

# **ANNUAL INFORMATION FORM**

For the year ended December 31, 2019

Dated: April 13, 2020

# TECTONIC METALS INC.

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# INTRODUCTORY NOTES

In this Annual Information Form ("AIF"), Tectonic Metals Inc. is referred to as the "Company" or "Tectonic". Unless the context otherwise indicates, these references include the subsidiaries described under "Corporate Structure" below.

This AIF is dated April 13, 2020. Except as otherwise indicated, the information contained herein is as at December 31, 2019, being the date of the Company's most recently completed financial year end.

All dollar amounts in this AIF are expressed in Canadian dollars, except as otherwise indicated. References to "\$" or "dollars" are to Canadian dollars and references to "US\$" are to US dollars.

# Cautionary Note Regarding Forward-Looking Information

This AIF contains forward-looking information and forward-looking statements, within the meaning of applicable Canadian securities legislation, (collectively, "forward-looking statements"), which reflect management's expectations regarding the Company's future growth, results from operations (including, without limitation, future production and capital expenditures), performance (both operational and financial) and business prospects, future business plans and opportunities. Wherever possible, words such as "predicts", "projects", "targets", "plans", "expects", "does not expect", "budget", "scheduled", "estimates", "forecasts", "anticipate" or "does not anticipate", "believe", "intend" and similar expressions or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, or the negative or grammatical variation thereof or other variations thereof, or comparable terminology have been used to identify forward-looking statements.

These forward-looking statements include, among other things, statements relating to:

- the Escrow Agreement, and the escrow of the Escrowed Securities (as such terms are defined herein);
- the Material Properties (as defined herein) and the Company's planned and future exploration on the Material Properties and its other mineral properties;
- the Company's goals regarding development of its projects, and regarding raising capital and conducting further exploration and developments of its properties;
- the Company's future business plans;
- expectations generally regarding the ability to raise further capital for corporate purposes;
- the market price of gold;
- expectations regarding any environmental issues that may affect planned or future exploration and development programs and the potential impact of complying with existing and proposed environmental laws and regulations;
- the ability to retain and/or maintain any require permits, licenses or other necessary approvals for the
  exploration or
- development of its Material Properties and other mineral properties;
- government regulation of mineral exploration and development operations in Alaska;
- the Company's expected reliance on key management personnel, advisors and consultants; and
- the volatility of global financial markets.

Forward-looking statements are not a guarantee of future performance and are based upon a number of estimates and assumptions of management, in light of management's experience and perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances, as of the date of this AIF including, without limitation, the following:

- the ability to raise any necessary additional capital on reasonable terms to advance exploration and development of the Company's Material Properties;
- future prices of gold and other metal prices;
- the timing and results of exploration and drilling programs;

- the demand for, and stable or improving price of gold;
- general business and economic conditions will not change in a material adverse manner;
- the Company's ability to procure equipment and operating supplies in sufficient quantities and on a timely basis;
- the geology of the Material Properties as described in the Technical Reports (as defined herein);
- the accuracy of budgeted exploration and development costs and expenditures;
- future currency exchange rates and interest rates;
- operating conditions being favourable such that the Company is able to operate in a safe, efficient and effective manner;
- the Company's ability to attract and retain skilled personnel and directors;
- political and regulatory stability;
- the receipt of governmental, regulatory and third-party approvals, licenses and permits on favourable terms;
- obtaining required renewals for existing approvals, licenses and permits on favourable terms;
- requirements under applicable laws;
- sustained labour stability; stability in financial and capital goods markets; and
- availability of equipment.

While we consider these assumptions to be reasonable, the assumptions are inherently subject to significant business, social, economic, political, regulatory, competitive and other risks, uncertainties, contingencies and other factors that could cause actual actions, events, conditions, results, performance or achievements to be materially different from those projected in the forward-looking statements. Many assumptions are based on factors and events that are not within our control and there is no assurance they will prove to be correct.

Furthermore, such forward-looking statements involve a variety of known and unknown risks, uncertainties and other factors which may cause the actual plans, intentions, activities, results, performance or achievements of the Company to be materially different from any future plans, intentions, activities, results, performance or achievements expressed or implied by such forward-looking statements. Such risks include, without limitation:

- the Company may fail to find a commercially viable deposit on any of its properties;
- there are no mineral reserves on any of the properties in which the Company has an interest;
- mineral exploration and development are inherently risky;
- the mineral exploration industry is intensely competitive;
- additional financing may not be available to the Company when required or, if available, the terms of such financing may not be favourable to the Company;
- the Company may not be able to identify, negotiate or finance future acquisitions successfully, or to integrate such acquisitions with its current business;
- the Company's exploration and development activities are dependent upon the grant of appropriate licenses, concessions, leases, permits and regulatory consents, which may be withdrawn or not granted;
- the Company's operations could be adversely affected by possible future government legislation, policies and controls or by changes in applicable laws and regulations;
- there is no guarantee that title to the properties in which the Company has a material interest will not be challenged or impugned;
- compliance with environmental regulations can be costly;
- social and environmental activism can negatively impact exploration, development and mining activities;
- the success of the Company is largely dependent on the performance of its directors and officers;
- the volatility of global capital markets over the past several years has generally made the raising of capital more difficult;
- the Company is exposed to the financial risk related to the fluctuation of foreign exchange rates;
- the Company's operations may be adversely affected by First Nations land claims;
- the Company and/or its directors and officers may be subject to a variety of other legal proceedings, the results of which may have a material adverse effect on the Company's business;
- the Company may be adversely affected if potential conflicts of interests involving its directors and officers that are not resolved in favour of the Company;

- the Company's future profitability may depend upon the world market prices of gold;
- investors may lose their entire investment;
- if securities or industry analysts do not publish research or publish inaccurate or unfavourable research about the Company's business, the price and trading volume of the Common Shares (as defined herein) could decline:
- the Common Shares may be subject to significant price volatility;
- dilution from future equity financing could negatively impact holders of Common Shares;
- failure to adequately meet infrastructure requirements could have a material adverse effect on the Company's business;
- the Company's exploration activities and business in general may be adversely impacted by the COVID-19 coronavirus outbreak;
- it may be difficult for investors to enforce within Canada any judgments obtained against the Company or its officers or directors, given that all of the Company's material assets are located outside of Canada;
- the Company is subject to various risks associated with climate change;
- if the Company fails to make payments or expenditures required in connection with material contract obligations, it may lose its interest in one or more of the Material Properties; and
- other factors discussed under "Risk Factors".

Although we have attempted to identify important factors that could cause actual actions, events, conditions, results, performance or achievements to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events, conditions, results, performance or achievements to differ from those anticipated, estimated or intended. See "*Risk Factors*" for a discussion of certain factors investors should carefully consider before deciding to invest.

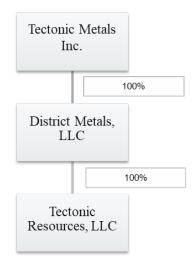
Readers are cautioned that the foregoing lists of important assumptions and risks, uncertainties and other factors are not exhaustive. Other events or circumstances could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, the forward-looking information contained herein. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking statements.

Forward-looking statements contained herein are made as of the date of this AIF and Tectonic disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as and to the extent required by applicable securities laws.

# CORPORATE STRUCTURE

Tectonic was incorporated under the *British Columbia Business Corporations Act* (the "**BCBCA**") as 1114436 B.C. Ltd. on April 7, 2017. By notice of alteration effective August 3, 2017, the Company's name was changed to Tectonic Metals Inc. The Company's head office is located at Suite 312, 744 West Hastings Street, Vancouver, British Columbia, Canada, V6C 1A5 and its registered office is located at Suite 2600, 595 Burrard Street, Vancouver, British Columbia, Canada, V7X 1L3.

The Company has the following subsidiaries, each of which is directly wholly-owned: (i) Tectonic Resources, LLC ("**Tectonic Resources**"), a limited liability company incorporated under the laws of the State of Alaska; and (ii) District Metals, LLC ("**District Metals**" and, together with Tectonic Resources, the "**Subsidiaries**"), a limited liability company incorporated under the laws of the State of Alaska.



# GENERAL DEVELOPMENT OF THE BUSINESS

#### Overview of the Company

Tectonic is a mineral exploration company involved directly, and indirectly through its Subsidiaries, in the identification, acquisition and exploration of mineral properties primarily in the State of Alaska. Tectonic was incorporated in British Columbia on April 7, 2017. The Company has two wholly-owned subsidiaries, Tectonic Resources and District Metals, both of which are located in Alaska and hold the majority of the mineral interests in the Material Properties.

The Company's exploration is focused on discovering and delineating gold resources. The Company has two material properties: the Tibbs Property and the Seventymile Property (together, the "Material Properties"). At present, neither of the Material Properties have any known mineral resources or reserves.

Since incorporation, the Company has taken the following steps in developing its business: (i) identified and acquired mineral properties with sufficient merit to warrant exploration; (ii) raised funds to progress the Company's exploration activities on its Material Properties, as described herein; (iii) completed National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") compliant technical reports on each Material Property; (iv) completed the Special Warrant Financing (as defined herein); and (v) recruited directors, officers and employees with the skills required to operate a junior public mineral exploration property.

On November 18, 2019 (the "**Listing Date**"), the Company's common shares (the "**Common Shares**") began trading on the TSX Venture Exchange (the "**TSXV**") under the stock symbol "TECT".

## Three Year History

#### Financings and Issuances of the Company's Securities

#### 2017 Issuances and Financing

On June 9, 2017, the Company issued an aggregate of 4,000,000 Common Shares to Antonio Reda, Eira Thomas, Robert Carpenter and Curt Freeman at a price of \$0.01 per Common Share for aggregate gross proceeds of \$40,000.

On June 16, 2017, the Company completed a seed financing (the "**Seed Financing**") of 8,200,000 units of the Company (the "**Seed Units**") at a price of \$0.05 per Seed Unit for aggregate gross proceeds of \$410,000. Each Seed Unit is comprised of one Common Share and one-half of one Common Share purchase warrant (each whole Common

Share purchase warrant, a "**Seed Warrant**"). Each Seed Warrant is exercisable into one Common Share at a price of \$0.10 per Common Share until June 16, 2022.

Between October 5, 2017 and April 16, 2018, the Company solicited the holders of the Seed Warrants to exercise of the Seed Warrants. To incentivize the holders of the Seed Warrants for their early exercise of the Seed Warrants, each Seed Warrant exercised would be exchangeable for one Common Share and one Common Share purchase warrant (an "Additional Warrant"). Each Additional Warrant is exercisable into one Common Share at an exercise price of \$0.25 per Additional Warrant until June 16, 2022 (the "Additional Warrant Solicitation").

#### 2018 Issuances and Financing

On April 12, 2018, the Company completed an employee financing round of 1,020,000 Common Shares issued at a price of \$0.10 per Common Share for aggregate gross proceeds of \$102,000.

On April 12, 2018, pursuant to the terms of the option agreement (the "MCQ Option Agreement") with Shawn Ryan ("Ryan") and Wildwood Exploration Inc. (together with Ryan, the "MCQ Optionors"), the Company issued 400,000 Common Shares at a deemed value of \$0.25 per Common Share to Ryan for exploration expenditures incurred by Ryan on the property located in the Mayo Mining District, Yukon Territory granted to Tectonic pursuant to the MCQ Option Agreement.

On April 12 and April 16, 2018, the Company issued an aggregate of (i) 3,380,000 Common Shares and (ii) 3,380,000 Additional Warrants to the holders of Seed Warrants who exercised their Seed Warrants pursuant to the Additional Warrant Solicitation.

#### PRIVATE PLACEMENT

On April 13, 2018, the Company closed the first tranche of its non-brokered private placement of 7,582,857 Common Shares at a price of \$0.35 per Common Share for aggregate gross proceeds of \$2,653,999.95.

On April 20, 2018, the Company closed the second tranche of its non-brokered private placement of 7,709,470 Common Shares at a price of \$0.35 per Common Share for aggregate gross proceeds of \$2,698,314.50 (the "2018 2<sup>nd</sup> Tranche Private Placement"). On May 1, 2018, the Company issued 24,845 Common Shares to certain finders in connection with the 2018 2<sup>nd</sup> Tranche Private Placement at deemed a price of \$0.35 per Common Share.

On May 3, 2018, the Company closed the third tranche of its non-brokered private placement of 2,363,087 Common Shares at a price of \$0.35 per Common Share for aggregate gross proceeds of \$827,080.45 (the "2018 3<sup>rd</sup> Tranche Private Placement"). On May 7, 2018, in connection with the 2018 3<sup>rd</sup> Tranche Private Placement, the Company issued 30,000 Common Shares to certain purchasers at a price of \$0.35 per Common Share for gross proceeds of \$10,500, and for aggregate gross proceeds of \$837,580.45 under the 2018 3<sup>rd</sup> Tranche Private Placement.

On August 17, 2018, the Company closed the fourth tranche of its non-brokered private placement of 300,000 Common Shares at a price of \$0.35 per Common Share for aggregate gross proceeds of \$105,000.

#### 2019 Issuances and Financing

On January 19, 2019, pursuant to the terms of the MCQ Option Agreement, the Company issued 150,000 Common Shares at a deemed value of \$0.35 per share to Ryan.

#### SPECIAL WARRANT FINANCING

During the year ended December 31, 2019, the Company completed a private placement of 16,621,988 special warrants at \$0.35 per special warrant (the "Special Warrants") in two tranches (the "Special Warrant Financing"). The Special Warrant Financing was completed in connection with the Company's direct listing on the TSXV. Each Special Warrant entitled the holder thereof to one Common Share of the Company and one warrant exercisable into one Common Share of the Company with an expiry of two years after the date of issuance of the applicable Special

Warrant and an exercise price of \$0.50 (the "Underlying Warrant"). Each Special Warrant was automatically converted for no additional consideration into one Common Share and the Underlying Warrant on November 11, 2019.

The Company completed the first tranche (the "**First Tranche**") of the Special Warrant Financing on July 12, 2019. The Company issued 6,809,370 Special Warrants pursuant to the First Tranche for gross proceeds of \$2,383,280 pursuant to the terms of a special warrant indenture dated July 12, 2019 (the "**First Special Warrant Indenture**") between the Company and Computershare Trust Company of Canada. The 6,809,370 Underlying Warrants, which are governed by the terms of a warrant indenture dated July 12, 2019 (the "**First Underlying Warrant Indenture**") between the Company and Computershare Trust Company of Canada, expire July 12, 2021. As a financing fee, the Company issued (i) 71,428 Special Warrants valued at \$25,000, and (ii) 227,936 compensation warrants with each warrant entitling the holder to acquire one Common Share with an exercise price of \$0.35 expiring July 12, 2021.

The Company completed the second tranche (the "Second Tranche") on the Special Warrant Financing on September 26, 2019. The Company issued 9,812,618 Special Warrants pursuant to the Second Tranche for gross proceeds of \$3,434,416 pursuant to the terms of a special warrant indenture dated September 26, 2019 (the "Second Special Warrant Indenture") between the Company and Computershare Trust Company of Canada (the "Second Tranche"). The 9,812,618 Underlying Warrants, which are governed by the terms of a warrant indenture dated September 26, 2019 (the "Second Underlying Warrant Indenture") between the Company and Computershare Trust Company of Canada, expire September 26, 2021. As a financing fee, the Company issued 235,978 compensation warrants with each warrant entitling the holder to acquire one Common Share with an exercise price of \$0.35 expiring September 26, 2021.

#### **RESTRICTED SHARES**

On July 29, 2019, the Company granted 2,400,000 restricted Common Shares of the Company (the "**Restricted Shares**") to certain directors, officers and employees pursuant to the Company's restricted share plan (the "**Restricted Share Plan**"). On September 17, 2019, the Company granted 950,000 Restricted Shares to certain directors pursuant to the Restricted Share Plan.

### Significant Acquisitions and Material Contracts

#### Tibbs Property

On June 15, 2017, the Company and Tibbs Creek Gold, LLC ("**Tibbs Creek**") entered into a mining lease and option agreement (the "**Tibbs Agreement**"), pursuant to which Tibbs Creek granted to the Company the full and exclusive right to use, occupy and carry out mineral exploration, production and extraction activities on the Tibbs Property for a period of 10 years terminating June 15, 2027. In consideration for entering into the Tibbs Agreement, the Company has paid Tibbs Creek a cash payment of US\$30,000 and two cash payments of US\$50,000 each on the first and second anniversary of the Tibbs Agreement, and has agreed to pay Tibbs Creek a cash payment of US\$50,000 on each subsequent anniversary of the Tibbs Agreement until such time as the Tibbs Agreement is terminated (each, a "**Tibbs Anniversary Payment**"). Each Tibbs Anniversary Payment may be paid in Common Shares equal in value to such Tibbs Anniversary Payment, provided both the Company and Tibbs Creek agree to such issuance. Further, the Company has agreed to pay Tibbs Creek a cash payment of US\$1,000,000 if the Company commences commercial production on the Tibbs Property. Moreover, under the terms of the Tibbs Agreement the Company has agreed to incur an aggregate of US\$1,000,000 in expenditures on the Tibbs Property prior to June 15, 2022.

In addition, the Company has the option to acquire the Tibbs Property (the "**Tibbs Option**") at any time during the lease term by making a lump sum payment equal to the aggregate amount of any remaining Tibbs Anniversary Payments. If the Company exercises the Tibbs Option, the Company shall grant a 2.5% net smelter return ("**NSR**") royalty from the sale or disposition of ore or other minerals and metals following the commencement of commercial production on the Tibbs Property to Tibbs Creek (the "**Tibbs NSR Royalty**"). The Company has the option, in its sole discretion, to repurchase 1.5% of the Tibbs NSR Royalty from Tibbs Creek for a purchase price of US\$1,500,000.

Further, if during the term of the Tibbs Agreement or following the exercise of the Tibbs Option the Company completes a preliminary economy assessment (a "**PEA**"), the Company must make a cash payment of US\$25,000 each year to Tibbs Creek (in addition to each Tibbs Anniversary Payment) commencing on the date the PEA is published and ceasing on the commencement of commercial production on the Tibbs Property.

On July 30, 2019, Tectonic received a notice from Millrock stating that six of the staked TMI (Tectonic) claims wholly or partially overstake 17 claims previously staked by Millrock, who is now asserting "senior claim" to the ground. The disputed 17 claims, all 40-acre (16.2 Ha) claims covering a total of 680 acres (275.3 Ha), are the HAB 22-30, HAB 39-43 and HAB 52-54 claims. After review by Tectonic, the disputed claims may actually affect seven Tectonic claims, all 160-acre (64.8 ha) claims covering a total of 1,120 acres (453.4 Ha); the TMI27-28, TMI33-35 and TMI40-41 claims.

Tectonic considers the disputed claims to be non-core, and this notice will not impact Tectonic's exploration efforts going forward on the rest of the Company's Tibbs claims. Tectonic is currently investigating the validity of this notice with its counsel and will not be performing any exploration work on the disputed claims until the matter is resolved.

As of the date hereof, the Company has met the minimum expenditures required to be incurred prior to June 15, 2022 under the Tibbs Agreement.

#### Seventymile Property

On June 1, 2018, the Company and Doyon, Limited ("Doyon") entered into a mining lease agreement (the "Seventymile Agreement"), pursuant to which Doyon leased to the Company the lands comprising the Seventymile Property for the purposes of the Company conducting mineral exploration and, if warranted, mineral development and production subject to the terms of the Seventymile Agreement for an initial term of 15 years (the "Seventymile Initial Term") expiring June 1, 2033, provided; however, that if the Company has achieved commercial production prior to the end of the Seventymile Initial Term, the Seventymile Agreement will continue in effect thereafter for so long as commercial production exists or is deemed to exist. The Company may also elect to extend the Seventymile Initial Term by five years if the Company completes a feasibility study on any portion of the Seventymile Property before the expiration of the Seventymile Initial Term (the "Seventymile Extension Option"). As consideration under the Seventymile Agreement, the Company: (A) has (i) paid Doyon an aggregate of US\$90,000 as of the date of this AIF; and (B) must:

- (i) make the following annual cash payments to Doyon, until the earlier of the termination of the Seventymile Agreement or the commencement of commercial production on the Seventymile Property:
  - a. US\$30,000 on or before January 1, 2021;
  - b. US\$60,000 on or before January 1 of each calendar year from January 1, 2022 to January 1, 2027; and
  - c. US\$200,000 on or before January 1, 2028 and on or before January 1 of each calendar year thereafter, provided; however, that if the Company exercises the Seventymile Extension Option such annual payment shall increase to US\$300,000 per year;
- (ii) incur expenditures on the Seventymile Property of at least:
  - a. US\$750,000 during the years 2020 to 2023;
  - b. US\$1,500,000 during the years 2024 to 2027; and
  - c. US\$2,000,000 during 2028 and each calendar year thereafter.

Eligible expenditures include all actual, direct costs, expenses, and charges related to exploration and development conducted on or for the benefit of the Seventymile Property, including without limitation costs and expenses incurred

off the property and reasonably allocated to operations on the property (such as salary, overhead and other administrative expenses).

In addition, if the Company completes a feasibility study on any portion of the Seventymile Property the Company must pay Doyon a cash payment of US\$600,000. Further, from January 1, 2025 onwards and prior to the commencement of commercial production on the Seventymile Property, the Company must incur at least US\$2,000,000 over every five-year period or make up for such shortfall by making a cash payment to Doyon of an amount equal to such shortfall.

The Company has further granted Doyon the following royalties over the all mineral product mined, produced and sold from the Seventymile Property:

- (i) until the fifth anniversary of the commencement of commercial production on the Seventymile Property a 2% NSR royalty from precious metals and a 1% NSR royalty from base minerals;
- (ii) from the fifth anniversary of the commencement of commercial production until the tenth anniversary of the commencement of commercial production on the Seventymile Property a 4% NSR royalty from precious metals and a 3% NSR royalty from base minerals; and
- (iii) from the tenth anniversary of the commencement of commercial production on the Seventymile Property and thereafter, (A) a production royalty equal to the greater of a 4% NSR royalty from precious metals, or fifteen percent (15%) of the net proceeds from the sale of precious metals mined from the Seventymile Property, and (B) a production royalty equal to the greater of only one of the following: a 3% NSR royalty from base metals or fifteen percent (15%) of the net proceeds from the sale of base metals mined from the Seventymile Property.

Additionally, the Company contributes to the Doyon Foundation a US\$25,000 scholarship each May for the term of the lease. The scholarship amount increases to US\$50,000 each year following the commencement of commercial production at the Seventymile Property. During the years ended December 31, 2019 and 2018, the Company paid Doyon the US\$25,000 scholarship payment.

### Other Properties

#### Northway Property

On June 1, 2018, the Company and Doyon entered into a mining lease agreement (the "Northway Agreement"), pursuant to which Doyon leased to the Company the lands comprising the Northway Property for the purposes of the Company conducting mineral exploration and, if warranted, mineral development and production subject to the terms of the Northway Agreement for an initial term of 15 years (the "Northway Initial Term") expiring June 1, 2033, provided; however, that if the Company has achieved commercial production prior to the end of the Northway Initial Term, the Northway Agreement shall continue in effect thereafter for so long as commercial production exists or is deemed to exist. The Company may also elect to extend the Northway Initial Term by five years if the Company completes a feasibility study on any portion of the Northway Property before the expiration of the Northway Initial Term (the "Northway Extension Option"). As consideration under the Northway Agreement, the Company: (A) has (i) paid Doyon an aggregated of US\$90,000 as of the date of this AIF; and (B) must:

- (i) make the following annual cash payments to Doyon, until the earlier of the termination of the Northway Agreement or the commencement of commercial production on the Northway Property:
  - a. US\$30,000 on or before each of January 1, 2021;
  - US\$60,000 on or before January 1 of each calendar year from January 1, 2022 to January 1, 2027;
     and

- c. US\$200,000 on or before January 1, 2028 and on or before January 1 of each calendar year thereafter, provided; however, that if the Company exercises the Northway Extension Option such annual payment shall increase to US\$300,000 per year;
- (ii) incur expenditures on the Northway Property of at least:
  - a. US\$750,000 during the years 2021 to 2022;
  - b. US\$1,500,000 during the years 2023 to 2027; and
  - c. US\$2,000,000 during 2028 and each calendar year thereafter.

Eligible expenditures include all actual, direct costs, expenses, and charges related to exploration and development conducted on or for the benefit of the Northway Property, including without limitation costs and expenses incurred off the property and reasonably allocated to operations on the property (such as salary, overhead and other administrative expenses).

In addition, if the Company completes a feasibility study on any portion of the Northway Property the Company shall pay Doyon a cash payment of US\$600,000. Further, from January 1, 2025 onwards and prior to the commencement of commercial production on the Northway Property, the Company must incur at least US\$2,000,000 over every five-year period or make up for such shortfall by making a cash payment to Doyon of an amount equal to such shortfall.

The Company has further granted Doyon the following royalties over the all mineral product mined, produced and sold from the Northway Property:

- (i) until the fifth anniversary of the commencement of commercial production on the Northway Property a 2% NSR royalty from precious metals and a 1% NSR royalty from base minerals;
- (ii) from the fifth anniversary of the commencement of commercial production until the tenth anniversary of the commencement of commercial production on the Northway Property a 4% NSR royalty from precious metals and a 3% NSR royalty from base minerals; and
- (iii) from the tenth anniversary of the commencement of commercial production on the Northway Property and thereafter, (A) a production royalty equal to the greater of a 4% NSR royalty from precious metals or fifteen percent (15%) of the net proceeds from the sale of precious metals mined from the Northway Property, and (B) a production royalty equal to the greater of only one of the following: a 3% NSR royalty from base metals or fifteen percent (15%) of the net proceeds from the sale of base metals mined from the Northway Property.

Additionally, the Company contributes to the Doyon Foundation a US\$25,000 scholarship each May for the term of the lease. The scholarship amount increases to US\$50,000 each year following the commencement of commercial production at the Seventymile Property. During the years ended December 31, 2019 and 2018, the Company paid Doyon the US\$25,000 scholarship payment. On January 1, 2020, the Northway Agreement was amended to defer the scholarship payment for the year ended December 31, 2020 to the year ended December 31, 2021.

Currently, the Company does not consider the Northway Property to be a material mineral property under NI 43-101.

#### MCQ Property

On September 30, 2019, the Company delivered a notice to terminate the MCQ Option Agreement. Such termination was effective when delivered. Upon the delivery of such notice to terminate, Tectonic has no further obligations under the MCQ Option Agreement other than the parties' obligation to deliver a report on all work carried out by Tectonic on the MCO Property to the MCO Optionors which was completed in January 2020.

# DESCRIPTION OF THE BUSINESS

#### General

### **Principal Operations**

The Company is an exploration stage company and does not currently mine, produce or sell any mineral products, nor do any of its current properties, including the Material Properties, have any known or identified mineral resources or reserves. See "Risk Factors – No Mineral Reserves".

## Specialized Skill and Knowledge

Various aspects of the Company's business require specialized skills and knowledge. Such skills and knowledge include, but are not limited to, the areas of exploration and development, geology, drilling, permitting metallurgy, logistical planning, and accommodation and implementation of exploration programs, as well as legal compliance, finance and accounting. The Company expects to rely upon various legal and financial advisors, consultants and others in the operation and management of its business, including consultants holding exploration and development expertise. See "Risk Factors – Dependence on Management and Key Personnel".

#### Competitive Conditions

The mineral exploration and mining industry is competitive in all phases of exploration, development and production. The Company competes with a number of other entities and individuals in the search for and the acquisition of attractive mineral properties. As a result of this competition, the majority of which is with companies with greater financial resources than the Company, the Company may not be able to acquire attractive properties in the future on terms it considers acceptable. The Company may also encounter increasing competition from other mining companies in efforts to hire experienced mining professionals. Increased competition could adversely affect the Company's ability to attract necessary capital funding or acquire suitable producing properties or prospects for mineral exploration in the future. See "Risk Factors – Competition and Mineral Exploration".

#### Cycles

The Company's mineral exploration activities may be subject to seasonality due to adverse weather conditions including, without limitation, incremental weather, frozen ground and restricted access due to snow, ice or other weather-related factors. In addition, the mining and mineral exploration business is subject to global economic cycles effecting, among other things, the marketability and price of gold products in the global marketplace.

### Intangible Properties

The Company's intangible property, including its mineral and surface rights are described in this AIF. The Company's business is not materially affected by intangibles such as business or commercial licences, patents and trademarks, nor is it significantly affected by seasonal changes other than seasonal weather.

### Economic Dependence

The Company is dependent on the Tibbs Agreement and the Seventymile Agreement. In the event that either of these agreements are terminated, the Company would lose all of its rights and interests in one or both of its Material Properties. The Company is, at this time, not aware of any aspect of its business which may be affected by renegotiation or termination of these agreements.

#### **Environmental Protection**

The Company is currently engaged in exploration activities on its Material Properties and such activities are subject to various laws, rules and regulations governing the protection of the environment. Corporate obligations to protect the environment under the various regulatory regimes in which the Company operates may affect the financial position, operational performance and earnings of the Company. A breach of such legislation may result in imposition of fines and penalties. Management believes all of the Company's activities are materially in compliance with all applicable environmental legislation. See "Risk Factors – Environmental Risks".

#### *Employees*

As of the date hereof, the Company has 5 employees. The Company also relies on consultants and contractors to carry on many of its business activities and, in particular, to supervise and carry-out mineral exploration on its Material Properties.

#### Foreign Operations

The Company's Material Properties are located in Alaska and, as such, a substantial portion of the Company's business is exposed to various degrees of political, economic and other risks and uncertainties. The Company's operations and investments may be affected by local political and economic developments, including expropriation, nationalization, invalidation of government orders, permits or agreements pertaining to property rights, political unrest, labour disputes, limitations on repatriation of earnings, limitations on mineral exports, limitations on foreign ownership, inability to obtain or delays in obtaining necessary mining permits, opposition to mining from local, environmental or other non-governmental organizations, government participation, royalties, duties, rates of exchange, high rates of inflation, price controls, exchange controls, currency fluctuations, taxation and changes in laws, regulations or policies as well as by laws and policies of Canada affecting foreign trade, investment and taxation.

#### Social or Environmental Policies

The Company is committed to conducting its operations in accordance with sound social environmental policies, however, at present, the scale of operations has not yet required the adoption of such policies. The Company will reevaluate this position if and when necessary.

The Company is subject to the laws and regulations relating to environmental matters in all jurisdictions in which it operates, including provisions relating to property reclamation, discharge of hazardous materials and other matters. The Company may also be held liable should environmental problems be discovered that were caused by former owners and operators of its properties. The Company conducts its mineral exploration activities in compliance with applicable environmental protection legislation.

# RISK FACTORS

### Risks Related to the Company and the Mining Industry

### **Exploration Stage Company**

The Company is an exploration stage company and cannot give assurance that a commercially viable deposit, or "reserve," exists on any properties for which the Company currently has or may have (through potential future joint venture agreements or acquisitions) an interest. Therefore, the determination of the existence of a reserve depends on appropriate and sufficient exploration work and the evaluation of legal, economic, and environmental factors. If the Company fails to find a commercially viable deposit on any of its properties, its financial condition and results of operations will be materially adversely affected.

#### No Mineral Resources

Currently, there are no mineral resources (within the meaning of NI 43-101) on any of the properties in which the Company has an interest. Only those mineral deposits for which there are reasonable prospects for eventual economic extraction, based on a comprehensive evaluation of form, grade or quality and quantity, are considered mineral resources.

#### No Mineral Reserves

Currently, there are no mineral reserves (within the meaning of NI 43-101) on any of the properties in which the Company has an interest. Only those mineral deposits that the Company can economically and legally extract or produce, based on a comprehensive evaluation of cost, grade, recovery and other factors, are considered mineral reserves.

#### Mineral Exploration and Development

Resource exploration and development is a speculative business, characterized by a number of significant risks including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but from finding mineral deposits which, though present, are insufficient in quantity and quality to return a profit from production. The marketability of minerals acquired or discovered by the Company may be affected by numerous factors which are beyond the control of the Company and which cannot be accurately predicted, such as market fluctuations, the proximity and capacity of milling facilities, mineral markets and processing equipment and such other factors as government regulations, including regulations relating to royalties, allowable production, importing and exporting of minerals and environmental protection, the combination of which factors may result in the Company not receiving an adequate return of investment capital.

There is no assurance that the Company's mineral exploration and development activities will result in any discoveries of commercial bodies of ore. The long-term profitability of the Company's operations will in part, be directly related to the costs and success of its exploration programs, which may be affected by a number of factors. Substantial expenditures are required to establish reserves through drilling and to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities to justify commercial operations or that funds required for development can be obtained on a timely basis.

Substantial expenditures are required to establish ore reserves through exploration and drilling, to develop metallurgical processes to extract the metal from the ore and, in the case of new properties, to develop the mining and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major mineralized deposit, no assurance can be given that minerals will be discovered in sufficient quantities and grades to justify commercial operations or that funds required for development can be obtained on a timely basis. Estimates of reserves, mineral deposits and production costs can also be affected by such factors as environmental permitting regulations and requirements, weather, environmental factors, unforeseen technical difficulties, unusual or unexpected geological formations and work interruptions. In addition, the grade of ore ultimately mined may differ from that indicated by drilling results. Short term factors relating to reserves, such as the need for the orderly development of ore bodies or the processing of new or different grades, may also have an adverse effect on mining operations and the results of operations. Material changes in ore reserves, grades, stripping ratios or recovery rates may affect the economic viability of any project.

### Competition and Mineral exploration

The mineral exploration industry is intensely competitive in all of its phases, and the Company must compete in all aspects of its operations with a substantial number of large established mining companies with greater liquidity, greater access to credit and other financial resources, newer or more efficient equipment, lower cost structures, more effective risk management policies and procedures and/or greater ability than the Company to withstand losses. The Company's competitors may be able to respond more quickly to new laws or regulations or emerging technologies or devote

greater resources to the expansion of their operations than the Company can. In addition, current and potential competitors may make strategic acquisitions or establish cooperative relationships among themselves or with third parties. Competition could adversely affect the Company's ability to acquire suitable new producing properties or prospects for exploration in the future. Competition could also affect the Company's ability to raise financing to fund the exploration and development of its properties or to hire qualified personnel. The Company may not be able to compete successfully against current and future competitors, and any failure to do so could have a material adverse effect on the Company's business, financial condition or results of operations.

#### Additional Funding

The exploration and development of the Company's mineral properties will require substantial additional capital. When such additional capital is required, the Company will need to pursue various financing transactions or arrangements, including joint venturing of projects, debt financing, equity financing or other means. Additional financing may not be available when needed or, if available, the terms of such financing might not be favourable to the Company and might involve substantial dilution to existing shareholders. The Company may not be successful in locating suitable financing transactions in the time period required or at all. A failure to raise capital when needed would have a material adverse effect on the Company's business, financial condition and results of operations. Any future issuance of securities to raise required capital will likely be dilutive to existing shareholders. In addition, debt and other debt financings may involve a pledge of assets and may be senior to interests of equity holders. The Company may incur substantial costs in pursuing future capital requirements, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. The ability to obtain needed financing may be impaired by such factors as the capital markets (both generally and in the gold and copper industries in particular), the Company's status as a new enterprise with a limited history, the location of the Company's mineral properties, the price of commodities and/or the loss of key management personnel.

### Acquisition of Additional Mineral Properties

If the Company loses or abandons its interest in one or both of the Material Properties there is no assurance that it will be able to acquire another mineral property of merit or that such an acquisition would be approved by the TSXV. There is also no guarantee that the TSXV will approve the acquisition of any additional properties by the Company, whether by way of an option or otherwise, should the Company wish to acquire any additional properties.

#### Government or Regulatory Approvals

Exploration and development activities are dependent upon the grant of appropriate licences, concessions, leases, permits and regulatory consents, which may be withdrawn or made subject to limitations. There is no guarantee that, upon completion of any exploration, a mining licence will be granted with respect to exploration territory. There can also be no assurance that any exploration licence will be renewed, or if so, on what terms. These licences place a range of past, current and future obligations on the Company. In some cases, there could be adverse consequences for breach of these obligations, ranging from penalties to, in extreme cases, suspension or termination of the relevant licence or related contract.

#### Permits and Government Regulation

The future operations of the Company may require permits from various federal, state, provincial and local governmental authorities and will be governed by laws and regulations governing prospecting, development, mining, production, export, taxes, labour standards, occupational health, waste disposal, land use, environmental protection, mine safety and other matters. Although the U.S. has a favourable legal and fiscal regime for exploration and mining, including a relatively simple system for the acquisition of mineral titles and relatively low tax burden, possible future government legislation, policies and controls relating to prospecting, development, production, environmental protection, mining taxes and labour standards could cause additional expense, capital expenditures, restrictions and delays in the activities of the Company, the extent of which cannot be predicted. Before development and production can commence on any properties, the Company must obtain regulatory and environmental approvals. There is no assurance that such approvals can be obtained on a timely basis or at all. The cost of compliance, with changes in

governmental regulations, has the potential to reduce the profitability of operations. The Company is currently in compliance with all material regulations applicable to its exploration activities.

