TECHNICAL REPORT ON THE COMBINED KITSAULT VALLEY PROJECT, BRITISH COLUMBIA, CANADA

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1 Summary

This Technical Report pertains to the Kitsault Valley silver-gold project ('the Project" or "the Property") located near the central west coast of British Columbia (BC), Canada, where Dolly Varden Silver Corporation ("Dolly Varden" or the "Company") has had an active and ongoing exploration program since 2011. The Kitsault Valley Project is located approximately 27 km north of Alice Arm, BC and 39 km southeast of Stewart, BC. The Property is situated within the Stewart Complex, a metallogenic island arc terrane that is host to over 200 mineral occurrences of predominantly precious metal vein type, skarn, porphyry and massive sulphide occurrences.

Dolly Varden is a Vancouver based, Toronto Venture Exchange listed mineral resource exploration company, currently exploring the Property for precious and base metal deposits, including volcanogenic massive sulphide and epithermal vein type deposits. In December 2021, Dolly Varden announced the acquisition of Homestake Resource Corporation ("Homestake") and acquired 100% interest in the Homestake Ridge silver-gold Project ("Homestake Project"), located adjacent to the Dolly Varden Property, from Fury Gold Mines Ltd. ("Fury") (Dolly Varden Silver Corporation, 2021). The Company then consolidated its original Dolly Varden Project and its newly acquired Homestake Ridge Project into the new Kitsault Valley Project. The total Project now comprises a contiguous area of some 15,311 hectares (excluding minor internal non-owned parcels) and comprises; 7 mineral leases, 75 mineral claims and 57 Crown granted mineral claims.

The Kitsault Valley Project has a lengthy and robust history of exploration and mining, with exploration occurring in the area from the early 1900s. The Dolly Varden Mine was discovered in 1910 with production occurring at both the Dolly Varden and North Star mines from 1919 to 1921. The Torbrit Mine was in production from 1949 to 1959. Modern exploration at the Property began in 1969. Since that time several companies have explored the Project area, completing geological mapping, geochemical sampling, drilling and historic mineral resource estimates.

Several styles of mineralization have been identified at the Kitsault Valley Project, these include: 1) exhalative stratiform silica-sulphide-rich mineralization; 2) exhalative stratiform pyrite, sphalerite, galena, chert, carbonate-rich mineralization; 3) stratabound, infill and replacement silver (Ag) sulphosalt rich mineralization; 4) quartz-silica, carbonate and variably barite-rich epithermal Ag mineralization; and 5) quartz-sericite-pyrite altered zones containing copper (Cu) – silver (Ag) +/- gold (Au) mineralization in quartz-sulphide stockwork, hydrothermal breccias and veins.

This Technical Report includes summaries of previously disclosed Mineral Resource Estimates (MRE's) for the Kitsault Valley Project and summarizes recent exploration programs completed on the Property between 2015 to 2022. This report is intended as an update to previous comprehensive Technical Reports completed on the former Dolly Varden and Homestake Projects, respectively, including reports by Garrow (2011), Higgs

(2015), Higgs and Giroux (2015), Macdonald and Rennie (2016), Ross and Chamois (2017), Turner and Nicholls (2019), MineFill (2020) and Hough et al. (2022).

1.1 Issuer and Purpose

This Technical Report has been completed on behalf of Dolly Varden Silver Corporation ("Dolly Varden" or "the Company" or "DVSC"), a Vancouver based and Toronto Venture Exchange listed (TSX.V: DV) mineral resource exploration company. In December 2021, Dolly Varden announced the acquisition of Homestake Resource Corporation ("Homestake" or "HRC") from Fury Gold Mines Ltd. ("Fury"), which owned a 100% interest in the Homestake Ridge silver-gold Project ("Homestake Project", or "HSR Project"), located adjacent to (and immediately north of) the Company's flagship Dolly Varden Property (see Dolly Varden Silver Corporation Press Released dated December 6, 2021). In early 2022, Dolly Varden announced the completion of the acquisition and the formation of the new Kitsault Valley Project ("the Project" or "the Property"), which is the subject of this Technical Report, and was formed by the consolidation of the former Dolly Varden and Homestake Ridge Projects (see Dolly Varden Silver Corporation Press Released dated February 25, 2022), which triggered a requirement for a single (consolidated)Technical Report.

The consolidated Kitsault Valley Project covers approximately 15,311 hectares ("ha") of mineral tenures in northwestern British Columbia comprising 7 mineral leases, 75 mineral claims and 57 Crown granted mineral claims. Throughout this report references are made to work that was completed on one or the other original projects prior to their consolidation, which will be specified by referencing either "the former" Dolly Varden or Homestake Ridge Properties, or by reference to the current Dolly Varden or Homestake Ridge "claim block" areas within the larger Kitsault Valley Project area.

This Technical Report has been prepared in order to summarize all of the previously and recently completed work at Dolly Varden Silver Corporation's consolidated Kitsault Valley Project, including previously reported mineral resource estimates for the Property's seven (7) deposits, and was originally intended to support a proposed prospectus financing for the Company. With respect to the former Dolly Varden Project area, this report updates the information discussed in the most recent Technical Report on this portion of the Property by Turner and Nicholls (2019). With respect to the former Homestake Ridge Project area, this report updates the information discussed in the most recent report on this portion of the Property, completed following its acquisition, by Hough et al (2022). Both of these previous Technical Reports are available on SEDAR (www.sedar.com).

The authors of this Technical Report include Mr. Andrew J. Turner, P.Geol., and Mrs. Rachelle Hough, P.Geo., of APEX Geoscience Ltd. (APEX). The authors are independent of Dolly Varden and are Qualified Persons as defined by Canadian Securities Administration's (CSA's) NI 43-101.

The Technical Report is prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum definition standards and best practice guidelines (2014, 2018, 2019) and the Canadian Securities Administration's Standards for Disclosure of Mineral Projects, National Instrument 43-101. The effective date of this Technical Report is September 28, 2022.

1.2 Authors and Site Inspection

This technical report has been prepared by Mr. Andrew J. Turner, P.Geol., and Mrs. Rachelle Hough, P.Geo., of APEX Geoscience Ltd. ("APEX"). The authors are independent of Dolly Varden and are Qualified Persons as defined by CSA's NI 43-101. Portions of the report were taken from the previous Dolly Varden Project and Homestake Ridge Project technical reports prepared by Garrow (2011), Higgs (2015), Higgs and Giroux (2015), Macdonald and Rennie (2016), Ross and Chamois (2017), Turner and Nicholls (2019), MineFill (2020), and Hough et al. (2022). Mrs. Hough takes responsibility of sections 7, 8, 9, 10, 12.6, and has contributed to Sections 1 and 25. Mr. Turner is the primary author of this report and takes responsibility for all other sections.

Mr. Turner, P.Geol., conducted a site visit to the Dolly Varden Property between October 1 and 2, 2018. During the site visit, Mr. Turner observed the Company's core sampling methodologies, observed extensive zones of silver mineralization in drill core and collected six duplicate core samples for analysis. Mr. Turner completed a second (current) site visit to the Kitsault Valley Project between September 28 and 29, 2022, during which core logging procedures were observed, recent drill collars at the Homestake, Torbrit and Wolf areas were confirmed, and 5 additional check samples were collected at random from recent mineralized drill intercepts for independent analysis, which confirmed the analytical results achieved by the Company. Additionally, Mrs. Hough conducted a site visit to the former Homestake Project area on January 20, 2022. This site visit involved verification of the Project and review of selected historical drill core in the current mineral resource with the intent of confirming silver-gold-base metal mineralization.

1.3 Property Location, Description and Access

The Kitsault Valley Project is located near the central west coast of BC, approximately 27 km north of Alice Arm, BC and 39 km southeast of Stewart, BC. The Property is situated within the Stewart Complex, a metallogenic island arc terrane that is host to over 200 mineral occurrences of predominantly precious metal vein type, skarn, porphyry and massive sulphide occurrences.

Primary access to the Property is via helicopter from the towns of Alice Arm, Kitsault or Stewart. Overland vehicle access from Terrace, BC, to Kitsault can be gained via the Nisga'a Highway (Highway 113) to the termination of the Kitsault Mine Road (total road length of 167 km). The historical mining town of Kitsault is located on the Alice Arm of the Observatory Inlet, which can be crossed via boat/barge to the historical town of Alice Arm. Once in Alice Arm, the Kitsault Valley Road runs along the Kitsault River and follows an

old rail bed that was constructed to service the Dolly Varden mine. The towns of Alice Arm and Kitsault can also be accessed from Prince Rupert, BC, by privately contracted seaplane or boat/barge.

1.4 Geology and Mineralization

The Kitsault Valley Property lies within the Stikine Terrane (Stikinia), the largest arc terrane in the Canadian Cordillera and within the Intermontane Belt. The Stikine Terrane extends from southern Yukon to south-central British Columbia. The Property is situated within the Stewart Complex, a large Middle Jurassic-Quaternary northwest-trending belt of Hazleton Group rocks that extends from Iskut River to Alice Arm along the western rim of the Bowser Basin. The Stewart Complex is a metallogenic island arc terrane that is host to over 200 mineral occurrences of predominantly precious metal vein type, skarn, porphyry, and massive sulphide occurrences including the historical gold mines Eskay Creek, Silbak-Premier and SNIP, as well as the Granduc, Anyox, and Dolly Varden-Torbrit base-metal and silver mines.

Rock packages underlying the Property include the Stuhini Group, the Hazelton Group, the Bowser Lake Group, Mesozoic intrusive rocks, and Intrusive rocks from the Coast Mountain Suite. Stratigraphically, the oldest rocks in the Stikine Terrane comprise the volcanic and deep marine sedimentary rocks of the Stuhini Group. The early Mesozoic volcanic, inter-arc and back-arc sedimentary rocks of the Hazelton Group overly the Stuhini Group. The Hazelton Group contains three major stratigraphic divisions; the Jack Formation, the Betty Creek Formation and the Salmon River Formation. A halt in volcanism in the middle Jurassic marked a shift to siliciclastic sedimentation and the deposition of the Bowser Lake Group over the Hazelton Group. The Bowser Lake Group is Middle to Upper Jurassic in age and comprises predominantly turbiditic sedimentary rocks. Mesozoic intrusive rocks in the area include the Late Triassic Stikine Plutonic Suite, the Early Jurassic Texas Creek Plutonic Suite, and the Early to Mid Jurassic Salmon River Formation. The youngest rocks in the region are Tertiary aged post-kinematic granitoid intrusions of the Coast Plutonic Suite.

There are two main periods of deformation occurred on a regional scale in the Property area: 1) Early to Middle Jurassic extensional deformation and 2) Cretaceous compressional deformation.

Mineralization on the Property generally exhibits characteristics of Volcanogenic Massive Sulphides (VMS) and epithermal gold-silver deposits associated with zones of pyrite-sericite alteration related to the Early Jurassic feldspar-hornblende-phyric sub-volcanic intrusions and felsic volcanism. Five mineralization styles are recognized on the Property: 1) Exhalative stratiform silica-sulphide-rich (North Star and Torbrit); 2) Exhalative stratiform pyrite (Sault prospect and upper portion of Trout Horizon); 3) Sphalerite, galena, chert, and carbonate; stratabound infill and replacement Ag-sulphosalts (lower portion of Trout Horizon); 4) Quartz-silica rich carbonate+/-barite epithermal Ag mineralization with lesser base-metals (Torbrit, Wolf, Kitsol, and Dolly Varden deposits); 5) Quartz-sericite-pyrite zones with Cu-Ag +/- Au (Gold Belt prospect,

North Star, and Red Point) ; and Structurally controlled epithermal silica veins and brecciation with Au-Cu and Ag-Pb (Homestake Main, Homestake Silver and South Reef).

1.5 Historical Exploration

Mineral exploration, focusing on gold, silver and base metals, has been continuing in the Kitsault Valley area since the early 1900s. The earliest exploration work in the upper region started in the early 1900s due to the interest generated by discoveries in Anyox, to the southwest of the Property, and near Stewart, to the northwest of the Property. The Dolly Varden silver deposit was discovered in 1910 with production occurring at both the Dolly Varden and North Star mines from 1919 to 1921. The Torbrit Mine was in production from 1949 to 1959.

Modern exploration at the Property began in the 1970s. Since that time several companies had interest in the area. Exploration work includes geological mapping, geochemical sampling, drilling and historical mineral resource estimates. A probable volcanogenic origin for the Dolly Varden-North Star-Torbrit deposits was recognized in 1986 (Devlin and Godwin,1985; Devlin 1987). During 1989 and 1990, Tecucomp Geological Inc. conducted an exploration program incorporating a volcanic exhalative (VMS) model of ore deposition (Higgs and Giroux, 2015).

Dolly Varden obtained the mineral rights in the Dolly Varden Property and has been actively exploring since 2011. The Homestake Project, located northwest of Dolly Varden Property, was acquired by Dolly Varden in 2021 and the two projects were consolidated into the Kitsault Valley Project.

1.6 Recent Exploration

Exploration work completed by the Company at the Kitsault Valley Project from 2015 to 2022 includes geological mapping, ground geophysical surveys, LiDAR airborne surveys, geochemical sampling, and diamond drill programs. Geological mapping and rock sampling were conducted at various prospects throughout the Property in two main programs in 2015 to 2016; 1) 2015 geological mapping underground at Torbrit and North Star and on surface at Musketeer, Ace-Galena Trout and Kitsol; and 2) 2016 geological mapping at Summit Ridge, Ace-Galena Trout, Chance Creek, Trout Hanging Wall, Northeast Sediment-Volcanic Contact and Medallion. Sporadic geological mapping and sampling was conducted throughout the Property in 2017, 2018, 2019, 2020, and 2022. The geological mapping and lithogeochemical sampling provided information on the stratigraphy and structure of prospect areas and identified multiple zones of mineralization, as well as anomalous zones warranting further exploration within the Property.

A soil sampling program was conducted over a portion of the Property in late 2015, with focus on the Wolf, Silver Horde, Chance and Ace-Galena Trout target areas. A total of 1810 soil samples were collected over the area. In 2017, 10 soil samples were collected

along an orientation line at the Ace-Galena prospect and analyzed in the field using a portable XRF (X-Ray Fluorescence) unit.

Whole rock geochemical sampling surveys were completed in 2019, 2020, and 2022, and targeted numerous prospects on the Property. Rock samples were collected from Dolly Varden Property in 2019, 2020, and 2022, and from Homestake Project in 2022.The objective of this sampling program was to use whole rock geochemical analysis to gain information about lithologies, trace elements, and alteration types for rocks located on the Property.

Geophysical work in 2017 comprised a study on the Property using the results from helicopter VTEM (versatile time-domain electromagnetic) and ZTEM (z-axis tipper electromagnetic) surveys completed in 2010 and 2011. In 2022, an Induced Polarization (IP) survey was completed over the Red Point area at Dolly Varden Property. A LiDAR (Light Detection and Radar) airborne survey was completed over the entire Dolly Varden Property in 2017, then a second LiDAR airborne survey was completed over the Homestake Project and southern Kitsault Valley areas in 2022, which when combined results in complete LiDAR coverage of the Kitsault Valley Project.

Diamond drill programs have been completed at the Kitsault Valley Property from 2015 to 2022. During this period, the Company has completed 375 diamond core drillholes totalling 120,028 m. These drilling programs focused on reconnaissance and exploration drilling, as well as the delineation, verification, and expansion of known Project deposits.

1.7 Current Mineral Resources

The Kitsault Valley Project includes Mineral Resource estimates for 7 discrete deposits or zones including the Homestake Main, Homestake Silver and South Reef zones located in the Homestake area in the northern part of the Project area, and the Wolf, North Star, Torbrit and Dolly Varden deposits in the southern portion (former Dolly Varden area) of the Project.

This Technical Report includes a review of previously reported Mineral Resource estimate (MRE) for the seven mineral deposits located on the recently combined Kitsault Valley Project, which were originally disclosed in Turner and Nicholls (2019) and Hough et al. (2022). The authors of this report have reviewed these Mineral Resource Estimates for the Kitsault Valley Project and accept them as current based upon reviews of the project's drilling database, the assumptions and estimation parameters on their original MRE's, their respective Reasonable Prospects for Eventual Economic Extraction (RPREE), and an evaluation of the potential impact of subsequent drilling completed at or near each, all of which is discussed in greater detail in Section 14 of this report. The current Kitsault Valley Project MRE's are summarised below in Table 1.1.

Table 1.1. Summary of Current Kitsault Valley Project Mineral Resources.

Resource Area	Cutoff	Deposit	Tonnes (Mt)	Silver (g/t)	Gold (g/t)	Copper (%)	Lead (%)	Silver (Moz)	Gold (koz)	Copper (Mlb)	Lead (Mlb)
Indicated											
Homestake	2.0 g/t AuEq	HM	0.736	74.8	7.02	0.18	0.08	1.80	166.0	2.87	1.25
		HS	-	-	-	-	-	-	-	-	-
		SR	-	-	-	-	-	-	-	-	-
Dolly Varden	150 g/t Ag	TB	2.623	296.8	-	-	-	25.025	-	-	-
		DV	0.156	414.2	-	-	-	2.078	-	-	-
		WF	0.402	296.6	-	-	-	3.834	-	-	-
		NS	0.236	262.8	-	-	-	1.994	-	-	-
		Total	4.153	-	-	-	-	34.731	166.0	2.87	1.25
Inferred											
Homestake	2.0 g/t AuEq	HM	1.747	35.9	6.33	0.35	0.11	2.0	355.6	13.32	4.14
		HS	3.354	146.0	3.13	0.03	0.18	15.7	337.0	2.19	13.2
		SR	0.445	4.9	8.68	0.04	0.001	0.1	124.2	0.36	0.00
Dolly Varden	150 g/t Ag	TB	1.185	278.0	-	-	-	10.588	-	-	-
		DV	0.086	271.5	-	-	-	0.754	-	-	-
		WF	0.010	230.6	-	-	-	0.070	-	-	-
		NS	0.005	223.6	-	-	-	0.035	-	-	-
		Total	6.831	-	-	-	-	29.2	816.8	15.87	17.34

Notes:

1. *Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability although, as per CIM requirements, the Mineral Resources reported above have been determined to have demonstrated reasonable prospects for eventual economic extraction.*
2. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
3. *The Mineral Resources for the HM (Homestake Main), HS (Homestake Silver), and SR (South Reef) Zones were originally reported in Hough et al (2022) – QPs Andrew J. Turner, P.Geol., and David Stone, P. Eng., effective date January 20, 2022.*
4. *The Mineral Resources for the TB (Torbrit), DV (Dolly Varden), NS (North Star) and WF (Wolf) Deposits were originally reported in Turner and Nicholls (2019) – QP Andrew J. Turner, P.Geol., effective date May 8, 2019.*
5. *The resources reported above are reviewed in detail within this report and are accepted as current by the Qualified Person, Mr. Andrew J. Turner, B.Sc., P.Geol., of APEX Geoscience Ltd.*
6. *The Cut-off grade for the Homestake Ridge property Mineral Resources is 2.0 g/t AuEq, which was determined using average block grade values within the estimation domains and a Au price of $1300/ tr oz, a Ag price of US$20.00/ tr oz, and a Cu price of U$2.50/lb, and Mill Recoveries of 92% for Au, 88% for Ag and 87.5% for Cu and combined mining, milling and G&A costs of approximately US$109/ton.*
7. *The Cut-off grade for the Dolly Varden property Mineral Resources is 150 g/t Ag, which was determined using a Ag price of US$20.00/ tr oz, a recovery of 90% and combined mining, milling and G&A costs of US$80/ton.*
8. *Sufficient sample density data existed to allow for estimation of block density within the estimation domains of the HM, HS and SR zones, which ranged from 2.69 t/m3 to 3.03 t/m3.*
9. *Bulk density values ranging from 2.79 t/m3 to 3.10 t/m3 were assigned to individual estimation domains based on available SG measurements for the DV, TB, NS and WF deposits.*
10. *Differences may occur in totals due to rounding.*

1.8 Conclusions and Recommendations

Based upon the author's site visit, the currently identified Ag-Au resources present on the Kitsault Valley Property, and the potential for additional discoveries (based on geology and the results of exploration work discussed in this report), it is the opinion of the authors that the Kitsault Valley Property is a "Property of Merit" warranting significant continued exploration work. This section describes recommended work at the Property and estimated costs for these work programs are provided in Table 1.2, below and comprises a total expenditure of approximately $21 million. In the opinion of the authors of this report, all of the recommended work is warranted at this time and none of the different work programs are dependent upon the results of any of the others.

In addition to various administrative costs, a significant exploration program is recommended for the Kitsault Valley Project. This includes detailed mapping, prospecting and rock sampling, and geophysical surveying at several areas with an emphasis recommended at the North Dome area, north of the Homestake deposits, and the "Cu-belt" alteration zone south of the Homestake deposits, as well as the remainder of "the gap" between the Homestake and Dolly Varden resource areas.

Additional in-fill and step-out drilling is recommended for the currently defined mineral resource areas at the Project comprising the Dolly Varden, Torbrit, North Star, Wolf and the three (3) main zones of mineralization at the Homestake silver-gold deposit area. New drilling should be completed in order to tighten drillhole spacing and increase confidence in the current geological models. Priority should thus be given to drillholes that test areas that currently have hole spacing greater than average. Priority should also be given to drillholes that test areas of the deposits that currently comprise mainly historical data points, which will a) validate or replace historical data and b) provide additional multi-element data for potential addition to future mineral resource updates (i.e. Cu, Pb and Zn).

With respect to the Dolly Varden area resources (Dolly Varden, Torbrit, North Star and Wolf), continued drill testing of their respective stratigraphic strike extensions and depth projections is recommended. This includes the continued drill testing of the northwest extension of the Torbrit stratigraphic horizon, marked by increased K and Na depletion of volcanics, to identify additional basins that might contain additional volcanic-hosted mineralization. Cross-cutting structures should also be tested for their potential to host epithermal (structurally-hosted) mineralization. Continued drill testing for the Torbrit horizon is recommended within the altered Hazelton group stratigraphy which runs through the Wolf deposit to the Ace Galena and Chance prospects.

With respect to the Homestake area resources, continued drill testing of their respective along-strike and down-dip (down-plunge) extensions is also recommended. Specifically, infill drilling was conducted at the Homestake Main zone in 2022 and similar infill drilling is recommended for the Homestake Silver zone in 2023. Additional drilling to test down-plunge and northern strike extensions of the Homestake Main zone is recommended.

There is currently no significant subsurface structural data available to assist/support geological modelling efforts at any of the Property's resource areas. As a result, core orientation and subsequent structural measurements is recommended as part of the recommended infill and step-out drill programs at the Project. This will provide data that will help support correlations and geological interpretations thereby supporting grade continuity, which will improve geological models and thereby potentially improve classification within future updated Mineral Resource Estimates (MREs). Additional Specific Gravity (SG) testing is recommended, and consideration should be given to making SG determination a regular part of the Company's geotechnical core logging program.

Table 1.2 Work recommendations.

Administrative/General				
Administration and Project Management				$300,000
Camp and Logistics				$500,000
Property Maintenance/Permitting				$50,000
Environmental, Permitting, Pty Maintenance				$250,000
initiation of baseline sampling				$150,000
wildlife surveys				$50,000
hydrogeology (test wells and sampling)				$150,000
Exploration - Fieldwork	**people**	**days**	**rate**	
Prospecting (mapping/sampling)	4	60	$500	$120,000
samples		100	$50	$5,000
Geological Mapping & Consulting	2	90	$1,000	$180,000
Geophysics (Mag/IP - various targets)		40	$5,000	$200,000
Drilling	**Total (m)**	**Estimated All-in Cost**		
Resource Areas - infill and step-out drilling				
Homestake Main	2,000	$300	/m	$600,000
Homestake Silver	10,000	$300	/m	$3,000,000
South Reef	5,000	$300	/m	$1,500,000
Torbrit	10,000	$300	/m	$3,000,000
Dolly Varden	5,000	$300	/m	$1,500,000
North Star	5,000	$300	/m	$1,500,000
Wolf	10,000	$300	/m	$3,000,000
Exploration Area				
(i.e. North Dome, "Cu-belt", etc.)	10,000	$300	/m	$3,000,000
Geotechnical Drilling				
Homestake resource area	5,000	$300	/m	$1,500,000
Other				
Metallurgical Test Work				
Homestake (HM, HS, SR)				$250,000
Torbrit (+ NS and DV)				$200,000
Wolf				$50,000
			Total	**$21,055,000**

2 Introduction

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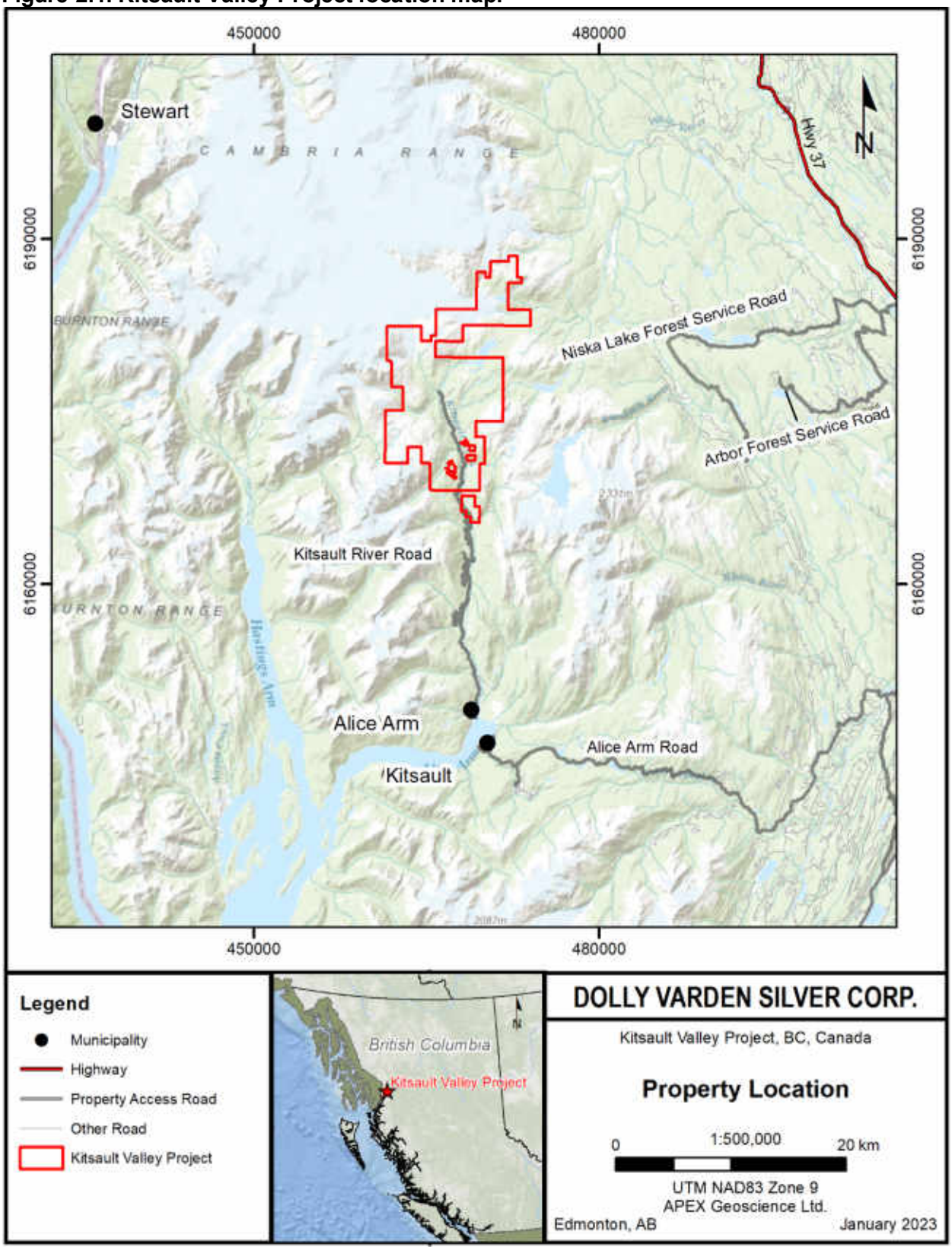
Figure 2.1. Kitsault Valley Project location map.



2.2 Authors and Site Inspection

The authors of this Technical Report include Mr. Andrew J. Turner and Mrs. Rachelle Hough of APEX Geoscience Ltd. ("APEX"). The authors are independent of Dolly Varden and are Qualified Persons as defined by CSA's NI 43-101.

Mr. Andrew Turner is the senior author and Qualified Person of this Technical Report and is responsible for the overall report. Mr. Turner is a Principal and a Senior Consulting Geologist with APEX and is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), as well as the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG). Mr. Turner has worked as a geologist for more than 30 years since his graduation from university, including experience working on epithermal gold/silver properties in Mexico, the USA and Canada, as well as volcanic-hosted massive sulfide deposits in the USA and Canada. Mr. Turner conducted several site visits to the Property between 2017 to 2018. Mr. Turner assisted Auryn Resources, predecessor of Fury, with the execution of the 2017 Homestake Project exploration field program, during which Mr. Turner spent time at the Homestake Project. In 2018, Mr. Turner conducted a site visit to the Dolly Varden Project and observed Dolly Varden's core sampling methodologies. Mr. Turner also examined zones of silver mineralization in drillcore and collected duplicate core samples for analysis. Most recently, Mr. Turner completed a site visit to the Project between September 28 and 29, 2022, during which time core logging procedures were observed, recent drill collars were confirmed at the Homestake are and at the Torbrit and Wolf areas and 5 additional check samples were collected at random from recent mineralized drill intercepts for independent analysis, which confirmed the analytical results achieved by the Company.

Mrs. Hough is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), received her professional designation in 2012, and has worked as a geologist and Senior Project Geologist with APEX for 12 years since her graduation from the University of Alberta in 2008. Mrs. Hough has extensive experience with exploration for, and the evaluation of, Au-Ag-Cu mineralization associated with epithermal style precious metal deposits and porphyry style intrusives, skarn, and volcanogenic massive sulphide style mineralization in Western Canada and Western United States of America (US). Mrs. Hough conducted a site visit to the Homestake Project on January 20, 2022. During the site visit, Mrs. Hough verified the physiography and reviewed selected historical drill core utilized in the mineral resource estimate in Section 14 herein. Mrs. Hough is responsible of sections 7, 8, 9, 10, 12.6 and contributions to sections 1 and 25 related with Homestake Project.

2.3 Sources of Information

This Technical Report is a compilation of proprietary and publicly available information, and is based upon a review of historical information, information and data from recent and historical exploration programs conducted in the Property area, as well as information gathered during the author's site visit to the Property. A large portion of the

background information for prior exploration and geology comes from work performed on the Property by several other companies and detailed in reports by Garrow (2011), Higgs (2015), Higgs and Giroux (2015), Macdonald and Rennie (2016), Ross and Chamois (2017), Turner and Nicholls (2019), MineFill (2020) and Hough et al. (2022).

The technical information discussed in this report was provided to the authors by the Company and was verified prior to the completion of this report. The data verification completed by the authors is described in greater detail in section 12 of this report. Authors found no significant issues with Dolly Varden's database and deemed the Company's exploration datasets suitable for use in the preparation of this report and as a basis for future exploration at the Project.

2.4 Units of Measure

With respect to units of measure, unless otherwise stated, this Technical Report uses:

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006).
- 'Bulk' weight is presented in both United States short tons ("tons"; 2,000 lbs or 907.2 kg) and metric tonnes ("tonnes"; 1,000 kg or 2,204.6 lbs.).
- Geographic coordinates are projected in the Universal Transverse Mercator ("UTM") system relative to Zone 9 of the North American Datum ("NAD") 1983; and,
- Currency in Canadian dollars (CDN$), unless otherwise specified (e.g., U.S. dollars, US$; Euro dollars, €).

3 Reliance of Other Experts

The QPs' opinions contained herein are based on information provided by Dolly Varden. Other sources of information are referenced within this report, respecting which the QPs have taken reasonable measures to confirm.

4 Property Description and Location

4.1 Description and Location

The Kitsault Valley Project is located near the central west coast of British Columbia (BC), approximately 39 km southeast of Stewart and 27 km north of Alice Arm, BC. The Project sits within National Topographic System Sheets 102P13, 103P11, 103P12, 103P13 and 103P14 in the Skeena Mining District and Cassiar Land District. The Property encompasses 7 mineral leases, 75 mineral claims and 57 Crown granted mineral claims (Crown grants) listed in Tables 4.1, 4.2 and 4.3, respectively. The Property area totals 15,311.01 square hectares, with non-owned land removed.

The detail of the mineral leases, crown grants and mineral claims, comprising the Kitsault Valley Project, are presented in Figures 4.1 and 4.2. It should be noted that the mineral leases listed in Table 4.1 below are 30-year leases with expiry dates as shown. The leases are maintained with the payment of annual rentals fees equivalent to $20/ha, with the total annual lease rental cost of $3,667.80. A renewal application has been submitted to the Mining Recorder by Dolly Varden for all seven (7) of the project's mineral leases (as listed in Table 4.1, below), including lease 254579, which is currently exempt from expiry by the Mining Recorder while it is in application.

Table 4.1. Kitsault Valley Project mineral leases.

Tenure Number	30 Year Expiry Dates	Registered Owner (100%)	Area (ha)	Annual Rental Costs
254534	July 6, 2023	Dolly Varden	53.31	$1,066.20
254535	February 4, 2024	Dolly Varden	8.73	$174.60
254536	April 5, 2024	Dolly Varden	37.2	$744.00
254537	April 5, 2024	Dolly Varden	11.89	$237.80
254538	April 5, 2024	Dolly Varden	17.28	$345.60
254542	July 8, 2024	Dolly Varden	41	$820.00
254579*	October 15,2022	Dolly Varden	13.98	$279.60

Table 4.2. Kitsault Valley Project mineral claims.

Tenure Number	Good to Date	Claim Name	Area (ha)	Claim Block
383279	2028/MAY/03	TIGER 2	500.0	Dolly Varden
383281	2028/MAY/03	TIGER 4	500.0	Dolly Varden
384022	2027/MAY/03	EVINDSON 2	500.0	Dolly Varden
523825	2027/MAY/03	DOLLY 2	218.884	Dolly Varden
538780	2030/MAY/03	DOLLY CROWN 3	127.574	Dolly Varden

Tenure Number	Good to Date	Claim Name	Area (ha)	Claim Block
538781	2032/MAY/03	DOLLY CROWN 4	163.998	Dolly Varden
538782	2027/MAY/03	DOLLY CROWN 5	18.223	Dolly Varden
538783	2030/MAY/03	DOLLY CROWN 6	91.161	Dolly Varden
538784	2032/MAY/03	DOLLY CROWN 7	182.283	Dolly Varden
538785	2032/MAY/03	DOLLY CROWN 8	437.658	Dolly Varden
538786	2027/MAY/03	DOLLY CROWN 9	72.971	Dolly Varden
538787	2028/MAY/03	DOLLY CROWN 10	127.709	Dolly Varden
538788	2027/MAY/03	DOLLY CROWN 11	109.477	Dolly Varden
538804	2027/MAY/03	DOLLY CROWN 15	36.442	Dolly Varden
538805	2029/MAY/03	DOLLY CROWN 16	18.232	Dolly Varden
538806	2027/MAY/03	DOLLY CROWN 17	164.25	Dolly Varden
538899	2028/MAY/03	DOLLY CROWN 19	18.2268	Dolly Varden
538900	2030/MAY/03	DOLLY CROWN 20	18.2248	Dolly Varden
538901	2027/MAY/03	DOLLY CROWN 21	18.2249	Dolly Varden
538902	2027/MAY/03	DOLLY CROWN 22	18.2229	Dolly Varden
538904	2028/MAY/03	DOLLY CROWN 24	18.2307	Dolly Varden
538906	2029/MAY/03	DOLLY CROWN 26	18.2403	Dolly Varden
564163	2029/MAY/03	DOLLY CROWN 27	18.2384	Dolly Varden
564240	2027/MAY/03	DOLLY CROWN 28	18.2402	Dolly Varden
569857	2027/MAY/03	DOLLY VARDEN EAST 1	637.293	Dolly Varden
569859	2027/MAY/03	DOLLY VARDEN EAST 2	655.9154	Dolly Varden
569871	2028/MAY/03	DOLLY VARDEN EAST 3	473.5278	Dolly Varden
569872	2028/MAY/03	DOLLY VARDEN NORTH 1	436.943	Dolly Varden
569873	2030/MAY/03	DOLLY VARDEN NORTH 2	364.2831	Dolly Varden
569874	2029/MAY/03	DOLLY VARDEN NORTH 3	273.2914	Dolly Varden
570074	2027/MAY/03	DOLL A	18.2229	Dolly Varden
570075	2027/MAY/03	DOLL B	18.2268	Dolly Varden
570076	2029/MAY/03	DOLL C	36.4632	Dolly Varden
570080	2030/MAY/03	DOLLY VARDEN WEST 1	419.2429	Dolly Varden
570081	2030/MAY/03	DOLLY VARDEN WEST 2	109.3779	Dolly Varden
570082	2029/MAY/03	DOLLY VARDEN WEST 3	510.6939	Dolly Varden
570083	2029/MAY/03	DOLLY VARDEN WEST 4	237.1939	Dolly Varden
589602	2027/MAY/03	DOLLY VARDEN - NORTH STAR	18.2384	Dolly Varden
251427	2030/DEC/17	CAMBRIA 1	100.0	Homestake
251428	2030/DEC/17	CAMBRIA 2	75.0	Homestake
377241	2030/DEC/17	WK 1	250.0	Homestake
377242	2030/DEC/17	WK 2	500.0	Homestake
377243	2030/DEC/17	WK 3	400.0	Homestake
380949	2030/DEC/17	WK 4	450.0	Homestake

Tenure Number	Good to Date	Claim Name	Area (ha)	Claim Block
380950	2030/DEC/17	WK 5	450.0	Homestake
380951	2030/DEC/17	KW 1	25.0	Homestake
380952	2030/DEC/17	KW 2	25.0	Homestake
380953	2030/DEC/17	KW 3	25.0	Homestake
383016	2030/DEC/17	KW 5	25.0	Homestake
383017	2030/DEC/17	KW4	25.0	Homestake
383037	2030/DEC/17	WK 6	150.0	Homestake
383038	2030/DEC/17	WK 7	400.0	Homestake
537435	2030/DEC/17	HR	127.45	Homestake
537436	2030/DEC/17	HRMARGIN 1	109.25	Homestake
537437	2030/DEC/17	HRMARGIN2	54.599	Homestake
538791	2030/DEC/17	HOMESTAKE RIDGE 1	18.209	Homestake
540533	2030/DEC/17	HOMESTAKE RIDGE 2	18.2035	Homestake
540540	2030/DEC/17	HOMESTAKE RIDGE 3	18.2074	Homestake
545945	2030/DEC/17	HOMESTAKE RIDGE 4	18.2036	Homestake
565708	2030/DEC/17	HOMESTAKE RIDGE 5	36.4169	Homestake
565709	2030/DEC/17	HOMESTAKE RIDGE 6	18.2055	Homestake
565710	2030/DEC/17	HOME STAKE 7	18.2036	Homestake
598667	2030/DEC/17	VANGUARD GOLD	18.2133	Homestake
598668	2030/DEC/17	VANGUARD EXTENSION	54.663	Homestake
950714	2030/JUN/13	BRAVO N1	327.4891	Homestake
950719	2030/JUN/13	BRAVO N2	436.5113	Homestake
950722	2030/JUN/13	BRAVO N3	436.5046	Homestake
950724	2030/JUN/13	BRAVO N4	272.8082	Homestake
950725	2030/JUN/13	BRAVO N5	381.8186	Homestake
950726	2030/JUN/13	BRAVO N6	418.0394	Homestake
950727	2030/JUN/13	BRAVO N7	417.955	Homestake
1011645	2030/MAR/09	KN HSR 1	273.8619	Homestake
1015450	2030/DEC/17	KINSKUCH NW2	1039.1809	Homestake
1015588	2030/DEC/17	HS SOUTH 1	36.442	Homestake
1061421	2030/AUG/30	NR	18.1958	Homestake

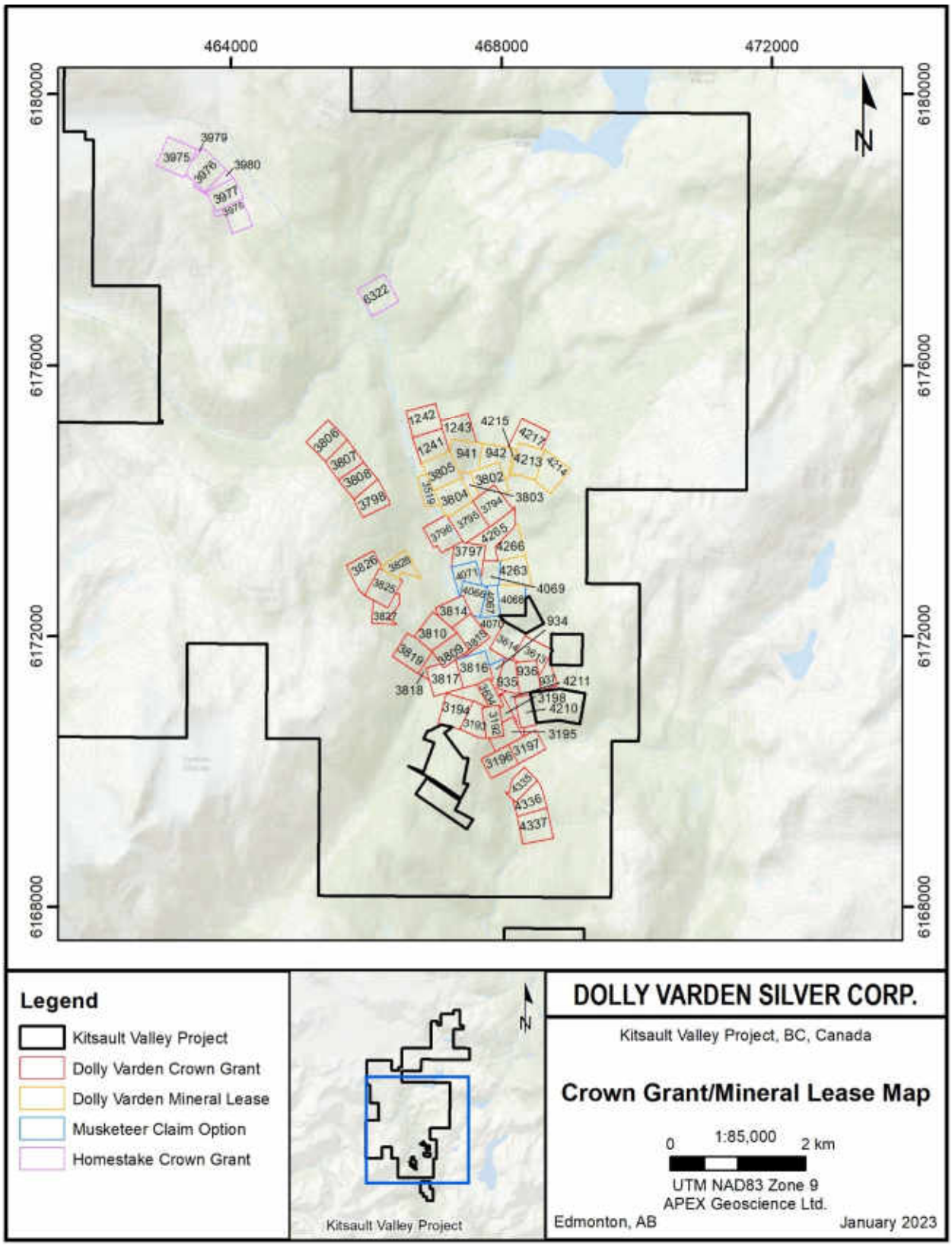
Table 4.3. Kitsault Valley Project crown granted mineral claims.

Claim Name	Lot Number	Ownership	Area
ANGLO	934	Dolly Varden 100%	5.77
ARMES	4068	Dolly Varden 100%*	18.236
ATHOS	4066	Dolly Varden 100%*	13.05
BLUEBERRY	4217	Dolly Varden 100%	16.007
BONANZA FRACTION	4070	Dolly Varden 100%*	17.254
COPPER CLIFF	3806	Dolly Varden 100%	18.51
COPPER CLIFF NO. 1	3807	Dolly Varden 100%	17.155
COPPER CLIFF NO. 2	3808	Dolly Varden 100%	15.583
COPPER CLIFF NO. 3	3798	Dolly Varden 100%	16.288
DAN PATCH	3825	Dolly Varden 100%	17.678
D'ARTAGNON	4071	Dolly Varden 100%*	11.774
D'ARTAGNON NO. 1	4069	Dolly Varden 100%*	9.423
DOLLY VARDEN M.C.	3194	Dolly Varden 100%	17.002
DOLLY VARDEN NO. 1	3192	Dolly Varden 100%	11.915
DOLLY VARDEN NO. 2	3193	Dolly Varden 100%	12.927
DOLLY VARDEN NO. 4	3195	Dolly Varden 100%	11.338
DOLLY VARDEN NO. 5 M.C.	3196	Dolly Varden 100%	14.74
DOLLY VARDEN NO. 6	3197	Dolly Varden 100%	14.681
DOLLY VARDEN NO. 7	3198	Dolly Varden 100%	4.77
KITSOL NO.1	3815	Dolly Varden 100%	16.109
KITSOL NO.2	3814	Dolly Varden 100%	14.334
LAMB	937	Dolly Varden 100%	7.364
LION	3613	Dolly Varden 100%	15.558
LUE DILLON	3827	Dolly Varden 100%	10.658
MAUD MCPHEE	3817	Dolly Varden 100%	19.093
MOOSE	936	Dolly Varden 100%	14.577
MOOSE NO. 1	1241	Dolly Varden 100%	17.159
MOOSE NO. 2	1242	Dolly Varden 100%	18.269
MOOSE NO. 6	1243	Dolly Varden 100%	16.379
MUTT AND JEFF FRACTION	4265	Dolly Varden 100%	20.533
NANCY HANKS	3826	Dolly Varden 100%	17.838
NORTH STAR	3634	Dolly Varden 100%	8.519
NORTH STAR FRACTION	4211	Dolly Varden 100%	6.911
PLUTUS FRACTION	3615	Dolly Varden 100%	0.048
PORTHES	4067	Dolly Varden 100%*	10.316
RED POINT EXTENSION	3810	Dolly Varden 100%	18.588
RED POINT NO. 1	3809	Dolly Varden 100%	14.083
RUBY	4210	Dolly Varden 100%	11.308
SPORTSMAN	3816	Dolly Varden 100%	19.561

Claim Name	Lot Number	Ownership	Area
SUNSET NO. 1	3818	Dolly Varden 100%	4.637
SUNSET NO. 2	3819	Dolly Varden 100%	18.333
SURPRISE	4335	Dolly Varden 100%	11.195
SWIFTWATER	4336	Dolly Varden 100%	14.523
TIGER	3614	Dolly Varden 100%	16.75
TORIC	935	Dolly Varden 100%	11.78
UIST	4337	Dolly Varden 100%	20.434
WOLF	3795	Dolly Varden 100%	20.197
WOLF NO. 2	3794	Dolly Varden 100%	19.009
WOLF NO. 3	3796	Dolly Varden 100%	18.009
WOLVERINE	3797	Dolly Varden 100%	14.855
HOMESTAKE	3975	Homestake 100%	20.902
HOMESTAKE NO. 3	3978	Homestake 100%	13.962
HOMESTAKE NO. 2	3977	Homestake 100%	15.042
HOMESTAKE NO. 1	3976	Homestake 100%	20.283
HOMESTAKE NO. 1 FRACTION	3980	Homestake 100%	4.702
HOMESTAKE FRACTION	3979	Homestake 100%	0.919
MILLSITE	6322	Homestake 100%	20.902

Notes:
* Denotes the claims comprising the “Musketeer Option”.

Figure 4.1. Kitsault Valley Project mineral leases and crown granted mineral claims.


464000
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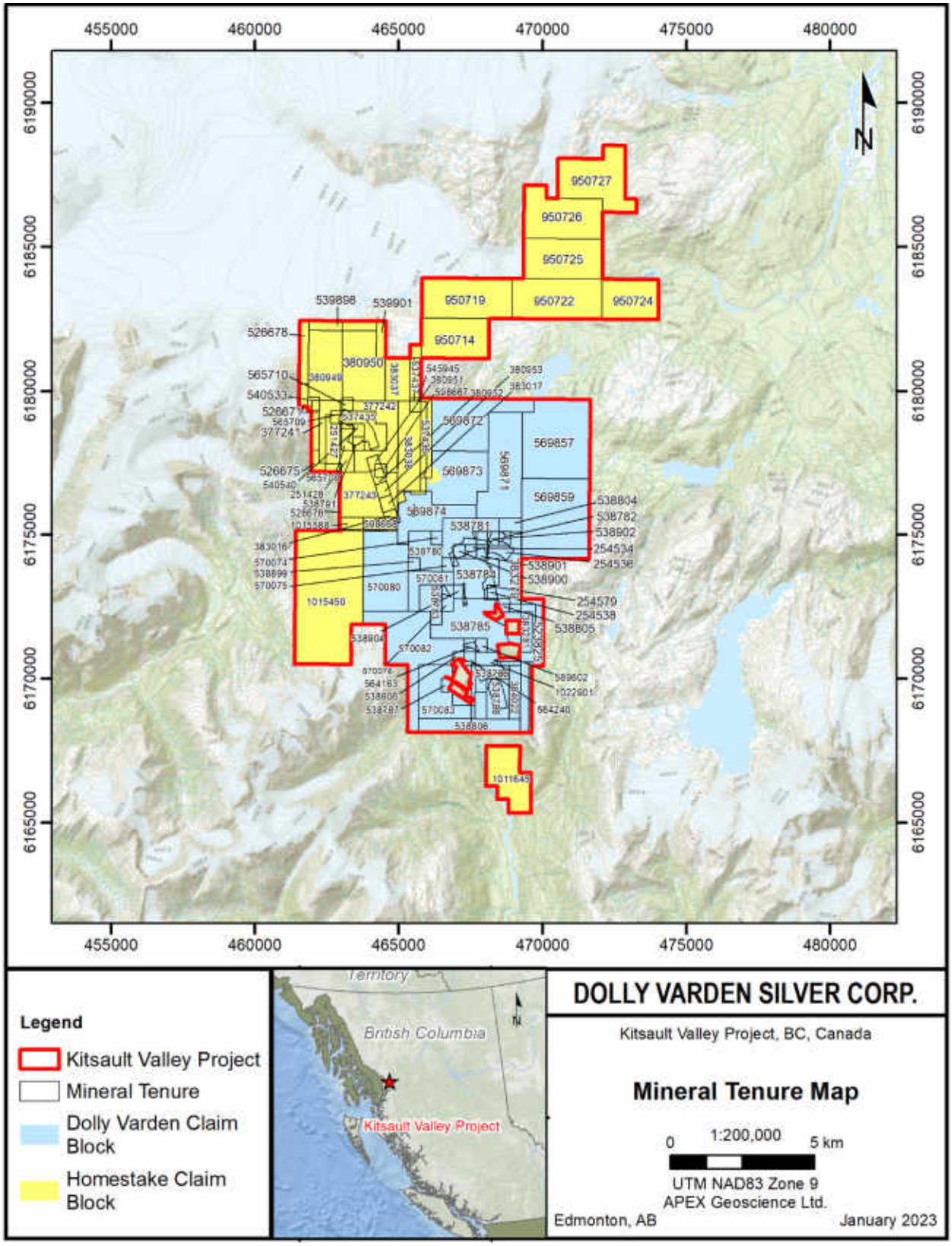
Legend
Kitsault Valley Project
Dolly Varden Crown Grant
Dolly Varden Mineral Lease
Musketeer Claim Option
Homestake Crown Grant
Kitsault Valley Project
DOLLY VARDEN SILVER CORP.
Kitsault Valley Project, BC, Canada
Crown Grant/Mineral Lease Map
0
1:85,000
2 km
UTM NAD83 Zone 9
APEX Geoscience Ltd.
Edmonton, AB
January 2023

Figure 4.2. Kitsault Valley Project mineral tenures.



4.2 Royalties and Agreements

The Kitsault Valley Project is encumbered with several royalty agreements covering separate yet contiguous portions of the Property in the form of standard Net Smelter Return (NSR) royalty agreements.

The Company entered into an NSR royalty agreement on March 18, 2011 with 0897287 B.C. Ltd. in consideration of title transfer for the majority of the Dolly Varden claim block (Figure 4.2), except for the "Musketeer Option" claims as described below. By an agreement dated April 1, 2011, 0897287 B.C. Ltd. sold and assigned the Royalty Rights to 0907105 B.C. Ltd. The Dolly Varden block claims are subject to a 2% NSR owed to 0907105 B.C. Ltd. of which one half can be repurchased by the Company for CDN$1,000,000 at any time (Dolly Varden Silver Corporation, 2019b; Higgs and Giroux, 2015).

The second NSR agreement is with Musketeer Holdings et al. ("Musketeer"). The initial agreement was for the Company to acquire 100% interest in the Musketeer claims (Figure 4.1) for a purchase price of CDN$1,050,000 payable over four years, subject to a 2% NSR to Musketeer. The Option Agreement with Musketeer has been completed through aggregate option payments by the Company of CDN$350,000, CDN$233,333 in 2013 and 2014, respectively. In 2015, the final two payments were renegotiated to defer CDN$100,000 until February 2018 plus a renegotiation fee of CDN$10,000 to be included with the 2015 payment (Dolly Varden Silver Corporation, 2015). The agreement was renegotiated again in February 2016 with CDN$81,000 plus a renegotiation fee of CDN$10,000 paid on February 12, 2016 (Dolly Varden Silver Corporation, 2016). The final two payments of CDN$102,334 and CDN$100,000 were made in 2017 and 2018, respectively.

Upon completion of the Option Agreement the Company entered into an NSR royalty agreement with Musketeer on May 16, 2018, for the 2% NSR royalty. On or before May 16, 2021, Dolly Varden can deliver notice to the NSR holders of the intent to re-purchase 50% of the 2% royalty for CDN $1,750,000. After May 16, 2021, the NSR holders have no obligation to accept an offer to buy back 1% of the NSR. Dolly Varden haven't gone through with the deal.

The Coombes Claims, part of the original Homestake claim block (including Cambria 1, Cambria 2, KW1, KW2, KW3, KW4, KW5, WK1, WK3, WK4, WK6 and WK7), are subject to a 2 percent NSR royalty by virtue of an option agreement dated July 5, 2000. The royalty includes a purchase right in favour of the Company for C$1,000,000.

The Homestake crown grants (including DL 3975, DL 3976, DL 3977, DL 3978, DL 3979, DL 3980, and DL 6322) are subject to a 2 percent NSR royalty which includes an annual advanced minimum royalty of C$50,000 in favour of Alice Sullivan and Mildred Keller.

4.3 Environmental Liabilities, Permitting and Significant Factors

Regarding environmental liabilities associated with the Project, a historical plant site and numerous historical workings and waste rock dump piles are located within the permit area. The Ministry of Energy, Mines and Petroleum Resources is aware of these historical sites and the Company has closed off access to these sites as a safety pre-caution. No compounded tailings have been identified to exist from the 1949 to 1959 plant site. Furthermore, acid rock drainage (ARD) testing has been conducted on water outflow locations within the Property and all results returned are within acceptable levels.

4.3.1 Dolly Varden Claim Block Permitting

Exploration Permit MX-1-860 was granted to the Company for the Dolly Varden claim area in 2011. Under the permit, 5-year Multi-Year Area-Based (MYAB) applications are submitted either every 5 years or if the allotted disturbance and activities have been reached. At the end of each year an Annual Summary of Exploration Activities (AESA) is filed which states the area disturbed, the area reclaimed, and other activities completed that year. These are subtracted from the MYAB allowance, and the remaining allowances are calculated.

In May 2018, Dolly Varden received approval for a 5-year amendment application to the MYAB under permit MX-1-860 with an expiry date of March 2023. Dolly Varden applied for another 5-year amendment in July 2021 because the allotted number of drill sites had been reached before the 5-year time limit, which extended the 5 year MYAB term to March 2026.

The current MYAB allows for a total of 24.03 ha disturbance including; 1) 112 helicopter supported drill sites (18.57 ha); 2) 140 line-km of geophysical surveys (0 ha disturbance); 3) 30 helicopter pads (3 ha); 4) work-related structures (1.4 ha disturbance); 5) 12 sites of trenching (0.06 ha); 6) 5 km at 2 m width exploration trails (1.0 ha); 7) 800 m of underground rehabilitation of Torbrit mine (136 m completed in 2013); 8) Underground drilling (20 Diamond Drilling sites and 10 Geotechnical drilling sites).

Under the calculations used to determine a reclamation bond amount under Exploration Permit MX-1-860 and subsequent amendments to the MYAB, the Company has provided CDN$85,000 in total deposits as reclamation liability. This amount will be returned once all reclamation work has been completed, approved and the exploration permit is closed off or switched to exploitation permit.

A Wildlife Management Plan and Archaeological Overview Assessment (AOA) was completed by ERM Consultants Canada Ltd. (ERM) in May 2018 to accompany the amendment application. The Wildlife Management Plan comprises protocols to address possible goat, bear and marbled murrelet encounters and outlines protected areas in the region. No protected areas are located within the Dolly Varden claim block, although there are protected areas along the fly route to access area. The AOA includes a desktop study outlining high probability chance discovery areas and culturally modified tree (CMT) high

probability areas. The Company must take pre-cautions when planning drill programs near or within these areas. Both the Wildlife Management Plan and AOA included a consultation with the Nisga'a Lisims Government. The Nisga'a Lisim Government's response to the Exploration Permit MX-1-860 amendment application was positive.

4.3.2 Homestake Claim Block Permitting

Homestake Resource holds a Mineral and Coal Activities and Reclamation Permit (Permit No. MX-1-603) that includes the following approved work: 1) 200 helicopter supported diamond drill sites; 2) 300 helicopter supported RC sites; 3) 50 line-km of geophysical surveys; 4) 6 helicopter pads; 5) 2 km of exploration trails; 6) Camp with 1.0 ha of disturbance.

The above permit is secured with a C$68,000 reclamation bond and with an expiry date of March 23, 2023. Due to the change of ownership and since the scope of work has not changed, Dolly Varden applied for an extension under "Notification of Deemed Authorization" in December, 2022 that could potentially extend the current permit to March, 2025.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Kitsault Valley Project is located near the central west coast of BC, approximately 27 km north of Alice Arm, BC, and 39 km southeast of Stewart, BC. Primary access to the Property is via helicopter from the towns of Alice Arm, Kitsault or Stewart. Overland vehicle access from Terrace, BC, to Kitsault can be gained via the Nisga'a Highway (Highway 113) to the termination of the Kitsault Mine Road (total road length of 167 km). The historical mining town of Kitsault is located on the Alice Arm of the Observatory Inlet, which can be crossed via boat/barge to the historical town of Alice Arm. Once in Alice Arm, the Kitsault Valley Road runs along the Kitsault River and follows an old rail bed that was constructed to service the Dolly Varden mine. The towns of Alice Arm and Kitsault can also be accessed from Prince Rupert, BC, by privately contracted seaplane or boat/barge.

Property access for Dolly Varden personnel is via helicopter from the Dolly Varden exploration camp situated in Alice Arm or from a staging point at km19 of the Kitsault River road. As surface exploration on the Property is helicopter based and therefore weather dependent, the operating season is typically May to October with adjustments depending on weather. Snow capped mountains in the area prove an added challenge regarding accessibility of exploration sites.

5.2 Site Topography, Elevation and Vegetation

The Property is situated within the Coast Mountains and exhibits rugged topography. Variations in elevation range from 300 m to 1300 m above sea level (asl). The Kitsault River runs through the Property within a glacially formed U-shaped valley. The Homestake area deposits are located near the headwaters of the Kitsault River, below the Homestake and Kitsault glaciers. As the river runs to the south pas the Wolf and then the Dolly Varden area deposits (Dolly Varden, Torbrit and North Star), its valley becomes quite deep with steep forested slopes and eventually opens into a large broad valley just to the south of the Property.

The Property is located in the Coastal Western Hemlock biogeoclimatic zone, within the wet submaritime subzone (Pojar et al., 1991). Sub-alpine forests dominate the vegetation of the area, tree species include western hemlock, douglas-fir, spruce, red cedar, mountain ash and cottonwood. Ground level vegetation on the Property includes devils club, huckleberry and blueberry bushes.

There are no federally or provincially identified plant species at risk in the project area (BC Conservation Data Centre, 2020). The nearest observed plant species at risk is Polystichum setigerum (Alaska holly fern), observed in 1975 in lower Kitsault River approximately 2.5 km upstream from Alice Arm, classified as being of “special concern” (BC Conservation Data Centre, 2020).

5.3 Climate

Climate at the Property is typical for the Coast Mountains, with mild rainy summers and cold snowy winters. The average annual temperature is 5.6° Celsius (C), with mid-winter (January) highs averaging -8.7°C and mid-summer (July) highs averaging 21.3°C. Precipitation increases significantly in the winter season from October to January. Peak rainy season occurs in September and October and averages 117 mm and 150 mm, respectively. In the winter, maximum snowfall accumulation can reach up to 85 cm in January. Average yearly precipitation is 1091.9 mm (Climate Change Canada, 2018).

5.4 Local Resources and Infrastructure

The town of Alice Arm hosts the Dolly Varden exploration camp, constructed on private land leased by the Company. Supplies are brought into the exploration camp by boat/barge from Prince Rupert, BC, (population 12,220) and by vehicle from Terrace, BC, (population 11,486) or Smithers, BC, (population 10,607) to Alice Arm. Supplies can be transported into the camp by air or by using the historical road access.

The towns of Prince Rupert, Terrace and Smithers are full-service communities providing food, fuel, equipment and general supplies for exploration work activities. Terrace and Smithers host regional airports with daily flights to Vancouver and Prince George. All three towns are accessible by highway. Mineral exploration and production in northwestern/central BC dates back to the early 1900s with the current economy of the

area driven, at least in part, by the resource industry. Field personnel and resources for exploration and potential operations at the Project are expected to be available from Prince Rupert, Terrace and Smithers.

Extensive historical and current mining in the area has left a network of surface and underground infrastructure. Access to the BC Provincial electrical power grid is available in Kitsault. The historical Kitsault River Hydroelectric Project hydroelectric dam is located on the Kitsault River near Kitsault Lake at the northern extent of the Property boundary. Infrastructure associated with the hydroelectric dam includes an access road and historical interconnections to BC Hydro. The Upper Kitsault River and Kitsault Lake provide abundant water for exploration activities.

Historical mining at the Dolly Varden and Torbrit mines has resulted in minimal surface waste rock dumps and no tailings were produced on site as “ore” was primarily shipped from site. There are no known significant environmental liabilities at the Property.

6 History

The Kitsault Valley area has a lengthy and robust history of exploration and mining, with exploration starting in the area from the early 1900s. This section summarizes the work done in the Dolly Varden and Homestake claim blocks.

6.1 Historical Work Conducted by Previous Owners: Dolly Varden Claim Block (Dolly Varden, North Star, Red Point and Torbrit Deposits)

The historical exploration completed at the area has been summarized in several previous Technical Reports on the Property (Garrow, 2011; Higgs, 2015; Higgs and Giroux, 2015; Turner and Nicholls, 2019) and thus much of the following information has been adapted from these reports, with additional information from British Columbia Ministry of Energy and Mines (2012a), Devlin and Godwin (1985) and Devlin (1987).

The historical surface geochemistry (pre-2011 known rock, soil and silt sample locations with assays) are shown on Figures 6.1 to 6.3 and historical surface drill locations are shown on Figure 6.4.

6.1.1 1910 to 1968 Exploration (reproduced from Higgs and Giroux, 2015)

The first claim staking in the Dolly Varden area occurred in 1910 with the location of the Red Point No.1 mineral claim (a Cu-Au prospect). The first claims for silver in the Dolly Varden mine area were staked in 1911. The Sportsman and North Star were staked in 1912 and 1914, respectively.

Extensive prospecting, test pitting and drifting was carried out over the next seven years to develop the Dolly Varden silver deposit and bring it to production in 1919. Between 1919 and 1921, the Dolly Varden and North Star mines produced 1.305 million

ounces silver from 36,000 tons at an average grade of 35.66 oz/t (1,109 g/t Ag). This ore was direct shipped without beneficiation to base metal smelters, mainly to the nearby Granby Mines Anyox Copper smelter, located at the historical Anyox town site (Leigh and Thompson, 1981).

The other historical mine on the Property was the Torbrit Mine. From 1949 to 1959 Torbrit Silver Mines Ltd. produced 18,706,847 million ounces of silver and 10.8 million pounds of lead from 1,377,632 tonnes averaging 13.58 oz/t (466.3 g/t) silver and 0.38% lead. Production was in the form of a high-grade silver-lead concentrate and silver bullion. During production at the Torbrit, exploration and development continued on the North Star and Wolf prospects. Lesser amounts of exploration were conducted on the Moose Lamb, Tiger and Surprise showings. Drilling on the North Star deposit by Torbrit Silver Mines Ltd. in 1957-1958 penetrated a well mineralized horizon with three drillholes including an intersection in hole NS-17 assaying 72.3 g/t Ag, 3.38% Pb and 16.48% Zn over 3.50 m.

6.1.2 1969 to 1990 Exploration

Exploration conducted by Dolly Varden Mines Ltd. from 1969 to 1973 included geochemical soil sampling on the “Copper Belt” zone on the west side of Kitsault Valley and diamond drilling (Garrow, 2011; Higgs and Giroux, 2015).

Diamond drill programs and ore reserve calculations for the known silver deposits were conducted by consultants on behalf of Dolly Varden Minerals Inc. from 1979 to 1981 (British Columbia Ministry of Energy and Mines, 2012). A probable volcanogenic origin for the Dolly Varden-North Star-Torbrit deposits was recognized by B. Devlin on behalf of Derry, Michener, Booth and Wahl and Dolly Varden Minerals Inc. in 1986 (Devlin and Godwin,1985; Devlin 1987). Work during this period was focussed on verifying the historical mineral resource estimates at the North Star and Wolf mines. The historical mineral resource estimates are summarized below in Section 6.3.

Exploration completed in 1989 and 1990 by Tecucomp Geological Inc., on behalf of Dolly Varden Minerals Inc., included geological mapping, geochemical sampling and diamond drilling (2,256 m) at Red Point. Additional work at North Star comprised underground geological mapping and drilling (2,397 m) to verify historical drilling (British Columbia Ministry of Energy and Mines, 2012). The drilling programs targeted a possible volcanic exhalative (volcanogenic massive sulphide “VMS”) model of mineralization and identified the significance of zinc, lead and copper in the mineralization (Garrow, 2011).

During 1989 and 1990, Tecucomp Geological Inc. (the predecessor company to Cambria Geosciences Inc.) conducted an exploration program which focused on diamond drilling at the Cu-Au-bearing Red Point prospects and on the silver-rich polymetallic stratigraphic horizon containing the Dolly Varden, North Star and Torbrit mines. The stratigraphic, structural and deposit trends were reassessed as part of this work and this particular drilling program was the first to incorporate a volcanic exhalative (VMS) model of ore deposition (Higgs and Giroux, 2015).

Figure 6.1. Historical (pre-2011) rock geochemistry (Ag ppm) at the Dolly Varden claim block.

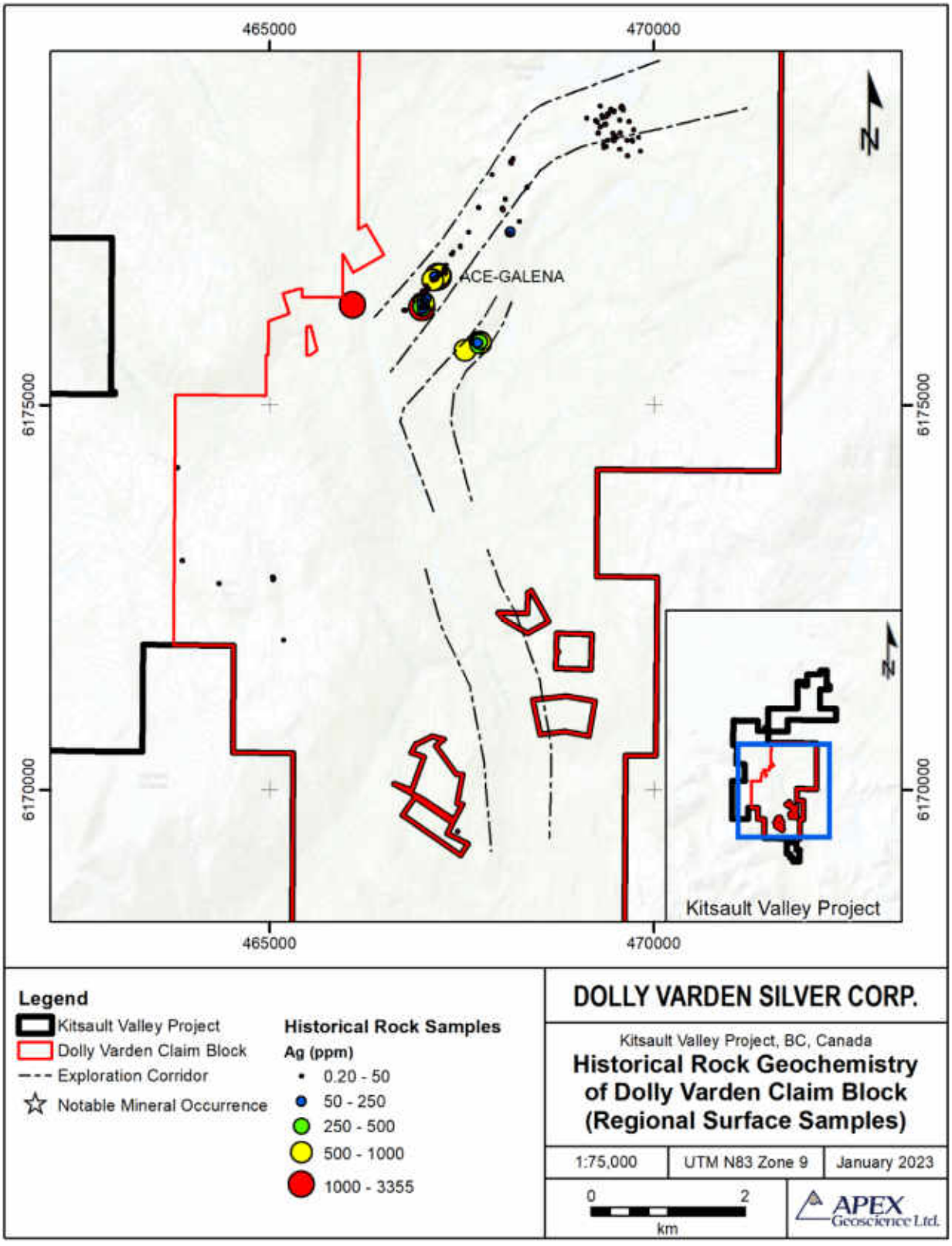


Figure 6.2. Historical (pre-2011) soil geochemistry (Ag ppm) at the Dolly Varden claim block.

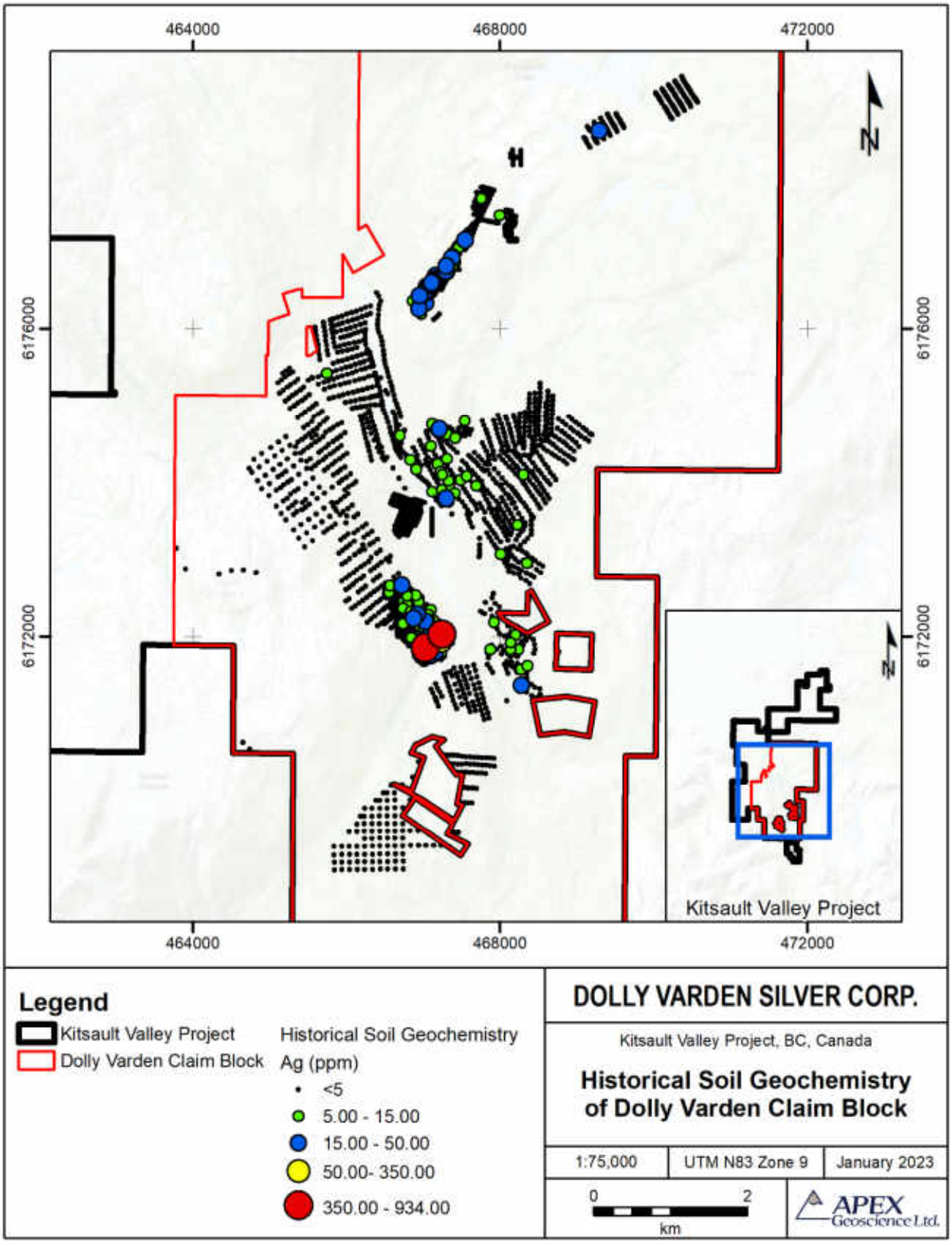


Figure 6.3. Historical (pre-2011) silt sample geochemistry (Zn ppm) at the Dolly Varden claim block.

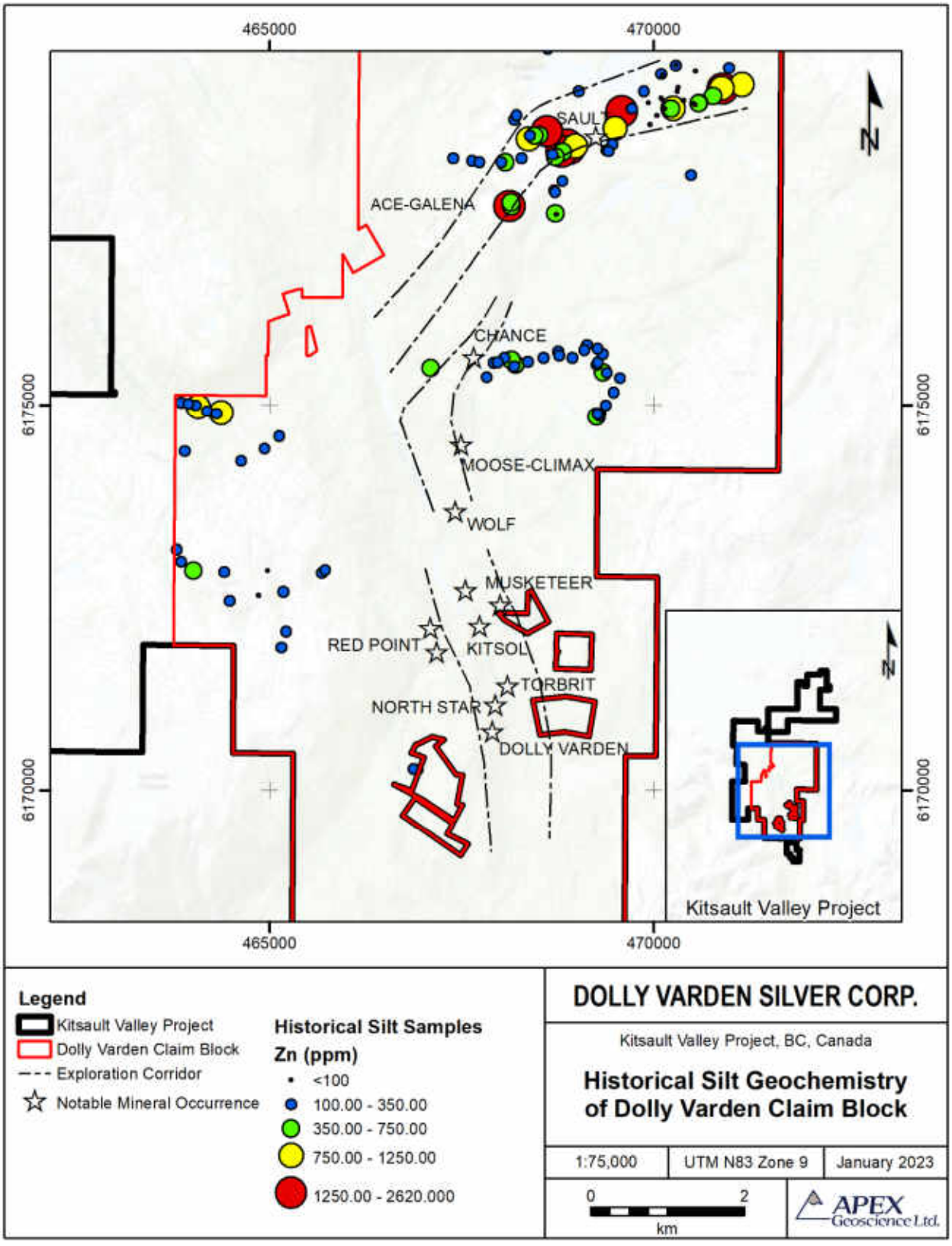
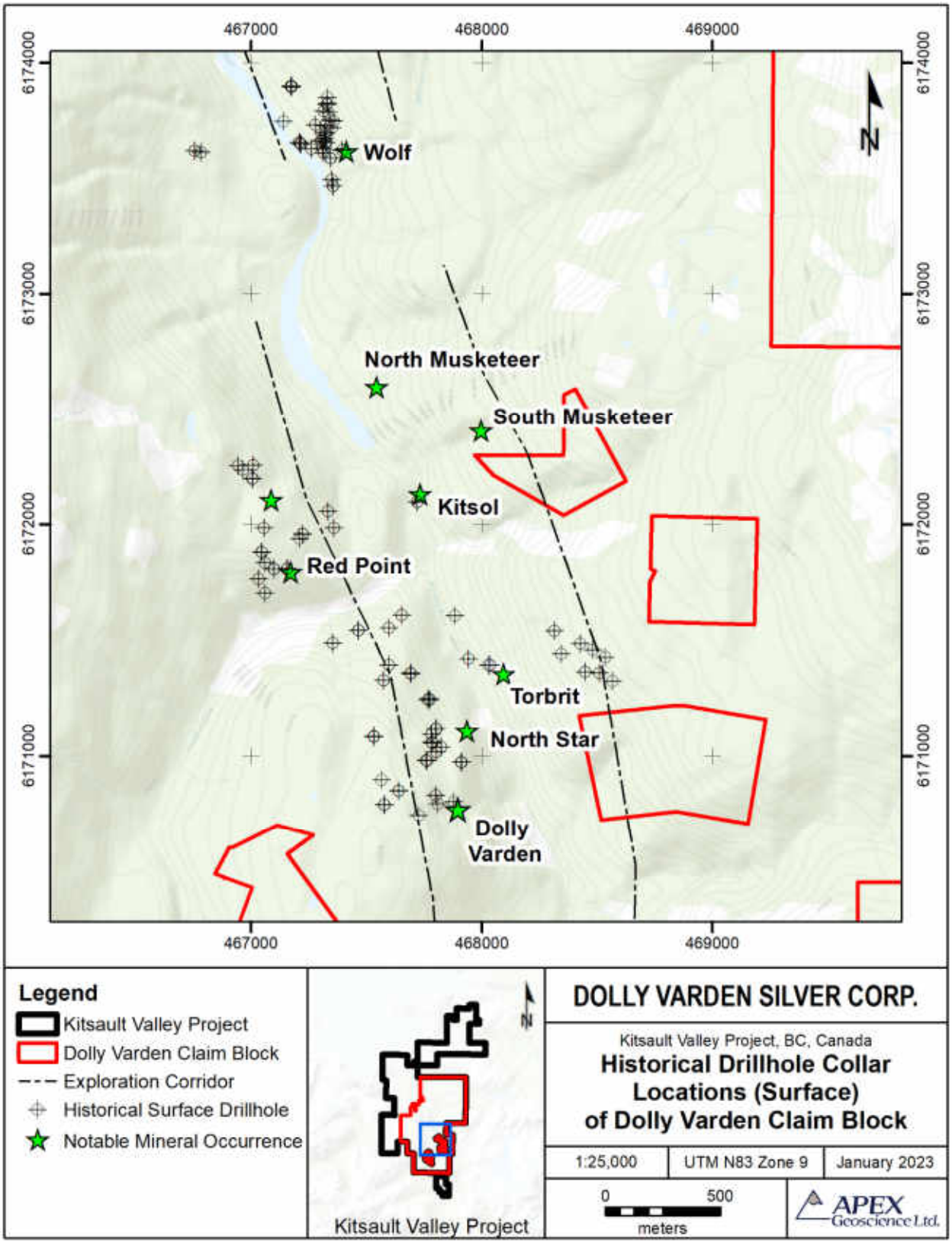


Figure 6.4. Historical drillhole collar locations (surface drilling) at the Dolly Varden claim block.



6.1.3 1991 to 2009 Exploration

According to the Mines Branch Notice of Work files, no exploration was conducted at Dolly Varden, North Star, Red Point and Torbrit deposits from 1991 to 2009.

6.1.4 2010 Exploration

In 2010, Dolly Silver Corporation and Dolly Varden Silver Ltd. (predecessor of Dolly Varden Silver Corporation) commissioned Geotech Ltd. to fly a helicopter-borne geophysical survey over the area. The survey utilized versatile time domain electromagnetic (VTEM), gamma ray spectrometry and aeromagnetic methods. A total of 941.7 line-km was flown at 100 m spacings, with 90% of the claim block covered by the geophysical survey (Garrow, 2011).

6.2 Historical Work Conducted by Previous Owners: Dolly Varden Claim Block (Other Prospects and Deposits)

Several mineral occurrences are situated within the claim block, notable occurrences include Ace-Galena, Kitsol, Chance, Moose-Climax and Sault. Exploration work conducted on select prospects in the area is summarized in the sub-sections below and has been adapted from the most recent Technical Report on the Property by Higgs and Giroux (2015) and Tuner and Nicholls (2019).

6.2.1 Ace-Galena (Tyee, Trout, Robin)

The Ace-Galena mineral occurrence was originally discovered as the Tyee group in 1929. Between 1930 and 1934 showings of high-grade galena and native silver were discovered and explored using open cuts and short adits. In 1946, the claims were relocated as the Galena group and trenching occurred over the mineralization (total length of 914.4 m). Transcontinental Resources Ltd. conducted trenching and drilling in 1951 prior to dropping the option on the claims.

The prospect was renamed as the Ace and Galena claims and acquired by Silver Butte Mines Ltd. in 1963. Silver Butte Mines Ltd. completed 457.2 m of drilling from 1963 to 1964 but dropped the claim group in 1968. In 1989, the claims were optioned to Aber Resources Ltd., Oliver Gold Corporation and Tanqueray Resources Ltd. Work completed at the prospect in 1990 included geophysical surveys and extensive geochemical sampling, including rock, silt and soil sampling. The exploration in 1990 outlined a lead (Pb) - zinc (Zn) – silver (Ag) – arsenic (As) – antimony (Sb) – barium (Ba) anomaly and discovered stratiform mineralization at Trout.

6.2.2 Kitsol

The Kitsol Vein was discovered in 1918 and staked at the end of 1918 by Donald, Miner and Swanson. The claim was transferred as part of the Musketeer claim group to

Meenach in 1919 and to the Brown family in 1920. Early exploration on the claim included surface trenching and limited underground work, although poorly documented.

The claim group was optioned to Dolly Varden Mines in 1969. From 1972 to 1973 exploration work comprised limited chip sampling of historical workings and diamond drilling (505 m in three holes). Results for the drilling include Ag values up to 380.57 g/t over 4.88 m and trench results returned Ag values up to 626.40 g/t over 4.11 m.

6.2.3 Chance (Victory Group)

The Chance mineral occurrence was discovered in 1918. Early exploration from 1919 to 1930 comprised trenching, diamond drilling and underground work to define Ag-Cu-Sb-Pb-Zn bearing quartz-barite-jasper veins. The occurrence was renamed the Victory Group in 1951.

Trenching and diamond drilling was conducted at the prospect from 1963 to 1964 and outlined a mineral resource estimate of 66,224 tonnes (73,000 tons) grading 393.26 g/t (11.47 oz/ton) Ag as reported by Wilson (cited in Mitchell, 1976). Additional mapping and drilling in 1975 downgraded the mineral reserve to 38,246 tonnes (42,160 tons) at 373.7 g/t (10.9 oz/ton) Ag, as reported by Mitchell (Mitchell, 1976). Selected highlights from the 1963-1964 drilling at Chance include 5.88 m zone at a weighted average of 480.0 g/t (14.0 oz/t) Ag from DDH12,1.68 m zone at 480.0 g/t (14.0 oz/t) Ag from DDH1, 10.6 m zone with a weighted average of 250.3 g/t (7.3 oz/t) Ag and 15.2 m zone with a weighted average of 607.2 g/t (17.71 oz) Ag from DDH3.

The Victory Group historical mineral resource estimate discussed in the paragraph above was calculated prior to the implementation of the standards set forth in NI 43-101 and current CIM standards for mineral resource estimation. No information regarding the methods or parameters used to calculate these historical MRE's is available. The cut-off grade is not reported. The methods of estimation nor any statistical data are provided. As a result, the authors of this Technical Report have referred to this estimate as a "historical resource" and are not treating it, or any part of it, as a current mineral resource. Other historical mineral resource estimates at the Dolly Varden claim block are summarized in Section 6.3 below.

6.2.4 Moose-Climax

The Moose-Climax mineral occurrences were discovered in 1916. Exploration in 1916 included trenching and underground work. Moose Group Mining Company Ltd. optioned the claim group in 1920 and completed underground development at the showing.

Silver Butte Mines Ltd. conducted diamond drilling in 1964 and 1967, respectively comprising 13 holes totalling 1,125.9 m and 9 holes totalling 528.1 m. Highlights from the drill programs included 2.44 m at 360.0 g/t (10.5 oz/t) Ag from DDH 14, 1.28 m at 366.86 g/t (10.7 oz/t) Ag from DDH 12 and 12.5 m at 257.14 g/t (7.5 oz/t) Ag from DDH 9. The

1964 drill program outlined a preliminary mineral resource estimate of 27,215 tonnes (30,000 tons) at 308.57 g/t (9.0 oz/t) Ag (Mitchell, 1976).

The Moose-Climax historical mineral resource estimate discussed in the paragraph above was calculated prior to the implementation of the standards set forth in NI 43-101 and current CIM standards for mineral resource estimation. No information regarding the methods or parameters used to calculate these historical MRE's is available. The cut-off grade is not reported. The methods of estimation nor any statistical data are provided. As a result, the authors of this Technical Report have referred to this estimate as a "historical resource" and are not treating it, or any part of it, as a current mineral resource. Other historical mineral resource estimates at the Dolly Varden claim block are summarized in Section 6.3 below.

6.2.5 Sault

A stratiform barite-realgar-celestite showing was discovered by N. Wynchopen at Sault in 1966. The Sault claims were staked in 1984 by J.R. Woodcock and optioned by Cominco Ltd. from 1984 to 1989. During this period, work on the claims comprised a variety of geological, geochemical and geophysical surveys, as well as diamond drilling (8 holes totalling 1,269.2 m) (Blackwell, 1986). The Sault claims were optioned by Aber Resources Ltd and Oliver Gold Corp in September 1989, work conducted during this time included geochemical sampling, prospecting and diamond drilling (992 m). Highlights from historical drilling at Sault includes:

- 26.5 g/t Ag, 0.12% Pb, 1.39% Zn over 4.95 m from K89-11
- 10.3 g/t Ag, 0.27% Pb, 1.18% Zn over 4.17 m from K89-6 ext

6.3 Historical Mineral Resource Estimates at Dolly Varden Claim Block

The following section provides a summary of historical mineral resource estimates completed at the deposits/prospects within the Dolly Varden claim block, which is summarised from information presented in previous Technical Reports on the area by Higgs and Giroux (2015) and Turner and Nicholls (2019). The historical mineral resource estimates are presented in Table 6.1. All of the mineral resource estimates provided below were calculated prior to the implementation of the standards set forth in NI 43-101 and current CIM standards for mineral resource estimation. No information regarding the methods or parameters used to calculate these historical MRE's is available. The cut-off grades are not reported and, in general, the methods of estimation and supporting statistical data and categorization criteria have not been adequately reported. As a result, the authors of this Technical Report have referred to these estimates as "historical resources" and are not treating them, or any part of them, as current mineral resources. The historical resources are only presented to document historical work on the area as an indication of the exploration and mineralization potential at each of the prospects. The current mineral resource estimates for the Wolf, North Star, Dolly Varden and Torbrit deposits are discussed in Section 14 of this report.

Table 6.1. Historical mineral resource estimates* of the Dolly Varden Claim Block Resources (modified from Higgs and Giroux, 2015).

