

SUMMARY REPORT ON THE LIVENGOOD PROJECT, TOLOVANA DISTRICT, ALASKA

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1.0 Summary

The Livengood property is located in approximately 120 km northwest of Fairbanks, Alaska in the Tolovana mining district within the Tintina Gold Belt. The area of interest is centered on a hill named Money Knob. This feature is considered by many to be the lode gold source for the Livengood placer deposits which lie in the adjacent valley to the north and have been actively mined since 1914 with production of more than 500,000 ounces of gold.

The property has been prospected and explored by several companies and private individuals since the 1970s. Some of the past exploration data is available but most derives from the most recent work conducted by AngloGold Ashanti (U.S.) Exploration Inc. (AGA). Geochemical surveys by Cambior in 2000 and AGA in 2003 and 2004 outlined a 1.6 x 0.8 km area with anomalous gold in soil. Scattered anomalous samples continue along strike for an additional 2 km to the northeast and 1.6 km to the southwest. Eight reverse circulation holes were drilled by AGA in 2003 and a further 4 diamond core holes were drilled in 2004 to evaluate this anomaly. Favorable results from these holes include wide intervals of gold mineralization (BAF-7; 138.7m @ 1.07 g/t Au; MK-04-03; 55.3m @ 0.51 g/t Au) and lesser intervals over a broad area.

Rocks at Livengood are part of the Livengood Terrane, an east-west belt, approximately 240 km long consisting of tectonically interleaved assemblages of various ages. These assemblages include the Amy Creek Formation consisting of latest Proterozoic and early Paleozoic basalt, mudstone, chert, dolomite, and limestone. Structurally above the Amy Creek Assemblage lies an early Cambrian ophiolite sequence, which in turn is structurally overlain by Devonian shale, siltstone, conglomerate, volcanic, and volcanoclastic rocks. The Devonian assemblage is, in turn structurally overlain by more Cambrian mafic and ultramafic ocean floor rocks. All of these rocks are intruded by Cretaceous multiphase monzonite, diorite, and syenite stocks, dikes, and sills. Gold mineralization is believed to be related to this intrusive event. Spatially, it occurs mostly in the Devonian volcanics, some in sediments, and to a lesser extent in structurally capping mafic to ultramafic rocks.

Gold mineralization occurs in several styles; as multistage fine quartz veins occurring in or near intrusive dikes and sills, some of which appear to be structurally controlled, and as diffuse mineralization within some volcanic, intrusive, and sedimentary rocks without a clear quartz vein association. Gold associated with dikes and sills is analogous to that at the Donlin Creek deposit. Vein mineralization is interpreted to be intrusion-related with an As-Sb±Hg geochemical association. Thrust-fold architecture is apparently key to providing pathways for magma (dikes and sills) and hydrothermal fluid.

Drill results to date have been used to estimate a resource for the Money Knob area. The estimated amount of gold varies significantly according to the choice of cutoff grade. A range of tonnes and grade with corresponding contained ounces have been estimated. **At a 0.3 g/t Au cutoff, it is estimated that 188.01 Mt of material are present at a grade of 0.54 g/t Au and 0.30 g/t Ag for a total of 3.269 M oz of gold and 1.789 M oz of silver.** Mineralization has not been closed off in any direction.

The authors conclude that a significant resource has been identified. ITH exploration plans for

2008 include an extensive drill program of approximately 40,000 m to further evaluate the Livengood property. It is recommended that exploration of the Money Knob area continue with systematic drilling at evenly spaced centers along regularly spaced lines with the goal of attaining sufficient mineralized intercepts to convert at least some of the Inferred Resource to the Indicated and Measured categories. The 40,000 m of drilling proposed is an appropriate amount of drilling for the needs of the project and the time available in the field season. In addition, further surface sampling and trenching should be undertaken to provide surface data to correlate with drill data at depth.

2.0 Introduction and Terms of Reference

2.1 Introduction

Mineral Resource Services Inc. (MRS) and Giroux Consultants Ltd. (GCL) have been requested by International Tower Hill Mines Inc. (ITH) to provide a new independent technical report on the Livengood gold project in the Tolovana mining district of central Alaska. The property is currently being explored by ITH through its wholly-owned subsidiary, Talon Gold Alaska, Inc. (TGA). This report updates a previous similar report dated June 30, 2006 (Klipfel, 2006) and incorporates exploration work performed in the latter half of 2006 and in 2007 along with a resource evaluation. The resource evaluation portion of this report has been prepared by Giroux Consultants Ltd. (Giroux Consultants Ltd, 2007).

Information used in this report has been provided to MRS and GCL by ITH in January 2008 in addition to the original information that was provided by ITH and Anglo Gold Ashanti (U.S.) Exploration Inc. (AGA) in 2006. This report also relies on personal observations made by Paul Klipfel in the course of two field visits and on general geologic information available to the public through peer review journals as well as publications by the U.S. Geological Survey and agencies of the State of Alaska.

2.2 Terms of Reference

Dr. Paul Klipfel of Mineral Resource Services Inc., of Reno, Nevada, and Mr. Gary Giroux M.Sc. of Giroux Consultants Ltd. of Vancouver, B.C. were commissioned by ITH to prepare the following report for submission to the Toronto Stock Exchange (TSX) in support of a resource estimate and future public financing. Dr. Klipfel and Mr. Giroux are independent consultants and are Qualified Persons (QP) for the purposes of this report as defined by N.I. 43-101.

2.3 Purpose of Report

The purpose of this report is to provide an independent evaluation of the Livengood project, the exploration history and discovery potential of the project area, and provide recommendations for future work. This report conforms to the guidelines set out by the Canadian National Instrument 43-101.

2.4 Sources of Information

Information for this report was provided to the authors by ITH and consists of data generated by ongoing exploration by ITH and initial data from 2006 which was provided to ITH by AGA in the course of exploring the property. In addition, the first author spent three days on the site on two occasions reviewing core, examining outcrop, and discussing the project with on-site geologic staff and with Mr. Jeffrey Pontius, President of ITH and former Exploration Manager, North America for AGA.

2.5 Field Examination

The first author of this report completed a data review on June 6-7, 2006 in AGA's Denver office and then visited the property on Friday, June 16, 2006 to examine the site with Mr. Jeff Pontius, president of ITH and former Exploration Manager, North America for AGA. The field visit included review of the physiographic, geologic and tectonic setting of the property, drill hole collar locations, as well as detailed examination of outcrop and sampling of the key veins. Drill core was examined at the core storage facility in Fairbanks, Alaska. The first author made a subsequent second visit for 2 days on October 4-5, 2007, during which time he reviewed exploration progress, drill core, drill sites, outcrop exposures, and geologic concept development with on-site geologic staff. Seven check samples were collected at this time.

3.0 Reliance on Other Experts

The preparation of this report has relied upon public and private information provided by ITH and AGA regarding the property. The authors assume and believe that the information provided and relied upon for preparation of this report is accurate and that interpretations and opinions expressed in them are reasonable and based on current understanding of mineralization processes and the host geologic setting.

4.0 Property Description and Location

4.1 Area and Location

The Livengood project is located approximately 115 km by road (85 km by air) northwest of Fairbanks in the northern part of the Tintina gold belt (**Figure 1**). At this location, the property straddles, but lies predominantly to the north of, the Elliot Highway, the main road connecting Fairbanks with the Alaskan far north. The property lies in numerous sections of T8N and RS4 and 5W. Money Knob, the principle geographic feature within the area being explored, lies near the center of the claim block and is located at 65°30'52''N, 148°27'50''W.

The property consists of an aggregate area of 4021 acres and is comprised of a Mining Lease (Alaska Mental Health Land Trust Lease # MHT 9400248; 3621 acres) along with 20 other underlying federal lode claims belonging to private individuals (400 acres). Other privately held

State mining claims and Federal placer claims cover part of the area of interest and adjacent ground to the north (**Figure 2**).

The key area of interest is a northeast-trending soil anomaly coincident with known gold-bearing quartz veins. This zone lies along the north flank of Money Knob and is approximately 1.6 x 0.8 km in size. The anomaly is situated in a broader area of anomalism that extends a further 2 km to the northeast and 1.6 km to the southwest. This zone is described further in Section 9.0.

4.2 Claims and Agreements

The Livengood Property (**Figure 2**) is controlled through agreements between TGA and the State of Alaska and private individuals who hold state and federal claims. These agreements are with the Alaska State Mental Health Land Trust (AMHLT), Messrs. Hudson and Geraghty, Mr. Tucker, the Griffin heirs, and a binding letter of intent with the Hanneman and the Bergelin Family Trust. This contiguous land position totals approximately 4,400 hectares (11,000 acres).

The AMHLT lease (#9400248), signed July 1, 2004 by AGA and assigned to TGA on August 4, 2006, includes advance royalty payments of \$5/acre/year which escalates to \$15/acre in years 4-6 and \$25/acre in years 7-9. The lease has a work commitment of \$10/acre in years 1-3, \$20/acre in years 4-6, and \$30/acre in years 7-9. The lease carries a sliding scale production royalty of 2.5% @ \$300 gold up to 5% for a gold price more than \$500.

The Hudson and Geraghty lease, signed April 21, 2003 by AGA and assigned to TGA on August 4, 2006, has a term of 10 years and can be extended. TGA has the option to buy down the royalty specified in the lease. The agreement is in good standing.

The Tucker and Griffin leases (signed March 28, 2007 and January 18, 2007 respectively) both have extendable terms of ten years and include options to purchase the properties.

The Hanneman/Bergelin Family Trust ground is held via a binding letter of intent with an effective date of September 1, 2006. The letter provides for a ten year term, which can be extended, and the option to purchase the property.

All agreements are in good standing and are transferable. The leases have not been surveyed.

4.3 Environmental Requirements

Project activities are required to operate within all normal Federal, State, and local environmental rules and regulations. This includes proper and environmentally conscientious protection of operational areas against spills, capture and disposal of any hazardous materials including aviation fuel, etc., reclamation of disturbed ground, and removal of all refuse.

With over 90 years of placer mining activity and sporadic prospecting and exploration in the area, the site has undergone moderate to considerable historic disturbance. Some of the historic placer workings are now overgrown with willow and alder. The old mining town of Livengood

is now abandoned except for road maintenance buildings. ITH does not anticipate any obligations for recovery and reclamation of historic disturbance.

Total disturbance associated with ITH's planned exploration will be minimal. Some drill pads and access ways will need to be cleared, but most of the hilly but subdued topography is covered with secondary alder, willow, and spruce. The highest ground is bare or covered in small shrubs.

All drill sites will be reclaimed after exploration activities in the area are finished

There are no known wildlife issues. Wildlife in the area consists of moose, bear, and various small mammals. None were observed in the course of the site visits.

There are no known existing environmental liabilities.

4.4 Permits

Operations which cause surface disturbance such as drilling are subject to approval and receipt of a permit from the Alaska Department of Natural Resources (ADNR) and the U.S. Bureau of Land Management (BLM). Permits initially issued to AGA (ADNR #9748 and BLM #FO039748 and # FF-093953) have been transferred or reissued to TGA and are effective through 2008. The permits in place are being amended to reflect the proposed 2008 program and are renewable on a semi-annual basis. There is no known issue at this time that would hinder ongoing renewal of these permits.

There are no known issues concerning water beyond normal operational obligations. These fall under operating permits issued by the state.

There are no known native rights issues concerning the project area.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Access

The Livengood Project area is located approximately 115 km northwest of Fairbanks on the Elliot Highway, which provides paved year-round access to the area. At present there are no full time residents in the former mining town of Livengood. A number of unpaved roads have been developed in the area providing excellent access to most of the areas of immediate interest.

5.2 Climate

The climate in this part of Alaska is temperate and mild in summer with average lows and highs in the range of 7 to 22 °C. Winter is cold with average lows and highs for December through March in the range of -27 to -5 °C. Annual precipitation is on the order of 23 cm which arrives mostly in the summer.

5.3 Local Resources

The project is serviced from Fairbanks, population 87,000. As central Alaska's principle center of commerce it is home to many government offices including Alaska Division of Geological and Geophysical Surveys, the U.S. Geological Survey, as well as the University of Alaska - Fairbanks. The town is serviced by major airlines with numerous daily flights to and from Anchorage and other locations. Helicopters and fixed wing aircraft are readily available. All supplies necessary for the project can be obtained in Fairbanks.

5.4 Infrastructure and Physiography

The project is situated in forested hilly countryside with subdued topography partly owing to widespread deposition of loess and gravel in valleys (**Figure 3**). Elevation ranges from a base level in streams of about 150 m to 700 m (500' to 2317') at Amy Dome along the east side of the property. Streams meander in wide valleys. Ridge lines are generally barren with sparse vegetation.

The area is drained by Livengood Creek which flows to the southwest into Tolovana River which joins the Tanana River and ultimately the Yukon River approximately 120 miles to the west.

Existing infrastructure includes a paved highway which passes through the property and within ~ 1.6 km of Money Knob. Lesser unpaved roads are developed throughout the property. A repeater tower has been built on Radio Knob approximately 1.6 km east of Money Knob.

6.0 History

Gold was first discovered in the gravels of Livengood Creek in 1914 (Brooks, 1916). Subsequently, over 500,000 ounces of gold were produced and the small town of Livengood was established. The primary focus of prospecting activity has been with placer deposits. Historically, prospectors have considered Money Knob and the associated ridgeline to be the source of the placer gold. Prospecting in the form of dozer trenches was carried out for lode type mineralization in the vicinity of Money Knob primarily in the 1950's. However, to date, no significant production has been derived from lode gold sources.

Several companies have explored in the Livengood District over the past 30 years for lode gold mineralization. A summary of these programs is shown in **Table 1**. Placer Dome's work appears to have been the most extensive, but it was focused largely in the valley to the north of Money Knob.

AGA acquired the property in 2003 and undertook an 8 hole RC program on the Hudson-Geraghty lease. The results from this program were encouraging and were followed up with an expanded soil geochemical survey which identified anomalous zones over Money Knob and to the east. Based on the results of the soil survey, 4 diamond core holes were drilled in late 2004.

Results from these two AGA drill programs were deemed favorable and a follow-up core hole drilling program was planned but not executed due to financial constraints. ITH drilled these holes as part of an 1227 m, 8 hole program in 2006. An additional 4400 m in 14 diamond core holes were drilled in 2007 to test surface anomalies, expand the area of previously intersected mineralization, and advance geologic and structural understanding of subsurface architecture.

TABLE 1
EXPLORATION HISTORY

Company / Year	Major Activity	Results	Comment
Homestake / 1976	Geochemistry & 6 boreholes	Significant soil anomaly, low grade gold in drill holes and auger samples	Management decided on other priorities.
Occidental Petroleum / 1981	6 boreholes	Low-grade gold encountered in several holes	Other priorities.
Alaska Placer Development 1981 - 1984	Extensive soil and rock sampling together with mapping, mag, EM, trenching and auger drilling.	Defined soil and rock anomalies; other data not available.	Mostly on flanks of Money Knob. Changed focus to placer deposits.
Amax / 1991	3 RC holes; surface geochemistry and auger testing	Good geological mapping, lots of rock sampling, low grade gold in drill holes.	Other priorities.
Placer Dome / 1995 - 97	Surface exploration; / geophysics & 9 diamond core holes	Intersected some moderate grade mineralization.	Work focused to north of Money Knob. Limited land position.
Cambior 1999	Geochemistry	First to identify the extent of gold on Money Knob.	Corporate restructuring – no follow-up.
AGA / 2003- 2005	Geochemistry, trenching, geophysics, drill testing;	Geochemical anomaly, numerous drill intersections	Results discussed in this report
ITH 2006-2007	Surface geochemical sampling; drilling 23 holes	First intersection of extensive zones of > 1g/t Au.	

In 2003, as part of larger state-wide programs, the Alaska Division of Geological and Geophysical Surveys undertook a district-scale program of mapping and whole rock geochemical sampling in support of the mapping. They report “one highly anomalous sample

that yielded slightly over one ounce per ton gold” (Athey and Crow, 2004).

