

# **VALUATION OF THE GARNET MINING DISTRICT – GARNET GOLD PROPERTY, MONTANA, USA**

**EFFECTIVE DATE:** 13 September 2019

**Prepared For:**

Garnex Gold Corporation  
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November 11, 2019

Mr. David Rodli, General Manager  
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1750 South Avenue West  
Missoula, Montana 59801

Via e-mail to: [dr@davidrodli.com](mailto:dr@davidrodli.com)

**Re:** Behre Dolbear Project 19-053 – Valuation of Garnex Gold Corporation – Garnet Mining District, Nancy Hanks Mine Property, Montana, USA

Dear Mr Rodli,

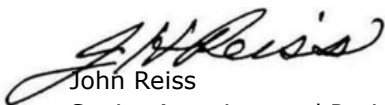
Behre Dolbear is pleased to submit its Final Report of the *Valuation of the Garnet Mining District – Garnet Gold Property, Montana, USA*, dated September 13, 2019 to Garnex Gold Corporation.

This report fulfills our obligations outlined in Behre Dolbear's Proposal 19-053.

The Behre Dolbear team has enjoyed the opportunity to work with you on this valuation project. We trust the findings contained in the report will provide Garnex with a valuation of its Nancy Hanks Mine property that is useful for your future purposes.

Please contact Ms. Amy Jacobsen or me if you should require further assistance on this project or have any questions.

Respectfully,



John Reiss  
Senior Associate and Project Manager

Attachment (Final Report)

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## GLOSSARY OF TERMS

- Development Drift** – A mine opening driven from the mine shaft or decline to gain access to the ore zone for extraction purposes.
- Dilution** – The contamination of ore with barren or sub-grade wall rock during blasting, which lowers ore grade and ore quality.
- Discount Rate** – A factor based upon the perceived risks in an investment or the rate of return required by an investor to a projected income stream from the investment.
- Exploration** – The search for mineral or ore by (1) geological surveys; (2) geophysical prospecting (may be ground, aerial, or both); (3) bore holes and trial pits; or (4) surface or underground headings, drifts, or tunnels. Exploration aims at locating the presence of economic deposits and establishing their nature, shape, and grade.
- Exploration Drilling** – Drilling bore holes by the rotary, diamond, percussive, or any other method of drilling for geologic information or in search of a mineral deposit.
- Face** – The exposed surface of the rock that is to be broken and extracted by mining activities.
- Fair Market Value** – The price a willing buyer will pay a willing seller for an asset, each possessing the base of knowledge about the asset and neither being under compulsion to complete the transaction.
- Income Approach Valuation** – A valuation derived from the free cash flow of a project, which is based upon revenues less operating costs, royalties, taxes, all general and administrative expenses, and capital investments.
- Indicated Resources** – Resources from which the quantity and grade and/or quality are computed from information similar to that used for Measured Resources, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for Measured Resources, is high enough to assume continuity between points of observation.
- Inferred Resources** – Resources from which estimates are based on an assumed continuity beyond Proven and/or Probable reserves for which there is geologic evidence. Inferred Resources may or may not be supported by samples or measurements.
- In-Situ** – In the natural or original position, as applied to a rock, soil, or fossil, occurring in the situation in which it was originally formed or deposited.
- Mining Level** – A main underground roadway or passage driven along a level course to afford access to stopes or workings and to provide ventilation and a haulage way for the removal of ore. Levels are commonly spaced at regular depth intervals and are either numbered from the surface or designated by their elevation below the top of the shaft or surface.
- LHD** – A mechanical shovel or other machine for loading coal, ore, mineral, or rock. Either a scraper loader; shaker-shovel loader; shovel loader; cutter loader; or gathering arm loader.
- Measured Resources** – Resources from which the quantity is computed from dimensions revealed in outcrops, trenches, workings, or drill holes; grade and/or quality are computed from the results of detailed sampling. The sites for inspection, sampling, and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth, and mineral content of the resource are well established.
- Mineral Resource** – Concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality, and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics, and continuity of a Mineral Resource is known, estimated, or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated, and Measured categories.
- Mineral Reserve** – This is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social, and governmental factors. These assessments demonstrate at the time of reporting that extraction could

## **GLOSSARY OF TERMS**

*(CONTINUED)*

reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

**Mine Decline** – A sloping underground opening for machine access from level to level or from the surface; also called a ramp.

**Mining Width** – The minimum width necessary for the extraction of ore regardless of the actual width of ore-bearing rock.

**Ore Block** – A section of an ore body, usually rectangular, that is used for estimates of overall tonnage and quality.

**Ore Deposit** – A mineral deposit that has been tested and is known to be of sufficient size, grade, and accessibility to be producible to yield a profit.

**Ore Face** – An ore body that is exposed on one side, or shows only one face, and of which the values can be determined only in a prospective manner, as deducted from the general condition of the mine or prospect.

**Outcrop** – The part of a geologic formation or structure that appears at the surface of the Earth; also, bedrock that is covered only by surficial deposits, such as alluvium.

**Patented Claim** – A claim to which a patent has been secured from the U.S. Government, in compliance with the laws relating to such claims.

**Probable Ore Reserve** – Areas of mineral believed to lie beyond the developed reserves but not yet proven by development.

**Proved Ore Reserve** – An ore deposit that has been reliably established as to its volume, tonnage, and quality by approved sampling, valuing, and testing methods supervised by a suitably qualified person. The Proved Reserve is the overridingly important asset of a mine, and by its nature is a wasting one from the start of exploitation unless it is increased by further development.

**Reserves** – That part of the reserve base that could be economically extracted or produced at the time of determination. The term reserves need not signify that extraction facilities are in place and operative. Reserves include only recoverable materials; thus, terms such as extractable reserves and recoverable reserves are redundant and are not a part of this classification system.

**Scaling** – Removal of loose rocks from the top or sides of underground openings. Also called barring down.

**Sill Pillar** – A block of ore entirely surrounded by stoping and left intentionally for purposes for ground control. Sill pillars remain between mining levels after the ore has been extracted. They may be removed at a future date but require special removal strategies.

**Stope** – Any excavation in a mine, other than development workings, made for the purpose of extracting ore. The outlines of the ore body determine the outlines of the stope. The term is also applied to breaking ground by drilling and blasting or other methods.

**Stull** – A timber prop set between the walls of a stope or supporting the mine roof.

**Unpatented Claim** – Mining claim to which a deed from the U.S. Government has not been received. A claim is subject to annual assessment work, to maintain ownership. A claim that requires \$100 of work to be done each year. A claim cannot be patented until \$500 has been spent on it.

**Vein** – A mineral body, thin in relation to its other dimensions, which cuts through the bedding and in which the minerals contained, are later than the surrounding country rock.



## **1.0 INTRODUCTION**

On January 17, 2019, the Nancy Hanks Mine and its entire land package was acquired from Commonwealth Resources, L.L.C. by the Garnex Gold Corporation (Garnex). During July of 2019, Behre Dolbear & Company (USA), Inc. (Behre Dolbear) was contacted by Garnex to provide an updated mineral valuation of the Nancy Hanks and Willie Underground Mines and the entire land package of patented and unpatented claims that comprise the property (collectively, the “Property” or the “Garnet Project”). Behre Dolbear is familiar with this Property and has previously performed a review of the Property’s 2011 Canadian National Instrument (NI) 43-101 report, a due diligence study, and valuation studies of the Property during 2011 and 2012 for a previous owner, Grant Hartford Corporation (GHC). Since 2012 to the present, the Property has essentially remained idle with its fixed assets left in place. There was a brief period of a small, open pit operation during 2014 to exploit surface oxides in the Dewey claims that ended in failure due to inadequate operating plans and execution.

This valuation report addresses the land value of 24 patented and 188 unpatented mining claims comprising the property package and the defined resources of the Property. In order to accomplish a valuation for the entire property with its assets and potential, several internationally accepted mineral valuation methodologies were reviewed and employed. These methodologies are described in detail within the body of this report.

On July 27, 2019, two Behre Dolbear Senior Associates, Mr. John Reiss (Project Manager) and Ms. Amy Jacobsen, conducted a site visit to examine the Property and discuss the project requirements with the Garnex General Manager, Mr. David Rodli and Mr. Bob Flesher, Director of Geology for Garnex. Also joining the site visit was Mr. Joseph Edington, representing the Garnex corporate management. During the visit, a surface tour of the Property was conducted (in particular, the mine camp and the Nancy Hanks Mine area). The site visit also included the proposed ore haulage road from the mine to the reload point at Beartown. Discussions occurred throughout the visit between Behre Dolbear and Garnex regarding project related issues.

### **1.1 PURPOSE AND INTENT OF THE VALUATION REPORT**

The purpose and intent of the report is to present Behre Dolbear’s opinion of the fair market value of the Garnet Project determined as of Midnight Mountain Daylight Savings Time on September 13, 2019 (Valuation Date). The report is intended to provide the valuation based upon interpretation of material information relevant to the asset in a clear and accurate manner. Garnex has indicated the valuation will be used in support of securing additional financing for moving the Garnet Project to production.

The report has been prepared in accordance with existing mineral property valuation codes, in particular the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Special Committee on Valuation of Mineral Properties (CIMVal). This code addressed issues specific to the valuation of mineral assets and is an internationally accepted valuation standards for mineral-related transactions.

The CIMVal Code defines fair market value as:

*“Fair Market Value means the highest price, expressed in terms of money or money’s worth, obtainable in an open and unrestricted market between knowledgeable, informed and prudent parties, acting at arm’s length, neither party being under an compulsion to transact.”*

### **1.2 PRIOR STUDIES COMPLETED BY BEHRE DOLBEAR**

Behre Dolbear has completed the following prior studies for the Garnet Project. These prior studies provided the background for completing the current valuation.

- “Garnet Gold Project Due Diligence Study” (Behre Dolbear Project 11-223A), dated March 27, 2012 – Maximilian Investors and the Grant Hartford Corporation engaged Behre Dolbear to undertake a technical due diligence of the Garnet Gold Project.
- “Compilation of Gold Transactions on a Comparative Basis for the Garnet Gold Project” (Behre Dolbear Project 12-097), dated June 28, 2012 – GHC requested Behre Dolbear to prepare a compilation of gold transactions to determine the position of the Garnet Gold Project on a comparative basis as an initial step toward a comprehensive valuation.
- “Valuation of Garnet Mining District Nancy Hanks Mine” (Behre Dolbear Project 12-191), dated March 8, 2013 – Behre Dolbear performed a mineral valuation on the defined and potential mineral resources of the Garnet Gold District Nancy Hanks Mine and its contiguous mining claims of GHC.

## **2.0 DISCLAIMER**

Behre Dolbear has conducted an independent valuation of the Garnex Nancy Hanks and Willie underground mines and the land package of patented and unpatented claims that comprise the property. A site visit was made to the project by two Behre Dolbear Senior Associates, Mr. John Reiss (Project Manager) and Ms. Amy Jacobsen. Behre Dolbear has reviewed technical data, reports, and studies provided by Garnex as well as other information, including Behre Dolbear’s previous due diligence, comparable sales analysis, and a general property valuation reports prepared in 2011 and 2012. Our review was conducted on a reasonableness basis and Behre Dolbear has noted herein where such provided information engendered questions. Except for the instances in which we have noted questions, Behre Dolbear has relied upon the information provided as being accurate and suitable for use in this valuation.

Behre Dolbear assumes no liability for the accuracy of the information provided. We retain the right to change or modify our valuation, if new or undisclosed information is provided, which might change our opinion of value.

## **2.1 CLIENT – CONSULTANT RELATIONSHIP**

Behre Dolbear is acting in an independent capacity as a consultant to Garnex Gold Corporation. Behre Dolbear is receiving a pre-negotiated fee for its services, which are invoiced on a time and expense basis at hourly rates ranging from US\$275 to US\$350 per hour. Behre Dolbear and each of the professionals working on this assignment do not have a security ownership position in, a financial interest in, or any other pecuniary interest in Garnex Gold Corporation.

## **2.2 ELECTRONIC DISCLAIMER**

Electronic mail copies of this report are not official unless authenticated and signed by Behre Dolbear and are not to be modified in any manner without Behre Dolbear’s expressed written consent.

## **2.3 UNITS OF MEASUREMENT AND CURRENCY**

All measurements are in the English system unless otherwise noted. The currency units utilized in the report are United States dollars (US\$), unless stated otherwise.

### 3.0 SUMMARY

#### 3.1 RESULTS OF VALUATION

Behre Dolbear considers the Garnet Project to have a fair market value, as of September 13, 2019, of \$11.5 million. This estimate is based upon the defined resources having a value of \$8.6 million and the mineral potential of the property’s claims of \$2.9 million.

In deriving this value, Behre Dolbear used the following recognized valuation methods to value the Garnet Project:

- Related Transactions – derived from market related transactions involving similar properties.
- Rule of Thumb – derived from historical related transactions on a per ounce of gold basis.
- Consideration of prior valuations.
- Consideration of previous sales prices of the Property.
- Geoscience Matrix – valuation of claims that do not have defined resources. The result from the Geoscience Matrix method is additive to the value for areas outside of those areas with known resources.

As no two mineral deposits are the same, the valuation methods employed will have a differing degree of confidence. The degree of confidence is based on the valuator’s experience and their confidence that the individual valuation method accurately reflects the value of the deposit. Based on experience Behre Dolbear has assigned the following weightings to the 4 valuation methods used to value the defined resource (Table 3.1):

- The Related Transaction value was weighted at 70%
- The Rule of Thumb method was weighted 10%
- The Adjusted Prior Valuations was weighted at 10%
- The Prior Property Transaction was weighted at 10%

The Geoscience Matrix was the only method considered for lands and claims outside of the defined resource area.

<b>TABLE 3.1</b>			
<b>PREFERRED VALUE OF THE GARNET PROJECT AS OF SEPTEMBER 13, 2019</b>			
<b>(US\$ MILLIONS)</b>			
<b>Valuation Method</b>	<b>Value</b>	<b>% Weighting</b>	<b>Weighted Value</b>
Related Transactions	8.8	70	6.2
Rules of Thumb	10.8	10	1.1
Adjusted Prior Valuation – Related Transaction	7.9	10	0.8
Prior Property Transaction	5.1	10	0.5
Geoscience Matrix	2.9	N/A – Additive	2.9
<b>Total</b>			<b>11.5</b>

### 3.2 RECOMMENDATIONS

Behre Dolbear, in the course of completing the valuation, has noted the following items Garnex should address as it moves forward toward developing the Garnet Project into a producing gold project.

- 1) Complete an engineering scoping study to determine more accurate costs for mining and processing. This scoping study should, at a minimum, accomplish the following objectives:
  - a) Determination of costs associated with upgrading the on-site infrastructure, including the transformer, necessary generators, and site road access.
  - b) A trade-off study for contract mining versus an in-house mining strategy.
  - c) Optimization of the Willie Mine plan and the total production plan for both mines.
  - d) Determine the options available for mill tolling of the mined material. This should include clearly identifying the available mills and the costs associated with each available mill to produce a final bullion product. This should include the tolling costs and transportation costs. The degree to which the material can be milled (production of a concentrate versus production of bullion) need to be taken into account and the appropriate cost determined.
  - e) Additional metallurgical test work is needed once the target toll mill is established to determine the expected gold recoveries using the toll mill flow sheet and equipment.
  - f) If a concentrate is produced at the toll mill, an additional market study is required to determine the expected revenues and costs associated with the sale of the concentrate.
  - g) An engineering trade-off study may be necessary to determine if an on-site milling strategy can be more economic than continued trucking of the ore to a custom mill.
  - h) The cash flow should be updated to reflect the costs and revenues, as determined from the scoping study.
- 2) Continue exploration drilling of both mines to increase the resource base and extend the mine life.
- 3) Ground Staking Recommendations:
  - a) If the ground is open, stake claims covering the large gap surrounded by unpatented claims; CR 75-78, CR80-CR84, and CR86-CR88. This area holds potential for extensions of the Coloma veins.
  - b) Re-stake GR3 and GR4 as it has potential value as part of the Mountain View Zone. In our previous reports (2011 and 2012), this area held "Good Potential" on strike of the Mountain View Zone.
- 4) Exploration Recommendations:
  - a) Although not the highest priority, as mine development tops the list, shallow drilling (or perhaps trenching) should be conducted in the area between the Tostman and Nancy Hanks, where deep soils might overlie potentially bonanza grade oxide mineralization. Discovery of shallow bonanza grade could be a game changer for the entire Garnet Project, provided a suitable and cost-effective processing method can be identified.

## **4.0 PROJECT WORK PLAN AND OBJECTIVES**

### **4.1 PROJECT OBJECTIVES**

The Project was undertaken to determine a fair market value for the gold resources and claim package, including the Nancy Hanks and Willie Underground Mines held by the Garnex Gold Corporation (Garnex) in Garnet, Montana. The valuation report has followed accepted industry valuation guidelines.

### **4.2 WORK PLAN**

A project team of experienced professionals was assembled by Behre Dolbear to undertake the valuation of the Garnet Project, including its mineral inventories, defined gold resources, Nancy Hanks Underground Mine, Willie Underground Mine, and land package of patented and unpatented mineral claims held by Garnex. The project team is experienced in the fields of geology, underground mining, milling and process, environment and permitting, financial analysis, and mineral valuation.

The project team reviewed and analyzed data and reports that were provided or developed by GHC. Much of this information was part of the source data used for the Behre Dolbear 2012 Valuation. As there had been limited development since 2012, Behre Dolbear concluded that this data, along with a site visit, could serve as the basis for this report. The technical aspects of the Property (mining claims, geology and exploration, resources, mine plan, and processing plan) were reviewed and revised to reflect any changes since the 2012 report. This included reviewing the current plan of action for tolling the ore from the Project.

Following the review, it was determined that the following valuation methods were appropriate for the Garnet Project, in its current status:

- Related Transactions - derived from market related transactions involving similar properties.
- Rule of Thumb – derived from historical related transactions on a per ounce of gold basis.
- Consideration of prior valuations.
- Consideration of previous sales prices of the Property.
- Geoscience Matrix – valuation of claims that do not have defined resources. The result from the Geoscience Matrix method is additive to the value for areas with known resources.

### **4.3 PROJECT TEAM**

The Behre Dolbear professionals undertaking this effort have no ownership, financial, or any other type of pecuniary interest in Garnex or its properties. Each has executed a statement of “no conflict of interest” and their remuneration is not dependent upon the results of the Nancy Hanks Garnet gold property valuation. The professionals are:

**Project Manager/Mining – Mr. John Reiss** has over 40 years of progressively responsible positions in operations management, technical studies, due diligence studies, and project management involving underground hard rock mining. He operated an internationally recognized underground panel-caving mining operation. His project management activities include delivery of bankable feasibility studies for mining systems in molybdenum, copper, and gold deposits. He has completed assignments in both domestic and international locations.

**Project Advisor – Mr. Christopher J. Wyatt** is a Senior Associate with Behre Dolbear and is currently the Chairman of the Board of Directors. He has over 25 years of experience in the minerals industry, including 14 years in senior and executive level operational management positions. Operational experience and consulting experience in North America, South America, Australia, Indonesia, Asia, Africa, and Sri Lanka including financial evaluations; mineral appraisals, project management; and performing feasibility studies, development, startup, and management of surface operations. In addition, he has assisted legal firms through development of expert technical reports, critically reviewing others reports and through depositions. Mr. Wyatt has assisted with or been the primary expert witness with the technical reviews and preparation of reports and expert testimony for ICSID arbitration, royalty disputes, legal cases, and insurance litigation. Mr. Wyatt graduated with a B.S. in Mineral Engineering from the University of California, Berkeley and has an M.S. in Engineering Management, and an MBA from California Polytechnic University, San Luis Obispo. In addition, he has M.S., Mineral Economics from the Colorado School of Mines and from 2014-2017 was a member of the South Dakota School of Mines, Mining Engineering and Management Department, Faculty. He is a Qualified Person via the Society for Mining, Metallurgy, and Exploration (SME) (3574500) and Mining & Metallurgical Society of America (MMSA) Qualified Professional (1364QP). In addition, he is Certified Mineral Appraiser, American Institute of Minerals Appraisers (2014-1), Member of the Society of Economic Geologists, and a Member International Marine Minerals Society.

**Project Mineral Appraiser and Cash Flow Specialist – Ms. Amy E. Jacobsen** is a Senior Associate with Behre Dolbear and the former Chair of the Behre Dolbear Board of Directors. She is currently the Corporate Treasurer and has over 25 years of diverse experience, which has included project evaluations, valuations, cash flow modeling, feasibility studies, process metallurgy, strategic planning and business plan development, and independent engineer technical reviews of large infrastructure projects, in particular, mineral projects and power generation. Her experience has been in North and South America, Europe, Australia, Middle East, Africa, and Asia and includes experience in industrial minerals and fertilizers, base metals including copper, cobalt, zinc, and nickel, precious metals, and energy fuels, such as uranium, coal, and lignite. Her expertise is in cash flow modeling and technical project evaluation. Starting in 2020, Ms. Jacobsen will be teaching the Mine Investment Evaluation course as part of the Colorado School of Mines Professional Masters – Mining Engineering and Management degree program. Ms. Jacobsen graduated from the Colorado School of Mines with a B.S. in metallurgical engineering and received a Master of Business Administration from the Executive MBA program at the University of Denver. She is an Associate Certified Minerals Appraiser with the International Institute of Mineral Appraisers and a Qualified Professional in Metallurgy through the Mining and Metallurgical Society of America. Ms. Jacobsen is a registered Professional Engineer in the State of Colorado.

**Project Metallurgist – Mr. Mark A. Anderson** has more than 40 years of diversified industry experience in both technical and managerial roles, including project feasibility, mine operations, and project due diligence. His experience includes evaluation of base and precious metal properties with emphasis on processing, metallurgy, project management, and feasibility analysis. His responsibilities have included construction, management, and operation of a 9 million tonne per year open pit copper/molybdenum mining operation with a 28,000 tonne per day concentrator, and milling and smelting operations at a 21,500 tonne per day copper ore mining and processing operation with byproduct gold. Prior to joining Behre Dolbear, Mr. Anderson was the general manager of Asamera Minerals Inc.'s U.S. operations where he had combined management responsibility for the underground operations at the Cannon Gold Mine in Wenatchee, Washington and the Gooseberry Mine in Nevada, which produced gold and silver at an average annual rate of 170,000 ounces of gold and 500,000 ounces of silver. He also served as vice president of operations for Marathon Oil Company/Centennial Gold Corporation where he managed exploration, laboratory, and pilot plant operations associated with the development of exploration targets in Colorado. He was also a key participant in mining finance arrangements with investment houses.

**Environment and Permitting – Mr. Reinis N. Sipols, P.E.** is a mining engineering graduate from Michigan Technological University and has over 20 years of operational experience in the construction materials and mining

industry and his responsibilities have included all aspects of mine operations and management. He has over 13 years of consulting experience beginning as Vice President of Spectra Environmental Group (a Northeastern United States integrated engineering and environmental firm), as President of Behre Dolbear & Company (USA), Inc., as Director of Mining Projects for Dalmore Group, as a Senior Associate of Behre Dolbear and Managing Director of Pack Leader Services. His project experience, while at Spectra Environmental Group, Behre Dolbear and Pack Leader Services includes compliance reviews, due diligence reviews, operations advisory work, site plan approval, and environmental permitting and feasibility study work on gold, copper, iron ore, coal, and industrial minerals projects. He was also Chief Operating Officer of Rare Earth Industries and was responsible for negotiating the acquisition of a major rare earths/rare metals refining asset acquisition in Ukraine. Mr. Sipols is a Professional Engineer in New York, Pennsylvania, and New Jersey. He is also a Qualified Person Member (QP) of the Mining and Metallurgical Society of America for environmental compliance and permitting issues as well as open pit mining.

**Project Geologist – Mr. Joseph A. Kantor** has over 40 years of experience in all phases of precious and base metal exploration from grassroots reconnaissance to mine development. His efforts resulted in the discovery of and production from several sediment-hosted (Carlin-style) gold ore bodies in the Jerritt Canyon District, Nevada (a district which has now produced over 9 million ounces of gold) and production from the Glove Mine lead-zinc-silver replacement/breccia pipe in Arizona, as well as discovery of other gold, copper-zinc skarn (limestone replacement deposits), and copper-zinc volcanogenic massive sulfide deposits. Mr. Kantor responsibilities have ranged from regional reconnaissance to advanced projects to mine development within a wide geographic area, including all of the western United States, as well as Maine, Michigan, Quebec, British Columbia, northern Mexico, Kazakhstan, Mongolia, China, Malaysia, Peru, and Colombia. Mr. Kantor also directed exploration for production and reserve replacement and gold mines in Nevada, China, and Kazakhstan. Mr. Kantor is a registered geologist in the State of Washington and a Mining and Metallurgical Society of America Qualified Professional in Geology (#1309QP).

Resumes of the project team can be found in Appendix 1.0.



## **5.0 PROJECT DESCRIPTION**

A detailed description of the project as excerpted and modified from Behre Dolbear's 2011 due diligence report is contained in Appendix 2.0 through Appendix 9.0 of this report. The following summary is provided as background for the valuation process.

### **5.1 PROJECT OVERVIEW**

The Garnet Project is located in the Garnet Mountain Range, Montana in a historical gold mining district. There is active small-scale "artisan" mining currently ongoing in the general area (mostly placer mining). The property is approximately 40 miles east of Missoula, Montana, 70 miles west of Helena, and 15 miles northwest of the small town of Drummond. The property lies in northern Granite County in Sections 2, 3, 10, and 11, Township 12N, Range 14W. The approximate property coordinates are Longitude 113° 20' 17" West, Latitude 46° 49' 29" North.

The property consists of 24 patented claims (the leased Free Coin being one of the 24) and 188 unpatented mining claims. The properties cover an area of 4,308.86 acres, or 6.73 square miles. It is not known whether this estimated acreage takes into account that some of the unpatented lode claims are fractional claims or that some of the placer claims might overlie lode claims but relies upon the Bureau of Land Management's (BLM) serial registry pages. In addition, Garnex has a BLM preference rights lease covering four formerly-patented claims that have reverted to public ownership, constituting an additional 56 acres. Of the 188 unpatented claims, 3 are placer claims of about 36 acres a piece. Garnex has paid the required fees (US\$31,515.00) to the BLM on behalf of Commonwealth Resources, LLC.

Gold bearing veins within the Nancy Hanks Garnet gold property occur within and in the contact zone of the Garnet stock and the Lewis and Clark line, a mineral rich shear zone of regional size. The Lewis and Clark line is host to over 150 mines and prospects in Montana. The Garnet district is one of the four most productive districts in the Lewis and Clark line. In this district, an estimated 150,000 ounces of gold were produced from lode mines and another 500,000 ounces from placers dating back into the 1800s.

A number of veins with gold mineralization has been identified on the property and are named in order from north to south. The Nancy Hanks vein zone, which is comprised of several smaller vein systems, occurs in the Garnet granodiorite stock. Proceeding south from the Nancy Hanks vein zone, the rock types change to sedimentary units and host the Free Coinage-Tiger vein, Grant Hartford (includes Gold Bug and Mountain View), Lead King, and the most southerly, the Willie vein.

The veins are generally parallel to sub-parallel and dip 30 to 40 degrees north. Vein widths generally range from 1 foot wide to 3 feet wide (true width) and can swell up to 10 feet wide. The veins consist mostly of quartz, irregularly distributed coarse-grained barite and ankerite. Sulfide content is very low, generally less than 2%. In the sulfide zone, gold is mainly present as telluride minerals, chiefly hessite ( $\text{Ag}_2\text{Te}$ ), calaverite or krennerite ( $\text{AuTe}_2$ ), and petzite ( $(\text{Au,Ag})_2\text{Te}$ ) along with native gold or electrum.

There is some infrastructure on the site, including a small mine camp (sufficient for a small staff of employees and contractors), two large metal buildings (sufficient for shops and equipment), and an office cabin. It is intended that diesel generators will provide power and compressed air services to the mine. Supplemental solar power has been used in the past for the mine camp. There is no active power system at the site and there is a significant distance and associated cost to tie into the power grid.

The most well maintained road access to the site is maintained by the BLM and goes directly through the Garnet Ghost Town. This access would not be acceptable for significant traffic or haulage, as the area is a tourist attraction.

The other site road that would be used for haulage needs significant upgrading. There are several areas of steep grade with no berm. The northern section of the Granite County road is called the "China Grade" – it is approximately three miles long ending at the mine site. The lower 7-mile portion of the road ends at the historic Beartown site. This 7-mile portion is well maintained by the County. In all, both sections comprise the 10-mile long Bear Gulch Road. Garnex would be responsible for the upkeep of the 3-mile long China Grade portion of the road. Garnex believes Granite County would willingly shut off the China Grade from the public for exclusive use by the mine. If the Bear Gulch Road becomes a dedicated mine haul road, it would be expected to come under MSHA safety guidelines.

A second access to the mine is via Highway 200 and the Garnet Range Road. It is about 10 miles shorter than the I-90 access, and the Range Road is a better road than the China Grade, so it is the preferred route from the west, when it is open. The Range Road is a BLM road, and the BLM closes it to wheeled traffic from January 1 until May 1, when it is used exclusively by snowmobilers and skiers.

The mine plan reviewed by Behre Dolbear for development and production at the Nancy Hanks Mine was created in 2012 by GHC. Garnex did not provide an updated mine plan and indicated they intend to implement the GHC mine plan as their own. The basic strategy of the plan is to mine the high-grade ore zones identified in the mine's resource block model during the first 18-months of the Project and then to mine the lower-grade ore zones for the remainder of the mine plan, extending to 36-months in duration.

The Nancy Hanks ore body is to be accessed by a main decline from the surface and driven at a negative 15% grade. The mine is designed for mechanized handling of blasted stope ore using load-haul-dump (LHD) units and dump trucks for development and production. The decline drift is 12 feet × 12 feet in cross-section and is designed to allow for truck haulage of the ore to the surface. The mining method chosen is called End Bite Timber Stull Stopping. The shallow dip of the ore body does not allow for gravity assisted mining methods to move the blasted ore. It is a more labor intensive and expensive mining method compared to other more common stopping methods.

The 2011 mine design calls for development and production of 6 mining levels that will retrieve approximately 65,000 tons of ore during the 18-month mine plan and a total 166,000 tons of Measured and Indicated ore during the 36-month planning period. Initial production will come from the Marble zone, which is the first mining level in the mine design. The approximate 8,667 tons of ore from the Marble zone will be shipped as a bulk sample to a test facility to aid in mill design and flow sheet development. The mine plan had envisioned a 10,000 ton bulk sample. If implemented, the difference between the two numbers would need to come from ongoing production. The Company expects that ongoing underground exploration drifting and diamond drilling, during this period, will increase the mine's resource inventory.

