

***AVALON DEVELOPMENT CORP.  
PROSPECT SUBMITTAL SUMMARY***

**PROPERTY NAME:** Maple Leaf

Past Name(s): None

Property Size: 10,270 acres (67 State claims, Figure 1).

**LOCATION AND INFRASTRUCTURE:**

State/Prov: Alaska

Mining District: eastern edge of the Goodpaster Mining District

UTM: 647800E; 7145310N, Zone 6, NAD27 Alaska

Local river, mountain range: two miles north of Eisenmenger Fork, Goodpaster River

Access: Helicopter

Infrastructure: None

Physiology: Elevations from 4,000 to 5,300 feet ASL, mostly above tree line, unglaciated

**CURRENT OWNER(S):**

Primary Owner & Percentage: Anglo Alaska Gold, 100%

Secondary Owner(s) & Percentage: None

Government Ownership & Percentage: State of Alaska, 3% NPI on production

**CURRENT LEASE or JV HOLDER(S):**

Lessee Name & Percentage: N/A

Lease terms:

Term: N/A

Adv. Roy.: N/A

NSR: N/A

Buyout: N/A

Work. Commitment: N/A

Transfer Rights: N/A

Joint Venture Terms: N/A

**LAND STATUS:**

Alluvial Rights: Anglo Alaska Gold, 100%

Lode Rights: Anglo Alaska Gold, 100%

Surface Rights: use consistent with mining, Anglo Alaska Gold, 100%

**TITLE VALIDITY:**

Title Recorded/Registered: Redux 1 through 67, ADL # 708702 through 708768,  
Recording Doc. 2011-015020

**ENCUMBRANCES:**

Government Production Royalty: State of Alaska, 3% NPI on production  
 Federal or State Claim rents: \$140 per year per claim for years 2011 - 2015  
 Secondary owner/lease-holder payment: None  
 Underlying Production Royalty: None (other than State of Alaska, see above)  
 Work Commitments: \$2.50 per acre per year (\$26,800 total), bankable up to 4 years into the future.  
 Liens on property or equipment: N/A  
 Debt encumbrances: N/A

**ENVIRONMENTAL/SOCIOLOGICAL CONSIDERATIONS:**

Proximity to Mineral Closures: 16 mile south of Yukon – Charlie Rivers National Preserve  
 Proximity to population centers: ~ 110 mi southeast of Fairbanks, AK  
 Environmental considerations: No significant issues, Sumitomo's Pogo gold mine operates year around on a downstream tributary of the Goodpaster River.

**GEOLOGIC SUMMARY:**

**History:** Placer gold exploration first reached the Goodpaster Mining District in 1915 and continued intermittently into the 1990's. Despite this protracted length of time, recorded placer gold production from the district has totaled only 2,050 troy ounces, none of which was derived from the Maple Leaf area. Placer mining was attempted by Peter Miscovich on lower Central Creek immediately south of the Pogo deposit in the 1940's however the operation was not successful. Similar small scale but unproductive placer mining ventures have been attempted nearer the Maple Leaf project on Tibbs Creek and Michigan Creek. Total lode gold production from the district prior to commercial start-up of the Pogo deposit in February 2006 is estimated at only 300 troy ounces, all of which came from the Black Mt. area, 11 miles to the southeast of Maple Leaf.

The Maple Leaf prospect was discovered during regional pan concentrate and stream sediment sampling conducted by Avalon Development Corp. for Evanachan Ltd. in the fall of 2006 (Figure 1). Quartz vein float boulders found during this work contained multi-gram gold with highly anomalous bismuth and arsenic. Evanachan was acquired by Rubicon Minerals in early 2007 and follow up work, including limited diamond drilling (1,105 meters in 4 holes), was conducted in 2007. Values up to 19 grams per tonne gold were announced from the Maple Leaf prospect and new mineralization was discovered in other areas of the property, including at the American Eagle prospect, 3.5 miles to the northeast. Gold values to +3 gpt gold with anomalous bismuth, arsenic and molybdenum were discovered at American Eagle however no drilling was conducted.

No other work was conducted on the Maple Leaf or American Eagle prospects and in the fall of 2008, Rubicon dropped the claims covering these prospects. The land was open to mineral

entry until staked by Anglo Alaska Gold Corp. in August, 2011 (Figure 1). No significant exploration work was conducted by Anglo Alaska in 2011.