### *Limited Operating History*

The Company has a limited operating history, and its mineral properties are exploration stage properties. As such, the Company will be subject to all of the business risks and uncertainties associated with any new business enterprise, including under-capitalization, cash shortages, limitations with respect to personnel, financial and other resources and lack of revenues. The current state of the Company's mineral properties requires significant additional expenditures before any cash flow may be generated. Although Tectonic possesses an experienced management team, there is no assurance that the Company will be successful in achieving a return on shareholders' investment, and the likelihood of success of the Company must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with the establishment of any business. There is no assurance that the Company can generate revenues, operate profitably, or provide a return on investment, or that it will successfully implement its plans.

#### Title Risks

Although the Company has or will receive title opinions for any properties in which it has a material interest, there is no guarantee that title to such properties will not be challenged or impugned. The Company has not conducted surveys on all of the claims in which it holds direct or indirect interests. The Company's properties may be subject to prior unregistered agreements or transfers or native land claims and title may be affected by unidentified or unknown defects. Title insurance is generally not available for mineral properties and the Company's ability to ensure that it has obtained secure claims to individual mineral properties or mining concessions may be constrained. A successful challenge to the Company's title to a property or to the precise area and location of a property could cause delays or stoppages to the Company's exploration, development or operating activities without reimbursement to the Company. Any such delays or stoppages could have a material adverse effect on the Company's business, financial condition and results of operations.

## Laws and Regulation

The Company's exploration activities are subject to extensive federal, state, provincial and local laws and regulations governing prospecting, development, production, exports, taxes, labour standards, occupational health and safety, mine safety and other matters in all the jurisdictions in which it operates. These laws and regulations are subject to change, can become more stringent, and compliance can, therefore, become more costly. The Company applies the expertise of its management, advisors, employees and contractors to ensure compliance with current laws.

#### Environmental Risks

The Company's exploration and/or development activities are subject to extensive laws and regulations governing environmental protection. The Company is also subject to various reclamation related conditions. Although the Company closely follows and believes it is operating in compliance with all applicable environmental regulations, there can be no assurance that all future requirements will be obtainable on reasonable terms. Failure to comply may result in enforcement actions causing operations to cease or be curtailed and may include corrective measures requiring capital expenditures. Intense lobbying over environmental concerns by non-governmental organizations has caused some governments to cancel or restrict the development of mining projects. Current publicized concern over climate change may lead to carbon taxes, requirements for carbon offset purchases or new regulation. The costs or likelihood of such potential issues to the Company cannot be estimated at this time.

The legal framework governing this area is constantly developing; therefore the Company is unable to fully ascertain any future liability that may arise from the implementation of any new laws or regulations, although such laws and regulations are typically strict and may impose severe penalties (financial or otherwise). The proposed activities of the Company, as with any exploration, may have an environmental impact, which may result in unbudgeted delays, damage, loss and other costs and obligations including, without limitation, rehabilitation and/or compensation. There

is also a risk that the Company's operations and financial position may be adversely affected by the actions of environmental groups or any other group or person opposed in general to the Company's activities and, in particular, the proposed exploration and mining by the Company within the State of Alaska.

#### Social and Environmental Activism

There is an increasing level of public concern relating to the effects of mining on the natural landscape, in communities and on the environment. Certain non-governmental organizations, public interest groups and reporting organizations ("NGOs") who oppose resource development can be vocal critics of the mining industry. In addition, there have been many instances in which local community groups have opposed resource extraction activities, which have resulted in disruption and delays to the relevant operation. While the Company seeks to operate in a socially responsible manner and believes it has good relationships with local communities in the regions in which it operates, NGOs or local community organizations could direct adverse publicity against and/or disrupt the operations of the Company in respect of one or more of its properties, regardless of its successful compliance with social and environmental best practices, due to political factors, activities of unrelated third parties on lands in which the Company has an interest or the Company's operations specifically. Any such actions and the resulting media coverage could have an adverse effect on the reputation and financial condition of the Company or its relationships with the communities in which its operations, which could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

### Dependence on Management and Key Personnel

The success of the Company is currently largely dependent on the performance of its directors and officers. The loss of the services of any of these persons could have a materially adverse effect on the Company's business and prospects. There is no assurance the Company can maintain the services of its directors, officers or other qualified personnel required to operate its business. As the Company's business activity grows, the Company will require additional key financial, administrative and mining personnel as well as additional operations staff. There can be no assurance that these efforts will be successful in attracting, training and retaining qualified personnel as competition for persons with these skill sets increase. If the Company is not successful in attracting, training and retaining qualified personnel, the efficiency of its operations could be impaired, which could have an adverse impact on the Company's operations and financial condition.

#### Global Economy Risk

The volatility of global capital markets, including the general economic slowdown in the mining sector, over the past several years has generally made the raising of capital by equity or debt financing more difficult. The Company may be dependent upon capital markets to raise additional financing in the future. As such, the Company is subject to liquidity risks in meeting its operating expenditure requirements and future development cost requirements in instances where adequate cash positions are unable to be maintained or appropriate financing is unavailable. These factors may impact the ability to raise equity or obtain loans and other credit facilities in the future and on terms favourable to the Company and its management. If these levels of volatility persist or if there is a further economic slowdown, the Company's operations, the Company's ability to raise capital and the trading price of the Company's securities could be adversely impacted.

### Currency Risk

The Company is exposed to the financial risk related to the fluctuation of foreign exchange rates. The Company operates in the U.S., and as such, a large portion of its expenses are incurred in U.S. dollars, which could cause a significant change in the results of operations, financial position or cash flows. The Company has not hedged its exposure to currency fluctuations.

#### First Nations Land Claims

Certain of the Company's mineral properties may now or in the future be the subject of First Nations land claims. The legal nature of First Nations land claims is a matter of considerable complexity. The impact of any such claim on the Company's material interest in the Company's mineral properties and/or potential ownership interest in the Company's mineral properties in the future, cannot be predicted with any degree of certainty and no assurance can be given that a broad recognition of First Nations rights in the areas in which the Company's mineral properties are located, by way of negotiated settlements or judicial pronouncements, would not have an adverse effect on the Company's activities. Even in the absence of such recognition, the Company may at some point be required to negotiate with and seek the approval of holders of First Nations interests in order to facilitate exploration and development work on the Company's mineral properties, there is no assurance that the Company will be able to establish practical working relationships with the First Nations in the area which would allow it to ultimately develop the Company's mineral properties.

Many lands in the U.S. and elsewhere are or could become subject to First Nations land claims to title, which could adversely affect the Company's title to its properties.

### Claims and Legal Proceedings

The Company and/or its directors and officers may be subject to a variety of civil or other legal proceedings, with or without merit. From time to time in the ordinary course of its business, the Company may become involved in various legal proceedings, including commercial, employment and other litigation and claims, as well as governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management's attention and resources and cause the Company to incur significant expenses. Furthermore, because litigation is inherently unpredictable, the results of any such actions may have a material adverse effect on the Company's business, operating results or financial condition.

### Conflicts of Interest

Most of the Company's directors do not devote their full time to the affairs of the Company. All of the directors and some of the officers of the Company are also directors, officers and shareholders of other natural resource or public companies, and as a result they may find themselves in a position where their duty to another company conflicts with their duty to the Company. Although the Company has policies which address such potential conflicts and the BCBCA has provisions governing directors in the event of such a conflict, none of the Company's constating documents or any of its other agreements contain any provisions mandating a procedure for addressing such conflicts of interest. There is no assurance that any such conflicts will be resolved in favour of the Company. If any such conflicts are not resolved in favour of the Company, the Company may be adversely affected.

#### Gold and Metal Prices

If the Company's mineral properties are developed from exploration properties to full production properties, the majority of its revenue will be derived from the sale of gold. Therefore, the Company's future profitability will depend upon the world market prices of the gold for which it is exploring. The price of gold and other metals are affected by numerous factors beyond the Company's control, including levels of supply and demand, global or regional consumptive patterns, sales by government holders, metal stock levels maintained by producers and others, increased production due to new mine developments and improved mining and production methods, speculative activities related to the sale of metals, availability and costs of metal substitutes.

Moreover, gold prices are also affected by macroeconomic factors such as expectations regarding inflation, interest rates and global and regional demand for, and supply of, gold as well as general global economic conditions. These factors may have an adverse effect on the Company's exploration, development and production activities, as well as on its ability to fund those activities.

### Negative Cash Flow from Operating Activities

The Company has no history of earnings and had negative cash flow from operating activities since inception. The Company's mineral properties are in the exploration stage, and there are no known mineral resources or reserves and the proposed exploration programs on the Company's mineral properties are exploratory in nature. Significant capital investment will be required to achieve commercial production from the Company's existing projects. There is no assurance that any of the Company's mineral properties will generate earnings, operate profitably or provide a return on investment in the future. Accordingly, the Company will be required to obtain additional financing to meet its future cash commitments.

#### Going Concern Risk

The Company's financial statements have been prepared on a going concern basis under which an entity is considered to be able to realize its assets and satisfy its liabilities in the ordinary course of business. The Company's future operations are dependent upon the identification and successful completion of equity or debt financings and the achievement of profitable operations at an indeterminate time in the future. There can be no assurances that the Company will be successful in completing equity or debt financings or in achieving profitability. The consolidated financial statements do not give effect to any adjustments relating to the carrying values and classifications of assets and liabilities that would be necessary should the Company be unable to continue as a going concern.

### Risks Associated with Acquisitions

If appropriate opportunities present themselves, the Company may acquire mineral claims, material interests in other mineral claims, and companies that the Company believes are strategic. The Company currently has no understandings, commitments or agreements with respect to any material acquisition, other than as described in this AIF, and no other material acquisition is currently being pursued. There can be no assurance that the Company will be able to identify, negotiate or finance future acquisitions successfully, or to integrate such acquisitions with its current business. The process of integrating an acquired Company or mineral claims into the Company may result in unforeseen operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of the Company's business. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities and/or amortization expenses related to goodwill and other intangible assets, which could materially adversely affect the Company's business, results of operations and financial condition.

#### *Infrastructure*

Exploration, development and processing activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important elements of infrastructure, which affect access, capital and operating costs. The lack of availability on acceptable terms or the delay in the availability of any one or more of these items could prevent or delay the exploration or development of the Company's mineral properties. If the adequate infrastructure is not available in a timely manner, there can be no assurance that the exploration or development of the Company's mineral properties will be commenced or completed on a timely basis, if at all. Furthermore, unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of necessary infrastructure could adversely affect our operations.

Exploration operations depend on adequate infrastructure. In particular, reliable power sources, water supply, transportation and surface facilities are necessary to explore and develop mineral projects. Failure to adequately meet these infrastructure requirements or changes in the cost of such requirements could affect the Company's ability to carry out exploration and future development operations and could have a material adverse effect on the Company's business, financial condition, results of operations, cash flows or prospects.

#### COVID-19 Coronavirus Outbreak

The current global uncertainty with respect to the spread of the COVID-19 coronavirus ("COVID-19"), the rapidly evolving nature of the pandemic and local and international developments related thereto and its effect on the broader global economy and capital markets may have a negative effect on the Company and its ability to continue exploration activities at its Material Properties. While the precise impact of the COVID-19 outbreak on the Company remains unknown, rapid spread of COVID-19 and declaration of the outbreak as a global pandemic has resulted in travel advisories and restrictions, certain restrictions on business operations, social distancing precautions and restrictions on group gatherings which are having direct impacts on businesses in Canada and around the world and could result in travel bans, post-travel quarantines, closure of assay labs, work delays, difficulties for contractors and employees getting to site, and diversion of management attention all of which in turn could have a negative impact on the Company. In particular, the current pandemic spread of the COVID-19 virus and the current review of closing crosscountry border crossings and the reduction in available commercial flights between the U.S. and Canada has increased mobility and infrastructure risks for the Company to send its employees to Alaska to conduct exploration work during the year ended December 31, 2020. The Company may need to rely entirely on U.S. contractors to complete any current year exploration program and meet minimum exploration expenditures, which may result in higher costs. The spread of COVID-19 may also have a material adverse effect on global economic activity and could result in volatility and disruption to global supply chains and the financial and capital markets, which could affect the business, financial condition, results of operations and other factors relevant to the Company, including its ability to raise additional financing.

### Force Majeure

The Company's projects now or in the future may be adversely affected by risks outside the control of the Company, including the price of gold on world markets, labour unrest, civil disorder, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics or quarantine restrictions. See "Risk Factors – COVID-19 Coronavirus Outbreak".

#### All of the Company's Material Mineral Assets are Located Outside of Canada

As a result, it may be difficult for investors to enforce within Canada any judgments obtained against the Company or its officers or directors, including judgments predicated upon the civil liability provisions of applicable securities laws. In addition, there is uncertainty as to whether the courts of United States and other jurisdictions would recognize or enforce judgments of Canadian courts obtained against the Company or its directors and officers predicated upon the civil liability provisions of the securities laws of Canada, or be competent to hear original actions brought in United States or other jurisdictions against the Company or its directors and officers predicated upon the securities laws of Canada.

### Climate Change Risks

The Company acknowledges climate change as an international and community concern, and it supports and endorses various initiatives for voluntary actions consistent with international initiatives on climate change. However, in addition to voluntary actions, governments are moving to introduce climate change legislation and treaties at the international, national, state/provincial and local levels. Where legislation already exists, regulation relating to emission levels and energy efficiency is becoming more stringent. Some of the costs associated with reducing emissions can be offset by increased energy efficiency and technological innovation. However, if the current regulatory trend continues, the Company expects that this could result in increased costs at some of its operations in the future.

The Company and the mining industry are facing continued geotechnical challenges, which could adversely impact the Company's production and profitability. Unanticipated adverse geotechnical and hydrological conditions, such as landslides, floods, seismic activity, droughts and pit wall failures, may occur in the future, and such events may not be detected in advance. Geotechnical instabilities and adverse climatic conditions can be difficult to predict and are often affected by risks and hazards outside of the Company's control, such as severe weather and considerable rainfall.

Geotechnical failures could result in limited or restricted access to mine sites, suspension of operations, government investigations, increased monitoring costs, remediation costs, loss of ore and other impacts, which could cause one or more of the Company's projects to be less profitable than currently anticipated and could result in a material adverse effect on the Company's business results of operations and financial position.

#### Material Contract Obligations

The agreements pursuant to which the Company acquired its interest in its properties provide that the Company must make a variety of payments in cash and Common Shares over certain time periods and expend certain minimum amounts on the exploration of its properties. If the Company fails to make such payments or expenditures in a timely fashion, the Company may lose its interest in one or more of the properties.

## Information Systems and Cyber Security

The Company's operations depend on information technology ("IT") systems. These IT systems could be subject to network disruptions caused by a variety of sources, including computer viruses, security breaches and cyber-attacks, as well as disruptions resulting from incidents such as cable cuts, damage to physical plants, natural disasters, terrorism, fire, power loss, vandalism and theft. The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or increase in capital expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Company's reputation and results of operations.

Although to date the Company has not experienced any material losses relating to cyber-attacks or other information security breaches, there can be no assurance that the Company will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cybersecurity and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

### Risks Related to the Company's Securities

#### Price Volatility of Publicly Traded Securities

The Company's Common Shares are listed on the TSXV. Securities of microcap and small cap companies, particularly mineral exploration and development companies, have experienced substantial volatility in the past, often based on factors unrelated to the companies' financial performance or prospects. These factors include macroeconomic developments in North America and globally and market perceptions of the attractiveness of particular industries.

The price of the Common Shares is also likely to be significantly affected by short-term changes in gold or other mineral prices or in the Company's financial condition or results of operations. Other factors unrelated to Company performance that may affect the price of the Common Shares include the following: the extent of analytical coverage available to investors concerning Tectonic's business may be limited if investment banks with research capabilities do not follow the Company; lessening in trading volume and general market interest in the Common Shares may affect an investor's ability to trade significant numbers of Common Shares; the size of the Company's public float may limit the ability of some institutions to invest in the Common Shares; and a substantial decline in the price of the Common Shares that persists for a significant period of time could cause the Common Shares to be delisted from the TSXV, or any exchange the Common Shares are trading on, further reducing market liquidity. As a result of any of these factors, the market price of the Common Shares at any given point in time may not accurately reflect the Company's long-term value. Securities class action litigation often has been brought against companies following periods of volatility

in the market price of their securities. Tectonic may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

#### Dilution

Future sales or issuances of equity securities could decrease the value of the Common Shares, dilute shareholders' voting power and reduce future potential earnings per Common Share. Tectonic may sell additional equity securities in subsequent offerings and may issue additional equity securities to finance operations, development, exploration, acquisitions or other projects. Tectonic cannot predict the size of future sales and issuances of equity securities or the effect, if any, that future sales and issuances of equity securities will have on the market price of the Common Shares. Sales or issuances of a substantial number of equity securities, or the perception that such sales could occur, may adversely affect prevailing market prices for Common Shares. With any additional sale or issuance of equity securities, investors will suffer dilution of their voting power and may experience dilution in earnings per share.

#### Securities or Industry Analysts

The trading market for the Common Shares could be influenced by research and reports that industry and/or securities analysts may publish about the Company, its business, the market or its competitors. The Company does not have any control over these analysts and cannot assure that such analysts will cover the Company or provide favourable coverage. If any of the analysts who may cover the Company's business change their recommendation regarding the Company's stock adversely, or provide more favourable relative recommendations about its competitors, the stock price would likely decline. If any analysts who may cover the Company's business were to cease coverage or fail to regularly publish reports on the Company, it could lose visibility in the financial markets, which in turn could cause the stock price or trading volume to decline.

# MINERAL PROJECTS

#### Scientific and Technical Information

Scientific and technical information relating to the Tibbs Property and Seventymile Property contained in this AIF are derived from, and in some instances are a direct extract from, and based on the assumptions, qualifications and procedures set out in:

- (i) the report entitled "Amended and Restated NI 43-101 Technical Report, Tibbs Property, Alaska, United States of America" with an effective date of October 31, 2019, prepared by Carl Schulze, P.Geo., of Aurora Geosciences Ltd., and prepared in accordance with NI 43-101 ("Tibbs Technical Report"); and
- (ii) the report entitled "Amended and Restated NI 43-101 Technical Report, Technical Report on the Seventymile Property, Alaska Eagle District, Alaska, United States of America" with an effective date of October 31, 2019, prepared by Carl Schulze, P.Geo., of Aurora Geosciences Ltd., in accordance with NI 43-101 ("Seventymile Technical Report" and together with the Tibbs Technical Report, the "Technical Reports").

Eric Buitenhuis, P. Geo., the Company's Vice President of Exploration reviewed and approved the scientific and technical information relating to the Tibbs Property and Seventymile Property contained in this AIF and is a "qualified person" for the purposes of NI 43-101.

Reference should be made to the full text of the Tibbs Technical Report and Seventymile Technical Report, each of which is available for review under the Company's profile on SEDAR at <a href="www.sedar.com">www.sedar.com</a>.

# List of Abbreviations

In this AIF, the abbreviations set forth below have the following meanings:

Abbreviation	<b>Equivalent Word or Phrase</b>	Abbreviation	<b>Equivalent Word or Phrase</b>
AAS	atomic absorption finish	Mo	molybdenum
Al	aluminium	MetSieve	metallic sieve
Ag	silver	N	north
As	arsenic	n	sample size
Au	gold	Na	sodium
Ba	barium	NAD	North American Datum
Be	berylllium	Nb	Niobium
Bi	bismuth	Ni	nickel
°C	degrees celsius	NSR	net smelter return
Ca	calcium	OZ	troy ounce (31.1035 g)
Cd	cadmium	oz/ton	ounce per tonne
cfs	cubic feet per second	P	phosphorus
cm	centimetre	Pb	lead
Co	cobalt	PEA	preliminary economic assessment
CO2	carbon dioxide	ppm	parts per million
Cr	chromium	ppb	parts per billion
Cu	copper	QA/QC	quality assurance / quality control
E	east	Qtz	quartz
FA	fire assay	RAB	Rotary Air Blast
Fe	iron	S	sulfur
ft	foot	S	south
g	gram	Sb	antimony
Ga	gallium	SD	standard deviations
gpd	gallons per day	Sc	scandium
gpm	gallons per minute	Sn	tin
GPS	Global Positioning System	Sr	strontium
g/t	grams per tonne	t	metric tonne
HCl	hydrogen cloride	Te	tellurium
Hg	mercury	Th	thorium
HLEM	horizontal loop electromagnetic	Ti	titanium
HN03	nitric acid	Tl	thallium
Hot CN	hot cyanide	TWUA	Temporary Water Use Authorization

Abbreviation	<b>Equivalent Word or Phrase</b>	Abbreviation	<b>Equivalent Word or Phrase</b>
Hz	hertz	U	uranium
IP	induced polarization	UTM	Universal Transverse Mercator
IT	information technology	V	vanadium
K	potassium	W	tungsten
kHz	kilohertz	W	west
km	kilometre	XRF	x-ray fluorescence
La	lanthanum	Y	yttrium
m	metre	YTT	Yukon-Tanana terrane
Ma	million years (mega-annum)	Zn	zinc
Mg	magnesium	Zr	zirconium
mm	millimetre	<	less than
Mn	manganese	>	more than

#### **Tibbs Property**

The scientific and technical information in this section relating to the Tibbs Property is derived from, and in some instances is a direct extract from, and based on the assumptions, qualifications and procedures set out in, the Tibbs Technical Report. Such assumptions, qualifications and procedures are not fully described in this AIF and the following summary does not purport to be a complete summary of the Tibbs Technical Report. Reference should be made to the full text of the Tibbs Technical Report, which is available for review under the Company's profile on SEDAR at www.sedar.com.

#### *Property Description and Location*

#### Location and Means of Access

The Tibbs Property is centered at 64°21'30" N 144° 15'08" W (Figure 1). The property comprises 169 claims, consisting of 110 40-acre claims and 59 160-acre claims, covering a total of 13,840 acres (5,603.2 ha). The claims are all located within Townships 06S and 07S, Ranges 017E and 018E, in the Big Delta B1 Quadrangle of the Fairbanks Recording District. The property comprises the ROB 1-84 and ROB 95-106 claims registered in the name of Tibbs Creek, and the TMI 1-73 claims, formerly registered in the name of Anglo Alaska Gold Corp. ("Anglo Alaska") and transferred to Tectonic on July 11, 2019 (Quitclaim deed 2019-010156-0).

Access is currently by helicopter only, although an unimproved airstrip is reported to occur in the western part of the Rob claim block. Although, in 2007, a previous operator identified a favourable site along a ridgeline for a 2,000-foot strip, no strip has been built. No serviceable airstrips are visible on Google Earth. Bulldozer trails in unknown condition extend from placer workings north of the property upstream along Tibbs Creek onto the northern property area. The nearest road access is the terminus of the all-weather Pogo gold mine access road 22 miles (35 km) to the west.

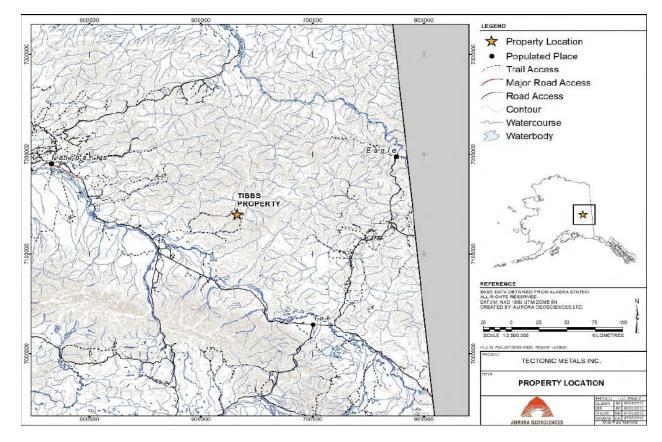


Figure 1: Location map, Tibbs Property

#### Title, Royalties and Encumbrances

All of the claims comprising the Tibbs Property, formerly known as the ROB Property, are state mining claims located on Alaska state-owned land.

On July 30, 2019, Tectonic received a notice from Millrock stating that six of the staked TMI (Tectonic) claims wholly or partially overstake 17 claims previously staked by Millrock, who is now asserting "senior claim" to the ground. The disputed 17 claims, all 40-acre (16.2 ha) claims covering a total of 680 acres (275.3 ha), are the HAB 22-30, HAB 39-43 and HAB 52-54 claims. After review by Tectonic, the disputed claims may actually affect seven Tectonic claims, all 160-acre (64.8 ha) claims covering a total of 1,120 acres (453.4 ha); the TMI27-28, TMI33-35 and TMI40-41 claims.

Tectonic considers the disputed claims to be non-core, and this notice will not impact Tectonic's exploration efforts going forward on the rest of the Company's Tibbs claims. Tectonic is currently investigating the validity of this notice with its counsel and will not be performing any exploration work on the disputed claims until the matter is resolved.

The ROB 1-84, ROB 95-106 and TMI 1-73 claims cover a contiguous block.

Please see "General Development and Business of the Company – Three-year History – Significant Acquisitions and Material Contracts – Tibbs Property" for a description of the Tibbs Agreement and the royalties payable thereunder.

### Environmental Liabilities

No environmental liabilities have resulted from modern exploration (2017 and later). Long, narrow, shallow 2018 trenches dug by "CanDig" excavators were left open to facilitate further study in 2019.

#### **Permits**

#### MISCELLANEOUS LAND USE PERMIT (MLUP)

Activities at the Tibbs Property are authorized by Miscellaneous Land Use Permit #9883 (the "MLUP"), in effect until December 31, 2022. The permit is granted to Tectonic Resources, Anglo Alaska and Tibbs Creek. The MLUP stipulates that, as of December 31 of each year, Tectonic will file an "Annual Exploration Report" describing exploration and reclamation requirements completed during the year, and a "Letter of Intent" to do reclamation for the next season.

The MLUP permit states numerous reclamation stipulations, including the provision of secondary containment facilities for fuel and hazardous substances in compliance with Emergency Spill Response Regulations under the *Environmental Protection Act*. The permit also does not allow for restriction of surface or air access. It states that any remaining structures, equipment, scrap iron, other material, chemicals, fuels, wastes and general mining debris must be removed by its termination unless authorized through a separate approval or written authorization. The permit prohibits the appropriation, excavation, removal, injury or destruction of any State-owned historic, paleontological or archaeological site, and prohibits any activities immediately surrounding these artifacts when discovered.

#### FISH HABITAT PERMIT

The Tibbs Property is also subject to Fish Habitat Permit FH18-III-0100, in effect until December 31, 2022, governing water usage during diamond drilling operations. Water may be withdrawn from water bodies described in the permit application, and no damming or diversion of water courses is permitted to facilitate usage. Water usage is anticipated not to exceed 15 gallons/minute or 21,600 gallons/day, with potential for reduced usage through recirculation.

#### TEMPORARY WATER USE AUTHORIZATION

Water use for drilling at the Tibbs Property will require a Temporary Water Use Authorization ('TWUA"), a Permit to Appropriate Water or a Certificate of Appropriation. These can be issued for any length of time up to 5 years and are filed under the Department of Natural Resources, Division of Mining, Land and Mining. A TWUA is mandatory if any of the following will be incurred during a project:

- (1) the consumptive use of more than 5,000 gallons of water from a single source in a single day; or
- (2) the regular daily or recurring consumptive use of more than 500 gallons per day (gpd) from a single source for more than 10 days per calendar year; or
- (3) the non-consumptive use of more than 30,000 gpd (0.05 cubic feet per second) from a single source; or
- (4) any water use that may adversely affect the water rights of other appropriators or the public interest.

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

The climate of the Tibbs Property is subarctic. Field season typically extends from late May, following completion of spring melt, to October.

The Tibbs Property is located about 173 km (108 miles) ESE of the City of Fairbanks in the Fairbanks North Star borough. Fairbanks is a full-service city with highway access provided by the Steese, Richardson and George Parks highways, the Alaska Railroad, and a major international airport, as well as significant military installations. Fairbanks has a large available trained workforce and service supply chain, and has abundant electrical power.

There is no significant infrastructure on the property. Delta Junction is serviced by the main electric power grid servicing Fairbanks and Healy. Sufficient water exists within property boundaries to service diamond drilling operations, although the location of many of the known zones along ridgelines may require multiple "lifts" to elevate

water to the drill sites. Tibbs Creek can supply sufficient water for milling operations and to service kitchen and residential facilities.

Any activities that deviate significantly from the approved plan, which currently prohibits damming or diversion of water courses, will require written approval in the form of a permit amendment prior to commencement. Construction of tailings ponds is considered as a mine development activity and would not be pertinent to permits concerning exploration activities.

The Tibbs Property covers the east and partial west flanks of the Tibbs Creek drainage, including the ridge marking the northward extension of Black Mountain east of the creek. Terrain is moderate to fairly rugged, though not excessively so, with elevations ranging from just under 2,400 feet (730 m) along Tibbs Creek to just over 5,000 feet (1,500 m) along Black Mountain.

## **Exploration History**

The Goodpaster area first underwent exploration for placer gold in 1915. Gold-bearing quartz veins were first discovered in the early 1930s in the upper Tibbs Creek area. In the winter of 1936, a 450-foot (137 m) tunnel was excavated to follow a small vein called the Blue Lead Extension. In the summer of 1937, a 300-foot (90 m) tunnel was excavated along the Blue Lead vein. In the winter of 1937, another 300-foot tunnel was completed at the Grizzly Bear mine, and a 50-ton mill was constructed. The following summer the mill was moved to the Blue Lead mine, where it operated until fall, 1939. During 1938 – 1939, about 132 oz. gold and 25 oz. silver were recovered from 150 tons of ore, at a grade of 0.88 oz/ton Au and 0.167 oz/ton Ag. From 1939 to 1942 approximately 350 tons of ore of unknown tenor were processed from the Grizzly Bear mine.

The U.S. Geological Survey conducted regional geological mapping in the property area in the mid-1970s and stream sediment sampling in the late 1970s. Also, in the late 1970s, the U.S. Geological Survey conducted high-altitude airborne magnetic surveying over the Rob property. In response to the Pogo discovery in the late 1990s, the Division of Geological and Geophysical Surveys conducted airborne magnetic and resistivity surveys in 2000 and 2001 over the Pogo area, but these did not extend to the Rob property. In 1995, Sumitomo Metal Mining Co., Ltd. ("Sumitomo") and WGM Inc. ("WGM" and, together with Sumitomo, the "Stone Boy JV") optioned the Rob property, which is now being referred to as the Tibbs Property by Tectonic. From 1995 to 1999, the Stone Boy JV conducted extensive airborne and ground geophysical surveying, soil and rock geochemical surveying, geological mapping, trenching and a 16,214.9 ft (4,942.3 m) diamond drilling program. During the program, 340 rock samples 2,059 soil samples, 7 silt samples, and 2,060 drill core samples were collected. Rock grab sampling returned Au values ranging from background to 169.0 g/t Au at the Gray Lead prospect; from background to 988.5 g/t Au at the Michigan prospect; and from background to 865.2 g/t Au at the Blue Lead prospect. Drilling returned values from background to 0.94 oz/ton (1.381 g/t) Au across 77.4 feet (23.6 m) at the Blue Lead prospect.

In 2000, the option agreement was terminated. In August 2002, Freegold Ventures Ltd. ("**Freegold**") acquired an option to purchase a 100% interest in the property and subsequently contracted Avalon Development Corp. ("**Avalon**") to conduct due diligence rock sampling and orientation soil auger sampling in 2002 and 2003. Rock sample results ranged from background to 30.45 g/t Au at the Gray Lead prospect, from background to 698.89 g/t Au at the Michigan prospect, and from background to 22.29 g/t Au at the Lower Trench prospect. In 2006, limited geochemical sampling was conducted across the Michigan, Blue Lead and Lower Trench prospects. Gold values from 3 samples at the Michigan prospect ranged from <0.050 g/t Au to 11.50 g/t Au, and gold values from 6 samples from the Blue Lead vein ranged from 0.16 g/t Au to 46.70 g/t Au. A total of 76 NQ sized whole core samples were taken from DDH BM97-02 on the Lower Trench prospect, returning values from <0.050 g.t Au to 1.90 g/t Au.

In 2007, Avalon completed a diamond drilling program comprising 3,499 feet (1,066.5 m) in 17 holes at the O'Reely and Gray Lead prospects. At Gray Lead, drilling returned values from background Au to 10.52 g/t Au across 14.5 feet (4.4 m) in DDH ROB07012. Another hole at Gray Lead, DDH ROB07014, returned values ranging from background Au to 19.14 g/t Au across 18.7 feet (5.7 m), including a 3.6-foot (1.1 m) sub-interval grading 82.50 g/t Au. In 2008, Avalon completed another diamond drilling program comprising 3,095.2 feet (943.4 m) at the Gray Lead prospect. Drill core samples returned Au values from background Au to 184 g/t Au across 1.7 feet (0.5 m) from DDH ROB0818.

In 2011, Freegold conducted a diamond drilling program of 2,984 feet (909.5 m) in 3 holes at the previously undrilled Michigan prospect. Of these, ROB 11-02 returned values ranging from background Au to 57.1 g/t Au across 5 feet (1.5 m) and a separate interval grading 7.04 g/t Au across 11.5 feet (3.5 m). A 30-foot (9.1 m) interval grading 2.58 g/t Au was returned from the final 30 feet of the hole, terminated at 1,078 feet (328.6 m). The option was terminated in 2014.

### Geological Setting

#### Regional Geology

The Tibbs Property is located within the Yukon-Tanana terrane ("YTT"), an accreted terrane comprised mainly of Proterozoic to Triassic metaigneous and metasedimentary assemblages, and Jurassic to Early Tertiary metaigneous rocks. The YTT comprises numerous pulses of arc magmatism and is bounded to the north by the Tintina fault zone and to the south by the Denali fault. The major, subhorizontal structural fabric marking much of the YTT likely represents a major continent-continent collision. Further subduction-related magmatism resulted in emplacement of batholithic-scale intrusions such as the 112 – 105 Ma Dawson Range batholith, extending from the Northway area eastward to the Coffee Creek area of west-central Yukon. Related magmatism also resulted in the emplacement of a series of intrusive suites comprising the 110 – 70 Ma Tintina Gold Belt.

Conjugate to the Tintina and Denali fault zones are a series of northeast-trending faults, including the Shaw Creek fault directly west of the Pogo deposit, and the Black Mountain tectonic zone which extends through the property area. Amphibolite-grade and locally higher-grade metamorphism is characteristic of YTT rocks between the Shaw Creek and Black Mountain faults. District-scale northwest-trending sympathetic faults, including the Pogo trend, occur between the Tintina and Denali faults and commonly occur as broad deformation zones with indistinct boundaries.

#### Property Geology

The Tibbs Property is located within the Black Mountain tectonic zone, centered along the western boundary of the mid-Cretaceous Black Mountain intrusion in contact with Devonian augen gneiss to the west. In the property area, the Black Mountain tectonic zone is characterized by a series of northeast to north-northeast trending normal and left-lateral high-angle strike-slip faults. Detailed mapping by 2010 indicates the Black Mountain intrusion within the property area is comprised of biotite granodiorite, with lesser andesite porphyry and minor granite. These units lie in contact with biotite gneiss, which is in turn adjacent to the biotite augen gneiss to the west.

Inspection of intrusive host rocks at the Michigan prospect during the May 2019 property visit revealed that biotite within the Black Mountain intrusion has been almost completely altered to sericite, likely due to alteration related to quartz veining. Intrusive rocks are medium grained and roughly equigranular, with moderate phyllic alteration, local silicification and argillic alteration. Inspection of core from DDH 11-02, collared at the Michigan target, confirmed alteration assemblages identified on surface, and revealed increased argillic and phyllic alteration within sheared material.

Examination of drill core from Holes ROB07007, ROB 07012 and ROB07115 at the Gray Lead prospect indicate the holes were collared within moderately to well foliated fine-grained biotite gneiss. Alteration intensity is low in drill core from the Gray Lead area. The holes intersected the intrusion from the west; marginal intrusive portions are biotiterich, weakly foliated and more finely grained than at the Michigan prospect. Visual inspection of intrusive rock at the "Connector Zone" indicates it is medium to finely grained and equigranular, with moderate phyllic alteration resulting in an absence of biotite.

#### Mineralization

Prior to 2008, several mineralized prospects had been identified on the Tibbs Property. The Gray Lead, Blue Lead and Grizzly prospects were discovered in the 1930s to 1940s and underwent limited extraction shortly after discovery. The Michigan prospect was subsequently discovered to the north of the Blue Lead workings. The Lower Trench and Upper Trench prospects were subsequently identified to the northwest of the Michigan prospect, and the O'Reely showing was identified southeast of the Grizzly Bear mine. More recently discovered prospects include: the Connector Zone

east-southeast of the Gray Lead; the Johnson Saddle prospect northeast of the Gray Lead; and the Wolverine prospect north of the Upper Trench prospect. The Gray Lead, Connector and Michigan prospects were visited in 2019.