The mine is a "wet mine" and will require de-watering during operations. In the summer months, mine discharge water will be piped to a surface Land Area Dispersion (LAD) drainage field. It is anticipated the water will be sprayed and allowed to evaporate. During the winter months, mine discharge water will be pumped and dispersed to an underground water infiltration gallery system near the LAD. It consists of a grid of drill holes serviced by a piping system from the mine.

The mine plan intended to use a contract miner to exploit the Nancy Hanks and Willie Mines. Garnex has indicated they intend to exploit the mineral resources via in-house personnel and equipment.

Some limited metallurgical test work has been completed on samples from the Garnet Project. This work was completed in 1992 and 2009-2010. The mineralization at the Nancy Hanks and Willie deposits responds well to both gravity and flotation concentration and can be treated to obtain high recoveries from the higher-grade underground material. Some composites exhibit gold recoveries in excess of 90%, utilizing the techniques tested

to date. It is probable the combined flotation/gravity concentrates will require cyanidation or smelting off-site, if the grades are sufficient.

Due to the current mine life of 36-months, it has been proposed that toll milling may be the most cost-effective approach to processing the ore from the Project. In the 2012 report, the plan was to toll the ore at the Golden Sunlight milling facility. The State of Montana has banned the use of cyanide for processing gold ores, except as grandfathered at a few existing facilities, such as the Golden Sunlight Mill.

The Garnet Project has the right to operate under the Small Miner Exclusion Statement (SMES) and is currently in the process of completing work to obtain a full-scale mining permit (as well as other support permits) for the mine. Garnex is working to obtain an operating permit (likely in the next 18-24 months) as it will need a much larger surface footprint as the mining operation expands and this permit would also be necessary should the mine decide to build a mill and concentrator or other infrastructure on site in the future. Based on Behre Dolbear's research and investigation, there appear to be no material environmental risks or liabilities that would materially impact the valuation of the Garnet Project.

## **5.2 CHANGES SINCE 2012**

There has been minimal activity at the site since Behre Dolbear's site visits in 2011 and 2012. No additional drilling or exploration has been completed.

During the current site visit, it was assessed that the building and mine camp infrastructure are still useable and are sufficient to support the start-up of the mine. One of the metal buildings is fully enclosed and currently houses the drill core. The other metal building is the location for the transformer, but it is open on two ends. It would need to be fully enclosed to protect the equipment and to serve more effectively as a shop.

There has been some recent theft at the site. The mine camp's solar panels, batteries, and inverter were removed. Additionally, the panels on the existing transformer were removed. Garnex has received estimates for replacement of the solar system and the transformer panels. There is no active power system currently at the mine site.

The site road that would be used for haulage needs significant upgrading. There are several areas of steep grade with no berm.

No significant mining has been completed since Behre Dolbear's 2011 and 2012 review and valuation. The former operator completed the mine portal with a negative 15% decline at a length of approximately 390 feet. During the site visit for this valuation, it was assessed that the mine portal appears to be in generally good condition. Shotcrete and rock bolts are in place tight around the portal entrance although there is some spalling of the shotcrete coating on the portal timbers that will need to be replaced. Water has filled the 12-foot × 12-foot decline to the surface and will need to be pumped out before any additional work can be completed.

The previous owner attempted some "open pit" mining. There are no benches and the efforts were highly disorganized, leaving several holes and piles as well as a waste dump area. This area will need to be graded and leveled. It is likely the "open pit" area can be used for waste from the underground operations. There is no mine or maintenance equipment at the site.

In the Behre Dolbear 2012 report, the intention was to toll mill the ore at Golden Sunlight Mill. This mill is anticipated to be closing and may no longer be an option. A second, family-owned (Antonlioli family) mill is available. This mill is approximately 50 miles away (versus 100 miles for the Golden Sunlight Mill). It has not been operating for approximately a year and has tolled material from the Garnet Project in the past. The mill is located in Philipsburg, Montana and is called the Contact Mill. During the completion of this report, Garnex indicated the

possibility that the Golden Sunlight Mill may continue operating and tolling ores. Currently, there is a significant amount of uncertainty regarding the tolling of the Garnet Project ores, which will need to be resolved before any mining operations can be initiated.

### 5.3 RESOURCE STATEMENT

A resource estimate was prepared by GHC, which provided the basis for the NI-43-101 prepared by CDM in November 2011. This resource estimate was reviewed by Behre Dolbear during its due diligence review in 2011. When Behre Dolbear prepared the 2012 Valuation, this resource estimate had been further updated by GHC and this updated estimate provided the basis for that valuation. Since no additional drilling or exploration work has been completed at the Garnet Project, Behre Dolbear has used that same resource estimate as the basis for the current valuation.

The ore body models and resource estimates were made using the Maptek/Vulcan® three-dimensional (3D) software. Solid models of the veins were prepared using geological interpretations. The vein models are used to limit grade estimation so resources are defined within the vein only and do not extend outside the vein limits. Behre Dolbear considers the block model was estimated using reasonable criteria and interpolation methods. The resulting resource estimate is shown in Table 5.1.

<b>TABLE 5.1</b>			
<b>MEASURED AND INDICATED RESOURCES AND INFERRED RESOURCES</b>			
<b>Area</b>	<b>Tonnage</b>	<b>Grade (ounces gold/ton)</b>	<b>Total Gold (ounces)</b>
<b>Measured and Indicated Resources</b>			
<b>Surface Accessible</b>			
Nancy Hanks	12,423,531	0.019	239,999
<b>Dewey</b>	1,996,606	0.024	47,759
Transferred to Underground	12,853	0.159	2,042
<b>Net Dewey Surface</b>	<b>1,983,753</b>	<b>0.023</b>	<b>45,717</b>
Marble	0	0.000	0
<b>Shamrock</b>	3,666,667	0.036	133,636
Transferred to Underground – Shamrock 1	16,555	0.174	2,880
Transferred to Underground – Shamrock 2	10,523	0.160	1,685
Transferred to Underground – Shamrock 3	7,197	0.158	1,140
<b>Net Shamrock Surface</b>	<b>3,632,392</b>	<b>0.035</b>	<b>127,931</b>
International	5,445,223	0.039	210,647
<b>Total Surface – Measured and Indicated</b>	<b>23,484,899</b>	<b>0.027</b>	<b>624,294</b>
<b>Underground Accessible</b>			
Nancy Hanks	195,909	0.254	49,706
Dewey – Transferred From Surface	12,853	0.159	2,042
Marble	8,667	0.311	2,692

<b>TABLE 5.1</b>			
<b>MEASURED AND INDICATED RESOURCES AND INFERRED RESOURCES</b>			
<b>Area</b>	<b>Tonnage</b>	<b>Grade (ounces gold/ton)</b>	<b>Total Gold (ounces)</b>
<b>Shamrock</b>			
Transferred From Surface – Shamrock 1	16,555	0.174	2,880
Transferred From Surface – Shamrock 2	10,523	0.160	1,685
Transferred From Surface – Shamrock 3	7,197	0.158	1,140
<b>Net Shamrock Underground</b>	<b>34,275</b>	<b>0.166</b>	<b>5,705</b>
Tostman – Upgraded From Inferred	11,548	0.179	2,067
Willie	55,875	0.245	13,694
<b>Total Underground – Measured and Indicated</b>	<b>319,127</b>	<b>0.238</b>	<b>75,906</b>
<b>Total Measured and Indicated – Surface Plus Underground</b>	<b>23,804,026</b>	<b>0.029</b>	<b>700,200</b>
<b>Inferred Resources</b>			
<b>Underground Accessible</b>			
Nancy Hanks	475,781	0.194	92,113
Dewey	1,223	0.169	207
Marble	591	0.206	122
<b>Shamrock</b>			
Shamrock 1	796	0.233	185
Shamrock 2	173	0.175	30
Shamrock 3	266	0.117	31
<b>Net Shamrock</b>	<b>1,235</b>	<b>0.200</b>	<b>247</b>
<b>Tostman</b>			
Upgraded to Measured and Indicated	11,548	0.179	2,067
<b>Net Tostman Inferred</b>	<b>131,997</b>	<b>0.177</b>	<b>23,340</b>
Willie	5,536	0.208	1,151
<b>Total Inferred</b>	<b>616,363</b>	<b>0.190</b>	<b>117,179</b>

## 6.0 VALUATION APPROACHES AND METHODOLOGIES

This valuation was done to CIMVal (2003)<sup>1</sup> standards. According to this international standard, there are three generally accepted valuation approaches.

- 1) **Market-based**, which is based primarily on the notion of substitution. In this Valuation Approach, the Mineral Asset being valued is compared with the transaction value of similar Mineral Assets under similar time and circumstance on an open market. Valuation Methods include but are not limited to comparable sales transactions and joint venture terms.
- 2) **Income-based**, which is based on the notion of cash flow generation. In this Valuation Approach, the anticipated benefits of the potential income or cash flow of a Mineral Asset are analyzed. Valuation Methods include but are not limited to discounted cash flow, royalty streams, and multiples of earnings.
- 3) **Cost-based**, which is based on the notion of cost contribution to Value. In this Valuation Approach, the costs incurred on the Mineral Asset are the basis of analysis. Methods include but are not limited to sunk costs or current replacement costs.

A general guide to the applicability of each Valuation Approach is outlined in Table 6.1.

<b>TABLE 6.1 GENERAL GUIDE TO THE APPLICABILITY OF EACH VALUATION APPROACH</b>				
<b>Valuation Approach</b>	<b>Exploration Projects</b>	<b>Pre-development Projects</b>	<b>Development Projects</b>	<b>Production Projects</b>
Market	Yes	Yes	Yes	Yes
Income	No	In Some Cases	Yes	Yes
Cost	Yes	In Some Cases	No	No

Behre Dolbear believes the Garnet Project can be categorized between the stage of a Pre-development and Development Project. As such, the Market and Income Valuation Approaches are considered to be the most appropriate approaches.

The CIMVal Code states that:

*“The three generally accepted Valuation approaches of Income, Market and Cost must be considered and discussed in the Valuation Report. More than one approach should be used in the Valuation of each Mineral Property. If a Qualified Valuator is strongly of the opinion that only one approach should be used in particular circumstances, the Qualified Valuator must justify and explain why other approaches are not used.”*

For this valuation, Behre Dolbear assessed the three primary Valuation Approaches and associated methodologies to determine their appropriate application to the Garnet Project.

- **Related Transactions (Market Approach)**  
 The Related Transactions Method (commonly known as the Comparable Sales Method) is frequently used as a valuation tool as it is simple to understand in concept. Simply put, other transactions

<sup>1</sup>Source URL: <https://mrmr.cim.org/media/1020/cimval-standards-guidelines.pdf>

involving purportedly similar properties are used as the basis for determining the value of the proposed transaction. The problem with the method is the fact that it is extremely rare to find two truly comparable mineral deposits, as there are a number of variations between properties including, metal grades, metallurgical factors and processing methods, mining methods, climate and geographical factors, and political and social risks. It is necessary to adjust the related transactions to bring them to a state where they are as comparable as possible.

Behre Dolbear gave greater weighting to the comparable sales methodology as its primary method in the previous 2012 valuation of the Garnet Project. At that time, seven property transactions were reviewed and adjusted to arrive at an average basis of value of 2.68% of the gold price at the time of the transaction. Behre Dolbear continues to believe this method to be the primary methodology for valuing the Garnet Project in this current valuation.

- **Rule of Thumb (Market Approach)**

The units of value or “rule of thumb” valuation method is another Market Approach Method. In the past, there have been multiple studies to determine a basic rule of thumb of value at the varying stages of development of gold and base metal projects. Mr. Frank Ludeman, in his publication, *A Decade of Deals, Gold and Copper Ore Reserve Acquisition Costs, 1990 – 1999*, analyzed 314 gold property acquisitions in order to determine benchmarks for acquisition opportunities. Mr. Ludeman divided the acquisitions into Exploration, Development, and Operating properties.

While the percentages paid for acquisitions may vary from year to year, they generally have stayed within the ranges shown in Table 6.2 for gold projects (as based on the Ludeman publication). The highest price paid per ounce is for higher quality projects, while the lowest percent paid is for lower quality projects, or those projects that are less developed and quantified. Applying these percentages to a project results in a rule of thumb value

<b>TABLE 6.2</b>		
<b>RANGES OF TRANSACTION VALUES FOR GOLD PROJECT ACQUISITIONS</b>		
<b>PERCENT OF PRICE PER OUNCE IN THE GROUND</b>		
<b>Behre Dolbear Designations</b>	<b>CIM Designations</b>	<b>Percentage Values</b>
Production Stage	Production Property	20.0+
Feasibility Stage/Mineral Reserve	Development Property	10.0 – 15.0
Measured/Indicated Resource or Pre-Development Project	Mineral Resource Property	5.0 – 7.5
Inferred Resources or Advanced Exploration Property	Mineral Resource Property – Exploration Property	2.5 – 5.0
Early Exploration/Exploration Potential	Exploration Property	1.5 – 2.5
Higher Risk Exploration Potential	Exploration Property	0.75 – 1.25

- **Market Multiples (Market Approach)**

This method is a variation of the Related Transaction Method. It is based on the value ascribed by public markets to a pound of gold equivalent held as a resource by a company. The method, in its simplest form, is based on the market capitalization (issued shares multiplied by share price) of similar companies to the target company. A resource value stated on the basis of dollars per ounce of gold is determined by dividing the comparable company market capitalization by their resource

ounces of equivalent gold. This resource equivalent value is then applied to the resource ounces of the target company to determine a value.

This method is based on the share value of the comparable companies making it event driven and more dependent on the “mood” of the stock markets and items not related to the underlying asset, such as rights certificates, current debt obligations, etc. Because junior mining companies often lack liquidity, it is possible that a mineral deposit or project may have greater value than the market capitalization of a single-project company would indicate. For these reasons and the recent volatility of the stock markets, Behre Dolbear has elected to not use the Market Multiples Method in this valuation. In Behre Dolbear’s 2012 valuation, the Market Multiples Method was used. The value derived from this method was nearly 2 times that of the other methods used. For these reasons, Behre Dolbear has not used the Market Multiples Method in this valuation.

- **Discount Cash Flow Method (Income Approach)**

The Income Approach tends to be a reliable indicator of value for mines with a history of production. It is considered less reliable for projects with no recent production. In the case of a development property, the production values and costs are estimates and can change considerably once production commences.

In the 2012 valuation, Behre Dolbear used the Income Approach as one of the valuation methods. At that time, the estimated costs, in particular the costs associated with contract mining and toll milling, were better understood with reasonable estimated costs. For this current valuation, given the possible closing of the Golden Sunlight Mill, there is a greater level of uncertainty regarding the processing of the ore from the Nancy Hanks and Willie Mines. Due to the uncertainty associated with the processing costs, Behre Dolbear has opted not to use the Income Approach.

- **Sunk Cost or Replacement Cost Methods (Cost Approach)**

As noted previously, the cost approach is appropriate for exploration and in some cases pre-development mineral deposits. At the current state of development of the Garnet Project, Behre Dolbear is of the opinion that the Cost Approach Methods are not appropriate for this current valuation.

- **Geoscience Matrix Method (Cost Approach)**

This method is best used for early-stage exploration projects with a paucity of information. The Garnet Project has a number of patented and unpatented claims that may have mineral value but for which no exploration data is available. Behre Dolbear believes these claims have value and should be included in the overall Garnet Project valuation. As these claims are beyond the area of the defined resources their value is additive to the value of the defined resources.

- **Prior Valuations**

The valuation must be relevant and adjusted for factors pertinent to the current valuation exercise. Behre Dolbear has taken into account its 2012 valuation in this current valuation.

- **Prior Sales of the Property**

In determining a property’s value, prior sales of the property should be considered. Behre Dolbear has taken into consideration three prior sales of the property.



## 7.0 VALUATION OF THE GARNET PROJECT

In its opinion, Behre Dolbear has determined the Related Transaction Method, the Rule of Thumb Method, prior valuations, and prior sales of the Property are to be considered in this current valuation of the Garnet Property.

### 7.1 RESOURCES VALUED

The defined resources in the area and the minerals contained within have not materially changed since the last review. Since the last review, the ability to economically exploit the resources has come under pressure making it likely that some of the resources may never be mined.

The surface-accessible mineralization, averaging 0.027 ounces per ton, would be difficult to exploit. Heap leaching would potentially be a viable option; however, heap leaching typically uses cyanide, which is currently illegal in Montana. There are alternative leaching agents, such as sodium thiosulphate and thiourea, which may have application to the Garnet ores but have been unexplored to date. It is possible that the veins could be mined in a targeted fashion, reducing the tonnage and dilution, but that has not been fully investigated at the time of this valuation. This was the operational approach taken by GHC, which, in Behre Dolbear’s opinion, was poorly executed. Because of the lower grade, the likely lower recovery and the uncertainty regarding the processing scheme for the Garnet Project, Behre Dolbear discounted the value of the surface-accessible Measured Mineral Resource by 90%. It should be noted that this is not a discount of the ounces themselves or a reduction in the resource statement, but a discount of the value of the ounces resulting from the uncertainty of being able to successfully exploit these ounces. In the 2012 valuation, the discount was 50%, but this was dependent on the continuing operation of the Golden Sunlight Mill that had been grandfathered into the cyanide ban in Montana.

Following the same logic, Behre Dolbear discounted the value of ounces categorized as the underground accessible Inferred Mineral Resources by 50%. As demonstrated in Table 7.1, the greater the geological confidence for which the grade and quantity can be estimated, the greater the value of the resource. By definition, Inferred Mineral Resources have less geological confidence than Indicated Mineral Resources, which in turn, have less geological confidence than Measured Mineral Resources. In Behre Dolbear’s experience, Indicated Mineral Resources are valued at approximately 50% of those of Measured Mineral Resources while Inferred Mineral Resources are valued at approximately 50% of those of Indicated Mineral Resources. Based on the current resource statement for the Garnet Project, since only Indicated and Inferred Mineral Resources are reported for the underground accessible material, Behre Dolbear has applied a value discount of 50% to the Inferred Mineral Resources.<sup>2</sup>

#### Underground Accessible

Indicated (100%) ..... 75,906 ounces

Inferred (50%) ..... 58,590 ounces

**Total for Indicated and Inferred ..... 134,496 ounces**

#### Surface Accessible

Measured (10%) ..... 62,429 ounces

**Grand Total for Indicated, Inferred, and Measured ..... 196,925 ounces**

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<sup>2</sup>In Behre Dolbear’s 2012 valuation, Inferred Mineral Resources were discounted by 75%. Upon further review during this valuation, Behre Dolbear believes that this was too high of a value discount.

**TABLE 7.1  
GARNET PROJECT – RELATED TRANSACTIONS**

Deposit	Country	Date of Sale	Price Paid (US\$ millions) <sup>1</sup>	U/G Measured and Indicated Resources (Ounces) <sup>2</sup>	U/G Inferred Resources (Ounces) <sup>2</sup>	Equivalent Purchased Ounces <sup>3</sup>	Reported Gold Grade (Ounces per Ton) <sup>2,4</sup>	Price Paid per Ounce <sup>1</sup>	Gold Price on Date of Sale (\$/oz LME PM Fix)	Price Paid per Ounce Divided by Gold Price (%) <sup>1</sup>	Adjustments	Adjusted Percentage
Garnet Project	Montana, USA	N/A	\$8.8 <sup>5</sup>	75,906	117,179	196,925	0.206	\$44.80 <sup>5</sup>	\$1,503	N/A	N/A	2.98% <sup>6</sup>
<b>Project Transactions</b>												
East Cadillac and Kinebik Projects	Quebec, Canada	July 25, 2019	\$8.95	30,445	169,295	115,092	0.121	\$77.76	\$1,416	5.49%	-25% for strategic acquisition	4.12%
Dufferin Gold Mine	Nova Scotia, Canada	October 7, 2016	\$10.6	57,963	149,364	119,380	0.220	\$79.58	\$1,259	6.32%	-20% for development stage -50% for availability of on-site mill	2.53%
Fenelon Project	Quebec, Canada	October 18, 2016	\$2.81	49,482	1,912	50,438	0.384	\$55.77	\$1,258	4.43%	+10% for size adjustment -25% for grade adjustment	3.66%
Silver Coin Property <sup>7</sup>	BC, Canada	October 26, 2018	\$13.12	105,469	143,509	177,223	0.135	\$74.03	\$1,234	6.00%	-25% for strategic transaction	4.50%
Premier Gold Mine	BC, Canada	October 18, 2018	\$8.52	281,264	325,854	444,191	0.193	\$19.18	\$1,231	1.56%	-10% for size adjustment	1.40%
McKenzie Break and Swanson Properties	Quebec, Canada	December 21, 2017	\$3.63	0	270,649	135,324	0.151	\$26.84	\$1,279	2.10%	+25% for resource classification	2.62%
<b>Company Transactions</b>												
Rice Lake Property	Central Manitoba, Canada	October 19, 2017	\$6.83	0	336,219	168,110	0.238	\$40.63	\$1,286	3.16%	+25% for resource classification	3.95%
Goldboro Property	Nova Scotia, Canada	May 19, 2017	\$9.03	456,738	373,275	643,375	0.144	\$14.04	\$1,252	1.12%	+20% for development stage	1.35%
Red Mountain	BC, Canada	March 27, 2019	\$21.55	728,610	62,272	759,746	0.232	\$28.36	\$1,310	2.17%	+20% for development stage	2.60%
Curraghinalt	Northern Ireland	September 7, 2018	\$279.13	3,060,863	3,038,799	3,581,765	0.393	\$60.94	\$1,199	5.08%	-25% for grade adjustment -25% for development stage	2.86%
<sup>1</sup> Adjusted to reflect 100% acquisition. <sup>2</sup> Weighted average of Measured, Indicated, and Inferred Resources. <sup>3</sup> Equivalent ounces equal to 100% of Measured and Indicated and 50% of Inferred ounces. <sup>4</sup> Reported totals – no adjustment for 100% acquisition. <sup>5</sup> Implied value based on average adjusted price paid per ounce divided by gold price of the compared transactions. <sup>6</sup> Weighted average – 35% of average company transactions, 65% of average property transactions. <sup>7</sup> Silver coin transaction is the sum of two transactions that occurred simultaneously with two sellers. The sales price per ounce was the same for both transactions.												

## 7.2 RELATED TRANSACTIONS

Behre Dolbear used the SNL Financial online databases to look for transactions involving gold assets in North America or other politically-stable global locations for a period of time within 36 months of the Date of Valuation (September 13, 2019). Behre Dolbear reviewed both company transactions and property transactions.

Approximately 222 property transactions and 564 company transactions (including net smelter royalty sales) were identified from the SNL Financial database. The SNL database only shows the transaction, the price, and the parties involved, so those transactions that met the search criteria were then assessed using other sources, such as filings with securities agencies, press releases, and company presentations. Technical Reports, such as NI 43-101 reports, were reviewed to verify Mineral Resource estimates and technical facts about the properties. To assure compatibility, the properties had to be gold deposits and could not be polymetallic deposits containing gold along with other metals (other than “small” amounts of silver resources). The properties had to be planned to be exploited primarily by underground mining methods and vein-style deposits were given preference. Additionally, the search criteria was limited to transactions to encompassing gold assets without reported reserves and at least Inferred Mineral Resources. Pre-development and development properties were preferred.

Four company transactions and seven property transactions were identified that generally met the criteria. The transactions are summarized in Table 7.1 and are presented in greater detail in Appendix 7.0. The purchase price per ounce was determined, giving 100% credit to the Indicated ounces and a 50% discount to the value of the Inferred ounces to account for their higher degree of risk. The purchase price per ounce was then divided by the London Metal Exchange gold price (PM fix) on the date of the transaction to yield a percentage of the then-current price of gold. As necessary, this percentage was adjusted for comparability. These adjustments are as follows:

- The Klondex Mines Ltd transaction involving the Rice Lake Property in Central Manitoba was adjusted upward for development stage (all the resources classified as Inferred Mineral Resources).
- The Anaconda Mining Inc. (Goldboro property in Eastern Nova Scotia), the Ascot Resources Ltd (Red Mountain Property in British Columbia), and the Ascot Resources Ltd. (Premier Property in British Columbia) transactions were both adjusted upward for size and development stage. In Behre Dolbear’s experience, projects that have more definitive resources but are relatively moderate in size and are near production can often be undervalued since they are at a stage that will require more immediate capital to get into production with potentially limited initial revenues due to their moderate size.
- Orion Resource Partners (USA), LP (Curraghinalt Property in Northern Ireland) transaction was adjusted downward for grade and size and development stage.
- The East Cadillac and Kinebik Property transaction was adjusted downward as a strategic acquisition where a premium was paid. O3 Mining Inc. is a subsidiary of Osisko Mining Inc., which has a significant resource holding in the Val-d’Or region in Québec. This acquisition strategically increases their overall holdings in the region.
- The Dufferin (Nova Scotia) Property transaction was adjusted downward for the development stage, prior operations, and the inclusion of an existing mill.
- The Fenelon Project transaction was adjusted upward for the size of the resource and downward for the higher grade. Due to economies of scale, it generally costs less on a dollar per ounce basis to bring a larger project into production; therefore, a buyer would be willing to pay a higher acquisition price than that of a smaller resource.

- The Silver Coin Property transactions by Ascot Resources Ltd. were adjusted downward to account for the premium associated with strategic acquisitions. Behre Dolbear believes a premium was paid as the Silver Coin property lies between two other Ascot-owned properties and this acquisition created a contiguous land and resource holding.
- The Boliden Ltd, Premier Gold Mine transaction was adjusted upward for size of resource.
- The McKenzie Break and Swanson Properties transaction was adjusted upward for the difference in resource classification. The resource for this transaction is classified only as an Inferred Mineral Resource versus the Indicated and Inferred Resource for the Garnet Project.

The range of price paid as a percentage of the gold price for the 4 company transactions was 1.35% to 3.95%, averaging 2.69%. The range for the 7 property transactions was 1.40% to 4.50%, averaging 3.15%. Direct property transactions are generally a better indication of the value of the property versus company transactions. Company transactions take into account other business-related factors, such as company debt; however, company transactions of a single-project company can be used in determining value using the Related Transactions method. Behre Dolbear has applied a weighted average to the property and company transactions of 65% and 35%, respectively. Based on this weighted average distribution, Behre Dolbear has determined an average price paid as a percentage of the gold price for the property and company transactions reviewed from 2016 through 2019 of 2.98%. Assuming the LME gold price of \$1,503.1 per ounce (gold price as of September 13, 2019)<sup>3</sup>, an approximate price of \$47 per ounce, would ascribe to the average project.

On the basis of an average price paid of 2.98% of the gold price or \$44.8 per ounce, the implied value of the Garnet Project using the related transactions method is \$8.8 million (as of the Valuation Date).

### **7.3 RULE OF THUMB**

Using the LME gold price of \$1,503.10 per ounce (as of the Valuation Date), the following ranges in price per ounce and corresponding values would apply to the Garnet Project (see Table 7.2). Based on the lower grade of the surface-accessible Measured Mineral Resources and the uncertainty regarding the processing scheme for the overall Garnet Project, Behre Dolbear has treated this material as Higher Risk Exploration Potential when applying the rule of thumb factors. Additionally, Behre Dolbear has applied an additional value discount of 90% to these ounces, as discussed above.

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<sup>3</sup>Source URL: <https://www.kitco.com/gold.londonfix.html>

<b>TABLE 7.2 RULE OF THUMB VALUE RANGES FOR THE GARNET PROJECT</b>					
<b>Resource</b>	<b>Ounces of Gold</b>	<b>Lower Percentage (%)</b>	<b>Higher Percentage (%)</b>	<b>Lower Value (US\$ millions)</b>	<b>Higher Value (US\$ millions)</b>
Underground Indicated Resources	75,906	5.0	7.5	5.70	8.56
Underground Inferred Resources	117,179	2.5	5.0	4.40	8.81
<b>Total Underground Resources</b>	<b>193,085</b>	<b>3.5</b>	<b>6.0</b>	<b>10.11</b>	<b>17.36</b>
Surface Accessible Measured Resources	62,429	0.75	1.5	0.70	1.41
<b>Total</b>	<b>814,256</b>	<b>1.4</b>	<b>2.6</b>	<b>10.81</b>	<b>18.77</b>

Given the uncertainty regarding the processing of the production from the Garnet Project, Behre Dolbear believes the lower range is more applicable.

#### 7.4 PRIOR VALUATIONS

Behre Dolbear performed a mineral valuation on the defined and potential mineral resources of the Garnet Gold District Nancy Hanks Mine and its contiguous mining claims of GHC. The report was titled *Valuation of Garnet Mining District Nancy Hanks Mine* (Behre Dolbear Project 12-191) and dated March 8, 2013. Three methods were used to derive a value of the resources. Areas outside of the known areas of mineral resource were valued using the Geoscience Matrix Method. This value is additive to the value of the mineral resources. The results are shown in Table 7.3. The fair market value was determined to be \$25.4 million.

<b>TABLE 7.3 PREVIOUS (MARCH 8, 2013) VALUATION SUMMARY FOR THE GARNET MINING DISTRICT NANCY HANKS MINE (US\$ MILLIONS)</b>			
<b>Valuation Method</b>	<b>Value</b>	<b>% Weighting in Behre Dolbear Analysis</b>	<b>Weighted Value</b>
Comparable Sales	18.4	60	11.0
Market Multiples	38.0	20	7.6
Discounted Cash Flow (Income) <sup>1</sup>	18.6	20	3.7
Weighted Average Value			22.3
Geoscience Matrix	3.1		
<sup>1</sup> Based on all mine ore shipped to Golden Sunlight Mill during the 36-month cash flow period.			

For the Comparable Sales Method, a total of 417,348 ounces were valued as the surface-accessible resource was only discounted by 50% rather than the 90% discount used in the current valuation. The average percentage of the gold price paid for the 8 transactions identified was 2.68%. When applied to the 196,925 ounces being valued in this current valuation, the implied value of the Garnet Project is \$7.9 million. As discussed previously, neither the Market Multiples nor the Discounted Cash Flow Methods are applicable to the Garnet Project at the time of this valuation.

## **7.5 PRIOR TRANSACTIONS – GARNET PROJECT**

The best comparable or related transaction, as an indication of value, is a prior transaction involving the same asset when the transaction is accomplished in an open and unrestricted market between a willing buyer and a willing seller in an “arm’s length” transaction, with each party acting knowledgeably, prudently, and without compulsion.

There have been three transactions for the Garnet Project since 2007.