Deposit	Year	Historical Resource Classification	Cut-off Grade Ag (g/t)	Tonnes	Grade Ag (g/t)	Contained Ag (oz)	Source
Dolly Varden	1964,1974	Proven & Probable	171	42,638	754.3	1,034,000	Skerl (1964) and Mann (1974)
North Star	1981	Proven & Probable	137	128,437	401.5	1,657,867	Thompson & Pearson (1981)
Torbrit	1983	Possible	171	786,531	312.0	7,889,700	Leigh and Thompson (1983)
Wolf No. 1 Zone	1981	Proven & Probable	171	77,932	395.0	989,626	Thompson & Pearson (1981)
Wolf No. 2 Zone	1981	Proven & Probable	171	218,512	285.9	2,008,839	Thompson & Pearson (1981)
Wolf No. 2 Zone	1981	Possible	171	100,295	279.4	901,031	Thompson & Pearson (1981)
Last Chance	1967	Possible	Unknown	42,160	373.9	459,581	Mitchell (1976)
Moose-Climax	1964	Possible	Unknown	30,000	308.7	270,000	Mitchell (1976)

The mineral resource estimates summarized in Table 6.1 are not consistent with current NI 43-101 and CIM standards for mineral resource estimation. The authors of this Technical Report have referred to these estimates as "historical resources" and the reader is cautioned not to treat them, or any part of them, as current mineral resources as there is insufficient information available to properly assess estimation parameters and the standards by which the estimates were categorized. The reader is referred to Section 14 "Mineral Resource Estimates" for a discussion of current mineral resource estimates for the Dolly Varden Project that have been completed in accordance with NI43-101.

6.4 Historical Work Conducted by Previous Owners: Homestake Claim Block

Historical exploration completed at the Homestake claim block remains mostly unchanged from the information provided in previous Technical Reports on the area by Macdonald and Rennie (2016), Ross and Chamois (2017), MineFill (2020) and Hough et al. (2022). The authors of this Technical Report have reviewed these sources and consider them to contain all of the relevant information regarding the exploration history for the area.

The historical surface geochemistry (2017-2019 known rock, soil-talus and silt sample locations with assays) are shown on Figures 6.5 to 6.11. Historical surface drill locations are shown on Figure 6.12.

6.4.1 1910 to 2000 Exploration

The Homestake claim block comprises two areas of historical exploration interest. The Homestake and the Vanguard groups have been tested by past explorers starting in the early 1900s after the discoveries at Anyox and in the Stewart region. Claims were first staked at the Homestake group between 1914 and 1917 and, in 1918, the claims were bonded to the MCDC. MCDC was reorganized into Homestake Development in 1921. Limited surface and underground work were done on the area. In 1925, the claims were given "Crown Grant" status. In 1926, Homestake Development and three other groups bonded to the interests of C. Spencer. The option was abandoned, with no further work being done on the claims (Knight and Macdonald, 2010). Arm staked the area and conducted surface trenching, limited underground work and drilled seven holes to an aggregate depth of 58.2 m, on the Lucky Strike and Cascade claims which comprise part of the Homestake group (Knight and Macdonald, 2010).

In 1966, Canex Aerial Exploration Ltd. (Canex) undertook a program of prospecting, geochemical sampling, electromagnetic (EM) surveying, and chip sampling in the Vanguard area. In 1967, Amax Exploration conducted and extended examination of the Vanguard group but didn't continue (Folk and Makepeace, 2007).

In 1979, Newmont Exploration of Canada Ltd. (Newmont) optioned part of the claim block, known as the Wilberforce group, from Ruby Collison. The Wilberforce group excluded the original Homestake and Vanguard claims. Newmont explored for near surface, massive sulphides conducting magnetometer and Max-Min geophysical surveys, geological mapping, and trenching. A total of 595 soil samples and 82 rock samples were assayed. Newmont terminated the option in late 1980 (Folk and Makepeace, 2007).

Caulfield Resources Ltd. explored over the Vanguard group in 1981 taking 102 soil samples and conducting 5.25 line km of ground magnetic surveys, but no subsequent work was done (Folk and Makepeace, 2007).

Homeridge Resources Ltd. optioned the claims from Ruby Collison in 1984, but no work was done (Bryson, 2007). The claims were allowed to lapse in 1986, were re-staked and optioned to Cambria Resources Ltd. (Cambria), which completed geological mapping, lithogeochemical sampling, trenching and 4.3 line km of IP and resistivity surveying. Weather deferred drilling for that year and the ground was eventually optioned to Noranda Exploration Company Limited (Noranda) (Folk and Makepeace, 2007).

Between 1989 and 1991, Noranda consolidated ground by optioning more area including the Cambria (formerly Collison), Homestake, and Vanguard claims. A 44.3 km grid was cut along which magnetometer and IP surveys were performed in addition to geological mapping. A total of 1,930 rock samples and 1,943 silt and soil samples were taken. Twelve diamond drill holes were cored (diameter unknown) for an aggregate depth of 1,450.05 m (Folk and Makepeace, 2007).

6.4.2 2000 to 2016 Exploration

Teck acquired the current Homestake claim block in 2000 via option agreements and staking. From 2000 to 2002, Teck conducted geochemical and geological surveys, trenching and diamond drilling with the intent of exploring volcanogenic massive sulphide (VMS) deposits. A total of 21 NQ (47.6 mm dia.) holes were drilled to an aggregate depth of 4,374.6 m yielding 618 core samples. In addition, 778 rock samples were analyzed by Inductively Coupled Plasma (ICP) multi-element geochemistry plus Au and another 31 samples were subjected to "whole rock" X-Ray Fluorescence (XRF) analysis (Folk and Makepeace, 2007).

In 2003, Bravo Ventures Group ("Bravo"), which was restructured and changed its name to Homestake Resource Corporation ("Homestake") on April 12, 2012, optioned the Teck claims and the crown granted claims from a group represented by the Hon. Alice D. Sullivan and Mildred Kelleher. Later that year, 11 confirmatory drillholes (1,002.39 m) were completed and results were encouraging enough to justify follow-up work. A total of 313 soil and 39 rock samples were taken in 2004, in conjunction with a 25 line-km magnetometer survey and geological mapping focused on the northern part of the claim block (Kasper and Metcalfe, 2004). During the 2005 program, 11 diamond drillholes (1,646.09 m) were completed but no report is available for this work; however, databases include results for this drilling. Bravo completed an additional 28 drillholes (6,488 m) and minor geological mapping on an area southwest of the drill zone during a 2006 program (Bryson, 2007).

Homestake continued aggressive drill-testing of the area with programs in 2007 (28 holes, totalling 9,323 m), 2008 (42 holes, totalling 8,724 m), 2009 (48 holes, totalling 13,548 m), 2010 (48 holes, totalling 18,083 m) and 2011 (23 holes, totalling 7,366 m) (Macdonald and Rennie, 2016). The 2008 drilling program is detailed in Kasper (2009); however, reports for the 2007, 2009, 2010 and 2011 programs are not available.

From 2010 to 2012, Homestake completed additional surface exploration including further mapping, soil and rock sampling and 13.54 line km of IP geophysical surveys, and diamond drilling.

In 2011 a new discovery was made 800 m to the southwest of, and parallel to, the previously discovered Main Homestake and Homestake silver deposits. This area, known as the South Reef target, was tested by three holes with all three intersecting +30 g/t gold mineralization.

During 2012, Homestake completed two phases of drilling focussed on the delineation and extension of the South Reef target. The second phase of drilling was funded by Agnico Eagle Mines Limited ("Agnico Eagle") as part of an option agreement (see below). The 2012 drilling was successful in identifying an approximate 250 m strike by 250 m down dip before ending in, or being offset by, a major fault structure. Mineralization is open along strike to the northwest. Other targets on the claim block remain to be explored.

Agnico Eagle optioned the claim block from Homestake in 2012. In 2013, Agnico Eagle completed an exploration program consisting of geological mapping, soil sampling (785 samples), approximately 21 line km of ground geophysical surveying including IP/resistivity and magnetics and a 10-hole drilling program totalling 3,947.24 m. The drilling was meant to test various exploration targets outside of the Homestake Main and Homestake Silver deposits (Swanton et al., 2013). In 2014, Agnico Eagle completed a limited amount of prospecting, reconnaissance geological mapping and rock sampling (57 samples) as well as a 6-hole drilling program totalling 2,578 m designed to test the Slide Zone. The drilling suggested that the Slide Zone is concordant with the Homestake Main and Homestake Silver Zones and trends north northwesterly and dips steeply to the northeast.

6.4.3 2016 to 2019 Exploration

On September 7, 2016, the claims were acquired by Auryn Resources Inc. (“Auryn”) through its acquisition of Homestake. Auryn completed extensive exploration across the Homestake claim block to advance additional targets to the drill ready stage. This work included geological mapping, rock and soil geochemical sampling, portable X-Ray fluorescence and shortwave infrared surveys, geophysical (IP) surveying, the re-logging of historical drill core, geochronological studies and airborne VTEM geophysical surveys along with reprocessing of historical geophysical survey data.

During 2017, 17.5 line km of Induced Polarization (IP) ground geophysical surveying was completed using a pole-dipole array with 50 m dipole spacing. The 2017 survey data was combined with the 2013 IP data and depth slices from both the resistivity and chargeability were used to create 3D inversion models. The 3D inversions were used in conjunction with drill hole logging to reinterpret the geological setting of the Homestake claims and confirmed the apparent extensional regime and graben geometry.

A total of 274 rock (channel, chip and grab) and 4029 soil-talus samples were collected from the central area during the 2017 and 2019 programs. A large proportion of the 2017 rock samples collected were located along ridges with gossanous outcrop, targeting a potential northern extension of the Homestake Main deposit. Additional samples were collected around historical mineral occurrences near the Homestake Main and South Reef Zones. The majority of the 2019 rock samples were collected in a grid fashion at the Kombi target where recent recession of glaciers exposed large tracts of rock without soil developed or deposited on top. Highly anomalous results in gold, silver and base metals were returned from all areas of the claim block. Anomalous soil samples suggest a northwestern extension to the Homestake Silver Mineralized Zone. Additionally, anomalous soil samples correlate well with the South Reef mineralized zone and suggest a southeastern extension. Anomalous talus fines samples suggest a northwestern extension to the South Reef main zone, which coincides with the northwest direction of plunging high-grade mineralization that remains undrilled demonstrating the highly prospective nature of this corridor.

The relog of historical drills was designed to evaluate criteria not previously captured as part of historical logging including identifying fluid flow characteristics, mineralization, and fluid chemistry evaluation through short wave infrared ("SWIR") analysis. This data was then used to refine the geological model of Homestake Main, Homestake Silver, the Slide Zone and South Reef. The relog was very effective at identifying the variables which correspond to mineralization.

Five geochronology samples were collected to help constrain the crystallization age of intrusions and establish the age of a rhyolite tuff (Hazelton or Salmon River) using Uranium-Lead (U-Pb) Laser ablation techniques.

A Versatile Time Domain Electromagnetic (VTEM) and Magnetics survey was flown by Geotech Ltd., covering parts of the Homestake claim block, to augment the historical airborne geophysical data. The claim block scale magnetics picture highlights several regional structures trending both NNE and NNW. The NNW trending structures are interpreted to be the basin bounding faults which parallel large-scale regional faulting.

During 2017, Auryn completed an additional 43 drill holes totaling 17,300 m targeting large step outs along the on the Homestake Main Zone and Homestake Silver Zone structures. Highlights from the drilling campaign includes 30 m of 2.00 g/t Au (including 4 m at 6.03 and 2 m at 11.80 g/t Au), 10 m of 4.12 g/t Au (including 2 m at 18.0 g/t Au), 18 m of 1.29 g/t Au (including 4 m at 4.18 g/t Au), 8 m of 2.67 g/t Au (including 2 m at 7.4 g/t Au), and 14 m of 1.23 g/t Au. No significant results were obtained from the Homestake Main extension drilling.

Figure 6.5. Historical (2017-2019) rock geochemistry (Au ppm) at the Homestake claim block.

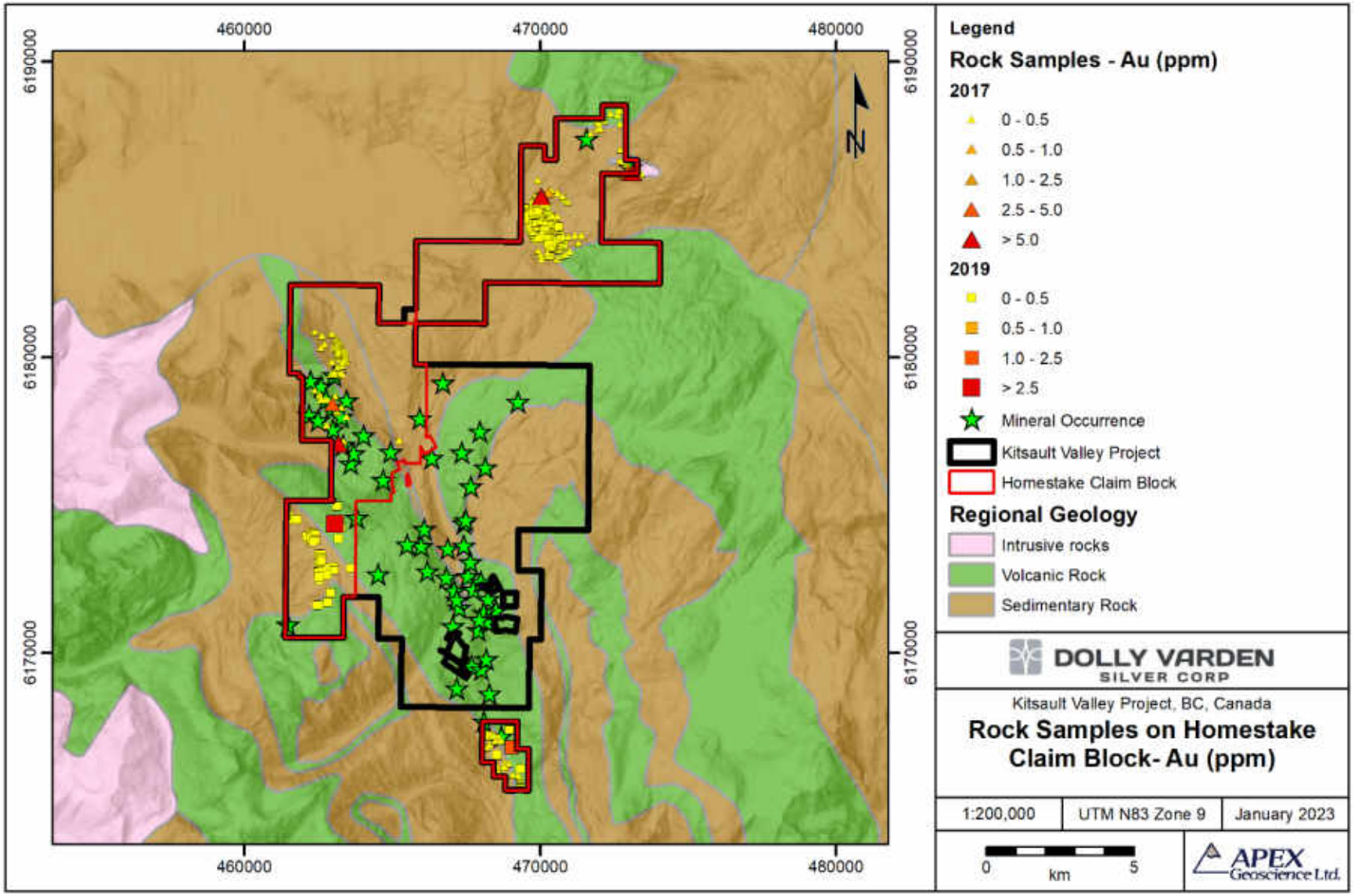


Figure 6.6. Historical (2017-2019) rock geochemistry (Ag ppm) at the Homestake claim block.

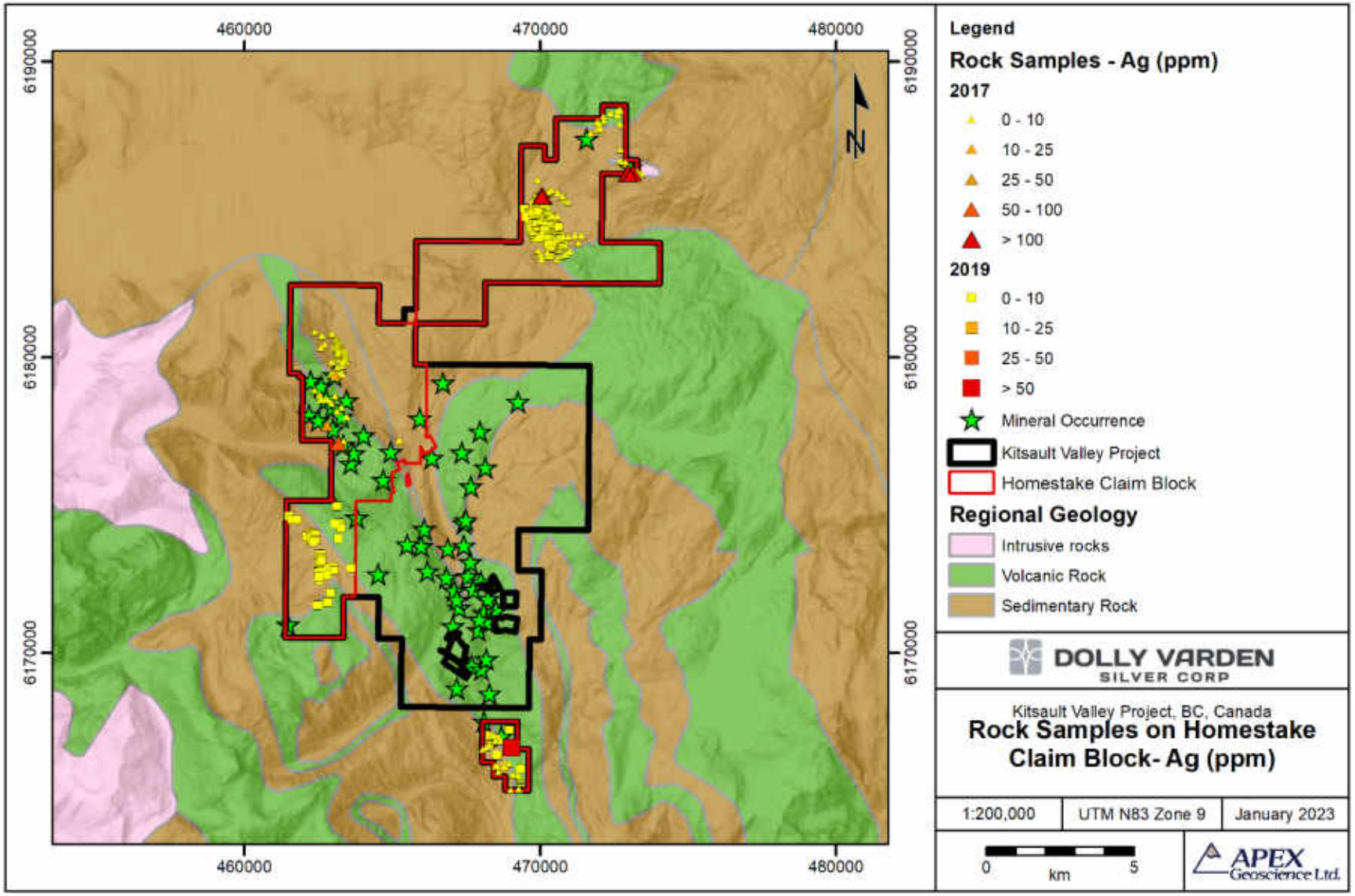


Figure 6.7. Historical (2017-2019) rock geochemistry (Cu ppm) at the Homestake claim block.

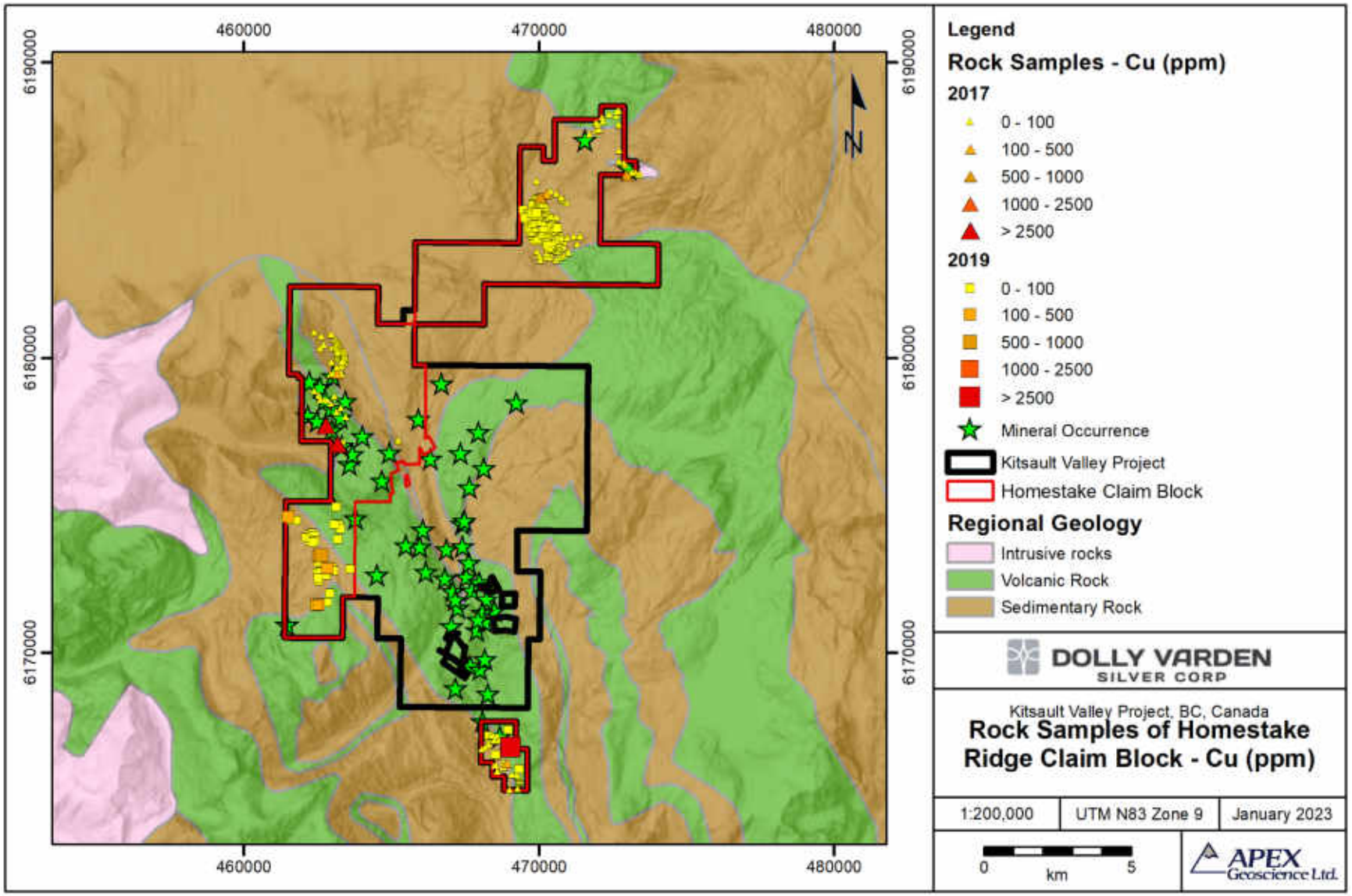


Figure 6.8. Historical (2017) soil-talus geochemistry (Au ppm) at the Homestake claim block.

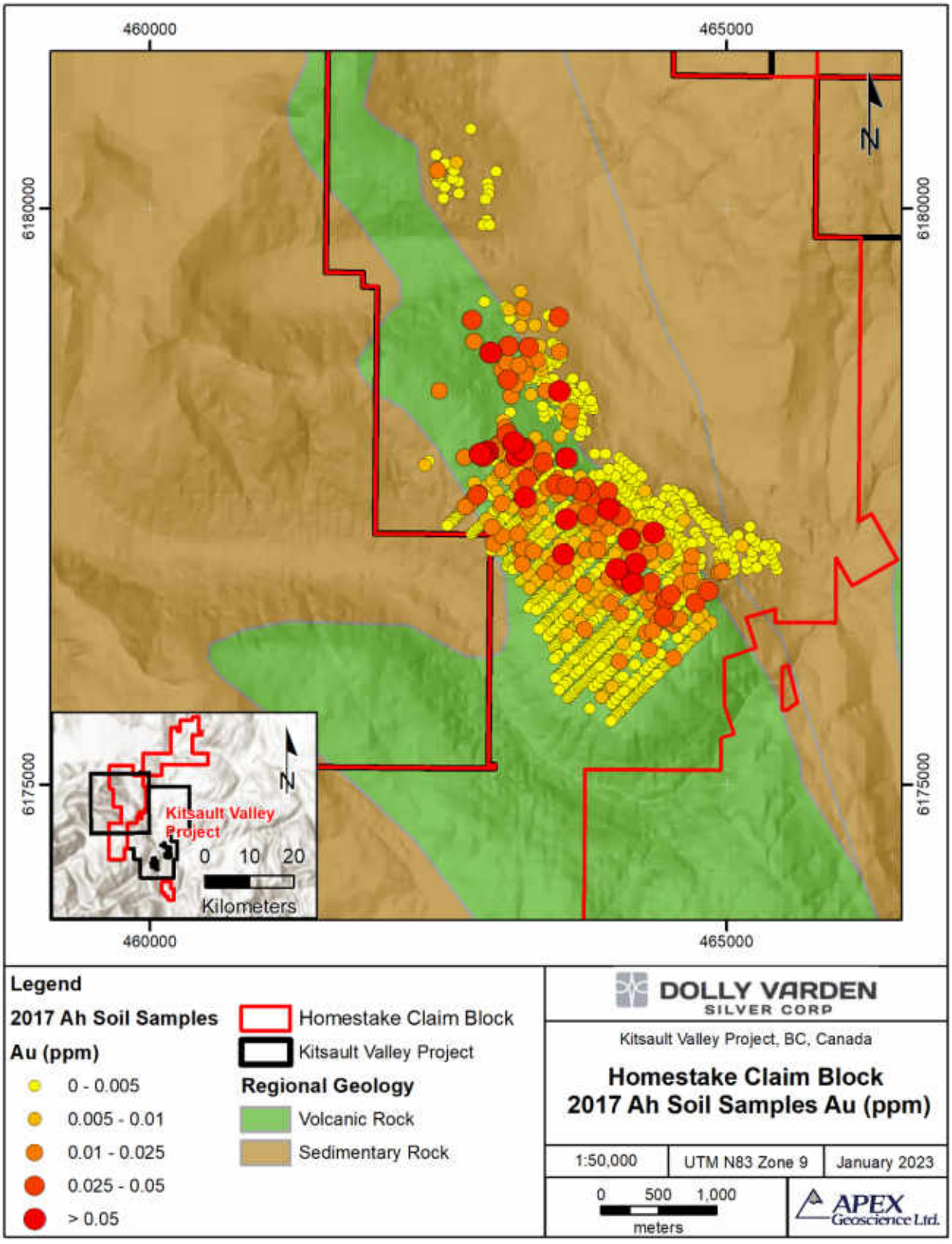


Figure 6.9. Historical (2017-2019) soil-talus geochemistry (Au ppm) at the Homestake claim block (Bria target).

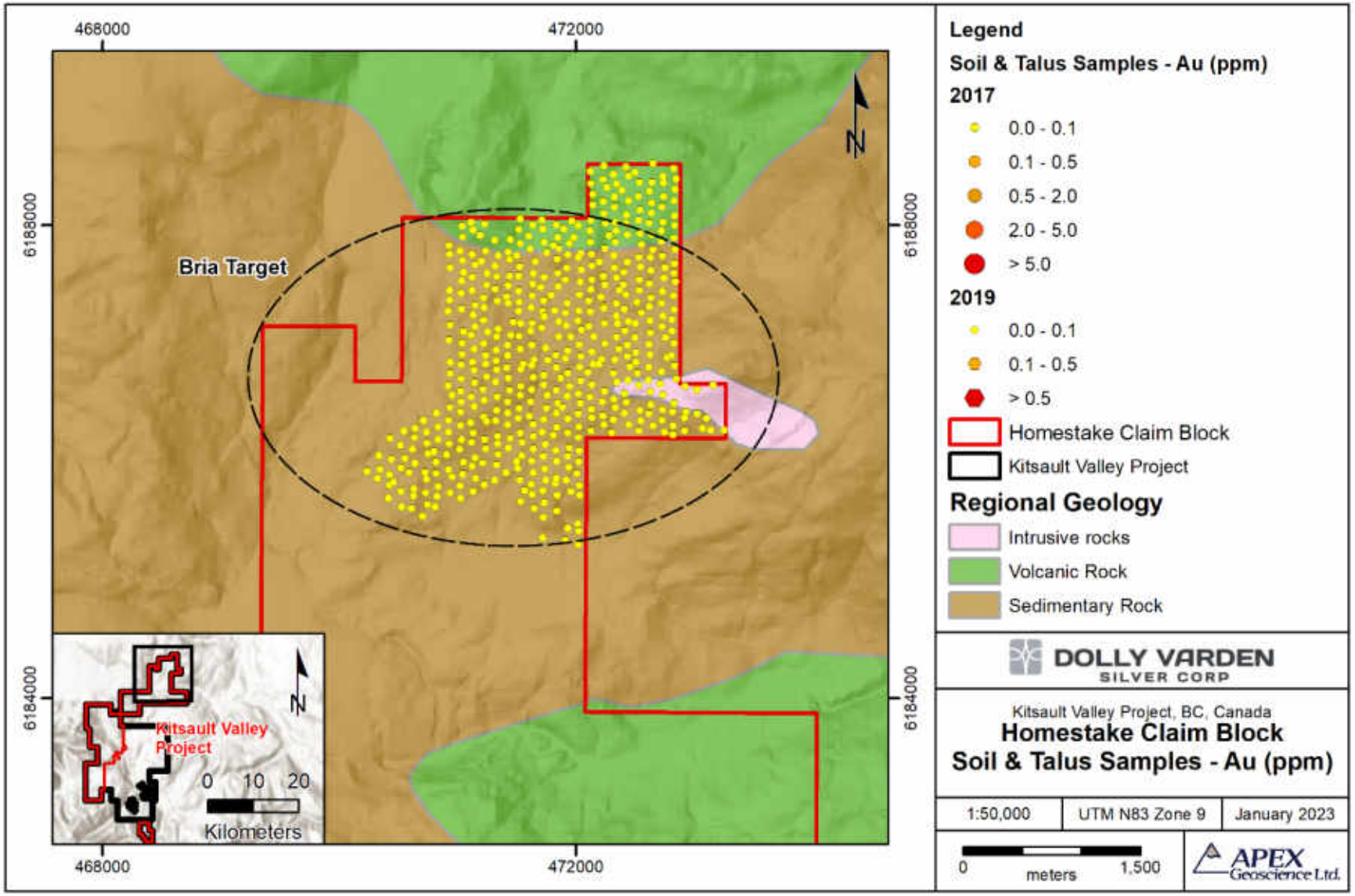


Figure 6.10. Historical (2017-2019) soil-talus geochemistry (Au ppm) at the Homestake claim block (Kombi target).

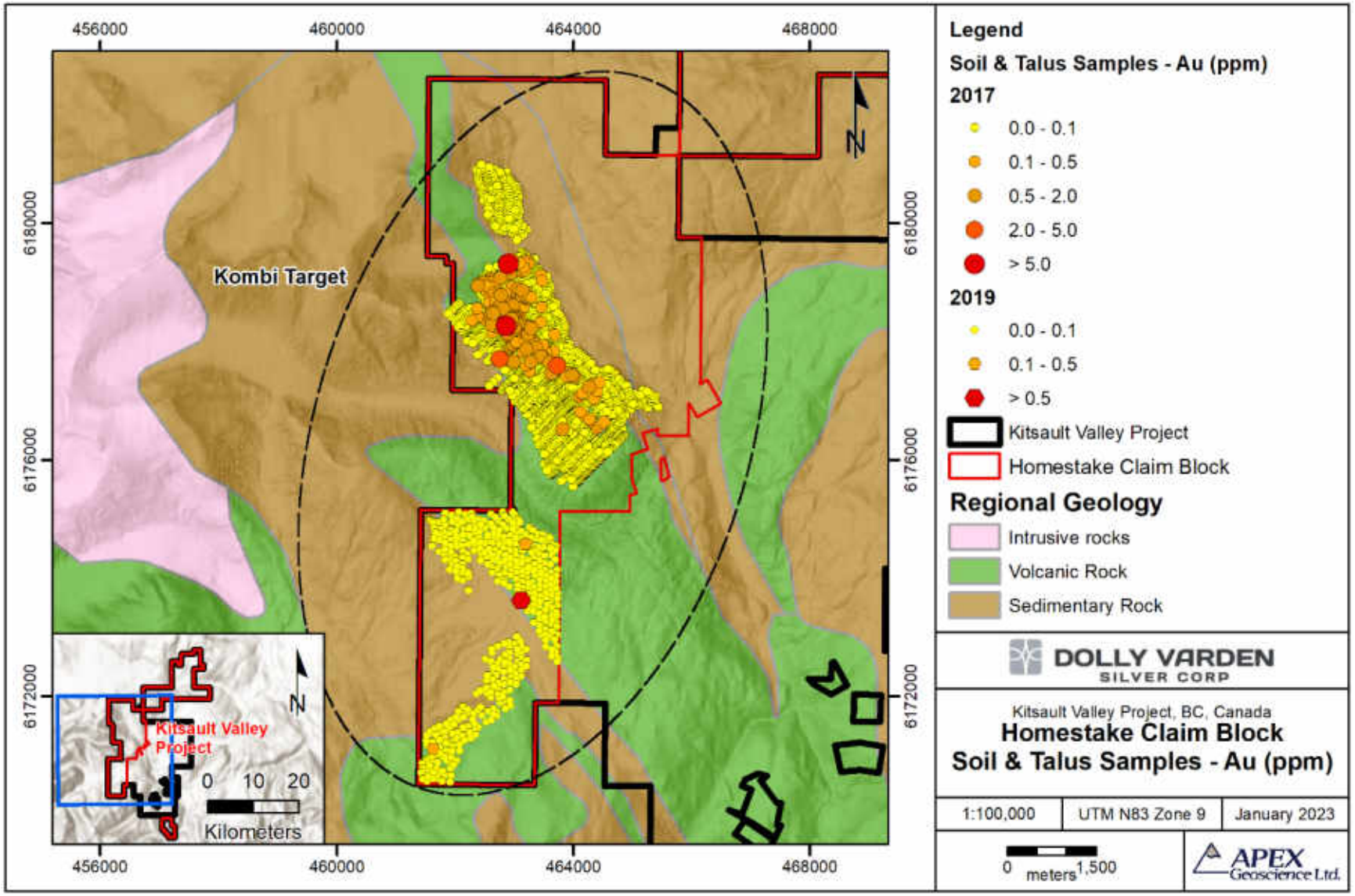


Figure 6.11. Historical (2017-2019) soil-talus geochemistry (Au ppm) at the Homestake claim block (South target).

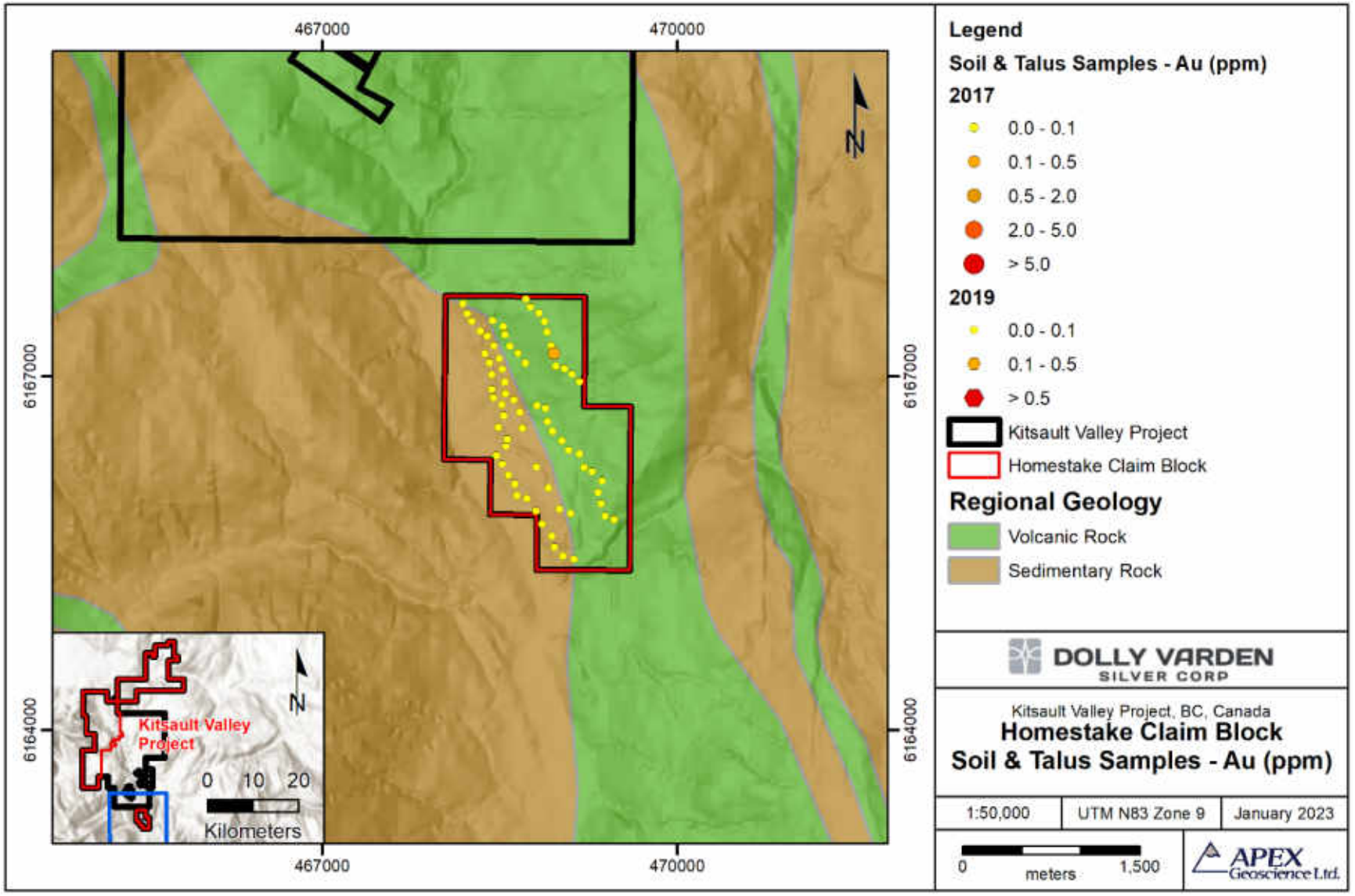
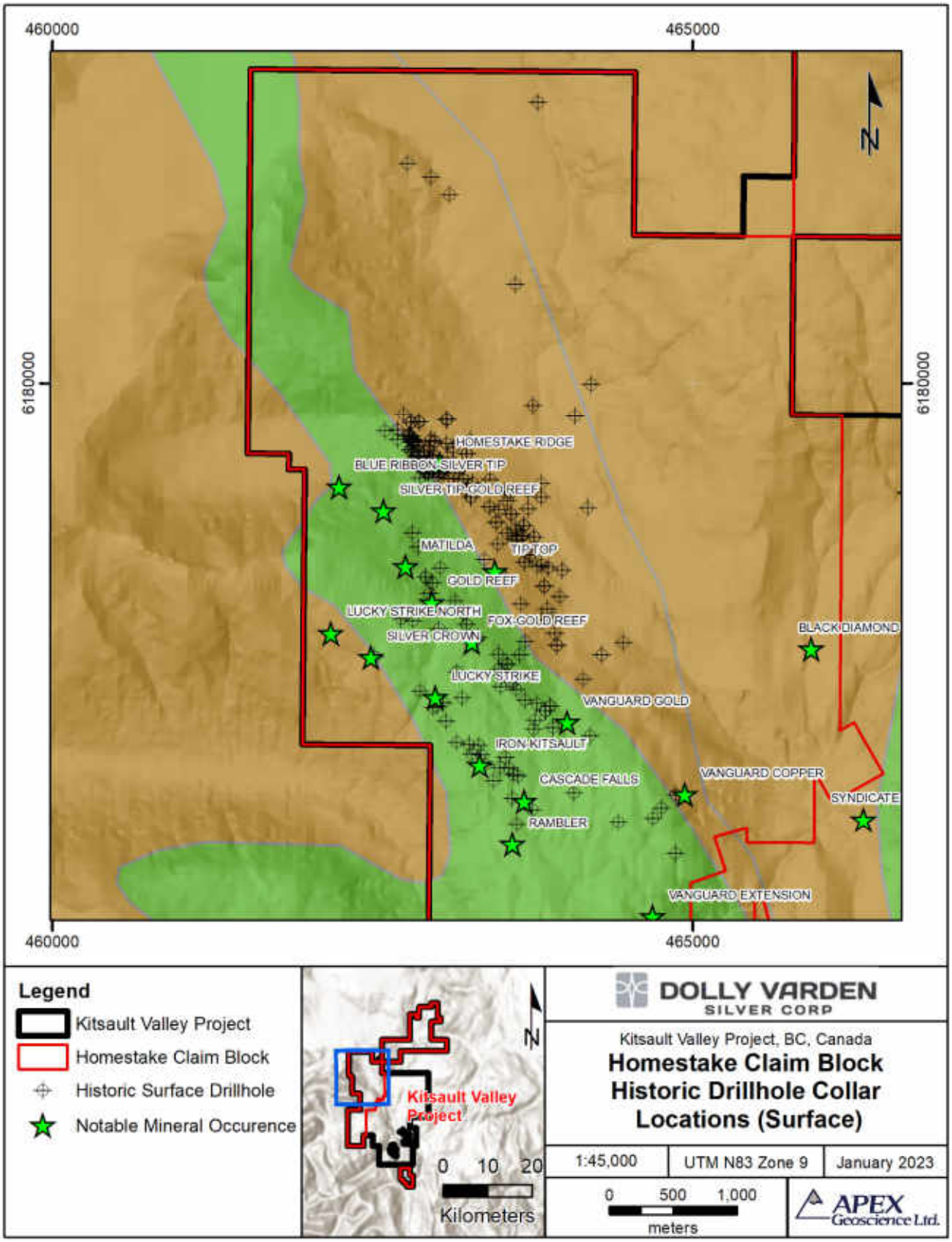


Figure 6.12. Historical (2017-2019) drilling at the Homestake claim block.



6.5 Historical Mineral Resource Estimates at Homestake Claim Block

The following section provides a summary of historical mineral resource estimates completed at deposits and prospects within the Homestake claim block, which is summarised from the information presented in previous Technical Reports by Macdonald and Rennie (2016), Ross and Chamois (2017), MineFill (2020) and Hough et al (2022). The historical mineral resource estimates below are provided for reference purposes only and simply to document previous work at the former Homestake portion of the Kitsault Property. These resource estimates are historical and are not to be considered as current resource estimates as they have been superseded by subsequent resource estimation work, as described in Section 14 of this report.

In 2006, Bravo commissioned Peter Folk and David Makepeace to produce a maiden inferred resource estimate for the Homestake Main deposit involving drilling completed through 2006. In 2010, drilling data through the 2009 program was used by Rennie et al. (2010) to update the Homestake Main deposit resource estimate resulting in a smaller tonnage, but a higher-grade inferred estimate (using a 3.0 g/t gold equivalent "AuEq" cut-off grade). The 2010 MRE work also included a maiden inferred resource estimate for the Homestake Silver deposit (Rennie et al., 2010). The Homestake Silver deposit MRE was subsequently updated in 2011 following the 2010 drilling campaign (Rennie, 2011). The Homestake Main and Homestake Silver MRE's were updated in 2012 and a maiden inferred resource was estimated for the South Reef deposit (using a 2.0 g/t AuEq cut-off, Macdonald and Rennie, 2016). Finally, the Homestake Main, Homestake Silver and South Reef deposit MRE's were updated following revised modeling by Ross and Chamois (2017). The current Homestake area MRE's are discussed in a subsequent section of this report while the historical estimates are tabulated below (Table 6.2)

Table 6.2. Historical mineral resource estimates from the Homestake area.

Year	Deposit	Historical Resource Classification	Cut-off Grade AuEQ (g/t)	Tonnes (million)	Grade Au (g/t)	Grade Ag (g/t)	Grade Cu (%)	Source
2006	**HSM**	Inferred	0.5	11.90	2.36	15.0	0.11	Folk and Makepeace (2007)
		Inferred	5.0	1.30	10.61	38.3	0.37	
2010	**HSM**	**Indicated**	3.0	0.89	6.69	47.2	0.15	Rennie et al. (2010)
		Inferred	3.0	1.14	5.02	50.9	0.25	
	HSS	Inferred	3.0	1.20	4.25	158	0.02	
2011	**HSS**	Inferred	3.0	2.90	3.69	123.4	n/a	Rennie (2011)
2012	**HSM**	**Indicated**	2.0	0.60	6.40	48.3	0.31	Macdonald and Rennie (2016)
		Inferred	2.0	2.03	5.65	28.6	0.18	
	HSS	Inferred	2.0	4.40	2.85	130.4	0.03	
	SR	Inferred	2.0	0.33	13.04	3.6	0.04	
2017	**HSM**	**Indicated**	2.0	0.60	6.25	47.9	0.18	Ross and Chamois (2017)
		Inferred	2.0	2.098	5.53	28.0	0.30	
	HSS	Inferred	2.0	4.81	2.71	124.4	0.02	
	SR	Inferred	2.0	0.337	12.88	3.6	0.04	

6.6 Historical Mineral Processing and Metallurgical Testing at Homestake Deposit

Section 6.6 has been extracted from the Ross and Chamois (2017) and MineFill (2020) Technical Reports outlining the results of recent metallurgical testwork completed at the Homestake area Mineral Resource Estimates. This information is currently considered to be "Historical" because it is based on work that was completed by/for a previous owner of the property and was not completed by Doly Varden Silver Corporation, the current owner of the property.

The process parameters adopted for this study were derived by Base Metal Laboratories in a 2016 test program that focussed on a hybrid of sulphide flotation and cyanide leaching to maximize the recovery of precious metals. Duplicate head cuts were taken from each composite and assayed for Au, Ag, Cu, Pb, Zn, and Fe. The Main composite had a measured head feed of 4.62 g/t Au and 6 g/t Ag and represented the copper dominant part of the Main deposit. The Silver composite had a measured head feed of 7.76 g/t Au and 198 g/t Ag and was much higher in Ag, Pb and Zn than the Main deposit.

For the Main zone, the process consisted of the sequential production of a gravity concentrate, copper concentrate, and gold bearing pyrite concentrate by flotation. The copper cleaner tailings and pyrite concentrate were cyanide leached together to extract gold and silver. For the Silver zone, the process was similar, however, the copper flotation stage was replaced by sequential flotation of lead and zinc concentrates. Tests were also conducted without gravity concentration to measure the effect on metallurgical performance.

The primary grinding was conducted in a mild steel rod mill using mild steel grinding charge. A 2 kg test charge was used for each test. Similarly, all regrinding was conducted in a smaller mill with stainless steel grinding charge.

Gravity concentration was conducted using a Knelson gravity concentrator with a 100 g bowl. The gravity concentrate was then panned to reduce the mass recovery and increase the grade of the gravity concentrate. The pan and Knelson tails were collected together, and excess water was decanted for the following flotation stages.

Flotation was conducted with a Denver D12 flotation machine. Rougher flotation was conducted in a 4.4 L cell and cleaner flotation was conducted in 2.5 L and 1.5 L flotation cells. Very selective reagent schemes were used in the base metal flotation stage to increase the probability of producing marketable concentrates. For copper flotation, NaCN was added to depress pyrite and a selective collector was used (Cytec 3418A). The flotation pulp was modulated to pH 9 to 9.5 with lime. For selective flotation of lead and zinc, zinc sulphate and cyanide were used to depress sphalerite and pyrite. Once complete, the pH was increased to 10 with lime and copper sulphate was added to recover sphalerite. The use of Cytec 3418A was continued in the lead and zinc circuit to aid in pyrite depression. Pyrite flotation was conducted with PAX.

All leaching was conducted as 24-hour bottle roll tests at relatively high cyanide dosage.

6.6.1 Gravity Concentration

Gravity concentration was performed after primary grinding. The entire primary mill discharge was passed through a Knelson Concentrator then the Knelson concentrate was panned to reduce the mass recovery to more typical recovery values achieved in operating plants.

The Main composite recovered approximately 21 percent of the gold in the feed into a concentrate grading 83 g/t Au. Further upgrading would be required to make the concentrate marketable, which often results in a further drop in recovery.

The Silver composite showed more promise, gold in the feed was 28 percent recovered into a gravity concentrate grading approximately 249 g/Au, on average. At these grades and recoveries, the gravity concentrate would have potential for sale.

6.6.2 Main Composite Rougher Flotation Testing

A total of three rougher flotation tests were completed, on the Main composite.

The selective flotation conditions applied to recover copper to a concentrate were mostly successful. Copper recoveries of between 85 percent and 90 percent can be achieved at rougher mass recoveries of 6 percent to 10 percent. The moderate level of mass recovery would indicate that process was somewhat selective against other sulphides and the rougher concentrate should be amenable to upgrading to high grade copper concentrates. This copper recovery was insensitive to primary grind size. To assess gold metallurgical performance, the cumulative gold recovery of the gravity, copper rougher, and pyrite concentrates were compared to the total cumulative mass recoveries of these concentrates.

For either grind size, gold recovery was about 95 percent to concentrates at 30 percent mass recovery. Gold recovery to concentrates did show some sensitivity at lower mass recoveries. Better gold recoveries were achieved at the finer primary grind size, with lower mass recovery. This is likely a result of improved mineral liberation at the finer grind size. Similarly, the silver metallurgical performance data indicates that at 30 percent mass recovery, silver was about 90 percent recovered into concentrates. Marginally better silver recoveries were observed with the finer primary grind size at lower mass recoveries. Finally, the inclusion of a gravity circuit was investigated with respect to overall gold recovery. The data was insensitive to gravity, indicating that high gold recoveries could be achieved with flotation alone.

6.6.3 Silver Composite Rougher Flotation Testing

Three rougher tests were performed on the silver composite. Selective flotation conditions were utilized to float sequential lead, zinc then gold bearing pyrite concentrates.

Lead recovery to the lead rougher concentrate reached a maximum of 80 percent. The rougher mass recovery to achieve this lead performance ranged from 2 percent to 5 percent. There was considerable scatter in the data making it difficult to determine if primary grind size had an influence on lead metallurgical performance.

There was a limited amount of testing to investigate zinc metallurgical performance. Zinc was about 25 percent recovered to the lead rougher concentrate and 60 percent recovered to the zinc rougher concentrate. While it may still be possible to produce high grade concentrates, further process development studies would be required. The zinc concentrates were low grade and there was a high deportment of gold and silver to the rougher concentrates. Payment terms for gold and silver are not as favorable for zinc concentrates, therefore zinc flotation was not developed further in this program.

The finer primary grind size had better initial gold recovery at low concentrate mass recovery. As the concentrate mass recovery was increased to more than 20 percent, however, there was little effect on gold recovery. Total gold recovery to all concentrates was 95 percent at 20 percent mass recovery.

The effect of primary grind on silver was inconclusive. Overall total silver recovery to all concentrates ranged between 90 percent and 95 percent at 20 percent mass recovery. The data indicates that omitting the gravity process will not reduce gold recovery to concentrates.

6.6.4 Main Composite Cleaner Flotation Testing

Selective flotation conditions were employed to suppress pyrite during copper flotation by using a low dosage of cyanide (5 g/t) and a collector selective against pyrite. The test results showed that copper in the feed was 70 percent recovered into concentrates grading up to 28 percent copper. These results were achieved in batch cleaner tests and improvements in copper recovery would be expected during closed circuit operation. During the testing, the regrind discharge size was relatively constant, ranging between 21 µm and 25 µm K80. This size is relatively fine; more testing would be required to fully optimize this parameter.

Tests indicated that gold grade and recovery were reduced when gravity was utilized, indicating that some of the gold was already captured in the gravity concentrate. Without gravity in the circuit, gold recoveries of between 50 percent and 55 percent would be expected at final copper concentrate grades that are marketable. The gold content at this recovery would be between 300 g/t and 380 g/t.

Similarly, including gravity concentration slightly reduced the recovery and grade of silver reporting to the copper concentrate. Overall, silver recovery to the final concentrate averaged 40 percent to 45 percent at grades of between 550 g/t and 650 g/t.

The batch cleaner tests clearly demonstrate that high grade copper concentrates can be produced with selective flotation conditions. Furthermore, the copper concentrate would be high value due to the gold and silver content.

Parameter optimization was limited and there is potential to improve the metallurgical results or reduce the cost of the process with additional optimization testing.

6.6.5 Silver Composite Flotation Testing

The batch cleaner testing for the Silver zone utilized selective conditions to recover a lead concentrate. In lead flotation, cyanide and zinc sulphate were used to depress pyrite and sphalerite. In some of the tests, production of a zinc concentrate was attempted after lead flotation. A gold bearing pyrite concentrate was recovered after the flotation of the base metal concentrates.

The inclusion of gravity concentration into the process resulted in poorer lead, gold, and silver grade and recovery performance. Deportment of these metals to the gravity concentrate was the cause of the poor flotation performance.

Without gravity concentration included in the process, lead was about 65 percent recovered into a concentrate grading 30 percent lead. The concentrate grade and recovery profiles were relatively flat indicating potential to further improve lead concentrate grade.

Only two tests attempted to produce zinc concentrate. Low grade concentrates were produced at about 45 percent zinc recovery. These initial tests indicate that zinc concentrate production would be unlikely using basic conditions. It may, however, still be feasible to produce zinc concentrate with further testing and development.

Tests without gravity concentration demonstrated that gold in the feed could be 66 percent to 68 percent recovered to the final lead concentrate at gold grades of 800 g/t to 1,000 g/t.

Silver recovery to the lead concentrate demonstrated much more variability than the other elements. Without gravity concentration, final silver content in the concentrates ranged from 7,000 g/t to 12,000 g/t. Recovery of silver to the concentrate varied from 23 percent to 50 percent to the final lead concentrate. The recalculated silver head matches were highly variable and typically lower than the measured head for this element. Due to the high measurement values, it is possible concentrate grades were under-reported, unfortunately there was insufficient concentrate mass to verify the silver assays.

6.6.6 Cyanide Leaching of Flotation Products

To maximize the gold and silver extraction from the project, the pyrite concentrate and cleaner tailings streams were leached with cyanide. The feed for each leach test was reground prior to leaching. Previous testing indicated that relatively fine grind sizes improved total extractions. Aggressive leach conditions were applied, primarily to accelerate the leaching of silver, which often has much slower leach kinetics than gold. Due to time constraints for project completion, 24-hour leach tests were performed. In retrospect, the kinetic rate curves for most of the tests indicated that leach was incomplete, particularly for silver.

For the Main composite, leaching of the pyrite concentrate and copper cleaner tailings without gravity indicated that extraction was 73 percent and 57 percent for gold and silver, respectively. The silver composite demonstrated better leach performance. Indicated gold and silver leach performances on concentrates without gravity were on average 80 percent and 65 percent for gold and silver, respectively.

Cyanide consumption was typical of concentrate leaching, averaging about 4.4 kg/t of leach feed. Lime consumption averaged about 0.4 kg/t of leach feed.

The results achieved were relatively good, but there is considerable scope for improving the performance. Finer regrind sizes should be investigated along with leach additives like lead nitrate to improve leach kinetics.

6.6.7 Concentrate Quality Estimates

Additional assays on the final concentrates from each composite were performed to determine levels of critical minor deleterious elements. The analyses conducted were limited due to the amount of concentrate available for testing. Most tests produced only 10 g to 15 g of base metal concentrate, which was mostly consumed for gold, silver, copper, lead, zinc, and iron.

Arsenic, antimony, and mercury are indicating high values that will likely attract smelter penalties. Normally, some smelters may reject concentrates on the basis of the high arsenic, antimony, and mercury, however, due to the exceptionally high precious metal values of these concentrates, the concentrates should be readily marketable.

It is strongly recommended that these initial minor element assays are confirmed with additional assaying with element specific techniques. Due to the unusually high grade of the concentrates, advice on the concentrate marketing should also be sought from a concentrate marketing specialist.

7 Geological Setting and Mineralization

The following discussions of the Regional Geology, Property Geology and Mineralization of the Kitsault Valley Property have been modified or taken directly from previous reports on the Property (Garrow, 2011; Higgs, 2015; Higgs and Giroux, 2015; McCuaig and Sebert, Ross and Chamois, 2017; 2017; Atkinson and Gunson, 2018; Turner and Nicholls, 2019; Minefill (2020), Hough et al. (2022) and studies by Monger et al. (1982), Alldrick (1993), Lewis (2001), Macdonald et al. (1996), Gagnon et al. (2012) and Sebert and Ramsay (2012).

7.1 Regional Geology

The Kitsault Valley Property lies within the Stikine Terrane (Stikinia), the largest arc terrane in the Canadian Cordillera and within the Intermontane Belt. The Stikine Terrane extends from southern Yukon to south-central British Columbia (Monger et al., 1982; Gagnon et al., 2012). The Stikine Terrane formed in the Pacific Ocean from 320 to 190 Ma and collided with North America in the Middle Jurassic (Folk and Makepeace, 2007). The Stikine Terrane is bound by the Cache Creek Terrane to the southeast and northeast; the Quesnellia Terrane to the east; the Methow and Cadwallader to the south; the Yukon-Tanana to the northwest and the west; and the Coast Pluton Complex to the west (Figure 7.1).

The Property is situated within the Stewart Complex, a metallogenic island arc terrane that is host to over 200 mineral occurrences of predominantly precious metal vein type, skarn, porphyry, and massive sulphide occurrences including the historical gold mines Eskay Creek, Silbak-Premier and SNIP, as well as the Granduc, Anyox, and Dolly Varden-Torbrit base-metal and silver mines (Alldrick, 1993; Knight and MacDonald, 2010). The Middle Jurassic-Quaternary Stewart Complex is a large northwest-trending belt of Hazleton Group rocks that extends from Iskut River to Alice Arm along the western rim of the Bowser Basin (Aldrick, 1993; Ross and Chamois, 2017).

Rock packages underlying the Property include the Stuhini Group, the Hazelton Group, the Bowser Lake Group, Mesozoic intrusive rocks, and Intrusive rocks from the Coast Mountain Suite. Stratigraphically, the oldest rocks in the Stikine Terrane comprise the volcanic and deep marine sedimentary rocks of the Stuhini Group. The early Mesozoic volcanic, inter-arc and back-arc sedimentary rocks of the Hazelton Group overly the Stuhini Group. The Hazelton Group contains three major stratigraphic divisions: the Jack Formation, the Betty Creek Formation and the Salmon River Formation. A halt in volcanism in the middle Jurassic marked a shift to siliciclastic sedimentation and the deposition of the Bowser Lake Group over the Hazelton Group. The Bowser Lake Group is Middle to Upper Jurassic in age and comprises predominantly turbiditic sedimentary rocks. Mesozoic intrusive rocks in area include the Late Triassic Stikine Plutonic Suite, the Early Jurassic Texas Creek Plutonic Suite, and the Early to Mid Jurassic Salmon River Formation. The youngest rocks in the Property region are Tertiary aged post-kinematic granitoid intrusions of the Coast Plutonic Suite. The regional geology of the Kitsault Valley Project is shown in Figure 7.2.

Figure 7.1. Terrane Diagram of the Canadian Cordillera and location of Dolly Varden's Kitsault Valley Project. (Extracted from Geoyukon)

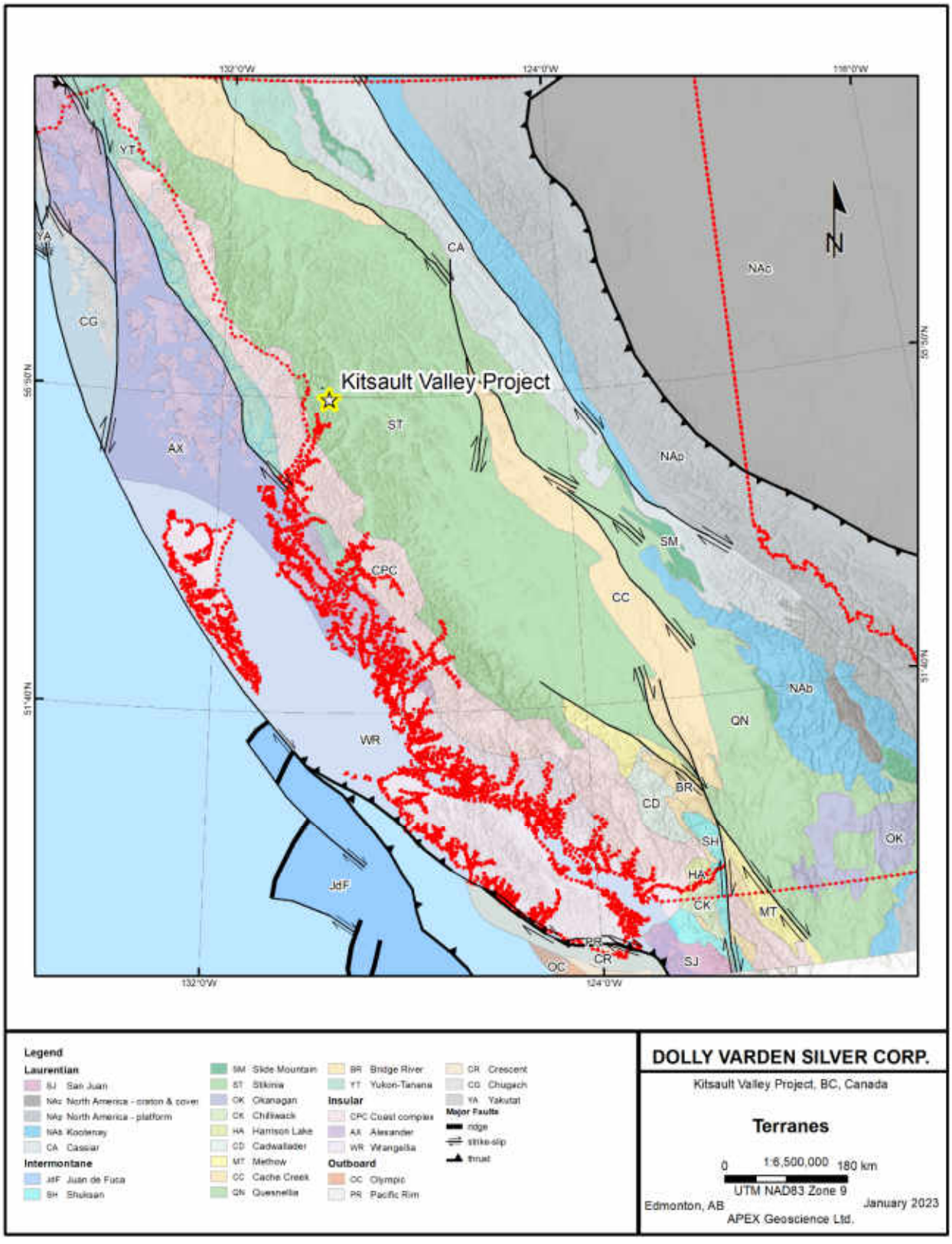
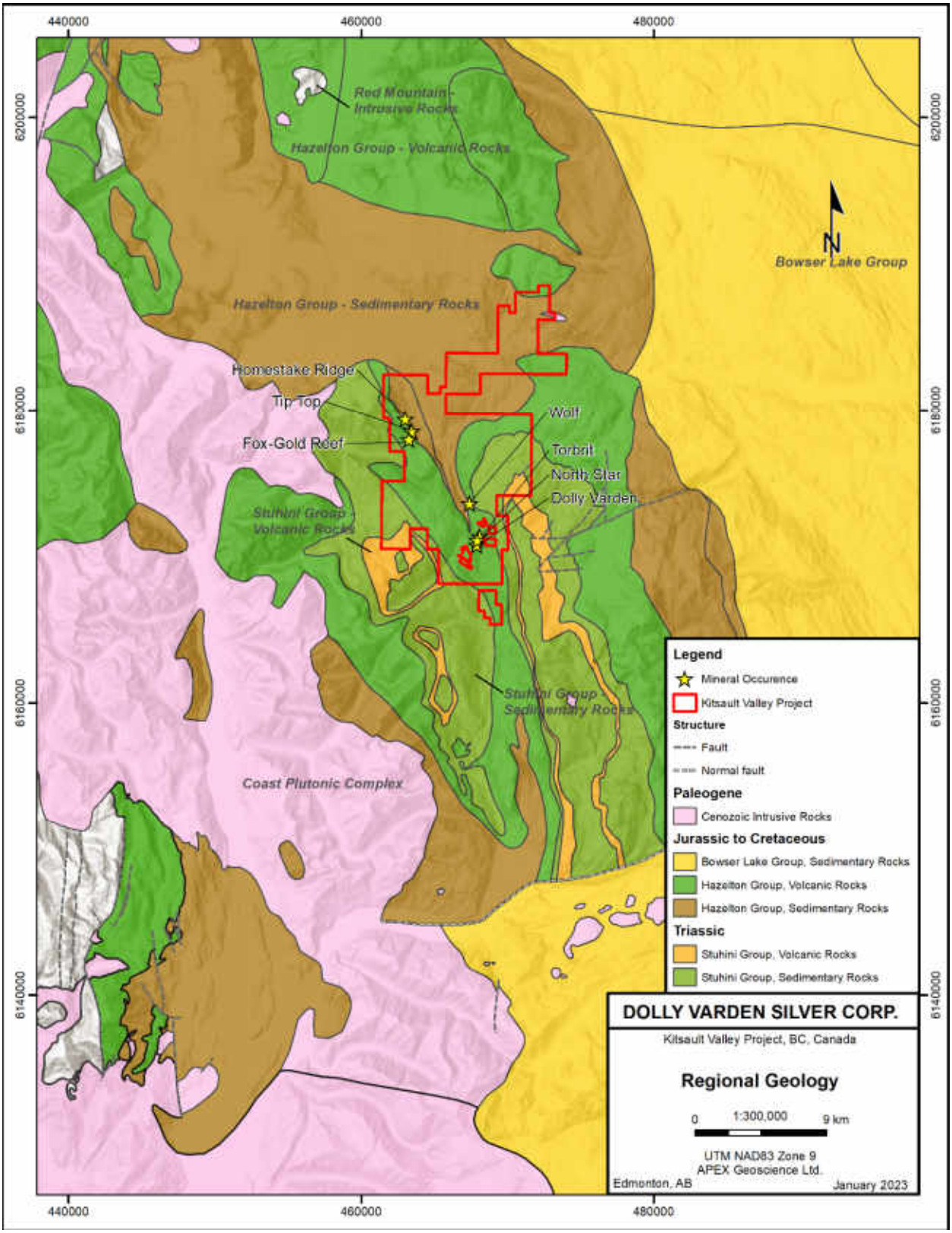


Figure 7.2. Regional geology of the Kitsault Valley Property (after Cui et al., 2017).



7.1.1 Hazelton Group

On a regional scale, the Hazelton Group displays complex variable geology due to its compositionally mixed (volcanic and sedimentary) geological history. The following information on the Hazelton Group is reproduced from Atkinson and Gunson (2017):

Hazelton Group stratigraphic nomenclature has been modified numerous times after its first definition in 1909 (Leach, 1909). The compositionally mixed volcanic and sedimentary rocks deposited in close time and space in both subaerial and subaqueous environments have produced complex geology. Lateral facies changes are locally very abrupt and many member units inter-finger complicating stratigraphic assignment (Lewis et al., 2001; Marsden and Thorkelson, 1992). As such, the stratigraphic architecture of the Hazelton Group varies from region to region. Within the Stewart Complex, Alldrick (1986) sub-divided the Hazelton Group into four formations, but this system was subsequently reduced to three formations modified by Lewis et al. (2001) in light of more detailed geochronology and mapping. Herein we follow the more recent Hazelton Group divisions for the Iskut River area of Lewis et al. (2001), which includes three formations. At the base is the discontinuous Jack Formation of clastic sedimentary rocks locally unconformably lying upon the Stuhini Group. Conformably lying on the Jack Formation is the Betty Creek Formation comprising a complex succession of red and green epiclastics interbedded with andesitic to dacitic tuffs and flows. The Salmon River Formation comprises a complex sequence of inter-fingering sedimentary and volcanic rocks and forms the top of the Hazelton Group.

Alldrick (1993) interprets the Betty Creek Formation as a subaerial clastic apron of poorly sorted lahars and reworked debris flows interbedded with andesitic to dacitic volcanic rocks, on the flanks of an emergent stratovolcano. The Betty Creek Formation varies from 4 to 1,200 m thick and ranges from dominantly volcanic to dominantly sedimentary, probably reflecting paleotopography and regional distribution of volcanic vents. Through detailed work in the Iskut River area, Lewis et al. (2001) divides the Betty Creek Formation into three members: 1) Lower Unuk River Member: andesitic composition volcanic and volcaniclastic strata. 2) Brucejack Lake Member: andesitic to dacitic pyroclastic, epiclastic and flow rocks which may be in part lateral equivalents to the Unuk River Member. 3) Upper Treaty Ridge Member: marine sedimentary rocks which overlap the Unuk River and Brucejack Lake Members.

In the area between Kitsault and the Unuk River, the Salmon River Formation (forming the top of the Hazelton Group) comprises dacitic to rhyolitic flows and tuffs, basaltic flows and intercalated volcaniclastic intervals (Lewis et al., 2001). The Salmon River Formation is associated with the mineralization at Eskay Creek and is subdivided into the following members:

- Bruce Glacier Member; dacite to rhyolite flows, tuffs and epiclastic rocks.
- Troy Ridge Member; sedimentary and tuffaceous sedimentary rocks.

- John Peaks Member; mafic components with massive flow, pillow flow, pillow breccia and volcanic breccia textures.

- Eskay Rhyolite Member; rhyolite flows, breccias and tuffs.

Recent revisions of the Hazelton Group stratigraphy were made by Gagnon et al. (2012) based on re-evaluation of rock exposures in north-western British Columbia. The revisions divide the Hazelton stratigraphy into two main subdivisions: Lower Hazelton Group and Upper Hazelton Group. The following discussion of the Hazelton Group stratigraphy revision is reproduced from Higgs and Giroux (2015):

The new simplified scheme recognizes the transition from intermediate and felsic arc volcanism in the Early Jurassic followed by waning volcanic activity and subsidence in pre- to early Mid-Jurassic time. This latter period was marked by a general reduction of arc volcanism, followed by crustal cooling and contraction. Extensional faulting and local rifting took place with the deposition of deeper water sediment-rich sequences in the resulting basins. This change in tectonics and depositional-style was important to the metallogeny of the region. The early Mid Jurassic Eskay Rift in the Iskut area is host to Au-Ag-rich hot spring VMS deposits related to localized bimodal rhyolite-basalt volcanism.

The revised Hazelton Group stratigraphy from Gagnon et al. (2012) is divided into two main subdivisions summarized as follows.

Lower Hazelton Group

This group consists of the basal sedimentary rocks of the Jack Formation and succeeding volcanic sedimentary rock packages. These latter include Betty Creek Formation equivalent intermediate and felsic volcanic rocks of the Unuk River and Brucejack Lake Members. These rocks were deposited as part of a volcanic arc sequence from roughly Hettangian to earliest Pliensbachian time (about 199.6 to 189.6 Ma)

Upper Hazelton Group

This stratigraphic unit is interpreted as comprising more sedimentary rich strata deposited in response to subsidence and extension. Gagnon et al. (2012) have assigned a regionally-derived time span of about 189.6 to 167.7 Ma for the deposition of Upper Hazelton Group stratigraphy stretching from the Early-Pliensbachian to Bathonian.

The transition from Lower Hazelton to Upper Hazelton Group stratigraphy is variable from place to place. In the Iskut River, Stewart and Kitsault areas this portion of the stratigraphy is mostly represented by the Salmon River Formation. Its basal layer consists of fossiliferous sandstone and local limestone of probable Toarcian age (Anderson and Thorkelson, 1990). In the Iskut River area it is succeeded by a volcano-sedimentary sequence of Upper Aalenian to at-least Lower Bajocian age (about 178 and 171.6 Ma). These rocks include the Eskay footwall rhyolite and tholeiitic basaltic rocks of the John

Peaks Member, as well as the felsic volcanic rocks of the Bruce Glacier Member. Gagnon et al. (2012) have assigned this sequence to a new subunit – the Iskut River Formation. The basal Toarcian sedimentary rocks are seen as possibly equivalents to similar rocks mapped at the Oweegee Dome located to the east of the Eskay Rift and were not included in the Iskut River Formation.

In the Kitsault area, arc-related calc-alkaline volcanism is interpreted to have continued after regional subsidence and extension was initiated. On the Property, a local basin formed and saw the eruption of additional intermediate, felsic and mafic volcanic rocks on its flanks with deposition of pyroclastic and epiclastic volcaniclastic rocks largely in a shallow marine environment. Hydrothermal activity was focused by extensional basin-bounding faults and cross faults; these features provided the traps for the valley's Ag-rich exhalative, replacement and vein mineralization. Calc-alkaline volcanism on the Property may have extended at least into Upper-Pliensbachian time (about 183 Ma). Sedimentary rocks consisting of basal fossiliferous limey sandstone and bedded argillite succeeded the cessation of major volcanic activity, possibly after a hiatus.

7.1.2 Intrusive Activity

Mesozoic intrusive activity within the Kitsault-Stewart-Iskut River area is indicated by Macdonald et al. (1996) to have occurred in two major events: 1) a Late Triassic magmatic pulse and 2) extended Early to Middle Jurassic plutonism. Three major temporal suites of plutonism are suggested:

- Late Triassic Stikine Plutonic Suite related to volcanic arc building.
- Early Jurassic Texas Creek Plutonic Suite related to a volcanic arc that was coeval to the Betty Creek Formation volcanics.
- Early to Middle Jurassic intrusions that are related to the Salmon River Formation.

7.1.3 Structural Activity

There are two main periods of deformation that have occurred on a regional scale in the Property area: 1) Early to Middle Jurassic deformation and 2) Cretaceous contractional deformation.

The Early to Middle Jurassic Deformation is suggested to be synchronous with the deposition of the Hazelton Group (Garrow, 2011). Faults in the region appear to separate faults of different volcanic succession, with some faults displaying juxtapose successions of Hazelton Group rocks of different thickness although they do not appear to offset the overlying rocks of the Bowser Lake Group. These types of structures are interpreted to be synvolcanic (growth) faults. As they do not appear to offset the overlying Bowser Lake Group succession, they are not interpreted to be active past the last deposition of Hazelton rocks (Garrow, 2011).

Two contractional orogens are interpreted to have been active during the Cretaceous period in the Eskay Creek area: a west-directed system of thrust faults along the western side of the coast belt and the east-northeast trending Skeena Fold and Thrust Belt of the Bowser Basin (Garrow, 2011). Regional evidence for Cretaceous contractional deformation includes major fold and thrust faults that show a pattern of broad, open folds and north-south trending strike. Garrow (2011) indicates that the Cretaceous contractional deformation event has overprinted and obscured earlier structures and is likely responsible for the reactivation of any favorably-oriented pre-existing faults in the region.

7.2 Property Geology

The following discussion on the stratigraphy and structure of the Kitsault Valley Property has been adapted from Kasper and Metcalfe (2004), Knight and MacDonald (2010), Garrow (2011), and Higgs and Giroux (2015). Sections 7.2.1-7.2.5 and Section 7.2.6 describe the local and the detailed geology of the Dolly Varden and the Homestake claim blocks, respectively. The Property Geology and simplified stratigraphy of the Kitsault Valley Property are presented in Figures 7.3, 7.4, 7.5 and 7.6.

Figure 7.3. Property geology of the Dolly Varden's Kitsault Valley Project-Dolly Varden Claim Block.

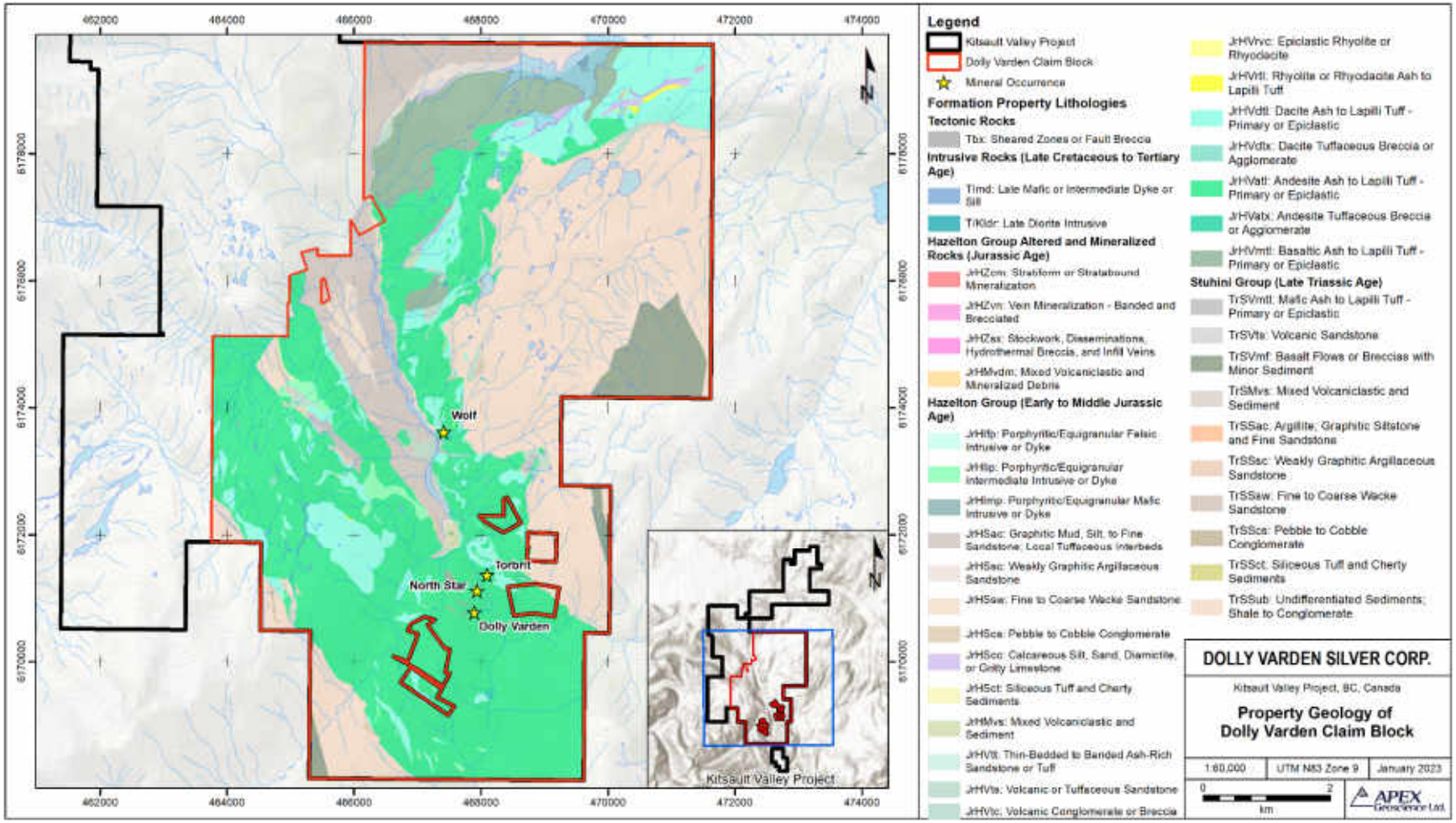


Figure 7.4. Property geology of the Dolly Varden's Kitsault Valley Project-Homestake Claim Block.

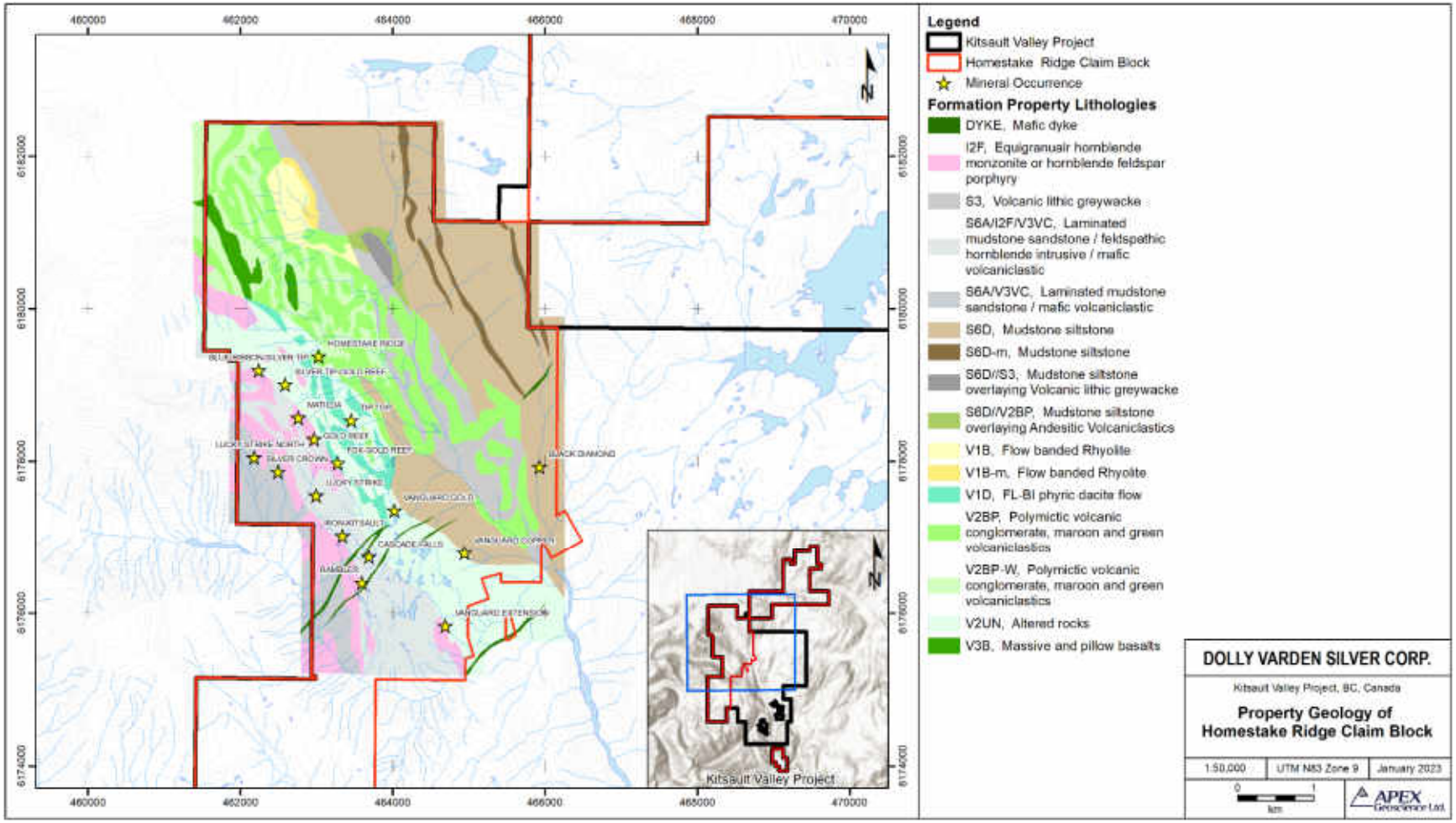


Figure 7.5. Detailed Geological Map of the Homestake Claim Block (Auryn Resources, 2020).

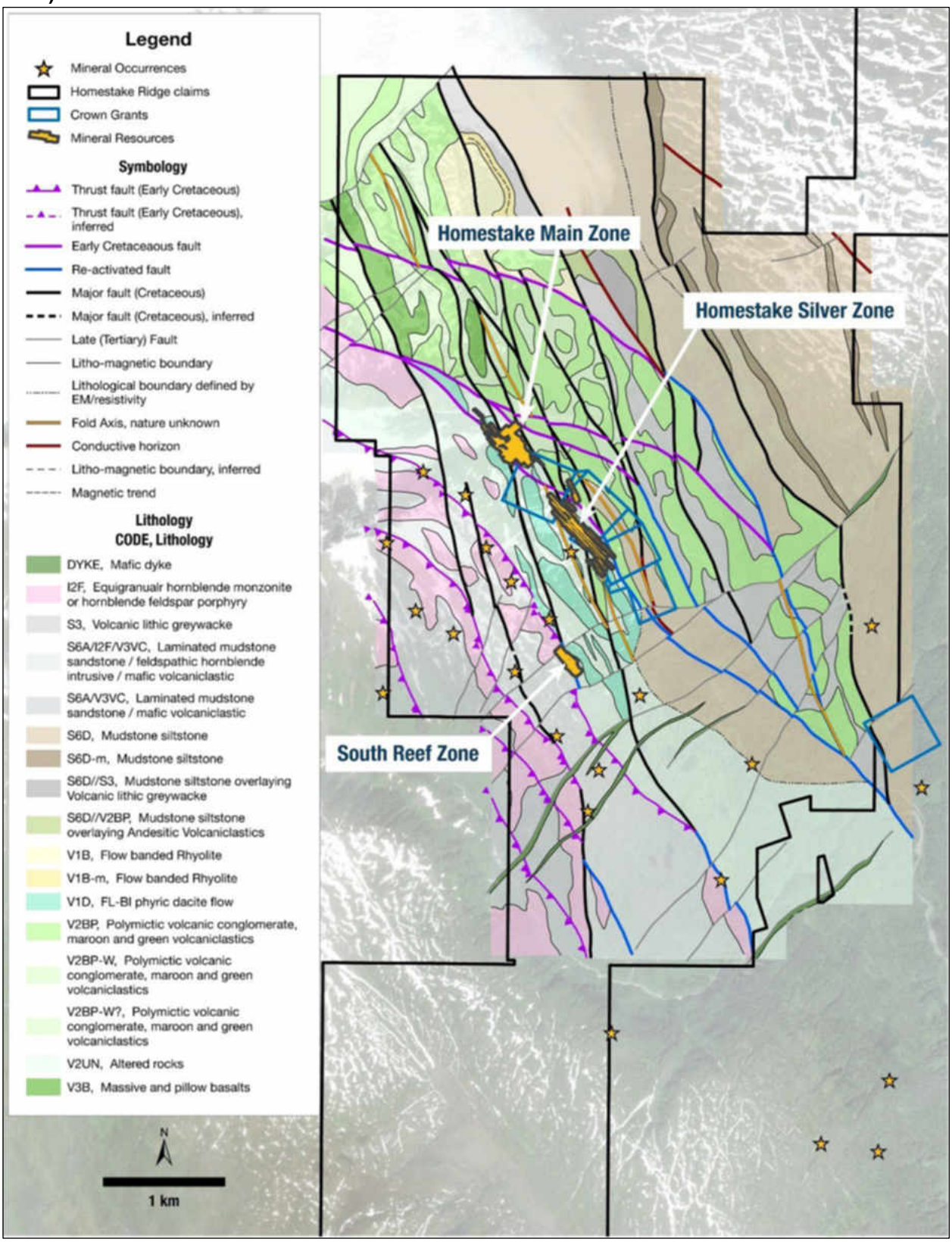
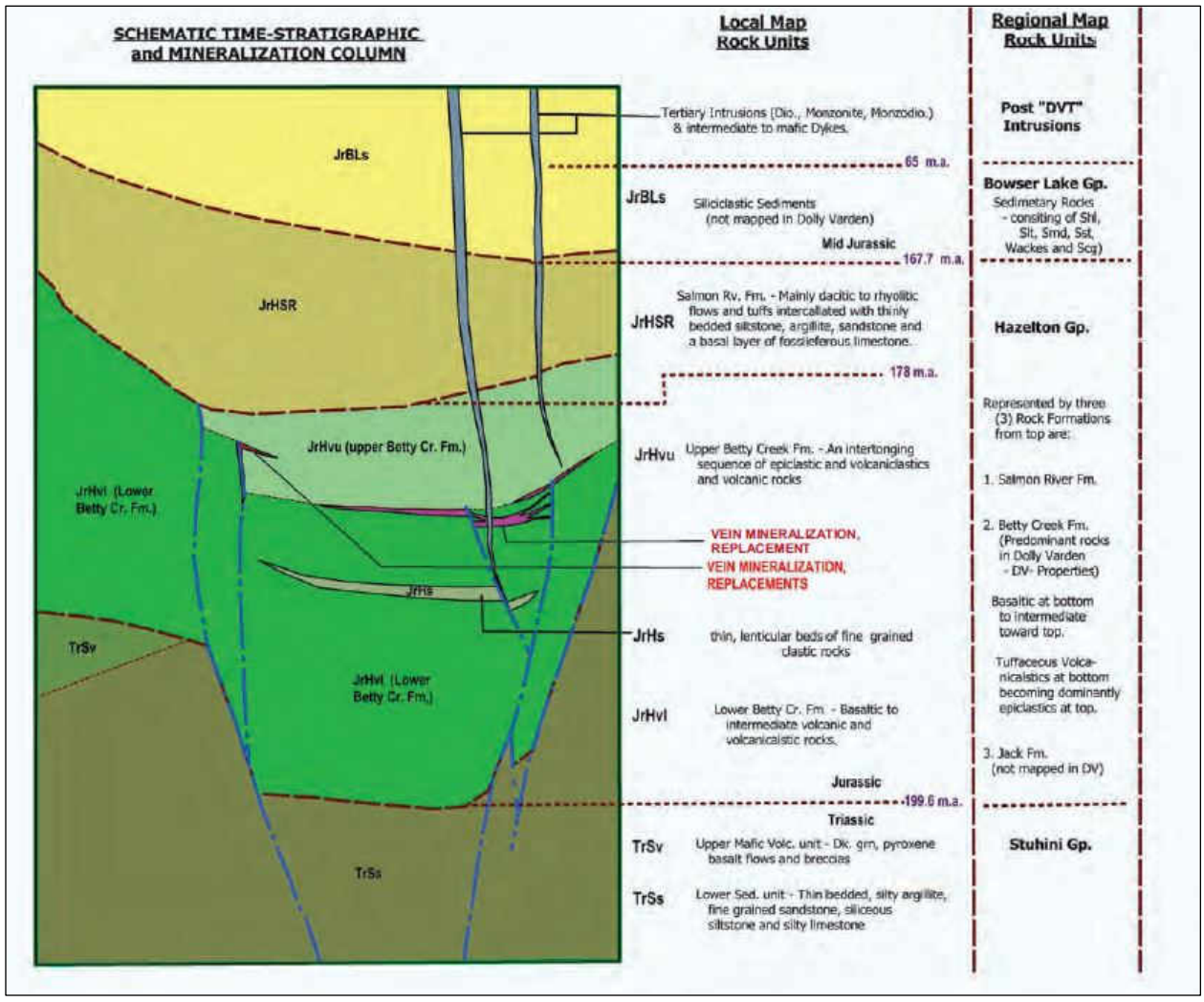


Figure 7.6. Simplified stratigraphic and mineralization column of the Dolly Varden's Kitsault Valley Project (from Higgs and Giroux, 2015).