### Gray Lead Prospect

The Gray Lead prospect comprises a quartz-arsenopyrite vein extending roughly along the western contact of the Black Mountain intrusion. Quartz-arsenopyrite veining, reported by Tectonic to attain widths to 4.0 m, hosts fractured to clotty arsenopyrite veining and minor pyrite.

#### **WORK TO 2010**

The Stoneboy Joint Venture conducted surface rock sampling and diamond drilling from 1995 to 1999. Rock sampling returned values to 169 g/t Au and drilling returned values to 31.512 g/t Au, including 2.5 g/t Ag and 9,468 ppm As across 13.5 feet (4.1 m) from DDH BM-10. Fluid inclusion studies on vein material indicate temperatures of deposition from 260 °C to 455 °C. In 2002, Freegold conducted due-diligence-style rock sampling and confirmed earlier reported grades. Results included "significant" values ranging from 0.216 opt (7.41 g/t) Au to 2.105 opt (72.171 g/t) Au; 4.26 to 43.50 g/t Ag; 4,630 to >10,000 ppm (1.0%) As; 6.68 to 1,610 ppm Bi; 8.0 to 415.0 ppm Pb; 112.95 to >1,000 ppm Sb, 0.40 to 180.50 ppm Te; and 0.2 to 97.2 ppm W.

In 2007, Freegold drilled a total of 8 holes from two sites located approximately 50 m apart to test for mineralization at depth along the Gray Lead vein. Holes ROB07006 and ROB07007 were drilled near the collar locations of Sumitomo-WGM holes BM-10 and BM-11, partly to confirm grades from the former. Hole ROB07006 returned values to 6.64 g/t Au across 16.5 feet (5.0 m), including 17.78 g/t Au across 2.5 feet (0.8 m). The remaining holes, ROB07012 through ROB07017 were targeted about 50 m to the northeast, and returned "significant" values ranging from 1.77 g/t Au across 28 feet (8.5 m) in hole ROB07015 to 15.76 g/t Au across 17.5 feet (5.3 m), which includes a subinterval grading 127.63 g/t Au across 1 foot (0.3 m) in hole ROB0713.

According to Flanders (2010) (as defined in the Tibbs Technical Report) all of the 2007 holes intersected north-south striking, west-dipping (at -50 to -60 degrees) quartz veining immediately adjacent to a brittle fault zone within Paleozoic biotite paragneiss. The sulphide mineralization included fine-grained bismuthinite, arsenopyrite and lesser pyrite. True widths of quartz vein intercepts are variable but average >3.0 m. Quartz veining is multipulsed, with an Au-Ag-Bi-As-Sb-Pb-Zn signature. Flanders identified at least four phases of mineralization: a quartz-Au- Bi phase, followed by a quartz – Ag-Pb-Sb phase, in turn overprinted by a Qtz-As-Zn phase. A final phase comprising mostly thin quartz + calcite + pyrite veinlets associated with very late brittle fracturing carries no gold and may have resulted from widespread Tertiary volcanism and plutonism in eastern Alaska.

Freegold subsequently conducted statistical analysis on the 77 drill core samples returning Au and Bi values exceeding lower detection limits of 0.034 ppm and 5 ppb respectively. Freegold also plotted cross-sections of the vein in Figure 2 below.

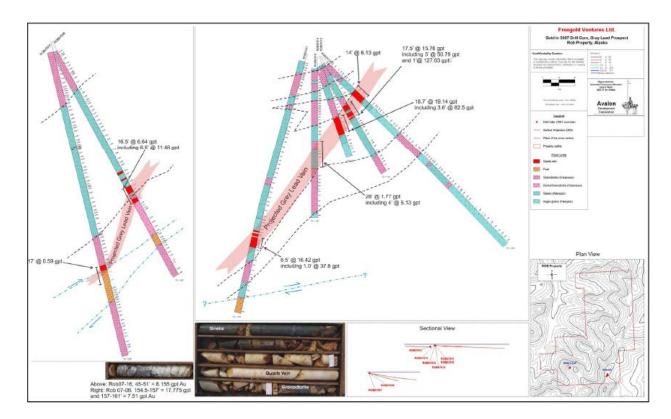


Figure 2: Cross section showing geology and mineralization of 2007 Freegold drilling, Gray Lead prospect

This analysis found that Au is associated most strongly with Bi, but has a "nearly random" correlation with As. Gold is spatially restricted to the quartz veining within the fault zone and its immediate host country rock, whereas arsenic, although centered on the fault zone, is more widespread, particularly within its footwall. Zinc correlates moderately with arsenic but is not considered a reliable pathfinder element. In 2008, Freegold completed a 3,095.2-foot (943.4 m) diamond drilling program in 12 holes from 6 sites at the Gray Lead prospect. The holes were designed to test for strike and depth extensions of the auriferous zones intersected in 2007. Surface prospecting also revealed two parallel auriferous veins east of the Gray Lead vein, indicating potential for a series of veins within a larger mineralized corridor.

#### 2018 TECTONIC PROGRAM

In 2018, Tectonic excavated a single NW-SE extending trench. This exposed the Gray Lead vein where expected, revealing it to be a roughly 4-metre wide two-phased vein hosted by biotite gneiss with minor sericite but little other alteration along its contact. The approximately 2-metre thick hanging wall section comprises opaque milky-white quartz with abundant arsenopyrite, bismuthinite and scorodite. Assaying of samples returned values of 38 g/t Au across 5 m in segment 01A, and 14.8 g/t Au across 8 m in segment 1B. A 5-metre interval grading 0.451 g/t Au was returned from the site of a 0.180 g/t Au Stone Boy JV soil sample.

#### 2019 PROPERTY VISIT

The Gray Lead area was visited on May 9, 2019 by Mr. Grant Lockhart, Chief Geoscientist of Tectonic, and Tibbs Technical Report author, Carl Schulze. The visit focused on the main Gray Lead vein, revealing it to be comprised of white quartz with 3-9% clotty and fracture-controlled arsenopyrite and trace to 3% pyrite. This part of the vein belongs to the hanging wall section reported by Tectonic. A single composite grab sample from a historic headings piles was collected of white quartz with 15% vuggy and fracture-controlled arsenopyrite and 3% pyrite, indicating ore taken from underground workings matches surface quartz vein material. The visit included inspection of core from DDH ROB07007, ROB07012 and ROB07015, stored at the Fox, Alaska facilities of Avalon. A mineralized interval comprising clotty to semimassive arsenopyrite in white quartz veining returned values of 10.5 g/t Au from 45-49.6

feet; 28.95 g/t Au from 49.6 - 52.0 feet, and 24.3 g/t Au from 52-53 feet. The interval is hosted within YTT biotite paragneiss, although a short interval of quartz diorite occurs at roughly 49.5 - 50.0 feet.

#### Connector Prospect

#### 2018 PROGRAM, TECTONIC

The Connector prospect was identified by Tectonic in 2018. This zone is located near two targets identified by the Stone Boy JV in 1995-1999: the King prospect to the north and the Argent prospect to the south. Test pitting by the Stone Boy JV at the King returned values to 101 g/t Au, and test pitting at the Argent returned values to 9.96 g/t Au. The Connector Zone did not undergo test pitting at that time, but auger soil sampling in 2017 returned multiple values exceeding 75 ppb Au along a prominent NNW-SSE trending lineament that extends to the Johnson Saddle target more than 1,200 m to the north.

Three CanDig trenches were excavated in the June 2018 Phase I program to test the potential NNE-SSW trending structure. In September, a short Phase II program included deepening sections of the trench where permafrost was encountered in Phase I.

<u>Trench CN18-01</u> – This trench is 212 m in length and intersected mineralization across a 28-metre section. Within this, a 13 m interval returned a value of 1.585 g/t Au, including 3 m grading 4.513 g/t Au. A separate 5 m interval within the mineralized zone returned 1.138 g/t Au. The adjacent 20 m interval to the southeast returned elevated As values, and a value of 0.168 g/t Au across 5 m immediately adjoining the main intersection. Tectonic considers this to be prospective, due to poor ground conditions. The Phase II resampling program focused on three sites along this trench. Two sites failed to return significant values, and the third, a resampling of a section initially assaying 1.171 g/t Au across 6 m, returned 0.685 g/t Au across 2 m.

<u>Trench CN18-02</u> - This is a short trench designed to test for Gray Lead-style quartz veining directly north of the Argent prospect. Sampling at its northwest end returned a value of 0.443 g/t Au across 4 m within granodiorite; however, subsequent resampling during the Phase II program on 2 m intervals returned only background gold values. A 5-metre intercept of grey sulphide-bearing quartz veining to the southeast returned values to 3,938 ppm As, and a peak Au value of 0.043 g/t. Adjacent grab sampling returned a value of 33 g/t Au. A separate 10-metre interval returned an average As value of 285 ppm and background gold values.

<u>Trench CN18-03</u> - This 287.7-metre trench intersected two intervals of Gray Lead-style quartz veining towards the northwest end. One comprised a 5 m interval of fragmental quartz vein material commencing at the 209-metre mark and returning 1.034 g/t Au. The other, commencing to the southeast at the 269-metre mark, returned a value of 1.698 g/t Au across 5.5 m. Tectonic predicted that the main Connector structure would be intersected from the 150 - 200 m section of the trench, indicating the interval commencing at 209 m approximately conforms to this hypothesis. During Phase II, Tectonic deepened the sections from 109 - 117 m and from 172 - 190 m. Re-sampling at the latter returned values of 0.812 g/t Au across 4 m from 174 - 178 m, and of 8.088 g/t Au across 6 m from 182 - 188 m.

#### 2019 PROPERTY VISIT

The 2019 property visit included inspection of trenches CN18-01 and CN18-03 by Messrs. Lockhart and Schulze. The trenches exposed rubble crop of fine to medium-grained, equigranular biotite granodiorite, with fairly pervasive moderate orange carbonate alteration in mineralized sections. Intrusive rocks also show moderate phyllic alteration, whereby biotite has been altered to sericite, and locally silicified. Quartz vein material is fairly abundant, but less so than amounts of host intrusive rock. A composite grab sample taken of quartz-arsenopyrite vein material indicate that, although mineralogy is similar to that of the Gray Lead prospect, a distinct fabric of massive arsenopyrite confined to late fractures, as opposed to more pervasive clotty to fracture-controlled sulphides, occurs here.

#### Michigan Prospect

#### **WORK TO 2011**

The Michigan prospect underwent soil sampling by the Stone Boy JV at some point from 1995 to 1999, returning values to 180 ppb (0.180 g/t) Au. Several trenches were also excavated during this period, revealing values up to 86 g/t Au from the "North Trench" rubble pile, and up to 988.46 g/t from a NW-SE trending vein near the "South Trench". Silver values are highly variable, ranging from 0.2 g/t to 1,585.6 g/t, with higher values associated with the highest gold values. Arsenic values ranged from 172 ppm to 9,300 ppm.

In 2002, Freegold conducted surface rock sampling, of which "significant analytical results" listed by Flanders (2010) returned values from 24.27 g/t Au to 175.06 g/t Au from vein material, and from 29.83 g/t Au to 698.89 g/t Au from altered granodiorite. Values ranged from 0.14 g/t Ag to 9.50 g/t Ag, 687 ppm As to >10,000 ppm As, 0.08 g/t Bi to 0.83 g/t Bi, 3.5 ppm Pb to 40 ppm Pb, 26 to 75 ppm Sb to 776.1 ppm Sb, <0.05 g/t Te to 0.30 g/t Te, and 0.1 g/t W to 1.0 g/t W. The pathfinder element assemblage, comprising Au-As-Sb is distinct from that of the Gray Lead prospect. Fluid inclusion studies at the nearby Blue Lead prospect indicated veins were emplaced at temperatures 50 °C to 100 °C lower than at the Gray Lead, and contain a much higher proportion of larger, methane-enriched inclusions). In 2006, four grab samples were taken from the Michigan prospect, returning gold values from <0.05 g/t Au to 11.50 g/t Au, <0.5 g/t Ag to 1.5 g/t Ag, 121 ppm As to 8,490 ppm As, 19 ppm Mo to 26 ppm Mo, 30 ppm Sb to 233 ppm Sb, and near-background Bi and Pb values.

In 2011, Freegold completed a three-hole diamond drilling program that totaled 2,984 feet (909.5 m). Hole ROB1102 returned a value of 57 g/t Au from  $163^{\circ} - 168^{\circ}$  (49.7 m - 51.2 m), and of 2.58 g/t Au in the final 30 $^{\circ}$  (9.1 m) of core from  $1,053^{\circ} - 1,078^{\circ}$  (320.9 m- 328.6 m).

#### 2018 TECTONIC PROGRAM

The 2018 program included excavation of four CanDig trenches for a total of 123 m in the vicinity of high-grade grab samples and the potential surface expression of the mineralized interval at the end of DDH ROB1102.

Trench MI18-01, the southernmost of three trenches in the Michigan area, was sampled from SE to NW and exposed strongly silicified and sericite-altered granodiorite from 0-28 m. Quartz vein material occurs throughout, with increased quartz stockwork development from 20-45 m. The best result was 1.96 g/t Au across 6 m from the 2-metre mark, including 5.429 g/t Au across 2 m starting at 2 m. A rock grab sample at the 22-metre mark, comprising a 2-cm quartz-arsenopyrite-stibnite vein within strongly silicified and sericite-altered granodiorite, returned a value of 43.8 g/t Au.

Trench MI18-02 was an 8-metre test pit designed to deepen the un-reclaimed "North Trench". Sampling returned a value of 1.013 g/t Au across the entire 8 m exposed.

Trench MI18-03, located to the northeast, was excavated in the area of past sampling of abundant boulders of veined granodiorite with stibnite and arsenopyrite, associated with strong sericitic alteration and silicification, returning values to 26.6 g/t Au. The trench was exposed from NW to SE and encountered strongly silicified and sericitized granodiorite along its entire length. The best result, of 11.5 g/t Au across 3.3 m, was obtained from the extreme southeast end of the trench. Other notable intervals are: 0.221 g/t Au across 4.5 m starting at the 7-metre mark, and 0.332 g/t Au across 2 m at the site of high-grade float samples.

Trench MI18-04 was excavated >300 metres southeast of trench MI18-03, targeting a NE-SW trending lineament about 15 m NE of a historic test pit that returned values to 29.8 g/t Au. The 2018 trench intersected a 1.3 m wide fault zone of sheared, broken granodiorite lacking quartz vein material, from which sampling returned a value of 0.256 g/t Au across 4 m.

## 2019 PROPERTY VISIT

The 2019 visit included inspection of the Michigan prospect on May 7, 2019. Inspection of the granodiorite confirmed that it has undergone pervasive moderate to strong phyllic (sericitic) alteration with near-total destruction of biotite,

and weak silicification. Abundant centimetre to millimetre-scale quartz  $\pm$  arsenopyrite  $\pm$  stibnite  $\pm$  minor cinnabar stockwork veining occurs throughout much of the target area. The visit included viewing and sampling of a small "blast pit" where sampling by Freegold returned values to 170 g/t Au.

Tectonic compared geochemical signatures of quartz vein mineralization and concluded that mineralization is controlled by the NE-SW-trending structural corridor. Quartz veining also shows a distinct mineralogy from the Gray Lead prospect. The Michigan prospect lacking the anomalous Bi, W and Te content marking the Gray Lead prospect. Pervasive alteration at Michigan also contrasts with very limited wall rock alteration at the Gray Lead prospect.

The 2019 visit included viewing of DDH ROB1102 core stored at Avalon Ventures Inc. at Fox, Alaska. The focus was a 2.5-foot (0.7 m) interval from 417' - 419.5' (127.1 m - 127.8 m) grading 25 g/t Au, and the final 25' (7.6 m) of core from 1,053' - 1,078' (320.9 m - 327.5 m). The former includes a 0.5' interval of near-massive stibnite in quartz veining. The latter, originally logged as basalt, comprises fine quartz-stibnite stockwork veining in a separate more finely grained strongly silicified intrusive phase.

#### Other Mineralized Prospects

The remaining prospects underwent exploration in 2018 but were not visited in May 2019.

#### OSCAR/HILLTOP

The Hilltop prospect is located northeast of the Gray Lead prospect, within a series of structural linears oriented at 010°, from which sampling of mineralized granite boulders with thin quartz veining returned values to 75 g/t Au. The most prominent linear feature hosts the Oscar vein. Two short trenches for a total of 67 m were excavated in 2018 from the top of the prospect. Trench OV18-01 exposed a 1-metre interval of mineralized fault zone, from which a 4-metre sample returned 0.032 g/t Au and 36 ppm As from a weakly sericitized quartz diorite that lacked quartz veining. A second interval of sericite-altered quartz diorite with a thin quartz vein returned a 2.5-metre interval of 0.035 g/t Au and 87 ppm As. A grab sample of the quartz material returned 0.092 g/t Au. Trench OV18-02 intersected the "Oscar Lineament", where sampling returned a value of 0.041 g/t Au and background As, Bi and Sb values across 5 m. Gold values from float samples increased with decreasing elevation, with highest grade values towards the base of slope.

### JOHNSON SADDLE

In 2018, four trenches totalling 461 m were excavated at the Johnson Saddle prospect, located 1,400 m NE of the Gray Lead prospect. This prospect is located along the contact of the Black Mountain intrusion to the east and Devonian augen and biotite gneiss to the west, at the interpreted convergence of northeast trending Gray Lead lineament and the NNE-trending Connector lineament. A 1999 rock sample returned a value of 4.34 g/t Au with low to background As, Bi and Sb. A shovel soil sample returned 755 ppb Au with anomalous As and Sb values. In 2017, Tectonic conducted an auger soil program, returning multiple values exceeding 100 ppb Au.

Trench JS18-01, 198 m in length, was excavated across the entire Johnson Saddle. Biotite gneiss and lenses of amphibolite were exposed in the western part, and intrusive rock in the east. The contact zone comprised intercalated intrusive material with gneiss. The only auriferous mineralization occurs within a fault gouge zone in biotite gneiss, returning a value of 0.140 g/t Au across 5 m. Minor carbonate veining occurs in gneisses in the west end of the trench.

Trench JS18-02, excavated south of the west end of JS18-01, exposed carbonate veining. The trench exposed intercalated biotite gneiss and amphibolite with strong epidote and calcite alteration, but a lack of quartz veining. The zone extended for 14 m, returning an average grade of 1.057 g/t Au, with a sub-interval grading 1.7 g/t Au across 8 m. Grab sampling of strongly calcite-altered Paleozoic rock returned values to 5.9 g/t Au, 103 ppm Bi, 103 ppm W, but low As and Sb values.

Trench JS18-03, the southernmost trench, was excavated from west to east, and intersected a mafic lens at the 50-metre mark adjacent to a 1-metre wide granodiorite dyke. Farther east, the trench exposed alternating biotite gneiss and granodiorite. No significant Au values were returned.

Trench JSI8-04 was excavated about 300 m to the southeast, and targeted a notch historically named the "Ursa notch" towards its southeast end. The main boom of the CanDig excavator failed at the 85-metre mark. No mineralization was intersected in the excavated portion, and the Ursa notch was not tested. Tectonic states that a large-scale NE-trending structure is visible as a series of notches extending from the Gray Lead prospect northeast to the Michigan prospect. Notably, the carbonate-altered mineralized interval in Trench JS18-02 is located up-slope and to the west of the main structure. This style of mineralization, marked by calcite alteration, high Bi and W values and a lack of quartz veining, has not been observed elsewhere on the Tibbs Property.

#### O'REELY PROSPECT

The O'Reely prospect, first identified by the Stone Boy JV from 1995 to 1999, is located about 1.75 km ESE of the Gray Lead prospect. The prospect comprises polyphase hydrothermal breccia veins, from which year-2002 sampling returned "significant" values to 8.04 g/t Au, 53.70 g/t Ag, 39.70 ppm Bi, 4,210 ppm Pb and >1,000 ppm Sb; and 8.38 g/t Au, 16.10 g/t Ag, 15.35 ppm Bi, 1,800 ppm Pb and 761 ppm Sb. Quartz vein surface exposures are up to 4 feet (1.2 m) in width and are "the likely source" of float samples immediately downslope which returned values to 3.174 opt Au (108.80 g/t Au).

#### Deposit Types

The Tibbs Property is located within the 110 - 70 Ma Tintina Gold Belt. This is an arcuate belt of subduction-related granitic, quartz monzonitic to dioritic intrusions extending from southwest Alaska through the Fairbanks, Alaska and Dawson City, Yukon areas, and terminating in southeast Yukon near Watson Lake, Yukon. In Alaska, the southern edge roughly follows the trace of the Denali-Farewell fault system. The belt hosts a large number of "intrusion-related" gold, silver and tungsten deposits and occurrences, many of which have been dated as late Cretaceous (70 - 65 Ma).

Intrusion-related prospects include lode vein, stringer and stockwork-style mineralized zones, gold, tungsten and base metal skarns, replacement style mineralization, and "Fort Knox"-style deposits. Exploration to date indicates the main target settings are large auriferous veins and vein stockwork-style mineralization. Veins are typically planar structures, formed when siliceous metal-rich fluids pass through an open area, such as a fault zone. Silica is gradually emplaced from vein margins to the centre; specific fluid pulses may result in metal-rich layers, including precious metal-rich layers, within the vein. Stringer and stockwork zones occur when metal-rich siliceous fluids pass through brecciated or strongly fractured areas, most typically fault zones, within the host rock. Vein deposits tend to be high grade and of small tonnage; stringer and stockwork deposits tend to be of lower grade but higher tonnage, due to incorporation of unmineralized country rock.

Gold +/- silver vein-hosted mineralization is typically associated with a suite of "pathfinder elements", particularly arsenic, lesser antimony, mercury; and, if proximal to the intrusion, bismuth. Arsenic is a particularly strong indicator of gold, as this element tends to precipitate from solution at the same temperature and pressure as gold.

Flanders (2010) has developed an intrusion-related deposit setting model, whereby metal and CO2-bearing hydromagmatic and hydrothermal fluids, combined with "volatile" gases fractionate during final stages of intrusive formation from a I-series melt. In this case the resulting intrusive rocks would be the Black Mountain granodiorites. Two distinct metallogenic subsystems may form from the same original melt, depending on the rate of fluid ascent and the level within the crust the hydrothermal fluids attain. Within deeper, higher-pressure settings, gold may precipitate at temperatures from 400 °C to 600 °C and low sulphur fugacities, indicating a lesser presence of "volatiles" or gases. These systems are characterized by an elevated Au-Bi-Te-W-As metallogenic signature, and show isotopic, trace element and fluid inclusion characteristics of almost exclusively hydromagmatic fluids These assemblages tend to form in more proximal settings to source intrusions. However, within higher-level, lower pressure settings, mineralization forms at temperatures from 250 °C to 400 °C, with an Au-Ag-As-Cu-Sb-Hg-Pb- Zn metallogenic signature.

At the Tibbs Property, this bimodal setting is indicated from fluid inclusion studies on vein mineralization within the Gray Lead and Blue Lead prospects. Vein samples from Gray Lead were deposited at temperatures ranging from 50 °C to 100 °C higher than those from the Blue Lead. Fluid inclusions from the latter are also significantly larger and more methane enriched. This suggests that gold-rich, volatile-poor fluids that formed the Gray Lead vein at depth with

an Au-Bi-As-Te assemblage became mixed with volatile-rich, gold-poor fluids forming the Blue Lead vein with the Au-As-Sb assemblage. The Blue Lead, Michigan, Grizzly Bear, Upper and Lower Trench and O'Reely prospects all share the low temperature-pressure Au-As-Sb assemblage.

### Current Exploration

#### 2017 Program

Following acquisition of the property in 2017, Tectonic conducted a field program comprising rock and soil sampling from August 15 to September 5, 2017. A crew of 2 geologists and 4 soil samplers collected 198 rock grab samples and 514 soil samples, 289 by shovel and 225 by gasoline-powered ice auger, out of 976 possible sites. The program was based from camps at the Gray Lead and Grizzly Bear ridges respectively, targeting the Gray Lead, Johnson Saddle and Grizzly Bear prospects. The soil grid extends northeast from the Gray Lead to the Grizzly Bear Ridge area and covers much of the Michigan and Blue Lead prospects. Although the grid is continuous, breaks in the sampled areas caused by permafrost, talus, or rubbly ground cover allow it to be regarded as three segments: the Gray Lead/Connector, Johnson Saddle and Grizzly Bear/ Michigan segments.

By 2017, Tectonic established that these occur along a prominent NE-SW trending lineament, roughly separating Devonian biotite gneiss to the northwest from Black Mountain intrusion granodiorite to the southeast. Johnson Saddle is underlain by augen gneiss, whereas the Gray Lead and Grizzly Bear saddles are mainly underlain by fine grained biotite-feldspar-quartz gneiss. Bedrock exposure is rare, and most rock sampling is of float located within the saddles or in talus slopes.

#### GRAY LEAD PROSPECT

At the Gray Lead prospect, milky white quartz float boulders are abundant, although bedrock exposure is rare. Quartz occurs as concordant veining within the gneiss, and as 2-10 cm-wide veins in granodiorite boulders. A total of 46 rock samples were taken from the Gray Lead prospect, with values ranging from <0.005 g/t Au to 43.5 g/t Au.

A total of 73 soil samples were taken at the Gray Lead prospect, returning values from <0.005 g/t Au to 0.332 g/t Au. Of these, 20 were taken by shovel and 53 by gasoline-powered auger. The majority of samples returned values less than 0.050 g/t Au, although one sample grading 0.073 g/t Au is located near the site of subsequently discovered high grade quartz veining.

#### CONNECTOR PROSPECT

At the Connector prospect, a total of 22 rocks were collected, returning values from <0.005 g/t Au to 70.3 g/t Au. A total of 42 soil samples, 15 by shovel and 27 by auger, were taken, returning values from <0.005 g/t Au to 0.318 g/t Au. The survey revealed an area of anomalous gold values, including the peak value of 0.318 g/t Au, towards the southern margin.

#### JOHNSON SADDLE

Grid soil sampling across the Johnson Saddle area revealed an arcuate soil anomaly, the axis of which became the target for follow-up trenching in 2018. The 2017 program returned several values exceeding 100 ppb Au in an area where previous shovel sampling returned low to background values. Tectonic interpreted the projected intersections of the Gray Lead and Connector linears as occurring in the area of anomalous gold-in-soil geochemical values.

A total of 32 rock samples were taken at the Johnson Saddle prospect, returning values from <0.005 to 0.255 g/t Au. A total of 150 soil samples were collected, 53 by shovel and 97 by auger, returning values from <0.005 g/t Au to 0.271 g/t Au.

#### MICHIGAN PROSPECT

A total of 75 rock samples were taken from the Michigan prospect area, assays ranged from <0.005 g/t Au to 86.8 g/t Au. A total of 224 soil samples were taken, 197 by shovel and 27 by auger, returning values from <0.005 g/t Au to

0.159 g/t Au. The survey revealed a cluster of samples returning values >0.100 g/t Au from the site of trenching and blast pitting by the Stone Boy JV. Another cluster of values exceeding 0.050 g/t Au occurs somewhat south of the Grizzly Bear workings.

### WOLVERINE PROSPECT

A total of 5 rock samples were taken from the Wolverine prospect, all of which returned <0.005 g/t Au. A total of 25 soil samples, 4 by shovel and 21 by auger, were collected from the Wolverine target area in 2017, returning values from <0.005 g/t Au to 1.385 g/t Au, including 8 values exceeding 0.100 g/t Au.

#### OTHER PROSPECTS

Two rock samples were taken from the O'Reely prospect area, southeast of the Connector prospect. These samples returned values of 0.007 g/t Au and 0.858 g/t Au respectively. A total of 7 samples were taken from an area north of the O'Reely target and southeast of the Johnson Saddle target. These returned values from 0.007 g/t Au to 49.5 g/t Au.

## 2018 Program

The 2018 program by Tectonic comprised a Phase I program conducted in June, involved geological mapping, prospecting of new ground acquired in the spring of 2018, rock sampling, limited soil sampling at the Michigan prospect and a 1,266-metre CanDig trenching program. Also, in spring 2018, a 605 line-km Dighem V aeromagnetic and electromagnetic survey was flown across the property. The Phase II program, conducted in September, comprised CanDig trenching at the Michigan prospect and soil sampling at the Wolverine prospect. Field work on both phases was done by Avalon with infield supervision provided by Tectonic.

## AIRBORNE GEOPHYSICAL SURVEY

The 605 line-km helicopter-supported Dighem survey was completed across the Tibbs Property by CGG Canada Services Ltd. of Mississauga, Ontario. The survey comprised a RESOLVE high precision electromagnetic (EM) system, which transmitted and recorded data with 5 differently tuned coil sets (Dighem V). The survey line spacing was 100 m, with a tie line spacing of 1,000 m. The flight speed was 30 m per second, and the flying height was 35 m.

The CGG field report includes several plots: a flight line plot, a Residual Magnetic Intensity plot, a Calculated Vertical Magnetic Gradient plot, and plots for Apparent Resistivity for each of 56kHz, 7200 Hz and 900 Hz coils.

The residual Magnetic Field and Calculated Vertical Magnetic Gradient plots reveal an arcuate magnetic high feature centered on an axis of N015° E (Figure 3). The Grizzly Bear and Michigan prospects occur along the eastern boundary of this feature. Within this major feature, several NNE trending magnetic linears can be discerned, one of which extends NNE from the Grey Lead to the Connector prospects. A second linear extending northward from the Connector intersects the former at the Johnson Saddle prospect, supporting Tectonic's hypothesis that the Johnson Saddle prospect covers an intersection area of significant structural features. The Blue Lead prospect occurs along an interpreted arcuate magnetic high feature and is also along strike of a linear extending northeast of the O'Reely prospect.

The plot of apparent resistivity from the 56 kHz coils reveals a similar orientation of NE-SW trending conductors. Two conductive features intersect at the Johnson Saddle area and are roughly coincident with the aforementioned magnetic high linears. However, the NE-SW trending linear does not extend to the Grey Lead prospect area. The eastern arcuate feature is less pronounced and may be partially interpreted as another NE-SW trending linear. A broadly arcuate intermittent conductive feature can be interpreted as extending southeast from the Wolverine through the Michigan, Grizzly Bear and Blue Lead prospects. With the exception of the Blue Lead, all appear along intersections of this feature with NE-SW trending conductors.

A large conductive feature extending at  $N010^{\circ}$  E represents the Tibbs Creek valley. Several WNW trending conductive features in the central survey area mark right tributaries of Tibbs Creek. The eastern part of the conductive feature extending northeast from the Grizzly Bear marks the upper extent of Summit Creek.

#### 2018 FIELD PROGRAM, PHASE 1

The Phase 1 program comprised geological mapping and surface rock sampling across all targets explored in 2018, a limited soil sampling program near the Michigan prospect, and trench sampling comprising 1,266 m utilizing a CanDig excavator on the Gray Lead, Hilltop/Oscar, Connector and Johnson Saddle prospects. A total of 375 rock grab and trench samples were taken, focusing on detailed sampling and geologic mapping in areas explored by the CanDig trenching. A total of 44 soil and rock samples were taken at the Michigan prospect as a training exercise for new soil sampling crews.

Personnel employed by Avalon mobilized on to site from June 3 - 5, 2018. Trenching commenced on June 7, and Phase I was completed on July 4.

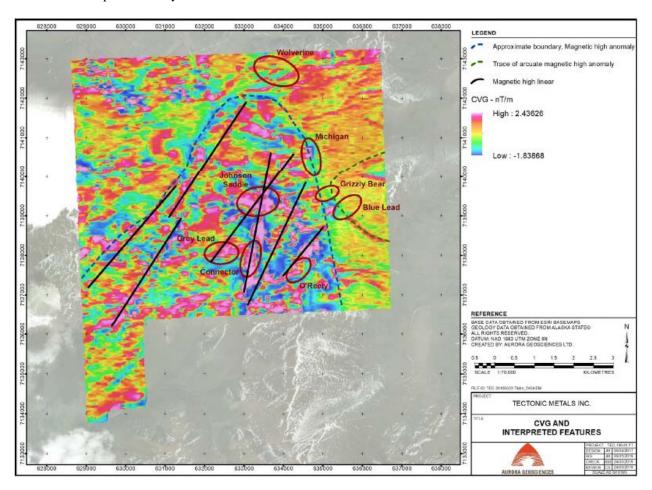


Figure 3: Calculated Vertical Magnetic Gradient

<u>Gray Lead Prospect</u> - One trench, Trench GL 18-01 oriented NW-SE, was excavated at the Gray Lead prospect, and designated as GL18-01A, west of an old wooden platform, and GL18-01C, east of it. A small offset portion, GL 18-01B, was excavated directly to the north to access the extension of the portion covered by the pad. Trench sampling values ranged from <0.005 g/t Au to 77.3 g/t Au. A total of 32 rock grab samples were taken from the Gray Lead area, returning values from <0.005 g/t Au to 77.3 g/t Au.

 $\frac{Hill top/Oscar\ Prospect}{Assaying\ returned\ values\ ranging\ from\ <0.005\ g/t\ Au\ to\ 0.041\ g/t\ Au\ across\ 5\ m.\ A\ total\ of\ 19\ rock\ samples\ were\ taken\ from\ the\ Oscar\ prospect,\ returning\ values\ from\ <0.005\ g/t\ Au\ to\ 53.2\ g/t\ Au.}$ 

Connector Prospect - Three trenches, oriented WNW-ESE, were excavated across the Connector saddle for a total of 602 m. Sampling along Trench CN18-01, with a length of 212 m, returned values ranging from <0.005 g/t Au to 4.513 g/t Au across 0.3 m. Trench CN18-02, with a length of 102.3 m including a 13-metre section remaining unexcavated due to permafrost, returned values from <0.005 g/t Au to 0.443 g/t Au across 4 m. Sampling along Trench CN18-03, with a length of 287.7 m, returned values ranging from <0.005 g/t Au to 3.052 g/t Au across 2.5 m. Re-sampling of material from 182 – 188m returned a value of 8.088 g/t Au across 6m. A total of 95 rock samples were taken in the Connector prospect area, returning values from <0.005 g/t Au to 35.2 g/t Au.

<u>Johnson Saddle Prospect</u> - In 2018, four trenches totaling 461 m were excavated at the Johnson Saddle prospect. Sampling along Trench JS18-01, with a length of 198 m, returned values ranging from <0.005 g/t Au to 0.045 g/t Au. A total of 31 rock samples were taken from the Johnson Saddle area, returning values from <0.005 g/t Au to 1.69 g/t Au. Trench sampling returned values from 0.012 g/t Au across 2 m to 1.057 g/t Au across 14 m, including a subinterval of 3.257 g/t Au across 2 m.

<u>Michigan Prospect</u> - A small C-horizon soil sampling program comprising 44 samples was also conducted across newly staked claims in the Summit Creek drainage directly east of the Michigan prospect. Weakly anomalous values to 35 ppb Au were returned from the southern half of the grid, although the majority of samples returned <25 ppb Au.

Blue Lead and Blue Lead Extension Prospects - A total of 25 rock samples were collected from the Blue Lead prospect, returning values from <0.005 g/t Au to 13.2 g/t Au. Two of these samples were taken from the Blue Lead East prospect, returning values from <0.005 g/t Au to 0.013 g/t Au.

Other Targets - In 2018, a total of 13 rock samples were taken from the Galosh prospect, roughly 1.2 km WNW of the Michigan prospect. Rock sample values ranged from <0.005 g/t Au to 0.041 g/t Au. Several traverses were done along the "Cool Boys Ridge" south of the Gray Lead prospect, as well as along a ridge to the west of Tibbs Creek. Both target areas are underlain by Devonian augen gneiss, hosting abundant metamorphic quartz vein "sweats". Gold values were low to background, ranging from <0.005 g/t Au to 0.072 g/t Au. Several other targets were also investigated, but rock sampling returned low to background gold values. Two exceptions are "Target 4" somewhat west of the Grizzly Bear workings, where sampling returned values from 0.087 g/t Au to 1.200 g/t Au; and 0.159 g/t Au from Target 7, in the Blue Lead prospect area.

## 2018 FIELD PROGRAM, PHASE II

A Phase II program was conducted from September 8 to 15, 2018, and focused mainly on CanDig trenching on the Michigan prospect and grid soil sampling on the Wolverine prospect. Mobilization began on September 7, 2018, and the crew comprised 1 Avalon project geologist, 3 Avalon field geologists, a helicopter pilot, and 3 Tectonic geologists.