**Geologic Setting:** Terrane models of Alaska refer to the east-central portion of Alaska, between the Yukon River to the north and the Alaska Range to the south, as the Yukon-Tanana terrane (YTT). The current prevailing theory on the origin of the YTT suggests development of a Devonian volcanic arc along the continental margin of the North American craton. This is a largely metamorphic and igneous province which is bounded on the north by the Tintina Fault and on the south by the Denali Fault. These parallel, dextral strike slip faults form major sutures and are speculated to have up to 400 km of offset since the late Cretaceous. Conjugate to these large scale structures are numerous northeast-trending faults, such as the Shaw Creek fault, Mt. Harper lineament (immediately east of the Maple leaf prospect) and Black Creek tectonic zone (immediately west of the Maple Leaf prospect, Figure 2). Large scale, northwest-trending sympathetic faults also occur between the Denali and Tintina Faults, including the Pogo trend, Central fault and the Richardson lineament. These northwest trending structures are less well defined and often occur as broad deformation zones with indistinct boundaries. Low angle reverse and normal faults have been mapped in the Goodpaster District, primarily in the Pogo mine area where they play a critical role in controlling the mineralization at this ore body.

Rocks comprising the YTT are poly-deformed and poly-metamorphosed, mid-Paleozoic and older, sedimentary, volcanic and plutonic rocks which are intruded by mid-Cretaceous to early Tertiary plutonic rocks and locally overlain by Tertiary volcanic rocks. West of the Shaw Creek fault the regional metamorphic grade is in the greenschist facies. East of the Shaw Creek fault and west of the Black Mt. tectonic zone the terrane is dominated by amphibolite grade and locally higher grade metamorphic rocks. East of the Black Mt. tectonic zone the terrane is dominated by Cretaceous and Tertiary plutonic rocks. This configuration suggests that erosional levels become progressively deeper to the east with the Maple Leaf prospect in the most deeply eroded of the three regional-scale blocks.

The primary host rocks at the Maple Leaf and American Eagle prospects are Cretaceous(?) age unfoliated biotite granite and biotite quartz monzonite. These rocks are fine- to medium-grained, equigranular and contain abundant quartz and biotite. There are numerous dikes of this biotite granite-quartz monzonite cutting the gneissic country rocks. Sulfide-bearing auriferous quartz veins at the Maple Leaf prospect are hosted in dikes of this unit.

The structures in the Maple Leaf area are poorly exposed but appear to be dominated by northeast-trending vertical to near-vertical faults that are evident on satellite photos and which may control the quartz-sulfide-gold mineralization. There are perhaps four northeast trending linears on the slope above and below the Maple Leaf discovery zone that are bleeding quartz-sulfide boulders down the hill, however, none of these faults are exposed in outcrops on the prospect.

**Mineralization** :In September 2006, Avalon Development was contracted to conduct regional pan concentrate and stream sediment sampling over the Evanachan-owned lands in the Goodpaster District. Near the end of this program, a quartz boulder train was discovered on a ridge on the east side of the Eisenmenger Fork of the Goodpaster River during routine reconnaissance exploration (Figure 3). There was no evidence of past sampling in the area. Seven grab samples of this float were collected and submitted for assay. Assay results from this work were not received until the early winter of 2006 so no follow-up was possible until 2007. Samples from this boulder train and from steam sediment and pan concentrate samples in surrounding drainages identified a 10 kilometer by 7.0 kilometer, greater than 100 ppm arsenic stream silt and pan concentrate anomaly within which samples of quartz veins interpreted as bedrock or sub-crop returned anomalous gold (from trace up to 12 gpt).

Assays of grab rock samples collected in 2007 returned gold values from trace to 19.1 gpt with 17% of samples (total 114 rock samples) containing gold in excess of 1.0 gpt gold with an average of 5.2 gpt gold. Gold is associated with elevated bismuth (up to 7,700 ppm), tellurium (up to 280 ppm) and variable arsenic. The presence of bismuthinite is significant since the 5.6 Moz Pogo gold mine, located approximately 50 kilometers to the west, also has a documented strong positive correlation between bismuth and gold content. Mineralization at Maple Leaf is characterized by sugary textured quartz veins and locally vein stockworks of variable orientations associated with intrusive and country rock (gneisses) containing trace to 2% sulfides characterized by arsenopyrite +/- bismuthinite +/- molybdenite and, locally, visible gold. Outcrop in the area is limited and solifluction has clearly transported float boulders down slope (Figure 3). Vein widths(?) range from less than 1.0 meter wide to vein stockworks over 1-3 meters. Large (0.5 meter x 0.25 meter) boulders containing bismuthinite-bearing veins noted from the target area have not yet been traced to their source although, given the topography, the source is likely local.

