

Developing North America's Newest Gold Discovery

NYSE-Amex: THM

TSX: ITH

Alaska Support Industry Alliance
Fairbanks Industry Update
Tom Irwin, President – Tower Hill Mines
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www.ithmines.com



## **Forward Looking & Cautionary Statements**

This presentation contains forward-looking statements and forward-looking information (collectively, "forward-looking statements") within the meaning of applicable Canadian and US securities legislation. All statements, other than statements of historical fact, included herein including, without limitation, statements regarding the anticipated content, commencement and cost of exploration programs, anticipated exploration program results, the discovery and delineation of mineral deposits/resources/reserves, the potential for the expansion of the estimated resources at Livengood, the potential for any production at the Livengood project, the potential for higher grade mineralization to form the basis for a starter pit component in any production scenario, the potential low strip ratio of the Livengood deposit being amenable for low cost surface mine mining that could support a high production rate and economies of scale, the potential for cost savings due to the high gravity concentration component of some of the Livengood mineralization, the completion of a pre-feasibility study at Livengood, the potential for a production decision to be made regarding Livengood, the potential commencement of any development of a mine at Livengood following a production decision, business and financing plans and business trends, are forward-looking statements. Information concerning mineral resource estimates and the preliminary economic analysis thereof also may be deemed to be forward-looking statements in that it reflects a prediction of the mineralization that would be encountered, and the results of mining it, if a mineral deposit were developed and mined.

The Company cautions investors that any forward-looking statements by the Company are not guarantees of future performance, and that actual results are likely to differ, and may differ materially, from those expressed or implied by forward looking statements contained in this presentation. Such statements are based on a number of assumptions which may prove incorrect, including, but not limited to, assumptions about the level and volatility of the price of gold, the timing of the receipt of regulatory and governmental approvals, permits and authorizations necessary to implement and carry on the Company's planned exploration and potential development program at Livengood; the Company's ability to attract and retain key staff, particularly in connection with the carrying out of a feasibility study and the development of any mine at Livengood, the timing of the ability to commence and complete the planned work at Livengood and for any feasibility study that may be commissioned.

Accordingly, the Company cautions that any forward-looking statements are not guarantees of future results or performance, and that actual results may be located, the Company's inability to obtain any necessary permits, consents or authorizations required for its activities, material adverse changes in economic and market conditions, changes in the regulatory environment and other government actions, fluctuations in commodity prices and exchange rates, the inability of the Company to raise the necessary capital for its ongoing operations, and business and operational risks normal in the mineral exploration, development and mining industries, as well as the risks and uncertainties disclosed in the Company's most recent Annual Information Form filed with certain provincial securities commissions in Canada and in the Company's most recent Form 40F filed with the United States Securities and Exchange Commission, available at <a href="https://www.sec.gov">www.sec.gov</a>, respectively. The Company undertakes no obligation to update publicly or release any revisions to these forward-looking statements attributable to the Company or any person acting on its behalf are qualified by the cautionary statements attributable to the Company or any person acting on its behalf are qualified by the cautionary statements after the date of this presentation or to reflect the courrence of unanticipated events except as required by law. All subsequent written or oral forward-looking statements attributable to the Company or any person acting on its behalf are qualified by the cautionary statements therein.

Scientific or technical information contained herein is derived from the independent NI43-101 technical reports which include more detailed information with respect to the Company's properties, including the dates of such reports and the estimates included therein, details of quality and grade of each resource, details of the key assumptions, methods and parameters used in the resource estimates and projections included in the reports may be materially affected by any known environmental, permitting, legal, taxation, socio-political, marketing, or other relevant issues and you are urged to review such reports in their entirety. The Company's preliminary economic assessment (PA) discussed herein is preliminary in nature, includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary assessment will be realized. Mineral resources that are not mineral reserves do not have any demonstrated economic viability.

