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TECHNICAL REPORT

*on the*

Rayfield Copper Project, British Columbia

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Clinton Mining Division NTS 092P02 & 03; BCGS 092P015, 016,  
025, 026  
British Columbia, Canada

**Prepared for:**



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**Prepared by:**



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**March 6, 2026  
Effective Date: March 6, 2026**

## Date and Signature

This Technical Report titled “NI 43-101 Technical Report: Rayfield Copper Project, British Columbia” and dated March 6, 2026, with an effective date of March 6, 2026 was prepared and signed by:



Andy Randell, P.Geol.  
Strata GeoData Services Ltd.

Date: March 6, 2026

## Certificate of Qualified Person – Andy Randell, P.Geo.

I, Andy Randell, P.Geo., hereby certify that:

1. I am a Professional Geoscientist (P.Geo.) in good standing with the Engineers and Geoscientists British Columbia (EGBC; License # 44669), with 20 years of relevant experience in copper-gold porphyry exploration.
2. My business address is 330-470 Granville Street, Vancouver, BC V6C 1V5.
3. I am the author of the Technical Report titled “NI 43-101 Technical Report: Rayfield Copper Project, British Columbia” dated March 6, 2026, with an effective date of March 6, 2026 (the “Report”).
4. I have personally visited the Property on October 30, 2025.
5. I am not independent of Golden Sky Minerals Corp. as defined in NI 43-101 due to my association with Strata GeoData Services Ltd., an optionor of certain Rayfield claims.
6. I have read NI 43-101 and Form 43-101F1, and the Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
7. As of the date of this certificate, to the best of my knowledge, information, and belief, the Report contains all scientific and technical information that is required to be disclosed to make it not misleading.

Signed: March 6, 2026



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Andy Randell, P.Geo.

## Consent of Qualified Person

I, Andy Randell, P.Ge., do hereby consent to the filing of the Technical Report titled “NI 43-101 Technical Report: Rayfield Copper Project, British Columbia” and dated March 6, 2026, with the securities regulatory authorities, and to the use of extracts from the Report in the issuer’s public disclosure. I certify that I have read the disclosure filed by the issuer that references the Report and that it fairly and accurately represents the information in the sections of the Report for which I am responsible.



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Andy Randell, P.Ge.

Date: March 6, 2026

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**APPENDIX B: SAMPLE PHOTOS FROM AUTHOR’S SITE VISIT (30<sup>TH</sup> OCTOBER 2025)**

**APPENDIX C: LABORATORY CERTIFICATES**

**APPENDIX D: CURRENT PERMITS**

## 1.0 SUMMARY

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**Andy Randell of Strata Geodata Services Ltd.** was retained by Golden Sky Minerals Corp. (“the Company”) to prepare a Technical Report on the Rayfield Property (“the Property”). This report is intended to provide a summary of the material scientific and technical information concerning the Property and, in so doing, fulfill the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101 (“NI 43-101”).

The Rayfield Copper-Gold Property is an early-stage exploration project located within the prolific Quesnel Trough of south-central British Columbia, a region well-known for hosting several of the province’s major copper-gold producers, including Mount Polley, Mount Milligan, and Copper Mountain. The Property comprises approximately 527 km<sup>2</sup> of contiguous mineral claims (66 in total) situated within the Clinton Mining Division, approximately 20 km east of 70 Mile House and 60 km northwest of Kamloops.

The Property is being actively explored by Golden Sky Minerals Corp., with a focus on discovering alkalic copper-gold porphyry, skarn, and epithermal mesothermal quartz vein mineralization. Exploration is supported by a substantial body of historical work dating back to the 1950s, which includes geological mapping, geochemical sampling, geophysics, and over 7,700 meters of drilling. Most historic exploration has been concentrated on the Rayfield Zone, where previous drilling outlined a large footprint (~450 m x 2,100 m) of low-grade copper mineralization and hydrothermal alteration, consistent with a significant porphyry system. Notable drill intercepts include up to 0.18% Cu and 71 ppb Au over 33.9 m.

The Property is underlain by Late Triassic to Early Jurassic volcanic and intrusive rocks of the Nicola Group and associated plutonic phases, including the Rayfield River Pluton. These units are part of the highly prospective Copper Mountain Magmatic Belt. The most common lithologies include syenite, hornblende syenite, leucosyenite, and diorite, with mineralization occurring as both primary sulphides (chalcopyrite and bornite) and secondary copper minerals (native copper, cuprite, malachite, azurite), particularly within fault zones, fractures, and breccias.

The regional setting is a gently sloping plateau ranging from 900 to 1,100 meters above sea level, with moderate glacial cover and forested terrain. Geophysical surveys have identified several

magnetic, gravity, and radiometric anomalies indicative of porphyry-style mineralization. Up to five copper-gold porphyry target zones have been delineated across the Property with characteristics analogous to known alkalic systems in the Quesnel terrane. In 2025, ZTEM + aeromagnetics were flown only over the Vidette block (Gnome & Semlin); Rayfield relies on 2024 ground IP and magnetics for subsurface targeting.

The combination of favorable geological setting, encouraging historic drill results, and the presence of multiple underexplored geophysical and geochemical anomalies supports the continued advancement of the Rayfield-Vidette Project. Further exploration, including drilling, is recommended to test these high-potential target zones.

The author visited the Property on 30<sup>th</sup> October, 2025, to verify the previous exploration work on the Property, to view local geological conditions, rock outcrops, local structural trends, and controls of mineralization. A total of five samples were collected during the visit from the Mowich target area (other areas of the project were restricted due to a road closure on the day of the visit, but the author has visited these sites several times between 2019 and the 30<sup>th</sup> October 2025). The personal inspection included independent check sampling and verification of select sample locations by GPS. Data verification procedures and limitations are summarized in Section 12. The results of samples indicate copper values in the range of 0.01% to 32.4% Cu, <0.02 to 3.93 g/t Au, and from <2 to 164 g/t Ag (Mowich area) indicating potential for porphyry copper style mineralization. Sample types and context are described in Section 9.3.5. These values are consistent with historical and current sampling data on the Property.

The data presented in this report is based on published assessment reports, a previous technical report available from Golden Sky Minerals Corp., the British Columbia Ministry of Mines, Minfile data, the Geological Survey of Canada, and the Geological Survey of British Columbia. In addition, a portion of the data was collected directly by the author during a site visit to the Property. All consulted data sources are considered reliable, and the newly collected data is deemed sufficient to support the conclusion that the Property has merit as a viable copper-gold porphyry exploration target.

This report includes forward-looking information regarding planned exploration programs and potential outcomes. Forward-looking statements are based on assumptions the Company and the

QP believe are reasonable as of the effective date, including access, permitting, availability of services, and geological interpretations; however, actual results may differ due to risks and uncertainties. The Company undertakes no obligation to update such statements except as required by securities laws.

**QP Independence:** The Qualified Person is not independent of Golden Sky Minerals Corp. as defined in NI 43-101 due to an association with Strata GeoData Services Ltd., an optionor of certain Rayfield claims. This Report has been prepared in compliance with NI 43-101 and Form 43-101F1; the QP accepts responsibility for the scientific and technical information herein.

## 1.1 Recommendations

Based on the results of recent exploration programs, it is the Author's opinion that additional exploration expenditures are warranted on the Rayfield Cu-Au Project. The Project has demonstrated strong potential for both Cu-Au porphyry and epithermal gold-style mineralization, with several targets presenting as individual porphyry targets (Rayfield, Mowich) and with gold-bearing epithermal systems in their periphery (Vidette).

It is recommended that future exploration focus on advancing the Rayfield, Gnome, Semlin, and Mowich target zones through detailed geological mapping, geochemical sampling, and geophysical surveys, followed by drill testing where justified.

In addition, continued regional prospecting is encouraged outside of the currently defined target zones, as the broader property area remains underexplored and is considered highly prospective. Systematic exploration across the property may result in the identification of new mineralized zones and further increase the potential of the Project.

A staged exploration program supported by a detailed budget should be developed to prioritize targets and guide ongoing work.

## 2.0 INTRODUCTION AND TERMS OF REFERENCE

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### 2.1 Purpose of Report

Andy Randell of Strata Geodata Services Ltd. (“the author”) was retained by Golden Sky Minerals Corp. (“Golden Sky” or “the Company”) to prepare a NI 43-101 Technical Report on the Rayfield Property (“the Property”). The author is not independent of Golden Sky Minerals Corp. due to his association with Strata GeoData Services Ltd., the optionor of certain Rayfield claims (see Section 4). This report is intended to provide a detailed summary of the material scientific and technical information concerning the Property and, in so doing, fulfill the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101 (“NI 43-101”).

### 2.2 Sources of Information

This report is based on a variety of publicly available and proprietary sources, including published assessment reports from the British Columbia Ministry of Mines, Minfile data, and technical publications by the Geological Survey of Canada (GSC), the British Columbia Geological Survey (BCGS), and various academic and industry researchers. Additional information was gathered from websites and through the Author’s direct observations. All referenced materials are listed in the References section, and map sources are noted within the figure captions.

The author, Andy Randell of Strata Geodata Services Ltd. (“the Author”), conducted site visits to the Property on 30<sup>th</sup> October 2025. The purpose of these visits was to verify historical and recent exploration activities, assess geological and infrastructural conditions, and evaluate the Property’s potential to host sedimentary copper and other economically significant mineralization styles. Due diligence work included surface grab sampling from accessible areas of the Property.

The Author also reviewed the current land tenure status using the BC Mineral Titles Online (MTO) system, which, to the best of the Author’s knowledge, is accurate and up to date.

The interpretations, conclusions, and recommendations contained in this report are based on:

- Information available to the Author at the time of writing;
- Assumptions, conditions, and limitations stated throughout the report; and

- Data and documentation provided by Golden Sky Minerals Corp. ("Golden Sky" or "the Company") and other third-party sources.

This Technical Report was prepared in accordance with the disclosure requirements set out in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") and is intended to summarize the material scientific and technical information relevant to the Rayfield Property ("the Property").

### 3.0 RELIANCE ON OTHER EXPERTS

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With respect to the ownership information presented in Section 1.0 (Summary) and Table 4-1: List of Property Claims in Section 4.0 (Property Description and Location), the Author has relied upon information provided by Golden Sky Minerals Corp. ("Golden Sky" or "the Company"). To the best of the Author's knowledge, this information is accurate and current as of the effective date of this report.

Ownership, Good-to-Date, and areas for the mineral titles in Table 4-1 were verified against BC Mineral Titles Online (MTO) through the Golden Sky Minerals Corp. client record (FMC 288318; 46 owned titles) and select title detail pages for both Golden Sky and Strata GeoData Services Ltd. as of February 5, 2026. This review confirmed the data provided by Golden Sky. However, this limited investigation does not constitute a legal opinion with respect to the ownership status of the Property.

Dr. Kenna Wilkie previously undertook a desktop-based study detailing the "Geomorphic and sedimentary evolution of the Rayfield River Region, British Columbia" which has been incorporated into this technical report under the Appendices. The QP reviewed the Appendix A material and adopts it for the purposes of this report.

The QP reviewed and verified the technical content of Appendix A and accepts responsibility for this content as incorporated into this Report. Reliance on the issuer was limited to title and ownership information, for which the QP expresses no legal opinion. Except for title and ownership information provided by the issuer (for which the QP expresses no legal opinion), the QP did not rely on other experts for scientific or technical information. All exploration data, QA/QC, interpretations, and conclusions presented herein are the responsibility of the QP.

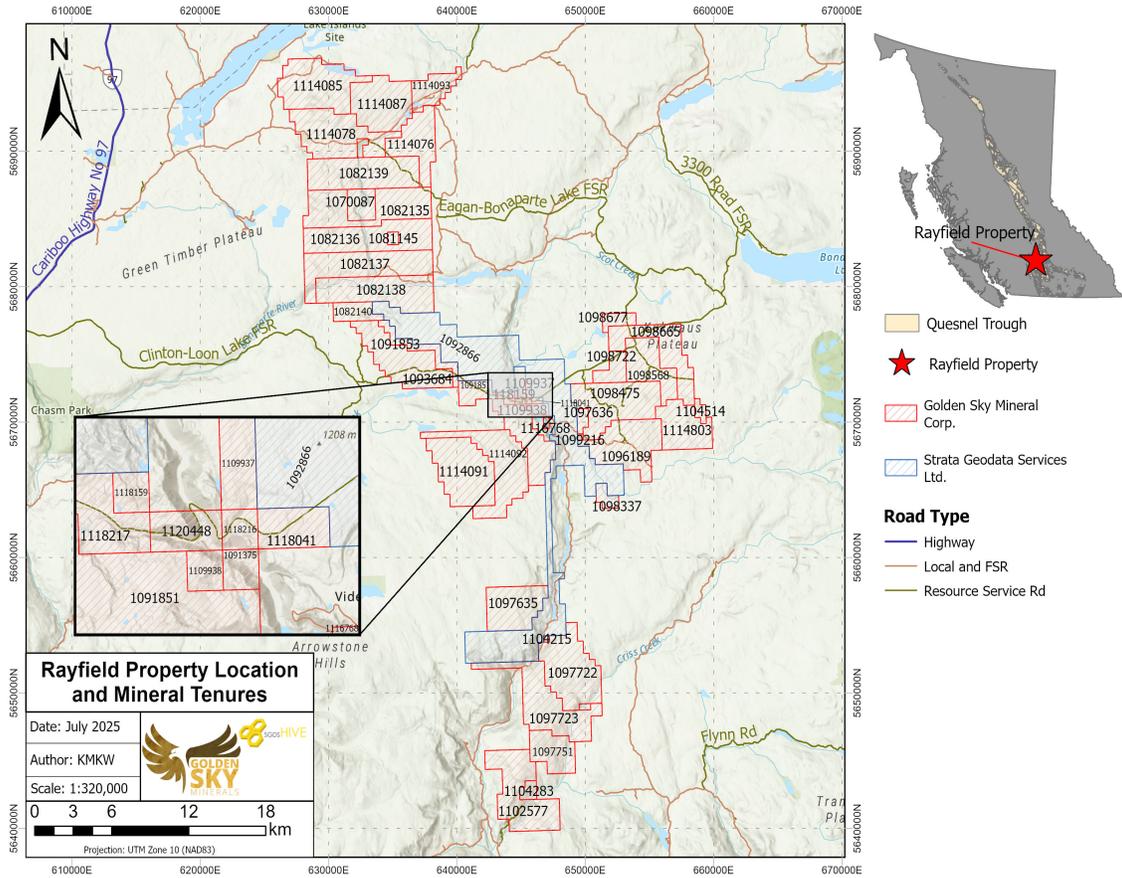
## 4.0 PROPERTY DESCRIPTION AND LOCATION

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As of the Effective Date, the Property comprises 66 contiguous mineral claims totaling 52,728.78 ha (527 km<sup>2</sup>) in the Clinton Mining Division (Table 4-1). The current property is centered at 51°18'42.5" N, 121°05'48" W (UTM 632,686E / 5,685,936N; NAD83 Zone 10). Earlier assessment reports referenced smaller land packages with different centroids as the Property expanded between 2023 and 2025. It is located within the Quesnel Trough, approximately 20 km east of 70 Mile House and 60 km northwest of Kamloops, British Columbia within the Clinton Mining Division.

The Project is comprised of 66 mineral claims at an early stage of exploration with much of the area considered to be underexplored. The Project's copper-gold porphyry, skarn, and epi- to mesothermal quartz vein potential is actively being explored by Golden Sky Minerals Corp. supported by historical exploration, geology, surface sampling, drilling, trenching, and geophysics.

The Project is located within NTS map sheet 092P/092I and is centered at a longitude and latitude of -121° 5' 48" W / 51° 18' 42.5" N or a UTM of 632686E / 5685936N (NAD83 Zone 10) (Figure 4-1). The nearest town, 70 Mile House, British Columbia, is a 39-kilometer to the west-northwest. The larger town of 100 Mile House is roughly 41km north of the Property along Highway 97.



*Figure 4-1: Location of the Rayfield Property, mineral tenures and access roads.*

The Project is on the unceded indigenous territory of Secwepemcúl'ecw (Secwépemc) peoples. SGDS Hive and Golden Sky Minerals Corp. recognize the inherent rights and title of Secwepemcúl'ecw (Secwépemc) peoples and is committed to engaging in meaningful ways through all phases of exploration and regulatory processes as the Project advances. Both parties wish to build positive lasting relationships with the First Nations that have an expressed interest in the area defining the Project.

The claims are held by two parties – Golden Sky Minerals Corp. (FMC Number 288318) and Strata GeoData Services Ltd. (FMC Number 286309). On 26th May 2022, an option agreement was signed between both parties whereby Golden Sky (the “Optionee”) has been granted exclusive rights by Strata GeoData Services Ltd. (the “Optioner”) to acquire 100% of the property subject to the following terms:

- (a) The Optionee paying an aggregate of \$120,000 to the Optionor as follows:
- (i) \$20,000 upon receipt of Exchange approval for the proposed transaction.
  - (ii) a further \$25,000 on or before the 31st of August 2024.
  - (iii) a further \$35,000 on or before the 31st of August 2025, and
  - (iv) a further \$40,000 on or before the 31st of August 2026.
- (b) The Optionee issuing an aggregate 240,000 Shares to the Optionor as follows:
- (i) 40,000 Shares upon receipt of Exchange approval for the proposed transaction
  - (ii) a further 50,000 Shares on or before the 31st of August 2024.
  - (iii) a further 75,000 Shares on or before the 31st of August 2025, and
  - (iv) a further 75,000 Shares on or before the 31st of August 2026.
- (c) The Optionee having expended a minimum of \$575,000 of Exploration Expenditures on the Property as follows:
- (i) \$65,000 on or before December 31, 2023.
  - (ii) a further \$90,000 on or before the 31st of August 2024.
  - (iii) a further \$150,000 on or before the 31st of August 2025, and
  - (iv) a further \$270,000 on or before the 31st of August 2026.

All obligations under this option agreement have been met to the date of this report.

**Note:** *The option terms in this section have been updated to reflect the most recent amendments between Golden Sky Minerals Corp. and Strata GeoData Services Ltd., replacing earlier versions of this agreement referenced in previous assessment reports.*

*Table 4-1 Mineral Tenures for the Rayfield Project*

Tenure Number*	Owner	Filed for Assessment	Good to Date	Area (ha)
1070087	Golden Sky Minerals Corp.	Yes	2026/APR/23	505.0808
1081145		Yes	2026/APR/23	80.8516
1082135		Yes	2026/APR/23	2020.3912
1082136		Yes	2026/APR/23	1960.6312
1082137		Yes	2026/APR/23	2022.1009
1082138		Yes	2026/APR/23	1982.4042
1082139		Yes	2026/APR/23	2019.3893

1082140		Yes	2026/APR/23	465.4057
1091375		Yes	2026/APR/23	20.2632
1091851		Yes	2026/APR/23	1722.9065
1091853		Yes	2026/APR/23	485.9074
1093684		Yes	2026/APR/23	1842.6526
1096189		Yes	2026/APR/23	1784.2877
1097635		Yes	2026/APR/23	1361.5521
1097636		Yes	2026/APR/23	141.8743
1097722		Yes	2026/APR/23	2034.013
1097723		Yes	2026/APR/23	2034.9336
1097751		Yes	2026/APR/23	916.3402
1098337		Yes	2026/APR/23	223.2007
1098475		Yes	2026/APR/23	1985.744
1098568		Yes	2026/APR/23	1174.6168
1098665		Yes	2026/APR/23	1437.6267
1098677		Yes	2026/APR/23	263.1002
1098722		Yes	2026/APR/23	425.3056
1099216		Yes	2026/APR/23	20.273
1102577		Yes	2026/APR/23	2017.0744
1104215		Yes	2026/APR/23	20.3313
1104283		Yes	2026/APR/23	162.9917
1104514		Yes	2026/APR/23	121.6022
1109937		Yes	2026/APR/23	60.773
1109938		Yes	2026/APR/23	20.2632
1114076		Yes	2026/APR/23	1231.2894
1114078		Yes	2026/APR/23	2018.2413
1114085		Yes	2026/APR/23	2016.8285
1114087		Yes	2026/APR/23	1674.4217
1114091		Yes	2026/APR/23	2028.2317
1114092		Yes	2026/APR/23	1967.2729
1114093		Yes	2026/APR/23	705.9446
1114803		Yes	2026/APR/23	1236.579
1116768		Yes	2026/OCT/16	40.5366
1118041		Yes	2026/APR/23	40.5223
1118158		Yes	2026/JUN/19	162.0548
1118159		Yes	2026/APR/23	20.2597
1118216		Yes	2026/APR/23	20.2614
1118217		Yes	2026/APR/23	81.0423
1120448		Yes	2026/APR/23	40.5229
1073898	Strata GeoData Services Ltd.	Yes	2026/APR/23	627.3627
1073911		Yes	2026/APR/23	547.1177
1075658		Yes	2026/APR/23	40.5404

1082287		Yes	2026/APR/23	1579.6496
1082288		Yes	2026/APR/23	1558.9301
1082449		Yes	2026/APR/23	40.5459
1084526		Yes	2026/APR/23	81.307
1084534		Yes	2026/APR/23	203.1927
1084743		Yes	2026/APR/23	60.9393
1084879		Yes	2026/APR/23	223.564
1085167		Yes	2026/APR/23	466.719
1085168		Yes	2026/APR/23	345.6559
1085169		Yes	2026/APR/23	1016.6451
1091081		Yes	2026/APR/23	121.6323
1091136		Yes	2026/APR/23	81.1401
1092833		Yes	2026/APR/23	486.697
1092866		Yes	2026/APR/23	40.5774
1093334		Yes	2026/APR/23	182.5783
1093543		Yes	2026/APR/23	223.1423
1095449		Yes	2026/APR/23	182.9454
<b>TOTAL (66 Claims)</b>				<b>52728.78</b>

**Note:** The totals above include granted mineral claims only. Applications (if any) are listed separately and are excluded from the area total. Historical reports list 49 claims (2023), 50 claims (early 2024), and 59 claims (~523.24 km<sup>2</sup>) in mid-2025 during ongoing acquisitions; the present totals supersede those figures.

Mineral tenure is granted for subsurface rights only, and Golden Sky Minerals Corp. holds no overlying placer rights (Table 4-2). Access to the Project is by local roads (Deadman-Vidette Road) and then by established Forestry Service Roads. Golden Sky Minerals currently hold no user agreements for shared use of these roads. Further details on site access are provided under Sections 4.1, 5 and 20 and of this report.

*Table 4-2: Overlying Placer Claims*

Tenure Number*	Owner	Good to Date	Area (ha)
1122826	Ireland, James Bain	2026/MAR/25	40.40
1120774	MacKay, Robert John	2026/FEB/18	20.35
1114221	Cocco, Rafael	2026/SEP/05	40.71
1122725	Dieleman, Martin James	2026/MAR/24	20.36
1091141	Arthur, Ross Wayne (25%) Langille, Micheal Scott (25%) Thornton, Frederick Wayne (50%)	2033/FEB/08	20.36
1113096	Morris-Nelson, William Izak (50%) Derreth-Blair, Tanner Allan Edward (50%)	2028/MAR/25	20.36
884409	Hammerquist, Wayne Leonard	2025/AUG/07	20.36

1108614	Cooke, Thomas William	2028/OCT/26	20.37
1051139	Berry, John Gordon	2028/APR/02	20.38
844924	Morris-Nelson, William Izak (20%) Derreth-Blair, Tanner Allan Edward (80%)	2028/MAR/09	142.65
1120757	Gillam, Robert John	2026/FEB/18	40.77
1120747	Perrin, Wesley	2026/FEB/18	20.38

There are no known environmental liabilities for this Project.

As of the effective date, the issuer reports no royalties, encumbrances or known legal risks associated with the Project. The QP has not performed a legal title opinion.

#### 4.1 Details of Current Permit or Permit Applications

Exploration on the Rayfield Copper–Gold Property is authorized under Mines Act Permit MX-100000611, issued December 17, 2025, with an approval end date of December 16, 2030. This permit finalizes the submitted Multi-Year, Area-Based (MYAB) Notice of Work (Tracking No. 100412762) and supersedes its former “pending” status, providing for an expanded five-year exploration program across the Rayfield–Vidette–Mowich (RVM) Project.

##### Permit Summary – MX-100000611

- **Permittee:** Golden Sky Minerals Corp.
- **Status:** Open (active)
- **Issued:** 17 Dec 2025
- **Approval End:** 16 Dec 2030
- **Reclamation Security:** \$19,000 posted with the Province under Permit MX-100000611
- **Total Authorized Disturbance:** 2.63 ha (Surface drilling 0.80 ha; Access construction/modification 1.80 ha; Camp structures 0.03 ha)
- **Authorized Activities:** Up to 36 drill sites; ~75 line-km IP; 1.5 km access modification; 4.5 km new exploration trails; fuel ≤820 L (secondary containment); core tents/temporary structures within drill pad footprints.
- **Reclamation Security:** \$19,000 posted with the Province under Permit MX-100000611.

**Relationship to earlier authorization:** The 2023 authorization MX-100000386 (Dec 7, 2023–Dec 6, 2028) remains valid for work under its narrower scope (~1.38 ha total disturbance; 10 drill sites; 15 line-km exposed-electrode IP; 0.5 km access modification; 2.0 km new temporary road; operating window Oct 16–May 14; ASEA and MYAB annual updates; cultural heritage & environmental conditions). However, MX-100000611 is now the principal multi-year authorization

for the RVM Project. A summary of the current Permits and applications are provided in Table 4-3 below.

*Table 4-3: Summary of Current Permits and Permit Applications*

Permit	Status	Issued/ Submitted	Approval End / Term	Key Scope (Drill / IP/ Access)	Total New Disturbance	Notes
MX-100000611 (RVM Project)	Open	Issued: 17 Dec 2025	Ends: 16 Dec 2030	Up to 36 drill sites; ~75 line-km IP; access: ~1.5 km mod + ~4.5 km new trails; fuel ≤820 L; core structures	2.63 ha	Finalizes MYAB (Tracking No. 100412762); \$19,000 security posted
MX-100000386 (Mine No. 1620376)	Active	Issued: 07 Dec 2023	Ends: 06 Dec 2028	10 drill sites; 15 line-km exposed-electrode IP; access: 0.5 km mod + 2.0 km new road; operating window Oct 16–May 14	~1.38 ha	Earlier Rayfield-specific authorization; ASEA & MYAB updates; cultural heritage & environmental conditions apply.

The applicable regulatory framework governing these authorizations—including the Mines Act, the Health, Safety and Reclamation Code (HSRC), and related environmental requirements—is summarized in Section 20.2 of this Report.

## 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

### 5.1 Accessibility

The Rayfield Property is accessible via several well-established routes from major highways. The most practical access is via Highway 97 (Cariboo Highway) with a turnoff onto Chasm Road. Alternatively, access can be gained from Highway 1 by turning onto Deadman-Vidette Road. From Chasm Road, secondary routes including Chasm Main and associated forestry roads provide direct access to the Property.

The northern part of the Rayfield Property is topographically divided by the Rayfield River, which has carved a ~10 km-long canyon between Crater Lake in the north and the Bonaparte River to

the south. Access to the west side of the Property is gained via Hutchison Road from North Bonaparte Road. The east side is accessed by driving east from 70 Mile House along North Bonaparte Road, then southeast along Eagan Bonaparte Forest Service Road 3700 (FSR 3700), followed by various logging roads traversing the Property.

Main access roads such as Hutchison Road and FSR 3700 are suitable for 4x4 vehicles. An extensive network of legacy forestry and mineral exploration trails can be accessed using all-terrain vehicles (ATVs). The Property is divided into three contiguous claim blocks, each with unique access routes and tailored exploration plans.

## 5.2 Climate and Exploration Season

The Property is located within the Interior Plateau climatic region of British Columbia, which is characterized by cold winters and warm, dry summers. Snow cover is common from November through April, with peak snowpack occurring in late winter. The exploration season typically spans from late May through early October, when ground conditions allow for road access, geological mapping, and sampling activities. Shorter programs may be feasible during winter months using snowmobiles or other specialized equipment, depending on access and terrain conditions.

## 5.3 Local Resources and Infrastructure

The Property lies approximately 39 km east-southeast of the community of 70 Mile House and approximately 41 km south of 100 Mile House, both of which are situated along Highway 97. These towns provide basic services and infrastructure such as fuel, food, accommodation, and equipment suppliers. More advanced services, including medical facilities and heavy equipment repair, are available in 100 Mile House and the larger centers of Kamloops and Williams Lake.

Electric power infrastructure exists within the region, and surface water is abundant, particularly near the Rayfield River and various lakes and wetlands that characterize the area. There is sufficient access to water sources for exploration needs, although any significant usage would require permitting. Suitable locations for temporary exploration camps are present on the Property, and accommodations for field crews may also be arranged in nearby towns depending on the program's size and logistics.

## 5.4 Physiography

The Rayfield Property is situated on the Fraser Plateau within the Bonaparte River drainage basin. Elevations range from approximately 900 meters above sea level along the Rayfield River to 1,100 meters in the northwest portion of the Property. The plateau surface is gently rolling at ~1,050 meters, interrupted by low hills rising 30 to 90 meters. The Rayfield River cuts a steep, deeply incised canyon through the plateau, providing significant bedrock exposure along its slopes.

The terrain is generally flat to moderately sloped, with areas of poor drainage, leading to the presence of numerous marshes and shallow lakes. Glacial overburden is moderately thick in parts of the plateau, especially in the northwest where outcrop is limited. However, glacial cover appears to thin closer to the Rayfield River, where rock outcrops are more common.

Vegetation consists of pine and aspen on drier, elevated areas, while fir, spruce, and willow dominate the lower, wetter zones. The southern end of the Property includes the Vidette Canyon, a 20 km-long erosional feature that transitions into a broader valley to the south near Savona and Kamloops Lake. A paved/gravel road (Deadman-Vidette Road) follows the canyon and adjacent waterways, further enhancing access and logistical support for exploration activities.

## 6.0 HISTORY

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### 6.1 Past Ownership and Property Transactions

The Rayfield Project has a long exploration history extending back to the early 20th century. The area has seen various cycles of staking, exploration, and lapsing of mineral tenures, often in response to changes in commodity prices and exploration focus.

Multiple companies have explored parts of the Rayfield Property, including Kennco Exploration, Cominco Ltd., AMAX Exploration Inc., Brenda Mines Ltd., Candorado Operating Company Ltd. (later Sunrise Resources Ltd.), Inco Gold Company, Chevron Canada Resources Ltd., Noranda Exploration Co., Iron River Resources Ltd., and Queenstake Resources Ltd. More recent work has been carried out by individual prospectors and junior exploration companies such as D.W. and W.W. Tupper (2015), prior to consolidation under Golden Sky Minerals Corp.