In mid-summer, 2007, Avalon Development managed a diamond core drilling program for Rubicon on the Maple Leaf prospect. The program included 1,105 meters of drilling in four holes. Drilling beneath surface gold-quartz vein showings intersected weakly anomalous (up to 0.25 gpt gold over 0.8 meters) but did not intersect vein style mineralization similar to that observed on the surface. No follow-up work was conducted and the source for the high grade Au-As-Bi-Te boulders remains unknown.

Additional prospecting conducted in 2007 outside of the immediate Maple Leaf area revealed additional gold mineralization. The American Eagle prospect was discovered about 3.5 miles northeast of Maple Leaf, and is hosted in biotite granite cut by sheeted white quartz veins ranging from 0.1 to 1.0 cm thick. Vein material makes up 5%-10% of the country rock over an area of 400 by 50 meters. Quartz veins at American Eagle host extremely coarse grained bismuthinite in flat, sometimes deformed tabular plates ranging up to 1.0 cm in maximum dimensions. The bismuth-bearing veins have not been seen in outcrop and occur on a coarse boulder-strewn talus slope just below a flat ridge line. Limited grab sampling along this ridge has returned gold values ranging from trace to 3.03 gpt gold, up to 3,880 ppm bismuth, up to 5,610 ppm arsenic and up to 494 ppm molybdenum. The full extent of this mineralization is unknown due to extensive talus cover. No follow up work was completed at American Eagle before the claims were dropped by Rubicon in 2008.

The Tourmaline Ridge prospect was discovered in 2007 on a ridge 1.5 miles west of Maple Leaf. The upper 150 meters of elevation on this ridge, extending for about 800 meters along the ridge crest, is composed of tourmaline-bearing paragneiss containing massive tourmalinite (+50% tourmaline) with lesser quartz veins and tourmaline-vein breccias. Numerous dikes of granite, ranging in size from less than 1 to 3 meters intrude the tourmaline-rich gneissic rocks and often contain tourmaline along the dike margins. Sampling of the tourmaline-rich rocks has returned weakly elevated gold numbers (maximum 164 ppb), up to 804 ppm bismuth and up to 2,620 ppm arsenic. The intensity and extent of tourmaline indicates that a fluid-rich intrusive-related mineralizing system is present on a large scale in the general Maple Leaf area. No follow up work was completed at Tourmaline Ridge before the claims were dropped by Rubicon in 2008.

Additional gold and copper-molybdenum sulfide mineralization was discovered in 2007 about 1.1 miles east of Maple Leaf. Rock samples from this area returned trace to 0.9 gpt gold and up to 1,925 ppm bismuth.

**Ore Reserves/Resources:** there currently are no resources or reserves on the Maple Leaf prospect.

**Ore Deposit Model:** Gold with anomalous bismuth and tellurium in sheeted quartz veins in an intrusive host rock is similar to the +10 Moz Fort Knox deposit while the additional of arsenic to this element suite suggests similarities to the 5.6 Moz Pogo deposit, another intrusive-related gold deposit in the Tintina Gold belt. Both are examples of proximal, higher P-T intrusive-related gold systems. Intrusive-hosted disseminated copper – molybdenum mineralization may be related to the northwest-trending 70-Ma Carmacks Porphyry Copper Belt extending from the western Yukon Territory through the Maple Leaf area to the Livengood District.

## CONCLUSIONS:

- 1) The Maple Leaf prospect hosts gold mineralization strongly associated with elevated Bi, As and Te similar to the Pogo (Au-Bi-As-Te) and Fort Knox (Au-Bi-Te) deposits.
- 2) Biotite quartz monzonite is the preferential host rock with moderate to weak sericite alteration adjacent to sugary textured quartz veins which host the gold mineralization.
- 3) Drilling conducted in 2007 (1,105 meters in 4 holes) failed to intercept any of the sugary textured stockwork veining associated with anomalous gold values. The lode source of these boulders remains unknown.
- 4) In addition to the Maple Leaf prospect, multiple unexplored gold and base metal occurrences are present on the property.