- 1) The Grant Hartford Option Agreement on June 15, 2007. This transaction was between Commonwealth Resources, L.L.C. and GHC. The final transaction value was \$7.0 million, which included annual options payments and the issuance of shares. This transaction was not at an arms-length, as Commonwealth Resources was the controlling shareholder of GHC and is excluded from this valuation.
- 2) A second transaction was for a 65% membership interest in Commonwealth Resources. It was a distressed sale as the seller was in foreclosure, and, as such this transaction has been excluded from this valuation.
- 3) Asset Purchase Agreement on January 17, 2019 between Garnex Gold Corporation (buyer) and Commonwealth Resources (seller). Garnex paid \$4.0 million with an additional \$3.0 million from a Net Revenue Royalty. No forfeiture or foreclosure remedy exists after the initial payment of \$4.0 million.

Behre Dolbear believes the 2019 Garnex-Commonwealth Resources transaction was completed at an arm’s length between a willing buyer and a willing seller and has included this transaction in its valuation.

Based on the following assumptions, Behre Dolbear has determined the discounted Net Present Value (NPV) of the net royalty stream to be \$1.1 million. It should be noted that the total net royalty payable of \$3.0 million is based on the expectation of the buyer and seller that sufficient resources will be upgraded to reserves and subsequently mined from the Garnet Project to meet the royalty terms.

- The Net Revenue Royalty is based on a royalty rate of 1.5% of the revenues received by the Buyer (Garnex) less the charges and cost for treatment of the minerals.
- A production rate of 56,555 tons per year and 13,793 ounces per year (assuming a 91% gold recovery). This production rate is based on the 36-month mine plan prepared by GHC in 2012.
- A gold price of \$1,275 per ounce. This is the historical 3-year average price. It is an industry accepted standard to use historical commodity pricing for projecting commodity prices.

- A milling cost of \$25 per ton. This value is based on the amount quoted by Golden Sunlight Mill in 2012.
- Given the terms of the Net Royalty Payment, estimated production rates and mill tolling cost, and the historical gold price, a total of 172,408 ounces will need to be produced (assuming a 91% recovery) to achieve the \$3.0 million Net Revenue Royalty. It should be noted that this assumes that nearly all the currently reported underground-accessible Indicated and Inferred Mineral Resources (193,086 ounces) are converted to reserves and subsequently mined and recovered at a 91% recovery rate. In Appendix A.3.2, Behre Dolbear has outlined the exploration potential and has indicated that there are viable targets that could add substantial new resources to the Garnet Project in the long term, but also could provide high-grade or bonanza ores easily accessible in the short-term. Behre Dolbear cautions that this is exploration potential and does not necessarily guarantee that new resources will be added to the Project.
- A 12.5-year production period, at the projected production rates, is necessary to achieve a total of \$3.0 million in royalty payments. Behre Dolbear has assumed a two-year ramp-up period in addition to this production time.
- A discount rate of 12.49% has been applied to the Net Royalty Revenue to determine a NPV of the royalty payments. This discount rate is determined as the sum of the 10-year average of 10-year U.S. Treasury Notes (2.49% – generally considered to be the risk-free rate of return) and a base 10% rate of return. It is Behre Dolbear’s experience that a 10% rate of return is the average rate of return expected by purchasers of similar mining projects to that of the Garnet Project.

Adding the initial payment of \$4.0 million and the discounted royalty payments, the implied value of the 2019 Garnex-Commonwealth Resources transaction is \$5.1 million.

## **7.6 GEOSCIENCE MATRIX**

Behre Dolbear has applied the Geoscience Matrix Method to the valuation of the Garnex claim holdings with no resources. The method is best used for early-stage exploration projects with a paucity of information.

### **7.6.1 Geoscience Matrix Methodology**

The Geoscience Matrix Method gained acceptance as a valuation method in the 1990s. Courts in the United States, the VALMIN Code of the AusIMM, and securities commissions in Canada have accepted this method. Behre Dolbear has been involved with two court cases where the Geoscience Matrix Approach was used. In the Alaska Mental Health case, valuation of mineral lands in Alaska, using this approach, was allowed by the court in Anchorage. In a condemnation action by the City of Cripple Creek, Colorado, the court accepted the method as valid. In addition, the VALMIN Code of the AusIMM has been legislatively enacted in the jurisdictions where the AusIMM is the mineral industry professional society (Southeast Asia and Australia).

The approach is based on four specific criteria:

- 1) location relative to known mineral occurrences (Sub-categories 1-6)
- 2) grade of mineralization on the property (Sub-categories 7-14)
- 3) on-property geophysical and geochemical targets (Sub-categories 15-17)
- 4) on-property geological targets (Sub-categories 18-19)

A total of 19 sub-categories are present, each with a given point range. Only one sub-category per category is used; that which seems to approximate the situation at the property in hand. A more detailed description of the categories and sub-categories is presented in Appendix 8.0.

Value is based on the inherent cost of land acquisition per acre, multiplied by the points of the selected sub-categories. The inherent land acquisition cost is typically the cost per acre to stake a claim on the public domain, currently estimated to be \$280 in exploration, geological, and physical staking costs plus \$245 in fees payable to the federal government for a standard claim of 600 feet by 1,500 feet (20.66 acres). Thus, the base value is \$25.41 per acre ( $\$492 \div 20.66 = \$25.41$ ). The mineral value per acre is then the base value times the points allowed for each category.

For example, if the property under valuation has characteristics that are as follows: Location Sub-category 2 – 2.0 points; Targets/Grade Sub-category 9 – 2.0 points; Geochemical/Geophysical Sub-category 15 – 2.0 points; and Geological Sub-category 18 – 2.0 points, then the property is valued as  $2 \times 2 \times 2 \times 2 = 16 \times \$25.41 = \$406.56$  per acre.<sup>4</sup>

### 7.6.2 Valuation of the Garnex Holdings by the Geoscience Matrix Method

Behre Dolbear has classified the extensive Garnex holdings outside of the immediate Nancy Hanks and Willie resource area into three categories: high, good, and moderate potential. None of these areas contain defined resources, but a varying amount of exploration and geologic interpretation has been done. The classification of areas is discussed in Appendix 8.0 of this report. The results are summarized in Table 7.4.

<b>TABLE 7.4</b>					
<b>GEOSCIENCE MATRIX – GARNET PROJECT</b>					
<b>Category</b>	<b>High Potential Areas</b>	<b>Good Potential Areas</b>	<b>Moderate Potential Areas</b>	<b>All Other Areas</b>	<b>Total/Average</b>
Location Points	4	4	4	4	
Grade Points	3	2	1.5	1.3	
Geochemical/Geophysical Points	2	2	2	2	
Geology Points	3	3	2.5	2	
<b>Total Points</b>	<b>72</b>	<b>48</b>	<b>30</b>	<b>20.8</b>	
Cost of Land per Acre	\$25.41	\$25.41	\$25.41	\$25.41	
Valuation per Acre	\$1,830	\$1,220	\$762	\$529	
<b>Total Acres</b>	<b>355.45</b>	<b>193.19</b>	<b>299.62</b>	<b>3,460.61</b>	<b>4,308.86</b>
Valuation	\$650,301	\$235,624	\$228,397	\$1,829,029	<b>\$2,943,351</b>

<sup>4</sup>Lionel C. Kilburn, Valuation of Mineral Properties, which do not contain Exploitable Reserves: CIM Bulletin, August 1990, pages 90-93.



### 7.6.3 Geoscience Matrix Summary

The areas valued by the Geoscience Matrix Method total \$2.9 million. These areas are outside the areas of known mineral resources. As such, the value of these areas is additive to the value of the resources valued by other valuation methods. Details of the Exploration Targets of Interest that make up the detail supporting the Geoscience Matrix Method can be found in Appendix 8.0.

### 7.7 PREFERRED VALUE

Behre Dolbear weighted the 4 valuation methods discussed above to arrive at a Preferred Value for the Garnet Project. The Related Transaction method is considered by Behre Dolbear to be the most reliable indicator of value for a project in the exploration and development phase (as is the Garnet Project), and is given the majority of the weighting in this analysis, as it is based on actual recent sales of comparable gold properties. This method was given a 70% weighting, while the Rules of Thumb, prior Related Transaction value (as applied to the resources currently being valued), and the 2019 Garnet-Commonwealth Resources property transaction, were given a 10% weighting each, to arrive at an average value of \$8.6 million, as shown in Table 7.5. Including the value of the areas outside the areas of known resources, as determined by the Geoscience Matrix Method, the Preferred Value of the Garnet Project, as of September 13, 2019, is \$11.5 million.

<b>TABLE 7.5</b>			
<b>PREFERRED VALUE OF THE GARNET PROJECT AS OF SEPTEMBER 13, 2019</b>			
<b>(US\$ MILLIONS)</b>			
<b>Valuation Method</b>	<b>Value</b>	<b>% Weighting</b>	<b>Weighted Value</b>
Related Transactions	8.8	70	6.2
Rules of Thumb	10.8	10	1.1
Adjusted Prior Valuation – Related Transaction	7.9	10	0.8
Prior Property Transactions	5.1	10	0.5
Geoscience Matrix	2.9	N/A - Additive	2.9
<b>Total</b>			<b>11.5</b>

## **8.0 TECHNICAL PROJECT AREAS AFFECTING VALUATION**

The technical areas of team investigation to support the Garnet Project Valuation can be found in the Appendices to this report. A listing of those appendices follows.

- Appendix 1.0 Behre Dolbear Project Team Resumes
- Appendix 2.0 Property Location, Mineral Title, Infrastructure, and Claim Listings
- Appendix 3.0 Geology, Exploration, and Drilling Resources
- Appendix 4.0 Mining – Nancy Hanks Mine
- Appendix 5.0 Metallurgy and Process
- Appendix 6.0 Environment and Permitting
- Appendix 7.0 Related Transaction Detail
- Appendix 8.0 Geoscience Matrix Detail
- Appendix 9.0 Property Risk Profile

**APPENDIX 1.0**  
**BEHRE DOLBEAR PROJECT TEAM RESUMES**

**JOHN REISS**  
**SENIOR ASSOCIATE**

Project Management, Operations,  
Feasibility Studies, Mine Engineering

Mr. John Reiss is a senior associate with Behre Dolbear and has over 40 years of progressively responsible positions in operations management, technical studies, due diligence studies, and project management involving underground hard rock mining. He operated an internationally recognized underground panel-caving mining operation. His project management activities include delivery of bankable feasibility studies for mining systems in molybdenum, copper, and gold deposits. He has completed assignments in both domestic and international locations.

Mr. Reiss's specific project experience includes the following:

- Participant in mining related arbitration cases for mining projects in El Salvador and Columbia, South America
- Project Manager and team participant in various underground mine projects in the USA, Canada, Mexico, Brazil, and China from 2005 to the present. Mining methods included; mechanized cut and fill, shrinkage stoping, long hole stoping, underhand cut and fill, room and pillar, and narrow vein mining methods.
- Project Manager on prefeasibility study that was completed for new 300 tpd underground narrow vein gold mine. Mine plan utilized cut and fill mining methods. Project was located in California.
- Due Diligence reviews of mining operations of various underground operating mines in Mexico and China. Mining methods reviewed included room and pillar, cut and fill, and shrinkage stoping with backfill. Production rates ranged from 2 ktpd up to 3 ktpd. Metals involved were gold, silver, and copper.
- Due Diligence reviews of mine plans for new surface/underground mining projects in Northern Mexico and northern Rocky Mountains of the United States. Planned production rates ranged from 3 ktpd up to 20 ktpd. Target metals for recovery were gold, silver, and copper.
- Recruited and directed study team that completed a bankable feasibility study evaluating rehabilitation and re-start of commercial operations of the Atlas Mine on Cebu Island, Philippines. The mine complex covers more than 3,000 hectares and had been shut down for 4 years. The mine has its own port facilities for ship-loading of copper and pyrite concentrates. The new mine plan involves mining remnant ore from the Carmen open pit and production from the Carmen underground block cave mine peaking at 42,000 tpd.
- Supervised activities of area managers of a junior mining company, with responsibility for operations and technical studies of four mine properties located on different islands in the Philippines.
- Supervised and directed activities of the company's headquarters office in Manila.
- Negotiated contracts with contractors, claim owners, and government agencies.
- Directed pre-feasibility study to rehabilitate and restart the Atlas mine under a new mining company, Tolco Mining Corporation, to which he was appointed CEO. The study was completed, and project capital was estimated at US\$90 million; however, the project could not continue due to lack of working capital.
- Acquisition evaluation and restart of 1,000-tpd mechanized placer gold mine in Nevada. Specific activities included generation of the operating budget, method optimization, testing of potential reserves, economics, hiring of workforce, securing permits, and wash plant design. Became general manager of the mine following acquisition by Equistar Mining.

- Completed 10-year production and development tonnage profile study for new resource blocks in the Ashanti underground gold mine, Ghana, West Africa. Activities included development of overall mining strategy, mining method selection, development rates, stope locations from geologic grids and sections, layouts for 17 main levels, and schedule of tonnage on an annual basis.
- Completed new production shaft scoping study that provided the client with site alternative analysis plus capital and schedule estimates for boring and equipping a two-stage, 10-foot diameter production and waste-rock shaft to a depth of approximately 2,900 feet. The plan was adopted and the shaft was bored and put into operation.
- Directed planning, design, and cost estimates for delivery of a high-tech security system to a South African platinum refinery.
- Contracted to direct activities of an owner's team and engineering contractor workforce that totaled 70 professionals to deliver a detailed feasibility study for a new 60,000-tpd block cave copper mine below an existing open pit in Palabora, South Africa. The study included process modifications to existing concentrator, smelter, and refinery and required approximately 122,000 man-hours to complete. Budget managed was equivalent to US\$10 million.
- Directed development of conceptual/detail mine designs and process modifications for bankable feasibility study of the Atlas Mine restart in the Philippines.
- Had approval authority over all design capital/operating cost estimates and budget expenditures of Palabora study.
- Managed activities of various third-party technical audits to validate feasibility study designs and cost estimates of feasibility studies.
- Managed activities of engineering contractor for development of a feasibility study of an underground gold mine in Alaska. Mining methods adopted involved open stoping and modified open stoping utilizing mass blasting techniques.
- Negotiated and managed activities of various engineering, exploration, and environmental contractors of several projects to accomplish project milestones, including necessary municipal, state, and federal permits.
- Managed development of underground cut-and-fill stope designs from geologic cross sections for a West African underground gold mine. Aspects included block model analysis of the deposit and completion of detailed operating costs for 10-year mine life.
- Developed, presented, and obtained approval for annual and long-range budgets for several companies.
- Developed methods to increase underground development productivity from 1.24 feet per man-shift to 2.5 feet per man-shift at an existing underground mining operation.
- Implemented safety programs in an existing mine that reduced accidents from 425 in 1979 to 32 in 1984, with no serious accidents. Aspects included aggressive programs for proper work techniques, spot safety tests, and vigorous workplace safety follow-up.
- Directed development of long- and short-range mine operating plans for an underground panel cave mining operation.
- Directed/controlled operation and maintenance of 15-mile, semi-automatic unit train system that delivered ore from an underground mine to its mill. Developed training techniques and education programs for inexperienced work force, which optimized systems from startup mode. Capitalized fleet costs of approximately US\$40 million.
- Held various technical and operational positions with AMAX, including Mine Superintendent of the Henderson Mine.

### **CORPORATE EXPERIENCE**

2002 – Present	Behre Dolbear & Company (USA), Inc., Senior Associate
2002	San Manuel Mine, Mining Consultant
2002	United Steel Workers, Mining Consultant
1997 – 2001	Minoro Mining, Vice President, Project Director
1996 – 1997	Base Metals Mineral Resources, Senior Vice President of Operations
1995 – 1996	Behre Dolbear & Company (USA), Inc., Senior Associate
1992 – 1994	Rio Tinto, South Africa, Project Director for Palabora Underground Project
1989 – 1991	Echo Bay Mines, Juneau, Alaska, Project Manager
1968 – 1989	AMAX Mine, Mine Superintendent

### **PROFESSIONAL ASSOCIATIONS**

- American Institute of Mining Engineers
- Society of Mining Engineers
- Colorado Mining Association
- Alaska Miners Association

### **REGISTRATIONS/CERTIFICATIONS**

- Qualified Professional Member (01311QP), Mining and Metallurgical Society of America

### **EDUCATION**

- Colorado School of Mines, Engineer of Mines (EM) – 1968
- University of Denver, MBA – 1989

### **PUBLICATIONS**

- Panel Caving at the Henderson: Theory and Practice, Vail Mining Conference; 1986
- The Henderson Mine Haulage Systems, Department of Transportation, UTRC Conference; 1982
- Project Overview/A.J. Project, Intermountain Minerals Conference; 1990
- To Reopen the A.J. Mine, Western Regional Conference on Precious Metals; 1990

**CHRISTOPHER J. WYATT**  
**SENIOR ASSOCIATE AND DIRECTOR**

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Mr. Christopher Wyatt has over 25 years of experience in the minerals industry, including 14 years in senior and executive level operational management positions. Since 2007, when he joined Behre Dolbear, Mr. Wyatt has been involved in the evaluation and valuation mineral assets including industrial, precious metal, and sand and gravel resources. His valuation work includes valuations related to local and international disputes; tax reasons; and fair market valuations for purchases, mergers, and dispositions. In addition to consulting work, he was an Instructor at the South Dakota School of Mines (2014-2017), where in addition to technical classes, he taught Mineral Economics, Advanced Mineral Economics, and Mergers and Acquisitions in the mineral industry. Since graduation from the University, he has worked for both large public mining companies, RGC and Placer Dome, as well as private mining companies. He has operational experience in Alaska, including exploration and reclamation assignments as well as operational experience and consulting experience in North America, South America, Australia, Indonesia, Asia, Africa, China, and Sri Lanka. Mr. Wyatt holds a Bachelors in Mineral Engineering from the University of California-Berkeley, an MBA and MS from California Polytechnic University-San Luis Obispo, as well as a Masters in Mineral Economics from the Colorado School of Mines.

Mr. Wyatt's business expertise includes financial evaluations; mineral appraisals, project management; and feasibility studies development, startup, and management of surface operations. He is a qualified professional and a member of the following Recognized Professional Organizations: Registered Member, Society for Mining, Metallurgy, and Exploration (3574500), Mining & Metallurgical Society of America Qualified Professional (1364QP) Mining and Environmental Permitting and Compliance, Certified Mineral Appraiser International Institute of Minerals Appraisers (Formerly the American Institute of Minerals Appraisers) (2014-1). He has led the development of new mining equipment and methods including the EMU 1 and 2 Mining Units for Iluka resources, and a Cavitating Water Jet Hard Rock Dredge Mining System receiving US patent #9303384.

Mr. Wyatt's specific project experience includes:

- Corporate officer for an international mineral consulting firm responsible for identifying and managing projects teams and budgets in the evaluation and valuation of mineral projects across the globe.
- Responsible for multiple mine and concentrate production facilities, including production, reclamation, maintenance, engineering, environmental compliance, and safety. He was a key member of the team that returned the operation's mines and processing plants to profitability.
- Executive officer of a private/public water sewer utility. Board member of a regional water treatment plant and a regional wastewater treatment plant.

While with Behre Dolbear & Company, Inc., Mr. Wyatt has participated in a number of recent mineral property valuations, including:

- Glamis Golds Imperial Project, California gold property for taking compensation.
- Haile Mine, South Carolina gold property for acquisition purposes.
- Butler Taconite, Minnesota iron ore property for balance sheet allocation purposes

## **CORPORATE EXPERIENCE**

- 2016 – 2017 South Dakota School of Mines, Rapid City, South Dakota, Faculty Member and Instructor, Mining Engineering and Management Department  
Focused on mineral economics and management  
Courses Taught: Mineral Economics, Mergers and Acquisitions, Advanced Mineral Economics, and Senior Capstone Design Course
- 2014 – Present Behre Dolbear & Company, Inc., Denver, Colorado, Independent Consultant
- 2007 – Present Behre Dolbear & Company (USA), Inc., Denver, Colorado  
Board Member  
Member of the Executive Committee  
Vice President Behre Dolbear (USA)  
Vice President Behre Dolbear Asia  
Vice President Behre Dolbear Company Inc., (Regional responsibilities for North America and Asia)  
Responsibilities include both business management and project execution.
- Business management includes internal as well external operations including interfacing with various clients and geographic locations (small investors, international financial institutions, hedge funds, large and junior mining companies as well governmental agencies and law firms) identifying their needs and putting together and managing multidisciplinary teams and budgets for the evaluations of projects.
  - Project execution can include a range of services from; conceptual, scoping, pre-feasibility, and feasibility studies; due diligence reviews in support of financings, investment decisions, acquisitions, dispositions, and mergers to strategic business plans for mining companies and individual operations
- 2005 – 2006 Barton Mines Company, LLC, North River, New York  
North Creek Operations Manager
- Responsible for all aspects of the mining, processing, packaging, and warehousing facilities.
- 2003 – 2005 Iluka Resources Limited, Stony Creek, Virginia  
Mining Manager Virginia Operations
- Responsible for mining, concentrating and reclamation activities. Served as Operations/General Manager during manager's absence and was responsible for all functions of the two mining and concentrating facilities. Successfully facilitated the return of the mine to profitability and environmental compliance.
- 2001 – 2003 Dinwiddie County Water Authority, Dinwiddie, Virginia, Executive Director
- Executive officer responsible for the private/public water sewer utility as well as board member of a regional water treatment plant and a regional wastewater treatment plant.



1996 – 2001	Iluka Resources Limited/RGC Mineral Sands Ltd., Stony Creek, Virginia
1999 – 2001	Mine Manager, Virginia Operations
1996 – 1998	Senior Mine Engineer
	<ul style="list-style-type: none"><li>Responsibilities encompassed a variety of roles including geology, planning and engineering (mining, processing, and operational), and operations management. Held roles at the corporation level including training new engineers and geologist, and member of assessment and review of global operations teams. Operations held by RGC at this time included the Mineral Sands operations, Tin (PT Koba Tin), Coal (Namara Coal), and Lime (Westlime). In addition, responsible for developing a new mining method including training of site personal in its operation.</li></ul>
1995 – 1996	SAES Pure Gas Inc., San Luis Obispo, California, Contract Engineer Quality control department within the engineering division and responsible for custom built gas purification systems for technology firms.
1991 – 1994	Placer Dome U.S. Inc., Alaska, California, and Nevada, Mineral Engineer Multiple roles in exploration, evaluation and operations.
Prior to 1990	Engineering roles with: AMC Mineral Sands Ltd., Australia (AMC was the mineral sands division of RGC) Parsons Brinckerhoff Quade & Douglas, Inc., California Praxis Engineering, California

### **PROFESSIONAL AFFILIATIONS**

- Registered Member, Society for Mining, Metallurgy, and Exploration (3574500)
  - Member of the Offshore Technology Committee (OTC) (2013-Present)
- Mining & Metallurgical Society of America Qualified Professional (1364QP) in Mining and in Environmental Permitting and Compliance
  - Colorado Section Treasurer (2008-2012)
  - Colorado Section Chair (2012-2014)
  - National Treasurer (2015-Present)
- Certified Mineral Appraiser, American Institute of Minerals Appraisers (2014-1)
- Member, International Marine Minerals Society
- Member, Society of Economic Geologists
- Member, International Marine Minerals Society
- Member, Water Jet Technology Association
- Member, Western Dredging Association

### **EDUCATION**

- Colorado School of Mines, M.S. Mineral Economics (Operational Research Track)
- California Polytechnic University, San Luis Obispo, MBA
- California Polytechnic University, San Luis Obispo, M.S. Engineering Management, Department of Industrial Engineering
- University of California-Berkeley, B.S. Mineral Engineering

**SELECT PROJECT WORK 2007 – PRESENT**

Valuation of Lithium Borate Project, 2018  
Outside Technical Reviewer for New Mining System for Mineral Sands, 2017  
Valuation of Limestone Reserves Missouri, 2017  
Provided Depositional Evidence Regarding Dispute between Investors in a Base Metal Mine, 2017  
Investors Technical Representative for Development of Hard Rock Rutile Garnet Deposit in Norway, 2017  
Valuation of Sand and Gravel Assets for Tax Purposes, New Mexico, 2017  
Valuation of Undeveloped Mineral Resources Located on the Smith Ranch, South Dakota, 2016  
Competent Person of Record for Two Manganese Nodule Contract Areas Located in the Clarion Clipperton Zone (CCZ), 2016  
Qualified Person of Record for One Manganese Nodule Contract Area Located in the Clarion Clipperton Zone (CCZ), 2016  
Valuation of a Company's Chinese Dimension Quarries to be used as Part of the Listing Documentation Required by the Singapore Stock Exchange, 2014  
Part of a Multi-disciplinary Team Evaluating the Extraction of Deep Sea Manganese Nodules and How to Accurately Assess the Resources for Mining Purposes, 2014-2015  
Valuation of a Uranium Project Grants, New Mexico, 2014  
Evaluation of a Multiple Copper Operations for Use by a Banking Entity, which was considering extending credit to the operating company, 2014  
Due Diligence Review of Mothballed Zinc Operation for Investors, including capital and operating costs to return to production, 2014  
Expert Witness Valuation Report Regarding Value of Garnet Mineralization in Montana, 2013  
Valuation of Multi-national Copper Producer's Development Properties in Central America, 2013  
Retained as Technical Consultant to a Large Garnet Producer to Assist in the Development of New Garnet Assets and Improve Operational Efficiencies, 2012  
Independent Technical Report on Chinese Mineral Sands Producer Intended for Use in Listing on the Hong Kong Stock Exchange, 2012  
Valuation of a Brazilian Kaolin Mines Resources and Reserves, 2011  
Report Covering 10 Years of Major Project Mining Concession Arrangements in Latin America; follow on assignment included drafting a bid document for use by government agency in awarding concession, 2010-2011  
Litigation Support Regarding a Dispute between Large Mining Contractor and Mine Owner over Claims Contractor Failed to Perform, 2010-2011  
Litigation Support to Value of 3 Gold Projects as to Damages Due to Misappropriations of Technology by Consulting Firm, 2010-2011  
Litigation Support in Determining Damages Associated with Value of Assets (mineral and physical) for a Mexican Silver Mine, 2010-2011  
Review and Opinion on Valuation Methods Used for Operating and Non-operating Iron and Copper Mineral Assets formerly held in trusts and being combined to form a royalty company, 2010-2011  
NI 43-101 Report on Large Polymetallic Mine Located in Mexico; completed report was to be submitted only if litigation occurred regarding potential acquisition of Canadian listed royalty company by U.S. listed company, 2010  
Due Diligence and Scoping Study of Client's Southwestern Potash Assets, 2010  
Litigation Support for Chilean Borate Producer Whose Properties in Bolivia Were Expropriated, 2009-2010  
Report and Recommendations to Chapter 18 Listing Rules for Mineral Companies Listing on the Hong Stock Exchange, 2009  
Aggregates Market Review for the Front Range of Colorado; the purpose of which was to assess the market position of a current producers as part of a possible acquisition, 2009  
Due Diligence Review for Financing of the Coos Bay Heavy Mineral Sands Deposit, 2009  
Valuation of a Platinum Producers Mine and Processing Assets, 2009

Assist Doe Run in Developing Promotional Technical Data Regarding the Sale of the Bushy Park Lead Zinc Property in South Africa, 2009  
Due Diligence Review of Western Utah Copper’s Milford, Utah operation, 2009  
Review of Historic Colorado Mining District and Development of Preliminary Exploration Plan, 2008  
Technical Review and Report Regarding Rusoro’s Choco 10 Gold Mining Operations; the review was undertaken to determine validity of claims that they could successfully operate a mine in Venezuela, 2008  
Performed an Initial Site Environmental Review for a Potential Investor Covering Midway Gold’s Nevada Assets, 2008  
Due Diligence Review of U.S. Silica’s Ottawa Silica Operation and Expansion Plans  
Litigation Support in Glamis Gold versus California over Effective Taking of Mineral Assets, 2007

### **PRESENTATIONS AND PAPERS**

2017 SME Annual Meeting Valuation Session, “Thoughts on Valuing Deep Sea Manganese Nodule Deposits in the CCZ”  
Co-Chair, 2015 SME Annual Meeting Valuation Sessions  
Colorado School of Mines guest lecturer, Garnet and Heavy Mineral Sands, MNGN 460, Industrial Minerals Production, Fall 2014  
Colorado School of Mines guest lecturer, Dredging and Marine Mining, MNGN 210 Introduction to Mining, Spring 2014  
Colorado School of Mines guest lecturer (Garnet, and Heavy Mineral Sands) MNGN 460, Industrial Minerals Production Spring, 2014  
Paper and Presentation “The Use of High Pressure Waterjets to Improve Performance of Rotary Cutter Head Dredges From the Inside Out” 2013 WJTA-IMCA Conference and Expo, Houston, Texas, September 2013  
Presentation “A Different Perspective on the Use of High Pressure Water Jets to Improve Performance of Rotary Cutter Head Dredges,” Western Dredging Association (WEDA) 2013 Midwest Chapter Meeting, St. Louis, April 2013  
Colorado School of Mines guest lecturer (Garnet) and (Heavy Mineral Sands Emphasis Ilmenite and Zircon) for GEGN 598 Geology of Industrial Minerals, Spring 2013  
Colorado School of Mines guest lecturer (Garnet, and Heavy Mineral Sands) MNGN 460, Industrial Minerals Production Spring, 2013  
Society for Mining, Metallurgy, and Exploration Inc. – Peer review of professional paper “Mining Heritage: Preservation and Sustainable Development of an Outstanding Universal Value,” by Juergen, Kretschmann; Technische Fachhochschule; and Georg Agricola, Spring 2013  
Colorado School of Mines guest lecturer Dredging MNGN 498, Small Scale Mining Fall, 2012  
Presentation “Valuations for Fairness Opinions and Other Tight Turnaround Needs,” SME-AIMA Annual Meeting Valuation Sessions 2011  
Society for Mining, Metallurgy, and Exploration Inc. – Peer review of professional paper “Heavy-Mineral Deposits of the Fox Hills Formation Located Near Limon, Colorado,” by Fredic Pirkle, Gale Bishop, William Pirkle and Norman Stouffer, February 2, 2011  
Rocky Mountain Mineral Law Foundation presentation Valuation of Mineral Projects and Mining Companies as part of the Due Diligence in Mining and Oil & Gas Transactions Conference, May 2010  
Colorado School of Mines guest lecturer (Garnet) for GEGN 598 Geology of Industrial Minerals, Fall 2009  
Presentations Related to Behre Dolbear’s ABCs of Mining Short Courses: Hong Kong, Toronto, and Singapore, 2009-2011: Mineral Processing and Costs; Political Risks in Mining

**AMY E. JACOBSEN, P.E., MBA**  
**SENIOR ASSOCIATE**

Business Process Analysis,  
Cash Flow Analysis and Modeling,  
Valuations

Ms. Amy Jacobsen has over 25 years of diverse experience in strategic business planning and leadership, technical cash flow model evaluation and preparation, and valuations and technical project management. Ms. Jacobsen has been instrumental in preparing and implementing several successful business and marketing plans as well as business process analyses and optimization studies.

