further comments on the amended closure plan in February 2012. The Company responded by submitting a proposal to resolve the minor outstanding issues and the MNDM responded with further comments in July 2012. No provision has been made in the financial statements as the Company is in discussions with the MNDM to close this matter.

### *Civil lawsuits*

Two parties which owned the surface rights and occupied buildings on the site of the former Moneta Mine, filed suit in 2005 against the Company, directors of the Company at that time, and other third parties claiming damages related to the mine subsidence. One of these parties also brought a claim for compensation under the Ontario Mining Act which was dismissed by the Mining Commissioner in March 2008. The Company believes the claims have no merit and intends to defend such claims vigorously. Accordingly, no provision has been made in these financial statements for these claims.

## **13 INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

The Company paid salary of \$400,000 (2011 - \$260,000) to an officer and director for the year ended December 31, 2012. The compensation was for services provided to the Company under an ongoing employment contract. The Company reported a salary of \$12,000 (2011 - NIL) to an officer and director for the year ended December 31, 2012. The amount was payable at December 31, 2012 and related to services provided to the Company. The Company reported a salary of \$6,731 (2011 - NIL) to an officer for the year ended December 31, 2012. The compensation was for services provided to the Company under an ongoing employment contract. The Company paid consulting fees of \$101,800 (2011 - \$121,300) to a related individual for the year ended December 31, 2012. The fees were for management consulting services provided to the Company. Directors' fees of \$31,534 (2011 - \$37,371) were expensed during the year ended December 31, 2012, with \$8,000 payable at December 31, 2012. During the year, 2,210,000 stock options (2011: 1,600,000) were issued to directors, officers and consultants. The stock options were issued out of the money with no intrinsic value however an accounting fair value of \$205,749 (2011: \$250,600) was reported based on the Black Scholes model. All related party transactions were completed in the normal course of business at the exchange amounts. There were no loans to Directors or Officers during the year (2011: \$NIL).

## **14 TRANSFER AGENTS AND REGISTRAR**

Moneta's transfer agent and registrar is Computershare Investor Services Inc., with principal offices in Toronto, Ontario.

## **15 MATERIAL CONTRACTS**

Moneta entered into no material contracts in the past three fiscal years outside of the ordinary course of business.

## **16 INTERESTS OF EXPERTS**

Stikeman Elliott, LLP of Toronto, Ontario act as legal counsel for the Company.

Sievert & Sawrantschuk, LLP are the independent auditors of the Company.

SRK Consulting, of Toronto, Ontario provides services related to structural geology to support the Company's exploration efforts.

P&E Mining Consultants Inc. ("P&E") authored the "Technical Report, Updated Mineral Resource Estimate and Preliminary Economic Assessment of the Golden Highway Project" published on SEDAR December 11<sup>th</sup>, 2012. P&E also authored the "Technical Report and Resource Estimates on the Windjammer South, Southwest Zone and 55 Zone Golden Highway Project Michaud and Garrison Townships North-Eastern Ontario, Canada", published on SEDAR January 16<sup>th</sup>, 2012.

George Cargill, Ph.D., P.Eng., of Cargill Consulting Geologists Limited, is the author of 2 reports, namely "NI 43-101 Technical Report on the Windjammer Project, Michaud and Garrison Townships, Ontario", published on SEDAR on July 28, 2008, and "Technical Report on the Windjammer Project, Matheson, Ontario", published on SEDAR on April 27, 2009.

No experts have received any securities or other property of the Company. The Company believes that none of the experts hold any securities of the Company.

## 17 GLOSSARY OF TECHNICAL INFORMATION

The estimated mineral reserves and mineral resources discussed herein have been calculated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") – Definitions Adopted by CIM Council on December 11, 2005 (the "CIM Standards") which were adopted by the Canadian Securities Administrators' National Instrument 43-101 *Standards of Disclosure for Mineral Projects* ("NI 43-101"). The following definitions are reproduced from the CIM Standards:

The term "**mineral reserves**" means the economically mineable part of a measured or indicated mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A mineral reserve includes allowances for dilution and losses that may occur when the material is mined. A "**proven mineral reserve**" is the economically mineable part of a measured mineral resource demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified. A "**probable mineral reserve**" is the economically mineable part of an indicated mineral resource, and in some circumstances a measured mineral resource, demonstrated by at least a preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

The term "**mineral resources**" means a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. A "**measured mineral resource**" is that part of a mineral resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. An "**indicated mineral resource**" is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the

economic viability of the deposit. The estimate is based on detailed and reliable exploration and test information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed. An **“inferred mineral resource”** is that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

The following technical terms may be used in this AIF, and may appear capitalized or in lower case, without any difference in meaning:

**Advance royalty** - A form of royalty where the payment is made before the start of commercial production.

**Albite** – A plagioclase sodium feldspar.

**Alkalic** - Containing either sodium or potassium.

**Alteration** - Any change in the mineral composition of a rock that is brought about by physical or chemical means

**Andesite** – Igneous rock of intermediate composition.

**Ankerite** - An iron rich carbonate mineral.

**Anomaly** - Geochemical and/or geophysical data, which deviates from the norm.

**Archean** - Oldest rocks of the Precambrian Era, older than about 2.5 billion years.

**Assay** - An analysis to determine the presence, absence or quantity of one or more chemical components.

**Au** – Chemical symbol for the element gold.

**Basalt** – Common dark and fine grained extrusive mafic volcanic rock.

**Base Metal** - A metal, such as copper, lead, nickel, zinc or cobalt.

**Belt** - A specific elongate area defined by unique geologic characteristics.

**Breccia** - Rock fragmented into angular components surrounded by a mass of finer grained material.

**Carbonate** - Mineral calcium carbonate (CaCO<sub>3</sub>) and often a rock composed principally thereof.

**Chalcopyrite** – Copper iron sulphide (CuFeS<sub>2</sub>).

**Chlorite** - A green platy iron-magnesium rich metamorphic mineral.

**Claim (Mineral)** – The area that confers mineral exploration/exploitation rights to the registered holder under the laws of the governing jurisdiction.

**Collar** - The top of a drill hole.

**Conglomerate** - A sedimentary rock composed of rounded to subrounded transported fragments greater than 2 millimetres (pebbles, cobbles, boulders) cemented into a solid mass.

**Dacitic** – Igneous rock intermediate in compositions between andesite and rhyolite.

**Diamond Drilling/Drill Hole** - A method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.

**Diabase** - A common basic igneous rock usually occurring in dykes or sills.

**Dip** - The angle at which a stratum is inclined from the horizontal.

**Dyke** - A tabular body of igneous rock cross cutting the host strata at a high angle.

**Epithermal** - A hydrothermal deposit formed close to surface at low temperature and pressure.

**Fault** - A fracture in a rock along which there has been relative movement between the two sides either vertically or horizontally.

**Fe** - Chemical symbol for the element iron.

**Feldspar** - A group of common aluminosilicate minerals.

**Felsic** - Igneous rock composed principally of feldspars and quartz.

**Fluvial/fluviatile** - Sedimentary material found in river beds.

**Fold** - Bend in strata or any planar structure.

**Foliation** - Parallel orientation of platy minerals or mineral banding in rocks.

**Footwall** - The wall or rock on the underside of a vein or structure.

**Formation** - A body of rock identified by lithological characteristics and stratigraphic position.

**Fracture** - A break in the rock, the opening of which allowing the entry of mineral-bearing solutions.

**Fuchsite** - Mica with a characteristic (emerald) green colour arising from the presence of chrome or vanadium.

**Gabbro** – A fine to coarse grained, dark coloured crystalline igneous intrusive rock composed mainly of calcic plagioclase, clinopyroxene and sometimes olivine.

**Geochemistry/Geochemical** - Study of variation of chemical elements in rocks or soil.

**Geology/Geological** – Study of the Earth's history and life, mainly as recorded in rocks.

**Geophysics/Geophysical** - Study of the earth by quantitative physical methods, either by surveys conducted on the ground, in the air (by fixed wing aircraft or helicopter) or in a borehole or drillhole.

**Gold** – A heavy, soft, ductile, malleable precious metal used in jewelry, dentistry, electronics and as an investment.

**Grams per tonne (g/t)** – A unit of measurement commonly used to quantify the concentration of precious metals.

**Greenstone belt** - Area underlain by metamorphosed volcanic and sedimentary rocks, usually in a continental shield.

**Greywacke** - Grey sandstone consisting of poorly sorted grains of quartz, feldspar and rock fragments in a clay matrix.

**Hanging wall** - The wall or rock on the upper side of a vein or structure.

**Hectare** - A square of 100 metres on each side.

**Hematite** - Black to reddish brown, non-magnetic iron oxide (Fe<sub>2</sub>O<sub>3</sub>).

**Horizon** - A defined layer within a stratigraphic sequence, having unique characteristics distinguishing it from the rest of the sequence.

**Igneous** - A classification of rocks formed from the solidification from a molten state.

**Infill drilling** - Any method of drilling intervals between existing holes, used to provide greater geological detail and to help establish resource/reserve estimates.

**Intrusive/Intrusions** - An igneous rock that invades older rocks.

**Iron formation (banded)** - Chemically precipitated rock consisting of repeated thin layers of chert (silica) and iron oxides commonly magnetite and/or hematite.

**Ironstone** - A sedimentary rock containing a substantial proportion of iron.

**IP/Induced polarization** - Method of ground geophysical surveying employing an electrical current to determine indications of mineralization through the measurement of resistivity and chargeability.

**JV/Joint venture** - business arrangement usually between companies that defines each party's vested interest in an asset.