Ownership of claims has transitioned multiple times, and at various points, large land packages were subdivided and optioned. The current configuration of the Property under Golden Sky Minerals Corp. represents a consolidation of three key historical areas: Rayfield, Vidette, and Mowich.

## 6.2 Historical Exploration and Production

### 6.2.1 Rayfield Project

Exploration at Rayfield began in the 1950s, with documented work by Kennco in 1963 and Cominco in 1966, involving early soil and magnetic surveys. A significant phase of exploration occurred from 1968 to 1970 when AMAX Exploration Inc. conducted grid-based soil sampling, geological mapping, magnetic and induced polarization (IP) surveys, and a 31-hole percussion drilling campaign. This program identified a large area of weak copper mineralization (0.05–0.1% Cu) over 450 m by 2,100 m. The best intersection reported was 0.42% Cu over 6.1 m.

Brenda Mines Ltd. drilled 22 diamond drill holes between 1989 and 1990 totaling 4,477.9 m, returning results including:

- 0.18% Cu over 43.4 m (DDH 374-3)
- 0.13% Cu over 146.0 m (DDH 374-6)
- 0.14% Cu over 99.0 m (DDH 374-13)

Candorado Operating Company Ltd. conducted airborne geophysics in 2006, followed by soil sampling, petrography, and diamond drilling in 2007–2008. Drill results included 0.13% Cu over 66.8 m. Unfortunately, drill core was destroyed in a 2017 wildfire. Claims lapsed in 2014 after a brief phase of prospecting in 2015.

### 6.2.2 Vidette Project

The Vidette area has seen intermittent exploration since 1926. Historical production at the Vidette mine (1933–1940) yielded ~40,000 oz Au, 30,000 oz Ag, and 100,000 lbs Cu. Several historical workings remain, including those at the Dexheimer zone, Savona Mine, and Hamilton Creek Mine.

In the 1970s, Keda Resources Ltd. documented geochemical and trenching results with elevated copper and gold values. Work by Chevron in 1984 and Noranda in the mid-1980s included soil

and rock sampling, magnetic surveys, and diamond drilling. Inco Gold Company conducted extensive soil surveys and drilling in 1988–1989, identifying anomalous gold values and zones of epithermal alteration. Highlights include:

- 4.62 g/t Au over 0.55 m at 114.7 m depth
- 1079 ppb Au over 14 m (incl. 4552 ppb over 2.77 m)

In 1995, Queenstake Resources Ltd. drilled three NQ holes and interpreted the presence of a buried porphyry system. Ray Stad conducted a biogeochemical survey in 2009. The Vidette area is considered prospective for both high-grade epithermal gold and large-tonnage porphyry Cu-Au mineralization.

### 6.2.3 Mowich Project

Historical exploration in the Mowich area dates back to 1879. Modern exploration commenced in the early 1980s with soil sampling and trenching by M. Dickens and N.L. Tribe, followed by mapping and trenching conducted by Northair Mines Ltd. in 1984. Between 1988 and 1989, Iron River Resources Ltd. completed soil and trench sampling, magnetometer, VLF-EM, and induced polarization surveys, and drilled four short diamond drill holes targeting VLF-EM anomalies associated with augite porphyry systems. Drilling intersected augite porphyry and tuff breccia but did not encounter significant mineralization. The drill holes did not test the currently interpreted intrusive–fault targets located upslope of the mineralized slump. Select historical samples nevertheless returned highly anomalous values of up to 18.4 g/t Au, 325.6 g/t Ag, and 63.8% Cu from vein material.

During prospecting in 2022, samples were collected from mineralized material within a localized slump that has migrated downslope through a narrow gully from the west and terminates at the base of the Deadman Valley. Angular, dense, malachite-rich fragments recovered from this slump returned assays of up to 286 g/t Au, 200 g/t Ag, and 37.45% Cu. Mineralogical analysis confirmed that the samples are hosted in serpentinized mafic volcanic rocks, consistent with Nicola Group basaltic lithologies present in the area.

### 6.3 Historical Mineral Resource Estimates

No historical mineral resource or reserve estimates compliant with CIM Definition Standards or NI 43-101 have been reported for the Rayfield Property. While some historical drilling programs (e.g., AMAX and Brenda Mines) reported broad zones of copper mineralization, these were preliminary in nature and not sufficient to define a compliant mineral resource.

Any historical estimates mentioned in previous reports should be considered speculative and are not treated as current by the Author or Golden Sky Minerals Corp.

### 6.4 Previous Technical Reports and Data

Numerous assessment reports have been filed with the British Columbia Ministry of Energy, Mines and Low Carbon Innovation (BCMEM) over the last seven decades. These include geological maps, geophysical survey results, soil and rock geochemical data, and drill logs. Key reports cited in this Technical Report include:

- AMAX Exploration Inc. (AR1723, AR2175)
- Brenda Mines Ltd. (AR19927)
- Candorado Operating Company Ltd. (AR29110, AR29538, AR30271)
- Geoscience BC's QUEST-South geophysical and geochemical surveys (2009-2010)
- Chevron Canada Resources Ltd., Inco Gold Company, and others

These historical data have been carefully reviewed and, where possible, verified through field visits, reinterpretation, and integration into Golden Sky's exploration planning. However, data quality and analytical standards vary widely across time and operators.

## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

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### 7.1 Regional Geology

The Rayfield Property is located within the Intermontane Belt of south-central British Columbia, approximately 85 km east of the Fraser River Fault. The Intermontane Belt comprises a series of terranes that were accreted to the ancestral North American margin beginning in the Early Jurassic (ca. 200 Ma), including the Cache Creek, Quesnellia, and Stikine terranes (Figure 7-1).

These form part of a complex tectonic and magmatic framework that hosts a number of significant porphyry copper and epithermal deposits throughout British Columbia.

The Quesnel terrane is particularly important in this context, being the host to the prolific Nicola Group rocks, which consist of Upper Triassic to Lower Jurassic volcanic and sedimentary sequences. These are spatially and genetically associated with alkaline to calc-alkaline intrusions that have been the focus of porphyry copper–gold exploration in the region. The Property is almost entirely hosted in Nicola Group marine sediments and volcanic rocks. Younger, flat-lying Miocene to Pleistocene volcanic units of the Chilcotin Group (mainly basalt flows) cover large areas of the Intermontane Belt and obscure many of the older prospective units.

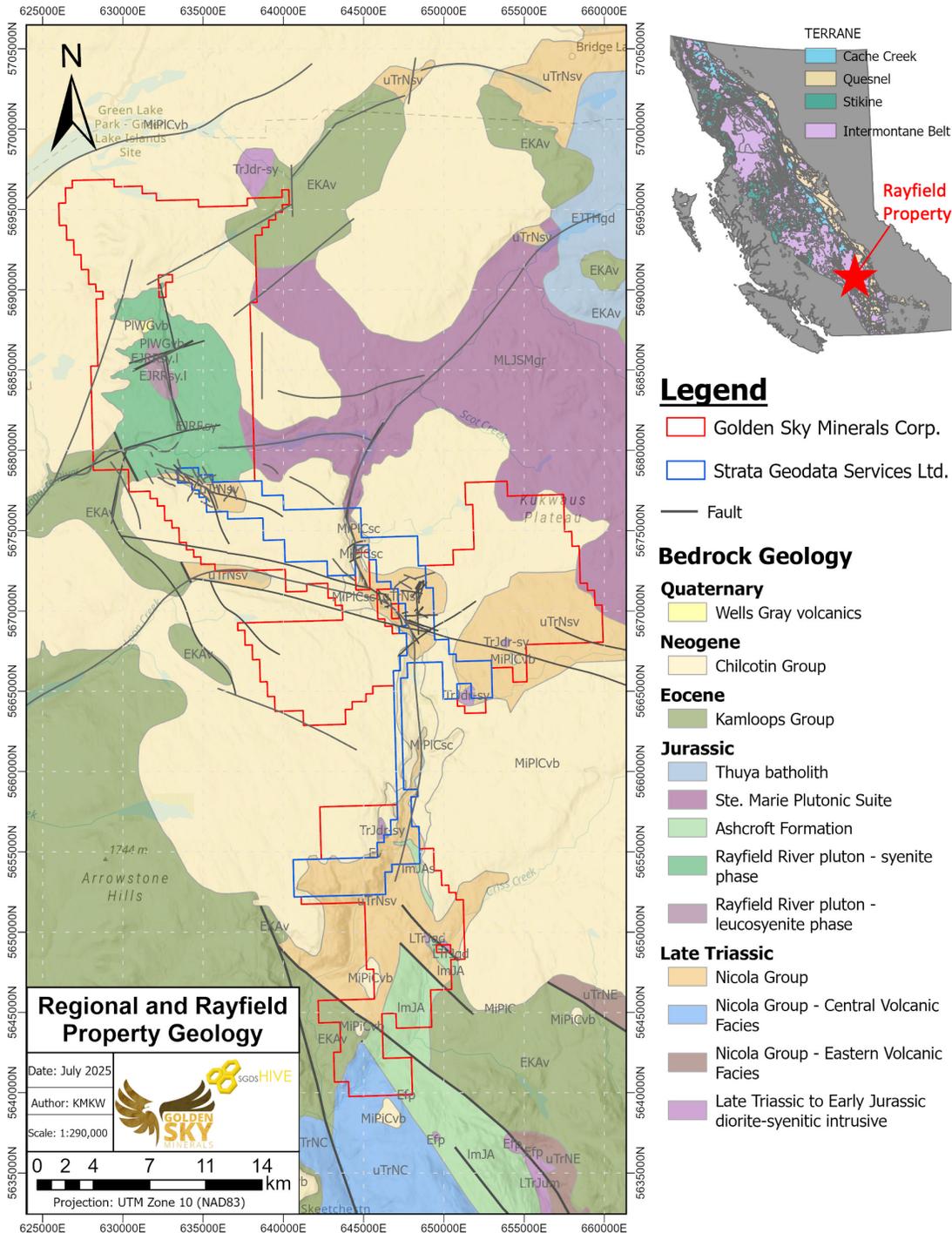


Figure 7-1: Regional and Property bedrock geology for the Rayfield Project.

## 7.2 Local Geology and Stratigraphy

### 7.2.1 Rayfield Area

The Rayfield Project area is underlain by a 65 km<sup>2</sup> exposure of Late Triassic to Early Jurassic Nicola Group volcanic and intrusive rocks, which are typically overlain by flat-lying younger Miocene to Pleistocene basalt flows of the Chilcotin Group, which obscure older lithologies in parts of the region (Figure 7-1). The Chilcotin basalts are typically massive, olivine-rich and exhibit limited internal stratigraphy with variable thickness.

Several intrusive phases, ranging from the Late Triassic to Early Jurassic, are present on the Property and are dominated by leucocratic syenite, hornblende syenite, leucosyenite, and diorite. The Rayfield River pluton is the most dominant and is comprised of two subunits: hornblende syenite surrounding a north-northwest trending leucosyenite center (1250m wide). These intrusions are spatially associated with zones of brecciation, pegmatite development, and hydrothermal alteration, particularly in the northern parts of the property near the Rayfield River. These plutonic rocks host visible copper mineralization and exhibit alteration styles consistent with an alkaline porphyry copper system.

### 7.2.2 Vidette Area

The Vidette area occupies the central part of the Rayfield Project and encompasses the Gnome and Semlin target zones. The area is predominantly underlain by Nicola Group volcanic and sedimentary rocks, including basalt, volcanic sandstone, siltstone, and conglomeratic sandstone, along with lesser limestone and felsic tuff. These units occur in erosional windows through the overlying Chilcotin Group basalts which covers most of the central part of the Property (Figure 7-1). The Chilcotin Group is described as olivine basalt flows, minor interflows breccia and pillow breccias and locally includes gabbro, conglomerate, sandstone, siltstone and diatomite (Logan and Schiaizza, 2014; Read, 2000). The northwest portion of the Property borders on the Early Jurassic hornblende-syenite of the Rayfield River Pluton where copper mineralization is widespread but low grade (Logan and Schiaizza, 2014). A small section of the Middle Jurassic Monzogranite of the Bonaparte Lake phase of the Thuya Batholith is indicated in the north central part of the Property (Logan and Schiaizza, 2014). The Nicola rocks around the past producing Vidette Mine are intruded by biotite-hornblende granodiorite plugs that are possibly related to the

Thuya Batholith (Vidette Minfile 092P 086). Alteration and mineralization styles in this area suggest a transitional setting between porphyry and epithermal environments.

### 7.2.3 Mowich Area

The Mowich area is located along the western flank of the Deadman River valley and is underlain predominantly by Triassic Nicola Group mafic volcanic rocks with interbedded clastic units, which are locally overlain by Miocene to Pleistocene volcanic and sedimentary rocks of the Chilcotin Group. Bedrock exposure is generally poor due to extensive volcanic cover and surficial deposits, contributing to a structurally and stratigraphically complex geological setting.

Several small syenitic to dioritic intrusive bodies of Late Triassic age (TrJdr-sy) are exposed in the northeastern, central, and southeastern parts of the Mowich area (Figure 7-1). These intrusions are spatially associated with northwest-trending fault corridors, which are consistent with regional structural trends observed elsewhere in the Quesnel terrane. In the southeastern portion of the Property, the central volcanic facies of the Nicola Group are locally interlayered with sedimentary rocks of the lower to middle Jurassic Ashcroft Formation, consisting primarily of siltstone and mudstone.

Along the Deadman River valley, outcrops of the Deadman River Formation (basal Chilcotin Group) comprise rhyolitic ash deposits and fluvial to lacustrine sediments. These units are unconformably overlain by basalt flows and intercalated rhyolitic ash with local diatomaceous sediments of the Chasm Formation (upper Chilcotin Group) (Read, 2000). This stratigraphic architecture indicates a complex volcanic and sedimentary history that has obscured much of the older prospective Nicola Group stratigraphy.

Copper–gold–silver mineralization documented in the Mowich area occurs primarily within shear zones cutting vesicular basalt and augite porphyry of probable Nicola Group affinity, and within associated quartz–carbonate vein and fracture networks. Identified copper minerals include chalcopyrite, bornite, native copper, and cuprite, with local gold and silver enrichment.

A prominent geomorphic feature of the area is a steep, narrow gully that drains eastward into the Deadman Valley. At the base of this gully, a slump or mudflow accumulation hosts angular, malachite-rich copper fragments (“nuggets”) that were initially recovered in 2022 and

subsequently confirmed during a Qualified Person site visit in 2025. Petrographic, QEMSCAN, and hand-specimen observations indicate that these fragments are hosted by serpentinized mafic volcanic rocks, consistent with Nicola Group lithologies.

The angularity, textural freshness, and lithological consistency of the mineralized fragments, together with their occurrence within a confined depositional setting, suggest limited transport distance and a proximal upslope bedrock source. Nevertheless, the absence of exposed in situ mineralization at the Discovery Showing indicates that at least some of the mineralized material has been secondarily transported, most likely by localized mass-wasting or mudflow processes from an as-yet unidentified source area upslope.

### 7.3 Structural Geology

Regional and local structural trends are dominated by northwest- and northeast-trending fault systems, with significant overprinting by brittle faulting and fracturing (Figure 7-1). The emplacement of the Rayfield syenitic intrusive phases appears to be structurally controlled, with mineralization preferentially developed along fault zones, shear structures, and fracture sets.

Structurally, the intrusive shows foliation, faulting, and feldspar veining. Foliation is moderately- to well-developed throughout the leucocratic syenite and parallels lithological contacts within the intrusives. It varies from a near vertical dip at the outer margins, to about 45°NE near the centre of the core. This suggests that the leucocratic core dips in a northeast direction beneath the amphibole syenite unit. In strongly fractured areas, the feldspar veinlet patterns have several common orientations, though none predominate. The most widespread veinlet set at Rayfield is a sheeted set of grey feldspar veinlets trending north-northwest and dipping moderately to the west (40–60°). Brecciation, quartz veining, and local pegmatite intrusions further suggest a complex structural environment that facilitates hydrothermal fluid flow and mineral deposition.

In the Vidette area, historical workings and geophysical interpretations indicate the presence of shear zones, stockworks, and breccias associated with quartz-carbonate veining, with mineralization localized along structural intersections.

## 7.4 Deposit Types and Mineralization Styles

The Rayfield Project is prospective for multiple deposit types (Figure 7-2), reflecting its diverse geological setting:

- **Alkaline Porphyry Cu-Au System (Rayfield):** Characterized by syenite-hosted copper mineralization (chalcopyrite, bornite, chalcocite, and native copper), typically as fracture fillings, quartz veinlet margins, and locally as disseminations. Secondary copper oxides (cuprite, malachite) occur in fault gouge and weathered zones. Alteration is not widespread and is typically constrained to fractures, faults, or quartz veins. Observed alteration types include potassium feldspar, epidote, chlorite, sericite, and hematite.
- **Epithermal and Orogenic Gold Veins (Vidette):** Quartz-carbonate veins with associated pyrite, chalcopyrite, and minor molybdenite. Breccias and stockworks host gold-silver mineralization, with historic workings reporting high-grade assays (e.g., 0.14 oz/t Au, 0.35% Cu). Alteration includes chlorite, sericite, calcite, and hematite.
- **Porphyry Cu-Mo-Au Systems (Vidette):** Granodiorite intrusions in Nicola greenstones host quartz-molybdenite veins and disseminated copper mineralization. These systems are interpreted as part of a deeper intrusive complex potentially related to the Thuya Batholith.
- **High-Grade Shear Zone–Hosted Cu-Au (Mowich):** Copper mineralization (chalcopyrite, bornite, native copper, cuprite) in shear zones within vesicular basalts and augite porphyry. Historical samples returned values exceeding 30% Cu and 100 g/t Au, although the transported nature of the mineralized material makes interpretation uncertain.

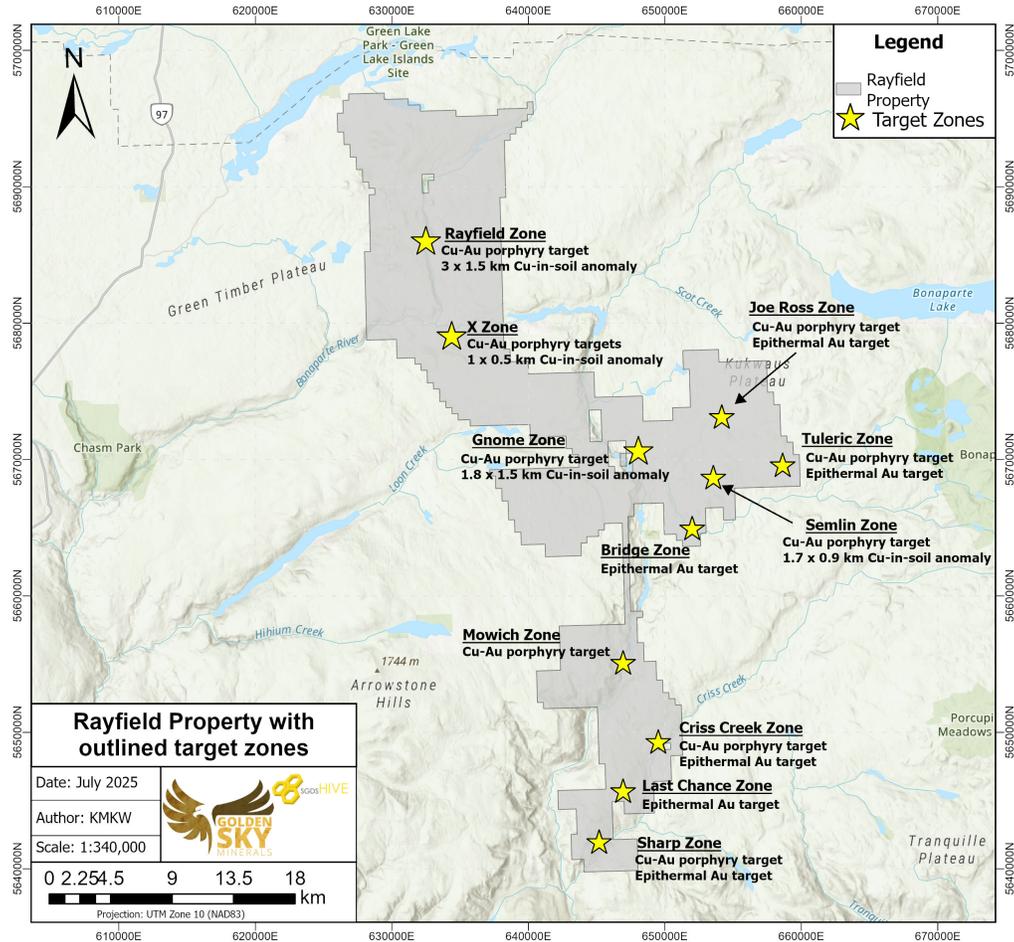


Figure 7-2: The Rayfield Property with outlined target zones.

## 7.5 Geological Model

The Rayfield Project is interpreted to host a multi-phase intrusive complex that has generated a spectrum of mineralizing environments. The dominant model at Rayfield is that of an alkaline porphyry copper system, driven by syenitic intrusions that generated broad zones of low-grade Cu mineralization and localized higher-grade zones near structural corridors (Figure 7-3).

In contrast, the Vidette area (Gnome and Semlin target zones) appears to be transitional between porphyry and epithermal systems, where intrusive plugs and associated hydrothermal breccias have localized gold-rich quartz vein systems, and possibly deeper copper-molybdenite porphyry-style intrusions.

The Mowich area remains less well understood but may represent a structurally controlled high-grade copper-gold system, possibly related to deeper Nicola Group intrusives or a remobilized component within Chilcotin Group cover rocks.

Further mapping, geochemical analysis, and geophysical interpretation are required to refine these models and assess the connectivity between mineralized zones.

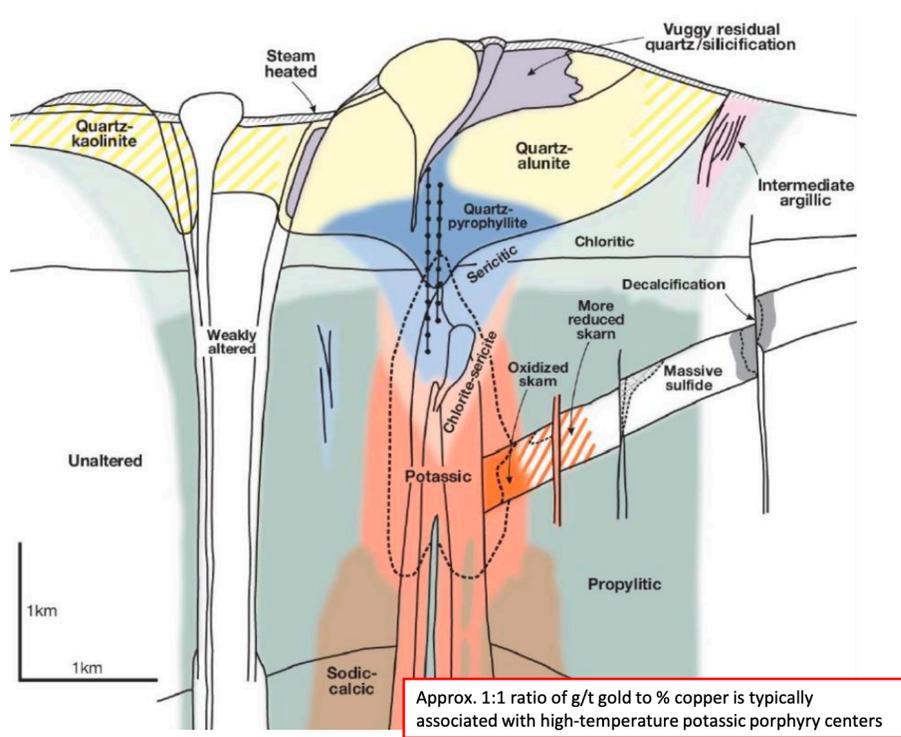


Figure 7-3: Generalized alteration-mineralization zoning pattern for porphyry copper deposits (Holiday and Cooke, 2007) after Sillitoe and Thompson (2006).

## 8.0 DEPOSIT TYPES

### 8.1 Classification of Deposits

The Rayfield Project area hosts several types of mineralization across its three main target zones. Based on lithological associations, mineralogy, alteration styles, and structural setting, the following deposit types are interpreted within the Property:

- **Alkaline Porphyry Copper-Gold (Cu-Au) Deposits – Rayfield Area**  
These deposits are characterized by copper sulphide mineralization (chalcopyrite, bornite, chalcocite, native copper) associated with syenitic and monzonitic intrusive phases. Mineralization is controlled by fractures, faults, and veinlets and is often accompanied by potassium feldspar, epidote, and chlorite alteration.
- **Porphyry Cu-Mo-Au Deposits – Vidette Area**  
In the Vidette region, porphyritic intrusions of granodiorite to diorite host quartz vein-hosted molybdenite and chalcopyrite mineralization. These represent a classic porphyry-style system, potentially related to the Thuya Batholith.
- **Orogenic and Epithermal Gold Veins – Vidette Area**  
Gold-bearing quartz veins associated with pyrite and chalcopyrite occur in greenstone and sedimentary rocks of the Nicola Group. Stockworks, shear zones, and breccia textures suggest both mesothermal (orogenic) and epithermal overprints.
- **Shear Zone-Hosted High-Grade Cu-Au-Ag – Mowich Area**  
The Mowich area features mineralized float with very high copper, gold, and silver grades (e.g., >30% Cu, >100 g/t Au, >200 g/t Ag), likely sourced from shear zones in Nicola Group augite porphyry. The occurrence is interpreted as structurally controlled, possibly of epithermal or remobilized porphyry origin.
- **Industrial Mineral (Diatomite) Deposits – Mowich and Vidette Areas**  
Multiple diatomaceous earth showings are associated with interlayers in the Chilcotin Group basalt flows. While not the primary exploration target, these showings may hold industrial mineral potential.

## 8.2 Analogues and Known Deposit Models

Several well-documented analogues can be used for the deposit types identified in the Rayfield Project:

- **Rayfield – Alkaline Porphyry Cu-Au:**  
Comparable to deposits such as Mount Polley, Copper Mountain, and Galore Creek, where syenite to monzonite intrusions in the Quesnellia or Stikine terranes host copper-gold mineralization. These deposits typically display structurally controlled zones of disseminated and vein-hosted mineralization with potassic and propylitic alteration.

- **Vidette – Porphyry Cu-Mo-Au and Epithermal Systems:**  
Comparable to the Afton-Ajax district near Kamloops, BC, where intrusive centers host both porphyry copper-molybdenum mineralization and peripheral epithermal gold systems. The setting of the Vidette area, with biotite-hornblende granodiorite plugs and multiple vein generations, aligns with this model.
- **Mowich – High-Grade Shear-Hosted Cu-Au-Ag:**  
These occurrences are loosely comparable to Mother Lode-style or Iron Oxide Copper Gold (IOCG) systems, especially if structural controls, iron oxides, and high-grade copper-gold-silver associations are further confirmed.  
Given the Project's position along the same northwest-trending structural corridor that hosts the New Afton Mine, and similarities in alteration styles (potassic-propylitic), metal associations, and intrusive compositions, a New Afton-style alkalic porphyry model is considered a valid analogue for the Rayfield Project.
- **Diatomite Deposits:**  
Comparable to industrial-grade diatomite deposits like those at Diatomite Ridge (NV, USA) and Red Lake (BC), hosted in intervolcanic layers. However, the limited work on these occurrences at Mowich precludes detailed comparison at this stage.

### 8.3 Economic Relevance of the Deposit Types

- **Porphyry Systems (Rayfield and Vidette):**  
Porphyry deposits are among the world's most important sources of copper, molybdenum, and gold. In British Columbia, they form the backbone of the provincial mining economy, with operations such as Highland Valley Copper and Mount Milligan demonstrating long mine lives and large tonnages. The presence of both alkaline and calc-alkaline porphyry systems on the Rayfield Property underscores its economic potential.
- **Epithermal and Orogenic Gold Veins (Vidette):**  
While more localized in extent, these vein systems can host high-grade ore zones suitable for underground mining. The historical production from the Vidette Mine validates the gold potential in the region. Veins with bonanza-grade values (up to 4.8 g/t Au) have been documented historically.

- **High-Grade Shear-Hosted Cu-Au (Mowich):**

Although currently interpreted from transported material, the extreme grades reported in historic documentation (>30% Cu and >100 g/t Au) suggest potential for a high-value discovery if a primary source can be located. These deposit types can yield economically significant, albeit smaller, high-grade zones.

- **Diatomite (Mowich):**

Diatomite is a commercially valuable industrial mineral used in filtration, absorbents, and agriculture. The occurrences in the Mowich area are regionally interesting, but their economic viability is yet to be assessed due to a lack of modern exploration or delineation.

**Note:** *References to deposits such as Mount Polley, Copper Mountain, Mount Milligan, and New Afton are provided as geological analogues. These deposits are not on the Rayfield Property, and the Qualified Person cautions that mineralization hosted on adjacent or analogous properties is not necessarily indicative of mineralization on the Rayfield Property.*

## 9.0 EXPLORATION

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### 9.1 Summary of Exploration Methods and Activities

Exploration programs conducted between 2021 and 2025 are directly comparable in terms of objectives, analytical methods, and data quality. Earlier work focused on reconnaissance mapping, confirmation of historical showings, and compilation of legacy datasets, while later programs emphasized systematic geochemistry, ground IP surveys, and modern airborne geophysics. Analytical methods across programs were consistent with industry standards, with ISO-certified laboratories used throughout, allowing results from different campaigns to be meaningfully integrated.

Golden Sky Minerals Corp. has conducted multiple exploration campaigns on the Rayfield Project with the objective of delineating porphyry, skarn, and epithermal to mesothermal copper-gold mineralization. Exploration activities have targeted multi-phase intrusions within the Quesnel Trough, a highly prospective belt hosting deposits such as Mount Polley and Mount Milligan.

Between 2021 and 2024, exploration methods included:

- Geological mapping and prospecting;
- Soil, rock, and stream sediment sampling;
- Compilation and reinterpretation of historical geochemical and geophysical data;
- Ground-based Induced Polarization (IP) surveys;
- Integration of airborne magnetic and radiometric datasets.

These activities focused on identifying alteration halos, structural corridors, and geochemical anomalies indicative of buried mineralized systems, and refining drill targets.