7.2.1 Stuhini Group (TrSs and TrSv)

The oldest lithological unit on the Property is the Upper Triassic (Norian) aged Stuhini Group. The Stuhini Group outcrops along the eastern and western areas, as mapped by Alldrick et al. (1986) and Devlin (1987). The Stuhini Group is divided into a sedimentary unit and a volcanic unit. The volcanic unit predominately consists of mafic dark green pyroxene-bearing basalt flows and breccias and the sedimentary unit is composed of thinly-bedded silty argillite, fine grained sandstone, siliceous siltstone and silty limestone.

7.2.2 Hazelton Group

7.2.2.1 Volcanic Rocks (JrHv)

The Hazelton Group hosts the known mineral deposits on the Property. The majority of the Hazelton Group volcanic tuffaceous rocks within the area are interpreted to be Betty Creek Formation lithologies (Lower Hazelton) with possible Upper Hazelton Group in the younger rocks of the Kitsault Valley. The interpreted Betty Creek Formation hosts the Ag-Zn-Pb showings and Dolly Varden, North Star and Torbrit deposits, as well as the epigenetic epithermal Ag mineralization at Wolf and Kistol and the quartz-sulphide veins, breccias and stockworks at Red Point.

The following information regarding the volcanic rocks of the Hazelton Group within the Property is reproduced from Higgs and Giroux (2015):

Lithogeochemical sampling indicates most have moderate to high degrees of light rare-earth enrichment typical of calc-alkaline igneous rocks. Least-altered samples suggest they are peraluminous and of high-K calc-alkaline magmatic affinity. Immobile trace element chemistry displays a relative depletion of high field strength elements typically found in arc-derived rocks.

The majority of these rocks are fragmental and of pyroclastic origin and appear to have been deposited in a subaqueous setting. Minor autoclastic or hydroclastic volcaniclastic occurs in places. To date, most fall into the compositional range of andesite, but the overall compositional range on the Property is from basalt to dacite. Minor examples of rhyodacite and rhyolite are mapped in the footwall of the Wolf deposit and in the footwall stratigraphy of the Sault Horizon.

The tuffaceous rocks form a succession of lenticular, discontinuous units composed of crystal ash tuff, lapilli tuff, and local tuff breccia. Most are ash-rich and contain variable proportions of lithic and pumiceous lapilli. Reworked epiclastic equivalents are more voluminous than primary units. These are more heterogeneous, with matrix-supported sub angular to rounded porphyritic lithic volcanic and ripped-up tuffaceous clasts that can display a range of textures and colouration. They are interpreted to have been emplaced by stumps and mass flows in sloped terrain, perhaps along the wall of a basin near the flanks of a stratovolcano. Systematic extensive mapping of these units is difficult as they are lensey, repeat in the stratigraphy, and often lack sharp contacts. Epiclastic units may exhibit internal heterogeneity in composition and texture on the local outcrop-scale. Also, rocks ranging from basaltic andesite to dacite often appear very similar in outcrop given general seafloor-style metamorphism, local hydrothermal alteration, and fragmental nature. Systematic lithogeochemical sampling remains key in separating some of these units.

Some examples of strongly hematitic tuff breccia have been mapped at higher elevations to the west of the Goldbelt and Red Point Zones. These rocks display partially interlocking sub angular porphyritic blocks and pebbles; some appear to be squeezed together (partially welded?) with minor tuffaceous matrix in-between. Given their texture

and high level of oxidation they may have been sub areal or deposited in very shallow water.

More intensively reworked tuffaceous sedimentary units include volcanic sandstone and conglomerate. The sandstones display better sorting and/or grading and range from massive to bedded varieties. Minor local examples of mixed lithology include fine-grained grey argillaceous tuff that represents an intimate mixture of ash and minor mud. Coarser conglomeritic units of reworked brecciated tuff, or partially consolidated tephra in a muddy matrix, are interpreted as slump and mass flow deposits. Thin-bedded fine-grained tuffaceous sandstones are present within the volcanic stratigraphy in places. These rocks are rare and look to have been the products of suspension settling or small turbidites. In general, the more reworked volcanic units are easily identified and provide local markers in the volcanic stratigraphy. However, most are discontinuous having been scoured out in sections, or deposited in small paleo-depressions amongst coarser units.

7.2.2.2 Intrusive Rocks (JrHiv)

Lower Jurassic aged Hazelton Group intrusive rocks on the Property are observed within the Red Point and Goldbelt Zones. The rocks observed are massive hornblende-feldspar porphyritic intrusives, interpreted to be sub-volcanic intrusive equivalents of the Hazelton volcanic rocks. Alteration of the intrusive rocks include sericite, quartz and pyrite alteration.

7.2.2.3 Sedimentary Rocks (JrHs and JrHSR)

Lower Jurassic aged Hazelton Group sedimentary rocks on the Property are observed within the tuffaceous Betty Creek Formation and consist of black siltstone, argillite, argillaceous sandstone and conglomerate.

Lower to Middle Jurassic Hazelton Group sedimentary rocks and tuffaceous strata cap the tuffaceous volcanic rocks and are predominately observed in the central portion of the Kitsault Valley synform. The sedimentary rocks comprise fossiliferous, weakly bedded, fine- to medium-grained grey limey sandstone overlain by graphitic silty to fine sandy argillite. Laminations of fine- to medium-grained grey to brown tuffaceous sandstone occur in the argillite. Sebert and Ramsay (2012) suggest that sedimentation overlapped mineralization in the Kitsault Valley and exploration on the Property in 2011 identified examples of hydrothermally altered and mineralized sediments at the Wolf deposit.

7.2.3 Bowser Lake Group (JrB)

Middle Jurassic Bowser Lake Group sedimentary rocks are observed near Kitsault Lake near the northern boundary of the Property.

7.2.4 Post-Ore Intrusive Rocks (Ti)

Post-ore intrusive rocks on the Property include fine-grained hornblende-feldspar diorite plugs and dykes, mafic and intermediate dykes and porphyritic ultramafic lamprophyre dykes. Post mineralization dykes on the Property tend to trend north-northeast, parallel to the orientation of most of the fracturing/faulting observed on the Property. The Wolf, Kitsol and South Musketeer deposits are hosted within northeast structures and the general strike of the mineralization in the North Star mine is northeast to north-northeast, therefore, Higgs and Giroux (2015) suggest that the dykes may serve as mineralization markers due to their general northeast orientation.

7.2.5 Structure

Major structural features observed within the Kitsault Valley Property include folds, Cretaceous compression structural features and large north to northwest trending faults. Folding on the Property is generally broad and open with upright axial planes that strike to the north and northwest. Examples of folding and Cretaceous compression include an anticline in Stuhini Group rocks at the headwaters of Evindsen Creek and a northwest trending synform along the central axis of the upper Kitsault Valley. Salmon River Formation sediments form the core of the synform, with Betty Creek Formation volcanic and sedimentary rocks flanking the core.

Large north-northwest trending, west dipping faults displace the rocks and mineralization at the Dolly Varden, North Star and Torbrit mines. Notable faults on the Property include the Mitchell Creek Fault and the Moose Lamb Fault. The Mitchell Creek Fault lies to the west of the Dolly Varden Mine and Kitsol showing, strikes to the north and dips approximately 60° west. The Moose Lamb Fault is located just east of the Torbrit Mine, strikes to the northwest and dips to the west. The Moose Lamb Fault was likely active during the deposition of Hazelton Group volcanic rocks and active after ore deposition.

Thrust faults are present on the west side of the Kitsault River, as indicated by geophysical, structural outcrop and drill data. These faults dips to the southwest and are interpreted to be a product of regional Cretaceous aged compression that formed the Skeena Fold Belt and are likely concurrent with folding observed in the same area.

7.2.6 Local Geology of the Homestake Deposit Area

This section is derived from Kasper and Metcalfe (2004), Knight and Macdonald (2010), and the results of mapping on the Homestake Deposit by Fury Gold Mines, formerly known as Auryn Resources. (Figure 7.5).

The Homestake deposit area covers the transition between the sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Stuhini Group, a complex sequence of Lower to Middle Jurassic sedimentary, volcanic, and intrusive rocks of the Hazelton Group and sedimentary rocks of the Upper to Middle Jurassic Bowser Lake

Group. The Hazelton Group rocks on the Homestake area mark a transition from a high-energy volcanic dominated lower stratigraphy through a hiatus and into a fining sequence of volcanic tuffs and sediments punctuated by bi-modal mafic and felsic volcanism and finally into fine clastic sedimentation of the Salmon River Formation (Upper Hazelton Stratigraphy) and the Bowser Lake Group (Evans and Lehtinen, 2001). This sequence hosts many sulphide occurrences and extensive areas of alteration on the Homestake area which are associated with the Lower to Middle Jurassic stratigraphy.

Interpretation of the geophysical data paired with field mapping define the boundaries and internal stratigraphy of four northwest-trending domains numbered from SW to NE.

First domain comprises Triassic sedimentary and volcaniclastic Stuhini Group rocks, underlying the southwest portion of the property. Intruded and silicified by sills and dikes of rhyolite/porphyritic monzonite. Posses a low relative magnetic signature. A second unit of relatively low magnetic signature, occupying the footwall of the Vanguard fault, and a second fault panel in Domain one, consisting of pervasively altered Early Jurassic andesitic volcanic and volcaniclastic Hazelton Group rocks (V2UN), are intruded along strike by similar sills and plugs of hornblende monzonite.

Early Jurassic Hazelton Group Betty Creek andesite, dacite and Brucejack Lake member (192 Ma) rhyolite/monzonite, comprise second Domain. The western margin of Domain two is overthrust by the Triassic/Jurassic package of Domain one and is unconformably overlain by Middle Jurassic Salmon River sediments northwest of the Vanguard showing.

Early to earliest Mid-Jurassic Hazelton Group volcanic and volcaniclastic rocks of Betty Creek and Salmon River Bruce Glacier member (~174 Ma) comprise the central Domain three, a northwest-trending package of varied and strong magnetic signatures which locally depict south trending fabrics related to south-plunging folds and younger southeasterly trending thrusting. The Lower Hazelton rocks comprise fine-grained to feldspar-hornblende phyric volcanic and volcaniclastic rocks of andesite to latite/trachyte composition and may include some phases of hypabyssal monzonite. This lower stratigraphy of the Hazelton extends along the length of the Homestake Ridge from the Main Homestake to the Vanguard Copper showings and is the host rock and footwall sequences to the three known mineral deposits, the Main Homestake, Homestake Silver and South Reef zones, as well as numerous other showings. Porphyritic monzonite dykes and hypabyssal domes intrude the Stuhini sediments and are believed to be coeval with the Lower Hazelton volcanic rocks. Greig et al. (1994) has related the Lower Hazelton Group feldspar-hornblende porphyry volcanic package to the Goldslide Intrusions at Red Mountain.

Thin, locally discontinuous units of matrix supported, feldspar-phyric volcanic breccias and heterolithic debris flow with tuffaceous and mudstone to sandstone interbeds cap the lower volcanic stratigraphy and are in turn unconformably overlain by maroon to green andesitic and dacitic volcaniclastic rocks and tuffs which form much of the central part of the Homestake claim block. These polylithic andesitic and dacitic pyroclastic to epiclastic rocks contain discrete mafic flows, tuffaceous beds, and debris flows. This andesitic

volcanic package has been equated to the Betty Creek Formation (Evans and Macdonald, 2003).

The southwestern bounding structure to domain three is a southwest-verging thrust fault that occupies the north side of the Homestake glacier with hornblende monzonite (I2F) either in the immediate hanging wall or footwall of the fault.

Middle Jurassic Salmon River/Quock Formation and overlying Bowser Lake Group sedimentary rocks comprise Domain four, covering the northeastern portion of the Property. Pyritic horizons within the Salmon River Formation define strong chargeability anomalies parallel to the stratigraphy. These fine grained carbonaceous and sulphidic horizons are economic targets and are prone to local slip and shear zones. North-northwest and northeast-trending dikes crosscut the Bowser Lake sediments.

The Salmon River sediments form a band of rock which unconformably overlie the volcanic flows and conglomerates of the underlying stratigraphy from the toe of the Kitsault Glacier southeast along the margins of Homestake Creek on the eastern side of the Property. A tongue of these sediments infills a basin which formed to the southeast of the Homestake Silver Deposit. The fining-up nature of this unit reflects the general fining up nature of the Salmon River Formation as it progresses into the Bowser basin and reflects the development of a large-scale basin at the end of Hazelton volcanism (Evans and Lehtinen, 2001).

In the northern part of the Homestake area at the headwaters of Homestake Creek, rhyolitic volcanic rocks occur at the base of the Salmon River sediments. Greig et al. (1994) mapped this unit and suggested a correlation with the Mount Dilworth Formation of the Eskay Creek area. The rhyolites are light to dark grey, massive and vary from aphanitic to fine grained feldspar porphyritic banded flows to tuffs and breccias. Pyrite is ubiquitous throughout, occurring either as fine dissemination or infilling fractures and joints. A series of mafic dykes with chilled margins and an elevated Niobium signature were encountered intruding the Hazelton Group Rocks in the Homestake Silver Zone. Similar dykes have been mapped at surface intruding the Lower Hazelton Stratigraphy. These dykes are of unknown age.

The eastern part of the Homestake area is dominated by grey, interbedded siltstones and sandstones that are thought to be part of the Middle to Upper Jurassic Bowser Basin Group which conformably overlie the thin bedded graphitic argillites of the Salmon River formation.

Structure on the Homestake area largely reflects NE-SW compression that has continued from the Jurassic to present day (Folk and Makepeace, 2007), recent drilling and mapping suggest that the local stratigraphy has undergone several deformation events including uplift and local extension of the Stuhini and lower Hazelton stratigraphy resulting in a marked unconformity between the lower and upper Hazelton rocks.

In general, the structural development is reflected by the magnetic signature of strata in Domain three (andesites, +/- pyroxene basalts, rhyolite, dacite). The NW-SE fabric (lithology/folds) results from primarily north-trending folding and thrusting. This fabric is crosscut by North and North-east striking faults and dykes.

These compressional tectonics have resulted in an antiformal (or horst related) block of Triassic and lower Jurassic stratigraphy in the western side of the Property and a synformal (graben like) block of middle to upper Jurassic rocks on the eastern side of the Property. In the southeastern part of the Property, these two regimes are separated by a northwest-striking, westerly dipping structure known as the Vanguard fault. The Vanguard fault is a northwest-trending, ~60° southwest dipping northeast verging structure characterized by up to 50 m of variably sheared quartz-sericite-pyrite (QSP) altered rock.

Uplift and local extension of the lower stratigraphy may have occurred during the same Early Jurassic compressional event. The earliest period of movement along the Vanguard fault may have occurred at this time.

Northwest-southeast oriented normal faults occur along the northeastern slopes of Homestake Ridge and locally represent the southwestern wall of the “Hazelton Basin”. These faults would have been active from the Early to Middle Jurassic as pyroclastic and volcanic flows of the PC unit infilled the basin. Mineralizing fluids which lead to the deposition of the gold and silver deposits on the Project are thought to have been channelled along these faults. Northeast-southwest faults offset the Hazelton Group volcanic and older sedimentary rocks throughout the Property. Younger Tertiary extensional faults may have been superimposed on these faults.

Large northeast trending ankerite bearing faults have been mapped and related to the Tertiary east-west extension (Evans and Lehtinen, 2001).

7.3 Mineralization

Historical and recent exploration has identified several styles of mineralization within the Kitsault Valley Property. The following section (section 7.3.1) has been reproduced from Turner and Nicholls (2019) and the descriptions of mineralization in the Homestake deposit area, reproduced from Hough et al., (2022), are presented in sections 7.3.2-7.3.5. The locations of individual deposits at Kitsault Valley Project are presented in Figure 7.7 and 7.8.

Figure 7.7. Individual deposit locations of Kitsault Valley Project (modified from Dolly Varden, 2022).

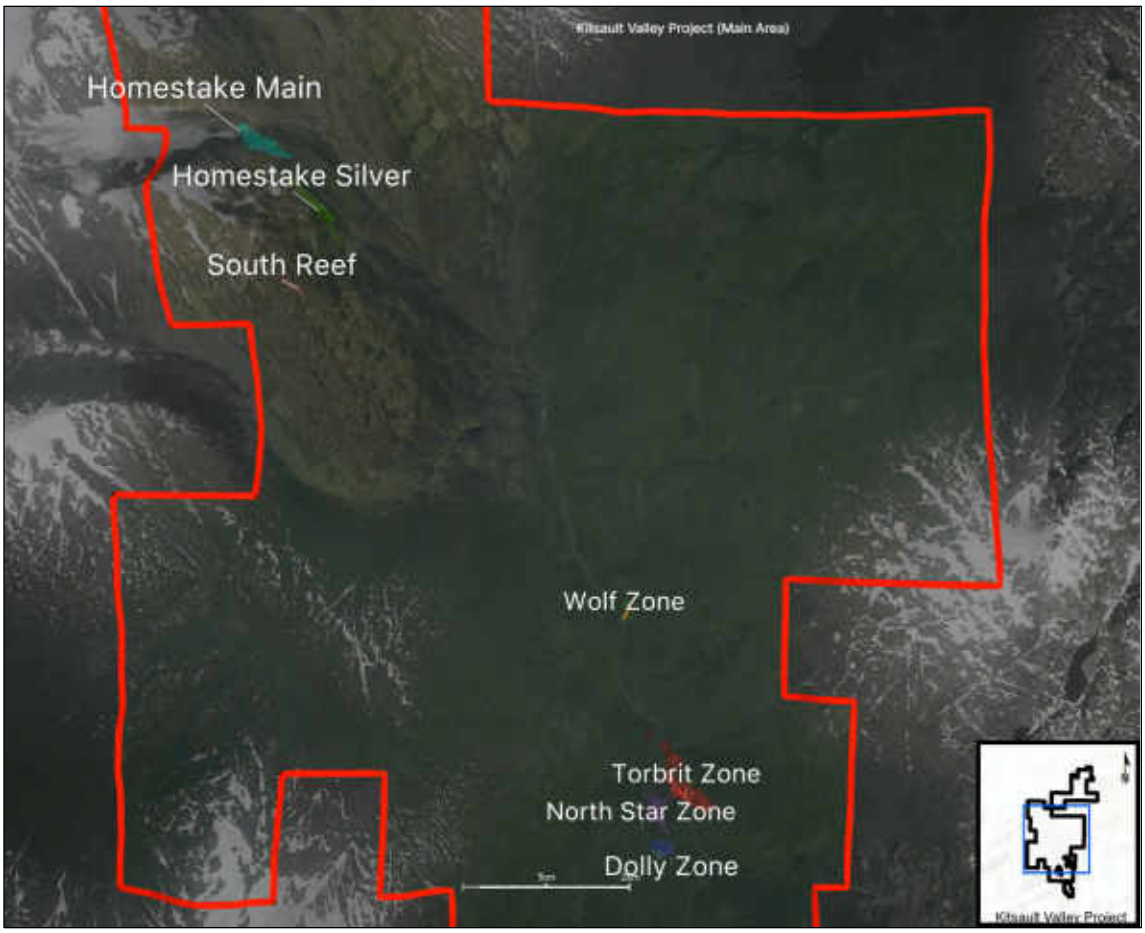
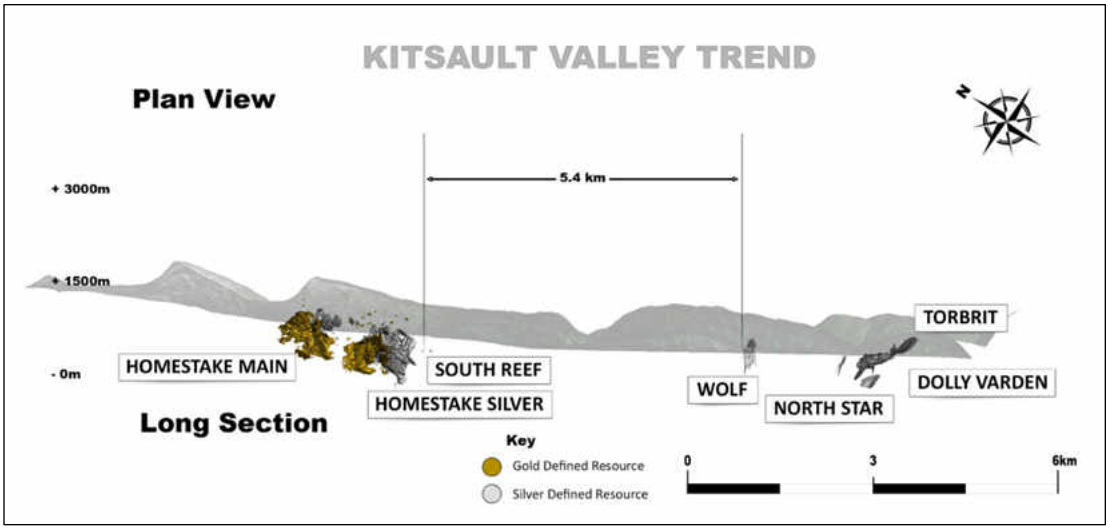


Figure 7.8. Longitudinal section through the Kitsault Valley Project deposits (modified from Dolly Varden, 2022).



7.3.1 Dolly Varden Deposits

The following list of notable mineralization styles, with examples of prospects and deposits, has been adapted from McCuaig and Sebert (2017) and Higgs and Giroux (2015):

- Exhalative stratiform silica-sulphide-rich mineralization containing variable amounts of quartz, chalcedony, barite, carbonate, jasper, galena, sphalerite, ruby silver, and other silver bearing minerals. This mineralization is observed in the Dolly Varden Torbrit (DVT) horizon at North Star and Torbrit.

- Exhalative stratiform pyrite, sphalerite, galena, chert, carbonate-rich mineralization at the Sault prospect and in the upper portion of the Trout Horizon.

- Stratabound, infill and replacement Ag-sulphosalt-rich mineralization in the lower portion of the Trout Horizon.

- Quartz-silica, carbonate and variably barite-rich epithermal Ag mineralization containing low to moderate amounts of galena, sphalerite and pyrite accompanied by lesser tetrahedrite, pyrargyrite, argentite/acanthite and local native silver. Colloform to crustiform banded chalcedony, quartz and bladed carbonate or barite textures are common. Hydrothermal brecciation, sealed by later gangue and sulphide, and cut by late-stage veining is present in parts. Epithermal mineralization occurs as structurally hosted veins and fissure fills at Wolf, Kitsol and Dolly Varden. At Torbrit mineralization consists of a combination of Ba-rich semi-conformable pod-like stratabound infills, with sheet-like veining, and in close proximity to reworked debris-style mineralization, and local stratiform lenses of thin-bedded barite and sinter-like silica-rich exhalate.

- Quartz-sericite-pyrite altered zones containing Cu-Ag- (+/-) Au mineralization in quartz-sulphide stockwork, hydrothermal breccias and veins. This mineralization contains chalcopyrite, sphalerite, galena and minor sulphosalt and tends to be enriched in Cu relative to Pb and Zn, while hosting elevated Ag (+/- Au). As/Sb ratios are higher than in the epithermal or stratiform types. Pervasive quartz-sericite-pyrite alteration is observed at the Gold Belt prospect and sericite-pyrite (with lesser quartz) alteration bounds the North Star deposit. Potassium feldspar alteration is observed within the Red Point mineralized zones.

Furthermore, Drown et al. (1990) and McGuigan and Melnyk (1991) outlined four distinct mineralization facies of exhalative stratiform mineralization at the Dolly Varden claim block, as adapted from Garrow (2011):

1) Silica-sulphide exhalative: quartz dominated, lacking calcite and barite. Sulphides consist of pyrite, chalcopyrite with minor argentite, pyrargyrite and native silver.

This mineralization facies is observed at the Dolly Varden Mine and Dolly Varden East Zone (Figure 7.9).

2) Silica-carbonate-sulphate-sulphide exhalative: comprised of calcite, quartz, barite and sulphides. Vertically zoned with a pyrite-silver rich upper zone and zinc-lead-silver rich middle zone that is locally a volcanogenic massive sulphide. Mineralization consists of layers, stringers and disseminations of sphalerite, galena and pyrite with lesser chalcopyrite (15-20% sulphides) in a variable gangue of quartz, calcite and barite. This mineralization facies is observed in the North Star and Dolly Varden West deposits.

3) Sulphate-oxide-sulphide exhalative: comprised of quartz, calcite, barite, hematite, jasper and sulphides. Mineralization is predominately silver, sphalerite, galena with minor chalcopyrite, pyrargyrite and tetrahedrite (5-10% sulphides) in a gangue dominated by quartz with lesser calcite and barite. This mineralization facies are observed in the Torbrit, Torbrit East and Moose Lamb deposits.

4) Debris flow breccia mineralization: an internally fragmented, re-cemented breccia is a common feature of all exhalative debris flow facies. They are mapped as polylithic exhalative breccias and include examples of all the silica, oxide, sulphate and sulphide mineralization types and contain volcanic rock fragments. The breccias are interpreted to have formed in unstable, shallow seafloor mounds as hot-spring veins and precipitates of sea floor vent exhalations or as hydrothermal eruption breccias (Figure 7.10).

Figure 7.9. Pyrite-sphalerite-galena mineralization observed in drillhole DV17-048 from 91 m, assayed at 518 ppm Ag from Dolly Varden (Turner and Nicholls, 2019).

Figure 7.10. Hematite-bearing, brecciated crustiform mineralization observed in drillhole DV17-040 from 189.5 m, assayed at 527 ppm Ag from Torbrit (Turner and Nicholls, 2019).

7.3.2 Homestake Deposits

The main zones of the Homestake Ridge deposit are the Homestake Main (HM), Homestake Silver (HS), and Silver Reef (SR). The HM is the more copper-rich of the zones, with both gold-rich and silver-rich variants and an apparent trend of increasing copper grade with depth. The HS is primarily silver with elevated lead values, and SR is essentially high-grade gold, with minor copper and lead.

Mineralization in the Homestake deposits display characteristics of both epithermal gold and VMS deposition. Stratabound and vein (or replacement) mineralization is present that contains values in Ag, As, Au, Cu, Hg, Pb, Sb and Zn (Folk and Makepeace, 2007). Mineralization is related to Early Jurassic feldspar-hornblende-phyric sub-volcanic intrusions and felsic volcanism and commonly occurs with zones of pyrite-sericite alteration. A later, less significant, mineralizing event occurred in the Tertiary and is characterized by ankerite-calcite-pyrite veins.

The Homestake deposits are commonly vertically zoned from a base metal poor Au-Ag-rich top to an Ag-rich base metal zone over a vertical range of 250 m to 350 m. The silver-galena-sphalerite veins of the Homestake Silver Zone exhibit many of these features.

7.3.2.1 Homestake Main Deposit

The Homestake Main deposit consists of a series of silica to silica-carbonate-chlorite altered lenses and hydrothermal breccias, which have a northwest strike and dip moderately northeast at slightly steeper than the topographic dip-slope. Gold and silver mineralization occurs with pyrite, chalcopyrite, and lesser galena and sphalerite in stronger areas of silica alteration or hydrothermal brecciation within zones of sericite-pyrite altered feldspar-hornblende phyric volcanic rocks. Only along the southwestern

flank of the Homestake Main deposit does lower grade gold mineralization penetrate up into the overlying package of basinal filling volcano-sedimentary and andesitic rocks which comprise the “hanging wall” sequence. Native gold along with pyrargyrite and acanthite have been observed hosted within quartz veins and quartz-carbonate hydrothermal breccias in drill core.

The Homestake Main deposit as currently known is about 700 m long and has been traced down-dip by drilling for a distance of approximately 500 m. At the surface, the northwestern extent of the mineralization is obscured by a glacier; while to the southeast surface geochemistry indicates that the zone continues towards the Homestake Silver deposit 700 m to the southeast. Width of the Homestake Main Zone vary up to about 60 m (approximate true width) and are defined by assay grades due to the diffuse nature of the mineralization.

Grades for gold typically range from 0.1 g/t Au to 2 g/t Au with some intercepts measuring into the hundreds of grams per tonne and averaged at 7.75 g/t Au. Silver grades are generally in the 1.0 g/t Ag to 100 g/t Ag range but can be as high as hundreds and even thousands of grams per tonne. The average silver grade in the HM is 68.6 g/t Ag. Copper grades vary from parts per million to several percent, with mean grades observed to increase significantly with depth.

Gold distribution appears to be inhomogeneous, and grades display a great deal of local variability. The zone has a complex form which may consist of a faulted series of lenses and related steeply dipping feeders.

7.3.2.2 Homestake Silver Deposit

Located 300 m to the southeast of the Homestake Main zone, the Homestake Silver deposit is comprised of a series of northwest trending, vertically to sub-vertically dipping hydrothermal breccias. Mineralization occurs in form of galena, sphalerite and silver in contrast to the gold enriched chalcopyrite commonly observed in the Homestake Main deposit. Modelling indicates that the Homestake Silver deposit can be traced over 700 m strike and 550 m down dip.

The Homestake Silver zone comprises a cluster of parallel structurally controlled zones, striking approximately 140° with near-vertical dips. The individual sub-zones in the Homestake Silver zone are narrower than the Homestake Main zones on average, with true thickness rarely exciding three metres. The Homestake Silver zone has been traced by drilling for a total vertical extent of approximately 600 m, along a strike length measuring just under 800 m.

Silver grades at Homestake Silver average 154 g/t Ag, approximately double that of the HM (68.6 g/t Ag) and 26 times that of SR (5.8 g/t Ag). Gold grades at Homestake typically range up to several g/t Au and averaged 3.5 g/t Au in the samples contained within the interpreted zone boundaries. Copper content is comparatively low, however, geochemically significant, and generally measures between 10 ppm Cu and 500 ppm Cu. There are elevated levels of lead and zinc, typically measuring in the 10 ppm to 1,000

ppm range, with some intercepts assaying as high as several percent lead and/or zinc. The lead and zinc grades at Homestake Silver are not expected to be consistently high to contribute much to the Project economics, although lead grades were estimated in the block model to facilitate metallurgical classification.

7.3.2.3 South Reef Zone

The South Reef deposit is located approximately 800 m to the south-southwest of the Homestake Silver deposit. Gold mineralization is variably associated with strong quartz-chlorite alteration, pyrite and minor base metal sulphides interspersed with intervals of sericite and pyrite alteration in two en-echelon, northwest-trending sub-vertical mineral zones that can be traced with drilling for over 250 m strike-length and 250 m dip. Several base-metal enriched intercepts are identified up-section from the gold-enriched zone but have yet to be fully defined by drilling.

The South Reef zone is comprised of two narrow sub-parallel tabular bodies which strike at approximately 120° to 130° and dip 70°NE to 80°NE. To date, only twelve holes have intersected significant mineralization, as such characterization of the structure and grades is preliminary. The zones measure one metre to three metres in thickness and have been traced for approximately 300 m vertically and 400 m along strike. Silver grades at South Reef average 5.8 g/t Ag in the vein samples. This is offset by high gold values, which average 5.9 g/t Au.

All three zones have elevated arsenic and antimony contents, typically averaging in the tens to low hundreds of parts per million.

7.3.2.4 Other Prospects/Exploration Targets at Homestake Claim Block

Numerous other mineral occurrences of interest are present on the area. The significant mineral occurrences are described in the following sections. None of the exploration targets have Mineral Resource estimated in accordance with NI43-101 guidelines.

Vanguard Cu and Au Zones

Located approximately 2.5 km southeast of the Homestake Zone, the Vanguard is an 1,800 m long, 150 m wide structural zone hosted in various pyroclastic and volcanic rocks. This area has undergone extensive exploration including 36 trenches and short adits. Most showings are located within a northwest striking, sub-vertically dipping zone containing diffuse sulphide veins, stockworks, sulphide breccia zones, and calcite-barite veins related to pervasive chlorite alteration. Gold-enriched mineralization occurs in the northern part of this belt and adjacent to and up-section from the South Reef gold zone. To the south, the mineralization is characterized by high grade copper with gold and silver (Folk and Makepeace, 2007).

Sericite Zone (Gold Reef, Fox Reef)

Located in a large area southwest of the Homestake Zone, the Sericite Zone comprises over 50 mineral occurrences hosted within pervasively sericite-pyrite altered FHP intrusives and volcanic rocks. These occurrences bear the historical names of Tip Top, Foxreef, Goldreef, Matilda, Silver Tip, among others. Gold is found in quartz-calcite-barite veins up to six metres wide with pyrite+chalcopyrite+galena+sphalerite mineralization. Geochemical surveys show an anomalous north-south trend along the volcanic-FHP contact (Folk and Makepeace, 2007).

Dilly and Dilly West Zones

Historical zones named Cascade Falls, Lucky Strike, Silver Crown, and Camp Zone are collectively known as Dilly and Dilly West and occur southwest of the Homestake zones. Exploration has been active in this area with over 40 pits, trenches, and adits excavated. The zones are hosted by silicified mudstones and siltstones overlying rhyolites. Mineralization consists of syngenetic sulphide bands anomalous in Au, Ag, As, Bi, Pb, Zn, Hg, and Sb. The zones are stratiform and display a linear trend with strike lengths of 1,500 m for the Dilly Zone and 600 m for the Dilly West Zone. The underlying rhyolite is cross-cut by veins with similar mineralization to the sulphide bands and these veins are interpreted to be “feeders”. Stratigraphically above the sediments is a thin, silicified and mineralized rhyolite pyroclastic. Silica decreases on the north end of the Dilly Zone, and base metals and barite occur within the sediments. Also present is semi-massive to massive arsenopyrite within sulphide stockwork and FHP sills (Folk and Makepeace, 2007).

North Homestake Zone (North Dome)

The North Homestake Zone is described as a large sericite-pyrite-silica altered felsic dome approximately 3.2 km north of the Homestake Silver deposit and occupies a 125 ha area. The geology is massive feldspar-phyric, fine grained felsic volcanic rock of dacite to latite composition that occurs in the upper part of the volcano-sedimentary stratigraphy. Sheeted northeast trending pyritic fractures occur in the strongly silicified southern and western margins. These fractures are strongly anomalous in pathfinder elements such as, Sb and Hg.

The upper contact of the rhyolite is projected to be in contact with sediments that are thought to be analogous to those at Eskay Creek. The Kitsault Glacier, however, partially obscures the projected two-kilometre contact.

KNHSR1

The KNHSR1 target lies directly south of the Dolly Varden Silver deposit. Historical sampling from the Silver King Min File occurrence has returned up to 34.28 g/t Au and 576 g/t Ag as well as 2.9 percent lead.

Work by Auryn/Homestake at the KNHSR1 target confirmed the presence of significant base and precious metal mineralization with peak assays of 1.35 g/t Au, 62.1 g/t Ag, 1.66 percent Cu and 20.3 percent Zn from boulders and outcrop at the Silver King occurrence. The VTEM airborne geophysical survey highlighted a major NW-SE trending structure that coincided with the anomalous drainage basin identified in 2018. Follow up of the magnetics and stream sediment anomaly with soils and rock sampling identified a coherent gold + silver soil anomaly centered around the Silver King occurrence. The highly anomalous base and precious metals assays paired with strong quartz sericite alteration throughout the claim indicate that additional exploration is warranted at KNHSR1.

Kombi

The Kombi target lies along a north – south oriented shear zone evidenced from field mapping of silicified shears as well as linear breaks in the magnetics picture. Stream sediment samples collected from the area returned up to 910 ppb Au as well as anomalous silver, lead and copper.

Work by Auryn/Homestake at Kombi has resulted in soil sampling up to 1.050 g/t Au paired with rock samples from quartz carbonate veining returning 6.3 g/t Au and 1.37 g/t Ag. The 2019 interpretation of historical airborne geophysics in the area outlined a NW trending block of fault bounded volcanics associated with the highly anomalous geochemical results.

Bria

The Bria target includes the Banded Mountain Min File occurrence and represents a potential Eocene Porphyry target. Stream sediment sampling in the target area has returned anomalous silver, lead, zinc and copper. Rock samples from the area have returned up to 11.05 g/t Au and 448 g/t Ag all from quartz veins hosted within intrusive rocks.

The 2019 VTEM survey over Bria highlighted a 3,000 x 500 m steeply dipping intrusive body within sedimentary rocks.

8 Deposit Types

Several styles of mineralization have been recognized within the Kitsault Valley Project area, the mineralization styles and associated facies are summarized above in sub-section 7.3. Historical and recent exploration on the Property, as well as studies completed by Devlin (1986) and Dunne and Pinsent (2002), suggest a potential for the Property to host volcanogenic massive sulphide (VMS) deposits and epithermal precious metal deposits. Furthermore, Dunne and Pinsent (2002) indicate similarities between the Property and the Eskay Creek precious metal-rich VMS deposit:

A fluid inclusion study by Dunne and Pinsent (2002), together with existing geological and geochemical data, supports the contention that the silver-rich deposits in the upper Kitsault River area are genetically related. It also suggests that the deposits may be silver-rich analogues to the precious metal-rich Eskay Creek deposit. The Kitsault River deposits all formed at surface or at shallow depth in the waning stages of Hazelton arc volcanism. They have similar tenor (silver, lead, zinc, strontium, barium) and mineralogy. Their mineralization varies from multi-episodic and irregularly zoned to laminated and bedded, perhaps relating to proximity to subaqueous chimneys, surface mounds or collapse textures in shallow marine basins or emplacement along active faults. Colloform, crustiform and comb textures clearly indicate early, high-level deposition of quartz in veins that formed from low temperature, and for the most part, low salinity hydrothermal fluids in a hot-spring-type setting. These early veins are locally brecciated, perhaps indicating near-contemporary structural activity or collapse. Alternatively, the brecciated zones may be the result of near-surface explosive brecciation. The silver was probably precipitated from low-to-moderate temperature and low salinity fluids that also deposited sphalerite and other sulphide minerals. It could either have been deposited in a subaerial hot-spring low-sulphidation epithermal environment or, possibly, a submarine hot-spring volcanic-hosted massive sulphide-type depositional setting.

8.1 Volcanogenic Massive Sulphide Deposits

Volcanogenic massive sulphide (VMS) deposits are important global sources of base metals (Zn, Pb, Cu) and precious metals (Au, Ag), as well as other by-product metals (e.g., cobalt (Co), tin (Sn), selenium (Se), manganese (Mn), cadmium (Cd), indium (In), bismuth (Bi), tellurium (Te), gallium (Ga), germanium (Ge), As, Sb and mercury (Hg)) (Piercey, 2010; Piercey et al., 2015). Nearly 800 known VMS deposits occurring globally with geological reserves estimated at over 200,000 tonnes (Galley et al., 2007).

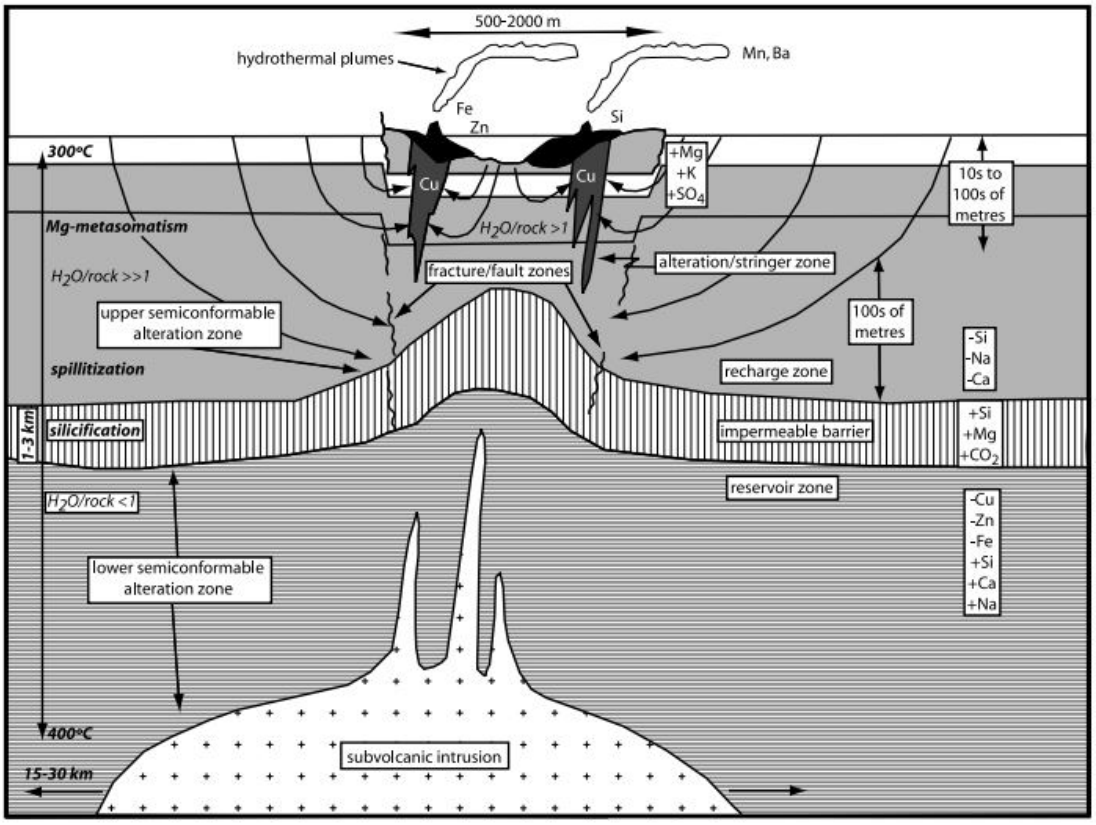
VMS deposits typically occur as lenses of polymetallic massive sulphides forming at or near the seafloor in a submarine volcanic setting. VMS deposits are classified as “exhalative” and are syn-genetic stratabound deposits formed through the focused discharge of hydrothermal fluids and precipitation of sulphide minerals in predominately stratiform accumulations (Barrie and Hannington, 1999; Galley et al., 2007). Typical characteristics of VMS deposits are listed as follows (adapted from Galley et al., 2007):

- Typical VMS deposit is a stratabound body, mound to tabular in shape, composed of predominately massive (>40%) sulphide, quartz and lesser phyllosilicates, iron oxide minerals and altered silicate wallrock.
- The stratabound body is commonly underlain by discordant to semi-discordant stockwork veins and disseminated sulphides.
- The stockwork vein systems are enveloped in distinct alteration halos. The alteration halos may extend into the hanging-wall strata above the deposit.
- Deposits often form in clusters or stacked lenses.

A model for the generalized setting and genesis of VMS deposits is shown in Figure 8.1. Due to the complexity and differences in the style and settings of VMS deposits, a six-fold classification scheme has been defined based on deposit rock types and associations (Barrie and Hannington, 1999; Franklin et al., 2005; Galley et al., 2007):

1) Mafic (Cyprus-type)
2) Bimodal Mafic (Noranda-type)
3) Mafic Siliciclastic (Besshi-type)
4) Bimodal Felsic (Kuroko-type)
5) Felsic Siliciclastic (Bathurst-type)
6) Hybrid Bimodal Felsic/Siliciclastic (Eskay Creek-type)

Figure 8.1. Model for the setting and genesis of VMS deposits (from Galley, 1993; Piercey, 2010).

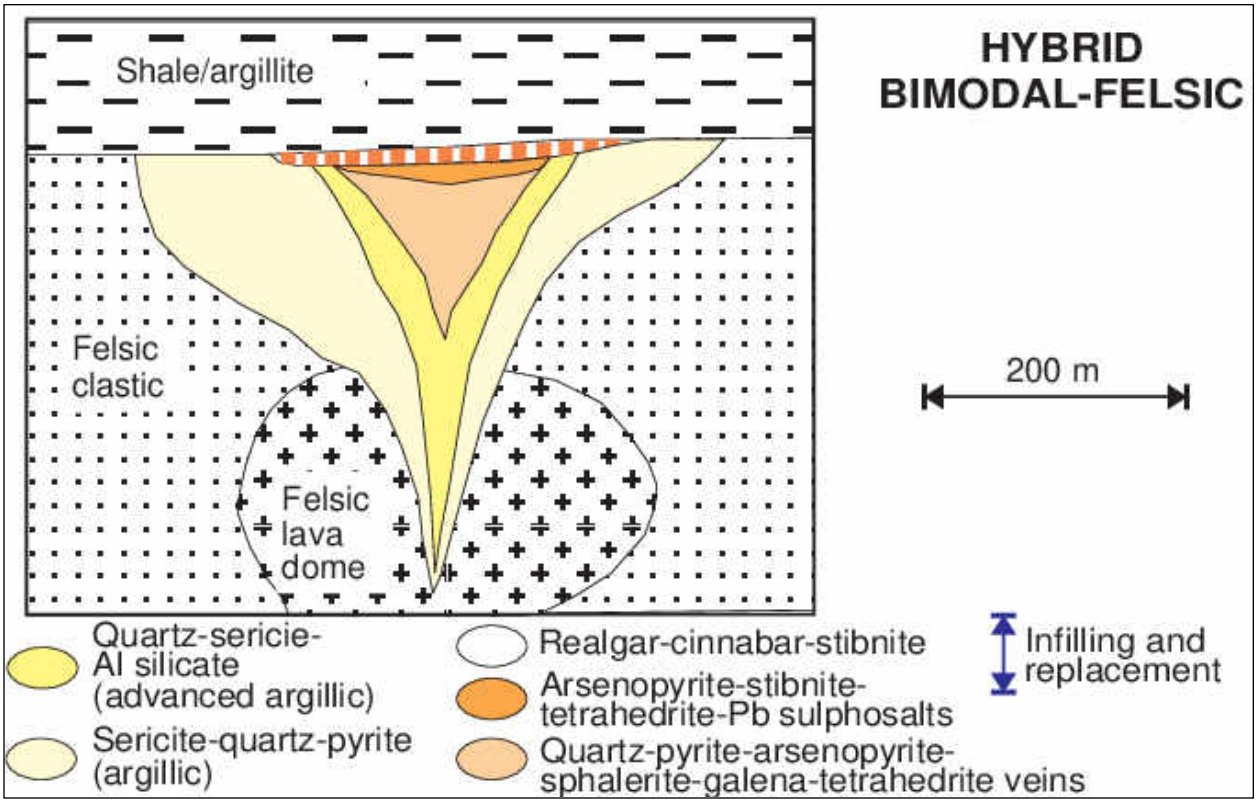


Studies by Dunne and Pinsent (2002) suggests similarities between the depositional environment of the Au-Ag-rich high-sulphidation VMS deposit style mineralization at the Eskay Creek Mine and the Dolly Varden resource, therefore, the hybrid bimodal felsic/siliciclastic (Eskay Creek-type) classification, high-sulphidation VMS deposits and the Eskay Creek deposit are detailed in the sub-section below.

8.1.1 Hybrid Bimodal Felsic/Siliciclastic (Eskay Creek-type) VMS Deposit

Hybrid bimodal felsic/siliciclastic VMS deposits display mineralization, alteration and textural characteristics similar to a typical VMS type deposit and epithermal-style mineralization that is associated with sub-aerial volcanism (Hinchey, 2008). Bimodal volcanism refers to the eruption of mafic and felsic lavas from a single volcanic center. Bimodal volcanism is generally associated with zones of extensional tectonics, notably rift settings and is the result of partial melting of the crust (Piercey et al., 2015). Hybrid bimodal felsic deposits are typically rich in Zn and Pb, as well as Hg-Bi-Sb-As-Au-Ag-S with aluminous alteration, such as pyrophyllite. A graphic illustration of a hybrid bimodal felsic deposit is shown in Figure 8.2.

Figure 8.2. Graphic illustration of a hybrid bimodal-felsic VMS deposit (from Galley et al., 2007).

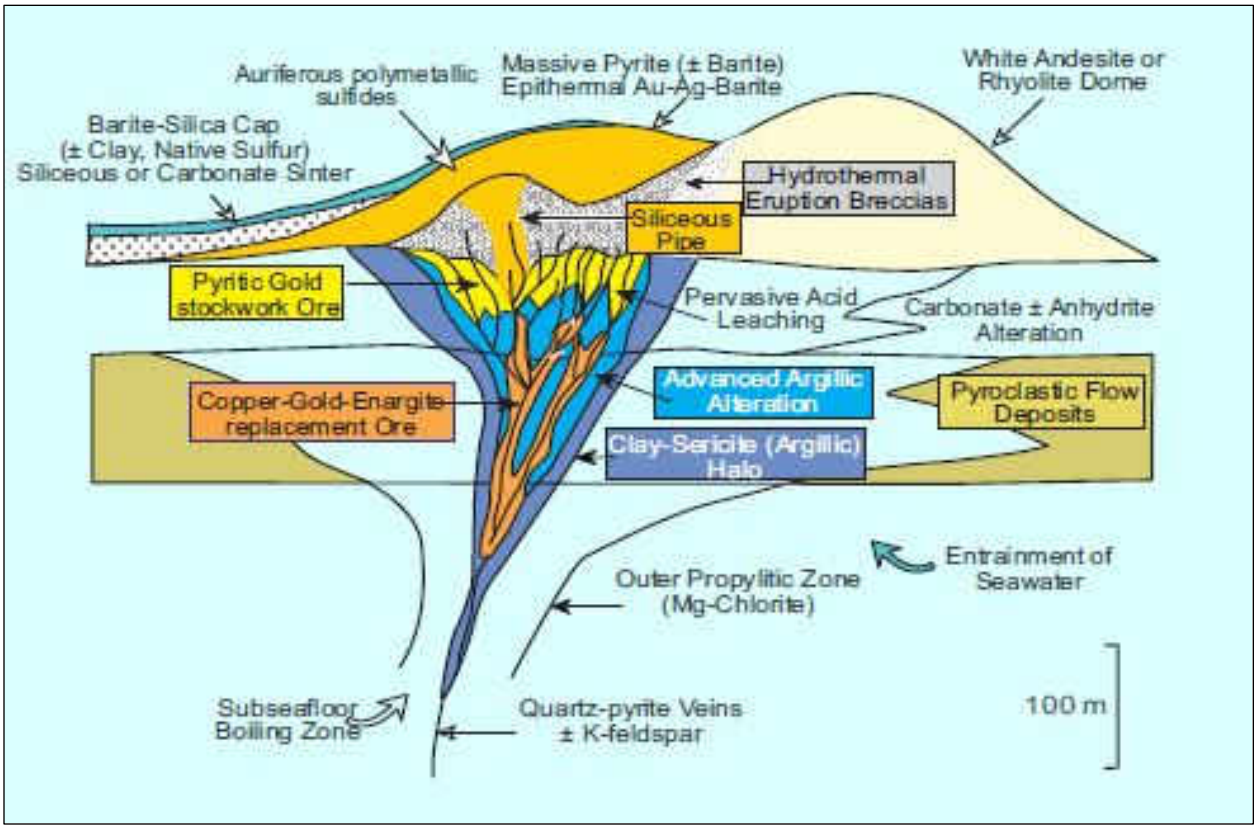


8.1.2 High-sulphidation VMS Deposits

Select VMS deposits show characteristics of high-sulphidation conditions similar to those encountered in epithermal environments. Metamorphosed advanced argillic and silicic alteration is evident in some gold-rich VMS deposits, indicating an oxidized low-pH hydrothermal fluid and high-sulphidation conditions (Dubé et al., 2007). Typically, VMS deposits are characterized by a neutral to slightly acid hydrothermal fluid, indicating low-sulphidation conditions. The geological setting and hydrothermal alteration associated with Au-rich high-sulphidation VMS deposits is shown in Figure 8.3.

Dubé et al. (2007) groups the Eskay Creek deposit with Au-rich VMS deposits. The diagnostic features of these deposits are *"strata-bound volcanic-hosted massive sulphide bodies with associated discordant stockwork stringer feeder zones in which gold grades exceed associated combined Cu, Pb and Zn grades".*

Figure 8.3. Geological setting and hydrothermal alteration associated with Au-rich high-sulphidation VMS deposits (from Dubé et al., 2007).



8.1.3 Eskay Creek VMS Deposit

The Eskay Creek VMS deposit (Eskay Creek) is located 75 km northwest of Stewart and 125 km north of the Kitsault Valley Project. Eskay Creek is a low temperature Au-rich VMS deposit that formed in a submarine volcanic environment. The underlying rhyolite footwall and overlying basalt hanging wall form the uppermost unit of the Hazelton Group (Roth, 2002; Ulansky et al., 2019).

Eskay Creek is distinguished from other VMS types by high precious metal grades, epithermal suite elements including Sb-Hg +/- As, sulfosalt-rich mineralogy and the dominance of clastic sulphides and sulfosalts (Roth, 2002). Several styles and zones of mineralization are present at Eskay Creek and are subdivided into zones with varying characteristics and associated elements. In general, stratiform mineralization is hosted by the contact mudstone and discordant mineralization is hosted by the footwall rhyolite. The majority of the ore at the Eskay Creek mine is hosted in the stratiform 21B zone at the base of the contact mudstone. The main associated elements of 21B zone include Au-Ag-Zn-Pb-Cu-Sb and the ore comprises beds of clastic sulphides and sulfosalts with variable amounts of barite, rhyolite and mudstone clasts (Roth, 2002). Alteration at Eskay Creek is widespread in the footwall rhyolite and comprises pervasive quartz-sericite-pyrite-potassium feldspar +/- chlorite alteration. A summary of the mineralization styles recognized in the Eskay Creek 21 zone is shown in Table 8.1.

Eskay Creek is interpreted to have formed in the Lower to Middle Jurassic Hazelton arc, during a period of weakening volcanic activity. Bimodal volcanism in the area is marked by the emplacement of the rhyolite footwall and intrusion and extrusion of the hanging-wall basalts (Roth, 2002). The tholeiitic geochemistry of the rhyolites and basalts is consistent with rifting of the Hazelton arc, at Eskay Creek and regionally, although it is unknown if the rhyolites and basalts are comagmatic (Macdonald et al., 1996; Roth, 2002).

The Eskay Creek Mine was in production from 1994 to 2008 with total production of 3,272,628 oz Au and 5,039,065 oz Ag (Ulansky et al., 2019). Roth (2002) indicates that the potential exists for similar discoveries to Eskay Creek in complex arc environments with concurrent tectonic and magmatic activity, basin development and subaerial to subaqueous conditions.

The authors have not visited or worked at Eskay Creek and where reference is made to past production of the Eskay Creek Mine, the authors have not attempted to verify the information. The description of the Eskay Creek mineralization is presented as a guide for exploration targeting only and is not necessarily indicative of the mineralization on the Kitsault Valley Project.

Table 8.1. Mineralization styles in the Eskay Creek 21 zone (from Roth, 2002).

Zone	Associated elements	Characteristics	Stratigraphic Position
21A	As-Sb-Hg-Au-Ag	Stratiform lens of massive to semi-massive sulfides (realgar, stibnite, cinnabar, arsenopyrite) underlain by disseminated stibnite, arsenopyrite, tetrahedrite and veinlets of pyrite, sphalerite, galena, tetrahedrite, ± chalcopyrite.	stratiform at base of contact mudstone; overlying discordant mineralization within rhyolite
21B	Au-Ag-Zn-Pb-Cu-Sb	Stratiform, bedded clastic sulfides and sulfosalts including: sphalerite, tetrahedrite - freibergite, Pb-sulfosalts (including boulangerite, bournonite, jamesonite), stibnite, galena, pyrite, electrum, amalgam.	stratiform, at base of contact mudstone
East Block	Ag-Au-Zn-Pb-Cu	Fine-grained massive to locally clastic sulfides and sulfosalts. Massive pyrite-flooding in rhyolite grading upwards into massive sulfides and sulfosalts.	within fault-bounded block, mainly at contact between rhyolite and mudstone
NEX	Au-Ag-Zn-Pb-Cu	Similar to the East Block and locally the 21B zone, with fewer sulfosalts and local overprint of chalcopyrite stringers.	stratiform, at base of contact mudstone
21C	Ba (Pb-Zn-Au-Ag)	Bedded massive to bladed barite associated with very fine-grained disseminated sulfides including pyrite, tetrahedrite, sphalerite and galena. Underlain by localized zones of cryptic, disseminated, precious-metal bearing mineralization in the rhyolite.	stratiform, at base of contact mudstone; and discordant in the rhyolite
Hanging Wall (HW)	Pb-Zn-Cu	Massive, fine-grained stratabound sulfide lens dominated by: pyrite, sphalerite, galena, & chalcopyrite (mainly as stringers) This zone has generally lower gold - silver grades and higher base metals relative to the 21 zones.	within contact mudstone; at a higher stratigraphic level than the 21 zones
Pumphouse & Pathfinder	Fe-Zn-Pb-Cu	Veins of pyrite, sphalerite, galena, and tetrahedrite. Commonly banded; locally with colloform textures. Local zones of very fine-grained mineralization in rhyolite.	discordant, within rhyolite; spatially underlying the 21B zone
109	Au-Zn-Pb-Fe	Veins of quartz, sphalerite, galena, pyrite and visible gold associated with silica flooding and fine-grained amorphous carbon alteration.	discordant, within rhyolite

8.2 Epithermal Precious Metal Deposits

Epithermal deposits are products of volcanism-related hydrothermal activity at shallow depths and low temperatures, with deposition occurring within 1 km of the surface at a temperature of 50 to 200°C (Guilbert and Park, 1986). Deposits can occur in several forms, including siliceous vein fillings, irregular branching fissures, stockworks, breccia pipes and disseminations.

Both vein and bulk-tonnage style epithermal deposits can be categorized into high-, intermediate- and low-sulphidation types based on their hypogene sulfide assemblage

sulfidation states, as well as alteration (Sillitoe and Hedenquist, 2003). Historical and recent exploration at the Kitsault Valley Project suggests potential for a low-sulphidation epithermal precious metal deposits, therefore the focus of this section will be on low-sulphidation epithermal deposits.

8.2.1 Low-sulphidation Epithermal Deposits

Low sulphidation deposits contain sulphide assemblages of low-sulphidation state, typically pyrite and lesser amounts of arsenopyrite, within banded veins of quartz, chalcedony, adularia and calcite. Chalcopyrite and pyrrhotite may be present in minor to trace amounts, respectively, in some deposits (Sillitoe and Hedenquist, 2003). Sillitoe (2002) suggests that low-sulphidation deposits are formed in a variety of continental and island-arc rifts that are characterized by bimodal volcanism, with the rifts forming in the following: 1) intra-, near- and back-arc settings during subduction of oceanic lithosphere; 2) post-arc settings following the end of subduction and 3) post-collisional settings (Sillitoe and Hedenquist, 2003). Sillitoe and Hedenquist (2003) suggest a transitional deposit type between low-sulphidation epithermal and submarine VMS deposits:

"The commonality between the rift settings of subaerial low-sulphidation epithermal and submarine VMS deposits raises the possibility that transitional deposit types may exist where shallow-water conditions prevailed. Indeed, the Eskay Creek VMS deposit in British Columbia, which formed during bimodal volcanism and rifting of an andesitic arc, possesses feeder zone textures and metal content, including bonanza Au and Ag gradesand abundant As, Sb, and Hg, reminiscent of the epithermal environment (Hannington et al., 1999; Roth et al., 1999)"

9 Exploration

Prior to the acquisition of the former Homestake Ridge Project in late 2021, Dolly Varden Silver Corporation had been exploring the Kitsault Valley area since 2011, discovering new exploration targets and advancing known prospects and deposits by systematic exploration. Exploration work from 2011 to 2022 has consisted of geological mapping, geochemical surveys, geophysical surveys, and LiDAR surveys.

9.1 Previous Exploration at Dolly Varden Claim Block

This sub-section is a summary of the work completed at the Dolly Varden claim block from 2011 to 2014. A thorough discussion of these work programs and their results and interpretations is presented in previous Technical Reports on the Project (Garrow, 2011; Higgs, 2015; Higgs and Giroux, 2015).

9.1.1 Geological Mapping

Geological mapping programs have been conducted over several prospect areas within the area from 2011 to 2014. Geological mapping in 2011 comprised surface and underground mapping at the Wolf deposit. Geological mapping in 2012 comprised regional mapping at Moose Lamb, Red Point, Kitsol and Surprise, as well as underground mapping at the Torbrit Mine. The 2012 mapping programs confirmed the presence of prospective growth faults at Moose Lamb and in the Tiger Evindsen area and documented intense hydrothermal activity at Red Point. Geological mapping in 2013 included surface and underground mapping at the Torbrit Mine. Geological mapping in 2014 was conducted on a regional scale to gather the necessary structural and lithological information to assist in defining future drill targets on the area.

9.1.2 Geophysics

Three geophysical surveys were completed on the Dolly Varden claim block from 2012 to 2014. A 694 line-km Z-Axis Tipper electromagnetic (ZTEM) and magnetometer airborne geophysical survey was flown in 2012. In 2014, ground electromagnetic and Induced Polarization (IP) surveys were conducted over three grids within the claim block. Additionally, down-hole borehole electromagnetic and IP surveys were completed at the Dolly Varden deposit in 2014.

9.1.3 Geochemistry

Several geochemical sampling programs have been completed at the Dolly Varden claim block from 2011 to 2014. Rock geochemical sampling has been conducted on the surface and underground, with a total of 804 rock samples collected between 2011 and 2014. Additionally, 2412 soil samples and 36 silt samples have been collected between 2011 and 2014.

9.2 2015 to 2018 Exploration at Dolly Varden Claim Block

The Company continued exploration efforts in the Dolly Varden claim block in 2015. Exploration work completed from 2015 to 2018 includes geological mapping, geochemical sampling, a LiDAR geophysical survey and geophysical studies. This subsection (9.2) is reproduced, with minor formatting modifications, from a previous Technical Report completed for the Dolly Varden Property by Turner and Nicholls (2019).

9.2.1 Geological Mapping and Rock Sampling

Recent geological mapping by the Company was conducted over two main programs in 2015 and 2016:

1) In 2015, select structural and lithological examinations were completed by C. Greig underground at the Torbrit and North Star Mines and on surface at the Musketeer, Ace-Galena and Kitsol prospects.

2) In 2016, geological mapping was conducted at Summit Ridge, Ace-Galena Trout, Chance Creek, Trout Hanging Wall, northeast sediment-volcanic contact and Medallion.

Lithogeochemical sampling was conducted concurrently with the 2015 and 2016 mapping programs. In total, 254 rock samples were collected in 2015 to evaluate historic prospects east of the Kitsault River Valley. Of the lithogeochemical samples collected, 8 were taken to assess the alteration at North Star. Lithogeochemical sampling in 2016 was completed over 4 target areas: Chance Creek, Medallion, Summit Ridge and Trout Zone Hanging Wall. A total of 242 rock samples were collected in the 2016 sampling program.

Sporadic geological mapping and rock sampling was conducted by Dolly Varden during 2017 and 2018. The geological mapping and sampling did not follow a set exploration program and were used as a general guide for drilling, as well as to provide information on the stratigraphy and structural setting of the claim block. In total, 235 rock samples were collected in 2017 and 229 rock samples in 2018. The 2015 to 2018 rock sample locations and updated geology are shown on Figure 9.1.

In addition to the geological mapping and sampling programs completed from 2015 to 2018, information regarding geology was collected at geo-stations throughout the Dolly Varden claim block. Geo-stations are data points for rock descriptions and measurements and do not include analytical data. In total, 370 geo-stations were completed in 2015, 121 geo-stations in 2016, 233 geo-stations in 2017 and 216 geo-stations in 2018. The 2015-2018 Dolly Varden claim block geo-station locations are shown in Figure 9.2.

Figure 9.1. Rock samples collected on the Dolly Varden claim block from 2015 to 2018.

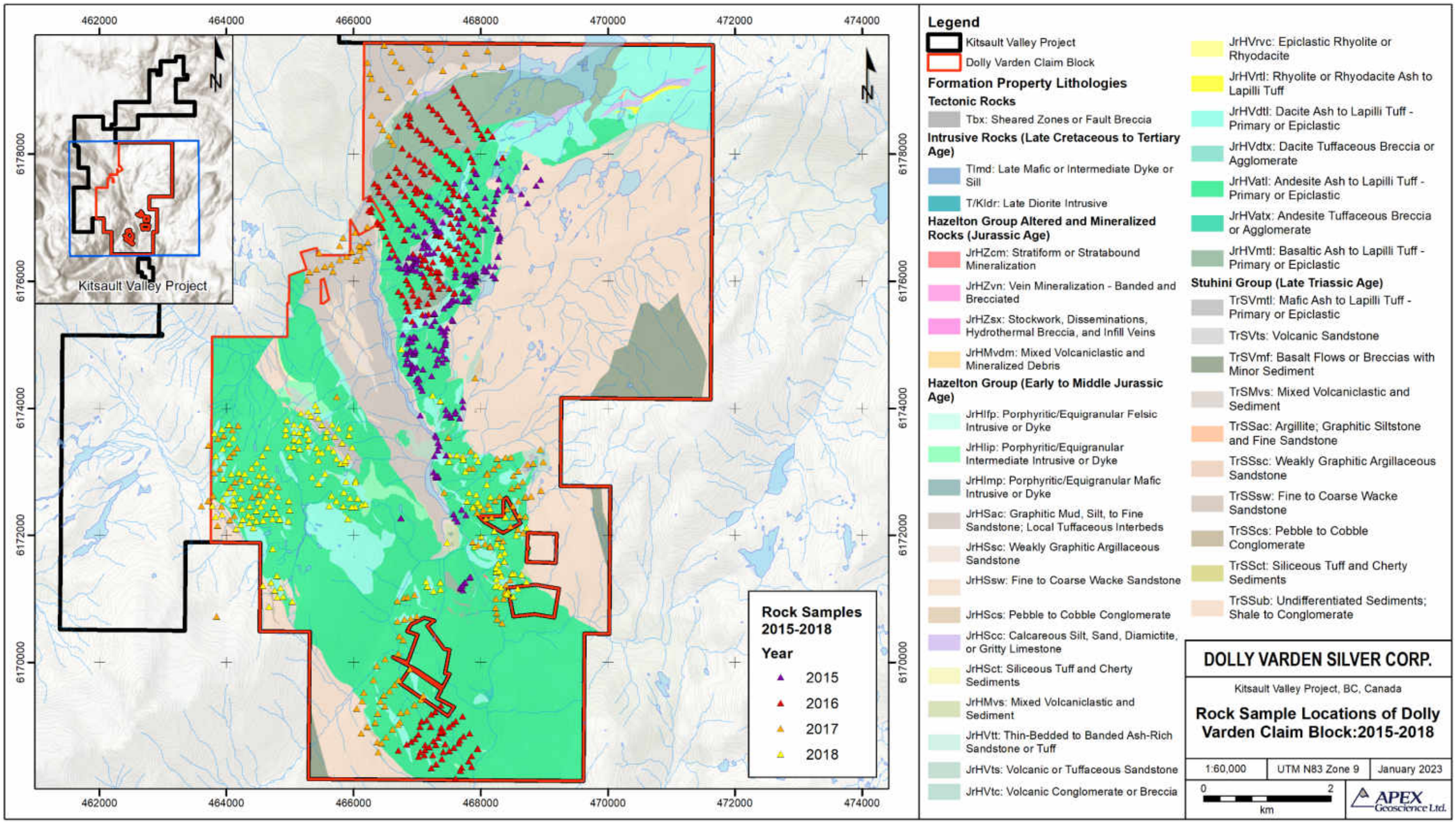
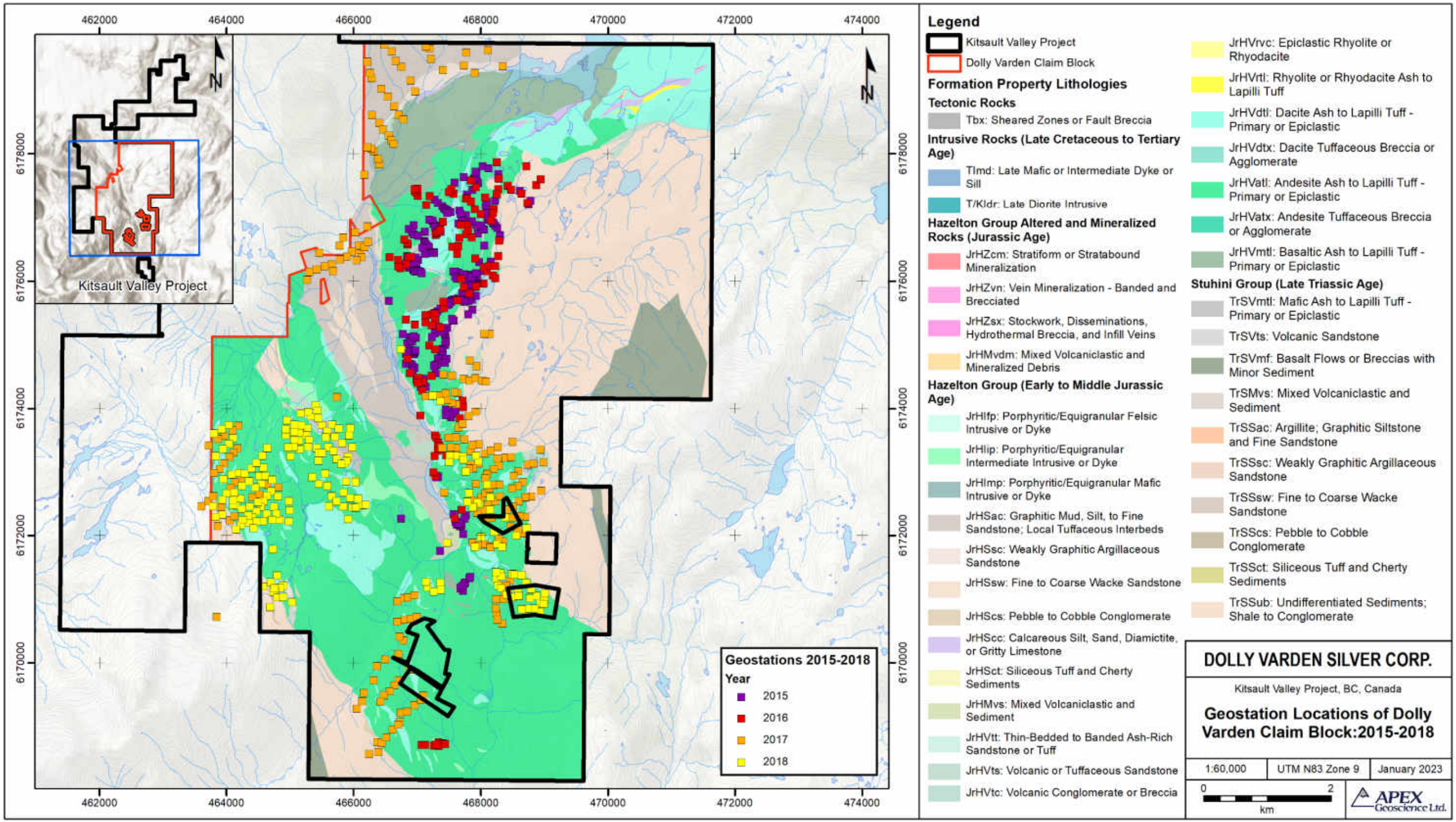


Figure 9.2. 2015-2018 Dolly Varden claim block geo-station locations.



The recent geological mapping and rock sampling conducted by Dolly Varden, combined with the compilation of previous mapping and sampling has contributed to the understanding of the complex lithological, structural and mineralization settings at many of the prospect areas throughout the Dolly Varden claim block.

The results of the main geological mapping and rock sampling programs conducted in 2015 and 2016 will be discussed below by prospect area. Geological mapping observations have been adapted from a recent assessment report on the claim block by McCuaig and Sebert (2017). The geochemical results for Ag, Pb, Zn, Cu and Au from the rock sampling conducted at the claim block from 2015 to 2018 are shown in Figures 9.3 to 9.7.

9.2.1.1 Ace-Galena Trout

The 2015 geological mapping and lithogeochemical sampling program at Ace-Galena Trout focused on the Trout Horizon and the mineralization on the east side of Bluebird Creek. Several styles of mineralization were observed in the work program:

- Ag-sulphosalt-rich sulphide mineralization was observed in epiclastic felsic tuff in the historic trenches located approximately 60 m south of the old Ace-Galena camp. Assay highlights include 3,438 g/t Ag, 1.10% Cu, 0.23% Sb and 2.20% Ba from sample MMDVR073.

- Contorted bands of sulphosalt-galena-rich mineralization was observed in calcareous sandstone of tuffaceous origin in a historic trench down-slope from the old Ace-Galena camp.

- Exhalative disseminated to laminated Pb-Zn mineralization was observed in the upper portion of the Trout Horizon and stratabound infill Ag-sulphosalt mineralization was observed in the lower portion. Assay highlights include 5 m with 51.2 g/t Ag, 0.72% Pb and 0.32% Zn, with 1 m of 188.0 g/t Ag, 2.06% Pb and 0.20% Zn from DV15013. Additionally, DV15013 intersected 42.0 g/t Ag over 22.50 m, including 454.0 g/t Ag over 1.25 m, in disseminated Ag-sulphosalt and native Ag mineralization.

- Discordant native silver-rich mineralization was intersected west of Bluebird Creek in hole DV15109. Results include 591.0 g/t Ag over 3.15 m, including 3,200.0 g/t Ag over 0.50 m.

Figure 9.3. 2015-2018 Dolly Varden claim block rock geochemistry – Ag.

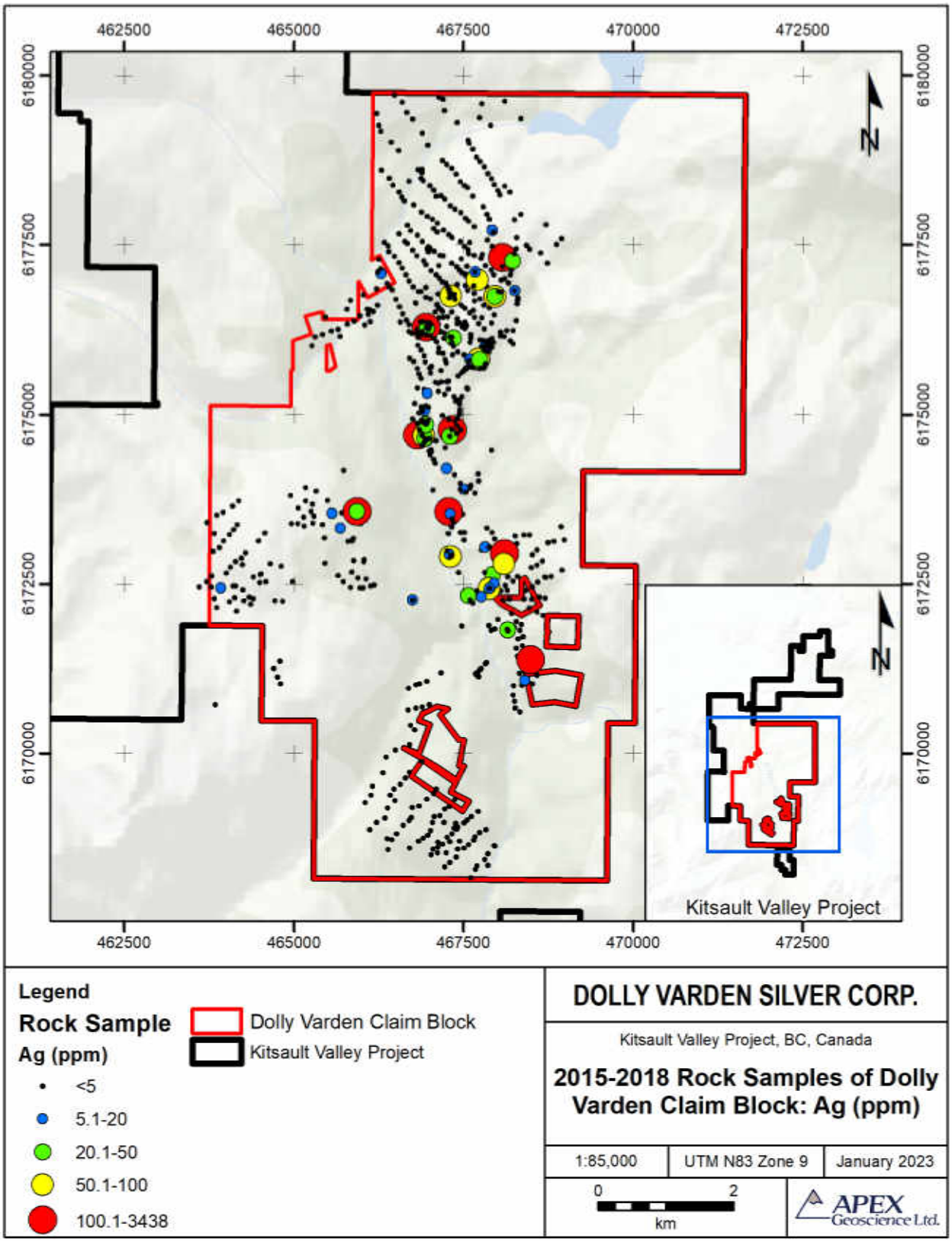


Figure 9.4. 2015-2018 Dolly Varden claim block rock geochemistry – Pb.

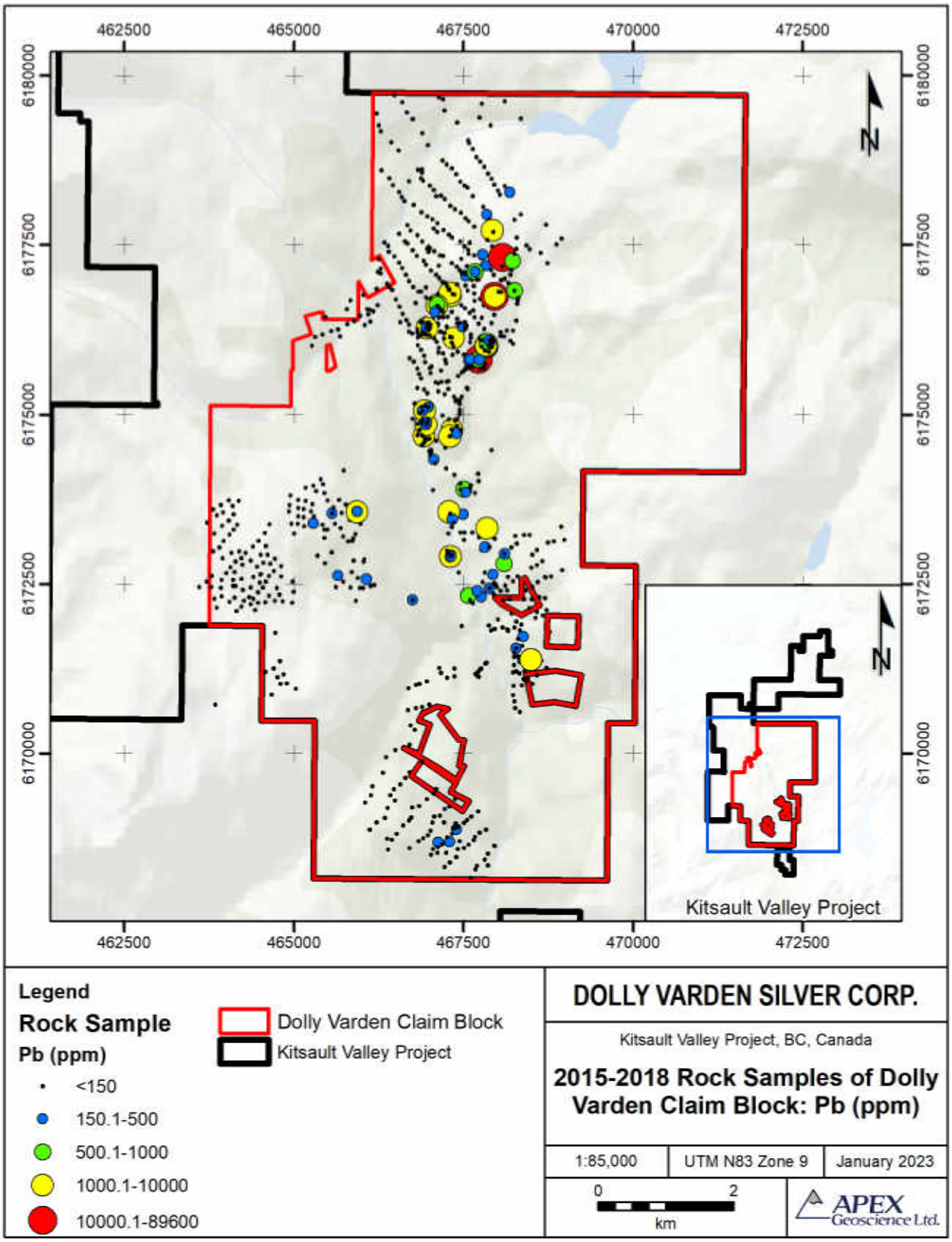


Figure 9.5. 2015-2018 Dolly Varden claim block rock geochemistry – Zn.

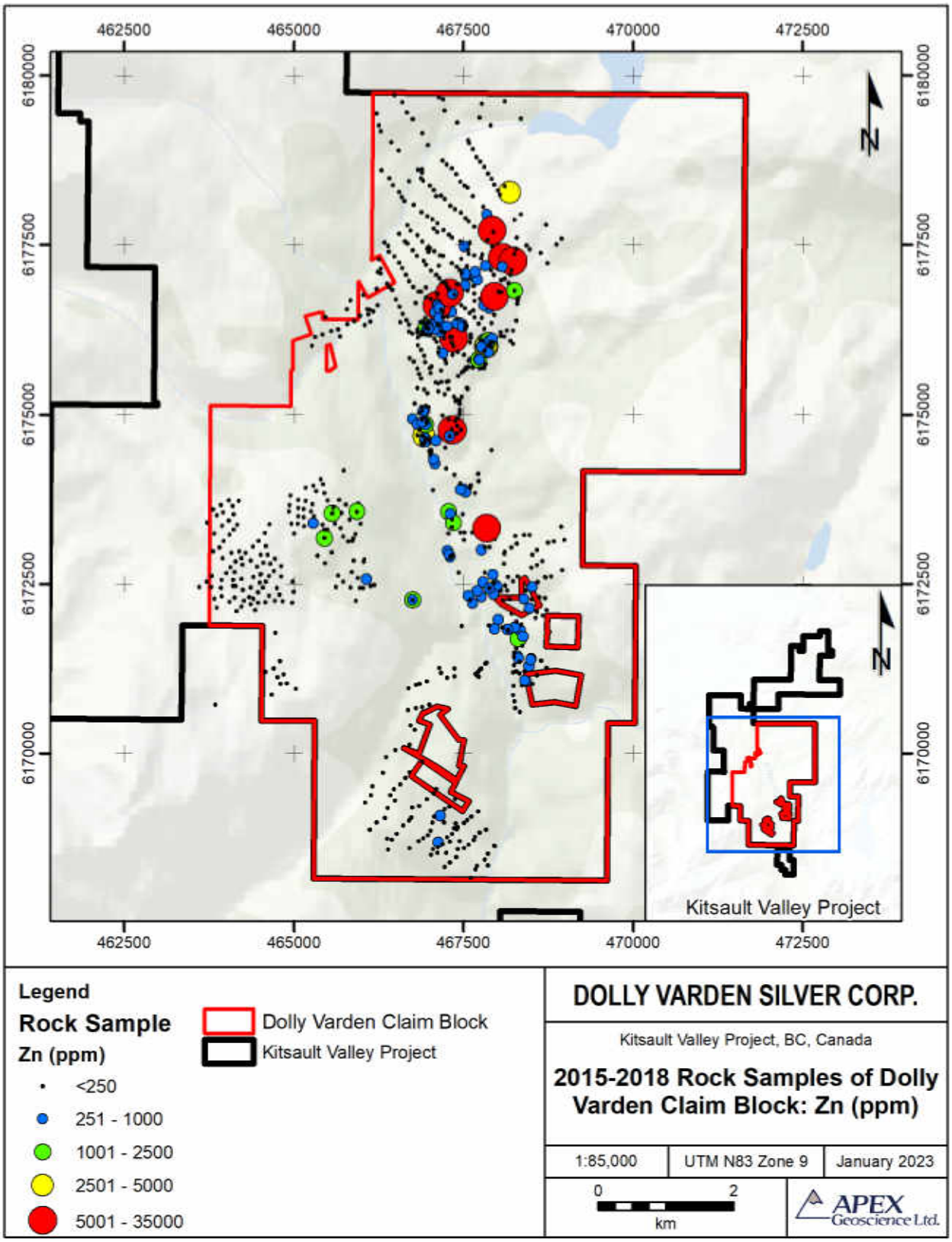


Figure 9.6. 2015-2018 Dolly Varden claim block rock geochemistry – Cu.

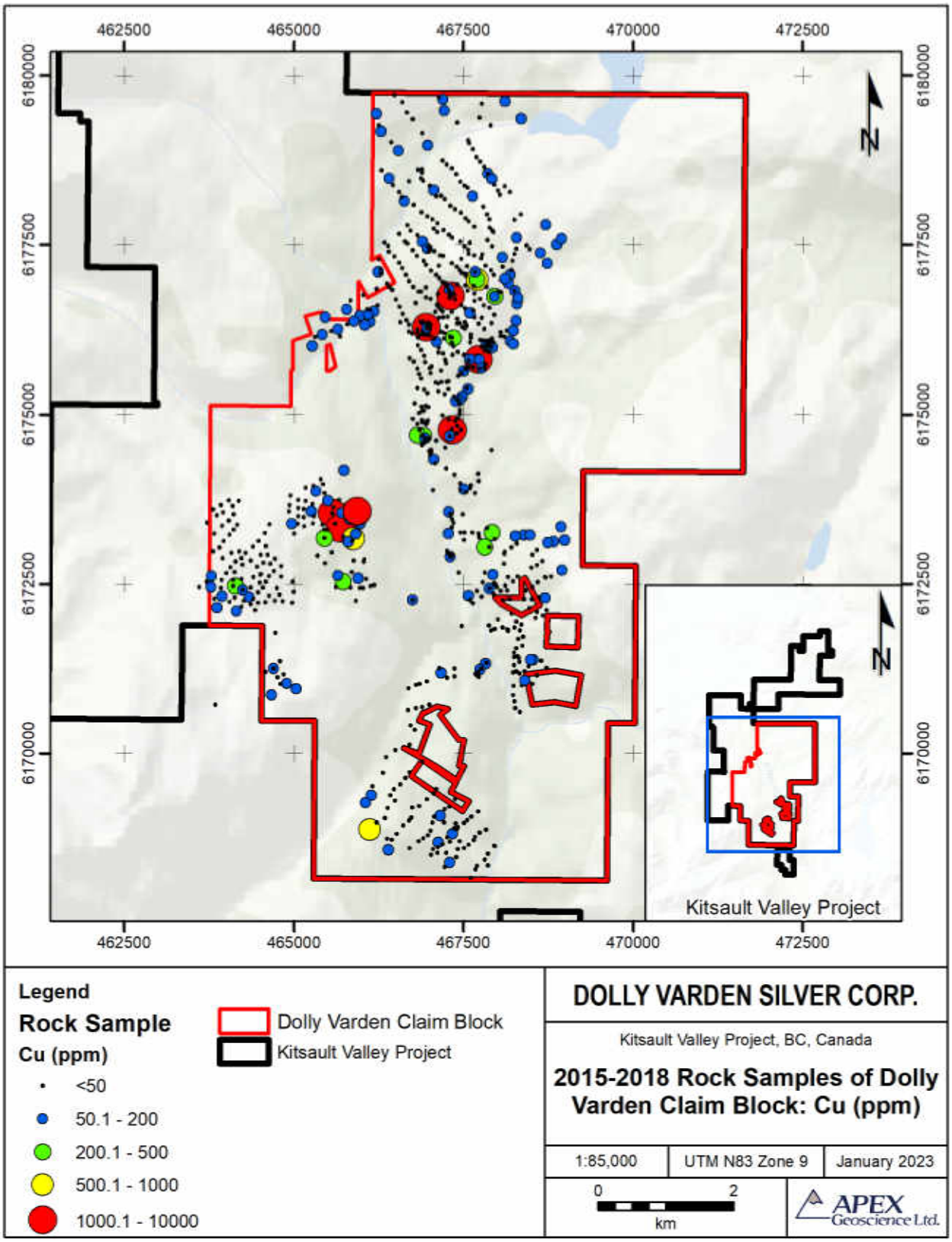
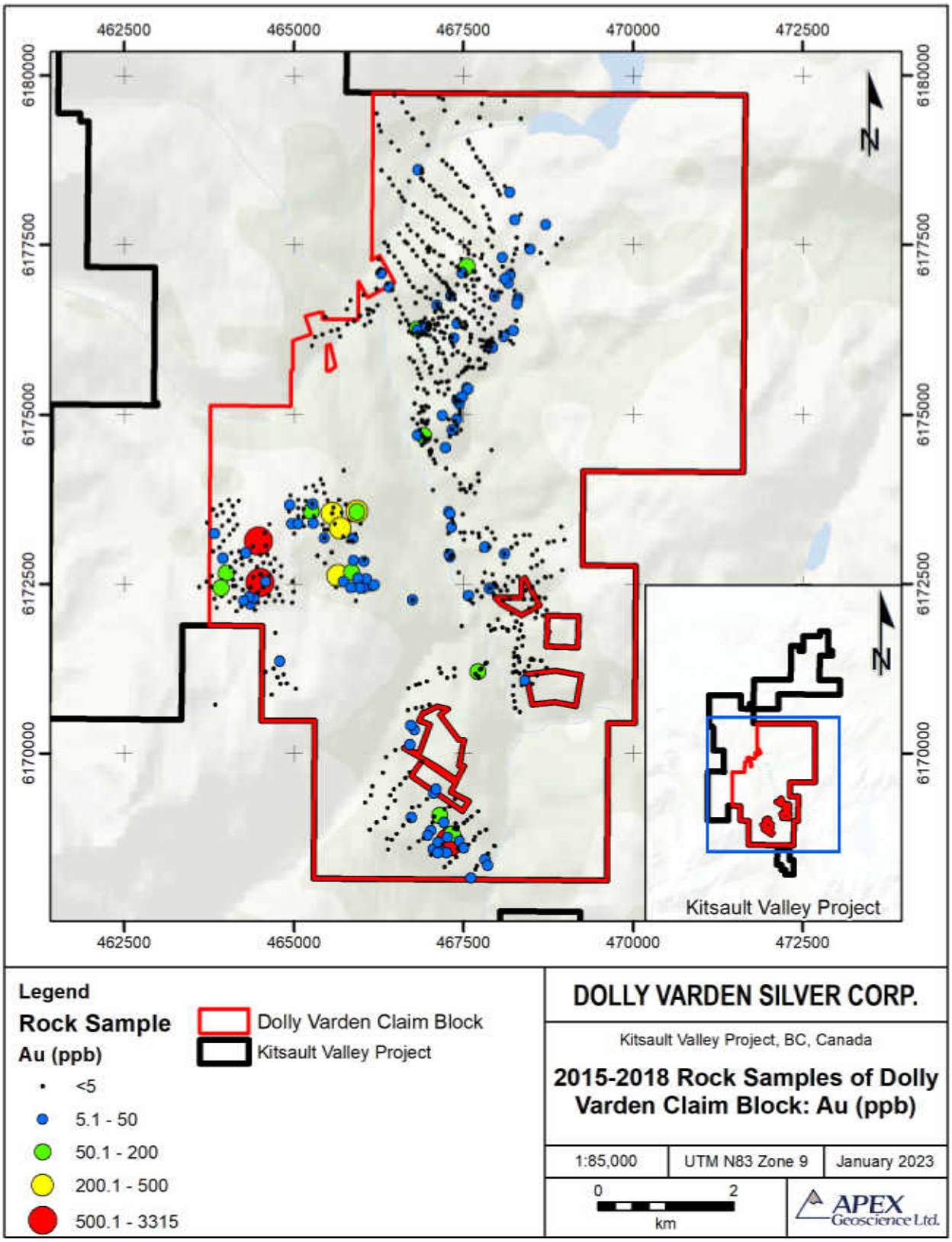


Figure 9.7. 2015-2018 Dolly Varden claim block rock geochemistry – Au.