Michigan Prospect - The Phase II trenching program comprised a total of 4 trenches for 123 m on the Michigan prospect, targeting the surface projection of the anomalous intercept returned from the final 25 feet of DDH ROB1102. Trench MI18-01, with a length of 51.5 m, returned values ranging from <0.005 g/t Au to 5.429 g/t Au across 2 m. A grab sample from the 22-metre mark returned a value of 43.8 g/t Au. Trench MI18-02, with a length of 8 m, was a deeper re-excavation of a historic trench. Sampling returned a value of 1.013 g/t Au across the entire 8 m. Values ranged from 0.078 g/t Au across 2 m to 2.098 g/t Au across 2 m. Trench MI18-03 was excavated 50 m northeast of trench MI18-01. Sampling returned values ranging from <0.005 g/t Au to 11.5 g/t Au across 3.3 m. Grab sampling of boulders of quartz-veined granodiorite with stibnite and arsenopyrite along the trench returned values from <0.005 g/t Au to 26.6 g/t Au. Trench MI18-04 was excavated more than 300 m northeast of Trench MI18-03. Values ranged from <0.005 g/t Au to 0.256 g/t Au across 4 m.

A total of 26 rock samples were taken during Phase II, including grab samples from the 2018 trench, which are distinct from the trench samples taken over width. These samples returned values from 0.009 g/t Au to 43.8 g/t Au. Two other samples taken from old workings returned values of 1.318 g/t Au and 172.3 g/t Au.

Connector Prospect - During Phase II, two days were spent deepening sections of the Phase I trenching by hand, which was feasible due to further thawing of the permafrost. This work increased the exposure of a section of orange, carbonate-altered fault gouge in Trench CN18-03, from which resampling returned 8.088 g/t Au across 6 m. A total

of 14 samples were collected from trench re-sampling of the Connector prospect. Resampling of Trench CN18-01 returned values from <0.005 g/t Au to 0.685 g/t Au; re-sampling of Trench CN18-02 returned values from <0.005 g/t Au to 0.024 g/t Au, although a separate grab sample returned a value of 33.6 g/t Au.

<u>Johnson Saddle Prospect</u> - In the September Phase II program, an additional 7 rock samples were collected, including 5 from resampling of Trench JS18-02. Trench re-sampling returned values from <0.005 g/t Au to 5.9 g/t Au, including a separate value of 4.601 g/t Au. The other two grab samples returned values of 0.006 g/t Au and 0.007 g/t Au.

<u>Blue Lead and Blue Lead Extension Prospects</u> - During Phase II a total of 9 samples were collected from the Blue Lead prospect, returning values from <0.005 g/t Au to 1.929 g/t Au. Also, 11 samples were taken from the Blue Lead Extension prospect, returning values from 0.006 g/t Au to 76.4 g/t Au; the latter from quartz-arsenopyrite-stibnite vein material.

<u>Wolverine Prospect</u> - The Wolverine prospect was the target for another mechanized auger soil geochemical survey, to follow up on a widespread, high-tenor gold geochemical anomaly with multiple values exceeding 200 ppb Au to a maximum of 1,360 ppb Au. A total of 9 samples returned values exceeding 100 ppb Au, to a maximum of 278 ppb. These results include a cluster of high gold values in an area of flat terrain, interpreted by Tectonic to be controlled by NE-SW trending structures visible in air photos and interpreted from airborne geophysical surveying.

A total of 20 rock samples were taken from the Wolverine prospect area, returning values ranging from <0.005 g/t Au to 0.100 g/t Au.

Other Targets - Two samples were collected from the Grizzly Bear area. One, of a quartz-arsenopyrite-stibnite vein in granodiorite, returned a value of 0.531 g/t Au. The other, of unmineralized quartz vein material, returned 0.009 g/t Au.

## 2019 Due-Diligence Visit

On May 7 and 9, 2019, a due-diligence style visit was conducted by Carl Schulze of Aurora Geosciences Ltd., accompanied by Tectonic Chief Geoscientist, Grant Lockhart, and Senior Geologist, Riley Millington. The visit focused on resampling of the 2018 trenching work, and of a historic blast pit at the Michigan prospect where sampling by Tectonic in 2018 returned 172.3 g/t Au, and sampling by earlier workers returned values to 988.459 g/t Au. One select composite grab sample, #1465510, taken from Trench MI18-01 at the location of sample #564824, returned a value of 1.270 g/t Au. Sample #1465511, a composite grab taken from the blast pit, returned 226.9 g/t Au. The visit confirmed earlier observations on the fabric of mineralization, which is of quartz  $\pm$  stibnite  $\pm$  arsenopyrite veining within silicified and phyllically (sericite) altered granodiorite.

On May 9, Messrs. Schulze and Lockhart visited the Gray Lead and Connector prospects. At the Gray Lead, old workings were inspected and a single composite grab sample, #1465512, of the old "headings" pile, was collected. This sample returned a value of 0.624 g/t Au. Two composite grab samples were taken from Trench GL18-01 and one from Trench GL18-01B (the portion offset about 5 m to the north). Sample #1465513, from Trench GL18-01A at the site of 2018 sample #3186009 which returned 87.9 g/t Au, assayed 255.8 g/t Au. Sample #1465514, a grab sample taken from Trench GL8-01A at the site of Sample #3186012 which returned 3.782 g/t Au, assayed 317.2 g/t Au. Sample #1465515, collected from the offset Trench GL18-01C, returned 51.3 g/t Au. The visit also confirmed 2018 sample descriptions of quartz-arsenopyrite veining within biotite gneiss.

At the connector prospect, sampling of Trench CN18-01 at the site of Sample #3186199 which assayed 1.318 g/t Au, returned a value of 1.192 g/t Au (Sample #1465516). The sample location is the same as a grab sample, Sample #521927, which graded 9.51 g/t Au. A proximal float sample, #1465517, a re-sample of Sample #521957 between trenches CN18-01 and CN18-03, returned a value of 0.121 g/t Au. The visit also confirmed earlier observations that veining is hosted by moderately silicified ankeritic granodiorite.

Results of the 2019 visit confirmed the significant variance in pathfinder element geochemistry between the Gray Lead, Connector and Michigan prospects. The Gray Lead has a pronounced Au-As-Bi-Te-W geochemical assemblage, which contrasts sharply with the Au-As-Sb assemblage at the Michigan prospect. Values of Sb are strongly anomalous

at both prospects, but considerably more so at Michigan. Samples from the Connector prospect are roughly intermediate, with a moderate As-Sb- Bi-Te signature.

## Drilling

In 2019, 20 Rotary Air Blast (RAB) boreholes for 2,184 m were completed on the Tibbs Property. Drilling took place between August and September, was contracted to Ground Truth Americas Inc. and completed with a single Ground Truth (GT) RAB drill rig. The GT RAB drill is a rubber tracked drill platform controlled by wireless remote control with a hydraulic tilting mast assembly and rotary drill head. The GT RAB drill delivers compressed air through the centre of 66.6 mm drill rods to activate the drill bit, recovers powdered rock chips from the cutting face and returns sample along the outside of the rods to a conventional cyclone. Borehole diameter was typically 92 mm. The drill rig either drove from site to site or was moved with the aid of a helicopter.

The purpose of the 2019 drilling program was to investigate gold mineralization observed in trench, rock grab, and gold-in-soil anomalies at 9 targets: Michigan (4 boreholes), Connector (3 boreholes), Connector North (1 borehole), Argent (1 borehole), Johnson Saddle (1 borehole), Gray Lead (4 boreholes), Oscar/Hilltop (1 borehole), Upper Trench (2 boreholes), and Blue Lead (3 boreholes). Boreholes ranged in depth from 60 – 201 m, with an average hole depth of 109 m.

Borehole locations were planned and marked by Tectonic geologists using a handheld GPS. A compass was used to determine borehole azimuth and inclination. Following the arrival of the drill at the drill site a geologist would then confirm drill alignment and inclination with the compass. Following completion of a drill hole, either by reaching target depth or termination due to poor ground conditions, the collar location was identified using a "differential global position system" (DGPS). The DGPS determines an average point location, refining the location to within 1 m. No downhole surveys were completed due to the short hole lengths.

RAB chips were logged on site by a Ground Truth Americas Inc. geologist before being transported by helicopter to the field camp at the Michigan prospect. Samples were then analyzed by XRF prior to being shipped to the Bureau Veritas facility in Fairbanks for preparation. The XRF analysis was undertaken in an attempt to establish a future relationship between in-field XRF results and Fire Assay data to determine the XRF's effectiveness and reliability in future exploration programs. Due to the early-stage nature of the Tibbs Property, no relationship between XRF data and drill assay data has been established. As data was collected in-field and not at an accredited laboratory, no standardized methodology was employed, and no Quality Control procedures could be implemented. For the reasons mentioned above, the author of the Tibbs Technical Report has determined the XRF data to be unreliable and not significant at this time. See "Tibbs Property – Sampling Method and Approach – Rock Sampling – XRF Data Collection, 2018 and 2019" for further discussion. The physical characteristics of the RAB boreholes are presented in Table 1 below.

Due to the open-hole nature of RAB drilling and return of rock chip and powder samples, the method does not provide the same level of geological and structural information as does diamond drilling. Accordingly, RAB drilling is used as an early to intermediate stage exploration tool and results cannot be used for the purposes of NI 43-101 mineral resource estimates.

Table 1: RAB drill hole collar data

Borehole ID	Easting (metre)	Northing (metre)	Elevation (metre)	Length (metre)	Azimuth (degree)	Dip (degree)	Prospect	Sample Intervals
TBRB19-001	635345	7140479	1182	100.58	135	55	Michigan	0 - 100.58 m
TBRB19-002	635345	7140481	1182	100.58	135	70	Michigan	0 - 100.58 m
TBRB19-003	635309	7140515	1179	161.54	135	55	Michigan	0 - 161.54 m

TBRB19-004	635278	7140547	1179	167.64	135	60	Michigan	0 - 167.64 m
TBRB19-005	633083	7137936	1228	100.58	110	55	Connector	0 - 100.58 m
TBRB19-006	633045	7137844	1219	103.63	108	55	Connector	0 - 103.63 m
TBRB19-007	633079	7137942	1229	121.92	110	60	Connector	0 - 121.92 m
TBRB19-008	633177	7137696	1242	103.63	110	55	Argent	0 - 103.63 m
TBRB19-009	633250	7138219	1158	97.54	290	55	Connector North	0 - 97.54 m
TBRB19-010	633506	7139190	1147	71.63	135	65	Johnson Saddle	0 - 71.63 m
TBRB19-011	632670	7138301	1219	100.58	100	55	Gray Lead	0 - 100.58 m
TBRB19-012	632720	7138295	1212	105.16	100	50	Gray Lead	0 - 105.16 m
TBRB19-013	632879	7138362	1190	201.17	110	55	Oscar / Hilltop	0 - 201.17 m
TBRB19-014	632750	7138355	1190	96.01	100	55	Gray Lead	0 - 96.01 m
TBRB19-015	632574	7138267	1240	156.97	100	75	Gray Lead	0 - 156.97 m
TBRB19-016	634633	7141761	1119	88.39	100	55	Upper Trench	0 - 88.39 m
TBRB19-017	634633	7141761	1119	94.49	100	70	Upper Trench	0 - 94.49 m
TBRB19-018	634919	7139663	1294	62.48	340	55	Blue Lead	0 - 62.48 m
TBRB19-019	635041	7139721	1285	60.96	360	55	Blue Lead	0 - 60.96 m
TBRB19-020	635183	7139746	1284	88.39	360	70	Blue Lead	0 - 88.39 m

Note: NAD83, Zone 07W

At the Tibbs Property, the entire drill hole was sampled from collar to end-of-hole, on 5-foot (1.52 m) intervals as governed by the length of each RAB drill rod.

Table 2 below summarizes the results of the 2019 RAB drilling program at the Tibbs Property.

**Table 2: Assay composites** 

Prospect	Drill Hole	From (m)	To (m)	Width (m) <sup>(1)</sup>	Weighted Average grade (g/t Au)
Michigan	TBRB19-001	19.81	21.34	1.53	7.29
		36.58	38.10	1.52	3.99
		47.24	48.77	1.53	0.53
	-	88.39	91.44	3.05	0.28
	TBRB19-002	7.62	9.14	1.52	0.49
	-	28.96	32.00	3.04	6.05
	including	28.96	30.48	1.52	12.1
		57.91	60.96	3.05	0.27
		92.96	94.49	1.53	0.33
	TBRB19-003	3.05	4.57	1.52	0.335
	-	7.62	15.24	7.62	0.74
		18.29	47.24	28.95	6.03
	including	18.29	22.86	4.57	12.3
	and	35.05	38.10	3.05	9.25
	and	41.15	42.67	1.52	14.3
	and	45.72	47.24	1.52	35.2
		70.10	74.68	4.58	0.28
		83.82	88.39	4.57	2.27
		94.49	96.01	1.52	0.41
	-	99.06	106.68	7.62	0.21
	-	112.78	121.92	9.14	0.7
		126.49	128.02	1.53	1.66
		137.16	138.68	1.52	0.42
		141.73	146.30	4.57	0.36

		150.88	153.92	3.04	0.55
	TBRB19-004	68.58	70.10	1.52	0.29
		86.87	92.96	6.09	0.39
		96.01	100.58	4.57	1.41
		105.16	108.20	3.04	0.43
		117.35	120.40	3.05	0.31
		123.44	126.49	3.05	0.60
		129.54	132.59	3.05	0.29
		140.21	141.73	1.52	0.25
		166.12	167.64	1.52	0.22
Connector	TBRB19-005	NSV	1	-	
	TBRB19-006	22.86	24.38	1.52	0.25
		27.43	28.96	1.53	0.34
	TBRB19-007	6.10	7.62	1.52	1.26
		99.06	100.58	1.52	0.22
Argent	TBRB19-008	48.77	50.29	1.52	0.22
		57.91	59.44	1.53	0.27
		83.82	85.34	1.52	0.56
		89.92	91.44	1.52	0.33
		94.49	99.06	4.57	0.35
Connector North	TBRB19-009	NSV	<u>'</u>	,	
Johnson Saddle	TBRB19-010	NSV			
Gray Lead	TBRB19-011	13.72	15.24	1.52	0.21
		16.76	18.29	1.53	1.62
		82.30	83.82	1.52	0.32

TBRB19-012	25.91	27.43	1.52	0.26
	30.48	32.00	1.52	0.62
TBRB19-013	45.72	51.82	6.1	2.35
including	47.24	48.77	1.53	8.01
	132.59	134.11	1.52	0.59
	146.30	147.83	1.53	0.33
	175.26	176.78	1.52	0.23
TBRB19-014	3.05	4.57	1.52	0.66
	10.67	12.19	1.52	0.63
TBRB19-015	10.67	12.19	1.52	0.22
	131.06	132.59	1.53	0.24
TBRB19-016	39.62	51.82	12.2	0.51
TBRB19-017	48.77	50.29	1.52	0.36
	68.58	70.10	1.52	0.34
TBRB19-018	NSV			
TBRB19-019	NSV			
TBRB19-020	32.00	33.53	1.53	0.33
	TBRB19-013	TBRB19-013 45.72  including 47.24  132.59  146.30  175.26  TBRB19-014 3.05  TBRB19-015 10.67  TBRB19-015 10.67  TBRB19-016 39.62  TBRB19-017 48.77  68.58  TBRB19-018 NSV  TBRB19-019 NSV	TBRB19-013 45.72 51.82  including 47.24 48.77  132.59 134.11  146.30 147.83  175.26 176.78  TBRB19-014 3.05 4.57  10.67 12.19  TBRB19-015 10.67 12.19  TBRB19-016 39.62 51.82  TBRB19-017 48.77 50.29  TBRB19-018 NSV  TBRB19-019 NSV	TBRB19-013     45.72     51.82     6.1       including     47.24     48.77     1.53       132.59     134.11     1.52       146.30     147.83     1.53       175.26     176.78     1.52       TBRB19-014     3.05     4.57     1.52       TBRB19-015     10.67     12.19     1.52       TBRB19-015     131.06     132.59     1.53       TBRB19-016     39.62     51.82     12.2       TBRB19-017     48.77     50.29     1.52       TBRB19-018     NSV       TBRB19-019     NSV

## Notes:

The above assay results in Table 2 have been reviewed and approved by Eric Buitenhuis, M.Sc., P.Geo., the Company's Vice President of Exploration who is a "qualified person" for the purposes of NI 43-101.

## Quality Assurance / Quality Control

Quality assurance and quality control procedures included the systematic insertion of blanks and standards into the drill sample string at a rate of approximately 1/10 (10%). In addition, field duplicate samples were systematically collected at a rate of 3 duplicates per 100 samples. Samples were placed in sealed bags and shipped directly to the Bureau Veritas Laboratories preparation facility in Fairbanks, Alaska. Any standards or blanks which returned values outside of two standard deviations (2SD) of certified values were reviewed, and re-assaying was conducted if necessary. See "Tibbs Property – Sample Preparation, Analysis and Security – Quality Assurance and Quality Control – Quality Control, 2019 RAB Drilling".

# Sampling Method and Approach

The March 25, 2010 report by R. Flanders for Freegold Recovery Inc. USA ("**Freegold Recovery**") titled "Executive Summary report for the Rob Gold Property, Goodpaster Mining District, Alaska" (the "**Rob Gold Property Report**"),

<sup>(1)</sup> Interpretation of the results is ongoing and there is not currently enough information to estimate true thickness of the mineralized zones.

stated the author had no available information on sample preparation, analysis and security protocol prior to 2002. Flanders describes protocol employed during 2002 through 2008, focusing mainly on analytical techniques rather than chain of custody protocol.

The author of the Tibbs Technical Report cannot comment on the validity of QA/QC practices for geochemical sampling prior to 2017. The author cannot confirm the level of sample preparation, analysis and security protocol, or QA/QC protocol, other than the aforementioned methodology described by Flanders above. The author also cannot comment on whether QA/QC controls conformed to industry best practices at the time.

### Rock Sampling

### TECTONIC ROCK SAMPLING, 2017

All personnel in 2017 were employed either by Tectonic or Avalon. Rock samples were described in the field, with the location recorded in hand-held GPS units in UTM Datum NAD 83, Zone 6W. The samples were categorized based on their provenance: float, outcrop, or trench grab samples, and were described by lithology alteration, and mineralization. Rock samples were characterized as float when not specifically sampled from outcrop, and were collected whenever metallic mineralization, quartz veining, or diagnostic alteration were observed. Trench grab samples were selected from within prospective intervals of mineralization or alteration noted within larger trench channel samples.

Rock samples were placed into cloth sample bags which were labelled, provided with a unique sample ID and assay tag, and the strings tied for shipment. Samples were placed either in rice bags with the sample numbers written on the bag, and also sealed with a cable tie, or in sealed "Super Sacks" closed with wire ties. All samples were flown from the property by helicopter to Delta Junction, Alaska, then transported by road to Fairbanks, Alaska. All samples remained in the custody of the field personnel (Avalon and/or Tectonic) and were transported by Avalon's expediter either to secure facilities at the Avalon warehouse or submitted directly to the prep lab of ALS Global Ltd. laboratory in Fairbanks, Alaska, USA. ALS Global Laboratories is an analytical laboratory with ISO 9001:2015 and ISO/IEC 17025:2017 certification. ALS Global Laboratories is independent of Tectonic, Avalon, Aurora Geosciences Ltd. and the author.

## TECTONIC ROCK SAMPLING, 2018

The sample collection methodology, transportation and security in 2018 were the same as for 2017, again, done either by Tectonic or Avalon personnel. However, samples were submitted to the Bureau Veritas prep lab in Fairbanks, rather than the ALS Global prep lab. Bureau Veritas Commodities is an analytical laboratory with ISO 14001 environmental certification and ISO 45001 certification for safety. Bureau Veritas is independent of Avalon, Aurora Geosciences Ltd. and the author.

#### TECTONIC TRENCH SAMPLING, 2018

Trenching was accomplished by CanDig excavators. Trenches were dug as deep as possible, in attempt to reach bedrock, although permafrost commonly limited depths to less than 0.5 m. Overburden was placed on the left side of the trench, and material from the bedrock-overburden interface was placed on the right side, directly beside where it was removed from.

Trenches were mapped either from west to east, or from north to south, depending on orientation. Sample intervals were 5 m where unaltered and unmineralized material was encountered, and shortened where changes in lithology, alteration or mineralization were encountered, to a minimum length of 1.0 m. "Shoulder samples", typically 2 m in length, were taken adjacent to mineralized zones. A rock sample bag was placed at the start of each interval; care was taken to ensure these were in sequence. A profile of trench samples was drawn in large "Rite in the Rain" trench mapping books.

For each sample, rock chips were extracted from the bottom of the trench, with equal representation across the entire interval. A representative sample was taken for each interval. The sample sequence was checked to ensure accuracy, and a photograph that included the sample bag and sample number was taken of each interval. "High-grading" of

mineralized portions was avoided in the main sample, although separate grab samples of mineralized or altered material were taken, utilizing a separate sample sequence.

The lithology, alteration and mineralization for each sample were recorded in the field. The detail of logging was governed by quality of excavation, with well exposed sections potentially logged at intervals of <0.5 m, and more poorly excavated sections logged at intervals of 0.5 - 1.0 m. All changes, including subtle changes in lithology or alteration were also recorded. All pages within the log notebook were scanned and recorded on field computers in camp.

Samples also typically but not always underwent XRF/Niton analysis (see "Tibbs Property – Sampling Method and Approach – Rock Sampling – XRF Data Collection, 2018 and 2019"). For each sample interval, the most prospective rock, containing the strongest and/or obvious mineralization, was removed to reduce potential for bias. A single spot of the remaining material was analyzed, and the sample was then returned to the bag and sealed for shipment. The resulting XRF data was downloaded and saved on the field computer nightly.

The chain of custody to Bureau Veritas was identical to that for rock samples.

#### 2017 AND 2018 SOIL SAMPLING

Soil samples were collected by two-person crews employed by Avalon, utilizing gasoline-powered ice augers capable of reaching depths of up to eight feet (2.4 m). Many 2017 samples were also taken by shovel where favourable soil conditions were encountered. In either case, sampling crews targeted the soil 'C' horizon to most closely approximate bedrock values. Samples collected by auger were placed on clean mats to ensure sufficient soil material was collected; sample size was approximately 600 grams. While collecting the soil samples, representative rock fragments from the 'C' horizon were also collected and reserved as a lithologic record to form a bedrock geologic map of the sampled area. Soil samples were collected in breathable cloth sample bags and dried before shipment to the laboratory.

Parameters recorded comprise UTM co-ordinates (NAD 83, Zone 6W) including elevation, sample depth, colour, moisture, lithology, texture, and condition of the site at surface were recorded. Samples were typically but not always analyzed with a Niton hand-held XRF unit prior to shipment (see "*Tibbs Property – Sampling Method and Approach – Rock Sampling – XRF Data Collection, 2018 and 2019*"). At locations where collecting a soil sample was impossible, (e.g. talus slopes) a rock grab sample was collected and recorded.

Soil samples collected in 2017 underwent the same chain of custody to the Fairbanks prep lab of ALS Global as 2017 rock samples. Soil samples taken in 2018 underwent the same chain of custody to the Fairbanks prep lab of Bureau Veritas as the 2018 rock samples.

### 2019 DUE DILIGENCE ROCK SAMPLING

In 2019, a total of 7 rock samples were collected and analyzed from the Tibbs Property. All samples have a minimum weight of 0.25 kg and were placed in 8" x 13" clear poly bags. Each sample included a sample tag with a unique sample number placed in the bag. The corresponding sample number was also written in indelible ink on the outside of the bag. The sample bag was then wrapped tightly and bound using a "Zap Strap" cable tie. The rock samples were placed within a "rice bag", with the sample numbers written on the outside of the bag, and sealed with a cable tie. All sample locations were recorded by using a Global Positioning System, utilizing UTM 1983 North American Datum (NAD-83), at the location of the sample. All samples were marked in the field, using a combination of blue and orange flagging tape, with the sample number written on the flagging tape and then wrapped numerous times around the sample to protect the identification of the sample. Notes on sample type, UTM locations, including elevation, sample type, sample description, geological formation, lithology, modifiers, colour, various types and intensity of alteration, types and amount of mineralization, date, sampler, and comments were recorded in a field book. These were then transferred to an Excel spreadsheet, where they were digitized with the analytical results.

The samples were transported by the Qualified Person and delivered directly to the Whitehorse, Yukon, Canada prep lab of Bureau Veritas.

### RAB DRILLING, 2019

The RAB drill works by channeling compressed air through 5-foot (1.52 m) single-wall drill rods to a pneumatic hammer attached to a semi-permeable bit, which acts as a jackhammer. The air forces rock chips and dust (the sample) through openings at the edge of the bit, where it then travels to surface along the sides of the rod string and is transferred from the borehole to a cyclone module by a sample hose. The sample is separated from the air in the cyclone and drops out of the bottom into a clean 5-gallon pail. Each sample comprises one 5-foot run. The sample is then tipped out of the pail into a 1:7 riffle splitter, with material to be assayed entering a 12" x 18" 8 mil clear poly sample bag, and the remaining material forming a separate tote. The sample bag is retained for analysis, while reference sample chips are sieved from a spear sample of the material in the tote and logged by the geologist directly on site into a Samsung handheld smartphone. The excess material in the tote is emptied at site for later reclamation.

Sample bags are labelled with a unique sample identification and assay tag and sealed with a cable tie for shipment to the lab. Samples were placed in rice bags with the sample numbers written on the bag and sealed with a cable tie and individually numbered yellow security tags. All samples were flown from the property by helicopter to a staging area near Delta Junction, Alaska, then transported by road directly to the Bureau Veritas prep lab in Fairbanks by Horst Expediting, Inc., or Tectonic personnel.

### XRF DATA COLLECTION, 2018 AND 2019

XRF data was selectively collected over exploration campaigns from 2018 to 2019 by various exploration service providers as part of a comprehensive service package. The XRF analysis was undertaken in an attempt to establish a future relationship between in-field XRF results and Fire Assay data to determine the XRF's effectiveness and reliability in future exploration programs.

No standardized methodology, calibration, nor Quality Control procedures were implemented during the collection of the XRF data. Varying models of XRF analyzers, specifications of analysis, and analytical procedures and methodologies have been employed by the differing exploration service providers rendering direct comparison difficult. Soil samples, if analyzed, may not have been consistently dried prior to analysis in the field, and rock and geoprobe samples, if analyzed, received only surficial point analysis. Due to the early-stage nature of the Tibbs Property, no relationship between XRF data and drill assay data has been established.

For the reasons mentioned above, the author of the Tibbs Technical Report believes any XRF data to be unreliable and not significant at this time.

Sample Preparation, Analysis and Security

Analytical Methods

#### 2017 ROCK SAMPLING

At the ALS Global Fairbanks facility, all rocks underwent coarse crushing. This was followed by fine crushing so that 70% of the sample size will pass through a 2 mm screen and then by pulverized split so that 85% would pass through a 75-micron screen. This results in 250-grams of pulverized rock, assuming sufficient available sample material. All samples underwent 30-gram fire assay analysis with an atomic absorption finish for gold, providing a detection range of 0.005 to 10 g/t Au. "Over limit" samples, exceeding 10 g/t Au, were re-analyzed by gravimetric finish. All samples also underwent four-acid digestion, then 35-element "Inductively coupled plasma atomic emission spectroscopy" analysis of a 0.5 gram split for: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Th, Ti, Tl, U, V, W and Zn. Over limits for Ag (>100 g/t Ag) underwent re-analysis by four acid over limit analysis, providing an upper limit of 1,500 g/t.

## 2018 ROCK AND TRENCH SAMPLING

At the Bureau Veritas Fairbanks prep lab, all samples underwent crushing, splitting and pulverization to achieve a 250-gram pulp capable of passing through a 200-mesh screen. All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish. "Over limit" samples,

exceeding 10 g/t Au, were re-analyzed by gravimetric finish. Following this, a 0.25-gram pulp was sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" analysis for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

#### 2017 SOIL SAMPLING

At the ALS Global Fairbanks facility, all soils underwent drying to 60 °C, then sieved to 180 micron (80 mesh) size. All samples underwent 30-gram fire assay analysis with an atomic absorption finish for gold, providing a detection range of 0.005 g/t Au to 10 g/t Au. All samples also underwent four-acid digestion, then 35-element "Inductively coupled plasma atomic emission spectroscopy" analysis of a 0.5 gram split for: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Th, Ti, Tl, U, V, W and Zn.

#### 2018 SOIL SAMPLING

At the Fairbanks Bureau Veritas prep facility, all soils underwent drying to 60 °C, then sieved to 180 micron (80 mesh) size. All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish. Following this, the 0.25-gram pulps were sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" analysis for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

#### 2019 DUE DILIGENCE ROCK SAMPLING

In May 2019, eight rock samples from the Tibbs Property were submitted as part of a shipment of 17 rock grab and composite grab samples and four Quality Control samples to the Bureau Veritas prep laboratory in Whitehorse, Yukon, Canada. At the prep lab, all samples underwent crushing, splitting and pulverization to achieve a 250-gram pulp capable of passing through a 200-mesh screen. The resulting pulps were then sent to the Bureau Veritas laboratory in Vancouver, British Columbia, where a 50-gram split of each underwent analysis by fire assay followed by ICP-ES analysis. This provides an analytical range of 0.002 to 10.0 g/t Au. "Over limit" samples, exceeding 10 g/t Au, were re-analyzed by gravimetric finish. A 0.5g split of each pulp also underwent ultra-trace ICP-MS analysis following a modified aqua regia digestion (1:1:1 HNO3:HCl:H2O) for a 37-element suite comprising Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Sr, Te, Th, Ti, Tl, U, V, W and Zn.

# RAB DRILLING, 2019

RAB samples, comprising mainly rock chips and dust, were treated as rock samples. At the Bureau Veritas Fairbanks prep lab, all samples underwent crushing, splitting and pulverization to achieve a 250-gram pulp capable of passing through a 200-mesh screen. All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish. Following this, a 0.25-gram pulp was sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" analysis for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

# Quality Assurance and Quality Control

Avalon and Tectonic incorporated several types of "standard" samples into the rock and soil sample streams, reflecting varying known gold grades per standard type. Standard samples were supplied by Ore Research and Exploration P/L ("OREAS") of Australia, and Rocklabs Reference Materials ("Rocklabs") of Auckland, New Zealand. Avalon and Tectonic also inserted blank samples of basaltic rocks taken from a local Fairbanks, Alaska quarry. Avalon has utilized the same basaltic rocks for quality control sampling for more than 20 years and can confirm samples consistently return <0.005 g/t Au. The rate of insertion was about one standard sample per 9 rock or soil samples (1 standard per 10 total samples), and about one blank sample per 50 samples, with one blank at the start of the sample sequence.

Standard samples test for the accuracy of gold geochemical analysis, whereas blank samples test for contamination, if any, within the sample stream. Individual samples falling outside of 2 standard deviations ("2SD") of the known value

do not necessarily indicate inaccurate values for the particular batch; however, numerous values outside of 2SD may indicate systematic inaccuracies in fire assay analysis.

### 2017 ROCK SAMPLING

In 2017, Avalon utilized 9 different standard samples of varying known concentrations, focusing mainly on known values <1.0 g/t Au. All values achieved were within two standard deviations of the known values. Avalon utilized basalt from a local Fairbanks rock quarry, the Browns Hill Quarry, as blanks for gold analysis. All six blank samples inserted into the sample stream returned <0.005 g/t Au. This indicates that gold analysis by fire assay was free of contamination.

#### 2017 SOIL SAMPLING

In 2017, Avalon utilized 5 different standard sample types, one from OREAS and four from Rocklabs. Several standard samples of OREAS H1 fell outside of the 2SD range. This may be explained by the very low known value of 0.012 ppm, although the 1SD value is only 0.001. There is likely to be a greater percentage deviation between known and returned values where grades only slightly above detection limits are returned. Only one other standard sample, #216210, of type OxE126 designed to test for very high gold-in-soil grades, fell outside of the 2SD range. Avalon utilized fines from basalt from a local Fairbanks rock quarry as blanks for gold analysis. All six blank samples inserted into the sample stream returned <0.005 g/t Au and <0.5 g/t Ag. This indicates that gold analysis by fire assay was free of contamination.

#### 2018 ROCK SAMPLING

In 2018, Avalon utilized 10 different standards of varying gold composition, 9 from OREAS and 1 from Rocklabs. Two standard samples of OREAS 214, with a certified Au value of 3.03 g/t Au, returned values outside of the lower and upper limits respectively, indicating potential for deviation of values for rock samples within their respective batches. One sample of Standard OREAS 220 returned a value significantly below the low limit of the 2SD range, indicating gold values in the respective batch may underestimate true values. Two other standard values returned, for samples of OREAS 218 and OREAS 252 respectively, were only marginally outside the 2SD limits, and do not indicate significant potential for inaccurate readings within their respective batches.

Blank samples of Browns Quarry basalt returned values of <0.005 Au, except for Sample #521900, which returned 0.027 g/t Au. Several nearby samples in the sample stream returned multi-gram gold values, indicating some potential for contamination in the respective batch.

## 2018 SOIL SAMPLING

A total of 5 separate standards with varying gold content, two from OREAS and 3 from Rocklabs, were inserted into the 2018 soil geochemical sample stream. Only one, of OREAS H1, returned a value outside the 2SD range. The deviation may be due to analytical results of very low gold grades, where variance is more likely to be encountered. All four blank standards of basalt fines returned <0.005 g/t Au.

#### 2018 TRENCH SAMPLING

A total of 11 separate standards with varying gold content, all from OREAS, were inserted into the 2018 trench geochemical sample stream. One sample of OREAS 214 returned a value below the low 2SD limit, and two of OREAS 218 returned values below the low 2SD limit. Notably, 3 samples of OREAS 220 returned values below the low STD limit, indicating a potential systematic deviation. Of 7 standard values falling outside of the 2SD range, 6 are below the low 2SD limit. One blank sample returned a value of 0.006 g/t Au; the remainder all returned <0.005 g/t Au, indicating a lack of contamination within the sample stream.

#### 2019 DUE DILIGENCE SAMPLING

A total of 2 standard and 2 blank samples were inserted into the 2019 due diligence sampling stream. One standard of each of low grade and fairly high-grade gold content were inserted to test accuracy of low and high-grade values returned from the sample stream. The two blank samples were 50-gram packets of material with a certified value of

<0.010 g/t Au. All samples were supplied by CDN Resource Laboratories, of Vancouver, British Columbia. Both standard samples returned values within 2SD, indicating a satisfactory level of accuracy took place in 2019. Both blanks returned values of 0.009 g/t Au, indicating a lack of contamination in the analytical procedure.

The Tibbs Property visit was done in conjunction with two other properties, involving collection of a total of 17 samples. These samples and the four QC samples were submitted as a single shipment.

#### QUALITY CONTROL, 2019 RAB DRILLING

During the 2019 RAB drilling program, QC reference material, comprising "Standard" and "Blank" samples were inserted at a rate of about 1 QC sample per 10 RAB drill samples. In addition, field duplicate samples were collected at a rate of 1 duplicate sample per 33 RAB drill samples at regular intervals. RAB field duplicates were collected by running the excess sample material in the retention tote from the original sample through the riffle splitter, thereby splitting a second sample at the drill site. The field duplicate is then prepared for shipment as part of the main sample stream.

Five types of reference materials (standard samples) were employed by Tectonic in 2019, all provided by OREAS. Standards were chosen to provide a range of gold values, from 0.531 to 6.66 g/t Au. A total of 24 standard samples of OREAS 209, 26 standard samples of OREAS 218, 16 standard samples of OREAS 220, 6 standard samples of OREAS 216, 10 standard samples of OREAS 214, and 82 blank samples of basalt from Brown's Quarry were inserted into the sample stream.

## Statement of Opinion

### QUALITY ASSURANCE

The rock sampling methodology is adequate for the conditions encountered, comprising grab sampling of float boulders. Grab sampling tends to return the least representative results, and commonly shows a bias towards "high grading" of the mineralized portions. However, grab sampling is likely the only option for most sample locations at the Tibbs Property, due to lack of outcrop. Composite grab sampling, involving collection of several pieces of similar material, may be possible in some locations where rubble crop or felsenmeer is encountered, and typically provide more representative gold values. Where feasible, composite grab sampling should be done. Chip sampling, involving an even amount of sampling across a known width, is recommended where mineralization occurs in situ.

The trench sampling methodology, comprising representative sampling across known widths, is also suitable for the conditions encountered. Trenching did not typically reach bedrock, requiring evenly distributed "chip-grab" sampling to be done instead. The collection of specific samples of mineralized material to test for higher grade gold values also assists understanding of the mineralogy, provided they are not confused with trench values over width. The results are likely to be as representative of true values as possible.

The routine and repetitive methodology of soil sampling in 2017 and 2018 should eliminate any chance of bias within each of the sampling methods. However, due to greater depth penetration, auger sampling tended to return higher gold values because the material sampled was taken at greater depths and is thus more representative of true values. Shovel sampling at shallow depths has a greater potential to return "false negative" values. Variability in results of soil sampling may be caused by depth of overburden, slope angle, vegetative cover, if any, and outcrop exposure, with lower values expected in flat areas with thick overburden. Soil anomalies may be transported, depending on slope and groundwater conditions; detailed records of slope, vegetation, soil conditions are used to determine probability of transportation.