Geophysical work that has been completed in the vicinity includes an airborne magnetic survey by Placer Dome in 1995. This data has not been recovered. They also conducted VLF surveys in the northern part of the district in 1996 with only limited success because of the mixed frozen and thawed ground. This data is only partially preserved. The state of Alaska flew a 400 meter line spaced DIGHEM survey (an aerial, multi-channel ElectroMagnetic technique) over the Livengood District in 1998. AngloGold Ashanti ran a series of CSAMT (Controlled-Source Audio-frequency Magneto-Telluric) lines across Money Knob in 2004. This survey was designed to look for resistive intrusive bodies in the subsurface. The survey appeared to map the main thrust zone but did not appear to delineate hidden intrusive bodies.

7.0 Geological Setting

7.1 Regional Geology

The Livengood ‘district’ is a portion of the broader Tolovana mining district. It is situated in a complex assemblage of rocks known as the Livengood Terrane (**Figure 4**). This Terrane is an east–west-trending belt, approximately 150 miles (240 km) long, bounded on the north by splays of the dextral Tintina strike-slip fault system and other terranes to the south. It is composed of a complex sequence of rocks which do not match assemblages of the adjacent Yukon – Tanana Terrane. Throughout the Livengood Terrane, individual assemblages of various ages are tectonically interleaved. Each assemblage, and perhaps the stratigraphy within each assemblage is bounded by both low angle thrust faults and steep faults, of which at least some of the latter type are interpreted to be splays of the Tintina Fault system.

The Livengood Terrane is overprinted by later Mesozoic intrusions believed to have originated in the back-arc position above subducting oceanic crust. These intrusions are quartz monzonite to diorite to syenite in composition and some of them are believed to be responsible for gold mineralization of the Tintina Gold Belt (Goldfarb, et al., 2000). The Livengood district occurs within the Tintina gold belt, an arcuate belt of gold mineralization that extends from the Yukon to southwestern Alaska and hosts numerous gold deposits, including Fort Knox and other deposits of the Fairbanks District and Donlin Creek deposit in the Kuskokwim region.

7.2 Local Geology

In the vicinity of the Livengood project, the structurally lowest rocks are latest Proterozoic to early Paleozoic basalt, mudstone, chert, dolomite, and limestone of the Amy Creek Assemblage (IPzZ units on Livengood geology map; Athey et al., 2004) (**Figure 5**). These units are believed to represent incipient ocean floor basalt in a continental rift system and overlying sediments. The origin and age are poorly constrained but fossil evidence suggests a depositional age of latest Proterozoic to Cambrian time.

Structurally above the Amy Creek Assemblage lies an early Cambrian ophiolite sequence (Plafker and Berg, 1994). This assemblage consists of structurally interleaved greenstone, pyroxenite, metagabbro, layered metagabbro, and serpentinite (**Figures 5 and 6**). Metamorphic ages suggest that this assemblage was emplaced over the Amy Creek assemblage by north-directed thrust faults during Permian time.

The ophiolite sequence is, in turn, structurally overlain by Devonian rocks which include shale, siltstone, conglomerate, volcanic, and volcanoclastic rocks (**Figures 6 and 7**). This assemblage is the principal host for gold mineralization. It is now known through drilling that most of the “intrusive” rocks mapped in this assemblage (Athey et al., 2004) are really volcanic and volcanoclastic rocks and form part of the Devonian stratigraphy.

Above the Devonian assemblage is a series of Cambrian mafic and ultramafic rocks which have been thrust over the Devonian assemblage. Minor islands of cherty sediment overlie the mafic and ultramafic rocks and are interpreted to be part of the Amy Creek Formation. If correct, these rocks have also been thrust over the Cambrian assemblage. This thrust sequence indicates that there has been extensive thrust stacking and interleaving of the different assemblages as well as the internal stratigraphy within the assemblages.

Rocks in each of these assemblages have been folded, but overall, they strike east-west to northeast-southwest and dip 20-60° south, consistent with northward to northwest vergence of thrust transport. Features observed in core indicate that these rocks define recumbent folds truncated by numerous thrust surfaces. Later dikes and sills intrude along these faults.

Despite some confusion between Cretaceous intrusions and Devonian volcanics, the Paleozoic sequence described above is intruded by back-arc Cretaceous (91.7 – 93.2 m.y.; Athey and Craw, 2004) multiphase monzonite, diorite, and syenite stocks, dikes, and sills with equigranular to porphyritic textures. Athey et al. (2004) concluded that the intrusive rocks were the primary host to the gold mineralization. However, exploration work since then has shown that these rocks are Devonian volcanics and have undergone extensive alteration along with introduction of mineralization in quartz veins. Narrow Cretaceous stocks (?) and large dikes are biotite monzonite. Narrower, late (?) stage dikes are composed of non-biotite feldspar porphyry +/- syenite, and aplitic non-biotite felsic intrusives (**Figure 7**). Some mineralization appears to be spatially associated with these dikes.

Faults in the area dip at low to moderate angles to the south and are considered to be thrust structures. Other faults are subvertical, trend roughly east-west and are thought to be related to the dextral Tintina fault system. West of Money Knob, a north-south normal fault is known as the Myrtle Creek Fault. West-side down movement on this fault may have influenced the paleo-drainage system of the area. Based on a number of lines of evidence, it is believed that Livengood Creek used to flow to the northeast. Capture of the stream by the Tolovana River, and reversal of flow could have been related, in part, to movement along the Myrtle Creek Fault (Karl, et al., 1987; Athey and Craw, 2004).

Exploration work in 2006 and 2007 by ITH confirms the structural features and previously interpreted geologic history of the Livengood area. Drilling and surface work have helped to

refine some of the details particularly with the use of principle component geochemical evaluation. This technique enables discrimination of different rock types based on geochemical characteristics and is particularly helpful when visual means are ambiguous. Interpretive cross sections (**Figures 8 – 12**) show the results of ITH work and their interpretation.

At the district scale, thrust stacking of rock assemblages (Amy Creek, ophiolite, sediments, and volcanics) is reasonably well understood. Drilling reveals that there are numerous local fold and thrust complications which are only partially understood at this stage (**Figure 7**). It is likely that the fold-thrust architecture that relates these assemblages to one another has been key in localizing dikes and auriferous hydrothermal fluid as mineralization appears to be, at least, spatially related to or controlled by thrust-stage structures.

8.0 Deposit Types

Gold occurs in several styles of mineralization. It occurs as multistage fine quartz veins occurring in or near intrusive dikes and sills, some of which appear to be structurally controlled, and as diffuse grade in some volcanic, intrusive, and sedimentary rocks without a clear association with quartz veins. Many of the dikes appear to fill thrust-related structures and some of the diffuse mineralization occurs in envelopes around these zones. Mineralization associated with dikes and sills is analogous to that at the Donlin Creek deposit where gold occurs in fine quartz veins associated with dikes and sills of similar composition (Ebert, et al., 2000). In the broader sense, mineralization at Money Knob appears to be spatially related to Cretaceous intrusions, consistent in style, timing, and composition to numerous gold deposits and mineral occurrences of the Tintina Gold Belt (McCoy, et al., 1997; Smith, 2000).

Vein mineralization of the Livengood property is interpreted to be intrusion-related epigenetic type. The character and geochemical association of As-Sb is suggestive of formation at a crustal level higher than mesothermal depths (~5-10 km) and deeper than shallow epithermal systems (≤ 3 km). Thrust-fold architecture is apparently key to providing pathways for magma (dikes and sills) and hydrothermal fluid. Some veins may occupy subvertical tension structures approximately parallel to the inferred thrust transport direction.

9.0 Mineralization

Historically, the Livengood district has been known for its >500,000 ounce placer gold production. The source of this gold is unknown, but the principal drainages which fed the placer gravels are sourced from Money Knob and the associated ridgeline. Prospecting in this area has revealed numerous gold-bearing quartz veins, generally associated with dikes, sills and stocks of monzonite, diorite, and syenite composition. The reduced composition and porphyritic to brecciated textures as well as local zones rich with arsenopyrite, are characteristics common to

many deposits of the Tintina Gold Belt (e.g. Brewery Creek, Donlin Creek) (McCoy, et al., 1997; Smith, 2000).

No lode production has taken place at Money Knob. Exploration of the area by various companies, including soil surveys by Alaska Placer Development, Cambior, AGA and ITH, reveals a 6 x 2 km northeast-trending anomalous area in which a 1.6 x 0.8 km area forms the locus of exploration interest (**Figure 13**). This area has been only partially drill-tested (**Figure 14**).

The 2003 reverse circulation drilling program conducted by AGA intersected gold mineralization interpreted to be the result of a large intrusive-related gold system. Multiple intercepts of > 1g/t Au were encountered in 7 of the 8 holes. Subsequent drilling by TGA has consistently intercepted significant gold-bearing intervals. Some of the results of this drilling are highlighted in **Table 2**. These intercepts are interpreted to be mineralization along particular structures and associated with dikes and sills.

In general, better gold values (>1 g/t) are associated with dike margins and broad zones within adjacent volcanic and sedimentary rocks. Some mineralization is internal to some of the dikes. Gold is commonly associated with increased concentrations of quartz veining +/- scattered coarse blebs of arsenopyrite and/or stibnite, though not always. Where gold occurs in sedimentary host rocks, host veins are most common in brittle siltstone, sandstone, and pebble conglomerate as opposed to shale. The diffuse style of mineralization is spatially associated with areas containing vein mineralization, but gold can be present where there is no discernable quartz veining to explain it.

10.0 Exploration

10.1 Past Exploration

Several companies have explored the Livengood area as outlined in Section 6 (History). Results from that work include identification of a sizeable area of anomalous gold in soil samples and drilling significant intervals of anomalous gold mineralization (described in previous sections).

10.2 Current Exploration

ITH has undertaken drilling to test areas beneath surface geochemical anomalies and identify the extent of mineralization. To date, drilling has been sufficient to allow estimation of a resource (section 17). The current exploration plan for 2008 is to drill 40,000 m of RC and 2000 m of diamond core drilling with the aim of converting mineralized material from the Inferred Resource category to the Indicated and Measured Resource category through fill-in drilling and further testing of the extent to mineralization.

Table 2
HIGHLIGHTS OF LIVENGOOD DRILLING*

Hole ID	From (m)	To (m)	Length (g/t)	Au (g/t)
BAF-4	16.8	48.8	32.0	0.49
BAF-7	161.5	300.2	138.7	1.07
BAF-8	114.3	152.4	38.1	0.94
LC-TR-02	41.2	56.4	15.2	1.45
MK-04-01	102.0	106.7	4.7	3.29
MK-04-02	52.8	68.9	16.1	1.16
MK-04-03	90.4	145.7	55.3	0.51
MK-04-03	148.7	189.9	41.1	0.55
MK-04-TR2E	33.7	72.0	38.3	0.66
MK-06-07	123.9	216.1	92.2	1.63
MK-07-12	109.9	119.9	10.0	1.49
MK-07-13	97.8	120.1	22.3	0.79
MK-07-13	250.5	329.8	79.3	0.53
MK-07-15	35.0	61.2	26.2	1.77
MK-07-15	79.9	151.3	71.4	0.99
MK-07-17	117.6	154.6	37.0	0.82
MK-07-18	77.3	86.1	8.8	9.95
MK-07-18	93.7	102.2	8.5	9.64
MK-07-18	121.3	199.9	78.6	1.09
MK-07-19	331.7	361.0	29.3	0.60
MK-07-20	42.1	59.1	17.1	1.07
MK-07-20	127.1	185.1	58.0	1.19
MK-07-21	4.6	10.9	6.3	2.43
MK-07-21	135.0	151.0	16.0	1.08
MK-07-21	253.6	281.1	27.5	0.61
MK-07-22	79.6	111.8	32.2	0.75
MK-07-22	310.3	363.2	52.9	0.60
MK-07-23	126.4	155.5	29.1	0.65
MK-07-23	187.8	251.2	63.4	0.78
MN-1	4.6	32.0	27.4	0.61
MN-1	38.1	106.7	68.6	0.70
MN-2	4.6	25.9	21.3	0.82
MN-2	41.2	61.0	19.8	1.01
BAF-4	16.8	48.8	32.0	0.49

*Intercepts reported here have length times grade products greater than 15. Intercepts are calculated with a 0.25g/t cutoff; up to 3 meters of internal waste is allowed but outlier zones have to carry waste to cutoff.

11.0 Drilling

11.1 Past Drilling

All of the companies that have explored at Livengood in the past, except Cambior, have drilled their targets. In each case, drill holes were targeting different concepts such as veins in bedrock beneath the alluvial gold. Drilling to date by AGA and ITH has focused on a modest portion of the surface anomaly area (**Figure 14**).

Drilling in 2003 consisted of 1514 m of vertical and angled reverse circulation (RC) drilling in eight holes. It identified broad zones of gold mineralization (BAF-7; **Table 2**). Drilling in 2004 consisted of 654 m of NQ2 coring in 4 diamond drill holes and tested possible gold mineralization beneath the soil anomaly up to 1.7 km to the west of 2003 drill holes. This drilling identified thick zones of gold mineralization in Devonian rocks beneath relatively barren, thrust-emplaced Cambrian rocks (MK-04-03; **Table 2**). These results highlight the fact that significant mineralization could exist beyond the limits of the main soil anomaly, particularly in blind locations beneath thrust faults.

The RC drilling in 2003 was conducted by Layne Christiansen Company using an MPD 1500 Track RC drill. Drilling in 2004 was also by Layne using a CS1000 core drill. No drilling took place in 2005. In 2006, ITH drilled 8 diamond core holes and in 2007 they drilled a further 14 diamond core holes.

11.2 Current Drilling

ITH anticipates undertaking a major drilling program (~40,000m of Reverse Circulation holes) in support of advancing the understanding of the Resource area. Goals of this drilling program include:

- 1 Drilling enough holes at a suitable spacing to convert some of the current Inferred Resource to the better defined and higher confidence categories of Indicated or Measured Resource if adequate mineralization is intersected.
- 2 Testing remaining areas of surface geochemical anomalies.
- 3 Testing conceptual targets and geologic models for continuations of mineralization at depth and across faults.

12.0 Sampling Method and Approach

12.1 Past Sampling

The sampling procedures of previous companies are not known but the major companies that did the work are known for their conscientious QAQC protocols. Sample data from past programs is consistent with more recent data generated by ITH. On this basis, there is no reason to doubt the validity or credibility of samples from Occidental, AMAX, Homestake, or Placer Dome. The similarity of results for each program suggests that sample collection and analytical procedures are sufficiently similar to allow use of their data by ITH in current exploration efforts.

All soil and drill sampling completed by AGA was done according to their own in-house protocols for geochemical sampling. The author has reviewed these protocols and security procedures and has verified that they meet or exceed standard industry practices. Sampling procedures remained the same through the course of 2003 and 2004 exploration programs. The author did not verify soil sample results because sample pulps and rejects have been discarded. The author did not collect any soil samples for verification purposes.

All geochemical samples were secured and shipped to Fairbanks according to AGA protocols for sample preparation (drying, crushing, sieving, and pulverizing) at ALS-Chemex in 2003 and Alaska Assay in 2004. Sample splits (300-500g for rock material; -80 mesh for soil samples) were then sent to ALS Chemex in Vancouver for analysis. Analytical methods used were standard 50 g fire assay with AA finish and four-acid digestion, multi-element ICP-MS. These are standard analytical packages for the exploration industry and are performed to a high standard. Analytical accuracy and precision are monitored by the analysis of reagent blanks, reference material and replicate samples. Quality control is further assured by the use of international and in-house standards. ALS Chemex is accredited by the Standards Council of Canada, NATA (Australia) and is an ISO 17025 accredited company.

Reverse circulation sampling was done by conventional collection and splitting of drill cuttings at five foot intervals and retention of 3-5 kg samples for analyses. Representative material was also collected and saved in chip trays for later visual inspection. Samples were secured and transported to the sample preparation facility of ALS Chemex in Fairbanks for drying, crushing, pulverization, and splitting. 300-500 gram splits were sent to Vancouver for analysis by standard 50 g fire assay with AA finish and multi-element ICP-MS.