## 9.2 Surface Work: Mapping, Sampling, and Geophysics

### 9.2.1 Geological Mapping and Prospecting

Mapping was conducted across key target zones, including Rayfield, X, Gnome, Semlin, and Mowich. Emphasis was placed on lithological discrimination, alteration styles, vein density, and fault systems. Key observations included:

- Propylitic and localized potassic alteration (biotite  $\pm$  magnetite  $\pm$  K-feldspar);
- Sheeted and stockwork feldspar veining, locally up to 30 veins/m;
- Disseminated and vein-hosted copper sulfides (chalcopyrite, bornite) and copper oxides (malachite, azurite);
- Structural measurements reveal two primary fault sets trending northwest (NW) and northeast (NE), possibly controlling emplacement of intrusions and mineralized fluids.

### 9.2.2 Soil Sampling Programs

Soil sampling programs were conducted in 2021, 2022, and 2023, with over 3,700 B-horizon samples collected (Figure 9-1). Grids were designed to delineate copper and multi-element anomalies over magnetic and radiometric features.

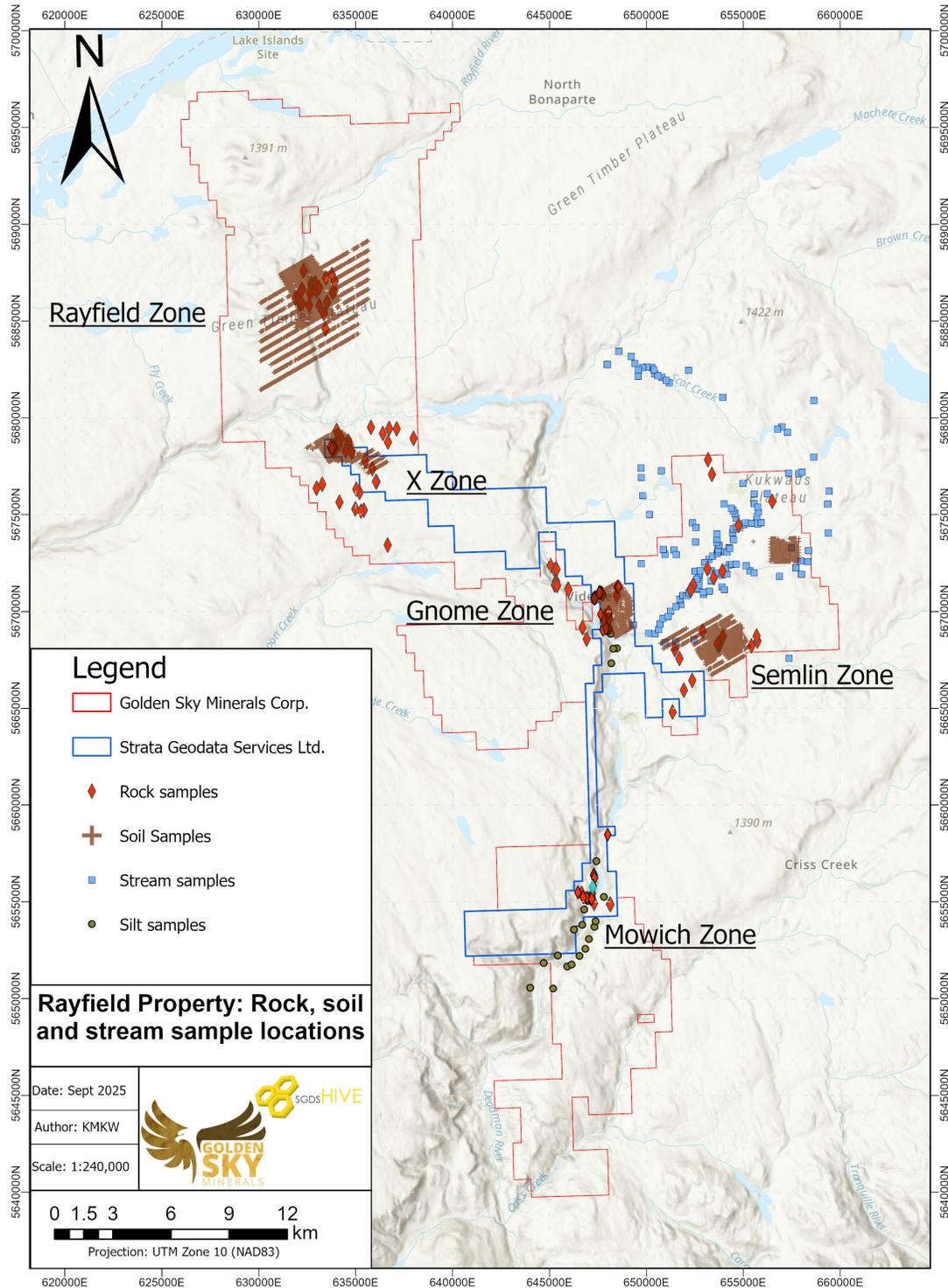
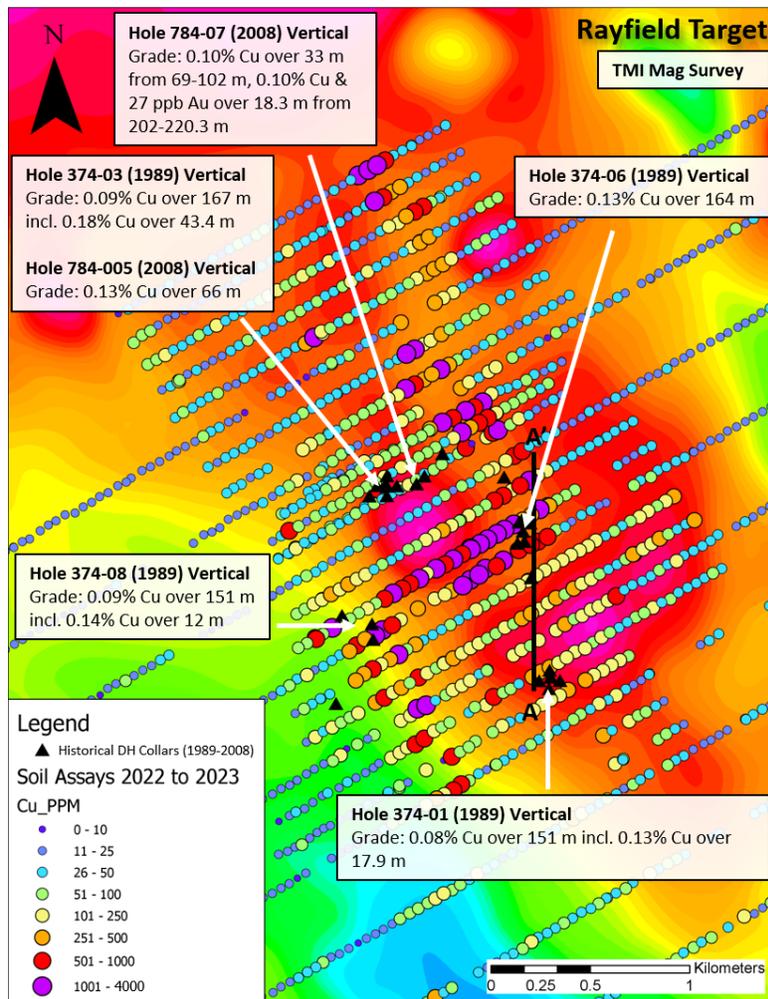


Figure 9-1: Locations of historic drill holes, rock, soil and stream samples within the Rayfield Project.

## Rayfield Zone

Soil sampling programs within the Rayfield zone revealed a 3 km x 1.5 km Cu-in-soil anomaly with assays up to 4000 ppm Cu. Elevated copper values in soil samples coincide with magnetic anomalies and correlate with elevated values of pathfinder elements (Mn, Zn, V, Ba) commonly associated with deeper alteration bounding the core (potassic altered zone) of porphyry systems. Elevated Cu-in-soil values along the northern and southern margins of the soil surveys suggest that mineralization continues to the northwest and southeast within the thick till cover (Figure 9-2).



*Figure 9-2: Copper-in-soil assays (2022-2023) overlying TMI Aeromagnetic survey. Elevated levels in copper also coincide with pathfinder geochemical elements commonly associated with deeper alteration.*

### **X Zone**

Soil surveys within the X zone revealed a 1.0 km x 0.5 km anomaly with elevated values of Cu-Au-Zn-As-Co-Ni-Mo-Li-Rb and remains open to the northwest and southeast. This soil anomaly flanks and partially overlies an elongated geophysical magnetic anomaly that potentially could be outlining a porphyry system at depth. The pathfinder elements in this anomaly overly an area with strong propylitic alteration observed in the outcrop, suggesting the upper portions of a mineralized porphyry system may be exposed at or near the surface.

### **Gnome Zone**

A multi-element Cu-Au-Zn-As-Co-Ni-Mo-Li-Rb soil anomaly extends approximately 1.8 km x 1.5 km and remains open to the southeast highlighting strong potential for additional mineralized extensions (Figure 9-3). Elevated Li and Rb values indicate the potential for nearby alkalic intrusions. The soil anomaly closely correlates with a low-moderate magnetic response on a regional geophysical survey.

### **Semlin Zone**

The 2023 soil survey at the Semlin zone successfully expanded a multi-element geochemical anomaly to an area measuring approximately 1.7 km x 0.9 km (Figure 9-3). Within this zone, elevated concentrations of Cu-Au-Zn-As were detected, indicating a strong geochemical signature with soil values up to 1.9 g/t Au and 294 ppm Cu. The anomaly is spatially associated with known bedrock-hosted disseminated and veinlet-style copper-gold mineralization and remains open to the northwest and northeast, reinforcing its exploration significance. Additionally, elevated levels of Li and Rb suggest the presence of nearby alkalic intrusions.

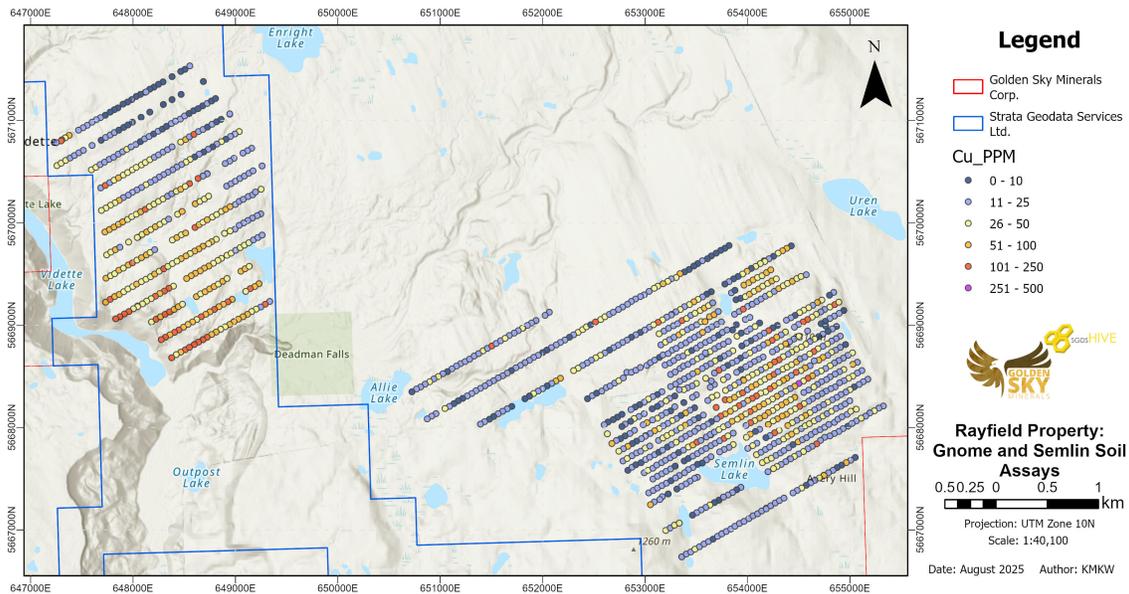


Figure 9-3: Cu-in-soil soil assay results over the Gnome and Semlin target zones within the Rayfield Project, BC.

### 9.2.3 Rock Sampling

Systematic rock sampling across all target areas yielded several high-grade copper and polymetallic samples.

#### Rayfield Zone

Key copper-bearing minerals observed—bornite, chalcopyrite, and secondary copper oxides—indicate a mineralized hydrothermal system hosted primarily in hornblende syenite with intense stockwork and sheeted quartz veining, locally reaching up to 30 veins per meter. Mineralization is most evident along fractures and vein surfaces (Figure 9-4). From 2022 to 2024, several samples confirmed this system: Sample B0224902 (2022) from malachite-stained tonalite assayed 0.67% Cu and 111 ppb Au; Sample C0068033 (2022) from altered granite returned 0.41% Cu; Sample 118884 (2023) from tonalite/syenite yielded 0.63% Cu and 92 ppb Au; and Sample 118891 (2024) from silicified hornblende syenite with chalcopyrite veinlets assayed 0.51% Cu and 79 ppb Au,

further supporting the presence of hydrothermal alteration and mineralization.



**Sample 118890 (2024): Megacrystic intrusion -** chalcopyrite & bornite associated with potassic veinlet. Assayed 1,724 ppm (0.17%) Cu and 24 ppb Au.



**Sample 118891 (2024): Hornblende syenite - sulphide** veinlets of chalcopyrite, fractures coated with malachite. Assayed 5,107 ppm (0.51%) Cu and 79 ppb Au.



**Sample 118892 (2024): Hornblende syenite – thin** veneer of 3% bornite & 1% chalcopyrite on fracture surface. Assayed 2,320 ppm (0.23%) Cu and 59 ppb Au.



**Sample 118888 (2024): Hornblende syenite – stockwork** quartz veins with 2% bornite, 1% chalcopyrite and malachite on vein margins. Assayed 2,320 ppm (0.23%) Cu and 59 ppb Au.

*Figure 9-4: Select rock samples (2024) displaying mineralization associated with stockwork quartz veining and fracture surfaces.*

## **X Zone**

Mineralization at the X zone was predominantly restricted to quartz or potassium-feldspar veins within metasediments or tonalites/diorites. The highest-grade sample collected in 2022 (sample 118833) assayed 0.75% Cu and was collected from a diorite with minor potassium-feldspar veinlets with blebby chalcopyrite-bornite- malachite-azurite present along the vein margins.

## **Gnome Zone**

Rock exposures within this zone are limited due to till cover and mineralization on the surface is predominantly observed in chalcedonic quartz-carbonate (calcite) veins hosting disseminated pyrite and chalcopyrite. Sample 118877 (2023) was collected from hydrothermally brecciated basalt with intense chlorite alteration, quartz-potassic veinlets, and rare 1 cm-thick magnetite veins. Mineralization included 0.5% disseminated chalcopyrite and minor malachite, assaying 23 ppb Au and 211 ppm Cu. Nearby, Sample 118878 was taken from a large angular boulder of chalcedonic quartz-carbonate veining with no visible sulfides, returning 26 ppb Au, 22.3 ppm Cu, 86.4 ppm Mo, and 1015 ppb Ag. Additional prospecting revealed excellent outcrop exposures with various degrees of alteration and quartz veining. Rare quartz-potassic veinlets were observed containing trace chalcopyrite and mineralization was dominated by up to 5% disseminated pyrite with rare sub-mm cubic pyrite. A 2023 sample collected from altered basalt outcrops with 10–15% stockwork quartz veining and minor siliceous alteration assayed 76 ppb Au, 12 ppm Mo, and 42 ppm Cu (Sample 118881).

## **Semlin Zone**

Rock samples from Nicola Group basalt showed up to 10% pyrite and chalcopyrite along fracture surface and as disseminations within quartz-carbonate veins, including a 4 cm-wide sulphide-rich vein that assayed 55 ppb Au, 0.2% Cu, and 135 ppb Mo. Samples from large angular boulders of strongly siliceous altered basalt on the northwest margin of this target zone revealed up to 5% disseminated pyrite with rare sub-mm quartz-sulphide stringers. Chlorite alteration is commonly associated with milky quartz-carbonate veinlets. These samples typically assayed around 100 ppm Cu, suggesting a broad zone of phyllic to propylitic alteration closely linked to a nearby geochemical soil anomaly.

### Mowich Zone

During the 2022 field program, a historic mineral occurrence (known as the Discovery Showing) was successfully relocated. Copper-rich float material, exhibiting malachite staining and ranging in size from sub-millimeter to over 5 cm, was recovered from the base of a slump. Rock float from the “Discovery Showing” returned up to 37.46% Cu, 286 g/t Au, and 200 g/t Ag (Sample D00226854); additional copper-rich basalt boulders at the Mowich Lake Copper showing yielded up to 2.5% Cu and 230 ppb Au (Figure 9-5). These elevated values are interpreted to be associated with proximal intrusive activity, supported by a strong geochemical correlation with bismuth (Bi), a known pathfinder element in porphyry and skarn-related systems.

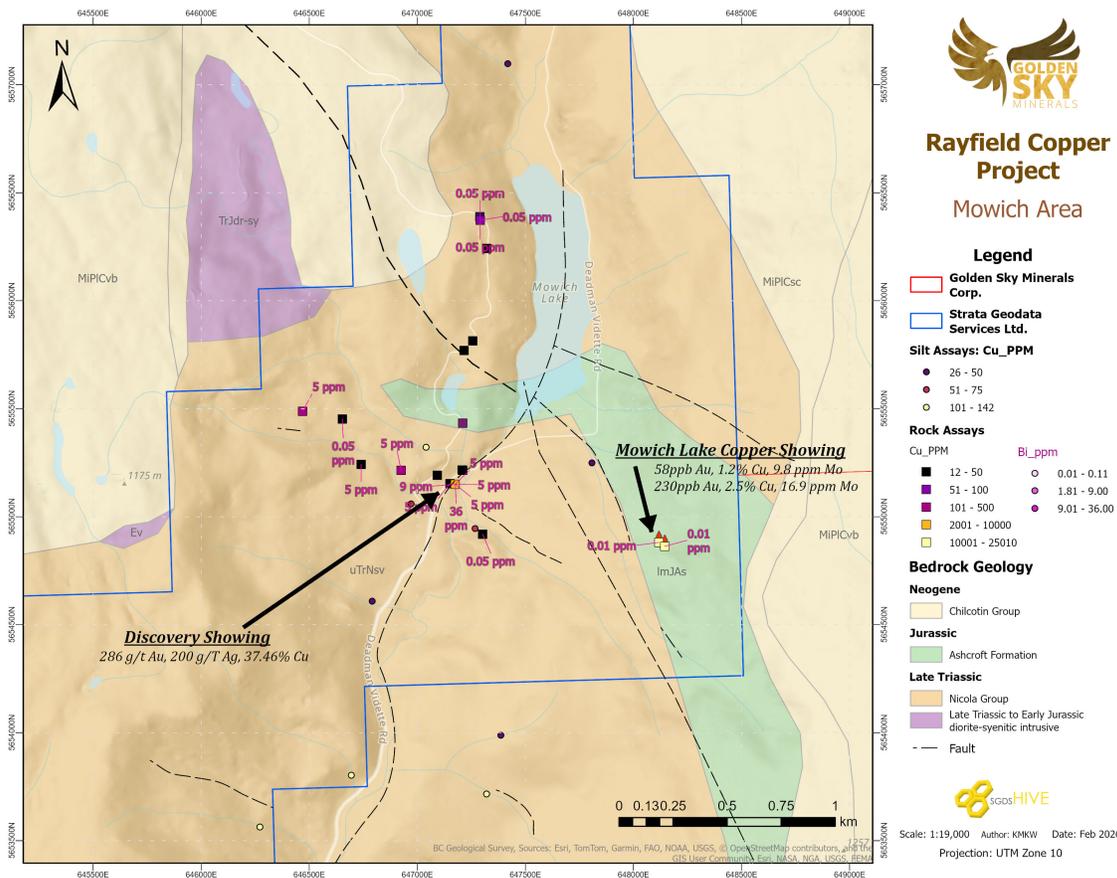


Figure 9-5: Rock and stream samples with anomalous copper (>100ppm Cu) values and bismuth (purple labels) in the Mowich area.

During the QP site visit on October 30, 2025, five check samples from the slump and upslope “blue clay” horizons assayed from 0.009–32.40% Cu, with corresponding Au to 3.93 g/t and Ag to

164 g/t. These results confirm the high-grade tenor of transported material and support a proximal bedrock source upslope. (See Table 9-1 below.)

*Table 9-1: Selected Mowich rock samples (2022-2025) assay results and context*

Sample ID	Year	Type	Location	Cu (%)	Au (g/t)	Ag (g/t)	Host/ Notes
D00226854	2022	Float (slump)	Discovery Showing (AR 41087)	37.46	286.0	200	Malachite-rich, angular fragments; serpentinized mafic volcanic
C00064618	2022	Boulder	Mowich Lake Copper showing	1.20	0.058	–	Azurite–malachite–chrysocolla in Nicola basalt; with hyalite silica.
C00064619	2022	Boulder	Mowich Lake Copper showing	2.50	0.230	–	As above; consistent with NW-trending structural corridor.
2025-RVM-QP1	2025	Float (slump)	Discovery Showing area	32.40	3.93	164	“Copper nuggets” with malachite; fibrous amphibole noted; confirms high-tenor float.
2025-RVM-QP2	2025	Float/ Colluvium	Upslope gully	2.00	0.80	10	Weathered host of nuggets; likely short transport from upslope.
2025-RVM-QP3	2025	Float	Upslope gully	0.01	<0.02	<2	Highly altered serpentinized porphyritic gabbro/basalt.
2025-RVM-QP4	2025	Clay horizon	~150 m upslope from slump	0.13	0.02	<2	“Blue clay” weathered country rock; malachite flecks.
2025-RVM-QP5	2025	Clay horizon	Further upslope	1.64	0.41	8	Similar to QP4; suggests copper mobility in colluvial profile.

The high grades reported from Mowich are derived from selective, transported float and are not representative of the property as a whole. These data do not constitute mineral resource or reserve estimates and should not be used to infer grade or continuity in bedrock. Additional work is required to locate and evaluate any in situ mineralization.

#### 9.2.4 Stream Sediment Sampling

Regional context for stream-sediment geochemistry is provided by the provincial Regional Geochemical Survey (RGS) (Han and Rukhlov, 2020). Within the Rayfield project area, these

datasets record the highest historic Cu values at 650 ppm (sample ID092I813243) and 168 ppm (sample ID092P795084) (Table 9-2).

*Table 9-2: Highest historical Cu (ppm) in stream sediment samples (RGS 2020).*

Sample ID	Year	UTM Easting	UTM Northing	Areas	Cu (ppm)	Method	RGS source
ID092I813243	1981	625,983	5,604,333	Semlin	650	ICP	GSC Open File 2666 / BC RGS-40
ID092P795084	1979	632,445	5,688,752	Vidette, Gnome	168	ICP	GSC Open File 775 / BC RGS-4; re-analysis BC RGS-36

In 2023, 23 stream sediment samples were collected from the Gnome and Mowich zones (Figure 9-1). Forty-four percent of the samples returned Cu values >100 ppm, validating and reinforcing upstream soil and rock anomalies in areas where outcrop is limited and supporting the current vectoring model toward intrusive/structural sources within these drainages.

### 9.2.5 Geophysics

Geophysical data coverage: In 2024, ground IP was completed over the Rayfield target area, together with ground/airborne magnetics. In 2025, an airborne ZTEM + aeromagnetics program was flown only over the Vidette block (Gnome & Semlin target areas); Rayfield was not covered by ZTEM, and therefore no airborne conductivity/resistivity data are available for Rayfield. Subsurface electrical interpretations at Rayfield in this Report are derived exclusively from ground IP inversions.

#### **Rayfield**

In 2024, a total of 15.7 kilometers of ground Induced Polarization (IP) surveying was conducted, concentrating on the Rayfield zone. The interpretation of the survey data revealed a moderate chargeability and resistivity anomaly, approximately 600 m by 1,100 m in size, with values ranging from 5 to 8 mV/V within the main target zone and resistivity exceeding 700 ohm/m (Figure 9-6). This anomaly extends to depths of around 800 meters below surface. Additionally, sub-vertical, northeast-dipping anomalies were identified, aligning with zones of high-grade rock samples and copper-in-soil anomalies.

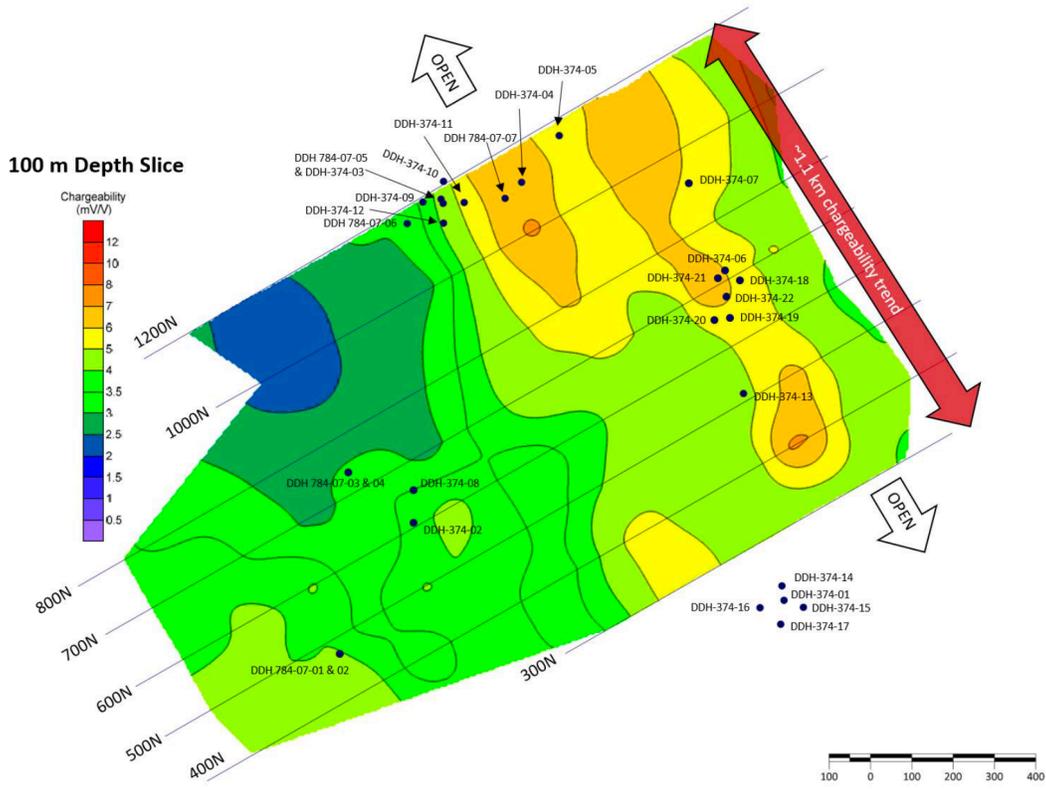
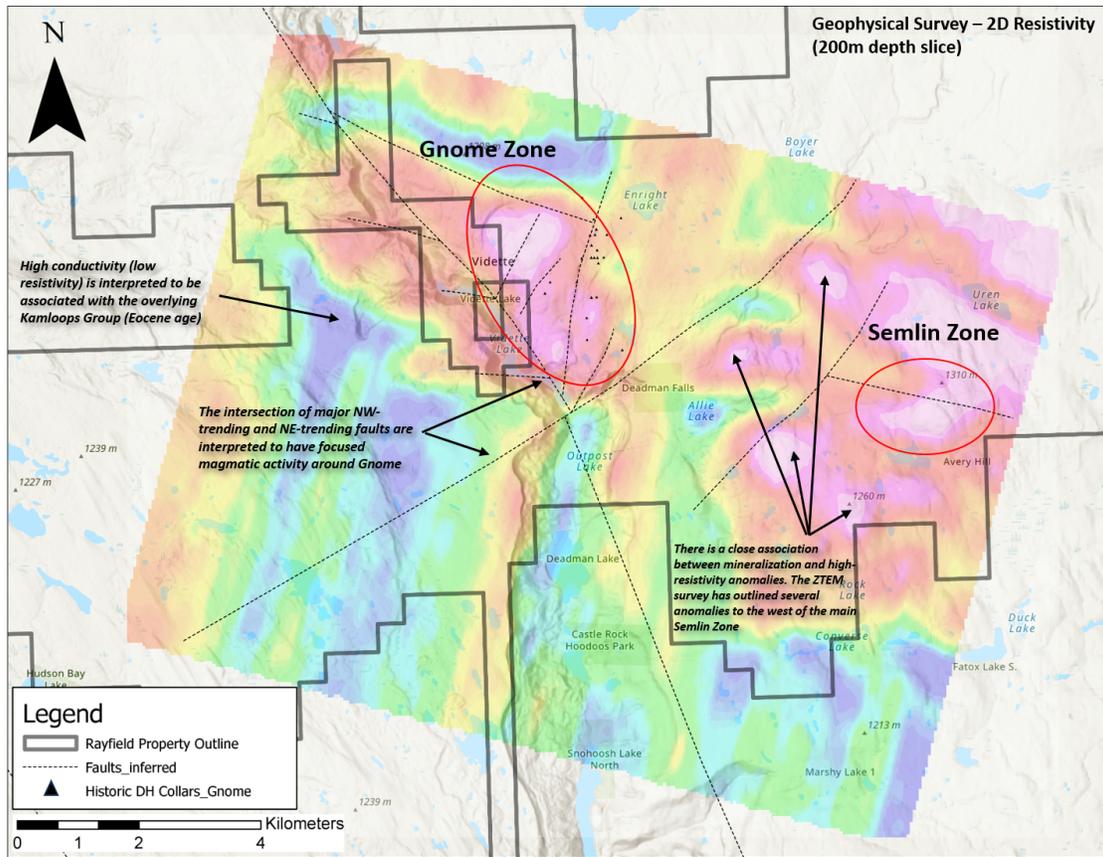


Figure 9-6: 2024 IP Survey chargeability (inverted) anomaly at 100 m depth slice from surface and historic vertical drillholes. The geophysical anomaly remains open along-strike to the northwest and southeast (AR42472).

### Vidette: Gnome and Semlin

In 2025, a helicopter-borne Z-Axis Tipper Electromagnetic (ZTEM) and aeromagnetic geophysical survey was conducted at the Gnome and Semlin targets on the Rayfield Project. A total of 735 line-kms was flown to cover both target areas (Figure 9-7).



*Figure 9-7: ZTEM and aeromagnetic survey extent over the Gnome and Semlin target zones with a 2D resistivity inversion at approximately 200 m depth. ZTEM coverage did not extend to the Rayfield target. Elevated resistivity zones (purple) delineate a large, coherent subsurface body interpreted as a buried intrusive complex associated with porphyry-style mineralization. A northeast-trending resistivity break is interpreted as a major fault or structural corridor separating two intrusive domains and may represent an important control on intrusive emplacement and mineralization.*

### Mowich Area

Historic magnetics, VLF-EM, and limited IP at Mowich delineate linear anomalies consistent with NW-trending faults. Regional-scale magnetic patterns and the distribution of anomalous rock/stream geochemistry support low-to-moderate magnetic “breaks” interpreted as alteration corridors and potential intrusive contacts. The intrusive plug mapped at the head of the gully (texturally similar to the float host and locally veined with quartz-calcite ± malachite) provides a plausible source for the downslope mineralized fragments.

