NI 43-101 Technical Report for the Khayyam-Stumble-On (KSO) Project, Alaska

State of Alaska, USA
Prince of Wales Island, Craig B-2 Quadrangle
Latitude: 55.295°N Longitude: 132.393°W

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1 Executive Summary

1.1 INTRODUCTION AND TERMS OF REFERENCE

The KSO Project ("KSO" or "the Project") is an early-stage polymetallic exploration project centred on the historical Khayyam and Stumble-On copper-gold massive sulphide mines on southern Prince of Wales Island, Southeast Alaska. The deposits have seen minimal work following their closure in 1907. Massive sulphide lenses outcrop at both historical mine sites and demonstrate potential for high-grade copper and gold VMS mineralization, with select chip samples returning grades up to **3.7 g/t Au, 54.9 g/t Ag, 8.1% Cu, 6.5% Zn over 2.2 m**. The Project is approximately 45 km west of Ketchikan by air.

This Technical Report was prepared for Alex Metals Corp. ("Alex Metals" or the "Company") by Dr. Roy Greig, P.Geo., an independent Qualified Person as defined by National Instrument 43-101 to support disclosure required for the Company's proposed initial listing on the TSX Venture Exchange. This report represents the first Technical Report for the Project and was prepared in compliance with disclosure and reporting requirements of the Canadian Securities Administrators' National Instrument 43-101 "Standards of Disclosure for Minerals Projects" and Form 43-101F1. It incorporates and verifies historical information from the U.S. Bureau of Mines and U.S. Geological Survey publications, together with new geological mapping, rock and soil geochemistry, and airborne electromagnetic data collected by Alex Metals in 2025.

1.2 PROPERTY DESCRIPTION AND OWNERSHIP

The KSO Project consists of 68 contiguous Federal Lode Mining Claims (K001–K068) covering approximately 568.9 ha (1406 acres) within the Craig B-2 Quadrangle. The claims are centred near 55.2959° N, 132.393° W at elevations of 350 to 810 m above sea level. The claims are located within the Tongass National Forest on lands administered by the U.S. Forest Service (USFS) for surface management and the U.S. Bureau of Land Management (BLM) for subsurface mineral rights.

All claims are 100% owned by Alexander Metals Inc., a wholly owned subsidiary of Alex Metals Corp., and are in good standing. There are no underlying agreements, royalties, liens, or encumbrances. To maintain the federal claims, a maintenance fee of $200 per claim must be paid annually by September 1.

1.3 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

The Project is accessible by helicopter from Ketchikan, a flight of approximately 20 minutes. An historical, overgrown, 7 km logging road connects the KSO claims to active logging roads and ultimately the state highway system on Prince of Wales Island. These roads can be used to transport equipment and personnel close to the Project. Deep-water barge access remains feasible at MacKenzie Inlet.

Ketchikan (population ~8,000) serves as the primary regional supply and industrial hub offering a deepwater port, barge transport facilities, an international airport, fuel, equipment, and skilled labour. Nearby communities on Prince of Wales Island, such as Craig, Hydaburg, Thorne Bay, and Klawock, provide additional services and supplies.

The region has a perhumid temperate maritime climate, with a mean annual temperature of ~7–8 °C and ~2,300 mm (90 inches) of precipitation, primarily as rain. Field operations are most practical from late May through October, as snowfall occurs above 400–500 m elevation during winter months.

The topography is rugged, featuring steep, glacially carved, vegetated U-shaped valleys and high alpine ridges rising to >800 m. Vegetation is dense coastal rainforest dominated by Sitka spruce, western hemlock, and cedar, transitioning upward into muskeg and alpine heath.

1.4 HISTORY

The Khayyam Mine was discovered in 1899 and developed and mined by the Khayyam Copper Company (later renamed Omar Mining Company) from 1901 to 1907, with approximately 385 m of underground workings constructed. The Khayyam mine reportedly produced 177,769 lbs. of copper, 129 oz of gold, and 1,711 oz of silver (though historical records are inconsistent), before closure in 1907 – due to poor management and declining copper prices (Roppel, 1991; Grybeck, 2004). The Stumble-On Prospect, 1.3 km east, was discovered in 1901. Two adits were developed, totalling 155 m of workings. No production data are available for Stumble-On. Ore was transported to an ore terminal developed at the head of MacKenzie Inlet using surface and aerial tramways. Reports suggest the mine was reopened in 1916, but no ore was shipped (Berg and Cobb, 1967).

Both deposits were evaluated in 1944 and 1945 by the U.S. Bureau of Mines as part of the war minerals investigation (Fosse, 1946). The Bureau completed 611 ft of trenching and 31 channel samples at Khayyam, and six channel samples at Stumble-On.

Anaconda Copper Company examined the property in 1946 (Bufvers, 1967).

Several companies evaluated the property between the 1970s and 1990s, including Banner Mining, Cominco Exploration, Homestake Mining, Duval Corporation, and Noranda Exploration. Banner Mining reportedly drilled 14 diamond drillholes at Khayyam and 11 holes at Stumble-On, though no drill data are available. These are thought to be the only holes drilled on the property.

Kennecott Exploration held the claims from 1994 to 2002, Niblack Mining Corp. held them from 2007 to 2014, and Jurassic AK LLC held them from 2019 to 2023. Little information and no data are available for work done by any of these companies.

Historical geophysical surveys included a 1980 ground VLF survey over each deposit and a 1999 airborne DIGHEM^{v} regional survey by the USGS, both of which highlighted strong conductors over the Khayyam and Stumble-On prospects, and suggest mineralization may continue to the east and at depth.

1.5 GEOLOGICAL SETTING AND MINERALIZATION

The Khayyam and Stumble-On mineralization is hosted by strongly deformed, amphibolite-grade volcanosedimentary rocks of the Ediacaran – Cambrian Wales Group. The Wales Group rocks are considered primitive arc-related and form the basement to the Alexander terrane. These rocks have at least two penetrative deformation fabrics and have undergone at least three episodes of metamorphism, reaching amphibolite facies.

Mineralization at KSO occurs as lenses of massive to semimassive pyrite and chalcopyrite, with subordinate pyrrhotite, sphalerite, and magnetite. Deformation and prograde metamorphism have destroyed all primary textures within the mineralized lenses. At least six lenses are identified at Khayyam, up to 8 m thick over a 70 m-thick stratigraphic interval. A single lens was mined at Stumble-On. Chip samples from lenses are typically copper- and gold-rich, with up to **3.7 g/t Au, 54.9 g/t Ag, 8.1% Cu, and 6.5% Zn over 2.2 m**.

Massive sulphide lenses transition along strike to magnetic, siliceous schists with up to 15% pyrite. Lenses are interlayered with and hosted by mafic and intermediate schists that contain variable amounts of hornblende, chlorite, plagioclase, garnet, and quartz. These schists locally preserve primary textures such as amygdules, lapilli, and possible pillows and are interpreted as tholeiitic subaqueous basalt to basaltic andesite based on their immobile-element composition.

Foliated diorite outcrops 1.3 km south of the Khayyam mine and intrudes Wales Group rocks. Late, unfoliated mafic dykes and sills cut schists across the Project area.

Pervasive foliation and schistosity are prevalent throughout the Wales Group host rocks. Foliation is typically parallel to compositional layering. In general, layering and foliation trend ~280°–290° and dip between 70° S and 70° N. Stratigraphy is interpreted to have been isoclinally folded and boudinaged. Later, m-scale folding of foliation is observed near late joints and faults. Several prominent north-south faults have been mapped in the Khayyam area and locally offset or truncate mineralization in the mine.

The Khayyam and Stumble-On deposits are classified as Volcanogenic Massive Sulphide (VMS) deposits, which form as stratabound accumulations of sulphide minerals precipitated at or near the seafloor and are genetically linked to contemporaneous volcanism. They typically form lenticular to tabular bodies concordant with stratigraphy and are often underlain by a discordant feeder zone of disseminated sulphides and stockwork quartz-sulphide veins.

1.6 EXPLORATION

Alex Metals staked the property in 2024 and collected eight rock and 13 soil samples during a reconnaissance trip. Alex Metals expanded staking and executed a preliminary exploration program in the fall of 2025. The 2025 program, spanning nine field days, focused on compiling and verifying historical data, geological mapping, and collecting samples. The Company collected a total of 51 rock samples (including chip, whole-rock, float, and grab samples) and 210 soil samples.

In October 2025, Alex Metals completed a 220 line-km SkyTEM time-domain EM and magnetic survey over the Project area. The SkyTEM data successfully identified strong conductors around known mineralization and is an excellent tool for massive sulphide exploration in the area. No drilling has been completed by Alex Metals to date.

1.7 SAMPLING METHODS AND APPROACH

Samples were collected, prepared, and packaged by Alex Metals employees and contractors under the direct supervision of employees. Samples were transported to Ketchikan under the custody of Alex Metals employees and shipped to ALS Geochemistry in North Vancouver, BC via commercial transport.

1.8 INTERPRETATIONS & CONCLUSIONS

The KSO Project is categorized as an early-stage polymetallic copper-gold (zinc-silver) volcanogenic massive sulphide (VMS) exploration Project. It is centred on two short-lived historical mines (Khayyam and Stumble-On) that have seen minimal activity since their closure in 1907.

Key Highlights:

- **High-grade VMS Potential**: Compilation of historical work and confirmation mapping and sampling of massive sulphide lenses at both historical mine sites demonstrate the potential for high-grade copper- and gold-rich VMS mineralization. Selected chip samples returned grades up to 3.7 g/t Au, 54.9 g/t Ag, 8.1% Cu, and 6.5% Zn over 2.2 m
- **Lack of modern exploration**: The property has seen minimal exploration since mine closure in 1907. Only one small drilling program was recorded (in 1971), and no data are available from it. The only publicly available geological mapping is from a 1984 master's thesis.
- **Favourable mineralogy**: Amphibolite facies metamorphism of the massive sulphide lenses has formed simple, coarse-grained mineralogy, consisting of dominantly pyrite and chalcopyrite with subordinate sphalerite, magnetite, and pyrrhotite. Preliminary metallurgical work by the U.S. Bureau of Mines 99.25% copper recovery and 91% zinc recovery from a minus 150-mesh grind, demonstrating the potential for very high recovery rates.
- **Drill-ready targets**: Modern geophysical methods readily and clearly identify known massive sulphide occurrences. Geophysical data combined with surface mapping and sampling to confirm historical results have provided drill-ready targets and an effective exploration toolbox for VMS exploration in the Wales Group rocks in Southeast Alaska.

1.9 RECOMMENDATIONS

Based on encouraging historical results, preliminary work by Alex Metals, and the general lack of modern exploration at the KSO Project, the Author recommends a staged exploration program for 2026.

A minimum 2,000 m **Phase I** drill and exploration program is proposed, **budgeted at $1.5M USD,** to confirm and test the lateral extent of known mineralization at both Khayyam and Stumble-On, followed by deeper step-out holes based on results. A low-cost surface exploration program is proposed, including infill soil sampling and comprehensive regional and local geologic mapping.

Contingent on Phase I results, an expanded Phase II drill program of a minimum of 3,000 m is recommended.

Airborne geophysical methods have successfully identified strongly conductive massive sulphide anomalies on the Project. An expansion of the 2025 SkyTEM airborne geophysical survey is recommended, contingent on Phase I drilling results, along with a downhole EM survey to better target and define the orientation of conductive massive sulphide bodies at depth, and to maximize drill efficiency.

Phase II, which includes expanded drilling and geophysics, is **budgeted at $1.8M USD.**

2 Introduction

The KSO Project is an early-stage copper, gold, zinc (Cu-Au-Zn) volcanogenic massive sulphide (VMS) exploration project approximately 45 km west of Ketchikan, on Prince of Wales Island. The property has two small historical turn-of-the-century, short-lived, producing mines: the Khayyam and Stumble-On mines. The area has seen very little work since mine closure in 1907. Alex Metals staked the ground in 2024 and completed preliminary field work in the fall of 2025.

2.1 TERMS OF REFERENCE AND PURPOSE

Roy Greig, Ph.D., P.Geo, an independent Qualified Person, was contracted by Alex Metals Corp. **(“Alex Metals”, or the “Company”)** to prepare a technical report to support disclosure in connection with Alex Metals’ proposed initial public listing application on the TSX Venture Exchange, in accordance with National Instrument 43-101 *Standards of Disclosure for Mineral Projects* and form NI 43-101F1, for the early-stage KSO Project, located on Prince of Wales Island in Southeastern Alaska. The author was requested to compile, review, and interpret available geological, geochemical, and geophysical data, conduct a site visit, and provide an independent assessment of the property’s exploration potential.

The historical data and material used in this report were provided by Alex Metals and collected from various sources. The dominant sources of information on the history and geology of the Project are reports by the U.S. Bureau of Mines and the U.S. Geological Survey, as well as a 1984 master's thesis. Citations are used throughout the document where appropriate. The report is also based on data from geophysical, geochemical, and geological surveys, both historical and those completed by Alex Metals in the fall of 2025. References are cited throughout. The Author has no reason to doubt the reliability of this information.

The Author made a site visit on April 1, 2026. An earlier attempt was made to physically access the site on September 25, 2025, but due to inclement weather and safety concerns, physical access to the KSO Project was not possible. Due to protracted inclement weather and scheduling, April 1st, 2026, was the first possible window for a site visit. The Author has reviewed recent satellite imagery of the property and region, extensive photographs of the outcrops, rock samples, and historic mine workings, mapping data, and assay data collected by Alex Metals, as well as historical reports from the KSO project. The Author is satisfied that the data collection methods and geological observations provided by Alex Metals are reliable and comply with industry standards.

2.2 UNITS AND CURRENCY

Metric units are used throughout this Technical Report.

Assay and analytical results for trace elements and precious metals such as gold ("Au") and silver ("Ag") are quoted in grams per metric tonne (“g/t”), parts per million (“ppm”), or parts per billion (“ppb”). 1

g/t is the equivalent of 1 ppm and 1000 ppb. Analyses for major elements and base metals such as zinc ("Zn") and copper ("Cu") are reported in weight percent ("%"). 10,000 ppm or g/t is equivalent to 1%.

Unless otherwise specified, all dollar amounts are expressed in United States Dollars ("USD").

Unless otherwise specified, all coordinates are presented in **UTM NAD83 (2011) Zone 8N.**

Table 1. List of Abbreviations & Acronyms

Acronym	Name
AA	Atomic Absorption Spectrometry
Ag	Silver
Ar-Ar	Argon-Argon
As	Arsenic
Au	Gold
Ba	Barium
cpy	Chalcopyrite
cm	centimeter
DDH	Diamond Drillhole
E	East
FA	Fire Assay
g/t	Grams per tonne; 31.1035 grams = 1 troy ounce
ICP	Inductively Coupled Plasma
K	Thousand
K-Ar	Potassium-Argon
kg	Kilogram = 2.205 pounds
km	Kilometre = 0.6214 mile
LOD	Limit of Detection
m	Meter = 3.2808 feet
Ma	Million years old
Mn	Manganese
µm	Micron = one millionth of a meter
N	North
oz	Troy ounce
Pb	Lead
ppm	Parts per million
ppb	Parts per billion
py	Pyrite
QA/QC	Quality Assurance/Quality Control
S	South
sph	Sphalerite
t	metric tonne
UTM	Universal Transverse Mercator
W	West
Zn	Zinc

Table 2. List of Units

Unit	Abbreviation	Si Conversion
acre	acre	4,046.86 m^2
hectares	ha	10,000 m^2
grams per metric ton	g/t	1 part per million
troy ounces per short ton	oz/ton	34.2855 g/t
foot	ft	0.3048 m
meter	m	Si base unit
kilometer	km	Si base unit
centimeter	cm	Si base unit
mile	mi	1,609.34 km
yard	yd	0.9144 m
gram	g	Si base unit
kilogram	kg	Si base unit
troy ounce	oz	31.10348 g
metric ton	T, tonne	1000 kg
million years	Ma	million years
cubic yard	cu yd	0.7626 m3
degrees Celsius	°C	Degrees Celsius
degrees Fahrenheit	°F	°F=°C x 9/5 +32

3 Reliance on Other Experts

The Company owns surface rights to 68 federal lode claims covering 568.9 ha (Appendix A). These rights are adequate for the current and proposed exploration programs. All permits necessary for the proposed programs have been submitted to the United States Forest Service and are pending approval. These details are in sections 4.1 and 4.2.

Any additional surface rights for mining operations would be acquired when the Project advances to mining.

The Author was informed by Alex Metals that there are no known litigations potentially affecting the Property.

4 Property Description and Location

The Khayyam–Stumble On Project ("KSO" or "Project") is located on central Prince of Wales Island, Southeast Alaska, within the Ketchikan Recording District, around 55.296°N and 132.393°W in the Craig B-2 quadrangle (Figure 1). The Project is approximately 45 km by air west of Ketchikan (population approximately 8,000). Other nearby communities include Hydaburg, Craig, Klawock, and Thorne Bay, with populations of approximately 354, 972, 734, and 497, respectively, as of 2024.

The Khayyam deposit is situated on a mountain ridge at the headwaters of Omar Creek at an elevation of 700 m. The Stumble On deposit is located 1.3 km to the east at an elevation of 380 m.

The KSO claims lie within the Tongass National Forest on multiple-use lands open to mineral development. The Project area is uninhabited but falls within traditional Tlingit and Haida territory. Prince of Wales Island hosts several nearby communities (e.g., Craig, Hydaburg, Klawock) and industrial support centers in Ketchikan, which provide potential logistics and labour for future exploration (Figure 1).

4.1 LAND STATUS

The 568.9-hectare KSO claim block consists of sixty-eight contiguous 1500 x 600 ft (457 x 183 m) claims (Figure 2). All claims are Federal Mining Lode claims and are recorded with the Federal Bureau of Land Management (BLM) using the Mineral and Lands Record System (MLRS). A listing of the mineral titles is presented in Table 3 and Appendix A.

KSO claims fall within the AK Copper River Meridian, Township 076S, Range 086E (Sections 7, 8, 9, and 18) and Range 085E (Sections 11, 12, 13, and 14).

To maintain the Federal Mining Lode claims, an annual maintenance fee of $200 must be paid by September 1 each year. This totals $13,600 USD for all sixty-eight claims. A map of all KSO Project claims is shown in Figure 2.

All claims are 100% owned by Alexander Metals Inc., a wholly owned subsidiary of Alex Metals Corp. No underlying agreements affect the claims. All claims are in good standing.