The 2016 geological mapping and lithogeochemical sampling program at Ace-Galena Trout focused on the area east of the Trout helipad over ground from the McKay trench area northward and eastward up-slope. The mapping program identified several fault sets of varying orientations throughout the area. Mineralization observed in the mapping program included wispy to patchy Ag-rich sulphosalt mineralization near the historic Ace-Galena campsite. Mineralization highlights from the sampling include 81.4 ppm Ag with elevated Cu, Sb and >10,000 ppm Pb. Additional mineralization was observed in the Bluebird breccia vein and in epiclastic dacite tuff from the lower Trout Horizon.

The 2015 and 2016 geological mapping and geochemical sampling provided information on the stratigraphy and the structure of Ace-Galena Trout. The general stratigraphy of the Trout Horizon is summarized in point form as follows:

- Predominately composed of interbedded argillaceous silt- to sand, diamictite, limestone, tuffaceous sandstone and epiclastic felsic tuff.
- Dips 35 to 55° to the northwest, strikes 180 to 210° north-northeast with a total strike extent of approximately 6 km.
- Upper portion of the Trout Horizon is an intercalated mixture of felsic tuffaceous sandstone and grey diamictite.
- Below the upper portion are interbeds of muddy silt- to sandstone, variable muddy diamictite, limestone and felsic tuffaceous sandstone - generally strongly calcareous and variably sulphidic.
- Lower portion of the Trout Horizon is weakly bedded medium to coarse grained tuffaceous sandstone and epiclastic pebbly dacitic tuff.
- Tertiary aged feldspar-hornblende-phyric mafic dykes cut through the Trout Horizon.
- The Bluebird Fault displaces Trout Horizon rocks at Bluebird Creek. Wide zones of quartz veining and quartz-rich breccia are observed within and adjacent to the fault. Exhalative mineralization is observed within the quartz-rich breccia.
- Alteration includes silicification in the lower and upper portions, sericite-chlorite phyllosilicate alteration in tuffaceous rocks, and carbonate alteration throughout the horizon. Pyrite, marcasite and sphalerite occur as diffuse patches or veinlets throughout sedimentary and tuffaceous rocks.

9.2.1.2 Summit Ridge and Chance Creek

The geological mapping and lithogeochemical sampling work in 2015 focused on the southeastern portion of Summit Ridge, including the Chance prospect, Queen and Frog

showings, as well as the area covering the Hazelton-Stuhini contact. The 2016 mapping focused on the upper and north to west facing portion of Summit Ridge that adjoin the Ace-Galena area. The main lithologies identified in the mapping programs in the Summit Ridge area are as follows:

- Variable pebbly epiclastic andesite tuff with minor layers of ash and lapilli tuffs occurs predominately on the crest of Summit Ridge.
- Mafic lapilli tuff (similar to the basalts observed in the Trout Hanging Wall) occurs near the southwest end of Summit Ridge to the west of the Chance Prospect.
- An interbedded sequence of volcanic-rich conglomerate, fine to coarse volcanic sandstone, fine-grained epiclastic felsic ash tuff and minor lapilli tuff. This sequence is observed to the southeast, below the andesite tuff and marks the contact with the Stuhini Group.
- A sequence of dacite ash, lapilli ash tuff and minor rhyodacite extends through the Chance prospect area and occurs up-slope from the Hazelton-Stuhini contact.

The 2016 mapping and sampling exploration program identified two important features upslope and to the east of the McKay trench area: 1) a west-northwest trending fault, and 2) an associated quartz sulphide bearing breccia vein. Samples from the vein reported assay highlights of 38.3 ppm Ag, >10,000 ppm Pb, 6720 ppm Zn, 2115.9 ppm As and elevated Cu and Sb values. The fault appeared to “cut-off” the breccia vein approximately 35 m down the creek drainage. The lithologies of the creek drainage include dark argillaceous sandstone, light tuffaceous sandstone and epiclastic dacite tuff. The composition and bedding of the lithologies appears to be consistent with the bedding in the Trout Horizon, extending the Trout Horizon approximately 270 m further east from the McKay Trenches.

In addition, quartz-carbonate veining in the Sault Horizon was observed along a northwest trending fault in an old trench on Summit Ridge. Vein sample results include 3.8 ppm Ag, 5.1 ppb Au, 20.6 ppm Cu, 395.3 ppm Pb, 2926 ppm Zn and 175.8 ppm As from sample CS371.

Mapping at Chance Creek identified tuffaceous and carbonaceous sandstone lithologies, similar to rocks mapped on the northwest of Summit Ridge and to rocks observed within the Trout Horizon.

9.2.1.3 Trout Horizon Hanging Wall and Northeast Sediment-Volcanic Contact

The geological mapping and lithogeochemical sampling work in 2016 at the Trout Horizon Hanging Wall (TZHW) and northeast sediment-volcanic contact was reconnaissance in nature as limited previous exploration had been conducted within this

area of the claim block. Dominant lithologies and structural characteristics identified in the 2016 geological mapping and sampling program at the Trout Horizon Hanging Wall and northeast sediment-volcanic contact include:

- Dacitic rocks composed of fine- to medium-grained ash-rich tuff and sandy epiclastic equivalents located along the Bluebird-Trout extension. These rocks are similar in texture to dacitic tuffs and epiclastic rocks observed in the footwall of the Sault Horizon.

- Hematite and chlorite altered andesite and basaltic andesite tuffs located upslope of the lineament. These rocks are similar in texture to the andesitic epiclastic tuffs of Summit Ridge, although more mafic.

- Basaltic ash, lapilli and epiclastic tuffs outcropping in Clearwater Creek. Some outcrops are coarse grained with visible feldspar, hornblende and biotite phenocrysts. Weak chlorite-carbonate-hematite alteration is common.

- Banding in tuffaceous rocks is variable, although overall it tends to be shallow (between 0 to 35°). Tuffaceous mafic rocks observed adjacent to Clearwater Creek tend to dip moderately to steeply.

- Recessive lineaments; striking generally east-northeast, north-northeast and north-northwest in the TZHW.

- Structurally controlled sericite alteration observed along a north-northeast striking west dipping fault and a sub-vertical north-northwest trending fracture.

Assay highlights from the 2016 lithogeochemical sampling program at the TZHW and northeast sediment-volcanic contact are listed below in Table 9.1.

Table 9.1. Assay highlights from the 2016 lithogeochemical sampling program at the Trout Horizon Hanging Wall and northeast sediment-volcanic contact.

Sample	Ag ppm	Au ppb	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Description
ASDVR072	2	14.4	18.7	5.6	63	0.3	13.7	Brecciated, basaltic-andesite lapilli-ash tuff
ASDVR073	0.1	0.3	32.3	8.0	108	39.1	10.8	Interbedded fine ash and graphitic argillite
ASDVR076	6.5	7.4	27.7	40.0	62	39.3	12.3	Altered tuffaceous volcaniclastic
CS369	0.4	6.0	21.5	4.2	76	13.0	4.4	Altered brecciated, silicified mafic volcanic

9.2.1.4 Medallion

The geological mapping and lithogeochemical sampling program conducted at Medallion in 2016 focused on known zones of alteration and structure within the area. Medallion is situated in Homestead Creek, along a northwest faulted corridor. Dominant

lithological and structural information identified in the 2016 geological mapping and sampling program at Medallion include:

- Predominately moderately to strongly foliated, altered, intermediate tuffaceous lithologies occur in Homestead Creek. Less altered, coarser grained epiclastic tuff layers and lenses of hornblende-biotite-feldspar intermediate intrusive rocks are observed at higher elevations to the north and the south of Homestead Creek.

- Foliation observed in the tuffaceous rocks dips shallowly to moderately to the northeast and strikes to the northwest.

- Alteration observed along the lower portion of the creek includes strong sericite, chlorite, pyrite and lesser carbonate alteration. Chlorite alteration appears to increase up-slope.

- Evidence of shearing is observed along Homestead Creek.

- Two main structural groups are observed at Medallion and include: 1) west-northwest striking faults; and 2) northwest to north-northwest striking faults. The west-northwest striking faults generally dip steeply northeast, although some faults display shallower dips and some trend to the east-west. The northwest to north-northwest striking faults tend to dip steeply to moderately steeply to the northeast or steeply to the southwest. Faults in the second structural group are observed to crosscut the west-northwest striking faults.

Regarding mineralization at Medallion, an anomalous zone of silver and gold was identified in quartz-carbonate stringer veins located approximately 25 m north of an old adit at the Medallion prospect. Assay highlights include 0.7 ppm Ag, 34 ppb Au, 64.5 ppm Cu, 177.4 ppm Pb, 343 ppm Zn and 69 ppm As in sample BSDVR005. An outcrop containing crustiform-vuggy quartz veinlets was sampled down-slope from the Medallion prospect. Assay highlights from the outcrop include 1.3 ppm Ag, 3315 ppb Au, 8.7 ppm Cu, 204 ppm Pb, 49 ppm Zn and 22.2 ppm As in sample BSDVR004. Vein attitude measurements are generally west-northwest to northwest striking and dip steeply northeast to vertical.

9.2.2 Soil Sampling

In 2015, the Company undertook an extensive soil sampling program over the Wolf, Silver Horde, Chance and Ace-Galena Trout target areas. The majority of the 2015 soil samples were collected on a grid with 25 m sample spacing on northwest to southeast or east to west oriented lines spaced 100 m apart. A total of 1810 soil samples were collected over the Dolly Varden claim block in 2015.

Select results from the 2015 soil sampling program are as follows:

- The Ag-in-soil results highlight areas of elevated concentrations near the Wolf prospect and at Silver Horde. The highest Ag values range between 151 and 276 ppm Ag and were taken from the southern most soil lines near the Wolf prospect. A weak silver anomaly trends to the northeast from the Chance prospect and appears to run parallel to the historic Ace-Galena soil anomaly.

- The Pb-in-soil and Zn-in-soil results show similar patterns to Ag-in-soil, although the anomaly trending from the Chance prospect to the northeast is more pronounced.

- The areas sample near Silver Horde and Wolf have an anomalous signature for several elements, including Ag, Pb, Zn and Sb.

- The Ba-in-soil results show elevated values from Wolf to Silver Horde, with a strong anomaly extending northeast toward Ace-Galena Trout.

- Cu-in-soil is elevated along the eastern edge of the sample grid. This correlates with a lithological change and elevated values are shown in the soils above Middle Jurassic sedimentary rocks. The highest Cu values are observed at Silver Horde and Wolf prospects.

- Less distinct signatures were observed for Au. The highest Au values include four samples ranging from 193 to 236 ppb Au, with two samples taken near to the historic Copper Cliff mineral occurrence. The results for Au are generally scattered.

In 2016, an orientation line totalling ten soil samples was conducted near Ace-Galena and analyzed in the field using a portable XRF unit (X-ray fluorescence). The samples were collected over one line with 7 m to 14 m between samples. It is important to note that although the XRF analysis data is semi-quantitative, it does provide an excellent means of determining relative abundances (concentrations) of various key elements in the samples. The soil line shows weakly to moderately anomalous Cu and Zn values.

The 2015 and 2016 Dolly Varden claim block soil sample locations are shown in Figure 9.8. Soil geochemistry for Ag, Pb and Zn for soil samples collected during 2015 is shown on Figures 9.9 to 9.11. The pXRF data for Ag, Cu and Zn is shown in Figures 9.12 to 9.13.

Figure 9.8. 2015-2016 Dolly Varden claim block soil sample locations.

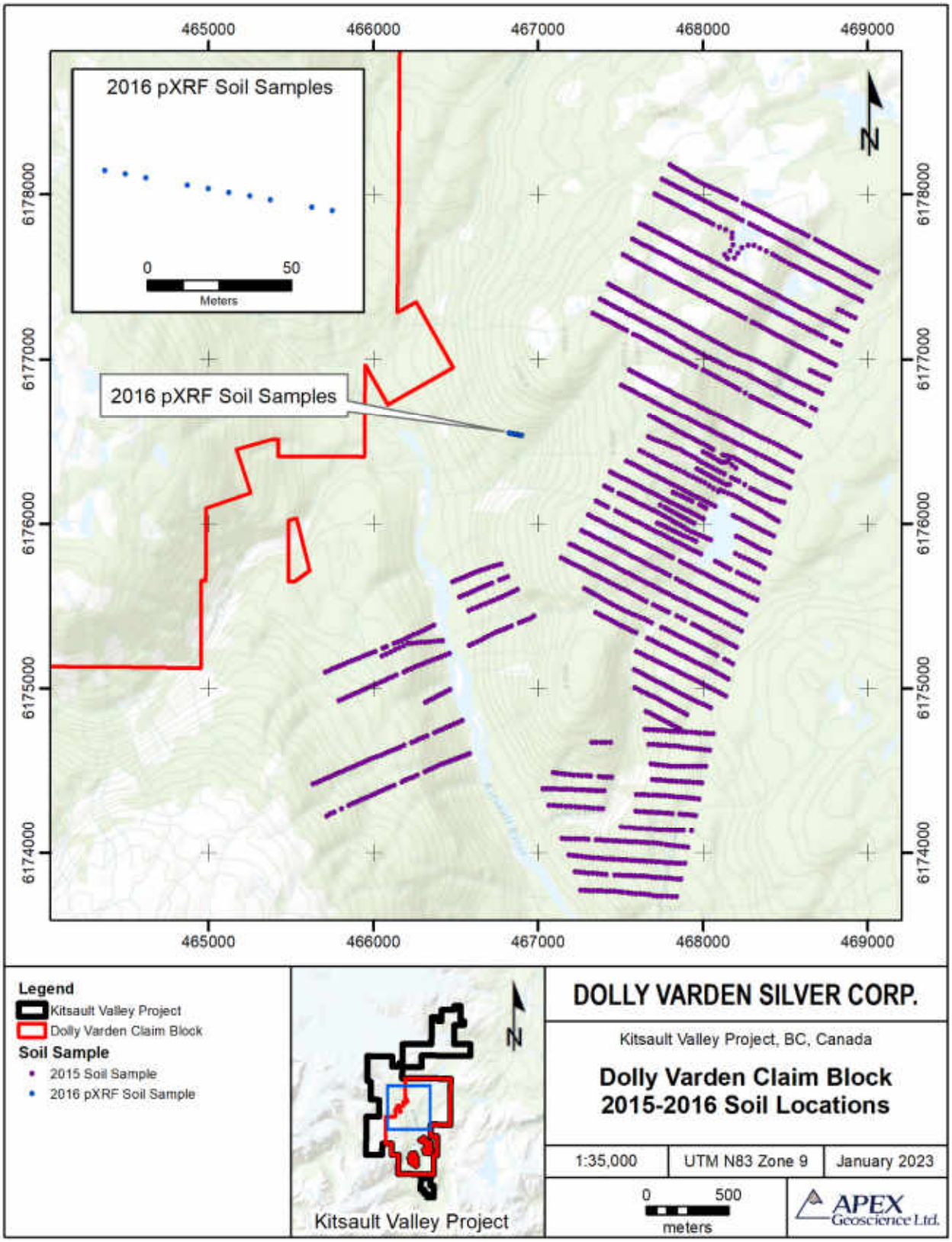


Figure 9.9. 2015 Dolly Varden claim block soil geochemistry – Ag results.

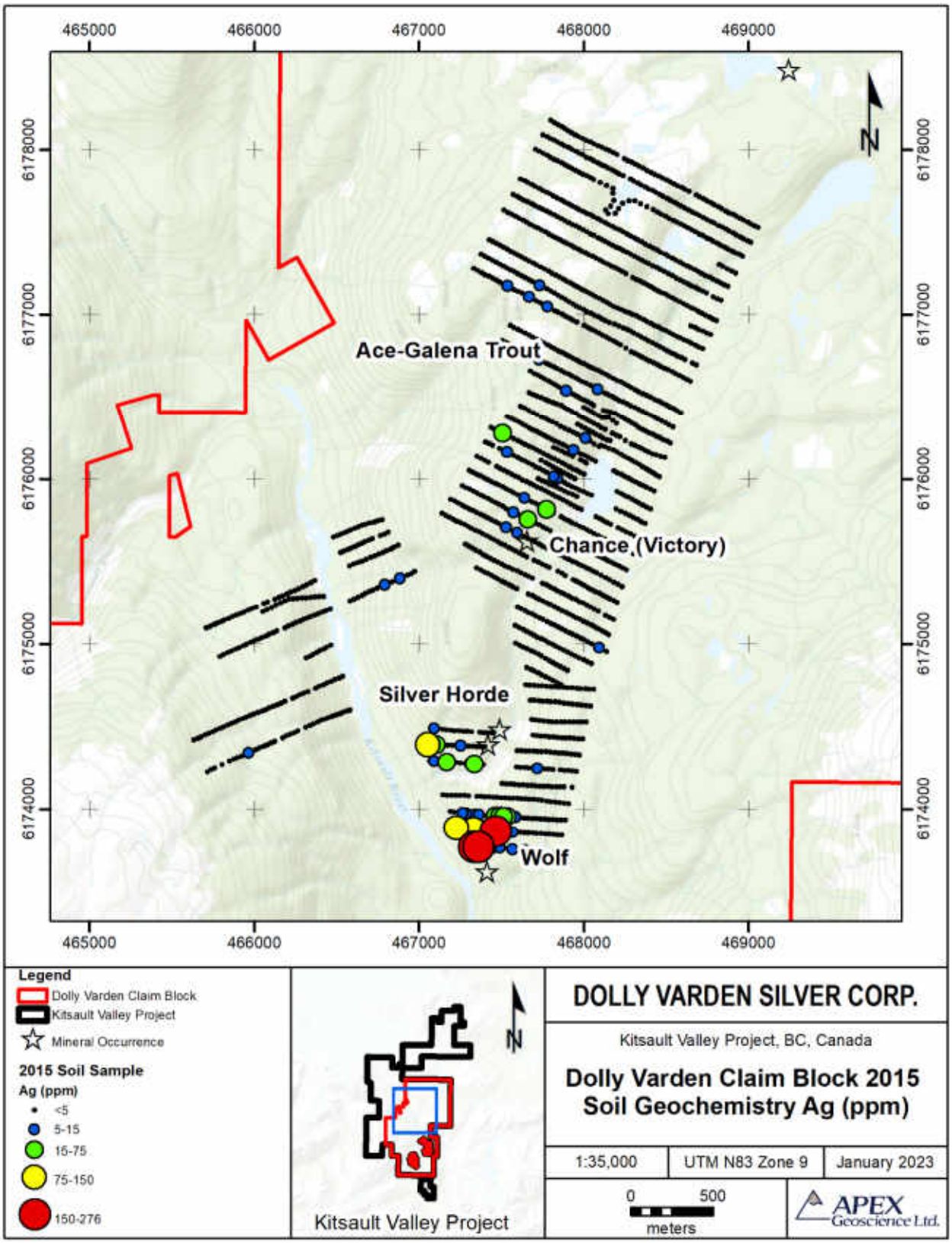


Figure 9.10. 2015 Dolly Varden claim block soil geochemistry – Pb results.

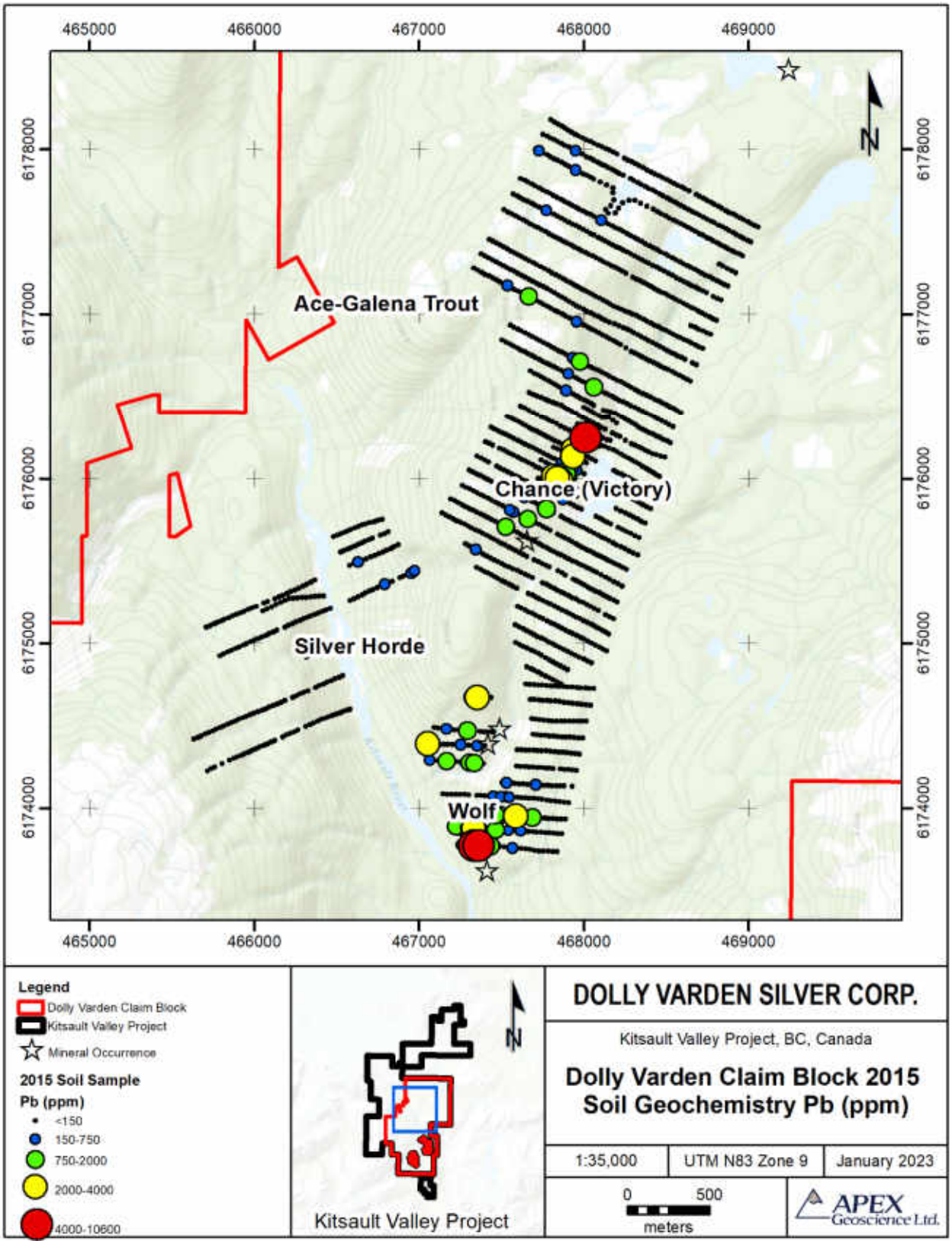


Figure 9.11. 2015 Dolly Varden claim block soil geochemistry – Zn results.

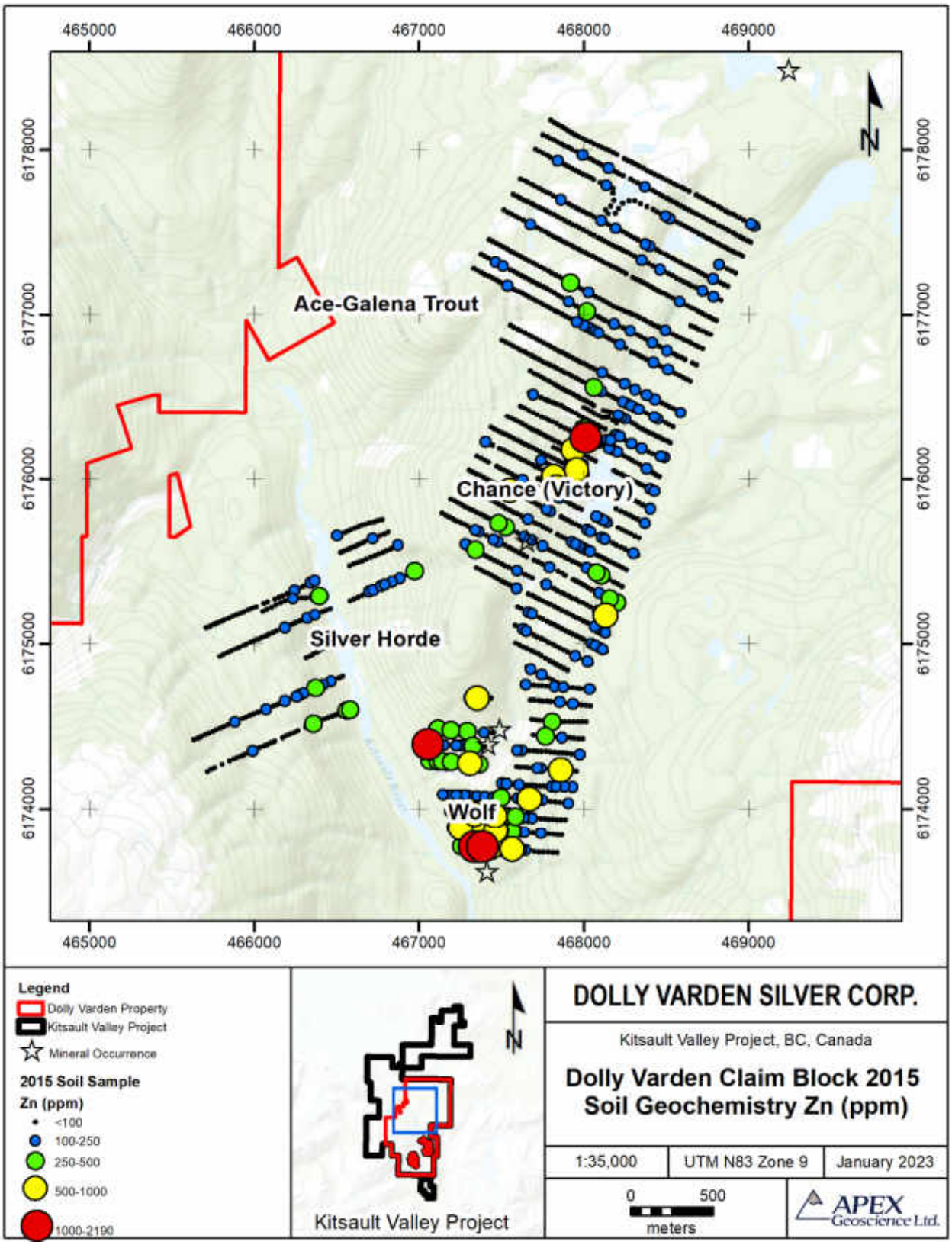


Figure 9.12. 2016 Dolly Varden claim block soil pXRF analysis – Ag results.

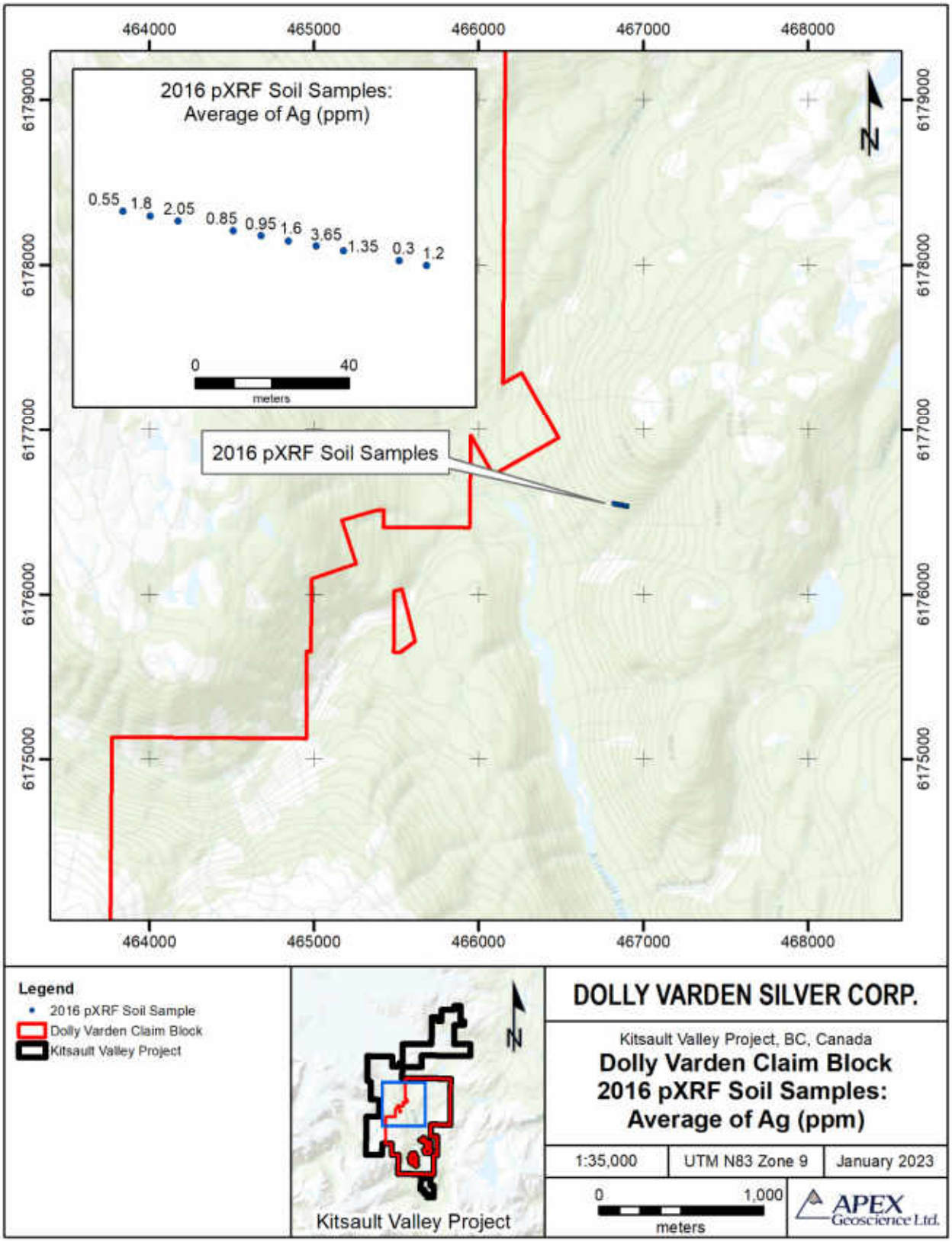
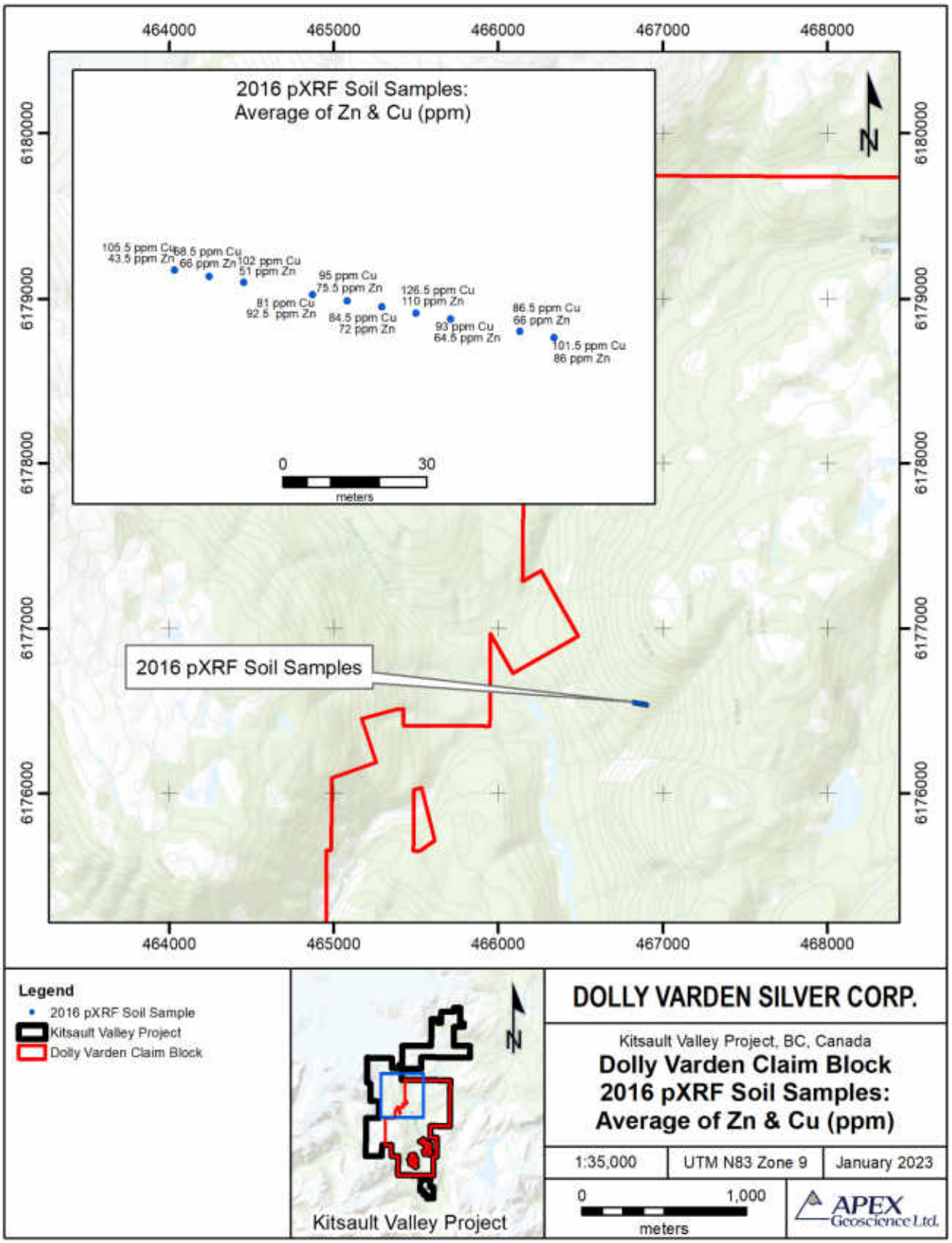


Figure 9.13. 2016 Dolly Varden claim block soil pXRF analysis – Zn and Cu results.



9.2.3 Geophysics

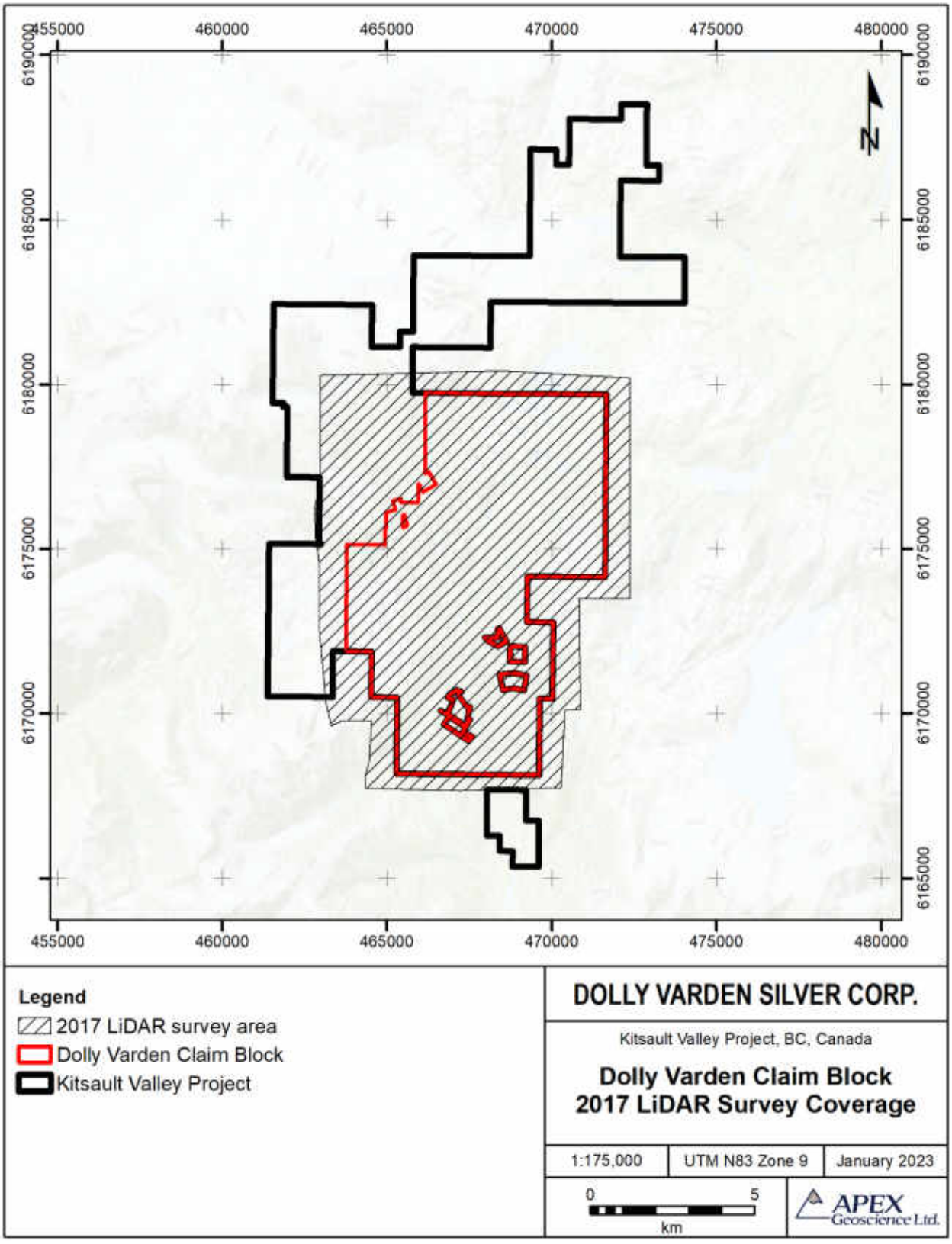
9.2.3.1 2017 Study on VTEM and ZTEM Surveys

In early 2017, Geotech Ltd., CW Geophysics Inc. and Dolly Varden completed a study on the Dolly Varden claim block using the results from helicopter VTEM (versatile time-domain electromagnetic) and ZTEM (z-axis tipper electromagnetic) surveys conducted in 2010 and 2011. The authors of the study concluded that the EM conductors of the principal VMS deposits seem unidentifiable using VTEM and suggested that this is due to their mineralogy; Pb-Zn rich and Cu poor. The ZTEM survey seems to clearly define the high resistivity regions around the known deposits (Campbell et al., 2017). Campbell et al. (2017) suggest that the discrepancy between ZTEM and VTEM results could be due to rugged topography on flight height affecting the sensitivity of the controlled-source system relative to natural filed plane-wave sourced system.

9.2.3.2 2017 LiDAR Survey

A LiDAR (Light Detection and Radar) airborne geophysical survey was conducted over the entire Dolly Varden claim block on August 7, 2017. The survey was completed by McElhanney Consulting Services Ltd. at a resolution of 25 cm. The survey utilized Optech Galaxy to acquire the LiDAR data and flew the survey using a Piper Navaho fixed wing aircraft. The Dolly Varden LiDAR survey area is shown in Figure 9.14.

Figure 9.14. Coverage of LiDAR survey completed in 2017 over the Dolly Varden claim block.



9.3 2019 to 2022 Exploration at Dolly Varden and Homestake Claim Blocks

The Company continued exploration at the Dolly Varden claim block from 2019 to 2022, as well as commencing exploration work on the Homestake claim block in 2022. This exploration work consisted of rock sampling, geological mapping, whole rock geochemical sampling, an Induced Polarization ground geophysical survey, and a LiDAR airborne survey.

9.3.1 Dolly Varden Claim Block

From 2019 to 2022, the Company continued exploration work at the Dolly Varden claim block, which included rock sampling in 2019, 2020, and 2022, whole rock geochemistry sampling in 2019, 2020, and 2022, geological mapping in 2022, and an Induced Polarization ground geophysical survey in 2022.

9.3.1.1 2019 – 2022 Rock Sampling and Geological Mapping

Rock sampling was completed by the Company in 2019, 2020, and 2022, as well as collecting geological information at geostations. No rock sampling was done in 2021. Locations and assay results of the rock sampling programs are shown in Figures 9.15-9.20. Locations of geostations are shown in Figure 9.21.

Rock sampling on the area in 2019 was completed at the Goldbelt and Fisher / Silver Tip areas, and a total of three rock samples were collected (Figure 9.15). Assay highlights include a grab sample (CSDVR105), collected from the Goldbelt area, that returned 2.66 ppm Ag and 0.03 ppm Au from a mineralized poorly sorted volcanoclastic pebble conglomerate with up to 15 % disseminated pyrite in the matrix.

In 2020, 17 rock samples were collected the Red Point, Goldbelt / Starlight-Racehorse, and Surprise exploration areas (Figure 9.15). At the Red Point exploration target, sampling encountered crystalline tuffs with sericite±chlorite±silica alteration. Pyrite occurs as massive veins, within banded quartz veins, and disseminated within the tuff. An assay highlight includes sample B0014209, that returned 1.25 ppm Au, 3060 ppm Cu, and 19.2 ppm Ag from a 10 to 20 cm wide massive pyrite vein. A sericite±chlorite±silica altered tuff was also sampled at the Goldbelt / Starlight-Racehorse area, where a sample (B0014219) of highly altered gossanous tuff with abundant pods of pyrite returned 0.225 ppm Au, 6.8 ppm Cu, and 2.04 ppm Ag.

In 2022, a total of 29 rock samples were collected from the target areas of Kitsol, Red Point, Starlight, Surprise, V-Vein, and 44 Zone. Highlights from each area are summarized below:

- Kitsol: Sample JM009 returned 0.216 ppm Au, 8.2 ppm Cu, and 10.7 ppm Ag from a highly altered ash tuff with disseminated pyrite and manganese veinlets.
- Red Point: Sample JM019 returned 2.41 ppm Au, 370 ppm Cu, and 8.23 ppm Ag from a 60 cm wide vuggy silica vein with abundant pyrite and black sulphides.

- Red Point: Sample JM020 returned 5.82 ppm Au, 8.11% Cu, and 106 ppm Ag from a massive pyrite vein cutting through silicified host rock.
- Starlight: Sample BF008 returned 1.545 ppm Au, 2920 ppm Cu, and 78.6 ppm Ag from a pyrite-quartz-carbonate vein.
- Starlight: Sample BF011 returned 3.53 ppm Au, 3110 ppm Cu, and 45.4 pm Ag from a pyrite-quartz-carbonate stockwork vein sample collected from a historical trench
- Surprise: Sample JM014 returned 0.322 ppm Au, 9310 ppm Cu, and 219 ppm Ag from a pyrite-quartz-barite vein sampled from a historical adit.
- V-Vein: Sample JM008 returned 0.285 ppm Au, 266 ppm Cu, and 6280 ppm Ag from a banded quartz vein with disseminated pyrite, chalcopyrite, and galena, as well as halos of sulphosalt halos surrounding the veins.

In addition to the sampling program in 2022, information regarding geology was collected at geostations throughout the claim block. Geostations are data points for rock descriptions and structural measurements and do not include analytical data. In total, 96 geostations were completed in 2022. The 2022 Dolly Varden claim block geostation locations are shown in Figure 9.21.

Figure 9.15. Rock Sample locations at Dolly Varden claim block 2019 – 2022.

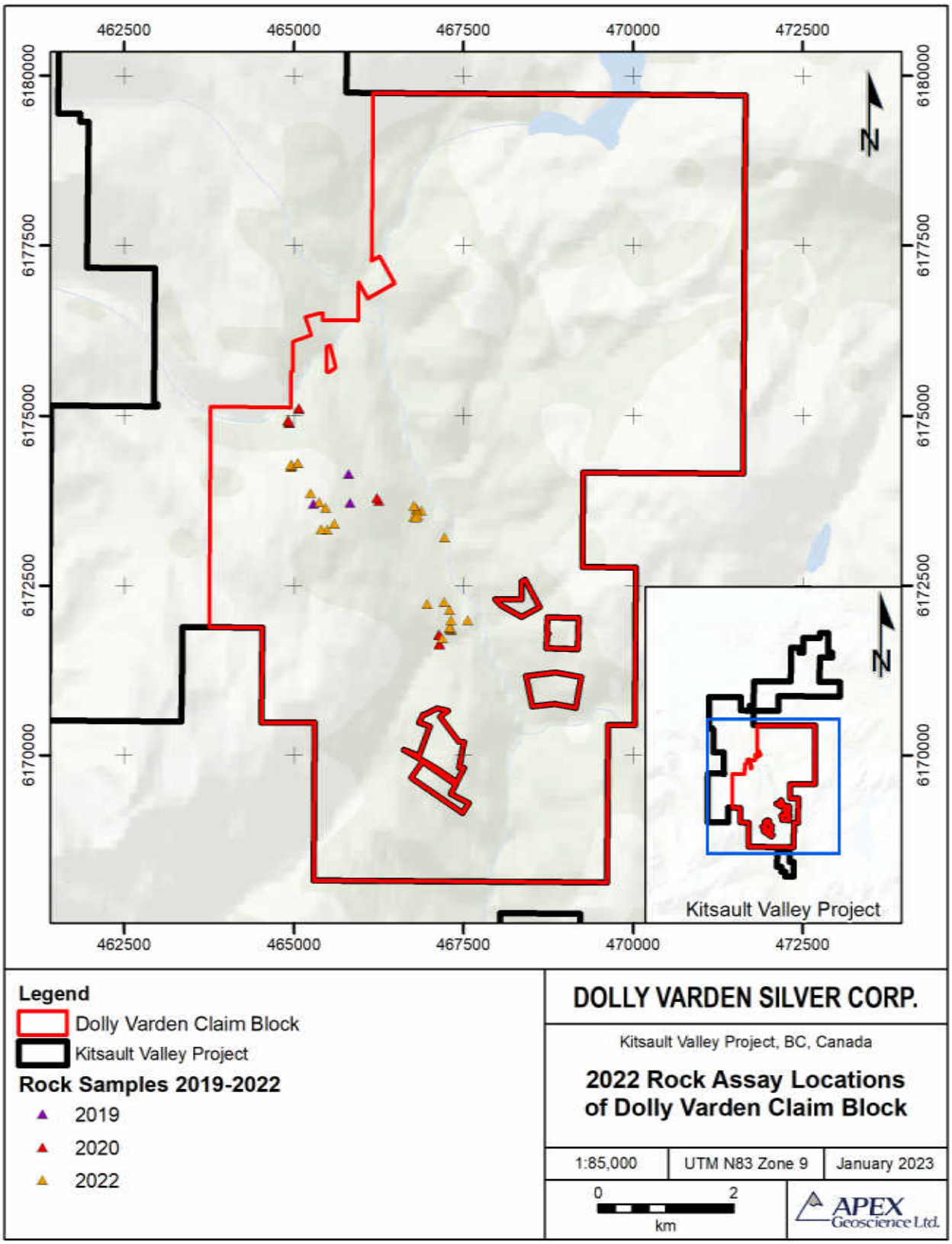


Figure 9.16 Rock sampling at Dolly Varden claim block 2019-2022, Ag Results.

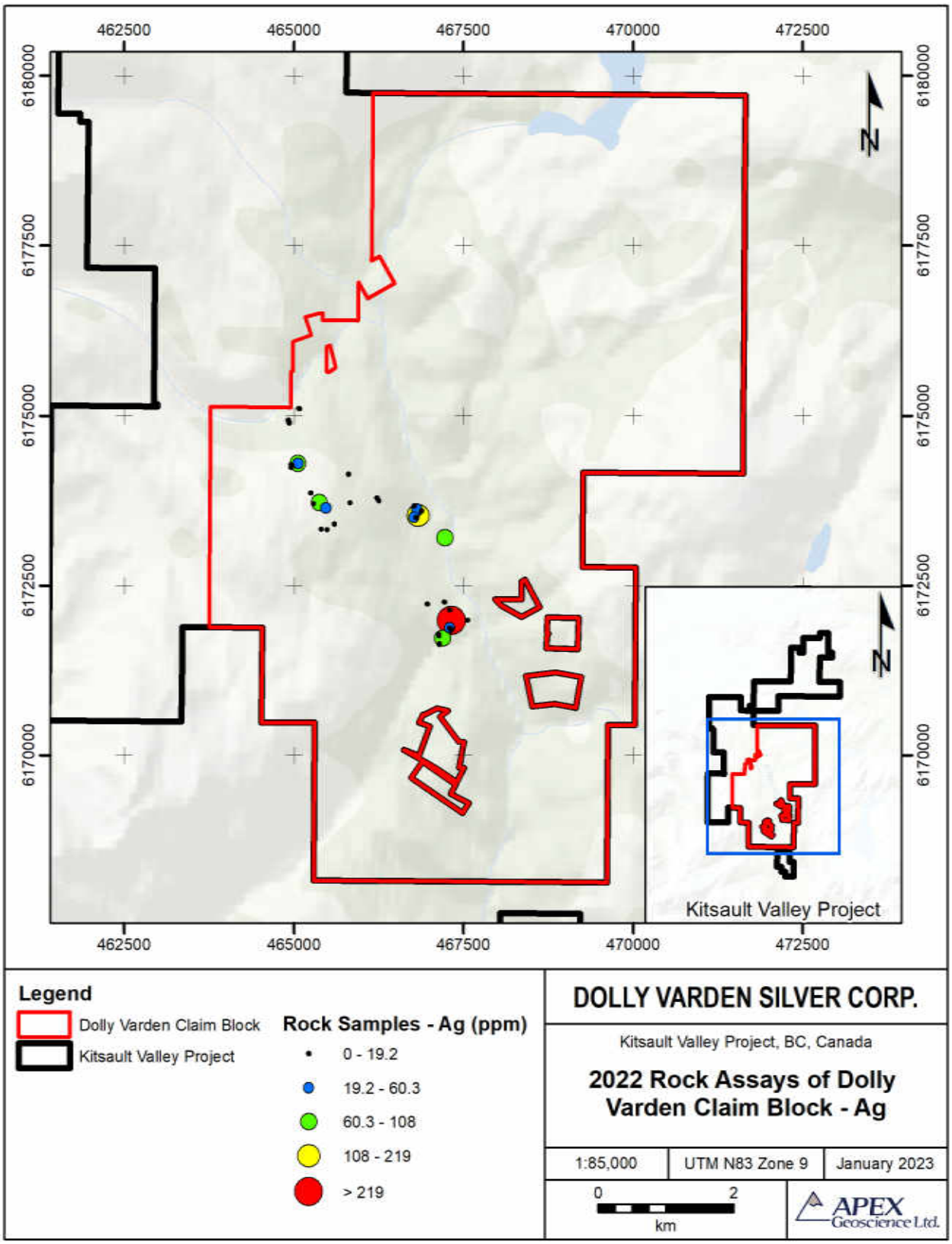


Figure 9.17 Rock sampling at Dolly Varden claim block 2019-2022, Pb Results.

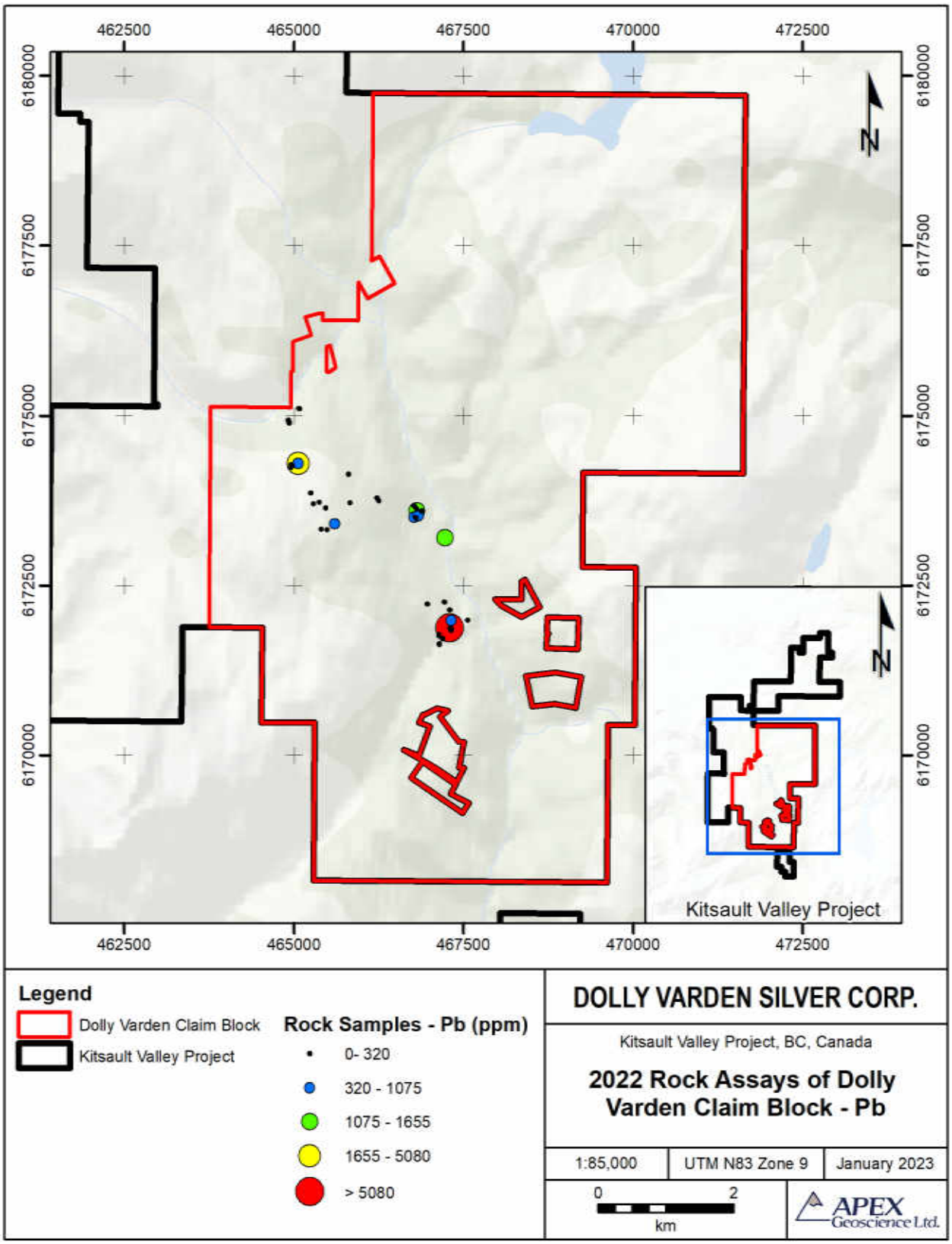


Figure 9.18 Rock sampling at Dolly Varden claim block 2019-2022, Zn Results.

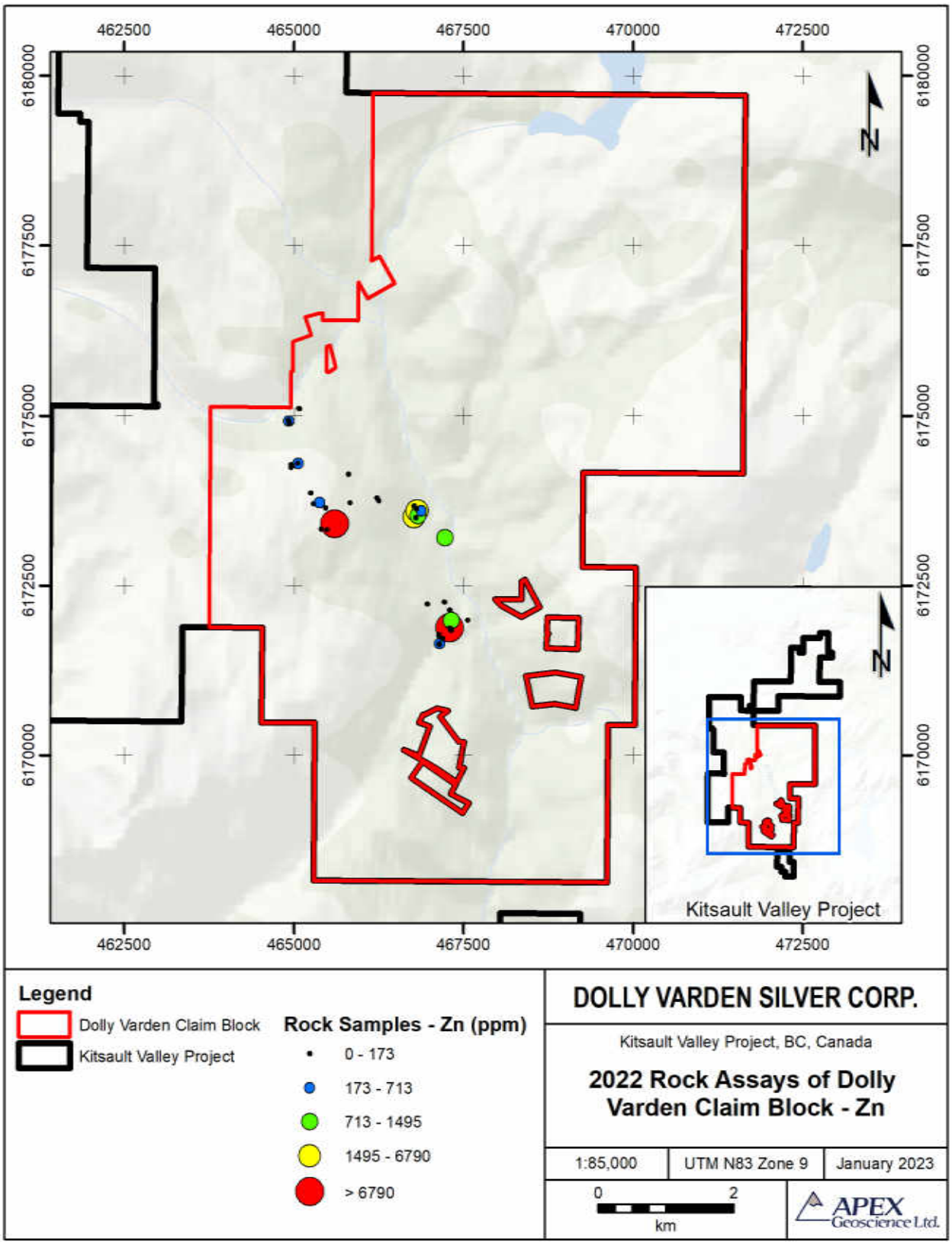


Figure 9.19 Rock sampling at Dolly Varden claim block 2019-2022, Cu Results.

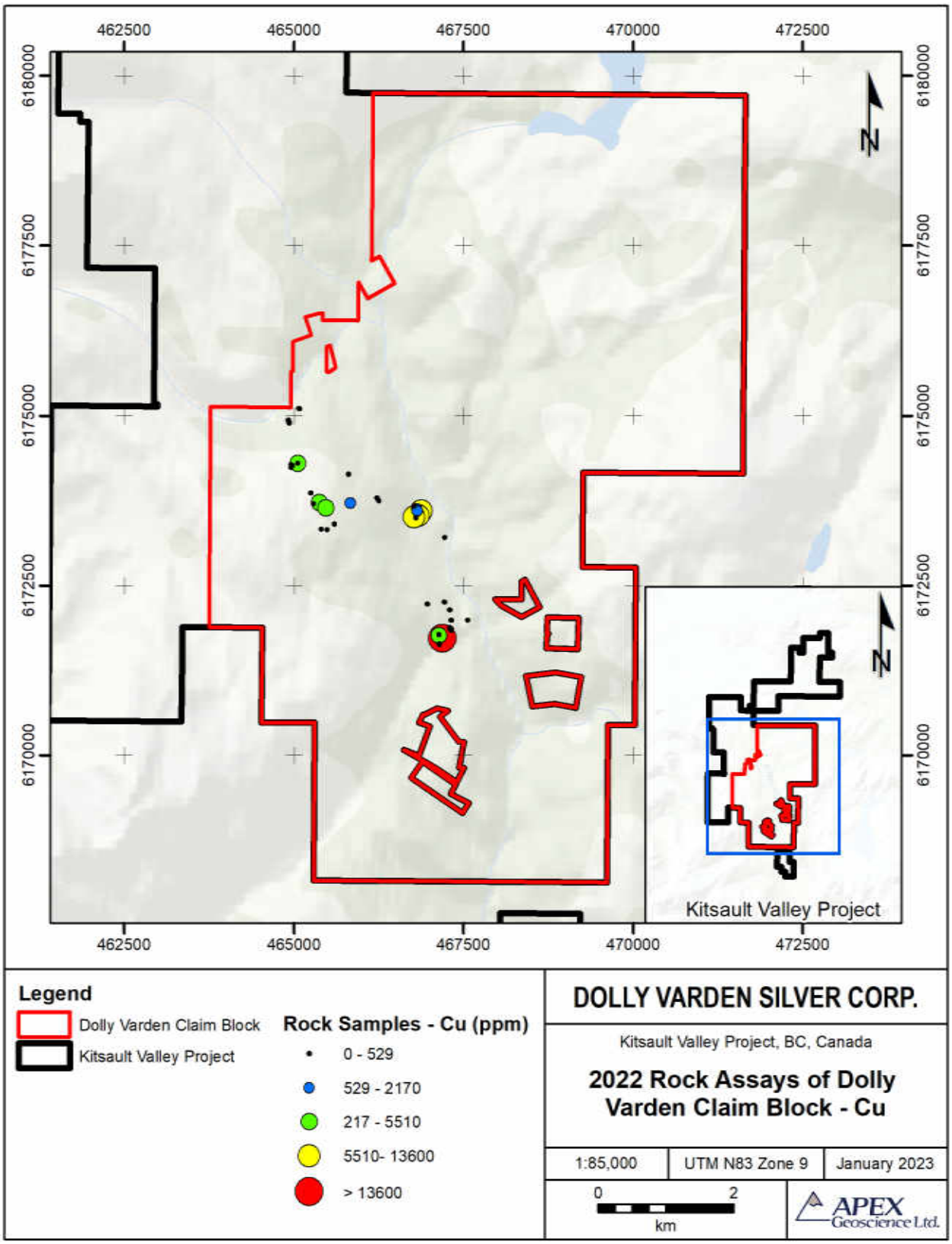


Figure 9.20 Rock sampling at Dolly Varden claim block 2019-2022, Au Results.

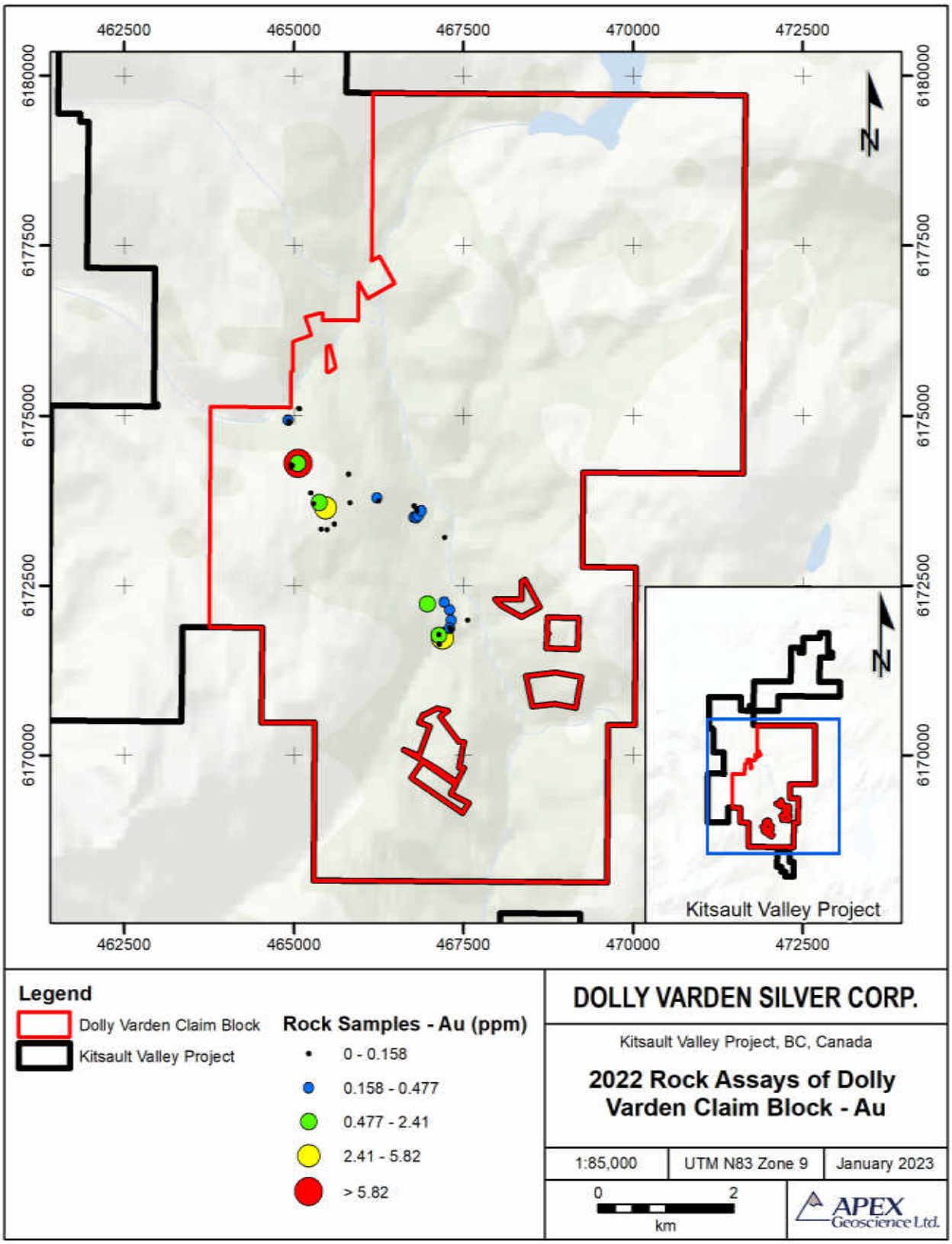
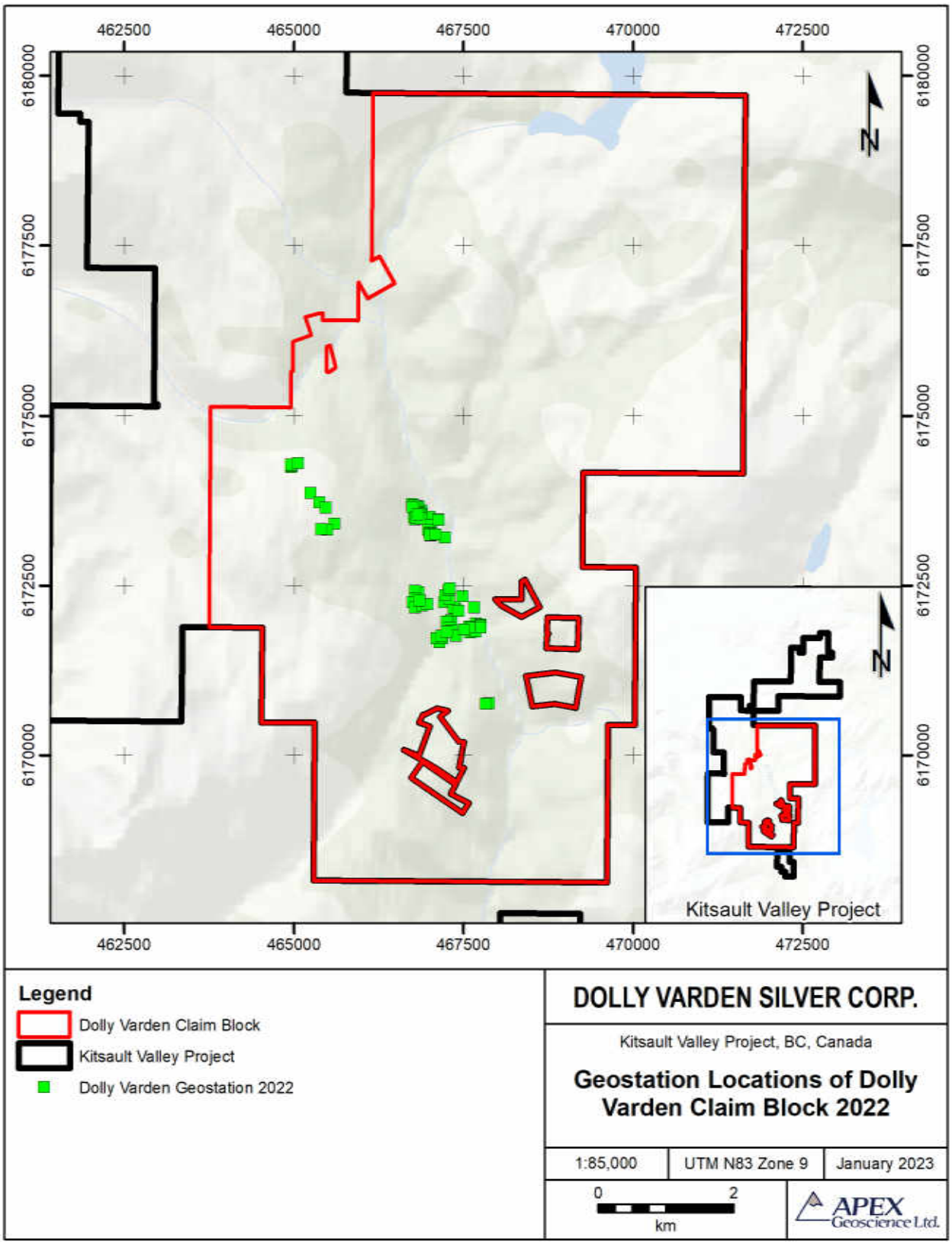


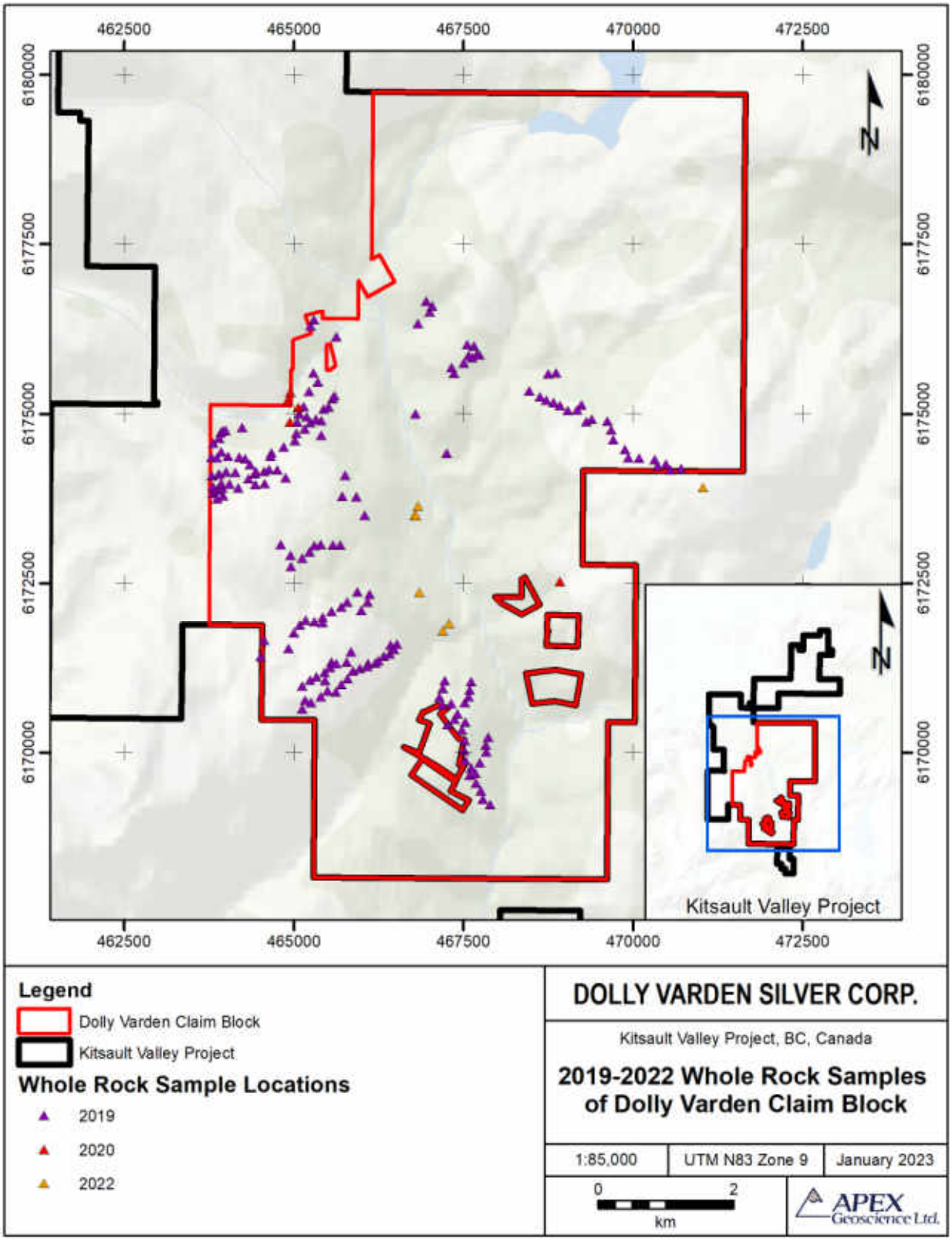
Figure 9.21. Geostation locations at Dolly Varden claim block 2022.



9.3.1.2 2019 – 2022 Whole Rock Geochemistry

The Company has completed lithogeochemical surveys over the Dolly Varden claim block from 2019 to 2022; rock samples were collected for whole rock geochemical analysis in order to characterize the lithologies and alteration types. A total of 184 rock samples in 2019 and five rock samples in 2020 were collected and analyzed. No Samples were collected in 2021. A total of seven rock samples were collected in 2022 for whole rock geochemical analysis. Results from the 2019 and 2020 sampling programs are being integrated with 2022 results, and interpretations of the whole rock geochemistry results are pending. The locations of the whole rock geochemistry samples are shown in Figure 9.22.

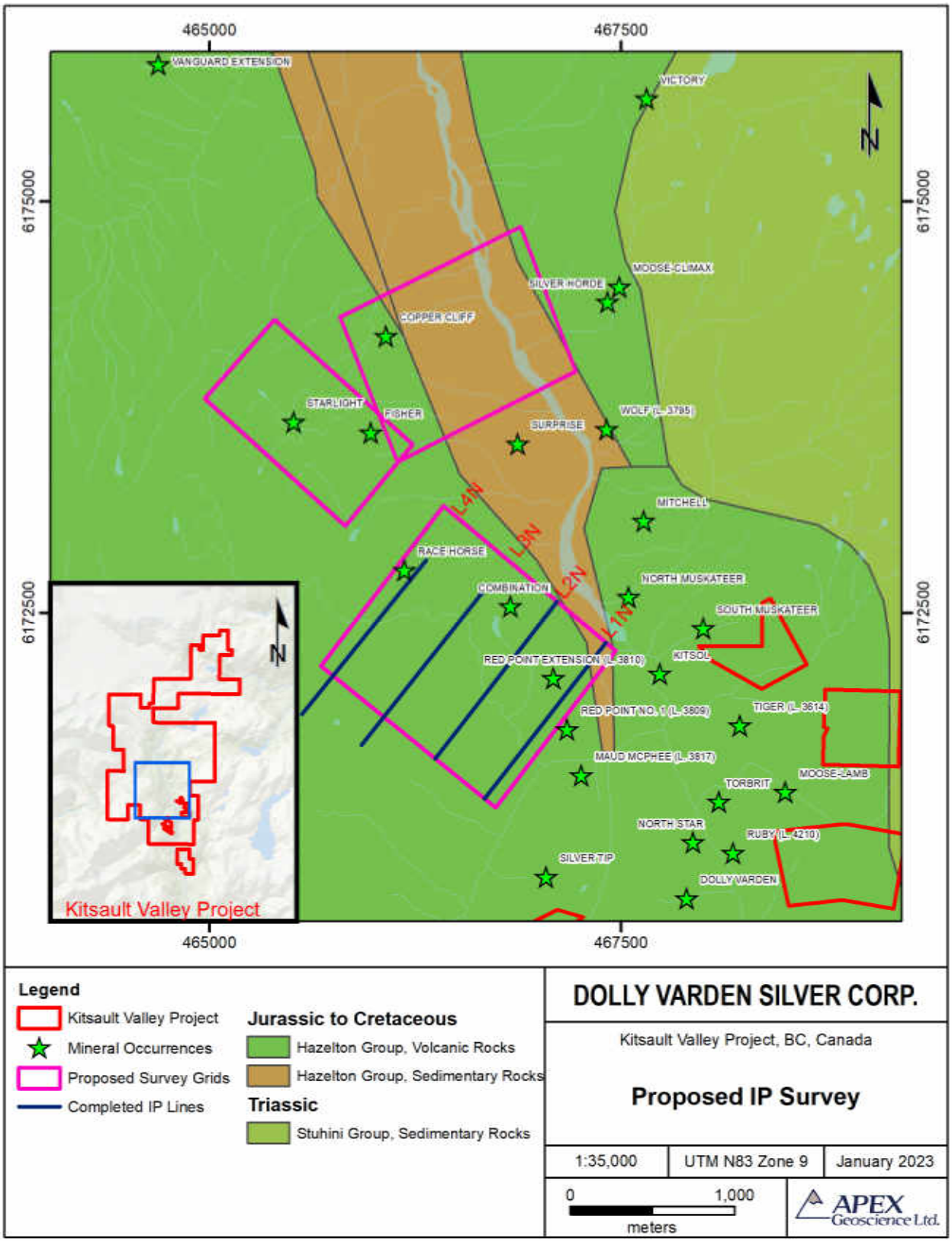
Figure 9.22. Whole rock geochemistry sampling locations at Dolly Varden claim block 2019 - 2022.



9.3.1.3 2022 Induced Polarization Ground Geophysical Survey

During the 2022 field season, an Induced Polarization (IP) ground geophysical survey was completed over the Red Point area. The IP survey was carried out by Simcoe Geoscience Ltd. Thirteen IP lines were proposed, and four IP lines were completed during 2022. The four northeast-southwest oriented lines were spaced 400 m apart, for a total of 4.6 line kilometres. and the interpretations of the IP survey results are pending. The Dipole-Pole-Dipole array had parameters of “a” spacing of 50 m at “n” separations of 1 – 40. The locations of the four completed IP survey lines, as well as the proposed survey grids, are presented in Figure 9.23.

Figure 9.23. Induced polarization ground geophysical survey at Red Point Area 2022.



9.3.2 Homestake Claim Block

9.3.2.1 2022 Rock Sampling and Geological Mapping

During the 2022 field program, 119 rock samples were collected for geochemical assay. The sampling program targeted several exploration areas at main Homestake claim block, as well as in the far south Silverking area. Locations and results of the rock sampling program are presented in Figures 9.24 – 9.29.

Rock sampling at Homestake claim block targeted historical workings and outcrops. Assay highlights of the sampling program will be addressed by area. At the Vanguard Gold area, samples were collected from historical trenches, adits, and waste piles, as well as at outcrops. Assay highlights from Vanguard Gold include:

- 141.5 ppm Au, 1.73% Cu, and 94.2 ppm Ag returned from a strongly oxidized and silicified rock sample with quartz-calcite veining and disseminated pyrite and galena (sample JM121), collected from a historical trench at the main Vanguard Gold workings.
- 69 ppm Au, 1.29% Cu, and 42.1 ppm Ag returned from a sample (JM093) collected from a historical trench, rocks contain disseminated pyrite and chalcopyrite with possible galena, and are silicified.

Rock sampling at the Vanguard Copper area encountered boulders on a historical drill pad with abundant chalcopyrite in banded quartz veins, where sample JM085 returned 2.35 ppm Au, 8.81% Cu, and 221 ppm Ag.

At the Homestake Camp area, a sample (BF017) collected from a 3 m wide intermediate dyke returned 6.75 ppm Au, 1.98% Cu, and 49.3 ppm Ag. To the south, samples were also collected from historical trenches and workings at the Old Homestake Camp area, and assay highlights include:

- 3.96 ppm Au, 2050 ppm Cu, and 32.3 ppm Ag (Sample JM104) returned from a massive silica vein containing disseminated pyrite, chlorite, and graphitic argillite.
- 3.08 ppm Au, 974 ppm Cu, and 21.9 ppm Ag (Sample JM105) returned from a massive silica containing disseminated pyrite, chlorite, and graphitic argillite.
- 1.76 ppm Au, 7830 ppm Cu, and 13.5 ppm Au (Sample JM112) returned from a silica vein containing mm scale veinlets of pyrite and black sulphides.

Sampling at the historical workings in the Rambler area encountered extensive silica veining exposed in historical workings and trenches. The silica veins contain abundant massive to disseminated pyrite, with minor amounts of galena. Assay highlights include:

- Sample JM118 returned 5.66 ppm Au, 2180 ppm Cu, 137 ppm Ag, 2120 ppm Pb, and 2010 ppm Zn from a 10 cm wide silica vein with abundant massive pyrite and minor malachite.

- Sample JM117 returned 3.11 ppm Au, 2.14% Cu, 150 pm Ag, 496 ppm Pb, and 993 ppm Zn from a 50 cm wide silica vein with bands of massive pyrite and disseminated pyrite, as well as minor galena.

In addition to the geochemical sampling program in 2022, information regarding geology was collected at geostations throughout the Homestake claim block. Geostations are data points for rock descriptions and structural measurements and do not include analytical data. In total, 502 geo-stations were completed in 2022. The 2022 Homestake claim block geostation locations are shown in Figure 9.30.

Figure 9.24. Rock sample locations at Homestake claim block 2022.

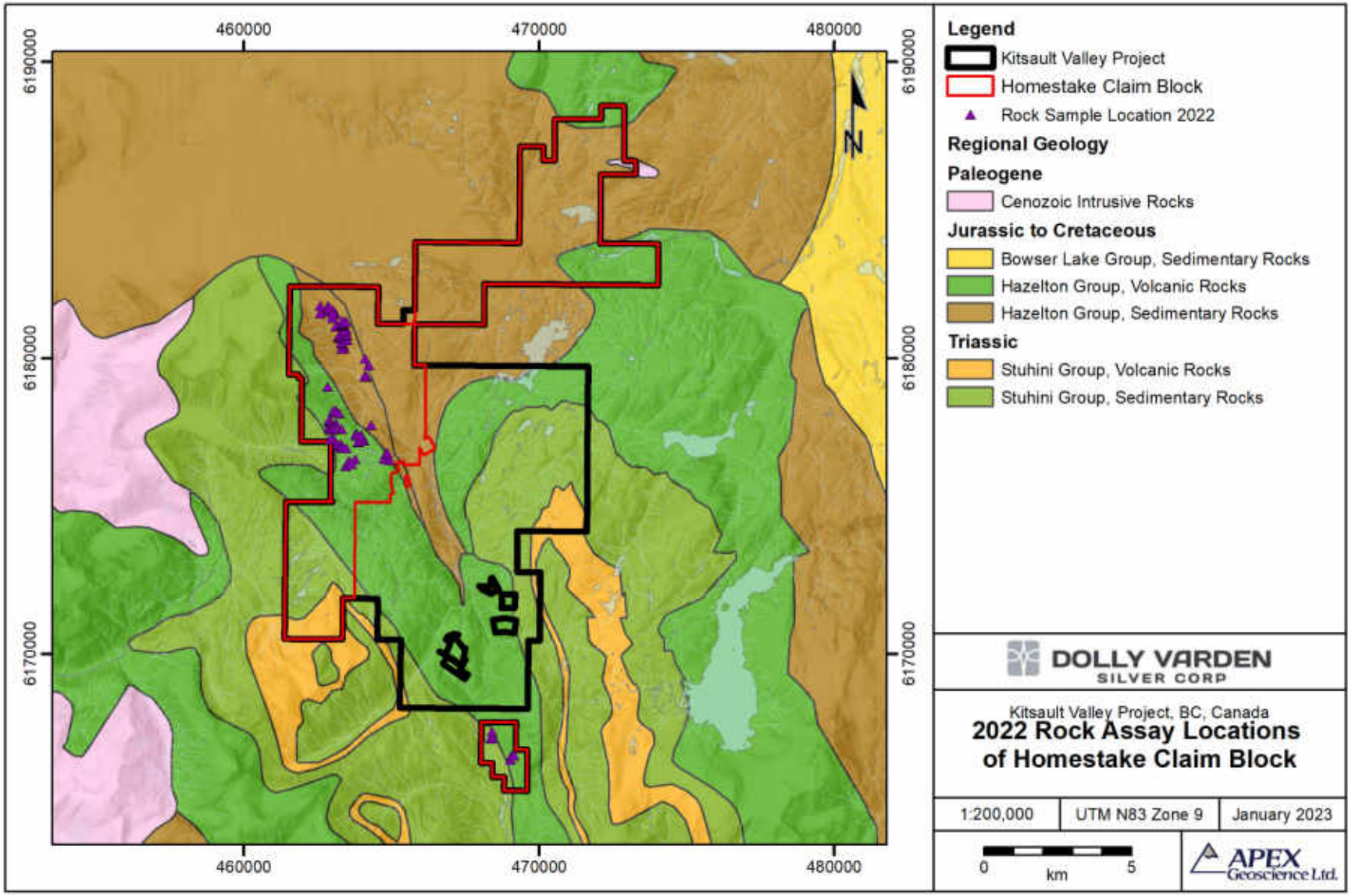


Figure 9.25. Rock sampling at Homestake claim block 2022, Ag results.

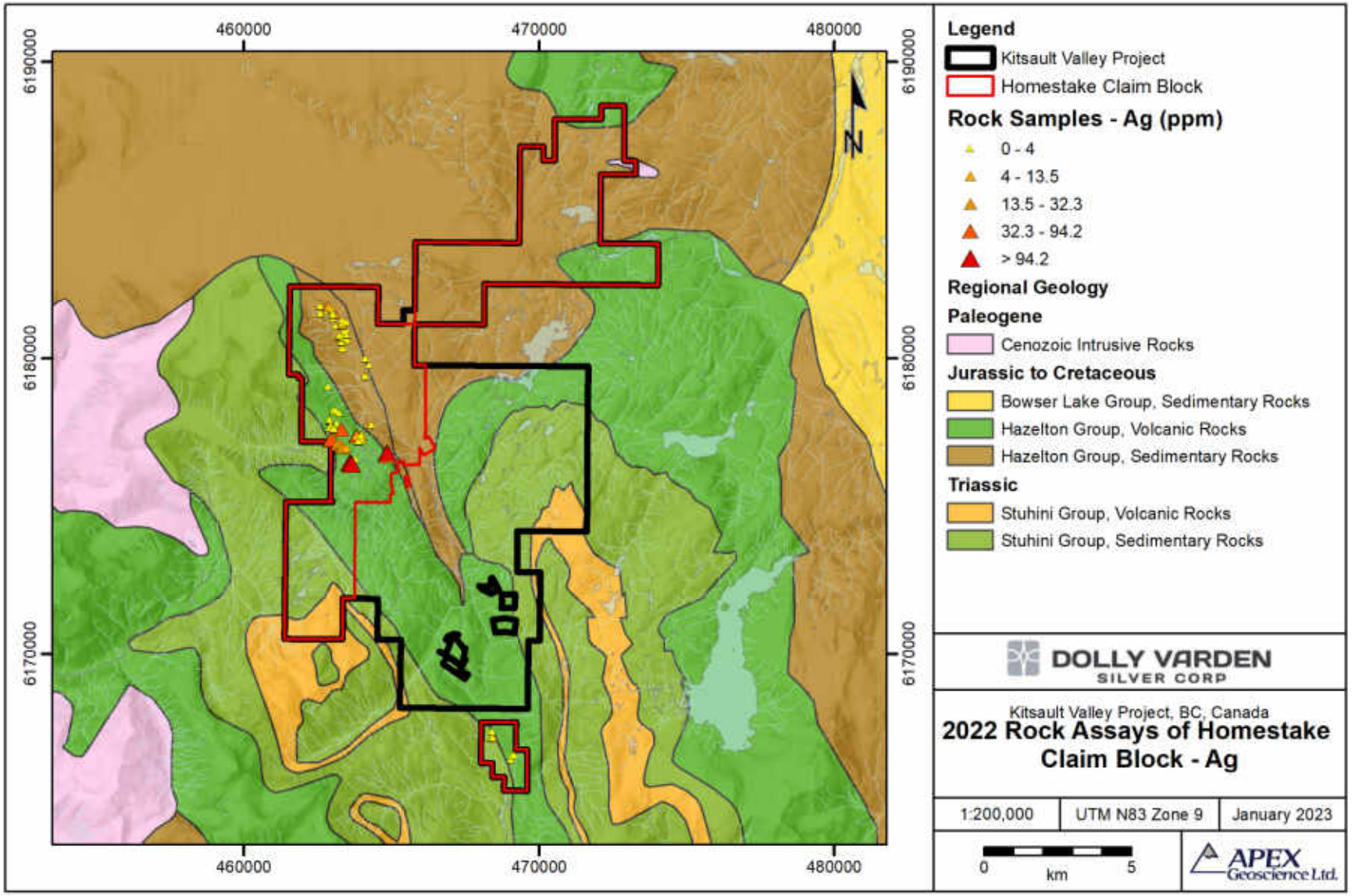


Figure 9.26. Rock sampling at Homestake claim block 2022, Pb results.