Core material was collected at the drill site and placed in core boxes under the supervision of an experienced geologist and Qualified Person for the purposes of NI 43-101. It was logged for rock type, alteration, structure, and with detailed descriptions. The author has examined the core logs and core from the four 2004 holes and can verify the reliability of the logging. Core was sawed in half and one half sent for analysis. The other half is kept either on site or at AGA's core storage facility in Fairbanks and was examined in the course of the site visit.

12.2 Current Sampling

ITH has collected 81 soil samples in 2006 and 180 soil samples along with 78 surface rock samples in 2007. These samples have helped ITH better define the distribution of gold in soils on the southwest side of Money Knob and better delineate the distribution of gold and rock types between Money Knob and Radio Knob.

ITH has adopted and continued the sampling protocols used by AGA and described in the previous section. This assures a high level of reliability in the sample data set and assures continuity of methodology, laboratory standards and conventions as well as confidence in the data generated.

13.0 Sample Preparation, Analyses and Security

13.1 Past Procedures

Soil and drill samples obtained in 2003 and 2004 exploration programs were subject to AGA's in house methodology and Quality Assurance Quality Control (QAQC) protocols. Samples were analyzed by various methods by different laboratories.

In general, all sampling campaigns were subject to insertion of blanks approximately every 25 samples, standards every 25 samples, as well duplicate samples from pulp splits and coarse reject splits, sample repeats approximately every 20 samples. Duplicate samples were also collected at the drill rig for 2003 RC drilling. Results of AGA's QAQC program have been reviewed by the first author. Overall, the QAQC samples indicate that sampling and analytical work is accurate and reliable. There were two instances of issues with blanks and standards out of compliance with AGA protocols, but these were satisfactorily resolved by ITH. The sample database does not appear to be compromised.

13.2 Current Procedures

ITH has continued with the QAQC protocol of AGA as described above and increased the number of control samples (blanks and standards) to 1 in 10. Duplicate splits of drill samples are prepared for every 20 samples. Standard 50g fire assay methods are used for the gold analysis. Samples were weighed by ITH before shipping, by the laboratory when received and logged in, and then the coarse reject material is re-weighed by the laboratory after the sample aliquot has been removed for pulverization. This tracking of samples enables constant verification of quality throughout the analytical process.

All drill samples were also submitted for multi-element ICP-MS analyses using a 4 acid digestion technique. Geochemical data has been worked by ITH to understand geochemical signature of veins and gold mineralization. Silver and arsenic correlate strongly with gold mineralization.

14.0 Data Verification

Field and drill core observations made by the first author during the site visit are consistent with the style of mineralization and alteration interpreted and reported in ITH documents. Outcrop exposures in drainages, trench faces, road cuts, and along the ridge lines were examined and found to be consistent with existing geological maps.

Drill logs, sections and maps were reviewed and are to a high quality. Information is consistent with observations of core and surface exposures.

As a check, seven samples were collected from portions of two different drill holes, MK07-18 and MK07-20, from the remaining half of drill core previously sampled by ITH. Samples were

selected for a range of gold content and rock type. The range of gold content in these samples is from below detection to 16.8 g/t Au. The core was quartered for the same sample interval as previously collected by ITH. Core material was bagged, labeled and information recorded by the first author and by ITH staff. Sample bags were sealed and transported to the ALS-Chemex laboratory in Fairbanks for sample preparation. Pulverized material was split into 100 gram master pulps and 60 gram analytical pulps before being sent to ALS Chemex in Vancouver for analysis. All samples except one returned results reasonably consistent with results from the ITH original sampling. The single sample that is different contains 0.61 g/t Au compared to 6.92 g/t Au in the original ITH analysis. This discrepancy is similar to the few discrepancies that occur in ITH's QAQC sample duplication procedures. For this reason, the discrepancy is interpreted to reflect normal variation attributable to nugget effect. To the extent that this type of error is throughout the database, it is equally likely that some samples report low when the other half of core might report higher.

In 2006, the first author collected a single sample along 3 m of a trench face where intrusive material with quartz veins is exposed. This sample was crushed, split, pulverized and assayed with a 50 g fire-assay AA finish method by ALS Chemex in Reno, Nevada. The sample contains 1.31 g/t Au, a value consistent with generalized results from AGA sampling and expectations for material of that type and location.

In addition, the author witnessed the sluicing and panning of concentrated "clean up" material shoveled from a trench face. The material contained a significant amount of fine colors as seen in the panning dish verifying the presence of free gold at a range of sizes in that part of the trench face.

The authors have not verified all sample types or material reported. To the best of the authors' knowledge, ITH has been diligent in their sampling procedures and efforts to maintain accurate and reliable results.

15.0 Adjacent Properties

Another claim block called the Shorty Creek claims is controlled by Select Resources is located approximately 10 km to the SW of the Livengood project area and is actively being explored for gold mineralization by Select Resources.

The Alaska Pipeline, the main means of transporting crude oil from Alaska's North Slope to the south coast of Alaska, runs northwest-southeast about 8 km to the west. This feature is not expected to have any impact on the project.

16.0 Mineral Processing and Metallurgical Testing

In 2004, AGA attempted to test the cyanide solubility of gold in drill sample material by analyzing samples containing more than 200 ppb Au. Samples were sent to ALS Chemex for a 30g cold cyanide leach assay (Au-AA24). 198 samples were analyzed in this manner and they show consistent low CN soluble assays, which on average are about 60% of the fire assay value (AGA in house memorandum to files). The significance of this result is unclear because there are many variables which could affect this outcome. These include small sample size, nugget effect, host rock type, sulfide content, other mineral content, encapsulation, and possible inappropriate testing method. Of these, nugget effect is expected when there is coarse free gold which was witnessed by the first author in the sluice sample of trench face material. Sulfide is present and also could be a significant factor. In an effort to determine which minerals might impact the cyanide test, AGA used principle component analysis for four sets of 'factors'. They concluded that As and Sb had little impact, but that sulfide content and coarse gold were the leading contenders for lowering recovery in the CN leach samples.

In the first author's opinion, this test is inconclusive due to small sample size and nugget effect. However, it should be an indicator that gold and sulfide characterization studies should be undertaken and metallurgical testing should be designed with sample size, coarse free gold content, distribution and location of gold in host rock, material type (shale, carbonate, intrusive), and sulfide content in mind. At this stage, the results should only be considered as a preliminary indicator of potential refractory issues for a cyanide leach processing

In 2006 ITH submitted a single sample of vein related mineralization to Hazen Research for a gold characterization study. The sample showed that the bulk of the gold occurs as micron-scale native gold grains in and adjacent to pyrite and arsenopyrite grains with a smaller number of grains associated with silicate gangue. Cyanide recovery in a bottle roll test was 61% (**Table 3, Sample 1A**),

In 2007 six more samples were submitted to Hazen Research for additional gold characterization studies. These samples represented both high and low grade mineralization from oxidized, partially oxidized and unoxidized material. The study is ongoing, however, preliminary cyanidation results have been received. These show that the cyanide extraction is very high on the oxide samples and partially oxidized samples (**Table 3**) and somewhat less in the sulphide material. Two of the sulphide samples (**Table 3, samples 3 and 1A**) were from the albitic alteration style and they each returned 60% cyanide recovery. The 3rd sulphide sample (**Table 3, sample 5**) came from the sericite alteration style and has only a 42% recovery.

A very important result of this work to date is the fact that, in all the samples tested in 2007, the bulk of the gold recovered by cyanide extraction comes out in the first 6 hours. This implies that the gold is readily available to the cyanide solution. The second part of this study will address the cyanide extraction on coarser material as well studying the actual mineralogical association of the gold.

TABLE 3
Gold Recovery Results from Cyanide Extraction Tests

Sample #	Ore Type	Average Grade (g/t)	% Cyanide Extraction*
1	Oxide Sediments	1.52	99.9%
2	Oxide Sediments High-grade	10.80	96.9%
3	Un-Oxidized Volcanic	1.52	59.7%
4	Oxide Sediments	1.39	99.9%
5	Un-Oxidized Volcanic	1.38	42.3%
6	Weakly Oxidized Volcanic	1.06	90.2%
1A	Volcanic Un-Oxidized	2.30	60.9%

* Samples were 300 gram bottle rolls with sample material crushed to ~200 mesh and sampled every 8-10 hours for a total of 48 hours

17.0 Mineral Resource and Mineral Reserve Estimates

17.1 Introduction

ITH commissioned Mr. G. Giroux of Giroux Consultants Ltd to prepare an initial resource estimate based on the drill intercepts in the Money Knob area (Giroux Consultants Ltd, 2007). This is the first resource estimation that has been undertaken for the property and provides insight into the potential of the Money Knob area.

ITH provided Mr. Giroux with a drill database consisting of data from 68 drill holes in the Money Knob area. Within this area, two Devonian volcanic units are modeled and the remaining area has been loosely constrained to include drill holes containing gold and silver mineralization. The list of drill holes provided is attached in **Appendix 2** with the 15 holes that intersected the mineralized volcanic zones highlighted in blue. These holes plus the additional holes highlighted in orange were used to estimate the surrounding mineralization. A total of 7,801 assays for gold and silver were supplied. During the historic exploration of this deposit a number of companies have sampled the mineralization in a variety of ways. **Table 4** outlines the companies, style of sampling, year of program and number of metres sampled.

While comparing the results from each style of sampling is problematic, as all are in different volumes of rock, there appears to be no significant bias present as approximately the same average grade is reported for each style of sampling (**Table 5**). The one exception is silver in percussion holes where only 10 samples were taken and all reported 0.001 g/t. Based on this limited review there appears to be no reason not to include all styles of sampling in this preliminary inferred resource estimate.

Table 4
Summary of Sampling History for Livengood Project

Drill Prefix	Company	Year	Type	Number of Holes	Metres	Comments on Data
BAF	AngloGold Ashanti	2003	RC	8	1514	All original data in possession
L	Occidental Petroleum	1981	Percussion	6	310	Intercepts and locations from 3rd Party
LC	AMAX	1989	Trench	2	160	Original data in possession; partial Lab Certificates
MK-04	AngloGold Ashanti	2004	Core	4	762	All original data in possession
MK-04-TR	AngloGold Ashanti	2004	Trench	5	257	All original data in possession
MK-06	Talon Gold	2006	Core	8	1227	All original data in possession
MK-07	Talon Gold	2007	Core	15	4408	All original data in possession
MK	Homestake	1976	Percussion	2	153	Intercepts and locations from 3rd Party
MN	AMAX	1990	RC	3	320	Original data in possession; partial Lab Certificates
TL	Placer Dome	1997	Core	8	1056	Original Placer Dome data in possession; no Lab Certificates

Table 5
Summary of Gold and Silver Grades Sorted by Sample Type

Sample Type	Number	Mean Au (g/t)	Number	Mean Ag (g/t)
Trench Samples	171	0.42	169	0.48
Percussion Samples	20	0.37	10	0.001
Reverse Circulation	1,201	0.35	886	0.26
Diamond Drilling	6,530	0.34	6,483	0.44

17.2 Resource Estimation Procedures

17.2.1 Modeling

A set of 3D wire frame solid models encompassing suites of various lithologies was developed by Northern Associates Inc. These shapes include an upper and lower ‘volcanics’ solid (**Figure 15**) and a third solid fills a rectangular shape that surrounds drill holes where mineralization occurred but was less continuous (**Figures 15**). The rectangle encompasses an area in which gold mineralization is intersected in drill holes and in surface trenches. Wire-framed solid construction is as follows:

“The Money Knob model is based on the occurrence of mineralized Devonian volcanics. Two solid models are presented. No grade cut-off was applied. The main and largest body occurs within a similar age sedimentary sequence and is relatively flat-lying. The second volcanic body is bounded by two parallel east-west oriented high-angle faults. Both bodies are limited by a 150m buffer surrounding drill intersections. The main body is also limited by surface topography and a southerly dipping overlying thrust fault.

The top and bottom drill intersections were identified using a previously determined chemical classification scheme that has been successful at identifying lithologies even when highly altered and mineralized. Often these intervals closely mimic the core logging geologists’ lithologic units, especially as our understanding and experience on the project has increased. Surfaces based on the tops and bottoms were created and clipped to the buffer and bounding fault planes. Cross-sectional strings were created based on the surfaces and two 3D solid wireframe models were subsequently formed. Each model contains only mineralized volcanic intersections. Software validations indicate a valid and closed solid model. Xplorpac 6.0.1 (Surpac-GemCom) software was used to make the model.

The USGS Livengood C-4 and B-4 30m DEM’s was used to represent topography for the Livengood Project. All collars that could be located were surveyed using differential GPS Magellan ProMark CP units in a post-processing mode. These points were used to generate a simple topographic surface for comparison to the USGS DEM. When viewed in cross-section the USGS DEM surface was found to lie variably 5-15m above the DGPS surface. To level the two datasets the USGS DEM was uniformly lowered 10m, then combined with the DGPS points, and a single surface was generated. Edits to this derived surface were made to compensate for the remaining variations between the USGS and DGPS surfaces. The resulting final topographic surface attempts to best represent the natural topographic trends while honouring the absolute elevations obtained for the locatable collars using the DGPS equipment.”

17.2.2 Sample Statistics and Capping

Drill holes were compared to the geologic solids and assays were tagged with the appropriate code if within one of the two interpreted solids. Solid volx_upp – the main volcanic solid or volxflt – a fault bounded volcanic solid. The statistics for gold and silver within each of these

solids is shown in **Table 6**. In addition the statistics for samples not within these two solids but inside the surrounding broad mineralized zone are presented.

Table 6
Statistics for Gold and Silver in Assays

	Volx_upp		Volxflt		Surrounding Sediment	
	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)
Number of Assays	876	876	683	683	5,324	4,967
Mean	0.71	0.54	0.55	0.40	0.31	0.43
Standard Deviation	1.29	1.41	1.18	1.04	1.92	6.40
Minimum Value	0.005	0.005	0.005	0.005	0.001	0.001
Maximum Value	13.60	32.50	22.00	18.25	22.90	440.0
Coefficient of Variation	1.80	2.62	2.13	2.60	3.34	14.73

The grade distribution for gold and silver were examined within each domain to determine if capping was required and if so at what level. Each data set showed positively skewed distributions for both gold and silver. Each variable was evaluated using lognormal cumulative frequency plots and in each case multiple overlapping lognormal populations were observed.

Gold within the Main Volcanic unit (Volx_upp) showed 6 overlapping lognormal populations (**Table 7**). The upper population (1) was considered erratic high grade and a cap of two standard deviations above the mean of population 2 was chosen to cap 4 assays at 10.5 g Au/t.

Table 7
Distribution of Gold within the Main Volcanic Unit

Population	Mean Au (g/t)	Proportion Of Data	Number of Samples
1	13.17	0.44 %	4
2	9.34	0.48 %	4
3	6.23	0.82 %	7
4	3.77	1.49 %	13
5	0.59	66.29 %	581
6	0.07	30.49 %	267

Silver within the Main Volcanic unit (Volx_upp) also showed 6 overlapping lognormal populations (**Table 8**). The upper population (1) representing 0.21 % of the data was considered erratic high grade and a cap of two standard deviations above the mean of population 2 was chosen to cap 2 assays at 12.2 g Ag/t.

Table 8
Distribution of Silver within the Main Volcanic Unit

Population	Mean Ag (g/t)	Proportion Of Data	Number of Samples
1	36.08	0.21 %	2
2	10.21	0.41 %	4
3	5.66	0.52 %	5
4	2.20	1.71 %	15
5	0.34	91.83 %	803
6	0.02	5.33 %	47

Gold within the Fault bounded Volcanic unit (Volx_ft) showed 6 overlapping lognormal populations (**Table 9**). The upper population (1) was considered erratic high grade and a cap of two standard deviations above the mean of population 2 was chosen to cap 3 assays at 6.1 g Au/t.