### 9.3 Significant Exploration Results

Between 2021 and 2024, Golden Sky Minerals Corp. conducted extensive exploration across the Rayfield Project, delineating multiple high-priority target zones with coincident geochemical, geophysical, and geological indicators of porphyry-style mineralization.

#### 9.3.1 Rayfield Zone

No airborne EM (e.g., ZTEM) was flown over the Rayfield target; electrical property interpretations at Rayfield are based on ground IP (chargeability and inverted IP-resistivity) integrated with aeromagnetics/ground magnetics.

In 2022, a major soil sampling program collected 1863 samples (+139 QA/QC), outlining a 3 km × 1.5 km copper-in-soil anomaly with values up to 0.40% Cu. This anomaly coincides with magnetic and thorium-to-potassium (Th/K) radiometric lows and IP chargeability highs, suggesting a buried porphyry system. Rock samples returned up to 0.67% Cu and 111 ppb Au. Historical drilling intersected 0.13% Cu over 152 m and 0.18% Cu over 33 m. The zone exhibits strong potassic and propylitic alteration, with bornite, chalcopyrite, and native copper observed in outcrop (Figure 9-8).

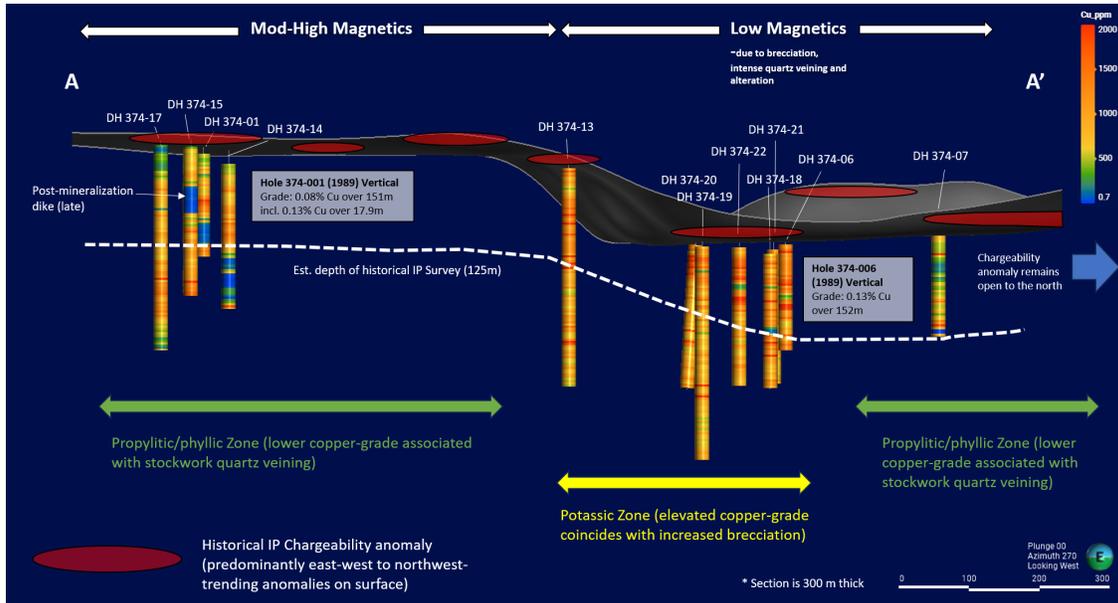


Figure 9-8: Cross-sectional view of the Rayfield Zone showing copper grades (Cu ppm) and magnetic properties along a northward transect (A–A'; Fig.6). Drill holes (e.g., DH 374-17, DH 374-15) intersect zones of potassic and propylitic/phyllitic alteration. Elevated copper grades are associated with brecciation and stockwork veining in the potassic zone. Historical IP chargeability anomalies are shown, with the survey depth estimated at 125 m. The chargeability anomaly remains open to the north.

In 2024, an induced-polarization (IP) and ground magnetic survey totalling 15.7 line-km (pole-dipole,  $a=100\text{--}200\text{ m}$ ; chargeability window 690–1050 ms) and 11 rock samples were completed at Rayfield/Semlin. A  $\sim 600\text{ m} \times \sim 1,100\text{ m}$  moderate chargeability/resistivity anomaly is interpreted to continue to  $\sim 800\text{ m}$  depth and correlates with surface Cu–Au anomalies and historical drill intercepts (Figure 9-9). Rock highlights include 0.51% Cu and 79 ppb Au (sample 118891; silicified hornblende syenite).

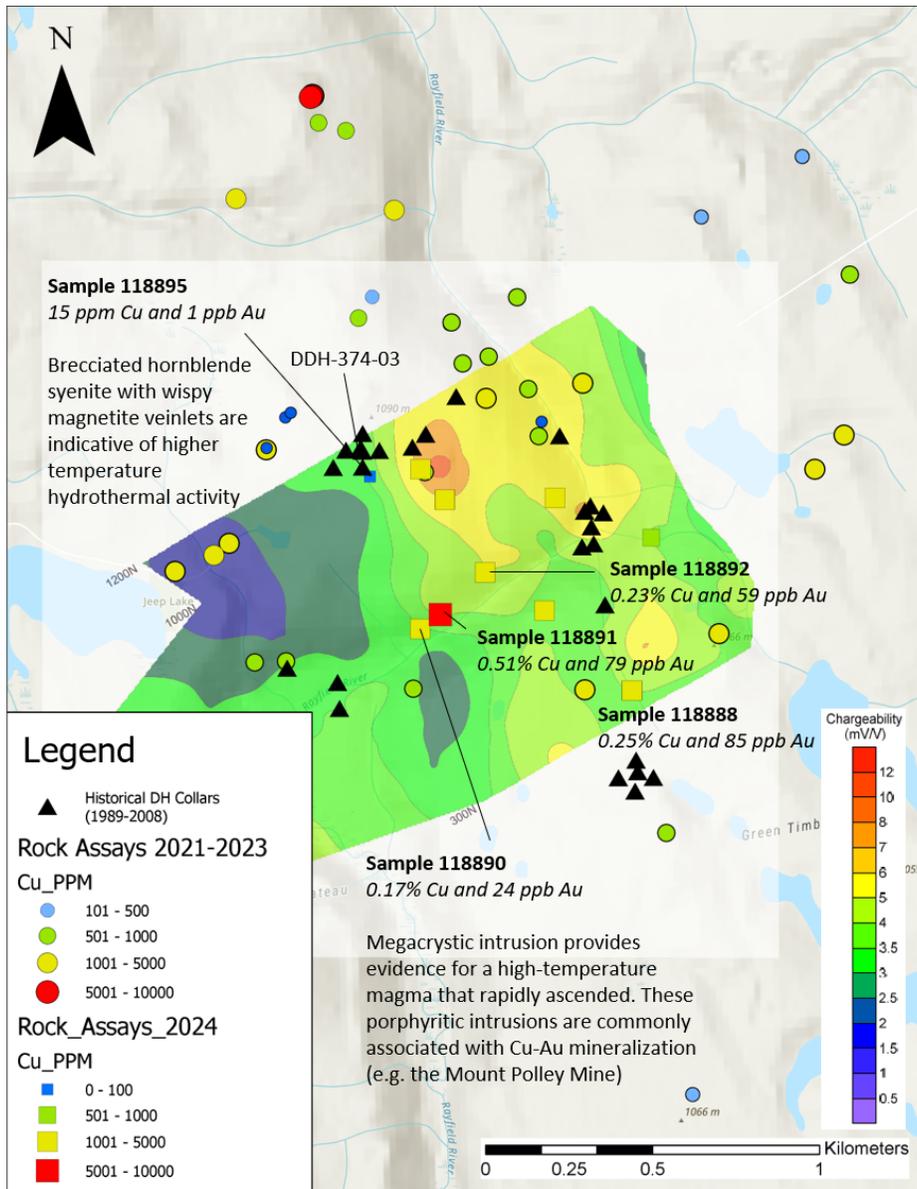


Figure 9-9: Select rock samples overlying a plan map of the surface chargeability within the Rayfield zone (2024 IP survey: AR42472).

### 9.3.2 X Zone

The X Zone is characterized by a 1.0 km × 0.5 km multi-element soil anomaly (Cu-Au-Zn-As-Co-Ni-Mo-Li-Rb) flanking and partially overlying an elongated geophysical anomaly (Figure 9-10). Mineralization is associated with potassium feldspar veins in diorite and metasediments. Rock sampling yielded up to 0.75% Cu in altered diorite containing bornite and malachite, suggesting the presence of a buried porphyry system. Strong propylitic alteration and structural features suggest the outer halo of a potential porphyry system at depth.

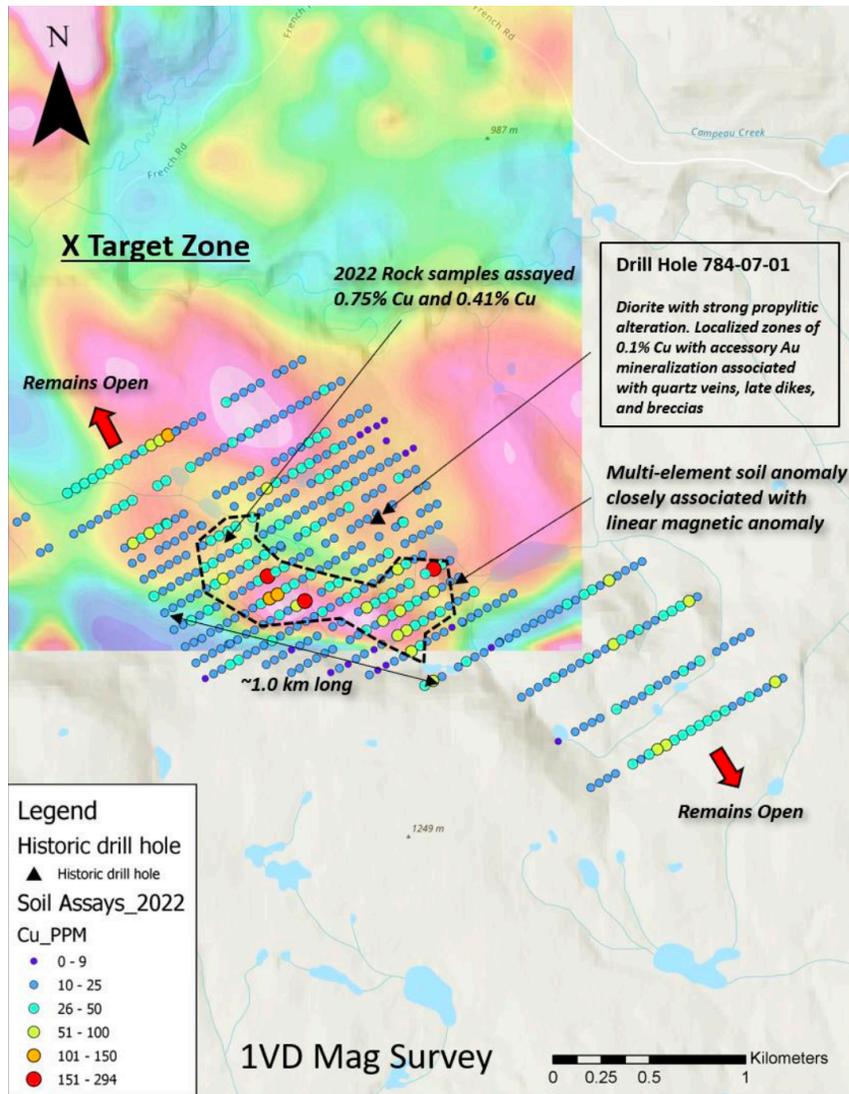


Figure 9-10: Copper assay values from the 2022 soil sampling program at the X target zone with overlapping Cu-Au-Zn-As-Co-Ni-Li-Mo geochemical signature outlined in dashed black line. The mineralized system remains open.

### 9.3.3 Gnome and Semlin Zones

At the Gnome target zone, soil sampling in 2022 outlined a 1.8 km × 1.5 km multi-element anomaly (Cu-Au-Zn-As-Co-Ni-Mo-Li-Rb) (Figure 9-11). Historical drilling intersected 0.10% Cu over 68 m. Surface samples returned up to 0.35% Cu, 4.8 g/t Au, and 8.9 g/t Ag. The zone is hosted in Nicola Group rocks intruded by the Thuya Batholith, with chalcedonic quartz-carbonate veins and phyllic/propylitic alteration. In 2025, ZTEM and aeromagnetic surveys confirmed a large east-dipping resistivity anomaly beneath the soil anomaly, interpreted as a preserved porphyry core.

A greenfields discovery in 2022 at the Semlin target zone revealed a 1.4 km × 0.9 km multi-element soil anomaly (Figure 9-11). Rock samples from Nicola Group basalt contained up to 10% pyrite and trace chalcopyrite occurring along fractures and within quartz-carbonate veins. One sample of sulphide-rich vein material assayed up to 0.2% Cu, 135 ppm Mo, and 55 ppb Au. Soil anomalies correlate with low-moderate magnetic responses and suggest a buried porphyry system. ZTEM data in 2025 delineated the edge of a resistive batholith. The geophysical data provides strong vectoring tools for future drilling.

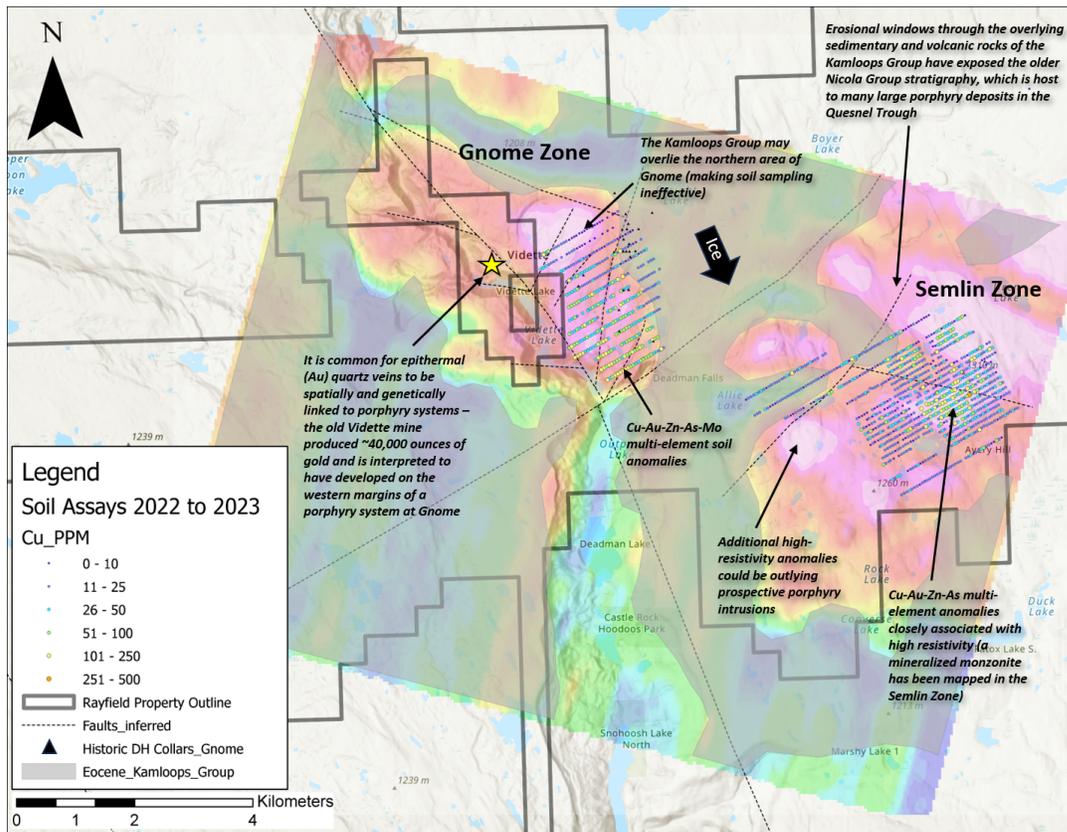


Figure 9-11: 2025 ZTEM geophysical survey (2D resistivity - 200m depth slice) ZTEM coverage did not extend to the Rayfield target. Zones with high resistivity (purple) are interpreted to be intrusions. Large areas of these target zones are covered by Eocene age Kamloops Group stratigraphy (conductive), with erosional windows exposing the underlying Triassic Nicola Group. There is a close association between elevated resistivity and Cu-in-soil values.

### 9.3.4 Mowich Zone

Float samples collected during the 2022 field program assayed up to 37.46% Cu, 286 g/t Au, and 200 g/t Ag, indicating the presence of high-grade mineralization within transported material, with the primary bedrock source not yet identified. Although the primary source remains unidentified,

the mineralized float is interpreted to be associated with proximal intrusive activity. Stream sediment sampling conducted in 2023 further validated upstream mineralization, with 44% of samples returning copper values greater than 100 ppm.

Elevated bismuth values associated with copper- and gold-rich samples at Mowich are interpreted as indicative of a magmatic–hydrothermal source, as Bi is a recognized pathfinder element in Cu-Au porphyry systems and is commonly associated with late-stage, high-temperature mineralization proximal to intrusive centers. The presence of Bi, together with high Cu and Au grades and limited transport of angular mineralized material, supports a nearby intrusive-structural source upslope of the Discovery Showing.

#### 9.3.5 Author’s Site Visit (2025)

Five samples were collected during the author’s visits on 30<sup>th</sup> October, 2025.

The samples were collected from the Mowich copper-gold porphyry target. Visits to other sites on the day were hindered by a rock fall which had blocked access to the north of the Mowich site but was being actively cleared on the day.

The Mowich samples include “nuggets” of serpentinized mafic volcanics which are highly weathered forming malachite on surface. Additional samples were collected further up a steep gully to the west where slumping has exposed layers of “blue clay” which is thought to be the source of the nuggets.

*Table 9-3: Descriptions, locations and assay results of Author Collected samples*

Sample ID	UTM Zone	Easting	Northing	Description	Copper (%)	Gold (g/t)	Silver (g/t)
2025-RVM-QP1	10	647163	5655079	"Copper nuggets" collected from slump block situated on the eastern side of the road and about 10m above the river. Location previously sampled in 2022. Nuggets are green with malachite and commonly have asbestos crystals embedded in them.	32.40	3.93	164
2025-RVM-QP2	10	647179	5655073	Sample of weathered rock, serpentinized and host of the nuggets collected in first sample. These samples are not in situ but the geography of the gully means they are sourced from within 400m.	2.00	0.80	10
2025-RVM-QP3	10	646948	5655133	Highly altered, serpentinized porphyritic gabbro or basalt. Soft, pale green porphyroblasts could be chloritized clays from weathering processes. Occasional green flecks of malachite and some asbestos.	0.01	<0.02	<2
2025-RVM-QP4	10	646890	5655242	Blue clay layer from 150m up slope from the above samples. Taken weathered country rock exposed in northern side of slump. Clay has a distinct blue colour when wet with some flecks of malachite.	0.13	0.02	<2
2025-RVM-QP5	10	646820	5655370	Additional blue clay sample taken further up the gully from 2025-RVM-QP4. Very similar although more weathered and clayey. Asbestos and malachite content reduced.	1.64	0.41	8

## 9.4 Integration and Interpretation

The Rayfield Project is being explored for porphyry-style Cu-Au mineralization associated with the Late Triassic Copper Mountain Magmatic Belt which hosts several major deposits in the Quesnel Trough. The Project is underlain by the same lithologic units that host the nearby Mount Polley, Copper Mountain and New Afton copper-gold porphyry deposits. The geological and tectonic framework of the Rayfield Project closely resembles the continental arc environment described by Sinclair (2007), which is known to host large-scale porphyry-style and related mineral deposits. Effective exploration will require identifying patterns of alteration and mineralization zoning, as well as syn-magmatic structural features that may have influenced the emplacement of intrusive bodies and directed the flow of mineralizing fluids.

## Rayfield Zone

Multi-year exploration has highlighted Rayfield as the most advanced porphyry target, where geochemical anomalies align with interpreted potassic alteration zones (magnetic lows) and structural corridors. The IP survey revealed a 600 × 1,100 m IP chargeability and IP-resistivity anomaly, sub-vertically oriented and correlated with surface mineralization and historic drill intercepts. This anomaly is interpreted as a mineralized hydrothermal system extending to depths of at least 800 m. The cumulative imprint of various alteration styles suggests multiple pulses of mineralized fluids occurring in a long-lived porphyry style system (Figure 9-12).

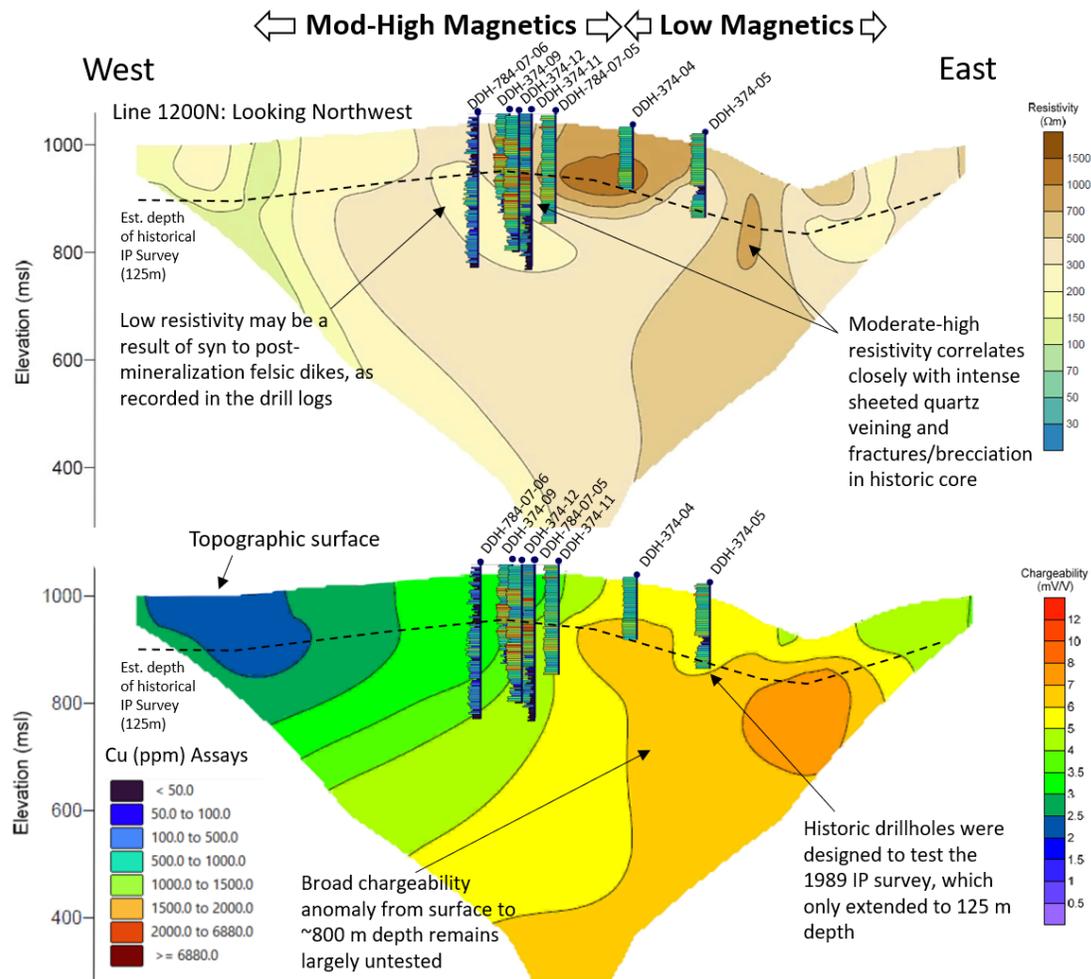


Figure 9-12: Line 1200N, vertical section of IP-resistivity and IP-chargeability (inverted), looking to the northwest. The geophysical anomaly remains largely untested to depth on line 1200N. Elevated resistivity values are interpreted to indicate zones of brecciation and quartz veining as observed in historical core logs and on surface.

Historical drill data show copper mineralization as both primary sulphides (chalcopyrite, bornite, chalcocite) and secondary oxides (cuprite, malachite), with native copper often associated. Primary sulphides are mainly found in fractures and quartz veinlet margins, while secondary oxides occur in fault zones and clay-rich areas. Copper grades are closely linked to the intensity of fracturing and quartz veining, suggesting the presence of higher-grade zones within the Rayfield target. The integration of geophysical anomalies, geochemical data, and geological mapping supports the interpretation of a robust porphyry system at Rayfield, warranting further exploration.

The X Zone presents a compelling case for a buried porphyry system. A multi-element soil anomaly (Cu-Au-Zn-As-Co-Ni-Mo-Li-Rb) partially overlays a magnetic anomaly that could be outlining a porphyry system at depth and remains open to the northwest and southeast. Elevated Li and Rb values within the soil anomaly suggest nearby alkalic intrusions. High-grade rock samples (up to 0.75% Cu) were found in diorite with chalcopyrite, bornite, and malachite. Widespread propylitic and magnetite alteration was observed, along with quartz veining and late-stage pegmatite dikes. Geophysical data also suggest possible faults or shear zones that may have influenced magmatic activity, similar to the Rayfield Zone.

### **Vidette: Gnome and Semlin Zones**

The Vidette area encompasses both the Gnome and Semlin target zones and exhibits strong geochemical signatures with pathfinder elements (Mo, Li, Rb) indicative of alkaline intrusive systems. Multi-element soil anomalies (Cu-Au-Zn-As-Mo) correlate with low to moderate magnetic responses and resistivity highs from ZTEM surveys, suggesting buried intrusive bodies. Rock samples confirm disseminated and vein-hosted copper-gold mineralization, with alteration styles consistent with phyllic and propylitic zones.

At the Gnome target, the geochemical footprint is indicative of a robust hydrothermal system and supports the presence of a buried porphyry target at depth, a target that has been further corroborated by results from the 2025 ZTEM geophysical survey (Figure 9-13; cross-section A-A'). Widespread phyllic and propylitic alteration occurs across the target area and is spatially related to a prominent, eastward dipping resistive geophysical anomaly. This high-resistivity zone—interpreted as a buried intrusion—extends significantly at depth and exhibits geometry consistent with preserved porphyry systems, where resistivity highs typically reflect zones of

intense silicification and quartz veining. The spatial relationship between this resistive feature and widespread phyllic and propylitic alteration across the target area reinforces the interpretation of a hydrothermal system centered around a porphyry core. Notably, mineralization and alteration are concentrated along the margins of the resistive anomaly, suggesting that the anomaly may represent the apical region of a porphyry system that has been preserved due to limited erosion. This strong geophysical signature not only enhances the geological model for the Gnome target but also provides a reliable vectoring tool for guiding deeper drilling and identifying additional mineralized zones along strike and at depth.

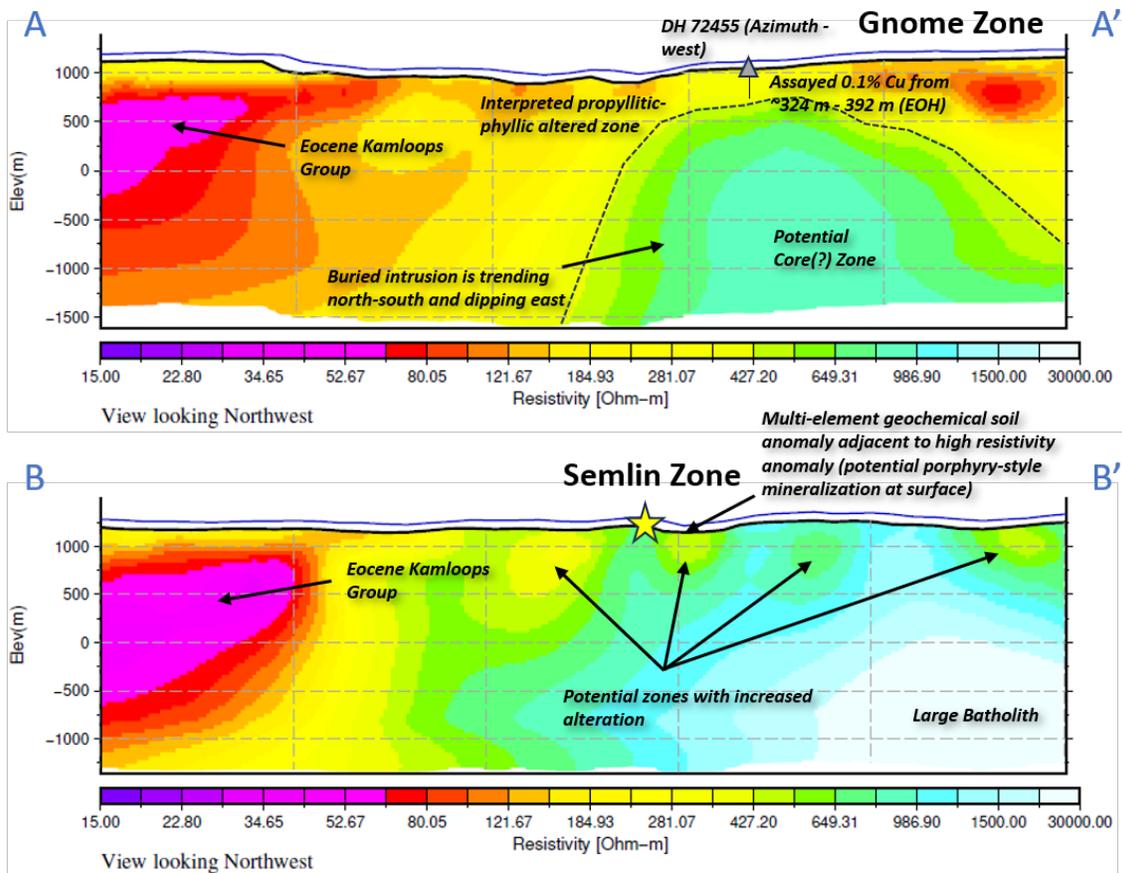


Figure 9-13: Cross sectional view of ZTEM 2D resistivity across the Gnome and Semlin target zones. Conductive areas (purple) are interpreted to reflect overlying Kamloops Group stratigraphy while areas of high resistivity (blue) are interpreted as intrusions.

At the Semlin target zone, exploration has revealed a compelling geological setting for porphyry-style mineralization. The zone lies along the interpreted edge of a large, high-resistivity batholith identified in the 2025 ZTEM geophysical survey (Figure 9-13; cross-section B-B'). This resistive

anomaly dips eastward and extends significantly at depth, consistent with the geometry of preserved porphyry systems where resistivity highs often reflect zones of silicification and quartz veining.