The author of the Tibbs Technical Report believes that the analytical and security procedures are adequate for programs to 2018 and the May 2019 property visit for the Tibbs Property.

### QUALITY CONTROL (QC)

A high standard of quality control was utilized by Avalon and Tectonic during the 2017 and 2018 programs. The insertion of 22 different types of standards, with varying known concentrations, was done to determine levels of

accuracy from near-background values (OREAS 200, 0.012 ppm Au) to moderate ore grade values (OREAS 256, 7.660 ppm Au). Avalon and Tectonic also utilized low Au-value standards in soil geochemical streams, and higher Au-value standards for rock and trench sample streams, in anticipation of expected values.

All gold values from standard sample analysis in the 2017 rock geochemical sample stream fell within 2SD, indicating no significant deviation in achieved values from known values. Within the 2017 soil geochemical stream, several samples of Standard OREAS H1 returned values outside of the 2SD range. This may result from the very low certified value of 0.012 ppm Au, reflecting a greater per centage variation from true in achieved values. This may affect delineation of very low-grade gold-in-soil anomalies; however, the percentage variance would be progressively less pronounced at higher achieved values.

The 2018 rock sample geochemical stream returned two values from Standard OREAS 214 (3.03 ppm Au) outside of the 2SD range, although no significant deviation occurs elsewhere in the sample stream. This indicates some potential for deviation of achieved values from true values in their respective sample batches. It is unlikely that original analysis of the standard material is sufficiently imprecise to cause this variation.

All gold values from standard samples inserted into the 2018 soil sample stream returned gold values within 2SD of certified values, except for one sample of OREAS H1. This indicates a high degree of reliability of results.

The 2018 trench sample stream revealed that three of six standard samples of OREAS 220 (0.866 ppm Au) returned values below the low 2SD limit, and that six standard values in total fell below their respective 2SD limits. This result indicates the possibility that achieved gold values may underestimate true values throughout the stream, particularly in grades approximating 0.866 ppm. It is recommended to determine whether these were inserted into to a common batch or sample shipment.

With one exception, blank sample analysis indicates the sampling process is essentially free of contamination. No duplicate samples were submitted during the 2017 and 2018 programs. Duplicate sampling, designed to test for distribution of metal values within a sample rather than for analytical accuracy, is not necessarily standard practice for non-drilling sample streams. Typical ratios of insertion of standard samples is typically about 1:20. Although the 1:10 ratio employed here is certainly beneficial, it is not necessary for confirming accuracy of elemental analysis. A minimum insertion rate is one standard sample per sample batch. However, the ratio of 1:50 for blank sample insertion may be inadequate to ensure at least one sample per batch. The insertion rate should be increased to a minimum of one per batch to guarantee this.

The author of the Tibbs Technical Report believes that the quality control (QC) procedures are adequate for programs to 2018 and the May 2019 property visit for the Tibbs Property.

## Data Verification

The Rob Gold Property Report stated that the author of the report had no available information on data verification techniques or QA/QC data for work before 2002. During 2002, the author describes the protocol for insertion of reference material "standard" and "blank" samples as a "one for 25 basis", and at a "one per 10 basis" for "standards" in 2006, 2007 and 2008. Blank samples, of material from the Browns Hill quarry, were inserted at a two per one-hundred basis. Eight different commercially available standards, from Analytical Solutions were utilized. All QC samples returned acceptable values upon analysis by ALS Chemex.

The author of the Tibbs Technical Report has not verified historical data or results. The protocol employed by Freegold Recovery for QC purposes conforms to industry best practices, although a greater frequency of blank sample insertion is recommended. The author cannot confirm that other data was obtained and compiled in compliance with quality assurance and control "best practices" during respective exploration programs, and cannot comment on their validity. No other pre-Tectonic QA/QC data was available to the author.

The 2019 due diligence property visit included re-sampling of previously sampled rock and trench samples, in some cases with known values. This was designed as a data verification exercise on the Tibbs Property. A total of 8 samples was taken; 2 from the Michigan prospect, 4 from the Gold Lead prospect, and 2 from the Connector prospect.

At the Michigan prospect, Sample #1465510 was taken from Trench MI18-01 and returned a value of 1.270 g/t Au. This compares to a 2018 grab sample (#564824) of 0.968 g/t Au, and the corresponding 2.0- metre chip sample (#3181352) of 5.429 g/t Au. Although the 2019 value is well below the 2018 chip sample value, it does confirm the presence of significant gold content. Also, at Michigan, Sample #1465511 was collected from a blast pit where 2018 sampling returned 172.3 g/t Au and earlier workers returned values to 988.459 g/t Au. Sample #1465511 re-turned a value of 226.9 g/t Au. This confirms the presence of high-grade gold and validates the results reported by past workers.

At the Gray Lead prospect, one sample (#1465512) taken from the old headings pile returned a value of 0.624 g/t Au. Although this is lower than expected, it is sufficient to confirm the presence of gold in the pile. Three samples were collected from the sections of the 2018 trench from which high-grade values were returned. Sample #1465513, taken from Trench GL18-01A at the site of 2018 sample #3186009 returning 87.9 g/t Au, provided a value of 255.8 g/t Au. Year-2019 sample #1465514, taken near the same trench as 2018 sample #3186012 (3.782 g/t Au), assayed 317.2 g/t Au. Sample #1465515 from the offset portion of trench GL18-01A, returned 51.3 g/t Au. The 2019 sampling confirmed the presence of high-grade gold, validated work by Tectonic, and typically significantly exceeded 2018 values. This is likely due to the more specific grab and composite grab nature of the 2019 verification sampling, as opposed to representative trench sampling in 2018.

At the Connector prospect, sample #1465516, a re-sample of 2018 sample #3186199 (1.318 g/t Au) returned a very similar value of 1.192 g/t Au, confirming the tenor of gold at the trench. Sample #1465517, a 2019 grab sample of quartz vein float between the two main trenches, returned 0.121 g/t Au. This is only weakly anomalous, although it does confirm the presence of gold at the Connector. Values returned from the Connector prospect are more than an order of magnitude lower than those from the Gray Lead prospect.

Although visible gold is uncommon, a coarse-gold effect, compounded by non-uniform sulphide distribution, is present. A high degree of variance may be expected between due diligence and previous sampling.

The author of the Tibbs Technical Report has reviewed the 2017 rock and soil geochemical data, combined with results, and has found them to be adequately tabulated. The author has also compared numerous rock and soil sample element values in the compiled data with those from the original assay certificates provided by ALS Global, and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one sample from each individual original certificate was involved in the comparison. The author also feels the 2017 geochemical databases supplied, combined with sample location data and all other information supplied by Tectonic to be accurate and complete. It is the author's opinion that the 2017 data provided by Tectonic is adequate for the purposes of the Tibbs Technical Report.

The author of the Tibbs Technical Report has reviewed the 2018 rock, soil, and trench geochemical data, combined with results, and has found them to be adequately tabulated. The author has compared numerous rock, soil, and trench element values in the compiled 2018 data with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is the author's opinion that the 2018 data provided by Tectonic is adequate for the purposes of Tibbs Technical Report.

No geochemical data had been provided for the 2019 RAB program as results were pending as of the effective date of the Tibbs Technical Report. Therefore, no data verification has been done for this program.

# Mineral Processing and Metallurgical Testing

In 2003, a total of 18 rock grab samples, taken from several Tibbs Property prospects in 2002, were resubmitted to ALS Chemex. These samples were analyzed by metallic sieve and hot-cyanide leach to determine the degree of coarse gold "nugget effect", and the amenability of mineralization to cyanide extraction. The small sample size was insufficient to make definitive conclusions. However, results show that some samples, such as #493729, have a significant nugget effect, and that some others, such as #493731, 462345 and 465262, are not amenable to simple cyanide extraction at the particular crush size.

Samples from the Gray Lead and Michigan prospects show a very high degree in variance in Fire Assay ("FA") versus Hot Cyanide ("Hot CN") recoveries, and in FA versus Metallic Sieve ("MetSieve") recoveries. Samples from the Lower Trench showed poor FA vs. Hot CN leach recoveries and poor but variable FA versus MetSieve recoveries. The sample size (n) is too small in all cases for definitive conclusions. In 2007, Freegold submitted 37 core samples to Alaska Assay labs for metallic screen analysis to determine the presence and degree of the coarse gold nugget effect. All samples were from 2007 Gray Lead drill core which returned gold values exceeding 1.0 g/t from standard gravimetric analysis.

## Mineral Resource and Mineral Reserve Estimates

No mineral resource or mineral reserve estimates have been done on any of the prospects within the Tibbs Property.

## **Conclusions**

The following conclusions may be made from results of exploration at the Tibbs Property to date:

- Observations and results from the 2019 due diligence visit confirm those from 2017 2018 exploration by Tectonic/Avalon and earlier workers.
- The main prospects discovered to date represent intrusion-related mineralization occurring proximal to the west boundary of the Black Mountain Intrusion. All are comprised of auriferous quartz veins, stringers or stockwork zones.
- The Gray Lead prospect is currently the most prospective target on the Tibbs Property, due to widths up to 4 m, and high gold grades, both from surface sampling and past diamond drilling. The Michigan prospect is also highly prospective, due to widespread mineralization and high gold grades.
- The majority of prospects occur along or proximal to several NE-SW trending "linears" marked by a combination topographic low features, magnetic high features from aeromagnetic surveying, and conductive features from apparent resistivity images.
- The Johnson Saddle prospect occurs at the intersection of a NE-SW trending linear and a north-south trending linear, shown in Residual Magnetic Field and Apparent Resistivity imagery. This setting, combined with a strong gold-in-soil geochemical anomaly, renders Johnson Saddle as another prospective target.
- A zonation from deep-seated high pressure-temperature mineralized settings at the Gray Lead to near-surface lower pressure-temperature mineralization at the Michigan and Blue Lead prospects has been identified. The northeast-trending structural zones were the conduits for fluid movement.
- A short trench at the Johnson Saddle prospect returned anomalous gold grades from an area of altered ankeritic biotite gneiss with an Au-Bi-W signature, but lacking quartz veining. This is the only unveined occurrence at the property, and may represent a separate setting for future exploration.
- Quartz vein-style mineralization and associated geochemical signature at Tibbs is similar to that within other
  prospects in the Goodpaster mining camp, including the Pogo deposit. This indicates the intrusive sources
  elsewhere are coeval with the mid-Cretaceous Black Mountain Intrusion, and comprise part of the Tintina
  Gold Belt.
- Mineral emplacement is controlled partly by the NE-SW trending conjugate fault zones occurring throughout
  the Goodpaster area, marked by the district-scale Black Mountain tectonic zone and the Shaw Creek fault.
  These fault zones represent conjugate structural features between the transpressional Tintina fault zone to the
  northeast and the Denali/ Shakwak fault to the southwest.

- Mineralization at the Pogo deposit is hosted by quartz veining that is associated with low-angle faults, a structural setting that occurs throughout the Goodpaster area. High angle faults have also been identified to host auriferous mineralization. Further study is required to determine whether fault angle is a significant controlling factor for mineral emplacement.
- An arcuate magnetic high feature was identified from airborne magnetic surveying. This feature remains
  unexplained but may represent a deep-seated intrusion, the contacts of which may represent areas of
  rheological contrast.

## Recommendations

Recommendations for follow-up exploration comprise a 2,000 m diamond drilling program primarily targeting the Wolverine prospect, with the Gray Lead and Johnson Saddle zones also targeted. A total of 8 to 10 holes is recommended, with depths ranging from 150 to 250 m. A site-based B3 A-Star helicopter will support a heli-portable drill, and personnel set-outs. The proposed 40-day program is recommended to be conducted between June 15 and August 31, 2020, to maximize efficiency during the frost-free season.

All-in costs for the diamond drilling program are estimated at about CDN\$1,045,385.00.

# Recommended Budget

Expense Type	No. of units	Type of unit	Cost/u	ınit (CDN\$)	Cos	t
Drilling	2,000	metres	\$	202	\$	404,000
Assaying	1,450	samples	\$	47	\$	68,150
Mobe/Demobe of camp (Astar)	50.4	hours	\$	2,950	\$	148,680
Chopper support on site (wet):	52.7	hrs	\$	2,950	\$	155,465
Additional fuel mobe costs	21	hrs	\$	2,950	\$	61,950
Personnel	40	days	\$	3,250	\$	130,000
Groceries/day	48	days	\$	320	\$	15,360
Report writing	1		\$	12,000	\$	12,000
			Sub-to	otal	\$	995,605
			5% Co	ontingency	\$	49,780
			Total:		\$	1,045,385

## Seventymile Property

The scientific and technical information in this section relating to the Seventymile Property is derived from, and in some instances is a direct extract from, and based on the assumptions, qualifications and procedures set out in, the Seventymile Technical Report. Such assumptions, qualifications and procedures are not fully described in this AIF and the following summary does not purport to be a complete summary of the Seventymile Technical Report. Reference should be made to the full text of the Seventymile Technical Report, which is available for review under the Company's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

## Property Description and Location

## Location and Means of Access

The Seventymile Property is centered at 64°56'32" N Latitude, 142° 08'13" W Longitude, extending from 27 to 70 km northwest of the village of Eagle, Alaska. It is wholly contained within land owned by Doyon. The area is within

the Eagle Mining District. The property is approximately 270 air km east of Fairbanks and approximately 59 km west of Eagle, Alaska (Figure 4).

Access to the property is by helicopter from Eagle, Alaska. There is an abandoned fixed-wing airstrip located above Alder Creek, which has recently been somewhat refurbished. The strip is now in fair condition, although further brushing and inspection would be required prior to use. A historic, 97 km long, winter caterpillar trail, the Eagle-Alder Creek Trail, extends onto the property from Eagle. This is a Revised Statute 2477 classified trail with a 100-foot-wide right of way. The status of this route is considered valid; therefore, it provides a potential route of surface access to the property.

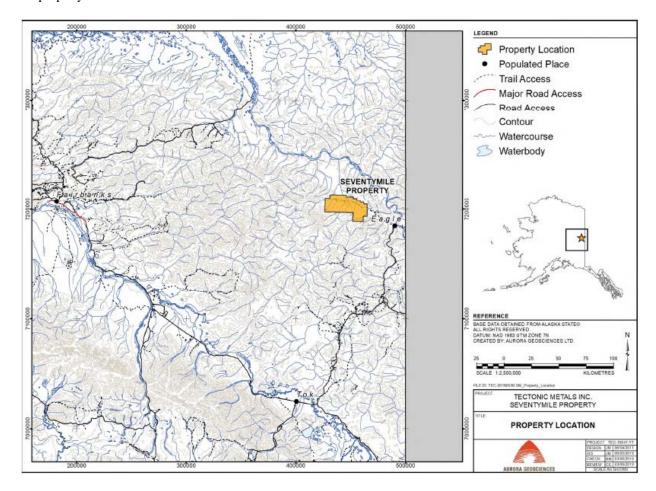


Figure 4: Location Map, Seventymile Property

## Title, Royalties and Encumbrances

Please see "General Development and Business of the Company – Three-year History – Significant Acquisitions and Material Contracts – Seventymile Property" for a description of the Seventymile Agreement and the royalties payable thereunder.

# **Environmental Liabilities**

At Flume Creek, physical remnants of the exploration and development programs undertaken between the 1900s and the 1950s include ruins of an old adit and several fuel drums in unknown condition. Placer workings along Alder Creek, commencing at its confluence with the Seventymile River, extend upstream to within property boundaries, although no significant environmental liabilities are known within these. Several cabins in various states of disrepair

are located within fairly recent placer workings on Alder Creek. No barrels or other fuel containment facilities are visible from the air. There are no other potential environmental liabilities known to the author of the Seventymile Technical Report.

As per the Seventymile Agreement, Tectonic will establish, prior to preparation for mining operations, an environmental remediation and reclamation fund for the leased properties. This fund must be maintained at 120% of the estimated costs for remediation and reclamation. This fund can be used only for remediation and reclamation. At least once every three years Tectonic must hire an environmental engineering firm to perform an on-site audit to determine environmental impacts of mining and/or exploration. If any are determined to exist, the reclamation fund must be adjusted accordingly.

#### **Permits**

The Seventymile Property is wholly located within Doyon owned lands; therefore, approvals for various activities need to be obtained from Doyon, which has jurisdiction over activities. Prior to the harvest and storage of timber, Tectonic must obtain approval from Doyon. Additionally, prior to conducting ground disturbance activities Tectonic must conduct an archaeological study on the area of proposed disturbance. In addition to approval from Doyon for certain activities, the permits outlined in the below table may be required depending on the stage of the project.

## Permits required for exploration and mining operations on Doyon lands

Agency	Agency Responsibility		Applicable During Production
Alaska Department of Fish	Fish Habitat Permit or Special	yes	yes
& Game	Area Permit		
Alaska Department of	Tax Division Mining Licenses	no	yes
Revenue			
Department of	Wastewater Discharge,	yes	yes
Environmental	Compliance & Technical		
Conservation	Assistance		
Department of	Alaska Pollution Discharge	no	yes (maybe)
Environmental	Elimination System permit		
Conservation			
DNR, Division of Mining,	Miscellaneous Land Use Permit	no	no
Land & Water Mining	(On claim activity only, including		
Section	surface use)		
DNR, Division of Mining,	Miscellaneous Land Use Permit	no, unless workplan	no, unless workplan
Land & Water Mining	(Access across state land)	includes access	includes access
Section		across state land	across state land
DNR, Division of Mining,	Temporary Water Use	yes	yes
Land & Water Mining	Authorizations, Permit to		
Section	Appropriate Water, or a		
	Certificate of Appropriation		
DNR, Division of Mining,	APMA (Applications for Permits	yes	no, superseded by
Land & Water Mining	to Mine in Alaska)		mine permits
Section			
DNR, Division of Parks	Special Park Use Permit or	no	no
	SHPO requirements Timber		
	Purchase may be required		
DNR, Division of Forestry	Timber Purchase may be required	no	yes, if mine access
			road is required
Bureau of Land	Approved Plan of Operation or	no	no
Management	Notice Operation		

U.S. Fish and Wildlife	Fish Habitat Permit or Special	no	no
Service	Area Permit		
U.S. Forest Service	Approved Plan of Operation	no	no
U.S. Park Service	Approved Plan of Operation	no	no
U.S. Army Corps of	Dredge and Fill Permit in Waters	yes	yes
<b>Engineers (USACE)</b>	of the U.S.		-
U.S. Army Corps of	Cultural Resource Assessment	yes	yes
Engineers (USACE)		-	

Tectonic has received all permits required to undertake all exploration activities up to and including core drilling. Although the Seventymile Property is on Doyon land, the State of Alaska's Department of Natural Resources retains management authority over the mining-related reclamation of all lands of Alaska, including Native Corporation lands, pursuant to Alaska Statute 27.19. To satisfy the requirements in Alaska Statute 27.19, an operator must file an appropriate Reclamation Plan for approval at least 45 days prior to commencement of the activity.

On June 17, 2019, Tectonic received an Approved Reclamation Plan for activities specified in "Application for Permits to Mine in Alaska #3262" for the Seventymile Property. This approval is valid until December 31, 2023. The approved works include only those within the application and changes to the scope of work are required to be submitted to the State of Alaska, Division of Mining, Land & Water in advance of additions or changes to work plans. A thorough review of any changes to proposed activities, both spatially and operationally, will be required annually to ensure the permit status is appropriate. The activities and thresholds within the application, and current approvals granted and requested for the Seventymile Property, include the following exploration activities in six distinct areas identified within the application:

- Fuel storage and transport of less than 1,100 gallons;
- Trenching: 5 trenches, each 500 ft x3 ft x 5ft;
- Water intake for drill lubricant: 15 gallons/minute (gpm), 30 days/month; and
- Rotary air-blast drilling using 5-foot wide track-mounted vehicles and/or diamond core drilling using skid-mounted drill rigs: 50 drill holes, maximum depth of 1,500 feet, maximum core diameter of 3.5 inches.

On June 4, 2019, Tectonic received a Fish Habitat Permit from the Alaska Department of Fish and Game, to withdraw waters from streams that support resident species of fish. The permit expires on December 31, 2023 and is specific to those waters indicated for withdrawal in the application. Tectonic has also received a Temporary Water Use Authorization ("TWUA") for the Seventymile Property. This approval is valid until December 31, 2023. The permit allows for water use activities up to 24 hours per day from May 1 through October 31 of each authorized year. The TWUA allows for a combined maximum withdrawal of 21,600 gpd.

Prior to the third year of the Seventymile Agreement, Tectonic must obtain a performance bond or similar security of an amount necessary to ensure the completion of necessary remediation activities on the site.

# Reporting and Notification Requirements

Subject to the terms of the Seventymile Agreement, Tectonic must meet with Doyon to provide an update on the progress of planned activities including reclamation and environmental protection. Tectonic must also provide an annual report of exploration activities and results.

## Surface Rights

Doyon is the sole owner of surface and subsurface rights for the Seventymile Property. Under the terms of the Seventymile Agreement, Tectonic has full, non-exclusive rights to use the surface of the land to conduct exploration and mining activities subject to the following conditions:

- Tectonic has the right to use and reconstruct all existing roads on the property and has the right to construct new roads. Tectonic is responsible for the maintenance of all roads they use within the property.
- Tectonic has the right to use Doyon's water rights in the leased property for mining activities, provided Doyon has no other firm plans for their use.
- Tectonic has the right to use timber, sand, gravel, rocks and other materials from the property to construct
  infrastructure, subject to first notifying Doyon and receiving approval of a reforestation or remediation plan
  as required.

# Climate, Local Resources, Infrastructure and Physiography

The Seventymile Property is located in the Yukon-Tanana uplands, a plateau bounded by the Yukon River to the north and the Tanana River to the south. The topography consists of rounded ridges and hills with local steep terrain and deeply incised stream valleys. Elevations range from about 1,800 m at the highest peaks to a low of about 365 m along valley bottoms. Local alpine glaciation has affected the higher peaks, resulting in cirques and moraines in these areas. Rock exposure at higher elevations is fairly abundant with outcrop and felsenmeer along ridgelines and talus on slopes. Vegetation on south facing slopes is dominated by white spruce, birch and aspen. North facing slopes are covered mainly by black spruce. The valley bottoms are principally black spruce forests and tussock and scrub bogs. White spruce, balsam poplar, alder and willow dominate the floodplains of headwater streams. Vegetation above treeline is predominately low birch and evergreen shrubs with lichen.

Historic workings exist in the area of the Flume prospect from exploration in the 1930s and 1950s. The status of any remaining infrastructure from these is unknown but unlikely to be serviceable.

The Seventymile Property, including the prospective Flume trend area, is sufficiently large to host all necessary mining infrastructure, including processing plants, heap leach facilities, tailings storage, waste disposal areas, on-site housing, meal preparation and maintenance facilities, and all other facilities necessary for mine operation.

Eagle, Alaska (population 86, 2010 census) is the closest population centre. It is connected to the North American highway system by a branch of the Taylor Highway. The Taylor Highway is open seasonally from April until mid-October. The first 97 km north from Tetlin Junction are paved, and the remaining 163 km are loose surface. During winter, the road can be travelled by snow machine. Services available in Eagle include lodging, groceries, fuel and expediting services. Eagle is also served by the Eagle Airport which has a 3,600' gravel strip, and scheduled air service to Fairbanks on weekdays.

Electrical services for Eagle, Alaska, are provided by a local diesel-powered generator, with insufficient capacity to serve future mining facilities at the Seventymile Property. Currently, there is no existing electric power infrastructure for the property to access.

The nearest larger community is Tok, Alaska (population 1,258, 2010 census), approximately 270 km by road to the south. Tok has full grocery, fuel, lodging and transport services. Fairbanks, Alaska, is a further 325 km northwest by road from Tok and represents the nearest major city. Fairbanks has a population of approximately 32,751 and is the centre of the North Star Borough, with a population of 97,121. The city is a full-service community, with scheduled air service, grocery, fuel, lodging, transport, heavy equipment, assaying and other services available.

An experienced mining and exploration workforce are based in Fairbanks. The Alaskan mining industry employs a significant number of people from remote communities.

The Seventymile Property lies predominantly within the Yukon-Tanana uplands ecoregion. The climate is continental with warm summers and very cold winters. The region is covered by discontinuous permafrost, particularly prominent on north-facing slopes and in valley bottoms. Climate data for Eagle, Alaska indicates that the area receives approximately 306 mm of precipitation per year.

# **Exploration History**

Gold was originally discovered in the Seventymile district following the Klondike gold rush in the late 1890s. Various placer mines operated in the area sporadically until the 1960s. Exploration for lode gold deposits occurred in the Flume Creek area from the early 1900s to the 1950s.

### Lode Exploration

#### 1890S TO 1986

Exploration for lode deposits occurred sporadically in the Flume Creek area between 1900 and the 1950s. The Flume Creek showing was discovered in the early 1900s by the Hudson Brothers who excavated a short adit. The claims lapsed and Fred Jenkins of Eagle, Alaska restaked the area in the late 1940s. The claims were transferred to the Alaska Nickel Company, of which Jenkins was a major shareholder. Jenkins conducted exploration and development work on the site in the early 1950s using a crawler-type loader and a small mill. His intent was to mine a talus pile which contained fragments of Au-bearing quartz veins.

The Seventymile Property area was chosen for its high mineral potential by Doyon during the land selection process. Prior to land conveyance, WGM conducted regional exploration as part of a joint venture with Doyon until 1986.

### AMERICAN COPPER AND NICKEL COMPANY 1987-1989

The American Copper and Nickel Company ("ACNC"), a subsidiary of Inco Ltd., optioned four townships on the eastern end of the Seventymile terrane from Doyon from 1987 to 1989. During this time, ACNC identified and explored the Ptarmigan Hill, Mogul Bluff, Ruby-Broken Neck Creek and Barney Creek areas. ACNC determined these four areas host epithermal mineralization.

In 1987, ACNC conducted primarily reconnaissance mapping and sampling on their optioned area. They discovered the Mogul Bluff and Ptarmigan Hill mineralized zones. Mapping and sampling at Ptarmigan Hill defined an extensive zone of Au-Ag mineralization with characteristic epithermal alteration and silicification, within Tertiary conglomerates. The Ptarmagin Hill prospect was discovered by prospecting in the Canyon Creek drainage, following up on discovery of a placer cinnabar occurrence in the creek. Two rock samples obtained approximately 400 m from the top of the hill and 1,200 m upstream from the Canyon Creek-Seventymile River confluence returned 670 ppb Au and 1,860 ppb Au, respectively, in addition to elevated Ag, As, Sb, and Hg values. A grid was established based on the location of these samples, and mapping and rock sampling were conducted on 200-foot centres. A total of 293 rock samples were collected. Most of these samples were felsenmeer obtained by digging through the soil. Of these, 17 returned between 1,000 ppb Au and 16,700 ppb (16.7 g/t) Au. Follow-up soil sampling was conducted on the eastern part of the grid, results of which supported those from rock sampling. A total of 169 soil samples were collected, returning results from background Au to 3,500 ppb Au.

Mineralization at Mogul Bluff was discovered in outcrop on the edge of Mogul Creek where rock samples containing up to 480 ppb Au and elevated Hg, As, and Sb. Detailed soil sampling was recommended as follow-up due to the extensive cover in the area. Additionally, a stream sediment sample in Hudson Gulch that assayed 320 ppb Au was collected.

In 1988, ACNC returned to the property to follow up on the results of the previous seasons. Work on Ptarmigan Hill included drilling and several geophysical orientation surveys. At Mogul Bluff, a detailed soil survey was followed up with drilling. A follow-up soil survey in the Ruby-Broken Neck Creek area failed to produce anomalous results.

The 1988 diamond drilling program at Ptarmigan Hill commenced in May and continued through September. A total of 25 holes for 2,754 m was drilled during this time. Extensive barren silicification was encountered in the upper 90 m, typical of an epithermal system. However, this barren silicification was cross-cut by several Au-bearing shear zones. Interpretation of the drill results indicates that the primary controlling structures at Ptarmigan Hill are oriented roughly north-south, as opposed to east-west as had been originally presumed (an east-west orientation would roughly parallel the Seventymile fault). These northerly oriented structures are projected to intersect a contact between Tertiary

and Paleozoic rocks in an area with significant silicification. This suggests that the contact may be an inter-graben fault structure that may have provided a conduit for fluids.

The 1988 geophysical program on Ptarmigan Hill included orientation surveys of Horizontal Loop Electromagnetics ("HLEM"), ground magnetometer, and induced polarization ("IP") surveys. The HLEM survey was conducted with 100 and 200-foot coil separations but failed to delineate any anomalies. Ground magnetic surveying was successful at mapping changes in lithology but was not useful in identifying mineralization-controlling structures. Thirteen IP lines were completed across the northern part of the Ptarmigan Hill grid. Resistivity contrasts provide some level of differentiation between silicified conglomerate, argillaceous conglomerate, and unaltered conglomerate. Variations in chargeability were related to the degree of argillic alteration.

At the Mogul Bluff prospect, the 1988 program commenced with a detailed soil and prospecting survey during which 659 soil samples and 21 rock samples were collected. This survey outlined a 240 m by 240 m Au-As-Hg-Sb anomaly. The soil survey was followed up by a drilling program in August and September during which five holes for 349.6 m were drilled. One hole intersected argillic altered conglomerate which included a 2.99 m section that graded 662 ppb Au.

#### CENTRAL ALASKA GOLD COMPANY 1989-1990

The Central Alaska Gold Company ("CAGC) optioned 320 square miles in the western part of the Seventymile Property from Doyon in 1989. That year they conducted reconnaissance stream sediment sampling and regional geological mapping. During the 1990 field season they conducted an intensive exploration program focused on the Flume Creek area. This consisted of regional stream sediment sampling, geological mapping, rock sampling, grid-based soil sampling, trenching and diamond drilling. These exploration activities were split into two phases: a reconnaissance program aimed at extending zones of known mineralization; and a target-development program aimed at evaluating known prospects and new prospects generated during the reconnaissance phase.

The reconnaissance program comprised geological mapping, prospecting and soil sampling. Reconnaissance exploration was successful in discovering the Flanders prospect east of Alder Creek, the Deep Creek trend, and outlined additional anomalies in the Alder Creek area. The Flanders prospect was discovered by prospecting while following up on anomalous stream sediments. The prospect was identified when twelve large quartz vein boulders were discovered. Following this discovery, a detailed geological mapping, grid soil sampling, trenching, and drilling program was conducted. The reconnaissance program also discovered a series of silicified "rhyolite" intrusions in the area of Deep Creek associated with anomalous gold from stream sediment. Rock sampling showed anomalous Au, Ag, and Hg values are associated with structurally controlled silicification. Three soil grids were established in the surrounding area where extensive vegetation kill zones are associated with faults and acidic springs. Soil geochemical sampling across these returned anomalous Au, Ag and Hg values, particularly in the Deep Creek and "Kill Zone 2" areas. CAGC also conducted reconnaissance work in the northern placer creeks. However, no Au "pathfinder" element mineralization was found, suggesting that the Au source for these placer creeks may be separate from the Flanders prospect.

The target development program focused on detailed mapping, sampling, trenching, and diamond drilling of the Flume Creek, Alder Creek, Bonanza Creek, and Flanders prospects. The drilling program comprised 29 holes for 2,879.4 m. Seven holes were drilled at the Flume prospect where values ranged from background to 29.3 g/t Au over 1.07 m. The mineralization encountered is hosted in an extensive stockwork zone within pillow basalt. CAGC used the results from this drilling to outline a drill-inferred resource of 1,000,000 tons of 0.025 opt (0.857 g/t) Au. The resource is based on only 7 diamond drill holes, from which results indicate a structure with a minimum strike length of 700 feet (213 m) and width of at least 100 feet (30.5 m). The zone is comprised of numerous veins within host rock assumed to carry no gold; the veins comprise a small percentage of the zone thickness. The author of the report in which this estimate is presented stated that the "size and grade is clearly not attractive".

The resource category is not specified, but the resource was clearly developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM"). The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained and should not be relied upon. No subsequent resource estimates are known to the author of the

Seventymile Technical Report. The author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to re-calculate the resource estimate.

An additional seven holes were drilled at the Bonanza prospect. Results included values of 10.9 g/t Au over 2.28 m, 1.89 g/t Au over 9.7 m, and 2.43 g/t Au over 3.66 m. One hole intersected 51.2 m of 1.30 g/t Au. Based on these drilling results CAGC calculated a drill-inferred resource of 24,400 tons at 0.210 opt (7.20 g/t) Au.

The resource category is not specified, but was clearly was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by CIM. The resource is based on results from a single drill hole (#FC90-1) and results from surface trench sampling along the surface projection of a zone "200 feet (61 m) long by 7.8 feet (2.4 m) wide", extended to a down-dip of 100 feet (30.5 m). The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, is likely to be low, and should not be relied upon. No subsequent resource estimates are known to the author of the Seventymile Technical Report. The author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to recalculate the resource estimate.

Four drill holes in a single fence were drilled on the Alder prospect. Results included values up to 6.07 g/t Au over 0.3 m. The highest-grade intersections were associated with intense silica and carbonate alteration and breccia zones. From this drilling and trenching program, a "drill inferred resource" of 71,680 tons at 0.60 opt (20.57 g/t) Au was calculated, based on the results of two diamond drill holes (#FC90-21 and FC90-22) and a single trench. The author of the report in which this estimate was presented stated three resource estimates: a "drill indicated resource" of 2.171 tons grading 0.060 opt (2.06 g/t); the aforementioned "drill inferred resource" and a "geologic inferred resource" of 288,000 tons grading 0.060 opt (2.057 g/t).

This resource was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by CIM. The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained, is likely to be low, and should not be relied upon. The resource categories are based on the results of two diamond drill holes (#FC90-21 and FC90-22) and a single trench. No subsequent resource estimates are known to the author of the Seventymile Technical Report. The author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to re-calculate the resource estimate.

At the Flanders prospect, eleven holes along four sections were drilled. Drilling intersected the north vein to a maximum of 60 m down-dip, and the south vein to 91 m down-dip. Mineralization was found to extend approximately 152 m along strike. CAGC calculated an average grade and size of all quartz vein intercepts on the Flanders prospect of 16.83 g/t Au over 0.76 m, comprising intercepts varying from barren to 0.91 m of 49.71 g/t Au. Trenching on the Flanders prospect returned values up to 112 g/t Au over 1.07 m. These results were used by CAGC to calculate a "drill-inferred (resource) total veins" resource of 66,000 tons grading 0.491 opt Au (16.83 g/t Au), including a "drill inferred (resource), best seven intercepts" of 36,000 tons grading 0.804 opt (27.57 g/t) Au. The report also stated a "geologic inferred (resource) total veins" of 500,000 tons grading 0.491 opt (16.83 g/t Au), including a "geologically inferred (resource), best seven intercepts" of 275,000 tons at 0.804 opt Au (27.57 g/t Au). CAGC stated that "polygonal or cross-section methods" of calculation of "reserves" would have been misleading, resulting in adoption of a "global estimate" assuming drill and trench samples are a "random population" and are representative of veins tested.

This resource was developed prior to regulations contained within NI 43-101, and prior to the development of modern resource categories by CIM. The level of confidence of the resource (Measured and Indicated versus Inferred) cannot be ascertained and should not be relied upon. The resource categories are based on the results of 11 diamond drill

holes and 7 trenches. No subsequent resource estimates are known to the author of the Seventymile Technical Report. The author has not done sufficient work to classify the historical estimate as a current mineral resource. Tectonic is not treating this historical estimate as a current mineral resource or mineral reserve. In order to satisfy modern CIM resource category standards, considerably more drilling is required to establish a suitable drill spacing to reliably upgrade the resource base. Also, a qualified person specifically trained in calculating resource estimates will be required to re-calculate the resource estimate.

#### VENTURES RESOURCES CORPORATION 1996-2000

Ventures Resources Corporation ("**Ventures**") optioned the majority of the Seventymile gold belt from Doyon in 1996. That year, Ventures conducted exploration across the property, focusing on ground-truthing and expanding on the work done by previous operators. The 1996 program included ridge-top mapping and sampling, soil sampling, stream silt sampling, and panned concentrate sampling.

Ventures returned to the property in 1997 to expand the soil sampling grid in the Flanders and Deep Creek prospect areas. An airborne DIGHEM survey was flown over the Flume Creek, Crooked Creek, and Deep Creek trends. The aeromagnetic results highlighted the presence of the ultramafic rocks through a broken linear trend of high amplitude magnetic anomalies. The longer, weaker magnetic trends were interpreted as representing basaltic units. Resistivity measurements found long conductive trends interpreted as major fault structures. Additionally, granitic intrusive rocks, limestones, siliceous sediments and sedimentary rocks, and silicic alteration were indicated by high resistivity signatures.