Table 9
Distribution of Gold within the Fault Bounded Volcanic Unit

Population	Mean Au (g/t)	Proportion Of Data	Number of Samples
1	16.89	0.44 %	3
2	5.39	0.35 %	2
3	1.79	9.19 %	63
4	0.72	27.58 %	188
5	0.24	32.92 %	225
6	0.03	29.53 %	202

Silver within the Fault Bounded Volcanic unit (Volx_ft) also showed 6 overlapping lognormal populations (**Table 10**). The upper population (1) representing 0.44 % of the data was considered erratic high grade and a cap of two standard deviations above the mean of population 2 was chosen to cap 3 assays at 8.7 g Ag/t.

Table 10
Distribution of Silver within the Fault Bounded Volcanic Unit

Population	Mean Ag (g/t)	Proportion Of Data	Number of Samples
1	16.83	0.44 %	3
2	8.73	0.48 %	3
3	1.95	1.01 %	7
4	0.94	4.36 %	30
5	0.27	81.39 %	556
6	0.02	12.33 %	84

Gold within the area surrounding the two mineralized solids also formed a strong skewed distribution and a total of six overlapping lognormal populations were recognized (**Table 11**). Population 1 is considered erratic high grade and a capping level of 2 standard deviations above the mean of population 2 was used to cap 9 assays at 14.5 g Au/t.

Table 11
Distribution of Gold Within the Surrounding Sediments

Population	Mean Au (g/t)	Proportion Of Data	Number of Samples
1	16.01	0.22 %	12
2	6.68	0.23 %	12
3	1.24	6.73 %	358
4	0.42	19.10 %	1,017
5	0.08	31.91 %	1,699
6	0.01	41.80 %	2,226

Silver in the area surrounding the two volcanic solids was also positively skewed and showed 7 overlapping lognormal populations (**Table 12**). The top 2 populations were considered erratic and a cap of 2 standard deviations above the mean of population 3 was used to cap 13 silver assays at 4.6 g Ag/t.

Table 12
Distribution of Silver Within the Surrounding Sediments

Population	Mean Ag (g/t)	Proportion Of Data	Number of Samples
1	51.42	0.10 %	5
2	10.04	0.14 %	7
3	2.75	0.77 %	38
4	0.58	10.79 %	983
5	0.21	44.08 %	2,189
6	0.09	20.73 %	1,030
7	0.06	14.40 %	715

The effects of capping are shown for each domain with slight reductions in mean grade and all coefficients of variation below 2 (**Table 13**).

17.2.3 Composites

Drill holes were compared to the geologic solids with the points each hole entered and left the solids recorded. Uniform down hole composites were then formed to honour the domain boundaries. Small intervals (less than 2.5 m) were combined with adjoining samples to produce

composites of uniform support, 5 ± 2.5 m in length. The 5 m composite statistics are shown in **Table 14**.

Table 13
Statistics for Gold and Silver in Capped Assays

	Volx upp		Volx flt		Surrounding Sediments	
	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)
Number of Assays	876	876	683	683	5,324	4,967
Mean	0.70	0.51	0.52	0.37	0.30	0.31
Standard Deviation	1.18	0.96	0.73	0.69	0.94	0.43
Minimum Value	0.005	0.005	0.005	0.005	0.001	0.001
Maximum Value	10.50	12.20	6.10	8.70	14.50	4.60
Coefficient of Variation	1.70	1.86	1.40	1.84	3.11	1.40

Table 14
Statistics for Gold and Silver in 5 m Composites

	Volx upp		Volx flt		Surrounding Sediments	
	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)
Number of Assays	168	168	134	134	1,437	1,371
Mean	0.66	0.50	0.48	0.34	0.26	0.27
Standard Deviation	0.59	0.46	0.47	0.27	0.57	0.32
Minimum Value	0.001	0.001	0.010	0.005	0.001	0.001
Maximum Value	3.73	3.38	3.21	1.65	11.90	3.18
Coefficient of Variation	0.90	0.93	1.00	0.77	2.20	1.15

17.2.4 Variography

Due to the relative lack of information (only 15 drill holes penetrated the two solids) the assumption of anisotropy could not be proven. As a result, simple isotropic models were fit to both gold and silver in each of the three domains. Pairwise relative semivariograms were run with nested spherical models fit in all cases. The semivariogram parameters are summarized in **Table 15** and the fit models are shown in Appendix 2.

17.2.5 Bulk Density

The specific gravities for 4,981 samples were calculated from a sample weight and estimated sample volume by Carl Schaefer of Northern Associates Inc. The results are tabulated and sorted by the four main rock types present (**Table 16**).

Table 15
Summary of Semivariogram Parameters for Au and Ag in Both Domains

Domain	Variable	Az/Dip	C ₀	C ₁	C ₂	Short Range (m)	Long Range (m)
Volx_upp	Au	Omni Dir.	0.20	0.20	0.19	15	60
	Ag	Omni Dir.	0.20	0.07	0.05	12	60
Volx_fit	Au	Omni Dir.	0.20	0.30	0.20	15	60
	Ag	Omni Dir.	0.08	0.15	0.22	15	28
Surrounding Area	Au	Omni Dir.	0.35	0.20	0.35	30	60
	Ag	Omni Dir.	0.20	0.10	0.40	20	60

Table 16
Specific Gravities Calculated by Northern Associates

Rock Type	Number of Samples	Average SG
Upper Sediments	1,901	2.79
Lower Sediments	1,139	2.76
Hangingwall	467	2.76
Main Volcanics	1,474	2.78
Total	4,981	2.78

As a check 18 pieces of drill core were sent to Chemex for specific gravity determinations. The Chemex results are presented in **Table 17**.

The grand average of 2.62 is lower than that taken from the 4,981 determinations of 2.79 but it is a much smaller sample. When the pieces of core measured by Chemex were compared to the total sample interval measured by C. Schaefer the results were again lower: 2.62 versus 2.96 respectively. Again Chemex tested small intervals of 5 cm while the Schaefer measurements were from the entire sample interval (usually greater than 1 m of material).

For this resource estimate the average of 2.78 was applied to all blocks.

17.2.6 Block Model

A block model with blocks 20 x 20 x 5 m high was superimposed on the various geologic solids with the proportion of each block below surface topography and within each solid recorded. The block model origin is as follows:

Lower Left Corner of Model

428170 E	Column size : 20 m	118 Columns
7265180 N	Row size : 20 m	70 Rows

Top of Model

540 Elevation	Level size : 5 m	92 Levels
---------------	------------------	-----------

No Rotation

Table 17
Specific Gravities Measured by Chemex

SampleID	SG	Hole	From (m)	To (m)	LithCode	Lith Desc.	C.S.
DC148011	2.61	MK-07-18	131.20	131.25	Dvol	2cm vn, wkly oxidized; volcanics	2.83
DC148018	2.77	MK-07-18	136.05	136.10	Dvol	volc w/ 2cm qtz>aspy vn	2.97
DC148019	2.66	MK-07-18	136.65	136.70	Dvol	ave grade, volc.	2.97
DC148020	2.11	MK-07-18	141.95	142.00	Dvol	ave grade, volc; clay ser. Alt.	2.39
DC148022	2.72	MK-07-18	175.56	175.61	Dvol	amyg. Volc, low grade	2.64
DC148023	2.74	MK-07-18	208.10	208.18	Dvol	xtl-lithic tuff, low grade	2.87
	2.60				Dvol Average		
DC148010	2.56	MK-07-18	121.80	121.85	Dvol-ec	oxidized epiclastic, ave grade	3.08
	2.56				Dvol-ec Average		
DC148009	2.76	MK-07-18	100.50	100.55	Kint	Dike	3.05
DC148012	2.47	MK-07-20	148.40	148.45	Kint	Dike	2.53
DC148016	2.44	MK-07-21	9.00	9.05	Kint	dike; ave grade	3.18
DC148021	2.85	MK-07-18	143.60	143.65	Kint	dike, ave grade	2.91
	2.63				Kint Average		
DC148007	2.23	MK-07-18	81.70	81.80	sed	high grade sed, oxide high grade sed, mixed	3.80
DC148008	2.47	MK-07-18	98.50	98.55	sed	oxide/sulfide	2.77
DC148013	2.62	MK-07-20	149.35	149.40	sed	wall rock to dike above	2.71
DC148014	2.55	MK-07-20	49.00	49.05	sed	mod grade sed.	2.98
DC148024	2.71	MK-07-18	285.50	285.55	sed	TD poker chip, no grade	3.21
	2.52				sed Average		
DC148015	2.95	MK-07-21	4.67	4.72	umaf	um; high grade	2.93
DC148017	2.89	MK-07-21	9.91	9.96	umaf	um; mod grade	3.51
	2.92				umaf Average		
	2.62				Grand Average		2.96

17.2.7 Grade Interpolation

Grades for gold and silver were interpolated into blocks by Ordinary Kriging. Each of the three solids was interpolated using hard boundaries (only composites from within the particular solid were used to estimate blocks in that solid). For each solid a series of 4 passes was completed with a minimum of 4 composites required to estimate a block in any given pass. Pass 1 used a search ellipse with dimensions equal to $\frac{1}{4}$ of the range of the semivariogram for the solid being estimated. For blocks not estimated during pass 1 a second pass was made with the ellipse expanding to $\frac{1}{2}$ the semivariogram range. A third pass using the full range and a fourth using twice the range were also complete. In all cases if more than 12 composites were found within any search the closest 12 were used. Blocks straddling more than one mineralized solid were estimated for both and a weighted average grade was determined using the percentage present in each solid. The percentage of the block below surface topography was used to determine the tonnage present. **Table 18** lists the search parameters used to estimate each mineralized solid.

Table 18
Summary of Parameters Used to Kriging Blocks

Zone	Variable	Pass	Az/Dip	Dist. (m)
Volx_upp	Au	1	Omni Directional	15
		2	Omni Directional	30
		3	Omni Directional	60
		4	Omni Directional	120
	Ag	1	Omni Directional	15
		2	Omni Directional	30
		3	Omni Directional	60
		4	Omni Directional	120
Volx_fit	Au	1	Omni Directional	15
		2	Omni Directional	30
		3	Omni Directional	60
		4	Omni Directional	120
	Ag	1	Omni Directional	7
		2	Omni Directional	14
		3	Omni Directional	28
		4	Omni Directional	120
Surrounding Sediments	Au	1	Omni Directional	15
		2	Omni Directional	30
		3	Omni Directional	60
		4	Omni Directional	120
	Ag	1	Omni Directional	15
		2	Omni Directional	30
		3	Omni Directional	60
		4	Omni Directional	120

17.3 Resource Statement

Based on the study herein reported, delineated mineralization of the Livengood Deposit is classified as a resource according to the following definitions from National Instrument 43-101 and from CIM (2005):

"In this Instrument, the terms "mineral resource", "inferred mineral resource", "indicated mineral resource" and "measured mineral resource" have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council, as those definitions may be amended."

The drill hole spacing and number of drill holes available at this time at the Livengood Deposit precludes the classification of this resource as anything but inferred. The resource is tabulated in total (**Table 19**) and then broken out by the three estimated zones (**Table 20, 21, 22**).

Table 19
LIVENGOOD INFERRED RESOURCE

Au Cutoff (g/t)	Tonnes > Cutoff (tonnes)	Grade > Cutoff			
		Au (g/t)	Ag (g/t)	Ounces Au	Ounces Ag
0.20	280,300,000	0.45	0.28	4,014,000	2,508,000
0.30	188,010,000	0.54	0.30	3,269,000	1,789,000
0.40	129,600,000	0.63	0.31	2,615,000	1,307,000
0.50	87,810,000	0.71	0.31	2,011,000	883,000
0.60	54,150,000	0.82	0.29	1,422,000	500,000
0.70	33,230,000	0.92	0.29	985,000	306,000
0.80	25,310,000	0.98	0.28	796,000	229,000
0.90	10,290,000	1.16	0.38	382,000	125,900
1.00	6,770,000	1.27	0.43	275,700	92,700
1.10	4,030,000	1.42	0.47	183,900	60,900
1.20	2,190,000	1.65	0.52	116,400	37,000

Table 20
LIVENGOOD INFERRED RESOURCE - VOLX UPP UNIT

Au Cutoff (g/t)	Tonnes > Cutoff (tonnes)	Grade > Cutoff			
		Au (g/t)	Ag (g/t)	Ounces Au	Ounces Ag
0.20	30,930,000	0.58	0.51	578,000	510,000
0.30	30,750,000	0.58	0.51	576,000	508,000
0.40	30,200,000	0.59	0.52	570,000	502,000
0.50	21,530,000	0.63	0.50	439,000	347,000
0.60	8,350,000	0.78	0.57	209,000	152,000
0.70	4,590,000	0.89	0.56	131,000	82,000
0.80	2,770,000	0.98	0.56	87,000	50,000
0.90	1,550,000	1.09	0.54	54,000	26,900
1.00	1,000,000	1.16	0.55	37,000	17,700
1.10	490,000	1.29	0.56	20,300	8,900
1.20	280,000	1.40	0.60	12,600	5,400

Table 21
LIVENGOOD INFERRED RESOURCE - VOLX FLT UNIT

Au Cutoff (g/t)	Tonnes > Cutoff (tonnes)	Grade > Cutoff			
		Au (g/t)	Ag (g/t)	Ounces Au	Ounces Ag
0.20	21,450,000	0.51	0.33	351,000	225,000
0.30	17,840,000	0.56	0.33	322,000	192,000
0.40	12,320,000	0.65	0.34	259,000	136,000
0.50	9,460,000	0.72	0.36	217,000	110,000
0.60	5,300,000	0.85	0.40	144,000	69,000
0.70	2,640,000	1.03	0.57	88,000	48,000
0.80	1,910,000	1.13	0.68	70,000	42,000
0.90	1,570,000	1.20	0.74	60,000	37,000
1.00	1,320,000	1.24	0.77	53,000	32,000
1.10	1,030,000	1.29	0.79	43,000	26,000
1.20	620,000	1.39	0.83	28,000	17,000

Table 22
LIVENGOOD INFERRED RESOURCE - SURROUNDING UNIT

Au Cutoff (g/t)	Tonnes > Cutoff (tonnes)	Grade > Cutoff			
		Au (g/t)	Ag (g/t)	Ounces Au	Ounces Ag
0.20	227,920,000	0.42	0.24	3,085,000	1,773,000
0.30	139,430,000	0.53	0.24	2,371,000	1,089,000
0.40	87,080,000	0.64	0.24	1,786,000	669,000
0.50	56,820,000	0.74	0.23	1,355,000	426,000
0.60	40,500,000	0.82	0.21	1,069,000	279,000
0.70	26,000,000	0.92	0.21	766,000	176,000
0.80	20,630,000	0.96	0.21	639,000	137,000
0.90	7,160,000	1.16	0.27	268,000	62,000
1.00	4,460,000	1.30	0.30	185,700	43,000
1.10	2,510,000	1.49	0.33	120,600	26,000
1.20	1,290,000	1.83	0.35	75,800	14,600

17.4 Mineral Resource Classification

Mineral Resources for the LMS project are classified as an Inferred Resource according to the CIM Standards on Mineral Resources and Reserves – Definitions and Guidelines (December, 2005). An Inferred Resource is defined as follows:

Inferred Mineral Resource

“An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, workings and drill holes.”

“Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.”

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

The authors are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues that could potentially affect this estimate of mineral resources. Mineral reserves can only be estimated based on the results of an economic evaluation generally as part of a preliminary feasibility or feasibility study. As such, no reserves have been estimated at this stage.

18.0 Other Relevant Data and Information

No additional information or explanation is known by the authors to be necessary to make the technical report understandable and not misleading.