In addition to marketing and business planning, Ms. Jacobsen has extensive experience in independent engineer technical reviews of large infrastructure projects, including mineral projects as well as power projects. These reviews include the overall evaluation of the project and project documentation, but her area of expertise is the review, analysis, and preparation of cash flow models for use in project evaluations and valuations. Ms. Jacobsen has managed numerous technical projects and has generated or reviewed cash flow models for numerous projects including expert witness opinions, valuations, technical report evaluations, feasibility studies and independent technical reports used by stock exchanges and investors. Her experience has been in North and South America, Australia, Middle East, Europe, Africa, and Asia.

Additionally, Ms. Jacobsen's technical experience in the minerals industry includes metallurgical process consulting, process development, and minerals operations. Her areas of knowledge include technical feasibility studies, process flow sheet design, pilot-and bench-scale testing of plant processes, metallurgical accounting, circuit start-up, and plant optimization. She has a background in energy fuels such as uranium, coal, and lignite, precious metals, base metals (including copper, cobalt, zinc, and nickel), industrial minerals, and fertilizers.

Her credentials include a Bachelor of Science Degree in Metallurgical Engineering from the Colorado School of Mines as well as a Master of Business Administration from the Executive MBA program at the University of Denver. She is a Qualified Professional in metallurgy through the Mining and Metallurgical Society of America, a registered Professional Engineer in the state of Colorado and an Associate Member of the International Institute of Mineral Appraisers.

## **CORPORATE EXPERIENCE**

2006 – Present	Behre Dolbear Group Inc., Chair, BDGI Board of Directors Behre Dolbear & Company, Inc., Senior Associate Behre Dolbear Management Consulting, Inc., Managing Director Behre Dolbear & Company, Inc., Vice President of Global Corporate Development
2001 – 2005	Stone & Webster Management Consultants, Inc., Consultant, Project Services
1986 – 2001	Hazen Research, Inc., various positions including Senior Project Engineer
1989 – 1991	Homestake Mining Company, McLaughlin Mine, Mill Metallurgist

## **RELEVANT EXPERIENCE**

### **Project Management**

- Managed \$3.7 million technical review and valuation for 24 mining and metallurgical assets in the Americas in support of proposed stock exchange listing. Efforts included directing 33 team members located in multiple countries, compiling and editing the final technical and valuation reports and managing the project budget and schedule.

### **Financial Model Analysis and Preparation**

- Prepared and reviewed financial cash flow models for multiple world-wide mineral and mining operations. Recent financial models have included:
  - Technical due diligence review of 12 marble and dimension stone projects in China
  - Technical due diligence review of \$6 billion copper project in Peru
  - Technical review of seven long-wall coal mines in China (\$1.8 billion) (successfully listed on the Hong Kong Stock Exchange)
  - Technical review of a \$530 million rare earths facility in North America
  - Feasibility study of a \$73 million gold project in North America
  - Feasibility study of a \$707 million underground iron project in North America
  - Technical review of a \$5.8 billion bauxite facility in the Middle East
  - Technical due diligence of a 158 million tonne cobalt and nickel project in Africa
- Reviewed, analyzed, and prepared project *pro formas* and cash flow models in support of due diligence and independent engineer technical reviews of power projects. The models were evaluated for identification of potential project concerns and consistency with technical operating parameters, contractual agreements, electricity and fuel market conditions, and maintenance practices. Scope of the project financings or asset acquisition costs ranged from \$92 million to \$667 million. Technologies included natural gas, geothermal, wind, small-scale hydropower, and CFB power generation.
- Types of financings have included public offerings on the Hong Kong, Singapore, NASDAQ, Toronto and London Stock Exchanges, 144A Note Offerings, refinancing of senior debt for existing facilities, asset acquisitions, and financings of new green field projects.

### **Expert Witness Opinions**

- Prepared valuation of a South American copper development project in support of international arbitration case. Work included the initial report to the arbitration panel and the preparation of the response to the rebuttal report by the defendants.
- Prepared technical cash flow model in support of an arbitration case for a development gold project in Eastern Europe.

### **Valuations**

- Performed valuations of several mineral and coal projects using multiple valuation methodologies including the income approach, market and related transaction approach and royalty stream analysis. Income approach valuations included the preparation of a cash flow model, development of an appropriate discount rate, and application of Monte Carlo simulations. The valuations were prepared in accordance with global standards such as the Valmin Code. Recent valuations have included:
  - Valuation of several aggregate and crushed stone operations as part of IRS donation filings.
  - Valuation of three integrated copper business units in North and South America for proposed stock exchange listing.
  - Valuation of a potash project in Russia in support of an acquisition.
  - Valuation of a South American copper project in support of an acquisition.

- Independent technical report and valuation for a Chinese coal mine in support of an acquisition and a possible listing on the Hong Kong Stock Exchange.
- Litigation support for a major thermal coal exporter in Asia.
- Valuation of three kaolin, glass sands, and feldspar operations in North America.

#### **Business Plan Preparation and Business Process Analysis**

- Interim CEO and Chairwoman of an international minerals consulting firm. Instrumental in identifying and successfully negotiating terms with a significant investor. Responsible for cash flow management, marketing plan development, stockholder relations and debt management.
- Completed a business process and operational review and gap analysis of a major European lignite producer. Annual production at the mine reviewed is 40 million metric tonnes of lignite per annum. Business practice analysis included mining and excavation, materials handling and transportation, maintenance, and water management. Identified greater than 20 million Euros potential process and technical improvement opportunities.
- Instrumental in the preparation of a business plan outlining strategy for growing an international minerals industry consulting firm through organic growth with new services as well as acquisitions. The business plan resulted in negotiations with potential acquisition targets as well as the expansion of the business into new service offerings.
- Prepared and implemented a business and marketing plan for an international power generation consulting firm for the expansion of their business into the minerals industry. The successful marketing program resulted in the completed expansion of their service offering and increased the company's visibility within the minerals industry. Revenues were increased by over \$250,000 in the first quarter of implementation.

#### **Market Research and Competitive Analysis**

- Prepared global market analysis for lithium. The market analysis was used by the client to determine whether to invest in a lithium project.
- Prepared market analysis for mining projects in the Southeast United States. The market study was used by a consulting firm to determine target customers for environmental services.
- Prepared market analysis for phosphate. The market analysis was used to determine potential for sales of fertilizer from the production of a green field phosphate project.
- Prepared a competitive analysis of North American soda ash producers in support of the identification of potential acquisition targets.
- Analyzed coking coal market in support of a scoping study for the green field development of a coking coal mine and facility in South America.

#### **Mineral Operations – Metallurgical Engineer**

- As a mill metallurgist, provided technical support at the McLaughlin pressure oxidation gold mill by reviewing methods to reduce reagent costs, conducting metallurgical accounting, performing circuit optimization and start-up, addressing environmental constraints and concerns, and directing routine equipment corrosion inspections. The McLaughlin mill processed over 4,000 tons of gold ore per day.
- Managed laboratory program for the process design for the processing of low-grade ores. Instrumental in the implementation and construction of full-scale flotation plant.

#### **Metallurgical Process Design**

- Prepared and designed mineral processing and extractive metallurgy process flow sheets for numerous ore and mineral systems. These efforts required coordination of research activities, interpretation of test data, and process modeling.

- Managed over 25 bench- and pilot-scale metallurgical process design studies. Designed research programs, developed process flow sheets, coordinated integrated project operations and teams, interpreted data, prepared final project reports, managed project schedules and budgets, ensured quality control, and maintained safe working conditions.
- Co-managed cross-departmental project teams that successfully completed seven complex, integrated metallurgical research projects with average budgets of \$850,000 and staffing up to 30 persons.
- Areas of technical proficiency include solvent extraction, biooxidation, pressure oxidation and leaching, and general hydrometallurgical processes and chemistry. Possess detailed knowledge of precious metals, especially refractory gold, as well as uranium, nickel laterite, cobalt, copper, and zinc (jarosite precipitation) extractive metallurgical processes, and flow sheets.

### **PROFESSIONAL AFFILIATIONS**

- Colorado School of Mines
  - Starting in mid-year 2019, Adjunct Professor for the Professional Masters – Mining Engineering and Management degree program. Course to be taught is Mine Investment Evaluation
- Mining and Metallurgical Society of America
  - 2014-present – Executive Committee
  - 2019 Incoming Chair
- International Institute of Mineral Appraisers
- Society for Mining, Metallurgy and Exploration
  - 2014-present – Mineral Processing Division Executive Committee
  - 2006-2008 – Marketing and Outreach Strategic Committee
  - Chair – 2007 Energy Symposium
  - 2004 Chair – Young Leaders Committee
  - 2003-2004 Board of Directors – Executive Committee
  - National Strategic Planning Ad-hoc Committee
  - Chair – Professional Engineers Registration Committee
- Minerals Information Institute
  - 2006 Chair
  - Board of Directors (1998-2006)
  - Strategic Planning Committee

### **REGISTRATIONS/CERTIFICATIONS**

- Associate Member – International Institute of Mineral Appraisers
- Qualified Professional in Metallurgy – Mining and Metallurgical Society of America
- Professional Engineer – Colorado

### **EDUCATION**

- University of Denver, Masters in Business Administration – 2001
- Colorado School of Mines, B.Sc., Metallurgical Engineering – 1989
- Colorado School of Mines, Mineral Economics Department, Economic Evaluation and Investment Decision Methods Short Course – 2001
- Colorado School of Mines, Using Monte Carlo Simulation to Value Mineral and Energy Projects Short Course – 2006

**PUBLICATIONS**

- Contributing Author – *Mineral Property Evaluation – Handbook for Feasibility Studies and Due Diligence*, published by Society of Mining, Metallurgy and Exploration, Senior Editor: Richard L. Bullock, 2018. Wrote Chapter 20 – “Using Technical Economic Evaluations and Cash-Flow Analyses in Feasibility Studies.”



**MARK A. ANDERSON**  
**SENIOR ASSOCIATE**

Mineral Processing

Mr. Mark Anderson has more than 40 years of diversified industry experience in both technical and managerial roles, including project feasibility, mine operations, and project due diligence. His experience includes evaluation of base and precious metal properties with emphasis on processing, metallurgy, project management, and feasibility analysis. His responsibilities have included construction, management, and operation of a 9 million tonne per year open pit copper/molybdenum mining operation with a 28,000 tonne per day concentrator, and milling and smelting operations at a 21,500 tonne per day copper ore mining and processing operation with byproduct gold. Prior to joining Behre Dolbear, Mr. Anderson was the general manager of Asamera Minerals Inc.'s U.S. operations where he had combined management responsibility for the underground operations at the Cannon Gold Mine in Wenatchee, Washington and the Gooseberry Mine in Nevada, which produced gold and silver at an average annual rate of 170,000 ounces of gold and 500,000 ounces of silver. He also served as vice president of operations for Marathon Oil Company/Centennial Gold Corporation where he managed exploration, laboratory, and pilot plant operations associated with the development of exploration targets in Colorado. He was also a key participant in mining finance arrangements with investment houses.

**CORPORATE EXPERIENCE**

2008 – Present	Behre Dolbear & Company (USA), Inc., Senior Associate
1991 – 2008	Behre Dolbear & Company (USA), Inc., Chairman of the Board and Senior Associate
1991 – Present	Principal M.A. Anderson & Associates
1986 – 1991	Asamera Minerals US, Inc., General Manager, U.S. Operations
1984- 1986	Centennial Gold Company, Vice President Operations
1984	Ralph M. Parsons Company, Senior Project Manager
1980 – 1984	Anaconda Minerals Company, Project Manager and Mill Manager, Nevada Moly Project
1978 – 1980	Climax Molybdenum/AMAX, Plant manager
1964 – 1978	Kennecott Copper Corporation, Nevada Mines Division, Reduction Plant Superintendent
1962 – 1964	Aerojet General Corporation, Development Engineer
1961 – 1962	U.S. Bureau of Mines, Research Engineer

**PROFESSIONAL AFFILIATIONS**

- Competent Person under current Canadian Security Regulations
- AIME – Trustee
- Society for Mining Metallurgy and Exploration – Qualified Person, President, Board of Directors, and MPD Chairman Engineer
- Northwest Mining Association – President and Trustee
- MMSA Qualified Person

**EDUCATION**

- Michigan Technological University, B.S. Metallurgical Engineering – 1961

**REINIS N. SIPOLS, P.E.**  
**CONSULTANT/SENIOR ASSOCIATE**

Mining Engineer

Mr. Reinis Sipols, P.E. is a mining engineering graduate from Michigan Technological University and has over 20 years of operational experience in the construction materials and mining industry and his responsibilities have included all aspects of mine operations and management. He has over 13 years of consulting experience beginning as Vice President of Spectra Environmental Group (a Northeastern United States integrated engineering and environmental firm), as President of Behre Dolbear & Company (USA), Inc., as Director of Mining Projects for Dalmore Group, as a Senior Associate of Behre Dolbear and Managing Director of Pack Leader Services. His project experience, while at Spectra Environmental Group, Behre Dolbear and Pack Leader Services includes compliance reviews, due diligence reviews, operations advisory work, site plan approval, and environmental permitting and feasibility study work on gold, copper, iron ore, coal, and industrial minerals projects. He was also Chief Operating Officer of Rare Earth Industries and was responsible for negotiating the acquisition of a major rare earths/rare metals refining asset acquisition in Ukraine. Mr. Sipols is a Professional Engineer in New York, Pennsylvania, and New Jersey. He is also a Qualified Person Member (QP) of the Mining and Metallurgical Society of America for environmental compliance and permitting issues as well as open pit mining.

**CORPORATE EXPERIENCE**

- 12/11- Present      Managing Director and Chairman, Pack Leader Services LLC. Consulting firm specializing in mining, minerals, and natural resources industry technical and advisory services. Recent project work has included precious metals due diligences and preliminary economic assessments, NI 43-101 reports for various projects, environmental permitting project management, a copper and tin smelter study, an iron ore mine pre-feasibility study and several geologic and due diligence reviews of precious and base metals projects. Additional recent work has included dimension stone project due diligence and independent technical reports to facilitate initial public offerings on the Stock Exchange of Hong Kong, rare earth metallurgical work management, industrial minerals and crushed stone operational due diligence reviews and optimizations, third party compliant reserve reports and coal project due diligence. Clients have included financial institutions, private equity, junior and mid-tier mining firms, royalty firms and major consulting firms. Additional information available at [www.packleaderservices.com](http://www.packleaderservices.com).
- 11/10 – 11/11      Chief Operating Officer, Rare Earth Industries Ltd., Responsible for all operational issues including negotiations to acquire two rare earth and rare metals refineries located in Eastern Europe and identification of rare earth/rare metal supply sources needed to vertically integrate the refineries to complete the value chain. Day to day duties included corporate system management, investor communications, negotiations with current refinery owners and government officials, exploration project development, acquisition team management, capital and operating cost development, financial model development, acquisition due diligence and operational structure development.

- 02/10 – 11/10 Director, Mining & Minerals Projects for the Dalmore Group LLC. Responsibilities included debt and equity financing facilitation, client development and management, investor communications, internal advisory tasks, and mining/minerals related consulting for clients and investors. Funding projects under management included a northern Ontario iron ore project, a Mexico copper-gold project, several narrow vein gold projects, a large lead-zinc-silver mine redevelopment project, and several exploration stage projects.
- 5/06 – 2/10 President and CEO for Behre Dolbear & Company (USA), Inc. with responsibility for all business unit management and development beginning in March 2007. Earlier responsibilities from May 2006 to March 2007 included marketing and client management targeting financial institutions and large mining firms.
- Delivered consistent revenue growth of 20% annually in 2007 and 2008 and maintained revenue and profitability through a significant downturn in 2009. Secured several large new clients in the industrial minerals sector and private equity community. Actively participated in and managed many projects including:
- Independent Engineer assignment for an underground limestone mine expansion and a chemical lime plant installation in Kentucky.
  - A pre-feasibility study for the rehabilitation and restart of a large underground iron ore project in Missouri.
  - Third party review of the resource model for a large copper/gold deposit in British Columbia.
  - Due diligence reviews of gold projects in British Columbia, Alaska and Sierra Leone, a large Nevada copper project and several industrial minerals properties for potential investors or financiers.
  - Evaluation, representation, and advisory services to facilitate the sale of a Colombia thermal coal property to several potential buyers.
  - Due diligence reviews and operational optimizations post acquisition of three Colombia metallurgical coal acquisitions.
  - The valuation of a large cement grade limestone quarry in New York.
  - Independent Engineer for the development of a titanium melting and casting facility in South Carolina.
  - A due diligence review and market study of Lafarge’s Denver metro area construction materials quarries for a potential acquirer.
- 8/02 – 4/06 Spectra Environmental Group Inc., Vice President and Director of Poughkeepsie, New York office of Spectra Engineering, Architecture and Surveying P.C. with responsibility for all office functions and departments. These included surveying, architecture, engineering and environmental services including mining related work. Revived an office with over \$400,000 in losses in 2002 to an annual profit of \$2.0M in 18 months. Staff billing percentage increased from 52% to an average of 85% in the same period while increasing billing rates an average of 15%.
- 10/97 – 4/02 Tilcon New York and New Jersey Inc., Mining Operations Area Manager. Responsibilities included operational management of the West Nyack and Clinton Point Quarries in New York and overseeing the integration of a \$150 million acquisition in New Jersey with existing Tilcon operations. The acquisition included 5 quarries, 2 sand/gravel pits, and 5 asphalt plants. Duties included preparing capital and operational budgets, maintaining cost controls, negotiating union contracts, coordinating safety initiatives, supervising the development and implementation of mining plans and operations optimization.

- 4/89 – 9/97                    New York Trap Rock Corporation (Division of Lonestar Industries)  
Plant Manager at the West Nyack Quarry. Responsible for all aspects of quarry and mill operations with an annual production of 1.1 million tons. Improved mill uptime from 60% in 1990 to 95% in 1993 and lowered unit costs by 40% in 3 years. Other accomplishments included rebuilding the plant management team, improving management/union relations and improving the plant safety program greatly reducing the injury rate and MSHA citations. Earlier responsibilities included being the Assistant Plant Manager of the Clinton Point Quarry and Aggregate Plant Engineer.
- 12/87 – 3/89                    Martin Marietta Corporation/Aggregates Co., Mining Engineer Enrolled in the production management training program at the Cayce Quarry (2 million t.p.y. granite) in Columbia, South Carolina. Training included all aspects of production management. Promoted in March 1988 to Associate Engineer and transferred to the Junction City Quarry (Talbot County, Georgia) to assist the Project Manager in supervising the construction of a new 1.5 million t.p.y. aggregate plant.

#### **PROFESSIONAL ASSOCIATIONS**

- Member, Society of Mining, Metallurgy and Exploration
- Qualified Person Member of the Mining and Metallurgical Society of America (#01440QP)
- Member, International Society of Explosives Engineers

#### **LICENSES**

- Registered Professional Engineer, Commonwealth of Pennsylvania, New York and New Jersey
- FINRA Series 7 and Series 63 Certifications. Qualified as a Registered Representative for a broker dealer.
- Licensed Blaster in the State of New York

#### **EDUCATION**

- Michigan Technological University, B.S. Mining Engineering – 1987

#### **LANGUAGES**

- Fluent in Latvian and a Latvian citizen with a Latvian (European Union) passport. I also have a limited knowledge of Spanish and German.

**JOSEPH A. KANTOR**  
**SENIOR ASSOCIATE**

Economic Geologist, Mineral Exploration,  
Project Evaluation, Mine Development

Mr. Joseph A. Kantor, Geologist, is well practiced in all phases of precious and base metal exploration with experience from grassroots reconnaissance to mine development. His efforts resulted in the discovery of and production from several sediment-hosted gold ore bodies in the Jerritt Canyon District, Nevada and production from the Glove Mine lead-zinc-silver breccia pipe in Arizona, as well as discovery of other gold, copper porphyry/skarn, and copper-zinc massive sulfide deposits. Since 2000, Mr. Kantor has consulted in many countries with responsibilities ranging from regional reconnaissance to advanced projects to mine development and project evaluation within a wide geographic area, including all of the western United States, as well as Maine, Michigan; Quebec, Newfoundland and British Columbia, Canada; northern Mexico; Kazakhstan; Australia; Malaysia; Mongolia; China; Mauritania; Colombia; Peru; Brazil and Ecuador. Mr. Kantor also directed exploration for production and reserve replacement at operating gold mines in Nevada, China, and Kazakhstan. Mr. Kantor has a bachelor's and a master's degree in geology from Michigan Technological University; is a registered geologist in the State of Washington and a Mining and Metallurgical Society of America Qualified Professional in Geology (#1309QP). Mr. Kantor is a Qualified Person as defined by Canadian NI43-101 regulations and JORC. He has authored or co-authored numerous NI43-101 and/or JORC compliant reports.

**CORPORATE EXPERIENCE**

2006 – Present	Behre Dolbear & Company (USA), Inc., Senior Associate
2006 – Present	JAK Exploration Services, LLC, Owner/President
2000 – 2006	Independent Geologic Consultant
1999 – 2000	AngloGold N.A., Jerritt Canyon Exploration Manager
1995 – 1999	Independence Mining Co., Jerritt Canyon Exploration Manager
1990 – 1995	Independence Mining Co., Big Springs Mine and Great Basin District Exploration Manager
1987 – 1990	Freeport McMoRan Gold Co., District Exploration Manager
1976 – 1987	Freeport McMoRan Gold Co., Senior Supervisory Geologist and Advanced Project Geologist
1971 – 1976	The Superior Oil Co., Mineral Exploration and Project Geologist
1969 – 1971	CF&I Steel – Non Ferrous Division, Field and Project Geologist
1967	AMAX, Field Geologist/Party Chief
1966	Quebec Cartier Mining Co., Ltd, Field Geologist

### **PROFESSIONAL ASSOCIATIONS**

- Professional Geologist No. 1909, State of Washington
- American Institute of Mining Engineers – 40 Year Member
- Mining and Metallurgical Society of America – QP Member Geology #1309
- Society of Economic Geologists
- Geological Society of Nevada
- American Exploration and Mining Association

### **EDUCATION**

- Michigan Technological University – B.S. Geology – 1966
- Michigan Technological University – M.S Geology – 1968
- Thesis: Assimilation and Dike Swarms in the Sugarloaf Mountain Area, Marquette County, Michigan

### **LANGUAGES**

- English (native)

**APPENDIX 2.0**  
**PROPERTY LOCATION, MINERAL TITLE, INFRASTRUCTURE, AND CLAIM LISTINGS**



### **A.2.1 LOCATION**

The Garnet Project is located in the Garnet Mountain Range, Montana. The property is approximately 40 miles east of Missoula, Montana, 70 miles west of Helena, and 15 miles northwest of the small town of Drummond. The property lies in northern Granite County in Sections 2, 3, 10, and 11, Township 12N, Range 14W. The approximate property coordinates are Longitude 113° 20' 17" West, Latitude 46° 49' 29" North.

### **A.2.2 ACCESS**

Access from Helena is west via State Highway 12 to Interstate 90 (I-90) and then northwest on I-90 (toward Missoula) to Drummond. From Drummond, there is a paved frontage road until the gravel road to the ghost town of Garnet. The property is adjacent to the ghost town, which is administered by the Bureau of Land Management (BLM). The drive from Helena to the property is about 1.5 hours. A second access is via Highway 200 and the Garnet Range Road. It is about 10 miles shorter than the I-90 access, and the Range Road is a better road than the China Grade in the Bear Gulch Road. It is the preferred route from the west when it is open. The Range Road is a BLM road, and the BLM closes it to wheeled traffic from January 1 until May 1, when it is used exclusively by snowmobilers and skiers.

### **A.2.3 PROPERTY POSITION**

The following property position and legal agreement and royalty summary is based upon information supplied by Mr. David Rodli, General Manager of Garnex Gold Corporation. The property consists of 24 patented claims (the leased Free Coin being one of the 24) and 188 unpatented mining claims. The properties cover an area of 4,308.86 acres, or 6.73 square miles. It is not known whether this estimated acreage takes into account that some of the unpatented lode claims are fractional claims or that some of the placer claims might overlie lode claims but relies upon the BLM's serial registry pages. In addition, Garnex Gold has a BLM preference rights lease covering four formerly-patented claims that have reverted to public ownership, constituting an additional 56 acres. Of the 188 unpatented claims, 3 are placer claims of about 36 acres apiece. Garnex has paid the required fees (\$31,515.00) to the BLM on behalf of Commonwealth Resources, LLC. That cost includes \$165 per unpatented mining lode claim (185 claims) and \$330/unpatented placer claim (3 claims).

The following is a list of all the patented claims held by Garnex and also a listing of all unpatented claims in the property position. The list of unpatented mining claims also shows documentation from the BLM that fees have been paid to keep the claims current (see Table A2.1).

<b>TABLE A2.1</b>		
<b>PATENTED CLAIMS WITH ACREAGE</b>		
<b>Claim Name</b>	<b>M.S. #</b>	<b>Acres</b>
Armistead Lode Mining Claim	5633	15.57
Berlene Lode Mining Claim	5454	14.25
Bullseye Lode Mining Claim	4651	20.02
Bullseye Fraction Lode Mining Claim	9405	1.21
Contact Lode Mining Claim	5666	20.66
Crescent Lode Mining Claim	4510	18.1
Dewey & Midnight Lode Mining Claim	9833	32.79
Fourth of July Lode Mining Claim	5453	20.66
Free Coinage Lode Mining Claim	9904	20.66
Gold Bug Lode Mining Claims	9704	13.966
Grotto Lode Mining Claim	5664	20.4
Harold Lode Mining Claim	5812	19.8
Honolulu Lode Mining Claim	5632	4.93
International Lode Mining Claim	3612	19.72
Lead King Lode Mining Claim	4511	20.34
Lide Lode Mining Claim	9876	18.623
Nancy Hanks Lode Mining Claim	5365	11.94
North Star Lode Mining Claim	9404	20.53
Parquet Lode Mining Claim	5452	4.22
Placer, Tract A&B Amended	751	10.66
Red Cloud Lode Mining Claim	5451	15.13
Tiger Lode Mining Claim	5361	12.88
White Cloud Lode Mining Claim	5631	8.07
<b>Subtotal Acres</b>		<b>365.13</b>
Free Coin Lode Mining Claim	4652	13.86
<b>Total Acres Patented Mining Claims</b>		<b>378.99</b>
<b>Total Acres 188 Unpatented Claims</b>		<b>3,929.87</b>
<b>Total Acreage</b>		<b>4,308.86</b>

UNITED STATES DEPARTMENT OF THE INTERIOR  
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 MONTANA STATE OFFICE  
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 BILLINGS, MONTANA 59101-4669

**CLAIM MAINTENANCE FEES**

FOR ASSESSMENT YEAR: 2020 TOTAL FEES REMITTED \$31,515.00

To expedite processing, please list your mining claims in serial number order.

BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC116773</u>	<u>AMEX NO. 11</u>
<u>MMC210811</u>	<u>CAYUSE (Placer, 36.367 acres)</u>
<u>MMC210813</u>	<u>WILLIE</u>
<u>MMC210816</u>	<u>FIRST CHANCE (Placer, 36.367 acres)</u>
<u>MMC211062</u>	<u>CAYUSE NO. 2 (Placer, 36.363 acres)</u>
<u>MMC211063</u>	<u>FIRST CHANCE NO. 2</u>
<u>MMC217480</u>	<u>GR-01</u>
<u>MMC217481</u>	<u>NHC 02</u>
<u>MMC217482</u>	<u>NHC 04</u>
<u>MMC217483</u>	<u>NHC 06</u>
<u>MMC217484</u>	<u>NHC 08</u>
<u>MMC217485</u>	<u>NHC 010</u>
<u>MMC217486</u>	<u>NHC 012</u>
<u>MMC217487</u>	<u>NHC 014</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
<u>Garnex Gold Corporation</u>	<u>BLM FEE VERIFICATION</u>
<u>(obo Commonwealth Resources, L.L.C.)</u>	<u>CLAIMS FILED</u>
<u>1750 South Ave. W.</u>	<u>AMOUNT RECEIVED</u>
<u>Missoula, Montana 59801</u>	<u>PROCESSING COMPLETE</u>
	<u>SURNAME/DATE</u>

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**CLAIM MAINTENANCE FEES**

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BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC217488</u>	<u>NHC 016</u>
<u>MMC217489</u>	<u>NHC 018</u>
<u>MMC217490</u>	<u>NHC 020</u>
<u>MMC217491</u>	<u>NHC 022</u>
<u>MMC217492</u>	<u>NHC 096</u>
<u>MMC217493</u>	<u>NHC 097</u>
<u>MMC217494</u>	<u>NHC 098</u>
<u>MMC217495</u>	<u>NHC 099</u>
<u>MMC217496</u>	<u>NHC 0100</u>
<u>MMC217497</u>	<u>NHC 0101</u>
<u>MMC217498</u>	<u>NHC 0102</u>
<u>MMC217499</u>	<u>NHC 0103</u>
<u>MMC217500</u>	<u>NHC 0104</u>
<u>MMC217501</u>	<u>NHC 0105</u>

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BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC217502</u>	<u>NHC 0106</u>
<u>MMC217503</u>	<u>NHC 0107</u>
<u>MMC217504</u>	<u>NHC 0108</u>
<u>MMC217505</u>	<u>NHC 0109</u>
<u>MMC217839</u>	<u>GHC 06</u>
<u>MMC217840</u>	<u>GHC 07</u>
<u>MMC217841</u>	<u>GHC 08</u>
<u>MMC217842</u>	<u>GHC 034</u>
<u>MMC217843</u>	<u>GHC 035</u>
<u>MMC217844</u>	<u>GHC 036</u>
<u>MMC217845</u>	<u>GHC 0199</u>
<u>MMC217846</u>	<u>GHC 0200</u>
<u>MMC217847</u>	<u>NHC 024</u>
<u>MMC217848</u>	<u>NHC 026</u>

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BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC217849</u>	<u>NHC 028</u>
<u>MMC217850</u>	<u>NHC 030</u>
<u>MMC219402</u>	<u>AMEX 1</u>
<u>MMC219403</u>	<u>AMEX 2</u>
<u>MMC219404</u>	<u>AMEX 4</u>
<u>MMC219405</u>	<u>AMEX 5</u>
<u>MMC219406</u>	<u>AMEX 6</u>
<u>MMC219407</u>	<u>AMEX 7</u>
<u>MMC219408</u>	<u>AMEX 8</u>
<u>MMC219409</u>	<u>AMEX 9</u>
<u>MMC219410</u>	<u>AMEX 10</u>
<u>MMC219411</u>	<u>GHC 1</u>
<u>MMC219412</u>	<u>GHC 2</u>
<u>MMC219413</u>	<u>GHC 3</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
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BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC219414</u>	<u>GHC 4</u>
<u>MMC219415</u>	<u>GHC 5</u>
<u>MMC219416</u>	<u>GHC 9</u>
<u>MMC219417</u>	<u>GHC 10</u>
<u>MMC219418</u>	<u>GHC 11</u>
<u>MMC219419</u>	<u>GHC 12</u>
<u>MMC219420</u>	<u>GHC 14</u>
<u>MMC219421</u>	<u>GHC 15</u>
<u>MMC219422</u>	<u>GHC 16</u>
<u>MMC219423</u>	<u>GHC 17</u>
<u>MMC219424</u>	<u>GHC 18</u>
<u>MMC219425</u>	<u>GHC 19</u>
<u>MMC219426</u>	<u>GHC 20</u>
<u>MMC219427</u>	<u>GHC 26</u>

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BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC219428</u>	<u>GHC 27</u>
<u>MMC219429</u>	<u>GHC 28</u>
<u>MMC219430</u>	<u>GHC 29</u>
<u>MMC219431</u>	<u>GHC 30</u>
<u>MMC219432</u>	<u>GHC 31</u>
<u>MMC219433</u>	<u>GHC 44</u>
<u>MMC219434</u>	<u>GHC 45</u>
<u>MMC219435</u>	<u>GHC 46</u>
<u>MMC219436</u>	<u>GHC 47</u>
<u>MMC219437</u>	<u>GHC 48</u>
<u>MMC219438</u>	<u>GHC 50</u>
<u>MMC219439</u>	<u>GHC 51</u>
<u>MMC219440</u>	<u>GHC 52</u>
<u>MMC219441</u>	<u>GHC 53</u>

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BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC219442</u>	<u>GHC 0201</u>
<u>MMC219443</u>	<u>GHC 202</u>
<u>MMC219444</u>	<u>GHC 203</u>
<u>MMC219445</u>	<u>GHC 204</u>
<u>MMC219446</u>	<u>GHC 205</u>
<u>MMC219447</u>	<u>GHC 206</u>
<u>MMC219448</u>	<u>GHC 207</u>
<u>MMC219455</u>	<u>GHC 214</u>
<u>MMC219456</u>	<u>GHC 215</u>
<u>MMC219457</u>	<u>GHC 216</u>
<u>MMC219458</u>	<u>GHC 217</u>
<u>MMC219459</u>	<u>GHC 218</u>
<u>MMC219460</u>	<u>GHC 219</u>
<u>MMC219461</u>	<u>GHC 220</u>

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BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
MMC219462	GHC 236
MMC219463	GHC 246
MMC219464	GHC 247
MMC219465	GHC 248
MMC219466	GHC 249
MMC219467	GHC 250
MMC219468	GHC 251
MMC219475	GR 3
MMC219476	GR 4
MMC219477	NHC 110
MMC219478	NHC 111
MMC222088	CR 1
MMC222089	CR2
MMC222090	CR 3

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
Garnex Gold Corporation (obo Commonwealth Resources, L.L.C.)	<b>BLM FEE VERIFICATION</b>
1750 South Ave. W.	CLAIMS FILED
Missoula, Montana 59801	AMOUNT RECEIVED
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FOR ASSESSMENT YEAR: 2020 TOTAL FEES REMITTED \$31,515.00

*To expedite processing, please list your mining claims in serial number order.*

BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC222091</u>	<u>CR 4</u>
<u>MMC222095</u>	<u>CR 8</u>
<u>MMC222096</u>	<u>CR 9</u>
<u>MMC222100</u>	<u>CR 13</u>
<u>MMC222101</u>	<u>CR 14</u>
<u>MMC222102</u>	<u>CR 15</u>
<u>MMC222103</u>	<u>CR 16</u>
<u>MMC222104</u>	<u>CR 16 GRANITE</u>
<u>MMC222105</u>	<u>CR 17</u>
<u>MMC222106</u>	<u>CR 18</u>
<u>MMC222107</u>	<u>CR 19</u>
<u>MMC222108</u>	<u>CR 20</u>
<u>MMC222109</u>	<u>CR 20 GRANITE</u>
<u>MMC222110</u>	<u>CR 21</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
<u>Garnex Gold Corporation</u>	<u>BLM FEE VERIFICATION</u>
<u>(obo Commonwealth Resources, L.L.C.)</u>	<u>CLAIMS FILED</u>
<u>1750 South Ave. W.</u>	<u>AMOUNT RECEIVED</u>
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**CLAIM MAINTENANCE FEES**

FOR ASSESSMENT YEAR: 2020 TOTAL FEES REMITTED \$31,515.00

To expedite processing, please list your mining claims in serial number order.

BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC222111</u>	<u>CR 22</u>
<u>MMC222112</u>	<u>CR 23</u>
<u>MMC222127</u>	<u>CR 38</u>
<u>MMC222128</u>	<u>CR 39</u>
<u>MMC222129</u>	<u>CR 40</u>
<u>MMC222130</u>	<u>NHC 112</u>
<u>MMC222241</u>	<u>CR 48</u>
<u>MMC222242</u>	<u>CR 49</u>
<u>MMC222243</u>	<u>CR 50</u>
<u>MMC222244</u>	<u>CR 51</u>
<u>MMC222245</u>	<u>CR 52</u>
<u>MMC222246</u>	<u>CR 53</u>
<u>MMC222247</u>	<u>CR 54</u>
<u>MMC222248</u>	<u>CR 55</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
<u>Garnex Gold Corporation</u>	<u>BLM FEE VERIFICATION</u>
<u>(obo Commonwealth Resources, L.L.C.)</u>	<u>CLAIMS FILED</u>
<u>1750 South Ave. W.</u>	<u>AMOUNT RECEIVED</u>
<u>Missoula, Montana 59801</u>	<u>PROCESSING COMPLETE</u>
	<u>SURNAME/DATE</u>

UNITED STATE DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 MONTANA STATE OFFICE  
 5001 SOUTHGATE DRIVE  
 BILLINGS, MONTANA 59101-4669

**CLAIM MAINTENANCE FEES**

FOR ASSESSMENT YEAR: 2020 TOTAL FEES REMITTED \$31,515.00

*To expedite processing, please list your mining claims in serial number order.*

BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC222249</u>	<u>CR 56</u>
<u>MMC222250</u>	<u>CR 57</u>
<u>MMC222251</u>	<u>CR 58</u>
<u>MMC222252</u>	<u>CR 59</u>
<u>MMC222253</u>	<u>CR 60</u>
<u>MMC222254</u>	<u>CR 61</u>
<u>MMC222255</u>	<u>CR 62</u>
<u>MMC222256</u>	<u>CR 63</u>
<u>MMC222257</u>	<u>CR 64</u>
<u>MMC222258</u>	<u>CR 65</u>
<u>MMC222259</u>	<u>CR 66</u>
<u>MMC222260</u>	<u>CR 67</u>
<u>MMC222261</u>	<u>CR 68</u>
<u>MMC222262</u>	<u>CR 69</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
<u>Garnex Gold Corporation</u>	<u>BLM FEE VERIFICATION</u>
<u>(obo Commonwealth Resources, L.L.C.)</u>	<u>CLAIMS FILED</u>
<u>1750 South Ave. W.</u>	<u>AMOUNT RECEIVED</u>
<u>Missoula, Montana 59801</u>	<u>PROCESSING COMPLETE</u>
	<u>SURNAME/DATE</u>

UNITED STATE DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
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 BILLINGS, MONTANA 59101-4669

**CLAIM MAINTENANCE FEES**

FOR ASSESSMENT YEAR: 2020 TOTAL FEES REMITTED \$31,515.00

*To expedite processing, please list your mining claims in serial number order.*

BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC222263</u>	<u>CR 70</u>
<u>MMC222264</u>	<u>CR 71</u>
<u>MMC222265</u>	<u>CR 72</u>
<u>MMC222266</u>	<u>CR 73</u>
<u>MMC222267</u>	<u>CR 74</u>
<u>MMC222268</u>	<u>CR 75</u>
<u>MMC222269</u>	<u>CR 76</u>
<u>MMC222270</u>	<u>CR 77</u>
<u>MMC222271</u>	<u>CR 78</u>
<u>MMC222272</u>	<u>CR 79</u>
<u>MMC222273</u>	<u>CR 80</u>
<u>MMC222274</u>	<u>CR 81</u>
<u>MMC222275</u>	<u>CR 82</u>
<u>MMC222276</u>	<u>CR 83</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
<u>Garnex Gold Corporation</u>	<u>BLM FEE VERIFICATION</u>
<u>(obo Commonwealth Resources, L.L.C.)</u>	<u>CLAIMS FILED</u>
<u>1750 South Ave. W.</u>	<u>AMOUNT RECEIVED</u>
<u>Missoula, Montana 59801</u>	<u>PROCESSING COMPLETE</u>
	<u>SURNAME/DATE</u>

UNITED STATE DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 MONTANA STATE OFFICE  
 5001 SOUTHGATE DRIVE  
 BILLINGS, MONTANA 59101-4669

**CLAIM MAINTENANCE FEES**

FOR ASSESSMENT YEAR: 2020 TOTAL FEES REMITTED \$31,515.00

*To expedite processing, please list your mining claims in serial number order.*

BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC222277</u>	<u>CR 84</u>
<u>MMC222279</u>	<u>CR 86</u>
<u>MMC222280</u>	<u>CR 87</u>
<u>MMC222281</u>	<u>CR 88</u>
<u>MMC222282</u>	<u>CR 89</u>
<u>MMC222283</u>	<u>CR 90</u>
<u>MMC222286</u>	<u>CR 93</u>
<u>MMC222287</u>	<u>CR 94</u>
<u>MMC222288</u>	<u>CR 95</u>
<u>MMC222749</u>	<u>CR 85</u>
<u>MMC224849</u>	<u>GH-89</u>
<u>MMC224850</u>	<u>GH-90</u>
<u>MMC224851</u>	<u>GH-91</u>
<u>MMC224852</u>	<u>GH-92</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
<u>Garnex Gold Corporation</u>	<u>BLM FEE VERIFICATION</u>
<u>(obo Commonwealth Resources, L.L.C.)</u>	<u>CLAIMS FILED</u>
<u>1750 South Ave. W.</u>	<u>AMOUNT RECEIVED</u>
<u>Missoula, Montana 59801</u>	<u>PROCESSING COMPLETE</u>
	<u>SURNAME/DATE</u>

UNITED STATE DEPARTMENT OF THE INTERIOR  
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 5001 SOUTHGATE DRIVE  
 BILLINGS, MONTANA 59101-4669

**CLAIM MAINTENANCE FEES**

FOR ASSESSMENT YEAR: 2020 TOTAL FEES REMITTED \$31,515.00

To expedite processing, please list your mining claims in serial number order.

BLM ASSIGNED SERIAL NO (S)	NAME OF CLAIMS (S)
<u>MMC224853</u>	<u>GH-93</u>
<u>MMC224854</u>	<u>GH-94</u>
<u>MMC224855</u>	<u>GH-95</u>
<u>MMC224856</u>	<u>GH-96</u>
<u>MMC224857</u>	<u>GH-97</u>
<u>MMC17214</u>	<u>THE SHAMROCK</u>

NAME AND ADDRESS OF OWNER/CLAIMANT	FOR OFFICE USE ONLY
<u>Garnex Gold Corporation</u>	<u>BLM FEE VERIFICATION</u>
<u>(obo Commonwealth Resources, L.L.C.)</u>	<u>CLAIMS FILED</u>
<u>1750 South Ave. W.</u>	<u>AMOUNT RECEIVED</u>
<u>Missoula, Montana 59801</u>	<u>PROCESSING COMPLETE</u>
	<u>SURNAME/DATE</u>

Figure A2.1 depicts the present land position and Figure A2.2 depicts the relationship of the land position, local geology, including the relationship of the Garnet Stock to the surrounding metamorphosed contact aureole and the known gold-bearing veins. For scale, typical lode mining claims are 1,500 feet long and 600 feet wide.



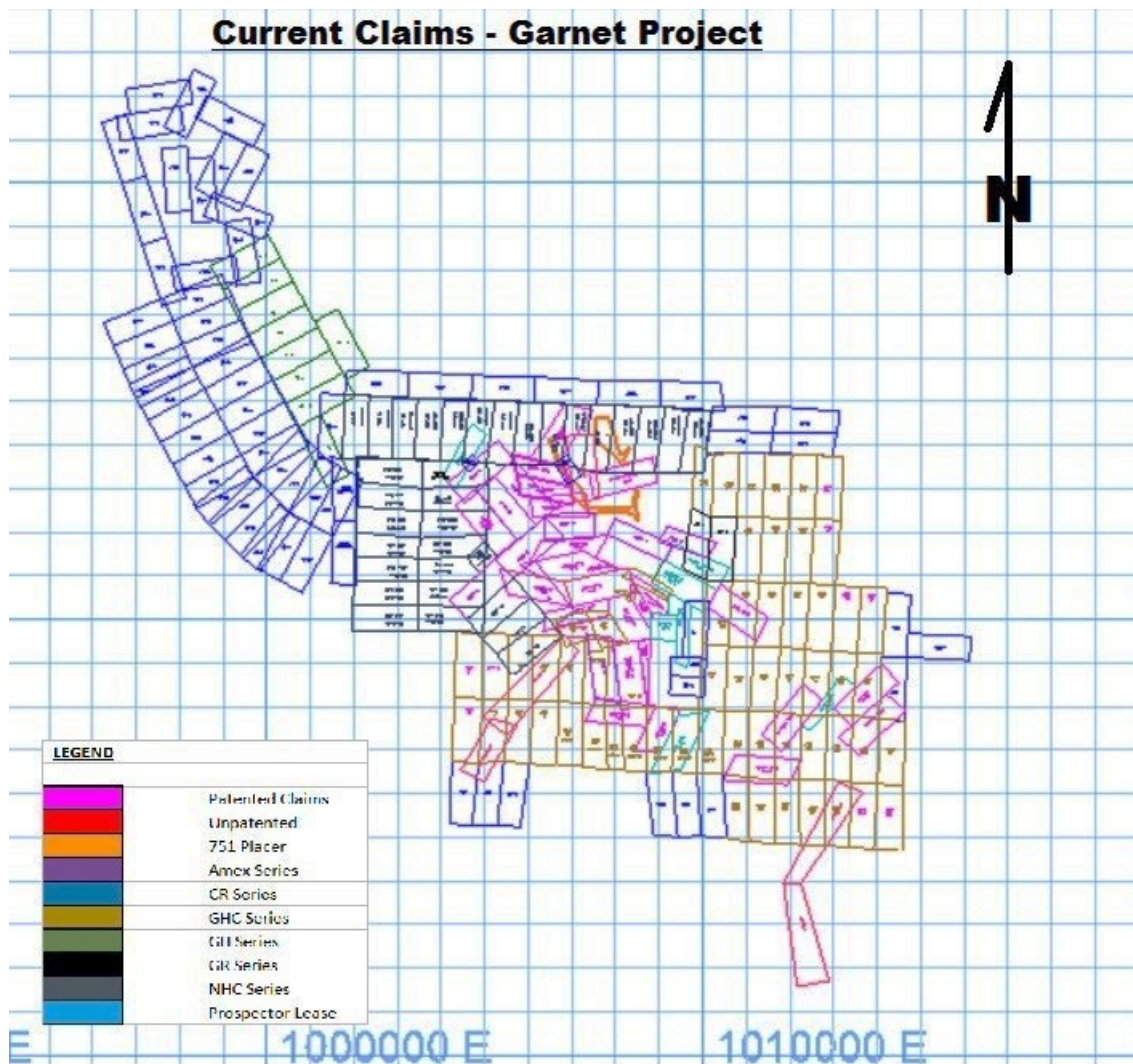
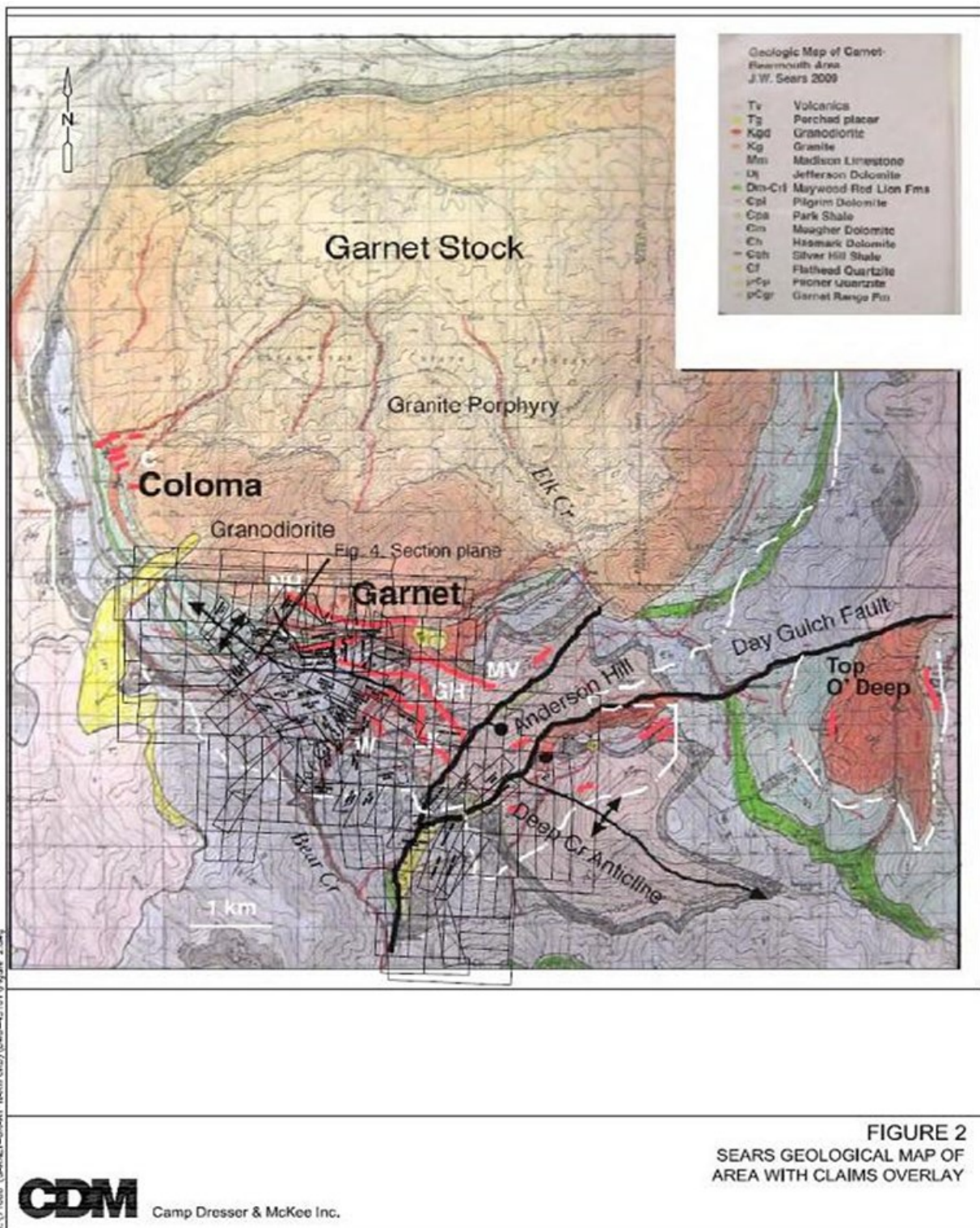


Figure A2.1. Current land position with central resource area as magenta colored claims



**Figure A2.2. Garnet Gold Corporation Claims overlaid upon gold vein systems in red (Source: Behre Dolbear 2012 Report)**

### A.2.4 INFRASTRUCTURE

The mine site was visited by Behre Dolbear on July 27, 2019 by Mr. John Reiss and Ms. Amy Jacobsen. The Project area remains in essentially the same condition as it existed in 2012 during the Behre Dolbear valuation. There have been no significant upgrades to the property since 2012. There was a reported theft of the camp site generator and solar panels in addition to certain electrical panels in the power house before the Garnex acquisition in January 2019. Garnex estimates that the replacement cost of those items taken will approximate \$60,000. The following is a description of the site infrastructure taken from the 2012 Valuation report that Behre Dolbear considers valid for this report.

There is limited infrastructure on site. Generators and solar panels supply energy to the campsite and portal construction. Power can be made available from two different local power companies. The United States Bureau of Land Management (BLM) would like to bring power into the Garnet ghost town, which the BLM maintains as a tourist attraction. Present road access from the paved Drummond Frontage Road to the historic Beartown site is narrow and may need to be improved. Road access from the historic Beartown site to the project site is sufficient for the present exploration activities but will need to be improved for full-scale mining operations. The BLM is supporting the present road access. The camp site is sufficient for the small staff of employees and contractors. The property is served by an established internal dirt road system that connects all parts of the project. The roadways appear graded and maintained. The project site is illustrated in Figure A2.3, but does not depict newer structures in the mine yard that have been built. The mine has added a compressor and power house to the site close to the portal that will provide power and compressed air services to the mine. One end of this building will have two maintenance bays for servicing underground equipment.

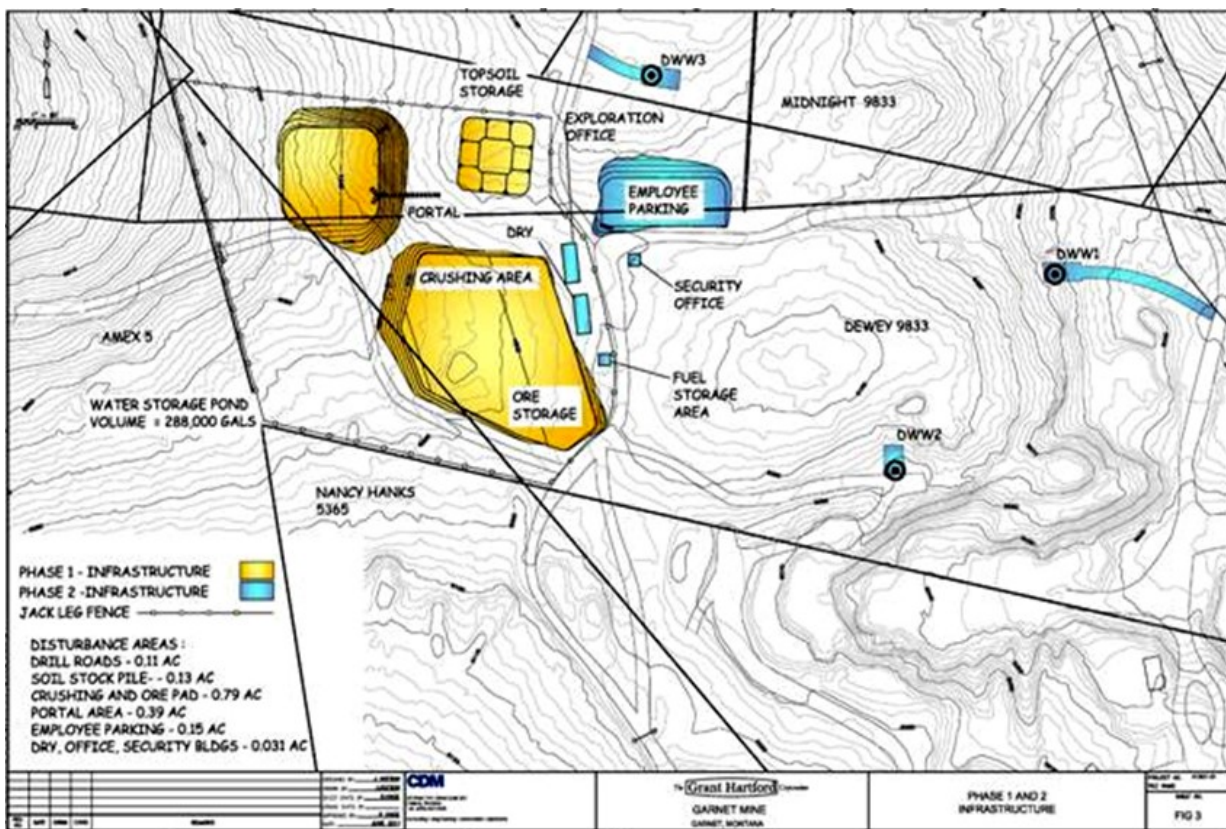


Figure A2.3. Garnet Gold Project site map

Garnex holds senior surface water rights and sufficient ground water via 2 water wells and a 3 mine de-watering well for present operations. An underground infiltration gallery has been installed to disperse mine water during cold weather. A surface dispersion field, called Land Area Dispersion (LAD), was installed but will be re-located before operations begin. The LAD will disperse mine water on the surface during warm weather. Since September 2011, the mine has installed approximately 6,000 feet of underground infrastructure to provide underground services to the surface buildings, pump houses, and other structures on the site.

#### **A.2.5 LEGAL AGREEMENTS AND ROYALTIES**

Pursuant to the terms of the asset purchase agreement by which Garnex Gold is purchasing the assets of Commonwealth Resources, L.L.C., after the secured purchase price of \$4 million, secured by the assets of Commonwealth, is paid, Garnex is required to pay a 1.5% net smelter return royalty to Commonwealth, up to a maximum of \$3 million, which the obligation is unsecured. If production sufficient to pay the \$3 million royalty does not occur, Garnex will not be declared in default; title to the assets will transfer to Garnex after the first \$4 million is paid. It is consistent with the parties' intentions, however, to state that the total purchase price for those assets is \$7 million.

A second, continuing 1.5% net smelter return royalty, will be paid to MineVest, LLC as partial consideration for the assignment to Garnex Gold Corporation of MineVest's option to purchase the assets of Commonwealth Resources, L.L.C., which eventually resulted in the asset purchase agreement between Garnex Gold and Commonwealth Resources.

**APPENDIX 3.0**  
**GEOLOGY, EXPLORATION, AND DRILLING RESOURCES**

In 2011, the Garnet Property was controlled by the Grant Hartford Corporation (GHC) with the underlying ownership by Commonwealth Resources. Behre Dolbear conducted a detailed due diligence technical review of the property in August 2011 and submitted its due diligence report of its findings to GHC in September 2011. **Since then, there have been no new exploration efforts; thus, the following discussion on the geology and exploration potential sections in that report will be included in this section. The property is now held by Garnex Gold Corporation.**

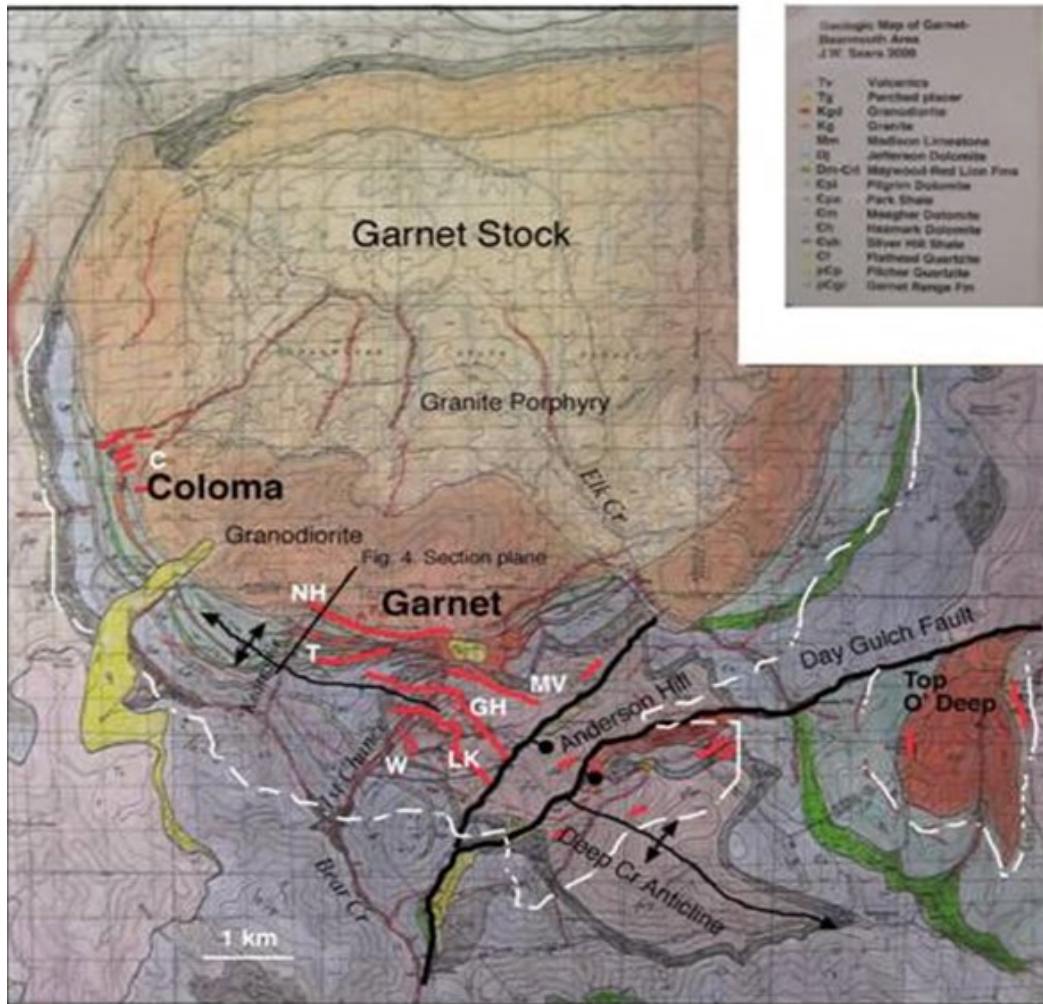
Gold-bearing veins within the Nancy Hanks Garnet gold property occur within and in the contact zone of the Garnet stock and the Lewis and Clark line, a mineral rich shear zone of regional size. The Lewis and Clark line is host to over 150 mines and prospects in Montana. The Garnet district is one of the four most productive districts in the Lewis and Clark line. In this district, an estimated 150,000 ounces of gold were produced from lode mines and another 500,000 ounces from placers dating back into the 1800s.