Table 3. KSO Project Federal Mining Claims

Project	Mining Claim Case Serial Numbers	Claim Names	Prospect	Meridian	Township	Range	Sections
KSO	AK106696509 - AK106696523 AK106753378 - AK106753402 AK106762646-AK106762673	K001 - K068	Khayyam & Stumble-On	Copper River	T076S	R086E R085E	SEC07, SEC08, SEC09, SEC018 SEC011, SEC012, SEC013, SEC014

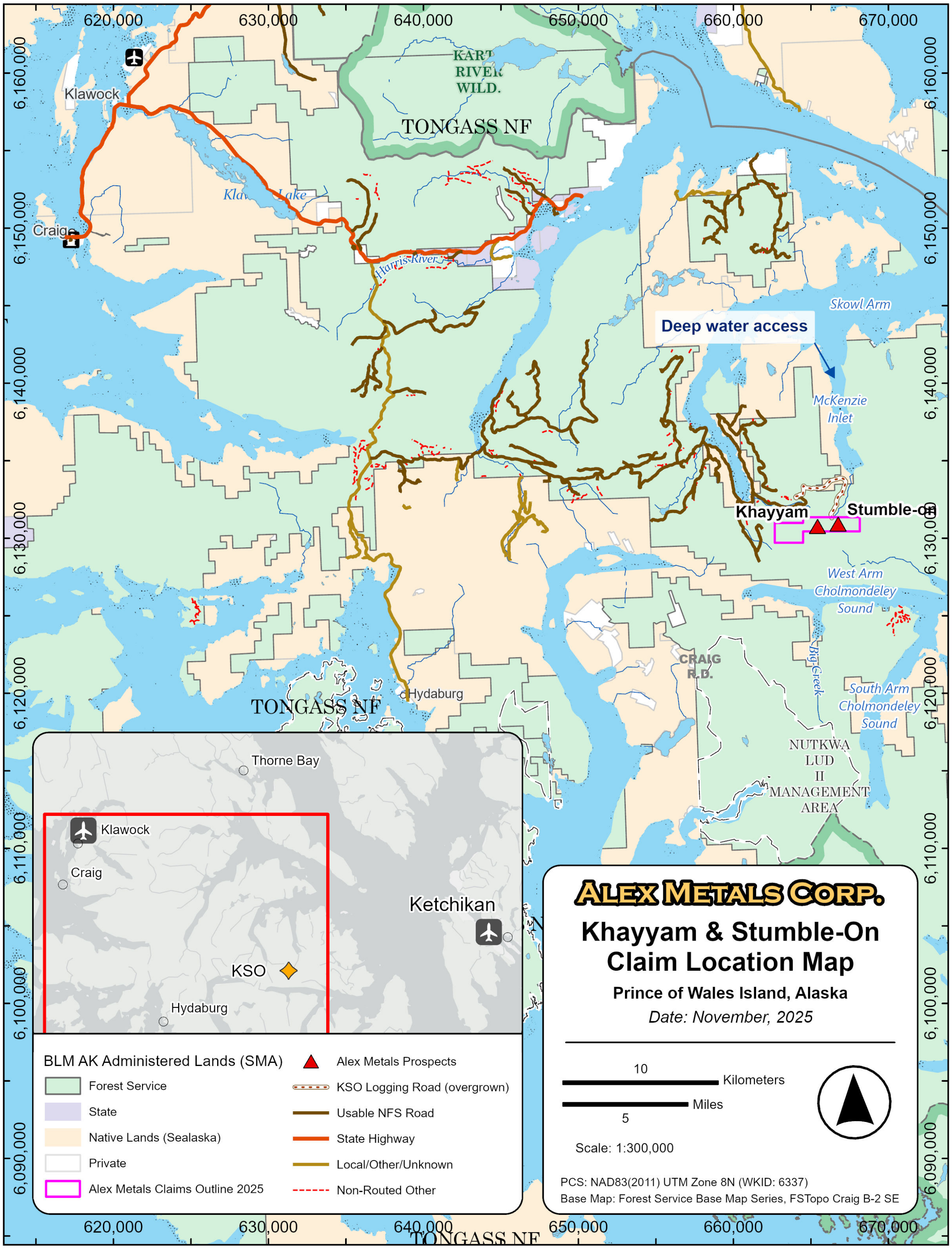

Figure 1. Map showing location of the KSO Project on Prince of Wales Island in relation to Ketchikan. Klawock airport is approximately 83 km by road. Hydaburg is approximately 66 km by road. Green is U.S. Forest Service lands. Tan is conveyed ANCSA Land belonging to Sealaska Native Corporation.

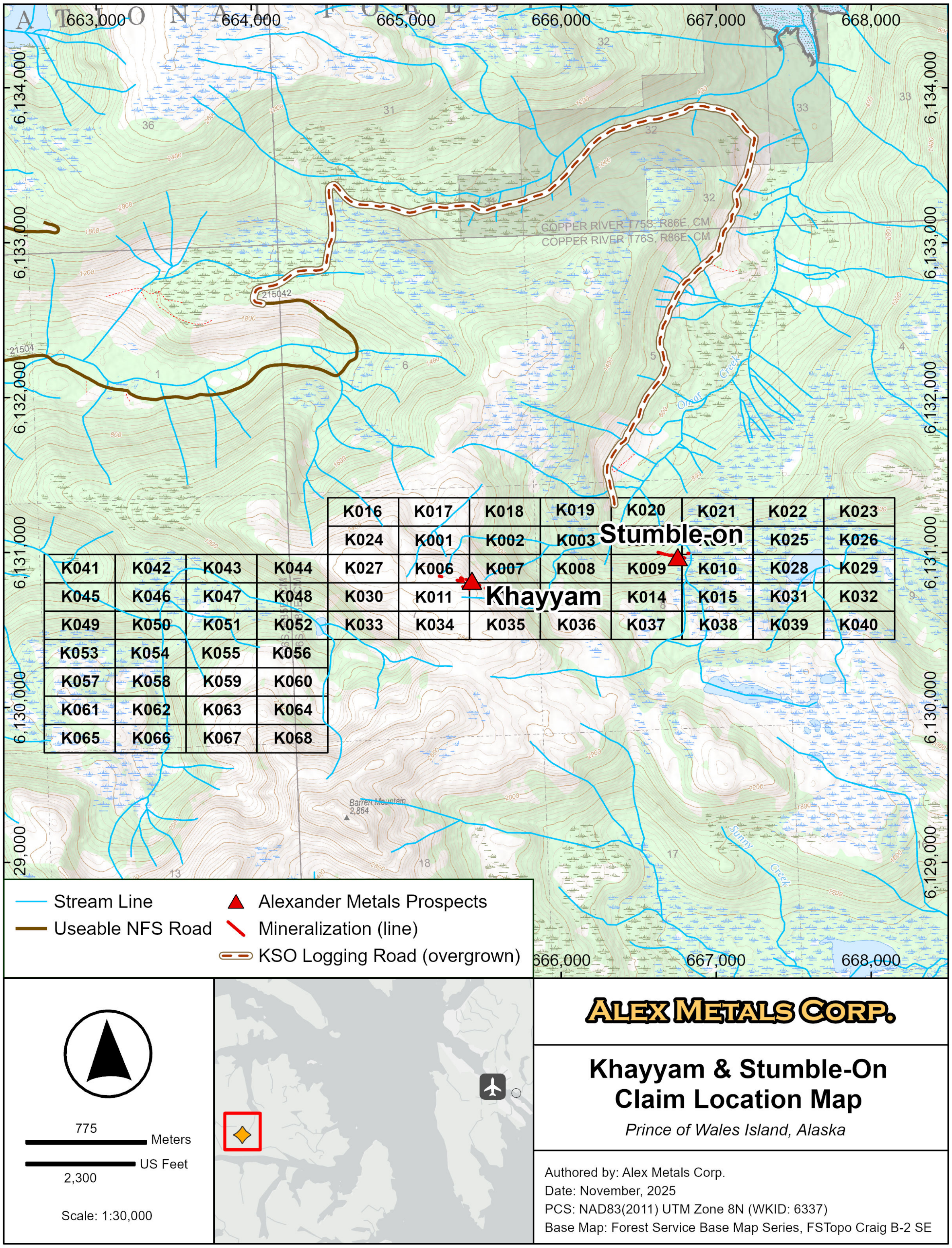

Figure 2. Location map showing the KSO and Stumble-On prospects.

4.2 PERMITTING

All claims are within Tongass National Forest, and all surface exploration activities are regulated primarily by the United States Forest Service (USFS) Craig District Ranger's Office, based in Craig, Alaska. The Federal Bureau of Land Management (BLM) manages all subsurface rights on these lands. The property falls within the Prince of Wales-Hyder Census Area, which lacks a borough seat or local government beyond municipalities or tribal governments. The Land Use Designation (LUD) for the area is Timber Production.

All mineral exploration activities on USFS lands are regulated under 36 CFR 228 Subpart A (Surface Use under the Mining Laws). A Notice of Intent (NOI) to the District Ranger's Office is required for exploration work done on USFS lands for locatable minerals. For minimal disturbance work, such as mapping, sampling, claim posting, and surveying, this NOI is sufficient. For work that involves limited disturbance (<5 acres), such as diamond drilling, construction of drill pads or roads, trenching, etc., the USFS requires a Plan of Operations (PoO). The exploration activities proposed in a PoO are subject to a documented environmental review by the USFS. The environmental review for most exploration activities with a duration of 1 year or less is documented in a USFS Decision Memorandum and is categorically excluded under 36 CFR 220.6(e)(8) from further environmental analysis in an Environmental Impact Statement (EIS) or Environmental Assessment (EA).

Although the claims fall on Federal lands managed by the USFS, the State of Alaska has jurisdiction over fish habitat protection, water quality protection and consumptive uses, air quality, and land reclamation for mineral activities. As such, exploration activities generally require certain State of Alaska authorizations from the Alaska Department of Natural Resources (ADNR) Division of Mining, Land and Water (DMLW) and the Alaska Department of Fish & Game (ADF&G). The state permitting process is managed through a consolidated application process referred to as the APMA process for "Application for Permits to Mine in Alaska." The completed APMA form is submitted to the DML&W, which distributes the form to select state and federal agencies. Pending review of the APMA, the applicant is issued the requisite Temporary Water Use Authorization(s) (TWUA), fish habitat permit(s), and reclamation plan approval. Reclamation Bonding is generally required by the USFS for activities that require a Plan of Operations.

The 1998 Prince of Wales Island Area Plan (POWIAP) recognizes mineral potential at the Khayyam and Stumble-On sites and a potential access route from the south end of Mackenzie Inlet. The mouth of Omar Creek is closed to mineral entry to avoid conflict with anadromous fish habitat (mineral closure order MCO573).

4.3 ENVIRONMENTAL CONSIDERATIONS

The KSO Project is in an area of historical mining. Remnants of mining activity from 1901 to 1907 include waste rock dumps covering approximately 6,400 m^2 (1.6 acres), as well as open adits, trenches, and pits around the Khayyam and Stumble-On mines. See Section 6.1 for details. Several kilometres of historical cut grids remain visible.

The Author is not aware of any federally listed endangered species present on the property or other potential environmental issues or concerns.

4.4 LAND TITLE RISK AND DESIGNATION

To the Author’s knowledge, no significant factors or risks are known that may affect access, title, or the right or ability to perform work on the property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 ACCESSIBILITY

Access to the KSO Project is by helicopter out of Ketchikan, 45 km away. Historically, a 3.7-km surface tramway transported ore from the head of McKenzie Inlet and a 1.6-km aerial tram connected to the mine portal (Fosse, 1946). The Stumble-On property had similar tram connections to tidewater, all of which are now derelict. An historical, overgrown, 7 km logging road connects the KSO claims to active road NF-2150, which follows Polk Creek to the head of Polk inlet, approximately five miles west. From there, NF-2150 connects to Nation Forest Road 21, and ultimately to the State Byway/Hydaburg Highway (AK 913) that connects major towns on Prince of Wales Island (Figure 1). Deepwater barge access remains feasible for modern exploration.

5.2 CLIMATE & PHYSIOGRAPHY

The Tongass National Forest is a perhumid temperate rain forest, and as such, conditions are typically cool and wet year-round at lower elevations. Average annual precipitation at the nearby observation station in Craig exceeds ~2,300 mm (90 in), with Autumn the wettest season. Snow is common above 460 m elevation during the winter months. Mean winter temperatures are around 2°C (36°F) and summer averages 13°C (55°F). Exploration is most efficient between late spring and early fall.

The terrain consists of glaciated U-shaped valleys, steep, vegetated slopes, and broad, flat alpine ridges. Small ponds and lakes occur on broad flat ridges in the alpine and in flat muskeg areas at lower elevations.

Vegetation is dominated by dense stands of Sitka spruce, western hemlock, and cedar below 460 m, with a thick undergrowth of alder, willow, cottonwood trees, berry bushes, and devil's club. Muskeg and scrub timber dominate above 460 m elevation, transitioning to alpine tundra and exposed rock above 610 m. The KSO claims cover an area of higher elevation, dominated by muskeg, thick timber forests, and alpine tundra, with a high point of 810 m.

5.3 INFRASTRUCTURE

The nearest industrial support hub is Ketchikan, with a population of approximately 8,000. Ketchikan serves as a regional hub and offers a deepwater port, barge transport facilities, an international airport with daily service to Seattle, and availability of fuel, equipment, and skilled labour. Ketchikan International Airport on Gravina Island is connected to the city via regular ferry crossing and provides regular daily commuter flights to Seattle, Washington. The Alaska Marine Highway System provides regular service for people, freight, and vehicles. The system also connects to Petersburg and Wrangell. Nearby Prince of Wales Island communities include Craig, Hydaburg, Thorne Bay, and Klawock. A variety of contractors, service providers, and industry professionals are available in Ketchikan.

There is active logging on Sealaska Native Corporation lands (Figure 1) on the west side of Mackenzie inlet, including a significant forest road system, logging camps, and a dock facility. These logging roads are approximately 300 m from an overgrown logging road parallel to Omar Creek. This overgrown logging road connects the KSO claims to the Hydaburg highway via several active forest service roads.

6 History

The Khayyam and Stumble-On deposits were first discovered in 1899 and 1901, respectively, and saw limited mining until 1907, followed by sporadic, minimal exploration work until the present. Table 4 lists all known historical mining and exploration work on the Project. The Khayyam prospect was first discovered by George MacKenzie in 1899. Khayyam is also referred to as 'Kiam' in historical reports, and was originally named for Omar Khayyam, a Persian mathematician, poet, and philosopher. The Stumble-On mine was discovered in 1901 by Tom Stevens and initially named 'Iron Mast', then renamed 'Mammoth' in 1902, and renamed again to Stumble-On in 1945. A third prospect, "Lake View," is mentioned in historical reports, along strike of Khayyam and close to Stumble-On, but no information is available.

Table 4. Historical work (pre-2024) at Khayyam and Stumble-On

Year	Operator	Drilling	Geophysics	Work
1899	George MacKenzie	N/A	N/A	Discovery of the Khayyam deposit
1901 – 1907	Omar Mining Company	N/A	N/A	Development and mining of Khayyam Deposit; 3.7 km tram/road to terminal camp; 1.6 km aerial tram to ore terminal at Mackenzie inlet; 8 adits totalling 385 m of workings,
1901	Omar Mining Company	N/A	N/A	Discovery of Stumble-On deposit (originally named Iron Mast, then Mammoth)
1916	Fred Heckman	N/A	N/A	Staked the land. Little or no work done
1937	Harry Townsend/Texas Gulf Sulphur	N/A	N/A	Located the property, but no work?
1944 – 1945	Bureau of Mines	None	N/A	Sampling, trenching, and surveying as part of war minerals investigations
1971	Banner Mining	25 holes	Unknown	Purportedly drilled 14 holes at Khayyam and 11 holes at Stumble-On. No available data.
1972 – 1973	Cominco Exploration	None	Unknown	Mapping and sampling
1975	Homestake Mining	None	Unknown	Examined the property (no data)
1980	Duval Company	None	VLF	Ground VLF over Khayyam and Stumble-On, underground mapping (see Barrie, 1984)
1984	C. Tucker Barrie	None	None	MSc. Thesis on the Khayyam and Stumble-On deposits
1990	Cominco Alaska Exploration	None	Unknown	Evaluated claims. Unknown work (Maas, 1995)
1990 – 1993	US Bureau of Mines	None	None	Sampling between 1990 and 1993 (Maas, 1995)

1994 – 2002	Kennecott Exploration	None	Unknown	Held claims. No data. (Maas, 1995 & claim records)
2007 – 2014	Niblack Mineral Development	None	CSAMT	Held claims. Sampling, reconnaissance geology, and 2.5 line-km of CSAMT.
2019 – 2023	Jurassic AK LLC	None	Unknown	Held claims. No data

6.1 HISTORICAL MINING

The Khayyam deposit was first discovered in 1899 as an outcropping of pyrite and chalcopyrite by George Mackenzie and developed between 1901 and 1907 (Brooks, 1902; Brooks, 1906; Wright, 1907; Wright, 1908; Wright and Wright, 1908; Fosse, 1946). Between 1901 and 1905, most of the mine workings, consisting of adits, crosscuts, drifts, shafts, and trenches were constructed by the Portland-based Khayyam Copper Company, though work was plagued by avalanches and by 1904, no ore had been shipped (Fosse, 1946; Roppel, 1991). In 1905, the Khayyam Copper Company reorganized as the Omar Mining Company. A dock, ~1.6-km aerial tram, and ~3.7-km gravity surface tram were constructed to transport ore to storage bunkers at the headwaters of Mackenzie Inlet (Wright and Wright, 1908; Roppel, 1991). A small mining camp and post office named Kiam was established at the head of Mackenzie Inlet to service the mine (Wright and Wright, 1908; Maas et al., 1995). Operations were suspended in 1906 due to mismanagement and unsatisfactory smelter returns due to high sulphur content (Wright, 1907; Wright and Wright, 1908). Operations resumed between July and October 1907, and two shipments totalling 4,100 tons of pyrite-copper ore were sent to the Tyee smelter in BC, Canada. Copper prices fell, and the mine was shut down in late 1907. Reports suggest the mine was reopened in 1916, but no ore was shipped (Berg and Cobb, 1967). It is worth noting that the widespread use of froth flotation technology did not occur until after 1910, which dramatically improved metal recovery in polymetallic ores, lessened the issue of high sulphur content, and enabled the separation of sphalerite, which could be considered deleterious by copper and lead smelters.

The US Bureau of Mines did extensive work at Khayyam and Stumble-On in 1944 and 1945, mapping and sampling the underground workings and trenching and channeling the surface (Fosse, 1946). Figure 3 shows a schematic map and section of the Powell adit and the four stopes that produced most of the ore at Khayyam (Wright and Wright, 1908).

Approximately 385 m of workings were developed at Khayyam. Eight adits were developed: the two largest, named the Powell and Kimball adits, and the others numbered. One of the adits is just a 1.5 m cut. Three test pits were also found. Most production came from four stopes within the main 67 m Powell adit (Figure 3). In the Powell adit, nearly vertical sulfide lenses are up to 8 m thick and have been stoped for up to 35 m along strike (Maas et al., 1995).

Little information is recorded on the history of the Stumble-On mine. The prospect was first discovered by Tom Stevens in 1901 and staked as the Iron Mast claims. These were later renamed Mammoth, then Stumble-On in 1945. The Bureau of Mines mapped approximately 155 m of workings at Stumble-On, including crosscuts. Figure 4 shows a schematic map and section of the workings at Stumble-On (Fosse, 1946).

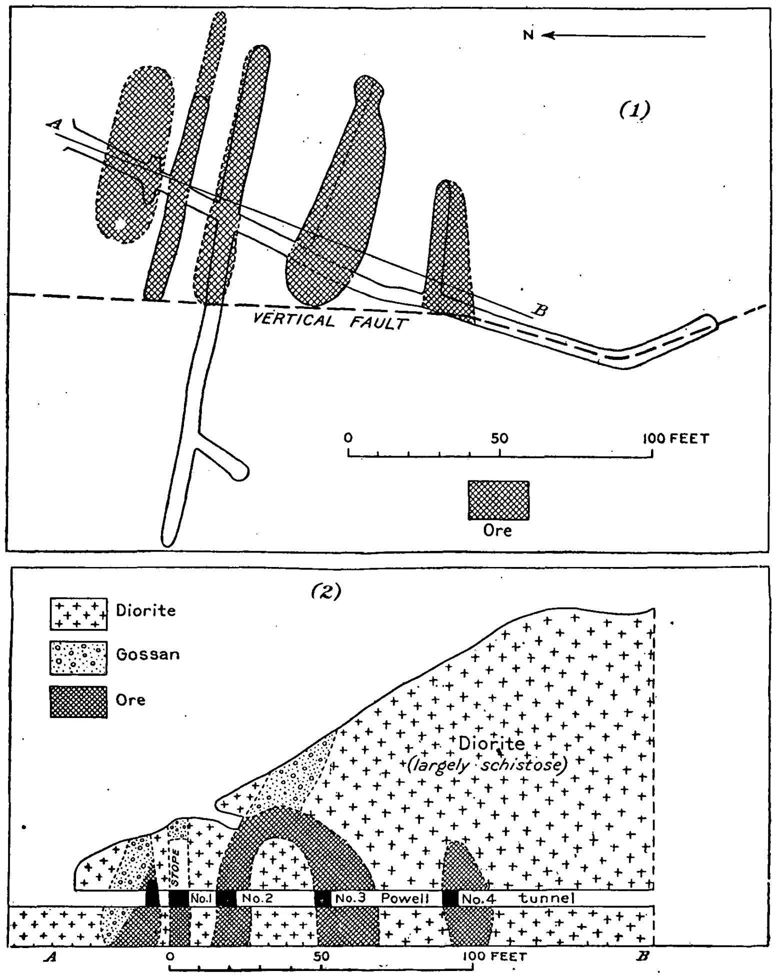

Figure 3. Map and section of the Khayyam Mine Powell adit from Wright and Wright (1908), Note that the "Diorite" host rock is now interpreted as schist derived from a volcanic protolith (e.g., Barrie and Kyle, 1988).