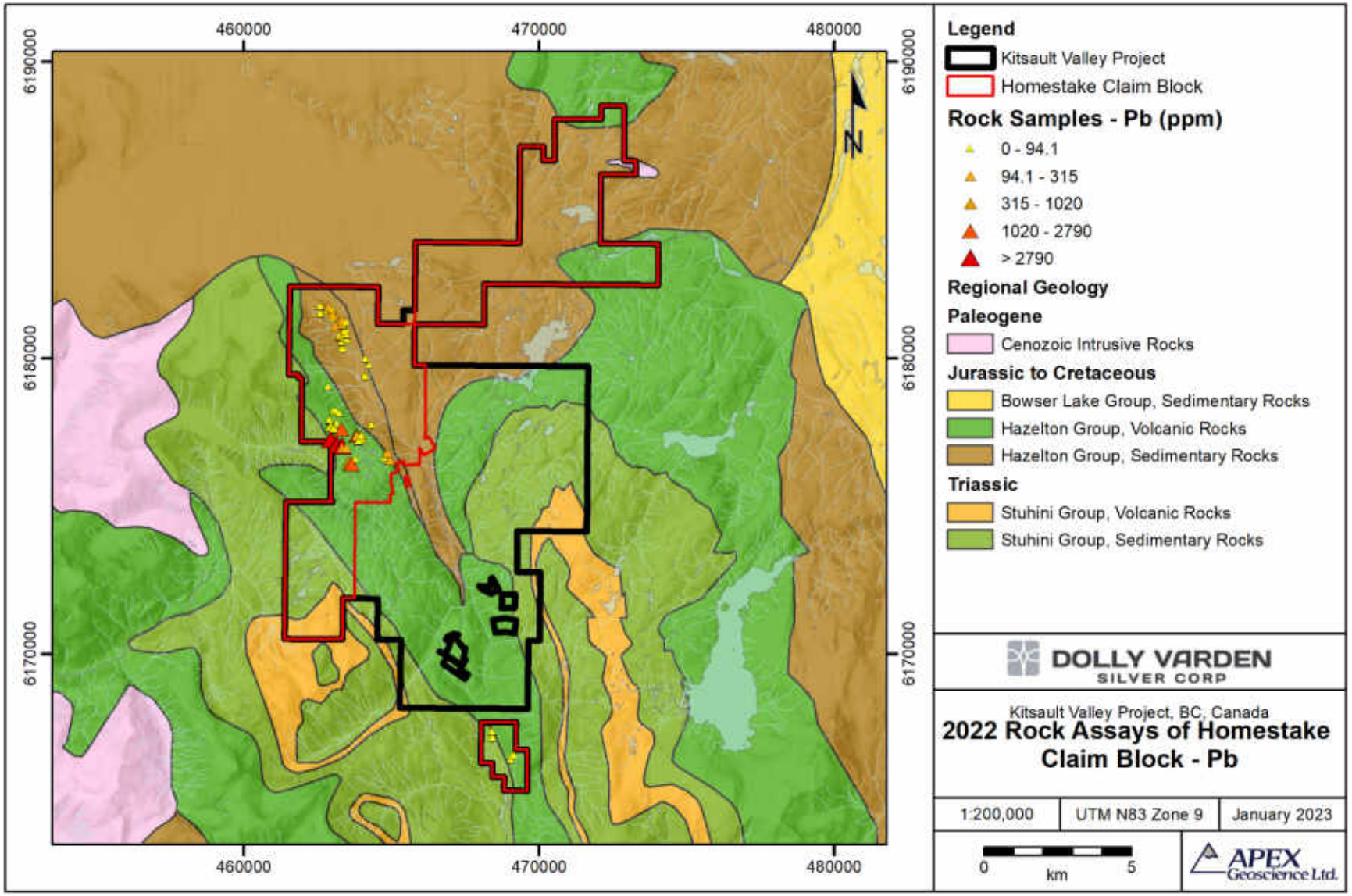


Figure 9.27. Rock sampling at Homestake claim block 2022, Zn results.

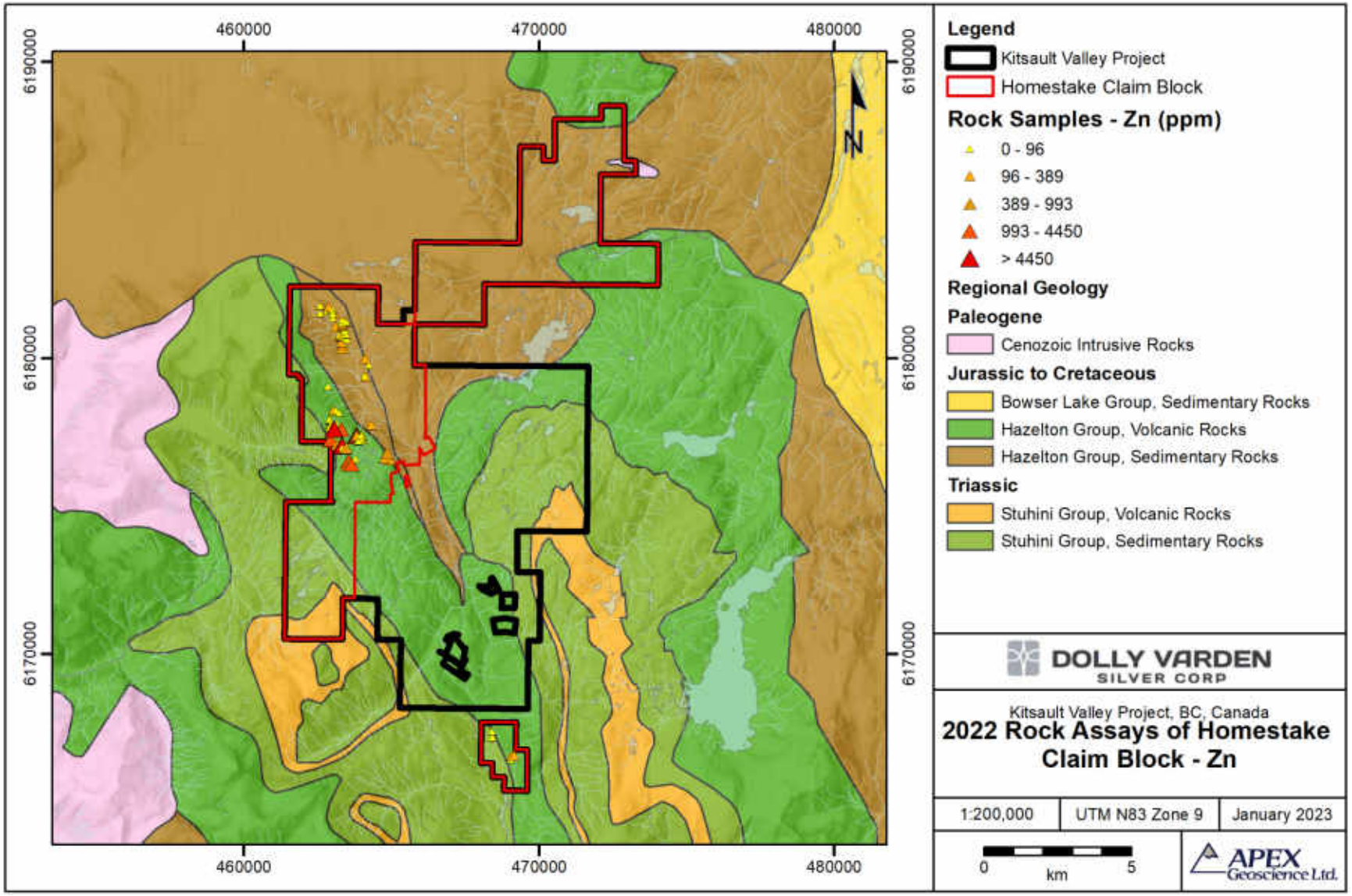


Figure 9.28. Rock sampling at Homestake claim block 2022, Cu results.

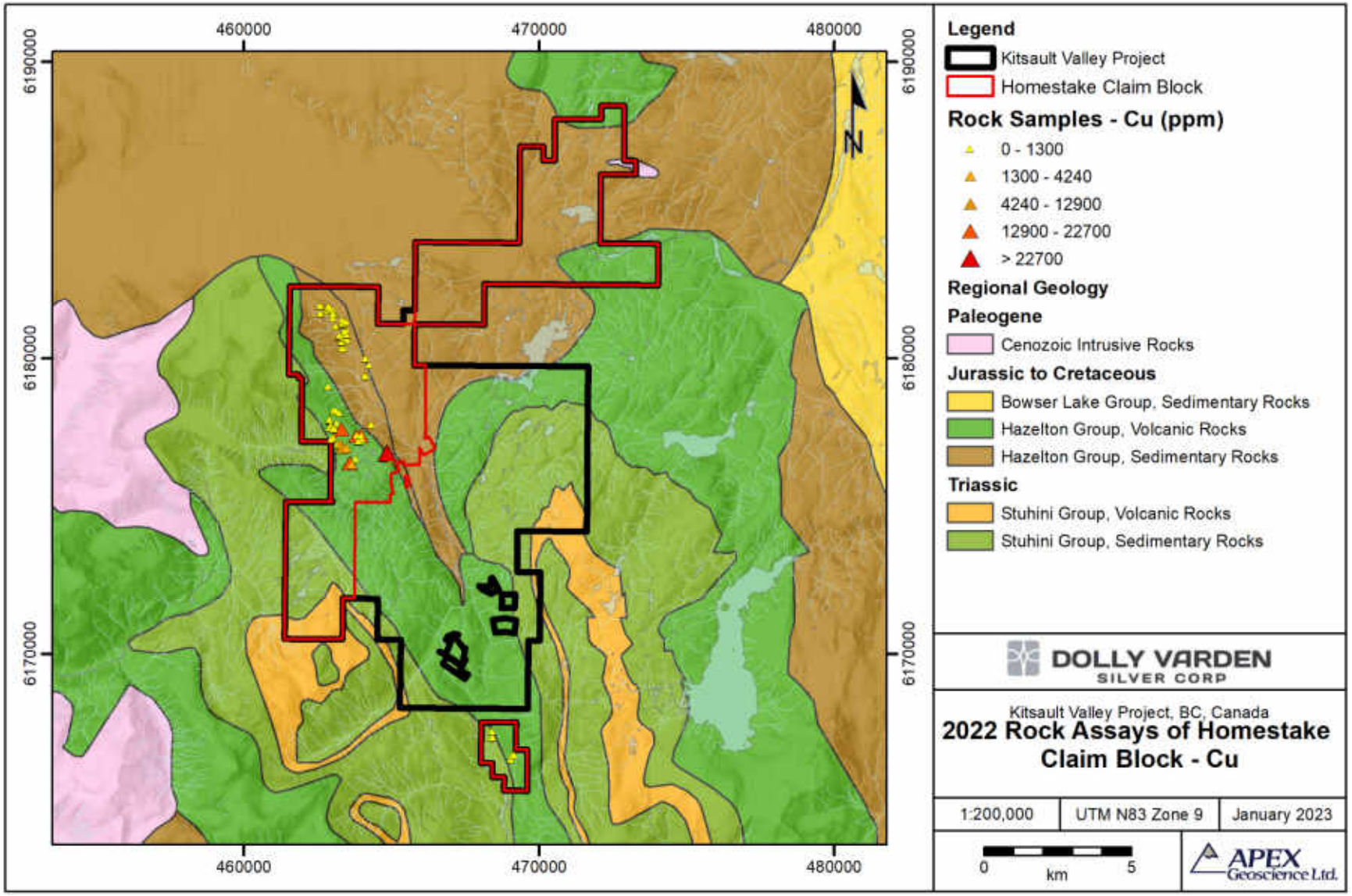


Figure 9.29. Rock sampling at Homestake claim block 2022, Au results.

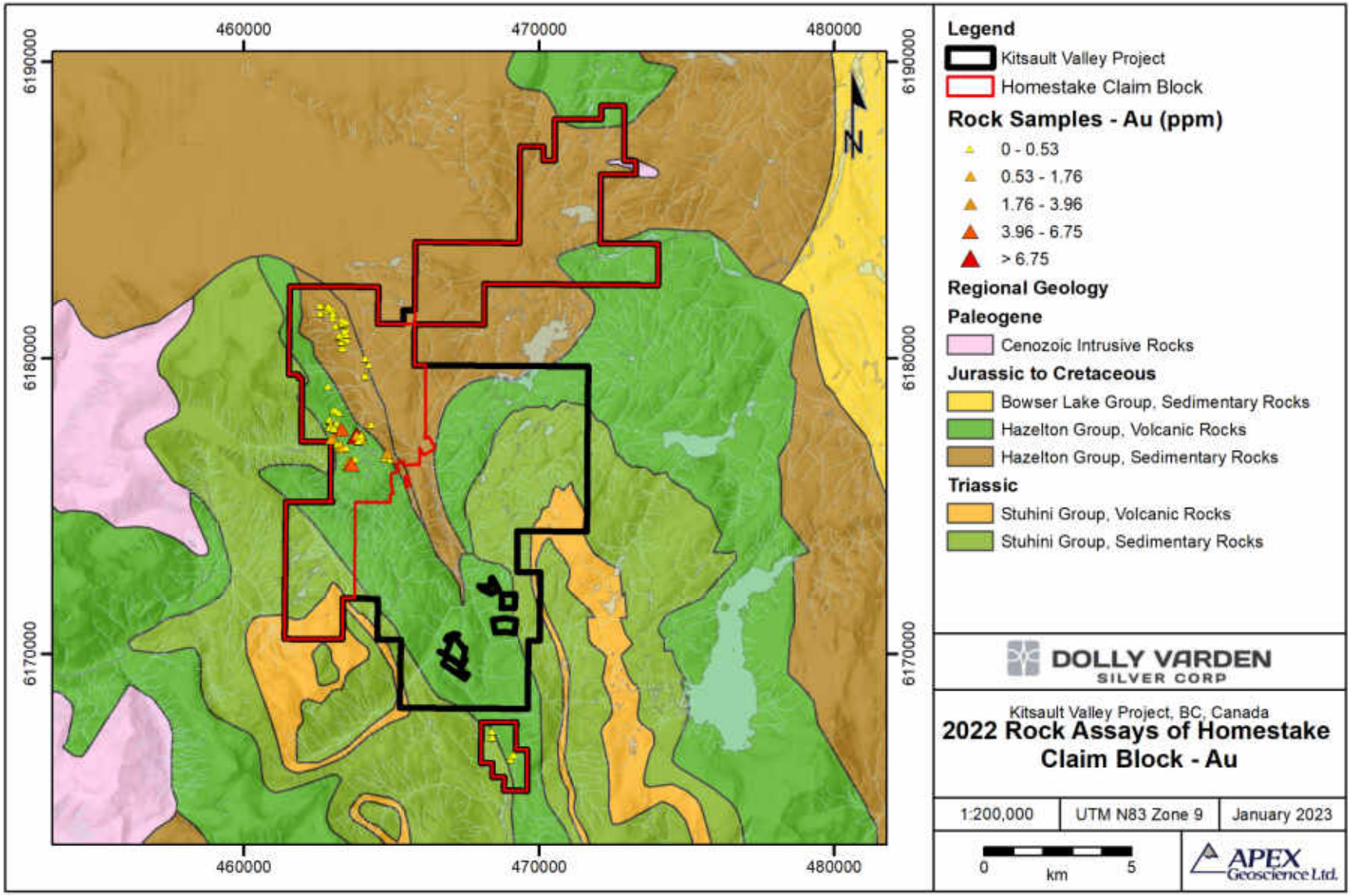
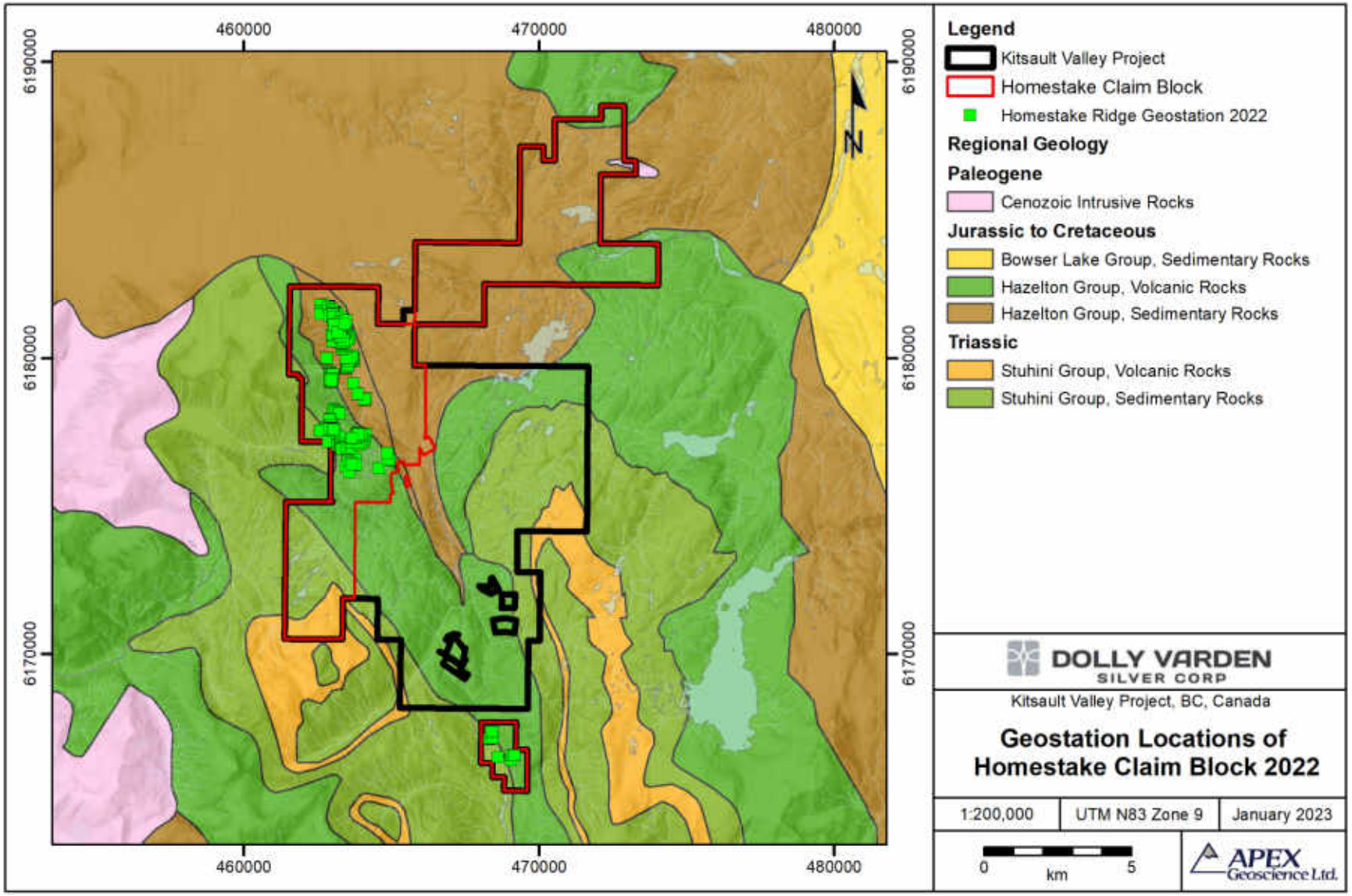


Figure 9.30. Geostation locations at Homestake claim block 2022.



9.3.2.2 Whole Rock Geochemistry

The 2022 lithogeochemical sampling survey targeted the main Homestake claim block, as well as the Homestake East Valley area to the northeast. A total of 44 rock samples were collected and submitted for whole rock geochemical analysis in order to better characterize the lithologies and alteration types observed at Homestake Project. Final interpretations based on the whole rock geochemistry results are currently pending. Locations of the whole geochemical sample locations are presented in Figure 9.31.

9.3.2.3 2022 LiDAR Airborne Survey

A LiDAR (Light Detection and Radar) airborne survey was conducted over the Homestake area and southern Kitsault Valley region on July 27 – 28, 2022. McElhanney Ltd. performed the LiDAR and aerial photography acquisition. The survey was completed using a Leica Terrain Mapper-2, which was mounted on a Piper Navajo fixed wing aircraft. Results of the 2022 LiDAR survey will be integrated with the results from 2017. The 2022 LiDAR survey coverage map is shown in Figure 9.32.

Figure 9.31. Whole rock geochemistry sampling locations at Homestake claim block 2022.

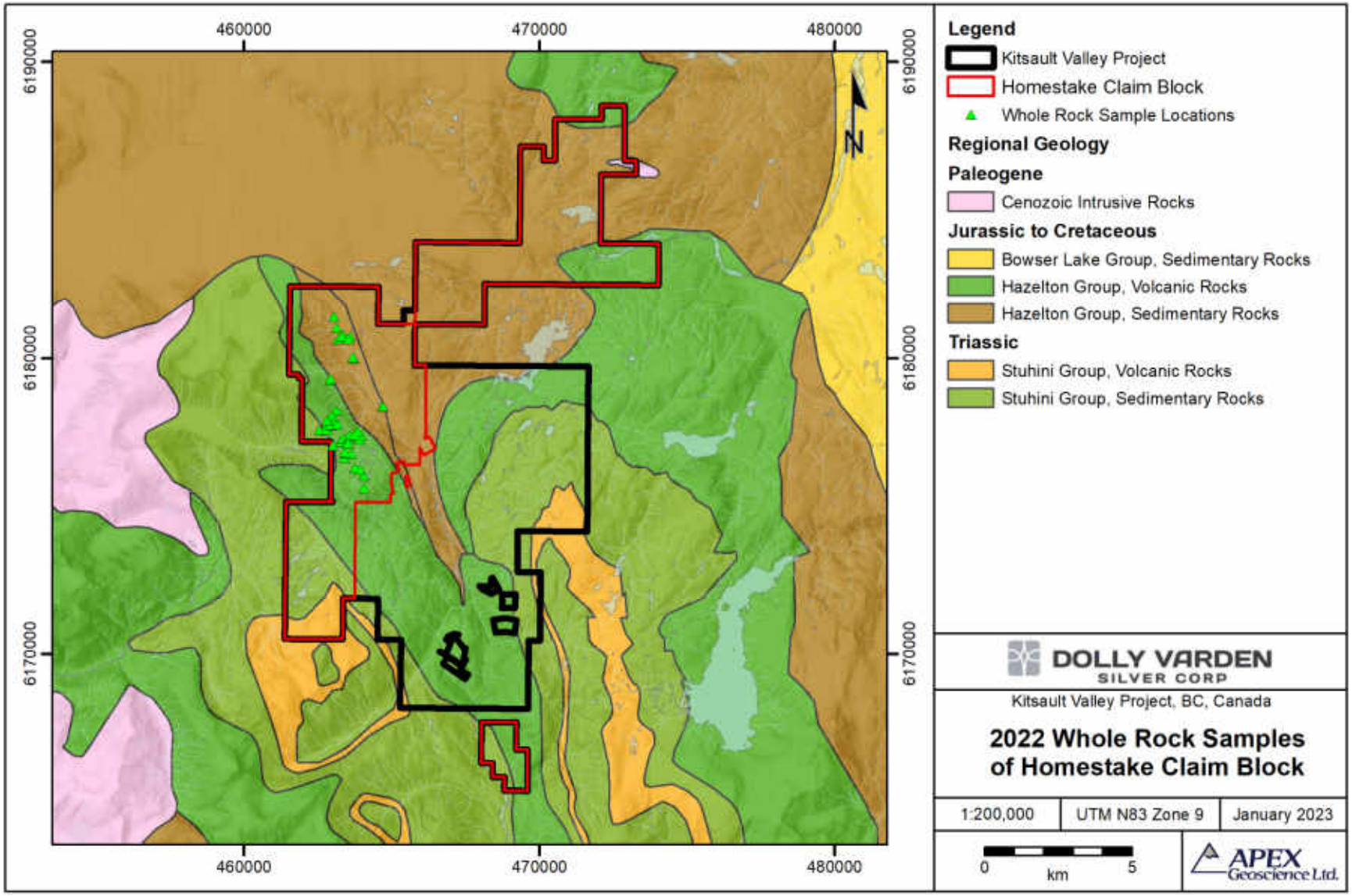
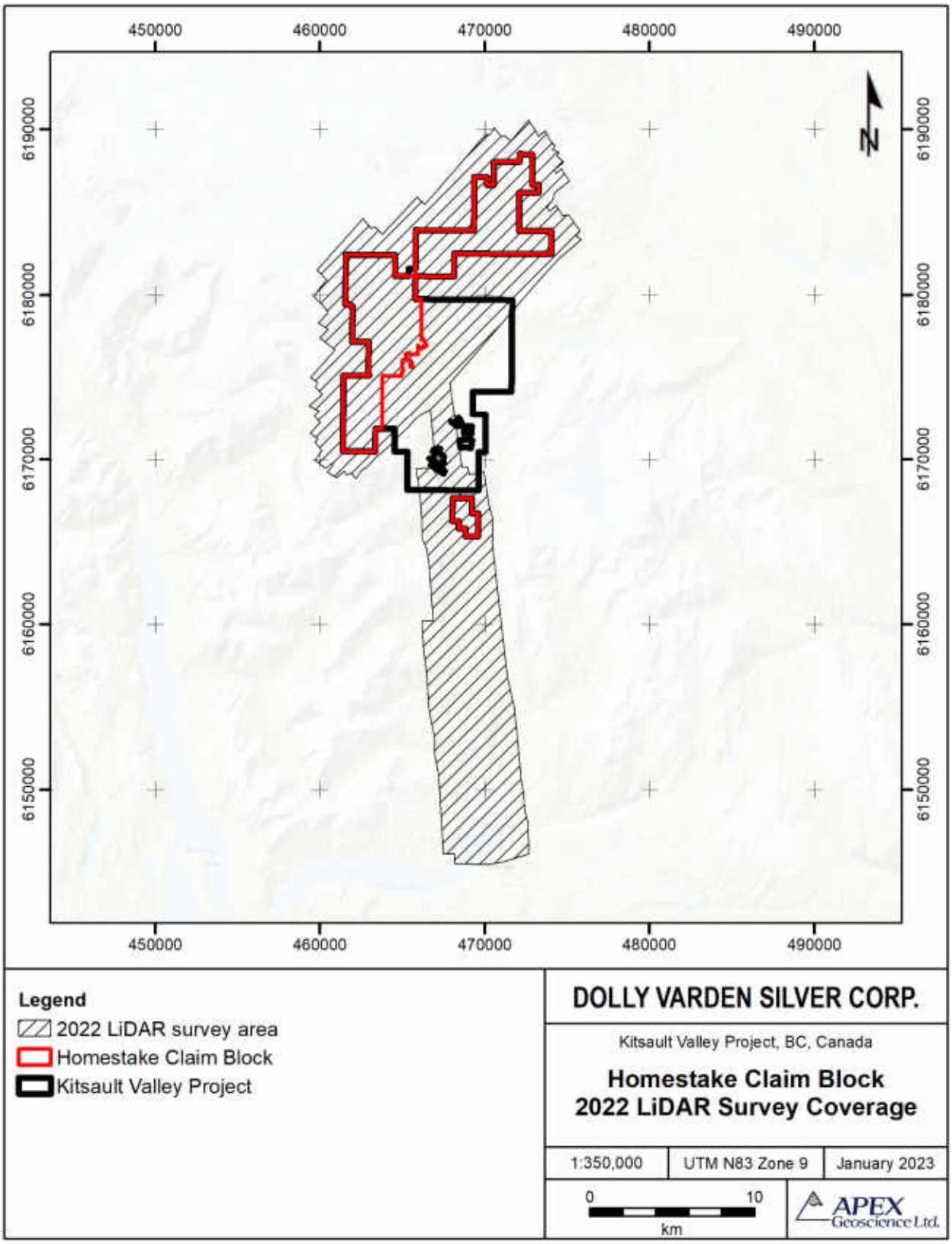


Figure 9.32. 2022 LiDAR airborne survey coverage.



10 Drilling

A comprehensive summary of the previous drilling programs conducted at Dolly Varden claim block was compiled in a previous Technical Report by Higgs and Giroux (2015). The following sub-section (10.1) has been reproduced, with minor formatting modifications, from Higgs and Giroux (2015):

10.1 Dolly Varden Claim Block Historical Drilling Summary

Previous drilling on the North Star deposit by Torbrit Silver Mines Ltd in 1957-58 penetrated a well mineralized horizon with 3 drill holes including an intersection in hole NS-17 assaying 72.3 g/t Ag, 3.38% Pb, and 16.48% Zn over 3.5m.

There have been minor historical drill programs conducted on a number of the mineral occurrences on the Dolly Varden Property, including Red Point, Ace-Galena, Moose, Climax, Kitsol, Musketeer and Surprise. Below is a table summarizing the historical drilling at a number of these locations (Table 10.1).

Table 10.1. Summary of historical drilling outside of deposits (from Higgs and Giroux, 2015).

Zone	Years	Metres Drilled	Notable Results
Ace-Galena	1951, 1968	1845	12.8 oz/t Ag over 0.5 m; 6 oz/t over 8.8 m
Last Chance	1963-1975	1893.4	9.4 oz/t Ag over 11.5 m; 17.7 oz/t Ag over 15.2 m; 54.8 oz/t Ag over 1.52 m; 14 oz/t Ag over 5.88 m
Moose-Climax	1964, 1967	1654	10.5 oz/t Ag over 2.44 m; 10.7 oz/t Ag over 1.28 m; 7.5 oz/t Ag over 12.5 m
Sault	1984-1989	2,274.8	0.77 oz/t Ag over 5.0 m

Drilling at the Wolf deposit was conducted by Sunshine Mining Company (option on holdings of Dolly Varden Mines Ltd) in 1964. In addition to 310.90 m of drifting and cross cutting in the 1200 level, 3137.92 m of surface and underground diamond drilling was completed. In 1968, 97.54 m of percussion drilling were completed on the Wolf by Dolly Varden Mines Ltd.

In 1989-90 a two-year diamond drilling program was conducted and funded by Dolly Varden Minerals Inc. and supervised by Cambria Geosciences. All originals of assay certificates, daily drill reports, diamond drill logs, assay tags and similar documents in support of the two drill programs were retained in the custody of Dolly Varden and available to the authors.

Collars of drill holes were accurately surveyed using the historical “Mine Grid” as reference and downhole Sperry Sun surveys were completed in all holes, giving azimuth and inclination. A Hughes 500D helicopter, contracted from ALC Airlift Corporation of Pitt Meadows, B.C. was used to provide daily drill support and to move the drill between sites.

The historical drilling at the known deposits prior to 1989, both on surface and underground, can be summarized (in Table 10.2) as follows:

Table 10.2. Drilling totals prior to 1989 at major deposits (from Higgs and Giroux, 2015).

Deposit	Number of Holes	Total Meterage
Torbrit	361	13,333.65
Wolf	92	8,124.27
North Star	120	7,429.69
Dolly Varden	22	2,686.33

10.1.1 1989 Diamond Drilling Program

During the 1989 diamond drilling program, 6 holes totalling 2397 m of drilling were completed. 1989 drilling intersected a mineralized horizon in all six surface holes drilled on the North Star zone. The best intersection occurred in drill hole NS 89-4 assaying 7.83% Zn, 2.28% Pb, and 167.30 g/t Ag over 6.46 m. A 4.3 m intersection in hole NS89-3 assayed 0.65% Cu and returned a geochemical analysis of 1851 ppb Au. (Significant intersections from the North Star 1989 drill program are shown in Table 10.3).

Table 10.3. North Star 1989 drill program significant intersections (from Higgs and Giroux, 2015).

Hole No.	From (m)	To (m)	Interval (m)	Ag (g/t)	Pb (%)	Zn (%)	Cu (%)	Au (ppb)
NS89-1	340.62	344.73	4.11	20.57	0.38	4.46	NA	Nil
NS89-2	323.49	327.66	4.18	24.17	0.39	3.49	NA	Nil
NS89-3	294.75	299.07	4.33	<13.7	<0.1	<0.5	0.65	1851
NS89-4	303.89	310.35	6.46	167.30	2.28	7.83	.13	Trace
NS89-5	389.20	394.78	5.58	18.51	0.34	5.34	<0.1	760
NS89-6	348.09	351.13	3.05	24.00	1.45	2.40	0.45	Nil
NS89-6	366.37	368.20	1.83	85.70	0.30	0.10	Nil	2360

In the North Star mine area, the mineralized horizon varies in thickness from 1 to 36 metres (true) and consists of a calcite-rich basal facies and a sulphide-rich, oxide-rich upper facies. A chlorite-calcite sulphide footwall stringer zone was identified in four, 1989-drillholes.

10.1.2 1990 Diamond Drilling Program

During the period from June 1 to August 31, 1990 surface diamond drilling on the Property totalled 7,095.90 m in 18 holes. Drilling was conducted on portions of the North Star, Dolly Varden, Torbrit deposits and the V Vein. Significant intersections from the 1990 North Star, Dolly Varden and Torbrit drill programs are shown in Table 10.4, Table 10.5 and Table 10.6, respectively.

Table 10.4. North Star 1990 drill program significant intersections (from Higgs and Giroux, 2015).

Hole No.	From (m)	To (m)	Interval (m)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Cu (ppm)	Au (ppb)
NS90-8	324.52	325.47	0.94	9.70	6129	16212	994	Nil
NS90-8	342.23	343.15	0.91	5.20	291	17423	1558	Nil
NS90-8	351.56	354.67	3.11	8.90	950	3556	2266	Nil
NS90-10	270.82	272.19	1.37	91.20	172	368	140	Nil
NS90-10	291.09	292.49	1.40	122.40	66	1157	2370	Nil
NS90-13	343.88	344.73	0.85	12.10	1217	4626	2248	Nil
NS90-13	354.79	355.71	0.91	7.10	152	1256	1471	343
NS90-15	417.64	420.48	2.83	4.30	223	1939	651	141
NS90-17	391.83	393.04	1.22	279.40	5339	542	3386	545
NS90-17	403.41	408.13	4.72	17.70	1895	4935	1514	74
NS90-21	506.07	508.11	2.04	1.70	77	2422	59	45
NS90-23	477.02	483.11	6.10	4.10	134	1068	58	25
NS90-24	547.73	549.26	1.52	1.80	236	3188	0	6

Table 10.5. Dolly Varden 1990 drill program significant intersections (from Higgs and Giroux, 2015).

Hole No.	From (m)	To (m)	Interval (m)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Cu (ppm)	Au (ppb)
NS90-7	356.62	357.53	0.91	25.70	86	398	8311	3429
NS90-7	357.53	358.75	1.22	54.85	2500	5149	3702	343
NS90-9	306.63	307.85	1.22	34.29	380	427	2035	343
NS90-9	307.85	308.46	0.61	130.28	386	197	1018	343
NS90-11	287.13	291.70	4.57	20.57	726	860	6589	343
NS90-11	309.99	310.44	0.46	96.00	374	893	38450	1714
NS90-11	320.81	323.61	2.80	13.71	621	3284	3046	343
NS90-12	319.43	320.35	0.91	14.80	246	2816	1659	45

Table 10.6. Torbrit 1990 drill program significant intersections (from Higgs and Giroux, 2015).

Hole No.	From (m)	To (m)	Interval (m)	Ag (g/t)	Pb (%)	Zn (%)	Cu (%)
NS90-22	143.10	151.00	7.90	58.80	0.54	1.20	0.05
Including	145.00	146.00	1.00	117.30	2.60	5.80	0.20

The North Star Mine area was tested by 8 NQ diamond drill holes in 1990. Six drill holes including NS 90-8, 10, 13, 15, 17, and 21 intersected a mineralized horizon. Drill holes NS 90-23 and 24 were drilled to target depth, NS 90-23 intersecting a very minor mineralized intersection (0.60m). NS 90-24 intersected no mineralization.

The Dolly Varden horizon was tested by four BD-BGM surface diamond drill holes including NS90-7, 9, 11, and 12. All drill holes penetrated a mineralized horizon. Drill hole NS90-11 intersected two additional parallel zones. Individual mineralized horizons vary from 3.2 to 9.1m.

The Dolly Varden horizon is a brecciated unit consisting of a quartz gangue, locally jasperoidal and chalcedonic, hosting variable amounts of sulphides including pyrite, chalcopyrite, sphalerite, and galena. Calcite and barite, two components in the Northstar exhalite horizon, are notably absent.

Hanging wall rocks consist of andesitic and dacitic tuffs, lapilli tuffs and brecciated equivalents. Alteration consists of varying intensities of chloritization and lesser hematization.

Footwall rocks are lithologically identical to hanging wall rocks. Alteration consists of moderate to intense pervasive chloritization and carbonatization. A strong chlorite-carbonate-pyrite stockwork is developed in holes NS90-9 and 11.

10.2 Pre-2015 Dolly Varden Drilling Programs at Dolly Varden Claim Block

10.2.1 2011 Drilling Program

In 2011, 21 surface diamond drill holes totalling 4,607.36 m was carried out at the Wolf deposit. The program focused on verifying grades and widths from previous drilling and extending and exploring the Wolf deposit (Sebert and Ramsay, 2012). Table 10.7 lists the significant intercepts (>100 g/t Ag) from the 2011 drilling.

The results lent considerable support to a genetic model that considers the Wolf deposit part of a system of submarine or subaqueous hot springs along a fault scarp that formed a hydrothermal plumbing system. The program verified the down-dip extent of the central area of the mineralized zone, identified additional mineralization not previously noted, and outlined additional areas where drilling could add significant mineralization along the northern extension of the Wolf deposit.

Table 10.7. 2011 Dolly Varden drilling highlights (from Higgs and Giroux, 2015).

Drillhole	From (m)	To (m)	True width, m	Ag (g/t)	Zone/Min Style
WS11-104	38.85	40.80	0.98	401	Sed/Vol Contact
WS11-104	52.66	53.80	0.67	254	Sed/Vol Contact
WS11-105	46.61	47.50	0.52	379	Sed/Vol Contact
WS11-105A	77.40	78.95	0.91	546	No. 2 Vein
WS11-105A	94.79	98.37	2.1	177	No. 2 Vein
WS11-105A	103.10	108.54	1.73	312	No. 2 Vein
WS11-106	82.14	82.99	0.40	675	Conformable Mineralization
WS11-106	95.58	97.58	0.93	153	No. 2 Vein

Drillhole	From (m)	To (m)	True width, m	Ag (g/t)	Zone/Min Style
WS11-106	103.10	108.54	1.99	144	No. 2 Vein
WS11-106	117.12	119.31	1.02	318	No. 2 Vein
WS11-107	132.80	135.70	1.92	333	No. 2B Vein?
WS11-107	141.60	156.80	10.05	595	No. 2 Vein
Including	151.55	156.28	3.13	995	No. 2 Vein
WS11-108	186.95	188.42	0.7	349	No. 2 Vein
WS11-110	86.17	105.82	12.20	388	No. 2 Vein
Including	86.17	90.38	2.61	1313	No. 2 Vein
WS11-111	54.06	59.75	4.19	207	Conformable Mineralization
WS11-112	55.26	72.4	14.78	99	Conformable Mineralization
WS11-112	104.47	111.77	4.17	149	No. 2 Vein
WS11-113	49.28	52.82	3.06	364	Conformable Mineralization
Including	50.82	51.82	0.86	717	Conformable Mineralization
WS11-114	75.80	87.19	6.50	272	No. 2 Vein
Including	77.40	78.40	0.57	1145	No. 2 Vein
WS11-115	35.35	46.07	8.20	293	Conformable Mineralization
Including	35.35	40.80	4.17	384	Conformable Mineralization
WS11-121	95.03	111.56	10.05	294	No. 2 Vein
Including	105.45	111.56	3.71	359	No. 2 Vein
WS11-122	59.73	61.90	2.17	579	No. 2 Vein
WS11-123	63.00	66.16	1.63	660	No. 2 Vein
WS11-123	73.17	77.33	2.14	181	No. 2 Vein

10.2.2 2012 Drilling Program

The 2012 drilling program targeted the down-dip and strike extension of the Dolly Varden mineralization, with six diamond drill holes aggregating 1,728.21 metres.

Table 10.8 provides details for diamond drill holes completed in 2012, and Table 10.9 provides a summary of the mineralized intercepts. For clarity, the following notes are provided:

- The weighted average grade composites may not span the entire width of the mineralized zone, depending on the width of intervals within the zone that are poorly mineralized. Weakly mineralized intervals were not included in the composites, so more than one composite may be presented for a single zone.

- True width estimates given are calculated from sectional views.

Table 10.8. 2012 Dolly Varden diamond drillholes (from Higgs and Giroux, 2015).

Drillhole	Easting UTM	Northing UTM	Elevation	Azimuth (°)	Dip (°)	Target	Length (m)
DV12-1	467533.22	6171151.05	629.49	185	-68.8	DVT* below 300 m elev.	560.83
DV12-2	467700.87	6170939.69	629.25	175.1	-51.5	DVT below 1410 m elev.	301.75
DV12-3	467700.86	6170940.02	629.06	175.1	-64.1	DVT below 1410 m elev.	377.95
DV12-4	467841.35	6170797.39	564.78	160.1	-54.2	DVT below 1638 m elev.	152.40
DV12-5	467841.23	6170797.52	564.42	160	-66.0	DVT below 1638 m elev.	167.64
DV12-6	467841.10	6170797.93	564.10	170.1	-84.6	DVT below 1638 m elev.	167.64
						Total metres	**1,728.21**

*DVT is the Dolly Varden Torbrit mineralized horizon.

Table 10.9. Summary of mineralized intercepts from 2012 drilling at Dolly Varden deposit (from Higgs and Giroux, 2015).

Drillhole	From (m)	To (m)	True Width (m)	Ag (g/t)	Ag (oz/t)	Pb (%)	Zn (%)
DV12-1	394.54	403.72	8.20	19.0	0.55	0.01	0.11
Including	397.6	398.6	0.89	52.9	1.54	0.04	0.55
DV12-2	209.65	212.4	2.20	860	25.1	0.18	0.81
Including	210.6	212.4	1.44	1289	37.6	0.23	0.99
DV12-3	254.0	259.6	3.90	24.0	0.70	0.04	2.46
DV12-3	270.8	279.1	6.30	19.8	0.58	0.07	12.30
DV12-4	77.60	83.15	5.30	536	16.5	0.97	1.74
Including	79.65	80.7	1.00	1786	55.0	3.44	4.63
DV12-5	83.74	88.9	4.80	100	2.92	0.75	5.17
Including	84.3	85.85	1.44	252	7.35	2.28	13.90
DV12-6	91.05	105.60	12.90	41.0	1.20	0.10	0.47
Including	91.05	92.7	1.46	154	4.49	0.06	0.23

Drilling confirmed the grade and tenor of mineralization indicated in historical drilling and historical mineral resource estimates above 450 m elevation, with well-mineralized intercepts in holes DV12-2 and DV12-4.

10.2.3 2013 Drilling Program

The purpose of the 2013 drilling program at the Torbrit mine was to verify and infill historical mineral resource blocks with current diamond drilling and assaying, and to extend those resources at depth and on strike toward the northeast and northwest. Fourteen holes were drilled for a total of 3,069 m from 4 different drill platforms. A total of 2,605 m of core was sampled, resulting in 1222 drill assay samples.

All drill holes successfully intersected the Torbrit mineralization horizon averaging 38 m per hole, totalling 526 m of Torbrit mineralization drilled.

The Torbrit mineralization appeared as epithermal veins, banded zones, banded breccias as well as massive carbonate, quartz and barite replacement. Mineralized horizons and zones, as well as underground workings were generally intersected where predicted from the pre-drilling 3D modeling of the available underground working blueprints. Considering the fourteen drill holes, the total thickness of the mineralized zone averaged 38 m per hole, ranging from 9.3m (hole TB13-09) to 89.1m (drillhole TB13-01). The drilling highlights are provided in Table 10.10.

Table 10.10. Torbrit Mine: 2013 diamond drill results summary (from Higgs and Giroux, 2015).

Drillhole	From (m)	To (m)	Interval* (m)	Ag (g/t)	Pb (%)	Zn (%)
TB 13-01	108.7	141.4	32.7	91.1	0.48	0.63
Including	108.7	117.5	8.8	140.0	0.55	1.10
Including	137.0	141.4	4.3	220.0	0.26	0.26
TB 13-02	92.8	134.0	41.2	198.0	0.56	0.41
Including	92.8	102.8	10.0	239.0	1.26	1.12
Including	110.7	134.0	23.3	242.0	0.43	0.21
TB 13-03	126.5	143.6	17.1	509.0	0.73	1.20
Including	140.4	143.6	3.2	1458.0	0.77	1.74
TB 13-04	126.0	148.4	22.4	26.6	0.34	0.93
TB 13-05	48.7	50.3	1.6	183.0	0.78	0.18
TB 13-05	156.8	161.1	4.3	124.3	0.13	0.23
TB 13-06	123.7	131.4	7.7	620.5	0.70	0.11
Including	123.7	126.6	2.9	1327.4	0.94	0.08
TB 13-07	157.2	178.9	21.7	150.4	0.50	0.40
Including	166.6	169.3	2.7	391.7	0.03	0.02
Including	174.3	178.9	4.6	279.1	0.06	0.04
TB 13-08	107.0	109.3	2.3	128.1	1.04	0.19
TB 13-08	116.7	117.9	1.2	198.8	1.18	0.03
TB 13-08	160.6	163.7	3.1	193.1	0.03	0.02
TB 13-10	78.2	80.3	2.1	74.7	0.06	0.14
TB 13-11	31.9	33.0	1.1	909.0	0.10	0.30
TB 13-11	153.5	170.7	17.2	155.3	1.40	1.65
Including	153.5	158.1	4.6	244.1	3..44	2.67
TB 13-11	200.1	219.1	19.1	121.8	0.45	1.20
TB 13-11	228.7	230.7	2.0	320.0	0.10	0.26
TB 13-12	219.8	234.2	14.4	206.8	0.45	0.25
Including	220.7	223.5	2.8	442.3	1.75	0.67

Drillhole	From (m)	To (m)	Interval* (m)	Ag (g/t)	Pb (%)	Zn (%)
TB 13-13	66.3	74.0	7.7	132.5	0.41	0.79
Including	71.6	74.0	2.4	198.2	1.06	1.32
TB 13-14	211.1	222.6	11.5	673.9	0.41	0.48

*Drill core interval: the true width has not been estimated.

It is clear from the 2013 program that a large component of the Torbrit deposit mineralization represents a long-lived multi stage system with silver-rich hydrothermal veining. It is likely that this environment manifested similar deposits at other locales (both adjacent and stacked) in a similar depositional setting. Following the trend of the controlling structures identified at Torbrit, when combined with the geophysical modeling results from the VTEM and ZTEM airborne surveys, could well lead to the discovery of other, similar silver deposits along the well-defined “Torbrit” structural trend.

10.2.4 2014 Drilling Program

In 2014, a total of 12 NQ diamond drill holes, totalling 5,280 m, were completed on the Property. The program was designed to test six distinct property-scale targets for high-grade Ag-Au mineralization:

- The NNW strike extension of the Torbrit deposit (Torbrit);
- Possible extension of the Torbrit graben North of Evindsen Creek (Torbrit NW);
- The Red Point alteration system (Red Point);
- The intersection of prospective stratigraphy with well mineralized / altered structures (Musketeer North, Kitsol); and
- The contact between the Salmon River Formation and the underlying Hazelton Group volcanic rocks (Wolf).

The program was successful in intersecting moderately anomalous to high-grade Ag mineralization at all target areas. Continuous pervasive intervals of highly anomalous silver ranging from 33.00 to 111.80 m in thickness with average grades of 3.1 to 5 g/t Ag were intersected in 7 of the 12 drill holes. High-grade intercepts included 9.01 m grading 1496.78 g/t Ag within a broader zone of 25.95 m grading 712.19 g/t Ag in hole DV14010 at the Kitsol vein. Table 10.11 outlines significant Ag intercepts calculated from the 2014 drill program results.

Table 10.11. 2014 diamond drillhole program results (from Higgs and Giroux, 2015).

Drillhole	From (m)	To (m)	Length (downhole, m)	Ag (g/t)	Pb (ppm)	Zn (ppm	Cu (ppm)	Au (ppb)
DV14001	46.30	59.62	13.32	1.70	20	151	52	14
	519.50	525.50	6.00	2.92	308	2058	25	7
	548.50	553.50	5.00	1.71	14	7834	523	21
DV14002	229.35	257.35	28.00	1.27	72	289	33	2
DV14003	90.73	148.55	57.82	4.96	308	768	35	2
	185.00	201.00	16.00	25.64	738	3306	31	2
Including	193.00	197.00	4.00	81.65	2756	11391	62	3.
DV14004	153.95	186.95	33.00	3.97	38	264	21	1
	606.12	630.10	23.98	1.15	218	208	55	6
DV14005	9.80	89.85	80.05	4.01	133	604	65	3
DV14006	82.18	92.18	10.00	6.05	28	69	57	6
	294.61	312.61	18.00	3.36	91	920	32	5
	413.61	458.61	45.00	1.79	134	3266	48	10
DV14007	40.00	88.00	48.00	4.41	185	446	25	4
	110.15	156.83	46.68	7.45	165	604	45	4
Including	151.67	154.83	3.16	87.65	699	1688	375	30
DV14008	134.17	187.17	53.00	4.27	258	1448	28	5
	195.17	200.17	5.00	125.50	2337	1552	329	12
	200.17	296.12	95.95	5.22	126	603	16	6
DV14009	14.57	102.57	88.00	2.26	10	959	77	8
	131.57	177.57	46.00	1.41	121	925	18	1
	297.57	348.57	51.00	3.06	146	613	16	2
DV14010	85.04	96.70	11.66	1.29	37	197	17	6
	106.70	141.35	34.65	2.90	126	1070	16	3
	141.35	167.30	23.14*	712.19	4900	3431	189	21
Including	144.09	153.10	8.03*	1496.78	4795	2464	180	20
	167.30	287.10	199.80	4.84	120	714	27	2
DV14011	121.79	205.79	84.00	1.72	79	470	89	88
	212.79	258.79	46.00	1.73	103	462	46	23
DV14012	226.85	246.49	19.64	2.67	177	950	14	4
	263.49	323.50	60.01	2.96	281	1294	18	9
	353.50	380.85	27.35	2.41	98	596	12	9

*True width.

Drill core was transported to TerraLogic Exploration's core processing facility in Alice Arm, BC where the core was logged and sampled. Core logging included surveys with a magnetic susceptibility meter, portable XRF, gamma-ray spectrometer and a HALO optical spectrometer. Potassium concentrations derived from the gamma-ray

spectrometer (confirmed with intermittent whole rock geochemical analysis) have delineated broad elevated potassium envelopes forming the hanging wall / footwall of many of the epithermal mineralization systems intersected in 2014. Assay data has also confirmed the presence of elevated Ag, Pb, Zn, Cd, Mn, Fe, As and S in the potassium altered zones.

10.3 Recent Drill Programs at Dolly Varden and Homestake Claim Blocks (2015-2022)

Drill programs have been completed at the Kitsault Valley Property from 2015 to 2022. During this period, the Company has completed 375 diamond core drillholes totalling 120,028 m (Table 10.12). The 2015-2022 drill collar locations are shown in Figures 10.1, 10.2 and 10.3.

Table 10.12. Summary of drillholes completed at the Kitsault Valley Project from 2015 to 2022.

Claim Block	Year	No. Drillholes	Total Meterage
Dolly Varden Claim Block	2015	10	2,037
	2016	13	2,312
	2017	45	15,715.8
	2018	84	29,134.2
	2019	44	11,863.5
	2020	40	11,396.6
	2021	31	10,506.7
	2022	52	18,614.15
Homestake Claim Block	2022	56	18,448.1
Total		375	120,028.05

Figure 10.1. Collar locations of drillholes completed at the Kitsault Valley Project from 2015-2022.

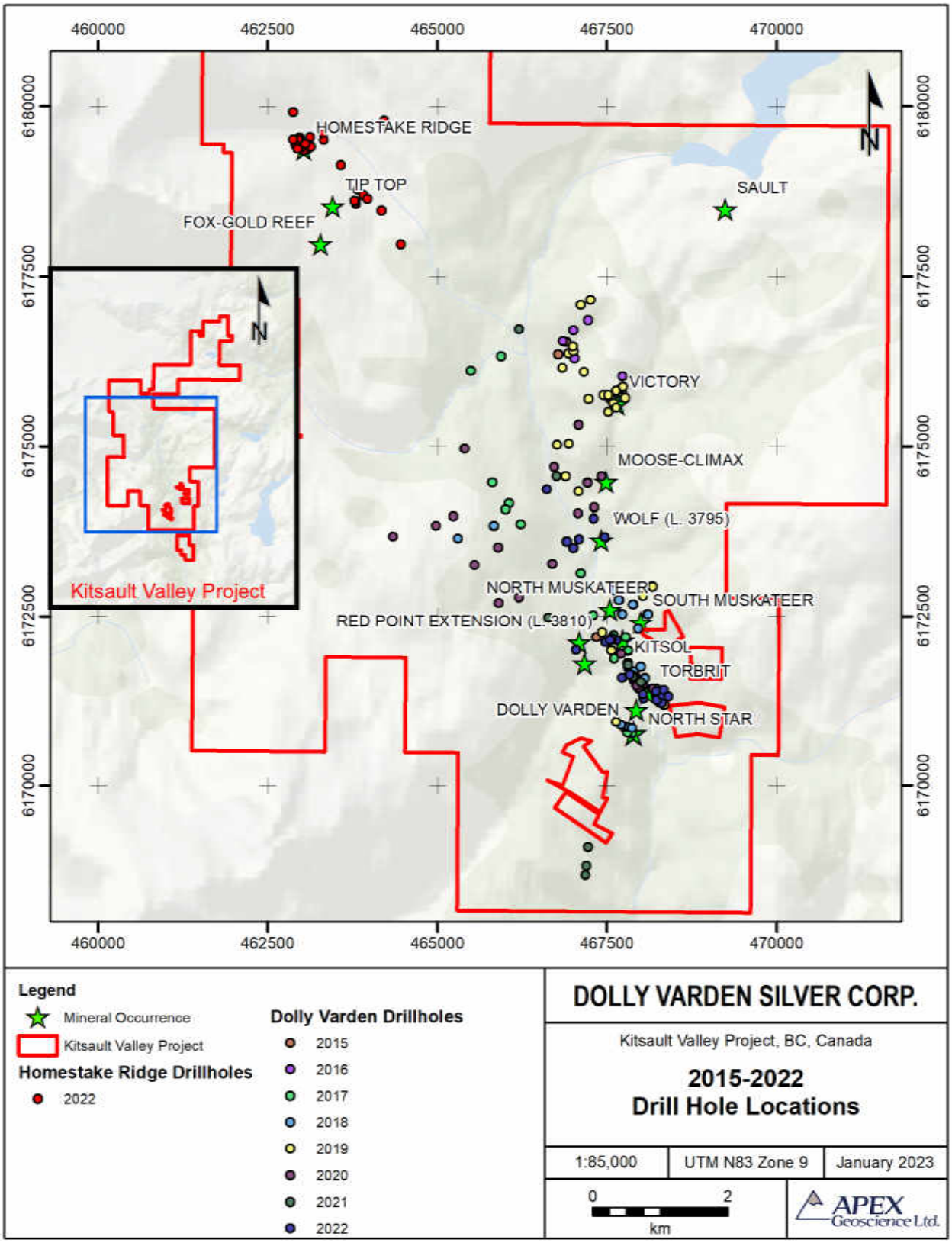


Figure 10.2. Collar locations of drillholes completed at Dolly Varden Claim Block from 2015-2022.

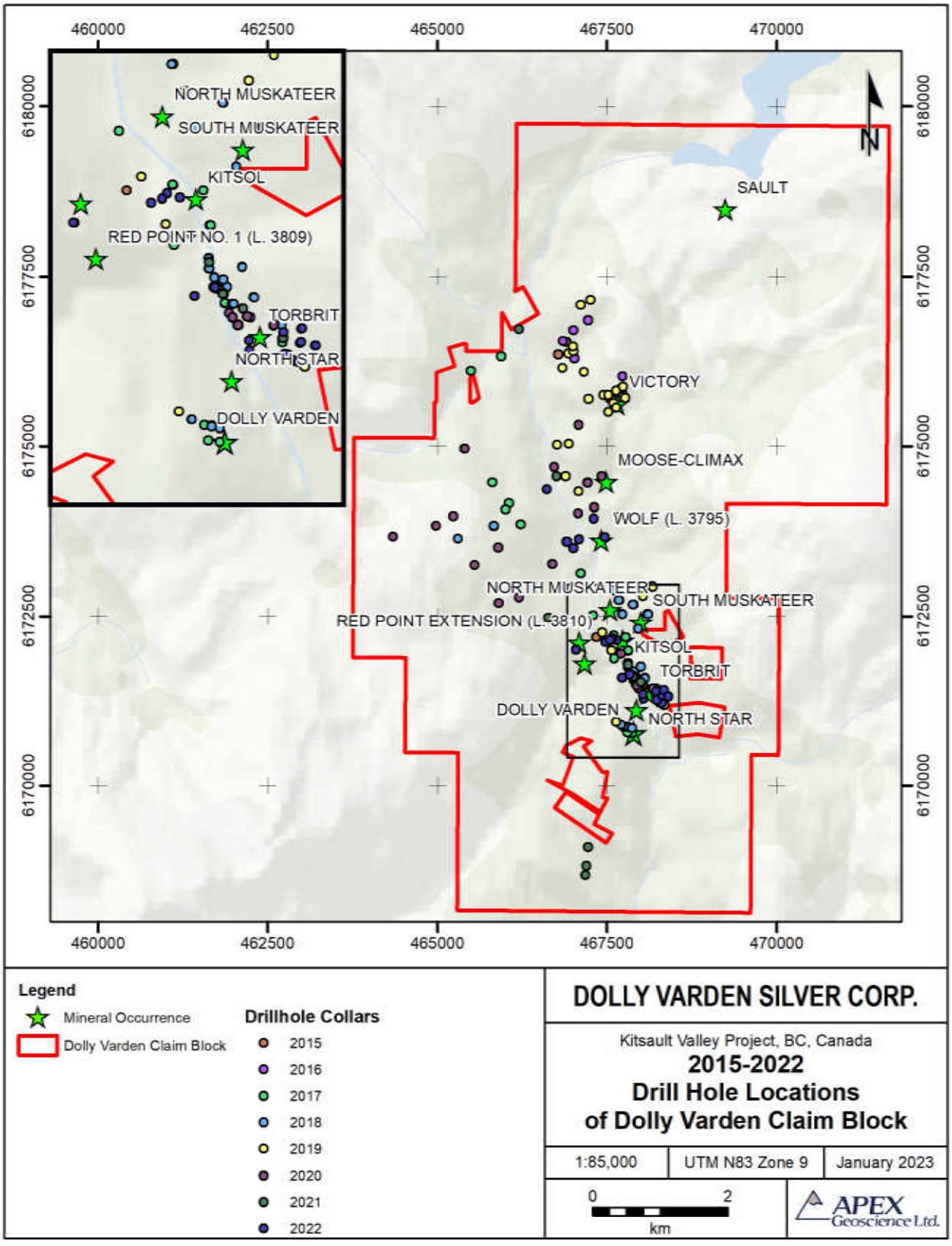
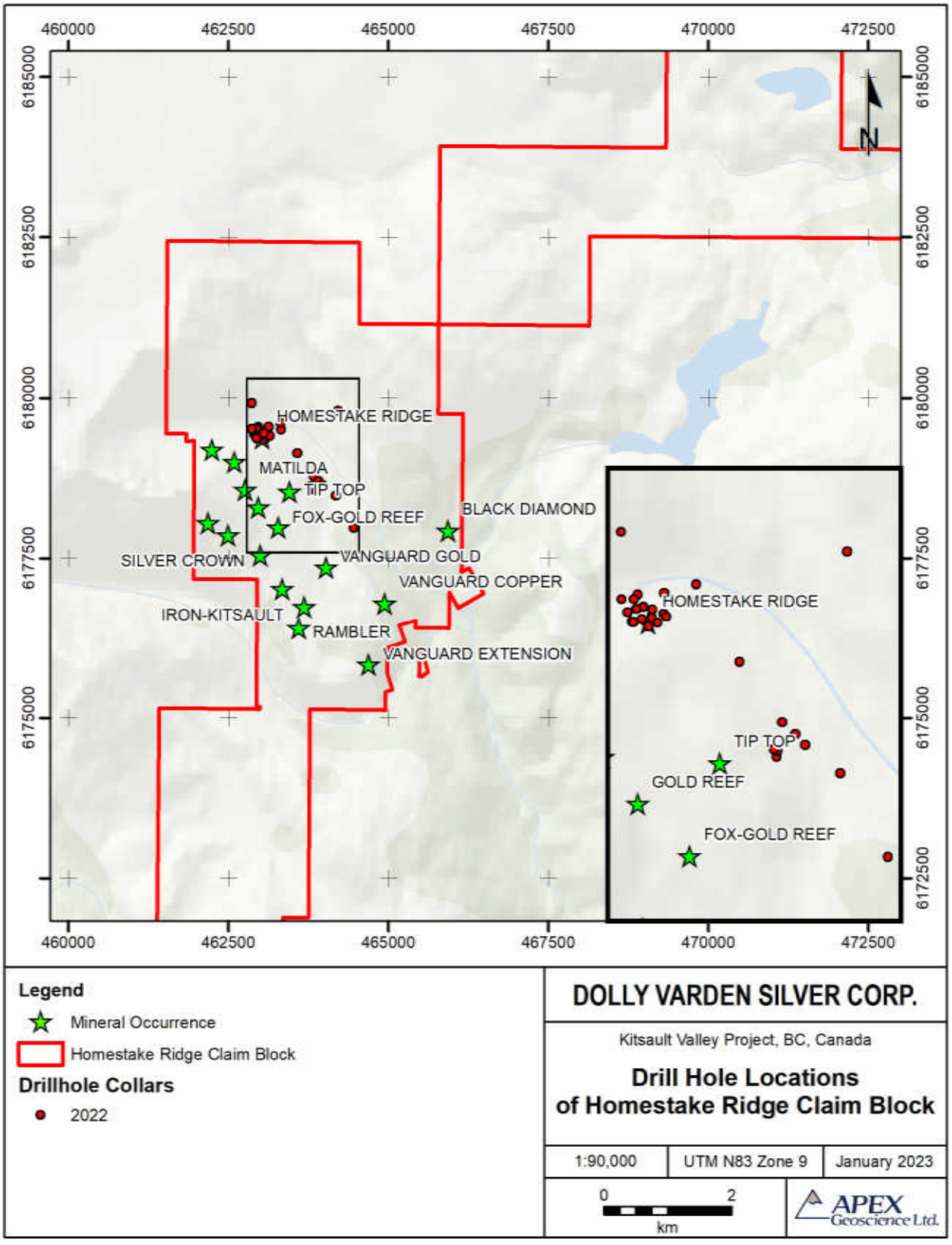


Figure 10.3. Collar locations of drillholes completed at Homestake Claim Block 2022.



10.3.1 Dolly Varden Claim Block

10.3.1.1 2015 Drill Program

In 2015, Dolly Varden completed a total of 10 diamond drill holes, totalling 2,037 m. The drill program tested three different target areas within the claim block, including Ace-Galena, Kitsol and the Sediment target. The drilling at Ace-Galena was designed to test a significant Ag-Pb-Zn-As-Sb soil geochemical anomaly, the drilling at Kitsol targeted high-grade mineralization in the historical high-grade epithermal Kitsol vein and the drilling at the Sediment target was designed to collect structural and stratigraphic information in regard to the prospect.

Moderately anomalous to high grade Ag mineralization was intersected at Ace-Galena and Kitsol. Furthermore, the lithology, alteration and mineralization intersected in the 2015 drillholes confirm the presence of VMS style mineralization at the Dolly Varden claim block. No significant mineralization was intersected in the stratigraphic test hole at the Sediment target. Significant intercepts from the 2015 diamond drilling program are listed below in Table 10.13.

Table 10.13. 2015 Dolly Varden drill program significant intercepts (modified from Dolly Varden Silver Corporation, 2015a).

Drillhole	Target	From (m)	To (m)	Length (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
DV15013	Ace-Galena	89.0	94.0	5.0	51.2	0.72	0.32	N/S
	including	93.0	94.0	1.0	188.0	2.06	0.20	N/S
		110.0	132.5	22.5	42.0	N/S	N/S	N/S
	including	110.0	111.25	1.25	454.0	N/S	0.24	N/S
DV15014	Ace-Galena	57.0	65.5	8.5	1.28	N/S	0.50	N/S
		104.0	112.0	8.0	4.85	N/S	0.15	N/S
DV15015	Ace-Galena	90.0	101.0	11.0	27.0	0.63	0.82	N/S
	including	91.0	92.0	1.0	59.8	1.71	1.84	N/S
	and	97.0	99.0	2.0	49.0	1.49	1.76	N/S
		112.5	123.75	10.85	25.7	N/S	0.13	N/S
	including	122.5	123.75	1.25	117.5	N/S	N/S	N/S
DV15016	Ace-Galena	100.3	119.0	18.7	15.3	N/S	0.17	N/S
	including	111.0	115.0	4.0	54.9	N/S	0.13	N/S
DV15017	Ace-Galena	93.0	119.0	26.0	11.3	0.20	0.37	N/S
	including	94.0	96.5	2.5	53.0	1.35	1.21	N/S
	and	114.0	119.0	5.0	21.6	N/S	0.16	N/S
DV15018	Kitsol	96.0	103.0	7.0	21.6	N/S	0.16	N/S
		109.0	110.0	1.0	36.5	N/S	N/S	N/S
DV15019 (1.)	Ace-Galena	46.35	49.5	3.15 (1.)	591.0	N/S	N/S	0.2
	including	47.5	48.0	0.5 (1.)	3,200	N/S	N/S	0.7

Drillhole	Target	From (m)	To (m)	Length (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
		153.5	156.0	2.5	44.0	0.37	1.54	N/S
	including	155.0	155.5	0.5	158.6	0.97	4.33	N/S
		256.0	263.0	7.0	4.24	N/S	0.26	N/S
		305.0	315.6	10.6	4.9	N/S	N/S	N/S
DV15020	Kitsol	87.0	87.5	0.5	99.5	N/S	0.18	N/S
		109.8	115.0	5.2	16.2	N/S	0.14	N/S
DV15021	Kitsol	147.0	150.0	3.0	60.3	N/S	0.17	N/S
	including	148.0	149.0	1.0	117.8	N/S	0.13	N/S

Note: Grades shown are averages over the reported lengths.
N/S – no significant values.
Lengths shown are true thickness except those from Kitsol and the upper section of hole DV15019 (note 1.). The upper intersection in DV15019 is at a low angle to the core axis.

10.3.1.2 2016 Drill Program

In 2016, Dolly Varden completed a total of 13 diamond drillholes at the Dolly Varden claim block, totalling 2,312 m. The 2016 drill program was planned to: 1) confirm the growth potential of the Torbrit resource area; 2) verify the mineral potential of Ace-Galena; 3) test the Chance prospect; and 4) gather information to further quantify the lead and zinc mineralization.

Moderately anomalous to high grade mineralization was intersected in the 2016 drill program at Torbrit and Ace-Galena. Mineralization intersected in the drilling at Torbrit was observed in multiple zones and remained open for expansion along strike and down-dip of historic workings. Furthermore, the drill program extended the known mineralization at Ace-Galena approximately 300 m to the northeast. The mineralization at Ace-Galena is within the Trout Zone, an argillaceous silt- to sandstone, diamictite, grey limestone, variably muddy tuffaceous sandstone and epiclastic felsic tuff. No significant mineralization was intersected at the Chance exploration target. The results from the 2016 diamond drill program are shown in Table 10.14.

Table 10.14. 2016 Dolly Varden drill program results (modified from Dolly Varden Silver Corporation, 2016a).

Drillhole	Target	From (m)	To (m)	Length (m)	Ag (g/t)	Pb (%)	Zn (%)
DV16023	Torbrit	37.05	80.55	43.50	51.32	0.20	1.71
	including	75.05	79.05	4.00	316.90	0.49	2.33
DV16024	Torbrit	Hole lost in workings above target zone					
DV16025	Torbrit	139.09	162.80	23.71	23.55	0.18	0.14
	including	160.00	161.00	1.00	307.00	0.09	0.02
DV16034	Torbrit	101.00	111.76	10.76	257.61	0.43	0.23
	including	103.00	109.00	6.00	367.17	0.67	0.26
DV16035	Torbrit	29.00	47.00	18.00	139.33	0.15	0.15

Drillhole	Target	From (m)	To (m)	Length (m)	Ag (g/t)	Pb (%)	Zn (%)
	including	36.90	38.90	2.00	252.11	0.25	0.11
	and	97.40	116.80	19.40	485.04	0.28	0.10
	including	97.40	99.40	2.00	2488.50	0.21	0.13
	and	129.10	134.10	5.00	357.40	0.33	0.90
DV16026	Ace-Galena	78.50	100.58	22.08	16.55	0.66	0.63
DV16027	Ace-Galena	102.50	130.90	28.40	10.08	0.23	0.44
	including	128.24	130.90	2.66	77.87	1.28	0.11
DV16028	Chance	45.10	64.50	19.40	1.01	0.02	0.10
DV16029	Ace-Galena	127.13	174.90	47.77	13.21	0.03	0.11
	including	140.06	159.00	18.94	30.58	0.09	0.34
DV16030	Ace-Galena	165.57	177.50	11.93	3.30	0.22	0.56
DV16031	Ace-Galena	66.34	132.80	66.46	59.97	0.12	0.10
	including	94.00	97.25	3.25	405.77	0.12	0.16
DV16032	Ace-Galena	No significant intercepts.					
DV16033	Ace-Galena	No significant intercepts.					

10.3.1.3 2017 Drill Program

In 2017, Dolly Varden completed a total of 45 diamond drillholes at the claim block, totalling 15,715.8 m. The majority of the 2017 drill program focused on exploration and reconnaissance drilling throughout the Dolly Varden claim block. Additional verification drilling was conducted at the Dolly Varden and Torbrit deposits, with aim to expand the current mineral resources adjacent to these deposits.

The 2017 drill program identified four new exploration targets within the claim block, including:

- Moose-Lamb: Epithermal vein-type mineralization in the Moose-Lamb Fault with 4 m grading 987.5 g/t Ag, 5.90% Pb, 0.90% Zn from DV17-063.
- Torbrit North: Dolly Varden Torbrit horizon (high-grade exhalative) mineralization in the footwall of the Moose-Lamb Fault with 7.65 m grading 481.1 g/t Ag, 0.50% Pb and 0.29% Zn from DV17-058 and 22.74 m grading 433.3 g/t Ag, 0.74% Pb and 0.90% Zn from DV17-063.
- Torbrit East: Dolly Varden Torbrit horizon (high-grade exhalative) mineralization in the footwall of the Torbrit base structure with 6.85 m grading 298.5 g/t Ag, 1.06% Pb and 0.80% Zn from DV17-076 and 5.00 m grading 481.9 g/t Ag, 0.21% Pb and 0.12% Zn from DV17-078.
- Beginners Luck: silver mineralization in a breccia structure.

Highlights from the 2017 diamond drill program are shown in Table 10.15.

Table 10.15. 2017 Dolly Varden drill program highlights (modified from Dolly Varden Silver Corporation, 2018).

Drillhole	Target	From (m)	To (m)	Length (m)	True Width (m)	Ag (g/t)	Pb (%)	Zn (%)
DV17058	Torbrit North	466.10	498.40	32.30	26.46	166.6	0.21	0.20
	Includes	481.30	497.40	16.10	13.19	269.0	0.30	0.21
	Includes	489.75	497.40	7.65	6.27	481.1	0.50	0.29
	Includes	492.75	495.75	3.00	2.46	905.7	0.82	0.27
DV17063	Torbrit North	415.80	438.54	22.74	21.37	433.3	0.74	0.22
	Includes	427.85	438.54	10.69	10.05	852.2	1.46	0.30
	Includes	427.85	435.00	7.15	6.72	1180.7	1.83	0.26
	Includes	433.00	435.00	2.00	1.88	3495.0	5.57	0.31
DV17076	Upper Torbrit East	107.00	134.00	27.00	22.64	119.7	0.57	0.53
	Includes	107.00	113.85	6.85	5.74	298.5	1.06	0.80
	Includes	110.50	113.85	3.35	2.81	508.4	1.69	0.76
	Includes	111.00	111.50	0.50	0.42	2210.0	6.21	1.28
	Lower Torbrit East	137.40	163.00	25.60	21.47	52.6	0.32	0.32
	Includes	137.40	143.00	5.60	4.70	90.0	0.79	1.15
	Includes	139.85	142.00	2.15	1.80	121.6	1.40	2.31
DV17078	Upper Torbrit East	121.00	134.00	13.00	9.96	244.8	0.14	0.09
	Includes	127.00	132.00	5.00	3.83	481.9	0.21	0.12
	Includes	127.00	130.30	3.30	2.53	646.6	0.30	0.15
	Includes	128.00	128.50	0.50	0.38	1330.0	0.58	0.34
	Lower Torbrit East	138.40	160.35	21.95	16.81	87.5	0.85	1.01
	Includes	151.00	159.35	8.35	6.40	121.6	1.79	2.33
	Includes	151.00	154.00	3.00	2.30	217.7	4.36	3.79
	Includes	152.50	153.00	0.50	0.38	888.0	16.45	5.40
DV17063	Moose-Lamb	153.20	164.20	11.00	7.07	394.2	2.27	0.46
	Includes	154.20	158.20	4.00	2.57	987.5	5.90	0.90
	Includes	154.20	156.20	2.00	1.29	1700.0	11.55	1.46
DV17080	Beginners Luck	120.28	123.67	3.39	2.94	110.4	0.04	0.06
	Includes	120.80	123.67	2.87	2.49	122.6	0.05	0.07
	Includes	120.80	121.40	0.60	0.52	167.0	0.03	0.03
DV17048	Upper Dolly Varden	23.98	37.20	13.22	12.26	701.8	0.36	1.05
	Includes	27.00	36.60	9.60	8.90	878.7	0.42	1.19
	Includes	34.00	36.60	2.60	2.41	2355.8	1.08	2.91
	Includes	34.75	35.48	0.73	0.68	3550.0	0.74	2.83
	Middle Dolly Varden	83.00	103.50	20.50	19.60	107.1	1.30	3.52
	Includes	83.00	99.00	16.00	15.30	129.3	1.65	3.31
	Includes	89.00	92.00	3.00	2.87	285.4	6.13	10.93

Drillhole	Target	From (m)	To (m)	Length (m)	True Width (m)	Ag (g/t)	Pb (%)	Zn (%)
	Includes	90.95	92.00	1.05	1.00	518.0	12.85	9.91
DV17052	Dolly Varden	81.75	87.50	5.75	5.66	495.2	0.87	3.64
	Includes	82.75	86.75	4.00	3.94	594.3	1.15	4.66
	Includes	84.75	85.75	1.00	0.98	1190.0	0.78	3.07
DV17039	Upper Torbrit	116.75	127.95	11.20	9.98	97.6	0.41	1.25
	Includes	116.75	118.70	1.95	1.74	182.6	1.05	1.66
	Lower Torbrit	150.30	181.00	30.70	26.04	113.9	0.38	0.48
	Includes	150.30	165.30	15.00	12.72	172.4	0.69	0.81
	Includes	151.30	157.30	6.00	5.09	355.3	1.63	1.30
	Includes	151.30	153.30	2.00	1.70	720.0	0.59	1.25
DV17040	Upper Torbrit	136.00	143.00	7.00	5.66	19.9	0.36	0.07
	Includes	142.00	143.00	1.00	0.81	57.0	1.19	0.07
	Lower Torbrit	187.50	200.05	12.55	9.89	514.3	0.09	0.04
	Includes	192.50	199.50	7.00	5.52	757.4	0.12	0.05
	Includes	194.50	196.50	2.00	1.58	949.0	0.17	0.06
DV17042	Upper Torbrit	169.55	178.10	8.55	6.05	50.0	0.18	0.81
	Includes	170.55	172.64	2.09	1.48	124.9	0.22	0.62
	Includes	170.55	171.50	0.95	0.67	191.0	0.15	0.95
	Lower Torbrit	202.00	213.70	11.70	8.27	204.3	0.11	0.07
	Includes	204.00	212.72	8.72	6.17	249.1	0.10	0.06
	Includes	208.55	210.68	2.13	1.51	598.8	0.07	0.05

10.3.1.4 2018 Drill Program

In 2018, Dolly Varden completed a total of 84 diamond drillholes at the claim block, totalling 29,134.20 m. The 2018 drilling program focused on resource delineation and verification at the known deposits within the Dolly Varden claim block. Additional exploration drilling was conducted at alteration zones; in the potassic alteration belt near the Musketeer prospect and in the pyrite-sericite alteration belt on the west side of the Kitsault River Valley.

The 2018 drill program confirmed high grade mineralization at Torbrit, Torbrit East, Moose-Lamb, in the Kitsol Zone and Dolly Varden. Significant intercepts from the 2018 drill program are shown below in Table 10.16.

Table 10.16. 2018 Dolly Varden drill program highlights (modified from Dolly Varden Silver Corporation, 2019c).

Drillhole	Target	From (m)	To (m)	Length (m)	True Width (m)	Ag (g/t)	Pb (%)	Zn (%)
DV18163	Torbrit	54.75	130.20	75.45	65.34	418.9	0.28	0.14
	Includes	54.75	70.75	16.00	13.86	1240.4	0.29	0.16
DV18164	Torbrit	71.20	147.00	75.80	53.60	155.2	0.63	0.32
	Includes	71.20	103.00	27.80	19.66	301.3	0.30	0.18
DV18142	Lower Dolly Varden	245.75	253.60	7.85	6.01	71.2	5.43	3.92
	Includes	249.80	253.60	3.80	2.91	130.8	11.20	7.88
DV18154	Upper Dolly Varden	113.03	125.35	12.32	12.13	189.7	0.13	0.74
	Includes	113.03	114.50	1.47	1.45	1389.5	0.52	0.69
DV18158	Upper Dolly Varden	82.35	89.70	7.35	7.10	247.3	0.90	1.92
	Includes	82.35	86.00	3.65	3.53	412.9	1.14	3.32
DV18131	Kitsol	146.00	177.00	31.00	30.38	302.2	0.26	0.41
	Includes	167.00	171.70	4.70	4.61	534.5	0.06	0.18
DV18135	Kitsol	170.00	192.15	22.15	21.81	332.8	0.45	0.22
	Includes	173.10	177.15	4.05	3.99	1112.7	0.32	0.35
DV18103	Moose	110.00	122.50	12.50	12.07	132.5	0.65	0.50
	Includes	115.25	120.10	4.85	4.68	224.3	1.23	0.27
DV18109	Moose	122.85	152.00	29.15	22.33	226.0	0.09	0.13
	Includes	137.40	146.60	9.20	7.05	566.0	0.03	0.07
DV18086	Torbrit North	400.68	409.00	8.32	8.07	248.4	0.15	0.10
	Includes	407.00	409.00	2.00	1.94	559.5	0.06	0.10
DV18105	Torbrit East	117.00	141.00	24.00	22.55	287.5	0.29	0.11
	Includes	124.00	132.00	8.00	7.52	585.2	0.49	0.11
DV18083	Bonus	123.50	139.00	15.50	7.75	161.4	0.25	0.20
	Includes	123.50	128.15	4.65	2.33	347.0	0.16	0.16

10.3.1.5 2019 Drill Program

In 2019, the Company completed a total of 44 diamond drillholes targeting twelve exploration targets, totalling 11,863 m. The majority of these drillholes were reconnaissance tests within the potassic alteration belt to the north of the resource area, designed with the goal of confirming historical drilling as well as testing lateral strike extension and continuity at depth. Of these exploration targets, five areas yielded silver values sufficiently high enough to warrant further testing: Chance, Silver Horde, Mackay, Beginner's Luck, and Kitsol South. These targets occur within the same stratigraphic rocks of the Hazelton Group that exist at the Torbrit Mine deposit. Highlights of the 2019 drill program are presented in Table 10.17.

Table 10.17. 2019 Dolly Varden diamond drill program highlights (Modified from Dolly Varden Silver Corp, 2019c).

Drillhole	Target	From (m)	To (m)	Core Length (m)	Est. True Width (m)	Ag (g/t)	Pb (%)	Zn (%)
DV19-165	Chance	4	30.5	26.5	24.9	385.4	0.24	0.09
	Includes	4	13	9	8.46	968.2	0.51	0.17
	Includes	8	13	5	4.7	1,606.50	0.86	0.26
	Includes	10	10.9	0.9	0.85	4,640.00	0.71	0.14
	Unnamed	39	39.5	0.5	0.47	199	0.17	0.07
DV19-166	Chance	3	23.65	20.65	10.33	233	0.45	0.09
	Includes	3	17.5	14.5	7.25	319.9	0.56	0.09
	Includes	5.5	13.4	7.9	3.95	471.7	0.81	0.09
	Includes	9.55	10.55	1	0.5	771	0.77	0.12
DV19-169	Chance-N	49.65	58.35	8.7	6.15	265.2	0.15	0.12
	Includes	51.65	56.85	5.2	3.68	396.2	0.18	0.16
	Includes	54.65	55.65	1	0.71	760	0.44	0.43
	Chance	72.5	85	12.5	8.84	340.7	0.2	0.13
	Includes	75.8	83.9	8.1	5.73	506.4	0.3	0.17
	Includes	79.8	82.8	3	2.12	700	0.54	0.26
	Includes	80.8	81.8	1	0.71	949	0.29	0.19
DV19-170	Unnamed	59.6	60.25	0.65	0.42	98.9	2.72	0.03
	Chance	129	141.3	12.3	7.91	108.5	0.01	0.05
	Includes	131.9	141.3	9.4	6.04	136.3	0.01	0.04
	Includes	136	140	4	2.57	192.3	0.02	0.04
	Includes	139	140	1	0.64	361	0.02	0.07
DV19-173	Chance	67.4	82.6	15.2	13.16	488.3	0.55	0.05
	Includes	71.15	82.6	11.45	9.92	629.3	0.73	0.06
	Includes	77	82.6	5.6	4.85	1,043.80	1.39	0.09
	Includes	81.7	82.6	0.9	0.78	2,410.00	0.24	0.15
	Unnamed	164	166	2	1.73	35.2	0.07	0.07
DV19-177	Unnamed	46	48	2	1.7	30.7	0.01	0.14
	MacKay	72	73.75	1.75	1.49	126.4	2.27	0.04
	Includes	73.25	73.75	0.5	0.43	385	7.56	0.05
DV19-188	Unnamed	19	21	2	1.7	65.4	0.01	0.02
	Unnamed	26	28	2	1.7	53.2	0.04	0.02
	Silver Horde	34.35	47	12.65	10.75	58.7	0.14	0.03
	Includes	34.35	38	3.65	3.1	139.1	0.43	0.04
	Includes	35.7	37.35	1.65	1.4	237.7	0.57	0.04
	Includes	35.7	36.25	0.55	0.47	470	0.45	0.06
	Unnamed	215	216	1	0.85	49.8	0.14	0.08
	Unnamed	228.5	229.5	1	0.85	83.7	0.08	0.1
	Unnamed	257.3	257.8	0.5	0.43	54.1	0.15	0.02

Drillhole	Target	From (m)	To (m)	Core Length (m)	Est. True Width (m)	Ag (g/t)	Pb (%)	Zn (%)
DV19-203	Beg. Luck	14.4	23.3	8.9	7.57	56.7	0.02	0.06
	Includes	18.9	23.3	4.4	3.74	99.2	0.03	0.04
	Includes	19.55	21.55	2	1.7	144.5	0.04	0.03
	Includes	19.55	20.55	1	0.85	188	0.04	0.03
DV19-205	Unnamed	264	266	2	1.7	40.6	0.02	0.02
	Unnamed	283	287	4	3.4	51.6	0.01	0.06
	Includes	285	287	2	1.7	78.3	0.01	0.06
	Unnamed	342.7	343.2	0.5	0.43	130	0.16	0.08
	Unnamed	346	347	1	0.85	33.1	0.05	0.05
	Kitsol South	390.15	393.45	3.3	2.81	148.9	0.16	0.08
	Includes	392.4	393.45	1.05	0.89	303.9	0.15	0.1

10.3.1.6 2020 Drill Program

During the 2020 diamond drill program at the Dolly Varden claim block, a total of 11,397 meters in 40 diamond drill holes were completed. 19 holes were completed in the Torbrit Resource area focusing on infill and step-out drilling, and 21 exploration drill holes were completed targeting several areas on the property. Oriented drill core techniques were used on all drill holes during the 2020 drill program. Significant intercepts from the 2020 drill program are present in Table 10.18.

Infill drilling at Torbrit was completed with the objective of delineating high grade ore zones within the deposit, which includes drillhole DV20-217 that averaged 642 g/t Ag over 4.0 m from within a 31.95 m interval that averaged 302 g/t Ag. Step out drilling was completed in several directions of 20 m to 50 m out from previous drilling intercepts. Highlights from drilling in the Torbrit Resource Area also include:

- DV20-222: 310 g/t silver over 6.00 meters, including 1,083 g/t silver over 2.70 meters.
- DV20-244: 304 g/t silver over 45.82 meters, including 642 g/t silver over 4.00 meters.
- DV20-246: 306 g/t silver over 5.10 meters, including 1,290 g/t silver over 0.60 meter.

The 45.82 m wide zone encountered by drillhole DV20-244 expanded the mineralization of the current Torbrit Mineral Resource model vertically. DV20-246 was designed as an infill hole to test the eastern extent of the internal high-grade zone, which confirmed modelled mineralization near historical workings. Drill hole DV20-222 was a 35m step out to the west of the nearest drillhole, and the mineralized intercept it encountered lines up with the extrapolated block model while also confirming a higher composite silver grade within that interval.

Table 10.18. 2020 Dolly Varden diamond drill program highlights (Modified from Dolly Varden Silver Corp, 2020 and 2021b).

Drillhole	Mineralization Zone	From (m)	To (m)	Core Length* (m)	Ag (g/t)	Pb (%)	Zn (%)
DV20-209	Vein Breccia	109	114	5	158	0.15	0.03
DV20-210	Vein Breccia	111	114	3	176	0.79	0.07
	Torbrit East extend	156.05	166.4	10.35	16	0.07	0.12
DV20-211	Torbrit East edge	147.25	160	12.75	351	0.41	0.09
	Includes	147.25	150.6	3.35	951	0.39	0.16
	Includes	147.9	150.6	2.7	1083	0.39	0.19
DV20-212	Torbrit East edge	132.75	133.75	1	227	2.3	0.09
DV20-213	Torbrit	129	166.5	37.5	134	0.45	0.28
	Torbrit upper lens	129	145.45	12.85	191	0.3	0.41
	Includes	129	130	1	906	2.4	2.48
DV20-218	Torbrit Horizon	56.5	65.5	9	10	0.05	0.42
DV20-220	Torbrit Horizon	67.5	86.15	18.65	50	0.05	0.42
	Includes	67.5	79	11.5	45	0.29	0.4
DV20-221	Vein Mineralization	79.4	81.2	1.8	129	0.39	0.82
DV20-222	Torbrit Horizon	53	75.5	22.5	95	0.33	2.8
	Includes	53	56	3	195	1.37	1.11
	Upper Torbrit	92.7	108.25	15.55	204	0.4	0.43
	Includes	92.7	98.7	6	310	0.81	0.57
DV20-235	Wolf Structure	20.9	35.3	14.4	53	0.16	0.11
	Includes	24	28	4	79	0.16	0.16
DV20-238	Wolf Structure	94.55	101.45	6.9	65	0.26	0.12
	Includes	96.55	100.3	3.75	104	0.36	0.11
DV20-240	Wolf Structure	286.8	297.7	10.9	49	0.13	0.1
	Includes	296.25	297.7	1.45	220	0.5	0.21
DV20-243	Torbrit Horizon Exploration	286.8	297.7	10.9	10	0.01	0.21
DV20-244	Vein Mineralization	57.08	59.81	2.73	359	0.1	0.37
	Torbrit Main	80.18	126	45.82	304	1.01	0.35
	Includes	80.18	97.5	17.32	490	1.39	0.44
	Includes	84.94	91	6.06	648	1.53	0.7
	Includes	84.94	86	1.06	1,595	2.54	0.33
DV20-245	Chance West	49	50.5	1.5	83	1.68	0.28
DV20-246	Torbrit Horizon	80.9	86	5.1	306	0.29	0.42
	Includes	82.3	82.9	0.6	1,290	0.19	0.57
	Ended in stope	104.35	105.55	1.2	338	0.24	0.76
DV20-247	Torbrit edge	189.9	211.88	21.98	50	0.36	0.38
DV20-248	Vein Mineralization	27.8	29.15	1.35	22	1.37	0.09
	Torbrit Horizon	180	202.58	22.58	73	0.46	0.41
	Includes	180	187.3	7.3	123	0.95	0.97

*The true width of intercepts is estimated to be 80-95% of the Core Length (m) reported, based on the current understanding of the three-dimensional nature of the mineralization and grade models at Torbrit.