A number of veins with gold mineralization have been identified on the property and are named in order from north to south. The Nancy Hanks vein zone, which is comprised of several smaller vein systems, occurs in the Garnet granodiorite stock. Proceeding south from the Nancy Hanks vein zone, the rock types change to sedimentary units and host the Free Coinage-Tiger vein, Grant Hartford (includes Gold Bug and Mountain View), Lead King, and the most southerly, the Willie vein. All of the known veins occur either in the granodiorite stock or in its contact aureole in the surrounding sedimentary units. Erosion of veins produced the placer gold deposits.

All the gold-quartz veins commonly pinch and swell. In the “pinches,” the vein structure is present but may be very narrow and in the “swells,” the vein thickness and generally grade increase dramatically. Veins occur as both discreet quartz veins and anastomosing vein zones. The veins are generally parallel to sub-parallel and dip 30 to 40 degrees north. The Coloma vein is the only noteworthy exception as it dips south. Vein widths generally range from 1 foot wide to 3 feet wide (true width) and can swell up to 10 feet wide. The veins consist mostly of quartz, irregularly distributed coarse grained barite and ankerite. Sulfide content is very low, generally less than 2%. In the sulfide zone, gold is mainly present as telluride minerals, chiefly hessite ( $\text{Ag}_2\text{Te}$ ), calaverite or krennerite ( $\text{AuTe}_2$ ), and petzite ( $(\text{Au,Ag})_2\text{Te}$ ) along with native gold or electrum. Based upon preliminary metallurgical studies perhaps as much as 35% of the total gold content is as native (free) gold whose grain size might average 50 microns in the sulfide zone.

In the immediate vicinity of Garnet, the greatest depth of oxidation is 75 feet. Further away, where drainages have been dissected more deeply by erosion, oxidation may descent 200 to 300 feet below the surface but still generally parallels topography. Grades of the oxidized veins have been enriched and are normally two to three times higher than their original precious metal content within the sulfide zone. This is a critically important exploration factor for the area between the Nancy Hanks and the Tostman veins, as deeper soil cover appears to have prevented historic prospecting; thus, the concept of potential undiscovered bonanza-grade vein zones is valid. Similar potential may exist between the Tostman and Coloma veins.

Figure A3.1 illustrates the main mineralized gold vein systems in red lines, which are enclosed by the Garnex Gold Corporation claim holdings.



**Figure A3.1. Geology of the Garnet mining district**

Thick red lines are gold-bearing vein systems. (NH=Nancy Hanks, T=Tiger, MV=Mountain View, GH=Grant-Hartford, LK=Lead King, W=Willie, C=Coloma). Thin red lines are placers. Dashed white line represents limits of contact aureole.

### A.3.1 EXPLORATION HISTORY

Drilling and sampling activities have been extensively performed on the property. The following section is excerpted from the Behre Dolbear 2011 report.

Behre Dolbear has no records on relatively recent exploration performed in the district prior to the exhaustive program undertaken by Pegasus in the late 1980s and early 1990s. From July 1989 through December 1992, Pegasus completed airborne and ground magnetic, VLF/EM, IP/Resistivity surveys, geologic mapping, trenching, and rock and soil sampling as follows:

- Soil sampling – 2,097 samples
- Trench or channel sampling – 1,238 samples
- Rock sampling – 301 samples

- Mine or prospect and dump sampling – 341 samples
- Underground sampling – 108 samples
- Stream sediment sampling – 25 samples
- 29.1 line miles of ground magnetic survey
- 15.3 line miles of IP/Resistivity survey
- 188 line miles of airborne magnetic survey and VLF/EM survey

Based upon their exploration data, Pegasus identified 14 targets in the Garnet district and drilled 147 reverse circulation (RC) holes testing, many but not all their targets. Significant mineralization was encountered; however, Pegasus's goal was focused upon the shallow, open-pit oxide potential rather than the deeper underground high-grade vein potential.

In addition to exploration trenching and rock/soil sampling on the veins of the property, both GHC and Pegasus conducted exploration drilling programs on these systems. GHC drilled 85,123 feet of RC and core holes since 2008, and Pegasus has historically drilled 47,600 feet of holes, for a total of 132,720 feet of RC and core holes.

### **A.3.2 EXPLORATION POTENTIAL**

The following are Behre Dolbear's conclusions for exploration potential on the Nancy Hanks Garnet gold property and are taken from its 2011 Due Diligence report. As no additional exploration was undertaken on the property, our comments are basically unchanged from our prior report. However, we have added an emphasis on the potential of bonanza grade mineralization in the oxide zone between the Nancy Hanks and Tostman veins and possibly between the Tostman and Coloma veins. Historically, mining typically stopped at the water table where mineralization transitioned from free-milling oxide material to more refractory sulfide mineralization. Thus, potential exists in any vein that mining stopped at the oxide-sulfide transition.

Exploration potential to increase resources and to discover additional veins is outstanding. Exploration potential is divided into five categories. Some may be critically important in the short term, while others are longer-term exploration possibilities.

- a) Extensions of the known resources down dip and immediately along strike of the Nancy Hanks vein – short-term potential.
- b) Discovery of new veins in the hanging wall and foot wall of the Nancy Hanks vein system – long-term potential.
- c) Strike and down dip extensions of other prominent veins, such as the Willie, Lead King, and Grant Hartford – short-term potential.
- d) Potential for discovery between Nancy Hanks and Tostman – short-term potential. Behre Dolbear considers this area as a potential "game-changer," as the potential for previously un-mined bonanza grade mineralization in the oxide zone is real as historic prospecting was apparently not undertaken or quite limited due to thick soil cover.
- e) Potential for discovery between Tostman and Coloma – long-term potential. This may also have potential for shallow oxidized bonanza grade mineralization.
- f) Deep potential where many district-wide veins would merge down dip – conceptual long-term potential.



Behre Dolbear considers all of these as viable targets that could add substantial new resources to the Project in the long-term, but also could provide high-grade and/or bonanza ores easily accessible in the short-term.

### **A.3.3 REVIEW OF HISTORIC DRILLING RESULTS**

This review of the historic drilling results is taken from Behre Dolbear's 2011 Due Diligence report and site visit.

The properties were extensively drilled by Pegasus and GHC. Drill fans are generally 40 feet apart in the Nancy Hanks vein zone, which should be sufficiently close-spaced for resource estimation. Most historic drilling is reverse circulation (RC) with only 5 core holes drilled as twins to RC holes in the Nancy Hanks deposit. Two concerns with drilling are determining the true width of the veins and downhole contamination during RC drilling. Note all drill intercepts in the database are stated as downhole width, not true widths. As a result of Behre Dolbear's inspection of the core holes (2011), we can state:

- Multiple high-grade vein intervals are often present, commonly separated by just a few feet.
- Some high-grade intervals are hosted by very soft, friable minerals thought to be hydrothermal sericite. Due to its extreme rock incompetency, during RC drilling, such high-grade material can easily be blown away as dust while drilling dry or lost as fines from over-flowing sample buckets while drilling wet. This would have the effect of underestimating mineralization grade.
- Incompetent rock and rubble can easily continue to cave and contaminate downhole sampling.
- Downhole contamination is likely present in many of the RC drill holes. Nearly one-third of the RC holes intersecting greater than 0.4 ounces of gold per ton could be affected by downhole contamination. The effect of such contamination is not quantifiable. In some cases, the "contamination" may not be real but only reflect the presence of a second vein, which is commonly seen in the core drill holes.
- One positive conclusion is that a high-grade vein was found in nearly all twin holes, albeit the thickness may not be comparable due to downhole contamination.
- In all cases, the high-grade vein in core is thinner than the same vein in the twin RC hole, partially due to all RC sample intervals being 5-feet while core sample intervals are nearly always 2 feet or less. Behre Dolbear opines that the true width of the high-grade veins will be similar to the true width of the historically mined veins.
- Based upon the core holes, hanging wall mineralization is limited to as little as 2 feet and perhaps as much as 10 feet above high-grade veins; and the footwall could be sharp and barren or may be as much as 5 feet to 10 feet wide (downhole thickness) with values generally less than 0.05 ounces of gold per ton. Continuous values of greater than 0.1 ounces of gold per ton for 15 feet to 20 feet beneath a high-grade intercept should be treated with caution, noting that in some cases it is due to a second vein.
- The short-term effect of downhole contamination on the present mine plan will be fewer tons, higher average mined grade, and probably fewer mineable ounces. The loss of tons and ounces should easily be replaced by adjacent Indicated and Inferred Resources, as the mine plan only mines a portion of the Measured and Indicated Resource. The deepest drill holes within the Inferred Resource still host high-grade values.

- The long-term effect of downhole contamination is similar; however, due to the excellent exploration opportunities, particularly for easily reached shallow and potentially bonanza grade mineralization, these shortfalls should be easily overcome.

### A.3.4 RESOURCE AND RESERVE ESTIMATION

The GHC ore body models and resource estimates were made using the Maptek/Vulcan® three-dimensional (3D) software. Solid models of the veins were prepared by GHC using geological interpretations. The vein models are used to limit grade estimation so resources are defined within the vein only and do not extend outside the vein limits. Behre Dolbear considers the block model was estimated using reasonable criteria and interpolation methods.

### A.3.5 REVISION TO RESOURCES – SEPTEMBER 2012

In Behre Dolbear’s September 2011 Due Diligence report and in Behre Dolbear’s June 2012 Comparable Sales Valuation, the same resource tabulation shown above was used. Since that time, GHC has done some additional work on separation of surface accessible and underground accessible resources. With the assistance of GHC’s Mr. Robert Flesher, the resource tabulation has been revised. The new tabulations for Measured and Indicated Resources and Inferred Resources are shown in Table A3.1.

<b>TABLE A3.1</b>			
<b>MEASURED AND INDICATED RESOURCES AND INFERRED RESOURCES</b>			
<b>Area</b>	<b>Tonnage</b>	<b>Grade (ounces gold/ton)</b>	<b>Total Gold (ounces)</b>
<b>Measured and Indicated Resources</b>			
<b>Surface Accessible</b>			
Nancy Hanks	12,423,531	0.019	239,999
<b>Dewey</b>	1,996,606	0.024	47,759
Transferred to Underground	12,853	0.159	2,042
<b>Net Dewey Surface</b>	<b>1,983,753</b>	<b>0.023</b>	<b>45,717</b>
Marble	0	0.000	0
<b>Shamrock</b>	3,666,667	0.036	133,636
Transferred to Underground – Shamrock 1	16,555	0.174	2,880
Transferred to Underground – Shamrock 2	10,523	0.160	1,685
Transferred to Underground – Shamrock 3	7,197	0.158	1,140
<b>Net Shamrock Surface</b>	<b>3,632,392</b>	<b>0.035</b>	<b>127,931</b>
International	5,445,223	0.039	210,647
<b>Total Surface – Measured and Indicated</b>	<b>23,484,899</b>	<b>0.027</b>	<b>624,294</b>
<b>Underground Accessible</b>			
Nancy Hanks	195,909	0.254	49,706
Dewey – Transferred From Surface	12,853	0.159	2,042
Marble	8,667	0.311	2,692

<b>TABLE A3.1</b>			
<b>MEASURED AND INDICATED RESOURCES AND INFERRED RESOURCES</b>			
<b>Area</b>	<b>Tonnage</b>	<b>Grade (ounces gold/ton)</b>	<b>Total Gold (ounces)</b>
<b>Shamrock</b>			
Transferred From Surface – Shamrock 1	16,555	0.174	2,880
Transferred From Surface – Shamrock 2	10,523	0.160	1,685
Transferred From Surface – Shamrock 3	7,197	0.158	1,140
<b>Net Shamrock Underground</b>	<b>34,275</b>	<b>0.166</b>	<b>5,705</b>
Tostman – Upgraded From Inferred	11,548	0.179	2,067
Willie	55,875	0.245	13,694
<b>Total Underground – Measured and Indicated</b>	<b>319,127</b>	<b>0.238</b>	<b>75,906</b>
<b>Total Measured and Indicated – Surface Plus Underground</b>	<b>23,804,026</b>	<b>0.029</b>	<b>700,200</b>
<b>Inferred Resources</b>			
<b>Underground Accessible</b>			
Nancy Hanks	475,781	0.194	92,113
Dewey	1,223	0.169	207
Marble	591	0.206	122
<b>Shamrock</b>			
Shamrock 1	796	0.233	185
Shamrock 2	173	0.175	30
Shamrock 3	266	0.117	31
<b>Net Shamrock</b>	<b>1,235</b>	<b>0.200</b>	<b>247</b>
<b>Tostman</b>	143,545	0.177	25,407
Upgraded to Measured and Indicated	11,548	0.179	2,067
<b>Net Tostman Inferred</b>	<b>131,997</b>	<b>0.177</b>	<b>23,340</b>
Willie	5,536	0.208	1,151
<b>Total Inferred</b>	<b>616,363</b>	<b>0.190</b>	<b>117,179</b>

Measured and Indicated underground accessible resources now total 75,906 ounces. The Inferred underground accessible resources now total 117,179 ounces. The surface accessible Measured and Indicated resources now total 624,294 ounces.

**APPENDIX 4.0**  
**MINING – NANCY HANKS MINE**

#### A.4.1 MINE PLAN – NANCY HANKS MINE

The mine plan reviewed by Behre Dolbear for development and production at the Nancy Hanks Mine was created in 2011-2012 by the Grant Hartford Corp. (GHC) Mine Manager, Mr. Cecil Connor, Mining Engineer, and Mine Geologist, Mr. Robert Flesher. Since the mine plan was created in 2012, the property has essentially been idle up to the filing of this current report. In 2014, there was a brief attempt to surface mine on the Dewey Claims, which ended several months later in failure. In January 2019, the property was acquired by Garnex Gold Corporation from Commonwealth Resources LLC; however, the supporting data for the Nancy Hanks Mine plan was generated by GHC in 2011 and 2012. Garnex is now the owner of the property and considers all previous reports by GHC to be its own.

The basic strategy of the Nancy Hanks Mine plan is to mine the high-grade ore zones identified in the mine’s resource block model during the first 18 months of the Project. Then to mine the lower grade ore zones for the remainder of the mine plan, extending to 36 months in duration.

Table A4.1 summarizes the general mine plan objectives for the 36-month period.

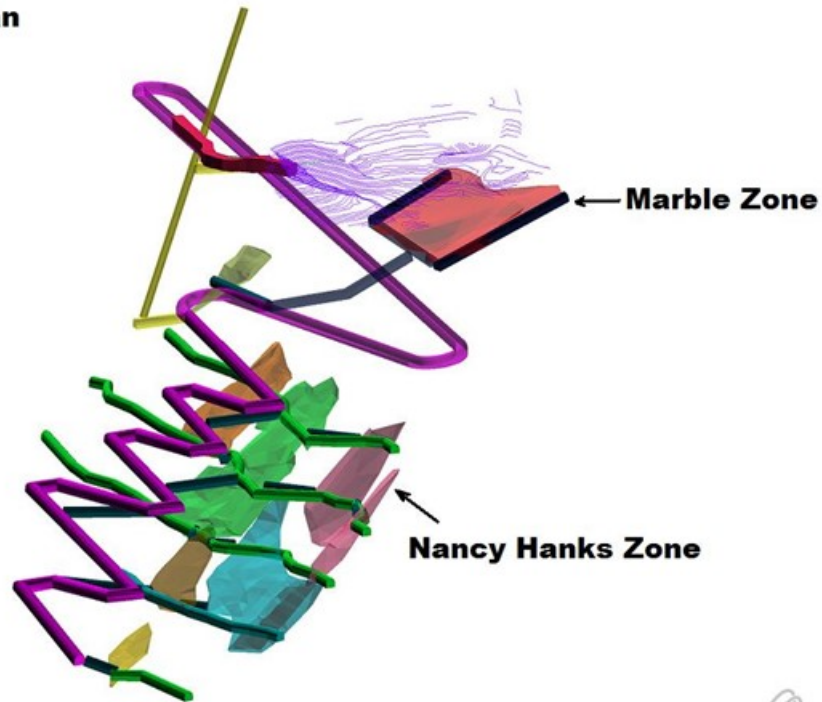
<b>TABLE A4.1 MINE PLAN PRODUCTION TARGETS<sup>1</sup></b>			
<b>Mine Plan Period</b>	<b>Ore Tonnage (Tons)</b>	<b>Gold Grade (oz/ton)</b>	<b>Ounces Paid</b>
18 Month Period	57,009 <sup>3</sup>	0.585	30,344
36 Month Period	169,665 <sup>2</sup>	0.268	41,378
<sup>1</sup> Referenced from 2011 GHC revised 18 month and 36 month business plan spreadsheets. <sup>2</sup> Ore tonnage includes Behre Dolbear recommended 91% mining recovery. <sup>3</sup> Ore tons do not include tonnage from the Marble Zone that will be a milling bulk sample.			

#### A.4.2 DEVELOPMENT AND PRODUCTION SEQUENCE

The Nancy Hanks ore body is accessed by a main decline from the surface and driven at a negative 15% grade. The mine is designed for mechanized handling of blasted stope ore using load-haul-dump (LHD) units and dump trucks for development and production. The decline drift is 12 feet × 12 feet in cross-section and is designed to allow for truck haulage of the ore to the surface.

The current mine design calls for development and production of 6 mining levels that will retrieve approximately 57,000, tons of ore during the 18-month mine plan and a total 169,665 tons of Measured and Indicated ore during the 36-month planning period. The mine expects that ongoing exploration drifting and diamond drilling, during this period, will increase the mine’s resource inventory. Figure A4.1 shows a 3D view of the general mine layout.

### Nancy Hanks and Marble zones mine plan



08/12



**Figure A4.1. 3D view of the general mine layout**

Production will start at the uppermost level and proceed to each lower level, as decline development and ore access drives reach the stoping areas for the respective levels. Once decline development reaches the first level, ore access drifts are started from the decline to reach the ore zone at the level. The decline continues in development to reach the lowest level in the mine. The first level is called the Marble zone and is in the oxidation zone of the deposit. The ore from this zone will be retrieved and sent for processing as a bulk sample to be used for mill design and flow sheet development. The Marble zone contains approximately 8,667 tons at a grade of 0.311 ounce per ton of gold.

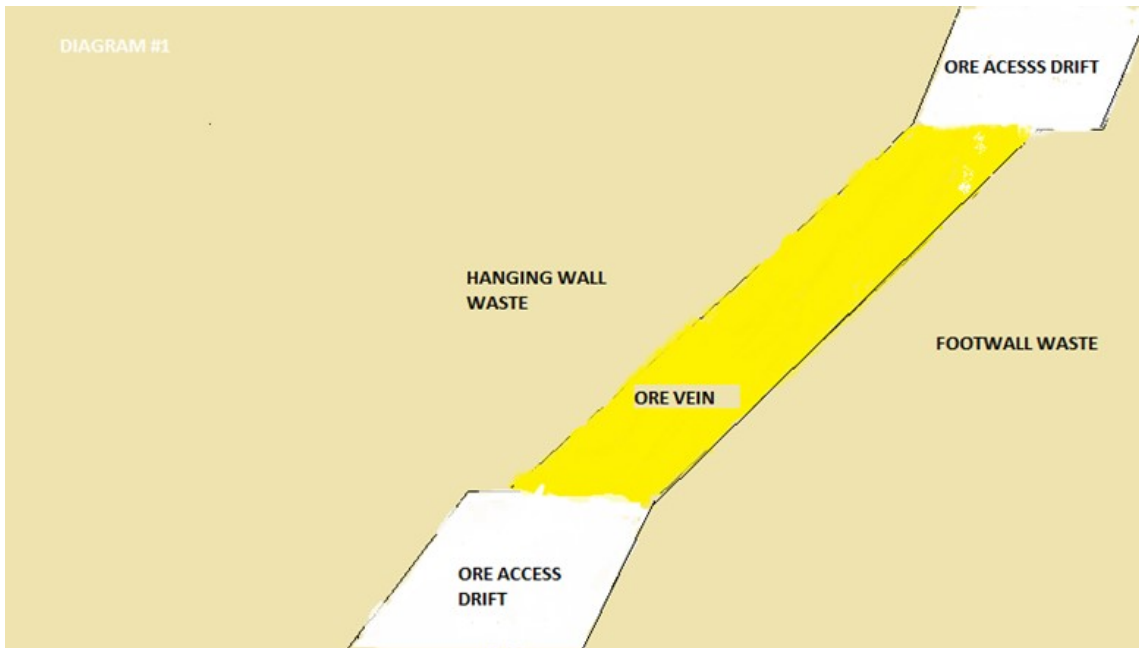
The current mining levels planned during the current 18-month mine plan are:

- 5810 Level – Marble Zone – 8,667 tons at 0.311 ounce per ton of gold
- 5720 Level – Four High Grade zones – 5,938 tons at 0.747 ounce per ton of gold
- 5670 Level – 21,354 tons at 0.691 ounce per ton of gold
- 5620 Level – 16,665 tons at 0.556 ounce per ton of gold
- 5570 Level – 11,853 tons at 0.388 ounce per ton of gold
- 5520 Level – 1,199 tons at 0.248 ounce per ton of gold

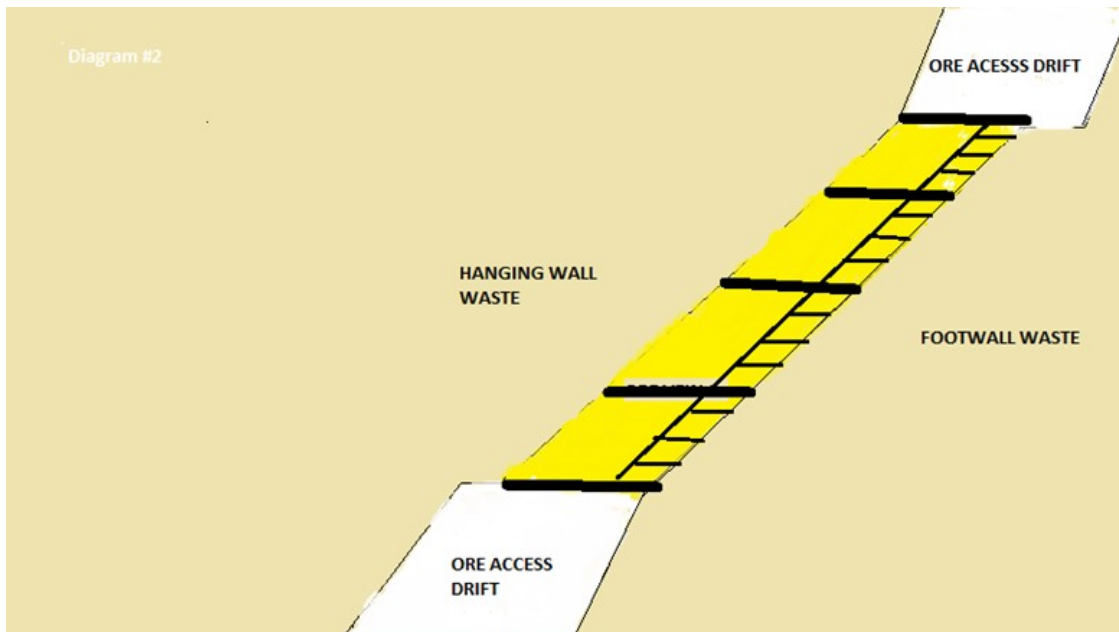
#### **A.4.3 MINING METHOD**

The Nancy Hanks vein dips from 30 to 40 degrees from horizontal. According to GHC reports, the vein averages 3 to 5 feet in thickness but can pinch and swell along strike and dip up to 10 feet. Generally, the hanging wall above the vein is a competent granodiorite rock unit. The foot wall rock can contain weaker sedimentary rock units. In order to mine the vein, GHC's mine engineer has chosen a mining method called, End Bite Timber Stull Stopping. In this method, 5 feet × 8 feet raises will be driven on dip from one level to the upper level for a given stope block.

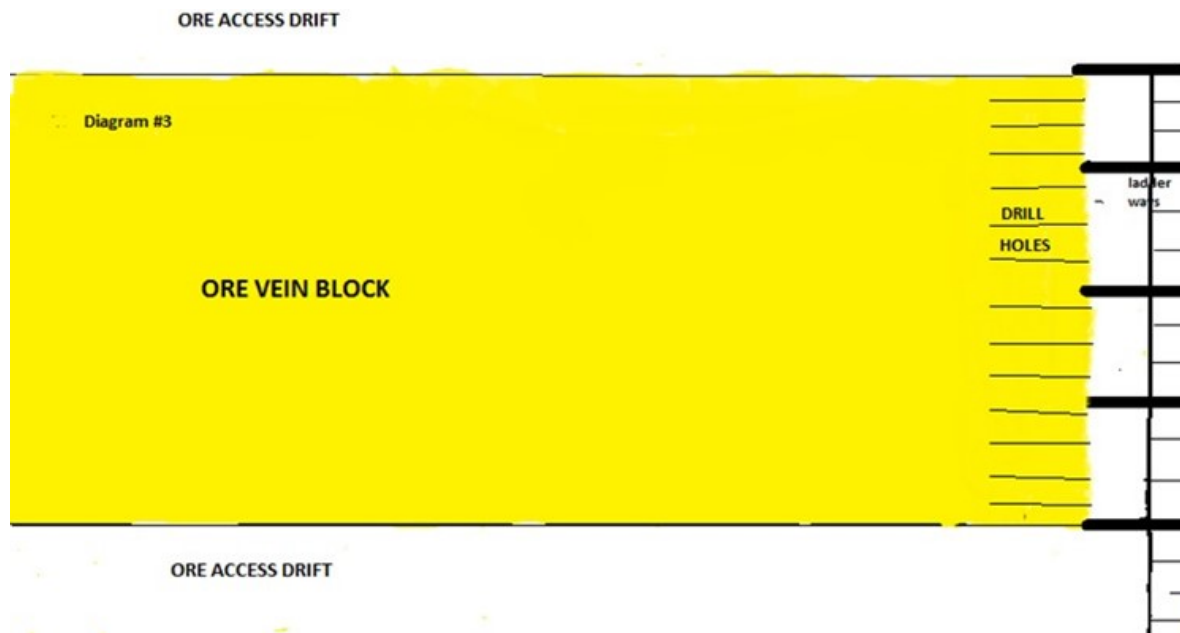
The raise will be timbered and have a ladder way installed for access and drill platforms. Miners will then drill 8 foot deep holes on 2.5 feet centers in the ore block on strike and along dip from the upper level to the lower level. The round will then be shot with timed delays to produce broken ore for removal. For example, if the vein is 4 feet thick, the broken ore would be approximately 236 tons. The following sequence of schematics describes the mining method (Figure A4.2 to Figure A4.5).



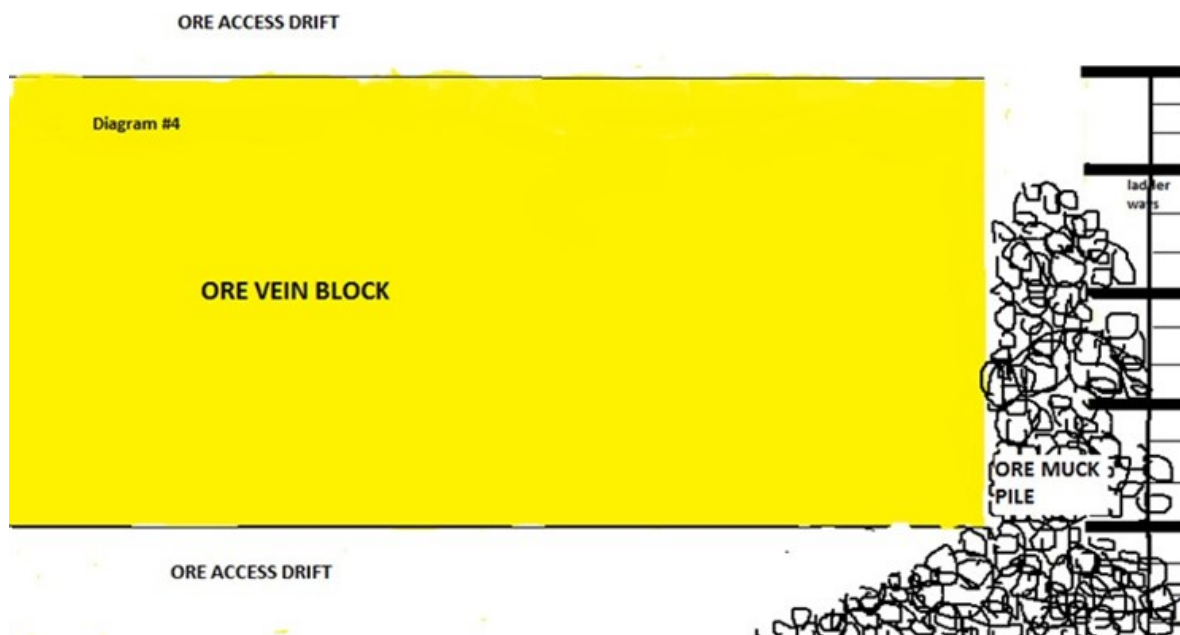
**Figure A4.2. Schematic shows a vein in cross section to be drilled**



**Figure A4.3. Initial horizontal drilling pattern that proceeds down-bit to the lower level**



**Figure A4.4. Shows initial drilling pattern that proceeds down dip to the lower level**



**Figure A4.5. Muck pile of broken ore after blasting**

Due to the shallow dip of the vein, gravity methods for collecting the broken ore are not feasible. The broken ore will be forced to the lower level to be collected by LHD units. Miners will move the broken ore to the lower level by the use of a combination of compressed air and water mix. Once the broken ore is removed, the ground is scaled of loose material and timber stulls installed to support the hanging wall and the cycle is repeated for the next round.



This method is labor intensive, due to the shallow dip of the deposit, but can adjust the drilling patterns to accommodate the pinch and swell of the vein.

#### **A.4.4 MINE PLAN – OPERATING AND DEVELOPMENT**

GHC developed cash flow plans for its 18-month, 24-month, and 36-month mine plans that included mine operating costs, capital costs, and development costs. Until inconsistencies are resolved between mine plan ore grades, production tonnages, and the property's mineral inventory resource estimates for the Nancy Hanks and Willie Mines, a project cash flow model is not being used for the current valuation.

#### **A.4.5 GHC'S 24-MONTH MINE PLAN – REVISED SEPTEMBER 18, 2012**

Garnex has decided to mine the high-grade part of the deposit first in order to meet financial obligations. It has called this period its 18-month business plan; however, the periods in winter where ore cannot be shipped to the Golden Sunlight Mill, increases this plan's duration to 24-months.