**RECOMMENDATIONS:**

- 1) Grid-based soil sampling is warranted at Maple Leaf in order to determine the lode source for the sugary textured gold-bearing quartz veins.
- 2) Grid-based rock sampling is warranted at American Eagle in order to determine the extent and geometry of gold mineralization on this prospect.
- 3) Outcrop-scale mapping and sampling are recommended to other known prospects.
- 4) An induced polarization (IP) geophysical survey may be helpful in outlining sulfide-bearing copper-molybdenum mineralization.



Curtis J. Freeman, CPG#6901  
Avalon Development Corp.

Date: May 18, 2011



Filename: ML-Subm-2011

RDX Claims:  
1 - 67

Fairbanks Meridian

T. 5 S, R. 19 E.  
Sections: 35 and 36

T. 5 S, R. 20 E.  
Sections: 31 and 32

T. 6 S, R. 19 E.  
Sections: 1, 2, 9 - 16, and 21 - 24

T. 6 S, R. 20 E.  
Sections: 5 - 8

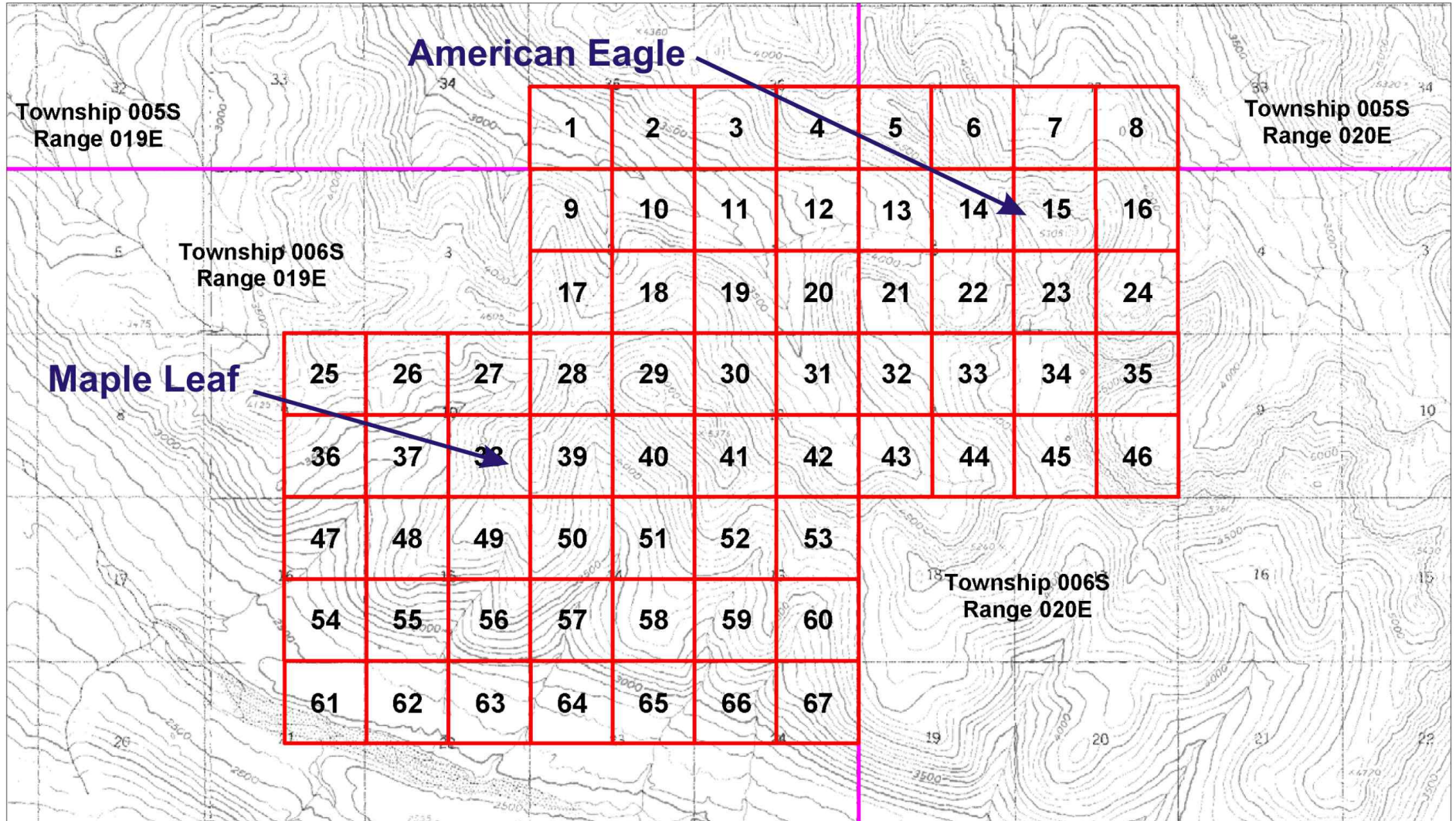
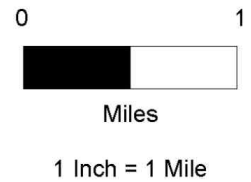


FIGURE 1: Claim and prospect location map for the Maple leaf prospect, Goodpaster District, Alaska. Data from Avalon Development, 2012.