19.0 Interpretation and Conclusions

The Livengood property is centered on an area (Money Knob) considered by many for a long time to be the lode source for gold in the Livengood placer deposits which have produced in excess of 500,000 ounces of gold. Anomalous gold in soil samples occur over a northeast trending area of approximately 6 x 2 km with a principle concentration of surface anomalies in an smaller area approximately 1.6 x 0.8 km. Drilling by past companies, AGA, and ITH have identified wide intervals (>100 m @ ≥ 1.0 g/t Au) of gold mineralization with local higher grade narrow intervals beneath the soil anomaly and in rocks beneath thrust surfaces which are not expressed geochemically at the surface. The possibility that more mineralization occurs over broader areas than the soil anomaly but is hidden beneath thrust faults is encouraging for the discovery potential at Livengood.

The style of mineralization is consistent with other deposits in the Tintina Gold Belt. Superficially, it appears to be most consistent with mineralization at Donlin Creek to the extent that quartz veins and gold content are spatially and possibly genetically related to multi-stage dikes and sills in volcanic and sedimentary rocks. Veining appears to continue into ophiolitic rocks locally, which means mineralization is not limited to the apparent mapped extent of the sedimentary package. Also, the surface geochemical anomaly in soil probably reflects only a portion of the mineralization present. Mineralization may continue down-dip along and/or beneath thrust surfaces and therefore be blind at the surface. This possibility should be included in further evaluation of the deposit.

Drill results to date have been used to estimate a resource for the Money Knob area. The amount of gold varies significantly according to the choice of cutoff grade. A range of tonnes and grade with corresponding contained ounces of gold are presented in **Table 19**. **At a 0.3 g/t Au cutoff, it is estimated that 188.01 Mt of material at a grade of 0.54 g/t Au and 0.30 g/t Ag will contain 3.269 M oz of gold and 1.789 M oz of silver.**

The author concludes that a significant resource has been identified and that the planned drilling program for 2008 is appropriate for further evaluation of this resource. Mineralization has not been closed off in any direction. Resolution of geologic uncertainties with more drilling will be helpful for understanding mineralization and ought to enable predictive ability for discovery of more mineralization. This is likely to be especially true for areas beneath thrust faults where surface geochemistry only conveys information about unmineralized rock above the thrust fault.

20.0 Recommendations

20.1 Recommended Exploration Program

It is recommended that exploration of the Money Knob area continue with systematic drilling at evenly spaced centers along regularly spaced lines with the goal of attaining sufficient mineralized intercepts to convert at least some of the Inferred Resource to the Indicated and Measured categories. The 40,000 m of drilling proposed is an appropriate amount of drilling for the needs of the project and the time available in the field season. In addition, further surface sampling and trenching should be undertaken to provide surface data to correlate with drill data at depth. Structural analysis should continue and in particular use of 3D modeling software to understand structure in 3D space. This should help predict and identify the lateral and depth extent of mineralization.

In addition, exploration work should undertake mineralogic and metallurgical characterization studies to ascertain the nature of gold and how it occurs in the project area. This should include petrographic work, gold characterization studies, leach tests, and any other studies that will help define the feasibility of extracting gold from host rock. Implementation of systematic specific gravity measurements should also be included in the program to help better define the s.g. for various rock types throughout the mineralized area.

20.2 Budget for 2008

ITH has proposed expenditure of approximately \$8.3 million dollars in 2008 evaluating the Livengood project (**Table 23**). This budget will be allocated primarily to drilling and geological analysis of the deposit. The budget is appropriate for the amount of drilling planned and feasible within the summer field season. The authors recommend implementation of this program in order to accomplish ITH's goal of advancing definition of Livengood mineralization.

TABLE 23
2008 Exploration Budget

Expenditure	2008 \$ (000)	Comments
Land	160	Claim and lease fees
Geological and Contract Services	2,400	Contract/consulting fees
Drilling	4,000	Drilling, supplies, preparation, hole abandonment
Geochemistry	1,000	Rock, soil, drill core and cuttings, prep and assay
Admin and Operations	756	Office, salaries, travel, reporting
TOTAL	8,316	

21.0 References

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22.0 Illustrations

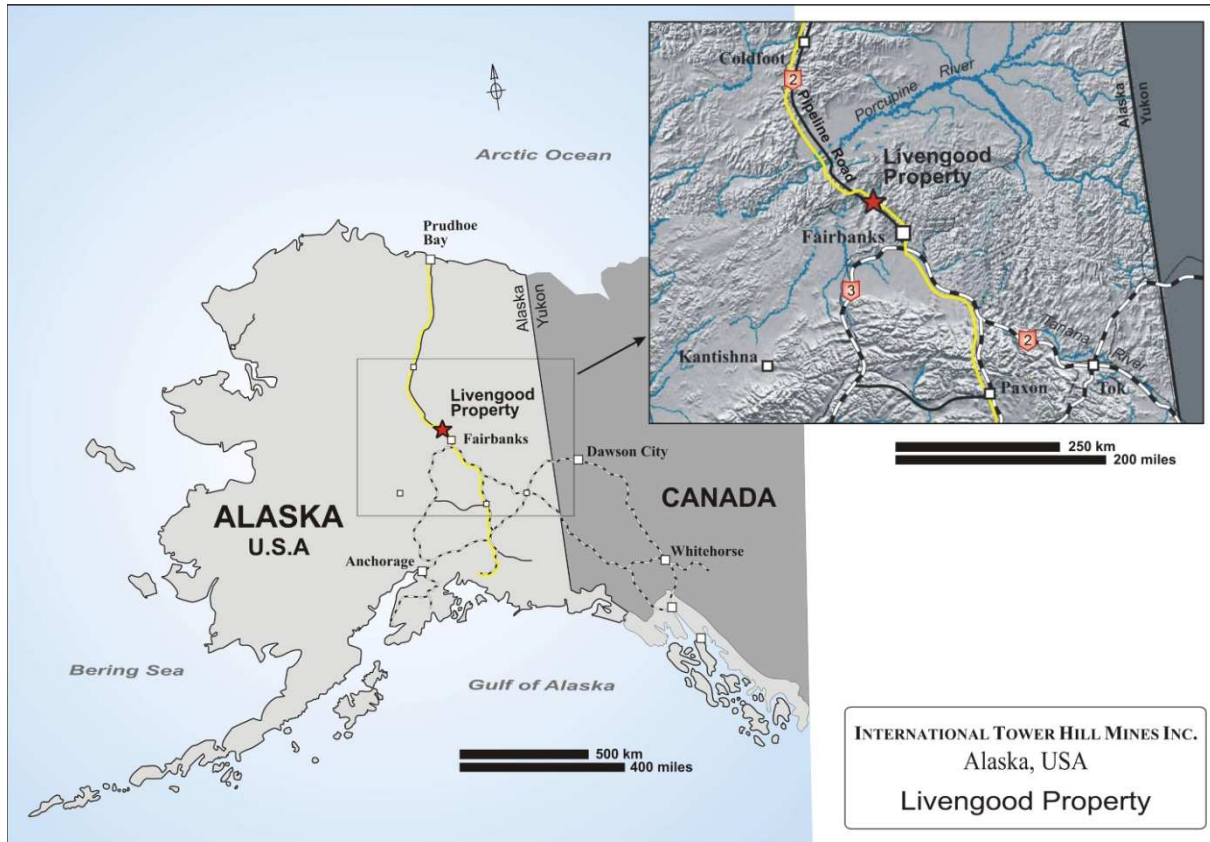


Figure 1. Location map showing the location of the Livengood project.

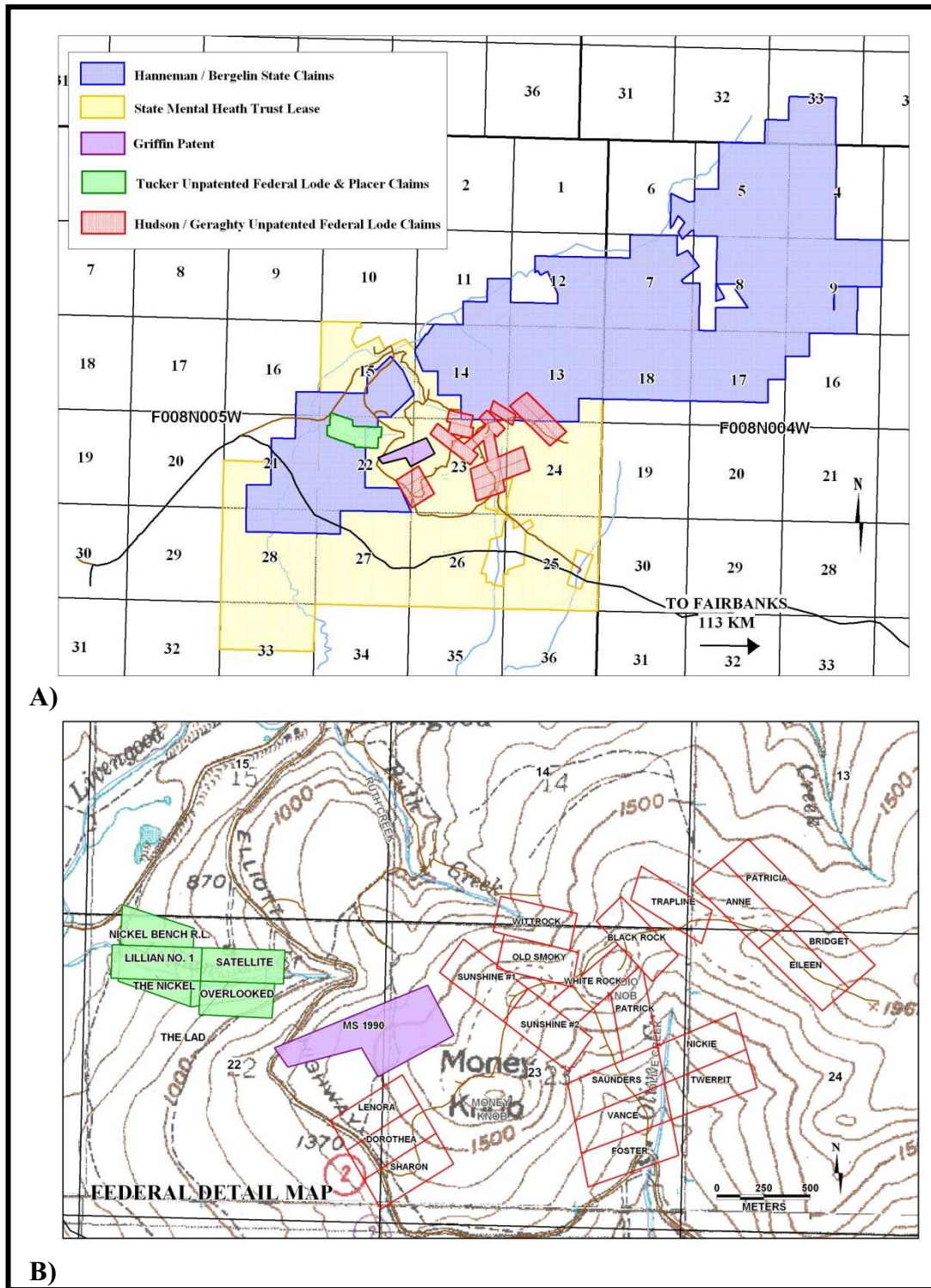


Figure 2. Claim map showing the Livengood land position. **A)** The AMHL Lease is shown in yellow and holdings belonging to other parties shown in respective colors. **B)** Detailed map of the individual claims within the AMHL Lease

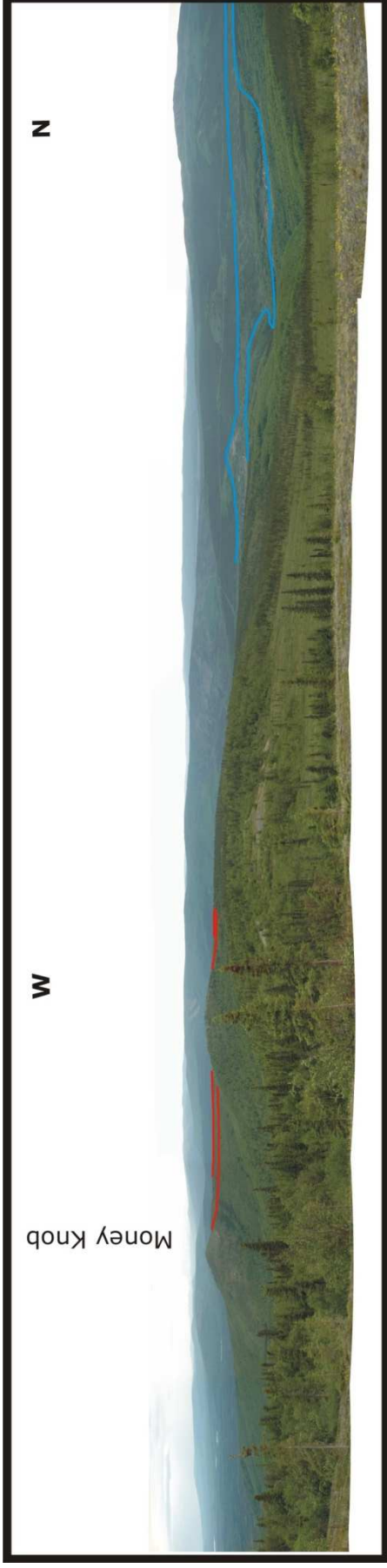


Figure 3. Panorama of Money Knob and the project area. Red outline shows area of soil anomaly. Blue lines outline placer workings to the north in Livengood Creek.

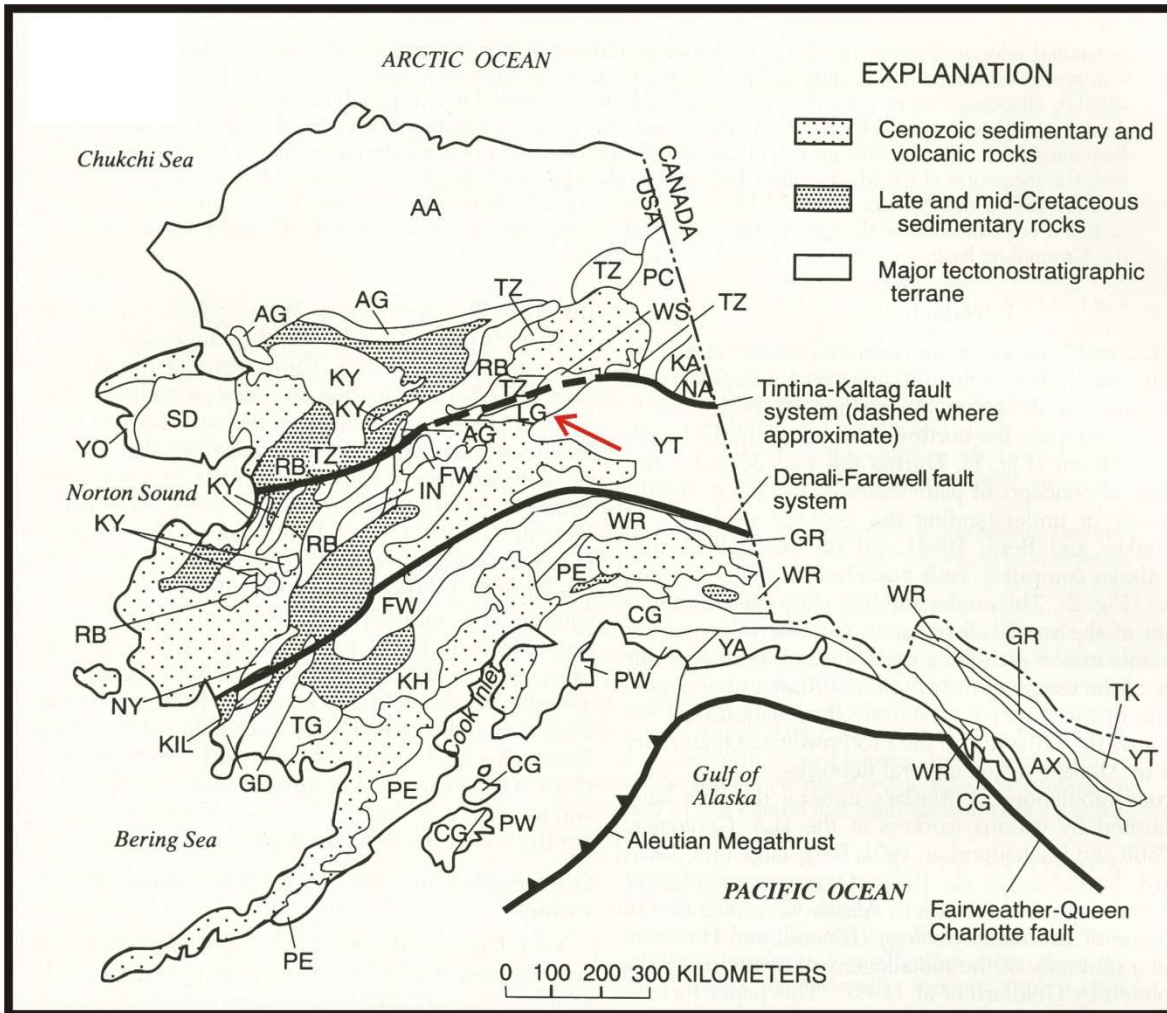


Figure 4. Terrane map of Alaska showing the location of the Livengood Terrane (red arrow). The heavy black line north of the Livengood Terrane is the Tintina Fault. The heavy black line to the south of the Livengood and Yukon – Tanana Terrane (YT) is the Denali Fault. The Tintina Gold Belt lies between these two faults. After Goldfarb, 1997.