The plan will mine approximately 57,000 tons of ore at the estimated grade of 0.585 ounce per ton of gold. This tonnage does not include some 8,667 tons of ore from the Marble zone that will be used as a bulk sample for pilot plant testing to develop mill design and process flow sheets. In actuality, the mine anticipates producing this total during a 12-month period using a 7-day development and production schedule. During this production period, all mine ore will possibly be shipped (trucked) to the Golden Sunlight Mill in Helena, Montana, if it is available. In the winter months when truck haulage to the mill is not feasible, the ore will be stored on-site until spring time and then campaigned to the mill along with the daily ore production. The prior mine plan called for a 10,000 ton bulk sample to be sent to the pilot plant testing for flow sheet development and mill design. If Garnex intends to collect the 10,000 ton bulk sample, the difference in tonnage between the Marble deposit resource and the bulk sample requirement would come from ongoing production.

The daily ore production rate has been calculated at 180 tons per day. Behre Dolbear considers this an aggressive estimate given the size and characteristics of the deposit and has recommended a schedule contingency of at least 2 months be included in the mine plan.

Ore grade dilution is to be expected in narrow vein mining, such as the Nancy Hanks deposit. It is a consequence of the production drilling and blasting activities of the mine. Dilution is sub-economic grade or waste material that is mixed within the ore after blasting has taken place. Dilution can come from the hanging wall or foot wall of the vein after blasting and mixes with the ore. The amount of dilution is dependent on a number of factors, including vein width, rock characteristics of the hanging and foot walls enclosing the vein, and quality control of the miner's work.

Behre Dolbear examined the GHC mine plan and determined that a dilution factor was not applied against the block model resource to obtain a mining ore grade. For planning purposes, Behre Dolbear recommends a grade dilution factor of 10% be applied to the resource grades within the stope blocks for both the 18-month and 36-month mine plans. The previous owner acknowledged the omission of a dilution factor and stated that it would revise its cash flow projections to reflect the ore grade reduction.

#### **A.4.6 GARNEX GOLD CORPORATION AND GHC'S 36-MONTH MINE PLAN – REVISED SEPTEMBER 18, 2012**

Garnex has adopted the mine plans of the previous owner, GHC. The GHC 36-month plan targets mining of the remaining resources identified in the mine's 3D block model, and continues the underground exploration drilling

program to expand the resource and extend the mine life. During this period, the mine intends to build a two-product concentrator on-site to process its production ore and additional ore discovered from the exploration program. Stope access drifts are planned to be extended to the west along strike of the vein beyond the currently known block model limits toward the Tostman deposit. Diamond drill cutouts will be cut on 75 foot centers along the length of the drift and an exploration diamond drilling program has been estimated into the plan expenditures.

The revised 36-month cash flow spreadsheet includes production from a second mining area on the property named the Willie Mine. A mine plan was developed for this deposit by Small Mine Development (SMD) in Battle Mountain, Nevada in 2010. However, the current Behre Dolbear valuation project has discovered a significant mismatch between the Willie resource statement and the total tons mined from the Willie in the 2012 36-month cash flow model. The 2012 Resource Statement shows a Willie Measured plus Indicated Resource of 53,875 tons. The 36-month cash flow model shows total tons mined from the Willie to be 122,072 tons. Until this issue is resolved, a cash flow model for the project is not advised.

#### **A.4.7 MINING RECOMMENDATIONS**

- Consider alternate mining methods to reduce costs, such as long hole stoping. Examine mining methods of South African gold and platinum mines that have a similar dip angle to the Nancy Hanks deposit.
- Behre Dolbear considers the present life-of-mine of 36-months to be too short of time to effectively hire and train up a new workforce. Consider the use of a mining contractor for development and production until significant additional resources are discovered. New Millennium Mining, a mining contractor, has worked with the previous owner's mining engineer to develop the mining method and costs for the 36-month mine plan.
- Behre Dolbear recommends that a new mine plan and project economics be developed at a Scoping Study level or Pre-feasibility Study level by an experienced engineering contractor. Contingency factors will be added to estimated costs for either study. Expect a 35% contingency factor to be placed on the capital and operating costs for a Scoping Level Study and a 25% a contingency factor for a Pre-feasibility Study.

**APPENDIX 5.0**  
**METALLURGY AND PROCESS**

The data, discussion, and recommendations made in this section are a repetition of the results shown in the 2012 Valuation by Behre Dolbear<sup>5</sup>. Behre Dolbear is not aware of any additional metallurgical work being performed since that date. The most significant change from the 2013 report is the possible unavailability of the Golden Sunlight Mill due to a complete shutdown of that mining and processing operation in 2019. The Golden Sunlight option was given a preliminary tolling cost of \$25 per ton of ore and a gold recovery of 91% based upon budget quotations obtained at that time. There are no equivalent operations nearby in Montana to replace the Golden Sunlight option due to the banning of cyanidation in mining for any new or other operations. The Contact Mill, located near Phillipsburg, Montana, is probably available to toll the ore from Garnet through to a gold concentrate but not to bullion. No preliminary quotations have been obtained from either the Contact Mill or the Golden Sunlight Mill. The concentrates would represent a significantly lower recovery from the Golden Sunlight past agreement and would require out of state smelting and refining and cyanidation to reproduce the Golden Sunlight recovery of 91%.

The following discussion is taken directly from the previous Behre Dolbear report.

### **A.5.1 PROCESS**

Metallurgical testing of the Garnet mine mineralization has been conducted beginning in 1992 by Pegasus, and again in 2009-2010 by Camp Dresser McKee (CDM). The testing programs were run on composites of underground accessible mineralization with the work being completed at the FLSmidth Dawson Metallurgical Laboratories (Dawson) in Salt Lake City, Utah. A majority of the testing was done on an open-cycle basis and resulted in very high gold recoveries and expectedly low gold concentrate grades. No locked-cycle or pilot plant testing has been done (in the records reviewed by Behre Dolbear) and so the full effect of re-circulating mineral losses cannot be ascertained at this time. In any case, typical flow sheet development, as completed by CDM, has resulted in a gravity separation/flotation circuit design, which will yield substantially lower gold recoveries and somewhat higher gold concentrate grades than indicated in the laboratory testing.

In all probability, the properties in question will require cyanidation or smelting off-site for the combined gravity/flotation concentrates. Smelting of gravity concentrates on-site will require gold concentrate grades, which run in the thousands of troy ounces per ton rather than the much lower grades, 2.5 to 9.0 ounce per ton, achieved to date. Significantly higher gold concentrate grades from gravity concentration in the range of from 250 to 500 ounce per ton have also been achieved but at very low weight recoveries, *i.e.*, <1.0% and low (<20%) gold recovery in the gravity circuit.

The mineralization at the Nancy Hanks and Willie deposits responds well to both gravity and flotation concentration and can be treated to obtain high recoveries from the higher-grade underground material. Some composites exhibit gold recoveries in excess of 90%, utilizing the techniques tested to date.

There are no high metallurgical technical risk items directly related to processing and the moderate risk items can be minimized through better sampling to obtain composites representing the deposits as they would be mined and the application of locked-cycle laboratory testing and pilot plant work to obtain more meaningful design criteria for a future on-site mill. Operating cost and capital costs, used in the current business plan, do not match up with planned production values; therefore, if taken without question, represent a potentially high risk to the decision-making process. It is critical that metallurgical recoveries, concentrate grades, and capital costs match up with the operating plan. In addition, the treatment of mine ores at the Golden Sunlight Mill should be pursued until sufficient resources/reserves are identified to support the construction of on-site milling facilities.

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<sup>5</sup>Grant Hartford Corporation, "Valuation of the Garnet Mining District Nancy Hanks Mine," Garnet, Montana, Behre Dolbear Project 12-191, March 2013.

## A.5.2 METALLURGICAL TESTING

### A.5.2.1 Historical Testing

Reference is made in reports, generated by the Pegasus Exploration Department, to limited metallurgical testing done on the Nancy Hanks property in 1992.<sup>6</sup> All of the tests done by Pegasus were either bottle roll or column leach tests. The results were similar to contemporary tests and resulted in fairly high gold recoveries, 62.1% to 87% with leach times of up to 27 days. Because the data were extracted from the executive summary of a geologic report, the metallurgical data are lacking reliable head grade data and/or complete analysis of leach products and leach feed sizing. Table A5.1 represents a summary of the historical metallurgical testing done by Pegasus.

Sample I.D.	Ore Type	Head Grade			Recovery		
		Au (oz/t)	Ag (oz/t)	Cu (%)	Au (%)	Ag (%)	Cu (%)
Nancy Hanks Oxide	Bottle Roll <sup>1</sup>	~0.04-0.058	N/A	N/A	72.0	N/A	N/A
Nancy Hanks Oxide	Bottle Roll <sup>1</sup>	~0.04-0.058	N/A	N/A	76.0	N/A	N/A
Nancy Hanks Oxide	Bottle Roll <sup>1</sup>	~0.04-0.058	N/A	N/A	82.0	N/A	N/A
Nancy Hanks Sulfide	Bottle Roll <sup>1</sup>	~0.04-0.058	N/A	N/A	62.0	N/A	N/A
Nancy Hanks Sulfide	Bottle Roll <sup>1</sup>	~0.04-0.058	N/A	N/A	81.0	N/A	N/A
Nancy Hanks Sulfide	Bottle Roll <sup>1</sup>	~0.04-0.058	N/A	N/A	82.0	N/A	N/A
Nancy Hanks Oxide	Column Leach <sup>2</sup>	~0.04-0.058	N/A	N/A	87.2	70.0	N/A
Nancy Hanks Sulfide	Column Leach <sup>2</sup>	~0.04-0.058	N/A	N/A	80.0	40.0	N/A
Nancy Hanks Sulfide	Column Leach <sup>2</sup>	~0.04-0.058	N/A	N/A	?	40.0	N/A
Nancy Hanks Sulfide	Column Leach <sup>2</sup>	~0.04-0.058	N/A	N/A	84.0	40.0	N/A

<sup>1</sup>Bottle roll tests – 72 hours  
<sup>2</sup>Column leach tests – 26 days

### A.5.2.2 Mineralogical

As per Pegasus,

*Gold is present as telluride minerals, chiefly calaverite, krennerite and petzite with minor gold or electrum. The gold tellurides are intergrown with minor amounts of pyrite which are found within quartz veins and veinlets. Gold is not found in the pyrite which is disseminated in the wall rock, only in the quartz veins and veinlets. The particle size of the gold tellurides is typically in the 10 to 30µm range, with occasional hair like crystals of petzite >100µm in length.*

The brief Pegasus mineralogical discussion serves to partially explain the “decent” gold recoveries from the rock types identified as sulfides throughout this study.

### A.5.2.3 Contemporary Testing

Beginning in 2009 and continuing through 2010, CDM engaged FLSmidth Dawson Laboratories in Salt Lake City, Utah to complete a series of metallurgical tests, which explored gravity concentration and flotation as treatment

<sup>6</sup>Pegasus Gold Corporation, “Garnet Project Summary,” December 1992.

schemes for the recovery of gold and ostensibly silver from the GHC's controlled claims in Montana. The samples were not identified by rock type or deposit location, nor was the sampling rationale for metallurgical work detailed. The end result is a series of result suites, which do not shed much light on the expected precious or base metal recoveries and concentrate grades for the properties.

#### **A.5.2.3.1 August 2009 Testing**

##### **Metallurgy**

The 2009 testing developed metallurgical data for the recovery of precious metals (gold and silver) and for base metals (copper). The testing also developed plant design criteria for grinding index (WI), filtration equipment sizing, water analysis, and acid/base accounting for various ores and metallurgical products.<sup>7</sup> Again, the representativeness of the samples is not clearly established in the report, rendering the cost effectiveness of the testing somewhat questionable. Table A5.2 represents the sample data developed in the 2009 test program.

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<sup>7</sup>FLSmith Dawson Metallurgical Laboratories, "Camp Dresser & McKee, Inc., Final Report on Metallurgical Test Work Conducted on Five (5) Samples for Garnet Mining," Project No. P-4080, August 11, 2009.

<b>TABLE A5.2</b>			
<b>CDM/GARNET MINING – RC CUTTING SAMPLES – HEAD ASSAY RESULTS<sup>1</sup></b>			
<b>Composite Number</b>	<b>Gold (ozt/t)</b>	<b>Silver (ozt/t)</b>	<b>Copper (%)</b>
1	0.089 <sup>2</sup> 0.159	<0.058 0.390	0.0195
2	0.144 <sup>3</sup> 0.175	~0.350 0.660	0.028
3	0.033 <sup>4</sup> 0.049	<0.058 0.200	0.029
4	0.436 <sup>5</sup> 0.443	<0.058 0.350	0.003
5	0.093 <sup>6</sup> 0.088	<0.058 0.610	0.024

<sup>1</sup>The black highlighted assays are by Dawson and the red highlighted assays are by CDM.

<sup>2</sup>A composite from a primary high grade vein system. 10 samples of oxidized and un-oxidized quartz vein material and granodiorite. The assay head grade is 0.159 ounce per ton of gold and 0.39 ounce per ton of silver.

<sup>3</sup>A composite from an alternate high grade vein systems. 9 samples of primarily oxidized quartz vein and altered granodiorite. The assay head grade is 0.175 ounce per ton of gold and 0.66 ounce per ton of silver.

<sup>4</sup>A composite from the primary pit area. 13 pit grade samples. The sample contains primarily altered, oxidized granodiorite with an assay head grade of 0.049 ounce per ton of gold and 0.200 ounce per ton of silver.

<sup>5</sup>An oxidized vein material contained in marble. 6 samples with an assay grade of 0.443 ounce per ton of gold and 0.35 ounce per gold of silver. The sample demonstrated a severe nugget effect in the comparable Dawson assays.

<sup>6</sup>A composite of samples 1, 2, and 3; 20% from sample 1, 20% from sample 2, and 60% from sample 3. The composite head grade is 0.088 ounce per ton of gold and 0.610 ounce per ton of silver.

A cursory examination of the sample assays reveals that the CDM assays appear to be from a completely different population than the Dawson assays. There is no explanation in the text of the report for the disparity in results. Behre Dolbear suspects that nugget effect is the most likely cause of the erratic results.

The samples were subjected to laboratory testing utilizing a Knelson concentrator to produce a rougher concentrate and a Knelson tailing, which was subjected to flotation. The Knelson rougher concentrate was hand vanned to produce a “Knelson” concentrate and the vanned tail was recombined with the Knelson tailing for flotation feed. The primary cause of low concentrate grades is the low sample weight of the gold concentrates produced by vanning or flotation. Extensive Knelson testing to produce large amounts of rougher concentrate would make the metallurgical testing more meaningful.

The metallurgical testing results are represented in Table A5.3.

Sample Number	Grind P <sub>80</sub> (µm)	Knelson Concentrate + 8 Minute Flotation Concentrate			
		Wt. (%)	Au Concentrate (oz/t)	Au Head (oz/t)	Au Recovery
1	176	4.0	3.71	0.15	98.4
2	182	4.0	2.90	0.12	72.6
3	185	3.8	0.68	0.03	57.4
4 <sup>1</sup>	205	0.9	21.92	0.12	82.3
5	184	3.8	2.28	0.09	82.3
5 <sup>2</sup>	187	2.2	3.25	0.07	79.0

<sup>1</sup>Sample contained significant visible free gold (nugget effect).  
<sup>2</sup>Results based on 4 minutes of flotation time.

Except for the low mass pull into the Knelson concentrate, it is difficult to draw many conclusions from the data due to the disparity between the CDM and Dawson assays. The Dawson assays are backed up by metallurgical balances from each test while the CDM data has no supporting foundation.

#### **Bond Work Index (WI) Determination**

The Bond Work Index (WI) of Sample No. 5 (Composite of Composites 1, 2, and 3) was determined to be 12.78 kWh per short ton or 14.09 kWh per tonne. If this result had been developed, based on a rigorous sample representation determination, the ore would be classified as moderately hard. Use of these data in actual plant design could possibly lead to serious short-falls in grinding capacity and/or overgrinding.

#### **Acid Base Accounting**

Acid base accounting values were determined from the five composites used in metallurgical testing using the heads and tailings from each test. With the exception of one suspicious test, the processing products have a net acid neutralization (ABA potential), as represented in Table A5.4.

Composite	Sample	Assay % S=	AP <sup>1</sup>	NP <sup>1</sup>	ABA Potential (NP-AP) <sup>2</sup>
1	Head	0.959	29.97	20.67	-9.30
	Tailings	0.053	1.66	18.13	16.47
2	Head	0.194	6.06	58.09	52.03
	Tailings	0.038	1.19	39.64	38.45
3	Head	0.052	1.63	42.12	40.50
	Tailings	0.035	1.09	42.77	41.67
4	Head	0.032	1.00	222.69	221.69
	Tailings	0.014	0.44	200.14	199.71
5	Head	0.220	6.88	35.41	28.53
	Tailings	0.027	0.84	40.18	39.33

<sup>1</sup>Tons CaCO<sub>3</sub>/1,000 tons scavenger tailings.  
<sup>2</sup>A negative ABA value suggests a potential acid producer.



### **Thickening and Filtration**

The thickening and filtration tests, although thought premature by Behre Dolbear, are obtained based upon an anticipated mill production rate of approximately 240 short tons per day.

The test results from DOE (Eimco) indicate that no special design problems, for the samples tested, are anticipated by DOE for thickener design. A single high-rate thickener will suffice for the thickening of plant tailings for either filtration or paste.

One single DOE pressure filter will handle the plant tailings prior to deposition in the tailings impoundment.

### **A.5.2.3.2 November 2009 Testing<sup>8</sup>**

#### **Metallurgy**

Based on the low gold concentrate grade achieved in the earlier 2009 test work, GHC and CDM requested Dawson to attempt, again, to make a higher-grade gravity gold concentrate for smelting at the mine site. A new composite, which included 21 individual samples, was received by Dawson as what appeared to be additional RC hole cuttings.

The samples were composited and assayed by Dawson at an average grade of 0.097 ounce per ton of gold and 0.0314% copper.

Following test procedures similar to the earlier Dawson work, a gold concentrate assaying of 155 ounce per ton of gold was produced, but as would be expected, the gold recovery was very low at 33%. Behre Dolbear feels that the ore will require downstream treatment of the combined gravity and flotation concentrates to achieve gold production at recoveries at or near 80%. Given the high pyrite content of the concentrates, the concentrates could easily be shipped to a copper smelter and excellent terms obtained for TC/RC and gold recoveries at the smelter of greater than 98%.

One series of flotation tests that has yet to be run is a flow sheet, which ignores gravity concentration and produces only a flotation concentrate for smelting. It may prove more efficient to produce a gold concentrate assaying >5.0 ounce per ton of gold at a gold recovery of 86% to 90%. Also, it remains to be seen what the economics of cyaniding the bulk concentrates would achieve. Although precluded in Montana by current legislation, an operating facility, which utilizes cyanide in Montana or one in Idaho or Nevada, may prove to have promise. A well-directed testing program will dictate which of the courses to follow.

### **A.5.2.3.3 May 13, 2010 Testing<sup>9</sup>**

#### **Metallurgical Testing**

In a continuing quest for higher gold concentrate grades, two additional composites representing the Nancy Hanks and Willie properties were shipped by CDM to Dawson. The composites were, by design, higher grade than samples received earlier in the test program and as would be expected, yielded high gravity gold recoveries and relatively higher gold concentrate quality. The head assay determinations are shown in Table A5.5.

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<sup>8</sup>FLSmidth, Dawson Metallurgical Laboratories, "Camp Dresser & Mckee, Inc., Final Report on Cleaner Flotation Test Work Conducted on a Single Master Composite for Garnet Mining," Project No. P-4105, November 30, 2009.

<sup>9</sup>FLSmidth, Dawson Metallurgical Laboratories, "Camp Dresser & Mckee, Inc., Final Report on Gravity, Flotation and Cyanidation Test Work on Willie and Nancy Hanks Composites from Garnet Mining," Project No. P-4137

<b>TABLE A5.5</b>				
<b>RE-CONSTITUTED COMPOSITES – GARNET MINING</b>				
<b>Composite</b>	<b>Head Assays</b>			
	<b>Au (oz/t)</b>	<b>Ag (oz/t)</b>	<b>Cu (%)</b>	<b>Fe (%)</b>
Willie	0.333	0.20	0.007	3.23
Nancy Hanks	0.256	0.32	0.049	3.12

The metallurgical testing included the use of larger head sample and resulted in having sufficient products to run realistic gravity and flotation tests. The tests produced gravity concentrate grades of 410 ounce per ton and 153 ounce per ton for the Willie and Nancy Hanks mineralization, respectively. The flotation concentrates were also relatively high at approximately 6.0 ounce per ton. The overall combined concentrate for both the Nancy Hanks and Willie were well over the minimum 4.0 ounce per ton level expected by copper smelters at approximately 11.0 ounce per ton and 8.1 ounce per ton, respectively. There is no data which indicates the relative availability of on-site or off-shore smelting of Garnex concentrates. The summarized metallurgical data is shown in Table A5.6.

**TABLE A5.6**  
**SUMMARY TEST RESULTS – NANCY HANKS AND WILLIE DEPOSITS**

Test Number	Comp.	Gravity Concentrates			Combined Concentrates <sup>1</sup>				Ro. Tails	Head
		Wt. %	Au (oz/t)	Au Dist. (%)	Wt. %	Au (oz/t)	Au Dist. oz/t Ore	Au Dist. (%)	Au (oz/t)	Au (oz/t)
1	Willie	0.04	410	39.8	4.0	11.0	0.43	96.2	0.018	0.45
2	Nancy Hanks	0.08	153	40.5	3.6	8.1	0.29	96.2	0.012	0.30
5	MC	0.08	285	53.4	4.5	8.9	0.40	97.0	0.013	0.42

<sup>1</sup>Combination of Knelson gravity concentrate + flotation bulk sulfide concentrate.

<sup>2</sup>Results on MC (50% Nancy Hanks, 50% Willie), with 6,000 g tests.

### **A.5.3 RECOMMENDATIONS**

- 1) A well designed scoping level study is definitely required to determine whether the property can stand the capital and operating costs required of the current deposit. This study is not within the scope of work of this current assignment;
- 2) Utilize the ongoing exploration program to obtain samples for metallurgical testing that mirror the proposed mine design production;
- 3) Optimize flow sheets by conducting locked cycle testing and or pilot plant work;
- 4) Follow the example of successful gold concentrate operations that have shipped lower grade (4.0 to 6.0 ounce per ton of gold) concentrates to copper smelters under favorable terms and conditions;
- 5) Investigate the cyanidation of combined gravity and flotation concentrates at appropriate sites within the United States; and
- 6) Given the short mine life indicated by the current resources may continue to be prudent to utilize a combination of contract mining and off-site toll milling to maximize gold recovery and minimize the risk of attempting to burden the operation with the recruitment and training of a local work force. The cyanidation of the ores and or flotation concentrates “out of state” encompasses all of these advantages. Unconfirmed information has it that toll milling may be available at the Golden Sunlight Mill facilities at approximately \$32 per ton and at Nevada based milling at Barrick/Newmont at approximately \$50 per ton.

**APPENDIX 6.0**  
**ENVIRONMENT AND PERMITTING**

The Garnet Gold Project has the right to operate under the Small Miner Exclusion Statement (SMES) and is currently in the process of completing work to obtain a full-scale mining permit (as well as other support permits) for the mine. The SMES requirements are summarized below as sourced from the Montana Department of Environmental Quality (MDEQ).

#### **A.6.1 TYPES OF ACTIVITIES REGULATED**

- 1) Mining operations – <5 acres of total surface disturbance, including roads (unless the operator bonds for the roads).
- 2) May have 2 mine sites of <5 acres of total surface disturbance as long as they are >1 mile apart, at their closest points.
- 3) Types of activities may include, but are not limited to, open pit, placer, underground, rock picking, etc.
- 4) An operator may not hold a Small Miner Exclusion Statement (SMES) in addition to an operating permit that exceeds 100 acres of permitted disturbance.

#### **A.6.2 APPLICATION REQUIREMENTS**

- 1) The applicant must sign a SMES, available at the MDEQ, which consists of a signed and notarized affidavit stating that the applicant will stay within the requirements or conditions of the exclusion.
- 2) Must submit an adequate map, preferably a seven and one-half minute quad map, showing the exact location of the site.
- 3) Must submit a one page plan of operations.
- 4) MDEQ will accept a copy of the United States Forest Services (USFS) operating plan as long as an adequate map is provided.

#### **A.6.3 REVIEW PROCEDURE**

- 1) Once the MDEQ receives and reviews a SMES application, it will be determined if an on-site visit is to be scheduled among the MDEQ, the applicant, and usually a representative from the appropriate federal agency, to calculate the amount of reclamation bond required for the project.
- 2) MDEQ has the authority to require a maximum of \$10,000 reclamation bond for placer and dredge mines. They may recover costs over the \$10,000 limit by filing for the additional amount in District Court.
- 3) Joint bonds with the MDEQ and the federal agency are accepted to avoid duplicate bonding. The applicant must agree to post the bond, reclaim any damaged land, and not be in default of another reclamation law.
- 4) The operator must post a performance bond and obtain approval for the design, construction, operation, and reclamation of any hard rock tailings impoundment.

- 5) An operating permit is required for that portion of a SMES operation that uses metal leaching agents.

#### **A.6.4 FEES**

- 1) There is no application or annual renewal fee for a SMES. However, an annual renewal form is required to maintain SMES status.

Additionally, the SMES governs only the surface disturbance footprint maximum of 5 acres and places no annual or other tonnage restrictions on the mining operation.

Garnex is working to obtain an operating permit (likely in the next 18-24 months) as it will need a much larger surface footprint as the mining operation expands and this permit would also be necessary should the mine decide to build a mill and concentrator or other infrastructure on-site in the future. In order to acquire an Operating Permit for full-scale mining operations from MDEQ, Garnex must submit and have approved the following.

- **Environmental Baseline Information:** current and adequate for assessment of any sensitive environmental issues, prediction of impacts, and development of adequate mitigation measures.
- **Operating Plan:** providing details of all mine and related facilities and planned operations, materials to be used, waste management, water management including quantity and quality, and similar for impacts assessment.
- **Reclamation Plan:** adequate for calculation of a surety bond to guarantee funding for adequate reclamation following closure, in the case of financial difficulties experienced by the operator.

The Garnex operation is a small underground mine similar to others, which have operated successfully in the mineral belt west of Helena, Montana. The Garnet gold project is familiar to regulators, non-governmental organizations (NGOs), and other potential opponents to mining development in Montana. Based on Behre Dolbear's research and discussions with management during the review process for this report, there appears to be no negative regulatory pressure, outstanding environmental violations, or consent orders that would impair operations. There also does not appear to be any organized opposition to the mine and its development plan. This will aid in routine permitting studies and reduce timelines in achieving the desired development and operating plans.

The Project plan currently has a relatively small surface footprint and will be able to locate all surface facilities on patented mining claims. This will limit involvement from the BLM in federal permitting. Additional federal permitting, such as a BLM Plan of Operations and Environmental Assessment (EA), would be required if a mill, a tailings facility, or other infrastructure were to be eventually located on unpatented BLM mineral claims.

Storm and mine water management plans will have to be developed (or revised/updated) to manage potential impacts and water discharge off the property. This is typically done via a Storm Water Pollution Protection Plan (SWPPP). No acidic mine or run-off water has been noted at the Project site but will have to be monitored as the Project develops.

As exploration continues below the water table and pumping occurs, actual volumes of mine water outflow will have to be managed. This is estimated in previous reports at 50 to 150 gallons per minute and should be able to be managed easily.

The permitting timeline and schedule is currently estimated by management to be 18-24 months to full approval of a MDEQ Operating Permit. Costs to complete this work were not estimated as part of this report.

Based on Behre Dolbear’s research and investigation, there appear to be no material environmental risks or liabilities that would materially impact the valuation of the Garnet Project.

#### **A.6.5 REFERENCES**

The above information and opinion of Behre Dolbear was compiled from documents provided by Garnex, from past Behre Dolbear reports, e-mails, a conference call with Garnex management and environmental consultant, and open source searches on the Internet.



**APPENDIX 7.0**  
**RELATED TRANSACTION DETAIL**

Four company transactions and seven property transactions were identified, as used as the basis for the Related Transactions Method applied in the valuation of the Garnet Project. These transactions are presented below.

### A.7.1 PROJECT TRANSACTIONS

- **East Cadillac and Kinebik Projects** – A 100% interest in these two projects located in Val-d’Or, Quebec, Canada was acquired by O3 Mining Inc. The transaction was completed on July 25, 2019 via the issuance of 3,092,784 of O3 Mining Inc. shares and a net smelter return royalty on all 100% owned claims that were not subject to a pre-existing royalty (577 claims). The transaction value was US\$8.95 million for 100% of the properties.
- **Dufferin Gold Mine** – A 90% interest in the Dufferin Gold Mine located in Nova Scotia, Canada was acquired by Resource Capital Gold Corp. from an undisclosed seller. The transaction was completed on October 7, 2016 via a C\$10.59 million cash deal and a 1% net smelter return royalty. The transaction value was US\$9.50 million for 90% of the property. The property was fully permitted with a gravity-flotation mill on site and a PEA in progress.
- **Fenelon Project** – Wallbridge Mining Co. Ltd acquired a 100% interest in the project from Balmoral Resources Ltd on October 18, 2016. An aggregate of C\$3.5 million and 2,381,575 shares were paid for a transaction value of US\$2.81 million. The project is located in Quebec, Canada. A pre-feasibility study was anticipated to be completed by mid-2017.
- **Silver Coin Property** – Ascot Resources Ltd. acquired 20% of the project from Mountain Boy Minerals Limited on October 26, 2018 for a transaction value of US\$2.67 million (3,746,874 shares plus an additional 48,000 shares for settlement of options and warrants with another party). Ascot also acquired 80% of the project from Jayden Resources Inc. on October 26, 2018 for a transaction value of US\$10.69 million (14,987,497 shares plus 192,000 shares for the settlement of options and warrants). The project is located in British Columbia, Canada. It is contiguous with other Ascot properties that include milling capabilities.
- **Premier Gold Mine** – Ascot Resources Ltd. acquired 100% of the project from Boliden Ltd on October 16, 2018 for a cash value of C\$11.05 million and the assumption of all obligations and liabilities of the Boliden. The project is located in British Columbia, Canada.
- **McKenzie Break and Swanson Properties** – Monarques Gold Corp. acquired 100% interest in the projects from Agnico Eagle Mines Limited on December 21, 2017. The deal was a combination of cash, shares, and a net smelter royalty totaling US\$3.63 million. The stated resources for the two properties are historical resources that are not classified as current mineral resources.