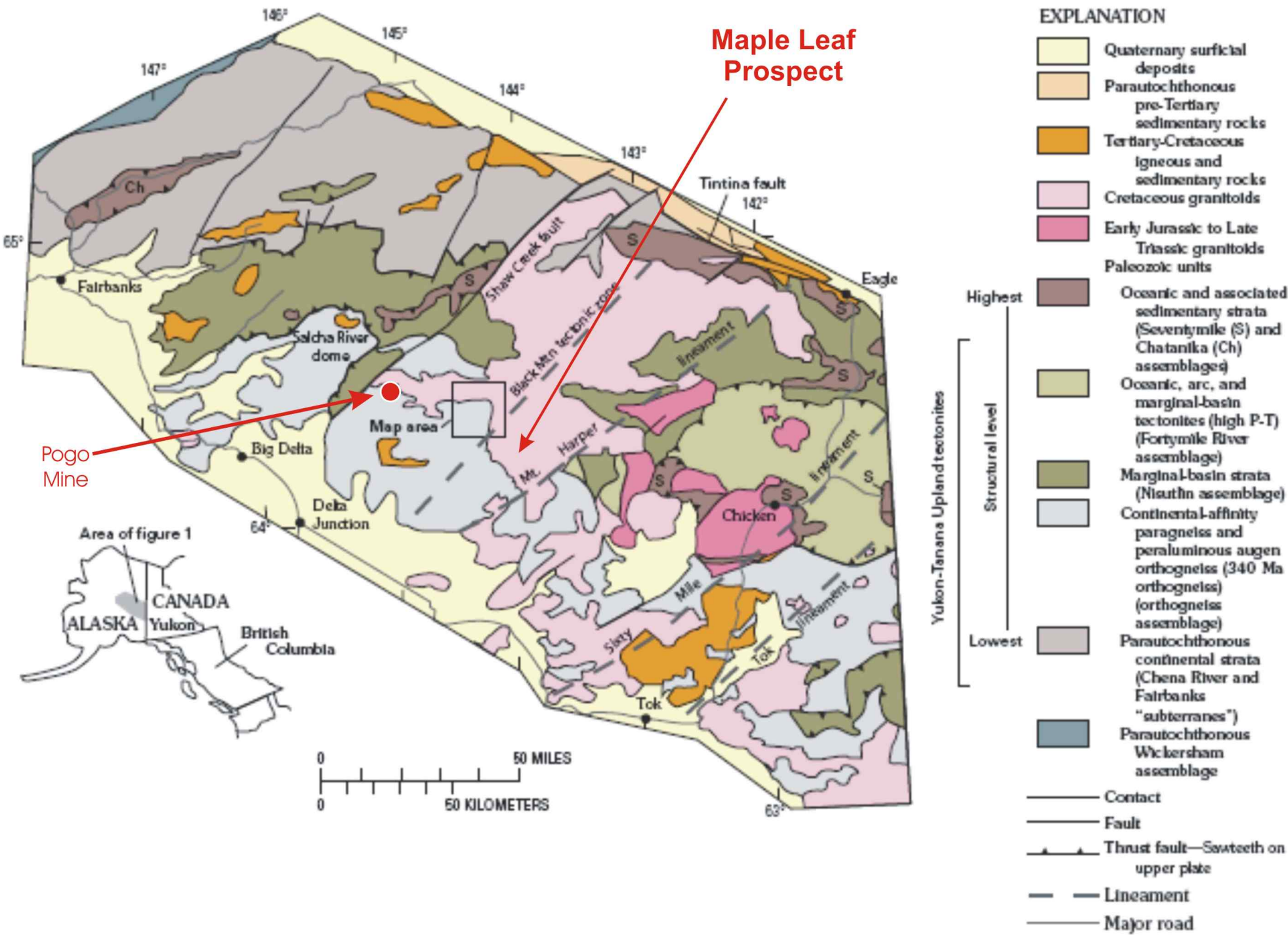


FIGURE 2: Lithotectonic map of the Yukon-Tanana Uplands, east-central Alaska. Data from Day and others, 2007 modified by Avalon Development, 2012.