The Semlin zone is underlain by Triassic Nicola Group volcanic rocks, primarily basalt, which are in contact with the intrusive body. This contact zone is geologically significant, as it represents a favorable environment for hydrothermal fluid migration and mineral deposition. The resistivity anomaly shown in the figure reflects zones of intense silicification and quartz veining—hallmarks of porphyry systems—suggesting that the batholith may host a preserved mineralized core at depth.

Surface exploration has been limited due to thick overburden, but road construction recently exposed new outcrop, enabling initial sampling. A strong multi-element soil anomaly (Cu-Au-Zn-As-Mo), extending ~1.4 km × 0.9 km, coincides with the resistive margin of the batholith. Rock samples collected in 2022 from altered basalt returned up to 10% pyrite and trace chalcopyrite within quartz-carbonate veins, with one sulphide-rich vein assaying 55 ppb Au, 0.2% Cu, and 135 ppm Mo—values consistent with peripheral mineralization in porphyry systems.

Geological mapping in 2023 confirmed the presence of disseminated pyrite and quartz veining within the intrusion and along its margins. These features, combined with the geophysical data, suggest that the Semlin zone may represent a structurally controlled mineralized corridor along the batholith contact. The eastward-dipping resistivity anomaly in Figure 9-13 provides a clear vectoring tool for targeting deeper mineralization and guiding future drilling.

The Semlin target shares geological similarities with other porphyry systems in the Quesnel terrane, such as Mount Polley and New Afton, where mineralization is often localized along intrusive contacts and structural intersections. Follow-up exploration is warranted to evaluate the extent and grade of mineralization at depth and to test the continuity of the system along strike.

### **Mowich Zone**

The Mowich Zone is characterized by high-grade float samples (up to 37.46% Cu, 286 g/t Au, 200 g/t Ag), interpreted to have been transported downslope via a localized slump or mudslide (Figure 9-14). The high-grade float material is interpreted to be associated with proximal intrusive activity,

supported by a strong correlation with elevated bismuth concentrations. QEMSCAN analysis confirmed the host rock as highly altered and serpentinized mafic volcanic material, suggesting enrichment through weathering processes.

Further upslope tracing led to the identification of a syenitic intrusive plug exposed in outcrop. This plug exhibits quartz-calcite veining with trace amounts of malachite and chalcopyrite and shares textural similarities with the mineralized float material (Sample C00064615 from this intrusion assayed 311 ppm Cu). The intrusion is surrounded by brecciated, altered basalt and typically borders major northwest-trending faults in the area. Additional copper-rich basalt boulders were found at the Mowich Lake Copper Showing, with assays up to 2.5% Cu and 230 ppb Au, indicating a possible northwest-trending mineralized structure.

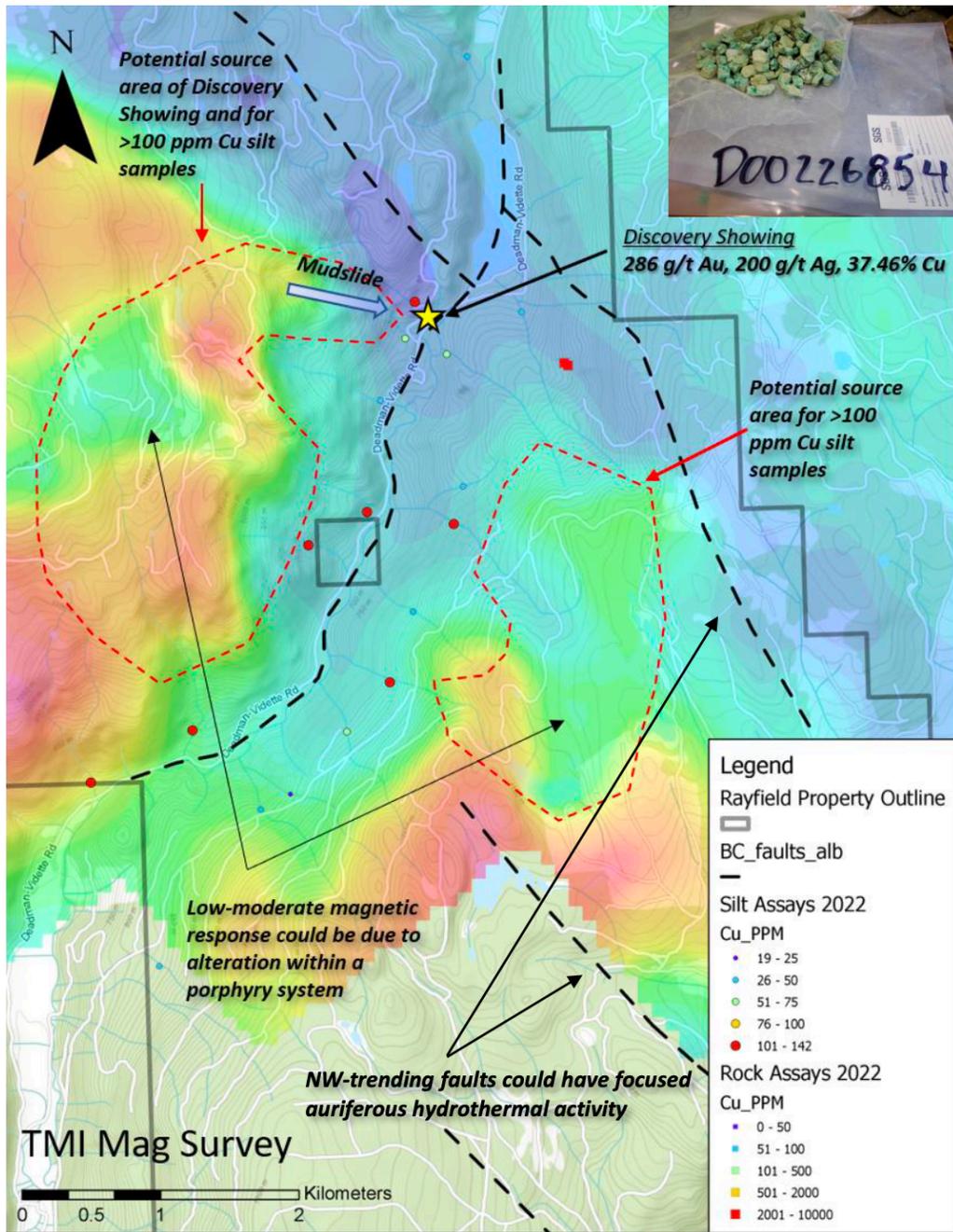


Figure 9-14: Mowich target area showing anomalous rock and stream-sediment sample locations overlain on the total magnetic intensity (TMI) aeromagnetic dataset. Copper-anomalous stream sediments and rock samples are concentrated in drainages along the western Deadman River valley and broadly coincide with low to moderate magnetic responses and gradient zones. Potential source areas are outlined by dashed red lines, and the distribution of anomalous material is consistent with localized downslope transport of copper-rich material to the Discovery Showing.

Stream sediment sampling returned >100 ppm Cu in 44% of samples, correlating with low-moderate magnetic anomalies, interpreted as zones of alteration. Regional fault systems, aligned with major structures like those at New Afton Mine, may have controlled intrusive emplacement and mineralization. The combination of high-grade float samples, altered intrusive rocks, stream sediment anomalies, and interpreted structural controls strongly supports the potential for a mineralized porphyry system within the Mowich Zone and warrant further exploration.

The Rayfield Project hosts a spectrum of mineralizing environments, from deep-seated porphyry systems to structurally controlled epithermal and skarn-style mineralization. The geological setting, dominated by Late Triassic to Early Jurassic Nicola Group rocks and syenitic intrusions, mirrors that of nearby producing mines such as Mount Polley, New Afton and Copper Mountain. Structural corridors, alteration zoning, and geophysical anomalies collectively point to a robust mineral system with multiple high-priority targets. Continued exploration is warranted to delineate these systems further and assess their economic viability.

## 10.0 DRILLING

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### 10.1 Summary of All Drilling Programs

Drilling on the Rayfield Property has been undertaken intermittently from 1968 through 2008, with activity concentrated primarily within the Rayfield block, and to a lesser extent on the Vidette and Mowich blocks (Figure 15). A total of 67 drillholes and approximately 10,600 meters have been completed across the Property. These campaigns targeted various mineralization styles, including porphyry Cu-Au, skarn, and epithermal/mesothermal vein systems, utilizing both percussion and diamond core drilling methods.

The most extensive drilling was conducted by Brenda Mines Ltd. (1989–1990) and Candorado Operating Company Ltd. (2008) at Rayfield, with additional earlier campaigns by AMAX Exploration (1968–1970). Vidette and Mowich blocks saw more limited testing, with programs by Noranda, Inco, Queenstake, and Iron River focusing on geochemical and geophysical targets developed from earlier surface work.

### 10.2 Drill Methods and Core Recovery

Drill types and recovery varied by program and era:

Percussion Drilling (1968–1970, Rayfield):

AMAX completed 31 vertical percussion holes (1,748 m) on a 300 m grid. Average hole depth was ~60 m. Core recovery was not reported, as this method does not generate continuous core.

Diamond Drilling (1989–1990, 2008, 1995, 1989):

Diamond drilling programs used NQ core size (47.6 mm diameter), with varying levels of core recovery.

- The 1989–1990 Brenda Mines Ltd. program achieved generally good recovery across 22 drillholes (4,478 m), although detailed recovery logs are not available.
- The 2008 Candorado program encountered frequent faulting, fracturing, and poor core conditions, especially below 180 m. Many holes terminated prematurely due to mechanical issues and poor recovery. Core recovery was estimated to range from 40–80%.
- Vidette and Mowich programs by Queenstake, Inco, and Iron River reported limited issues with recovery but noted localized fault zones and alteration-related fracturing.

All available core from the 1989–2008 Rayfield programs was stored near the Plateau area but was destroyed in the 2017 wildfires.

### 10.3 Collar Locations, Azimuths, and Dips

Precise collar coordinates for historical drilling are limited, especially for the 1968–1970 AMAX percussion program. Available location data from assessment reports and GIS reconstructions are compiled in Figure 10-1.

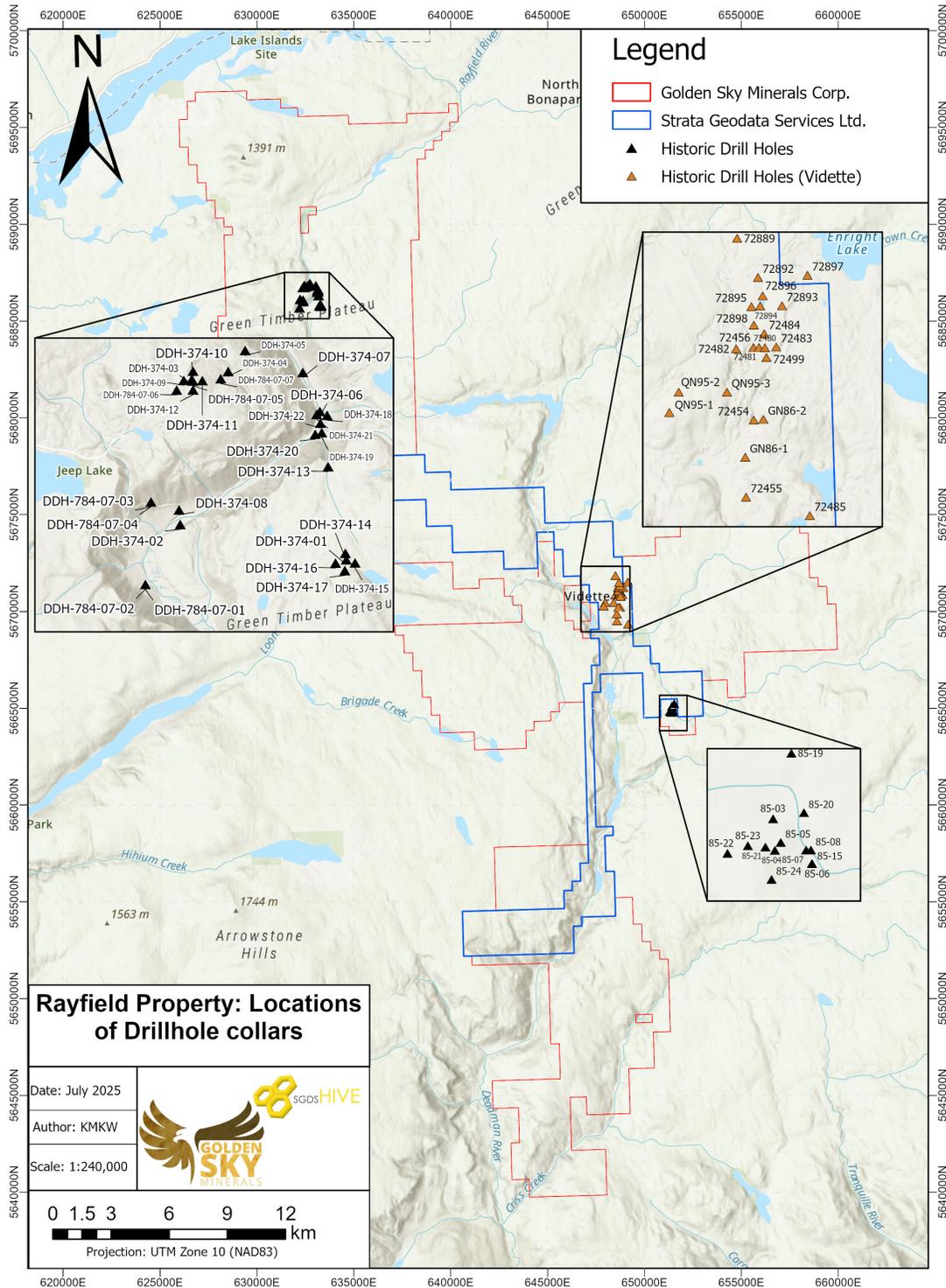


Figure 10-1: Locations of historic drill holes within the Rayfield Project.

### 10.3.1 Rayfield Block:

Drilling on the Rayfield Property has been conducted intermittently between 1968 and 2008, with the majority of activity concentrated within the Rayfield Block. The earliest program, conducted by AMAX Exploration Inc. (1968–1970), consisted of 31 vertical percussion drillholes totaling approximately 1,748 metres. These holes were spaced on a 300-metre grid and targeted broad zones of copper mineralization identified through soil sampling and geophysical surveys. Precise collar coordinates for this program are limited, and no deviation surveys or GPS-based collar data were recorded.

Subsequent drilling by Brenda Mines Ltd. (1989–1990) involved 22 diamond drillholes totaling 4,478 metres. These holes were concentrated northwest of the Rayfield River elbow and across a broad plateau. Drillhole azimuths typically ranged from 045° to 270°, with dips between –45° and –90°. Candorado Operating Company Ltd. followed with a 2008 program that included seven diamond drillholes, one of which—DDH 784-05—was a twin of Brenda’s DDH 374-3. The collar location for DDH 784-05 was recorded at UTM NAD83 Zone 10 coordinates 632,477E / 5,686,555N. This program encountered variable core recovery due to faulting and poor ground conditions, particularly below 180 metres.

### 10.3.2 Vidette Block:

In the Vidette Block, drilling was conducted by Inco, Noranda, and Queenstake Resources between 1988 and 1995. Drillholes were located along Yard Creek, the Gnome claim, and the Central Gully Trend. Azimuths generally ranged from 080° to 120°, with dips between –45° and –70°. These programs targeted epithermal and porphyry-style mineralization, with some intercepts returning anomalous gold values.

### 10.3.3 Mowich Block:

The Mowich Block saw limited drilling activity, with Iron River Resources Ltd. completing four short diamond drillholes in 1989. These holes were collared along VLF-EM anomalies and drilled with azimuths of 090°, dipping between –60° and –75°. Although the target lithologies were intersected, no significant mineralization was encountered.

No collar survey data from GPS or total station is available for historical holes, and drillhole deviation surveys were not conducted.

## 10.4 Significant Intercepts and Sampling Intervals

### 10.4.1 Rayfield Block

During the 1968–1970 percussion drilling program by AMAX, a notable intersection of 0.42% Cu over 6.1 meters was reported. In addition, broad zones of copper mineralization ranging from 0.05% to 0.10% Cu were encountered across a substantial area measuring approximately 450 by 2,100 meters.

Between 1989 and 1990, Brenda Mines Ltd. drilled 22 diamond drillholes. Significant results include 0.18% Cu over 43.4 meters in hole DDH 374-3, 0.13% Cu over 146.0 meters in DDH 374-6, 0.14% Cu over 99.0 meters in DDH 374-13, and 0.17% Cu over 51.0 meters in DDH 374-20.

In 2008, Candorado Operating Company Ltd. drilled seven diamond drillholes. The best intercept was 0.13% Cu over 66.8 meters in DDH 784-05, which was a twin of Brenda's 1989 hole DDH 374-3. Copper enrichment was generally observed near surface to a depth of 180 meters, with grades decreasing at greater depths.

All core samples from these programs were collected at intervals of 1 to 2 meters and analyzed using either ICP-MS or atomic absorption methods. Quality assurance and quality control (QA/QC) procedures were not consistently documented in the earlier programs.

### 10.4.2 Vidette Block

Inco and Noranda conducted drilling in 1988–1989, with Drillhole 72493 returning an intercept of 4.62 g/t Au over 0.55 meters at a depth of 114.7 meters, as well as 1,079 ppb Au over 14.0 meters in a brecciated diorite zone.

Queenstake Resources Ltd., in their 1995 program, observed increasing concentrations of copper, gold, and arsenic downhole in drillhole QN 95-1; however, no economically significant intercepts were reported.

### 10.4.3 Mowich Block

Iron River Resources Ltd. conducted a limited drilling program in 1989, comprising four short diamond drillholes totaling 200 meters. No significant mineralized intercepts were encountered. Although drillholes intersected augite porphyry and tuff breccia, the associated geochemical signatures were weak and did not warrant follow-up.

## 10.5 Cross-Sections or Drill Plans

Several historical cross-sections and plan maps exist for the Rayfield property. On the Rayfield Plateau, interpretations from the Brenda (1990) and Candorado (2008) programs depict broad zones of low-grade mineralization distributed along east-west sections spaced at 100 to 200 meters. These zones are shown to envelop intrusive phases located west of the Rayfield River. Drill plans for the 2008 program were included in assessment report AR30271 and illustrate the placement of all seven diamond drillholes.

At the Vidette Central Gully Fault Zone, Morin (1989) presented schematic cross-sections that highlight the structural controls, alteration patterns, and mineralization related to epithermal systems and fault-hosted breccias.

For the Mowich block, sectional data are limited. However, Iron River's 1989 program included interpreted geophysical cross-sections aligned with drill trace locations, as submitted in assessment report AR18167.

## 11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

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### 11.1 Sampling Methods and QA/QC Protocols

#### 11.1.1 Soil Samples

Soil samples were collected using either a shovel or a hand auger to target the B-horizon, typically located at a depth of 15 to 40 cm. Sampling was carried out using clean tools, with coarse material, roots, and organic contaminants removed prior to bagging. Each sample was placed into a labeled Kraft paper or soil bag, with a corresponding sample tag inserted. The bag was securely sealed using a flagging-tape tie method. Location data, including GPS coordinates, sample depth,

color, and horizon descriptions, were recorded in UTM NAD83 Zone 10 using handheld GPS units or tablets.

### 11.1.2 Rock Samples

Rock samples were collected from outcrops, talus, or float using a rock hammer. Each sample was bagged in a labeled poly ore bag with an internal sample tag and sealed using cable ties. Field notes and GPS coordinates were recorded using handheld GPS units or digital tablets. Rock samples were analyzed by Bureau Veritas (Vancouver) using AQ-251-Ext (aqua regia ICP-AES/MS, 51 elements). Preparation followed BV protocols (drying; crush to 70% <2 mm; 250 g split pulverized to 85% <75 µm). In addition to BV AQ251-Ext, select campaigns utilized FA350 (30 g fire assay with AAS finish for Au), AQ201 (aqua regia ICP-AES multi-element), and MA200 (four-acid near-total digestion with ICP-AES) depending on sample type and expected grade ranges. Analytical selection was made to balance detection limits and matrix effects; over-limit re-analyses were performed as per lab protocols. Lab QA/QC inserts (blanks, duplicates, certified standards) were used in each batch.

### 11.1.3 QA/QC Procedures

A consistent quality assurance and quality control (QA/QC) protocol was implemented across both soil and rock sampling programs.

- Blanks: Commercially purchased dolomite was used as a blank material.
- Standards: Certified reference materials (CRMs) from OREAS were inserted into the sample stream at regular intervals.
- Duplicates: For select sampling campaigns, field duplicates were included where applicable.

Laboratories also incorporated their own internal QA/QC measures, including insertion of blanks, standards, and analytical duplicates within each batch.

## 11.2 Laboratory Details, Preparation Procedures, and Analytical Methods

### SGS Canada Inc. – Burnaby, BC

All soil and rock samples submitted to SGS were processed under ISO 9001 certified protocols.

Both procedures started with drying the sample and crushing it until the desired grain size was reached. To homogenize and obtain a nonbiased sample, the crushed sample was put through a rifle splitter until the desired sample weight was achieved. The gold grade was then determined from a 30 g sample. This sample was then processed using lead collection fire assay and finished with Atomic Absorption Spectroscopy (AAS.) For multi-element analysis, the sample was processed first using an aqua regia digest of the homogenized rifle split sample and then tested using Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES.)

### **Bureau Veritas (BV) Laboratories – Vancouver, BC**

The soil samples were dried and sieved to -80 mesh (<177 microns). Soil samples were analyzed by method AQ251-Ext, which includes a 15 g sample analyzed for 51 multi-elements by utilizing 3:1 Aqua Regia, ICP-AES/MS, ultra trace level.

Rock samples submitted to BV underwent the following preparation: The samples were first dried at 60 degrees and then up to 1 kg were crushed to 70% passing a 10 mesh (2mm). A split of 250 g is then further pulverized to 85% passing 200 mesh (75um). The remaining coarse reject portions of the sample remains in storage at the Bureau Veritas storage facility in Vancouver, BC and are disposed after 3 months from the date of analytical completion. Once the sample was prepared, a 0.5-gram aliquot of the pulverized material was digested in a hot 3:1 (HCl: HNO<sub>3</sub>) aqua regia bath for 1 hour. Following digestion completion, the resulting solution was made up to volume with deionized water and analyzed for 51 elements by ICP-AES/MS (analytical package AQ251-Ext).

Quality control samples (blanks, duplicates and standards) from the lab were inserted within each sample batch to ensure the validity of the analytical results.

### **MSA Labs – Langley, BC**

Soil samples submitted to MSA Labs were first dried and then sieved to a particle size of less than 80 mesh (under 177 µm). The primary analytical method used was IMS-131, in which a 20-gram sample was digested using aqua regia and subsequently analyzed for 51 elements using ICP-AES/MS. In cases where there was insufficient sample mass, an alternative method, IMS-130, was employed. This method utilized a smaller 0.5-gram aliquot for analysis.

All laboratories employed routine QA/QC checks and participated in inter-laboratory performance audits to ensure accuracy and repeatability.

### 11.3 Chain of Custody and Data Integrity

A strict chain of custody protocol was maintained throughout all stages of sampling, transport, and analysis. Key procedures included:

- Each sample was assigned a unique identifier recorded in a field tablet, sample book, and on the bag label.
- Sample tags were inserted directly into the sample bags to ensure traceability.
- Sample bags were sealed immediately upon collection using cable ties or flagging tape and stored in secure containers while in the field.
- Upon completion of the sampling program, samples were compiled and securely bagged in batches with tamper-evident security tags.
- Samples were hand-delivered by project personnel directly to the analytical laboratories (SGS, MSA, or BV), eliminating third-party handling.

All sample data, including field notes, GPS locations, and analytical results, were cross-verified and stored in a secure digital database. QA/QC performance was monitored throughout, and no significant discrepancies were noted.

## 12.0 DATA VERIFICATION

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### 12.1 Verification Steps by the Qualified Person (QP)

The Qualified Person (QP) conducted a comprehensive verification of the data used in this report to ensure accuracy, consistency, and reliability. This included reviewing sampling methodologies, QA/QC protocols, laboratory certificates, and chain of custody documentation from SGS, Bureau Veritas, and MSA laboratories. The QP confirmed that sample documentation, unique identifiers, and spatial data were properly maintained throughout the collection, transportation, and analytical processes.

Historical data incorporated into this report, including grades and tonnages, were sourced from BC Ministry of Mines assessment reports and the British Columbia Minfile database. These

sources were prepared and approved by professional geologists and engineers and are deemed reliable.

## 12.2 Site Visits Conducted

The Qualified Person personally visited the Property on October 30, 2025, to verify both historical and current exploration activities. The visit focused on confirming geological context and field practices, including direct examination of local stratigraphy, outcrops, and structural controls on mineralization to ground-truth interpretations used elsewhere in this Report.

During the visit, the QP collected five verification grab samples from the Mowich area. Independent laboratory analyses returned assays ranging from 0.01% to 32.4% Cu, <0.02 to 3.93 g/t Au, and <2 to 164 g/t Ag. The corresponding assay certificates are included in Appendix C. In contrast, historically reported transported float at Mowich—locally high-grade, up to 37.46% Cu, 286 g/t Au, and 200 g/t Ag—is treated as non-in-situ material and was not used for any resource estimation considerations in this Report.

Note that northern areas of the project were inaccessible on the site visit day due to works to remove a localized slump across the road at Mowich Lake.

The site inspection also included review of field sampling procedures, spot-checks of recorded sample locations with GPS, and evaluation of the local geological and structural features interpreted to influence the distribution of mineralization. These verification steps support the reliability of the recent datasets incorporated into this Technical Report.

## 12.3 Independent Sampling and Assay Checks

Where applicable, independent check sampling was performed to validate existing analytical data. The author's collected samples were submitted for assay at SGS Labs in Burnaby but were ultimately sent to their Lakefield lab in Ontario due to grade / volume. Results were compared against previous datasets to ensure reproducibility and data integrity. QA/QC protocols from the respective laboratories included insertion of standards, blanks, and duplicate samples within sample batches to monitor precision and accuracy of assay results.

## 12.4 Database Audits and Verification Techniques

The project's geological and assay database underwent detailed audits to identify discrepancies, duplicate entries, or inconsistencies. Cross-verification of sample IDs, locations, and assay values was performed against original field notes, GPS records, and laboratory certificates. The QP confirmed data entry procedures complied with industry standards for traceability and quality assurance. Any identified discrepancies were investigated and resolved before incorporation into final reporting.

The data collected during the present study, including that from site visits and new sampling, is considered reliable as it was collected and verified by the author. Additionally, all historical and external data quoted have been reviewed for validity and are based on reports approved by the BC Ministry of Energy, Mines and Petroleum Resources, ensuring a high degree of confidence in the dataset.

## 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

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This section is not required because no metallurgical testing has been completed to date.

## 14.0 MINERAL RESOURCE ESTIMATES

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This section is not applicable as the project does not contain any current Mineral Resource estimates.

## 15.0 MINERAL RESERVE ESTIMATES

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Not applicable. No Mineral Reserves have been defined for the project at this stage.

## 16.0 MINING METHODS

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Not applicable. No Mining Methods have been defined for the project at this stage.

## 17.0 RECOVERY METHODS

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Not applicable. No Recovery Methods have been defined for the project at this stage.

## 18.0 PROJECT INFRASTRUCTURE

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As an early-stage exploration project, no dedicated project infrastructure has been constructed. Regional access and services that support exploration activities are described in Section 5.

## 19.0 MARKET STUDIES AND CONTRACTS

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Not applicable. No formal market studies or contracts have been completed at this stage.

## 20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

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As of the Effective Date, the project is primarily governed by **Mines Act Permit MX-100000611** (approved December 17, 2025; term to December 16, 2030). This permit authorizes expanded exploration activities across the property and formalizes the MYAB Notice of Work submitted in September 2023 (Tracking No. 100412762). Details of permits and applications can be found in Appendix D.

### 20.1 Environmental baseline and liabilities

**Environmental liabilities:** As of the Effective Date, the issuer reports no known environmental liabilities on the Property.

**Baseline/mitigation approach:** Current exploration remains small-footprint and governed by standard mitigation measures (erosion/sediment control, fuel handling, invasive species management, wildlife considerations). Field programs have been conducted under Mines Act authorization and progressive reclamation consistent with permit conditions. No water licenses or land-use tenures are presently required for activities authorized under the existing permit.

### 20.2 Regulatory framework

Exploration activities are regulated under British Columbia's Mines Act and the Health, Safety and Reclamation Code (HSRC), administered by the Ministry of Energy, Mines and Low Carbon Innovation (EMLI). Mechanized mineral exploration (e.g., drilling, trenching, access construction) requires a Mines Act authorization (NoW permit). Permit-specific conditions addressing

environmental protection, archaeology, and Indigenous engagement apply (see Sections 20.3–20.4).

### 20.3 Permitting Status (see also Section 4.1 and Table 4-3)

**Active multi-year authorization:** Mines Act Permit MX-100000611 (issued Dec 17, 2025; approval end Dec 16, 2030). This permit formalizes the MYAB Notice of Work (Tracking No. 100412762) and authorizes an expanded, five-year exploration program across the Rayfield (RVM) Project. The approved scope includes: up to 36 surface drill pads (0.36 ha drill disturbance), ~1.5 km of access modification (0.45 ha), ~4.5 km of new exploration trails (1.35 ha), ~75 line-km IP geophysics, core logging structures within drill pads (0.03 ha), and fuel storage up to 820 L in secondary containment. Reclamation security of \$19,000 is posted with the Province under MX-100000611. Total approved new disturbance: 2.63 ha.

**Earlier authorization (still active):** MX-100000386 (issued Dec 7, 2023; expiry Dec 6, 2028) covers a smaller-scale program: 10 drill sites, 15 line-km exposed-electrode IP, 0.5 km access modification, and 2.0 km of new temporary road, for a total new disturbance of ~1.38 ha. This permit also stipulates an operating window (Oct 16–May 14), ASEA annual reporting, and MYAB updates prior to subsequent-year work, together with standard environmental and cultural heritage conditions.

**Relationship between authorizations:** MX-100000611 is the primary multi-year authorization for the Project. MX-100000386 remains valid within its boundaries and scope; any expanded activity must be conducted under MX-100000611 or through further amendment/approval where required.