### A.7.2 COMPANY TRANSACTIONS

- **Rice Lake Property** – Klondex Mines Ltd. acquired Bison Gold Resources Inc. on October 19, 2017 for a transaction value of US\$6.83 million (0.1242 share per issued and outstanding common share of Bison Gold). Bison Gold owned the Central Manitoba Rice Lake project.
- **Goldboro Property** – Anaconda Mining Inc. acquired 100% of Orex Exploration Inc. on May 19, 2017 for a transaction value of US\$9.03 million (0.85 share per issued and outstanding common share of Orex). The primary asset of Orex was the Goldboro project in Nova Scotia, Canada. The project had a completed PEA and was in the pre-feasibility study stage.

- **Red Mountain** – Ascot Resources Ltd. acquired 100% of IDM Mining Ltd on March 27, 2019 for a transaction value of US\$21.55 million (0.0675 share per issued and outstanding common share of IDM). The primary asset of IDM was the Red Mountain project in British Columbia, Canada. A feasibility study has been completed for Red Mountain and the project is near construction.
- **Curraghinalt** – Orion Resource Partners (USA) LP acquired an additional 78.2% interest in Dalradian Resources Inc. for a transaction value of US\$218.28 million (C\$1.47 per share in cash). The primary asset of Dalradian is the Curraghinal project in Northern Ireland. The project is a pre-development property with a completed feasibility study.

**APPENDIX 8.0**  
**GEOSCIENCE MATRIX DETAIL**

The Geoscience Matrix Method gained acceptance as a valuation method in the 1990s. Courts in the United States, the VALMIN Code of the AusIMM, and securities commissions in Canada have accepted this method. Behre Dolbear has been involved with two court cases where the Geoscience Matrix Approach was used. In the Alaska Mental Health case, valuation of mineral lands in Alaska, using this approach, was allowed by the court in Anchorage. In a condemnation action by the City of Cripple Creek, Colorado, the court accepted the method as valid. In addition, the VALMIN Code of the AusIMM has been legislatively enacted in the jurisdictions where the AusIMM is the mineral industry professional society (Southeast Asia and Australia).

The approach is based on four specific criteria:

- 1) location relative to known mineral occurrences (Sub-categories 1-6)
- 2) grade of mineralization on the property (Sub-categories 7-14)
- 3) on-property geophysical and geochemical targets (Sub-categories 15-17)
- 4) on-property geological targets (Sub-categories 18-19)

Nineteen sub-categories are present, each with a given point range. Only one sub-category per category is used; that which seems to approximate the situation at the property in hand. The points to be awarded for each sub-category are as follows:

Location with respect to off-property mineral occurrences:

- 1) interesting but sub-ore grade material that has measured in two horizontal dimensions – 1.5
- 2) ore-grade material that has measured in two horizontal dimensions – 2.0
- 3) an interesting, but sub-ore-grade mineralized zone that has been measured in three dimensions – 2.5
- 4) an ore-grade mineralized zone that has been measured in three dimensions, but has not yet been shown to be economically exploitable – 3.0
- 5) a mine, either a past or present producer – 4.0
- 6) a major mine, either a past or present producer – 5.0

Targets or Grade:

- 1) one exploration target exists or two, based on different methods that correlate – 1.3
- 2) three or more targets that correlate – 1.5
- 3) mineralization on the property is interesting but sub-ore-grade material that has been measured in two horizontal dimensions – 2.0
- 4) ore-grade mineralization that has been measured in two horizontal dimensions, at a size which is economically interesting – 3.0
- 5) an interesting, but sub-ore-grade zone that has been measured in three dimensions – 5.0
- 6) an ore-grade mineralized zone that has been measured in three dimensions, at a size which is economically interesting, but not yet shown to be economically exploitable – 6 to 8
- 7) a mine, a past producer with ore-grade mineralization, which has been measured in three dimensions, at a size that is economically interesting, but has not yet shown to be economically exploitable – 7 to 8
- 8) a major mine, a past producer with ore-grade mineralization, which has been measured in three dimensions, at a size that is economically interesting, but has not yet shown to be economically exploitable – 9 to 10

Geophysical or geochemical targets on the property, similar to those indicative of known exploitable mineral deposits:

- 1) one such geophysical or geochemical target – 2.0
- 2) two or three such geophysical or geochemical targets, which correlate – 3.0
- 3) four or more such geophysical or geochemical targets, which correlate – 3.5

Geological patterns recognizable as similar to those indicative of known exploitable mineral deposits:

- 1) one or two such patterns – 2.0
- 2) three or more such patterns – 3.0

If there is nothing to indicate the presence of anything in a category, then 1.0 point is awarded. A property with no indication of mineral resources is awarded 1.0 point in each category, and the mineral rights to the property are valued at the minimum, as explained below.

Value is based on the inherent cost of land acquisition per acre, multiplied by the points of the selected sub-categories. The inherent land acquisition cost is typically the cost per acre to stake a claim on the public domain, currently estimated to be \$280 in exploration, geological, and physical staking costs plus \$245 in fees payable to the federal government for a standard claim of 600 feet by 1,500 feet (20.66 acres). Thus, the base value is \$25.41 per acre ( $\$492 \div 20.66 = \$25.41$ ). The mineral value per acre is then the base value times the points allowed for each category.

For example, if the property under valuation has characteristics that are as follows: Location sub-category 2 – 2.0 points; Targets/Grade sub-category 9 – 2.0 points; Geochemical/Geophysical sub-category 15 – 2.0 points; and Geological sub-category 18 – 2.0 points; then the property is valued as  $2 \times 2 \times 2 \times 2 = 16 \times \$23.81 = \$381.02$  per acre.<sup>10</sup>

### **A.8.1 VALUATION OF THE GARNEX HOLDINGS BY THE GEOSCIENCE MATRIX METHOD**

Behre Dolbear has classified the extensive Garnex holdings outside of the immediate Nancy Hanks and Willie resource area into three categories: high, good, and moderate potential. None of these areas contain defined resources, but a varying amount of exploration and geologic interpretation has been done. The classification of areas is discussed in Appendix 8.0 of this report.

- The high potential areas total 355.449 acres.
- The good potential areas total 193.185 acres.
- The moderate potential areas total 299.616 acres.
- All holdings total 4,308.86 acres. Thus, areas not in the immediate Nancy Hanks area or the high/good/moderate potential areas total 3,460.61 acres.

The Geoscience Matrix Method has been applied to these four areas.

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<sup>10</sup>Lionel C. Kilburn, Valuation of Mineral Properties, which do not contain Exploitable Reserves: CIM Bulletin, August 1990, pp. 90-93.

### **A.8.1.1 High Potential Areas**

- Location – Category 5 – a mine – 4.0 points
  - The claims are located near a mine that produced in the past
- Grade – Category 10 – ore-grade mineralization – 3.0 points
  - Ore-grade and near ore-grade mineralization has been intercepted by drilling
- Geochemical/Geophysical – Category 15 – one target – 2.0 points
  - Soil chemical studies verify presence of veins or anomalies
- Geology – Category 19 – three or more patterns – 3.0 points
  - Numerous geologic patterns are discernible in the area
- Total of points  $4.0 \times 3.0 \times 2.0 \times 3.0 = 72$
- Valuation per acre  $72 \times \$25.41 = \$1,829.62$  per acre
- Valuation of highest potential areas  $\$1,829.62$  per acre  $\times$  355.449 acres = \$650,337

### **A.8.1.2 Good Potential Areas**

- Location – Category 5 – a mine – 4.0 points
  - The claims are located near a mine that produced in the past
- Grade – Category 9 – sub-ore-grade mineralization – 2.0 points
  - Sub-ore-grade mineralization has been intercepted by drilling
- Geochemical/Geophysical – Category 15 – one target – 2.0 points
  - Soil chemical studies verify presence of veins or anomalies
- Geology – Category 19 – three or more patterns – 3.0 points
  - Numerous geologic patterns are discernible in the area
- Total of points  $4.0 \times 2.0 \times 2.0 \times 3.0 = 48$
- Valuation per acre  $48 \times \$25.41 = \$1,219.74$  per acre
- Valuation of good potential areas  $\$1,219.74$  per acre  $\times$  193.185 acres = \$235,637

### **A.8.1.3 Moderate Potential Area**

- Location – Category 5 – a mine – 4.0 points
  - The claims are located near a mine that produced in the past
- Grade – Category 8 – mineralization patterns – 1.5 points
  - Several targets similar to those indicative of exploitable mineral deposits
- Geochemical/Geophysical – Category 15 – one target – 2.0 points
  - Soil chemical studies verify presence of veins or anomalies

- Geology – Category 18 or 19 – two or three patterns – 2.5 points
  - Geologic patterns are discernible in the area
- Total of points  $4.0 \times 1.5 \times 2.0 \times 2.5 = 30$
- Valuation per acre  $30 \times \$25.41 = \$762.34$  per acre
- Valuation of moderate potential areas  $\$762.34$  per acre  $\times 299.616$  acres = \$228,410

#### **A.8.1.4 All Other Areas**

- Location – Category 5 – a mine – 4.0 points
  - The claims are located near a mine that produced in the past
- Grade – Category 7 – mineralization patterns – 1.3 points
  - At least one target similar to those indicative of exploitable mineral deposits
- Geochemical/Geophysical – Category 15 – one target – 2.0 points
  - Soil chemical studies verify presence of veins or anomalies
- Geology – Category 18 – one or two patterns – 2.0 points
  - Geologic patterns are discernible in the area
- Total of points  $4.0 \times 1.3 \times 2.0 \times 2.0 = 20.8$
- Valuation per acre  $20.8 \times \$25.41 = \$528.56$  per acre
- Valuation of all other areas  $\$528.56$  per acre  $\times 3,460$  acres = \$1,828,809

### **A.8.2 RATING THE EXPLORATION TARGET AREAS**

#### **A.8.2.1 Discussion**

Behre Dolbear characterized the various areas of exploration potential and estimated their acreage along strike and down dip of the major vein zones. An average dip of 30 degrees was used for all veins. In all areas, except the Coloma, the veins dip north. At Coloma, they dip south. Based upon a vein dip of 30 degrees and drill holes that intersected mineralized veins at a down dip distance of about 600 feet, the horizontal distance of potential mineralization is about 515 feet.

This horizontal distance (515 feet) was used for all areas except (a) between the Tostman and the Nancy Hanks veins and (b) the International veins. Because of the deeper drilling, deeper intercepts, continuity along strike and dip, and the quality of the resource at Tostman, Nancy Hanks, Marble, Shamrock, and Dewey, the exploration potential in the Tostman-Nancy Hanks-International vein zone was considered for a down dip distance of 1,000 feet, corresponding to a horizontal distance of 865 feet.

Additionally, below the known resource at the Nancy Hanks (including Dewey, Marble, and Shamrock), Tostman, and Willie, the potential was expanded another additional horizontal distance of 300 feet, as highly favorable prospective exploration lands and as the deepest drill holes intersect mineralization.



Three categories of exploration potential were considered.

- **Highest and Outstanding Potential** – These are areas where: (1) numerous drill holes have intercepted a combination of moderate (0.1-0.2 ounce of gold per ton) and high-grade (>0.2 ounce of gold per ton) mineralization even though a resource has not been estimated; and (2) areas that cover strike extensions with limited or no drilling between existing resource areas. In Behre Dolbear’s opinion, this group of veins have a high potential to develop minable resources, if continued drilling confirms.
- **Good Potential** – These are areas where: (1) drilling intercepted a combination of moderate-grade (0.1-0.2 ounce of gold per ton) and low-grade (0.05-0.1 ounce gold per ton); (2) drilling has yet to be conducted on the down dip extension of the well-established resources; and (3) there are well established veins on the surface and historic prospects and mines but limited drilling. The horizontal distance factor is 300 feet when the potential mineralization is directly down dip of an estimated resource and 200 feet when the target area is between two existing resource areas.
- **Moderate Potential** – For the most part, these are areas along strike of known mineralization but where there is no drilling to establish a higher characterization. They are justified by favorable geology and extensions beyond well mineralized drill holes and open-ended mineralization. They include:
  - The entire potential strike length between the Tostman and Coloma veins because of the large amount of data demonstrating continuity of the Tostman, Coloma, and especially the Nancy Hanks, Dewey, Marble, Shamrock, and International vein systems;
  - An extension of 50% of the known strike length of the “Highest and Outstanding Potential” areas; and
  - Small areas of surface vein exposures on unpatented claims (GHC 17, GHC 18, and GHC 44) that are apparently not related to the major vein zones.

Table A8.1 lists defines dimensions and assigns acreages to the major vein zones based upon the location of existing underground mine workings, exploration drill results, and geology.

<b>TABLE A8.1</b>				
<b>RATING THE EXPLORATION TARGET AREAS</b>				
<b>Area</b>	<b>Dimensions of Area (feet)</b>	<b>Acreage Highest Potential Area</b>	<b>Acreage Good Potential Area</b>	<b>Acreage Moderate Potential Area</b>
Coloma Vein	600 x 515 and 2,000 x 515		30.739	
Coloma Vein (north-northwest projection)	300 x 515			3.547
Coloma Vein to Tostman Vein	6,500 x 515			76.848
Between Tostman and Nancy Hanks Vein System (includes Dewey, Marble, and Shamrock)	1,300 x 865	25.815		
Between Tostman and Nancy Hanks Vein System – down dip	1,300 x 200		5.969	
Tostman - down dip	1,500 x 300		10.331	
International Vein <sup>1</sup>	1,500 x 865	29.787		

<b>TABLE A8.1 RATING THE EXPLORATION TARGET AREAS</b>				
Area	Dimensions of Area (feet)	Acreage Highest Potential Area	Acreage Good Potential Area	Acreage Moderate Potential Area
Nancy Hanks Vein System – down dip (includes Dewey, Marble, and Shamrock)	1,800 x 300		12.397	
Tiger (includes Free Coinage)	3,500 x 865	69.502		
Tiger (includes Free Coinage) Strike Extensions <sup>2</sup>	875 x 865		17.375	
Mountain View <sup>3</sup>	1,800 x 515		21.28	
Mountain View Strike Extensions <sup>4</sup>	750 x 515			8.867
Grant & Hartford (includes Gold Bug and Magone & Anderson and Lide) <sup>5</sup>	7,000 x 865	139.00		
Grant & Hartford Strike Extensions	2,750 x 865		54.609	
Lead King (includes Red Cloud, Crescent, First Chance, and Mitchell & Mussigbrod)	3,800 x 865	75.459		
Lead King Strike Extensions	1,900 x 865		37.730	
Willie Down Dip	400 x 300		2.755	
Willie Strike Extensions <sup>6</sup>	800 x 865	15.886		
Non-major Vein Zones on Unpatented Claims (GHC 17, GHC 18, and GHC 44)	1,500 x 515			17.734
Other Patented Claims, including Armistead, Berlene, Grotto, Contact, Honolulu, North Star, Harold, Fourth of July, Robert Emmet, High Road, and Cave Hill	See text for individual claim acreage			192.62
<b>Total Based Upon Drilling and Geology</b>		<b>355.449</b>	<b>193.185</b>	<b>299.616</b>
<sup>1</sup> No credit for possible eastward extension because Gold King, Sierra, and Austin patented claims are not part of the GHC land holdings. <sup>2</sup> No credit for possible eastern 875 foot extension because the Mary Anderson patented claim is not part of the GHC land holdings. <sup>3</sup> Decrease of credit from the 2012 report because unpatented claims, GR3 and GR4, was dropped. <sup>4</sup> No credit for possible westward extension because Homestake and Garnet patented claims are not part of the GHC land holdings. <sup>5</sup> Increase of credit from the 2012 report because the Lide patented claim added to the Project holdings. Originally, a strike length of 5,500 feet but about 900 feet of strike length subtracted out because the 900 foot portion lies on the Grant & Hartford claim that is not part of the GHC land holdings. <sup>6</sup> Potential strike extension for an additional 600 feet eastward, if related to the Fourth of July workings.				

The acreage within the patented claims that have been explored by drilling has already been taken into account in Table A8.1, via the assignment of strike length and horizontal width of potential mineralization based upon drilling and geology. However, there are 11 patented claims, which have had no drilling but based upon the fact that they have been patented, should have a valuation applied to them. Unfortunately, because there is no recorded drilling data, Behre Dolbear has applied the minimum “prospectivity” classification of Moderate Potential. A minimal amount of soil and rock geochemistry confirms the presence of gold on at least some of these claims. Based upon

scaling the available claim map, Behre Dolbear has made an estimate of acreage for each of the following patented claims (a total of 192.62 acres).

- Armistead – Mineral Survey #5633 at ±17.68 acres
- Berlene – Mineral Survey #5454 at ± 15.15 acres
- Grotto – Mineral Survey #5664 at 20.66 acres
- Contact – Mineral Survey #5666 at 20.66 acres
- Honolulu – Mineral Survey #5632 at ± 5.17 acres
- North Star – Mineral Survey #9404 at 20.66 acres
- Harold – Mineral Survey #5812 at 20.66 acres
- Fourth of July – Mineral Survey #5433 at 20.66 acres
- Robert Emmet – Mineral Survey #3616 at 20.66 acres
- High Road – Mineral Survey #9413 at ± 10.0 acres
- Cave Hill – Mineral Survey #5455 at 20.66 acres

Based upon recent documents supplied by Garnex, a number of unpatented claims were dropped and 1 unpatented claim (Lide) was added to the property position.

The property consists of 24 patented claims (the leased Free Coin being one of the 24) and 188 unpatented mining claims (3 of which are placer claims). The properties cover an area of 4,308.86 acres, or 6.73 square miles. It is not known whether this estimated acreage takes into account that some of the unpatented lode claims are fractional claims or that some of the placer claims might overlies lode claims. In addition, Garnex has a BLM preference rights lease covering 4 formerly-patented claims that have reverted to public ownership, constituting an additional 56 acres.

Recently dropped claims include:

- 1) CR 5, 6, 7, 10, 11, 12, 24-37, 47
- 2) NHC 0110, 0111, 0112
- 3) GHC 05, 09-12, 201, 208-213, 300-305
- 4) GR 03, 04
- 5) The entirety of the GHM series
- 6) The entirety of the GHP series
- 7) The entirety of the GHA series
- 8) The entirety of the GHB series
- 9) The entirety of the GHH series
- 10) The entirety of the GHS series
- 11) The entirety of the GHZ series
- 12) The entirety of the GHG series
- 13) The entirety of the GHL series
- 14) The entirety of the GHD series
- 15) The entirety of the GHK series
- 16) The entirety of the GHR series
- 17) The entirety of the GHW series
- 18) The entirety of the GHY series
- 19) The entirety of the GHX series
- 20) The entirety of the GHT series

A number of gold-in-soil and gold-in-rock chip geochemical survey maps were available for review. The vast majority of the samples were part of a grid soil survey, which covered much of the northern two-thirds of the total

land position. Many gold anomalies are present. The vast majority of anomalies lie within the known major vein zones. Some rock-chip anomalies confirm the presence of gold in patented claims that have had no drilling performed on them. The most significant gold-in-soil anomaly, not within the GHC land package, is the obvious eastward extension of the Nancy Hanks vein zone on the Forest, Sierra, and Gold King patented claims (none held by GHC). This anomaly continues eastward onto the unpatented GHC 247 claim. However, because the vast majority of this gold anomaly lies within patented claims not in the Garnex land package, Behre Dolbear did not assign any additional acreage to Table A8.1. Similarly, there are some scattered gold anomalies north of the Tostman patented claim but there is insufficient data to assign additional acreage to Table A8.1.

The two changes in Table A8.1, from 2012, reflect the addition of the Lide Patented (increase to “Highest Potential Area” acreage) and dropping the GR03 and GR04 unpatented claims (decrease to “Good Potential Area” acreage). The remainder of the dropped, unpatented claims has low potential as nearly all are on the periphery of the land position. There are no resources on the dropped unpatented claims; however, the GR03 and GR04 have moderate exploration potential as they are on strike of the Mountain View veins. Behre Dolbear recommends that the fractional claims, GR03 and GR04, be re-staked, and thus, add to cover the mineral potential along the Mountain View zone and enhance the valuation.

Figure A8.1 shows the claim block from 2012 and reflects unpatented claims dropped (light green); patented claims in the present land block (including the Lide patent) in grey; and patented claims not in the present land package in blue. Colored claims (red = highest potential; orange = good potential; and yellow = moderate potential) are also shown.

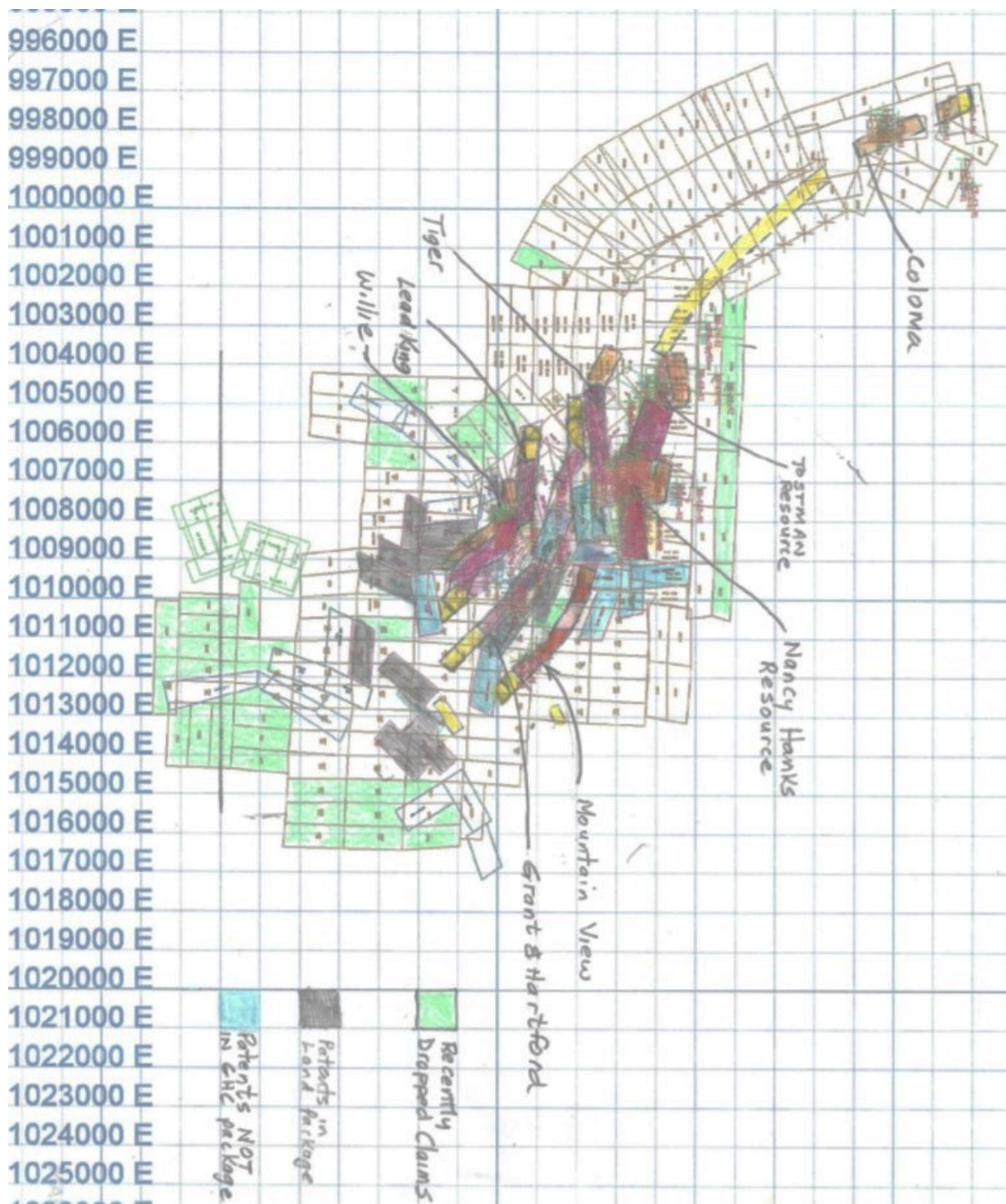


Figure A8.1. Target area rating

**APPENDIX 9.0**  
**PROPERTY RISK PROFILE**

### A.9.1 GARNET GOLD PROJECT RISK ASSESSMENT MATRIX

Mining operations have inherent risk in the fact that they occur within spheres of influence that cannot be as fully controlled as is seen in many other industries. Although mining projects can be engineered to minimize operational risks and hazards, there are inherent uncontrollable natural and external factors that can have a significant effect on the ability of the business to achieve production, cost, and revenue targets.

Risk assessment is a subjective exercise, relying on the experience of the professional undertaking the assessment. Behre Dolbear uses a combination of the likelihood that a specific risk will occur and the level of severity of a specific risk to categorize project risks as low, medium, or high. Typically, Behre Dolbear categorizes the risks according to the definitions footnoted in the matrix in Table A9.1; however, there are instances where a risk may be categorized differently than shown in the matrix, as a result of the nature of a particular risk.

<b>TABLE A9.1</b>			
<b>OVERALL RISK ASSESSMENT MATRIX</b>			
<b>Likelihood of Risk (within 5 years)</b>	<b>Consequence of Risk</b>		
	<b>Minor<sup>1</sup></b>	<b>Moderate<sup>2</sup></b>	<b>Major<sup>3</sup></b>
Likely – will probably occur	Medium	High	High
Possible – may occur	Low	Medium	High
Unlikely – unlikely to occur	Low	Low	Medium
<sup>1</sup> <b>Minor Risk:</b> The factor, if uncorrected, will have little or no effect (<10%) on project cash flow and performance. <sup>2</sup> <b>Moderate Risk:</b> The factor, if uncorrected, could have a significant effect (10% to 15% or 20%) on the project cash flow and performance unless mitigated by some corrective action. <sup>3</sup> <b>Major Risk:</b> The factor poses an immediate danger of a failure, which if uncorrected, will have a material effect (>15% to 20%) on the project cash flow and performance and could potentially lead to project failure.			

Behre Dolbear’s risk assessment of the Garnet Nancy Hanks Underground Mine Project is presented in Table A9.2. The proposed project development and pre-production tasks are representative of a majority of small mine development projects. The Garnex properties are an early stage exploration and development project that faces identified uncertainties in order to become a fully economic mining and milling project. This early stage uncertainty is the principal driver in several possible failures being labeled as high risk. Behre Dolbear has identified significant potential operational risks to the Garnex management that may or may not be effectively mitigated. The identified risks at the Garnet Nancy Hanks Mine site were judged to be similar to other early stage exploration projects, which are attempting to achieve economic benefit in spite of their relatively small size. The risks associated with the mining, metallurgical gold recovery, production of marketable concentrates, and potential future operating costs associated with toll milling, smelting, and refining are no greater than other operations of their type and stage of development. There are risks at the proposed Garnet Nancy Hanks Underground Mine Project that were found to be high or of significant materiality.

<b>TABLE A9.2 GARNET PROJECT MINE RISK ASSESSMENT MATRIX</b>			
<b>Risk</b>	<b>Likelihood</b>	<b>Consequence Rating</b>	<b>Risk</b>
<b>Location, Access, and Infrastructure</b>			
Minimal risk associated with the established infrastructure.	Unlikely	Minor	Low
The mine is in a remote location but has graded county roads for access. The mine relies on generated power that may fail during operations	Possible	Moderate	Medium
Land Position required for operations is adequate	Unlikely	Minor	Low
Land position required for future exploration efforts is adequate but could be improved long term	Unlikely	Minor	Low
<b>Geology and Resources</b>			
Geology of the deposit is well understood. Minimal risk is associated with the geology or unforeseen geologic anomalies.	Unlikely	Minor	Low
The risk of the block model grade estimations being too high or too low	Possible	Moderate	Medium
Exploration potential is excellent	Likely	Minor	Low
Thickness of historic reverse circulation (RC) drilling intercepts can be overestimated due to down-the-hole contamination. Based upon comparisons with twin to RC with diamond core drill results, some contamination is present. Potential loss of estimated ounces should be offset by discovery of extensions of known veins along strike and down-dip; however, some negative effect on expected mined grade and thickness of mineralization should be expected.	Likely	Moderate	Medium
<b>Mining Operations</b>			
<p><b>Mining Method</b>                      The mine plan has chosen the End Bite Timber Stull Stopping method to mine its ore. This is a labor intensive and expensive method not in common use in this country.  <b>Risk:</b> The method will not meet expectations for productivity and cost targets.</p>	Possible	Moderate	Medium
<p><b>Mine Plan</b>                      Between 2011 and 2012, the previous property owner Grant Hartford Corp. (GHC) produced a number of mine plans ranging from 18 months to 36 months duration to test project economics. The GHC 2012 cash flow model also included production from the Willie underground mine. Behre Dolbear has discovered several significant discrepancies in the 2012 GHC 36 month cash flow model involving yearly ore grade, production tonnage, and total tons mined compared to stated resources in the property's Resource Statement.  <b>Risk:</b> The current mine plan cash flow model is faulty and requires reconstruction.</p>	Likely	High	High



<b>TABLE A9.2 GARNET PROJECT MINE RISK ASSESSMENT MATRIX</b>			
<b>Risk</b>	<b>Likelihood</b>	<b>Consequence Rating</b>	<b>Risk</b>
<b>Metallurgy and Processing</b>			
<b>Metallurgy</b>			
That high-grade gold concentrates, at an acceptable quality and metal recovery cannot be achieved for shipment to a toll cyanidation plant or copper refinery.	Possible	Moderate	Medium
The planned gold recovery of 91 percent a cyanidation-based flow sheet being achievable cannot be achieved.	Unlikely	Moderate	Low
That gold concentrates will include penalty elements thereby increasing smelting and refining costs a decreasing metal payables.	Unlikely	Moderate	Low
<b>Processing</b>			
That development of a viable flow sheet which supports high gold recovery and marketable finished product cannot be achieved.	Possible	High	High
<b>Environmental and Permitting</b>			
The operation appears to be in compliance with permits. Currently is covered by Small Miner Exclusion Statement (SMES) for mines with less than 5 acres. <b>Risk:</b> To have the Exclusion revoked.	Unlikely	Low	Low
Obtaining an operations permit for future mining as a larger mine over five acres is size. <b>Risk:</b> Time delay beyond what Garnex is currently anticipating.	Unlikely	Medium	Low
<b>Manpower</b>			
<b>Mining</b>			
The GHC 2012 36-month mine plan uses company forces and leased mine equipment to develop and mine the ore body. Currently, mine life is 36-months until more ore can be discovered from an underground exploration drilling program. With a relatively short mine life of 3 years, bringing on a new company workforce that will require hiring, training, gaining experience in the mining method, and equipment maintenance to achieve cost and production targets will be a difficult challenge. <b>Risk:</b> The challenging factors can contribute to cost and schedule over-runs.	Likely	High	High