In 2000, Ventures conducted target evaluation drilling on the Flanders and Deep Creek prospects. Six holes for a total of 1,045 m were drilled at the Flanders prospect, and two exploratory holes totalling 256 m were drilled on the Deep Creek prospect. An additional 232 soil samples were collected to the northwest of the Deep Creek prospect. The soil sampling program was successful in outlining a 450-metre extension of the Deep Creek trend, including a cluster of anomalies with values up to 140 ppb Au with a coincident Ag anomaly. The 2000 drilling program at Flanders focussed on stepping out from the most prospective hole drilled by CAGC. All holes encountered Au mineralization of varying widths, except for DDH FD 2000-2 which was lost due to bad ground at 33 m. In DDH FD 2000-4, gold mineralization was encountered to depths of 236 m. The best intercept was 205.89 g/t Au over 1.10 m (FD 2000-4). Additional notable intercepts, both in DDH FD 2000-4, include 13.185 g/t Au over 1.31 m and 11.301 g/t Au over 0.52 m. The drilling at Flanders confirmed mineralization over an area of 366 m by 122 m. No significant Au values were encountered in the two drill holes at the Deep Creek prospect.

## Placer Production

Between 1898 and 1962, an estimated 45,000 ounces of gold were produced from several different creeks in the Seventymile District. Significant production occurred on Alder, Crooked, and Barney Creeks.

# Geological Setting

## Regional Geology

The Seventymile Property is located within the YTT, an accreted terrane comprised mainly of Proterozoic to Triassic allochtonous and metasedimentary assemblages mainly of continental affinity and including Jurassic to Early Tertiary metaigneous rocks. The Paleozoic rocks have been metamorphosed to quartzites, phyllite, slate, schist and gneisses. The YTT is an allocthonous terrane extending from east-central Alaska to south-central Yukon. It comprises numerous pulses of arc magmatism, accreted on to the Ancient North American Continent. The YTT is bounded to the north by the Tintina fault zone and to the south by the Denali fault. Both major fault zones have a lateral displacement of roughly 400 km, occurring since the late Cretaceous. Nelson and Colpron (2007) estimated an Eocene age of displacement. The Tintina fault has produced a broad topographic low known as the Tintina Trench which has been partially filled by Tertiary and Quaternary sediments.

Three major pulses of continental arc magmatism have been identified, occurring respectively during Late Devonian to Early Mississippian, Permian, and lastly Late Triassic to Early Jurassic time. The major, subhorizontal structural

fabric marking much of the YTT was formed from the mid-Permian to the onset of magmatism in Late Triassic time, and likely represents a major continent-continent collision. Further subduction-related magmatism occurred into the mid-Cretaceous, resulting in emplacement of batholithic-scale intrusions such as the 112-105 Ma Dawson Range batholith that extends from the Northway area eastward to the Coffee Creek area of west-central Yukon. Related magmatism also resulted in the emplacement of a series of intrusive suites comprising the 110-70 Ma Tintina Gold Belt.

Conjugate to the Tintina and Denali fault zones are a series of district-scale northeast-trending faults and lineaments, including the Shaw Creek fault near the Pogo deposit, the Black Mountain tectonic zone east of this, and the Mount Harper lineament extending to the south property boundary. These major faults are the most obvious members of a regional NE-SW trending fault and fracture set, marked by smaller drainages throughout the Seventymile area. The YTT east of the Black Mountain fault has been intruded by Cretaceous to Tertiary plutonic rocks.

In the Seventymile area, the "Seventymile terrane", a narrow assemblage of Permian-aged submarine mafic to felsic volcanic and ophiolitic ultramafic rocks, with lesser limestones and quartz rich clastic rocks extends WNW-ESE, roughly paralleling the Seventymile River to the north. This terrane is equivalent to the Slide Mountain terrane in southern Yukon and parts of British Columbia. In Alaska, it forms a discontinuous belt that trends northwest from the Yukon Territory border to the northern section of the Eagle quadrangle, where it has undergone sinistral offsetting by the Shaw Creek fault. The western portion trends southwestward to the centre of the Fairbanks Quadrangle.

The Seventymile terrane is recognized as an ocean basin assemblage that originally divided the YTT but closed in the mid-Permian due to short-lived westward subduction under the YTT. This package of rocks was thrust upon and imbricated with the rocks of the Yukon-Tanana terrane during the Jurassic. The Seventymile fault, a splay of the Tintina fault, defines the northern boundary of the Seventymile terrane. The Seventymile terrane has undergone thrust faulting that commonly separates the major lithological components. The ultramafic units form the leading edge of the main thrust sheet, with the greenstone and metasedimentary rocks successively thrust over these.

Much of the ultramafic stratigraphy of the Seventymile terrane has undergone pervasive serpentinization, as a result of its obduction onto the crust. The overall metamorphic grade of the Seventymile Terrane rocks is quite low, a maximum of lower greenschist metamorphism principally affects the volcanic tuffs and sedimentary units.

## Property Geology

The Seventymile Property covers a 42-km section of the Seventymile Terrane extending NW-SE across the property. The Seventymile fault defines the north boundary, separating it from YTT metamorphic rocks to the north. The south boundary of the Seventymile terrane abuts Yukon-Tanana rocks, which can be distinguished from the northern YTT rocks because they are significantly more pelitic in composition and contain a smaller number of intrusive units. In the northern and eastern property area, Paleozoic stratigraphy is overlain by poorly consolidated Tertiary sediments predominantly composed of conglomerate, sandstone, and minor lignite. These sedimentary units host the Ptarmigan Hill and Mogul Bluff epithermal Au prospects.

The Seventymile terrane underlying the property has several key components. In the northwestern property corner, serpentinized peridotite forms a component of the Mount Sorenson ophiolitic suite. This unit is bound by the Seventymile fault on the northern side and by the informally named Flume Creek thrust fault on the southern side, separating it from the related "greenstone" rock units to the south. These greenstone units consist mainly of basalt, as well as associated hyaloclastic breccias, mafic tuffs, and minor interbeds of chert and gabbroic sills.

To the south of the greenstone unit, and presumably up section, a crystal lithic tuff unit of dacitic composition occurs within the Seventymile terrane southeast of Bonanza Creek. This is bounded to the south by a complex of volcaniclastic and clastic rocks comprising arkose, arenite and wacke sandstone, as well as lapilli tuff, graphitic argillite, and siltstone. It stratigraphically overlies, and is intercalated with, the basalts and the crystal lithic tuff. A minor unit of micaceous dolomitic siltstone containing Permian brachiopods occurs above the volcaniclastic rocks.

West of Flume Creek and southeast of Deep Creek, a package of intermediate to felsic volcanic rocks including andesitic to dacitic tuffs, breccias, and dacitic to rhyolitic quartz-eye porphyries occurs. This unit appears to be up-

section of the pillow basalts and may represent a coeval terrestrial volcanic system. A south-dipping tabular body of monzonite, less than 45 m thick, has intruded Seventymile Terrane rocks in the central part of the belt. An interpreted fault contact separates this unit from stratigraphy to the north. Diorite dykes which crosscut Seventymile stratigraphy to the west are interpreted as coeval with the monzonite. Unconformably overlying the monzonite is a thin unit of terrigenous clastic rocks, principally composed of a conglomerate with quartzite and quartz-eye rhyolite clasts. To the south of the terrigenous clastic unit is a thicker package of intermediate porphyritic volcanic rocks. This unit overlies both the rocks of the Seventymile Terrane and the Yukon Tanana Terrane rocks to the south. This intermediate volcanic and terrigenous clastic unit may be Tertiary in age.

There are three episodes of folding observed within the Seventymile Property. The earliest comprises small-scale folding within the schists of the Yukon-Tanana terrane within the north and south property areas. These folds have undergone subsequent deformation and are poorly preserved. The entire property was subjected to southwest to northeast ductile compression directed along a NW-SE axis. The axial planes resulting from this deformation are subparallel to the strike of the Seventymile fault and the fold axes plunge approximately 10° to the southeast. A possible second set of folds related to this event has been identified within Seventymile terrane rocks and consists of open folding indicated by a vertical northeast trending axial planar fracture cleavage. The final folding event is related to strike-slip movement of the Tintina fault system. The displacement on the Tintina fault produced isoclinal folds with nearly vertical fold axes. The axial planes of these isoclinal folds are consistent with drag on the Tintina fault during its offset.

Three generations of faulting have also been identified in the Seventymile terrane. The first comprises south-dipping thrust faults that form contacts between the serpentinite and basalt units, and also between the other greenstone lithologies. These contacts are particularly susceptible to faulting due to competency contrasts between lithological units. This stage of faulting probably occurred as flexural slip movement during the first deformation event. Presumably, there are older faults contained within the YTT rocks to the north and south of the Seventymile terrane, but the structural setting remains poorly understood.

The second generation comprises NW-SE-trending transpressional faulting, represented by the Tintina fault. Locally, the largest of these faults is the Seventymile fault, with an apparent dextral displacement of approximately 11.2 km. The smaller splays display lesser displacement of several hundred metres, as interpreted by earlier workers. The temporal relationship between these faults and the Tintina fault zone is unclear.

The final episode of faulting resulted in a vertical northeast-trending fracture set with minor strike slip displacement that appears to post-date the Tintina fault system. This fracture system produced a set of northeast-trending topographic lineaments in the Seventymile Terrane and controls the northeast orientation of the creeks draining this area. This may also represent conjugate faulting related to movement along the Tintina and Denali faults.

# Mineralization

Due to the numerous occurrences of both lode and placer gold, the area surrounding the Seventymile Terrane has been termed the Seventymile Gold Belt. Placer gold has been produced from creeks draining the Tertiary sediments north of the Seventymile River, and the Seventymile terrane rocks south of it.

The Seventymile Property contains 19 defined mineral occurrences of various types. Eleven are placer gold deposits, four are orogenic gold occurrences and four are epithermal gold occurrences. The most prominent exploration targets are discussed in detail below.

The lode prospects on the Seventymile Property have been divided into three distinct trends by previous workers that exhibit common mineralization characteristics, structural, and stratigraphic controls. The first of these is the Flume Creek trend, which includes the Flume Creek, Alder Creek, Flanders and Bonanza Creek orogenic gold prospects. The second is the Crooked Creek trend, which hosts the Ptarmigan Hill and Mogul Bluff epithermal gold prospects. The third is the Deep Creek trend, which includes the Deep Creek and Kill Zone 2 epithermal gold prospects.

#### FLUME CREEK TREND

Mineralization in the Flume Creek trend is hosted by the weakly metamorphosed Seventymile terrane, along a key thrust fault dividing footwall serpentinite to the north from hanging wall volcanic packages to the south. Tertiary mafic and felsic dykes intrude all lithologies. Mineralization is accompanied by quartz-carbonate-mariposite alteration at the Flume, Bonanza, Alder and Flanders prospects. Gold mineralization occurs in variably oriented quartz-carbonate-arsenopyrite- pyrite veins and vein breccias up to 0.61 m thick. Hanging wall stockwork vein zones of similar mineralogy are up to 9.1 m thick. These stockworks display a strongly developed quartz-dolomite-ankerite-mariposite-arsenopyrite-pyrite assemblage which grades outwards to barren calcite veining. While these prospects all display similar features, there is a degree of variability in Au-Ag-As content between the four prospects comprising the trend. The four prospects form a semi-continuous soil anomaly striking NW-SE.

#### **FLANDERS**

The Flanders prospect forms the eastern end of the Flume Creek trend and consists of two parallel gold-bearing quartz veins hosted in altered pillow basalts, the North Vein and the South Vein. These quartz veins occur in tabular tension fractures that dip to the north at angles of 30° to 45°. Vein textures exhibit multiple generations of quartz growth. Mineralization at Flanders occurs within quartz veins and silica carbonate alteration zones and vein selvages. In addition to pyrite and arsenopyrite, trace galena, sphalerite and chalcopyrite are also present. Gold occurs as grains from 5 to 150 microns in size with sulphide inclusions. Typical wall rock alteration at the Flanders prospect comprises propylitic, silica-carbonate-mariposite, sericitic, argillic and albitic assemblages. The Flanders prospect was drilled in 1990 by CAGC and again in 2000 by Ventures. The best intercept was 205.89 g/t Au over 1.10 m. Additional notable intercepts including 13.185 g/t Au over 1.31 m, 11.301 g/t Au over 0.52 m, and 49.71 g/t Au over 0.91 m. Trenching on the Flanders prospect by CAGC produced values to 112 g/t over 1.07 m.

Examination of 2000 WGM drill core from DDH FD 00-4 revealed zones of strongly developed quartz vein stockwork within silicified limonitic mafic volcanics adjacent to clay-altered fault gouge with fine grained disseminated pyrite. The interval of stockwork-hosted mineralization from 235.5 feet to 238.0 feet (71.8 m - 72.5 m) returned 7.7 g/t Au. A mineralized interval in DDH FD 2000-6 from 480 feet - 482 feet (146.3 m - 146.9 m) returned 0.964 oz/ton (33.05 g/t) Au. The mineralization in DDH FD 2000-6 comprises quartz-pyrite vein breccia within basalt which has undergone early brecciation with limonitic alteration of clasts and chloritic matrix alteration.

## ALDER CREEK

The Alder Creek prospect is located approximately 2,400 m west-northwest of the Flanders prospect. Mineralization at Alder Creek occurs as quartz veins primarily within stockwork zones and tension gash structures with associated ribbon veins, breccia in-fills, and comb-textured veins. Arsenopyrite and pyrite are the principle sulfides and occur both in veins and the adjacent silica-carbonate alteration zones. At the Alder Creek prospect, the mineralized veins appear to be confined to pillow basalts on the south limb of a northwest-trending anticline. This basalt is propylitically altered and contains numerous zones of silica-carbonate alteration up to 18.3 m thick, hosting mineralized quartz veins. Results of drilling include values to 6.07 g/t Au over 0.3 m. The highest-grade intersections are associated with intense silica-carbonate alteration and with breccia in-fill zones. The Alder Creek prospect has returned lower grade values than the Flanders prospect and may represent a distal extension of the Flanders prospect. The Alder Creek prospect is located at the approximate upstream limit of placer operations, suggesting the prospect may be the source of placer mineralization.

#### **BONANZA CREEK**

The Bonanza Creek prospect is located approximately 3,200 m west of Alder Creek. There are three types of mineralization associated with a fault controlled stockwork vein system. The first is sulfide-poor quartz stockwork veins with visible gold cutting dolomitically altered serpentinite and gabbro. The second is arsenopyrite-quartz stockwork veins cutting sulfide-bearing silica-ankerite altered tuffs and tuffaceous siltstone. The third type is quartz veins with local pyrite with limited alteration in argillites. Seven drill holes were completed on the prospect in 1990 by CAGC. Results included values from background Au to 10.9 g/t Au over 2.28 m, 1.89 g/t Au over 9.75 m, and 2.43 g/t Au over 3.66 m. One hole intercepted 51.2 m of 1.18 g/t Au.

#### **FLUME CREEK**

The Flume Creek prospect is located approximately 1,600 m to the west-northwest of the Bonanza Creek prospect. Mineralization at Flume Creek occurs within a zone of silica-carbonate alteration of the serpentinite and greenstone rocks in the hanging wall of the Flume Creek thrust fault. The entire rock package in this area has been highly deformed by faulting, including imbricate northwest-striking reverse faults, apparently associated with both the larger Flume Creek fault and northwest-trending vertical faults possibly coeval with the Tintina fault. Mineralization consisting of arsenopyrite, pyrite, and gold occurs in quartz-carbonate veins and altered wall rock. Visible gold has been observed in the quartz-carbonate veins. The primary alteration assemblage is silica-carbonate-mariposite. A series of dextral strike slip northeast-trending faults offset the mineralization.

Grab samples of outcrop at the Flume Creek prospect returned values up to 178.286 g/t Au. Seven holes drilled on the Flume Creek prospect returned Au values from core samples from background to 29.3 g/t over 1.07 m.

### Crooked Creek Trend

The Crooked Creek trend comprises two epithermal Au prospects on the eastern side of the Seventymile Property, the Ptarmigan Hill and Mogul Bluff prospects. These prospects are hosted in unmetamorphosed continental sediments that unconformably overlie rocks of the YTT. These sediments are Tertiary in age, possibly as young as Pliocene, and are poorly consolidated. Previous workers were attracted to the area by placer gold and cinnabar (HgS) occurrences. Both occurrences are associated with strong geochemical anomalies.

#### PTARMIGAN HILL

The Ptarmigan Hill prospect is hosted by a thick sequence of poorly consolidated sediments that consist of predominately conglomerates with rounded quartz and chert clasts, and thinner interbeds of sandstones, siltstones, shales, and minor lignite. Tertiary felsic volcanic and intrusive rocks, including quartz-rhyolite and quartz-feldspar porphyries and minor serpentinite bodies, have been juxtaposed with the conglomerates by splays of the Tintina fault. Mineralization at the prospect is overlain by approximately 90 m of barren coarse clastic rocks that have undergone pervasive silicification. Auriferous mineralization is concentrated within post-silicification fractures. Mineralization consists of concentrations of epithermal As, Sb, Hg, Ag, and Au. The mineralized vein system is controlled principally by a steeply-dipping north-trending fracture system. The prospect is associated with a significant Au – Ag soil geochemical anomaly approximately 1,065 m by 305 m in aerial extent, with anomalous Au values ranging from 20 ppb Au to >1,000 ppb, and Ag values in excess of 10 ppm. Drill results from Ptarmigan Hill included 5.83 g/t Au over 24.38 m, 4.46 g/t Au over 6.40 m, and 7.20 g/t Au over 6.10 m.

## MOGUL BLUFF

The Mogul Bluff prospect is geologically and mineralogically similar to Ptarmigan Hill. It is also hosted by a thick sequence of poorly consolidated sediments comprised mainly of conglomerates with mature clasts of quartz and chert, and includes thinner interbeds of sandstones, siltstones, shales, and minor lignite. Tertiary felsic volcanic and intrusive rocks have been juxtaposed with the conglomerates by splays of the Tintina fault. Mineralized zones within the conglomerate are strongly silicified with concentrations of As, Sb, Hg, Ag and Au. Mineralization is principally controlled by a north-trending, steeply dipping fracture system, and has been classed as epithermal. The geochemical anomaly was tested with nine drill holes by ACNC, but intercepts of altered material typically graded less than 1,000 ppb (1.0 g/t) Au.

## Deep Creek Trend

The Deep Creek trend is located approximately 610 m south of the Flanders prospect, within silicified dacitic volcaniclastic rocks of probable Tertiary age. The Deep Creek trend consists of the Deep Creek and Kill Zone 2 prospects and the associated Au in soil anomalies along strike. Bedrock exposure is limited and mostly occurs in stream cuts. This trend is thought to represent distinct volcanic-hosted epithermal mineralization that runs parallel to the Flume Creek and Crooked Creek trends. Due to the extensive soil cover, Au, Ag, and As soil geochemical anomalies were used to define targets in this area.

#### DEEP CREEK PROSPECT

Mineralization at the Deep Creek prospect consists of silicified volcanic rocks returning grades from background Au to 1.72 g/t Au. Mineralization is structurally controlled, occurring in quartz carbonate veins within silicified pale green dacite showing sericitic alteration and black quartz stockwork zones. Soil sampling results indicate areas of anomalous gold values to 480 ppb Au. Drilling conducted in 2000 failed to intersect significant mineralization and no further drilling was recommended until a better understanding of the structural controls could be gained.

### KILL ZONE 2

The Kill Zone 2 prospect is located approximately 800 m south of the Alder Creek prospect and has a similar geological setting. It is also associated with anomalies gold-in-soil values to 130 ppb Au.

# Deposit Types

Tectonic is primarily exploring for orogenic gold mineralization on the Seventymile Property; however, both orogenic and epithermal gold mineralization have been recognized.

# Orogenic Gold Deposits

Orogenic gold deposits are epigenetic in origin and structurally controlled, with lode-style mineralization occurring in shear zones and faults. They are typically associated with large first order crustal scale faults which provide a fluid conduit, however, the mineralization itself is typically hosted within second and third order structures. Examples of structures that typically host the mineralized veins include moderate to steep-dipping compressional brittle-ductile shear zones, faults with associated shallow-dipping extensional veins, and hydrothermal breccias. These smaller features provide structural traps for mineralizing fluids. The fluid source may result from regional metamorphism generated during structural deformation and be associated with greenschist to amphibolite grade metamorphism. Gold mineralization is principally found within the veins, but may also be found within altered host rocks and vein selvages, and within silicified and arsenopyrite rich replacement zones.

The lode occurrences of the Flume Creek trend exhibit characteristics typical of orogenic gold deposits. Mineralization is hosted by quartz-carbonate veins that fill tectonically formed structures, and associated with pyritic silica-carbonate-albite-ankerite alteration assemblages. Mineralization at the prospects of the Flume Creek trend shows some or all these characteristics, and the orogenic gold deposit model that Tectonic is applying to these prospects is appropriate.

The orientation of the mineralized structures varies with the regional stress regime. To date most of the high-grade mineralization along the Flume Creek trend has been found in shallowly dipping structures such as tension gashes. Tectonic is utilizing this model to locate larger vertically-dipping shear structures that may host larger concentrations of gold.

## Epithermal Gold Deposits

Epithermal Au (±Ag), deposits commonly form in shallow-level hydrothermal systems, typically developed in volcanic arcs at convergent plate boundaries, as well as in intra-arc, back-arc, and post-collisional rift settings. Mineralization occurs both as veins and disseminations. These deposits form from hydrothermal fluids, typically by replacement or by void-filling. Broadly speaking, these deposits are young and form within the top 1.5 km of the earth's crust. Steeply dipping veins typically host the highest ore grades whereas mineralization within adjacent host rocks and/or disseminated mineralization tends to be of significantly lower grade. Epithermal deposits are typically classified into three different categories based on the sulphidation state of associated sulfide mineralogy: high, intermediate and low sulphidation. Each of these types has distinct associated mineral and alteration assemblages.

The lode occurrences of the Crooked Creek trend and the Deep Creek trend exhibit characteristics associated with epithermal, particularly low sulphidation systems. The dominant alteration types are silicification and sericitization. The presence of Hg and Sb sulphides is another preferential characteristic of low-sulphidation epithermal deposits.

Alteration and mineralization assemblages at the Ptarmigan and Mogul Bluff prospects show a component of stratigraphic control preferential to the conglomerates.

# Current Exploration

Upon acquiring the lease on the Seventymile Property in 2018, Tectonic completed an exploration program comprising 1,762 line-km of high-resolution airborne magnetics, 380 soil samples and 106 m of trenching with a helicopter-portable backhoe.

## Airborne Magnetic Survey

From July 9 to July 18, 2018, an airborne CGG MIDAS high-definition magnetic survey was flown. The survey covered a total of 1,762 line-km, comprised of 1,552 km of grid lines flown at an orientation of 022°/202° and 100 m line spacing, and an additional 210 km of tie lines flown at 112°/292° and a line spacing of 845 m. The survey covered the entire extent of the Seventymile greenstone belt that transects the property.

The MIDAS system consists of two Scintrex CS-3 Cesium Vapour magnetometers mounted on a transverse boom with a 13.3 m separation, a fluxgate magnetometer, and a GPS antenna for flight path recovery. In the tail boom an additional GPS antenna, altimeters (radar, laser, and barometric), a video camera, and data acquisition system are mounted. This system was mounted on an AS350 B3 helicopter operated by Questral Helicopters. The base magnetometer was a CGG CF1 with a Scintrex cesium vapour sensor with a GEM Systems GSM-19 as a secondary unit.

The purpose of the high-resolution magnetic survey was to provide a control for accurately mapping different geological units, and the identification of geological structures that may be related to mineralization. A total magnetic intensity map with geological structures and contacts is shown in Figure 5.

## Rock Sampling

Rock sampling in 2018 focused mainly on the Flanders prospect area, including the interpreted western extension, where a total of 48 samples were taken. The majority of rock samples returned low to background values (<0.005 g/t Au), although anomalous Au values were returned from the core Flanders area. The highest value of 8.585 g/t Au was returned from a sample of multi-pulsed quartz breccia collected from an old trench.

The program also focused on the Flume prospect area, where seven samples were taken, and returned values from <0.005 g/t Au to 2.721 g/t Au. The latter was a sample of strongly and pervasively oxidized basalt, showing sericite and clay alteration, and hosting quartz-carbonate veinlets. A total of nine samples were taken from two sites southeast of the Bonanza showing. All values returned were at sub-detection level (<0.005 g/t Au).

Two samples were collected at the Ptarmigan Hill prospect. A sample of pervasively silicified and oxidized quartz pebble conglomerate that may have been collected near a historic showing returned 0.229 g/t Au with 11 g/t Ag and 49 ppb Sb. A second sample, taken about 25 m to the WSW, graded 3.483 g/t Au with 814 g/t Ag and 153 ppm Sb. No descriptions are available for the second sample. The pathfinder mineralogy, including the lack of elevated As and Bi values, suggest a lower temperature setting typical of epithermal mineralization.

### Soil Sampling

The 2018 soil sampling program was conducted in two phases. The initial phase of 280 soil samples was completed from June 9 to July 5, 2018. The second phase of 100 samples was conducted between September 17 and 21, 2018. The 2018 soil sampling program was conducted using power augers to penetrate beneath the tundra and permafrost on topographic plateaus that had hampered historic shovel sampling. The auger sampling focused on obtaining Chorizon soil samples in an effort to achieve more representative assay and analytical values. Previous shovel sampling returned "false negative" values because the sample was unobtainable or was of unrepresentative surface material.

North-south oriented soil lines were laid out at a 50 m to 100 m line spacing and 25-metre sample spacing. The lines were laid out to cross volcaniclastic-mafic contacts and mafic-ultramafic contacts identified from historic geological maps and from geophysical data. These lithological boundaries are interpreted as prospective for shear hosted gold mineralization. Additional lines were surveyed to cover historic shovel soil anomalies. Three target areas were sampled during the 2018 program: the Flume-Bonanza Link, Bonanza East, and the Flanders Area targets.

#### FLUME-BONANZA LINK

Three soil lines were laid out to cover a historic WNW-ESE trending 800 m long soil anomaly. The anomaly is located on a north-facing ridge with permafrost and tussock cover approximately 1,400 m east of the Flume prospect and 800 m west of the Bonanza prospect. The anomaly covers an interpreted mafic-ultramafic contact where historic shovel sampling returned values of up to 420 ppb Au with consistent values in excess of 100 ppb Au. A total of 78 auger samples was collected from this area in 2018. Gold values ranged from <5 ppb to 258 ppb, with multiple values between 56 ppb Au and 69 ppb Au. This anomaly is coincident with the historic results.

#### **BONANZA EAST**

Three sample lines were laid out approximately 800 m, 900 m, and 1,200 m east of the Bonanza prospect. These lines tested a prospective mafic-ultramafic contact uphill of a historic soil anomaly that returned values to 90 ppb Au. The lines also tested the southern extent of a mapped mafic volcaniclastic contact. A total of 78 samples was collected on this target, returning values from <5 ppb Au to a peak result of 57 ppb Au, obtained along strike from the historic high gold-in-soil value. However, extensive permafrost, hampering sampling efforts, was encountered in this area.

### FLANDERS AREA

The Flanders area was the primary target for the auger soil sampling campaign. Three initial sample lines were laid out to test the mafic (crystal lithic tuff)-volcaniclastic contact interpreted as a shear zone along the ridgetop at the Flanders prospect. Analysis of these samples returned values from <0.005 g/t Au to 1.080 g/t Au, and included a value of 1.014 g/t Au. Numerous values exceeding 0.100 g/t Au are coincident with the lithic tuff-volcaniclastic contact. A fourth orientation line, extending directly across the drilled portion of the Flanders prospect, returned values from 0.117 g/t Au to 1.913 g/t Au; outlying samples returned background Au values.

Based on these results, an additional four lines of auger soil samples were added to test the extension of the anomaly. Results from these samples returned values from <0.005 g/t Au to 0.670 g/t Au. An additional two short lines, totaling 23 samples, were sampled northwest of this grid and east of the Alder Creek zone. Results included values from <0.010 g/t Au to 0.388 g/t Au. Sampling to the west of the Flanders prospect was hampered by steep rocky terrain and, in locations where no suitable soil was found, rock samples were collected instead.

## Trenching

A single 106-metre long, 1-metre deep trench was dug with a heli-portable CanDig excavator to sample subcrop. This trench was dug to follow up on the 1.014 g/t Au and 1.913 g/t Au-in-soil values at the Flanders prospect. The trench was laid out in a N-S orientation to cross the anomalous samples and interpreted major shear zone. The excavation was to commence at the north end in overburden overlying mafic rocks and terminate once it has successfully transected the shear zone; however, the excavator failed in fault gouge at its southern terminus. This fault gouge was mineralized, returning a value of 278 ppb Au across 9 m from the 97 m to 106 m interval at the southern limit of the trench. Brecciated welded tuff exhibits moderate silicification and chlorite alteration. A total of 26 samples ranging from 2.5 m to 5.0 m in length were collected from subcrop exposed along the length of the trench. These samples returned values from 0.005 g/t Au across 5 m to 0.283 g/t across 5 m.

## 2019 Due Diligence Sampling

Three samples of proximal quartz float were taken from the Flanders prospect in May 2019 and assayed from 2.021 g/t Au to 20.0 g/t Au, with anomalous As and weakly anomalous Sb values. Quartz float boulders hosted clotty to fracture controlled arsenopyrite, as well as abundant limonitic fractures. This fabric is shown in Sample 1465509,

which returned 20.0 g/t Au and hosted one speck of visible gold. The 2019 sampling confirmed the tenor of gold from surface sampling at the Flanders prospect.

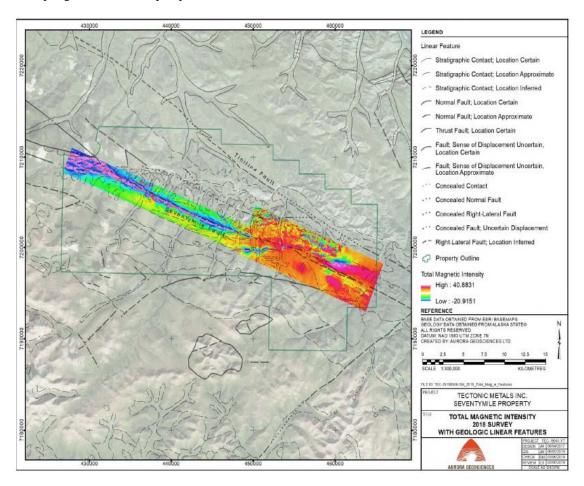


Figure 5: Total magnetic intensity from the 2018 MIDAS Airborne Survey with regional contacts and structures overlain

## 2019 Geoprobe Sampling

In 2019, Tectonic conducted a "Geoprobe" survey across four target areas along the Flume trend: the Flume-Bonanza, Bonanza, Flanders and East Flanders targets. Two lines were also completed across the "Deep Creek" target directly southwest of the Flanders target. These Geoprobe surveys were designed to collect representative rock samples from the soil-bedrock interface along parallel grid lines at depths ranging from near-surface to 4.5m, in order to determine lithology and mineral potential at the interface.

A total of 788 samples were collected across 3,865m of grid lines. These comprise: 130 samples across 640m in two grid lines at the Flume-Bonanza target; 151 samples across 485m in three lines at the Bonanza target; 322 samples across 1,575m in 7 lines at the Flanders target; 119 samples across 585m in two lines at the Deep Creek target, and 118 samples across 580m in two lines at the East Flanders target. The sample spacing was 5m.

## FLANDERS TARGET

The Flanders target is a high-angle shear zone potentially hosting bonanza-style veins or other veins feeding the northeast-dipping low angle veins and high-grade tension gash veins. The Geoprobe lines covering the target are:

SVMGTP19-001, 002, 003, 009, 012, 013 and 014. Four zones, FL 1 through FL4 were delineated within the target (Figure 6).

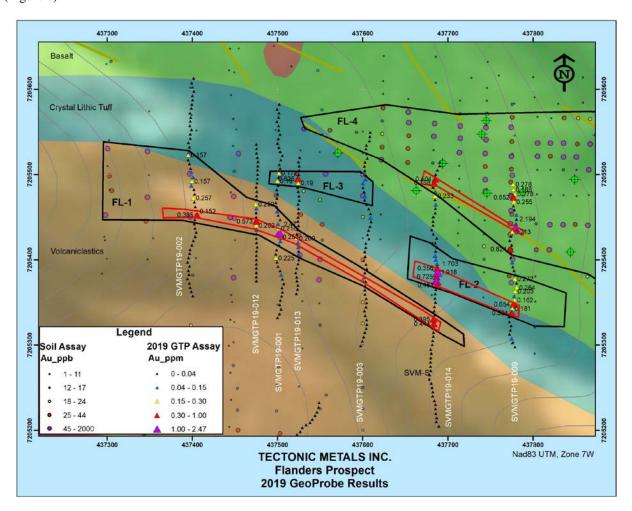


Figure 6: Location of FL-1 through FL-4 zones, Flanders target

Zone FL1, hosted within a package of volcaniclastic rocks, has a strike length of 465m, with widths of 15m in the east possibly widening to 90m to the west. The zone, open to the east and west, contains fourteen Geoprobe assays exceeding 0.15 g/t Au, four exceeding 0.30 g/t Au, to a maximum of 2.47 g/t Au. The zone also includes a 5-10-metre wide, 350m long high-grade corridor, supported by 2018 power auger sampling results. This corridor may represent a high-angle structurally-hosted bonanza vein.

Zone FL-2, measuring 200m long and 40m wide and open to the east, hosts the "historic" tension gash veins. This zone straddles the crystal lithic tuff-basalt contact. Geoprobe sampling returned twelve assays exceeding 0.15 ppm Au, seven greater than 0.30 ppm Au, and two peak assays of 1.703 and 1.918 ppm Au respectively. Sample results identified a 20-metre wide high-grade corridor. The 2019 program indicates that the FL-2 zone may represent the surface expression of a tension gash vein.

Zone FL-3, apparently located entirely with the crystal lithic tuff unit, returned four Geoprobe assays exceeding 0.15 g/t Au to a maximum of 0.625 g/t Au. The zone may be of limited strike extent and has approximate dimensions of 125m x 20m. The zone may also represent the surface expression of a tension gash vein.

Zone Fl-4 comprises a very broad area of high-grade values. Previous drilling intersected high-grade gold-bearing quartz veins, some of which returning the highest-grade intervals returned at the Flanders prospect. Gold-bearing

quartz veins occur within shallowly-dipping en-echelon tension gashes, hosted entirely within the basalt and serpentinite units. A total of eleven samples returned Au values  $\geq 0.15$  g/t to a maximum of 2.194 g/t Au.

## FLUME-BONANZA LINK PROSPECT

The 2019 Geoprobe surveying across the Flume-Bonanza prospect targeted untested gold-in-soil anomalism within pillow basalt and serpentinite units near a diorite dyke possibly contemporaneous with the late Cretaceous monzonite intrusion at the Deep Creek target. Two Geoprobe lines, Lines SVMGTP19-005 and 006 covering 0.640 line-km were completed across the target. A total of 130 samples were taken.

The Geoprobe assay values did not reproduce the historic shovel Au soil values, but correlate better with the 2018 power auger soil results. Geoprobe results encountered moderately strong Au anomalism at or near the maficultramafic contact, with values ranging from background to 0.372 g/t Au. However, despite high Au values from shovel samples overlying the actual serpentinite unit, 2019 sampling returned background Au values. Samples taken from the southern area, underlain by basalt, correlate more strongly with the 2018 power auger results. These returned weakly to moderately anomalous Au values, ranging from background to 0.086 g/t Au. Closer to the contact along line SVMGTP19-005, two consecutive samples returned values of 0.118 and 0.325 g/t Au respectively. These are south of the mapped contact of the basalt with the serpentinite to the north, which may be explained by downslope soil creep.

#### **BONANZA PROSPECT**

The Bonanza prospect targeted a high-angle shear-hosted vein potentially occurring along the serpentinite-volcaniclastic contact. Limited historic drilling at Bonanza focused on the serpentinite unit and defined a "low-grade, bulk tonnage Au resource". No drilling targeted the area of the 2018 soil value returning 0.230 ppm Au within the volcaniclastic unit to the south. Two Geoprobe lines, SVMGTP19-004 and 007, covered a distance of 0.485 km, from which 99 samples were taken. Along line SVMGTP19-007, two consecutive samples directly along the serpentinite-volcanic contact returned values of 0.05 and 0.102 g/t Au respectively. Somewhat farther to the northeast within the serpentinite, two others returned consecutive values of 0.101 and 0.046 g/t Au, and one additional sample farther north returned 0.107 g/t Au. Sampling along line SVMGTP19-004 returned background to weakly elevated gold values, to a maximum of 0.051 g/t Au.

## **EAST FLANDERS PROSPECT**

The East Flanders prospect followed up on historic shovel soil Au anomalism and tested the hypothesis that a high-angle shear zone hosting possible bonanza vein or veins exists east of the Flanders prospect and extends across Deep Creek. Two lines, SVMGTP19-008 and 010, were completed across this, and 118 samples were taken.