10.3.1.7 2021 Drill Program

Exploration and Reconnaissance drilling was also completed to test structures within the potassic alteration zone that extends 4.5 km north of the Torbrit Deposit, as well as testing the Western Gold Belt area of that comprises a strong north-northwest quartz-sericite-pyrite (QSP) alteration zone. Drilling in the Western Gold Belt area encountered hydrothermal breccias, stockwork quartz veining, and anomalous gold mineralization.

During the 2021 field season, a total of 31 diamond drillholes were completed at the Dolly Varden claim block, for a total of 10,506 m. 21 of these drillholes were designed to test the high-grade Torbrit Deposit and the neighbouring Kitsol Vein, with the goal of expanding Resources as well as promoting the current Inferred Resources to Measured and Indicated classifications. These drillholes tested the Kitsol Vein and the northward extension of the Torbrit Horizon below it, the westward connection of the Torbrit Horizon with the North Star deposit, as well as infilling and expanding the Torbrit Main and Torbrit North Resources. The remaining 10 holes were reconnaissance tests targeting the Medallion, Red Point, Syndicate, Silver Horde, and Wolf regional exploration targets.

At the Kitsol Vein target, a three hole fan was completed to infill, expand, and upgrade mineralization, which confirmed wide zones of epithermal-vein style mineralization through the target. These holes also tested the extension of the Torbrit horizon to the east of Kitsol and to north at depth. This drilling encountered high grade mineralization along the northward extension of the Torbrit Horizon below the Kitsol vein, which confirms the synformal profile of the potassic alteration hosting Hazelton group volcanics that underlie the centre of the valley. Significant intercepts encountered in the Kitsol Vein and Torbrit Extension drilling are stated below, and further highlights of the drilling results are presented in Table 10.19.

- DV21-274: returned 705 g/t Ag, 0.65% Pb, and 0.28% Zn over 3.70 m (2.97 m true width) from within a thicker intercept of 15.28 m (12.28 m true width) that yielded 354 g/t Ag, 0.38% Pb, and 0.48% Zn though the Kitsol Vein at 134.85 m to 150.13 m.
- DV21-275: averaged 220 g/t Ag, 0.79% Pb, and 0.49% Zn over 23.88 m (18.27 m true width) within the Kitsol Vein, as well as 1,220 g/t Ag over 0.7 m Core Length from 362.05 m to 362.75 m through the Torbrit Horizon Extension.
- DV21-275 also yielded 5.4 g/t Au from a 2 m interval at 204 m to 206 m depth.

Table 10.19. 2021 Dolly Varden diamond drill program highlights from Kitsol Vein infill and Torbrit Extension drilling (Modified from Dolly Varden Silver Corporation, 2022a).

Drillhole	Target	From (m)	To (m)	Core Length (m)	True Width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
DV21274	Kitsol	134.85	150.13	15.28	12.28	354	0.38	0.48	
	including	142	145.7	3.7	2.97	705	0.65	0.28	
	Torbrit extension	368.75	370.32	1.57	*	86	0.29	0.15	

Drillhole	Target	From (m)	To (m)	Core Length (m)	True Width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
	including	369.75	370.32	0.57	*	131	0.35	0.11	
DV21275	Kitsol	157.12	181	23.88	18.27	220	0.79	0.49	
	including	157.12	170.5	13.38	10.24	230	1.31	0.74	
	including	157.12	160.15	3.03	2.32	297	1.31	1.26	
DV21275	Au in Alteration zone	204	206	2	?				5.4
	Torbrit extension	361.45	362.75	1.3	*	725	NSV	NSV	
	including	362.05	362.75	0.7	*	1220	NSV	NSV	
DV21276	Kitsol	221	248	27	12.34	7.6	0.08	0.13	
	including	242.5	244	1.5	0.69	17	0.59	0.52	
	Torbrit Extension	Geochem marker	394.5						

*True Width for the Torbrit Horizon is estimated at 90% to 100% of core length, using angle to core from oriented core data.

Drilling west of the main resource encountered a previously unknown northwest plunging extension of the Torbrit Horizon, where wide zones of stratabound syngenetic volcanogenic-related mineralization were discovered. The Ag mineralization within this extended horizon bears similar Pb and Zn ratios to those in the North Star Deposit. In addition to this discovery, two of the step-out drillholes encountered epithermal-style Cu-Au mineralization associated with the horizon that bears similarity to the mineralization style observed in the western gold belt towards Homestake Ridge. Drillhole DV21-255 averaged 1.23% Cu and 0.39 g/t Au over a 0.95 m interval within a zone of epithermal mineralization. Highlights of the drilling results are presented below in Table 10.20.

Table 10.20. 2021 Dolly Varden diamond drill program highlights from Torbrit Resource Area infill and west step out drilling, North Star connector (Modified from Dolly Varden Silver corporation, 2022a).

Drillhole	Target	From (m)	To (m)	Core Length* (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (ppm)
DV21253	Torbrit	98.5	114.04	15.54	28.64	0.49	0.46	NSV
	Torbrit North	445.18	451.5	6.32	30.5	0.38	0.61	NSV
DV21254	Torbrit	107.1	119	11.9	135	1.21	1.99	NSV
	including	107.1	109.6	2.5	156	3.38	2.5	NSV
	including	111	115	4	215	0.42	1.5	NSV
	including	112	113	1	449	0.79	0.64	NSV
DV21255	Torbrit/North Star	208	224.24	16.24	4	0.07	0.25	NSV
	including	220.05	221	0.95	13	NSV	0.13	0.39
DV21256	Torbrit/North Star	227.5	246.35	18.85	66	0.17	0.63	0.16
	including	230.5	233.5	3	262	0.28	0.43	NSV
DV21257	Torbrit/North Star	249.88	279.83	29.95	5	0.1	0.43	NSV
	including	249.88	252	2.12	14	0.8	2.43	NSV

*True Width for the Torbrit Horizon is estimated to be 85% to 95% of core length, using angle to core from oriented core data.
NSV: not significant value

Drillholes completed near the Torbrit Resource area were infill and expansion holes that tested the extent of the mineralized lenses within the resource. Highlights of the drilling results are presented below in Table 10.21.

Table 10.21. 2021 Dolly Varden diamond drill program highlights from Torbrit Resource Area infill and Step-out drilling (Modified from Dolly Varden Silver Corporation, 2022a).

Drillhole	Target	From (m)	To (m)	Core Length* (m)	Ag (g/t)	Pb (%)	Zn (%)
DV21249	Torbrit	128	162	34	31	0.05	0.15
	including	135.05	137	1.95	158	0.22	0.46
	Torbrit North	407	428	21	162	0.24	0.19
	including	410.85	412	1.15	605	0.85	0.1
	including	421.25	425	3.75	307	0.42	1.3
DV21250	Torbrit	159	178.27	19.27	3	0.02	0.07
	Torbrit North	417.9	437	22.05			
DV21251	Torbrit	110.65	113.4	2.75	6	NSV	NSV
	Torbrit North	328.15	353.1	24.95	12	0.03	0.1
DV21252	Torbrit	127.5	158	30.5	78	0.47	0.03
	including	136	139	3	256	1.49	0.72
	Torbrit North	458	465.45	7.45			
DV21258	Torbrit	72	102.45	30.45	7	0.05	0.25
	Torbrit	184.54	190	5.46	143	0.11	0.12
	including	185.5	188	2.5	274	0.08	0.12
DV21259	Torbrit	87	133	46	8	0.12	0.48
	including	121	131	10	17	0.35	1.21
	Torbrit	243	244.62	1.62	155	NSV	NSV
DV21260	Torbrit	128.87	129.87	1	274	0.33	4.26
	including	128.87	129.37	0.5	473	0.55	8.28
DV21261	Torbrit	69.73	71.83	2.1	206	0.25	0.45
	including	69.73	70.23	0.5	575	0.32	0.92
DV21262	Torbrit	20	24.04	4.04	10	0.03	0.05
	and	58.4	66	7.6	6	0.03	0.1
DV21263	Torbrit	14.95	24.5	9.55	12	0.07	0.13
	and	51.5	53	1.5	9	0.82	3.42
DV21277	Torbrit South	152	153	1	297	NSV	NSV
	Torbrit South	165	181	16	212	0.36	0.19
	including	174	178.7	4.7	507	0.43	0.16
DV21278	Torbrit	101.5	113.8	12.3	90	0.95	1.51
	including	104.7	110.3	5.6	131	1.37	1.46
	including	113.3	113.8	0.5	258	2.06	0.26
	Torbrit	120.5	143.7	23.2	112	0.95	0.2
	including	120.5	125.6	5.1	364	2.45	0.13
	including	124.5	125.1	0.6	1095	7.7	0.29

Drillhole	Target	From (m)	To (m)	Core Length* (m)	Ag (g/t)	Pb (%)	Zn (%)
DV21279	Torbrit	81.5	84.4	2.9	70	0.25	0.74
	Torbrit South	152.7	155.85	3.15	60	1.13	0.15
	including	155	155.85	0.85	128	0.21	0.07

*True Width has not been determined as there is insufficient drilling to model the orientation of the diffuse sheeted veins.

During the 2021 field program, ten regional exploration and reconnaissance drillholes were completed targeting five target areas. The drilling results of each area are discussed below, as well as highlighted in Table 10.22.

Drilling at the Wolf Deposit was competed in order to test the southwest extension of the Wolf vein, where drillhole DV21-273 confirmed significant mineralization outside the Mineral Resource. Drillhole DV21-273 averaged 1,532 g/t Ag, 0.44 g/t Au, 2.11% Pb, and 1.07% Zn over 1.22m core length from within a wider zone measuring 17.50 m that averaged 214 g/t Ag and 0.47% Pb.

The Red Point Target is located on the western side of the Kitsault Valley within the southern end of the Western Gold Belt area, where drilling encountered anomalous gold, silver, and copper mineralization hosted in stockwork quartz-veined Hazelton Group volcanic rocks.

No significant results were returned from the drilling completed at the Medallion Prospect.

Drillhole DV21-270 tested the Syndicate Target and intersected an interval of 1.10 m core length that averaged 126 g/t Ag and 1.31 g/t Au.

Drilling at Silver Horde was completed in order to test the volcanic rocks underlying the surface sediment cap rocks, as these volcanics lie down plunge of previously positive drill results. Drillhole DV21-272 returned a 1.5 m interval that averaged 256 g/t Ag from within a wider 9.0 m interval that averaged 126.75 g/t Ag.

Table 10.22. 2021 Dolly Varden diamond drill program result highlights from Regional Exploration and Reconnaissance drilling (Modified from Dolly Varden Silver Corporation, 2021c)

Drillhole	Target	From (m)	To (m)	Core Length (m)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)
DV21-273	Wolf Vein	302	319.5	17.5*	214		0.47	0.06	
	including	303.18	304.4	1.22*	1532	0.44	2.11	1.07	
	including	311.85	315.8	3.95*	328	0.12	0.52	0.83	
DV21-267	Red Point	1.55	170.1	168.55†		0.13			
	including	26	26.65	0.65†	13	0.35			
	including	79	80	1†	24	1.15			
	including	81.8	83	1.2†	5	0.95			0.07

Drillhole	Target	From (m)	To (m)	Core Length (m)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Cu (%)
	including	168	170.1	2.1†	10	0.33			0.41
DV21-268	Red Point	2.36	186.8	184.44†		0.17			
	including	66	72	6†	6	0.57			
	and	192.06	192.56	0.5†	128				0.94
DV21-269	Red Point	2.65	85	82.35†		0.17			
	Red Point	127	430	303†		0.15			
	including	289	290.12	1.12†		1.1			
	including	316	317	1†		1.12			
DV21-270	Syndicate	52.4	53.5	1.1**	126	1.31			
DV21-272	Silver Horde	41	50	9‡	126.75				
	including	41	42.5	1.5‡	256				
DV21-272	Silver Horde	202.5	203	0.5‡	249				

*True Width is estimated to be 85% of core length, using angle to core from oriented core data.
†True Width has not been determined as there is insufficient drilling to model the orientation of the broad mineralization and alteration zone.
**True Width is estimated to be 80% to 90% of core length based on limited drilling for geometry modelling.
‡True Width has not been determined as there is insufficient drilling to model the orientation of the diffuse sheeted veins.

10.3.1.8 2022 Drill Program

During the 2022 drill program at the Dolly Varden claim block, 52 drillholes were completed for a total of 18,614 m drilled. Step-out and infill drilling was completed at the Torbrit Deposit area (including the Kitsol Vein), as well as wide-spaced step-out drilling at the Wolf Deposit.

Step-out drilling at the Torbrit Main Deposit tested the southern extent of the current Mineral Resource, in addition to infilling zones of modelled inferred resources. At the Kitsol Vein zone, step-out and infill drilling encountered high-grade silver mineralization including a 0.5 m core length interval from hole DV22-283 that averaged 2910 g/t Ag. Drill results from the Kitsol Vein zone suggest that grade and thickness of mineralization increases with depth. Highlights from the drilling program at Torbrit Main and Kitsol Vein are presented in Table 10.23.

Table 10.23 2022 Dolly Varden diamond drill program highlights from the Torbrit Deposit Area and Kitsol Vein zone (Modified from Dolly Varden Silver Corporation, 2022b, 2022d and 2023a).

Drillhole	Target	From (m)	To (m)	Core Length (m)	True width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
DV22-283	Kitsol Vein	181.32	231.5	50.18	30.11	414	0.18	0.19	0.07
	Includes:								
	Zone 1	189.11	196.26	7.15	4.29	634	0.47	0.31	0.11
	including	191	193.75	2.75	1.65	1121	0.66	0.37	0.21

Drillhole	Target	From (m)	To (m)	Core Length (m)	True width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
	including	191	191.5	0.5	0.3	2910	2.81	1.32	0.54
	including	193.25	193.75	0.5	0.3	2390	0.12	0.14	0.42
	Zone 2	207	218.74	11.74	7.04	658	0.21	0.14	0.07
	including	211	217.9	6.9	4.14	849	0.2	0.16	0.1
	including	212.7	215.04	2.34	1.4	1245	0.22	0.11	0.23
	including	212.7	213.2	0.5	0.3	2500	0.03	0.08	0.23
	Zone 3	223.02	228.36	5.34	3.2	801	0.07	0.22	0.02
DV22-282	Kitsol	175.38	179.05	3.67	2.83	210	0.48	0.11	0.04
DV22-284	Torbrit	111.33	112.97	1.64	1.31	50	0.58	6.1	NSV
	and	114.43	115.51	1.08	0.86	129	0.16	1.45	NSV
	and	125.32	128.85	3.53	2.82	27	0.11	3.44	0.06
DV22-286	Kitsol	173.54	174.5	0.96	0.58	141	0.81	0.55	0.15
	and	177	183.95	6.95	4.17	188	0.24	0.16	0.09
	including	178.8	179.53	0.73	0.44	448	0.15	0.18	0.16
	including	181.92	182.42	0.5	0.3	564	0.29	0.11	0.39
DV22-287	Torbrit	176	177	1	0.9	NSV	NSV	1.69	NSV
DV22-289	Torbrit	11.49	12	0.51	0.49	979	0.37	0.16	NSV
DV22-290	Torbrit	19.21	19.94	0.73	0.7	406	0.17	0.13	NSV
DV22-291	Kitsol	120.19	132.7	12.51	8.88	442	0.26	0.31	NSV
	including	120.19	120.72	0.53	0.38	144	1.21	1.33	0.05
	including	125.5	127	1.5	1.07	1367	0.22	0.17	NSV
DV22-293	Torbrit	88.34	91.8	3.46	3.43	136	0.05	0.02	NSV
	including	90.77	91.8	1.03	1.02	166	0.08	0.03	NSV
DV22-295	Kitsol	145.9	152	6.1	3.48	145	0.85	0.36	NSV
	including	147.4	151	3.6	2.05	166	0.23	0.33	NSV
	and	240.5	241	0.5	0.29	230	0.02	0.01	0.01
DV22-296	Torbrit	81	82.25	1.25	0.89	119	1.15	0.27	NSV
	and	85.05	88.5	3.45	2.45	130	1.31	0.41	NSV
	and	90	91	1	0.71	98	1.28	0.35	NSV
	and	108.4	115.6	7.2	5.11	60	1.44	0.67	NSV
	and	124.25	125.4	1.15	0.82	274	0.05	0.43	NSV
DV22-298	Kitsol	25.45	47	21.55	10.78	372	0.68	0.42	NSV
	including	27.79	34.56	6.77	3.39	785	1.59	0.64	NSV
	including	27.25	28.85	1.6	0.8	517	5.48	2.4	NSV
	including	29.5	30.5	1	0.5	1054	0.5	0.21	NSV
DV22-299	Torbrit	19.45	23	3.55	3.12	166	0.03	0.06	NSV
	and	30.5	31	0.5	0.44	517	3.16	0.09	NSV
	and	52.35	52.83	0.48	0.42	267	2.29	0.07	NSV
	and	74.73	75.48	0.75	0.66	242	0.26	0.1	NSV
	and	107.12	112	4.88	4.29	168	0.15	0.5	NSV
	and	122.87	123.53	0.66	0.58	199	0.25	0.19	NSV
DV22-301	Torbrit	127.5	129	1.5	0.66	370	0.55	0.15	NSV

Drillhole	Target	From (m)	To (m)	Core Length (m)	True width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
	and	163.3	164.16	0.86	0.38	153	0.26	0.2	0.01
	including	173.16	173.95	0.79	0.35	235	0.22	0.16	NSV
DV22-303	Torbrit	150.91	154.85	3.94	3.43	325	0.42	0.06	0.3
DV22-305	Torbrit	157	159.26	2.26	2.21	168	0.21	0.05	NSV
	and	170.05	170.55	0.5	0.49	283	0.05	0.02	NSV
DV22-306	Torbrit	114	117.41	3.41	3.41	132	0.4	0.64	0.01
	and	119	123.5	4.5	4.5	166	0.12	0.56	0.02
	and	148	151.44	3.44	3.44	191	0.06	0.03	0.01
	and	155	159	4	4	145	0.18	0.09	0.01
DV22-308	Torbrit	146.18	154.52	8.34	6.59	297	1.25	0.47	NSV
	including	149.75	152.28	2.53	2	773	1.29	0.68	NSV
DV22-309	Torbrit	126.62	128.58	1.96	1.84	193	0.48	0.03	0.01
DV22-312	Torbrit	60	63.3	3.3	3.3	585	0.02	0.06	NSV
	including	60	61.13	1.13	1.13	1050	0.02	0.06	NSV
	and	105.25	108.62	3.37	3.37	159	0.13	0.04	NSV
DV22-313	Torbrit	80	81.1	1.1	1.1	158	0.01	0.3	NSV
	and	105	106.67	1.67	1.67	160	0.3	0.09	NSV
DV22-323	Kitsol	325.3	340.3	15	9.6	301	0.23	0.56	NSV
	including	332.4	338.3	5.9	3.78	434	0.41	0.69	NSV

*Calculated true widths vary depending on intersection angles and range from 50% to 100% of intersection lengths.

Wide spaced step-out drilling at the Wolf Deposit tested the extension of mineralization along strike towards the southwest of the current Resource underneath the sediment cap of the Upper Hazelton Group rocks. The majority of step-out drill holes intersected the extension of the Wolf Vein system underneath the sediment cap layer, confirming anomalous to high-grade silver intercepts within this extension zone down-dip and down-plunge of the current deposit. Highlights of the drilling results at the Wolf Deposit are presented below in Table 10.24.

Table 10.24. 2022 Dolly Varden diamond drill program highlights from the Wolf Deposit (Modified from Dolly Varden Silver Corporation, 2022c, 2022e and 2023a).

Drillhole	From (m)	To (m)	Core Length (m)	Approx. True Width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
DV22-280	220.9	223.9	3	2.4	84	0.02	0.02	0.03
including	220.9	222.05	1.15	0.92	138	0.03	0.04	0.07
DV22-281	354.25	371	16.75	10.89	87	1.56	3.62	0.02
including	355.55	358.57	3.02	1.96	182	0.35	1.04	0.02
including	367.25	371	3.75	2.43	170	6.25	14.12	0.06
DV22-285	424.75	436	11.25	6.75	NSV	0.13	0.51	0.04

Drillhole	From (m)	To (m)	Core Length (m)	Approx. True Width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
including	425.25	425.75	0.5	0.3	17	1.09	1.29	0.01
including	432	432.93	0.93	0.56	NSV	0.16	2.76	0.46
and	452.59	485.84	33.25	19.95	NSV	0.1	0.28	NSV
including	458	459.25	1.25	0.75	42	0.47	1.08	NSV
including	483.36	484.46	1.1	0.66	244	0.8	1.41	0.02
and	540	541.4	1.4	0.84	NSV	0.17	2.52	0.12
DV22-288	475.4	476.8	1.4	0.77	NSV	0.16	1.28	0.01
and	515.7	526.65	10.95	6.02	10	0.71	0.66	NSV
including	516.2	517	0.8	0.44	16	1.06	0.24	0.01
including	522	523	1	0.55	6	0.73	1.32	0.02
including	525.15	526.65	1.5	0.83	26	2.8	2.14	0.05
and	569	569.8	0.8	0.44	27	1.56	1.39	NSV
and	587.4	589	1.6	0.88	6	0.25	1.15	0.01
DV22-294	343.4	346.8	3.4	2.38	18	0.35	0.84	NSV
including	346.3	346.8	0.5	0.35	78	1.72	3.05	0.02
and	351.6	354.65	3.05	2.14	128	0.73	2.04	0.01
including	351.6	353.1	1.5	1.05	226	0.97	1.72	0.02
DV22-300	325.5	345.35	19.85	13.9	584	0.92	0.56	0.19
including	342	343.6	1.6	1.12	4326	4.21	1.36	1
and	353.25	354.7	1.45	1.02	347	0.65	0.53	0.1
DV22-302	397.05	415.85	18.8	11.28	17	0.36	0.63	NSV
DV22-304	396.5	413.5	17	11.56	48	0.33	0.51	NSV
DV22-311	699.9	712.7	12.8	5.38	412	0.82	2.14	NSV
including	706	708.15	2.15	0.9	1646	2.38	3.1	0.1
DV22-316	449.5	592.85	143.35	71.65			0.48	
Vein 1	466.8	484.7	17.9	8.95	315	0.48	0.23	NSV
including	466.8	476.6	9.8	4.9	551	0.81	0.3	NSV
including	472.5	476.1	3.6	1.8	1049	1.73	0.29	NSV
including	474.8	475.6	0.8	0.4	2080	4.1	0.21	0.1
Vein 2	501.25	538	36.75	18.37	78	0.24	0.75	NSV
Including	513.8	527	13.2	6.6	111	0.51	1.37	0.08
Vein 3	567.54	572.15	4.61	2.3	29	0.13	0.47	NSV
DV22-320	182	183	1	0.53	2	0.01	1.07	NSV
and	586	587	1	0.53	5	0.36	1.18	NSV
and	592	593	1	0.53	8	0.33	1.15	NSV
and	623.65	625	1.35	0.72	158	0.4	0.14	NSV
and	648.4	661.25	12.85	6.81	321	0.84	0.84	NSV
including	649.47	651.1	1.63	0.86	664	1.24	3.54	NSV
DV22-329	30	45.94	15.94	8.77	1499	1.89	0.46	NSV
including	30	33.5	3.5	1.93	4563	0.66	0.11	NSV
including	32.33	32.68	0.35	0.19	23997	1.24	0.34	NSV

Three exploration drill holes tested an Induced Polarity chargeability anomaly and the depth extent of gold bearing veins from the Red Point Area, located approximately 500m west of the Kitsol Vein. All holes intersected strong QSP (quartz-pyrite –sericite) alteration with stockwork veining that returned anomalous gold over broad intervals (Table 10.25). In areas where the quartz veining intensified and brecciation occurred, gold and copper grades increased.

Table 10.25. 2022 Dolly Varden diamond drill program highlights from the Red Point (Modified from Dolly Varden Silver Corporation, 2023a).

Drillhole	From (m)	To (m)	Core Length (m)	Approx. True Width (m)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
DV22-321	6.19	12	5.81	75% to 90% of length	NSV	NSV	NSV	0.22
and	23	29	6		NSV	NSV	NSV	0.44
and	103	105	2		NSV	NSV	NSV	3.01
and	113	162	49		13	NSV	NSV	0.59
including	138	143	5		83	NSV	NSV	2.94
including	139	140	1		244	NSV	NSV	8.1
and	248	261	13		NSV	NSV	NSV	0.73
DV22-322	2.88	11	8.12	75% to 90% of length	NSV	NSV	NSV	0.18
and	45	76	31		NSV	NSV	NSV	0.19
and	106.6	107.75	1.15		23	0.07	0.13	17.2

10.3.2 Homestake Claim Block

10.3.2.1 2022 Drill Program

During the 2022 diamond drill program at Homestake claim block, 56 drillholes were completed for a total of 18,448 m drilled. The drilling program was designed to infill and upgrade the current Inferred Mineral Resources at the Homestake Main and Homestake Silver zones, as well as to test the extension of the deposits' mineralized zones. Drilling at the Homestake Main zone identified new targets down-dip of the deposit, and the results of infill drilling imply that the lenses of increased gold-silver grade within the deposit may be more continuous than previously interpreted from historical drilling. Highlights of the drilling results at the Homestake Main Deposit are presented below in Table 10.26.

Table 10.26. 2022 diamond drill program highlights from the Homestake Main zone (Modified from Dolly Varden Silver Corporation, 2022f, 2023b)

Drillhole	From (m)	To (m)	Core Length* (m)	Au (g/t)	Ag (g/t)	Cu (%)
HR22-313	107	148	41	0.85	12	0.1
including	125.08	127	1.92	3.13	42	NSV
including	141	146.1	5.1	3.1	11	0.72
HR22-314	149.66	165.72	16.06	4.27	64	NSV
including	159.92	163	3.08	18.76	193	0.28
and	168.23	169.19	0.96	10.55	50	4.14
HR22-315	174.7	175.22	0.52	2.07	25	1.37
HR22-316	124	152.5	28.5	0.88	3	NSV
including	142.5	144	1.5	2.47	3	NSV
including	150	151.5	1.5	3.11	13	0.49
HR22-317	200	205	5	0.25	NSV	NSV
and	232	235.6	3.6	0.21	NSV	NSV
HR22-318	129	181	52	1.19	23	NSV
including	148.88	149.38	0.5	19.9	1990	0.39
including	152	160.2	8.2	2.57	8	0.19
including	172	177	5	3.23	3	0.09
HR22-319	200.34	207	6.66	1.16	3	NSV
HR22-320	108.5	125.5	17	0.83	6	NSV
including	123.87	124.6	0.73	5.98	17	NSV
HR22-321	179	192	13	1.16	4	0.12
including	189	190.55	1.55	5.18	10	0.15
HR22-322	83	143.12	60.12	1.69	21	NSV
including	113	119	6	6.47	27	NSV
including	134.13	138.71	4.58	5.23	17	0.5
HR22-323	190.3	222	31.7	0.91	6	0.37
including	198	203	5	2.36	5	0.08
including	207.6	209.56	1.96	0.49	37	3.5
including	214	214.55	0.55	0.52	16	1.97
HR22-324	152	174.5	22.5	4.32	76	NSV
including	170	174.5	4.5	19.42	375	NSV
including	171.96	172.4	0.44	166	984	NSV
HR22-325	174	201	27	3.11	12	0.2
including	174	184	10	7.18	30	0.49
including	175	175.5	0.5	18	23	1.92
including	177.3	177.8	0.5	15.6	92	2.95
including	180	181.47	1.47	20.2	68	0.08
HR22-327	217.28	227.5	10.22	1.01	17	1.43
including	220.75	223.23	2.48	2.15	35	3.98
and	231	274	43	0.35	5	0.1
including	248.55	251.48	2.93	1.85	65	1.13
HR22-328	160.81	169.97	9.16	27.44	463	0.21
including	163.13	164.9	1.77	75.13	2337	0.23
including	168	168.5	0.5	216	113	0.48
HR22-330	111	126	15	5.68	147	NSV
including	112	112.39	0.39	54.1	4890	0.11
including	116.3	116.69	0.39	74.8	20	NSV
including	118	118.81	0.81	33.8	14	NSV
and	131	143	12	0.24	8	NSV
HR22-331	101	113	12	0.92	63	NSV
including	111	111.8	0.8	9.43	224	0.1

Drillhole	From (m)	To (m)	Core Length* (m)	Au (g/t)	Ag (g/t)	Cu (%)
and	130	144	14	1.02	5	0.15
including	134.1	134.82	0.72	11.95	70	2.45
HR22-333	92	105	13	1.05	21	NSV
including	98.3	99.08	0.78	13.95	196	NSV
and	117	142	25	46.31	70	0.19
including	120.26	130.1	9.84	111.94	162	0.37
including	124.67	125.15	0.48	1145	826	0.51
HR22-334	123	154.61	31.61	1.75	15	0.27
including	131	139.2	8.2	3.66	30	0.27
including	131	132	1	7.67	198	0.04
including	138.7	139.2	0.5	19.55	50	4.26
including	145.13	147.39	2.26	5.38	19	1.09
including	152.06	152.41	0.35	6.92	48	7.27
HR22-335	177	202.55	25.55	0.55	1	NSV
including	184.5	190	5.5	1.4	1	NSV
and	220	245.5	25.5	0.34	2	NSV
HR22-336	96.3	100.2	3.9	6.19	1844	NSV
including	96.62	97	0.38	3.78	13855	0.49
and	132	157	25	1.95	NSV	0.38
including	133	139	6	6.37	29	1.51
HR22-337	145	175.84	30.84	2.74	2	NSV
including	151	172	21	3.79	2	NSV
including	151	152.64	1.64	12.9	4	NSV
including	161	163	2	11.15	5	NSV
including	171	172	1	6.58	3	NSV
HR22-339	148.25	172.5	24.25	2.33	2	NSV
including	156.5	159	2.5	14.56	4	NSV
including	156.5	157.5	1	33.4	7	NSV
and	164.75	165.6	0.85	5.05	3	NSV
HR22-338	120.9	126	5.1	4.16	21	1.42
including	120.9	121.4	0.5	20.8	115	11.6
including	128.6	129.84	1.24	8.92	52	1.38
and	150.5	159	8.5	0.63	5	0.21
including	150.5	151.3	0.8	4.89	28	1.43
and	175.5	178.5	3	0.61	17	0.45
including	177	177.65	0.65	1.17	43	1.55
HR22-345	95	124.54	29.54	8.73	12	0.13
including	115.12	124.54	9.42	26.25	28	0.37
including	120	120.7	0.7	260	102	NSV
HR22-359	49.7	50.2	0.5	0.74	6420	0.11
and	111.63	113.15	1.52	49.49	50	0.96
and	136.85	137.55	0.7	24	76	0.38
and	141	141.5	0.5	46.2	6	NSV

*Estimated true widths vary depending on intersection angles and range from 80% to 90% of core lengths

The 2022 drilling at the Homestake Silver Deposit area was a combination of step out holes below the primarily Inferred Mineral Resource as well as some infill drilling designed to convert Inferred resources to Indicated classification. The mineralization encountered in 2022 drilling is consistent with previous drilling. Highlights of the drilling results at the Homestake Main Deposit are presented below in Table 10.27.

Table 10.27. 2022 diamond drill program highlights from the Homestake Silver zone (Modified from Dolly Varden Silver Corporation, 2023b)

Drillhole	From (m)	To (m)	Core Length* (m)	Au (g/t)	Ag (g/t)	Cu (%)
HR22-349	153	156.5	3.5	NSV	211	0.12
and	159.2	160	0.8	NSV	688	NSV
and	325.8	329	3.2	0.12	210	NSV
and	337	341	4	0.5	287	NSV
and	355.47	356.18	0.71	0.1	434	NSV
and	361.5	362.8	1.3	NSV	151	NSV
HR22-357	194.38	195.5	1.12	0.16	318	NSV
and	200	200.5	0.5	NSV	151	NSV
and	206.6	209.3	2.7	0.08	506	NSV
including	206.6	207.1	0.5	0.11	1185	NSV
and	239	239.5	0.5	0.11	816	NSV
and	298.7	299.2	0.5	NSV	1085	0.18
and	315.6	316.15	0.55	0.17	585	NSV
and	335.1	335.9	0.8	0.3	351	NSV
HR22-361	165.17	165.63	0.46	NSV	599	NSV
and	213.33	213.65	0.32	0.37	99	NSV
and	226.1	227.3	1.2	15.04	2500	0.17
and	317.01	317.41	0.4	2.07	45	0.44
HR22-362	633	635.5	2.5	0.81	1252	0.14
including	634	634.75	0.75	2.24	3330	0.38
HR22-365	184.7	186.85	2.15	NSV	187	NSV
and	190.75	193.45	2.7	NSV	469	NSV
including	192.3	192.95	0.65	NSV	1040	NSV
and	512	512.85	0.85	0.31	98	NSV

*Estimated true widths vary depending on intersection angles and range from 80% to 90% of core lengths

Currently, the Company is compiling and examining the results from the 2022 drilling programs throughout the Kitsault Valley Project area and the authors of this report recommend that the Company complete a formal remodeling exercise at all of the current resource areas (deposits) and initiate revised Mineral Resource estimation where appropriate/necessary.

11 Sample Preparation, Analyses and Security

11.1 Homestake Ridge Project Sampling (pre-2021)

11.1.1 Historical Pre-2003 Homestake Ridge Sample Preparation, Analyses, and Security

The following section is reproduced, with minor formatting changes, from a previous Technical Report completed on the former Homestake Ridge Project (Hough et al., 2022), which is now part of the Company's Kitsault Valley Project.

The following is taken from Macdonald and Rennie (2016).

The [former Homestake Ridge] Project has been explored by numerous historic trenches and adits. Auryn is not aware of any written procedures for sampling that predates Homestake's acquisition of the Project. However, as the trenching and underground sampling were not used in the Mineral Resource estimate, they are not discussed in detail in this Technical Report.

On acquiring the Project in 2003, Homestake conducted several traverses to orient and ground truth existing database sites such as drill collars and individual sampling locations. Homestake concluded that Teck Resources' (Teck) sampling was accurately located, but discrepancies were found with respect to the Noranda Exploration Company Limited (Noranda), Cambria Resources Ltd. (Cambria), and Newmont Exploration of Canada Ltd. (Newmont) sampling. Generally, previous operators' sampling sites were clearly marked with flagging, tags, and paint. Samples that could not be verified in the field were dismissed.

11.1.2 2003-2012 Homestake Resource Corporation Drill Core Sampling Procedures

The following is taken from Macdonald and Rennie (2016).

Drill core was delivered to the logging facility by helicopter where it was inspected by the logging geologist and subjected to a quick log. The quick log comprised of a brief description of lithology, alteration, and mineralogy, as well as a description of any significant structural characteristics. The core was photographed and stored for future comprehensive logging.

All drill core was logged for lithology, mineralization, type and intensity of alteration, vein mineralogy and component percentage, breccia intensity, fracture intensity and structural components such as faults, fractures, contacts, bedding, cleavage (primary and secondary), and veining, measured relative to the core axis. Geotechnical logging included recovery, RQD and, occasionally, bulk density.

Sample intervals, to a maximum length of three metres, were designated by the logging geologist based on lithology, mineralogy, alteration, and structure. Each sample

was given an identifier from a three-part tag system. The core was cut in half longitudinally using a diamond saw, with half being sent for analysis and half remaining as a permanent record. One part of the waterproof tag was placed in the sample bag, one was placed with the remaining core at the start of the sample interval, and the third tag remained in the tag book as a reference. Unmarked standards and blanks were included in the samples submitted, roughly once in every 20 samples with a ratio of 2:1 standard to blank. Samples were secured in a locked facility until they were transported by local freight to the assay laboratory.

All of the [remaining] core was transported to Prince Rupert and placed in a storage facility where it was reviewed periodically by Homestake Geologists.

Homestake took bulk density measurements of the core, using a water immersion method. Intact core specimens were weighed in air, then on a pan immersed in a bucket of water. The weight of displaced water was determined by subtracting the wet weight of the sample from the dry weight. The density is the ratio of the dry weight to the weight of the water displaced by the specimen. A total of 7,330 bulk density determinations had been collected to the end of the 2012 program.

In the Qualified Person's opinion [Macdonald and Rennie, 2016], the core was transported, handled, and stored in a safe and secure manner. Homestake's sampling and logging procedures are appropriate for the deposit type and style of mineralization. The drill samples are representative of the mineralization.

11.1.3 2003-2012 Drill Core Assaying

11.1.3.1 2003-2006 Procedure

The following is taken from MineFill (2020):

The primary laboratory utilized for the 2003 to 2006 period was Acme Analytical Laboratories Ltd. (Acme) of Vancouver, although Eco-Tech Laboratories Ltd. (Eco-Tech) of Kamloops, BC was the primary laboratory in 2003. Both companies are independent laboratories and their accreditation during this time period is unknown.

[Samples were crushed to 80 percent passing 10 mesh. The crushing product was riffle split to produce a ~250 g subsample, which was homogenized and pulverized to 85 percent passing 150 mesh. A one assay ton (1AT or 29.167 g) aliquots from the resulting sample pulps were subjected to fire assay (FA) fusion with Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) finish for gold and silver. Samples assaying above 10 ppm Au or 200 ppm Ag were rerun with gravimetric finish]. Base metals were also commonly re-run on over-limit samples (Bryson, 2007).

All samples were analyzed by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) for 41 elements. A 0.25 g [pulp aliquot] was digested in an acid solution of H2O-HF-HclO4-HNO3 (2:2:1:1) and 50 percent HCl was added to the residue and heated. After

cooling, the solutions were transferred to test-tubes and brought to volume using dilute HCl and then analysed.

Metallic analysis was done for over-limit samples during the 2005 to 2008 programs. Samples were crushed and a 500 g subsample was selected for pulverization. The samples were sieved, and the +200 and -200 mesh fractions were collected and weighed. For each sample, the coarse fraction was assayed in its entirety with gravimetric finish, while a single gravimetric fire assay was completed on a 50 g aliquot of the fine fraction. The final grade was calculated as the weighted average of the individual coarse and fine fraction assays.

11.1.3.2 2007-2008 Procedure

The following is taken from MineFill (2020):

Initially, samples were sent to Acme, however, in order to address processing delays, some samples were sent to International Plasma Labs Ltd. (IPL) of Richmond, BC, an ISO 9001:2000 accredited facility. The sample preparation consisted of:

- Crushing samples to approximately 80 percent passing 10 mesh and the entire charge was reduced to 250 g by repeated splitting through a riffle splitter.
- Ground the 250 g split using and Ring and Puck pulverizer until approximately 90 percent passes 150 mesh.
- Rolling the split to ensure homogeneous particle distribution and transferred to a computer labelled sample bag.

A one (1) AT aliquot was assayed by FA with AA finish. Samples with gold values greater than 1,000 ppb Au (over-limit) were re-assayed using FA with gravimetric finish. In addition to the FA, each sample was subjected to a 30 element analysis by ICP with aqua regia digestion.

11.1.3.3 2009-2012 Procedure

The following is taken from MineFill (2020):

Acme was the primary laboratory for the 2009 and 2010 programs. Sample preparation procedures consisted of a one kilogram split being crushed to 80 percent passing 10 mesh from which a 500 g split was taken. This split was pulverized to 85 percent passing 150 mesh (later 200 mesh). A one AT split was taken and subjected to FA with Inductively Coupled Plasma Emission Spectroscopy (ICP-ES) finish for gold and silver. The upper detection limit for this method was 10 ppm Au and 200 ppm for Ag. Any determinations that exceeded 10 ppm Au or 200 ppm Ag were rerun by AA with gravimetric finish. Over-limit samples were also commonly run for base metals using four-acid digestion and ICP-ES analysis. A 0.25 g split was taken for all samples and run by ICP-MS after three-acid (HNO3-HCl4-HF) digestion.

In the Qualified Person's opinion, assaying was conducted using conventional methods commonly used and accepted within the industry and appropriate for the type of mineralization. The laboratories were certified commercial facilities. A reasonable practical level of sample security has been maintained throughout all of the drill programs.

11.1.4 2013 Agnico Eagle Mines Limited Drill Core Sampling

The following summary related with sampling procedures followed in Agnico Eagle's 2012-2013 drill program is taken from Swanton et al. (2013).

Half core samples were collected using a gas-powered core saw onsite at the site core shack. Samples were placed in sealed poly rock bags and sent to the ALS Minerals (ALS) preparation facility in Terrace for sampled preparation (crushing and pulverising). ALS re-directed some sample shipments directly to Vancouver for sample preparation depending on capacity at the Terrance facility. Geochemical analyses were completed at the main ALS facility in Vancouver. ALS is an accredited laboratory, recognized under accreditation No. 579, and conforms with requirements of CAN-P-1599, CAN-P-4E (ISOMEC 17025-20905)). Samples were analyzed for gold via fire assay (method code Au-AA23) and a 48-element ICP package utilizing four-acid, "near total" sample digestion (method code ME-MS61). Sample lengths varies between 1.5 m and 0.5 m at the prerogative of the logging geologist and a total of 3,658 (including quality assurance/quality control (QA/QC)) samples taken. Samples of Certified Reference Materials (CRMs) or blanks were inserted every ten samples on sample numbers ending in zero, alternating between one of three CRMs (CDN-GS-2L, CDN-GS-13A and CDN-CM-24) which were supplied by CDN Resource Laboratories Ltd (CDN) of Vancouver, British Columbia. Blank material comprised of gardening limestone acquired from a Canadian Tire retail outlet. Similarly, a duplicate was inserted every ten samples, on sample numbers ending in '5'. Half of the duplicates were field duplicates, where the half of the split core which would normally remain in the box was instead sampled. The other type of duplicate was a preparation duplicate, in which an empty bag (with sample tag) was inserted into the sample sequence and the preparatory laboratory instructed to take a split of the material after crushing and analyze it as the duplicate sample.

ALS prepared additional splits of the master pulps and returned them to the Project site for analysis using a portable X-ray Fluorescence (XRF) analyser rented from Innov-X Systems. A total 326 samples were analyzed using both "Soil Mode" and "Mining Plus Mode" – a procedure designed to detect both trace and high concentration elements.

In the QP's opinion, the assaying and QAQC programs by Homestake and Agnico Eagle were done using conventional methods that are commonly used and accepted within the industry and appropriate for the type of mineralization. The laboratories were certified commercial facilities. A reasonable practical level of sample security has been maintained throughout all of the drill programs.

11.1.5 2016-2020 Auryn Drill Core Sampling

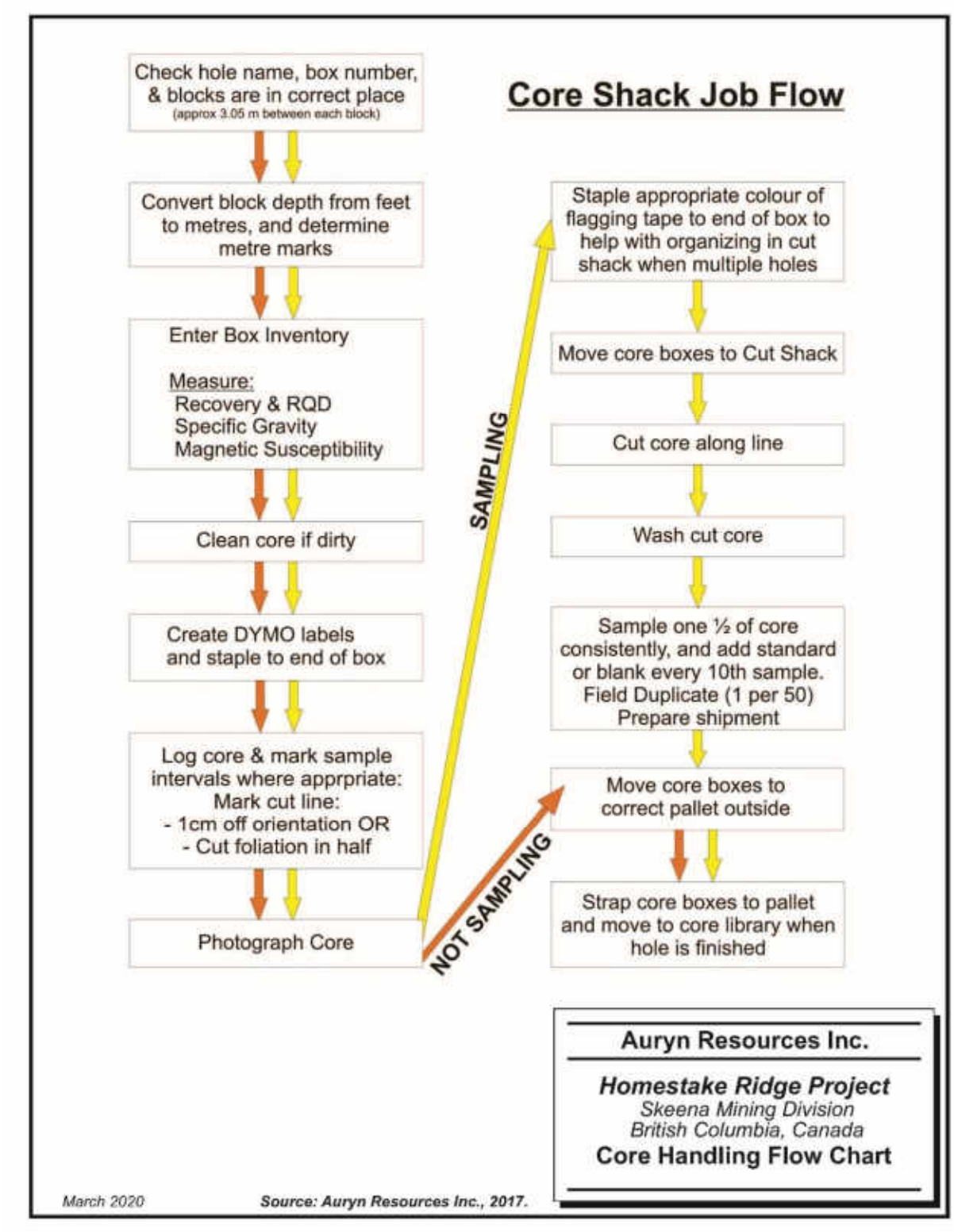
The following is taken from MineFill (2020):

Core recovery is generally very good to excellent, allowing for representative samples to be taken and accurate analyses to be performed. Half-core samples, two metres long, were taken along the entire length of each hole. A total of 8,622 split core samples were taken.

Individual core samples were placed in rice bags which were sealed using uniquely numbered zip ties and flown to the staging area on a twice per week basis where they were immediately transferred to Rugged Edge Holdings Ltd., acting as Auryn's expeditor, for transportation to Smithers. From Smithers, the samples were trucked by Banstra Transportation System Inc. to the ALS sample preparation facility in Terrace/Vancouver, BC.

Core boxes from completed and sampled holes were secured and flown by helicopter to a staging site from where they were trucked to a secure sample storage site in Prince Rupert, BC. Figure 11.1 illustrates Auryn's core handling flow chart.

Figure 11.1. Auryn Core Shack Work Flow.



11.1.5.1 Laboratory Methods

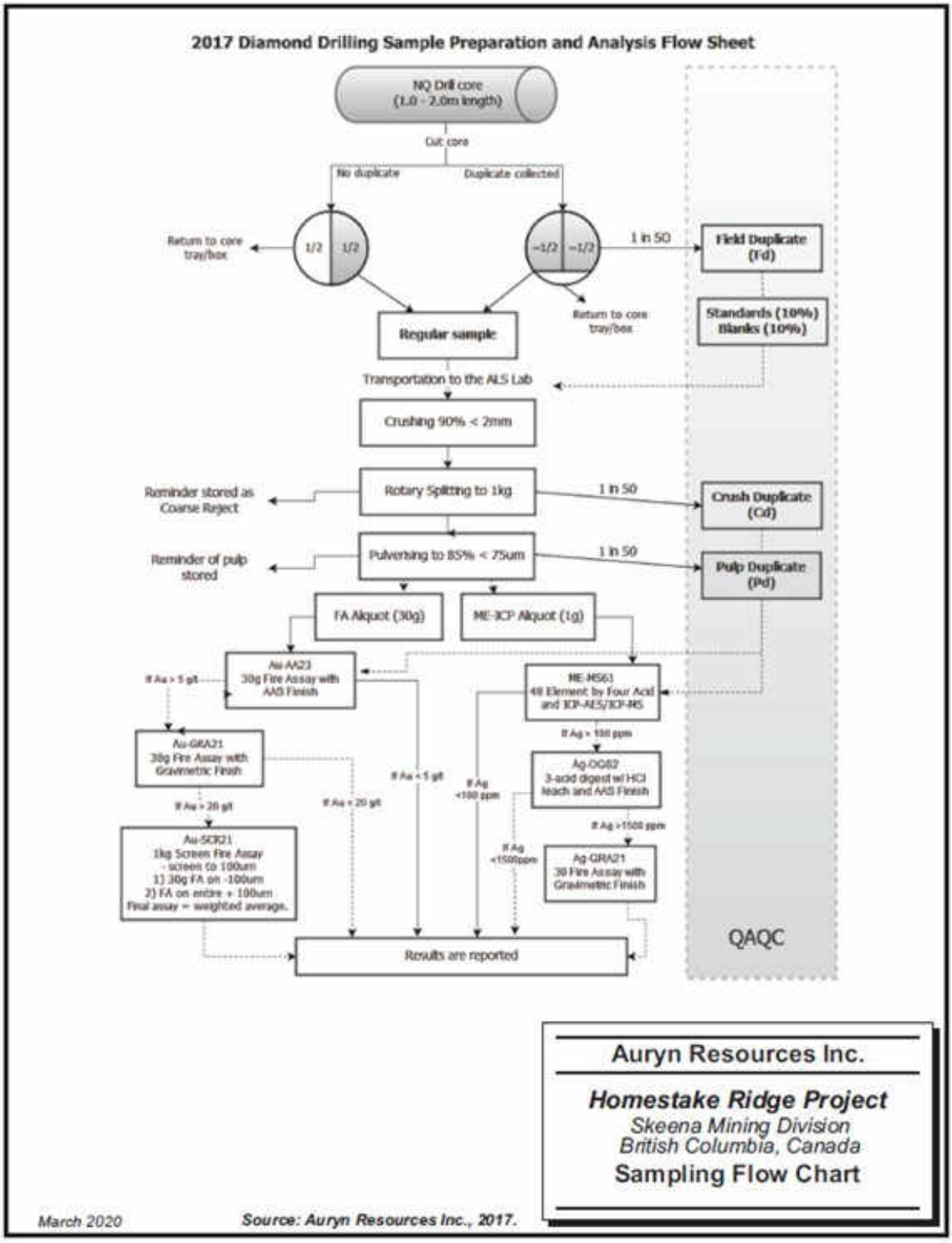
The following is taken from MineFill (2020):

In Terrace/Vancouver, the samples are logged into ALS's sample tracking system, dried and fine crushed to better than 90 percent passing 2 mm. The sample is then split using a riffle splitter and a 250 g portion is pulverized to better than 85 percent passing 75 µm (ALS Sample Preparation Code Prep-33D). The pulverized samples were forwarded to ALS's analytical facility in Vancouver for analysis. ALS is an accredited laboratory, recognized under accreditation No. 579, and conforms with requirements of CAN-P-1599, CAN-P-4E (ISOMEC 17025-20905)). Auryn and RPA are independent of ALS.

In Vancouver, each sample was assayed for gold and analysed for a multi-element suite. Gold was determined by fire assay on a 30 g sample with an Atomic Absorption Spectroscopy (AAS) finish (ALS Code Au-AA23). Samples assaying greater than 5 g/t Au were re-assayed with a gravimetric finish (ALS Code Au-Grav21). One kilogram of pulverized material from samples assaying greater than 20 g/t Au were re-assayed by screened metallics fire assay (ALS Code Au-SCR21).

A one-gram sample of pulverized material was analysed for a 48-element suite, including silver and copper, by ICP-MS after a four-acid digestion (ALS Code ME-MS61). Samples yielding analyses of silver greater than 100 ppm Ag were re-analyzed by HCl leach with AAS finish after a three-acid digestion (ALS Code Ag-OG62). Thirty grams of material yielding analyses of silver greater than 1,500 ppm Ag were fire assayed with a gravimetric finish (ALS Code Ag-GRA21). Figure 11.2 illustrates Auryn's sampling flow chart.

Figure 11.2. Auryn Sampling Flow Chart.



11.1.5.2 QC Sampling

The following is taken from MineFill (2020):

Quality Control (QC) samples were introduced into the sample stream at a rate of 1 in 20 for both blank samples and CRM samples. Field duplicates, in the form of quarter sawn samples, were introduced into the sample stream at a rate of 1 in 50 samples.

Certified blank material was acquired from Analytical Solutions. Four CRMs were acquired from OREAS to cover a range of grades and elements including gold, silver, and copper. Table 11.1 lists the CRMs and their respective expected values.

Table 11.1. Certified Reference Materials.

CRM	Certified Values		
	Au	Ag	Cu
OREAS 60C	2.47 g/t	4.87 ppm	N/A
OREAS 229	12.11 g/t	N/A	N/A
OREAS 600	0.20 g/t	24.75 ppm	482 ppm
OREAS 603	5.18 ppm	284.34 ppm	1.00%

All holes were continuously sawn in two metre samples regardless of geological contacts.

11.1.5.3 2017 - 2019 QC Programs

The following is taken from MineFill (2020):

RPA received QC reports for all 2017 to 2019 drilling. Auryn generated a standard report exported from acQuire with the results of each sample batch. Microsoft (MS) Excel files were provided summarizing the results for all QC standards, blanks, and duplicates. The Qualified Persons have reviewed the reports and files, as well as the laboratory procedures outlined in the RPA (2017) report and concludes that the QC program for the 2017 to 2019 period is sufficient to support a Mineral Resource estimate. In some instances, the Auryn standards and duplicates did not perform as well as the laboratory control samples. QC standards MP-1b and OREAS 932 demonstrated consistent overestimation for the laboratory method Ag_OG62_ppm (an over-limit method), however, these standards were not used in the 2017 drill program since over-limit analysis did not occur. QC sample failures were dealt with on a case-by-case basis and were documented with commentary in the Dispatch Returns table within the acQuire database. The Qualified Persons recommend Auryn produce MS Word style reports on QC sample performance for regular periods which describe the results and those of the MS Excel files, summarize measures taken, outline possible issues, and suggest any possible further improvements to the process.

The Qualified Persons concur with the adequacy of the samples taken, the security of the shipping procedures, and the sample preparation and analytical procedures at ALS. In the Qualified Person's opinion, the QA/QC program as designed and implemented by Auryn is adequate and the assay results within the database are suitable for use in a Mineral Resource estimate.

11.1.6 2022 Dolly Varden Silver Corporation Sampling Procedures

The former Homestake Ridge Project was acquired by Dolly Varden Silver Corporation in late 2021. There was no drilling completed on the former Homestake Ridge Property that year, however, Dolly Varden completed a significant drill program at the Homestake resource area in 2022 (as discussed in a previous section of this report). The drill core sampling procedures employed by Dolly Varden are discussed below (Section 11.3).

11.2 Dolly Varden Project Geochemical Sampling

The following describes the surface sampling procedures for rock and soil sampling for mineral exploration that have been established by the Company. All sampling is conducted under the supervision of the Company's geologists or sampling technicians trained by TerraLogic Exploration Inc (TerraLogic). The chain of sample custody from the field to the laboratory is continuously monitored.

11.2.1 Sample Collection, Preparation and Security

11.2.1.1 Rock Samples

Rock samples are collected at the Kitsault Valley Project using the following procedure:

1) Sample location is determined using a handheld GPS or from the interpretation of detailed aerial photos;

2) A heavy grade plastic sample bag is labelled with sample ID (on both sides of the bag in permanent marker);

3) Sample information is entered into a notebook, information includes: date, field station, site coordinates, area, lithological unit and description, alteration and additional comments;

4) A 1 to 2 kg sample is collected from the sample location;

5) A photograph is taken of the sample collected and the sample location;

6) The sample is inserted into the sample bag and the bag is sealed using a plastic cable tie;

7) The sample site is marked with flagging tape and an aluminum tag (with corresponding sample ID inscribed on the tag);

8) Samples are transported back to camp at the end of the day;

9) Select samples are cut for detailed description and photographs before being shipped for analysis;

10) Samples are catalogued and placed into poly woven rice bags labelled with sample IDs;

11) A sample manifest is inserted into the first rice bag before being sealed; and

12) Rice bags are weighed and shipped according to section 11.1.2.

11.2.1.2 Soil Samples

Soil samples are collected at the Kitsault Valley Project using the following procedure:

1) Sample location is determined using a handheld GPS;

2) A sample bag is labelled with sample ID and a corresponding sample tag is inserted in the bag;

3) Sample information is entered into a notebook, information includes: date, site ID, site coordinates, sample description, sample depth, slope angle, sample quality and additional comments;

4) Samples are collected from the B-horizon (typically 25 to 45 cm below the surface) if possible;

5) Samples are transported back to camp and hung to dry prior to shipping;

6) Samples are placed into rice bags labelled with sample IDs and a sample manifest is inserted into the first rice bag before being sealed; and

7) Rice bags are weighed and shipped according to section 11.1.2 below.

11.2.2 Sample Shipping and Handling

Rock and soil samples are shipped separately, and all samples are double checked with the sample manifest before being sealed into rice bags. The chain of custody from the sample site to the laboratory is managed by the Company. The author of this

Technical Report cannot verify that the samples were not tampered with during shipping, however, no issues with sample shipments or acceptance at the laboratories were reported.

11.2.3 Analytical Procedures

11.2.3.1 Rock Samples

The 2015 rock samples were submitted to Bureau Veritas Mineral Laboratories (Bureau Veritas) preparation facility in Smithers, BC. Preparation of the samples consists of crushing, splitting and pulverizing a 500 g rock sample to 200 mesh. The pulps were then sorted, labelled and packaged for shipping to Bureau Veritas in Vancouver, BC, for analysis. Bureau Veritas complies with the data quality objectives of the International Standards Organization (ISO/IEC 17025:2005 CAN-P-43), General Requirements for the Competence of Mineral Testing and Calibration Laboratories. Analysis of the 2015 rock samples included analysis for Au using fire assay fusion by inductively coupled plasma emission spectrometry (ICP-ES) and complete lithogeochemical characterization of the whole rock samples using XRF (X-Ray Fluorescence) analysis and inductively coupled plasma mass spectrometry (ICP-MS) trace element analysis, as well as total sulphide and inorganic carbon analysis. High-grade samples were analysed using four acid digestion by ICP-ES/ICP-MS.

The 2016, 2017 and 2018 rock samples were prepared and analyzed at the laboratory of Bureau Veritas in Vancouver, BC. Sample preparation included crushing, splitting and pulverizing a 500 g rock sample to 200 mesh to supply pulps for whole rock XRF (X-Ray Fluorescence) analysis and inductively coupled mass spectrometry (ICP-MS) trace element analysis using lithium meta-borate/tetra-borate fusion. Additional analysis using aqua regia partial digestion and ICP-MS was conducted for metals.

The 2018 rock check samples were submitted to ALS Canada Ltd. (ALS) for sample preparation and analysis. ALS complies with the data quality objectives of the International Standards Organization (ISO/IEC 17025:2017 and ISO 9001:2015). The samples were submitted to the ALS preparation facility in Terrace, BC, or Kamloops, BC, where the samples were logged into a computer-based tracking system, weighed and dried. Preparation included crushing of the sample so that 70% passes a 2 mm screen. The sample is then split and pulverized to better than 85% passing a <75-micron screen. From the preparation facility samples were shipped to ALS in Vancouver, BC, for analysis. Samples were analyzed for a suite of trace elements using ICP-MS four acid super trace analysis. Ore grade Ag was analyzed using four acid ICP-AES (inductively coupled plasma – atomic emission spectroscopy). Analysis for Au used a fire assay fusion with an atomic absorption spectroscopy (AAS) finish.

The 2019, 2020, and 2022 lithogeochemical samples from Dolly Varden, and the 2022 lithogeochemical samples from Homestake Ridge, were prepared and analyzed at Bureau Veritas Laboratories in Vancouver, BC. Samples were prepared by crushing 1kg of sample to better than 70% passing a 2 mm screen, then pulverizing 500g of the sample

to better than 85% passing a 75-micron screen (Code PRP70-500). Whole rock characterization was done by analyzing for trace elements by ICP-MS and whole rock major oxides by XRF.

The rock samples collected in 2019, 2020, and 2022 from Dolly Varden, and the 2022 rock samples from Homestake Ridge, were submitted to ALS Laboratories for sample preparation and analysis. The rock samples were sent to ALS sample preparation labs in Terrace, BC or Yellowknife, NWT. At the sample preparation facilities, the samples were logged into a computer-based tracking system, weighed and dried. The entire sample was crushed so that 70% passes a 2 mm screen then split and pulverized to better than 85% passing a <75-micron screen. From the sample preparation facility, the pulp samples were shipped to ALS in Vancouver, BC for analysis. Samples were analyzed for Au using fire assay fusion with an atomic absorption spectroscopy (AAS) finish. Samples were also analyzed for a suite of trace elements using ICP-MS four acid analysis. Over limit analysis was completed using four acid ICP-AES (inductively coupled plasma – atomic emission spectroscopy) for ore grade levels of Ag, Cu, Pb and Zn.

In the opinion of the author of this report, the rock sampling procedures and protocols employed by Dolly Varden are sufficient to ensure sample integrity and the resulting samples and their analysis are appropriate with respect to their intended use. There are no indications that there were any issues with respect to sample bias or sample security.

11.2.3.2 Soil Samples

The 2015 soil samples were submitted to AGAT Laboratories' preparation facility in Terrace, BC. Preparation of the samples consisted of drying and sieving to 80 mesh. The prepared pulps were then shipped to AGAT Laboratories in Vancouver for analysis. AGAT Laboratories complies with the data quality objectives of the International Standards Organization (ISO/IEC 17025:2005 CAN-P-43), General Requirements for the Competence of Mineral Testing and Calibration Laboratories. Three analytical techniques were conducted on the soil samples, these included; 1) aqua regia digestion with an ICP/ICP-MS finish multi-element analysis; 2) fire assay fusion with an ICP-MS finish for Au; and 3) borate fusion with an ICP-MS finish for Ba.

The 2016 soil samples were not submitted to a laboratory for analysis and were instead analysed by the Company in the field by pXRF (a portable XRF, X-Ray Fluorescence) machine. The results were semi-quantitative and were simply intended to identify discreet XRF "signatures" with respect to the mineralization at Ace-Galena that might aid in the identification of additional areas of mineralization within the Property.

In the opinion of the author of this report, the soil sampling procedures and protocols employed by Dolly Varden are sufficient to ensure sample integrity and the resulting samples and their analysis are appropriate with respect to their intended use. There are no indications that there were any issues with respect to sample bias or sample security.

11.3 Dolly Varden Diamond Drilling

The following describes the logging and sampling procedures for diamond drilling that have been established by the Company. All sampling is conducted under the supervision of the Company's geologists or sampling technicians trained by TerraLogic.

11.3.1 Sample Collection, Preparation and Security

Drill core collection occurs at the drill site after a drill site inspection is conducted. Drill site inspections are conducted under the supervision of the Company's geologists or consultants from TerraLogic and occur twice daily at shift change. Drill site inspections include safety checks and drill core monitoring to ensure correct placement of the drill core/core markers in the core boxes. Once the inspection is complete, the core boxes are loaded into metal baskets and transported to camp by helicopter. At the secure logging facility, Dolly Varden or TerraLogic personnel complete the following:

- The core boxes are laid out on wooden skids and a core inspection is completed.
- A quick summary log is completed on the core. Summary log information includes alteration, lithology and mineralization.
- The core boxes are transferred into the core shack for logging and sampling.
- Geotechnical procedures completed on the whole core include:
    - converting footage markers to metric and recording one-meter intervals on the drill core;
    - marking meterage on drill boxes;
    - calculating core recovery;
    - affixing a metal tag with drillhole number, box number and the meterage interval information to each core box; and
    - recording the metal tag information into a digital data capture device.
- Geological logging procedures completed on the whole core include:
    - marking sample intervals (completed by a project geologist) and recording the sample number and interval on each sample tag;
    - recording the sample tag number and sample interval into the digital data collection device;

  - recording the total recovered length of each sample interval; and
  - logging all geological data into an Access database, information collected includes alteration, brecciation, lithology, mineralization, structure, shearing, veining and vein intervals.

- After logging, the core is removed from the core shack, stacked and photographed.
- Core sampling begins at the start of each sample interval and continues to the bottom of the hole.
- Core sampling is conducted using a conventional rock saw fitted with a diamond saw blade. The procedure for core sampling is as follows:
  - sample tags and sample bags are prepared prior to sampling;
  - each sample interval is visually inspected by the geo-technician prior to cutting to determine the best split for equal representation of the mineralization;
  - the core is cut in half using the rock saw;
  - half of the core is placed in the pre-marked sample bag and the other half is returned to the core box;
  - the core saw is washed clean between each sample interval;
  - standard reference materials are inserted into the sample sequence by the project geologist at a rate of approximately 1 in every 25 samples (depending on the distribution of the metal-bearing zones);
  - blank reference materials are inserted into the sample sequence by the project geologist at a rate of approximately 1 in every 20 to 40 samples (depending on the distribution of the metal-bearing zones);
  - duplicate samples are inserted into the sample sequence at a rate of approximately 1 in every 30 samples;
  - sample bags are sealed using plastic ties and are placed into rice bags labelled with sample IDs; and
  - sample bags are lined up in order prior to shipment.

11.3.2 Sample Shipping and Handling

All drill core samples are double-checked with the sample manifest before being sealed into rice bags. The chain of custody from the drill site to the laboratory is managed by the Company. No issues with sample shipments or their acceptance at the laboratories were reported. It is the opinion of the authors of this report that the Company's procedures are adequate with respect to the management and maintenance of sample security between the work site and the laboratory.

11.3.3 Analytical Procedures

The 2015 drill core samples were submitted to Bureau Veritas for sample preparation and analysis. Bureau Veritas complies with the data quality objectives of the International Standards Organization (ISO/IEC 17025:2005 CAN-P-43), General Requirements for the Competence of Mineral Testing and Calibration Laboratories. At the preparation facility the samples were crushed, split and pulverized so that 70% passes a 200-mesh screen. A 30 g aliquot was extracted from the pulp and analyzed for Au using a fire assay fusion and ICP-ES (inductively coupled plasma emission spectroscopy). Samples were also analysed for a suite of trace elements by ICP-MS.

Bulk density (specific gravity) analysis for the 2015 core samples was conducted at Activation Laboratories Ltd. (Act Labs) in Kamloops, BC. Act Labs is accredited to ISO/IEC 17025:2005, General Requirements for the Competence of Mineral Testing and Calibration Laboratories.

The 2016, 2017, 2018, 2019, 2020, 2021, and 2022 drill core samples were submitted to ALS Canada Ltd. (ALS) for sample preparation and analysis. ALS complies with the data quality objectives of the International Standards Organization (ISO/IEC 17025:2017 and ISO 9001:2015). For the 2016 and 2017 core samples, the samples were submitted to the ALS preparation facility in Terrace, BC. For the 2018 core samples, the samples were submitted to the ALS preparation facilities in Kamloops, BC, or Terrace, BC. For the 2019 core samples, the samples were submitted to the ALS preparation facilities in Elko, Nevada, USA, or Kamloops, BC, Canada, or Terrace, BC, Canada. The 2020 drill core samples were submitted to the ALS preparation facilities in Terrace, BC, or Yellowknife, NWT. The 2021 drill core samples were submitted to the ALS preparation facilities in Kamloops, BC, Canada, or Terrace, BC, or Vancouver, BC, or Yellowknife, NWT. The 2022 drill core samples were submitted to the ALS preparation facilities in Kamloops, BC, or Terrace, BC, or Yellowknife, NWT. At the sample preparation facilities, the samples were logged into a computer-based tracking system, weighed and dried. The entire sample was crushed so that 70% passes a 2 mm screen then split and pulverized to better than 85% passing a <75-micron screen.

From the sample preparation facility, the pulp samples were shipped to ALS in Vancouver, BC or Reno, Nevada for analysis. Drill core pulps were analyzed for Au using fire assay fusion with an atomic absorption spectroscopy (AAS) finish. Samples were also

analyzed for a suite of trace elements using ICP-MS four acid super trace analysis. Over limit analysis was completed using four acid ICP-AES (inductively coupled plasma – atomic emission spectroscopy) for ore grade levels of Ag, Cu, Pb and Zn. Samples grading over 1,500 ppm Ag were analyzed using gravimetric fire assay. Select samples from Torbrit were analyzed for bulk density (specific gravity) using analysis code OA-GRA09A.

2016, 2017 and 2018 drill core check samples were sent to Bureau Veritas Laboratories in Vancouver, BC for analysis. Sample preparation included crushing of the core sample so greater than 70% passes a 2 mm screen. The sample was then split and pulverized to better than 85% passing a 75-micron screen. An extra wash with silica was conducted between each sample. Drill core pulps were then sorted, labelled and boxed before analysis. A 30 g aliquot was extracted from the pulp and a multi-element analysis conducted using four acid digestion ICP-MS. Gold was analyzed using a fire assay fusion with an AAS finish. Over limit analysis was completed using four acid digestion with AAS finish and by gravimetric fire assay. Complete lithogeochemical characterization of the drill core was completed using XRF whole rock and ICP-MS analysis, as well as total sulphide analysis.

In 2019, 2020, and 2022, select drill core samples were sent to Bureau Veritas Laboratories in Vancouver, BC for lithogeochemical Sample preparation included the crushing, splitting, and pulverizing of a 500g sample to 85% passing a 75 micron screen (Code PRP70-500). Drill core pulps were then sorted, labelled and boxed before analysis. Complete lithogeochemical characterization of the drill core was completed using XRF whole rock major oxide analysis and ICP-MS Trace element analysis.

In the opinion of the author of this report, the drill core sampling procedures and protocols employed by Dolly Varden are sufficient to ensure sample integrity and the resulting samples and their analysis are appropriate with respect to their intended use. There are no indications that there were any significant issues with respect to sample bias or sample security.

11.3.4 QAQC Data (2015-2022)

The Company's Analytical QAQC Program includes the collection of field/core duplicate samples and the regular insertion of blank and standard reference material samples into the normal drill sample stream. In addition, the Company periodically conducts umpire analyses at a second laboratory. A summary of the QC samples inserted into the drill core sample steams from the former Dolly Varden project area is provided in Table 11.2. The results for the analysis of Ag and Cu for the Standards inserted into the 2015 through 2022 Dolly Varden project area drilling sample streams are shown in Table 11.3. As examples of the Standard analyses, the Ag and Cu results for standard PM 1147 are illustrated in Figures 11.3 and 11.4, respectively, and the Ag, and Zn results for standard CDN-ME-1801 are illustrated in Figures 11.5, 11.6 and 11.7, respectively. Graphs for the remaining standards are appended to this report.

In the opinion of the authors of this report, the Company's recent analytical QAQC programs are adequate to ensure overall analytical data quality and no significant issues were identified in the resulting from the Company's 2015-2022 drilling programs (note: some analytical data from the 2022 drill program remains outstanding as of the writing of this report). Although some standard sample failures are present, it is the opinion of the authors of this report that there are no systematic errors or analytical bias issues indicated in this data and that the failures observed are likely the result of heterogeneity within the respective QC samples.

Table 11.2. Summary of 2015-2022 Dolly Varden Project Area Drilling QC Sampling.

Year	2015	2016	2017	2018	2019	2020	2021	2022	Total
Drillholes	10	13	44	85	44	40	31	52	**319**
Core Samples	1,345	1,533	5,485	8,770	4,522	5,180	6,277	4,521	**37,633**
Sampled Length (m)	2,036.95	2,311.90	15,338.45	29,458.50	11,852.27	11,396.63	9,868.58	6,345.25	**88,608.53**
Standard Samples									
CDN-ME-14	20	-	-	-	-	-	-	-	**20**
CDN-ME-19	22	0	-	-	-	-	-	-	**22**
ME-1303	-	5	6	-	-	-	-	-	**11**
ME-1305	-	6	1	-	-	-	-	-	**7**
ME-1307	-	16	3	-	-	-	-	-	**19**
PM1146	-	13	14	32	2	6	5	-	**72**
PM1147	-	11	22	46	28	9	15	50	**181**
ME-1304	-	-	27	13	0	0	0	0	**40**
ME-1306	-	-	33	78	71	53	68	13	**316**
ME-1505	-	-	29	21	-	-	-	-	**50**
ME-1601	-	-	49	10	-	-	-	-	**59**
ME-1706	-	-	-	96	62	59	80	67	**364**
ME-1801	-	-	-	-	-	52	46	0	**98**
ME-1805	-	-	-	-	-	2	6	4	**12**
ME-1902	-	-	-	-	-	6	6	-	**12**
ME-1405	-	-	-	-	-	-	30	62	**92**
Blank Samples									
Crs Blnk - GR	21	-	-	-	-	-	-	-	**26**
Crs Blnk - MD	5	51	117	175	78	22	19	0	**508**
Crs Blnk - MI	-	-	-	-	-	74	230	263	**567**
Duplicate Samples									
1/4 Core	11	42	-	-	-	68	-	-	**137**
1/2 Core	-	-	-	-	-	-	111	50	**161**
SRM + BLK Samples	**68**	**102**	**301**	**471**	**241**	**283**	**505**	**459**	**2,476**
Insertion Rate	**5.1%**	**6.7%**	**5.5%**	**5.4%**	**5.3%**	**5.5%**	**8.0%**	**10.2%**	**6.6%**

Table 11.3. Ag and Cu Results from the 2015-2022 Dolly Varden Project Area Drilling QC Sampling.

Standards (2015-2022)	Ag Value (ppm)	+3SD	-3SD	SD	%RSD	n	n < 3SD	n > 3SD	Total	(%)
CDN-ME-14	42.3	48.6	36	2.10	5.0%	20	0	0	0	0%
CDN-ME-19	103	113.5	102.5	3.50	3.4%	22	0	0	0	0%
ME-1303	152	167	137	5.00	3.3%	11	0	0	0	0%
ME-1305	231	249	213	6.00	2.6%	7	1	0	1	14%
ME-1307	54.1	58.75	49.45	1.55	2.9%	19	0	0	0	0%
PM1146	1586.9	1655.9	1517.9	23.0	1.4%	72	4	0	4	6%
PM1147	225.8	250.0	201.5	8.1	3.6%	181	1	0	1	1%
ME-1304	34	38.8	29.2	1.60	4.7%	40	0	0	0	0%
ME-1306	104	114.5	93.5	3.50	3.4%	316	1	0	1	0%
ME-1505	360	378	342	6.00	1.7%	50	1	11	12	24%
ME-1601	39.6	42.3	36.9	0.90	2.3%	59	4	4	8	14%
ME-1706	11.7	13.5	9.9	0.60	5.1%	364	0	5	5	1%
ME-1801	108	114	102	2.00	1.9%	98	0	3	3	3%
ME-1805	2236	2347	2125	37.0	1.7%	12	2	0	2	17%
ME-1902	349	374.5	323.5	8.50	2.4%	12	0	0	0	0%
ME-1405	88.8	98.7	78.9	3.30	3.7%	92	0	0	0	0%
Standards (2015-2022)	**Cu Value (%)**	**+3SD**	**-3SD**	**SD**	**%RSD**	**n**	**n < 3SD**	**n > 3SD**	**Total**	**(%)**
CDN-ME-14	1.221	1.338	1.104	0.039	3.2%	20	0	0	0	0%
CDN-ME-19	0.474	0.501	0.447	0.009	1.9%	22	0	1	1	5%
ME-1303	0.344	0.368	0.32	0.008	2.3%	11	0	0	0	0%
ME-1305	0.617	0.653	0.581	0.012	1.9%	7	0	1	1	14%
ME-1307	0.537	0.567	0.507	0.010	1.9%	19	0	3	3	16%
PM1146	1.960	2.038	1.882	0.026	1.3%	72	2	2	4	6%
PM1147	0.307	0.328	0.286	0.007	2.3%	181	0	3	3	2%
ME-1304	0.268	0.273	0.253	0.002	0.6%	40	0	10	10	25%
ME-1306	0.398	0.425	0.371	0.009	2.3%	316	5	5	10	3%
ME-1505	0.049	0.055	0.043	0.002	4.1%	50	0	0	0	0%
ME-1601	0.344	0.371	0.317	0.009	2.6%	59	0	0	0	0%
ME-1706	0.831	0.867	0.795	0.012	1.4%	364	22	11	33	9%
ME-1801	0.284	0.299	0.269	0.005	1.8%	98	6	0	6	6%
ME-1805	0.873	0.915	0.831	0.014	1.6%	12	0	1	1	8%
ME-1902	0.781	0.8215	0.7405	0.014	1.7%	12	4	1	5	42%
ME-1405	0.685	0.739	0.631	0.018	2.6%	92	0	0	0	0%

Figure 11.3. Standard PM1147 Ag data (2015-2022).

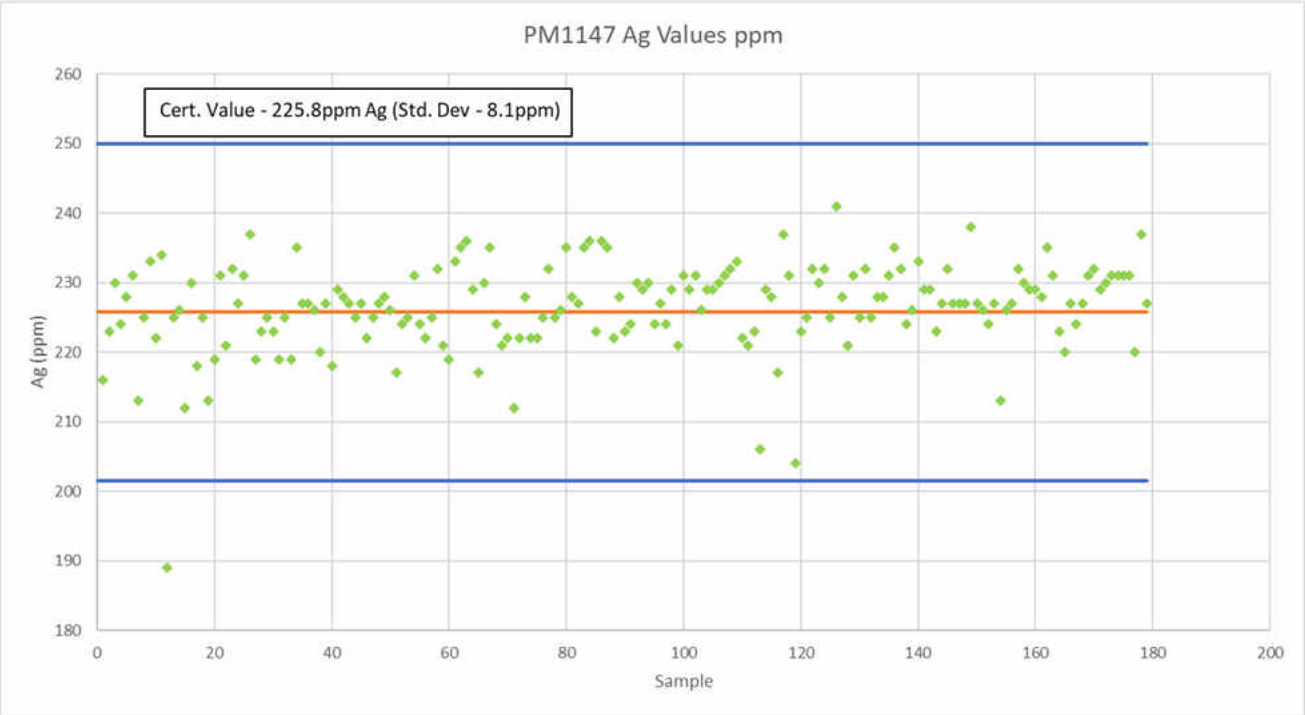


Figure 11.4. Standard PM1147 Cu data (2015-2022).

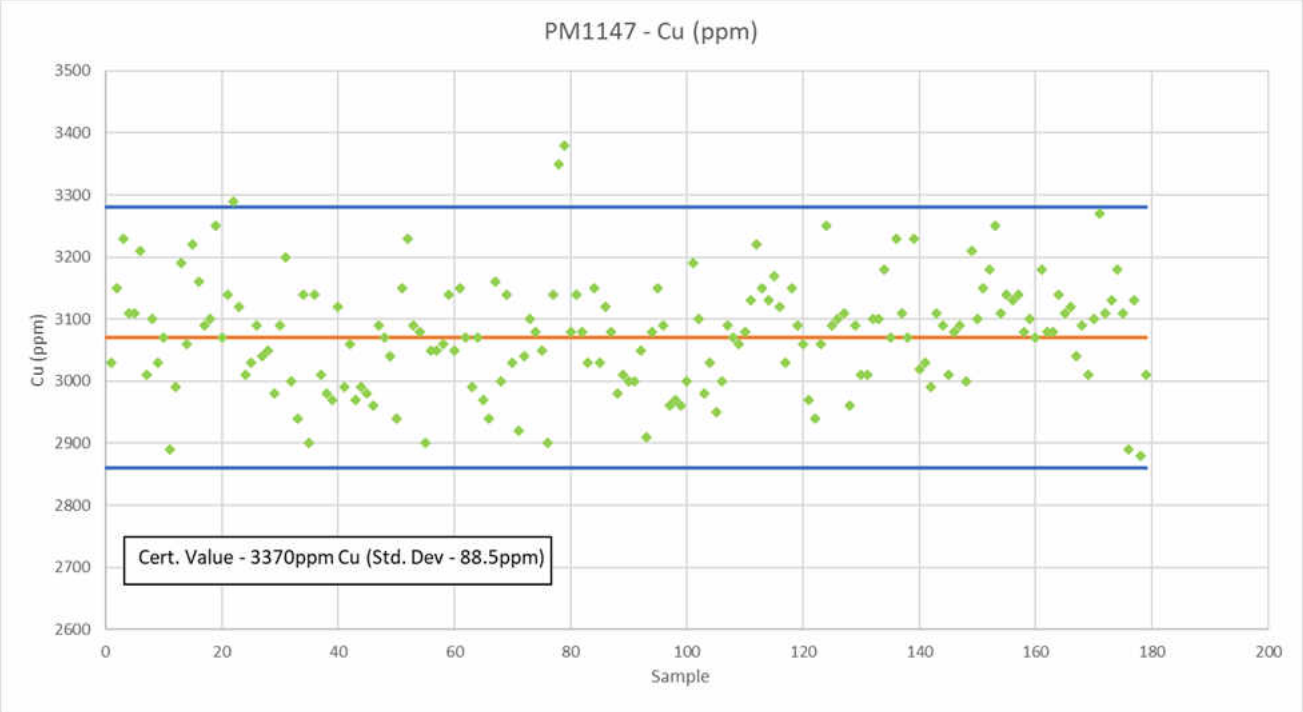


Figure 11.5. Standard ME-1801 Ag data (2015-2022).

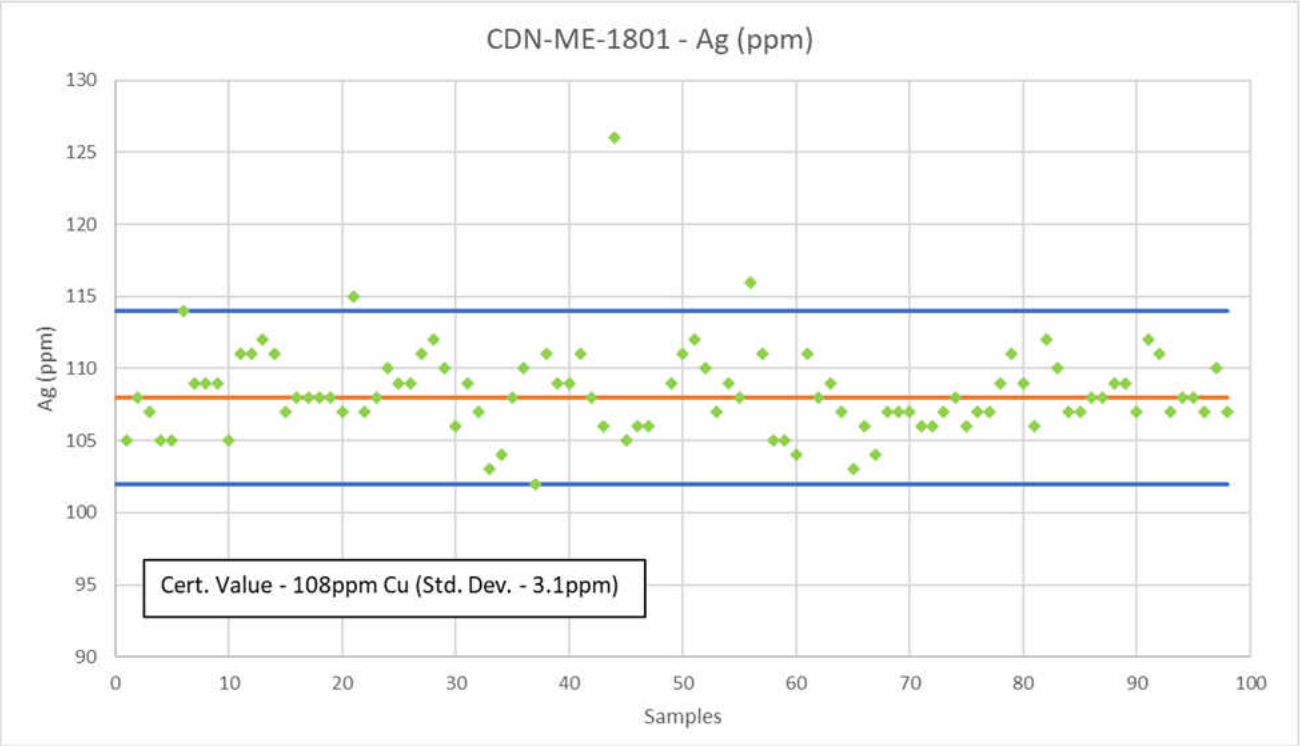


Figure 11.6. Standard ME-1801 Cu data (2015-2022).

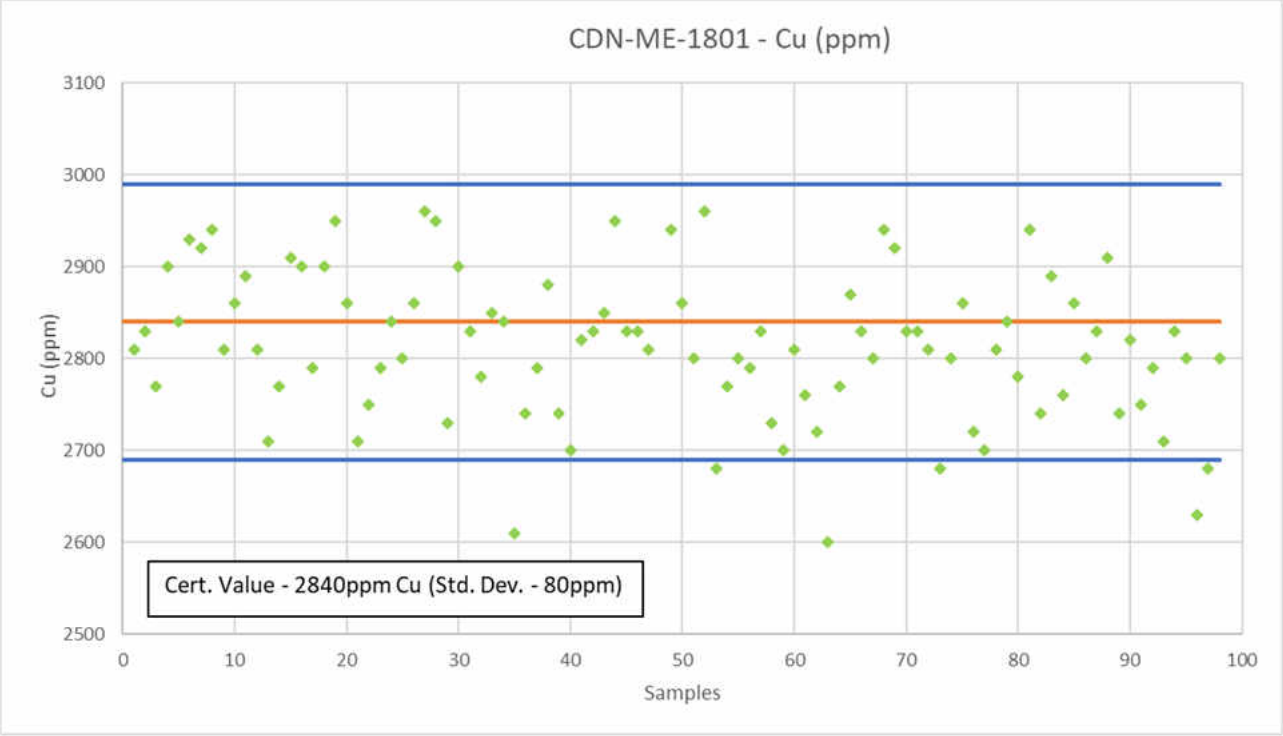
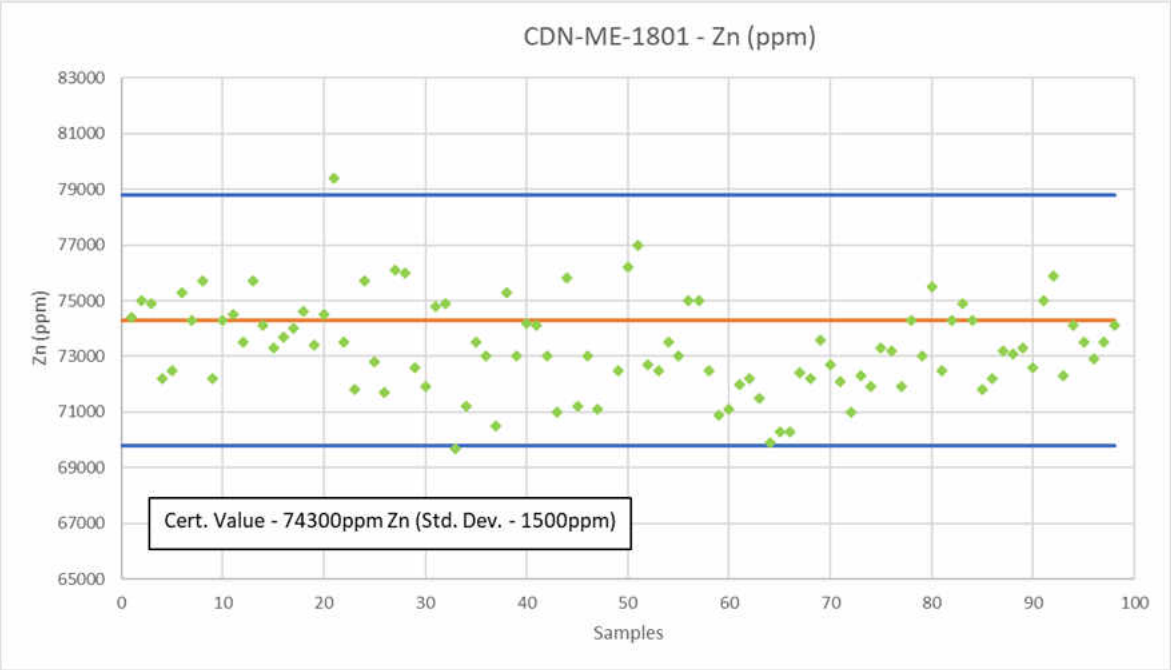


Figure 11.7. Standard ME-1801 Zn data (2015-2022).