### 20.4 Community and Indigenous engagement

The Project is situated within the unceded territory of the Secwepemcúl'ecw (Secwépemc). The issuer maintains an engagement commitment through all exploration phases. Permit conditions include cultural-heritage and archaeological requirements—e.g., Chance Find Procedure implementation and, where applicable, completion of assessments by qualified professionals with deliverables to EMLI and relevant First Nation(s) prior to new mechanical disturbance outside previously impacted areas.

## 20.5 Social or community impacts and risks

Given the early exploration stage and limited approved disturbance, potential social or environmental impacts are expected to be localized and manageable under permit conditions. Mitigation measures include seasonal constraints (where applicable), progressive reclamation, and compliance with archaeological/heritage stipulations.

## 20.6 Compliance statement

The QP reviewed the active permits and the program scope. As of the Effective Date, the work described herein is consistent with MX-100000611 (primary MYAB authorization) and MX-100000386 (earlier Rayfield-specific authorization). Any material expansion beyond the approved scope will require prior authorization. Annual reporting (ASEA) and required MYAB updates will be filed per permit conditions.

## 21.0 CAPITAL AND OPERATING COSTS

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Operating costs and capital requirements have not been considered.

## 22.0 ECONOMIC ANALYSIS

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This section is not applicable as the project has not reached a level of study where economic analysis is required.

## 23.0 ADJACENT PROPERTIES

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There are no adjacent properties with public disclosure relevant to this report.

## 24.0 OTHER RELEVANT DATA AND INFORMATION

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No other relevant data of information is reported herein.

## 25.0 INTERPRETATION AND CONCLUSIONS

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The Rayfield Project is interpreted to host a multi-phase intrusive complex that has generated a spectrum of mineralizing environments across its three principal zones: Rayfield, Vidette, and Mowich. The Project is underlain by Late Triassic to Early Jurassic volcanic and intrusive rocks of

the Nicola Group, including syenite, monzonite, and diorite phases, which are geologically analogous to those hosting major copper-gold porphyry deposits in the Quesnel Trough, such as Mount Polley, Copper Mountain, and New Afton.

Regional and local structural trends, dominated by northwest- and northeast-trending fault systems, are interpreted to have played a key role in controlling the emplacement of intrusions and the migration of hydrothermal fluids. These structures are spatially associated with zones of alteration and mineralization, as confirmed by geophysical and geochemical datasets.

The tectonomagmatic setting exhibits strong parallels to the continental arc environment described by Sinclair (2007), which is conducive to the formation of large-scale porphyry and epithermal systems. Exploration strategy is focused on delineating hydrothermal alteration halos, mineralization zonation, and syn-magmatic structural controls that may have governed the emplacement of calc-alkaline intrusions and facilitated the ascent and focusing of metal-bearing fluids. Integration of geochemical, geophysical, and structural datasets will be critical in vectoring toward potential mineralized centers.

### **Rayfield Zone**

The Rayfield Zone is the most advanced target, with a 3 km × 1.5 km copper-in-soil anomaly coinciding with magnetic lows, IP chargeability highs, and Th/K radiometric anomalies. Historical drilling intersected broad zones of low-grade copper mineralization, with several holes ending in mineralization, suggesting the system remains open at depth. Rock samples confirm the presence of bornite, chalcopyrite, and native copper, associated with potassic and propylitic alteration. A 2024 IP survey defined a 600 × 1,100 m anomaly extending to ~800 m depth, interpreted as a mineralized hydrothermal system. This anomaly remains open along strike to the northwest and southeast.

### **X Zone**

The X Zone hosts a 1.0 km × 0.5 km multi-element soil anomaly flanking a magnetic feature, interpreted as a buried porphyry system. Rock samples assayed up to 0.75% Cu in altered diorite with chalcopyrite and bornite. Widespread propylitic alteration and structural features suggest the presence of a mineralized system at depth, similar in style to the Rayfield zone.

**Vidette: Gnome and Semlin Zones**

The Gnome and Semlin Zones exhibit strong multi-element geochemical anomalies (Cu-Au-Zn-As-Co-Ni-Mo-Li-Rb) and are spatially associated with resistivity highs from ZTEM surveys, interpreted as buried intrusive bodies. Rock samples confirm disseminated and vein-hosted copper-gold mineralization, with alteration styles consistent with phyllic and propylitic zones. The Semlin Zone lies along the edge of a large batholith, with mineralization concentrated along its contact with Nicola Group volcanics.

**Mowich Zone**

Geological, geochemical, and geophysical data at Mowich define a coherent exploration model centered on NW-trending structural corridors and small syenitic-dioritic intrusions emplaced within Nicola Group mafic volcanics. The Discovery Showing documents exceptional Cu-Au-Ag tenor in serpentinized mafic-volcanic fragments derived from a confined slump/mudflow. Together with copper-rich basalt blocks at the Mowich Lake Copper showing, this indicates a proximal, intrusive-related source with structural focusing of mineralizing fluids. The intrusive plug exposed at the head of the gully, its vein stockworks (quartz-calcite ± malachite), and magnetic breaks consistent with alteration collectively support the presence of a buried mineralized centre upslope from the float accumulation.

Legacy drilling (1989) was insufficient to test this model; holes were short and sited on VLF targets rather than at intrusive-fault intersections now considered critical. The absence of bedrock exposure at the Discovery Showing and limited depth-penetrating geophysics remain the principal gaps. Nonetheless, stream-sediment Cu anomalies (44% >100 ppm) and multi-element associations (including Bi) are consistent with copper-gold systems in the alkalic porphyry spectrum and provide vectoring capacity toward bedrock sources. The balance of evidence indicates that Mowich is a priority, model-driven target warranting systematic follow-up to locate and test the in-situ source of the high-grade float.

The Rayfield Project hosts a diverse suite of mineralizing environments, including alkaline porphyry copper systems, epithermal gold veins, and high-grade structurally controlled copper-gold occurrences. The integration of geological, geochemical, and geophysical datasets supports

the interpretation of multiple robust mineral systems across the Property. Continued exploration is warranted to delineate these systems further and assess their economic potential.

## 26.0 RECOMMENDATIONS

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Based on the results of recent exploration programs, it is the Author's opinion that additional exploration expenditures are warranted on the Rayfield Cu-Au Project. The Project has demonstrated strong potential for both Cu-Au porphyry and epithermal gold-style mineralization.

It is recommended that future exploration focuses on advancing the Rayfield, X, Gnome, Semlin, and Mowich target zones through detailed geological mapping, geochemical sampling, and geophysical surveys, followed by drill testing where justified.

In addition, continued regional prospecting is encouraged outside of the currently defined target zones, as the broader property area remains underexplored and is considered highly prospective. Systematic exploration across the property may result in the identification of new mineralized zones and further increase the potential of the Project.

A staged exploration program supported by a detailed budget should be developed to prioritize targets and guide ongoing work.

The work programs, budgets, schedules, and expected outcomes described below are forward-looking and based on assumptions that the QP and issuer consider reasonable as of the effective date (e.g., access, permitting, availability of contractors, and market pricing). Actual results, costs, and timelines may differ due to operational, logistical, permitting, weather, and market risks. The issuer undertakes no obligation to update forward-looking statements except as required by applicable securities laws.

### **Phase I (Target Refinement):**

The QP recommends an integration and extension program that converts anomalies into drill-ready targets. At Rayfield, a full 3-D inversion of the newly acquired aeromagnetics should be undertaken and co-modeled with the 2024 ground IP and magnetics to generate susceptibility–chargeability volumes, emphasizing IP highs beneath corridors of magnetic destruction that are spatially coincident with copper-in-soil response. Deliverables will include voxel models, target

shells and depth slices, with collar pierce-points compiled into GIS and 3-D targeting software. Away from Rayfield, grid expansions should extend ground IP along the axes of the Gnome, Semlin and X anomalies using 100–200 m dipoles and 50–100 m station spacing, with tie lines across interpreted structural breaks, while high-resolution ground magnetics (25–50 m line spacing) should map magnetite destruction haloes and intrusive contacts at Semlin and X. The aim is to resolve sulphide shells and chargeability gradients that, combined with the multi-element geochemistry, will vector toward potential potassic cores.

In parallel, soil sampling could be infilled across the Rayfield copper-in-soil footprint to 50 m × 100 m spacing, employing auger or power-probe methods where till is thick to consistently reach B-horizon or basal till. The fringes of the Gnome, Semlin and X anomalies should be extended and closed with multi-element suites (Cu–Au–Zn–As–Co–Ni–Mo–Li–Rb) to maintain pathfinder sensitivity to alkaline intrusions. Detailed 1:5,000 geological and structural mapping is warranted over intrusive contacts and shear corridors to constrain vein-set orientations and domain boundaries for drill design. At Mowich, the QP recommends channel sampling of exposures around the mapped syenitic plug and at the head of the slump where very high-grade float (up to 286 g/t Au, 200 g/t Ag and 37.46% Cu) was previously reported, in order to confirm tenor and continuity proximal to northwest-trending structures that are interpreted as fluid conduits. All new geophysical, geochemical and mapping datasets should then be integrated and ranked via a quantitative scoring matrix (geochemical magnitude and coherence; IP amplitude/geometry; magnetic context; structural setting; alteration style; and, where applicable, historical intercepts). Targets exceeding a pre-defined threshold will proceed to scout drilling under Phase II; others will be deferred or closed.

Additional ground geophysical survey work, in particular IP, should be used to further identify mineralized structures / bodies at Rayfield and along other target sites.

### **Phase II (Discovery Drilling):**

Subject to the Phase I gate, the QP recommends an initial discovery-drilling program with flexible meterage to test the best-ranked targets. At Rayfield, oriented fences should test the intersections of IP highs beneath the core copper-in-soil and magnetic-destruction corridor, targeting potassic cores and sulphide stockworks at ~200–350 m vertical depth. At Gnome, step-out holes should

probe IP apices flanking the multi-element soil anomaly to evaluate increasing sulphide content toward an interpreted intrusive center informed by Li–Rb–Mo haloes. At Semlin, scout holes should test IP/structural intersections east-northeast of the 2022 discovery outcrops. At X, short holes should target beneath K-feldspar–veinlet-hosted copper within diorite along the elongate magnetic feature to clarify intrusion geometry and vectoring. At Mowich, two to three short holes are recommended beneath the strongest channel results and along the northwest structures adjacent to the syenitic plug to search for coherent high-grade shoots. At Vidette, one or two confirmation holes should be considered on coincident soil–magnetic features to confirm prospectivity before larger allocations are contemplated. The 2022 assessment recommended ~3,000 m as an initial program; given the improved subsurface resolution from the 2024–2025 geophysics, the QP supports a decision-led approach that can scale meterage up or down after early results meet or fail threshold criteria.

#### **Risk Management and Decision Criteria:**

The principal technical risks are (i) thick till and limited outcrop that can obscure geochemical response and structural control, and (ii) access and wildfire exposure during peak season. Phase I mitigations include deeper B-horizon/basal-till sampling by auger, reliance on IP/resistivity for subsurface positioning of collars, and contingency access routing. A decision-led framework will govern Phase II: porphyry-style intercepts returning, for example,  $\geq 0.10$ – $0.20\%$  Cu over  $\geq 100$  m, or higher-grade intervals accompanied by appropriate alteration (K-feldspar  $\pm$  magnetite with bornite/chalcopyrite), will trigger immediate follow-up drilling; sub-threshold results will be re-ranked and may be deferred unless vectoring indicators strengthen. (Thresholds are illustrative and will be finalized once the 3-D targeting products are in hand.)

#### **Justification:**

Rayfield offers the highest probability of near-term discovery because a large, coherent Cu-in-soil anomaly overlaps robust IP/magnetic responses; 3-D targeting should integrate full 3-D inversion of the aeromagnetics co-modeled with the 2024 ground IP; drilling here is therefore prioritized. Gnome and Semlin exhibit strong multi-element haloes consistent with alkaline intrusions; IP extensions will refine sulphide shells prior to drilling. The X target presents Cu-bearing K-feldspar veinlets within diorite along an elongate magnetic feature that merits short holes for geometric

control and further vectoring. At Mowich, the combination of exceptional Cu–Au float, anomalous streams and nearby syenitic intrusions justifies limited scout holes beneath channel anomalies and along northwest structures. Vidette retains merit for selective scout drilling on coincident soil–magnetic features defined in 2021 to confirm prospectivity ahead of larger allocations. Collectively, the recommended program is technically justified by the recent geochemical and geophysical results and is structured to make rapid, data-driven decisions as new results are delivered.

**Budget:**

It is estimated that a budget of \$345,000 would be required for Phase 1 work, to include IP work, 1,000 soil samples and around 30-days of additional mapping / prospecting around the Rayfield, Gnome, Mowich target areas.

Drilling of around 2,000m during Phase 2 would be estimated to cost of \$600,000 “all in” (includes drilling, support equipment, technical labour and assaying).

**Combined Phase 1 and Phase 2 would be a budget of \$1,056,500** (Table 26-1). This would need to be refined with quotes from suppliers and general expenses at the time of execution.

*Table 26-1: Summary of Recommended Expenditures*

Item	Unit	Unit Rate (\$)	Number of Units	Total (\$)
Ground IP Survey	line-km	8000	25	200,000
Soil Geochemistry	sample	65	1000	65,000
Diamond Drilling	metres	300	2000	600,000
Mapping/ Prospecting				
Geological mapping (geologist 1)	days	750	30	22,500
Geological mapping (geologist 2)	days	650	30	19,500
Accommodations/ Meals	days	300	100	30,000
Supplies	ls	5000	1	5,000
Data Compilation	days	650	10	6,500
Report Writing	days	750	12	9,000
Project Management	days	750	4	3,000.
Sub Total				<b>960,500</b>
Contingency (10%)				96,050
<b>Total Estimated Budget</b>				<b>1,056,550</b>

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## Appendix A: Geomorphic and Sedimentary Evolution of the Rayfield River Region, British Columbia

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NOTE: The following section was authored by Dr. Kenna Wilkie, whose expertise lies in Quaternary geology and paleoenvironmental reconstructions. Dr. Wilkie holds a BSc with Specialization in Environmental Earth Science (University of Alberta, 2003), an MSc in Quaternary Geology (Simon Fraser University, 2006), and a PhD in Quaternary Geology and Organic and Stable Isotope Geochemistry (University of Massachusetts, 2012). She also completed postdoctoral research at the University of Toronto (2012–2013), contributing to studies on the geochemistry of deep crustal fluids in Precambrian Shield rocks (across Canada, Fennoscandia, and South Africa.). While Dr. Wilkie is not currently affiliated with a professional geology association, her academic background and research experience provide a strong foundation for the insights presented in this section.

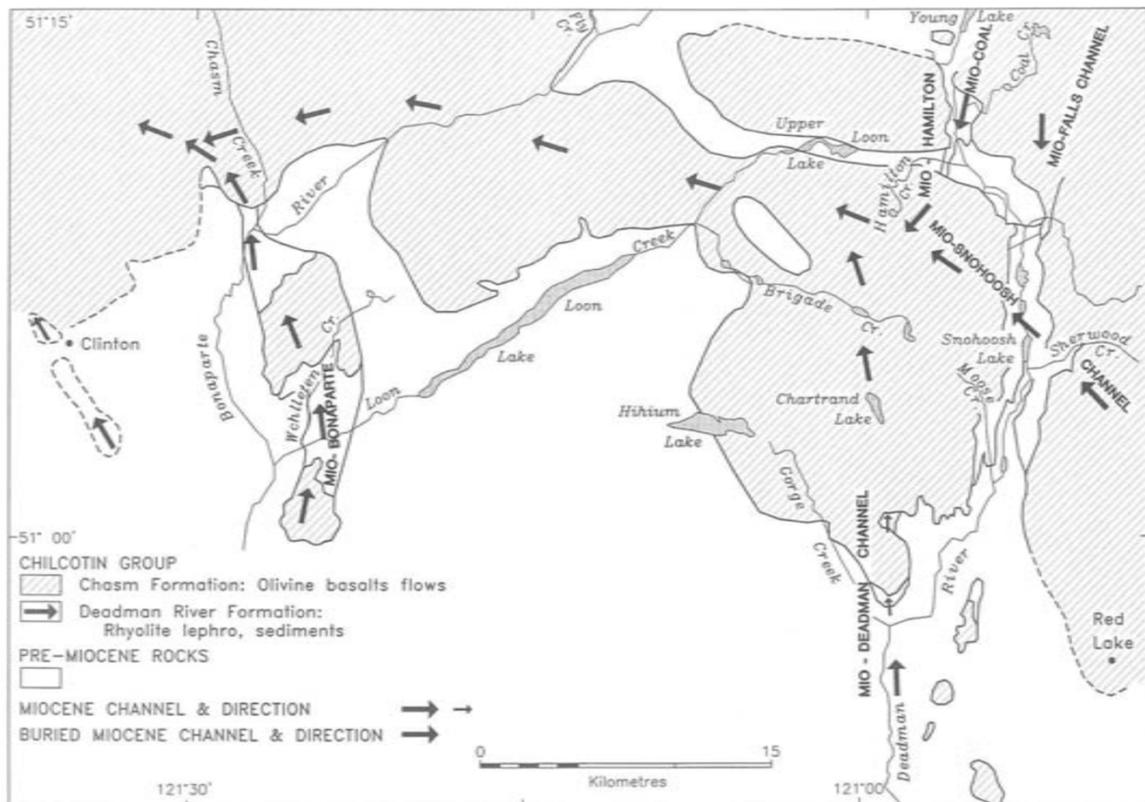
The Rayfield River region in south-central British Columbia, part of the southern Interior Plateau, presents a dynamic geological history shaped by deep mantle processes, Miocene volcanism, Quaternary glaciation, and fluvial reorganization. This landscape has evolved through episodic events that reflect the interplay of tectonics, climate, and surface processes over millions of years.

Paleo drainage patterns in British Columbia are critical for understanding the transport and concentration of elements in surface samples, particularly in glaciated terrains where past meltwater flow influenced sediment deposition and erosion. Studies show that while active drainage disperses elements from sources like mineral deposits and smelter emissions, older paleo-drainage systems can define the long-term geological framework for element distribution, creating specific depositional environments and influencing the path of elements into lake sediments and soils.

The broader geomorphic context of the region reveals significant changes in base level and drainage organization over time. Eocene base levels were approximately 400 m, while Miocene base levels rose to around 900 m, suggesting substantial uplift and reorganization of fluvial systems. Structural controls, including major faults such as the Fraser and Lomex Faults, played a critical role in shaping valley incision and drainage patterns. Valleys such as those of the Thompson, Nicola, and Stein Rivers show evidence of incision into older Eocene valleys, reflecting a complex history of tectonic activity and erosional processes.

Prior to the emplacement of the Chilcotin Group basalt flows, the Bonaparte River occupied a deeply incised, steep-walled Miocene paleovalley, estimated to be up to 500 meters deep and several kilometers

wide (Bevier, 1983; Read, 1989). This valley was subsequently infilled with volcanic ash and sediments derived from the Deadman River Formation. The timing and evolution of this drainage system were closely linked to the late Miocene volcanic activity, during which successive lava flows from the Chilcotin Group significantly altered the geomorphology of the Interior Plateau, ultimately burying the ancient river channels. Although a detailed paleo-drainage map for the Bonaparte River is lacking, regional geological evidence suggests that drainage during the Cenozoic era was broadly directed toward the north and northwest (Read 2000; Tribe, 2003).



*Simplified geological map showing the distribution and flow directions of Miocene drainage channels between Deadman and Bonaparte Rivers. (From Read, 2000)*

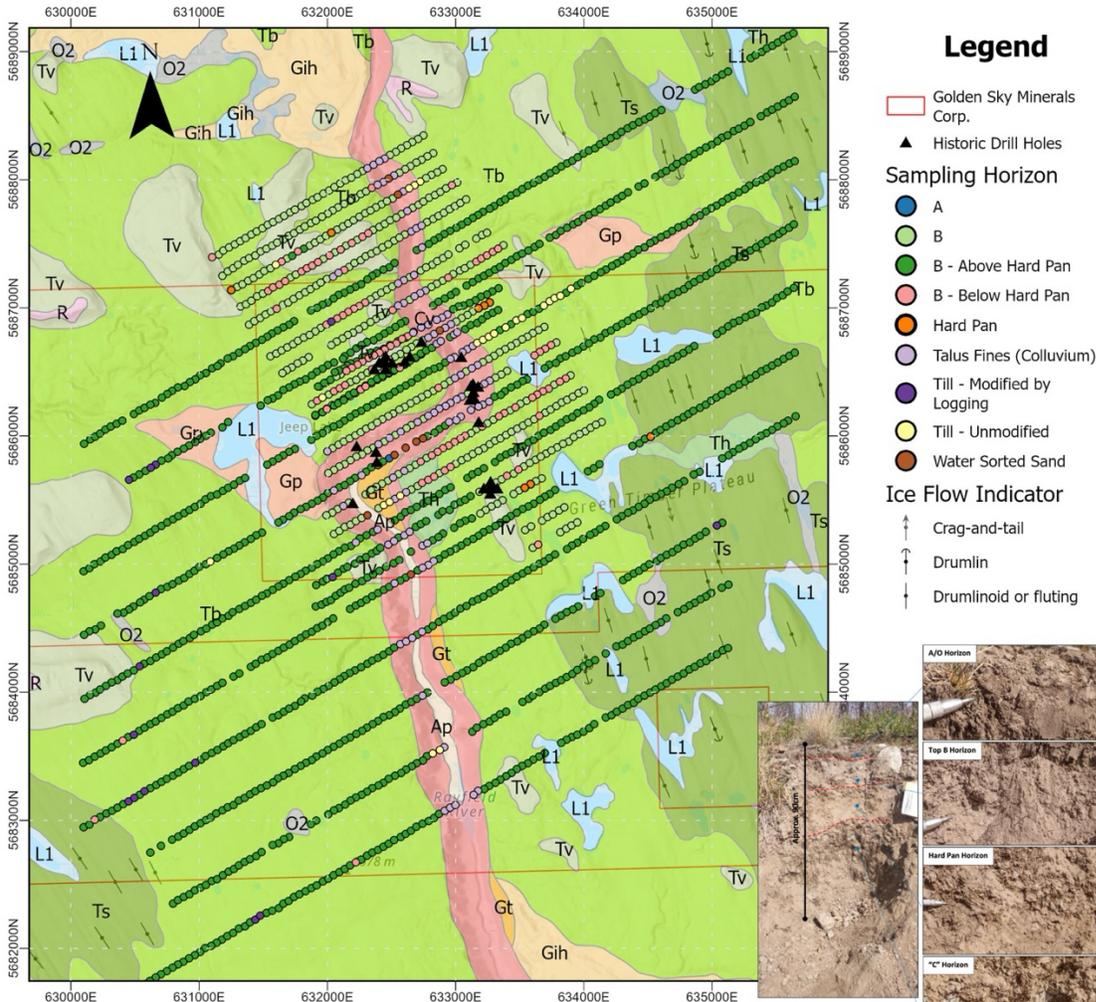
Following the volcanic episode, repeated glacial advances and retreats throughout the Quaternary Period further reshaped the landscape. These glacial processes removed much of the evidence of earlier drainage systems and deposited till and streamlined landforms that now define the modern surface, effectively obscuring the pre-glacial geomorphic framework.

**Geomorphic and Sedimentary Evolution of the Rayfield River Region, British Columbia**

The Quaternary period introduced profound changes through the advance and retreat of the Cordilleran Ice Sheet. According to Clague (1986), the terrestrial Quaternary stratigraphic record of British Columbia is characterized by brief intervals of rapid sedimentation separated by long periods of nondeposition and erosion. Glacial maxima were marked by widespread deposition of till and glaciofluvial sediments, while nonglacial periods were typified by incision and sparse sediment accumulation, often recorded only by unconformities. In valleys such as Rayfield River, glacial deposits are relatively thin, often less than 15 meters, while surrounding plateau areas may host thicker accumulations. The sedimentary record is discontinuous and time-transgressive, reflecting the diachronous nature of glacier advance and retreat across the province.

Ice-flow features and till provenance in the Bonaparte Lake area shows that glaciers originally flowed from the east off Cariboo/Columbia Mountains (Bednarski et al., 2009). This advance was subsequently deflected to the south by ice originating from the Coast Mountains west of the study area. At the height of the Fraser Glaciation, coalescent ice over the Bonaparte Lake area flowed to the SSE from what must have been an ice divide immediately north of the study area over the Fraser Plateau, depressing the crust by approximately 420 meters due to the immense weight of the ice (Clague and James, 2002). This ice divide likely bridged the main ice divides over the Coast Mountains to the west and the Columbia Mountains to the east. As the ice thinned, the local topography imparted a greater influence on ice flow.

Glacial processes deposited a variety of sediments across the landscape, including widespread till, glaciofluvial sands and gravels in meltwater channels, glaciolacustrine silts and clays in ice-dammed lakes, and colluvium and alluvium from slope and fluvial reworking. In the Rayfield River valley itself, glacial deposits are relatively thin, often less than 15 m, while surrounding plateau areas may host thicker accumulations. These sediments are generally alkaline, except in talus zones where oxidation of sulphide minerals has led to localized acidity.



**Non glacial environments**

**O2 Organic Deposits**  
Fen peat; 1-3m thick on average; generally occurs as flat, wet terrain (swamps) over poorly drained substrates; forms relatively open peatlands

**Colluvial Deposits**

**Cv Colluvial veneer**  
thin and discontinuous cover of slumped and/or soilflucted material <1m thick; overlies bedrock or till

**Alluvial Deposits**

**Ap Floodplain deposits**  
sorted gravel, sand, silt and organic detritus >1m thick; forming active floodplains close to river level with meander channels and scroll marks

**L1 Lacustrine deposits**  
sand, silt and minor clay deposited in a former lake; >1m thick; occasionally overlain by organic deposits; exposed by recent fluctuations in lake levels

**Glaciofluvial Deposits**

**Gp Proglacial outwash deposits**  
generally 1-5m thick; forming planar surfaces; generally mantle valley floors and surfaces adjacent to glacial meltwater channel margins

**Gt Outwash terrace deposits**  
1 -10m thick; generally associated with meltwater channels and canyons; generally forming flat paired terraces perched above fluvial deposits

**Gih Ice-contact stratified deposits**  
poorly-sorted sand and gravel with minor diamictons; 1 ->20m thick; deposited in contact with the retreating glacier; forming hummocky topography relating to melting of underlying ice

**Till**  
**Tb Till blanket**  
>1m thick; continuous till cover forming undulating topography that locally obscures underlying units

**Ts Streamline and fluted till**  
>1m thick; till surface marked by streamline landforms including fluting and drumlins

**Th Hummocky till**  
>1m thick; hummocky to rolling till surface including discontinuous pockets of gravel

**Tv Till veneer**  
<1m thick, discontinuous till cover, underlying bedrock topography is discernible

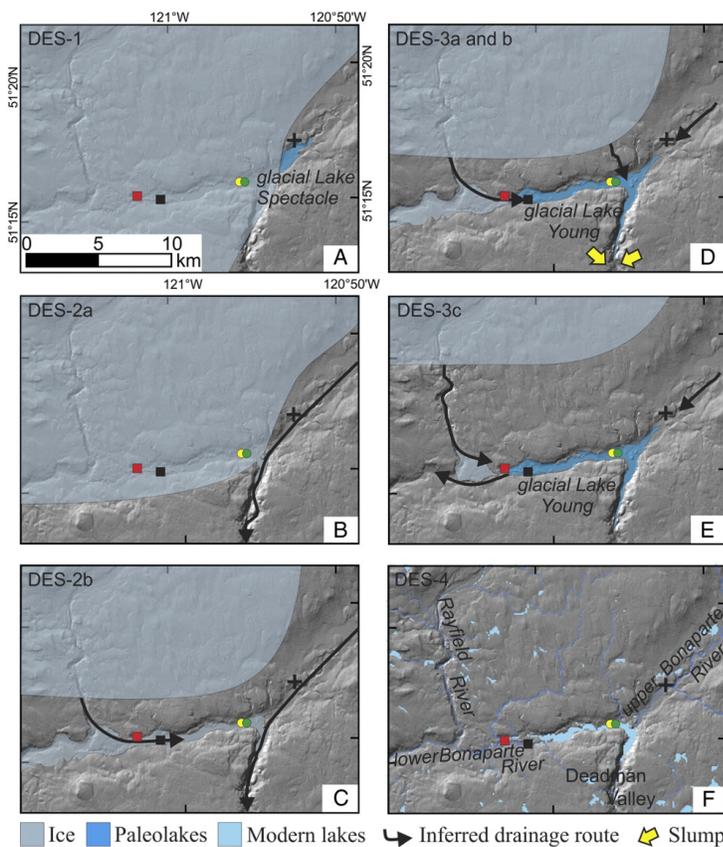
**Pre-Quaternary**

**R Bedrock outcrop**  
continuous bedrock outcrop; can include pockets of till or colluvium rarely exceeding 2 m thickness

Quaternary and surficial deposits and locations of soil samples and their stratigraphic sampling horizons within the Rayfield River area. (adapted from Plouffe, 2009).

One of the most prominent geomorphic features along Rayfield River is the Young Lake Esker-like Ridge (YLER), located within the Young Lake basin at the terminus of Rayfield River into the northeastern end of

the Bonaparte Valley (Perkins et al, 2013). Detailed morpho-sedimentary and basin analysis show that this ridge formed through deposition of sub-aerial outwash between and/or on dead ice in front of a regionally backwasting ice margin. The ridge includes Hjulstrom-style deltaic deposits in shallow water and Gilbert-style foresets at its eastern terminus, reflecting sediment progradation into glacial Lake Young. This lake formed when slump-induced dams in Deadman Valley blocked southward drainage, reversing flow and ponding water within the basin. As ice continued to retreat and melt, the lake eventually overtopped its ice dam and drained westward through the lower Bonaparte River valley, establishing the modern drainage configuration. The complex deglacial evolution of the Young Lake basin including a drainage reversal and formation of two glacial lakes, supports north- westward backwasting of the CIS and dead ice within Young Lake Basin.