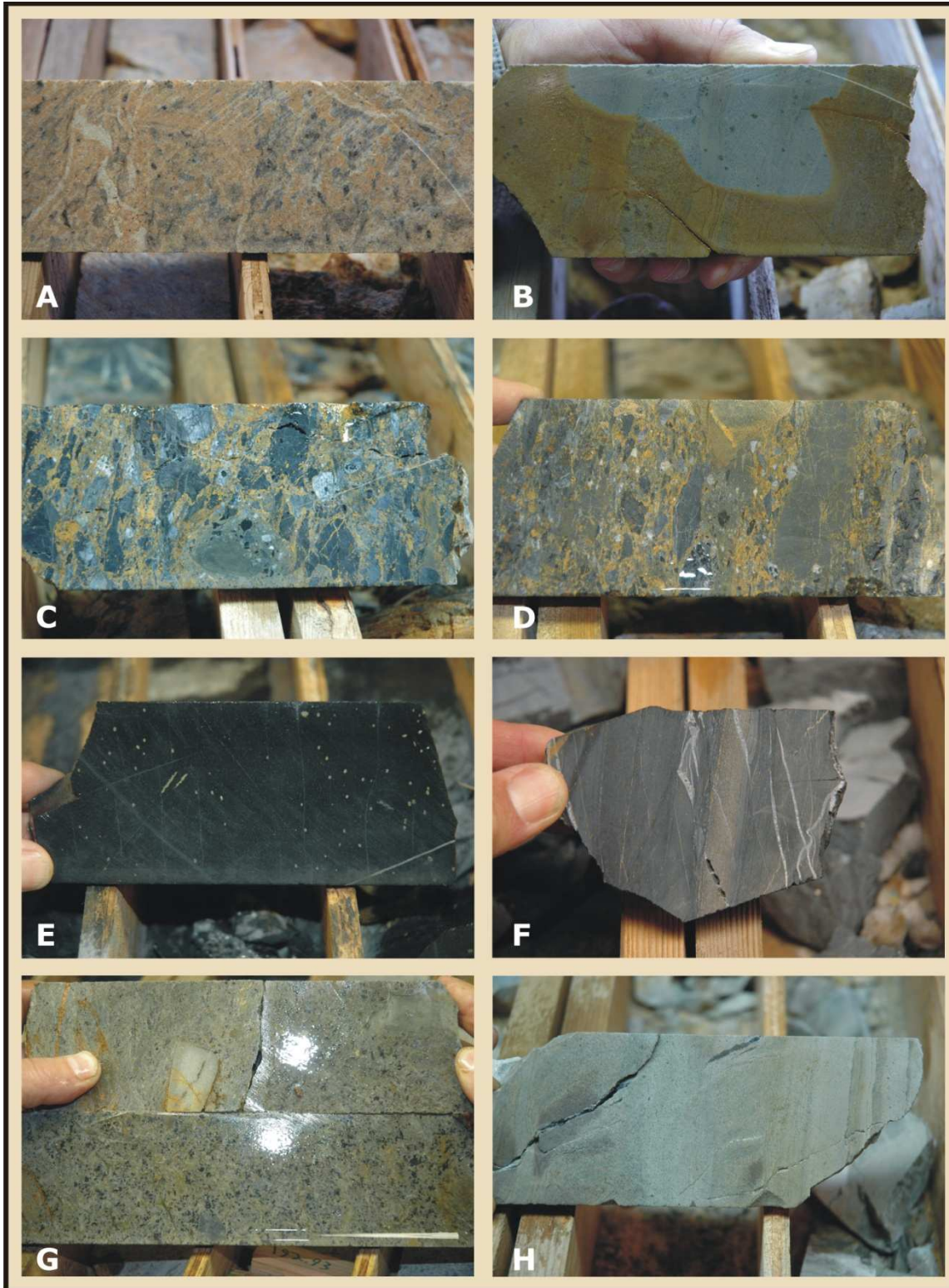


Figure 6. Photographs of key rock types at Livengood. **A)** ultramafic rock with carbonate alteration (yellow-brown); MK7-20, 13.5m **B)** siltstone with carbonate and pyrite knots. Brown color is oxidation front. MK 07-18, 8.5m **C)** sedimentary conglomerate; at least some clasts appear to be rip-

up clasts of similar sedimentary rocks; brown color is probably after introduced carbonate; MK07-18, 41.2m; **D**) sedimentary conglomerate; at least some clasts appear to be rip-up clasts of similar sedimentary rocks; brown color is probably after introduced carbonate; MK07-18, 57.7m; **E**) argillite with pyrite; MK07-20, 222m; **F**) argillite with siltstone band; MK07-18, 280 ; **G**) tuff showing lithic fragments; this unit contains MK07-18, 190m 0.23 – 0.75 g/t Au; **H**) fine-grained tuffaceous sediment; MK07-20, 151.5m.

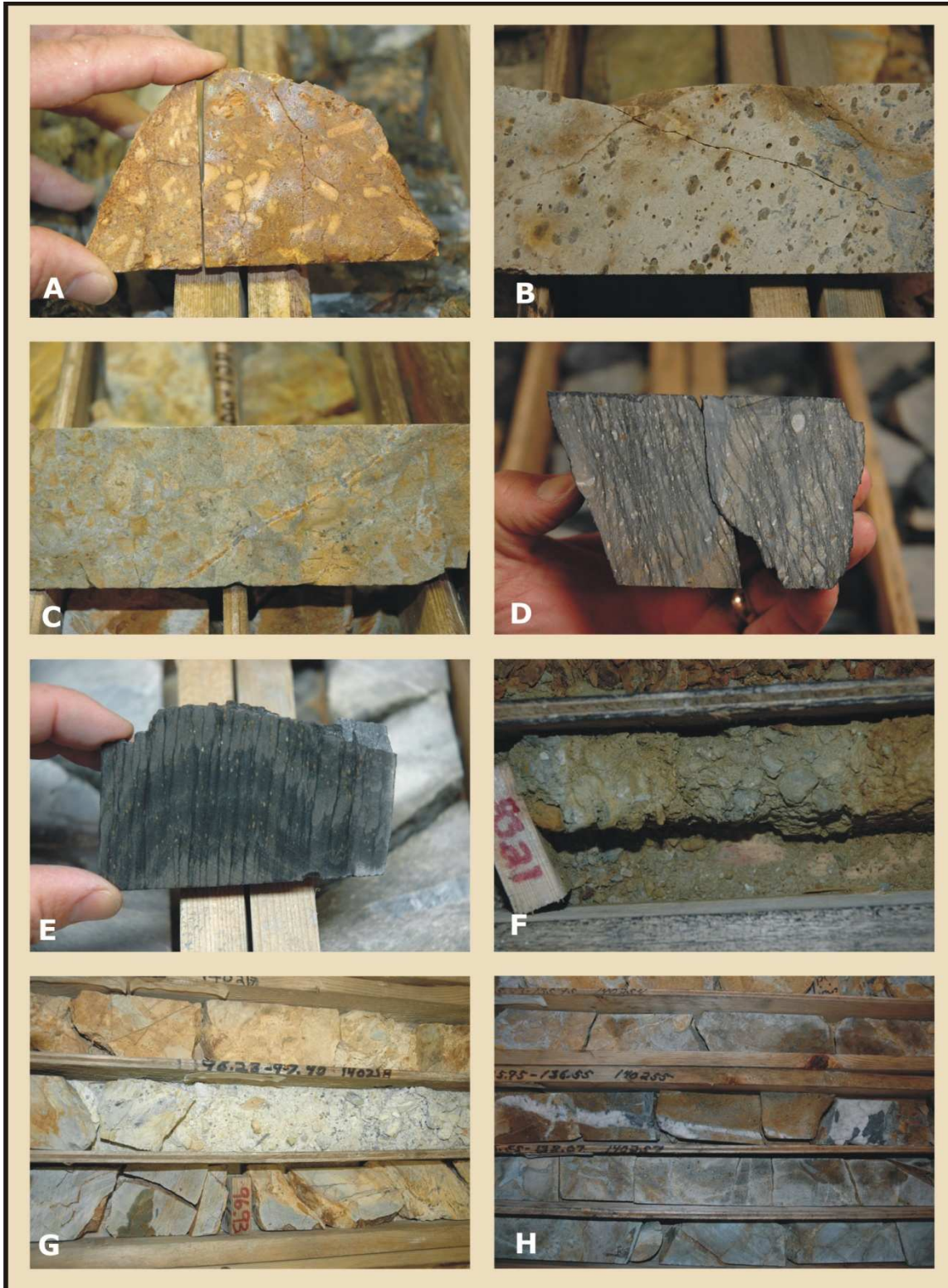


Figure 7. Photographs of key rock types and mineralization features. **A)** porphyry dike; MK07-18, 41.2 m; 1.01 g/t Au **B)** amygdaloidal volcanic, presumably a flow, with possible Na alteration; MK07-18, 152-189 **C)** silicified volcanic breccia; MK07-18 **D)** argillite with more silty band and coral hash;

note the shearing which is approximately 30° to bedding; MK07-18, 288.4m **E**) axial planar cleavage on fold nose in interlayered argillite – silty argillite; MK07-18, 296.11m. This type of feature supports the fold-thrust interpretations of the cross section shown in Figure 10. **F**) fault; broken siltstone fragments in clay gouge/shear zone; this is part of an ~8m interval which contains 2 – 22.4 g/t Au; MK07-18, 77.9 – 86.08m **G**) broken rock in shear zone within mineralized interval. The material in the photo includes portions of sample intervals that contain 15-16.2 g/t Au; MK 07-18, 96.93m **H**) narrow mineralized quartz vein in silicified volcanic contains 13 g/t Au and 35,900ppm As from arsenopyrite; MK07-18, 136.5m

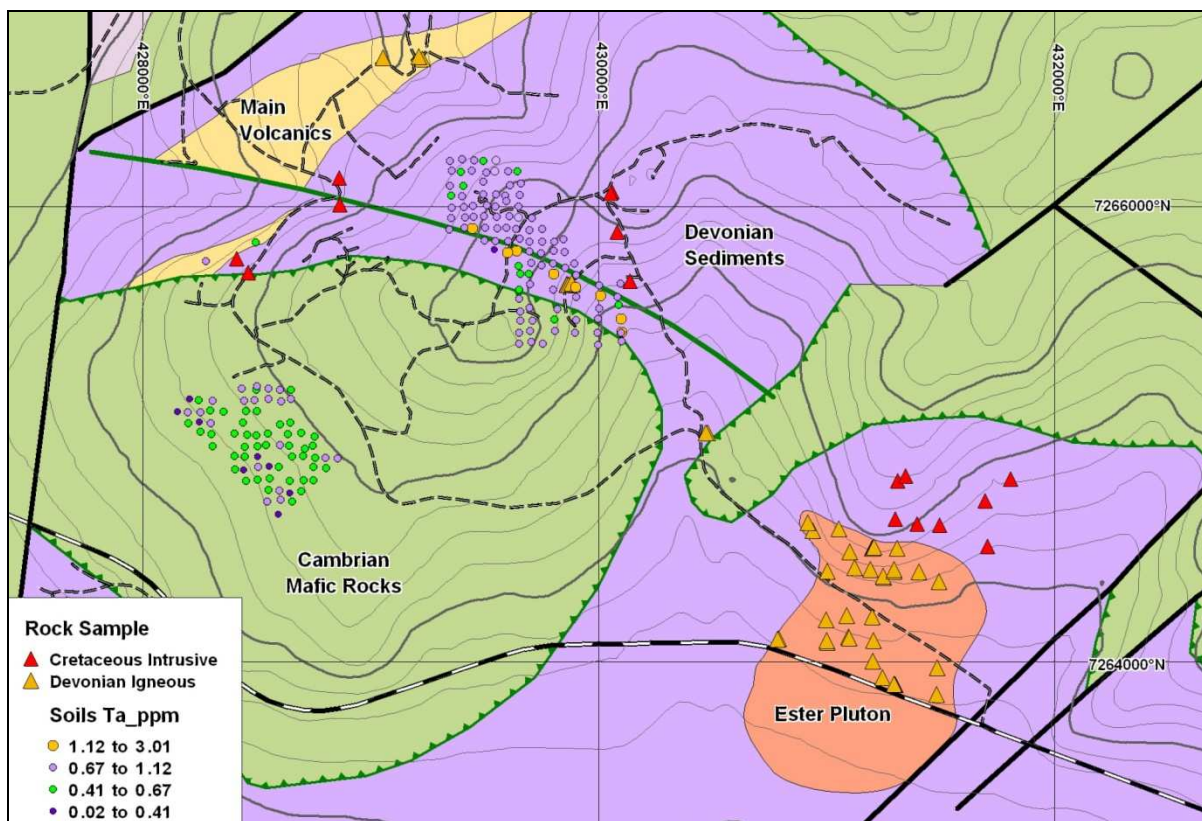


Figure 8. Geologic map of Money Knob (upper left of center) area showing rock and soil sample data and the manner in which it identifies various rock types.