**Komatiite** - A volcanic rock containing a high concentration of magnesium and generally a low concentration of silica.

**Mafic** - An igneous rock composed chiefly of dark iron and manganese silicate minerals.

**Magnetic Survey** - A geophysical survey conducted on the earth's surface that measures variations in the earth's magnetic field caused by variations in rock type or geological structures.

**Magnetite** - Black, magnetic iron ore, an iron oxide (Fe<sub>3</sub>O<sub>4</sub>).

**Mapping** – The art and science of recording geological observations on a map.

**Massive** - Solid (without fractures) wide (thick) rock unit.

**Metamorphism/Metamorphic/Meta** - A process whereby the composition of rock is modified by heat and pressure/A class of rock affected by metamorphism.

**Mg** - Chemical symbol for the element magnesium.

**Mineralization** - The concentration of metals and their chemical compounds in a body of rock.

**Molybdenite** - Molybdenum sulphide (MoS<sub>2</sub>)

**Mudstone** – A fine grained sedimentary rock originally composed of clay and mud.

**NSR** - Net Smelter Royalty – Royalty based on the actual gold sale price received less the cost of refining

**Ore** - Rock containing mineral(s) or metals that can be economically extracted to produce a profit.

**Orogen/Orogeny** – Deformation of a belt of rocks through folding and faulting, in many places accompanied by metamorphic and intrusive rocks that form mountains/the process of mountain building.

**Outcrop** - An exposure of bedrock at surface.

**Pillowed** - Volcanic rock texture that formed from the bulbous cooling of magma when cooled quickly in water.

**Plunge** - The vertical angle an ore body makes between the horizontal plane and the direction along which it extends, longitudinally to depth.

**Pluton** - Body of rock exposed after solidification at great depth.

**ppb** – Concentration in parts per billion.

**ppm** – Concentration in parts per million.

**Porphyry** - A rock consisting of larger crystals embedded in a more compact finer grained groundmass.

**Prospecting** – The art and science of searching for mineral deposits.

**Proterozoic** - The youngest part of the Precambrian from 2450 - 570 million years ago.

**Pyrite** - Iron sulphide mineral (FeS<sub>2</sub>).

**Pyroxene** – A calcium/sodium ferromagnesium silicate.

**Pyrrhotite** - A magnetic iron sulphide mineral (FeS).

**Quartz** - A mineral composed of silicon dioxide.

**Rhyolite** – Igneous rock of felsic (silica rich) composition.

**Sandstone** – A sedimentary rock composed mainly of sand-sized quartz and/or feldspar.

**Schist** – Rocks of medium-grade metamorphism with well-developed lamellar minerals.

**Sediment** - Solid material that has settled down from a state of suspension in a liquid; may be transported and deposited by wind, water or ice, chemically precipitated from solution, or secreted by organisms, forms in layers in loose unconsolidated form.

**Sedimentary** - Pertaining to or containing sediment or formed by its deposition.

**Sericite** - Generally light coloured iron, magnesium and sodium rich mica.

**Shear** - A planar zone of deformed rock caused by the movement of the rock.

**Siliceous** - A rock rich in silica.

**Sill** - A tabular body of igneous rock conforming to the strata it invades.

**Siltstone** – A sedimentary rock with an intermediate grain size finer than sandstone with a higher clay fraction.

**Soil Sampling** - Systematic collection of soil samples from a series of different locations in order to study the distribution of its geochemical composition.

**Specific gravity** - The density of a substance relative to the density of water expressed as  $t/m^3$ .

**Splay** – Branch of a fault.

**Stockwork** – A local higher density of veins/stringers at numerous orientations

**Strike** - Direction or trend of a geologic structure.

**Stringer** - A very small vein or irregular filament of mineral(s) cutting a rock mass, occurs independently or as a branch of a larger vein.

**Structure/Structural** - Pertaining to geological structure such as folds, faults, etc.

**Sulphide/Sulphidation** - A group of minerals in which one or more metals are found in combination with sulfur/rock that has been sulphidized.

**Syenite** - An felsic intrusive igneous rock composed chiefly of the mineral orthoclase

**Tholeiite** – Mafic volcanic rock with higher silica and lower sodium, potassium and magnesium content.

**Tuff/Pyroclastics** - A rock formed of compacted volcanic fragments.

**Turbidite** - Submarine landslide along a continental slope containing large masses of sediment.

**Ultramafic** – A dark coloured igneous rock with a low silica content and characterized by mafic minerals, such as olivine, amphibole and pyroxene.

**Unconformity** - A surface of erosion that separates younger rocks from older rocks.

**Vein** - A thin sheet-like intrusion into a fissure or crack, commonly bearing quartz /a small vein or cluster of veins.

**Volcanic** - Descriptive of rocks originating from volcanic activity.

**Volcano-sedimentary** - A mix of rocks formed by volcanic and sedimentary processes.