*Geomorphic evolution of the Young Lake basin during CIS retreat. (A) Deglacial event stage (DES) 1: The ice margin is downwasting and backwasting to the NW, opening the upper Bonaparte River valley, forming glacial Lake Spectacle, and resulting in the deposition of glacial lake sediments. (B) DES-2a: The ice margin retreats further, allowing drainage from the paleo-upper Bonaparte River south through Deadman Valley, resulting in deposition of river terrace gravel and the sediments within the erosional remnants and incision of the Deadman Valley raised channel. (C) DES-2b: Ice retreat opens up the Rayfield River valley, but downwasting ice blocks the lower Bonaparte River valley resulting in drainage east into Young Lake basin overtop of stagnating ice and south down Deadman Valley (raised channel from DES-2a is abandoned after further glaciofluvial erosion of Deadman Valley). (D) DES-3a: Coalescent slumps into*

*Deadman Valley dam this drainage route forming glacial Lake Young and resulting in the deposition of glaciolacustrine sediments. DES-3b: Evolution of a Hjulstrom-style delta occurs as sediment pro-grades eastward over lake bottom sediments and amongst waning ice blocks in the lower Bonaparte River valley. A Gilbert-style delta progrades eastward over lake bottom sediments, as inflows encounter deeper lake water. Meltwater drainage from the plateau surface to the north deposits outwash sediments in valley marginal fans within the Young Lake basin; (E) DES-3c: Lake level rises, overtops the ice dam in the lower Bonaparte Valley (the lowest possible outlet at the west end of Young Lake), and*

*rapidly drains, establishing the path for modern Bonaparte River drainage. (F) DES-4: All dead ice has melted out and the modern lower Bonaparte River drains west from modern Young Lake. Rayfield River no longer drains into Young Lake basin and south through Deadman Valley, but has cut through the ice contact sediments at the west end of the YLER and joined the westward-flowing lower Bonaparte River. Ice margin locations are schematic in C–E. (From Perkins et al., 2013)*

The deglacial evolution of the Rayfield River region, marked by episodic ice retreat, meltwater reorganization, and sediment redistribution, has left a complex surficial landscape that directly influences modern geochemical sampling strategies. Understanding this glacial legacy is essential for interpreting elemental data from soil and till samples, particularly in areas where glacial processes have obscured or redistributed bedrock signatures. Drift prospecting, when informed by geomorphic context, enables the identification of buried mineralization by tracing geochemical anomalies back to their source (e.g., Levson et al., 1994; Levson, 2001; Plouffe et al., 2001; Ward et al., 2013; Sacco et al., 2018). Sampling subglacial till—especially from the C-horizon—provides a more direct link to bedrock provenance, as it represents the least altered material derived from underlying lithologies (Shilts, 1993). In contrast, upper soil horizons may reflect post-depositional processes such as pedogenesis or hydromorphic dispersion.

The C horizon in this region is typically composed of compact, unweathered basal till, interpreted as lodgement till deposited subglacially under high pressure. This unit exhibits low permeability, high bulk density, and poor sorting, with a matrix-supported texture and angular clasts derived from local bedrock lithologies.

Overlying the basal till is a layer of ablation till, which is less consolidated and more heterogeneous in composition. This material was deposited during ice melt and is characterized by improved drainage properties and a looser structure, facilitating soil development.

Within the ablation till, pedogenic processes have led to the formation of a Bt horizon, indicative of clay illuviation and horizon differentiation. The Bt horizon reflects post-glacial weathering and soil formation, with increased clay content and evidence of eluviation from overlying horizons. This horizon is typically found within the upper 0.5 to 1.5 meters of the profile, depending on local topography and drainage conditions. The presence of a ‘hardpan layer’ within the soil B horizon at sites in the Rayfield area suggests an Orthic Grey Luvisol, typical of the Kamloops Luvisol. A Kamloops Luvisol refers to a specific soil profile found in the Kamloops region, characterized by well-developed Ae (eluviated) and Bt (illuviated clay) horizons, reflecting the downward movement and accumulation of clay particles. These Luvisolic soils are forest soils, typically developing in medium- and fine-textured parent materials, often on loamy

tills or developed on calcareous glacial till derived from volcanic bedrock. Sampling below this ‘hardpan’ horizon—ideally targeting the C horizon or compact basal tills—is recommended when using element tracing in soils to delineate bedrock anomalies.

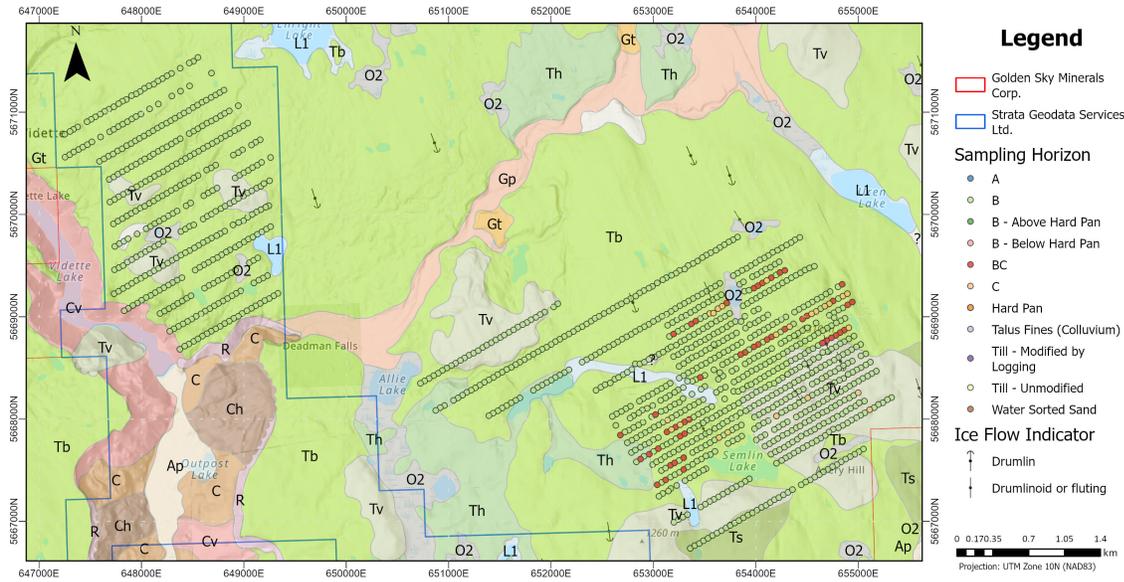
The vertical profile of the overburden in the Rayfield River area thus comprises:

- A surface organic-rich A horizon (where present),
- A transitional eluvial E horizon (in well-developed profiles),
- A clay-enriched Bt horizon within ablation till,
- Underlain by compact basal till forming the C horizon.

This stratigraphy has implications for geochemical sampling, particularly in drift-covered terrains. Sampling below the Bt horizon—ideally targeting the C horizon—provides a more direct geochemical link to bedrock provenance, minimizing the influence of post-depositional processes such as pedogenesis and hydromorphic dispersion.

#### **Quaternary and Surficial geology: Vidette area (Gnome and Semlin targets)**

The advance and retreat of the Cordilleran Ice Sheet deposited a complex stratigraphy of glacial sediments, including basal lodgement till, ablation till, and post-glacial soil horizons. These deposits obscure bedrock signatures and complicate geochemical sampling, making it essential to understand the provenance and depositional context of till materials. In the Vidette area, ice-flow indicators suggest a dominant northwest–southeast glacial transport direction, implying that mineralized material found in till may have originated from outcrops of the Nicola Group or Ashcroft Formation to the northeast. After glacial maxima, valleys like the Deadman River and Hamilton Creek (near Vidette Lake) were incised by streams, creating unconformities in the geological record and glaciofluvial reworking of material. Postglacial sedimentation was more localized and less extensive.



**Quaternary and Surficial Deposits Post Last Glaciation**

<p><b>Non glacial environments</b></p> <p><b>O2 Organic Deposits</b> Fen peat; 1-3m thick on average; generally occurs as flat, wet terrain (swamps) over poorly drained substrates; forms relatively open peatlands</p> <p><b>Colluvial Deposits</b></p> <p><b>Ch Landslide and slump debris</b> diamiction, generally 1-10m thick, but may exceed 10m near toe of large landslides; hummocky topography; includes active and inactive landslides</p>	<p><b>Cv Colluvial veneer</b> thin and discontinuous cover of slumped and/or soilfucted material &lt;1m thick; overlies bedrock or till</p> <p><b>C Undifferentiated colluvial deposit</b> undivided landslide debris, colluvial veneer and talus</p> <p><b>Alluvial Deposits</b></p> <p><b>Ap Floodplain deposits</b> sorted gravel, sand, silt and organic detritus &gt;1m thick; forming active floodplains close to river level with meander channels and scroll marks</p>	<p><b>L1 Lacustrine deposits</b> sand, silt and minor clay deposited in a former lake; &gt;3m thick; occasionally overlain by organic deposits; exposed by recent fluctuations in lake levels</p> <p><b>Glaciofluvial Deposits</b></p> <p><b>Gp Proglacial outwash deposits</b> generally 1-5m thick; forming planar surfaces; generally mantle valley floors and surfaces adjacent to glacial meltwater channel margins</p>	<p><b>Gt Outwash terrace deposits</b> 1-10m thick; generally associated with meltwater channels and canyons; generally forming flat paired terraces perched above fluvial deposits</p> <p><b>Till</b></p> <p><b>Tb Till blanket</b> &gt;1m thick; continuous till cover forming undulating topography that locally obscures underlying units</p> <p><b>Ts Streamlined and fluted till</b> &gt;1m thick; till surface marked by streamline landforms including fluting and drumlins</p>	<p><b>Th Hummocky till</b> &gt;1m thick; hummocky to rolling till surface including discontinuous pockets of gravel</p> <p><b>Tv Till veneer</b> &lt;1m thick, discontinuous till cover, underlying bedrock topography is discernible</p> <p><b>Pre-Quaternary</b></p> <p><b>R Bedrock outcrop</b> continuous bedrock outcrop; can include pockets of till or colluvium rarely exceeding 2 m thickness</p>
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*Quaternary and surficial deposits and locations of soil samples and their stratigraphic sampling horizons within the Vidette area (Gnome and Semlin target zones). (adapted from Huscroft, 2009).*

**Glacial Lake Deadman and the Deadman River Delta: Late-Glacial Evolution and Catastrophic Drainage**

During the late-glacial period, the Thompson Basin of south-central British Columbia hosted a series of proglacial lakes formed in response to the stagnation and retreat of the Cordilleran Ice Sheet (CIS). One of the most prominent among these was Glacial Lake Deadman, which developed approximately 10,000 to 13,000 years before present (Fulton, 1969; Ryder, 1981; Clague and James, 2002; Johnsen and Brennand, 2004). The lake formed as ice retreated from the Fraser Plateau, leaving behind a ribbon-shaped basin dammed by stagnant ice near Spences Bridge and draining eastward toward Kamloops.

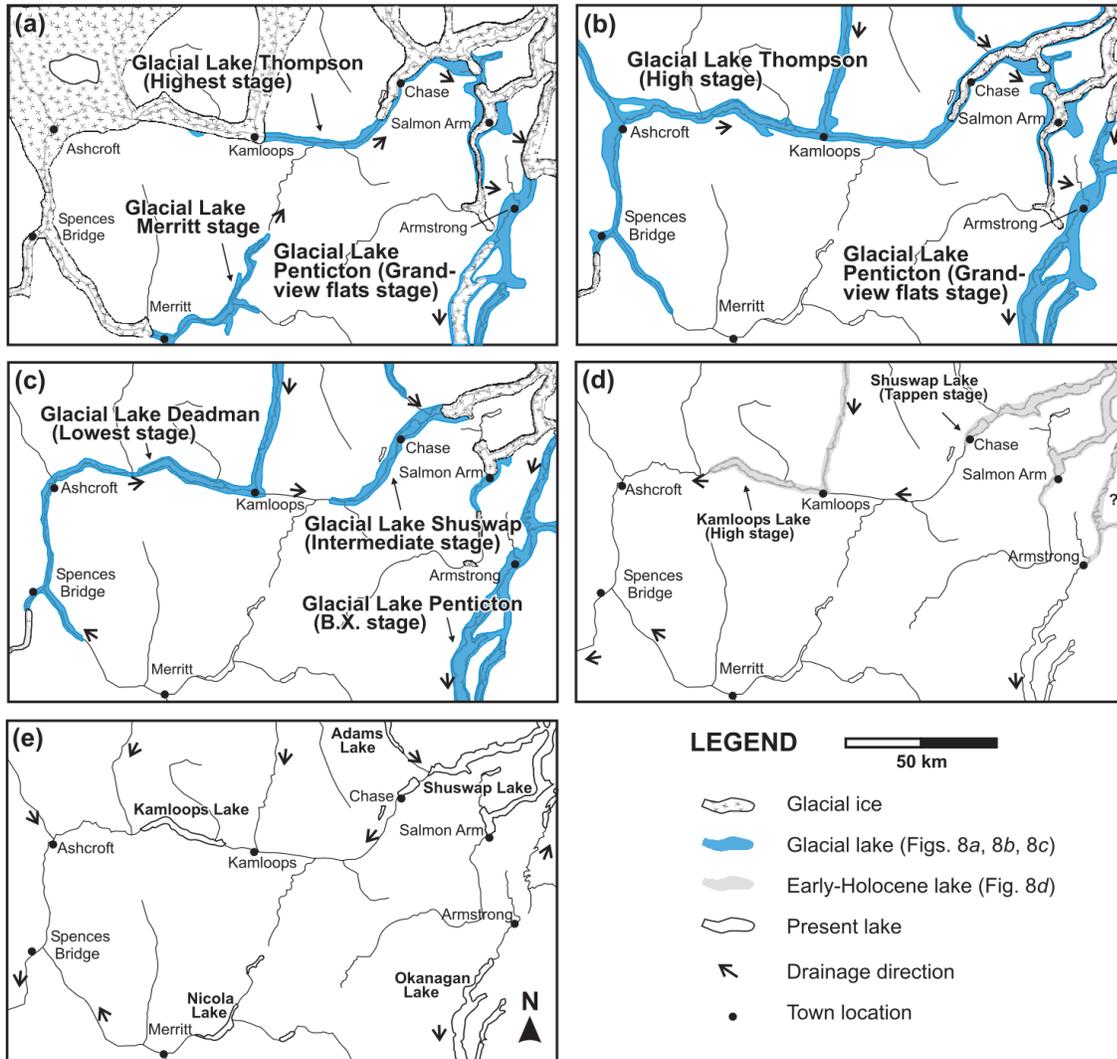
At its maximum extent, Glacial Lake Deadman reached depths of up to 80 meters and held an estimated 24 km<sup>3</sup> of water. The lake’s morphology was strongly influenced by the underlying topography and ice margin configuration, resulting in a narrow, elongated basin with steep valley walls and limited lateral expansion.

A key geomorphic feature associated with Glacial Lake Deadman is the Deadman River Delta, the largest Gilbert-type delta in the region, covering approximately 13 km<sup>2</sup>. This delta exhibits multiple inset surfaces at elevations of approximately 540 m, 480 m, and 450 m above sea level, reflecting episodic lake level changes and sedimentation events. Ground Penetrating Radar (GPR) surveys and sediment exposures confirm the delta's lacustrine origin, revealing classic topset–foreset–bottomset architecture indicative of progradation into a standing body of water.

The lake underwent a catastrophic drainage event—a jökulhlaup—when the ice dam near Spences Bridge failed. This sudden release of approximately 20 km<sup>3</sup> of water carved erosional bedforms and deposited flood-related sedimentary features, including eddy bars and giant ripple marks on the delta surface. The floodwaters propagated downstream for over 250 km along the Fraser River system, and may have contributed to the deposition of exotic muds in offshore basins such as the Strait of Georgia and Saanich Inlet, dated to between 10,190 and 11,940 years BP (Fulton, 1969; (Blais-Stevens et al. 2001, 2003; Conway et al. 2001).

Post-drainage, the Deadman delta acted as a sediment dam, temporarily impounding high stages of Kamloops Lake. The ancestral Thompson River subsequently incised through approximately 150 meters of valley fill, leaving behind a series of fluvial terraces and removing an estimated 14.1 km<sup>3</sup> of sediment. This incision event significantly reshaped the regional landscape and established the modern drainage configuration.

The region exhibits exceptionally high glacio-isostatic tilts, among the highest recorded globally, ranging from 1.7 to 1.8 m/km. These tilts suggest that ice loads were heavier or more persistent to the north-northwest, supporting the hypothesis of a regional ice divide centered on the Fraser Plateau. This differential loading and subsequent isostatic rebound played a critical role in post-glacial drainage evolution and sediment redistribution.



*Late-glacial lake evolution in the southern interior of British Columbia. Two glacial lakes with three glacial lake stages (a–c) are identified in the study area. The extent of Glacial Lake Thompson - Highest stage is after Fulton (his South Thompson stage; 1965, 1969). Glacial lakes and naming outside the Thompson Basin are applied from Fulton (1969). Plateau ice is not shown in (b) and (c) as ice-marginal positions remain uncertain. (d) Early-Holocene High stage of Kamloops Lake. (e) Present lakes and drainage directions. (From Johnsen and Brennand, 2004).*

Understanding the geomorphic and sedimentary evolution of Glacial Lake Deadman and its associated delta is essential for interpreting surficial geochemical anomalies and guiding drift prospecting strategies. The legacy of catastrophic drainage, sediment damming, and valley incision has left a complex stratigraphic record that influences modern soil development, till composition, and elemental dispersion patterns across the Rayfield Project area.

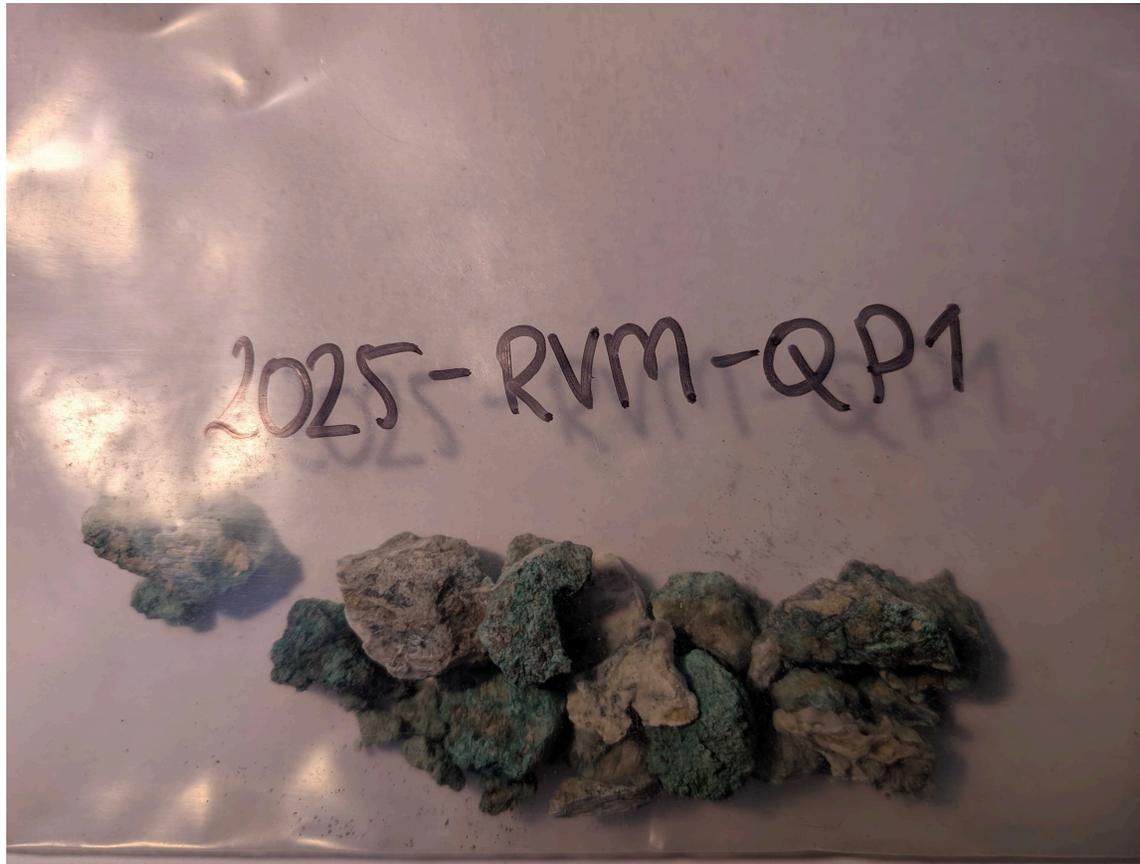
**References:**

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**APPENDIX B: SAMPLE PHOTOS FROM AUTHOR'S SITE VISIT (30<sup>TH</sup> OCTOBER 2025)**

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Sample photos from QP Site Visit on 30<sup>th</sup> October 2025.



*Figure 1: Sample 2025-RVM-QP1*

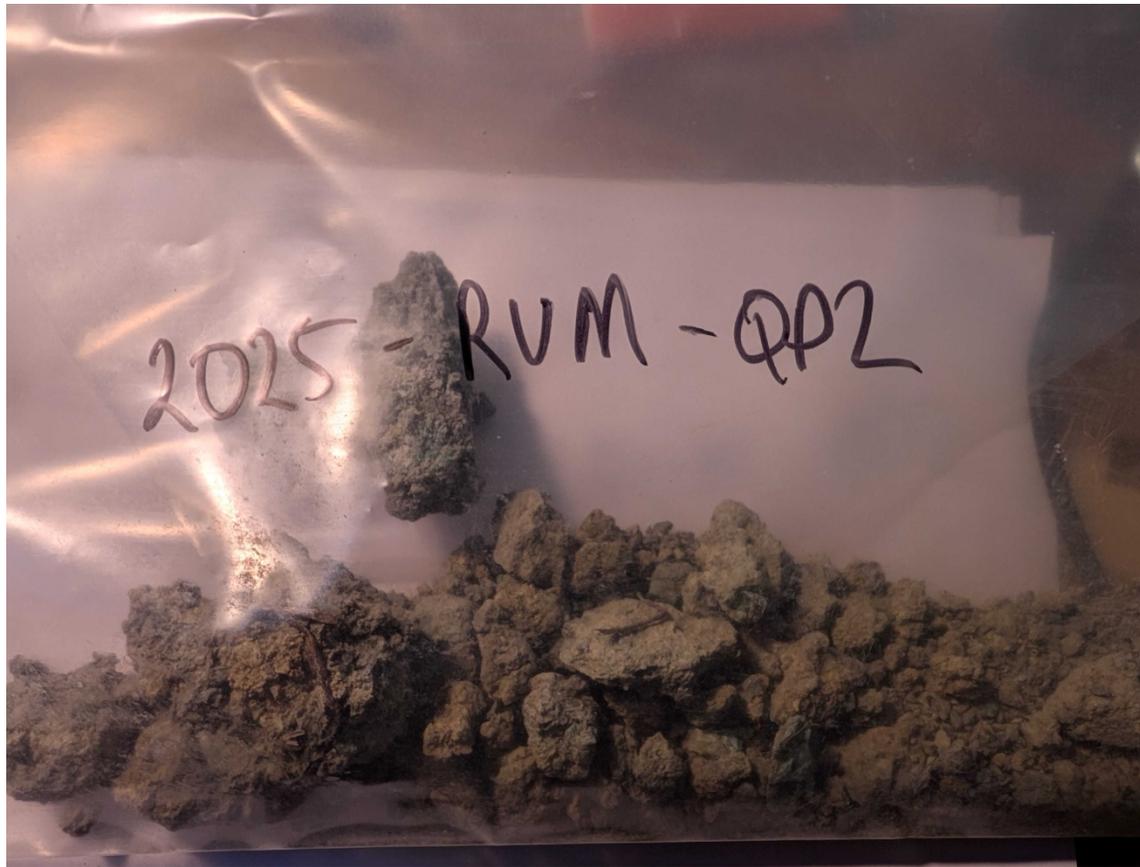


Figure 2: Sample 2025-RVM-QP2

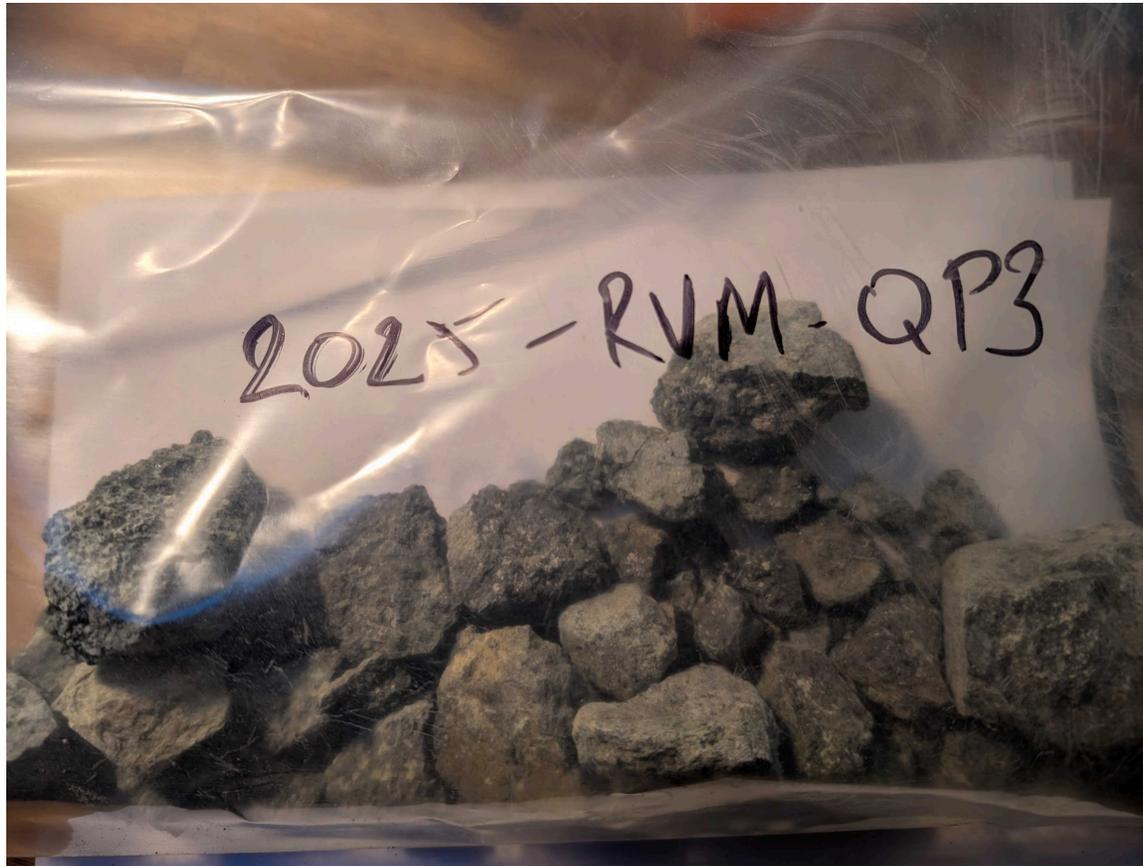


Figure 3: Sample 2025-RVM-QP3

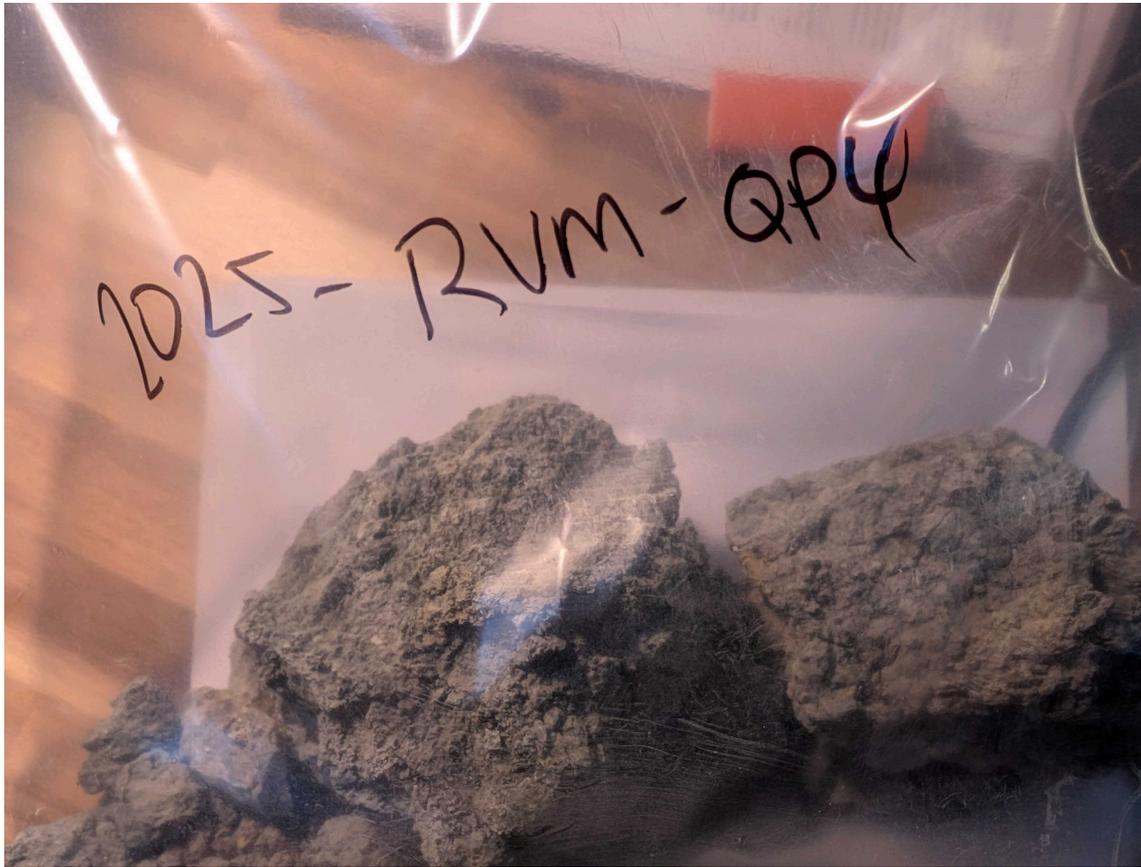


Figure 4: Sample 2025-RVM-QP4

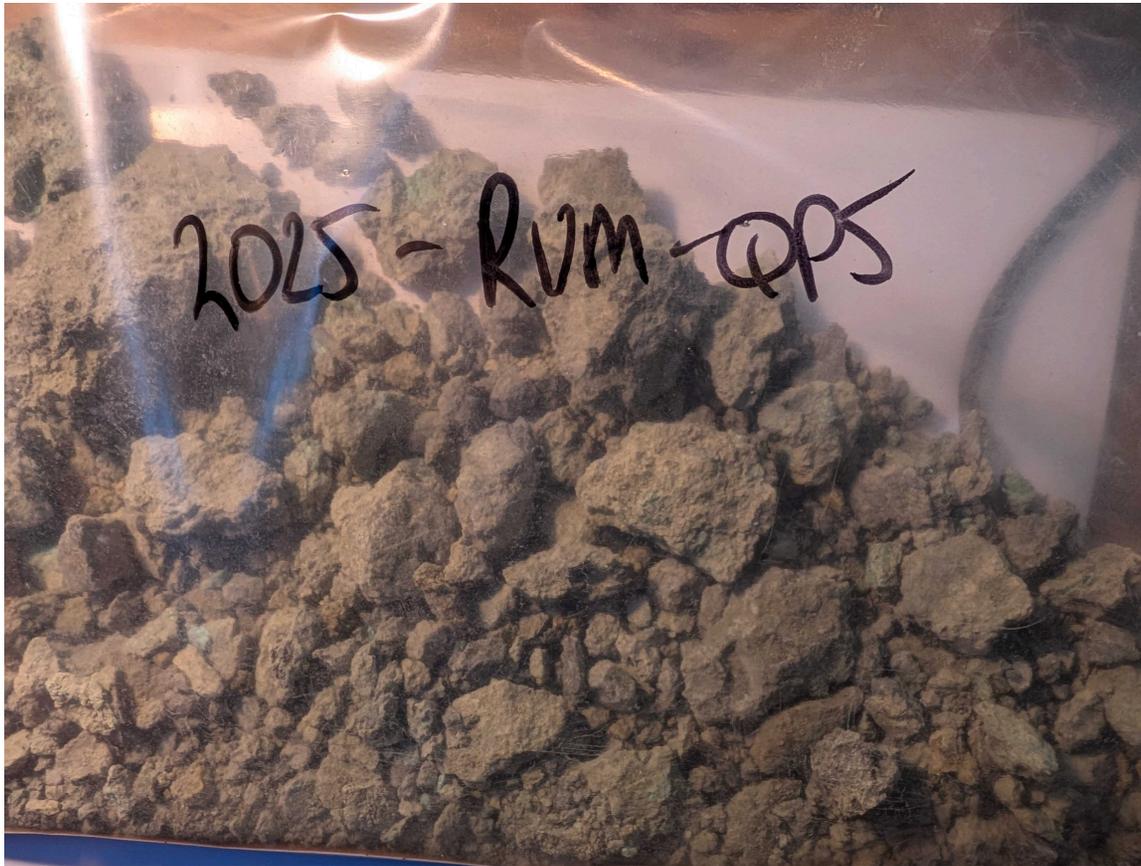


Figure 5: Sample 2025-RVM-QP5



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**APPENDIX C: LABORATORY CERTIFICATES**



SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.