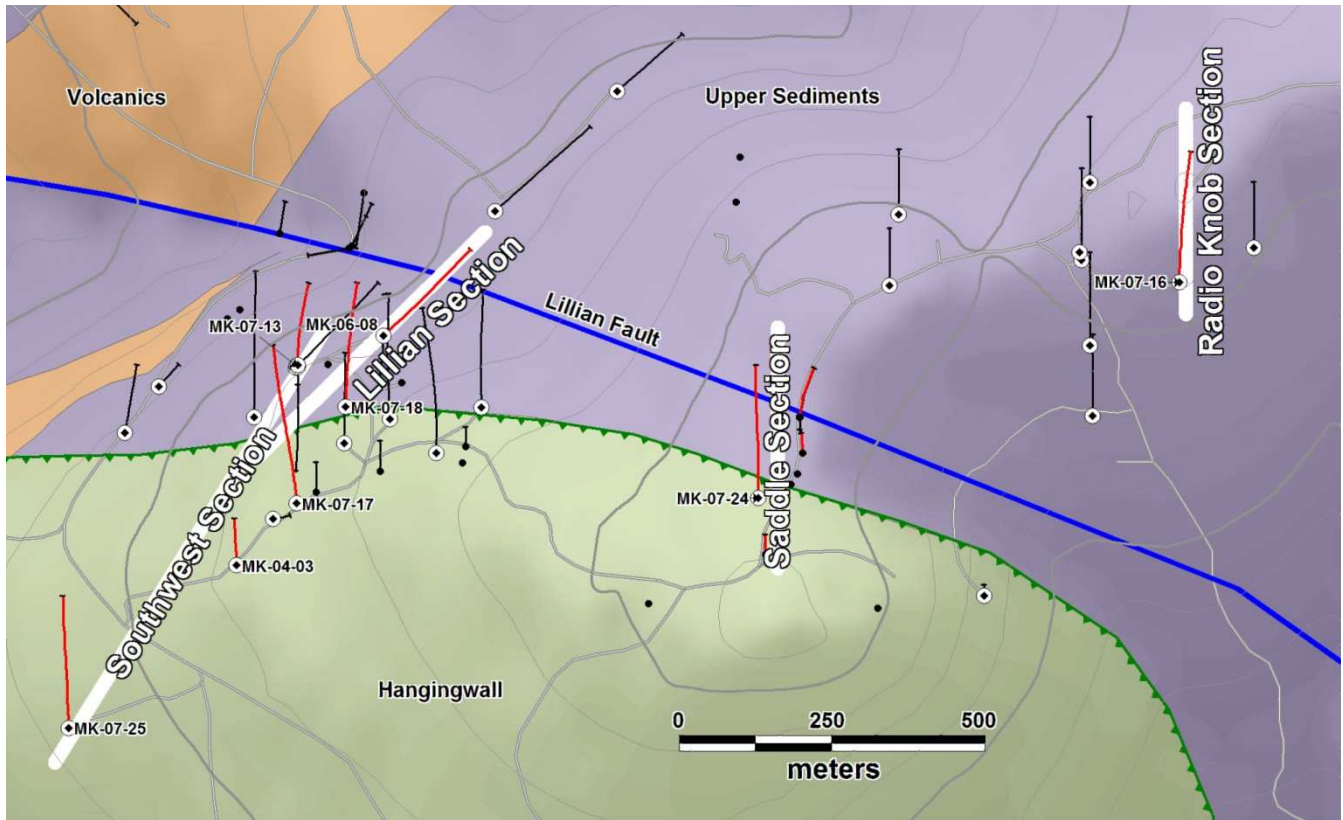


Figure 9. Detailed geologic map of the Money Knob area showing drill hole locations and traces. White swaths indicate the location of sections shown below.

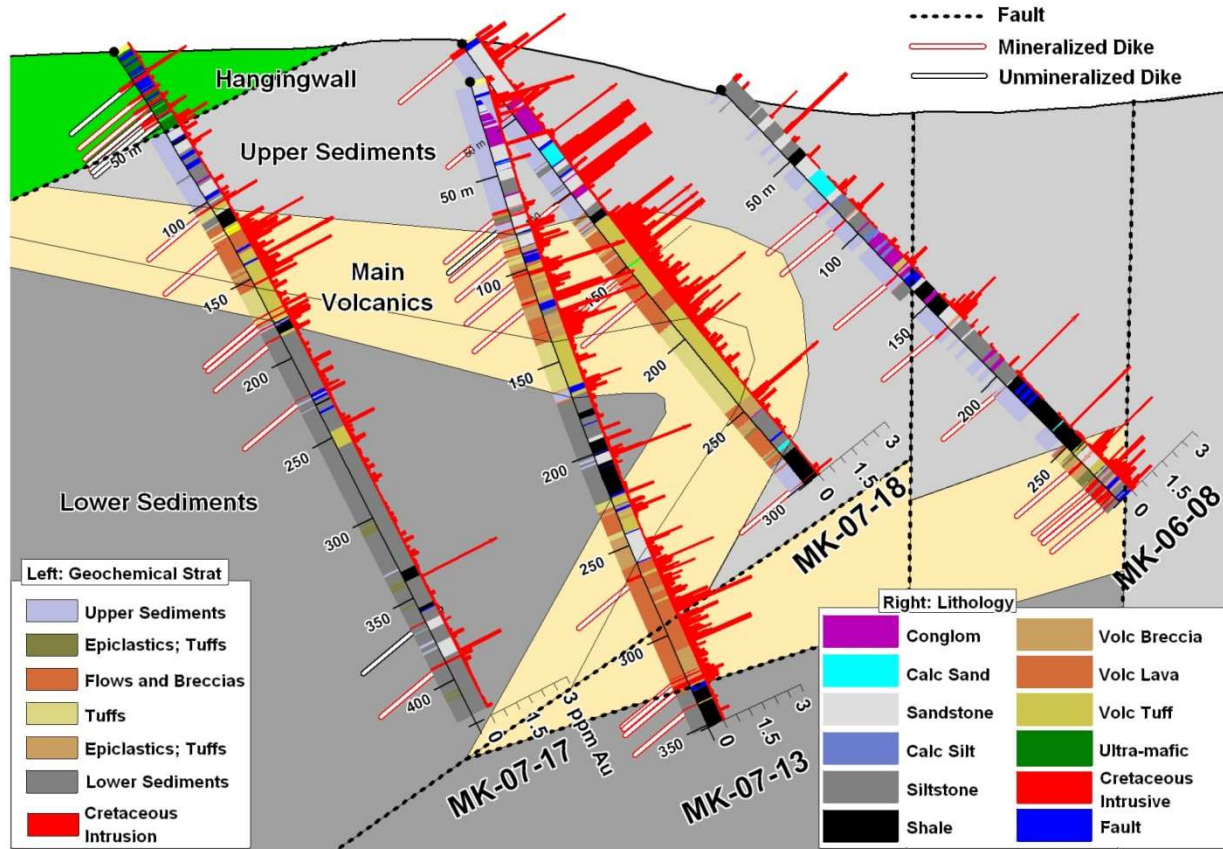


Figure 10. Interpreted cross section of the Lillian section. Red histograms to the right of drill traces indicates relative gold content

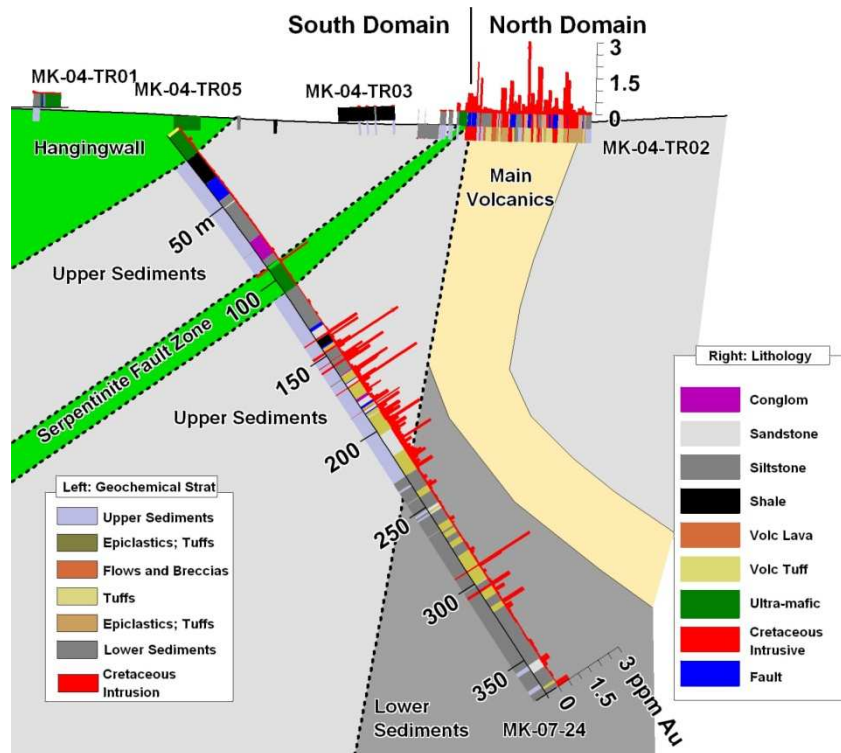


Figure 11. Interpreted cross section at the Saddle section location. Red histogram to the right of the drill trace indicates relative gold content. Fold is inferred from bedding dip measurements made in surface trenches and in the lower sediments in MK-07-24.

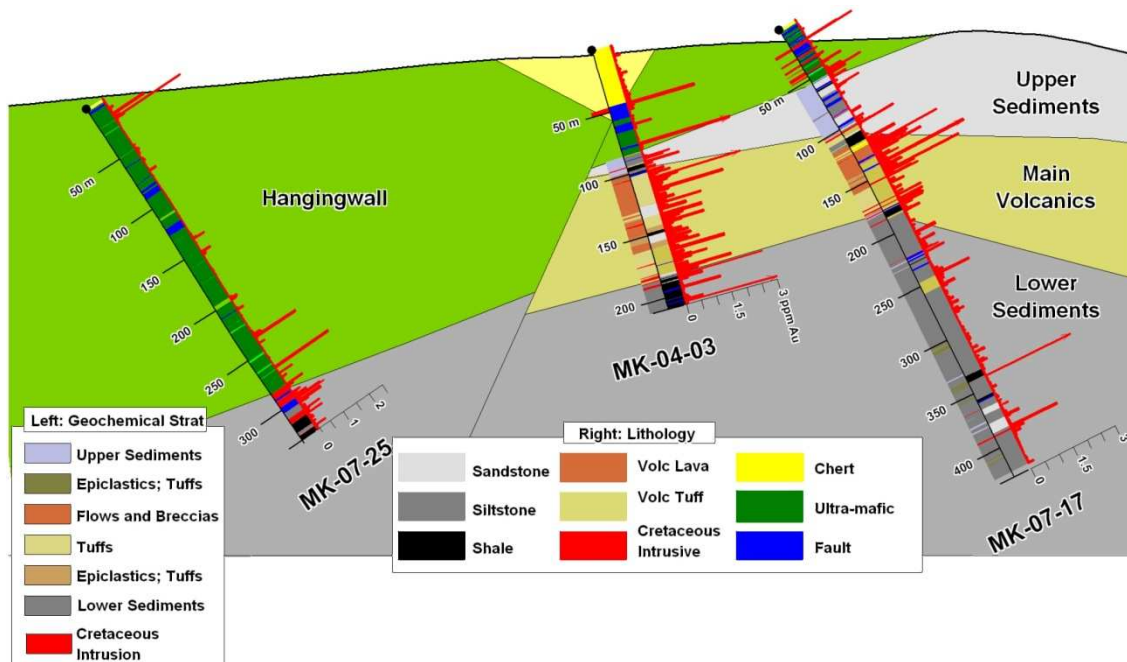


Figure 12. Interpreted cross section at the Southwest section location. Red histogram to the right of the drill trace indicates relative gold content.

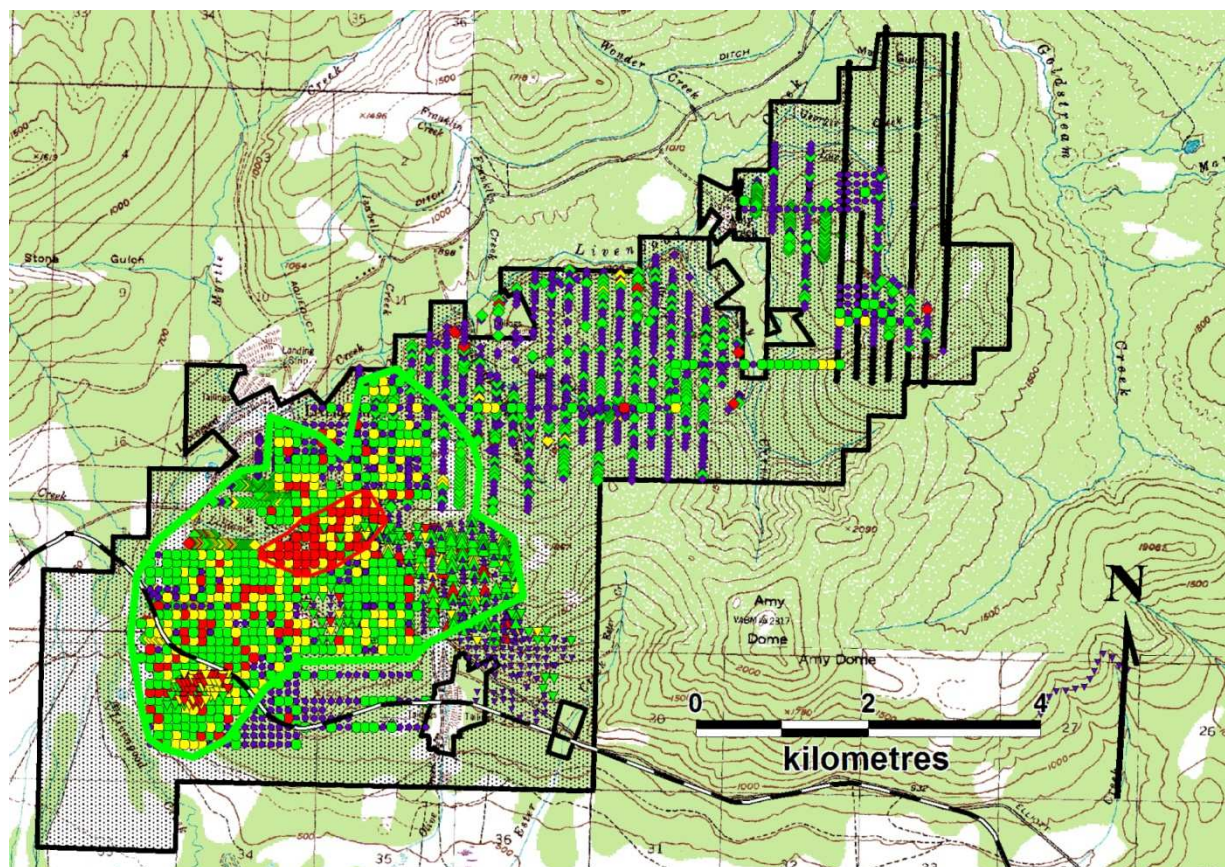


Figure 13_ Plot of soil samples. Color coding shows relative gold content with red indicating gold ≥ 0.100 _ g/t Au. The green line encloses the area containing anomalous gold samples.