The Company uses certain terms in this presentation, such as "resources," "indicated" and "inferred" that the SEC's guidelines strictly prohibit U.S. registered companies from including in their filings with the SEC. Accordingly, the Company's disclosures regarding mineralization may not be comparable to similar information disclosed by US registered companies. You are urged to consider closely the disclosure in the Company's latest Form 40-F annual report, which may be secured from the Company, or from the SEC's website at <a href="https://www.sec.gov">www.sec.gov</a>.

Note: All monetary values are USD unless otherwise stated.



### **Discussion Topics**

- I. Livengood Gold Project Overview
- II. Geology and Exploration
- III. Technical / Engineering
- IV. Environmental Baseline Studies
- V. Next Steps & Summary

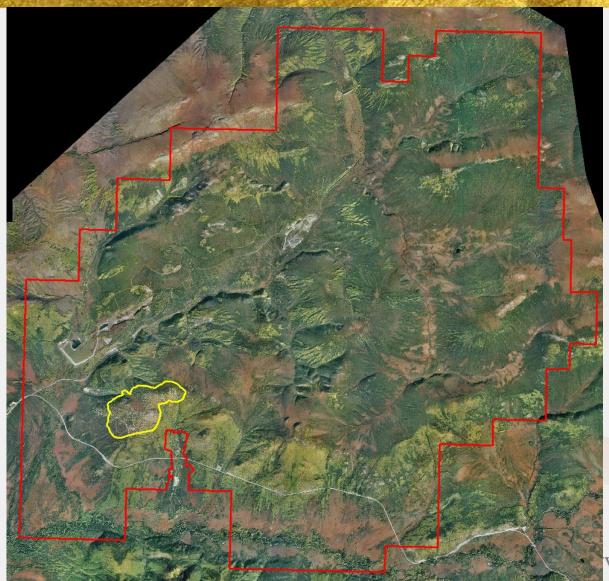


## **Producing Mines in Alaska**





## **Livengood Gold Project Land Map**



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## **Livengood Hardrock History**

1914	Placer Gold discovered in Livengood valley	
1914-1950's		by old timers located small d – named "Money Knob"
1976	Homestake	6 bore holes
1981	Occidental	6 bore holes
<b>₩</b> 1991	AMAX	3 bore holes
1996	Placer Dome	9 bore holes
1999	Cambior	soil geochemistry
2003-2005	Anglo Gold Ashanti	12 bore holes
2006-2011	ITH Livengood	803 bore holes

Note that it was almost 2 decades after State geologists helped the Alaska Mental Health Trust select the Livengood area (1994) for its mineral potential before a major hardrock gold resource was identified