Geoprobe sampling revealed a highly anomalous gold value of 0.946 g/t Au from the basalt in Line SVMGTP19-008, as well as two strongly anomalous values of 0.239 g/t Au and 0.299 g/t overlying the crystal lithic tuff but close to its contact with the basalt unit. Samples elsewhere along this line returned values from background to 0.036 g/t Au, except for a value of 0.096 g/t near the basalt-hosted value of 0.946 g/t. Sampling along line SVMGTP19-010 returned four consecutive values across 15m ranging from 0.045 to 0.815 g/t Au. This anomalous zone also occurs within the crystal lithic tuff unit slightly south of its contact with basalt. Some downslope dispersion may have occurred, although the constrained nature of the anomalous zone indicates a proximal target within the tuffs. Samples elsewhere returned mainly background Au values, to a maximum of 0.025 g/t Au.

## DEEP CREEK PROSPECT

Geoprobe sampling targeted the Deep Creek trend, which comprises a zone of anomalous silver and gold values in altered silicic volcanic and subvolcanic rocks. The specific target is the lithologic contacts and surrounding country rock of the late Cretaceous monzonite intrusion. Two lines, SVMGPT19-015 and 011 tested this target. Sample results revealed weak to moderate Au anomalism within the terrigenous clastic rocks located on the southern flank of the monzonite intrusion. Gold assay values ranged from 0.010 g/t to 0.106 g/t at this locality, with numerous samples exceeding 0.044 g/t Au.

## 2019 Auger Sampling

The 2019 gasoline-powered auger drilling program comprised a total of 71 samples at a 25-metre line spacing along four lines with a total length of 1,680m. One line was completed across each of the Flanders, Alder, Flume and Nugget targets.

#### FLANDERS PROSPECT

A single 222-metre power auger soil line, Line SVMPAS-001 comprising 10 samples was completed across the Flanders target. A peak Au assay of 74 ppb was obtained from the centre of the east-west linear topographic depression suggesting the FL-1 zone extends westward by another 100 m from previous soil sampling. Elevated Au values occur near the crystal lithic tuff-volcaniclastic contacts, indicating that the gold-bearing quartz veins have exploited lithologic contacts. Gold values elsewhere along the line ranged from background to 0.025 g/t Au.

#### ALDER PROSPECT

Power auger sampling along the Alder prospect was designed to test the various lithologic contacts immediately west of Alder Creek. One auger line, SVMPAS19-002, with a linear distance of 503m was completed, providing a total of 21 samples. A peak assay of 139 ppb Au was obtained directly at the basalt-crystal lithic tuff contact. Weak Au anomalism was detected within the volcaniclastic unit, with values ranging from background to 0.020 g/t Au and 0.023 g/t Au at its respective contacts. Very weak Au anomalism with values ranging from background to 0.017 g/t Au also occurs within the serpentinite rocks.

#### FLUME PROSPECT

Power auger sampling at the Flume prospect targeted the area east of the historic Flume soil anomaly. A single line, SVMPAS19-003, with a linear distance of 425 m was completed, providing 21 samples. Samples yielded seven values from 0.025 g/t Au and 0.038 g/t Au, with remaining values ranging from background to 0.018 g/t Au. Three consecutive values ranging from 0.025 to 0.037 g/t Au are associated with a diorite dyke towards the north end of the line. The majority of remaining elevated values were returned from the southern basalt package, with the exception of anomalous values of 0.017 and 0.027 g/t Au from the serpentinite unit. Historic shovel sampling failed to return values above a 0.005 g/t Au detection limit in this area.

## NUGGET PROSPECT

Power auger sampling at the Nugget prospect was designed to follow up on a historic shovel soil anomaly of 0.120 g/t Au east of Deep Creek. One line, SVMPAS19-004, covering a linear distance of 530m, provided 22 samples. Power auger sampling at the site of the 0.120 g/t sample returned a value of 0.014 g/t Au. Farther south, two consecutive samples returned values of 0.027 and 0.041 g/t Au respectively. All were taken from areas underlain by the basalt package, mainly in areas where historic shovel sampling returned sub-detection Au values. Farther south, within the crystal lithic tuff package, samples returned values ranging from background to 0.024 g/t Au.

# Drilling

No drilling has been conducted on the property by Tectonic.

## Sampling Method and Approach

A total of 380 soil samples, 71 rock grab samples, and 26 trench composite rock samples were collected during the 2018 exploration program on the Seventymile Property.

# 2018 Soil Sampling Methodology

Soil samples were primarily (372 samples) collected by two person crews using gasoline powered ice augers to drill through the overburden and permafrost to obtain a C-horizon sample that is more representative of bedrock values. Shovel samples (8 samples) were used to collect near-surface soil. Crews augered to the 'C' soil horizon and collected

approximately 600 grams of material in breathable cloth bags. Sample depths ranged from surface to 2.4 m in depth. Samples were located using handheld non-differential GPS units. Parameters recorded comprise UTM co-ordinates including elevation, sample depth, colour, moisture, lithology, texture, and condition of the site at surface. Samples were typically but not always analyzed with a Niton hand-held XRF unit prior to shipment (see "Seventymile Property – Sampling Method and Approach – XRF Data Collection, 2018 and 2019").

Soil samples were placed into cloth sample bags which are labelled, assigned a unique sample ID and assay tag, and the strings were tied for shipment. Samples were placed either in rice bags with the sample numbers written on the bag and sealed with a cable tie, or in sealed "Super Sacks" closed with wire ties. All samples were flown from the property by helicopter to Delta Junction, Alaska, then transported by road to Fairbanks, Alaska. All samples remained in the custody of the field personnel and were transported by Avalon's expediter either to secure facilities at the Avalon warehouse, or submitted directly to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

## 2018 Rock Sampling Methodology

A total of 71 rock grab samples were collected on the Seventymile Property during the 2018 field season. All samples were described in the field and located using handheld GPS units. Typical sample weights ranged between 0.9 kg and 2.7 kg. Samples were categorized based on the material sampled. Samples were collected from outcrop, float, and the 2018 trench. Samples were classified as float whenever they were not specifically sampled from outcrop. Rock samples were collected on soil grid locations where no soil could be obtained, and additional samples were collected wherever metallic mineralization, quartz veining, or diagnostic alteration was observed. Six of the grab samples were collected from the trench at the Flanders prospect and represent sub-samples of visible mineralization or alteration noted within larger trench channel samples.

Rock samples were placed in cloth sample bags which were labelled with a unique sample identification and assay tag and tied for shipment to the lab. Samples were placed either in rice bags with the sample numbers written on the bag and sealed with a cable tie, or in sealed "Super Sacks" closed with wire ties. All samples were flown from the property by helicopter to Delta Junction, Alaska, then transported by road to Fairbanks, Alaska. All samples remained in the custody of the field personnel and were transported by Avalon's expediter either to secure facilities at the Avalon warehouse or submitted directly to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

## 2018 Trench Composite Sampling Methodology

The CanDig trench was excavated to target the overburden-bedrock interface, however, the ground conditions at the Flanders prospect prevented the trench from reaching bedrock. Organic material was removed and placed to the side of the trench for later reclamation purposes. Overburden material was placed on the right side, directly beside where it was removed from. Although bedrock was not reached, sampling was done on abundant rubble crop exposed at the base of the trench.

Once the trench was excavated, it was inspected by a geologist to determine appropriate sample intervals based on observed material. The 106 m long trench was sampled continuously in 2.5 m to 5.0 m intervals along its length. Shorter increments were used in more prospective rocks and longer intervals used in unmineralized and unaltered sections. A rock sample bag was placed at the start of each interval; care was taken to ensure these were in sequence. A profile of trench samples was drawn in large "Rite in the Rain" trench mapping books. Samples were collected by hand using a mattock or a geotool to collect representative subcrop and proximal float samples exposed in the trench.

For each sample, rock chips were extracted from the bottom of the trench, with equal representation across the entire interval. A representative sample was taken for each interval. The sample sequence was checked to ensure accuracy, and a photograph was taken of each interval, including the sample bag with the sample number. "High-grading" of mineralized portions was avoided in the main sample, although specific samples of mineralized and/or altered material were collected, utilizing a separate sample sequence.

The lithology, alteration, and mineralization for each sample were recorded in the field. The detail of logging was governed by quality of excavation, with well exposed sections potentially logged at intervals of <0.5 m, and more poorly excavated sections logged at intervals of 0.5 m -1.0 m. All changes, including subtle changes in lithology or

alteration were also recorded. All pages within the log notebook were scanned and recorded on field computers in camp.

Samples were placed in large rice bags, labelled and sealed for transport to camp and the lab. Samples also typically but not always underwent XRF/Niton analysis (see "Seventymile Property – Sampling Method and Approach – XRF Data Collection, 2018 and 2019"). For each sample interval, the most prospective rock, containing the strongest and/or obvious mineralization, was removed to reduce potential for bias. A single spot of the remaining material was analyzed, and the sample was then returned to the bag and sealed for shipment. The resulting XRF data was downloaded and saved on the field computer nightly. The chain of custody to Bureau Veritas was identical to that for rock samples.

## 2019 Due Diligence Rock Sampling

In 2019, a total of three rock samples were collected and analyzed from the Seventymile Property. All samples have a minimum weight of 0.25 kg and were placed in 8" x 13" clear poly bags. Each sample was placed in a bag with a unique sample tag. The corresponding sample number was also written in indelible ink on the outside of the bag A representative sample of each was also taken for reference. The sample bag was then wrapped tightly and bound using a "Zap Strap" cable tie. The rock samples were placed within a "rice bag", with the sample numbers written on the outside of the bag and sealed with a cable tie. All sample locations were recorded by using a GPS, utilizing UTM 1983 North American Datum (NAD-83), at the location of the sample. All samples were marked in the field, with the sample number written on the flagging tape and then wrapped numerous times around the sample to protect the identification of the sample. Notes on sample type, UTM locations, including elevation, sample type, sample description, geological formation, lithology, modifiers, colour, various types and intensity of alteration, types and amount of mineralization, date, sampler and comments were recorded in a field book. These were then transferred to an Excel spreadsheet. The samples were transported by the Qualified Person and delivered directly to the Whitehorse, Yukon, Canada prep lab of Bureau Veritas.

## 2019 Geoprobe Sampling

The Geoprobe is a track mounted, remote controlled, hydraulically powered direct-push drill designed by Ground Truth Exploration Inc. and operated by Ground Truth Americas, Ltd. The Geoprobe is designed to collect representative rock samples from the soil bedrock interface using a 2" internal diameter sampling rod. At Seventymile, a sample spacing of 5m was employed along pre-set grid lines or "corridors" at depths ranging from near surface to 4.5 m depending ground conditions.

At each sample site approximately 30 cm of material from the bottom of each hole is collected. Representative rock chips are collected from the sampled material and each sample site is logged in a handheld Samsung smartphone. Each site is flagged, labelled, and surveyed using a differential GPS. Parameters logged comprise: UTM co-ordinates including elevation, sample depth, rock content, content of frozen material, oxidation level, amount of weathering, rock fragment angularity, lithology, alteration, whether bedrock was successfully reached, and any additional comments pertaining to the sample. All samples were analyzed with a Niton hand-held XRF unit prior to shipment (see "Seventymile Property – Sampling Method and Approach – XRF Data Collection, 2018 and 2019").

Geoprobe samples were placed into 12 x 18" 8mil clear poly sample bags, each labelled with unique sample identification and assay tags and sealed with a cable tie for shipment to the lab. Samples were placed in rice bags with the sample numbers written on the bag and sealed with a cable tie and individually numbered yellow security tags. Samples were either flown directly from the Alder Airstrip by 40 Mile Air to Fairbanks, or by helicopter to Eagle, Alaska, where they were then transferred to an Everts Air Cargo fixed wing aircraft for delivery to Fairbanks. Samples were received in Fairbanks by Horst Expediting ("Horst") and Remote Operations Inc. and delivered by Horst or Remote Operations employees to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

## 2019 Soil Power Auger Sampling

The methodology of collection of the 2019 soil samples was identical to that of the 2018 auger sampling. Samples were collected by two person crews using gasoline powered ice augers to drill through the overburden and permafrost

to obtain a C-horizon sample that is more representative of bedrock values. Crews augered to the 'C' soil horizon and collected approximately 600 grams of material in breathable cloth bags. Sample depths ranged from surface to 2.4 m in depth. Samples were located using handheld non-differential GPS units. Parameters recorded comprise UTM coordinates including elevation, sample depth, colour, moisture, lithology, texture, and condition of the site at surface. All samples were analyzed with a Niton hand-held XRF unit prior to shipment (see "Seventymile Property – Sampling Method and Approach – XRF Data Collection, 2018 and 2019"). At locations where collecting a soil sample was impossible, such as on a talus slope, a rock grab sample was collected and recorded separately.

Soil samples were placed into cloth sample bags which are labelled, assigned a unique sample ID and assay tag, and the strings were tied for shipment. Samples were placed either in rice bags with the sample numbers written on the bag and sealed with a cable tie, or in sealed "Super Sacks" closed with wire ties. All samples were flown from the property by helicopter to Delta Junction, Alaska, then transported by road to Fairbanks, Alaska. All samples remained in the custody of the field personnel (Avalon and/or Tectonic) and were transported by Avalon's expediter either to secure facilities at the Avalon warehouse, or submitted directly to the prep lab of Bureau Veritas in Fairbanks, Alaska, USA.

## XRF Data Collection, 2018 and 2019

XRF data was selectively collected over exploration campaigns from 2018 to 2019 by various exploration service providers as part of a comprehensive service package. The XRF analysis was undertaken in an attempt to establish a future relationship between in-field XRF results and Fire Assay data to determine the XRF's effectiveness and reliability in future exploration programs.

No standardized methodology, calibration, nor Quality Control procedures were implemented during the collection of the XRF data. Varying models of XRF analyzers, specifications of analysis, and analytical procedures and methodologies have been employed by the differing exploration service providers rendering direct comparison difficult. Soil samples, if analyzed, may not have been consistently dried prior to analysis in the field, and rock and geoprobe samples, if analyzed, received only surficial point analysis. Due to the early-stage nature of the Seventymile Property, no relationship between XRF data and assay data has been established.

For the reasons mentioned above, the author of the Seventymile Technical Report believes any XRF data to be unreliable and not significant at this time.

## Sample Preparation, Analysis and Security

## Preparation, Analysis and Security

The 2018 field program was conducted by staff of Avalon under direction of Tectonic. Samples were transported from the field to camp or Eagle, AK each day. They were then stored in camp or accommodations until transport to the Bureau Veritas Commodities lab in Fairbanks, AK. Bureau Veritas Commodities is an analytical laboratory with ISO 14001 environmental certification and ISO 45001 certification for safety.

At the Bureau Veritas Fairbanks prep lab, all rock samples underwent crushing, splitting and pulverization to achieve a 250-gram pulp capable of passing through a 200-mesh screen. All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish. A 30g lead collection fire assay was used to analyze for Au. The Ag dore bead is digested with aqua regia and then analyzed by Atomic Absorption. "Over limit" samples, exceeding 10 g/t Au, were re-analyzed by gravimetric finish. Following this, a 0.25-gram split was sent to the Vancouver, British Columbia lab for four-acid digestion. The split was heated in HNO3, HClO4, and HF to fuming and taken to dryness. The residue was then dissolved in HCl. The product of the digestion was then analyzed using "Inductively Coupled Plasma Emission Spectrometer" analysis for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

All soil samples underwent drying to 60 °C, then sieved to -180 micron (80 mesh) size. All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish.

Following this, the 0.25-gram pulps were sent to the Vancouver, British Columbia lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" analysis for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

#### 2019 GEOPROBE SAMPLING

Geoprobe samples, mainly comprising rock chips, were treated as rock samples. At the Fairbanks Bureau Veritas prep lab, all samples underwent crushing, splitting and pulverization to achieve a 250-gram pulp capable of passing through a 200-mesh screen. All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an atomic absorption finish. Following this, a 0.25-gram pulp was sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" analysis for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

#### 2019 POWER AUGER SOIL SAMPLING

The 2019 preparation and analytical methodology for power auger soil sampling is identical to that for 2018. At the Fairbanks Bureau Veritas prep lab, soil samples underwent drying to 60°C, then sieved to -180-micron (80 mesh) size. All samples were then sent to Reno, Nevada, where they underwent analysis by gold by 30-gram fire assay fusion with an AAS. Following this, the 0.25-gram pulps were sent to the Vancouver, British Columbia, Canada lab for four-acid digestion "Inductively Coupled Plasma Emission Spectrometer" analysis for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Th, Ti, U, V, W, Y, Zn and Zr.

## *Quality Assurance and Quality Control*

Approximately one QAQC sample was placed into the sample sequence for every 10 samples. Eight standards were inserted for every 100 samples and 2 blanks were inserted for every 100 samples. Ten different standards from OREAS and Rocklabs were used.

A total of 10 standards were inserted into the 2018 rock and trench sample streams, and 34 were inserted into the soil sample sequence. A total of 5 standards entered into the rock/trench sample stream returned values within one standard deviation ("**1SD**") of the certified value, 4 returned values within one to two SDs, and 1 (OREAS 260) returned a value approximately 5 SD higher. The OREAS 260 standard which returned the highest deviation had the lowest certified Au value.

Of the 34 standards inserted into the soil sequence, 26 returned values within 1SD of the certified Au value, 5 returned values from 1SD to 2SD higher than the certified Au values, and three samples returned values between 5SD and 7SD above the certified Au values. Notably, standard OREAS H1 returned values that were consistently 1SD to 2SD above the certified values, as well as the values from 5SD to 7SD above the certified value. In contrast, all the Rocklabs standards returned values within 1SD of the certified value. Greater deviations occur in results from standards with certified Au values closer to the lower detection limit of 0.005 g/t Au.

Blank material was taken from the Browns Hill Quarry basalt, an unmineralized Quaternary basalt flow from the Fairbanks Mining District, Alaska. Avalon has made extensive use of this as a blank material for Au analysis and maintains a large database of results for this material. During this program, a total of 6 of these blanks were inserted into the rock sample streams, and 11 were inserted into the soil stream. Most Au values from 2018 analyses were below the 0.005 g/t detection limit. However, three blanks within the soil stream returned values from 2 to 3 ppb above the Au detection limit. Additionally, two blanks inserted into the rock stream returned values of 0.016 g/t Au and 0.017 g/t Au. Additional lab standards, blanks and repeat samples were run by Bureau Veritas Commodities as part of their assaying procedures.

## 2018 ROCK SAMPLING

In 2018, Avalon inserted a total of 8 standard samples of 5 varying concentrations, all supplied by OREAS labs, as well as 4 blank samples. All standards returned values within 2SD except one of OREAS 260, which has a low known gold value of 0.016 g/t Au. One blank sample returned a value of 0.017 g/t Au; the rest all returned values <0.005 g/t.

#### 2018 TRENCH SAMPLING

In 2018, Avalon inserted 2 standard samples and 1 blank sample into its trenching sample stream. Both standards returned values within 2SD of certified values, although the blank sample returned a value of 0.017 g/t Au.

#### 2018 SOIL SAMPLING

In 2018, Avalon inserted 34 standard samples from OREAS Labs and Rocklabs, and 11 blank samples from the Browns Quarry. Three samples, all of OREAS H1, returned Au values above the upper 2SD limit. All others returned values within the 2SD range. The high values from OREAS H1 are partially caused by the very low certified grade of the standard sample, where a slight variation in true values translates into a significant percentage variance. Three blank samples returned values slightly in excess of the 0.005 g/t Au analytical threshold.

## 2019 DUE DILIGENCE SAMPLING

A total of 2 standard and 2 blank samples were inserted into the 2019 due diligence sampling stream. One standard of each of low grade and fairly high-grade certified gold content were inserted to test accuracy of low- and high-grade values returned from the sample stream. The two blank samples were 50-gram packets of material with a certified value of <0.010 g/t Au. All samples were supplied by CDN Resource Laboratories ("CDN") of Vancouver, British Columbia. Both standard samples returned values within 2SD, indicating a satisfactory level of accuracy took place in 2019. Both blanks returned values of 0.009 g/t Au, indicating a lack of contamination in the analytical procedure.

#### 2019 GEOPROBE SAMPLING

During 2019, quality control "Standard" and "Blank" samples were inserted at a rate of about 1 sample per 10 rock chip Geoprobe samples. Two types of reference materials ("standard" samples) were employed by Tectonic in 2019, both provided by CDN. One is Reference Material CDN-CM-38, which employs known values for gold, silver, copper and molybdenum, designed to test for porphyry-style mineralization. The other is Reference Material CDN-ME-1205, employing known values of Au, Ag, Cu, Pb and Zn, and designed to test for polymetallic mineralization.

Analysis of standard reference material CDN-CM-38 revealed a "failure rate" (outside of the 2SD limits) of 17.4% for Au, 26.1% for Ag, 8.7% for Cu and 13.0% for Mo. Of four Au values outside of the 2SD range, two are above the upper limit, indicating actual geochemical values may be less than returned values for their respective sample "batches"; and two are below the lower threshold, indicating actual gold grades may exceed returned values for their respective sample batches. All six Ag values outside the 2SD range were above the upper threshold, indicating rock values returned within respective batches may exceed true Ag values. All three of the Mo "fail" values exceeded the upper 2SD threshold by a slight amount, indicating likelihood that rock values returned exceed true values. Both Cu "fail" values fell below the lower 2SD threshold, indicating true Cu values likely exceed returned values within their respective batches.

Analysis of standard reference material CDN-ME-1205 returned a 0.0% failure rate for Au and Zn. A failure rate of 10% was returned for Ag, and 5% was returned for Cu. Again, a high failure rate of 40% was returned for Pb. Both of the Ag "fail" values exceeded the upper 2SD threshold, indicating rock values returned within respective batches may exceed true Ag values. The single Cu fail value fell below the lower 2SD threshold, indicating values for the respective batch may be under-estimated. Six of the Pb values fell below the lower 2SD threshold, indicating values for their respective batches are under-estimating true values. The remaining two samples exceeded the upper 2SD threshold, indicating values for their respective batches are over-estimated.

All 43 blank samples returned sub-detection (<0.005 g/t) values for Au. Analysis for Ag returned nine values exceeding the detection level of 0.5 g/t, including five exceeding 1.0 g/t Ag to a maximum of 6.1 g/t Ag. All values returned for Mo are sub-detection (<2 ppm), and all values for Cu, Zn and Pb are roughly at crustal abundancies.

## Statement of Opinion

## QUALITY ASSURANCE (QA)

The rock sampling methodology is adequate for the conditions encountered, comprising grab sampling of float boulders. Grab sampling tends to return the least representative results, and commonly shows a bias towards "high grading" of the mineralized portions. However, grab sampling is likely the only option for many sample locations at Seventymile, due to lack of outcrop. Composite grab sampling, involving collection of several pieces of similar material, may be possible in some locations where rubble crop or felsenmeer is encountered, and typically provide more representative gold values. Where feasible, composite grab sampling should be done. Chip sampling, involving an even amount of sampling across a known width, is recommended where mineralization occurs in situ.

The trench sampling methodology, comprising representative sampling across known widths, is also suitable for the conditions encountered. Trenching did not typically reach bedrock, requiring evenly distributed "chip-grab" sampling to be done instead. The collection of specific samples of mineralized material to test for higher grade gold values also assists understanding of the mineralogy, provided they are not confused with trench values over width. The results of trench sampling over width are likely to be fairly representative of true values, provided that an even distribution of material per each sample was taken. Specific samples of mineralized material of potentially higher-grade sections are not representative of true values over width.

The routine and repetitive methodology of soil sampling in 2018 should eliminate any chance of bias within each of the sampling methods. However, due to greater depth penetration, auger sampling tended to return higher gold values because the material sampled was taken at greater depths and is thus more representative of true values. Shovel sampling at shallow depths has a greater potential to return "false negative" values. Variability in results of soil sampling may be caused by depth of overburden, slope angle, vegetative cover, if any, and outcrop exposure, with lower values expected in flat areas with thick overburden. Soil anomalies may be transported, depending on slope and groundwater conditions; detailed records of slope, vegetation, soil conditions are used to determine probability of transportation.

The routine and repetitive methodology of 2019 Geoprobe sampling should also eliminate any chance of bias and is more definitive than power auger sampling. The sampled material is treated as rock, comprising mainly rock chips, thus representing lithological rather than deep soil metal content. The material is also much less prone to downslope movement, and more accurately represents bedrock geochemistry. The 2019 power auger soil geochemical sampling has the same level of accuracy and quality assurance as the 2018 auger sampling.

The author of the Seventymile Technical Report did not perform any resampling of 2019 Geoprobe samples in the field, as the program post-dated the May 2019 property visit. No direct sample assay verification has therefore been done. However, the author has reviewed the 2019 data, including the QC sample data, and it is the author's opinion that the data provided by Tectonic is adequate for the purposes of the Seventymile Technical Report.

### QUALITY CONTROL (QC)

A high standard of quality control was utilized by Avalon and Tectonic during the 2018 program. The insertion of 10 different types of standards, with varying known concentrations, was done to determine levels of accuracy from near-background values (OREAS 200, 0.012 ppm Au) to moderate ore grade values (OREAS 214, 3.03 ppm Au). Avalon and Tectonic also utilized low Au-value standards in soil geochemical streams, and higher Au-value standards for rock and trench sample streams, in anticipation of expected values. The source of blank samples is well-chosen; actual rock samples are preferable to the usage of prepared blanks, assuming adequate additional testing of blank material. The basalt samples from the Browns Hill Quarry basalt are adequate for the QC process here.

All 2018 rock and soil sample data and results were provided in Excel spreadsheet from the Bureau Veritas laboratory in Reno, Nevada. These were then matched with sample locations (UTM-NAD 83) and descriptions, and all QC reference sample "standard" and "blank" sample results, and presented to the author of the Seventymile Technical Report in revised Excel spreadsheet format. The 2019 Geoprobe and power auger sample data was also presented in this manner, and also underwent analysis by an "XRF" unit on site. The results of these were matched with the

laboratory results, although no relationship has been established at this time (see "Seventymile Property – Sampling Method and Approach – XRF Data Collection, 2018 and 2019"). The author of the Seventymile Technical Report is of the opinion that the data has been generated with proper procedures, has been accurately transcribed from the original source (the Reno laboratory of Bureau Veritas) and is suitable for usage.

Within the 2018 rock sampling stream, only one standard sample, of OREAS H1, returned an Au value outside of the 2SD range. This has a very low certified value of 0.012 g/t Au; therefore, a slight variance in actual grade translates into a sizable percentage variance. The 2018 values obtained may be regarded as representative of true values. All blank samples returned values of <0.005 g/t Au, indicating the analytical process was free of contamination.

Standard samples within the 2018 trench sample stream returned Au values within 2SD, indicating reliability of results. The single blank sample returned a somewhat elevated Au value indicating the possibility of slight contamination and associated increase in Au grades. This would be a factor only at very low Au values.

The author of the Seventymile Technical Report is of the opinion that the security procedures employed during the chain of custody of samples from the project sites to the analytical laboratory are adequate. The author also believes the analytical procedures are suitable and adequate for the purposes of this report.

Standard samples inserted into the 2018 soil sampling stream returned values within 2SD, except for several samples of OREAS H1, which returned values slightly above the upper 2SD limit. Again, the very low certified value of OREAS H1 is prone to higher percentage deviations from known values. Achieved soil values under 0.020 g/t Au may vary somewhat from true values, although a similar difference in values at higher grades translates into a smaller percentage difference. Blank sample results indicate the process is free of significant contamination.

Typical ratios of insertion of standard samples is typically about 1:20. Although the 1:10 ratio employed here is certainly beneficial, it is not necessary for confirming accuracy of elemental analysis. A minimum insertion rate is one standard sample per sample batch. However, the ratio of 1:50 for blank sample insertion may be inadequate to ensure at least one sample per batch. The insertion rate should be increased to a minimum of one per batch to guarantee this.

The author of the Seventymile Technical Report has reviewed the 2018 rock and soil sampling data, combined with results, and has found them to be adequately tabulated. The author has also directly compared numerous individual rock and soil element values in the compiled 2018 data with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is the author's opinion that the 2018 data provided by Tectonic is adequate for the purposes of the Seventymile Technical Report.

A high standard of quality control was again utilized by Avalon and Tectonic during the 2019 Geoprobe program. Two sets of standard reference material with known base and precious metal values were utilized, as well as blanks from the same source (Brown's Quarry) as that utilized for previous programs. Of the two types of standard reference material, CDN-ME-1205 was shown to be more reliable for Au, largely due to the higher known values resulting in a 2SD range with a lesser percentage variance from the known value. Reference material CDN-ME-1205 also proved more reliable for Ag analysis than CDN-CM-38, again due to the former's higher known or "expected" value. For both sets of reference material, fail values for Ag all exceeded the upper 2SD limit. Avalon stated that Ag values returned from Bureau Veritas Labs commonly over-estimate true values, a statement supported by analytical results of standard samples. Blank samples also commonly return elevated to anomalous Ag values, indicating imprecision in the analytical technique, and over-estimation of actual values.

Values returned for Cu and Mo within reference material CDN-CM-38 typically fall within the 2SD range, with only occasional "fail" results. This indicates a high degree of reliability for these elements. Again, fail values indicate the respective batches may have either over-estimated or under-estimated values for the respective elements, and care should be used when compiling results from these batches. Analysis for Zn has been shown to be highly reliable for both sets of standard reference material. However, Pb values in both sets of reference material showed the highest

variance from expected values, with the greatest number of "fail" values. Fortunately, Pb is of secondary importance at the Seventymile Property, useful mainly as a pathfinder element for Au and Ag mineralization.

"Blank" sampling returned sub-detection values for Au for all samples, indicating gold analysis throughout the program was free of contamination. However, several blank samples returned elevated to anomalous values for Ag, indicating contamination. This has been reported as a consistent issue with the Bureau Veritas lab employed for analysis and should be investigated. Blanks sample values for Mo were all at sub-detection levels, free of contamination, and values for Cu, Pb and Zn were all at roughly crustal abundance, indicating no contamination issues for these elements.

The insertion rate for standard reference material, at a standard: rock sample ratio of about 1:18, is adequate for the program. The insertion rate for blanks is identical, and the alternating standard and blank insertion rate ensures one sample of standard and one of blank material will be enclosed in each sample batch. It is the author of the Seventymile Technical Report's opinion that the data provided by Tectonic is adequate for the purposes of this report, and that the QC regimen employed is adequate for the project.

The author of the Seventymile Technical Report has compared numerous 2019 Geoprobe and power auger soil element values in the compiled 2019 database with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is the author's opinion that the 2019 data provided by Tectonic is adequate for the purposes of the Seventymile Technical Report.

# Data Verification

The data from the pre-Tectonic historic work has not been verified, and the author of the Seventymile Technical Report cannot verify whether results from historic work are representative of true values.

For the 2018 work, Tectonic and Avalon reviewed sample collection records, the master data base and assay certificates. During each exploration program, Avalon evaluated each sample batch when received and ensured any spurious results were corrected by the laboratory prior to the data being incorporated into the master database. Tectonic and Avalon did not note any areas of concern regarding QA/QC procedures. The Tectonic personnel were of the opinion that the processes of data collection, sampling, chain of custody, sample preparation and analysis, and QA/QC protocol were done to a high degree of due care, utilizing methods that met or exceeded industry standards. The qualified person for the 2018 report confirmed the information in the 2018 report is, to the best of their knowledge, accurate and truthful.

The sampling conducted during the 2018 field season was carried out by Avalon personnel under direction from Tectonic personnel and the author of the Seventymile Technical Report has no reason to believe that this work was conducted in a manner inconsistent with modern geological field practices. The author has reviewed the geochemical data from the 2018 samples including the certificates of analysis from the laboratory and believes the analytical results to be within an acceptable range of error.

The author of the Seventymile Technical Report has reviewed the 2018 rock and soil sampling data, combined with results, and has found them to be adequately tabulated. The author has also directly compared numerous individual rock and soil element values in the compiled 2018 data with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is the author's opinion that the 2018 data provided by Tectonic is adequate for the purposes of the Seventymile Technical Report.

The author of the Seventymile Technical Report also conducted a due-diligence visit to the Flanders prospect area on May 7, 2019. Three rock samples, all from the Flanders prospect, were taken by the author. These samples are of proximal float boulders and are not exact re-samplings of previously sampled material. The 2019 samples returned values of 2.021 g/t Au, 10.4 g/t Au, and 20.0 g/t Au, similar to many of the gold values from mineralized drill intercepts

and confirming the tenor of gold mineralization at the Flanders prospect. The author can confirm that the data for the 2019 due diligence sampling is accurate, and that the processes of data collection, sampling, chain of custody, sample preparation and analysis, and QA/QC protocol were done to a high degree of due care, utilizing methods that meet or exceed industry standards.

The 2019 Geoprobe survey can be partly considered as a due-diligence exercise. Values returned were typically higher than those from power auger surveying, due to media sampled and depth penetration, but mainly confirmed existing anomalism. The Geoprobe sampling much more closely identifies the in-situ source of mineralization, due to minimal transport of rock chips compared to soil transport.

It is the author of the Seventymile Technical Report's opinion that the data provided by Tectonic is suitable to be used within the Seventymile Technical Report. The results, combined with those from XRF analysis on site, were tabulated by Tectonic personnel into Excel spreadsheet form, and provided to the author. However, the author was unable to conduct data verification directly through duplicate sampling of summer 2019 results, as the program post-dated the May 2019 property visit.

The author of the Seventymile Technical Report has compared numerous 2019 Geoprobe and power auger soil element values in the compiled 2019 database with those from the original certificates from Bureau Veritas and has found that, in all cases, results were tabulated accurately in the databases supplied. At least one comparison was made for each individual certificate. The author also feels the geochemical databases supplied, combined with drill collar data and all other information supplied by Tectonic to be accurate and complete. It is the author's opinion that the 2019 data provided by Tectonic is adequate for the purposes of the Seventymile Technical Report.

# Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical testing has been conducted on the Seventymile Property.

### Mineral Resource and Mineral Reserve Estimates

No mineral resources or mineral reserves in compliance with definitions under the CIM have been calculated for the Seventymile Property or any of its constituent prospects.

## **Conclusions**

The following conclusions can be made, based on results of the 2018 program, the 2019 due-diligence visit, and earlier programs, particularly by WGM in 2000:

- The Seventymile Property covers a narrow assemblage of Seventymile terrane Permian ophiolitic ultramafic to mafic rocks, other non-ophiolitic mafic to felsic volcanic rocks, and lesser clastic sedimentary rocks and limestone. This assemblage is clearly visible in 2018 airborne magnetic data and is bounded to the north and south by Yukon-Tanana terrane stratigraphy.
- Three major mineralized trends have been identified: the Flume trend, encompassing the Flume, Bonanza, Alder and Flanders prospects; the Deep Creek trend, comprising the Deep Creek and Kill Zone 2 prospects; and the Crooked Creek trend, hosting the Ptarmigan Hill and Mogul Bluff prospects.
- The Flume trend, and likely the Deep Creek trend, host mesothermal gold-bearing vein-style mineralization interpreted to be of orogenic origin. The Crooked Creek trend comprises epithermal gold mineralization within Tertiary conglomerates and sandstones.
- Two deposit settings are applicable: orogenic gold, comprising lode-style mineralization along splays of a district-scale crustal fault; and epithermal mineralization, marked by mineralization deposited in a lower temperature-pressure environment. Orogenic gold tends to be of higher tenor, whereas epithermal gold typically occurs as larger-tonnage, lower grade deposits.

- Anomalous to high silver, antimony and gold values from two samples at Ptarmigan Hill indicate an epithermal mineralizing environment within Tertiary coarse clastic sediments. Further surface sampling is warranted.
- Although the two main deposit models are quite distinct, they may have a common hydrothermal origin of early Tertiary age or younger. It is unlikely that two aerially extensive settings are of two separate provenances.
- A common origin would suggest that hydrothermal mineralization originally having high pressuretemperature characteristics travelled SSE from the Flume/Deep Creek areas to the Crooked Creek trend. Fluid movement would occur along permeable horizons, such as shear zones along the ultramafic-volcanic contact.
- During movement, fluids may have evolved to a lower temperature-pressure regime indicative of shallow
  emplacement environments. This would result in mesothermal-style veining in structurally constrained
  environments along the Flume trend, and epithermal-style mineralization emplaced in permeable, poorly
  consolidated coarse clastic sediments at the Ptarmigan and Mogul Bluff prospects.
- 2018 trenching at the Flanders prospect returned anomalous gold values from sheared, brecciated chloritic mafic volcanics, indicating the presence of a significant structure.
- 2018 soil sampling also expanded the gold-in-soil anomaly to the west at Flanders. Power auger sampling successfully obtained anomalous gold grades in C-horizon soil where shovel sampling was unable to do so.
- Results of the 2018 field program have confirmed the presence and tenor of Au on the property. Rock sample values from Flanders taken in May 2019 confirm high-grade tenor of proximal float. These results indicate that the Seventymile Property is a property of merit.
- Geoprobe sampling results in 2019 expanded and delineated anomalous areas identified from previous sampling. Geoprobe top-of-bedrock sampling tended to return higher metal values than power auger sampling, accentuating values from surface sampling. Geoprobe sampling is an effective method for identifying the bedrock sources of surface soil geochemical anomalism.