Production and resource figures from historical reports have numerous inconsistencies, making it difficult to be confident of total historical production and mined grades. An unpublished War Minerals Report (Fosse, 1945; Maas et al., 1995) calculates 78,700 Mt of ore at 2.94% Cu, 0.79% Zn, 1.3 ppm Au, 16.8 ppm Ag, and 39.7% S, and reports production as 4.0 kg Au, 53.2 kg Ag, and 80,636 kg Cu. Berg and Cobb (1967) suggest that likely 100,000 lbs of Cu and several thousand dollars worth of gold and silver were produced. Wolff and Heiner (1971) report the Khayyam mine produced 7,017,769 lbs. (3.19 million kg) Cu, 1290 oz. (36.6 kg) Au and 1711 oz. (48,600 g) Ag from 1906 – 1907, which is implausible and inconsistent with other reports. Bufvers (1967) report that the Bureau of Mines calculated 84,000 tons, which is close to the total production figures in Maas et al. (1995), but at different grades: 1.71% Cu, 0.93% Zn, 2.06 g/t Au, 10.3 g/t Ag, and 38% S. Confusingly, Barrie and Kyle (1988) report 210,000 tons at the same grades, citing Bufvers (1967). **These estimates were not completed by a qualified person, and no work has been done to classify historical estimates as current mineral resources. The Author is not treating historical estimates as current mineral resources**.

No production figures or ore grades are available for the Stumble-On mine.

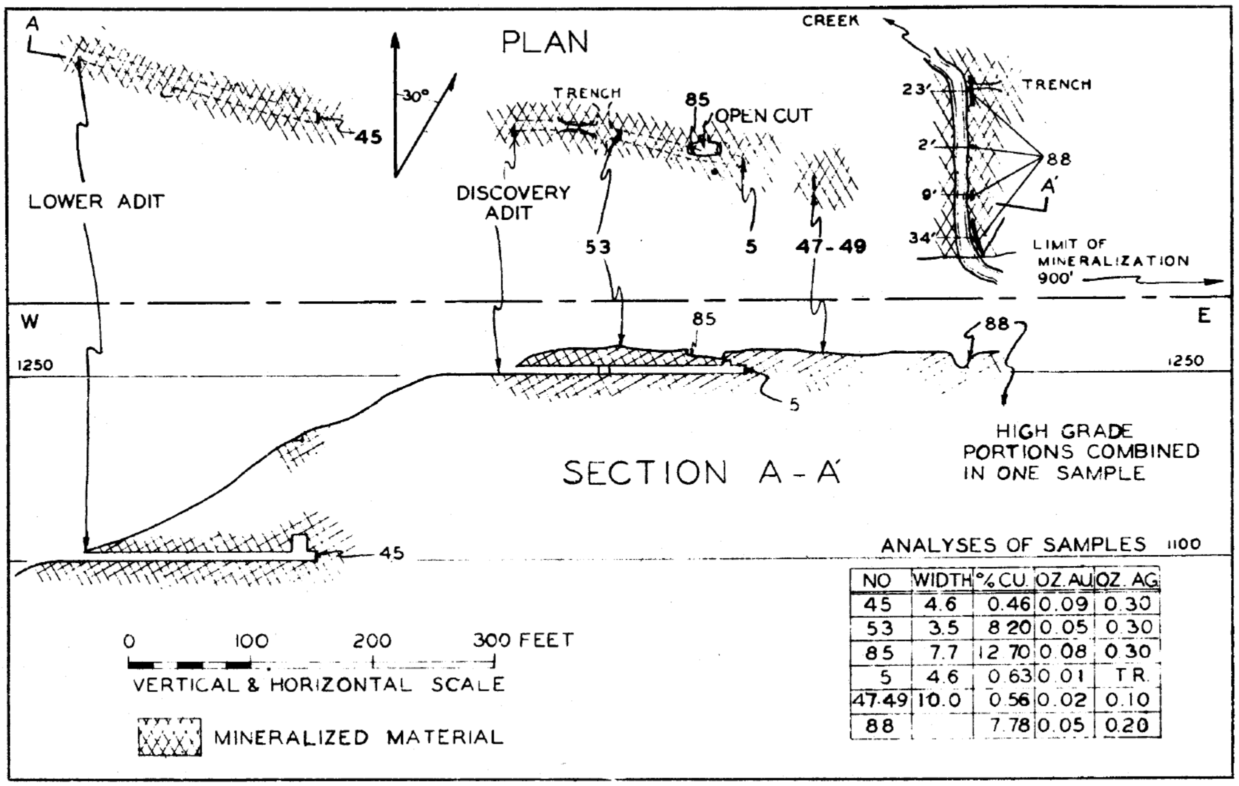

Figure 4. Map and section of mine workings at Stumble-On (Fosse, 1946).

6.2 HISTORICAL EXPLORATION WORK

Mining ended in 1907, and no other work is recorded until 1916. A few other parties staked claims and examined the site in 1916 (Fred Heckman of Ketchikan), in 1937, and in 1945, but no significant work was done (Bufvers, 1967).

In 1944 and 1945, the U.S. Bureau of Mines completed a study of the Khayyam and Stumble-on sites as part of the war minerals investigations (Fosse, 1946). The Bureau built a camp at tidewater and another at 610 m elevation near Khayyam and cut a trail to the upper camp. The Bureau mapped the workings at both Khayyam and Stumble-On (Figure 4). The Bureau also completed several channel samples of adits, trenches, and outcrops at both Khayyam and Stumble-On. They excavated 11 trenches totalling 186 m at Khayyam and took 31 moil and hammer channel samples. At Stumble-On, two channel samples and six chip samples were taken. No trenching was completed at Stumble-On, though old cuts were cleared for sampling. Select sample highlights are shown in Table 5.

It should be noted that prior to 1910, froth-flotation was not typically used to separate zinc from copper and lead in polymetallic ores, and zinc was typically not a payable product. Therefore, mine dump material may contain a disproportionate amount of sphalerite relative to the ore because of hand-sorting.

Claims were staked over the prospects in 1945 by Lee Howard and John Bufvers, who renamed the Khayyam claims to 'Howbuff' and the Stumble-On claims to 'JohnLee' (Bufvers, 1967).

Anaconda Copper Company examined the sites in 1946 but dismissed them due to the distance to tidewater (Bufvers, 1967).

In 1971, Banner Mining, an Arizona-based company, drilled 14 holes at Khayyam and 11 holes at Stumble-On (Grybeck, 2004). No data exists for this work, though several A-sized drill collars were observed and measured in the field by Alex Metals' geologists.

Between 1972 and 1973, Cominco Exploration mapped and sampled the prospects, and in 1975, Homestake Mining Company examined the sites (Grybeck, 2004).

In or around 1980, the Duval Corporation held the claims and completed a ground VLF-EM survey (Barrie, 1984). No other information is available.

A master's thesis by C. Tucker Barrie was published in 1984 (Barrie, 1984) and the work was published as a Scientific Communication in Economic Geology in 1988 (Barrie and Kyle, 1988).

Between 1990 and 1993, the U.S. Bureau of Mines completed investigations on the Ketchikan Mining District, including the Khayyam and Stumble-On sites (Maas et al., 1995). They concluded that the most significant potential for discovery lies in the Wales Group rocks that host VMS targets. Bureau geologists collected 41 samples from massive sulphide lenses and host rocks from Khayyam and 28 samples from Stumble-On. Samples include a 1.5 m chip from a Powell adit stope grading 2.85% Cu and 1.91 g/t Au (Maas et al., 1995). Select samples include up to 5.96% Cu, 3.61% Zn, 43.7 g/t Ag, and 3.92 g/t Au. Select sample highlights are shown in Table 5. The bureau also did metallurgical work. They collected a 125 kg sample from the Khayyam mine area grading 1.3 g/t Au and 13 g/t Ag, and a calculated head grade for the base-metal flotation test of 2.5% Cu and 1.4% Zn. Preliminary tests showed 99.25% copper recovery and 91% zinc recovery from a minus 150-mesh grind. Their concentrate was 50% of the head weight, and they recommend more testing.

Maas et al. (1995) indicate that Noranda Exploration and Anaconda Copper evaluated Khayyam and Stumble-On, though no dates or other information are provided. Maas et al. (1991) report that Cominco Alaska Exploration evaluated the Khayyam and Stumble-on deposits in 1990.

In 1993, Kennecott Exploration Company examined the claims and, from 1994 to 2002, held claims over Khayyam and Stumble-On, though no data are available.

The U.S. Geological Survey took a few samples from mine dumps at Khayyam and Stumble-On (Slack et al., 2007). Select samples are shown in Table 5.

From 2007 to 2014, Niblack Mineral Development (staked under Abacus Alaska Inc. and later named Niblack Mining Corp.) held the claims over Khayyam and Stumble-On and named them the 'Cayenne Property' (Szumigala et al., 2008). Reconnaissance work was completed in 2007, including geologic mapping, rock and chip sampling, and a four lines, 2.4 line-km controlled-source audio-frequency magnetotellurics (CSAMT) survey (Szumigala et al., 2008). Multiple strong conductors were identified at depth. A 2.0 m chip sample returned 9.7% Zn, 0.9% Cu, 6.2 g/t Ag, and 0.3 g/t Au. Mine dump sampling returned up to 14.6% Zn, 15.4% Cu, 109.0 t/t Ag, and 5.7 g/t Au (Szumigala et al., 2008). No other data are available.

From 2019 to 2023, Jurassic AK LLC held the claims over Khayyam and Stumble-On. No information is available for work completed.

Table 5. Select historical sample highlights.

Source	Prospect	General Location	Sample ID	Sample Type	Chip Length (m)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Fosse, 1946	Khayyam	long trench along test pit	17	Channel	2.7	8.9	48.0	0.00	N.D.	N.D.
Fosse, 1946	Khayyam	small trench	27	Channel	3.4	6.9	30.9	3.04	N.D.	N.D.
Fosse, 1946	Khayyam	Timbered test pit	44	Channel	0.9	1.4	3.4	5.52	N.D.	N.D.
Fosse, 1946	Khayyam	Powel Adit underground workings?	W7	Channel	0.9	0.7	24.0	5.25	0.40	N.D.
Maas et al., 1995	Khayyam	pyrite/pyritic.	3651	Float		13.4	4.8	0.01	0.00	0.00
Maas et al., 1995	Khayyam	Khayyam Powell Adit, surface of 2nd stope, trench, pit, or cut, gossan, surface of 2nd stope.	3195	Chip	0.9	5.8	14.8	0.14	0.01	0.00
Maas et al., 1995	Khayyam	Khayyam Adit No 4, underground workings, massive sulfide lens, local quartz eyes.	3233	Chip	1.5	2.1	34.0	4.68	0.43	0.00
Maas et al., 1995	Khayyam	Khayyam, outcrop, massive sulfide lens or pod.	3267	Chip	1.5	1.5	42.4	9.57	0.47	0.00
Slack et al., 2007	Khayyam	Khayyam mine dump (lower tram terminal)	JS00_62E	Mine waste		1.7	35.0	6.38	11.30	0.00
Slack et al., 2007	Khayyam	Khayyam mine dump (main workings)	JS00_33G	Mine waste		1.0	26.0	6.00	3.28	0.00
Fosse, 1946	Stumble-On	Western side of open cut, possibly outcrop	85	Channel	2.3	2.7	10.3	12.70	N.D.	N.D.
Fosse, 1946	Stumble-On	Stumble-On crosscut Adit entrance	53	Channel	1.1	1.7	10.3	8.20	N.D.	N.D.
Maas et al., 1995	Stumble-On	Stumble-On, trench, pit, or cut, 1.8mx 6m trench, sericite schist with sulfide.	3474	Chip	1.5	6.9	15.4	4.57	0.35	0.00
Maas et al., 1995	Stumble-On	Stumble-On main workings?, underground workings, massive sulfide lens, part of main zone.	3271	Chip	1.5	5.3	46.4	8.93	1.74	0.00
Maas et al., 1995	Stumble-On	Stumble-On Discovery Adit mine dump, mine dump, ore car in adit, massive sulfide ore.	3301	Select	0.6	2.0	33.2	4.89	3.27	0.00
Slack et al., 2007	Stumble-On	Stumble-on mine dump	JS00_36C	Mine waste		0.1	4.0	0.04	56.70	0.00

6.3 HISTORICAL DRILLING

The only recorded drilling on the property was by Banner Mining Inc. in 1971. Fourteen holes were drilled at Khayyam, and 11 holes were drilled at Stumble-On. Three collars were located by Alex Metals geologists in 2025 at Khayyam, and the holes have a diameter of approximately 2 inches, indicating they are likely A-size. These holes were drilled at moderate angles (-50 to -55) to the south. A few collar locations are marked on maps by Barrie (1984), presumably from the same campaign. No drill hole data are available. No other drilling campaigns are known to have been conducted on the Project.

6.4 HISTORICAL SURFACE SAMPLING

Data are available for historical channel, chip, and rock sampling by the USBM (Fosse, 1946; Maas et al., 1995), the USGS (Slack et al., 2007), and by Barrie (1984). Select samples are shown in Table 5. See Section 6.2 for more details.

6.5 HISTORICAL GEOPHYSICS

The earliest known geophysical survey was a VLF-EM (very low frequency electromagnetic) survey conducted by Duval Corporation in 1980 and reported by Barrie (1984) and Barrie and Kyle (1988).

These results confirm that mineralization is strongly conductive and parallel to stratigraphy (Figure 5). Flaser filter and contoured data indicate that both deposits may continue to the east and at depth.

A 2.4 line-km CSAMT survey was done over the Khayyam deposit by Abacus Alaska (later named Niblack Mining Corp) in 2007. No data are available, though Szumigala et al. (2008) remark that multiple strong conductors were identified at depth, and that some of these conductors correlate well with known sulphide lenses mined at surface, while other conductors may represent undiscovered lenses.

In 1999, a regional airborne frequency-domain electromagnetic and magnetic survey was flown over parts of Prince of Wales Island, including the KSO area, using the DIGHEM^{V} system (Figure 6; Burns et al., 2020). The survey was flown at 400 m line spacing and an average ground clearance of 150 m. These data were interpreted by the USGS, and clearly highlight strong conductors at the Khayyam and Stumble-on prospects. The USGS conducted ground magnetic susceptibility measurements using a GEO Instruments GMS-2 and ground resistivity measurements using a Geonics EM-16R to compare with the airborne data. These works are not available as publications, though USGS presentations of these data are available online (Wynn et al., 2001). The data show strong anomalies where topography is relatively flat, but the anomalies attenuate where the flight lines cross cliffs and steep slopes, which suggested that instrument height may have had a significant effect on the ability of the survey to detect mineralization.

No drilling has been completed since the collection of any geophysical data.

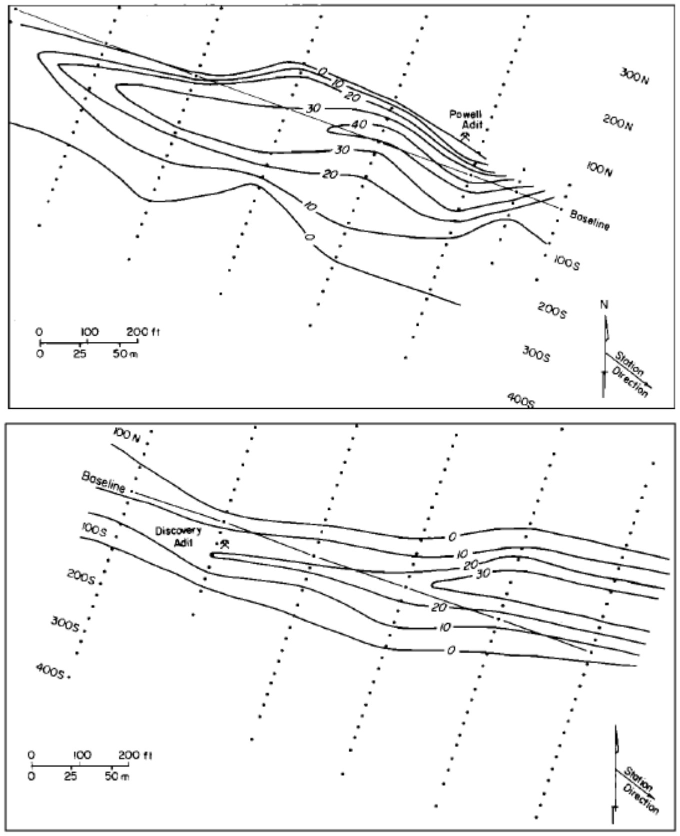

Figure 5. VLF maps of Khayyam (a) and Stumble-On (b). Results suggest that mineralization may continue east and to depth (Barrie and Kyle, 1988)

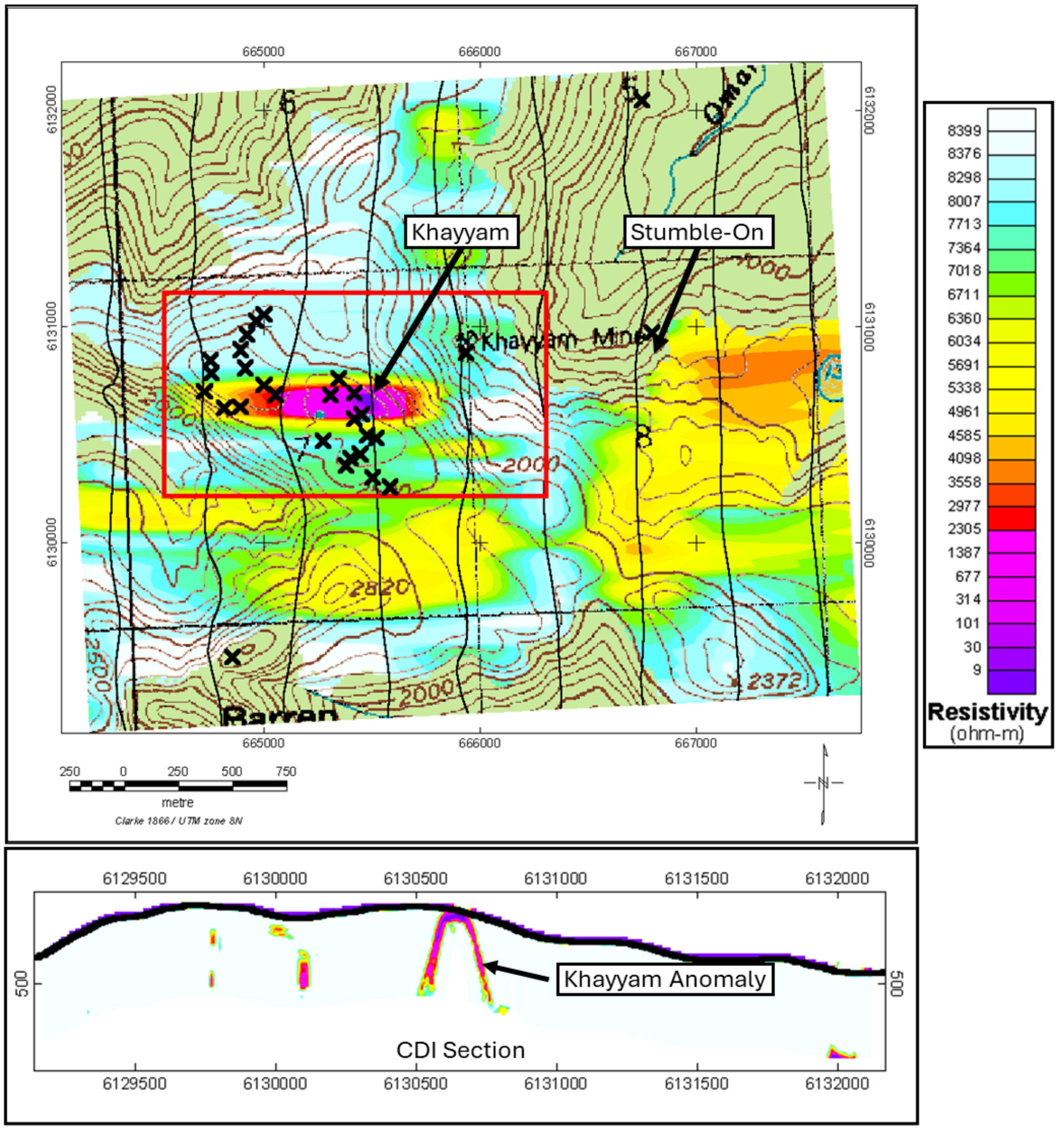

Figure 6. Map of 1999 DIGHEM data showing flight lines and 7200 Hz apparent resistivity (Wynn et al., 2001). Clearly defined, strong conductors are shown around the Khayyam and Stumble-On prospects (arrows). The black Xs show where ground measurements were taken by USGS staff. A conductivity-depth section across the Khayyam anomaly is shown below and shows a 'pantleg' anomaly, typical of a steep, narrow conductor.