### **Livengood Gold Project Area Map**

**Money Knob** 

Outcropping Deposit Dipping shallowly into the photo

2.5 Km

Aerial view looking southeast at Livengood Gold Deposit



### **Creating Value through Exploration**

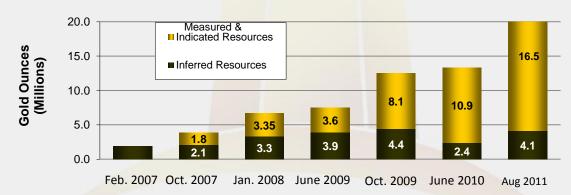


## Through 2011:

- +803 Boreholes
- + 233,000 Meters

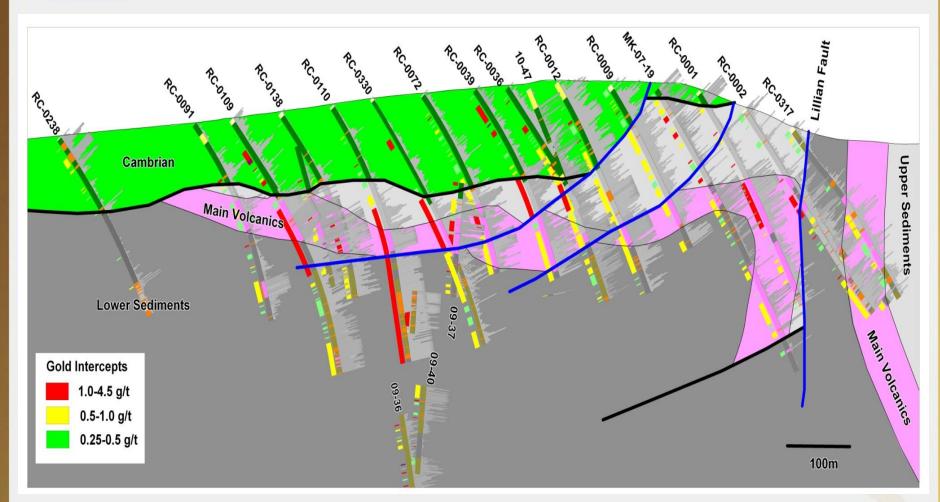


#### **Livengood Gold Resource Growth**





#### **Cross Section - Core Zone**





## **Livengood Gold Project Team**

**Karl Hanneman** 

**Chris Puchner** 

**Debbie Evans** 

**Denise Herzog** 

**Keith Malone** 

**Rick Solie** 

**Steve Newkirk** 

Al Thabit (Denver)

**Tom Irwin** 



## Alaskan Team – Alaskan Experience



## **Project Objective**

"Maximize project value by advancing engineering, agency and public outreach, permitting, financing, and construction in a coordinated manner to a successful conclusion as soon as possible"

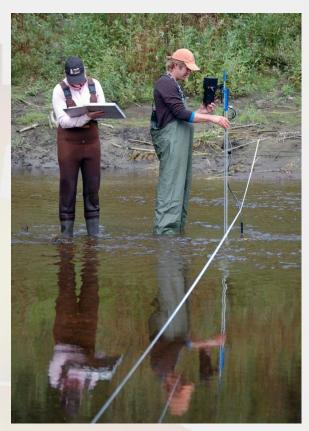
Earn public trust by transparency, good science and consistency of actions and message



## Livengood Gold Project - Tech. / Eng.

#### **Feasibility Studies**

- Metallurgical Optimization Test work
- Geotech, Infrastructure, Metallurgical Processing, Plant Design and Engineering, including alternative studies.
- Infrastructure site selection and characterization including electrical lines, substations, roads, pipelines, workshops, tailing storage sites and water supply
- Mine Design

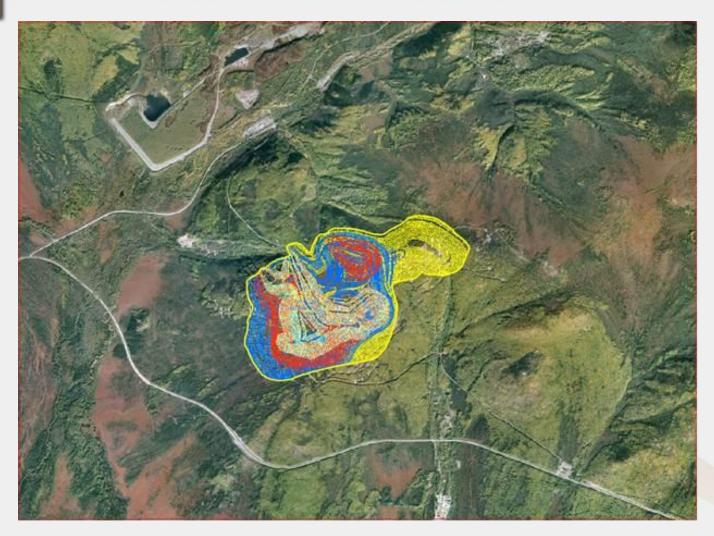


Water Testing Near Livengood

FEASIBILITY STUDY EXPECTED IN FIRST HALF OF 2013



## **Conceptual Mine Phases from 2011 PEA**





## **2012 Drilling Program**

- Winter Brine Drilling Program
- Pit Slope Drilling
- Borrow Program
- Hydrological Testing

Condemnation Drilling







## Environmental Baseline Program Rock Characterization

- Identify potential for Metal Leaching or Acid Rock Drainage
- Identify methods to minimize the potential for ML/ARD to affect the environment