## **Recommendations**

Exploration work in 2020 is recommended to comprise a "Rotary Air Blast" (RAB) drilling program designed to test for bedrock mineralization at depths to 100 m, which may be extended to 200 m as required. The objective is to follow up on the soil sampling from 2018 and Geoprobe sampling from 2019 along the Flume trend, specifically on the Flanders, Flanders East, Flume-Bonanza Link, Alder, Deep Creek, and Flume targets. The expected total meterage is 2,025 m. The RAB holes are recommended to be drilled as roughly north-south oriented "fences", approximately normal to the orientation of the main shear zone within the Flume Trend.

The program is recommended to take place over a period of 27 days of actual drilling, with an additional 10 days for mobilization and de-mobilization, for a total of 37 days. The program would commence in early-June, following conclusion of the spring thaw. Drilling would be conducted utilizing a single 12-hour shift, and the camp would be heli-supported. A crew of 10 people, including a geologist, drill sample technician, helicopter pilot and cook, would comprise the camp.

All-in costs for the RAB drilling are estimated at approximately US\$605,681, equivalent to CDN\$799,500, assuming an exchange rate of US\$1.00 = CAD\$1.32.

# Recommended Budget

Expense Type	No. of Units	Type of Unit	Cost/unit (\$USD)	Cost
RAB drilling	27	days	\$ 3,440	\$92,880
Assaying	1,462	samples	\$ 50	\$73,100
XRF Analysis	27	days	\$ 300	\$8,100
Mobe, De-mobe	10	days	\$ 2,580	\$25,800
Set-up and take-down	200	hours	\$ 60	\$12,000
Camp base rent, communications	27	days	\$ 525	\$14,175
Helicopter support on site ("wet rate")	94.5	hours	\$ 2,250	\$212,625
Drill consumables	1	program total	\$ 25,000	\$25,000
Fuel (diesel)	1	program total	\$ 10,210	\$10,210
Personnel (Geologist and Technician)	27	days	\$ 995	\$26,865
Personnel (Cook)	27	person-days	\$ 450	\$12,150
Groceries/day	270	person-days	\$ 55	\$14,850
Shipping	1	program total	\$ 5,000	\$5,000
			Sub-total	\$532,755
			GTE Management Fee	
			-10%	\$17,864.50
			Contingency (10%)	\$55,061.95
			RAB drilling total (US\$):	\$605,681.45
			RAB total (CDN\$)	\$799,499.51

# **DIVIDEND POLICY**

The Company has not, since the date of its incorporation, declared or paid any dividends or other distributions on its Common Shares, and does not currently have a policy with respect to the payment of dividends or other distributions. While there are no restrictions precluding the Company from paying dividends, it has no source of cash flow, and anticipates using all available cash resources toward its stated business objectives. As such the Company does not anticipate the payment of dividends in the foreseeable future. At present, the Company's policy is to retain earnings,

if any, to finance its business operations. The payment of dividends in the future will depend upon, among other factors, the Company's earnings, capital requirements and operating financial conditions.

# DESCRIPTION OF CAPITAL STRUCTURE

## **Common Shares**

The Company's authorized capital consists of an unlimited number of Common Shares, of which 54,753,675 Common Shares are issued and outstanding as at the date of this AIF (including 2,900,000 Restricted Shares, see "Description of Share Capital – Restricted Shares". The holders of the Common Shares are entitled to receive notice of, and to attend and vote at, all meetings of shareholders (other than meetings at which only holders of another class or series of shares are entitled to vote). Each Common Share carries the right to one vote. In the event of the liquidation, dissolution or winding-up of the Company, or any other distribution of the assets of the Company among its shareholders for the purpose of winding-up its affairs, the holders of the Common Shares will be entitled to receive, on a pro rata basis, all of the assets remaining after the payment by the Company of all of its liabilities. The holders of Common Shares are entitled to receive dividends as and when declared by the board of directors of the Company (the "Board") in respect of the Common Shares on a pro rata basis. There are no pre-emptive, redemption, retraction, purchase or conversion rights attached to the Common Shares.

# **Options**

As of the date of this AIF, no stock options of the Company ("**Options**") have been granted pursuant to the Company's stock option plan (the "**Option Plan**").

# Stock Option Plan

On April 10, 2019, the Board adopted the Option Plan. The purpose of the Option Plan is to provide the Company with a share-related mechanism to attract, retain and motivate qualified directors, officers, employees and consultants, to reward those individuals from time to time for their contributions toward the long terms goals of the Company and to enable and encourage those individuals to acquire Common Shares as long term investments. Upon becoming a reporting issuer, the Company will be required to obtain shareholder approval of the Option Plan on a yearly basis in accordance with the policies of the TSXV. The general terms and conditions of the Option Plan are reflected in the disclosure below.

The Option Plan will be administered by the Administrator (as defined in the Option Plan) on the instructions of the Board. The Board may delegate to the Administrator or any director, officer or employee of the Company such administrative duties and powers as it may see fit.

The eligible participants are any director, officer, employee or consultant of the Company (including any subsidiary of the Company), as the Board may determine.

Each Option entitles the holder thereof (an "**Option Holder**") to purchase one Common Share at an exercise price set at the time of the grant.

Subject to certain limitations, the number of Common Shares that will be available for directors, officers, employees and consultants to acquire pursuant to an Options granted will not at any time exceed 10% of the Company's then outstanding Common Shares.

If, and for so long as, the Common Shares are listed on the TSXV, the number of Common Shares which may be issuable under the Option Plan and all of the Company's other previously established or proposed share compensation arrangements (a) shall not exceed 10% of the total number of the issued and outstanding Common Shares; (b) to any one Option Holder within a 12 month period shall not exceed 5% of the total number of the issued and outstanding Common Shares; and (c) within a one-year period (i) to any one person, shall be no more than 5% of the total number

of issued and outstanding Common Shares, with the exception of a consultant who may not receive grants of more than 2% of the total number of issued and outstanding Common Shares; and (ii) to persons employed to conduct Investor Relations Activities (as defined in the Option Plan), shall be no more than an aggregate of 2% of the total number of issued and outstanding Common Shares at any one time.

The exercise price of an Option will be determined by the Board at the time of the grant but will be no lower than the market value of the Common Shares as of the award date. If the Common Shares are listed on the TSXV or one or more alternative organized trading facilities, the market value will be (a) the closing price of the Common Shares on the last trading day immediately preceding the award date; or (b) a value within the parameters set by the guidelines or policies of such organized trading facility. If the Common Shares are not listed on any organized trading facility, the market value will be determined by the Board, subject to the necessary approvals of the applicable regulatory authorities.

The vesting and exercise period of an Option will be determined by the Board at the time of grant; however, the exercise period of an Option shall not be greater than ten years from the award date.

Subject to certain limitations, in the event that an Option Holder's position as a director, officer, employee or consultant is terminated for any reason other than long term disability, death or for cause, the Options held by such Option Holder may be exercised within 90 days of termination, provided such Options have vested and not expired.

Subject to certain limitations, in the event that an Option Holder's position as a director, officer, employee or consultant is terminated as a result of his or her long term disability, any Options held by such Option Holder that could have been exercised immediately prior to such termination of service shall be exercisable by such Option Holder, or by his or her guardian, for a period of one year following the termination of service of such Option Holder.

Subject to certain limitations, in the event that an Option Holder's position as a director, officer, employee or consultant is terminated as a result of death, any Options held by such Option Holder shall pass to the Qualified Successor (as defined in the Option Plan) of such Option Holder, and shall be exercisable by the Qualified Successor for a period of one year following the death.

In the event that an Option Holder's employment is terminated for cause, the Options held by such Option Holder shall expire and terminate on the date of such termination for cause.

Subject to certain limitations, the Option Plan provides for the net settlement of Options.

## **Restricted Shares**

During 2019, the Board approved the granting of 3,350,000 Restricted Shares pursuant to the Company's Restricted Share Plan. As of the date of this AIF, there are 2,900,000 Restricted Shares issued and outstanding.

## Restricted Share Plan

On July 29, 2019, the Board adopted the Restricted Share Plan. The purpose of the Restricted Share Plan is to establish a vehicle by which equity-based incentives may be awarded to qualified directors, officers, employees and consultants to recognize and reward their ongoing significant contributions to the long-term success of the Company and to align those individuals' interests more closely with the shareholders of the Company. Pursuant to the terms of the Restricted Share Plan, no Restricted Shares may be granted following the listing of the Company's Common Shares on the TSXV. The general terms and conditions of the Restricted Share Plan are reflected in the disclosure below.

The Board has the authority in its sole and absolute discretion to administer the Restricted Share Plan and to exercise (or delegate to any one or more directors, officers or employees) all the powers and authorities either specifically granted to it under the Restricted Share Plan or necessary or advisable in the administration of the Restricted Share Plan. The Board may also appoint or engage a trustee, custodian or administrator to administer the Restricted Share Plan or any aspect of it.

The eligible participants are any director, officer, employee or consultant of the Company (including any subsidiary of the Company) who, in the opinion of the Board, is in a position to contribute to the success of the Company.

If the Common Shares are not listed on any organized trading facility, then the market value will be determined by the Board.

The Board shall have the authority to determine the terms and conditions of grants including, without limitation, (a) the number of Restricted Shares subject to a grant; (b) the applicable vesting period(s); (c) the vesting conditions, including terms relating to performance conditions and/or other vesting conditions and the performance period; (d) the circumstances upon which a Restricted Share shall be forfeited, cancelled or expire; (e) the consequences of a termination with respect to a Restricted Share; (f) the manner and time of the distribution of vested Restricted Shares; and (g) whether the terms upon which any Common Shares distributed upon the vesting of a Restricted Share must continue to be held by a Participant (as defined in the Restricted Share Plan) for any specified period.

Until the expiration of the Vesting Period (as defined in the Restricted Share Plan), the Participant shall not be permitted to sell, assign, transfer, pledge or otherwise encumber the Restricted Shares.

Subject to certain terms of a Participant's employment agreement with the Company, in the event that a Participant's employment is terminated by the Company or that Participant resigns, Restricted Shares that have not vested and been distributed prior to the date of termination or resignation, as the case may be, shall not vest and shall be forfeited immediately.

## Warrants

Warrants outstanding as at December 31, 2019 are as follows:

Number outstanding	Exercise price per share (\$)	Expiry date
227,936(1)	0.35	July 12, 2021
$6,880,798^{(2)}$	0.50	July 12, 2021
$235,978^{(3)}$	0.35	September 26, 2021
9,812,618(4)	0.50	September 26, 2021
$720,000^{(5)}$	0.10	June 16, 2022
$3,380,000^{(6)}$	0.25	June 16, 2022
21,257,330		

## **Notes:**

- (1) Issued as compensation pursuant to the First Tranche of the Special Warrant Financing.
- (2) Issued pursuant to the First Tranche of the Special Warrant Financing.
- (3) Issued as compensation pursuant to the Second Tranche of the Special Warrant Financing.
- (4) Issued pursuant to the Second Tranche of the Special Warrant Financing.
- (5) Issued pursuant to the Seed Financing.
- (6) Issued in connection with the Additional Warrant Solicitation.

The Underlying Warrants are governed by the terms under respective warrant indentures. The Underlying Warrants expiring July 12, 2021 with an exercise price of \$0.50 per share are governed by a warrant indenture dated July 12, 2019 between the Company and Computershare Trust Company of Canada. The Underlying Warrants expiring September 26, 2021 with an exercise price of \$0.50 per share are governed by a warrant indenture dated September 26, 2019 between the Company and Computershare Trust Company of Canada. For further details, please refer to the full text of the warrant indentures which are available under the Company's profile on SEDAR at www.sedar.com.

# MARKET FOR SECURITIES

The Company's Common Shares are listed and traded in Canada on the TSXV under the symbol "TECT".

The following table sets forth, for the periods indicated, the reported high and low trading prices and the aggregate volume of trading of the Common Shares on the TSXV.

Period	High \$	Low \$	Volume
November 18 – 30, 2019	0.31	0.23	467,000
December, 2019	0.26	0.22	788,250

# PRIOR SALES

This table sets out particulars of securities exercisable for or exchangeable into Common Shares issued during the year ended December 31, 2019.

	Number of			
Date of Issuance	Type of Security	Securities Issued	<b>Exercise Price</b>	
July 12, 2019	Compensation Warrants <sup>(1)</sup>	227,936	\$0.35	
September 26, 2019	Compensation Warrants <sup>(2)</sup>	235,978	\$0.35	
November 11, 2019	Underlying Warrants <sup>(3)</sup>	16,693,416	\$0.50	

## **Notes:**

Notes:

- (1) Issued as compensation pursuant to the First Tranche of the Special Warrant Financing.
- (2) Issued as compensation pursuant to the Second Tranche of the Special Warrant Financing.
- (3) Issued pursuant to the automatic conversion of the Special Warrants.

# ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTIONS ON TRANSFER

The following table sets forth the securities subject to escrow or that are currently, or will be, subject to a contractual restriction on transfer and the percentage that number represents of the outstanding securities of that class ("**Escrowed Securities**").

Designation of Class	Number of Securities Held in Escrow or that are Subject to a Contractual Restriction on Transfer	Percentage of Class <sup>(1)</sup>
Common Shares <sup>(2)</sup>	17,344,863 <sup>(3)</sup>	31.42%
Seed and Additional Warrants	3,366,000 <sup>(3)</sup>	82.10%
Underlying Warrants	482,077 <sup>(3)</sup>	2.89%

- (1) As of December 31, 2019, there were 55,203,675 Common Shares outstanding, 4,100,000 Seed and Additional Warrants outstanding and 16,693,416 Underlying Warrants outstanding.
- (2) Total number of Common Shares used for calculating percentage of class includes the outstanding 2,900,000 Restricted Shares, 2,575,000 of which are collectively held by Antonio Reda, Mel Benson, Michael Roper, Curt Freeman, Allison Rippin Armstrong, Krysta Rehaag, Eric Buitenhuis, Robert Carpenter and Eira Thomas (the "Escrowed Shareholders").
- (3) The Common Shares, Seed and Additional Warrants and Underlying Warrants are subject to the terms of an escrow agreement (the "Escrow Agreement") dated November 8, 2019 between the Company, the Escrowed Shareholders and Computershare Investor Services Inc., as escrow agent.

The Escrowed Securities will be released as follows:

Date	Number of Common Shares Released	Number of Seed and Additional Warrants Released	Number of Underlying Warrants Released
May 18, 2020	2,890,810	561,000	80,345
November 18, 2020	2,890,810	561,000	80,345
May 18, 2021	2,890,810	561,000	80,346
November 18, 2021	2,890,811	561,000	80,347
May 18, 2022	2,873,222	561,000	80,347
November 18, 2022	2,908,400	561,000	80,347
Total	17,344,863	3,366,000	482,077

The release schedule may be accelerated if the Company meets "Tier 1 Issuer" listing requirements of the TSXV or otherwise establishes itself as an "established issuer" as described in National Policy 46-201 – *Escrow for Initial Public Offerings* ("NP 46-201").

## **Escrow Agreement**

Pursuant to the terms of the Escrow Agreement, the Escrowed Securities will not be able to be transferred or otherwise dealt with during the term of the Escrow Agreement unless the transfers or dealings within escrow are:

- transfers to continuing or, upon their appointment, incoming directors and senior officers of the Company or of a material operating subsidiary, with the approval of the Board;
- transfers to a person or company that before the proposed transfer holds more than 20% of the Company's outstanding Common Shares, or to a person or company that after the proposed transfer will hold more than 10% of the Company's outstanding Common Shares and has the right to elect or appoint one or more directors or senior officers of the Company or any material operating subsidiary;
- transfers to an RRSP or similar trustee plan provided that the only beneficiaries are the transferor or the transferor's spouse, children or parents;
- transfers upon bankruptcy to the trustee in bankruptcy or another person or company entitled to escrow securities on bankruptcy; and

• pledges to a financial institution as collateral for a *bona fide* loan, provided that upon a realization the securities remain subject to escrow.

Tenders of Escrowed Securities to a take-over bid or business combination are permitted provided that, if the tenderer is a Principal of the successor corporation upon completion of the take-over bid or business combination, securities received in exchange for tendered Escrowed Securities are substituted in escrow on the basis of the successor corporation's escrow classification.

If the Principals acquire any additional securities of the Company of the type listed above, those securities will be added to the securities already in escrow, to increase the number of remaining Escrowed Securities. Such increased number of remaining Escrowed Securities will be released in accordance with the release schedule in the table above.

Additionally, securities of the Company may be subject to additional escrow restrictions and restrictions on transfer pursuant to NP 46-201, or if required by the TSXV (in accordance with TSXV Policy 5.4) or other applicable regulations of any other stock exchange on which the securities of the Company may be listed for trading in the future. There can be no guarantee that the Securities will be listed for trading on the TSXV or any other stock exchange

# **DIRECTORS AND OFFICERS**

To the Company's knowledge, as at the date of this AIF, the directors and executive officers of the Company as a group, beneficially owned or had control or direction over, directly or indirectly, 11,982,785 Common Shares, representing approximately 21.84% of the outstanding Common Shares on a non-diluted basis, (or approximately 19.32% on a fully-diluted basis).

## Director and Executive Officer Information

The following table sets forth the name of each director and executive officer of the Company as at the date of this AIF, their province or state and country of residence, their position(s) and office(s) held with the Company, their principal occupation(s) during the preceding five years, the date they became a director of the Company, if applicable, and the number and percentage of Common Shares they beneficially own, or control or direct, directly or indirectly. Each director's term will expire immediately prior to the next annual meeting of shareholders of the Company.

Name and Residence	Position(s) and Office(s) with Tectonic <sup>(1)</sup>	Principal Occupation(s) During Past Five Years	Director Since	Number and Percentage of Common Shares Held <sup>(2)</sup>
Antonio Reda British Columbia, Canada	President, CEO & Director <sup>(4,5)</sup>	President and CEO of the Company since June 2017; Vice President of Corporate Development of Kaminak from 2005 to 2016	June 9, 2017	4,216,071 <sup>(6)</sup> (7.69%)
Curt Freeman Alaska, USA	Director	President of Avalon since January 1995	April 13, 2018	3,387,500 <sup>(7)</sup> (6.18%)
Allison Rippin Armstrong British Columbia, Canada	Director <sup>(3,5)</sup>	President of ARA Environmental Consulting Ltd. since August 2016; Vice President, Sustainability of Kaminak from 2013 to 2016	April 15, 2019	890,000 <sup>(8)</sup> (1.62%)

Name and Residence	Position(s) and Office(s) with Tectonic <sup>(1)</sup>	Principal Occupation(s) During Past Five Years	Director Since	Number and Percentage of Common Shares Held <sup>(2)</sup>
Mel Benson Alberta, Canada	Chair of the Board and Director <sup>(3,4,5)</sup>	President, Mel E. Benson Management Services Inc. since 1999; Director of Suncor Energy Inc. since April 2000	September 17, 2019	1,285,714 <sup>(9)</sup> (2.34%)
Michael Roper British Columbia, Canada	Director <sup>(3,4)</sup>	Director, Project Evaluations of Agnico Eagle Mines Ltd. since May 2004	September 17, 2019	600,000 <sup>(10)</sup> (1.09%)
Krysta Rehaag British Columbia, Canada	CFO & Corporate Secretary	CFO of the Company since October 2018; Director of Finance of AdPerfect Dynamic Advertising Solutions from 2016-2018 (on maternity leave from 2014-2016)	-	475,000 <sup>(11)</sup> (0.87%)
Eric Buitenhuis British Columbia, Canada	Vice President, Exploration	Vice President, Exploration of the Company since December 2017; Project Geologist of Goldcorp Inc. 2016-2017; Project Geologist of Kaminak from 2011 to 2016	-	1,128,500 <sup>(12)</sup> (2.06%)

### Notes:

- (1) All officers are full-time employees of Tectonic.
- (2) Based on 54,753,675 outstanding Common Shares as of the date of this AIF.
- (3) Member of the audit committee of the Company (the "Audit Committee").
- (4) Member of the compensation committee of the Company.
- (5) Member of the nominating and corporate governance committee of the Company.
- (6) Mr. Reda also holds 928,571 Common Share purchase warrants ("Warrants"), entitling him to acquire an additional 928,571 Common Shares. Pursuant to the Escrow Agreement, 92,857 Warrants were released from escrow upon Tectonic's listing on the TSXV on the Listing Date and 835,714 Warrants remain in escrow. The 4,216,071 Common Shares (421,607 of which were released from escrow on the Listing Date and 3,794,464 remain in escrow, pursuant to the terms of the Escrow Agreement) includes 650,000 Restricted Shares.
- (7) Mr. Freeman also holds 900,000 Warrants (90,000 of which were released from escrow on the Listing Date and 810,000 remain in escrow, pursuant to the terms of the Escrow Agreement), entitling him to acquire an additional 900,000 Common Shares. The 3,387,500 Common Shares (338,750 of which were released from escrow on the Listing Date and 3,048,750 remain in escrow, pursuant to the terms of the Escrow Agreement) includes 250,000 Restricted Shares.
- (8) Ms. Rippin Armstrong also holds 140,000 Warrants (14,000 of which were released from escrow on the Listing Date and 126,000 remain in escrow, pursuant to the terms of the Escrow Agreement), entitling her to acquire an additional 140,000 Common Shares. The 890,000 Common Shares (89,000 of which were released from escrow on the Listing Date and 801,000 remain in escrow, pursuant to the terms of the Escrow Agreement) includes 250,000 Restricted Shares.
- (9) Mr. Benson also holds 285,714 Warrants (28,572 of which were released from escrow on the Listing Date and 257,142 remain in escrow, pursuant to the terms of the Escrow Agreement), entitling him to acquire an additional 285,714 Common Shares. The 1,285,714 Common Shares (118,572 of which were released from escrow on the Listing Date and 1,067,142 remain in escrow, pursuant to the terms of the Escrow Agreement) includes 400,000 Restricted Shares.
- (10) The 600,000 Common Shares (60,000 of which were released from escrow on the Listing Date and 540,000 remain in escrow, pursuant to the terms of the Escrow Agreement) includes 250,000 Restricted Shares.
- (11) Ms. Rehaag also holds 50,000 Underlying Warrants (5,000 of which were released from escrow on the Listing Date and 45,000 remain in escrow, pursuant to the terms of the Escrow Agreement), entitling her to acquire an additional 50,000 Common Shares. The 475,000 Common Shares (47,500 of which were released from escrow on the Listing Date and 427,500 remain in escrow, pursuant to the terms of the Escrow Agreement) includes 425,000 Restricted Shares.

(12) Mr. Buitenhuis also holds 28,500 Underlying Warrants (2,850 of which were released from escrow on the Listing Date and 25,650 remain in escrow, pursuant to the terms of the Escrow Agreement), entitling him to acquire an additional 28,500 Common Shares. The 1,128,500 Common Shares (112,850 of which were released from escrow on the Listing Date and 1,015,650 remain in escrow, pursuant to the terms of the Escrow Agreement) includes 350,000 Restricted Shares.

# Cease Trade Orders or Bankruptcies

No director or executive officer of the Company is, as of the date of this AIF or was within 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including the Company) that:

- (a) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days, that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or
- (b) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

No director or executive officer of the Company, and no shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- (a) is, as of the date of this AIF or was within 10 years before the date of this AIF, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt made a proposal under any legislation relating to bankruptcy or insolvency, or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (b) has, within 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

## Penalties or Sanctions

No director or executive officer of the Company and no shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company has been subject to:

- (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor making an investment decision.

The foregoing, not being within the knowledge of the Company, has been furnished by the respective directors, executive officers and shareholders holding a sufficient number of securities of the Company to affect materially the control of the Company.

## **Conflicts of Interest**

To the best of the Company's knowledge, there are no existing or potential material conflicts of interest between the Company and any of its directors or officers as of the date hereof. However, certain of the Company's directors and officers are, or may become, directors or officers of other companies with businesses which may conflict with its business. Accordingly, conflicts of interest may arise which could influence these individuals in evaluating possible acquisitions or in generally acting on the Company's behalf. See also "Risk Factors – Conflicts of Interest".

Pursuant to the BCBCA, directors and officers of the Company are required to act honestly and in good faith with a view to the best interests of the Company. As required under the BCBCA and the Company's Articles:

- a director or senior officer who holds any office or possesses any property, right or interest that could result, directly or indirectly, in the creation of a duty or interest that materially conflicts with that individual's duty or interest as a director or senior officer of the Company, must promptly disclose the nature and extent of that conflict; and
- a director who holds a disclosable interest (as such term is defined under the BCBCA) in a contract or transaction into which the Company has entered or proposes to enter may generally not vote on any directors' resolution to approve such contract or transaction.

Generally, as a matter of practice, directors who have disclosed a material interest in any contract or transaction that the Board is considering will not take part in any Board discussion respecting that contract or transaction. If on occasion such directors do participate in the discussions, they will refrain from voting on any matters relating to matters in which they have disclosed a material interest. In appropriate cases, the Company will establish a special committee of independent directors to review a matter in which directors or officers may have a conflict.

# LEGAL PROCEEDINGS AND REGULATORY ACTIONS

To the Company's knowledge, there are no legal proceedings or regulatory actions material to the Company to which it is a party, or has been a party to, or of which any of its property is the subject matter of, or was the subject matter of, during the year ended December 31, 2019, and no such proceedings or actions are known by the Company to be contemplated.

There have been no penalties or sanctions imposed against the Company by a court or regulatory authority, and the Company has not entered into any settlement agreements before any court relating to provincial or territorial securities legislation or with any securities regulatory authority, since its incorporation.

# INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as disclosed elsewhere in this AIF, no director, executive officer or shareholder that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the issued Common Shares, or any of their respective associates or affiliates, has any material interest, direct or indirect, in any transaction within the three years before the date of this AIF which has materially affected or is reasonably expected to materially affect the Company or a subsidiary of the Company.

# TRANSFER AGENT AND REGISTRAR

The registrar and transfer agent for the Common Shares is Computershare Investor Services Inc. at its principal office in Vancouver, British Columbia.

The Warrant Agent for the Underlying Warrants is Computershare Trust Company of Canada at its principal office in Vancouver. British Columbia.

# MATERIAL CONTRACTS

Except for material contracts entered into in the ordinary course of business, set out below are material contracts to which the Company or any of its subsidiaries are a party entered into during the year ended December 31, 2019 or before the most recently completed financial year and which still remain in effect and material to the Company. Copies of such material contracts are available for review under the Company's profile on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

- 1. First Special Warrant Indenture, see "General Development of the Business Three Year History Financings and Issuances of the Company's Securities 2019 Issuances and Financing Special Warrant Financing".
- 2. Second Special Warrant Indenture, see "General Development of the Business Three Year History Financings and Issuances of the Company's Securities 2019 Issuances and Financing Special Warrant Financing".
- 3. First Underlying Warrant Indenture, see "General Development of the Business Three Year History Financings and Issuances of the Company's Securities 2019 Issuances and Financing Special Warrant Financing".
- 4. Second Underlying Warrant Indenture, see "General Development of the Business Three Year History Financings and Issuances of the Company's Securities 2019 Issuances and Financing Special Warrant Financing".
- 5. Tibbs Agreement, see "General Development of the Business Three Year History Significant Acquisitions and Material Contracts Tibbs Property".
- 6. Seventymile Agreement, see "General Development of the Business Three Year History Significant Acquisitions and Material Contracts Seventymile Property".
- 7. Escrow Agreement, see "Escrowed Securities and Securities Subject to Contractual Restrictions on Transfer".

# **EXPERTS**

Information of a scientific or technical nature in respect of the Tibbs Property is included in this AIF based upon the Tibbs Technical Report, with an effective date of October 31, 2019, prepared by Carl Schulze, P.Geo., of Aurora Geosciences Ltd., who is an independent "qualified person" under NI 43-101.

Information of a scientific or technical nature in respect of the Seventymile Property is included in this AIF based upon the Seventymile Technical Report, with an effective date of October 31, 2019, prepared by Carl Schulze, P.Geo., of Aurora Geosciences Ltd., who is an independent "qualified person" under NI 43-101.

To the best of the Company's knowledge, after reasonable inquiry, as of the date hereof, the aforementioned individual and his firm do not beneficially own, directly or indirectly, any Common Shares.

Information of a scientific or technical nature relating to the assay results at the Tibbs Property has been reviewed and approved by Eric Buitenhuis, M.Sc., P.Geo., the Company's Vice President of Exploration who is a "qualified person" for the purposes of NI 43-101. As at the date hereof, Eric Buitenhuis, beneficially owns, directly or indirectly, in the aggregate 2.06% of the issued and outstanding Common Shares of the Company. Mr. Buitenhuis is currently an

employee and officer of the Company, but is not currently expected to be elected, appointed or employed as a director of the Company or of an associate of affiliate of the Company.

The Company's auditors are Davidson & Company LLP ("**Davidson**"), who have prepared an independent auditor's report dated March 12, 2020 in respect of the Company's consolidated financial statements for the year ended December 31, 2019. Davidson has advised that they are independent with respect to the Company within the meaning of the Chartered Professional Accountants of British Columbia Code of Professional Conduct.

# **AUDIT COMMITTEE**

The Company has formed an Audit Committee comprised of Michael Roper (Chair), Mel Benson and Allison Rippin Armstrong, all of whom are "financially literate" and independent as defined in National Instrument 52-110 – *Audit Committees* ("NI 52-110").

The Audit Committee assists the Board in fulfilling its obligations relating to the integrity of the internal financial controls and financial reporting of the Company. The external auditors of the Company report directly to the Audit Committee. The Audit Committee's principal responsibilities include (i) recommending the external auditor to be nominated for the purpose of audit, review or attest services for the Company, (ii) recommending the compensation of the external auditor, (iii) overseeing the work of the external auditor in performing audit, review or attest services for the Company, (iv) reviewing the Company's financial statements, management's discussion and analysis and annual and interim earnings press releases before the Company publicly discloses this information, and (v) establishing procedures for addressing complaints or concerns regarding accounting, internal control or auditing matters.

The text of the Audit Committee's charter is attached as Schedule "A" to this AIF.

# Relevant Education and Experience

Each member of the Audit Committee has adequate education and experience that is relevant to their performance as an Audit Committee member and, in particular, the requisite education and experience that have provided the member with:

- (a) an understanding of the accounting principles used by the Company to prepare its financial statements and the ability to assess the general application of those principles in connection with estimates, accruals and reserves;
- (b) experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements or experience actively supervising individuals engaged in such activities; and
- (c) an understanding of internal controls and procedures for financial reporting.

## Michael Roper, Chair

Mr. Roper has experience with accounting principles, corporate financing reporting, budgeting and accruals and provisions, as well as, supporting the preparation, auditing and evaluation of financial statements related to corporate accounting requirements, for various junior mining companies, including adherence to internal corporate controls and procedures with respect to financial reporting requirements. Based on his experience, Mr. Roper has an understanding of financial reporting requirements respecting financial statements sufficient enough to enable him to discharge his duties as an audit committee member.

# Mel Benson

Mr. Benson has been involved in publicly traded companies and has served on the audit committee for several public

companies, including Suncor. Mr. Benson is very familiar with managing junior listed companies, including financing and compliance with reporting requirements. Mr. Benson has served on a number of publicly traded companies internal and operational audit teams and has experience with management various operational and reporting requirements, including the reporting of internal financial reporting requirements and economic projections. Based on his experience, Mr. Benson has an understanding of financial reporting requirements respecting financial statements sufficient enough to enable him to discharge his duties as an audit committee member.

## Allison Rippin Armstrong

Ms. Armstrong has various experience with budgeting, economic assessments, and financial reporting through roles at various private and publicly traded companies. Ms. Armstrong is familiar with managing junior mining companies, including financing and compliance with reporting requirements. Based on her experience, Ms. Armstrong has an understanding of financial reporting requirements respecting financial statements sufficient enough to enable her to discharge her duties as an audit committee member.

## Audit Committee Oversight

At no time since the commencement of the Company's most recently completed financial year was a recommendation of the Audit Committee to nominate or compensate an external auditor not adopted by the Board.

# Reliance on Certain Exemptions

The Company may rely upon the exemption provided by section 6.1 of NI 52-110, pursuant to which the Company is not required to comply with Part 5 (Reporting Obligations) of NI 52-110.

# *Pre-Approval Policies and Procedures*

The Audit Committee is responsible for the pre-approval of all non-audit services to be provided to the Company or its Subsidiaries by the Company's external auditor or the external auditor of the Subsidiaries, unless such pre-approval is otherwise appropriately delegated by the Audit Committee, or if the Audit Committee adopts appropriate policies and procedures for the engagement of non-audit services.

# External Auditor Service Fees by Category

The fees billed by the Company's external auditors in each of the last two fiscal years for audit and non-audit related services provided to the Company or its subsidiaries (if any) were as follows:

Financial Year Ending	Audit Fees	Audit Related Fees <sup>(1)</sup>	Tax Fees <sup>(2)</sup>	All Other Fees <sup>(3)</sup>
December 31, 2019	\$67,958	nil	nil	nil
December 31, 2018	\$40,000	nil	nil	nil

### Notes:

- (1) Fees charged for assurance and related services that are reasonably related to the performance of an audit, and not included under Audit Fees.
- (2) Fees charged for tax compliance, tax advice and tax planning services.
- (3) Fees for services other than disclosed in any other column.

# ADDITIONAL INFORMATION

Additional information relating to the Company can be found on SEDAR at www.sedar.com.

Additional information, including directors' and officers' remuneration and indebtedness principal holders of the Company's securities authorized for issuance under equity compensation plans will be contained in the management information circular of the Company to be mailed and filed in connection with its annual meeting of the shareholders to be held on May 21, 2020.

Additional financial information is provided in the Company's audited consolidated financial statements and managements' discussion and analysis for the year ended December 31, 2019.

## SCHEDULE A

#### **Audit Committee Charter**

This Audit Committee Charter has been adopted by the Board of Directors (the "Board") of the Tectonic Metals Inc. (the "Company") in order to comply with National Instrument 51-102 *Continuous Disclosure Obligations* (the "Instrument") and to more properly define the role of the Audit Committee (the "Committee") in the oversight of the financial reporting process of the Company. Nothing in this Charter is intended to restrict the ability of the Board or the Committee to alter or vary procedures in order to comply more fully with the Instrument, as amended from time to time.

## I. Purpose

The purpose of the Committee is to:

- (a) improve the quality of the Company's financial reporting;
- (b) assist the Board in properly and fully discharging its responsibilities;
- (c) provide an avenue of enhanced communication between the directors and external auditors;
- (d) enhance the external auditor's independence;
- (e) increase the credibility and objectivity of financial reports; and
- (f) strengthen the role of the directors by facilitating in depth discussions between directors, management and external auditors.

The Board has hereby established the Committee for, among other purposes, compliance with the Instrument. The Board, after each annual shareholders' meeting, must appoint or re-appoint its Committee.

## II. Duties and Responsibilities

## Relationship with External Auditors

The Company will require its external auditor to report directly to the Committee.

## Responsibilities

- (1) The Committee must have a written charter that sets out its mandate and responsibilities.
- (2) The Committee must recommend to the Board:
  - (a) the external auditor to be nominated for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company; and
  - (b) the compensation of the external auditor.
- (3) The Committee must be directly responsible for overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting.
- (4) Except as exempted by securities regulatory policies, the Committee must pre-approve all non-audit services to be provided to the Company or any of its subsidiaries by the Company's external auditor.

- (5) The Committee must review the Company's financial statements, MD&A and annual and interim earnings press releases before the Company publicly discloses this information.
- (6) The Committee must be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements, other than the public disclosure referred to in subsection (5), and must periodically assess the adequacy of those procedures.
- (7) The Committee must establish procedures for:
  - (a) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and
  - (b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.
- (8) The Committee must review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former external auditor of the Company.

## **Composition**

The Committee membership shall satisfy the laws governing the Company and the independence, financial literacy and experience requirements under securities law, stock exchange and any other regulatory requirements as are applicable to the Company.

## Authority

The Committee shall have the authority to:

- (a) to engage independent counsel and other advisors as it determines necessary to carry out its duties,
- (b) to set and pay the compensation for any advisors employed by the Committee,
- (c) to communicate directly with the internal and external auditors; and
- (d) recommend the amendment or approval of audited and interim financial statements to the Board.

## Chair

The members of the Company shall elect a chair from among their number.

## Meetings

Meetings of the Committee shall be scheduled to take place at regular intervals and, in any event, not less frequently than once a year. Opportunities shall be afforded periodically to the external auditor, the internal auditor and to members of senior management to meet separately with the members. Minutes shall be kept of all meetings of the Committee.

The quorum for a meeting of the Committee is a majority of the members.

## Effective Date

This Charter was implemented by the Board on September 17, 2019.