7 Geological Setting and Mineralization

7.1 REGIONAL GEOLOGY

The earliest geologic mapping on Prince of Wales Island and the Craig Quadrangle, in the vicinity of the KSO property, was a general reconnaissance of the Ketchikan Mining District by A. H. Brooks in (1902) followed by Wright and Wright (1908). Early work by Chapin was published in 1916 (Chapin, 1916), followed by paleontological work in 1917 (Kirk and Amsden, 1952).

The first major compilation of Southeast Alaska geology was based on reconnaissance work, mainly shoreline mapping, done between 1921 and 1925 (Buddington and Chapin, 1929). In the 1940s, the U.S. Bureau of Mines visited select mines as part of the war minerals effort, including at Khayyam and Stumble-On (Fosse, 1946).

The next comprehensive, published geologic map of the Craig quadrangle is by Condon (1961) based on the compilation of work up to the 1950s. This work was followed by Eberlein et al. (1983) and by Brew (1995) in the region of southern Prince of Wales Island, and finally by Wilson et al. (2015) in the most recent compilation of the geology of Alaska.

7.1.1 Alexander Terrane

The Khayyam and Stumble-On mineralization is hosted by metamorphosed volcanosedimentary rocks of the Ediacaran to Cambrian Wales Group (Eberlein et al., 1983; Gehrels and Saleeby, 1987b; Barrie and Kyle, 1988; Gehrels, 1990; Gehrels et al., 1996; Nelson et al., 2013b). The Wales Group rocks are the basement to the Ediacaran to Jurassic Alexander Terrane, which hosts three suites of VMS mineralization (Figure 8): within Ediacaran to Cambrian rocks of the Wales Group (e.g., Niblack, Lookout, Khayyam, Stumble-On), within Ordovician to Silurian rocks of the Moira Sound Unit (e.g., Nichols Bay, Barrier Islands) (Gehrels et al., 1983; Maas et al., 1995; Newberry et al., 1997; Ayuso et al., 2005; Oliver et al., 2021), and within Late Triassic deposits of the Alexander Triassic Metallogenic Belt (e.g., Greens Creek, Palmer, Windy Craggy; Taylor et al., 2008; Steeves et al., 2016; Steeves, 2018).

The Alexander Terrane is one of North America's largest allochthonous terranes and occupies a large portion of Southeast Alaska. The terrane comprises three distinct tectonostratigraphic entities: the Craig, Admiralty, and St. Elias Subterranes (Nelson et al., 2013a). The Craig Subterrane is the most widespread and underlies Prince of Wales Island. On Prince of Wales Island, the basal rocks are deformed and metamorphosed primitive arc-related volcanic rocks and subordinate sedimentary rocks of the Wales Group and post-kinematic Neoproterozoic to Cambrian plutons (Figure 7 and Figure 8; Nelson et al., 2013a). Wales Group age constraints include U-Pb age dates of 554 ± 4 Ma (Gehrels, 1990), ca. 565.1 ± 0.9 Ma from the Niblack deposit (Oliver et al., 2021), and a maximum age of ca. 600 Ma (Gehrels, 1990; Slack et al., 2007).

7.1.2 Wales Group

Wales Group rocks are unconformably overlain by bimodal volcanic rocks interbedded with deep-water sedimentary rocks (siltstone, mudstone, argillite, greywacke, limestone, conglomerate) of the Ordovician to Lower Silurian Moira Sound Unit (Figure 8; Slack et al., 2007; Nelson et al., 2013a; Oliver et al., 2021). The Moira Sound Unit, introduced by Ayuso et al. (2005) and Slack et al. (2007), is age equivalent to but lithologically distinct from the Early Ordovician to Early Silurian Descon Formation of northern Prince of Wales Island, which consists of voluminous intermediate volcanic and volcaniclastic rocks, and does not host VMS mineralization (Gehrels et al., 1996; Nelson et al., 2013a; Nelson et al., 2013b). The Moira Sound Unit extends from southern Prince of Wales Island to as far south as Grenville Channel in northwestern coastal British Columbia (Nelson et al., 2013a).

Rocks of the Wales Group exhibit mainly transitional to mid-ocean ridge basalt (MORB)-like magmatic signatures, suggesting an oceanic arc origin (Barrie and Kyle, 1988). Lead isotopic signatures from VMS mineralization in the Wales Group rocks indicate a primitive arc setting (Ayuso et al., 2005).

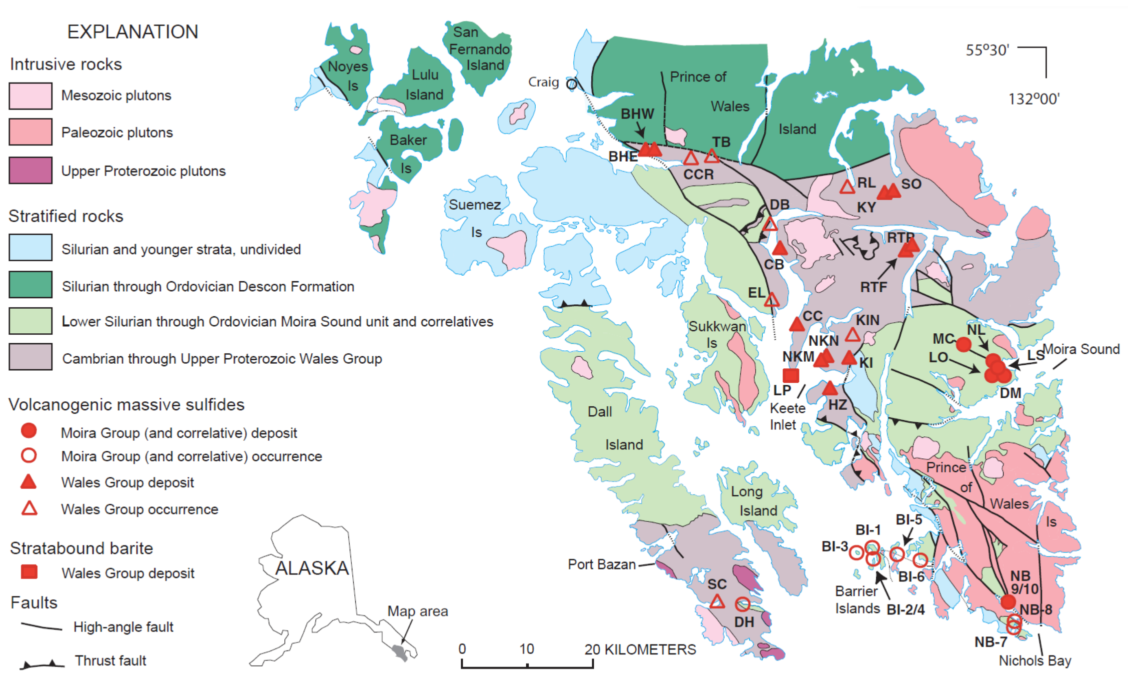

Figure 7. Geology of southern Prince of Wales Island showing known VMS prospect and deposits (from Ayuso et al., 2005). Khayyam (KY) and Stumble-On (SO) are hosted by Upper Proterozoic through Cambrian Wales Group rocks.

7.1.3 Regional Deformation and Metamorphism

Three major tectonometamorphic events are recorded for the Wales Group rocks on southern Prince of Wales Island (Figure 8): a Precambrian pre-554 Ma event (M1), an Early Ordovician 480 – 470 Ma event (M2), and an Early Devonian 410 – 400 Ma event (M3) (Zumsteg, 2007). Only M2 and M3 are typically recognizable and form deformation and metamorphic features.

The first metamorphic and deformation event (M1) is constrained by a 554 Ma granodioritic orthogneiss on Dall Island that cuts preexisting fabric in metavolcanic Wales Group rocks (Gehrels, 1990). This event only affects the oldest Wales Group rocks (Zumsteg, 2007). M1 is also identified in garnet chemistry and microstructures and textures in relict porphyroblast cores (Zumsteg et al., 2004).

The second event (M2) occurred after deposition of the Wales Group rocks but before deposition of the Moira Sound unit (Slack et al., 2007). This event is known as the Wales Orogeny (Figure 8), which deformed and metamorphosed Wales Group rocks to lower greenschist to locally upper amphibolite facies during Early Ordovician (Gehrels and Saleeby, 1987a; Gehrels and Berg, 1994; Gehrels et al., 1996; Slack et al., 2007; Slack et al., 2007). This event is responsible for most metamorphic mineralogy in the Wales Group rocks, and is characterized by strong foliation, lineation, and the formation of regional- to outcrop-scale isoclinal to recumbent folds (Gehrels and Saleeby, 1987a; Gehrels, 1990; Gehrels et al., 1996; Slack et al., 2007). Whole-rock K-Ar analysis of hornblende indicates a metamorphic age of ~484 Ma for M2 (Herreid et al., 1978; Eberlein et al., 1983; Gehrels and Saleeby, 1987b; Ayuso et al., 2005).

The third event (M3) occurred after deposition of the Moira Sound Unit and Descon Formation in the Silurian to Early Devonian and is constrained by Ar-Ar geochronology (Slack et al., 2007). This event is known as the Klakas Orogeny (Figure 8) and formed open folds and slaty cleavage (Gehrels and Saleeby, 1987a). This deformation is most intense in the southern and western parts of Prince of Wales Island (Oliver et al., 2021). The Klakas Orogeny led to thrust imbrication, metamorphism, ductile deformation, and deposition of the Karheen Formation clastic wedge (Gehrels and Saleeby, 1987a; Gehrels et al., 1996; Colpron and Nelson, 2011).

No geochronological data exist at present for Khayyam and Stumble-On; therefore, they are correlated with Wales Group rocks based on the presence of two episodes of penetrative deformation (F1 and F2 folds), in contrast to a single episode in the Moira Sound and Descon Formations (Barrie, 1984; Slack et al., 2007; Oliver et al., 2021).

M1 and M2 reached greenschist to amphibolite facies (peak at 610 to 690 °C and 8.4 to 10.1 kbar; Zumsteg, 2007). M3 reached greenschist facies. M2 determines most mineral assemblages in the Wales Group rocks, while M3 is attributed to extensive alteration of M2 mineralogy.

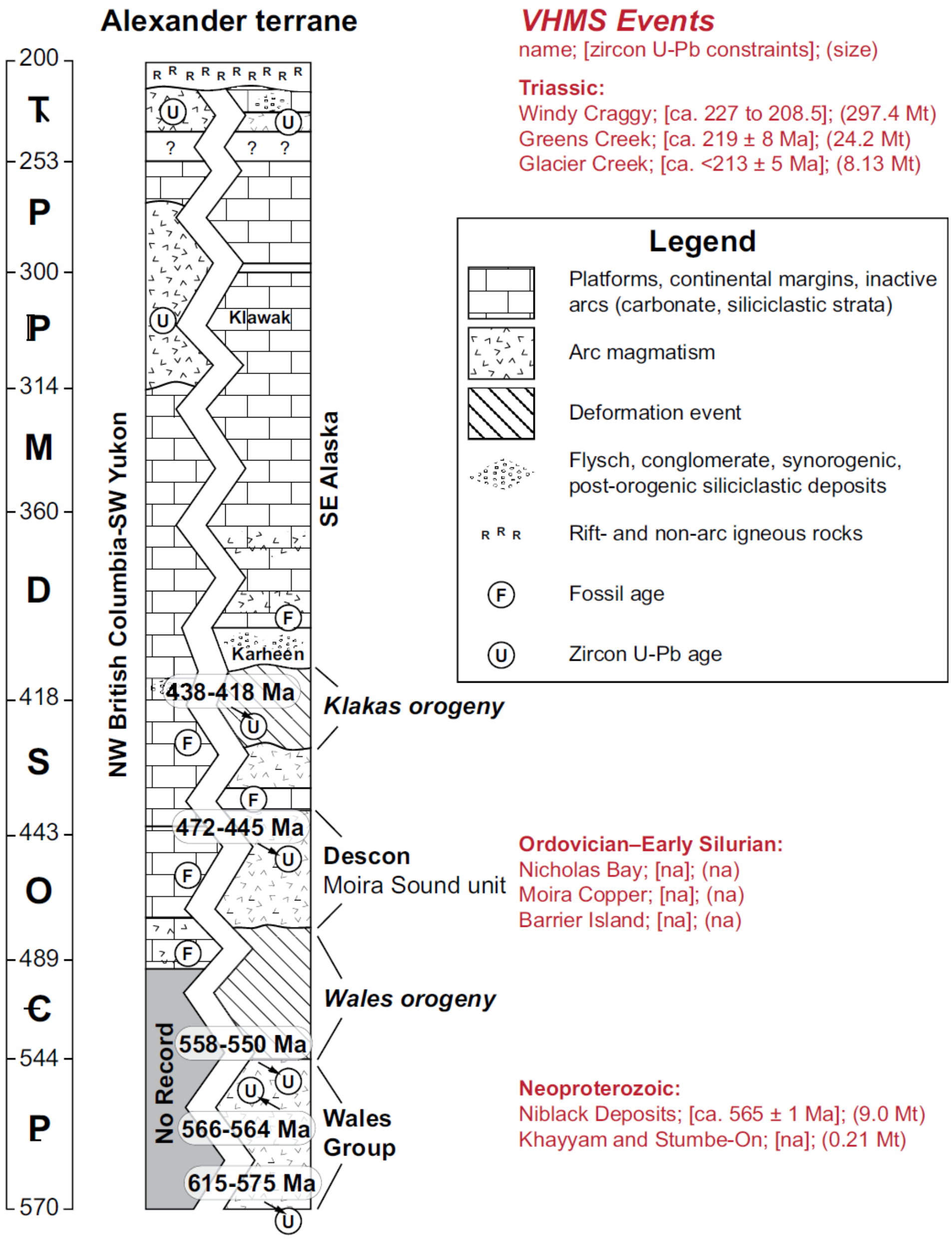

Figure 8. Schematic Stratigraphic column for the Alexander terrane with select VMS suites. From (Oliver et al., 2021). Note that the Glacier Creek deposit is now known as the Palmer deposit (Steeves et al., 2016).

7.2 PROPERTY GEOLOGY

To date, there has been no detailed geologic mapping of the Craig B-2 quadrangle. The rocks are generally mapped as undivided Wales Group rocks in most recent publications (Brew, 1995; Wilson et al., 2015). The only detailed mapping at the Khayyam and Stumble-On deposits is from a Master's thesis published in 1984 (Barrie, 1984; Barrie and Kyle, 1988).

7.2.1 Rock Types

The Khayyam and Stumble-On geology is described in the most detail by Barrie (1984) and Barrie and Kyle (1988). Barrie (1984) divides the host rocks into six lithologic units based on metamorphic mineralogy: amphibolite, mafic schist, intermediate schist, intermediate schist with >25% interbedded felsic schist, metasedimentary rocks, and siliceous schist that is gradational along strike with massive sulphide. Foliated and unfoliated diorite are also mapped in the vicinity (Figure 9). These units are interbedded at the meter to tens of meter scale, and mapping is generalized, with contacts representing the dominant unit (Figure 9). The following property geology description is taken from Barrie (1984) and Barrie and Kyle (1988), and Alex Metals' geologic field observations.

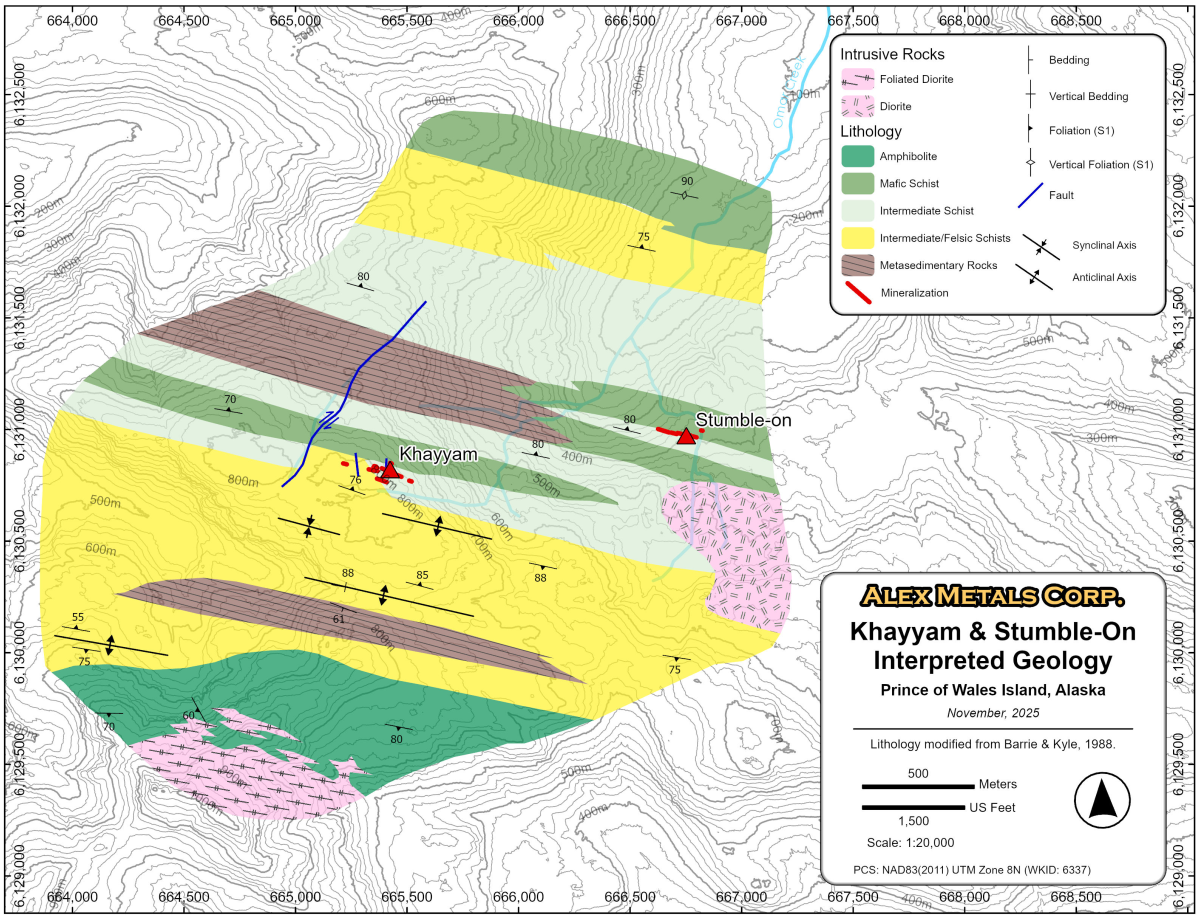

Figure 9. Geology map of the Khayyam and Stumble-On area (Modified from Barrie and Kyle, 1988).

7.2.1.1 Mafic Schists

Mafic schists contain >60% combined hornblende and chlorite and <10% quartz, and are subdivided into two phases based on chlorite and hornblende content:

- hornblende-plagioclase schist with ~65% hornblende, ~25% plagioclase, and ~5% chlorite, and

- chlorite-hornblende-plagioclase schist with ~45% chlorite, 25% plagioclase, and ~20% hornblende

Mafic schists vary in texture even at the outcrop scale. They typically occur as 1–15 m-thick, relatively continuous layers along strike and are commonly interlayered with intermediate, felsic, and siliceous schists.

The hornblende-plagioclase schists are dark grey, massive, relatively uniform, well foliated, and have local compositional layering. These schists are fine-grained and more massive than the chlorite-dominant schists.

The chlorite-dominant schists are green-gray to dark grey and locally contain lapilli fragments and/or possible amygdules in the form of elongate blebs up to 1.5 cm, accounting for up to 30% of the rock (Figure 10). Locally, these fragments are graded. They may represent primary volcanic or sedimentary textures. Locally chlorite-rich mafic schists exhibit possible pillows and/or hyaloclastic textures. The chlorite-dominant schist is the typical wall rock to massive sulphide lenses. It typically exhibits anastomosing chlorite bands separating massive zones on a decimeter scale.

Mafic schists are interpreted as metamorphosed tholeiitic subaqueous basalt to basaltic andesite flows and tuffs by Barrie (1984) and Barrie and Kyle (1988).

Figure 10. Outcrop photo showing possible amygdules (resistive white lenses) in mafic or intermediate schist.