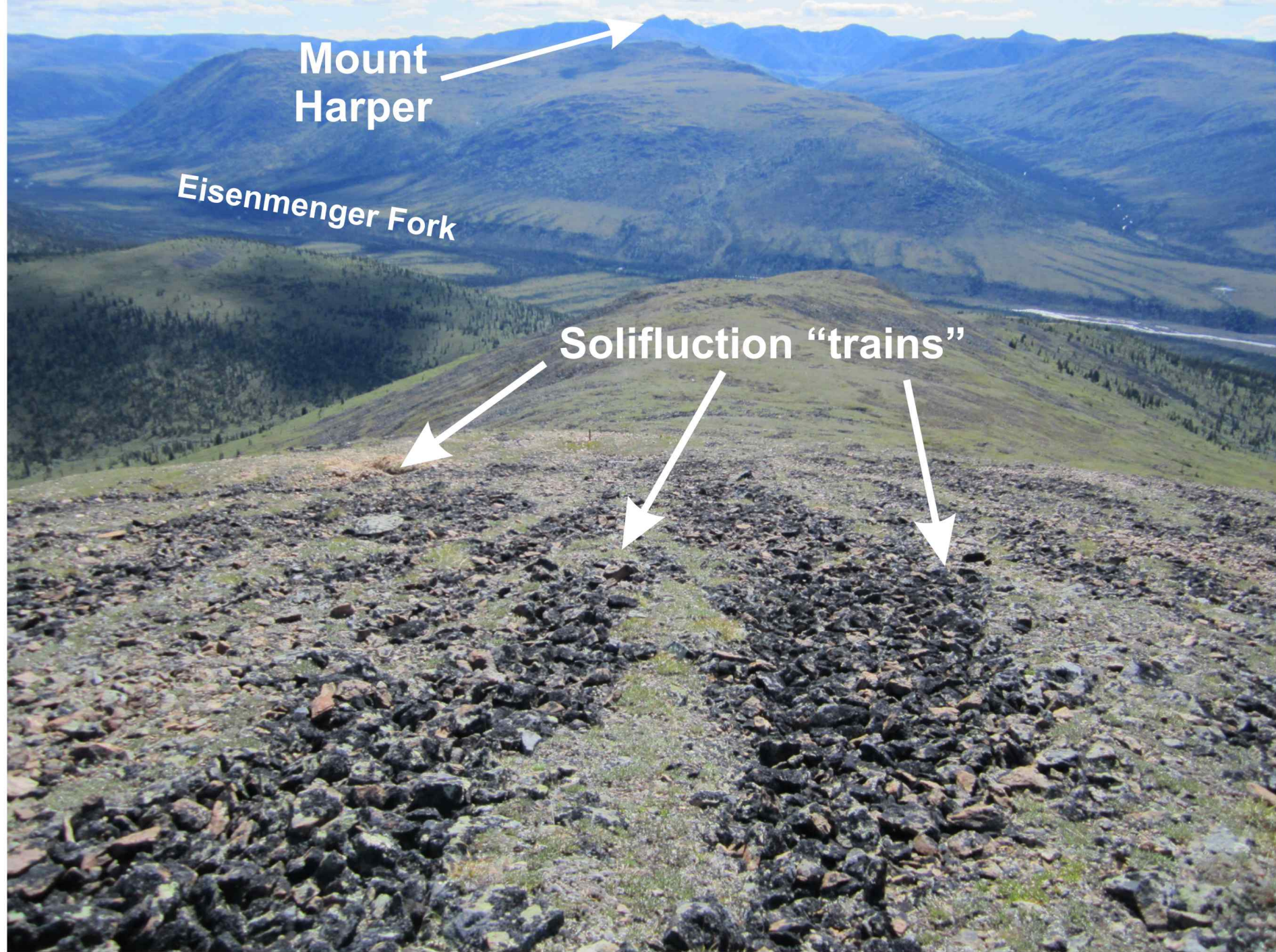


FIGURE 3: View looking south from Maple Leaf prospect discovery area. Rock in the foreground is biotite quartz monzonite mixed with gold-bearing quartz vein boulders. Black color is lichen coating both intrusive and quartz boulders. Data from Avalon Development, 2011.