#### Static

- Acid base accounting
- Whole rock multi-element analyses

#### Mineralogy

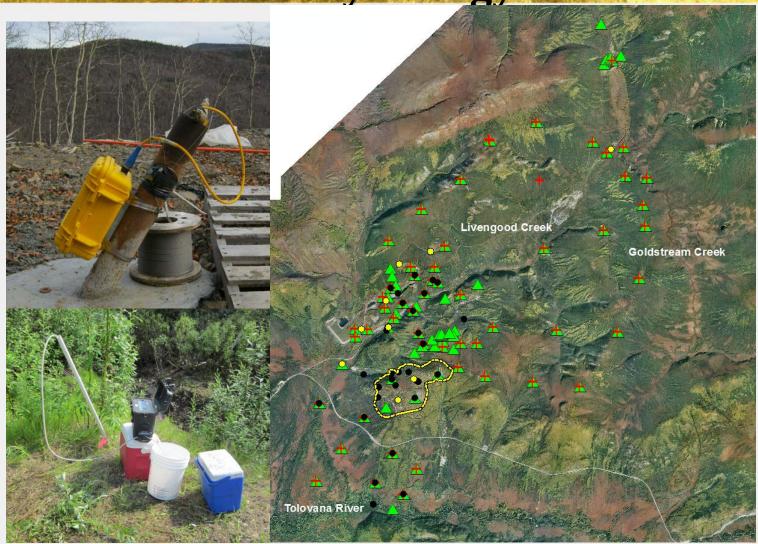
- X-ray diffraction
- Optical
- Electron microscopy

#### Kinetic

- Humidity Cells
- Meteoric water mobility procedure
- On-site barrel tests



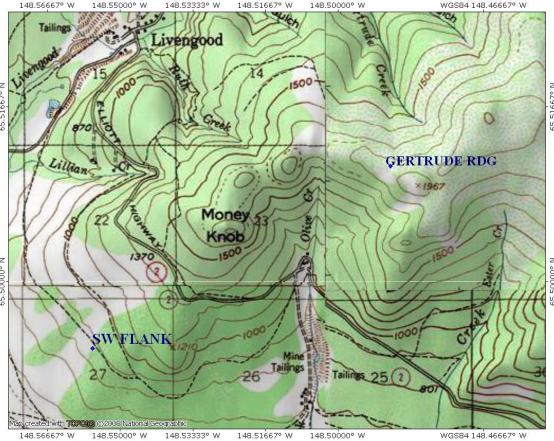
## **Environmental Baseline Geohydrology**





## Environmental Baséline Meteorology









## **Environmental Baseline Wetlands & Vegetation**

#### 2031 Field Points

- 1055 Wetland

#### **Determinations**

- 976 Photopoints

Over 60,000 acres mapped







## Environmental Baseline Aquatic Studies



- Fish presence and absence surveys
- Overwintering habitat
- Grayling spawning and distribution
- Grayling metal sampling
- Benthic macro-invertebrates
- Periphyton







## **Environmental Baseline Wildlife & Habitat Studies**



- Mammal studies
- Bird surveys
- Habitat mapping





## **Environmental Baseline Cultural Resources**



About 14,000 acres surveyed to date.

### Types of Sites

- Mining ditches
- Mining camps
- Trash dumps
- Trails and roads
- Buried prehistoric sites



### Where Do We Go From Here?

# Complete Feasibility Study Engage in early discussions with agencies and public Project Documentation

- Conceptual Project Description
- Water Management Plan
- Reclamation and Closure Plan

#### **Future Stages**

- Application
- > Permitting
- > Construction
- > Operation
- > Closure





## **Golden Opportunity for Alaska**

Gold resource is substantial and well proven

Favorable land status and location Experienced Alaska development team

**Jobs for a Generation of Alaskans** 

- ~100 Summer Season 2012
- ~1,000 during construction
- ~500 for mine life of +20 years







## **Livengood Gold Resource Validation**





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Responsibly Advancing Alaska's Resource Based Economy

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