7.2.1.2 Intermediate Schist

Intermediate schists are the dominant lithology in the Project area (Figure 9). They typically contain 30–60% plagioclase, 30–60% chlorite, up to 20% quartz, up to 20% hornblende, locally up to 30% garnet, and are subdivided by metamorphic mineralogy and texture into three subunits:

- Plagioclase-chlorite-hornblende schist with dominantly ~50% plagioclase, ~25% chlorite, and 10% hornblende,
- Chlorite-plagioclase-quartz schist with dominantly ~50% chlorite, ~20% Plagioclase, ~20% quartz, and
- Plagioclase-garnet-hornblende schist with dominantly ~25% hornblende, ~20% chlorite, ~10 – 15% plagioclase, and up to ~30% garnet

Intermediate schists are medium grey-green and typically lighter coloured than mafic schists. They vary in texture throughout the Project area, even at the outcrop scale. They are relatively continuous along strike and are commonly interlayered with mafic, felsic, and siliceous schists. Locally, possible pillow and hyaloclastic textures are observed. Elsewhere, light grey-green, 2 mm to 3 cm, possible lapilli fragments are observed.

The plagioclase-chlorite-hornblende schist is fine-grained and has chlorite aggregates. The chlorite-plagioclase-quartz schist is medium-grained and shows anastomosing chlorite bands, similar to those in the chlorite-rich mafic schist.

Garnet-bearing schist occurs within 10 to 20 m of Khayyam and Stumble-On mineralization. Garnets are 1–2 mm euhedral spessartine-rich almandine garnets.

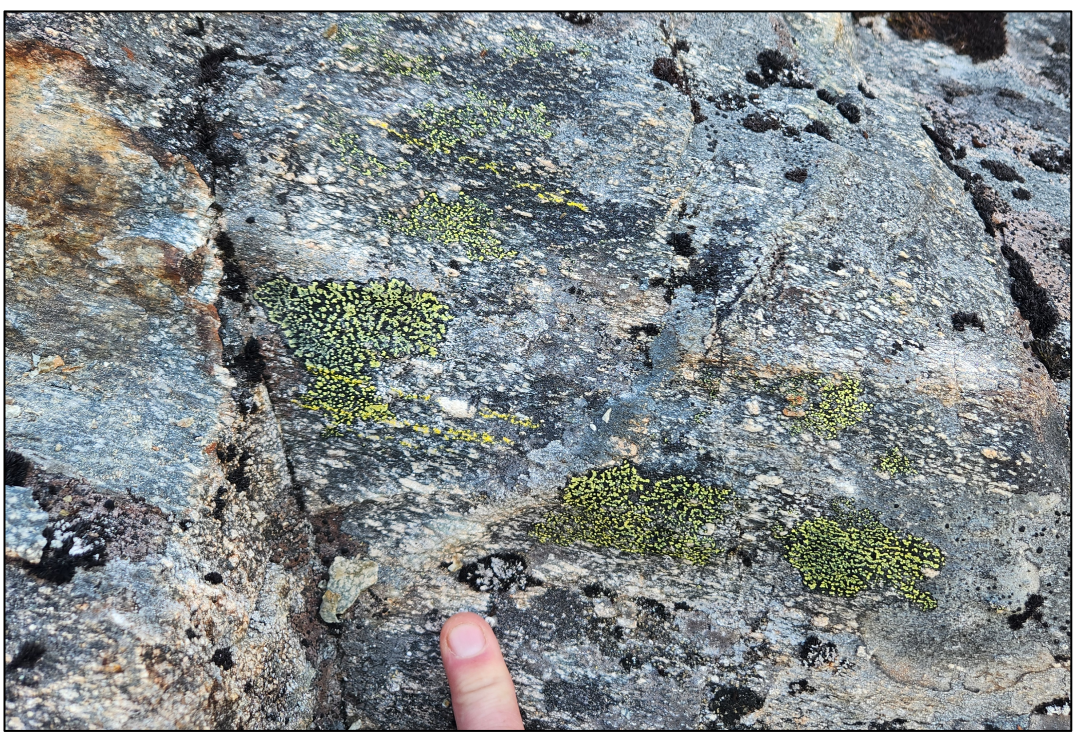

Figure 11. Outcrop photos of possible lapilli fragments in intermediate schist.

7.2.1.3 Felsic Schist

Felsic schists occur interbedded with mafic and intermediate schist and are the dominant rock type 200 to 800 m south of the Project area (Figure 9). Felsic schists are light grey to light green, which distinguishes them from intermediate schists, and are dominantly composed of 60–90% combined quartz and feldspar with <10% hornblende, chlorite, or biotite (Figure 14). They typically have a strong foliation, though they are locally less schistose with large plagioclase phenocrysts. They locally contain well-preserved 2 mm to 5 cm, possible lapilli fragments. Felsic schists are interbedded with mafic, intermediate, and siliceous schists. Locally, felsic schist is gradational with more mafic rocks.

7.2.1.4 Siliceous Schist

Siliceous schists occur as 1–5 m layers interbedded with other schists. They are locally gradational along strike with massive sulphide at Khayyam and Stumble-On (Figure 15 and Figure 16). They occur as tan to white resistive beds, often with iron oxide staining from weathered pyrite. They may contain up to 15% pyrite and are typically moderately magnetic, particularly near massive sulfide mineralization. Siliceous schists contain up to 40% quartz, with subordinate sodic feldspar, chlorite, biotite, and sulphides, and may contain minor garnet. Locally, siliceous schists are gradational with more mafic rocks.

Siliceous schists are common around and along strike of known massive sulfide mineralization and are considered to be genetically related to mineralization at Khayyam and Stumble-On as either transposed feeder zones or syn-mineral chert horizons.

Figure 12. Outcrop photo showing siliceous schist band interlayered with felsic schist, approximately 400 m south of the Khayyam mine. The band is isoclinally folded.

Figure 13. Photo of siliceous schist.

7.2.1.5 Metasedimentary Rocks

Metasedimentary rocks are defined by their more finely laminated textures and are mapped 700 m south of the Khayyam mine. They are interbedded with all other schists. They are fine- to medium-grained, well-banded, quartz-biotite/chlorite and quartz-plagioclase-chlorite schists and metachert. The metacherts are distinguished from the siliceous schists and are composed of 70% quartz and 20% plagioclase, and locally exhibit wispy laminations.

A single 3-m ankerite-bearing carbonate bed with thin metachert interbeds was mapped within the metasedimentary unit.

7.2.1.6 Amphibolite

Amphibolite occurs in contact with the foliated diorite intrusion on Barren Mountain (Figure 9). It occurs as dark gray, medium- to coarse-grained hornblende-plagioclase schist or gneiss. It is locally coarsely layered either from metamorphic differentiation or lit par lit injection from the diorite. It contains locally large 10 cm elongate hornblende aggregates parallel to foliation and possible lapilli fragments up to 1 cm.

The amphibolite is differentiated from the adjacent mafic and intermediate schists based on textural differences, though the transition is locally gradational. The amphibolite is interpreted to have the same protolith as the mafic and/or intermediate schists and to have undergone higher strain and metamorphism due to the neighbouring diorite.

7.2.1.7 Diorite

A light gray-green, foliated diorite occurs 1.3 km south of the Khayyam mine, on Barren Mountain (Figure 9). The diorite is composed of ~50–60% hornblende and 20–30% plagioclase and crosscuts Wales Group rocks.

An undeformed, more melanocratic diorite outcrops ~400 m south of the Stumble-On mine (Figure 9). Locally, this diorite is porphyritic with up to 8 cm euhedral plagioclase phenocrysts in a fine-grained dark matrix of hornblende with biotite and chlorite.

7.2.1.8 Mafic Dykes

Numerous mafic dykes and sills cut the schists and metasedimentary rocks in the Project area. They are 1–5 m wide and are relatively parallel to foliation/schistosity, though they jog across foliation and layering locally (Figure 14). The dykes are dark brown to black, massive, unfoliated, weakly magnetic, and typically relatively resistive. Most are sparsely porphyritic with altered plagioclase phenocrysts, and larger dykes may exhibit chilled margins and flow textures. They are basaltic to andesitic in composition.

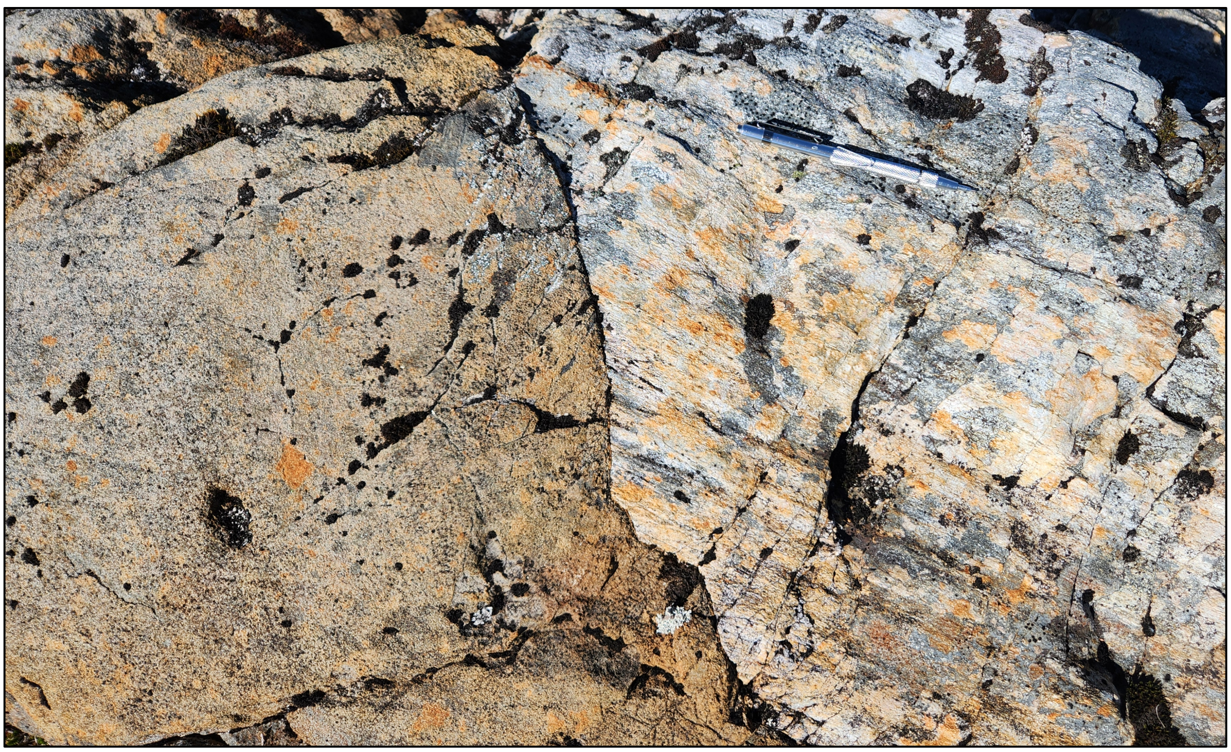

Figure 14. Unfoliated mafic dyke cutting well foliated felsic schist south of Khayyam mine.

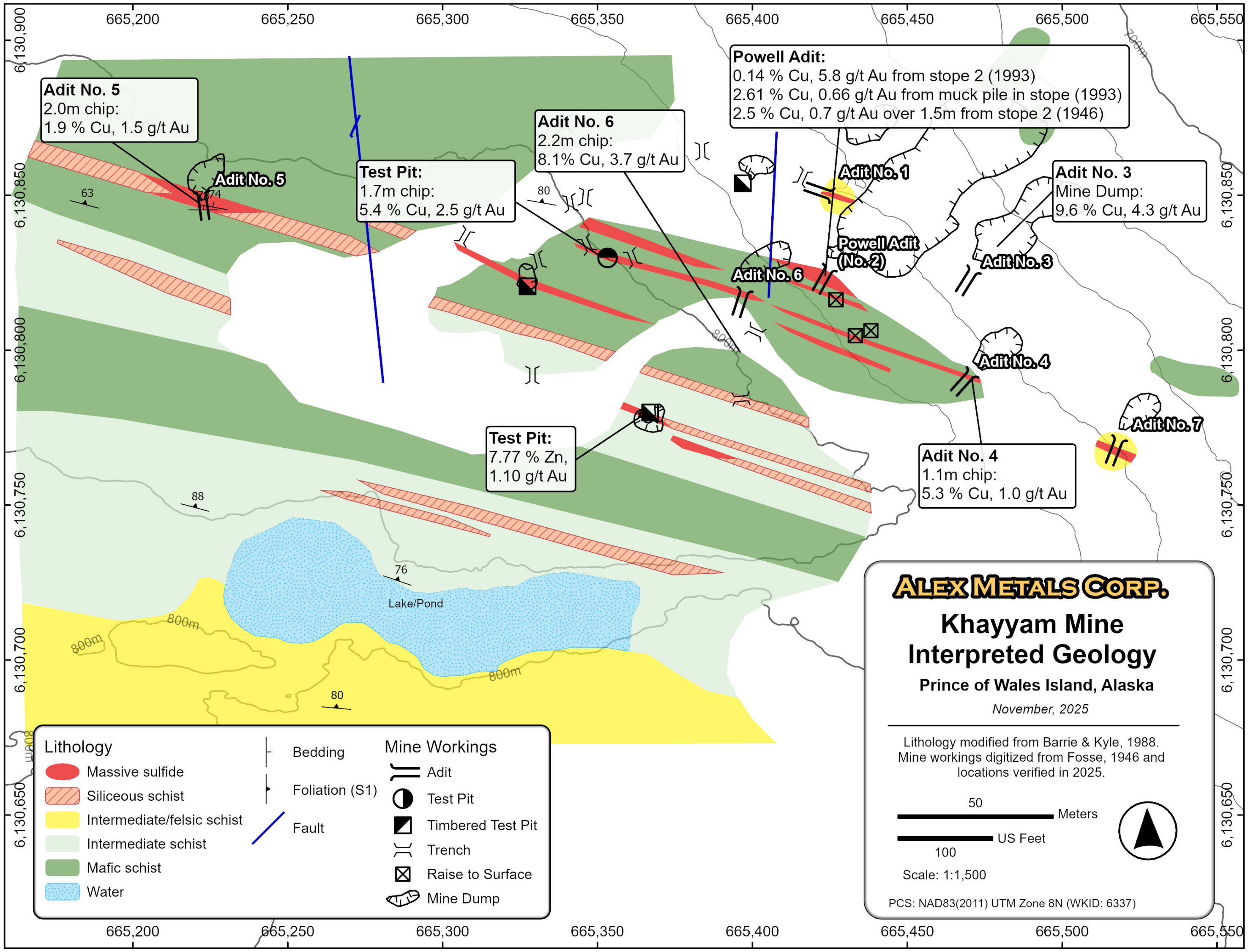

Figure 15. Detailed geology map of the Khayyam deposit modified from Barrie and Kyle (1988). Adit, test pit, raise, and trench locations modified from Fosse (1946).

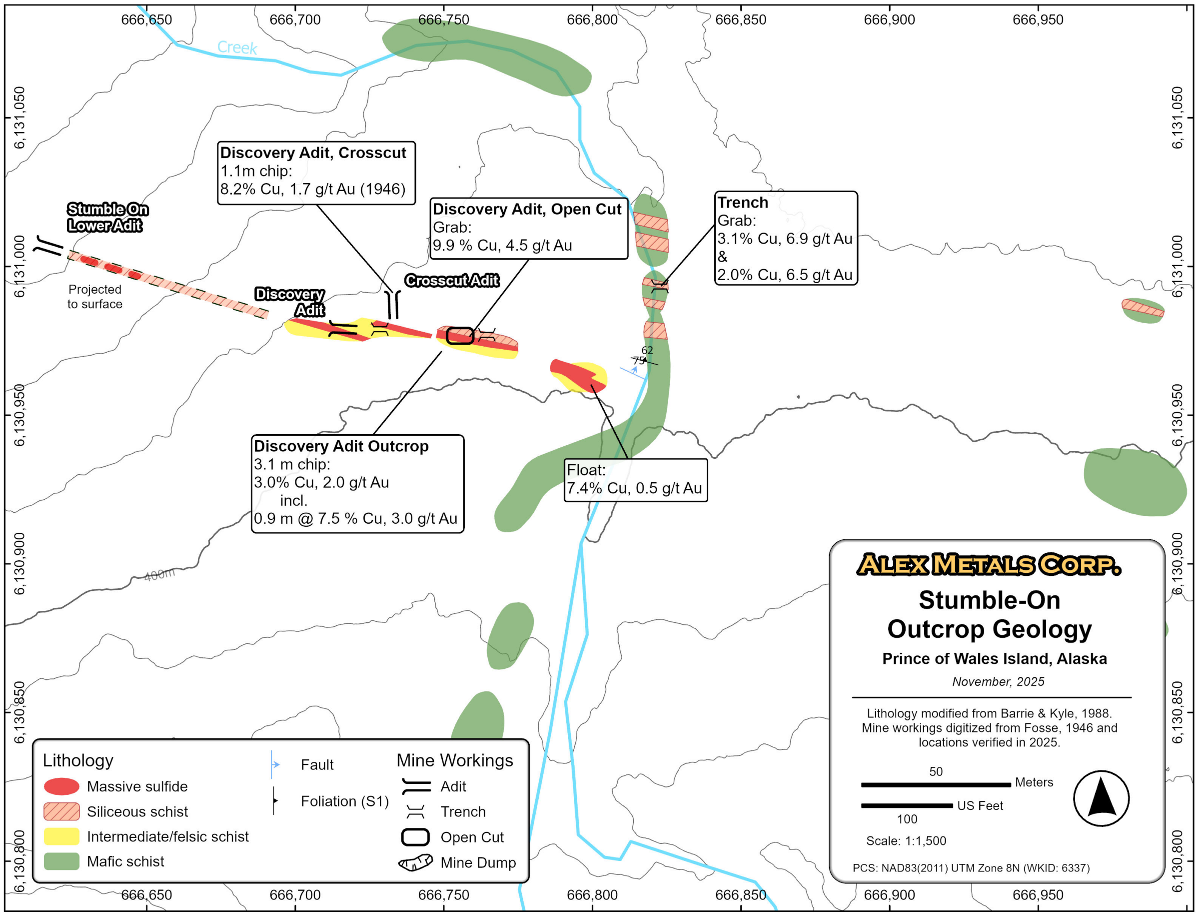

Figure 16. Detailed geology map of the Stumble-On deposit from (Barrie and Kyle, 1988).

7.2.2 Local Deformation and Metamorphism

The dominant, readily observable structural features in the Project area are pervasive foliation and schistosity and late faults. Locally, isoclinal folds are inferred based on map interpretation of foliation measurements. Rare isoclinal fold noses are observed in the field (Figure 12). Boudinage is common in many layers, especially massive sulphide lenses, at cm- to m-scale. Local, cm- to dm-scale box folds are observed around minor faults and joints (Figure 17).

All rocks except massive sulphide lenses exhibit foliation. Foliation is interpreted to be dominantly parallel to compositional layering and rarely crosses compositional banding (Barrie, 1984). The foliation and compositional layering generally trend ~280°–290° and dip between 70° S and 70° N. Changes in dip are interpreted to represent limbs of isoclinal folds. Flattening and stretching fabrics are observed. Rare, subhorizontal mineral lineation and stretched clasts plunge shallowly east.

Boudinage is observed at multiple scales. Within thin, competent layers, boudins of competent clasts appear as 'pull-apart' features surrounded by chloritic material. Massive sulphide lenses also exhibit boudinage at the meter scale in outcrop.

Schistosity is well developed in chloritic or sericitic mafic, intermediate, and felsic schists. Retrograde alteration of hornblende and garnet to randomly oriented chlorite can locally obscure the regional schistosity. Recrystallization of quartz can also locally obscure schistosity.