Lakefield - Ontario - KOL 2HO

Phone: 705-652-2000 FAX: 705-652-6365

**Walk In Minerals BC**

Attn : Andy Randell

1720-13th Avenue

Invermere BC

VOA1K4

05-February-2026

Date Rec. : 12 January 2026

LR Report : CA02208-JAN26

Client Ref : SGDS Hive

# CERTIFICATE OF ANALYSIS

Sample ID	Weight Received g	Au g/t	Ag g/t	Al g/t	As g/t	B g/t	Ba g/t	Be g/t	Bi g/t	Ca g/t	Cd g/t	Co g/t
2: RVM-QP1	196	3.93	164	5250	< 30	< 20	2640	< 5	< 20	99100	< 10	11
3: RVM-QP2	460	0.80	10	39400	< 30	< 20	1090	< 5	< 20	46000	< 10	58
4: RVM-QP3	1113	< 0.02	< 2	25900	< 30	35	178	< 5	< 20	34800	< 10	83
5: RVM-QP4	2349	0.02	< 2	27700	< 30	< 20	285	< 5	< 20	39200	< 10	76
6: RVM-QP5	1523	0.41	8	34700	< 30	< 20	471	< 5	< 20	51000	< 10	63

Sample ID	Cr g/t	Cu g/t	Fe g/t	K g/t	Li g/t	Mg g/t	Mn g/t	Mo g/t	Ni g/t	P g/t	Pb g/t	S g/t
2: RVM-QP1	102	324000	22200	< 1000	< 10	41400	924	< 10	101	< 200	42	74000
3: RVM-QP2	1320	20000	58300	4420	12	110000	1170	< 10	650	570	< 20	2750
4: RVM-QP3	2590	91	67200	4300	< 10	159000	1090	< 10	1140	491	< 20	< 200
5: RVM-QP4	2050	1270	62500	2870	< 10	149000	1110	< 10	982	511	< 20	235
6: RVM-QP5	1440	16400	61500	2810	< 10	121000	1180	< 10	668	619	< 20	1660

Sample ID	Sb g/t	Sc g/t	Se g/t	Si g/t	Sn g/t	Sr g/t	Ti g/t	Tl g/t	V g/t	W g/t	Y g/t	Zn g/t	Zr g/t
2: RVM-QP1	< 50	< 7	< 50	45300	< 50	1760	351	< 100	106	< 50	< 5	< 10	< 100
3: RVM-QP2	< 50	20	< 50	191000	< 50	184	2050	< 100	139	< 50	8	57	< 100
4: RVM-QP3	< 50	20	< 50	191000	< 50	212	1540	< 100	116	< 50	5	55	< 100
5: RVM-QP4	< 50	19	< 50	167000	< 50	158	1540	< 100	117	< 50	5	53	< 100
6: RVM-QP5	< 50	22	< 50	178000	< 50	158	1910	< 100	156	< 50	7	60	< 100



**SGS Canada Inc.**

P.O. Box 4300 - 185 Concession St.

Lakefield - Ontario - KOL 2H0

Phone: 705-652-2000 FAX: 705-652-6365

LR Report : CA02208-JAN26

*Tabitha Anand*  
*Project Coordinator*

## **APPENDIX D: CURRENT PERMITS**

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December 17, 2025

Golden Sky Minerals Corp.  
2110-650 W Georgia St  
Vancouver BC V6B4N9 CAN  
Sent as electronic mail

**Re: Mines Act permit approval notification**  
**Mines Act permit: MX-100000611**  
**Mine name: RVM Project**  
**Mine number: 2000362**  
**Permittee: Golden Sky Minerals Corp.**

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Please be advised that this letter refers to **information** that is available on the ministry's Mining proponent guide to the Notice of Work application process page of our website: <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/permitting/proponent-now-guide>.

Your Mines Act permit MX-100000611 is hereby issued, authorizing mining activities as now listed in your permit. The authorized activities include your program for the conservation, protection, and reclamation of the land, watercourses and cultural heritage resources that may be affected by the activities. For your reference:

- Notice of Work number: 2000362-2023-01
  - Submission accepted: October 16, 2023
  - For the term of: December 17, 2025 to December 16, 2030

A Free Use Permit for timber cutting to support mining activities has been issued. Ensure all timber cutting activities are conducted by an appropriately trained and qualified person.

As you were advised via previous correspondence from this office, other legislation may be applicable to your operation and, as the Permittee, you may be required to obtain approvals or permits under that legislation, such as for road use or the operation of a camp. It is your responsibility to comply with the terms and conditions of all other permits and authorizations which may be issued to you and all **other applicable legislation** including but not limited to the Forest Act, Wildlife Act, and Wildfire Act and regulations.

Industrial and commercial operators, including those involved in mining activities, have specific obligations under the Wildfire Act. Ensure you understand the definitions of **industrial and high risk activities**, and accordingly, your responsibilities and obligations that are based on how your mining activities are categorized.

Importantly, and as advised via previous correspondence from this office, be reminded that it is your responsibility to communicate with **other overlapping and potentially affected tenure holders**. Communication and coordination with overlapping tenure-holders is imperative in order to eliminate or minimize conflicts with other tenure-holders. Examples of other tenure holders include:

- Forest licensee
- Woodlot licensee
- Community forest tenure holder
- Range tenure holder
- Trapline holder
- Water licensee
- Guide outfitter certificate holder
- Recreation or tourism operators
- Petroleum, natural gas, transmission lines, wind energy or other energy tenure holder

A variety of **online applications and tools** are available to assist in screening for overlapping tenure holders.

Please be reminded that your **cultural heritage resources protection and conservation plan** (chance find procedure), submitted as part of your application, must be implemented prior to the start of mechanized activities.

Mining activities are regulated by the **Mines Act and the Health, Safety and Reclamation Code for Mines in British Columbia (Code)**, among other legislation, and you are advised to familiarize yourself with the Mines Act and the Code. The Code and its guidance documents are periodically updated. Ensure to check the Code section of our website regularly for the most recent version.

Please be reminded that **Minespace** is the ministry's platform where you can access any issued regional mine permits, and where you will submit **regional mine permit-required and/or Code-required reports**. MineSpace is also where you can update **mine manager information** and keep other contact information up to date, including notification requirements for the start and stop of work in, on, or about a mine, as required via **the Code**.

**Annual summaries** that document yearly work and reclamation are **Code-required reports**. It is a requirement that you submit a completed Annual Summary of Exploration Activities (ASEA) form and detailed map of your mining operation by March 31, annually, to

the ministry via **MineSpace**. This information is required to assist in the ministry's regulatory oversight of mining activity and if not submitted, may lead to compliance and enforcement actions.

Additionally, for each year of your **multi-year area-based (MYAB)** authorization, a Multi-Year Area-Based Annual Update form (**Annual Update**) of cumulative work completed and work proposed for the new calendar year must be submitted to **MineSpace** no later than March 31. If new work activities are planned to commence in the new calendar year prior to March 31, the Annual Update must be submitted 30 days prior to the proposed commencement of the work. For more information, please see our **MYAB policy** and **proponent guidance** documents.

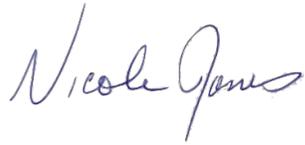
Total reclamation security held as a condition of your Mines Act permit is \$19,000. Continual and progressive reclamation of the areas affected by the mining activities is expected unless otherwise advised in writing. The amount of your security deposit may be adjusted based on reclamation performance, field inspections by this ministry, and on reports which may be requested. Until the Mines Act permit is closed and security returned, the permittee and mine manager are responsible for the site. For further information on reclamation security, please review the **reclamation security for mines in British Columbia** section of our website.

Importantly, and as advised in previous correspondence, your **Code-required Mine Emergency Response Plan (MERP)** must be filed with the regional mines office if not already submitted. Your MERP must be maintained and posted at the mine site at all times and must include the name of the designated mine manager or alternate in their absence. The MERP must be implemented prior to the start of field activities including travel to the mine site. All employees must be trained in the use of this plan.

Be reminded that departure from approved mining activities as specified in your permit requires written authorization. Ensure that you and everyone involved in the mining operation comply with all conditions of the permit and adhere to the approved work program in its entirety.

Ensure you update **MineSpace** with notification to start work at least 10 days prior to beginning work on the program.

Sincerely,



Nicole Jones  
Inspector of Mines

CC: [Reclamation.Security@gov.bc.ca](mailto:Reclamation.Security@gov.bc.ca)



Permit Number: **MX-100000386**

Mine Number: **1620376**

Permittee: **Golden Sky Minerals Corp.  
2110-650 W Georgia St  
Vancouver BC V6B4N9**

Name of Property: **Rayfield Copper-Gold Property**

Reclamation Liability Amount: **\$8,500.00**

Map Reference: **Lat: 51.3113500 Long: -121.0936000**

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**Date of Issuance: Dec 07 2023**

**Approval End Date: Dec 06 2028**

A handwritten signature in blue ink, appearing to read "Grant Feldinger".

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Grant Feldinger  
Inspector of Mines – Permitting

## PREAMBLE

Notice Of Work for the Rayfield Copper-Gold Property Mineral project was filed with the Chief Permitting Officer, submitted on Jul 20 2021 and last updated on Dec 06 2023. The application included a plan of the proposed work system (“Mine Plan”) and a program for the protection and reclamation of the surface of the land and watercourses (“Reclamation Program”), affected by the Notice of Work.

The Mines Act, the Health, Safety and Reclamation Code for Mines in British Columbia (“Code” or “HSRC”), and this Mines Act Permit contain the requirements of the Chief Permitting Officer for the execution of the Mine Plan and Reclamation Program, including the deposit of reclamation securities. Nothing in this permit limits the authority of other government agencies to set additional requirements or to act independently under their respective authorizations and legislation.

## THE MINE PLAN AND RECLAMATION PROGRAM

The Chief Permitting Officer considered the following Mine Plan and Reclamation Program(s) for the stated period(s):

1. **Notice of Work Mine Plan and Reclamation Program**
  - 1.1. Notice of Work **1620376-2021-01** tracking number **100348998** submitted **Jul 20 2021** and last updated on **Dec 06 2023**
  - 1.2. Notice of Work (No. 1620376-2021-01) Tracking Number: 100348998, dated Nov 29 2021, prepared by Cameron Dorsey
  - 1.3. Rayfield permit area accomodation 2023, dated Apr 28 2023, prepared by Cameron Dorsey
  - 1.4. RAYFIELD PROPERTY PROPOSED WORK MAP, dated Nov 29 2021, prepared by Cameron Dorsey
  - 1.5. Rayfield Proposed IP Lines Option A, dated Nov 29 2021, prepared by Cameron Dorsey
  - 1.6. Archaeological Chance Find Procedure Rayfield Property – Golden Sky Minerals Corp., dated Jun 17 2021, prepared by Cameron Dorsey
  - 1.7. iMapBC Mapping (Burn Severity Map 1:50,000), dated Sep 21 2023, prepared by Grant Feldinger
  - 1.8. iMapBC Mapping (Harvested Block Map 1:20,000), dated Sep 21 2023, prepared by Grant Feldinger

## PERMIT CONDITIONS

The Chief Permitting Officer hereby issues this permit subject to the following conditions that the permittee must comply with:

### A. General

1. Approval - This permit authorizes only the following mining activities as outlined in the Mine Plan and Reclamation Program. Mining activities conducted that are not listed below are considered to be undertaken without a permit as required by Mines Act 10(1):

a. Approved Activities:

- i. Work Related Structures: Core cutting tent site, core logging tent site for a total disturbance area of 0.03 hectares.
- ii. Geophysical Survey with exposed electrodes: fifteen line kilometers for a total disturbance area of 0.00 hectares.
- iii. Surface Drilling: ten diamond drilling sites for a total disturbance area of 0.10 hectares.
- iv. Exploration Access Construction/Modification: five hundred meters of existing access modification for a total disturbance area of 0.25 hectares. Two thousand meters of new temporary road for a total disturbance area of 1.00 hectares.
- v. For a total disturbance area of 1.38 hectares.

b. Approved activities must be conducted as outlined in Document 1.2.

c. Activities must be conducted within the permit area illustrated by the Rayfield\_Proposed\_Accommodation\_Permit\_Area\_April2023 polygon in Document 1.3 and located as shown in Documents 1.4 and 1.5. Subsequent work must only be carried out as detailed on the accepted Mineral MYAB Work Program Update form and as located on the updated map.

d. Only reclamation activities may occur after December 6, 2028.

e. Mechanical exploration activities are restricted to the period from October 16th to May 14th.

2. Definitions

a. Unless otherwise specified, the definitions in the Mines Act, the regulations and the Code apply to the use of the terms in this permit.

3. Documentation

a. A completed Annual Summary of Exploration Activities (ASEA) form must be submitted to the Regional Mines Office e-mail Inbox: mmd-kamloops@gov.bc.ca or through MineSpace prior to March 31 annually and must be accompanied by:

- i. a detailed as-built map of the mine site.
- ii. spatial data of the as-built disturbances which includes attribution data for the status of reclamation.

- b. For Multi-Year Area-Based (MYAB) work programs, a MYAB annual update form must be submitted annually to the Regional Mines Office e-mail Inbox: [mmd-kamloops@gov.bc.ca](mailto:mmd-kamloops@gov.bc.ca) or through MineSpace prior to March 31st. More than one MYAB update may be submitted in any year. The MYAB update must be submitted at least two (2) weeks prior to the anticipated commencement of exploration activities. In addition to the required mapping, the Permittee must submit spatial files of current and proposed disturbances.
- c. Work in subsequent years from the approval date for MYAB work programs must not commence without written approval from the Chief Permitting Officer based on the review of the annual update and receipt of any additional reclamation security as required by the Chief Permitting Officer.

## B. Health and Safety

1. Mine Emergency Response Plan (MERP)
  - a. The MERP required under 3.7.1 of the Code must be maintained on the mine site and made available to an inspector upon request.
2. Fuels and Lubricant Handling, Transportation and Storage
  - a. Handling, transportation and storage of fuels and lubricants must conform to the requirements of the document: BC Fuel Guidelines, 11th Edition, January 2, 2022 (NorthWest Response Ltd), or most recent version thereof.

## C. Geotechnical

1. Reporting
  - a. The Chief Inspector must be advised in writing upon discovery of any unforeseen conditions that could adversely affect the extraction of materials, site stability, erosion control or the reclamation of the site.
  - b. An Advice of Geotechnical Incident form must be submitted to the Chief Inspector for any geotechnical incident that:
    - i. is classified as a reportable incident,
    - ii. requires changes to an existing standard operating procedure or the creation of a site-specific safe work plan.
2. Site Stability
  - a. Stockpiles of waste, overburden or soil must not be placed in areas identified as Terrain Class IV or V.
3. Design
  - a. Prior to initiating road, trail construction or drill or tent site construction, a qualified person must determine the terrain stability classification for all areas where roads, trails or drill or tent sites are to be constructed.

- b. All roads, trails or drill or tent sites on terrain Class IV or V must be constructed, maintained and operated per the written recommendations of a qualified professional. The signed and sealed design reports must be maintained on site and made available to an Inspector upon request.

## D. Environmental Land and Watercourses

### 1. Cultural Heritage Resources

- a. The Archaeological Chance Find Procedure (CFP) (Document 1.6) must be implemented prior to commencement of work. All employees and contractors at the mine site must be trained on the CFP. The plan must be maintained onsite and available to an Inspector upon request.
- b. Prior to any mechanical ground disturbance within the permit area illustrated by the Rayfield\_Proposed\_Accommodation\_Permit\_Area\_April2023 polygon in Document 1.3 and not within existing disturbance (high and medium burn intensity as per Document 1.7 and/or within harvested blocks as per Document 1.8 and/or on access structures), a cultural heritage resource assessment must be completed by a qualified person with local knowledge of the mine area.
- c. Prior to any mechanical ground disturbance within the permit area illustrated by the Rayfield\_Proposed\_Accommodation\_Permit\_Area\_April2023 polygon in Document 1.3, an archaeological assessment must be conducted by a qualified eligible professional.
  - i. Any recommendations provided by the qualified eligible professional resulting from this assessment must be implemented.
  - ii. The assessment must be submitted to the Regional mines office email: mmd-kamloops@gov.bc.ca and to the Skeetchestn First Nation.

### 2. Environmental Protection

- a. Garbage and other animal attractants must be removed from work sites daily or stored in a secure and appropriate container until removed from the mine site.
- b. Water intakes must comply with the Freshwater Intake End-of-Pipe Fish Screen Guideline, 1995 (Department of Fisheries and Oceans), or most recent version thereof.
- c. Erosion and sediment must be effectively controlled on the mine site. Sediment laden water must be suitably contained on the mine site and not be allowed access to any watercourse.
- d. Fugitive dust originating from the mine site must be controlled at the source.
- e. For any discharge of sediment laden water originating from the mine site, immediate measures must be taken to prevent further and future discharges.
  - i. Discharge that reaches a surface water body must be documented with estimates on flow rate and photographs and reported to the Chief Inspector at the Regional Mines e-mail Inbox; mmd-kamloops@gov.bc.ca within 24 hours of discovery.

### 3. Invasive Plants

- a. Invasive plants on the site must be identified, monitored, controlled and documented. Monitoring and treatment records must be made available to an Inspector upon request.

- b. Reasonable efforts must be taken to ensure that invasive plants do not migrate from the site to adjacent areas.
- c. The control of invasive plants must consider using non-toxic means for invasive plant control.

4. Works in and about a Stream:

a. Timing:

- i. If works are proposed on a stream that contains fish (fish-bearing), all works must be completed during the applicable timing window to protect fish, wildlife or the aquatic ecosystem within that stream. Timing windows represent periods during which works can occur to ensure the lowest risk to environmental and fisheries values.
- ii. If any of the following conditions are met, the timing window is not applicable:
  - 1. If the stream channel is naturally dry (no flow) or frozen to the bottom at the worksite and the instream activity will not adversely impact fish habitat (e.g. result in the introduction of sediment into fish habitat).
  - 2. If construction of a winter crossing is proposed and such works does not adversely impact the stream channel (including stream banks), fish habitat or fish passage.
  - 3. The structure does not encroach below the high-water mark, no work is proposed below the high-water mark of a fish stream, and measures will be taken to prevent the delivery of sediments or contaminants into fish habitat.
  - 4. You retain a Qualified Professional (such as a Registered Professional Biologist) to prepare a prescription that provides specific measures to comply with the windows and to prevent impacts to fish or fish habitat. This document must be submitted to the Regional Mines Office e-mail Inbox: [mmd-kamloops@gov.bc.ca](mailto:mmd-kamloops@gov.bc.ca) with reference to your Notice of Work number: 1620376-202101.
  - 5. Work is in a non-fish stream and measures will be taken to prevent the delivery of sediments into downstream fish habitat or the stream is not fish-bearing and discontinuous with no connection to downstream fish habitat.

b. Design requirements:

- i. The original rate of water flow in the stream (existing prior to commencing work) must be maintained upstream and downstream of the worksite during all phases of instream activity associated with the work;
- ii. If the stream is fish-bearing, the culvert allows fish in the stream to pass up or down stream under all flow conditions;
- iii. Debris can pass through the culvert;
- iv. The culvert and its approach roads do not produce a backwater effect or increase the head of the stream;
- v. The culvert is installed in a manner that permits the removal of obstacles and debris within the culvert and at the culvert ends;

- vi. Embankment fill materials do not, and are unlikely to, encroach on culvert inlets and outlets;
  - vii. The culvert has a depth of fill cover that is at least 300 mm or as required by the culvert manufacturers specifications;
  - viii. The culvert is made of materials that meet the applicable standards of the Canadian Standards Association;
  - ix. The culvert has a minimum equivalent diameter of 600 mm;
  - x. Any stream within the mine site must be assumed to be fish bearing unless determined otherwise by a qualified professional.
- c. Construction:
- i. The equipment used for site preparation, or for installation, construction, maintenance or removal of the culvert, is situated in a dry stream channel or operated from the top of the bank;
  - ii. The stream channel width must not change as a result of the work.
  - iii. The permanent removal of stable, naturally occurring material from the stream or stream channel must be minimized and completed only as necessary;
  - iv. All activities in and about streams must be conducted in a manner that does not cause harm to fish or fish habitat and species at risk or their habitat;
  - v. The removal of material must not lead to stream channel instability or increase the risk of sedimentation into the watercourse immediately downstream of the worksite;
  - vi. Any spoil materials must be deposited in a stable area and in such a way that the excavated material will not contribute sediment or debris to the stream or adversely impact riparian habitats or species at risk and their habitats;
  - vii. A qualified person must supervise installation of all stream crossings.
- d. Erosion and Sediment Control:
- i. The culvert inlet and outlet incorporate measures to protect the structure and the stream channel against erosion;
  - ii. Any work associated with the proposed changes in and about a stream must not cause stream channel instability or increase the risk of sedimentation into the stream;
  - iii. Measures must be taken to ensure that no deleterious substances (e.g. fuel and other hydrocarbons, soil, road fill, or sediment), which could adversely impact water quality, fish and fish habitat and other aquatic life, can enter the stream channel. Equipment used in close proximity to the stream must be free of exposed deleterious substances;

- iv. During works, erosion and sediment control materials must be available onsite at all times and must be installed if sedimentation is likely to occur into the stream (e.g. silt fences, straw bale dikes, settling basins, ditch blocks, or filter cloth). A contingency plan must be developed outlining the measures to be taken by workers when carrying out any work to control erosion and sediment. All erosion and sediment control devices must be regularly inspected and maintained to remain functional during works. These devices and any accumulated sediment must be removed from the site after the completion of works;
  - v. Soil disturbance must not occur in heavy rain conditions and any soil removed must be placed in a location that ensures that sediment or debris does not enter the stream;
  - vi. Work must be suspended if the sediment control measures are ineffective and result in the introduction of sediment into the stream. In the event of sediment release into a stream, permittees are directed to immediately stabilize and mitigate the release, and then notify the Inspector of Mines.
  - vii. During periods of heavy or persistent precipitation, work must stop if continuing the work will result in sediment delivery downstream of the immediate worksite. Measures must be taken to minimize the risk of on-going sediment delivery to the stream during the shutdown period;
- e. Protection of fish or Wildlife:
- i. Open bottom structures such as clear span bridges or open bottom culverts are preferred on all fish bearing streams. If permittees wish to install a closed bottom culvert (e.g. round or elliptical) on a fish bearing stream, they must ensure that upstream fish passage through the culvert is maintained. In addition, closed bottom culverts must be embedded in order to provide a natural substrate such that there is no net loss of fish habitat. To achieve this, permittees must comply with the requirements detailed in Section 3.2 of the 2012 Fish-Stream Crossing Guidebook.
- f. Riparian Vegetation and Habitat:
- i. Damage above the high water mark to values such as banks and stream side (riparian) vegetation in the vicinity of the work area must be minimized. Unavoidable impacts that occur must be remedied as per the reclamation section below;
  - ii. Any trees at the work site or within the clearing width area adjacent to streams that must be removed must be felled away from the stream to the fullest extent possible. Where this is not possible, the tree(s) and all resultant debris must be removed from the stream channel as soon as possible after felling, or at most, within the same workday by means that avoid machinery being placed within the stream channel;
  - iii. Minimize disturbance to natural materials, including but not necessarily limited to embedded logs and boulders, as well as vegetation that contribute to fish and wildlife habitat or stream channel stability;
- g. Site Reclamation:
- i. Complete required reclamation works on disturbed areas must be conducted according to the site-specific reclamation plans that will ensure function as close as possible to natural pre-disturbance conditions;

- ii. Soils exposed as a result of work activities that have the potential for sediment delivery to the stream must be promptly re-vegetated. All disturbed soils adjacent to the stream must be re-vegetated with a certified weed free mix of native species grasses, and suitable seedlings for the BEC zone if necessary, as soon as works are completed or as soon as site conditions are conducive to growth; if seedlings are included in reclamation plans, they will be planted when material is available.
- iii. Any materials, such as riprap or gabion rock, used for stream bank armouring must be clean and not contain substances that could be harmful to fish, wildlife or the aquatic ecosystem of the stream.
- h. Construction, maintenance and removal of clear span bridges is approved subject to the following conditions:
  - i. The equipment used for site preparation, or for construction, maintenance or removal of the bridge is situated in a dry stream channel or operated from the top of the bank;
  - ii. The bridge and its approach roads do not produce a back water effect or increase the head of the stream;
  - iii. Bridge abutments or other structures and materials must not be placed within the stream channel width. Rip-rap must be keyed into the stream bank and must not constrict the natural stream channel width;
  - iv. The hydraulic capacity of the bridge is equivalent to the hydraulic capacity of the stream channel, or is capable of passing the 1 in 200 year maximum daily flow;
  - v. The height of the underside of the bridge is adequate to provide free passage of flood debris and ice flows;
  - vi. The bridge is made of materials that meet the applicable standards of the Canadian Standards Association.
- i. The construction of a temporary ford for vehicular traffic across a stream, is approved subject to the following conditions:
  - i. the construction occurs at a time in the year during which the construction can occur without causing a risk of significant harm to fish, wildlife or the aquatic ecosystem of the stream,
  - ii. the 1 in 10 year maximum daily flow over the ford is accommodated without the loss of the ford and without eroding the stream channel,
  - iii. any culvert is designed and installed to pass the average low flow for the period of use,
  - iv. the stream channel is protected against any anticipated erosion
    - 1. for the period of construction and use of the ford, and
    - 2. after the ford is removed,
  - v. sediment from approach ditches does not enter the stream,
  - vi. the driveable running surface is erosion-free,
  - vii. the stream remains in its channel,

viii. channel debris will pass over the ford, and

ix. the ford is removed at the end of the period of use at a time when the removal can proceed without causing a risk of significant harm to fish, wildlife or the aquatic ecosystem of the stream;

5. Inter-seasonal Condition of the Land

- a. At the end of each season, drill site timbers not in use must either be removed from site or neatly stockpiled in one location in the permit area such that they will not be scattered by weather effects.
- b. Derelict or damaged equipment, supplies, or materials must not be stored or otherwise left or abandoned anywhere on the permitted mine site.
- c. At the end of each field season, disturbed areas are to be left in a condition that is neat, clean and safe.

**E. Reclamation and Closure Program**

1. Reclamation Security

- a. Eight thousand five hundred dollars (\$8,500.00) in security must be maintained with the Minister of Finance.

2. Obligation to Reclaim

- a. Reclamation of the surface of the land affected by the operations must be conducted in accordance with the approved work program. The surface of the land and watercourses must be reclaimed to the following end land use: forest, range and recreation use.

3. Reclamation

- a. All available topsoil, overburden, and organic material including large woody debris in the disturbance footprint must be salvaged and stockpiled for use in reclamation.
- b. All stockpiled topsoil, overburden, and organic material including large woody debris must:
  - i. be protected from erosion, degradation, and contamination,
  - ii. be clearly marked to ensure that they are protected during construction and mine operations,
  - iii. not be used as fill,
  - iv. not be removed from the mine site without the specific written permission of an Inspector.
- c. Progressive reclamation must be conducted and must include:
  - i. Compacted surfaces must be de-compacted to allow water infiltration and achieve self-sustaining vegetation.
  - ii. Salvaged soil material must:
    - 1. be replaced on disturbed areas to pre-disturbance depth;

2. be treated with a rough and loose site preparation where practicable;
  3. be keyed into the underlying materials such that they do not slump off or become unstable;
  4. incorporate roots, stumps and other woody debris to reduce erosion and create greater biological diversity; and
  5. be re-vegetated promptly to a self-sustaining state using appropriate and/or native plant species that support approved end land use.
- d. Disturbances that have been determined to be necessary for future use beyond December 6, 2028 must:
- i. be approved under an amendment to this Permit,
  - ii. be under consideration in a subsequent updated mine plan, or;
  - iii. have a care and maintenance plan submitted to the Regional Office e-mail: [mmd-kamloops@gov.bc.ca](mailto:mmd-kamloops@gov.bc.ca) and approved by the Chief Permitting Officer.
- e. For Siwash Lake Wilderness Resort License of Occupation trails not covered by other access authorizations, disturbance to the existing trail bed and surface must be minimized during exploration activities and any damage must be rehabilitated to the pre-existing terrain condition prior to May 1st. New trail and drill site disturbance within 50 meters of Siwash Lake Wilderness Resort License of Occupation trails must be reclaimed prior to May 1st.
- f. For the Siwash Lake Wilderness Resort tenured archery area, disturbance must be minimized during exploration activities and any damage must be rehabilitated to the pre-existing terrain condition prior to May 1st. New trail and drill site disturbance within 50 meters of Siwash Lake Wilderness Resort tenured archery area or private land must be reclaimed prior to May 1st.