The drilling sample QC program employed by Dolly Varden during its recent (2015-2022) drill programs has utilized locally sourced mafic dyke rock as coarse blank material. A total of 1081 coarse blanks samples have been inserted into the 2015 – 2022 drill campaigns conducted on the former Dolly Varden project area. The data for these samples indicates no significant issues with sample contamination and the Ag and Zn data for the Mafic Dyke blank material used from 2015 through 2021 are illustrated in Figures 11.8 and 11.9.

Figure 11.8. 2014-2021 Mafic Dyke Coarse Blank Ag data.

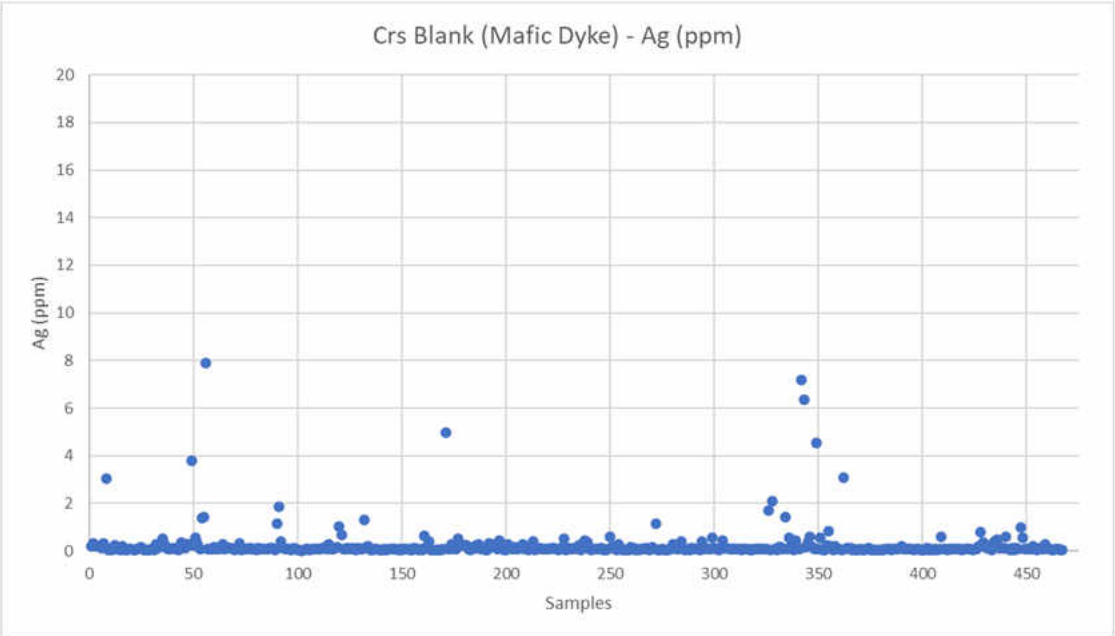
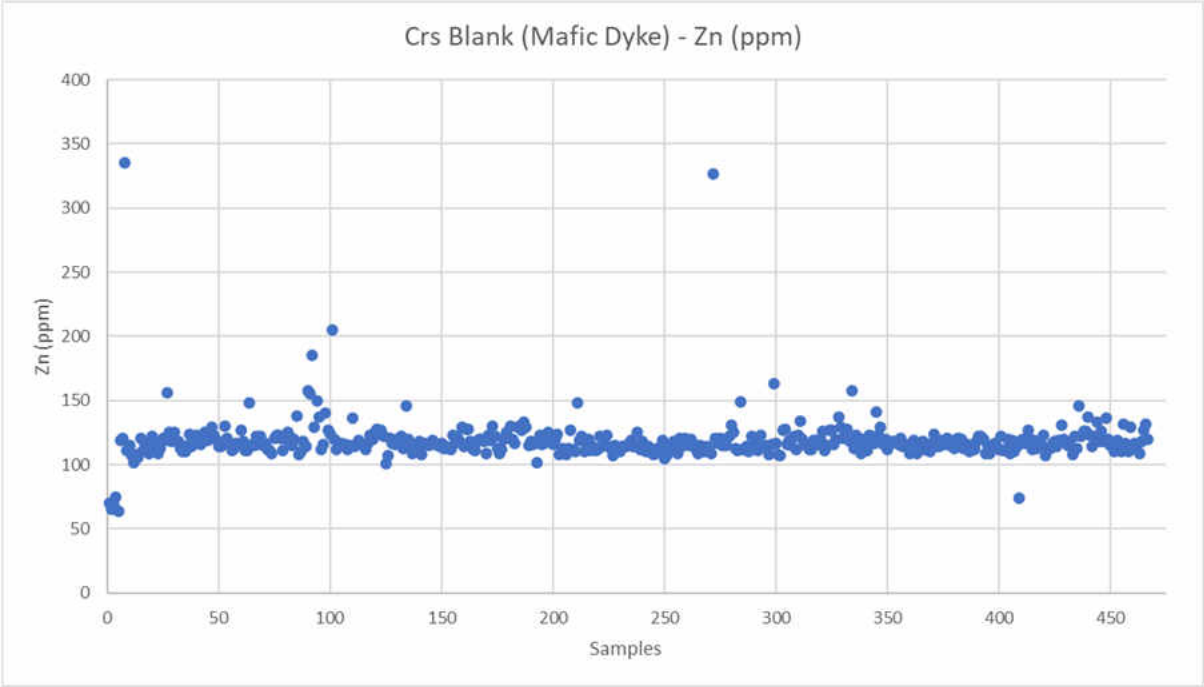


Figure 11.9. 2014-2021 Mafic Dyke Coarse Blank Ag data.



Duplicate sampling, as part of the drilling QAQC program, has been conducted sporadically as part of the recent (2015 through 2022) former Dolly Varden project area drill programs. The data for Ag and other metals indicates excellent reproducibility with minimal variance. Half core duplicate Ag and Zn data collected as part of the 2021 and 2022 drilling campaigns is illustrated as Q-Q plots in Figures 11.10 and 11.11 (note: the 2022 data remains incomplete as of the writing of this report).

Figure 11.10. Q-Q (percentile) Plot of Ag Data For ½ Core Duplicates from the 2015-2022 former Dolly Varden Project Area Drill Programs.

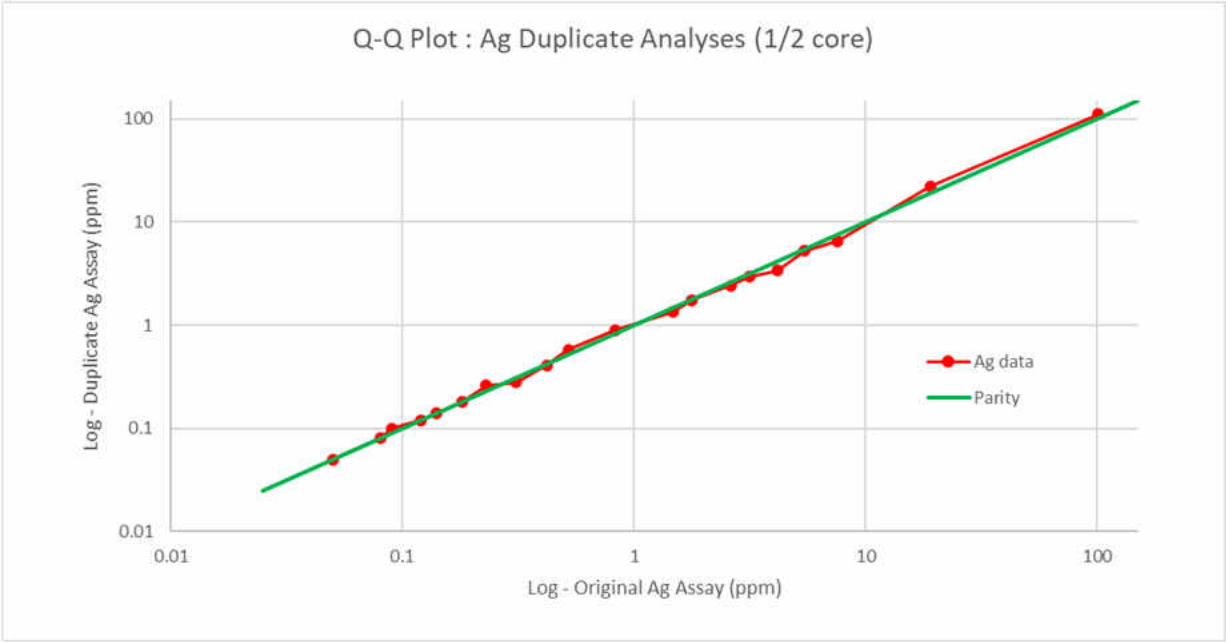
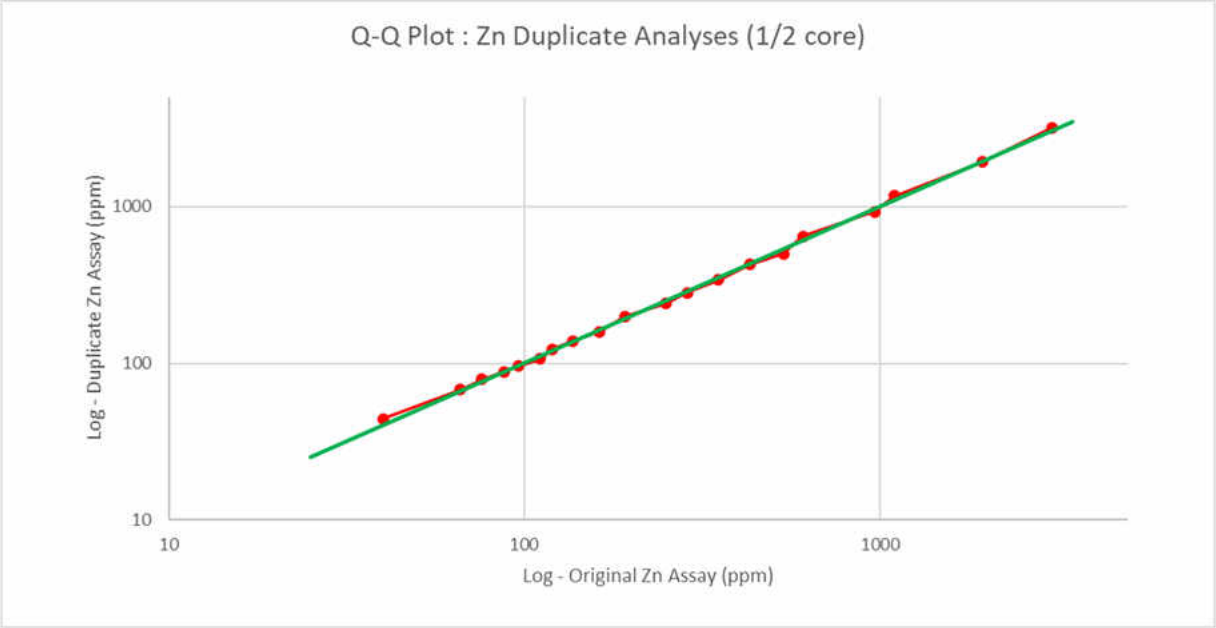
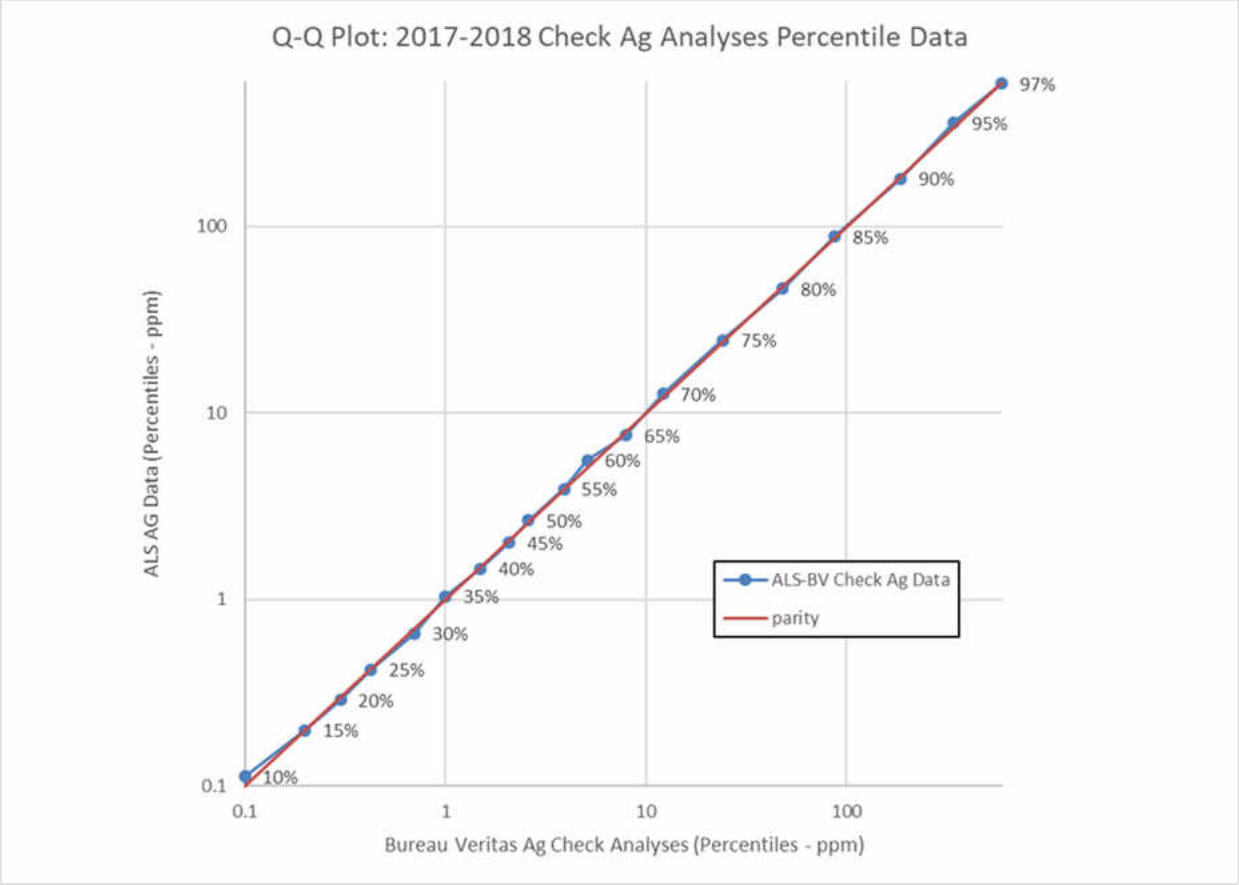


Figure 11.11. Q-Q (percentile) Plot of Zn Data For ½ Core Duplicates from the 2015-2022 former Dolly Varden Project Area Drill Programs.



There were no duplicate core samples collected during the 2017 and 2018 Dolly Varden drill program. However, an umpire assaying program was completed following the completion of the 2018 drill program whereby 294 aliquots of core sample pulps originally analysed at ALS Laboratories in Vancouver, BC, were randomly selected and sent for analysis at Bureau Veritas (BV) Laboratories, in Vancouver, BC. The 294 umpire samples represent a test frequency of 1 in every 45.6 core samples from the 2017 and 2018 Dolly Varden drill programs and comprise a range of Ag values, as determined by their original ALS analysis, from < detection (1/2 detection limit = 0.1 g/t Ag) to 3,390 g/t AG. The umpire BV data showed excellent correlation with the original ALS analyses (correlation coefficient of 0.9991) with original (ALS) mean and standard deviation values of 75.3 g/t Ag and 274.7 g/t Ag, respectively, and umpire (BV) mean and standard deviation values of 76.0 g/t Ag and 277.9 g/t Ag, respectively. A Q-Q plot of the 2018 Umpire Ag data sets is presented in Figure 11.12.

Figure 11.12. Q-Q (percentile) Plot of Ag Data For 2017-2018 Umpire Assay Samples.



12 Data Verification

The following section describes past and present Data Verification efforts regarding the Kitsault Valley Project. Sections 12.1 and 12.2 have been taken from the previous technical reports on the Dolly Varden Property and Homestake Project prepared by Turner and Nicholls (2019) and Hough et al. (2022). The authors of this current Technical Report have reviewed the previous verification work and consider it to contain all accurate description of the historical data verification programs completed at the Project. The authors take responsibility for the information presented in Section 12.

12.1 Dolly Varden Claim Block Exploration Data Verification

APEX has not conducted any field verification of non-drilling exploration work conducted at the former Dolly Varden portion of the Kitsault Valley Project. With that said, there are no known issues with respect to the location or quality of the geological, geochemical and geophysical datasets located pertaining to the former Dolly Varden portion of the Project.

With respect to recent geochemical sampling (rocks and soils), APEX was provided with access to the recent analytical certificates and a comparison of several certificates to the Company's databases did not identify and issues or inconsistencies. As a result, APEX considers the Company's rock and soil geochemical datasets appropriate for use in ongoing exploration at the Project.

With respect to the 2022 limited IP geophysical survey that was completed at the Property, as of the effective date of this report, Dolly Varden has not yet received the original data and so a formal data verification effort has not yet been conducted.

12.2 Dolly Varden Claim Block Drilling Data Verification

The following section summarizes the data verification efforts completed by APEX personnel prior to the initiation of the mineral resource estimation for the Dolly Varden and Torbrit deposits as discussed in Turner and Nicholls, 2019) and summarized in Section 14 of this report. In short, the authors of this report found no significant issues with the Company's surface and underground drilling and sampling databases ("drill database") and deemed them suitable for use in the mineral resource estimates.

Efforts regarding drill database verification have been described in previous Technical Reports written on the Dolly Varden Property (Higgs and Giroux, 2015), which included maiden mineral resource estimates for the Dolly Varden, Torbrit, North Star and Wolf deposits (the effective date of the maiden resource estimates was May 18, 2015). The Higgs and Giroux (2015) report included a comprehensive discussion of the data verification efforts that were completed by the authors of that report prior to their resource estimation work. Prior to the work described in Turner and Nicholls (2019), APEX was presented with the surface and underground drilling/sampling ("pre-2015") database that was utilized by Mr. Giroux in his resource estimates and conducted independent data

verification. This included geographic (grid and field) coordinate checks, based on the locations of underground workings and other landmarks around the former Dolly Varden claim block, and data verification based upon spot checks relative to data provided in historical reports and datafiles provided to APEX personnel by Dolly Varden. APEX personnel found no significant issues with the "pre-2015" portion of the Company's drill database and deemed it suitable for use in the continued exploration of the Property, including mineral resource estimation.

Since 2015, Dolly Varden has been assisted in its execution of drilling and exploration work at the former Dolly Varden Property by geological consultants TerraLogic Exploration Inc. This work has included a comprehensive Quality Assurance and Quality Control (QAQC) program. APEX (Mr. Turner, P.Geol.) was able to evaluate the key components of the drilling QAQC program during property visits conducted in October 2018 and September 2022. With respect to all non-analytical data, the company utilizes a number of important QAQC protocols designed to ensure data quality, including surveying of drill collars by differential GPS, collection of down-hole surveys, and the validation through repeated checks of all drillhole logging information, including consistency checks for lithologic units and descriptions, monitoring/supervision of logging progress from geological and geotechnical logging to core sampling, and the verification of digitized data to illuminate data entry errors. During these site visits, the QP (Mr. Turner) was able to examine several drill collars in the field to verify by hand-held GPS that their locations matched the surveyed locations in the Company's database and no issues were identified.

With respect to analytical data verification, prior to the mineral resource estimation work completed by APEX and reported in Turner and Nicholls (2019), APEX was provided with PDF copies of analytical certificates for the 2015-2017 drill programs and was provided online access to the Company's most recent (2018) drilling certificates though ALS "webtrieve" account. APEX conducted spot checks from a total of 60 analytical certificates, both historical and current data, representing approximately 18% of the total number of certificates and approximately 15% of the total number of assay intervals (see Table 12.1 below). APEX personnel found no significant issues within the Company's drill database and deemed it suitable for use in continued exploration at the Kitsault Valley Project, including its use in mineral resource estimation work (Turner and Nicholls, 2019).

APEX has since been provided with copies of subsequent drill program analytical certificates (2019 through 2021) that are related to work conducted on the former Dolly Varden portion of the Property prior to the Company's acquisition of the Homestake Ridge Project in late 2021. APEX was also provided with online access to the Company's most recent (2022) drilling certificates though its ALS "webtrieve" account, however, as of the effective date of this report, the analyses of the 2022 drill samples remains incomplete (in progress). With that said, APEX has found no errors or issues with the Company's drill database through the 2021 drill program (pre-2022) and deems it suitable for use in the continued exploration of the Kitsault Valley Project.

Table 12.1. APEX Analytical Certificate Review Summary Prior to MRE Work Reported in Turner and Nicholls (2019).

Program	Total Certificates	Laboratory	Sample Type	Certificates Examined
2018	98	ALS	drill core	10
2017	49	ALS	drill core	10
2016	14	ALS	drill core	4
2015	50	ActLabs/BV	SG (core)	10
2014	17	BV	drill core	4
2013	54	BV	drill core	10
2012	22	BV	drill core	4
2011	23	BV	drill core	4
earlier	20	various	drill core	4
Total	347			60

The results of recent metallurgical test work completed on samples collected from Dolly Varden and Torbrit drill core are provided in Section 13 of this report. This information was summarized from a report provided to the Company by Mr. David J. Middleditch, B.Eng, ACSM, who is a Senior Metallurgist with the Company's metallurgical consultants Blue Coast Research Ltd., Parksville, BC. (Middleditch, 2019). The authors of this report reviewed the Company's data and disclosure regarding the 2019 metallurgical test work report (Middleditch, 2019) with the report itself and found no issues or misrepresentations. Although APEX has not independently verified the sample intervals tested or the metallurgical results disclosed in this report, it is the opinion of the authors of this report that the mineralization tested, although limited in number and spatial distribution, appears to have been reasonably representative of the respective deposits. Furthermore, it is the opinion of the authors of this report that the test wok completed by Blue Coast was appropriate for the mineralization being tested and that the test work and results are suitable for inclusion in this report (see Section 13).

12.3 2018 Qualified Person Site Visit (former Dolly Varden portion of the Project)

The author of this Technical Report, Mr. Turner, visited the former Dolly Varden Project, now part of the larger Kitsault Valley Project that is the subject of this report, on October 1 and 2, 2018. During the site visit the author collected six duplicate core samples to confirm the presence of Ag mineralization. The duplicate samples were taken from drillholes DV17040 (Torbrit), DV17063 (Musketeer) and DV17076 (Moose Lamb), with original assay results ranging from 122 to 2210 ppm Ag. Samples from drillhole DV17040 were taken from a hydrothermally brecciated quartz-barite-carbonate-jasper-sulphide vein with visible native silver. Samples from drillhole DV17063 were moderately chlorite-hematite altered epiclastic tuff. Samples from DV17076 were collected from a zone of strongly hematite-jasper-silica altered quartz-carbonate-barite mineralized hydrothermal vein breccia with minor hematite-chlorite altered epiclastic tuff. The original and duplicate assay results from the samples are shown in Table 12.2.

Table 12.2. Comparison of original assay results vs. duplicate assay results of samples collected during Andrew Turner's October 1-2, 2018 site visit.

Drillhole	Sample ID	Original Assay Results			Duplicate Assay Results		
		Ag (ppm)	Pb (%)	Zn (%)	Ag (ppm)	Pb (%)	Zn (%)
DV17040	DV17040-113	140	0.17	0.03	160	0.25	0.04
DV17040	DV17040-117	960	0.25	0.09	911	0.20	0.04
DV17063	DV17063-090	459	0.17	0.10	165	0.14	0.10
DV17063	DV17063-092	289	0.25	0.45	414	0.20	0.43
DV17076	DV17076-067	122	0.72	0.06	182	0.35	0.05
DV17076	DV17076-068	2210	6.21	1.28	1890	5.72	1.28

The analysis of the duplicate samples collected by the author confirmed the presence of silver mineralization, with varying amounts of Pb and Zn. The results of the silver analyses on the author's confirmation samples agree reasonably well with the Company's original analytical results considering the fact that the samples comprised relatively high silver grades and their silver contents will naturally exhibit some degree of variance due to the distribution of native silver and silver-bearing sulphide minerals.

The duplicate samples were submitted to ALS Canada Ltd. (ALS) in Terrace, BC by Andrew Turner on October 2, 2018. Sample preparation at the laboratory in Terrace included crushing of the sample so that greater than 70% passes a 2 mm screen, the sample was then split by riffle splitter and pulverized to better than 85% passing a 75-micron screen. From Terrace, the prepared pulp samples were shipped to the ALS laboratory in North Vancouver, BC, for analysis. A 30 g aliquot from the pulp was extracted and analysed for precious metals using a fire assay fusion, with gravimetric finish for silver analysis and atomic absorption spectroscopy (AAS) finish for gold analysis. Samples were also analyzed for a suite of other "trace elements" by ICP-AES (Inductively Coupled Plasma – Atomic Emission Spectroscopy).

12.4 2022 Qualified Person Site Visit

The author of this Technical Report, Mr. Turner, visited the Kitsault Valley Project between September 28 and 29, 2022. During the site visit the author observed core logging and sampling procedures at the Company's Alice Arm campsite and visited and confirmed drill collar coordinates for several holes at the Torbrit, Kitsol, Wolf and Homestake target areas. In addition, Mr. Turner collected six (6) additional duplicate core samples to confirm mineralization. The duplicate samples were collected from drillholes DV22-283 (Kitsol target), DV22-300 (Wolf prospect), DV21-277 (Torbrit prospect) and HR22-338 (Homestake Main prospect).

For the Dolly Varden area drillholes, the original silver analyses ranged from 381 to 4230 ppm and the Ag and were reasonably well duplicated by the authors check samples that ranged from 237 to 4430ppm Ag. Check samples 4951 and 4952 from Kitsol area drillhole DV22-283 were collected from a multi-phase hydrothermally brecciated quartz-barite-carbonate vein with 5-10% pyrite and very fine "sooty" sulphides. Check sample

4953 was collected from a chalcopyrite-rich quartz vein from Homestake drillhole HR22-338 and returned a result of 43.5ppm Au and 10.6% Cu, which corresponds reasonably well (for such a high-grade structure) with the original analytical results of 20.8ppm Au and 11.6% Cu. Check samples 4954 and 4955 were collected from the Wolf area drillhole DV22-300 from multi-phase hydrothermally brecciated quartz-barite-carbonate veins with 3-5% pyrite and very fine "sooty" sulphides. Finally, check samples 4956 was collected from the Torbrit area drillhole DV21-277 from a zone of strongly hematite-jasper-silica altered quartz-carbonate-barite mineralized hydrothermal vein breccia. The original and duplicate assay results from the 2022 check samples are shown in Table 12.3.

Table 12.3. Comparison of original assay results vs. duplicate assay results of samples collected during Andrew Turner's October 1-2, 2018 site visit.

APEX Sample ID	Drillhole	Target Area	Original Sample ID	Original Assay Results			Duplicate Assay Results		
				Ag (ppm)	Pb (%)	Zn (%)	Ag (ppm)	Pb (%)	Zn (%)
4951	DV22-283	Kitsol	5198	**424**	0.02	0.03	**237**	0.03	0.02
4952	DV22-283		5204	**381**	0.29	0.08	**303**	0.21	0.03
4954	DV22-300	Wolf	1106	**4230**	3.36	1.59	**4430**	3.75	1.25
4955*	DV22-300		1091	**410**	0.11	0.11	**438**	0.95	1.02
4956	DV21-277	Torbrit	DV21277-112	**303**	0.31	0.15	**775**	0.42	0.17
				Au (ppm)	Ag (ppm)	Cu (%)	Au (ppm)	Ag (ppm)	Cu (%)
4953	HR22-338	Homestake Main	7127	**20.80**	**115**	**11.6**	43.5	143	10.6

* data appears correct as the remaining duplicate trace element data matches the original data.

The results from the 2022 check samples confirmed mineralization within the sampled intervals and agreed reasonably well with the original analyses within the Company's database.

12.5 Homestake Claim Block Database Verification

The following section summarizes the data verification efforts completed by APEX personnel prior to the initiation of the mineral resource estimation for the Homestake deposits discussed in a subsequent section of this report. In short, the authors of this report found no significant issues with the Company's surface and underground drilling and sampling databases and deemed them suitable for use in the mineral resource estimates.

Efforts for database verification were done and presented in previous Technical Reports written on the Homestake Project (Rennie et al. 2010; Rennie, 2011; Ross and Chamois, 2017; Minefill 2020), which included maiden mineral resource estimates for the Homestake deposits. APEX personnel were retained by Dolly Varden in 2021 to conduct a review of the Homestake Project drilling database and mineral resources. APEX

personnel were provided with access to original assay certificates, geological logs, survey files, and completed a comparison of 5,000 certificate values (~12% of the database) with the database and found no issues. APEX personnel was also provided with proposed underground development workings and stopes. APEX personnel performed a formal data examination used in the Mineral Resource Estimate using Micromine 3-D modeling and resource estimation software. No significant issues were found within the Company's current drilling databases, which were deemed to be suitable for use in continued exploration at the claim block as well as the mineral resource estimation work discussed in Section 14 of this report.

With respect to the verification of the geochemical sampling databases, APEX personnel were given access to the PDF data certificates for the geochemical sampling, including rock and whole rock sampling, completed on the Homestake claim block. APEX personnel completed spot checks on analytical certificates for geochemical samples collected and found no significant issues with the Company's geochemical databases. During the Qualified Person Site Visit completed by Mrs. Hough in January 2022, Mrs. Hough verified the geochemical sampling procedures and is satisfied with the accuracy of sample locations. APEX personnel reviewed the LiDAR airborne survey completed over the Homestake claim block in 2022 and did not observe any unusual data. The results of historical metallurgical test work reported in 2016 is not verified but the authors of this report reviewed the Shouldice and Coombs (2016) metallurgical test work report. This report was completed by Tom Shouldice, P.Eng, who is a Qualified Person and Principal Metallurgist at Base Metallurgical Laboratories, and the authors of this report have no reason to doubt the veracity of the data or found no issues or misrepresentations. Any recommendation or conclusions reached in this report are not relying on the results of the 2016 metallurgy work (Shouldice and Coombs, 2016).

12.6 Qualified Person Site Inspection – Homestake Claim Block

Mrs. Hough, a senior geologist with APEX and an independent QP and co-author of this report, conducted a site visit, on behalf of Dolly Varden on January 20, 2022 on the Homestake Project. Mrs. Hough verified the physiography and reviewed selected historical drill core utilized in the mineral resource estimate in Section 14 herein. Mrs. Hough examined mineralized intersections in core holes HR06-27, HR06-50, HR08-99 and HR09-152 from the HR Zone and HR09-165 from the HS Zone and collected six half core check samples for assaying. The samples were submitted to ALS in North Vancouver, BC, Canada for geochemical analysis. Assay results are shown in Table 12-4.

Table 12.4. Assay Results from 2022 QP Site Inspection

Drill Hole	From (m)	To (m)	Sample ID (Orig)	Sample ID (Verified)	Au-ppm (Original)	Au-ppm (Verified)	Ag-ppm (Original)	Ag-ppm (Verified)
HR06-050	48.2	49.1	206365	22RH001	4.13	3.96	2.8	2.9
HR08-099	102.7	103.2	80776	22RH002	4.3	2.66	176	143
HR09-164	374.9	375.5	95368	22RH003	1	1.12	25.7	47.6
HR09-164	388.55	389.8	95382	22RH004	19.15	21.3	55.3	89.8
HR06-027	199.35	200.85	427898	22RH005	1.72	0.762	2.6	3.39
HR06-027	200.85	201.9	427899	22RH006	11.94	14.1	53.2	46.5

Samples collected by Ms. Hough were shipped via FedEx to ALS in North Vancouver for sample preparation and processing. The samples were logged into ALS's sample tracking system, dried and fine crushed to better than 90 percent passing 2 mm. The samples were then split using a riffle splitter and a 250 g portion was pulverized to better than 85 percent passing 75 µm (ALS Sample Preparation Code Prep-33C). The pulverized samples were forwarded to ALS's analytical facility in Vancouver for analysis. ALS is an accredited laboratory, recognized under accreditation No. 579, and conforms with requirements of CAN-P-1599, CAN-P-4E (ISOMEC 17025-20905). Dolly Varden and APEX are independent of ALS.

Each sample was assayed for gold and analysed for a multi-element suite. Gold was determined by fire assay on a 30 g sample with an Atomic Absorption Spectroscopy (AAS) finish (ALS Code Au-AA23). Samples assaying greater than 5 g/t Au were re-assayed with a gravimetric finish (ALS Code Au-Grav21). A one-gram sample of pulverized material was analysed for a 48-element suite, including silver and copper, by ICP-MS after a four-acid digestion (ALS Code ME-MS61). Samples yielding analyses of silver greater than 100 ppm Ag were re-analyzed by HCl leach with AAS finish after a three-acid digestion (ALS Code Ag-OG62). The 2022 collected half core samples yielded gold and silver results that were in good agreement with the original sample assays results determined in 2006, 2008 and 2009.

Also, as described above in Section 12.4, Mr. Turner (an author of this Technical Report) visited the Kitsault Valley Project between September 28 and 29, 2022. During the site visit Mr. Turner observed core logging and sampling procedures at the Company's Alice Arm campsite and visited and confirmed drill collar coordinates for several holes at the Torbrit, Kitsol, Wolf and Homestake target areas. In addition, Mr. Turner collected six (6) duplicate core samples including one (1) from the drillhole HR22-338 located on the former Homestake Ridge property area. Check sample 4953 was collected from a chalcopyrite-rich quartz vein from Homestake drillhole HR22-338 and returned a result of 43.5ppm Au and 10.6% Cu, which corresponds reasonably well (for such a high-grade structure) with the original analytical results of 20.8ppm Au and 11.6% Cu. The original and duplicate analytical results from Mr. Turner's September 2022 site visit check samples are provided in Table 12.3.

13 Mineral Processing and Metallurgical Testing

Historical metallurgical testing completed on Homestake deposit is reported at section 6.6. Until 2019, there had not been any modern metallurgical testing from any of the deposits or prospects at the Dolly Varden claim block.

On May 8, 2019, Dolly Varden announced (Dolly Varden, 2019a) the results of an initial metallurgical test program that examined samples for mineralization from the Dolly Varden and Torbrit deposits. It is the opinion of the authors of this report that the mineralization tested appears to have been reasonably representative of the respective deposits. Furthermore, the test wok completed is appropriate for the mineralization being tested. However, the tests completed represent an early stage (high level) examination of the mineralization's metallurgical characteristics. Thus, although results were encouraging, and no significant issues were identified, these results are not yet sufficiently detailed or comprehensive to allow for any sort of economic assessment of the deposits and additional test work is recommended.

The following is a summary of the 2019 Dolly Varden Metallurgical Test Program that was recently prepared by Mr. David J. Middleditch B.Eng, ACSM, who is a Senior Metallurgist with the Company's metallurgical consultants Blue Coast Research Ltd., Parksville, BC (Middleditch, 2019).

13.1 Blue Coast Research 2019 Metallurgical Testwork

In January 2019, samples from the Torbrit and Dolly Varden deposits were shipped to Blue Coast Research Ltd. (BCR), located in Parksville, BC for a preliminary metallurgical assessment. The testwork focused on feed characterisation (head assays and mineralogical analysis via QEMSCAN), comminution testing (Bond Ball Work Index), froth flotation, whole ore cyanide leaching, cyanide leaching of flotation tails and gravity recoverable silver testing. Blue Coast is considered to be a reputable metallurgical testwork laboratory, with suitably qualified personnel applying conventional mineral processing techniques for base and precious metals recovery.

13.2 Sample Characterisation

The Dolly Varden and Torbrit composites were selected by Dolly Varden Silver Geologists to be representative of the average silver equivalent (AgEq) resource grade. The samples contained 290-350g/t Ag, with relatively minor amounts of lead (0.35% to 0.55% Pb) and zinc (0.39% to 1.11% Zn) as summarised in the table below (Table 13.1). It should be noted that the zinc grade for both deposits is significantly higher than was reported from historical production at Torbrit, where it is likely that the previous operators focused on higher grade silver-lead zones of mineralisation as flotation technology in the 1920s did not enable lead and zinc separation.

Table 13.1. Summary of Dolly Varden composite head assays.

Composite	Cu (%)	Pb (%)	Zn (%)	Fe (%)	Ag (g/t)	S total (%)
Dolly Varden	0.03	0.35	1.11	8.29	347	7.67
Torbrit	0.02	0.55	0.39	4.44	290	8.23

Mineralogical analysis of these composites via QEMSCAN confirmed that the lead and zinc deportment is predominantly to galena and sphalerite, respectively, with silver present as native silver, acanthite and polybasite, all of which should be readily flotable via conventional froth flotation. Pyrite was also present in both composites; however, the combined sulphide content was lower for Torbrit (4.3%) compared to Dolly Varden (19.3%). At a nominal primary grind size of ~120µm, galena and sphalerite liberation were quite poor at 15-16% and 38-49% respectively. This coupled with fine grain sizes for the galena, sphalerite and silver minerals suggests that finer primary, and or regrinding will be required for adequate mineral recovery.

13.3 Comminution Testwork

A single Bond Ball Work Index test was conducted on the Torbrit composite. Drillcore was not available for the Dolly Varden composite, so comminution was not conducted on this material at this time. The closing size of the test was 106µm, and the P80 of the product was measured at 78µm. The Bond Ball Work Index was calculated to be 9.5kWh/tonne, suggesting that Torbrit material is relatively soft.

13.4 Whole Ore Flotation Testwork

Both the Torbrit and Dolly Varden composites were subjected to batch flotation tests to assess their amenability to two different flotation flowsheet options. Option 1 was a differential lead-zinc flowsheet whereby attempts were made to produce separate a saleable lead-silver and zinc concentrates, and Option 2 was a bulk flowsheet option where no attempt was made to separate lead and zinc.

For Torbrit, the differential flowsheet proved to be a success and a high-grade lead-silver concentrate with minimal zinc dilution at acceptable lead and silver recoveries was produced. This concentrate is considered to be high value, grading 58% Pb, 25,000g/t Ag and 3% Zn at 76% lead and 64% silver recovery. The zinc concentrate graded 36% Zn and 2700g/t Ag at 64% zinc recovery and 7% silver recovery, bringing total silver recovery via flotation for Torbrit to 71%. The flowsheet employed is considered to be conventional, with the following reagent/processing strategy:

- Primary grind P80 of 70µm, 250g/t soda ash, 100g/t sodium silicate, 150g/t zinc sulphate and 50 g/t sodium cyanide added to the mill.
- Lead rougher flotation at pH 9.5 adjusted with soda ash, 50g/t 3418A, 100g/t sodium silicate.

- Ceramic media regrind with 100g/t soda ash, 15g/t zinc sulphate and 5g/t sodium cyanide.
- Three stages of lead cleaning at pH 10 adjusted with soda ash, 20g/t 3418A and 20g/t sodium silicate.
- pH adjustment ahead of zinc conditioning with 1115g/t lime to pH 11.0.
- Copper sulphate conditioning (75g/t).
- Zinc rouging at pH 11.0 adjusted with lime and 20g/t SIPX.
- Ceramic media zinc regrind with 250g/t lime and 7.5g/t copper sulphate.
- Two stages of zinc cleaning at pH 11.8 to 11.0 adjusted with lime, 7.5g/t SIPX collector.

For Dolly Varden, the zinc to lead ratio in the feed was more challenging at >3:1 therefore producing differential lead and zinc concentrates proved to be challenging. The best test for this composite produced a bulk concentrate grading 21% Pb, 23% Zn and 22,000g/t Ag at 59% lead, 21% zinc and 65% silver recovery. From a silver perspective, this is a high-grade concentrate at acceptable silver recovery, however the lead and zinc grades are such that smelters would likely not offer attractive payment terms for the lead and zinc. No zinc circuit was included in this test as further testwork is required to reduce zinc misplacement to the lead circuit prior to embarking on zinc flotation optimisation.

13.5 Whole Ore Cyanidation

Whole ore cyanide leaching as a means of recovering silver was investigated in parallel with froth flotation. Due to the nature of the process, cyanide leaching typically only recovers the precious metals, i.e. silver in this case, and the base metals (lead and zinc) are not recovered into a saleable product. A total of six whole ore leaches were conducted, three on each composite. The first test was a baseline test (80-90µm) primary grind, low cyanide concentration and standard 48hr retention time, the second test employed a finer grind (65-70µm), longer retention time (72hr) and increased cyanide concentration, and the third test employed a very fine grind (38-45µm), 96hr retention time and increased cyanide concentration.

The results are summarised in Table 13.2 and Figures 13.1 and 13.2

Table 13.2. Summary of whole ore cyanidation test results.

Test ID	Calc. Head Ag (g/t)	Reconciliat'n (%)	Ag Recovery (%)	CaO Cons. (kg/t)	NaCN Cons (kg/t)
CN-1	337	91	63	0.76	0.60
CN-2	293	101	54	0.81	0.81
CN-3	303	81	72	0.57	3.52
CN-4	261	90	74	0.00	4.29
CN-5	364	98	86	0.00	7.93
CN-6	340	117	87	0.00	7.50

Figure 13.1. Dolly Varden deposit whole ore leach kinetic curves.

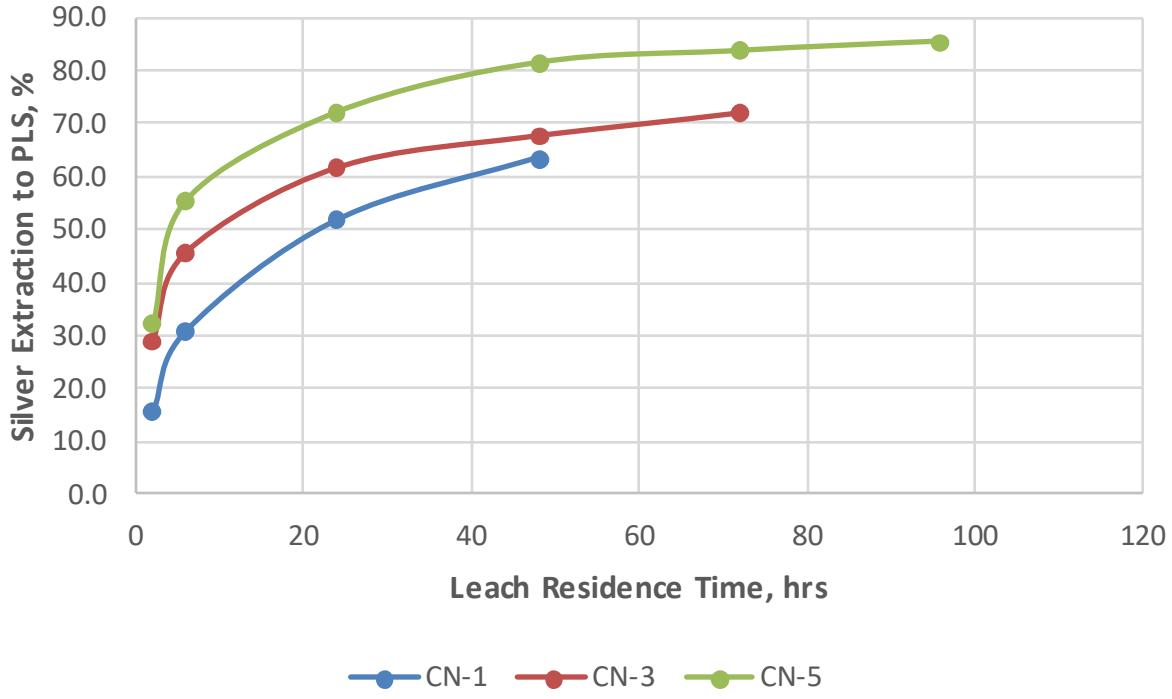
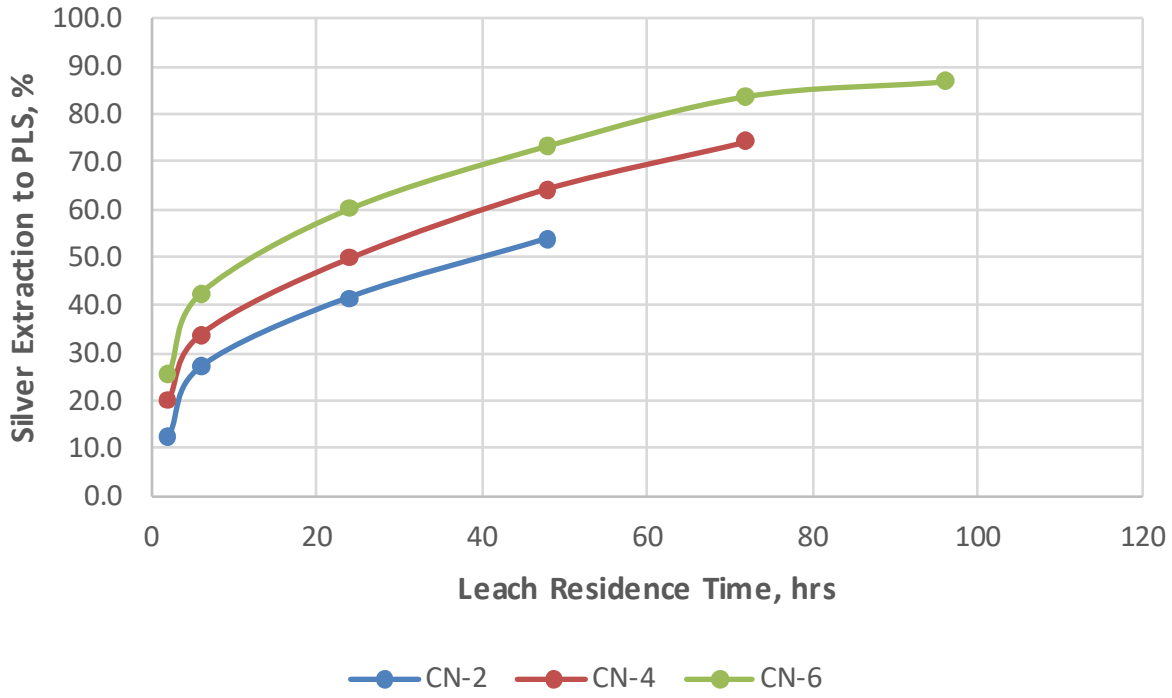


Figure 13.2. Torbrit deposit whole ore leach kinetic curves.



For the Dolly Varden composite, silver extraction to pregnant leach solution (PLS) ranged from 63-86%, with the highest extraction achieved in test CN-5 with the finest grind (P80 = 38µm), long retention time (96 hours) and higher cyanide concentration (3.0g/L).

For Torbrit, silver extraction to PLS ranged from 54-87% with the highest extraction achieved in test CN-6 with the finest grind (P80 = 38µm), long retention time (96 hours) and higher cyanide concentration (3.0g/L).

The higher silver extractions also required higher cyanide consumption rates of 7.5-8.0kg/tonne which could be attributed to increased surface area due to the finer grind and/or the formation of CNWAD species with base metals such as lead and copper.

13.6 Cyanidation of Flotation Tails

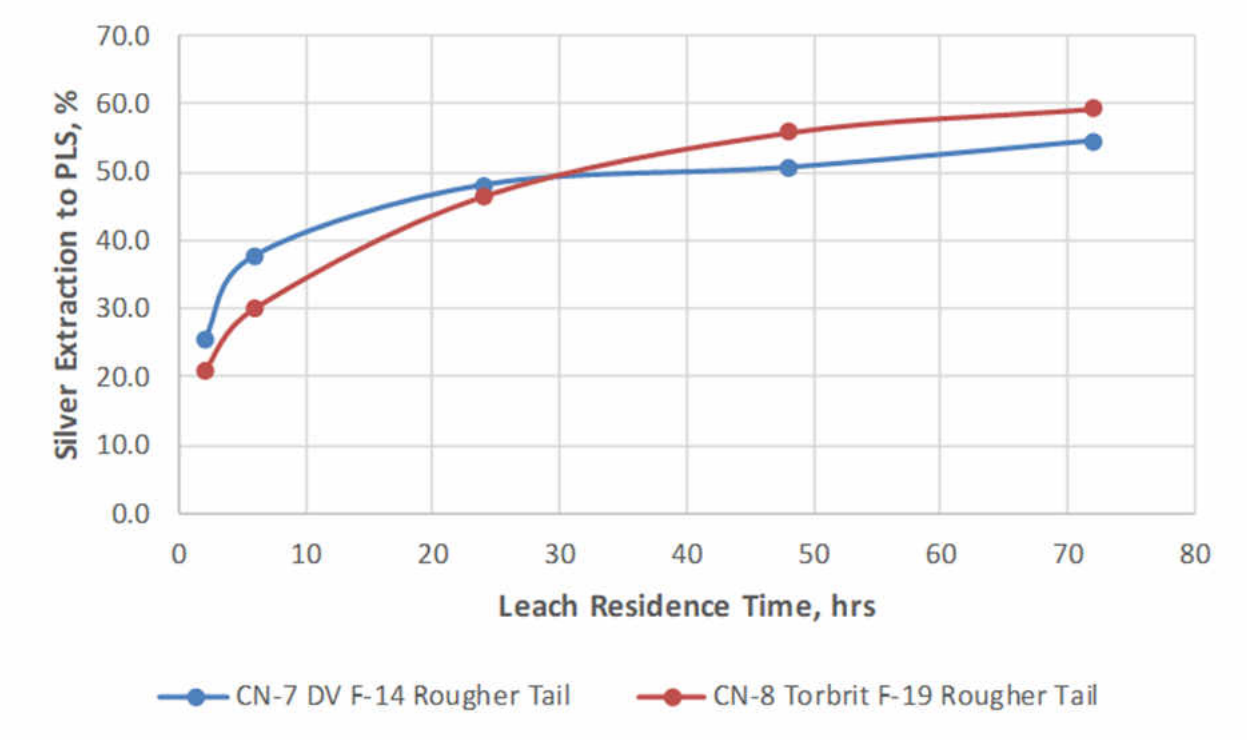
Two additional bottle roll tests were conducted on flotation tails generated earlier in the program from Dolly Varden and Torbrit. The following conditions were employed for these tests:

- No further grinding post flotation. P80 of the tails for Dolly Varden was 81µm, and 70µm for Torbrit.
- 40% solids pulp density

- 1.5g/L NaCN concentration (maintained)
- pH 10.5-11.0 (maintained with lime)
- 72hr retention time.

The kinetics curves for these two tests are summarised below [in Figure 13.3]:

Figure 13.3. Flotation tail leach kinetics curves.



Silver extraction to PLS was 54% and 59% for Dolly Varden flotation tails and Torbrit flotation tails, respectively. Cyanide consumptions for these tests were relatively low at 1.0-1.5kg/tonne, but the profile of these curves suggests that leaching may still be ongoing and longer retention times may be required, resulting in slightly higher overall silver extraction to PLS.

Combining flotation recovery and leaching of the flotation tails provides the following overall calculated recoveries to saleable product for Dolly Varden and Torbrit (Table 13.3 below):

Table 13.3. Combined flotation and cyanidation silver recoveries.

Zone	Recovery (%)				
	Flotation Only		Cyanidation	Flotation +	Whole Ore
	Lead Conc	Zn Conc	Float Tails	Cyanidation	Cyanidation
Dolly Varden	65	-	54	84	86
Torbrit	64	7	59	88	87

For Dolly Varden the combined flotation and cyanidation recovery was 84% versus 86% for whole ore cyanidation alone.

For Torbrit, the combined flotation and cyanidation approach resulted in an overall silver recovery of 88%, with the added advantage of lead and zinc being recovered in appreciable amounts to saleable flotation concentrates. This is compared to just 87% recovery via whole ore cyanidation. It is therefore apparent, that flotation and cyanidation combined is likely the more favourable option for Torbrit, whereas whole ore cyanidation alone may be more favourable for Dolly Varden.

13.7 Silver Recovery Projections

Based on the testwork conducted at Blue Coast Research Ltd. It is realistic to expect that Dolly Varden and Torbrit material could return on average, 86% and 88% silver recovery, respectively. Dolly Varden is best suited to a whole ore tank leach process which will likely not result in payment for the base metals – further optimisation of flotation conditions may result in a flowsheet whereby zinc can be better rejected from the lead concentrate, but further testwork is required to demonstrate this. Torbrit appears to respond more favourably to differential lead/zinc flotation with cyanidation on the flotation tails providing additional silver recovery. This flowsheet also separates the lead and zinc into separate and saleable concentrates where both are anticipated to attract favourable payment terms.

13.8 Recommendations for Future Work:

It is recommended that as the project advances additional metallurgical testwork is conducted to increase the robustness of the metallurgical projections indicated above:

- Additional comminution testwork would be required for more robust grinding circuit design, and should include Bond Ball Work Indices, crusher work indices and SAG mill testing on both Dolly Varden and Torbrit. Currently no comminution data has been conducted on the Dolly Varden deposit.

- Further optimisation of lead/zinc flotation conditions is required for Dolly Varden, with a focus on producing a high-grade lead-silver concentrate with minimal zinc dilution. This could be achieved by depressant dosage optimisation or better definition of high zinc zones within the deposit and treating these separately.

- For Torbrit, further optimisation of the zinc circuit is required to achieve zinc concentrate grades at ~50% Zn. This could be achieved through reagent optimisation and /or the addition of a third stage of zinc cleaning.

- Once flotation conditions have been optimised, a series of locked cycle tests is recommended to increase confidence in the metallurgical projections. This may

result in increases in metal recoveries to concentrates as middlings streams are recirculated in these tests.

- If whole ore cyanidation is the preferred processing route, a bottle roll optimisation program should be conducted to reduce cyanide consumption and optimise the primary grind.

- A variability program covering ~5-10 discrete variability samples from each deposit should be incorporated into any future phases of testwork."

14 Mineral Resource Estimates

The following section summarizes the current mineral resource estimates (MRE's) that occur on Dolly Varden's Kitsault Valley Project. The Kitsault Valley Project comprises the combination of the Company's original Dolly Varden silver project ("Dolly Varden Project"), which includes the Wolf, North Star, Dolly Varden, and Torbrit silver deposits, and the recently acquired Homestake Ridge gold-silver project ("Homestake Project") that includes the Homestake Main, Homestake Silver, and South Reef gold-silver deposits. This section summarizes each of the seven (7) deposits' current mineral resource estimates (MRE's).

Andrew J. Turner, B.Sc., P.Geol. (APEX) is responsible for the following section involving a review of the current MRE's at Dolly Varden's Kitsault Valley Project. Mr. Turner was assisted by, and directly supervised the work of, Mr. Warren E. Black, M.Sc., P.Geo., a Resource Geologist and Geostatistician with APEX. No new geological modeling has been conducted. However, APEX has reviewed the existing MRE's at the Property and has evaluated the potential impact of recent drilling and has conducted new evaluations of their respective "reasonable prospects for future economic extraction". As a result, the existing MRE's at the Kitsault Property are accepted as current by the authors of this report.

There are four (4) previous technical reports supporting mineral resource estimates at the Kitsault Valley Project, which are referred to or discussed and summarized in this Technical Report, which comprise:

- Maiden MRE's for the Dolly Varden, Torbrit, North Star and Wolf deposits on the former Dolly Varden Property by Higgs and Giroux (2015). This report had an effective date of September 30, 2015, and is referred to herein as the "2015 Dolly Varden MRE".
- In 2019, a technical report was prepared by APEX (Turner and Nicholls, 2019) that included updated MRE's for the Torbrit and Dolly Varden deposits. In addition, APEX reviewed the data, geological models, block models and resource estimation parameters used in the 2015 Dolly Varden MRE for the North Star and Wolf deposits, where no drilling subsequent to the 2015 Dolly Varden MRE had then been completed, and accepted their MRE's as current. This technical report (Turner and Nicholls, 2019) had an effective date of May 8, 2019, and will be referred to herein as "2019 Dolly Varden MRE."
- The Homestake Project was the subject of a technical report (MineFill, 2020) which included MRE's for the Homestake Main, Homestake Silver, and South Reef deposits. The MRE's discussed in MineFill (2020) had an effective date of December 31, 2019, and will be referred to herein as the "2019 Homestake MRE". This report is considered historical as it was not written on behalf of Doll Varden.
- Following the acquisition of the Homestake Project from Fury Gold Mines Ltd., a new technical report was prepared for Dolly Varden regarding the former

Homestake Ridge Project, which included a review of its mineral resources. The result was an updated technical report by Hough et al. (2022), in which the Homestake MRE's were accepted as current (with a new effective date of January 20, 2022).

14.1 Homestake Project Mineral Resource Estimate

The former Homestake Ridge Project MRE includes the Homestake Main, Homestake Silver, and South Reef deposits.

APEX reviewed the drilling database and mineral resource estimate for the three Homestake zones/deposits, which were the subject of Technical Reports by MineFill (2020) and Hough et al. (2022), comprising the Homestake Main (HM), Homestake Silver (HS) and South Reef (SR) zones of gold and silver mineralization. The author's current review was facilitated by its direct previous experience with the former Homestake Project. APEX was contracted in 2017 to assist Auryn Resources (predecessor to Fury Gold Mines) with work at the former Homestake Ridge Project. APEX personnel assisted Auryn with a re-logging effort involving all of the project's archived historical (pre-2017) drill core and later assisted Auryn with the execution of the 2017 exploration and drilling programs at the former Homestake Project area, during which Mr. Turner and Mr. Black both spent time in the field at the project. APEX personnel were not involved in any subsequent exploration work at the former Homestake Project area, nor in the 2019 geological modelling and mineral resource estimation work, or the 2020 Homestake Preliminary Economic Assessment (Historical Homestake PEA) and subsequent technical report (MineFill 2020).

APEX personnel have conducted two (2) site visits to the former Homestake Project area on behalf of its current owner, Dolly Varden Silver Corporation. Mrs. Rachelle Hough, P.Geo., a senior geologist with APEX and an independent QP and co-author of this report, conducted a site visit, for the Issuer on January 20, 2022 and reviewed mineralization in a number of historical drillholes utilized in the 2019 Homestake MRE including core holes HR06-27, HR06-50, HR08-99 and HR09-152 from the HR Zone and HR09-165 from the HS Zone. Furthermore, Mr. Turner (APEX), conducted the most recent and current site visit on behalf of the Company on September 28 and 29, 2022 and confirmed several recent and historical collar locations and reviewed core in a number of recent (2022) drillholes at the former Homestake Project (and the former Dolly Varden Project) area. The details of these site visits are provided in Section 12 of this report, but both visits resulted in the visual and analytical verification of mineralization at the Homestake deposits.

Recent drilling at the former Homestake portion of the Kitsault Property has been roughly split between targeting the Homestake resource areas and other pure exploration targets. APEX has conducted a review of the currently available data from these drill

programs and has concluded that the additional drilling has not resulted in a material change (increase or decrease) in the existing/current Homestake MRE's. In addition, as of the writing of this report, 2022 drilling results were incomplete and so updated geological modeling, and potential updating of the Homestake MRE's, has not yet been completed by the Company.

Mr. Turner completed a review of the Homestake MRE's and accepted them as current in a previous Technical Report (Hough et al., 2022). Mr. Turner, B.Sc., P.Geol., assisted by Mr. Black, M.Sc., P.Geo., has completed a further review of the Homestake MRE's, as discussed herein, useing Micromine (v21.0), a 3-D modelling and resource estimation software, to evaluate the Homestake resource data provided by Dolly Varden. The review included investigations of the drillhole database, geological logs, geological model, estimation domains, statistics, block model and resource calculations. The author's current review of the Homestake Project MRE's did not identify any significant issues with the drillhole database or the workflow and methodology used in their calculation. Furthermore, it is the opinion of Mr. Turner that the Homestake Project MRE's were completed in accordance with the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines," dated November 29, 2019, and the CIM "Definition Standards for Mineral Resources and Mineral Reserves," dated May 10, 2014. As a result, Mr. Turner accepts the Mineral Resource Estimates for the Homestake Main, Homestake Silver and South Reef mineralization zones, as previously discussed in Hough et al (2022), and considers them to be current as of the effective date of this report (September 28, 2022).

The following section describes the methodology and conclusions for the current Homestake Project MRE review.

14.1.1 Review of Database and Resource Files

Dolly Varden provided APEX with the most recent drillhole database, 3-D topographic surface, and the block model with mineralization domains used for the calculations of the most recent Homestake Project MRE. In addition, Dolly Varden provided the proposed underground development workings and stopes.

The provided drillhole database comprises 22 trenches and 351 drillholes, each having coordinates, depths, and zone information within the collar file. In addition, the drillhole data comprises interval data for alteration, assays, assay AuEQ values, fluid pathway observations, geotechnical measurements, lithology, magnetic susceptibility, specific gravity, structure, and survey information.

Dolly Varden provided APEX personnel with the most recent block models and mineralization domains for the Homestake Main, Homestake Silver, and South Reef zones. The block models contained coordinates, block dimensions, domain, density, classification information, NSR factors, and the metals antimony, arsenic, copper, lead, gold, and silver grades.

APEX personnel reviewed and performed data verification of the drilling data provided, as described elsewhere in this report, and no significant issues were identified. Dolly Varden conducted infill and step-out drilling in 2022 at the Homestake MRE area, mainly at the Homestake Main deposit. However, some of the analytical data from this work remains outstanding as of the writing of this report. As a result, formal updating of the current Homestake MRE has not been completed. A review of the Homestake geological model(s) is recommended once all of the 2022 drilling results are received and compiled, which may warrant revised mineral resource estimation.

14.1.1.1 Review of Estimation Domains

APEX reviewed the estimation domains used to constrain the Homestake Project MRE block model. The review's purpose was to establish if the Homestake Project estimation domains adequately constrain mineralization and reasonably represent the volume and tonnes of mineralized material. Moreover, APEX personnel evaluated the geological data available in the drillhole database and evaluated its relationship versus the constructed estimation domains. Finally, the reasonable prospects for eventual economic extraction (RPEEE) for the Homestake area resources are evaluated below.

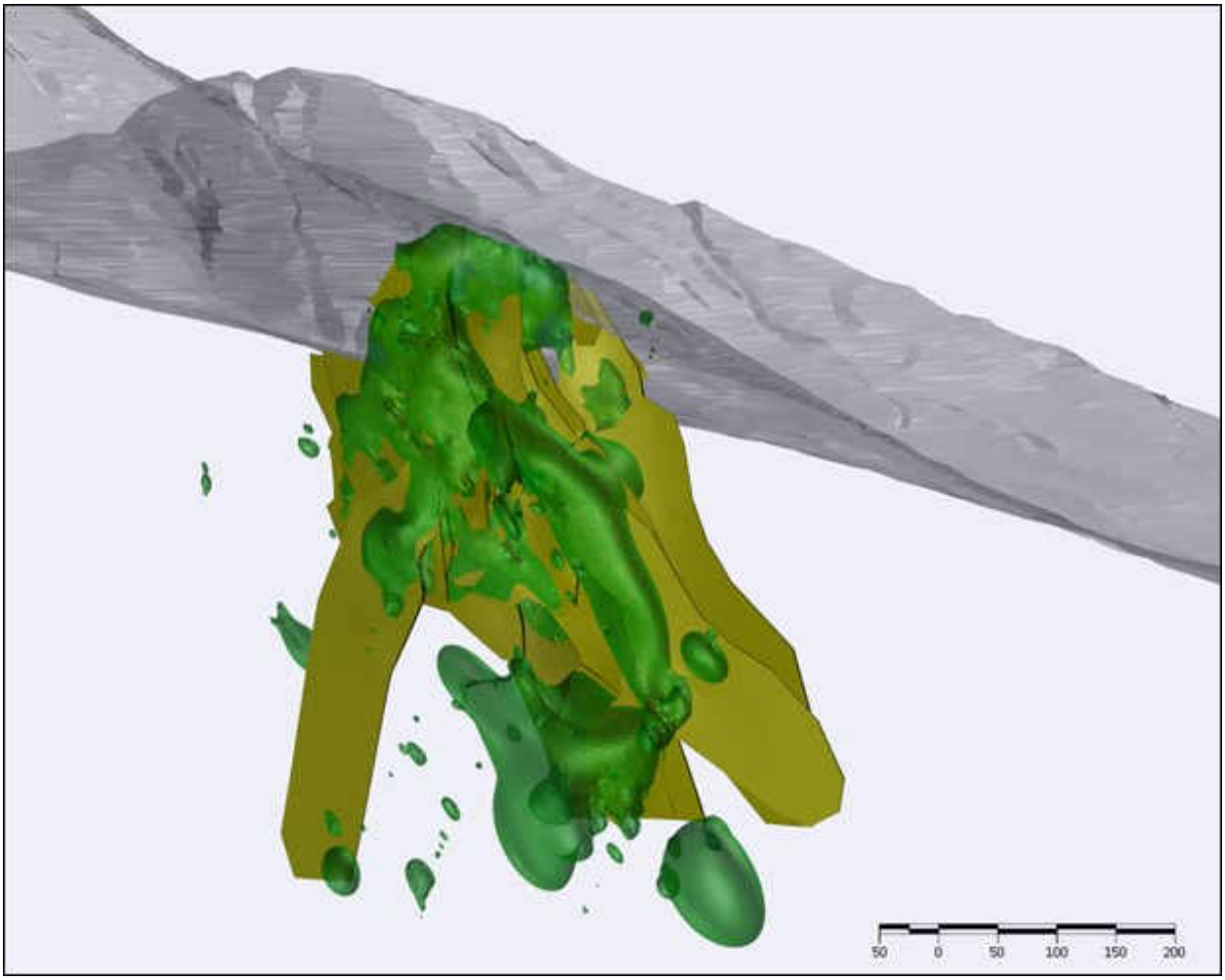
The Homestake Main (HM), Homestake Silver (HS), and South Reef (SR) domains comprise a series of thin high-grade 3-D models that appear to be primarily guided by Auryn's fluid pathway logging. The Homestake Main and Homestake Silver zones also include a low-grade model that constrains broader zones of lower-grade material surrounding, in-between or separate from the high-grade domains. These low-grade shells follow the general trend defined by the high-grade domains.

All domains appear to be constructed using implicit modelling and constrain the identified mineralization in the drill holes. The high-grade domains are defined using a vein-type implicit modelling approach with extents restricted manually to limit their extents based upon the drilling. The low-grade domains are defined using an intrusion-type implicit modelling approach, typical for grade shells.

The eleven Homestake Main high-grade domains range in thickness from 0.5 to 8 metres and dip to the northeast at approximately 65-70 degrees (Figure 14.1 and Figure 14.2). The nine Homestake Silver high-grade domains range in thickness from 0.5 to 4 metres and are steeply dipping to the southwest at angles of approximately 80 degrees (Figure 14.3 and Figure 14.4). The two South Reef high-grade domains range in thickness from 1 to 5 metres in thickness dipping to the northwest at approximately 80 degrees (Figure 14.5 and Figure 14.6).

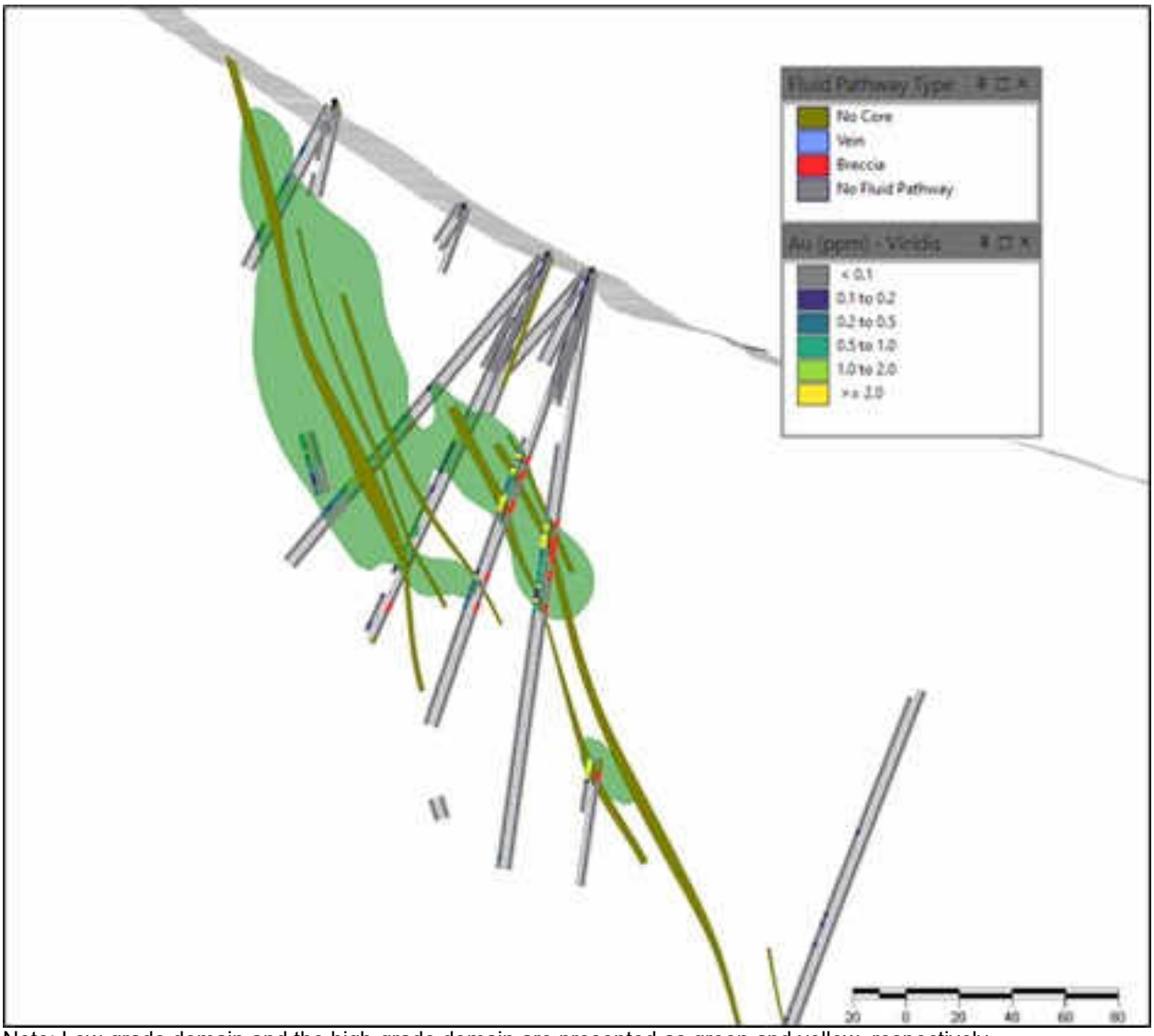
The HM, HS, and SR estimation domains appear to reasonably encapsulate mineralization identified in the drill holes and adequately represent the volume of mineralized material at the Homestake Project. The estimation domains do not appear to be expanded unnecessarily, which could exaggerate volumes beyond what is reasonably supported by drilling.

Figure 14.1. Oblique View of the Homestake Main Domains.



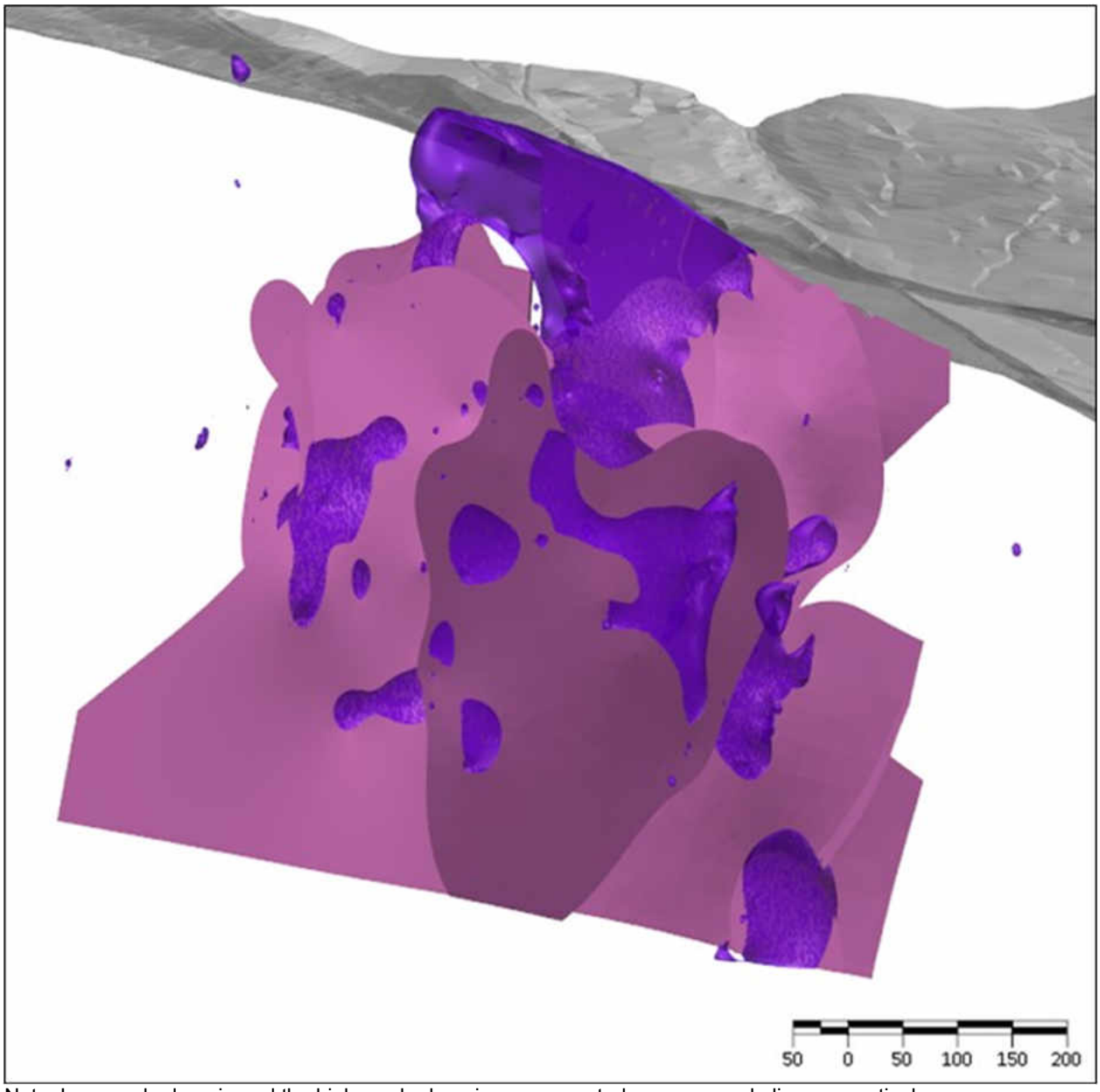
Note: Low-grade domain and the high-grade domain are presented as green and olive, respectively.

Figure 14.2. Cross-sections of the Homestake Main Area (looking Southwest).



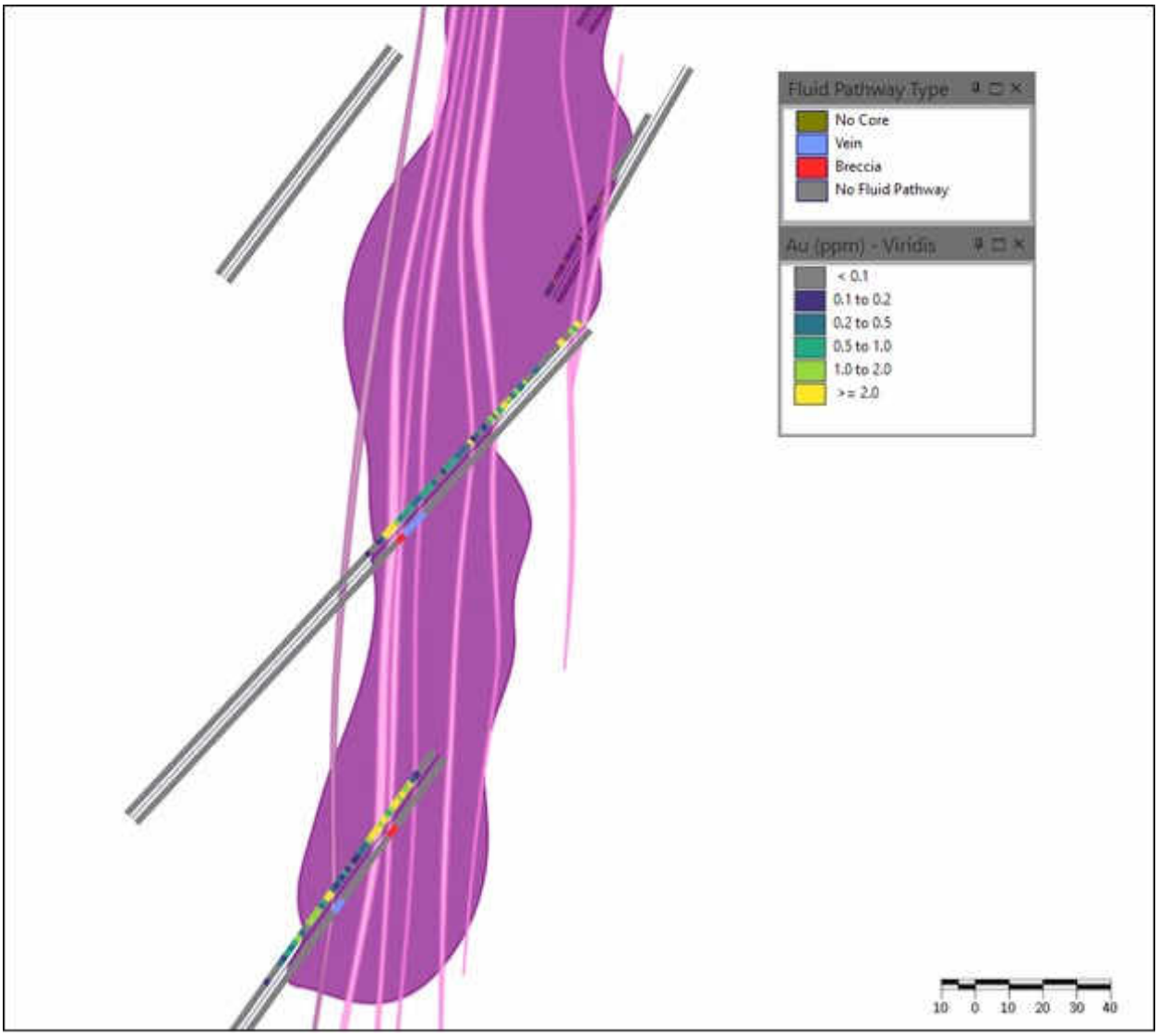
Note: Low-grade domain and the high-grade domain are presented as green and yellow, respectively.

Figure 14.3. Oblique View of the Homestake Silver Domains (looking Southwest).



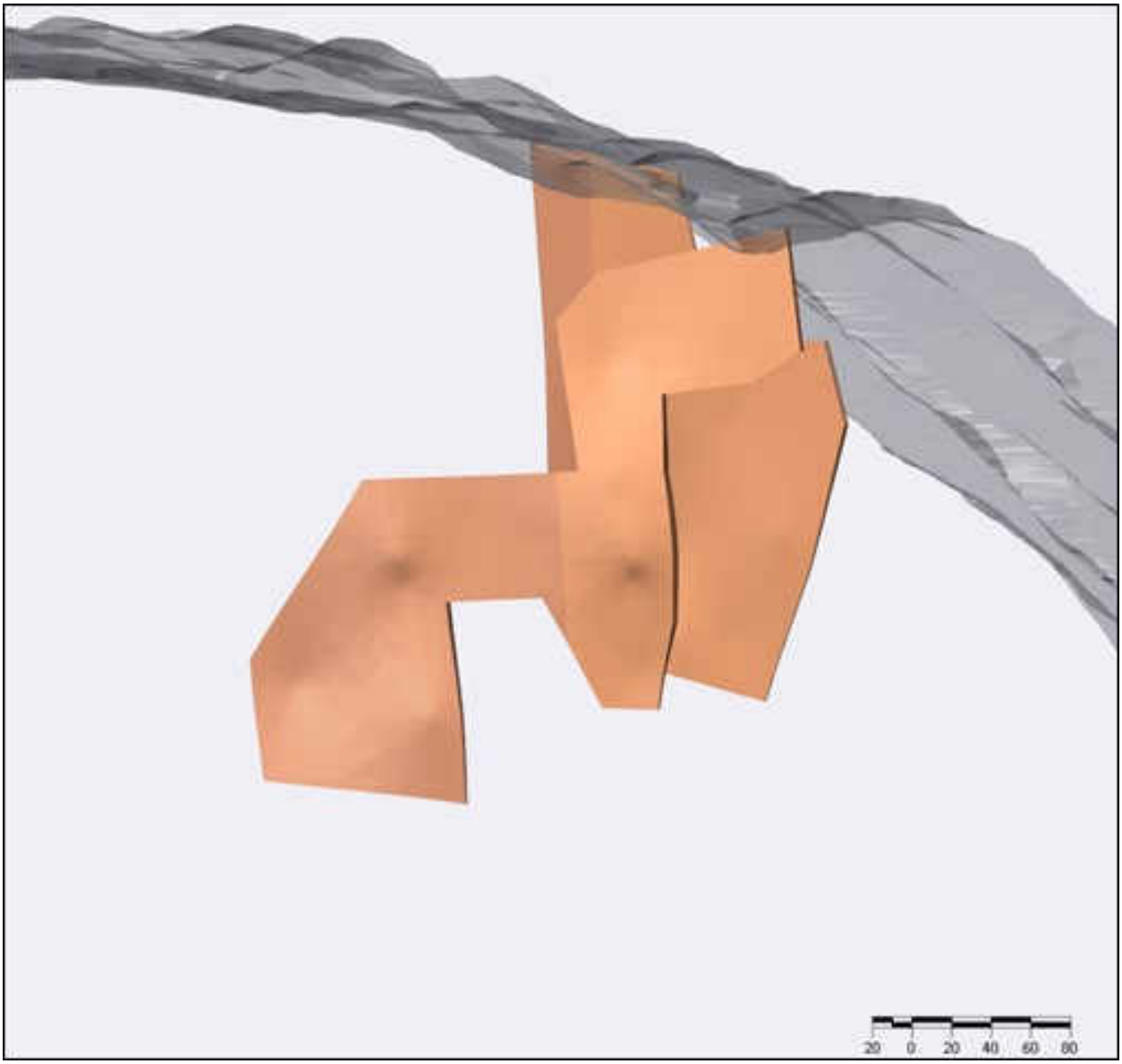
Note: Low-grade domain and the high-grade domain are presented as green and olive, respectively.

Figure 14.4. A cross-section View of Homestake Silver (looking Southwest).



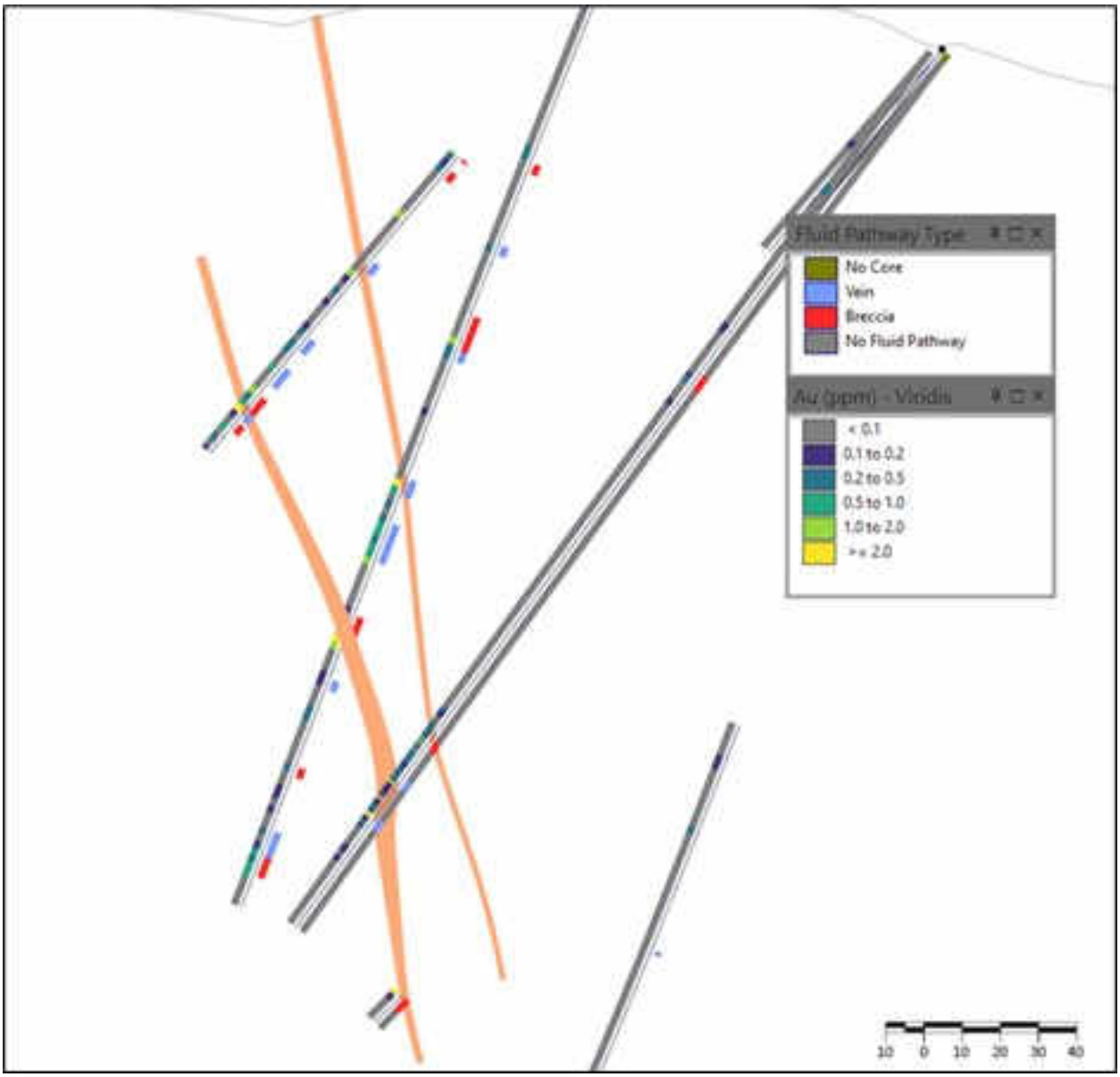
Note: High-grade domain in pink with low-grade shell in purple. The logged Fluid Pathway types on the right and gold grade in ppm on the left are along the drill trace.

Figure 14.5. Oblique view of the South Reef Domains.



Note: High-grade domains are presented in orange.

Figure 14.6. A cross-section view of the South Reef (looking Southwest).



Note: High-grade domains are presented in orange. The logged Fluid Pathway types on the right and gold grade in ppm on the left are along the drill trace.

14.1.1.2 Review of Resource Calculation

Visual Validation

APEX validated the Homestake block model in plan view and cross-section to compare the estimated gold grade of the block model versus the conditioning composites. Overall, the model compares well with the composites. There is some local over-and under-estimation observed, which is expected due to the limited conditioning data to estimate metal in those areas. In general, the estimated block size fractions compare well with the composite gold grade.

Statistical Validation

Essentially, resource estimations must reasonably reproduce global statistics such as the declustered mean grade of the composites used to calculate a block model within each estimation domain. Assuming the estimation domains volumes are a reasonable approximation of the volume of mineralized material contained within the deposit, the average declustered metal grade and total volume of the domains can be used to calculate the global unconstrainted in situ resource. The calculated global resource can help validate a calculated block model to ensure it is unbiased. Mr. Turner and Mr. Black used this validation approach to verify that the block model reasonably represents the global contained metal of the deposit.

It is typical to collect data in a manner that preferentially samples high-value areas over low-value areas. This preferential sampling is an acceptable practice; however, it produces closely spaced measurements that result in under-represented sparse data compared to the closer-spaced data. Therefore, it is desirable to have spatially representative (i.e., declustered) statistics for global resource assessment and check estimated models. Declustering techniques calculate a weight for each datum, resulting in sparse data having a higher weight than closely spaced data. The calculated declustering weights allow spatially repetitive summary statistics to be calculated, such as a declustered mean.

Cell declustering calculates declustering weights for each composite in the Homestake Main, Homestake Silver, and South Reef estimation domains. The histograms in Figure 14.7 to Figure 14.11 illustrate that the declustered means of composites at Homestake Main and Homestake Silver are lower than their raw mean values. The observed drop in means is expected as drilling preferentially samples higher-grade zones. However, the declustered mean at South Reef increases, indicating that the high-grade zones are not as densely drilled as the lower grade zones.

Figure 14.7. Cumulative histogram of clustered and declustered composites Inside the Homestake Main high-grade estimation domain.