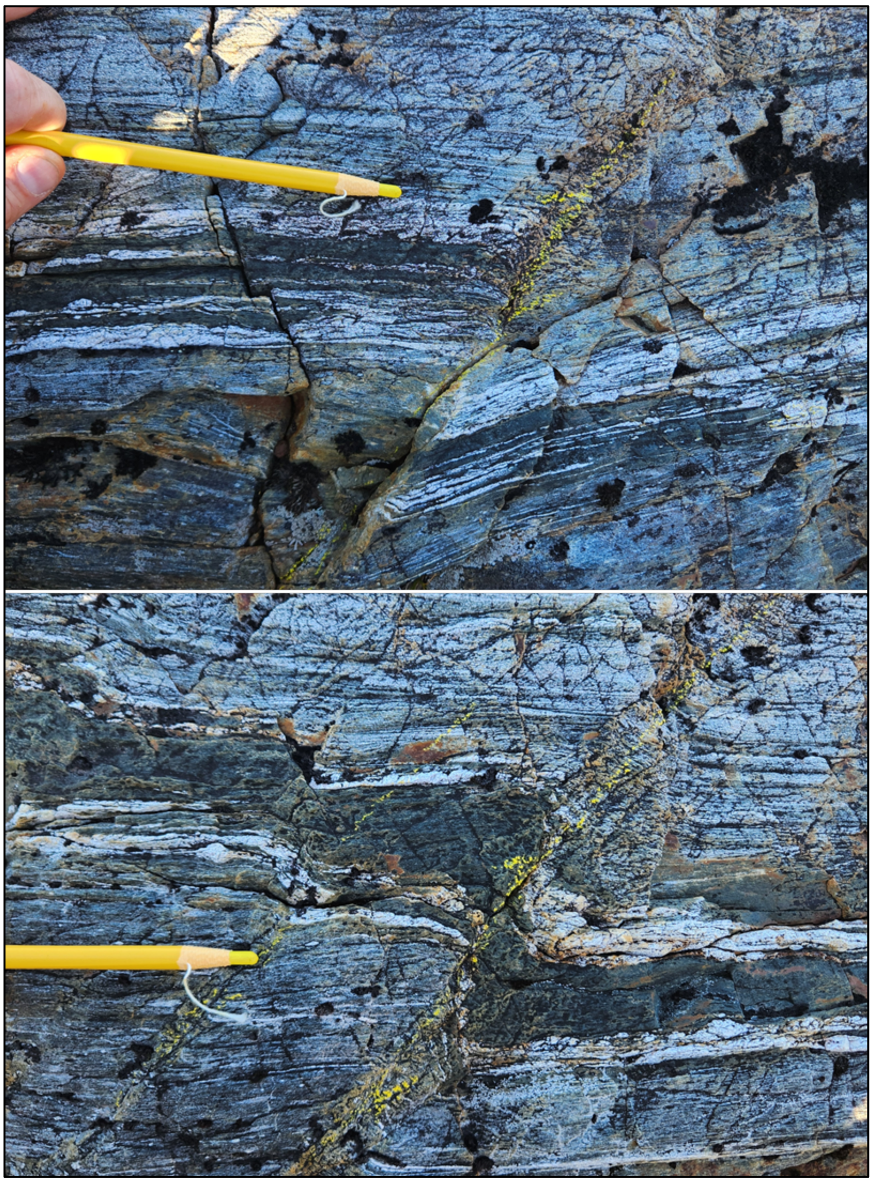

Figure 17. Outcrop photos showing examples of small slip surfaces possibly related to small-scale folds within intermediate schists west of Khayyam mine.

Two dominant fault and joint orientations are mapped by Wright and Wright (1908): a steep south-dipping set, and a moderate to steep east to southeast set. A prominent (unnamed) fault 300 m west of the Khayyam mine forms a 5 m deep crevasse and is interpreted to have at least 20 m of left-lateral displacement as inferred by imagery (Figure 9; Barrie, 1984). Two other faults are mapped near the Khayyam deposit. One fault dips steeply southeast and truncates the western extent of mineralization in the Powell Adit (Figure 3 and Figure 15). This fault is characterized by gouge and broken rock (Wright and Wright, 1908). A second, parallel fault occurs 80 m west and shows 10 m of apparent left-lateral displacement (Barrie, 1984).

Small-scale folding is observed locally as steeply dipping folds up to 1 m in scale, possibly related to NNW- to NNE-striking joints or faults (Figure 17).

Barrie (1984) determined that the mafic schists at the KSO Project area were metamorphosed to above the lower limit for lower amphibolite facies based on anorthite content of plagioclase and by calcic hornblende composition as measured by microprobe analysis. The abundance of amphibole in the area could be due to the reaction chlorite + epidote + plagioclase => amphibole. Peak metamorphic grade is uniform across the Project area (Barrie, 1984). Prograde metamorphism has destroyed all primary textures within the mineralized lenses.

7.3 ALTERATION

Very little work has been done to map the alteration at Khayyam and Stumble-On.

Barrie (1984) describes four main alteration patterns: 1) a sodium-enrichment, 2) chloritization, 3) retrograde metamorphic alteration, and 4) surficial alteration. However, no alteration maps are available.

Sodium-rich schists are interpreted as submarine felsic to mafic volcanic rocks that underwent spilitization during hydrothermal circulation.

Syngenetic chlorite alteration may be masked by prograde and retrograde metamorphism. Barrie (1984) describes 'mottled' intermediate schists near massive sulphide. These are chlorite-rich schists with up to 30% coarse, dark blue-green chlorite with pyrite around clasts. This chlorite is interpreted to have a high iron content (Barrie, 1984). This mottled chlorite has not been well mapped, and its extent is unknown.

Barrie (1984) describes that the rocks analyzed in the area generally have high sodium and low potassium. Garnet-rich intermediate schists within 50 m south of the Powell Adit have anomalously high Mn from spessartine-rich almandine garnet. A similar Mn- and garnet-rich intermediate schist occurs in the footwall of the Stumble-On deposit (Barrie, 1984).

Retrograde metamorphic effects are observed in intermediate- and mafic-grade schists. Barrie (1984) describes chlorite and locally epidote formed from retrograde metamorphism of hornblende and garnet in schists and from chalcopyrite in massive sulphide lenses, based on petrographic observations. Epidote, sericite, hematite, and stilpnomelane locally replace mafic minerals, plagioclase, and sulphides.

Gahnite is observed in intermediate and felsic schists near massive sulphide lenses as porphyroblasts associated with chlorite, muscovite, sericite, quartz, and sphalerite (Barrie and Kyle, 1988). Gahnite likely formed from a desulfidation reaction during prograde metamorphism in Zn-rich altered rocks.

Sericite is described by Barrie (1984) as dominantly a surficial alteration affecting most rocks, partially replacing plagioclase.

Local propylitic alteration around late mafic dykes is a retrograde metamorphic effect.

7.4 MINERALIZATION

The Khayyam deposit was first described by Wright and Wright (1908) as elongate lenses of sulphide ore parallel to the strike and dip of schistosity. They noted in 1908 that the ore bodies were likely genetically related to the host rocks. Eberlein et al. (1983) mapped the KSO area as Wales Group rocks. This was confirmed by Barrie (1984) through detailed mapping.

The Khayyam and Stumble-On mineralization occurs as massive sulphide lenses parallel to foliation and interlayered with mafic and intermediate schists and interlayered with and/or gradational along strike of siliceous schists.

Numerous massive sulphide lenses have been mapped at Khayyam within a 70 m mineralized interval. At least six lenses have been mined at Khayyam, up to 8 m thick in underground workings (Figure 15). Lenses have been traced for up to 70 m along strike at surface.

The Stumble-On mine is located in a heavily vegetated area with minimal outcrop. A single massive sulphide lens was mined, though nearby outcrops and creek exposure suggest potential for multiple horizons of mineralization (Figure 16). Four sulphide-rich, chalcopyrite-sphalerite-rich siliceous horizons outcrop in the creek (Barrie, 1984). The Stumble-On massive sulphide lens is up to 2.5 m thick and has been tracked along strike for 170 m (Barrie and Kyle, 1988).

Pyrite forms 50–90% of the sulphide lenses at Khayyam and Stumble-On (Figure 18; Barrie and Kyle, 1988). Sulphide minerals within the lenses are dominantly pyrite (up to 90%), chalcopyrite (up to 20%), and sphalerite (up to 20%), with subordinate pyrrhotite, local bornite, and minor arsenopyrite (Barrie and Kyle, 1988). The dominant non-sulphide minerals include quartz, hornblende, chlorite, plagioclase, magnetite, hematite, gahnite, garnet, sericite, stilpnomelane, and epidote (Barrie and Kyle, 1988). Mineralogy is recrystallized and reflects both prograde and retrograde metamorphism. The gold and silver phases were not identified during petrographic work by Barrie (1984).

A typical VMS 'stringer' zone has not yet been identified at Khayyam or Stumble-On. Historical reports document that wall rock is 'pyritic' up to 80 m in the wallrock (Fosse, 1946). Barrie (1984) reports pyrite and locally chalcopyrite with chlorite and hornblende in 'mottled' schists adjacent to massive sulphide lenses that form around clasts.

The western limit of the lenses in the Khayyam mine is truncated by a fault 40 m west of the Powell adit entrance that trends perpendicular to foliation and dips steeply (80–90°) southeast.

Figure 18. Outcrop photo of pyrite-rich massive sulphide lens above the Powell adit at Khayyam.

Figure 19. 'Adit' No. 6 at Khayyam. Possible sulphide stringers (right) adjacent to massive sulphide (left) within the excavated section. A 2.2 m chip sample from the adit returned 3.7 g/t Au, 54.9 g/t Ag, 8.1% Cu, and 6.5% Zn (Table 6).

Figure 20. Example of massive sulphide from Adit 6 showing sulphide banding with pyrite, chalcopyrite, and bornite. Photo is from an area sampled as a 1.2m chip (M830559) that returned 6.2 g/t Au, 83.7 g/t Ag, 11.8% Cu, and 6.1% Zn.

8 Deposit Types

8.1 VMS DEPOSIT SYNTHESIS

Taken largely from Galley et al. (2007) and Hannington (2014):

Volcanogenic massive sulphide (VMS) deposits are strata-bound accumulations of sulphide minerals that precipitated at or near the seafloor in spatial, temporal, and genetic association with contemporaneous volcanism (Franklin et al., 2005). VMS deposits are a major source of Zn, Cu, Pb, Ag, and Au globally, and a significant source for Co, Sn, Se, Mn, Cd, In, Bi, Te, Ga, and Ge (Galley et al., 2007). They typically occur as polymetallic lenticular (mound-shaped) or tabular, stratabound massive (>40%) sulphide bodies with subordinate quartz, sulphate, phyllosilicates, and oxides. These bodies are often underlain by discordant stockwork veins and disseminated sulphides that form a 'feeder' zone.

VMS deposits form when seawater, driven by anomalous crustal heat typically localized over subvolcanic intrusions forming in active rift zones, circulates through the crust and interacts with volcanic rocks, producing a series of progressively higher temperature chemical reactions that form high-temperature, metal- and sulphur-rich hydrothermal fluids. These subvolcanic intrusions are typically gabbro, diorite, tonalite, or trondhjemite and are co-magmatic with the host volcanic stratigraphy. Deep-penetrating syngenetic faults and fractures related to rifting form zones of high permeability over these heat sources and concentrate heated hydrothermal fluids, which rise buoyantly through upflow zones and discharge at or just below the seafloor.

As hydrothermal fluids approach the seafloor, rapid cooling, mixing with seawater, and other chemical reactions cause sulphide minerals to precipitate. Above the seafloor, rapid cooling, pH changes, and oxidation cause mineral precipitation. Depending on fluid temperature, salinity, and density, mineralization may occur as chimney-like mounds or laterally extensive stratiform blankets. Many large VMS deposits formed at least in part by subseafloor replacement of permeable substrates.

8.2 KHAYYAM AND STUMBLE-ON DEPOSIT TYPE CLASSIFICATION

The Khayyam and Stumble-On deposits are semimassive to massive sulphide lenses interpreted as stratabound, conformable, and interbedded with cogenetic oceanic mafic, intermediate, and felsic volcanic protoliths (Barrie, 1984; Barrie and Kyle, 1988). Though no large, discordant stockwork feeder zones have been discovered, quartz-sulphide veinlets and disseminated sulphides in the wallrock are interpreted to have formed from syngenetic hydrothermal fluid upflow (Barrie, 1984). A discordant alteration zone is difficult to identify due to intense deformation, metamorphism, and likely transposition. Chlorite-rich mafic and intermediate schists in the wallrock of the mineralized zone and cross-cutting sulphide veins provide some evidence for a discordant alteration zone.

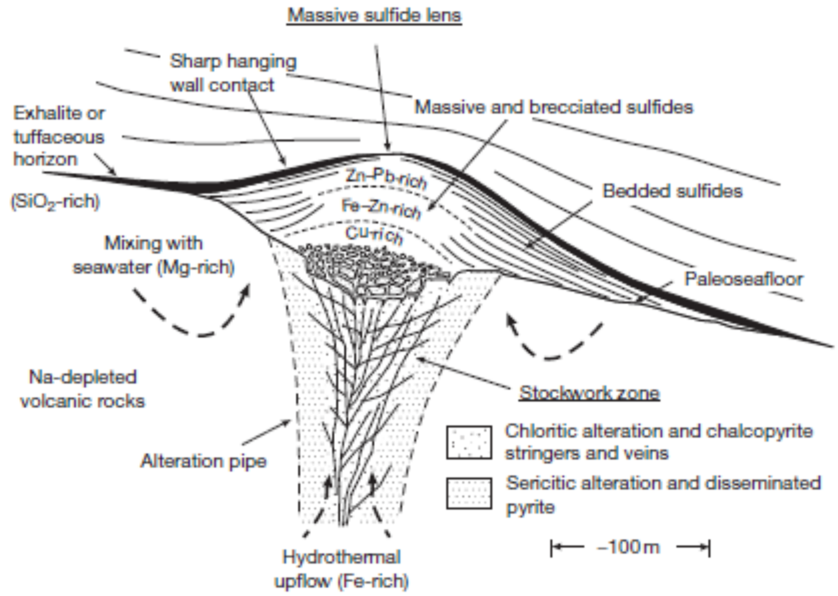

Figure 21. Schematic cross-section of an idealized VMS deposit with pipe-like upflow zone (Lydon, 1984). Note: not all VMS deposits have a pipe-like discordant upflow zone (e.g., Galley et al., 2007).

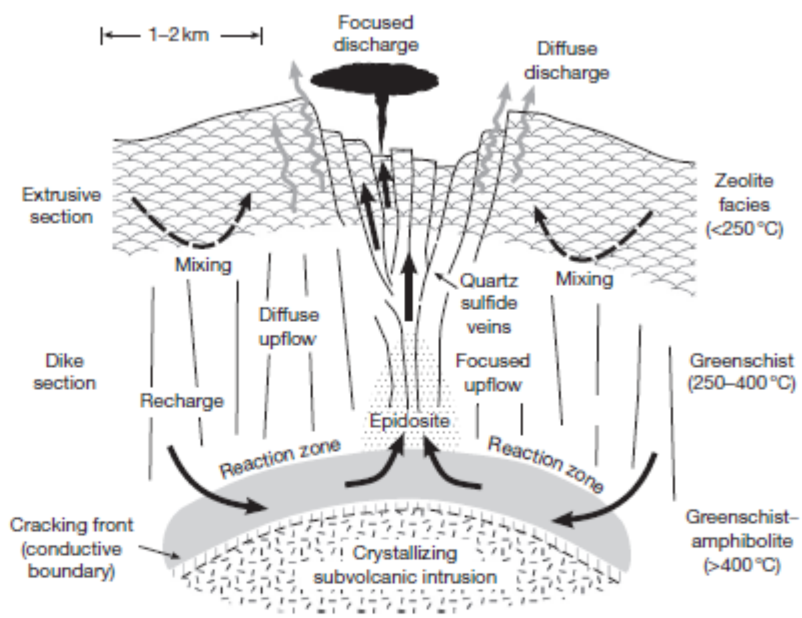

Figure 22. Schematic of a typical submarine hydrothermal system (Hannington, 2014).

VMS deposits often have distal SiO_2 and iron-rich horizons distal to and gradational with massive sulphide, representing widespread unfocused hydrothermal discharge and precipitation. The magnetic and pyrite-rich siliceous schists at Khayyam and Stumble-On are interpreted as distal exhalative horizons related to hydrothermal discharge. Similar quartz- and hematite-rich, fine-grained siliceous layers are associated with sulphide lenses at the nearby Niblack VMS deposit, hosted by greenschist facies, bimodal Wales Group volcanic and volcaniclastic rocks (Oliver et al., 2021).

While gold grades are significant at KSO, based on definitions by Dubé et al. (2007), gold values (in g/t) must exceed combined Cu, Zn, and Pb values (in percent) for the deposit to be considered 'gold-rich'. Based on historical resource and production data, Khayyam and Stumble-On do not currently categorize as gold-rich VMS deposits.

9 Exploration

9.1 PREVIOUS EXPLORATION BY THE COMPANY

9.1.1 2024 Exploration

A one-day reconnaissance program by Alex Metals in September 2024 collected eight rock and 13 soil samples from Khayyam and Stumble-On, including one chip sample at Stumble-On. Sample results include 9.6% Cu, 22.7% Zn, 4.3 g/t Au, and 74.6 g/t Ag from a waste pile at Khayyam and 8.5% Cu, 2.04% Zn, 3.3 g/t Au, and 65.6 g/t Ag from a waste dump at Stumble-On. A 70 cm chip from an outcrop near Stumble-On returned 4.9% Cu, 2.6% Zn, 0.5 g/t Au, and 32.6 g/t Ag (Table 6).

9.1.2 2025 Exploration

9.1.2.1 Surface Exploration

In September 2025, Alex Metals conducted nine days field work on the KSO property to familiarize company geologists with the Project area and geology, chip sample surface showings and historical mine workings to validate and verify historical data, survey and georeference historical data, and collect soil samples. A total of 51 rock samples were collected. Select sample highlights are shown in Table 6 and Table 7. Of these, 20 samples were analyzed for whole rock. Twenty samples are chips, no longer than 1.5 m and composited where appropriate. Composite chip highlights are shown in Table 6. Six samples are of float (from waste dumps or transported rocks), and six samples are grab samples from outcrop (Table 7). A total of 210 soil samples were collected (Figure 25).

Alex Metals' results validate and, in some cases, appear to exceed historical results. The results show that mineralization at both Khayyam and Stumble-On is gold- and copper-rich, and can include high zinc grades. Silver grades are locally very high, up to 83.7 g/t in one sample, and generally correlate with copper grades.

Rarely discussed in historical reports is the massive carbonate mineralization sampled as float around Test Pit 2, approximately 75 m southwest of the Powell Adit (Figure 23). This mineralization appears to be dominantly very coarse-grained calcite with bands of dark reddish-brown sphalerite, pyrite, and magnetite. A float sample from this test pit returned 1.1 g/t Au, 1.6 g/t Ag, 7.8% Zn, and 0.1% Cu.

Two massive baritic boulders were discovered by Alex Metals geologists within a creek bed approximately 1.3 km along strike east of the Khayyam mine and 550 m south of the Stumble-On mine (Figure 24). Their origin is currently unknown. It is unlikely they were transported from the Khayyam area based on topography. These two samples returned 1.6 g/t Au and 1.3% Cu, and 4.3 g/t Au and 2.6% Cu (Table 7). There is no historical report of barite on the property. Carbonate- and barite-rich mineralization styles typically form as lower temperature ‘white smoker’ deposits or outboard of, but related to, massive pyrite and chalcopyrite deposits.

Table 6. Highlights from 2024 & 2025 Chip Sample Composites

Prospect	General Location	Chip length (m)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Khayyam	Test pit	1.7	2.4	33.4	5.42	3.34	0.00
	Adit No. 4	1.1	1.0	28.1	5.30	0.91	0.00
	Adit No. 5	2.0	1.5	18.0	1.87	0.14	0.00
	Adit No. 6	3.7	2.5	37.3	4.84	4.39	0.01
	including	2.2	3.7	54.9	8.11	6.45	0.00
Stumble-On	West of open cut	3.1	2.0	22.2	2.98	1.17	0.02

Table 7. Highlights from 2024 & 2025 Chip, Grab, and Float Samples

Prospect	General Location	Sample ID	Sample Type	Chip Length (m)	Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Pb (%)
Khayyam	Adit 6	M830559	Chip	1.2	6.2	83.7	11.80	6.10	0.00
Khayyam	Test Pit	M830016	Chip	0.7	1.5	58.8	11.55	2.07	0.00
Khayyam	Adit 4	M830021	Chip	1.1	1.0	28.1	5.30	0.91	0.00
Khayyam	Adit 6	M830558	Chip	1.0	0.7	20.3	3.69	6.87	0.00
Khayyam	Adit 5	M830013	Chip	1.0	1.3	20.8	2.29	0.10	0.00
Khayyam	Massive sulfide lens 20m SW of Powell Adit	M830018	Chip	1.5	1.3	13.3	1.77	0.70	0.00
Khayyam	Adit 5	M830012	Chip	1.0	1.6	15.2	1.45	0.18	0.00
Khayyam	Test Pit	M830017	Chip	1.0	3.1	15.7	1.13	4.23	0.00
Khayyam	Adit 3 mine dump	B0171708	Float	N/A	4.3	74.6	9.62	22.70	0.00
Khayyam	Mine dump north of Powell Adit	B0171703	Grab	N/A	1.1	9.6	2.14	0.42	0.00
Khayyam	Adit 5	B0171701	Grab	N/A	0.7	10.4	1.48	0.88	0.00
Khayyam	Mine dump north of Powell Adit	B0171702	Grab	N/A	0.3	4.6	0.67	13.15	0.00
Stumble-On	End of Discovery Adit, east of Crosscut Adit	M830025	Grab	N/A	4.9	65.2	9.85	2.50	0.00
Stumble-On	Crosscut Adit mine dump	B0171706	Grab	N/A	3.3	65.6	8.54	2.04	0.00
Stumble-On	Outcrop west of open cut	M830572	Chip	0.9	3.0	49.0	7.49	1.37	0.01
Stumble-On	45m southeast of open cut	B0171704	Float	N/A	0.5	46.2	7.38	3.40	0.01
Stumble-On	Outcrop west of open cut	M830569	Chip	0.4	5.1	41.7	6.17	3.57	0.01
Stumble-On	Outcrop west of open cut	B0171705	Chip	0.7	0.5	32.6	4.93	2.63	0.01
Stumble-On	Outcrop west of open cut	M830570	Grab	N/A	0.5	30.5	4.88	0.65	0.00
Stumble-On	Creek Trench east of Stumble-On Adits	M830022	Grab	N/A	6.9	13.0	3.09	0.73	0.01
Stumble-On	Crosscut Adit mine dump	M830571	Float	N/A	0.7	13.4	1.24	4.04	0.00
Barite Float	Msv barite float ~550m SW of Stumble-On	M830026	Float	N/A	4.3	6.3	2.60	0.01	0.00
Barite Float	Msv barite float ~550m SW of Stumble-On	M830027	Float	N/A	1.6	2.7	1.32	0.00	0.00
Barite Float	Outcrop in creek east of Stumble-On Adits	M830024	Grab	N/A	0.9	3.0	1.07	0.10	0.00

Figure 23. Massive carbonate ore with pyrite, dark reddish-brown sphalerite, and magnetite bands. From a test pit south of the Khayyam mine (Figure 15). Sample returned 1.1 g/t Au, 1.6 g/t Ag, 7.8% Zn, and 0.1% Cu.