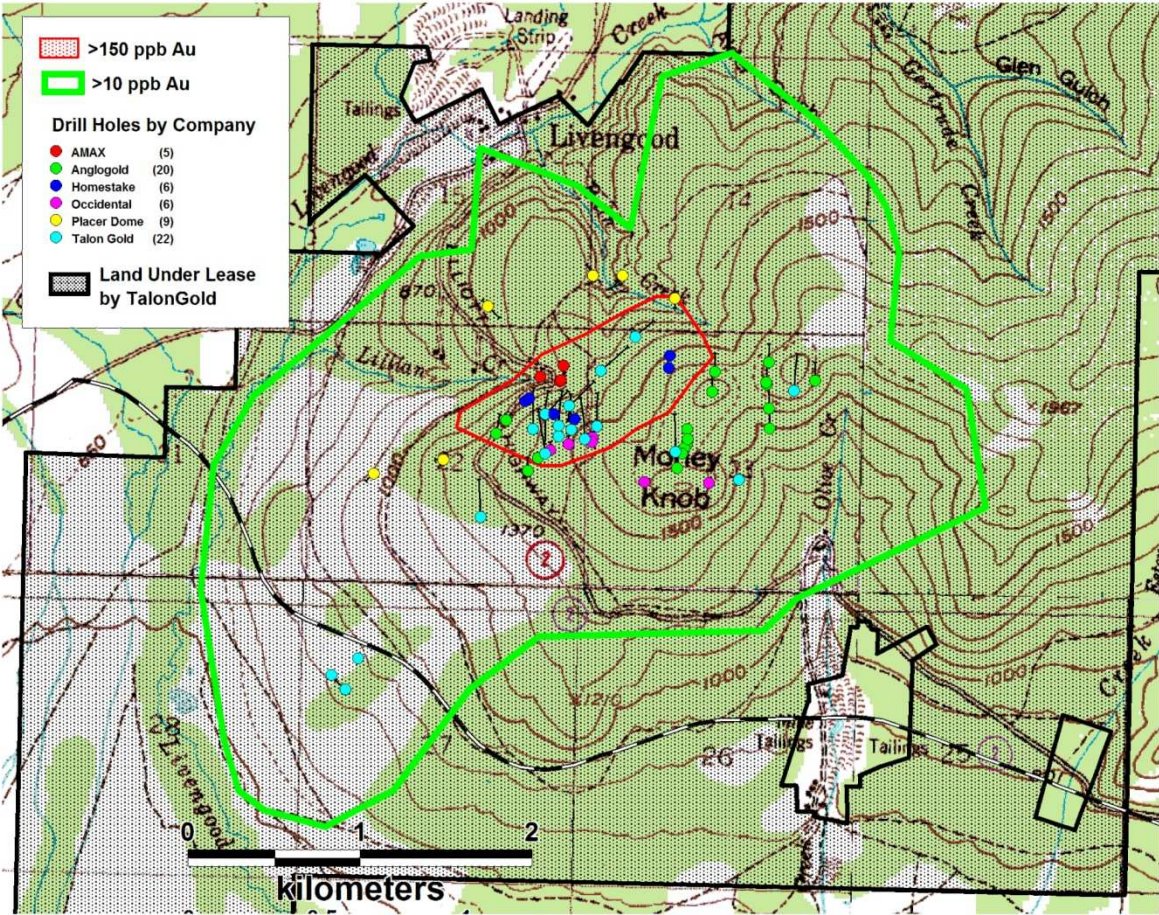
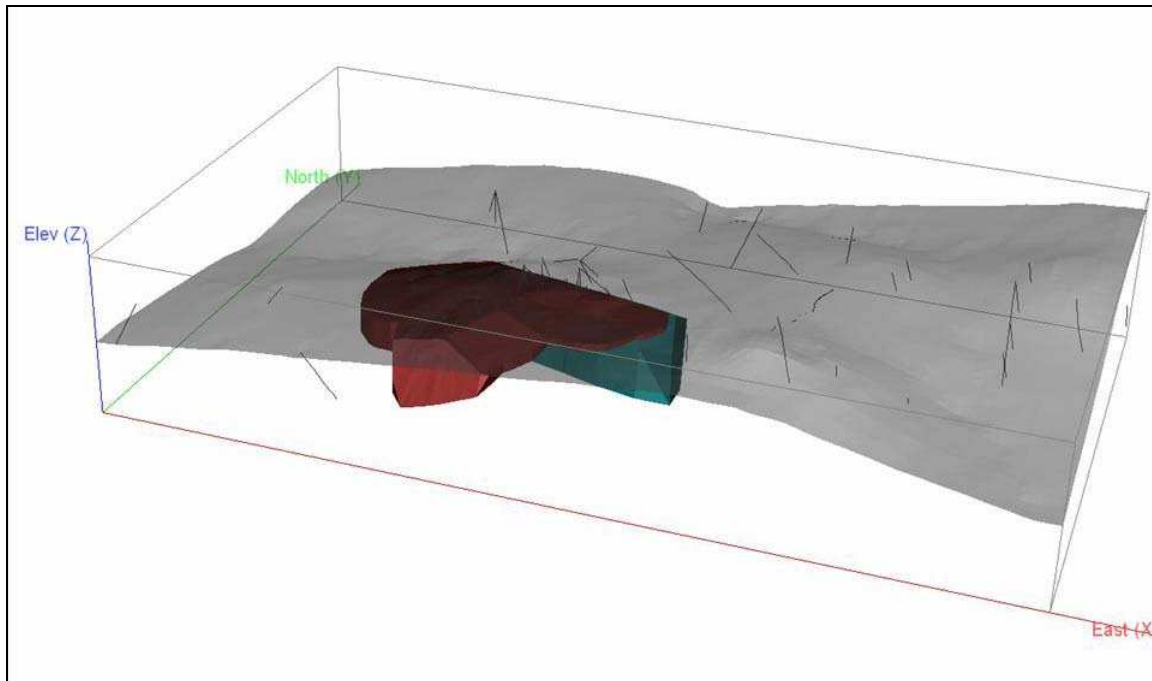
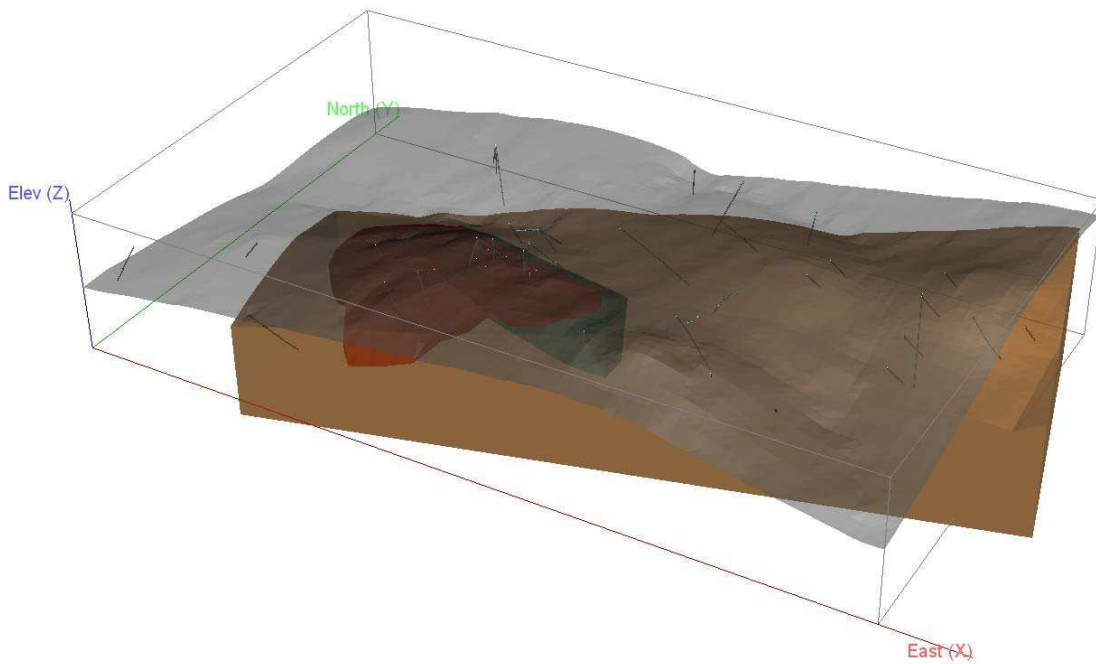


Figure 14. Distribution of drilling in the Money Knob area (red outline) with respect to anomalous soil samples (green outline). The majority of the soil geochemical target remains untested.



A)



B)

Figure 15. Perspective view of modeled solids. **A)** This view shows volcanic solids; upper in red, lower in green, topographic surface in grey; **B)** same diagram but with the addition of the solid representing the surrounding sedimentary rocks. Drill hole traces are shown as thin graylines.

MINERAL RESOURCE SERVICES, INC.

CERTIFICATE OF AUTHOR

I, Paul D. Klipfel Ph.D., do hereby certify that:

1. I am President of :
Mineral Resource Services, Inc.
4889 Sierra Pine Dr.
Reno, NV 89519
2. I have graduated from the following Universities with degrees as follows:
 - a. San Francisco State University, B.A. geology 1978
 - b. University of Idaho, M.S. economic geology 1981
 - c. Colorado School of Mines M.S. mineral economics 1988
 - d. Colorado School of Mines Ph.D. economic geology 1992
3. I am a member in good standing of the following professional associations:
 - a. Society of Mining Engineers
 - b. Society of Economic Geologists
 - c. Geological Society of America
 - d. Society for Applied Geology
 - e. American Institute of Professional Geologists
 - f. Sigma Xi
4. I have worked as a mineral exploration geologist for 28 years since my graduation from San Francisco State University.
5. I have read the definition of “Qualified person” set out in National Instrument 43-101 and certify that by reason of my education, affiliation with professional associations and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for the preparation of the technical report titled **Summary Report on the Livengood Project, Tolovana District, Alaska** and dated February 18, 2008 (the “Technical Report”) relating to the Livengood property. I visited the Livengood property on June 16, 2006 for 1 day.

7. I have not had prior involvement with the property that is the subject of the Technical Report.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 18 Day of February, 2008

”signed and sealed”

Signature of Qualified Person

Print name of Qualified Person

CERTIFICATE G.H. Giroux

I, G.H. Giroux, of 982 Broadview Drive, North Vancouver, British Columbia, do hereby certify that:

- 1) I am a consulting geological engineer with an office at #1215 - 675 West Hastings Street, Vancouver, British Columbia.
- 2) I am a graduate of the University of British Columbia in 1970 with a B.A. Sc. and in 1984 with a M.A. Sc., both in Geological Engineering.
- 3) I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 4) I have practised my profession continuously since 1970. I have had over 30 years experience calculating mineral resources. I have previously completed resource estimations on a wide variety of precious metal deposits both in B.C. and around the world, many similar to Livengood.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.
- 6) This report titled “**Summary Report on the Livengood Project, Tolovana District, Alaska**” dated February 18, 2008, is based on a study of the data and literature available on the Livengood Property. I am responsible for Section 17 on the resource estimations completed in Vancouver during 2007-08. I have not visited the property.
- 7) I have not previously worked on this deposit.
- 8) As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- 9) I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 18th day of February, 2008

“signed and sealed”

G. H. Giroux, P.Eng., M.A.Sc.

Appendix 1 Claim Information

Land/Lease Holder	Project Name	Parcel Name	Count	Date Acquired	MTRS Location	Acres	File Num	Type	Last governmental obligation met	Last adv royalty & report	Status
Anglogold Ashanti (Usa) Expl. Inc.	Livengood	AMHLT - ML	1	1-Jul-04	F008N005W	3621	9400248	AMHLT-ML	Annual rpt Mar 06	Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	ANNE	2	21-Apr-03	F008N005W24	24	55469	AK-FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	BLACK ROCK	3	21-Apr-03	F008N005W24	21	55466	AK-FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	BRIDGET	4	21-Apr-03	F008N005W24	21	55471	AK-FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	DOROTHEA	5	21-Apr-03	F008N005W23	21	55453	AK-FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	EILEEN	6	21-Apr-03	F008N005W24	22	55470	AK-FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	FOSTER	7	21-Apr-03	F008N005W24	24	55455	AK-FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	LENORA	8	21-Apr-03	F008N005W23	20	55454	AK-FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current

RICHARD L								FULMC	05		rpt Mar 06, Adv royalty Jun 06
HUDSON RICHARD L	Livengood	NICKIE	9	21-Apr-03	F008N005W24	23	55459	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	OLD SMOKY	10	21-Apr-03	F008N005W23	19	55464	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	PATRICIA	11	21-Apr-03	F008N005W13	22	55468	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	PATRICK	12	21-Apr-03	F008N005W23	19	55460	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	SAUNDERS	13	21-Apr-03	F008N005W23	26	55458	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	SHARON	14	21-Apr-03	F008N005W23	21	55452	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
GERAGHTY RICHARD	Livengood	SUNSHINE #1	15	21-Apr-03	F008N005W23	23	55462	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
GERAGHTY RICHARD	Livengood	SUNSHINE #2	16	21-Apr-03	F008N005W23	24	55463	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current

HUDSON RICHARD L	Livengood	TRAPLINE	17	21-Apr-03	F008N005W24	20	55467	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	TWERPIT	18	21-Apr-03	F008N005W24	24	55457	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	VANCE	19	21-Apr-03	F008N005W24	24	55456	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	WHITE ROCK	20	21-Apr-03	F008N005W23	20	55461	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current
HUDSON RICHARD L	Livengood	WITTRUCK	21	21-Apr-03	F008N005W23	20	55465	AK- FULMC	Claim rental Sept 05	Annual rpt Mar 06, Adv royalty Jun 06	current

APPENDIX 2
LIST OF DRILL HOLES
Drill holes used in Resource are Highlighted
Holes within Volx_upp and Volx_ft Solids

HoleID	UTM_East	UTM_North	Elev_m	Depth_m
BAF-1	430060.00	7266021.00	518.20	213.40
BAF-2	430073.00	7266149.00	525.50	152.40
BAF-3	429760.00	7266096.00	506.00	150.90
BAF-4	430073.00	7265881.00	476.70	216.40
BAF-5	430078.00	7265765.00	460.20	189.90
BAF-6	429745.00	7265979.00	515.10	134.10
BAF-7	430056.00	7266034.00	518.20	304.80
BAF-8	430342.00	7266042.00	524.90	152.40
L-1	429726.00	7265450.00	503.00	31.00
L-2	429350.00	7265457.00	506.00	73.00
L-3	429050.00	7265715.00	468.00	46.00
L-4	429045.00	7265688.00	470.00	20.00
L-5	428910.00	7265675.00	454.00	70.00
L-6	428805.00	7265640.00	441.00	70.00
LC-TR-01	428883.00	7266132.00	358.14	91.44
LC-TR-02	428859.00	7266041.00	358.14	68.58
MK-04-01	428734.36	7265595.83	421.50	109.73
MK-04-02	428492.11	7265737.81	361.60	305.71
MK-04-03	428674.66	7265520.37	412.20	208.80
MK-04-04	428547.65	7265813.38	354.40	137.80
MK-04-TP1	429594.00	7265670.00	510.00	2.00
MK-04-TP2	429583.00	7265653.00	512.00	2.00
MK-04-TR1	429541.10	7265537.03	524.72	34.00
MK-04-TR2E	429598.04	7265763.08	514.78	85.00
MK-04-TR2S	429598.04	7265763.08	514.78	20.00
MK-04-TR2W	429597.06	7265763.30	514.78	85.00
MK-04-TR3	429602.98	7265703.95	516.44	33.40
MK-04-TR5	429570.00	7265621.00	512.00	15.00
MK-06-05	429099.00	7266101.00	403.00	305.10
MK-06-06	429299.00	7266298.00	405.00	205.44
MK-06-07	428772.31	7265845.05	412.80	276.45
MK-06-08	428915.27	7265896.90	408.70	288.34
MK-06-09	427614.00	7264251.00	223.70	124.66
MK-06-10	427533.00	7264335.00	228.20	10.36
MK-06-11	427691.00	7264430.00	242.30	17.07
MK-07-12	428915.27	7265896.90	408.70	282.85
MK-07-13	428773.31	7265847.55	412.80	351.13
MK-07-14	428774.81	7265846.05	412.80	44.81
MK-07-15	428774.81	7265849.05	412.80	281.64
MK-07-16	430220.00	7265985.00	531.27	332.84
MK-07-17	428773.40	7265621.64	427.70	421.84
MK-07-18	428853.64	7265780.23	431.80	301.14

MK-07-19	429002.64	7265704.11	458.40	436.17
MK-07-20	428851.71	7265720.07	435.30	244.30
MK-07-21	428925.82	7265760.62	440.20	309.98
MK-07-22	428703.31	7265763.84	408.50	382.83
MK-07-23	429075.75	7265779.26	458.80	290.17
MK-07-24	429529.82	7265631.08	508.90	372.16
MK-07-25	428399.64	7265252.85	368.20	330.40
MK-07-26	429900.00	7265470.00	438.00	28.35
MK-1	428945.00	7265820.00	442.00	76.00
MK-2	428825.00	7265850.00	427.00	77.00
MK-3	429500.00	7266190.00	465.00	0.00
MK-4	429493.00	7266117.00	478.00	0.00
MK-5	428660.00	7265925.00	368.00	0.00
MK-6	428680.00	7265940.00	367.00	0.00
MN-1	428864.00	7266045.00	358.14	106.68
MN-2	428864.00	7266045.00	358.14	106.68
MN-3	428745.00	7266065.00	335.28	106.68
TL-10	428183.00	7265586.00	358.00	79.00
TL-11	429528.00	7266520.00	370.00	105.00
TL-12	429223.00	7266654.00	318.00	200.00
TL-13	429054.00	7266654.00	307.00	150.00
TL-14	427780.00	7265504.00	266.51	124.00
TL-6	433265.00	7269380.00	277.00	43.89
TL-7	428443.00	7266477.00	317.00	101.00
TL-8	428443.00	7266477.00	317.00	192.00
TL-9	428443.00	7266477.00	317.00	105.00

APPENDIX 3 SEMIVARIOGRAMS