Figure 24. Massive baritic float from 1.3 km east along strike of the Khayyam mine (Figure 25).

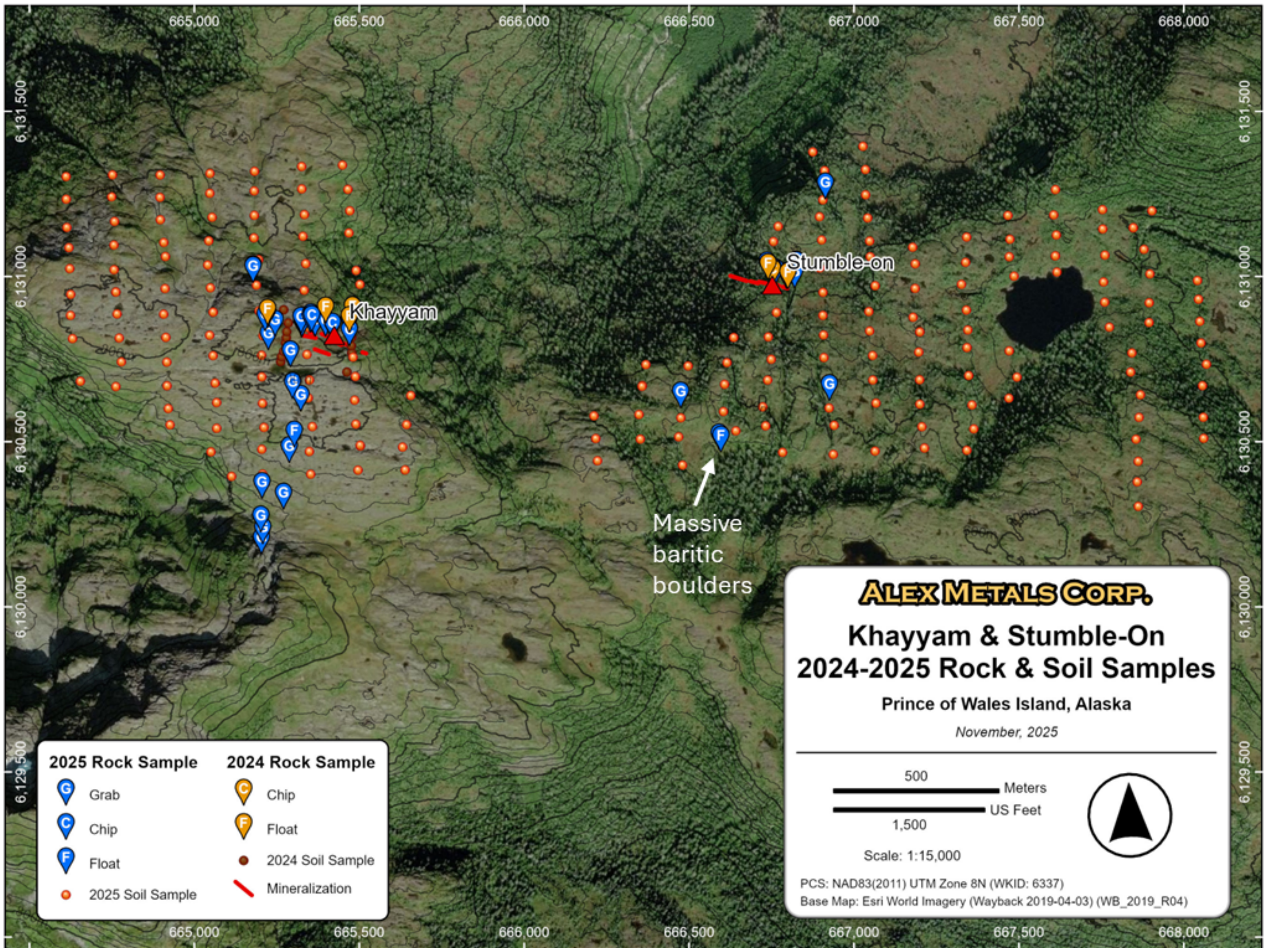

Figure 25. Map of the KSO area showing the location of 2024 and 2025 rock and soil samples collected by Alex Metals.

9.1.2.2 Geophysical Surveys

A 220 line-km SkyTEM312 time-domain electromagnetic (EM) and magnetic helicopter-borne geophysical survey was flown over the Project area in October 2025. The survey was flown with 100 m-spaced north-south lines and 500 m-spaced tie lines.

The SkyTEM system uses low and high dipole-moments to discriminate between shallow geologic features (low moment) and deeper features (high moment). Figure 26 shows results from modelling the SkyTEM conductivity and magnetics data. Modelling and examination of amplitude and time gate data have clearly identified a 385 m strongly conductive anomaly over Khayyam and a 265 m conductive anomaly immediately east of Stumble-On (Figure 26), indicating high potential for continued mineralization at depth. The slightly weaker anomaly over Stumble-On is interpreted as massive sulphide and could indicate a deeper source. This anomaly underlies muskeg with little to no outcrop. Ground VLF-EM data collected over Stumble-On in 1980 similarly suggest that the deposit likely continues at depth to the east.

The data also show a large, previously unknown 'Western' EM anomaly, with two smaller satellite anomalies. These anomalies are highly conductive and resemble those over known mineralization at Khayyam and Stumble-On. Mapping by Barrie (1984) shows numerous lenses of siliceous schist above the anomalies at the western extent of their map. Siliceous schists are gradational along strike with massive sulphide at Khayyam (Figure 15) and are interpreted to have formed at stratigraphic horizons that host massive sulphide. There has been no detailed mapping in the area of the Western EM anomaly, and no rock, soil, or stream sediment samples are known from the area or downstream. From the air, Alex Metals geologists observed gossanous cliffs within a steep, narrow, NNW-trending gulley through the centre of the largest anomaly. Follow-up is required.

These strong conductors are interpreted as massive sulphides and are clearly defined from all surrounding, more resistive Wales Group rocks, showing that the SkyTEM survey is an excellent tool for VMS exploration in the Project area.

Massive sulphides at both Khayyam and Stumble-On are locally weakly to strongly magnetic due to the presence of pyrrhotite and magnetite. Magnetic anomalies appear relatively coincident with known massive sulphide mineralization and with EM anomalies at both deposit sites.

Of note, the SkyTEM system is unlikely to detect massive carbonate or massive barite mineralization. It is possible that massive sulphide lenses on the property zone outward to carbonate- or barite-rich mineralization that is not detected by the SkyTEM system. Similarly, individual massive carbonate- or barite-rich lenses that lack massive sulphide would not be detected.

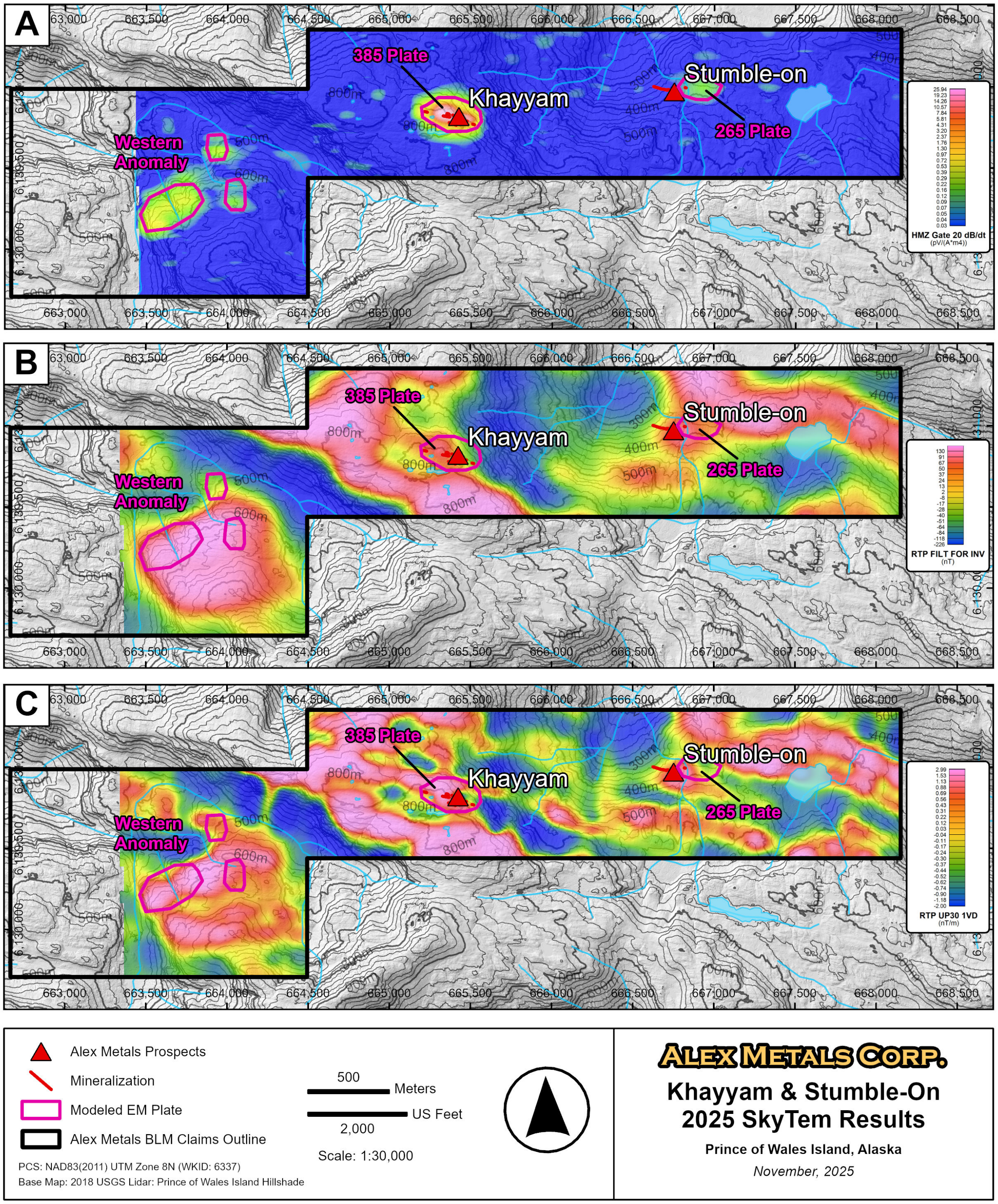

Figure 26. Map of results from within the claim boundary of the 220 line-km SkyTEM EM and magnetic geophysical survey flow in October 2025, showing A) height-corrected, high moment Z dB/dt Gate 20 EM amplitude conductivity data, B), RTP magnetic data filtered for inversion (40 m upward continued), and C) filtered first vertical derivative (1VD) reduced to pole magnetic data (30 m upward continued). Both the Khayyam and Stumble-On deposits show clear EM plates, 385 and 265 m across, respectively. Siliceous schists, likely related to VMS mineralization, outcrop above the 'Western Anomaly'.

10 Drilling

No drilling has been completed by Alex Metals to date. Only one historical drilling campaign was completed in 1971, and no results, logs, and only dubious, partial, and second-hand location data are available.

11 Sample Preparation, Analyses, and Security

11.1 SAMPLE COLLECTION

Sample information is collected in the field using ESRI Field Maps and ArcGIS Online software on tablets. Photos of samples and their source are taken in the field and include metadata and geotags. Chip samples are collected using a hammer and chisel, and best efforts are made to collect geologically representative material along the chip line. Chip lines do not exceed 1.5 m in length. Chip lengths and orientation information are collected.

11.2 SAMPLE PREPARATION AND SECURITY

Sample preparation was conducted by appropriately trained and qualified personnel of the Company. Individual sealed plastic sample bags were placed in sealed woven rice bags for shipment to the analytical laboratory. Samples were transported directly from the site to Ketchikan under the custody of Company geologists and delivered to a commercial transportation company for delivery to North Vancouver, BC, Canada, into the custody of ALS Geochemistry Vancouver.

11.3 ANALYTICAL TECHNIQUE

All samples are prepared and analyzed by ALS Geochemistry in North Vancouver, BC, Canada.

The raw samples are crushed in an oscillating steel jaw crusher so that >70% of the sample passes through a 2mm screen, and a 250 g Boyd rotary crush split is pulverized to 85% passing through a 75-micron screen.

Four acid digestion ICP (ALS method ME-ICP61) is performed for analysis of 33 elements: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, and Zn. The method utilizes inductively coupled plasma-atomic emission spectrometry (ICP-AES) on 0.25 g of a prepared sample, digested in perchloric, nitric, hydrofluoric, and hydrochloric acids. For samples in which Cu, Zn, Pb, or Ag values exceeded the ME-ICP61 upper detection limit, ALS method OG62 is utilized – a four-acid ICP-AES technique calibrated for ore grade mineralization. For samples in which Ag exceeds the OG62 upper detection limit, Ag by fire assay and gravimetric finish (Ag-GRA21) is used.

Gold analyses are performed on a 50 g sub-sample using the ALS method Au-AA26: fire-assay fusion with atomic absorption spectroscopy (AAS) finish. For samples that exceed the upper detection limit of Au-AA26, the ALS method Au-GRA22 is utilized – fire assay with gravimetric finish.

11.4 ASSAYING QUALITY ASSURANCE AND QUALITY CONTROL (QA-QC)

No QA-QC field samples were submitted with surface rock and soil samples in 2024 or 2025. ALS Geochemistry is an ISO/IEC 17025–accredited laboratory and operates a formal QA/QC program that covers both sample preparation and analysis. Coarse-crush duplicates are inserted at a frequency of one per 50 samples. For analytical QA/QC, the ALS inserts certified reference materials, blanks, and pulp duplicates into every batch for routine AAS, ICP-AES, ICP-MS, and fire-assay analyses.

In the Author's opinion, these protocols are sufficient for a reconnaissance surface sampling program at this stage of exploration.

12 Data Verification

The Author reviewed all available information from historical reports relevant to the KSO Project. The Author reviewed mapping, sampling, and photographic data collected by Alex Metals, and interviewed Alex Metals' geologists. The Author is confident that the exploration data collected by Alex Metals were acquired using adequate quality control procedures that generally meet industry best practices.

There are currently no drill data or database available for the Project. The Author is satisfied that the data is adequate for the purpose of this technical report.

13 Mineral Processing and Metallurgical Testing

The only metallurgical testing completed at the KSO project is an historical study by the U.S. Bureau of Mines (Maas et al., 1995). The Bureau collected a 125 kg sample from the Khayyam mine area grading 1.3 g/t Au and 13 g/t Ag, and a calculated head grade for the base-metal flotation test of 2.5% Cu and 1.4% Zn. Preliminary tests showed 99.25% copper recovery and 91% zinc recovery from a minus 150-mesh grind. Their concentrate was 50% of the head weight, and they recommend more testing. This metallurgical work is historical in nature and is not considered current by the Company.

14 Mineral Resource Estimates

No National Instrument 43-101 compliant resource estimate currently exists.

15 Mineral Reserve Estimates

No National Instrument 43-101 compliant reserve estimate currently exists for the Project.

16 Mining Methods

No mining method is recommended at this time as the Project has no mineral reserve or resource.

17 Recovery Methods

No recovery methods were designed for the Project.

18 Project Infrastructure

No infrastructure was designed for the Project.

19 Market Studies and Contracts

No market studies or contracts were conducted for the Project.

20 Environmental Studies, Permitting, and Social or Community Impact

Disclosure under Section 20 applies to advanced-stage Projects. The Project is not an advanced-stage exploration Project.

21 Capital and Operating Costs

No capital and operating costs were estimated for the Project.

22 Economic Analysis

No economic analysis was conducted for the Project.

23 Adjacent Properties

There are no adjacent properties whose boundaries are in close proximity to the Project and have geological characteristics similar to those of the Project.

24 Other Relevant Data and Information

There is no additional information or explanation necessary to make this Report understandable and not misleading.

25 Interpretation and Conclusions

The Khayyam-Stumble-On (KSO) Project is an early-stage polymetallic copper-gold (zinc-silver) volcanogenic massive sulphide (VMS) exploration Project. The Project is centred on two historical, short-lived mines that have seen minimal work following their closure in 1907. Massive sulphide lenses outcrop at both historical mine sites and demonstrate potential for high-grade copper and gold VMS mineralization, with select chip samples returning grades up to **3.7 g/t Au, 54.9 g/t Ag, 8.1% Cu, 6.5% Zn over 2.2 m**.

Alex Metals has diligently compiled and integrated all available historical geological, geochemical, and geophysical data pertaining to the KSO Project. Most information comes from historical reports by the U.S. Bureau of Mines and U.S. Geological Survey, and from a master's thesis completed in 1984. Little to no data are available for the sporadic work done by exploration companies.

Records indicate that historical mining at KSO was short-lived, ending abruptly in 1907 due to poor management and fluctuating copper prices. The Project has subsequently received minimal exploration. The only recorded drilling was a single, small program conducted in 1971. No data are available from that program, and no comprehensive, modern exploration program has been performed on the property. Significant advances in VMS exploration methods have been made since the 1970s. VMS deposits, especially those in Southeast Alaska, are known to have small surficial footprints but significant extents at depth (e.g., Greens Creek, Palmer, Niblack), indicating good exploration potential remains at the project.

Mineralogy of the massive sulphide lenses is relatively simple and coarse-grained and comprises dominantly pyrite and chalcopyrite with subordinate sphalerite, pyrrhotite, and magnetite. Dominant non-sulphide gangue minerals are quartz, hornblende, chlorite, plagioclase, magnetite, hematite, gahnite, garnet, sericite, stilpnomelane, and epidote. Preliminary metallurgical work by the U.S. Bureau of Mines showed 99.25% copper recovery and 91% zinc recovery from a minus 150-mesh grind.

Historical airborne EM and ground VLF-EM and CSAMT surveys indicate conductors associated with the Khayyam and Stumble-On targets. No drilling has been conducted since the completion of these historical geophysical surveys. A 2025 airborne SkyTEM electromagnetic (EM) and magnetics survey conducted by Alex Metals clearly defines strong conductors over these targets, indicating that massive sulphide may extend vertically and laterally to depth. The survey also identified a large, similarly conductive, previously unknown 'Western' EM anomaly underlying siliceous schists, which are known to be stratigraphically equivalent to mineralization at Khayyam. This survey provides new drill-ready targets, confirms known mineralization, and is a highly effective tool for VMS exploration in the Wales Group rocks. The presence of gold-rich massive carbonate-sphalerite lenses near Khayyam and the discovery of gold- and copper-rich massive barite float on-trend of Khayyam indicates the potential for low-conductivity (higher resistivity) VMS mineralization on the property that would not have been readily identified by geophysical methods used to date.

Based on the data available to the Author, there are no significant environmental or social impediments to exploration of the Project, nor any significant existing environmental liabilities. Alaska state and federal regulations for mining and mineral exploration are well established and include a well-defined permitting process. Exploration permit applications have been submitted to the U.S. Forest Service for a 2026 exploration and drilling program.

In the Author’s opinion, the compilation and field work done by Alex Metals' geologists to verify historical results and recently obtained exploration data confirms the potential for the KSO Project to host significant copper- and gold-rich volcanogenic massive sulphide mineralization. The SkyTEM survey flown by Alex Metals in 2025 shows that modern geophysical methods enable enhanced targeting of massive sulphide deposits in Wales Group rocks on Prince of Wales Island. Nonetheless, given the preliminary understanding of the geology of the Project and the risks and uncertainties inherent in mineral exploration, there can be no guarantee that the Company will discover additional mineralization or that it will be able to define a mineral resource on the Project.

26 Recommendations

Based on encouraging historical results and preliminary work by Alex Metals, and the general lack of modern exploration at the KSO Project, the Author recommends a staged exploration program for 2026.

A minimum **2,000 m Phase I** drill program is proposed to confirm mineralization at the Khayyam and Stumble-On deposits and test near-deposit extent. Shallow (<200 m) holes are proposed to test the lateral extent of known mineralization, followed by deeper step-out holes based on results. A low-cost surface exploration program is proposed, including infill soil sampling and comprehensive regional and local geologic mapping, including mapping and sampling of the new Western EM anomaly. Minimal geologic mapping has been completed in the region.

A Phase I budget is proposed in Table 8.

An expanded **Phase II** drill program of at least **3,000 m** is recommended, contingent on Phase I drill results.

Airborne geophysical methods have successfully identified strongly conductive massive sulphide anomalies on the Project. An expansion of the 2025 SkyTEM airborne geophysical survey is recommended for regional exploration, contingent on drilling results. To better target and define the orientation of conductive massive sulphide bodies at depth, and to maximize drill efficiency, a downhole EM survey is recommended to be completed concurrently with Phase II drilling.

A Phase II budget is proposed in Table 9.

Table 8. Phase I 2,000 m Drill and Exploration Program Budget Proposal

Phase I (2,000 m)

Category	**Total Budget**
Claim Maintenance & Staking	$ 50,000
Office & Administration	$ 100,000
Permitting	$ 10,000
Drilling	$ 675,000
Field Transport (Helicopter & fuel)	$ 285,000
Geology & Project Management	$ 165,000
Camp & Accommodations	$ 55,000
Travel Expenses	$ 30,000
Subtotal	$ 1,370,000
Contingency	$ 137,000
Total	**$ 1,507,000**

Table 9. Phase II 3,000 m Drill and Geophysical Program Budget Proposal

Phase II (3,000 m)

Drilling	$ 950,000
Field Transport (Helicopter & fuel)	$ 430,000
Geophysics	$ 250,000
Camp & Accommodations	$ 90,000
Travel Expenses	$ 20,000
Subtotal	$ 1,740,000
Contingency	$ 17,400
Total	**$ 1,757,400**

27 References

Ayuso, R.A., Karl, S.M., Slack, J.F., Haeussler, P.J., Bittenbender, P.E., Wandless, G.A., and Colvin, A., 2005, Oceanic Pb-Isotopic Sources of Proterozoic and Paleozoic Volcanogenic Massive Sulphide Deposits on Prince of Wales Island and Vicinity, Southeastern Alaska: United States Geological Survey, Studies by the U.S. Geological Survey in Alaska, 2005, Professional Paper 1732E, 1–20 p.

Barrie, C.T., 1984, The Geology of the Khayyam and Stumble-On Deposits, Prince of Wales Island, Alaska: MSc Thesis, University of Texas at Austin, 171 p.

Barrie, C.T., and Kyle, J.R., 1988, Geology, Geochemistry, and Tectonic Setting of the Khayyam and Stumble-On Massive Sulphide Deposits, Prince of Wales Island, Alaska: Economic Geology, v. 83, no. 1, p. 182–196.

Berg, H.C., and Cobb, E., 1967, Metalliferous Lode Deposits of Alaska: Bulletin 1246, 260 p.

Brew, D.A., 1995, Geologic map of the Craig, Dixon Entrance, and parts of the Ketchikan and Prince Rupert quadrangles, Southeastern Alaska: United States Geological Survey, Open-File Report 95–215, 1 p.

Brooks, A.H., 1902, Preliminary Report on the Ketchikan Mining District, Alaska, with an Introductory Sketch of the Geology of Southeastern Alaska: United States Geological Survey, 1, 125 p.

Brooks, A.H., 1906, Report on progress of investigations of mineral resources of Alaska in 1905: Bulletin 284, 169 p.

Buddington, A.F., and Chapin, T.S., 1929, Geology and Mineral Deposits of Southeastern Alaska: United States Geological Survey, Bulletin 800, 398 p.

Bufvers, J., 1967, History of Mines and Prospects, Ketchikan District, Prior to 1952: Alaska Division of Mines and Minerals, SR 1, 32 p.

Burns, L.E., Graham, G.R.C., Barefoot, J.D., Geoterrex-Dighem, and WGM Mining and Geological Consultants, Inc., 2020, Ketchikan electromagnetic and magnetic airborne geophysical survey data compilation: Alaska Division of Geological & Geophysical Surveys, GPR 2020-5, 9 p.

Chapin, T., 1916, Mining Developments in Southeastern Alaska, in Mineral Resources of Alaska, Report on Progress of Investigations in 1915: United States Geological Survey, p. 73–104.

Eberlein, G.D., Churkin, M., Carter, C., Berg, H.C., and Ovenshine, A.T., 1983, Geology of the Craig quadrangle, Alaska: U.S. Geological Survey, 83–91.

Fosse, E.L., 1945, Khayyam Mine, McKenzie Inlet, Prince of Wales Island, Southeastern Alaska: United States Bureau of Mines, Draft War Minerals Report, 17 p.

Fosse, E.L., 1946, Exploration of the Copper-Sulfur Deposit Khayyam and Stumble-on Properties Prince of Wales Island, Alaska: United States Bureau of Mines, Report of Investigations 3942, 8 p.

Franklin, J.M., Gibson, H.L., Jonasson, I.R., and Galley, A.G., 2005, Volcanogenic Massive Sulphide Deposits, *in* One Hundredth Anniversary Volume: Society of Economic Geologists, p. 523–560.

Galley, A.G., Hannington, M.D., and Jonasson, I.R., 2007, Volcanogenic massive sulphide deposits, *in* Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 141-161.

Gehrels, G.E., 1990, Late Proterozoic-Cambrian metamorphic basement of the Alexander terrane on Long and Dall Islands, Southeast Alaska: GSA Bulletin, v. 102, no. 6, p. 760–767.

Gehrels, G. E., and Berg, H. C., 1994, Geology of Southeastern Alaska, *in* Plafker, G., and Berg, H. C., eds., The Geology of Alaska: Boulder, Colorado, Geological Society of America, The Geology of North America, v. G-1.

Gehrels, G.E., and Saleeby, J.B., 1987a, Geologic Framework, Tectonic Evolution, and Displacement History of the Alexander Terrane: Tectonics, v. 6, no. 2, p. 151–173.

Gehrels, G.E., and Saleeby, J.B., 1987b, Geology of Southern Prince of Wales Island, Southeastern Alaska: Geological Society of America Bulletin, v. 98, no. 2, p. 123.

Gehrels, G.E., Berg, H.C., and Saleeby, J.B., 1983, Ordovician-Silurian Volcanogenic Massive Sulphide Deposits on Southern Prince of Wales Island and the Barrier Islands, Southeastern Alaska: United States Geological Survey, Open-File Report 83–318, 9 p.

Gehrels, G.E., Butler, R.F., and Bazard, D.R., 1996, Detrital Zircon Geochronology of the Alexander Terrane, Southeastern Alaska: Geological Society of America, Bulletin 108, no. 6, p. 722–734.

Grybeck, D.J., 2004, Alaska Resource Data File: Craig Quadrangle: United States Geological Survey, Open-File Report 2004–1384, 505 p.

Hannington, M.D., 2014, 13.18 - Volcanogenic Massive Sulphide Deposits, *in* Holland, H.D. and Turekian, K.K. eds., Treatise on Geochemistry (Second Edition): Oxford, Elsevier, p. 463–488.

Herreid, G., Bundtzen, T.K., and Turner, D.L., 1978, Geology and Geochemistry of the Craig A-2 Quadrangle and Vicinity, Prince of Wales Island, Southeastern Alaska: Alaska Division of Geological and Geophysical Survey, Geologic Report 48, 49 p.

Kirk, E., and Amsden, T.W., 1952, Upper Silurian Brachiopods from Southeastern Alaska: United States Geological Survey, Professional Paper 233–C, 53–66 p.

Lydon, J., 1984, Ore Deposit Models - 8. Volcanogenic Massive Sulphide Deposits Part I: A Descriptive Model: Geoscience Canada, vol. 11, No. 4, p. 195 - 202.

Maas, K.M., Bittenbender, P.E., and Still, J.C., 1995, Mineral Investigations Ketchikan: United States Bureau of Mines, Open File Report 11–95, 606p.

Nelson, J.L., Diakow, L.J., van Staal, C., and Chipley, D., 2013a, Ordovician Volcanogenic Sulphides in the Southern Alexander Terrane, Coastal NW British Columbia: Geology, Pb Isotopic Signature, and a

Case for Correlation with Appalachian and Scandinavian Deposits, *in* Geological Fieldwork 2012: British Columbia Ministry of Energy, Mines and Petroleum Resources, Geologic Survey Paper 2013–1, 13–33 p.

Nelson, J.L., Colpron, M., and Israel, S., 2013b, The Cordillera of British Columbia, Yukon, and Alaska: Tectonics and Metallogeny, *in* Colpron, M., Bissig, T., Rusk, B.G., and Thompson, J.F.H. eds., Tectonics, Metallogeny, and Discovery: The North American Cordillera and Similar Accretionary Settings: Society of Economic Geologists, Special Publication 17, p. 53–109.

Newberry, R.J., Crafford, T.C., Newkirk, S.R., Young, L.E., Nelson, S.W., and Duke, N.A., 1997, Volcanogenic Massive Sulphide Deposits of Alaska, *in* Goldfarb, R.J. and Miller, L.D. eds., Mineral Deposits of Alaska: Society of Economic Geologists, Monograph 9, p. 120–150.

Oliver, J., McNulty, B., and Friedman, R., 2021, High-Precision Ca-Id-Tims Age Constraints on the Niblack Cu-Zn-Au-Ag Deposits: A Neoproterozoic Volcanic-Hosted Massive Sulphide Deposit in the North American Cordillera: Economic Geology, v. 116, no. 6, p. 1467–1481.

Roppel, P., 1991, Fortunes from the Earth: An History of the Base and Industrial Minerals of Southeast Alaska: Manhattan, Kan, Sunflower University Press, 139 p.

Slack, J.F., Shanks III, W.C., Karl, S.M., Gemery, P.A., Bittenbender, P.E., and Ridley, W.I., 2007, Geochemical and Sulfur-Isotopic Signatures of Volcanogenic Massive Sulphide Deposits on Prince of Wales Island and Vicinity, Southeastern Alaska: United States Geological Survey, Studies by the U.S. Geological Survey in Alaska, 2005, Professional Paper 1732–C, 37 p.

Steeves, N.J., 2018, Mineralization and genesis of the Greens Creek volcanogenic massive sulphide (VMS) deposit, Alaska, USA: PhD Thesis, University of Tasmania, 393 p.

Steeves, N.J., Hannington, M.D., Gemmell, J.B., Green, D., and McVeigh, G., 2016, The Glacier Creek Cu-Zn VMS Deposit, Southeast Alaska: An Addition to the Alexander Triassic Metallogenic Belt: Economic Geology, v. 111, no. 1, p. 151–178.

Szumigala, D.J., Hughes, R.A., and Harbo, L.A., 2008, Alaska's Mineral Industry 2007: Alaska Division of Geological & Geophysical Surveys, Special Report 62, 105 p.

Taylor, C.D., Premo, W.R., Meier, A.L., and Taggart, J.E., 2008, The Metallogeny of Late Triassic Rifting of the Alexander Terrane in Southeastern Alaska and Northwestern British Columbia: Economic Geology, v. 103, no. 1, p. 89–115.

Wilson, F.H., Hults, C.P., Mull, C.G., and Karl, S.M., 2015, Geologic Map of Alaska: U.S. Geological Survey Scientific Investigations Map 3340, pamphlet 196 p., 2 sheets, scale 1:1,584,000.

Wright, C.W., 1907, Lode Mining in Southeastern Alaska, 1906, *in* Brooks, A., ed., Report of progress of investigations of mineral resources of Alaska in 1906: United States Geological Survey, Bulletin 314, 47–72 p.

Wright, C.W., 1908, Lode Mining in Southeastern Alaska, 1907, *in* Brooks, A. ed., Mineral Resources in Alaska; Report of progress of investigations in 1907: United States Geological Survey, Bulletin 345, 78–97 p.

Wright, F.E., and Wright, C.W., 1908, The Ketchikan and Wrangell mining districts, Alaska: United States Geological Survey, Bulletin 347, 210 p.

Wynn, J., Doucette, J.P., Karl, S.M., McCafferty, A.E., Smith, B.D., and Bittenbender, P., 2001, Geophysical Signatures Used to Constrain Geologic Mapping, Narrowing the Search for VMS Deposits in Southeast Alaska: U.S. Geological Survey, Open-File Report 2001–44.

Zumsteg, C.L., 2007, Metamorphism of the Wales Group and Moira Group on Prince of Wales and Dall Islands, Southeastern Alaska: Ph.D. Thesis, University of Missouri-Columbia.

Zumsteg, C.L., Karl, S.M., Haeussler, P.J., and Himmelberg, G.R., 2004, Recognition of Three Metamorphic Events Within the Wales Group on Prince of Wales and Dall Islands, Southeastern Alaska (abs.), *in* Geological Society of America Abstracts with Programs, vol. 36, no. 5, p. 135.

28 Certificate of Qualified Person

I, **Roy Edward Greig**, of Penticton, British Columbia, Canada, hereby certify that:

1. I am a Geologist with C.J. Greig & Associates, Ltd. (EGBC Permit # 1005003), whose office is located at 729 Okanagan Ave. E., Penticton, B.C., V2A 3K7, Canada.

2. I am a graduate of the University of Arizona with a Ph.D. in Geosciences (2021), and of the University of British Columbia with a B.Sc. (Honours) in Geological Sciences (2012).

3. I have been employed in the mineral exploration industry since 2006 and have explored for base and precious metals in North America, South America, and Africa.

4. I have been certified as a Professional Geoscientist (P.Geo.) by the Association of Professional Engineers and Geoscientists of British Columbia (ID #171943, License #43930) and am a member of the Society of Economic Geologists.

5. I am a Qualified Person under the definitions of National Instrument 43-101 (the "Instrument").

6. I am author of the report entitled; "NI 43-101 Technical Report for the Khayyam-Stumble-On (KSO) Project, Alaska" with an effective date of January 1, 2026, and am responsible for the entirety of it. I have read the Instrument and this report has been prepared in compliance with it.

7. I visited the Project on April 1, 2026, after a failed attempt on September 25, 2025. I confirmed the robustness of current exploration work by Alex Metals, and visited several other properties operated by the company.

8. I am responsible for the entirety of this technical report.

9. I am independent of the Company.

10. I have had no prior involvement with the Project that is the subject of this report.

11. 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.

Dated: April 9, 2026

Roy Greig, Ph.D., P.Geo
729 Okanagan Ave. E., Penticton, B.C., V2A 3K7

Appendix A

Claim Name	BLM Serial Number	Original Locator	Location Date
K001	AK106696513	Alexander Metals Inc.	September 3, 2024
K002	AK106696512	Alexander Metals Inc.	September 3, 2024
K003	AK106696511	Alexander Metals Inc.	September 3, 2024
K004	AK106696510	Alexander Metals Inc.	September 3, 2024
K005	AK106696509	Alexander Metals Inc.	September 3, 2024
K006	AK106696514	Alexander Metals Inc.	September 3, 2024
K007	AK106696515	Alexander Metals Inc.	September 3, 2024
K008	AK106696516	Alexander Metals Inc.	September 3, 2024
K009	AK106696517	Alexander Metals Inc.	September 3, 2024
K010	AK106696518	Alexander Metals Inc.	September 3, 2024
K011	AK106696519	Alexander Metals Inc.	September 3, 2024
K012	AK106696520	Alexander Metals Inc.	September 3, 2024
K013	AK106696521	Alexander Metals Inc.	September 3, 2024
K014	AK106696522	Alexander Metals Inc.	September 3, 2024
K015	AK106696523	Alexander Metals Inc.	September 3, 2024
K016	AK106753378	Alexander Metals Inc.	September 13, 2025
K017	AK106753379	Alexander Metals Inc.	September 13, 2025
K018	AK106753380	Alexander Metals Inc.	September 13, 2025
K019	AK106753381	Alexander Metals Inc.	September 13, 2025
K020	AK106753382	Alexander Metals Inc.	September 13, 2025
K021	AK106753383	Alexander Metals Inc.	September 13, 2025
K022	AK106753384	Alexander Metals Inc.	September 13, 2025
K023	AK106753386	Alexander Metals Inc.	September 13, 2025
K024	AK106753387	Alexander Metals Inc.	September 13, 2025
K025	AK106753388	Alexander Metals Inc.	September 13, 2025
K026	AK106753389	Alexander Metals Inc.	September 13, 2025
K027	AK106753385	Alexander Metals Inc.	September 13, 2025
K028	AK106753390	Alexander Metals Inc.	September 13, 2025
K029	AK106753391	Alexander Metals Inc.	September 13, 2025
K030	AK106753392	Alexander Metals Inc.	September 13, 2025
K031	AK106753393	Alexander Metals Inc.	September 13, 2025
K032	AK106753394	Alexander Metals Inc.	September 13, 2025
K033	AK106753395	Alexander Metals Inc.	September 13, 2025
K034	AK106753396	Alexander Metals Inc.	September 13, 2025
K035	AK106753397	Alexander Metals Inc.	September 13, 2025
K036	AK106753398	Alexander Metals Inc.	September 13, 2025
K037	AK106753399	Alexander Metals Inc.	September 13, 2025

K038	AK106753400	Alexander Metals Inc.	September 13, 2025
K039	AK106753401	Alexander Metals Inc.	September 13, 2025
K040	AK106753402	Alexander Metals Inc.	September 13, 2025
K041	AK106762646	Alexander Metals Inc.	November 21, 2025
K042	AK106762647	Alexander Metals Inc.	November 21, 2025
K043	AK106762648	Alexander Metals Inc.	November 21, 2025
K044	AK106762649	Alexander Metals Inc.	November 21, 2025
K045	AK106762650	Alexander Metals Inc.	November 21, 2025
K046	AK106762651	Alexander Metals Inc.	November 21, 2025
K047	AK106762652	Alexander Metals Inc.	November 21, 2025
K048	AK106762653	Alexander Metals Inc.	November 21, 2025
K049	AK106762654	Alexander Metals Inc.	November 21, 2025
K050	AK106762655	Alexander Metals Inc.	November 21, 2025
K051	AK106762656	Alexander Metals Inc.	November 21, 2025
K052	AK106762657	Alexander Metals Inc.	November 21, 2025
K053	AK106762658	Alexander Metals Inc.	November 21, 2025
K054	AK106762659	Alexander Metals Inc.	November 21, 2025
K055	AK106762660	Alexander Metals Inc.	November 21, 2025
K056	AK106762661	Alexander Metals Inc.	November 21, 2025
K057	AK106762662	Alexander Metals Inc.	November 21, 2025
K058	AK106762663	Alexander Metals Inc.	November 21, 2025
K059	AK106762664	Alexander Metals Inc.	November 21, 2025
K060	AK106762665	Alexander Metals Inc.	November 21, 2025
K061	AK106762666	Alexander Metals Inc.	November 21, 2025
K062	AK106762667	Alexander Metals Inc.	November 21, 2025
K063	AK106762668	Alexander Metals Inc.	November 21, 2025
K064	AK106762669	Alexander Metals Inc.	November 21, 2025
K065	AK106762670	Alexander Metals Inc.	November 21, 2025
K066	AK106762671	Alexander Metals Inc.	November 21, 2025
K067	AK106762672	Alexander Metals Inc.	November 21, 2025
K068	AK106762673	Alexander Metals Inc.	November 21, 2025