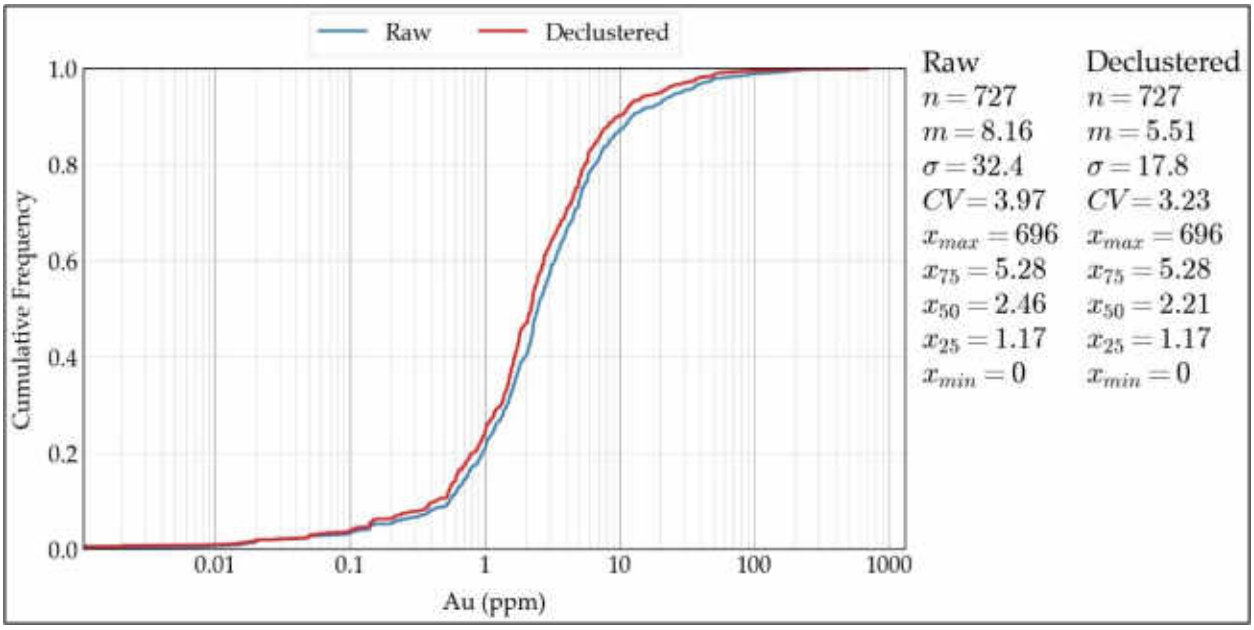


Figure 14.8. Cumulative histogram of clustered and declustered composites inside the Homestake Main low-grade estimation domain

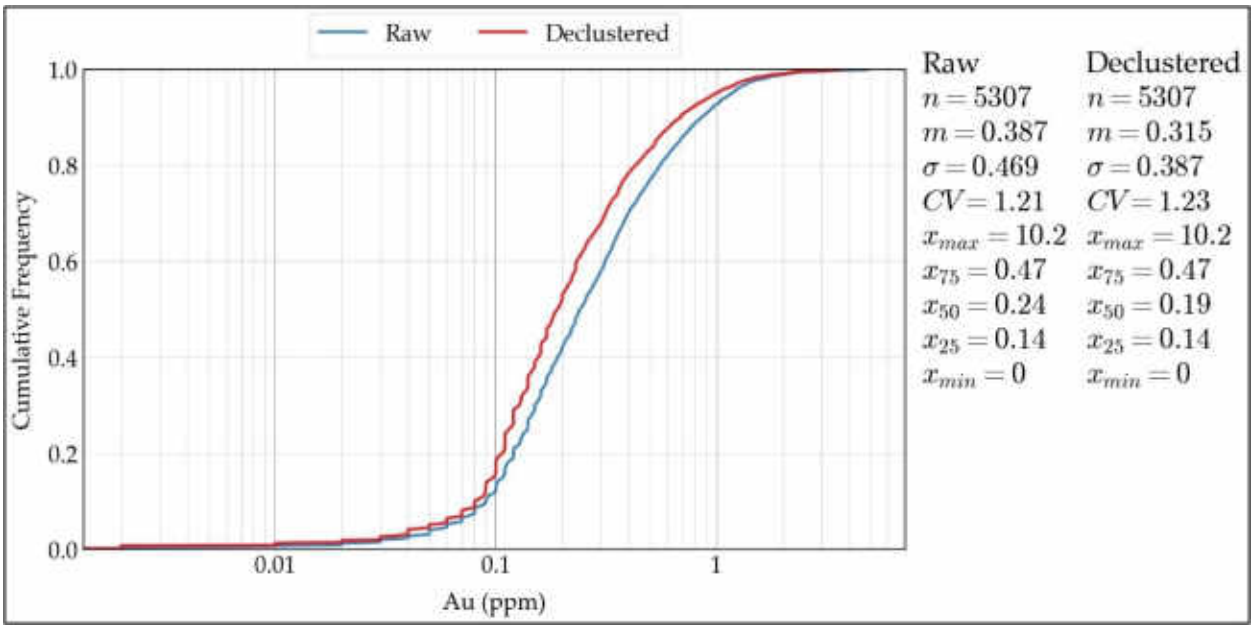


Figure 14.9. Cumulative histogram of clustered and declustered composites inside the Homestake Silver high-grade estimation domain.

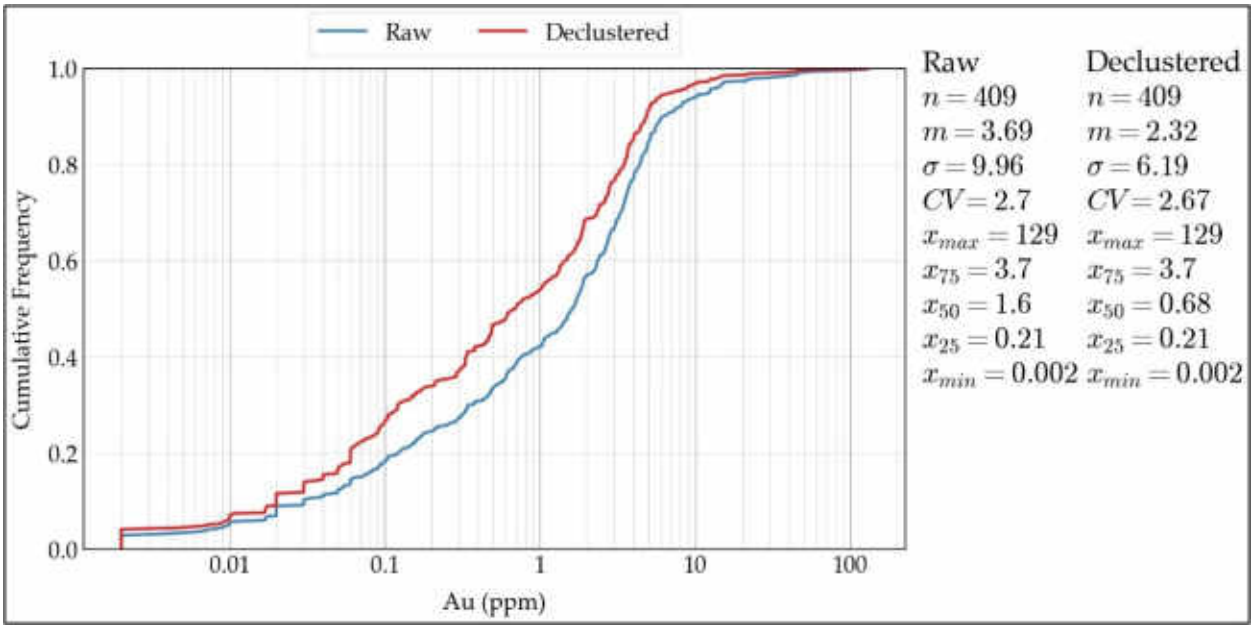


Figure 14.10. Cumulative histogram of clustered and declustered composites inside the Homestake Silver low-grade estimation domain.

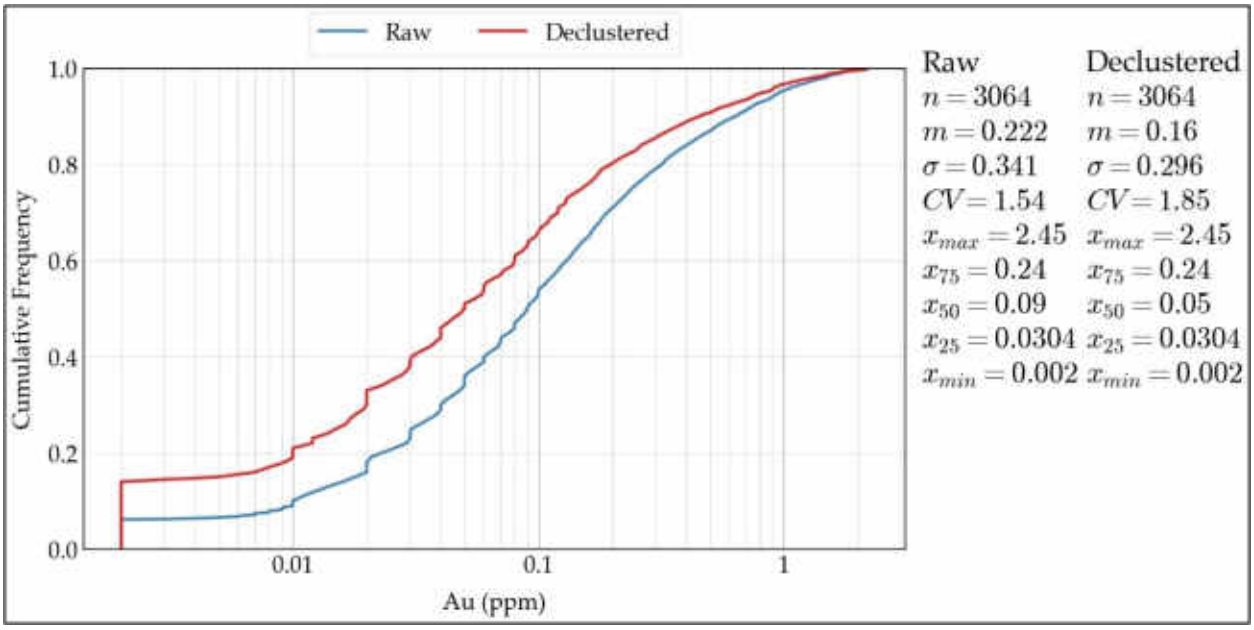
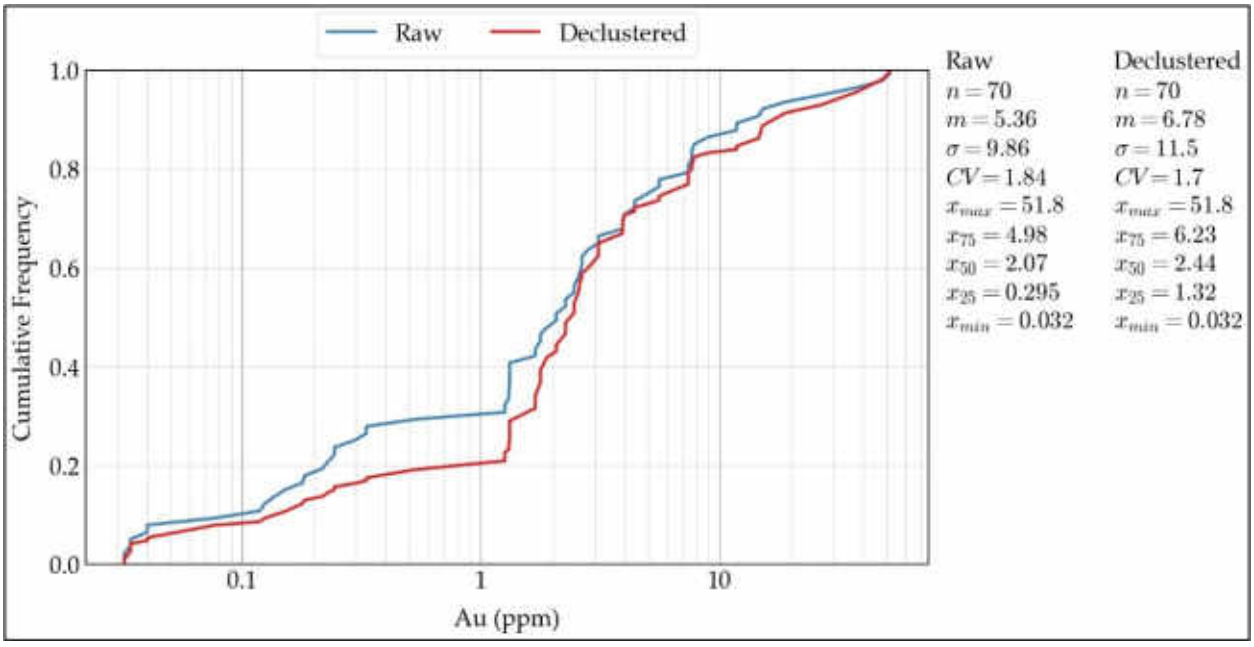


Figure 14.11. Cumulative histogram of clustered and declustered composites inside the South Reef high-grade estimation domain.



Using the total volume of each domain calculated from the block model, the corresponding declustered composites, and the mean values, Mr. Turner and Mr. Black calculated a declustered global resource and compared it to the block model used for the current resource. The declustered global resource is unconstrained and does not consider a cut-off. Table 14.1 details the percent difference between the calculated means and contained gold from both approaches. The Homestake block model validates extremely well, indicating that the block model used to calculate the Homestake Project MRE is not globally biased and based upon the existing drill hole database is a good approximation of the resources present.

Table 14.1 Comparison Between APEX's Calculated Declustered Global Resource Versus The 2019 Block Model.

Domain	Gold Grade Difference	Contained Gold Difference
Homestake Main	3.21%	0.41%
Homestake Silver	-0.72%	-0.45%
Silver Reef	-1.18%	-1.24%

14.1.2 MRE Assumptions, Parameters and Methodologies

The current Homestake MRE, originally used a Gold Price of US$1,300 per ounce, which is considered conservative for an MRE completed at the date of this report. A new and updated MRE would likely consider a price of US$1700 to $1800/oz of gold (see

Table 4.2). APEX personnel reviewed the block model in light of higher gold prices and lower gold equivalent cutoffs. Sensitivity analysis suggests a minimal effect on the amount of contained metal above the cutoff, on the order of 3% to 4% in ounces of gold with increase gold prices. Hence a price utilized today would not significantly affect the MRE, and likely, with cost increases for labour and fuel, a 2 g/t AuEq might be considered appropriate or even low, when the other factors are considered for determining the lower cut-off used for the MRE, including treatment charges, refining costs, transportation, and the milling/processing methods. The cut-off grade was applied using AuEq values calculated from the interpolated grade of each block and assumed metal prices and mill recoveries:

Table 14.2 Metal Price Comparison: 2019 Historical Homestake MRE (MineFill, 2020) vs Current (3-yr average 2020 thru 2022).

	MineFill (2020)	Current (3-yr average)	Mill Recoveries (%)
Silver	US$20/oz	US$22.53/oz	88.0
Gold	US$1,300/oz	US$1,791.5/oz	92.0
Copper	US$2.50/lb	US$3.68/lb	87.5

The AuEq calculation included provisions for treatment charges, refining costs, and transportation. Metallurgical recoveries were based on test work completed by Homestake. Mr. Turner has reviewed the assumptions, parameters, and methodologies used and accepts the 2 g/t AuEq lower cutoff and considers it appropriate. Although costs have undoubtedly increased since the initial calculation of the Homestake MRE, there has also been a significant increase in the price of gold, which in the opinion of the authors of this report, would essentially offset cost increases.

Sufficient numbers of density measurements on individual samples existed within the former Homestake Project drilling database to allow for the estimation of density to the domains of the three zones. The original density data was examined by APEX personnel and no outliers were identified. The data were determined to be acceptable for use in resource estimation by APEX personnel. The estimated block model density values ranged between 2.69 and 2.81 tonnes per cubic metre (t/m^3) for the Homestake Main zone, between 2.71 and 2.82 t/m^3 for the Homestake Silver zone, and between 3.01 and 3.03 t/m^3 for the South Reef zone.

Capping levels for high grade gold and silver samples were reviewed by APEX personnel. Capping was conducted on each estimation domain and the small populations of some of the domains has resulted in minor variance in the capping levels. However, the authors reviewed the data and consider that the capping approach used reasonable, if somewhat conservative, and recommends that this be reviewed in future following the completion of additional drilling. Overall, the capping levels applied to the former Homestake Ridge Project mineral resources are accepted by Mr. Turner (QP).

The compositing methodology applied creates a wide range of composite lengths. The relationship between grade averages and the composites' variance in length was evaluated and reviewed. Future MREs should evaluate alternative approaches to create more regular composite lengths to ensure equal support (variance) during estimation. APEX personnel generated new composites that were used by Mr. Turner and Mr. Black for their review documented in Section 14.1.1.3 that are more consistent in length, which validates with the block model very well. Therefore, Mr. Turner believes the composites used to calculate the resources produce a model that adequately represents the deposit.

The Normal Score methodology used by for variography is appropriate if back-transformed correctly, and theauthors indicate the final parameters are from the back-transformed variograms. The variography assumptions and methods used are accepted by Mr. Turner. It should be noted that there is not enough data at the South Reef to calculate a meaningful variogram for that zone; after additional drilling, future resource efforts should review this.

The MRE utilizes Inverse Distance Cubed (ID3) for the estimation of the high-grade Au and Ag domains, and Ordinary Kriging (OK) for the low grade domains and waste. The previous MRE implemented a multiple-pass search strategy; future MRE efforts should avoid this as it introduces artifacts into the block model that affect mine planning. However, validation illustrates that the estimation methodology adequately defines the amount of contained metal within the deposit; therefore, the differences in approach would not result in any material change in the reported MRE. Mr. Turner accepts the estimation and search strategy used to calculate the previous.

The classification methodology used considers many important classification factors, such as data density and classification continuity. In addition, a higher level of support is required for higher-grade material. Mr. Turner accepts the classification methodology used in the previous MRE. As discussed in Section 14.5, a more robust geological model supported by oriented core would help reduce uncertainty and risk in future MRE studies. The previously reported MRE has mostly inferred resources, which is appropriate. Future MRE assessments should ensure that confidence in the geological model is considered before upgrading additional inferred resources.

14.2 Dolly Varden Project – North Star and Wolf Mineral Resource Estimates

Mr. Andrew J. Turner, P.Geol., a senior geologist with APEX and an independent QP and co-author of this report, conducted a site visit to the former Dolly Varden Project, now part of the larger Kitsault Valley Project that is the subject of this report, on October 1 and 2, 2018. More recently, Mr. Turner conducted the “current” site visit to the Kitsault Valley Project on September 28 and 29, 2022. The details of these site visits are provided in Section 12 of this report, but both visits resulted in the visual and analytical verification of mineralization at the former Dolly Varden Project area deposits.

APEX personnel conducted a review of the data, geological models, domain models, statistics, block models and resource estimation parameters discussed in the 2015

Technical Report (Higgs and Giroux, 2015) for the North Star and Wolf deposits. No issues with respect to the models and actual mineral resource estimates for these two deposits were identified and it is the opinion of the authors of this report that the 2015 Wolf and North Star resource estimates were prepared in accordance with CIM standards for Mineral Resource Estimation at that time and that they are in accordance with current CIM standards and guidelines today (CIM 2014, 2019).

The Company has recently conducted further drilling at the North Star and Wolf deposit areas during 2022. While some of the 2022 drilling results remain outstanding as of the writing of this report, the APEX authors have conducted a review of the results received to date and they are of the opinion that there has not been a material change (increase or decrease) in the North Star and Wolf deposit mineralized zones and thus the MRE's, originally constructed in 2015 for these two (2) deposits, remain current.

14.2.1 Wolf Deposit Mineral Resource Estimate

A total of four mineralization lodes (Wolf 1, 2, 3, and 4) were modeled at the Wolf zone based on geological and geochemical data from 114 drill holes (74 surface and 40 underground), 92 of which were historical holes (drilled between 1962 and 1980) and 22 drilled in 2011. Of the 114 holes at Wolf, 99 intersected the Wolf lodes. An examination of the historical vs 2011 Ag analyses showed no apparent analytical bias. A statistical examination was made of the assays within each lode and mean Ag values were found to vary significantly from 25.7ppm Ag to 193.3ppm Ag, but all were much higher than the average "waste" Ag value (assays external to the 4 lodes), which was 7.6 ppm Ag. Caping values were established for each lode, which varied from 100 ppm to 4500 ppm Ag, and a total of 11 analyses were capped. Additionally, a capping limit of 50 ppm Ag was established for the "waste" area assays and a total of 29 values were capped representing thin zones of mineralization that could not be joined to the larger modeled lodes. With 99.6% of the sample intervals being >2.5 m in length, the Wolf samples were composited to 2.5m resulting in 744 "waste" composites and 1107 "lode" composites from 1211 "waste" samples and "2181" lode samples.

Pairwise relative semivariograms were produced for silver in the two main Wolf lodes with sufficient data and nested spherical models were fit to the along strike, across strike and down, as presented in Table 14.3 below.

Table 14.3 Wolf semivariogram parameters for silver (from Higgs and Giroux, 2015).

Lode/Domain	Azm / Dip	C0	C1	C2	Short Range (m)	Long Range (m)
2	025 / 0	0.55	0.35	0.25	5.0	100.0
	295 / 0				8.0	20.0
	0 / -90				12.0	110.0
3	005 / 0	0.20	0.12	0.64	10.0	36.0
	275 / 0				2.0	30.0
	0 / -90				15.0	42.0

An examination of the density data was conducted that included a set of 21 pieces of core that were submitted to Bureau Veritas Laboratories for SG determination by the Archimedes method (18 from load 2, 2 from lode 3 and 1 waste sample). Based on this data, a bulk SG value of 2.79 was applied to Wolf zone lodes 1 and 2, an SG value of 3.05 was applied to lodes 3 and 4, and an SG of 2.73 was assigned to waste blocks.

An orthogonal (unrotated) 5m x 5m x 5m block model was created for the Wolf Zone (origin 467000 E, 6173400N, 10m Z, with 130 columns, 120 rows and 138 levels). Sub-blocking was not applied but for each block the percentage below topography, below overburden, inside mineralized solids and within underground development were recorded. Any block with both some percentage within a mineralized solid and within an underground development/working was assumed to be within the underground working and was tagged for removal from the resource. The amount of waste in a block was determined by subtracting the amount of mineralized solid not in underground workings and the amount of the block in underground workings from the amount of the block below overburden.

Within each domain silver grades were interpolated by Ordinary Kriging, using only composites from within that domain. In each case the interpolation was done in a series of four passes with the search ellipse for each pass a function of the semivariogram ranges. In the first pass the search ellipse dimensions were set to ¼ of the semivariogram range. A minimum of 4 composites was required to estimate a block with a maximum of 3 from any single drill hole allowed. For blocks not estimated in pass 1 a second pass was completed using search ellipse dimensions equal to ½ the semivariogram range. Any block estimated during the first and second pass is classified as indicated. A third pass using the full range and a fourth pass using twice the range completed the exercise. In all passes if more than 12 composites were found in any search the closest 12 were used. All blocks estimated in the third or fourth pass are classified as inferred.

14.2.2 North Star Deposit Mineral Resource Estimate

A single mineralization lode was modeled encompassing the main mineralized zone at the North Star area based on geological and geochemical data. Geological data for the North Star zones is limited and so the resulting model was largely mineralization-based, however, the North Star mineralization was interpreted to show a strong tabular (bedding-parallel) configuration with minor structural displacements and a mafic sub-vertical dike body along its strike. The main North Star zone strikes generally to the northeast and dips to the northwest at 45-50 °.

The database at the North Star zone includes 134 drill holes (34 surface and 100 underground), 122 of which intersected the North Star lodes. A total of 1171 (lode) samples (averaging 125.5ppm Ag) were found to occur within the lode while 988 (waste) samples (averaging 4.4ppm Ag) were found to lie outside of the main zone. Unlike the Wolf dataset, the North Star data included a significant number of polymetallic analyses

allowing for an evaluation of Au, Cu, Pb and Zn. A statistical analysis of the lode samples suggested a need for capping and a total of 7 Ag values were capped to 1600ppm, 6 Pb values were capped to 9% and 4 Zn values were capped to 14%. Additionally, for the waste samples, 36 Ag values were capped to 30ppm, representing thin zones of mineralization that could not be joined to the larger modeled lode, and 6 samples were capped to 0.8% Pb and 12 samples to 2.0% Zn. With 98.9% of the sample intervals being >2.5m in length, the North Star samples were composited to 2.5m resulting in 4727 "waste" Ag composites and 701 "lode" Ag composites.

Pairwise relative semivariograms were produced for silver for the North Star mineralization lode and the waste domain and nested spherical models were fit to the along strike, across strike and down, as presented in Table 14.4 below.

Table 14.4 North Star semivariogram parameters for silver (from Higgs and Giroux, 2015).

Lode/Domain	Azm / Dip	C0	C1	C2	Short Range (m)	Long Range (m)
Mineralized Lode	046 / 0	0.50	0.32	0.27	30.0	80.0
	316 / -45				12.0	100.0
	136 / -45				10.0	15.0
Waste	Omni-directional	0.08	0.07	0.13	15.0	64.0

An examination of the density data was conducted that included 301 spot analyses collected during the 2012 and 2013 programs at the Torbrit and Dolly Varden deposits, adjacent to the North Star zone. No direct SG measurements were made of North Star mineralization. However, based on observed geological similarities, the bulk SG value assigned to the Dolly Varden lode 1 (2.97) was assigned to the North Star lode, and the Dolly Varden "waste" SG value of 2.84 was assigned to North Star "waste" blocks.

A single orthogonal (unrotated) 5m x 5m x 5m block model was created for the proximal North Star, Dolly Varden and Torbrit Zones with an origin at 467000 E, 6170500N, 200m Z with 300 columns, 300 rows and 210 levels). Sub-blocking was not applied but for each block the percentage below topography, below overburden, inside mineralized solids and within underground development were recorded. Any block with both some percentage within a mineralized solid and within an underground development/working was assumed to be within the underground working and was tagged for removal from the resource. The amount of waste in a block was determined by subtracting the amount of mineralized solid not in underground workings and the amount of the block in underground workings from the amount of the block below overburden.

Within each domain silver grades were interpolated by Ordinary Kriging, using only composites from within that domain. In each case the interpolation was done in a series of four passes with the search ellipse for each pass a function of the semivariogram ranges. In the first pass the search ellipse dimensions were set to ¼ of the semivariogram

range. A minimum of 4 composites was required to estimate a block with a maximum of 3 from any single drill hole allowed. For blocks not estimated in pass 1 a second pass was completed using search ellipse dimensions equal to ½ the semivariogram range. Any block estimated during the first and second pass is classified as indicated. A third pass using the full range and a fourth pass using twice the range completed the exercise. In all passes if more than 12 composites were found in any search the closest 12 were used. The search parameters for each pass within each domain are listed below along with the number of blocks estimated in each pass. All blocks estimated in the third or fourth pass are classified as inferred.

14.3 Dolly Varden Project - Dolly Varden and Torbrit Mineral Resource Estimations

A Technical Report updating the MRE's for the Dolly Varden and Torbrit deposits was completed in 2019 (Turner and Nicholls, 2019). A review of the 2019 Dolly Varden and Torbrit MRE's is presented in this section.

The mineral resource estimation work was completed by Mr. Steven Nicholls, MAIG (APEX Geoscience Ltd.) under the direct supervision of Mr. Turner, P. Geol., also with APEX, who is a Qualified Person as defined by National Instrument 43-101. Mineral resource modelling and estimation was carried out using a 3-dimensional block model based on geostatistical applications using commercial mine planning software Micromine (v18.0.947.6).

This drilling database used in the estimation work comprises results from exploration conducted between 1989 and 2018, and does not include recent drilling. The historical data for the Project, including the Dolly Varden and Torbrit deposit areas, was compiled previously from various reports and was located relative to historical workings that have since been confirmed by surveying. In short, the evaluation and validation work completed by Turner and Nicholls (2019) on the company's drillhole and underground sampling databases found no significant issues and thus it is the opinion of the authors the data is acceptable for use in the current resource estimations.

The 2019 Dolly Varden and Torbrit MRE's were prepared in accordance with CIM standards for mineral resource estimation. The Company has conducted in-fill and step-out drilling at the Dolly Varden and Torbrit deposits since the completion of their respective 2019 MRE's. However, the authors have reviewed the data from the recent drilling, with the exception of a small amount of 2022 data still outstanding as of the writing of this report, and have concluded that there has been no material change (increase or decrease) in the Dolly Varden and Torbrit resources. A following section of this report discusses a new evaluation of the reasonable prospects for eventual economic extraction and, as a result, the 2019 MRE's for the Dolly Varden and Torbrit deposits are accepted as current as of the effective date of this report by the authors of this report.

14.3.1 Review of Database, Resource Calculations, Parameters and Methods for Dolly Varden and Torbrit Deposits

The Mineral Resource Estimates for the Torbrit and Dolly Varden deposits of the Dolly Varden Property were based on 85 surface diamond core holes, 275 underground diamond core holes and 123 underground channel/face samples for the Torbrit deposits and 27 surface diamond core holes, 26 underground diamond core holes, 9 trenches and 229 underground channel/face samples for the Dolly Varden deposits. The Torbrit and Dolly Varden drilling and sampling delineated twenty-five and three distinct veins/lodes or zones of mineralization, respectively.

During the compositing process it was noted that within the mineralized wireframes there were a number of gaps in the drillhole sampling. These gaps represent un-sampled core intervals located within the interpreted mineralization that were assumed to comprise visually unmineralized core. As such, it was decided to assign a nominal grade of 0.01 g/t Ag to these zones. There were a total of 1517 unsampled/gaps intervals that were not analysed for silver at Torbrit and 82 for Dolly Varden.

The composited sample data which were situated within the mineralized wireframes was used for the top cut analysis. Silver grades within the lodes were examined as a whole for each deposit. A combination of histograms, probability plots and inflection points were used to determine the extreme values to be cut. The grade estimation used the capped values to estimate the grade.

APEX personnel calculated and modelled semi-variograms for silver using the 2.5 m composites flagged within the estimation domains for both the Torbrit and Dolly Varden zones. Experimental semi-variograms for each zone were calculated along the major, minor, and vertical principal directions of continuity.

Parameters of the modelled semi-variograms are documented in Table 14.5, and the calculated experimental semi-variogram and models used for resource estimation for the Torbrit and Dolly Varden zones are illustrated in Appendix 3 - Silver Semi Variograms. These variographic orientations are in line with the observed mineralization interpretation.

Table 14.5 Silver semi variogram parameters (C0: nugget effect; C1: covariance contribution of structure 1; C2: covariance contribution of structure 2).

Deposit	Domain	C0	Azm	Plunge	Dip	C1				C2			
			(º)	(º)	(º)	Sill	R1 (m)	R2 (m)	R3 (m)	Sill	R1 (m)	R2 (m)	R3 (m)
Torbrit	Lodes 1, 4	0	136	0	-40	88733	20	25	10	50800	100	80	24
	Lodes 7, 14, 17	0	139	0	60	50800	36	17	21				
Dolly Varden		0	90	-38	-17	20393	10	5	9	36159	108	40	44

A total of 1396 bulk density measurements were collected from 2012, 2013, 2016 to 2018 diamond drill core using the weight in air/weight in water methodology over the entire property. Of the 1396 bulk density measurements collected over the entire property, 895 were collected from the Torbrit deposit and a further 454 were collected from the Dolly

Varden deposit. The density samples located within the mineralized lodes were then examined. From the 895 density samples at Torbrit there were 377 samples located within the mineralized lodes. Of the 454 density measurements collected at Dolly Varden, 146 samples were located within the mineralized horizons. The two datasets were examined for outliers and none were identified, and the analysis of the mineralization density data resulted in the assignment of bulk density values of 3.0 and 3.1 to the Dolly Varden and Torbrit estimation domains.

Due to the variable, and sometimes narrow, widths of the modeled mineralization lodes at both deposits, their respective block models were designed in order to keep the block size small enough to best honour the lodes. As a result, a parent block size of 5 m (X) x 5 m (Y) x 5 m (Z) was utilized for both the Torbrit and the Dolly Varden resource block models. The block models were extended far enough past the mineralized wireframes to encompass the entirety of the modeled mineralization.

Grade estimation for the Torbrit and Dolly Varden deposit resources was calculated using Ordinary Kriging (OK) and Inverse Distance to the power of two (ID2). The OK technique was chosen for the final model estimation method on the basis that, geostatistically, it provided a better reflection of the grade distribution of both deposits. Ordinary kriging is deemed an appropriate method of estimation based on the style of mineralization.

Within each domain silver grades were interpolated by Ordinary Kriging, using only composites from within that domain. In each case the interpolation was done in a series of four passes with the search ellipse for each pass a function of the semivariogram ranges. In the first pass the search ellipse dimensions were set to ¼ of the semivariogram range. A minimum of 4 composites was required to estimate a block with a maximum of 3 from any single drill hole allowed. For blocks not estimated in pass 1 a second pass was completed using search ellipse dimensions equal to ½ the semivariogram range. A third pass using the full range and a fourth pass using twice the range completed the exercise. In all passes if more than 12 composites were found in any search the closest 12 were used. The search parameters for each pass within each domain are listed below along with the number of blocks estimated in each pass. The grade was interpolated into an anisotropic ellipsoid. A block discretization of 4 (E), 4 (N) and 4 (RL) was chosen. Estimation was only calculated on parent blocks. All sub-blocks within the parent block were assigned the parent block grade. The lodes were treated as hard boundaries for the purposes of grade estimation. This meant that only the samples located with a lode would be used to guide the grade estimation of that lode.

The Dolly Varden and Torbrit deposits are still at an early stage of evaluation and formal engineering or other economic analyses have not yet been completed for either deposit. For the purposes of reporting, cut-off grade selection involved an evaluation of comparable underground silver deposit mineral resource estimates, and a cut-off grade of 150 g/t Ag was selected as a reasonable average value.

14.4 Cut-off Grade – Dolly Varden 2019 MRE's

The Dolly Varden, Torbrit, Wolf and North Star deposits are still at an early stage of evaluation and formal engineering, or other detailed economic analyses, has not yet been completed for these deposits. For the purposes of resource reporting, cut-off grade selection for these deposits primarily involved an evaluation of comparable underground silver deposit mineral resource estimates and a cut-off grade of 150g/t was selected as a reasonable average value. For example, a recent mineral resource estimate for the Las Chispas silver-gold epithermal vein deposit in Sonora, Mexico was recently reported that utilized an underground cut-off grade of 150 g/t Ag (Fier, 2018).

Additionally, a 150 g/t Ag cut-off grade was proposed by Higgs and Giroux (2015) with respect to the Dolly Varden deposits based upon a comparison to the Santacruz Silver Mining Ltd. and their 2014 PEA for the San Felipe Project in Sonora, Mexico, which hosts 4 separate vein deposits with resources determined relative to a 150 ppm Ag(Eq) cut-off grade (with Pb and Zn credits included with Ag). The San Felipe and Dolly Varden projects both represent Ag-dominant, underground narrow vein/structure deposits and Higgs and Giroux (2015), acknowledged that "While these two deposits are in different geographic jurisdictions the Dolly Varden has some favourable factors that would influence the economics" supporting a comparison of cut-off grades."

In estimating a cut-off grade, the authors used an estimated mining cost of ~US$60/ton, a milling cost of ~$15/ton and a G&A cost of ~$5/ton. Using a price of US$20/oz for Ag, this equates to a gross metal content of 4.0 oz Ag or ~137.1 g/t Ag. Although metallurgical testwork is currently at a very early stage, there are indications (Middleditch 2019) that silver recoveries will likely be on the order of 90%. Applying a recovery of approximately 90% (91.7%) to the gross metal value indicated by the assumed mining costs discussed above, a cut-off value of approximately 150 g/t Ag was calculated and subsequently used.

The cut-off value of 150 g/t Ag is further supported as rough mean value between higher and lower cut-off grades, as exemplified by the following recent underground mineral resource estimates, which are based on the common commodity, the underground mining scenario (vs open pitable resources) and the fact that these comparable deposits are targeting relative narrow structures or mineralized bodies.

International Millennium Mining Corp. recently released a mineral resource update for their Silver Peak Project in Nevada (Sears and Barry, 2019) with a relatively low cut-off grade. The deposit is modeled as a potential underground operation targeting low-sulphidation epithermal Ag-Au veins. The primary target is the Nivloc vein structure, which comprises variable amounts of narrow epithermal Ag-Au vens within a mineralized structure that ranges from 0.5 to over 50 metres in width. Presumably as a result of the increased thicknesses, the mineral resource estimate for this deposit was calculated using a cut-off grade of US$40/ton (or ~84 g/t Ag @ US$16/oz Ag). On the higher end of cut-off grades are projects like Coeur mining's Silvertip Project located in northern British Columbia. As reported in Bolu et al (2019), the Silvertip Property is host to silver + base

metal replacement or Manto style mineralization that was modeled as a potential underground mining operation and its resources were calculated using a US$130/t (~US$118/short ton) cut-off grade or ~250 g/t Ag (@ US$16.25/oz Ag).

14.5 Mineral Resource Reporting

The following section discusses an examination of the 'reasonable prospects for eventual economic extraction' of the Kitsault Valley Project MRE's. The Kitsault Valley Project MRE's statements are also provided below. The resource estimates are stated in accordance with the CSA NI 43-101 rules for disclosure and were estimated in accordance with the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019, and CIM "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10, 2014. The effective dates for the resources are provided below.

14.5.1 Evaluation of Reasonable Prospects for Eventual Economic Extraction (RPEEE)

This section summarizes a review conducted by the APEX authors of the current MRE's at the Kitsault Valley Project with respect to their respective "Reasonable Prospects for Eventual Economic Extraction" (RPEEE), as required by the CIM "Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines" (2019). As a result of this review, it is the opinion of the authors of this report that the mineral resource estimates of the seven (7) deposits/zones within the current Kitsault Valley MRE's have demonstrated "reasonable prospects for eventual economic extraction.

14.5.1.1 RPEEE for the Homestake MRE

The review of the reasonable prospects for eventual economic extraction (RPEEE) of the Homestake area MRE's has been conducted by APEX personnel on behalf of Dolly Varden Silver Corporation. This mainly involved a review of the MRE's using a set of previously generated stope shapes and a review of certain information included in a previous technical report (Minefill, 2020), which was entitled "Updated Mineral Resource Estimate and Preliminary Economic Assessment on the Homestake Ridge Gold Project". Although this technical report was rendered "historical" following the project's change of ownership (i.e. it was not completed on behalf of the issuer – Dolly Varden), its PEA discussion, which was completed by Qualified Individuals, remains relevant, in the opinion of the authors of this report, but only as an indication of the RPEEE for the Homestake area mineral resources.

The original assessment of the potential mineability of the current HSR MRE's was conducted utilizing Deswik Stope Optimizer (DSO) software. The HSR MRE block model was loaded in the DSO software and a 3.5 g/t AuEq cut-off grade and a 2.5 m minimum mining width were applied (see Table 14.6 below).

The Deswik Stope Optimizer successfully converted 55 percent of the overall tonnes in the Homestake MRE into potentially economically mineable blocks, including 66% of

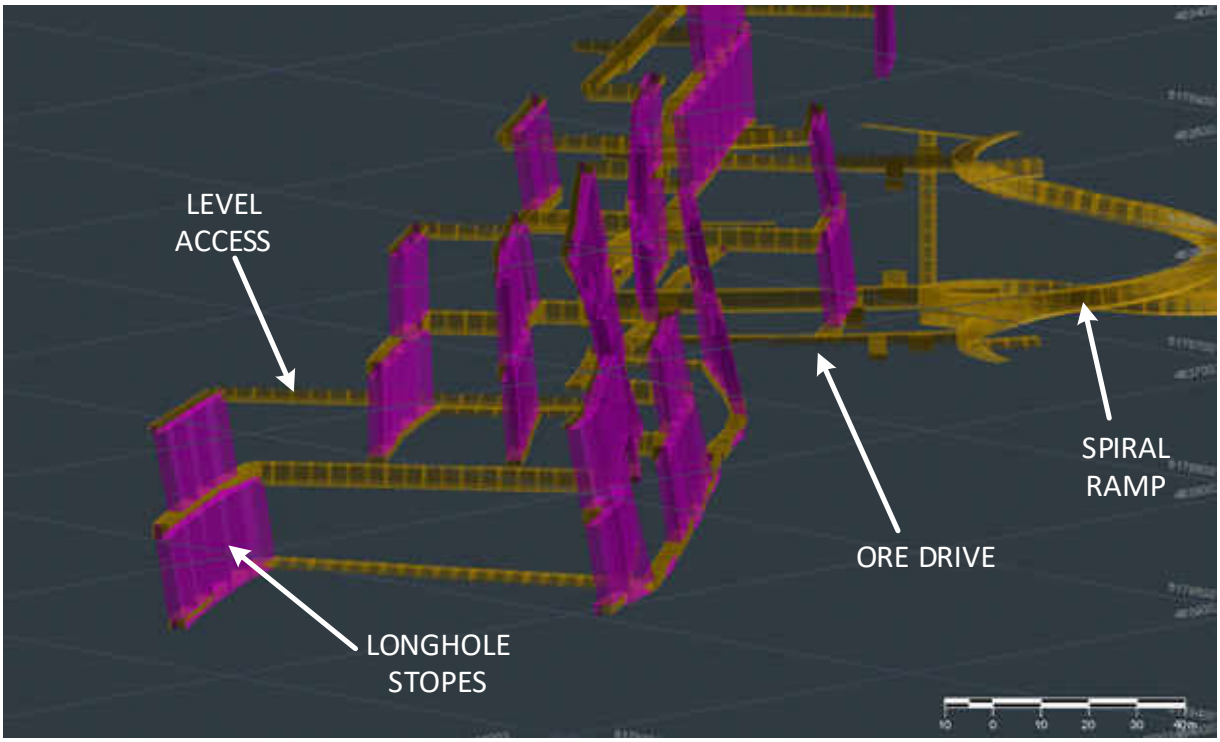
the tonnes at Homestake Main, 42% of the tonnes at Homestake Silver, and 84% of the tonnes at South ReefIt is the opinion of the authors of this report that the stope optimization work , the metal prices and mining parameters used were reasonable at that time and are today.,

It is the opinion of the authors of this report that this work continues to demonstrate RPEEE for the Homestake MRE's as it is reasonable to assume that any increase in mining costs since this work was completed and reported, would at least be offset by the subsequent increase in gold price. The original evaluation of the Homestake MRE's uses a gold price of US$1350/tr oz, whereas the average daily spot price for gold over the last 12 months is approximately $1800/tr oz (~33% increase).

Table 14.6 Cut-off grade Calculation and (Historical) PEA cost/mining Parameters (Minefill, 2020).

	Rate	Notes
Gold Price	US$1,350.00 per oz Au US$43.40 per gram	
Foreign Exchange	C$1.00=US$0.70	
Au Recovery Factor	0.85%	
Gross value	C$52.70	Per gram gold
All-in operating costs	C$127.70	Per tonne milled
Capitalized Development	C$27.68	Per tonne milled
Contingency	C$31.07	20%
Onsite Costs	C$186.46	Per tonne milled
Cut-off Grade	**3.53 gpt AuEq**	
Minimum Mining Width	**2.5m**	

Figure 14.12. Example of Potential Long-hole Stoping and Development Drifts from a Historical PEA for the Homestake Ridge Project (Figure 16-1 from Minefill, 2020).



Note: Orientated along E-E' looking 30°. Magenta outlines illustrate potential minable shapes.

14.5.1.2 RPEEE for the Dolly Varden area MRE's

The Torbrit, Dolly Varden, North Star and Wolf silver deposits are located on the former Dolly Varden portion of the Kitsault Valley Property. Their MRE's are presented in greater detail in a previous Technical Report (Turner and Nicholls, 2019) and their estimations are summarized above.

The following section discusses an evaluation of the four (4) former Dolly Varden property areas MRE's with respect to their "Reasonable Prospects for Eventual Economic Extraction" (RPEEE), as required by the CIM "Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines" (2019). As a result of the information summarized below, it I the opinion of the authors of this report that the Torbrit, Dolly Varden, North Star and Wolf silver deposits have "reasonable prospects for eventual economic extraction."

Firstly, it should be noted that the Torbrit, Dolly Varden and North Star silver deposits are located adjacent to one another and that the Torbrit and Dolly Varden deposits were sites of underground mining operations that were active up to 1959. Although both mines

are currently closed, this at least demonstrates that these deposits had the potential for economic extraction in the past, which would apply to the potential resumption of mining operations with respect to the remaining resources at each deposit.

With respect to all four (4) of the silver MRE's located on the former Dolly Varden portion of the Kitsault Valley Project, the following common characteristics support their "reasonable prospects for eventual economic extraction". Also, many of these characteristics are also applicable to the gold and silver MRE's on the former Homestake portion of the property.

- The mineral deposits of the Kitsault Project are located very close to tide water and within a 3-hour drive of Terrace, BC., with a short boat/barge ride across Alice Arm.
- Collectively, the deposits are of a size that would support on site milling and a potential mine life that would allow sufficient time for the repayment of capital expenditures.
- The geological continuity at all seven of the project's deposits has been established by historical underground production as well as more recent surface mapping, trenching and drilling, as well as some underground mapping, all of which was the basis for the geological modeling of all four deposits.
- The Dolly Varden and Torbrit deposits were sites of active underground mining operations that ran up to 1959. Although both mines are currently closed, this at least demonstrates that these deposits had the potential for economic extraction in the past, which would apply to the potential resumption of mining operations with respect to the remaining resources at each deposit, which have been estimated in this report.
- The QP (Mr. Turner) went underground at the Torbrit deposit and observed the geological continuity of mineralization in several locations.
- Grade continuity was examined for all 4 of the Dolly silver deposits and is discussed below.
- APEX personnel conducted an evaluation of the block models for all seven deposits, specifically to examine the continuity of blocks over an assumed 1.5 m (~5 foot) minimum mining width. Although some discontinuous blocks were observed, the majority of the mineralized blocks above cut-off grade were found to be continuous within potentially mineable stope shapes with minimum thicknesses >1.5m (see Figures 14.16-14.21 below). Blocks not outlined within potential mineable shapes do not constitute a material change to the resources.
- To date, metallurgical testing has been limited but suggests some combination of floatation and whole ore leaching, what are standard (commonly implemented) metallurgical processes. Initial results for the Dolly Varden and Torbrit deposits indicate Ag recoveries on the order of 85-90% (Middleditch, 2019).

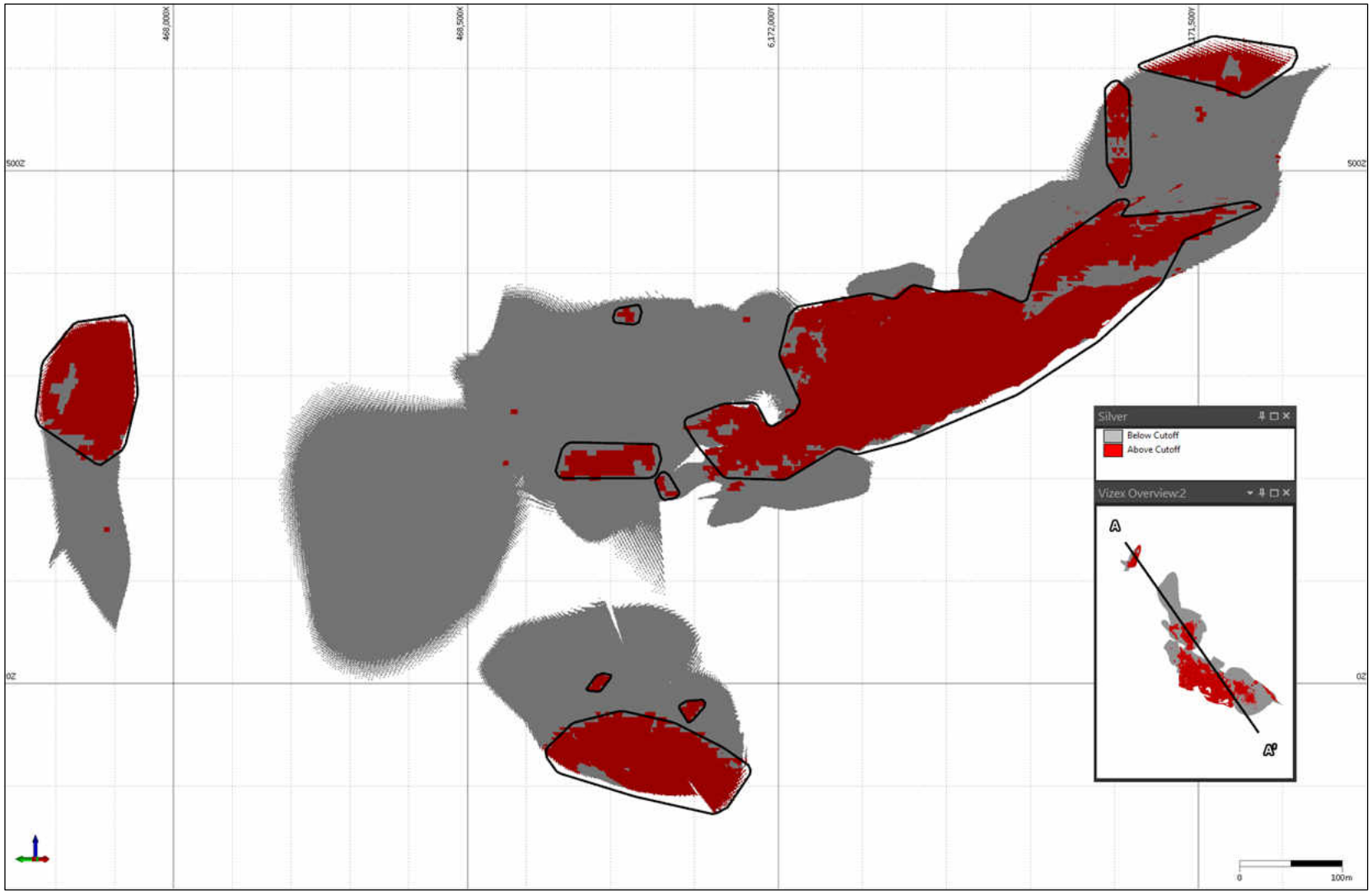
- There are preliminary indications that Pb and Zn concentrate could be produced, at least from the Dolly Varden deposit, but further work is required to provide additional data to properly evaluate the distribution of these base metals throughout all seven of the deposits at the Project. As a result, base metals were not estimated as part of the current mineral resource estimates discussed in this report.
- The mining method was assumed to be a combination of shrinkage stoping for steeper dipping zones and cut and fill mining for flatter-lying portions of the deposits.
- Rough mining costs were assumed to be US$60/ton, with $15/ton for processing and $5/ton for G&A and a long-term silver price of US$20/oz was assumed. Silver recovery utilized in the estimates is 90%.

Grade Continuity

The evaluation of grade continuity within the four (4) silver MRE's on the Kitsault Valley Property (Torbrit, Dolly Varden, North Star and Wolf deposits) was largely visual but using some constraining shapes. At each deposit, the resource blocks within the estimation domains (lode wireframes) were colored so as to emphasize the blocks with grade at and above the cut-off grade of 150 g/t Ag. Additionally, coloration was given to blocks with assigned grades above 100 g/t Ag in order to evaluate the potential for connecting above cut-off grade blocks with "near cut-off grade" blocks, which would minimize potential dilution, in areas where grade continuity starts to diminish. The visual examination of grade continuity at the Torbrit, Dolly Varden, North Star and Wolf deposits has established significant continuity, which supports RPEEE for these four (4) deposits. Furthermore, the authors of this report have concluded that the removal of discontinuous blocks from the Torbrit, Dolly Varden, North Star and Wolf deposits would not represent a material change to their respective MRE's and thus their MRE's have not been adjusted or restated at this time.

Long-sectional views of the Torbrit, Dolly Varden, North Star and Wolf deposits highlighting the continuity of mineralized resource blocks (>150 g/t Ag) are presented in Figures 14.13 to 14.15.

Figure 14.13 View of the Torbrit Deposit Illustrating Grade Continuity of Resource Blocks Above Cut-off (>150 g/t Ag) and Potential Mineable Shapes.

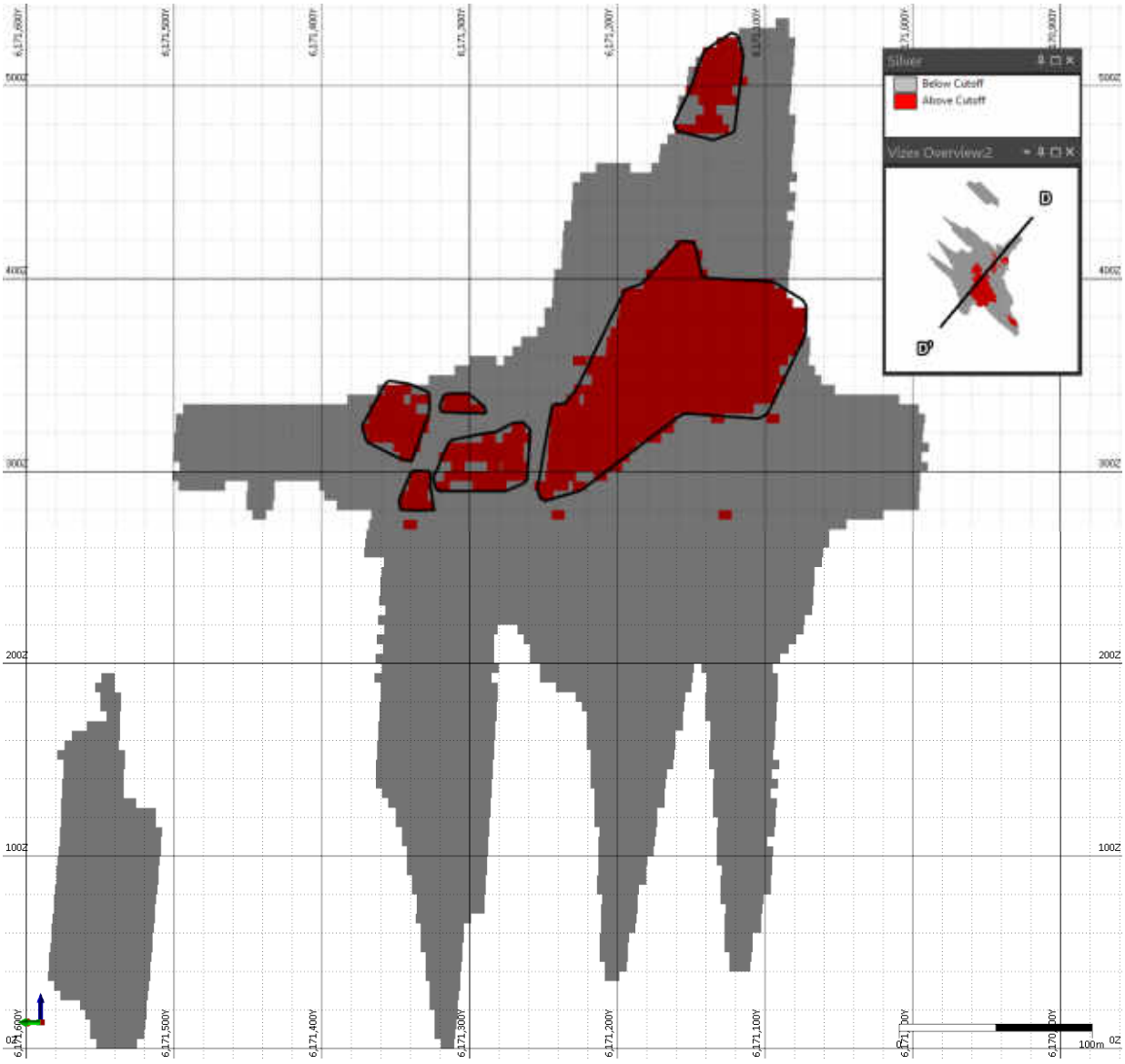


Note: Orientated along A-A' looking 55 degrees Northeast. Black outlines illustrate potential minable shapes.

Figure 14.14. View of the Dolly Varden Deposit Illustrating Grade Continuity of Resource Blocks Above Cut-off (>150 g/t Ag) and Potential Mineable Shapes.

Note: Orientated along B-B'' looking north. Black outlines illustrate potential minable shapes.

Figure 14.15. View of the Wolf Deposit Illustrating Grade Continuity of Resource Blocks Above Cut-off (>150 g/t Ag) and Potential Mineable Shapes.



Note: Orientated along D-D' looking 160°. Black outlines illustrate potential minable shapes.

Potentially Mineable Shapes

An evaluation was conducted of the four (4) silver MRE's on the Kitsault Valley Property (Torbrit, Dolly Varden, North Star and Wolf deposits) with respect to potentially mineable (stope) shapes. This evaluation is essentially a more detailed extension of the grade continuity evaluation described above. At each deposit, the resource blocks within the estimation domains (lode wireframes) were colored so as to emphasize the blocks with grade at and above the cut-off grade of 150 g/t Ag. Additionally, coloration was given to blocks with assigned grades above 100 g/t Ag in order to evaluate the potential for connecting above cut-off grade blocks with "near cut-off grade" blocks, which would minimize potential dilution, in areas where grade continuity starts to diminish. Potentially mineable "stope" shapes were constructed at each deposit that were based on potential short-hole stoping and cut and fill mining methods. This evaluation resulted in the majority of the resource blocks with grades above the cut-off value of 150 g/t Ag being contained within potentially mineable "stope" shapes with near vertical to steeply inclined polygonal shapes and minimum mining widths of >1.5 to 2 m, which supports RPEEE for these four (4) deposits. Furthermore, the authors of this report have concluded that the removal of blocks from the Torbrit, Dolly Varden, North Star and Wolf deposits that fall outside of the potentially mineable "stop" shapes would not represent a material change to their respective MRE's and thus their current MRE's have not been adjust or restated at this time.

Cross-sectional views of the Torbrit, Dolly Varden, North Star and Wolf deposits highlighting the enclosure of mineralized resource blocks (>150 g/t Ag) within potentially mineable "stop" shapes are presented in Figures 14.16 to 14.21.

Figure 14.16. Torbrit Deposit (South) Cross-Section with potential stope shapes on resource blocks above cut-off (>150 g/t Ag).

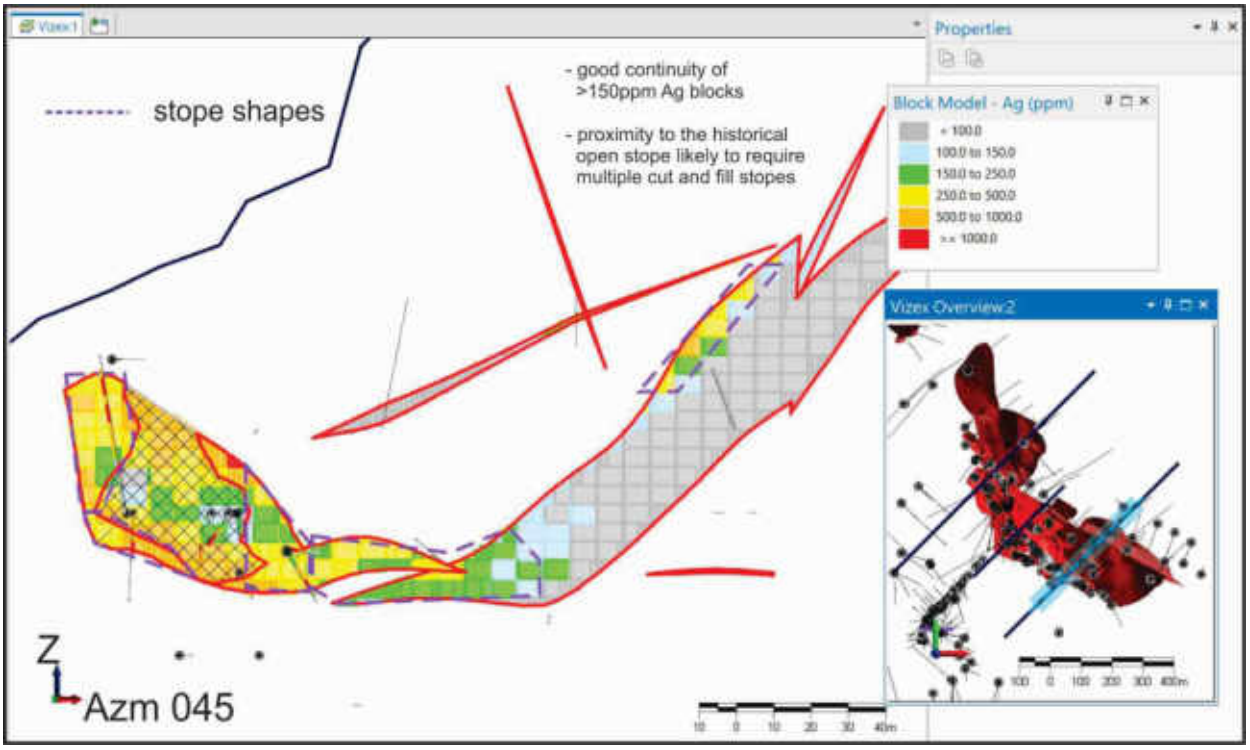


Figure 14.17. Torbrit Deposit (Central) Cross-Section with potential stope shapes on resource blocks above cut-off (>150 g/t Ag).

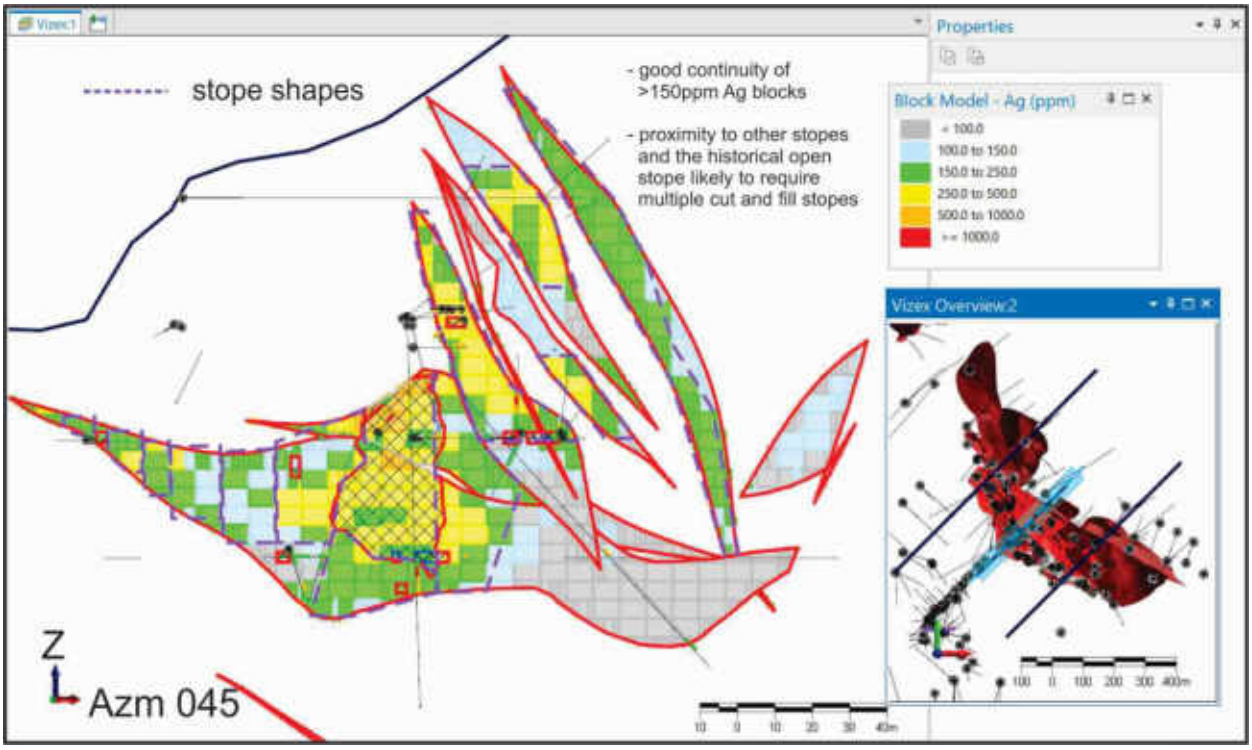


Figure 14.18. Torbrit Deposit (North) Cross-Section with potential stope shapes on resource blocks above cut-off (>150 g/t Ag).

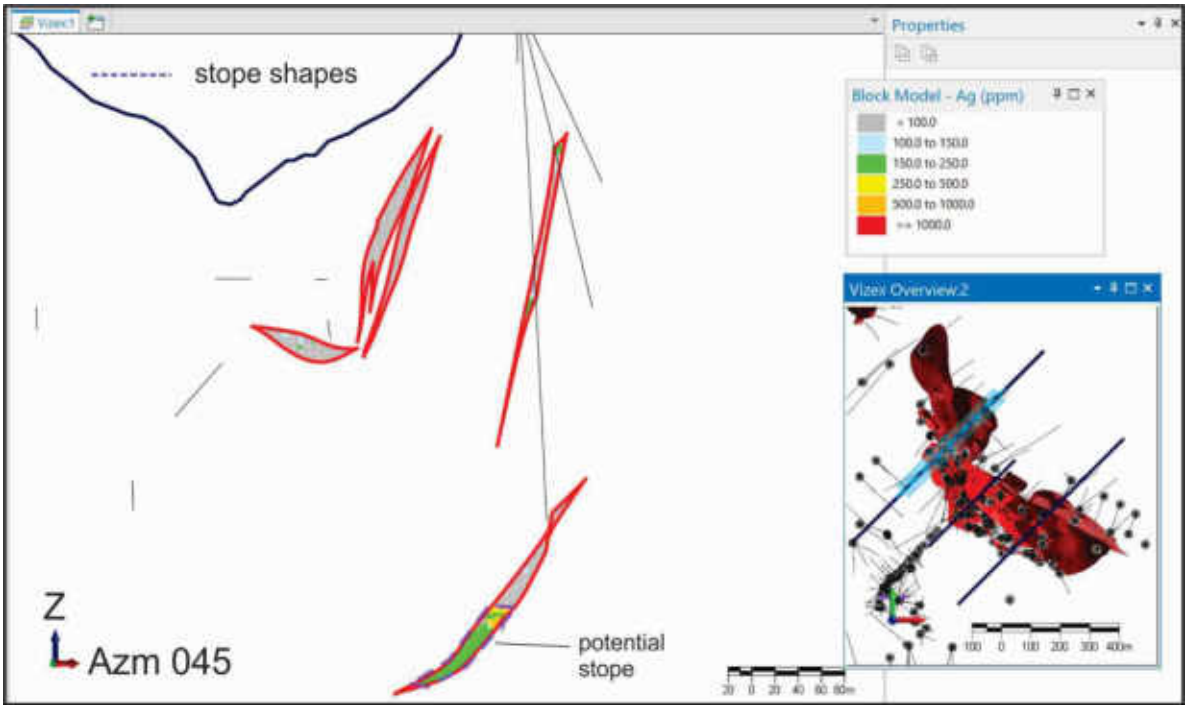


Figure 14.19. Dolly Varden Deposit Cross-Section with potential stope shapes on resource blocks above cut-off (>150 g/t Ag).

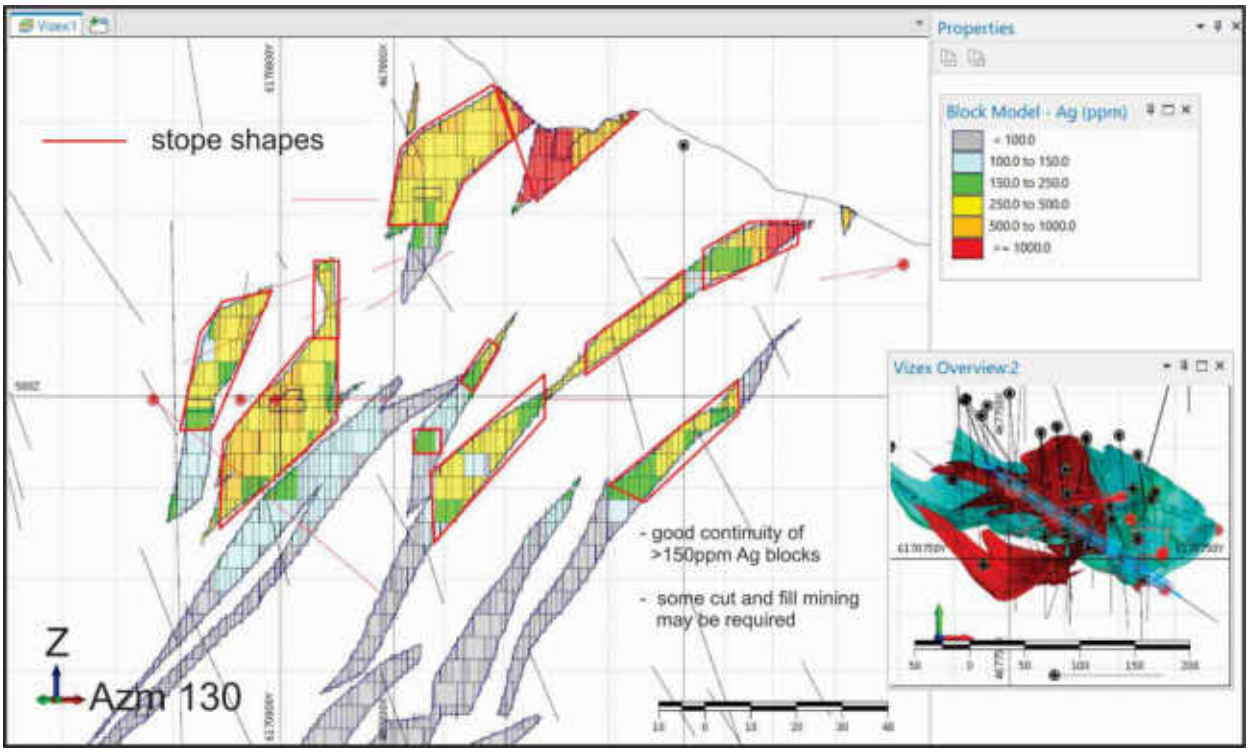


Figure 14.20. North Star Deposit Cross-Section with potential stope shapes on resource blocks above cut-off (>150 g/t Ag).

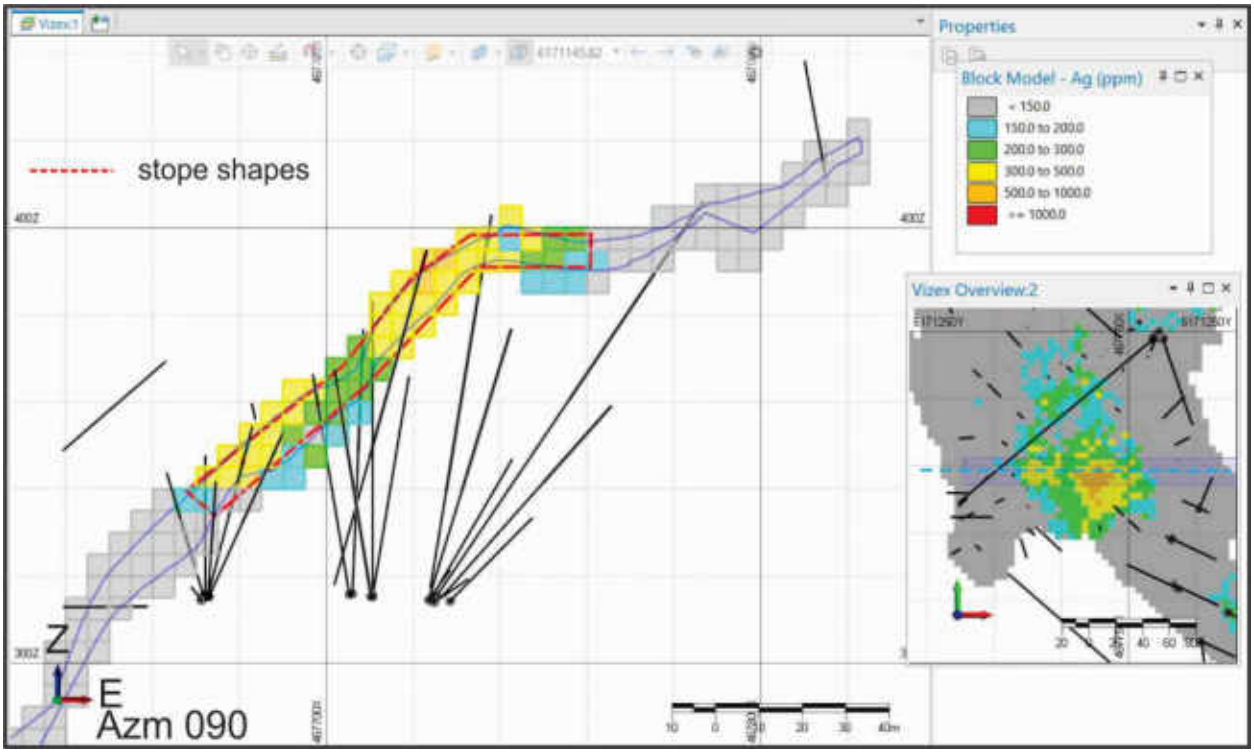
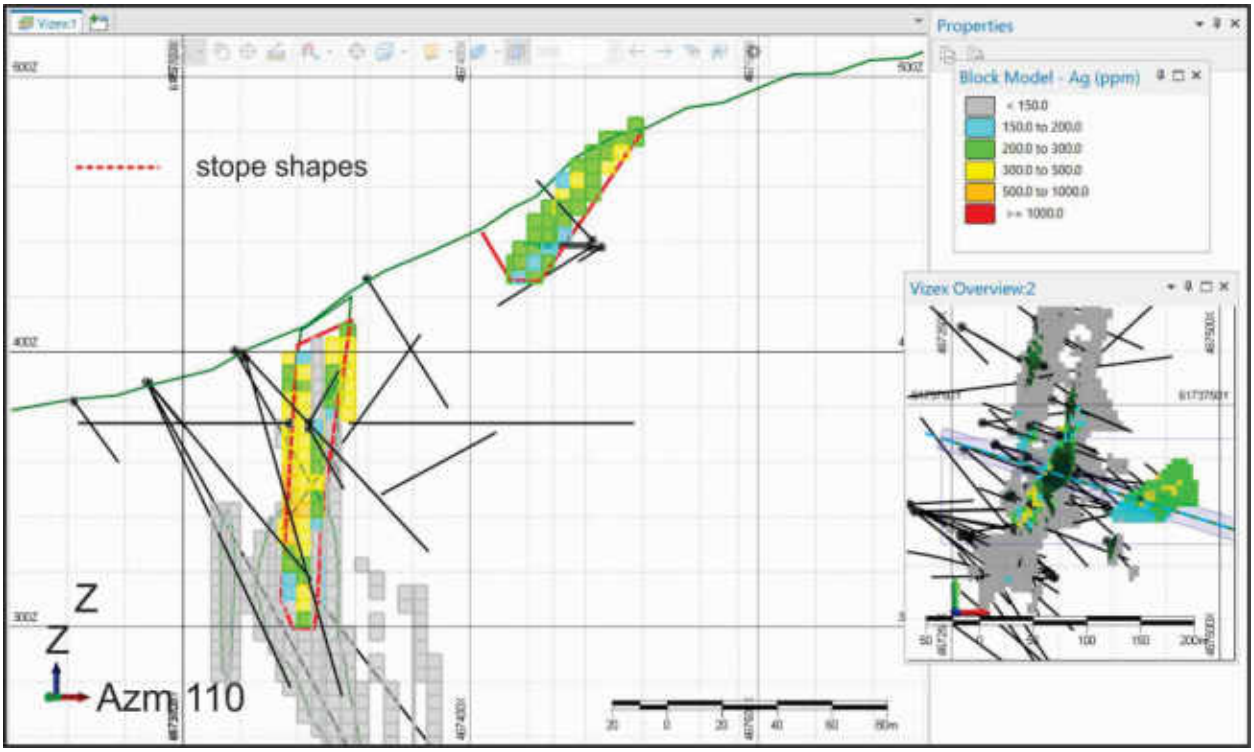


Figure 14.21. Wolf Deposit Cross-Section with potential stope shapes on resource blocks above cut-off (>150 g/t Ag).



14.5.2 Classification Definitions

A measured mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A measured mineral resource has a higher level of confidence than that applying to either an indicated mineral resource or an inferred mineral resource. It may be converted to a proven mineral reserve or to a probable mineral reserve.

An indicated mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An indicated mineral resource has a lower level of confidence than that applying to a measured mineral resource and may only be converted to a probable mineral reserve.

An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An inferred mineral resource has a lower level of confidence than that applying to an indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.

14.5.3 Kitsault Valley Project Mineral Resource Statements

The current Kitsault Valley Project MRE's are tabulated below. The resource estimates are stated in accordance with CSA's NI 43-101 rules for disclosure and were estimated in accordance with the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019, and CIM "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10, 2014. As discussed above, the APEX authors have completed a review of the Kitsault Valley Project MRE's with respect to their specific estimation parameters and assumptions, as well as the potential affect of recent drilling and their (current) reasonable prospects for eventual economic extraction. As a result of this review, the authors of this report accept the Kitsault MRE's tabulated below as current.

Table 14.7 Summary of Current Kitsault Valley Project Mineral Resources.

Resource Area	Cutoff	Deposit	Tonnes (Mt)	Silver (g/t)	Gold (g/t)	Copper (%)	Lead (%)	Silver (Moz)	Gold (koz)	Copper (Mlb)	Lead (Mlb)
Indicated											
Homestake	2.0 g/t AuEq	HM	0.736	74.8	7.02	0.18	0.08	1.80	166.0	2.87	1.25
		HS	-	-	-	-	-	-	-	-	-
		SR	-	-	-	-	-	-	-	-	-
Dolly Varden	150 g/t Ag	TB	2.623	296.8	-	-	-	25.025	-	-	-
		DV	0.156	414.2	-	-	-	2.078	-	-	-
		WF	0.402	296.6	-	-	-	3.834	-	-	-
		NS	0.236	262.8	-	-	-	1.994	-	-	-
		Total	4.153	-	-	-	-	34.731	166.0	2.87	1.25
Inferred											
Homestake	2.0 g/t AuEq	HM	1.747	35.9	6.33	0.35	0.11	2.0	355.6	13.32	4.14
		HS	3.354	146.0	3.13	0.03	0.18	15.7	337.0	2.19	13.2
		SR	0.445	4.9	8.68	0.04	0.001	0.1	124.2	0.36	0.00
Dolly Varden	150 g/t Ag	TB	1.185	278.0	-	-	-	10.588	-	-	-
		DV	0.086	271.5	-	-	-	0.754	-	-	-
		WF	0.010	230.6	-	-	-	0.070	-	-	-
		NS	0.005	223.6	-	-	-	0.035	-	-	-
		Total	6.831	-	-	-	-	29.2	816.8	15.87	17.34

Notes:

1. *Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability although, as per CIM requirements, the Mineral Resources reported above have been determined to have demonstrated reasonable prospects for eventual economic extraction.*
2. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
3. *The Mineral Resources for the HM (Homestake Main), HS (Homestake Silver), and SR (South Reef) Zones were originally reported in Hough et al (2022) – QPs Andrew J. Turner, P.Geol., and David Stone, P. Eng., effective date January 20, 2022.*
4. *The Mineral Resources for the TB (Torbrit), DV (Dolly Varden), NS (North Star) and WF (Wolf) Deposits were originally reported in Turner and Nicholl (2019) – QP Andrew J. Turner, P.Geol., effective date May 8, 2019.*
5. *The resources reported above are reviewed in detail within this report and are accepted as current by the Qualified Person, Mr. Andrew J. Turner, B.Sc., P.Geol., of APEX Geoscience Ltd.*
6. *The Cut-off grade for the Homestake Ridge property Mineral Resources is 2.0 g/t AuEq, which was determined using average block grade values within the estimation domains and a Au price of $1300/ tr oz, a Ag price of US$20.00/ tr oz, and a Cu price of U$2.50/lb, and Mill Recoveries of 92% for Au, 88% from Ag and 87.5% for Cu and combined mining, milling and G&A costs of approximately US$109/ton.*
7. *The Cut-off grade for the Dolly Varden property Mineral Resources is 150 g/t Ag, which was determined using a Ag price of US$20.00/ tr oz, a recovery of 90% and combined mining, milling and G&A costs of US$80/ton and was supported by comparison to similar projects.*
8. *Sufficient sample density data existed to allow for estimation of block density within the estimation domains of the HM, HS and SR zones, which ranged from 2.69 t/m3 to 3.03 t/m3.*
9. *Bulk density values ranging from 2.79 t/m3 to 3.10 t/m3 were assigned to individual estimation domains based on available SG measurements for the DV, TB, NS and WF deposits.*
10. *Differences may occur in totals due to rounding.*

14.6 Risks and Uncertainties

In the opinion of the authors of this report, the most significant risk/uncertainty pertaining to the Kitsault Valley Project MRE's is the accuracy and completeness of the historical workings and stopes at the property, which could potentially affect the MRE's for the Torbrit and Dolly Varden (and possibly the North Star) deposits. The Company has made efforts to locate, validate and digitize historical maps, sections and level plans from various historical reports that has resulted in the current set of underground workings at these deposits. Although this information is quite detailed, there remains a risk that additional unreported, and thus as yet unknown, workings exist within these past-producing mines. At some point in the near future, the APEX authors recommend that efforts be made to secure and re-open access to the Dolly Varden and Torbrit deposits to further survey and examine (sample) their respective historical workings.

The existing drillhole and assay database, particularly for the Homestake Main and Silver deposits and the Dolly Varden and Torbrit deposits includes analytical data from a significant number of older (pre-2000's) drillholes. Although significant efforts have been made to verify the locations of these holes there is a risk that some are not properly located and/or may have analyses that were not performed up to today's high standards of accuracy and precision. The Company is working to mitigate this risk by slowly "replacing" older drillholes with newer infill drilling. Over time, this risk will be further reduced.

Metallurgical characterization has not yet been definitively established at any of the deposits on the Kitsault Valley Project. Further metallurgical test work is recommended in order to increase the understanding of the mineralization and to better delineate any zones with low (poor) recovery that would help to increase confidence in the resources for the Kitsault Valley Project.

Currently, there is no orientated core to support the orientation of the structurally controlled high-grade domains at the Homestake area. Additional infill drilling with oriented drill holes is recommended at all of the Kitsault Valley resource areas in order to provide greater certainty in the current geological models at each deposit. Along with additional drilling, detailed structural measurement collection (utilizing oriented drill core) is also recommended for future infill and expansion drill programs, particularly at the Homestake area deposits, in order to provide data to further support current structural interpretations.

Unsampled intervals within, or adjacent to, mineralization zones represent a source of uncertainty, particularly within historical (older) drillholes. If possible (if core is available), all unsampled intervals proximal to mineralized zones should be sampled. If not available, follow-up drilling should be targeted so as to verify or replace older drillholes with possible sampling issues.

The authors are not aware of any other significant material risks to the MRE other than the inherent risks to mineral exploration and development in general. The authors of this

report are not aware of any specific environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that might materially affect the results of this resource estimate, and there appear to be no obvious impediments to developing the MRE at the Homestake Project.

15 Mineral Reserve Estimates

There are no mineral reserves at Kitsault Valley Project.

16 Mining Methods

This section is not applicable.

17 Recovery Methods

This section is not applicable.

18 Project Infrastructure

This section is not applicable.

19 Market Studies and Contracts

This section is not applicable.

20 Environmental Studies, Permitting and Social or Community Impact

This section is not applicable.

21 Capital and Operating Costs

This section is not applicable.

22 Economic Analysis

This section is not applicable.

23 Adjacent Properties

The Kitsault Valley Project is situated within the Stewart Complex, which is a part of what is more commonly referred to as BC's "Golden Triangle", which is a metallogenic Triassic-Jurassic island arc terrane that is host to over 200 mineral occurrences of predominantly precious metal vein type, skarn, porphyry and massive sulphide occurrences (Grove, 1986; Ross and Chamois, 2017). Notable adjacent projects include Kinskuch, Red Mountain and Kitsault (Figure 23.1).

Neither of the authors of this report have any interest in the adjacent properties discussed below. The authors have not visited or worked at any of the other adjacent properties discussed below and have thus not had an opportunity to verify any of the information provided, which was compiled from various public sources as referenced throughout. Where references are made to past production and/or historic or current mineral resources, the authors have not verified the information. The reader is further cautioned that no inference regarding the nature or tenor of mineralization on the Kitsault Valley Project is to be drawn from any of the following descriptions of adjacent properties.

23.1 Red Mountain Gold Project

The following summary has been adapted from Ascot Resources website (Ascot Resources, 2023):

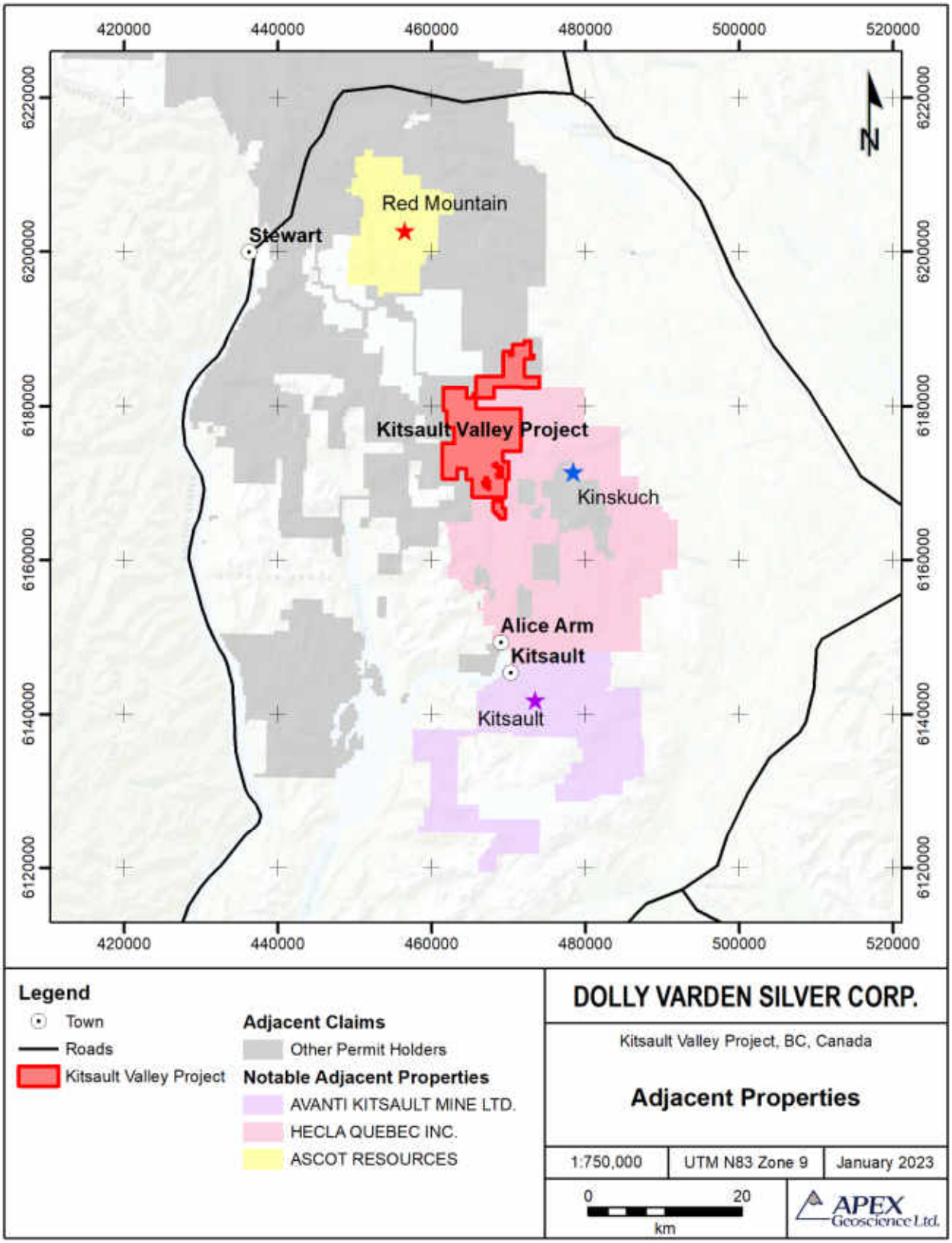
The Red Mountain Project ("RMP") is located 15km northeast of the town of Stewart near the headwaters of the Bitter Creek Valley within Nisga'a Nation traditional territory. The project was advanced by IDM Mining Ltd. between 2014 and 2019. On March 28, 2019, RMP was purchased by Ascot Resources.

A substantial deposit of high-grade gold has been delineated, primarily in the Measured and Indicated category and is accessed by 2,000 meters of production-sized underground workings. With an average thickness of 15 meters and up to 40 meters in areas, and with excellent ground conditions, the deposit is primarily amenable to low-cost longhole stoping.

The RMP ground comprises 17,125 hectares with prospective geology suitable for the discovery of high-grade gold deposits of multiple mineralization styles. The Red Mountain Gold Deposit is hosted within multi-phase Jurassic age diorite that intruded Triassic sediments of the Stuhini group. Mineralized zones consist of crudely tabular, northwesterly trending and moderately to steeply southwesterly dipping gold and silver bearing iron sulphide stockworks. Pyrite is the predominant sulphide; however, locally pyrrhotite is important. The stockwork zones consist of pyrite micro-veins, coarse-grained pyrite veins, irregular coarse-grained pyrite masses and breccia matrix pyrite hosted in a pale, strongly sericite-altered porphyry. Vein widths vary from 0.1 cm to approximately 80 cm but widths of 1 to 3 cm are most common. The veins are variably spaced and average 2 to 10 per metre. The veins are very often heavily fractured or brecciated with infillings of fibrous quartz and calcite. The pyrite veins typically carry gold grades ranging from 3 g/t to greater than 100 g/t. Gold occurs in grains of native gold, electrum, petzite and a variety of gold tellurides and sulphosalts. The stockwork zones are surrounded by more widespread zone of disseminated pyrite and pyrrhotite alteration.

A Mineral Resource Estimate for the Red Mountain Deposit was completed in 2019 (Arseneau, 2019) on behalf of Ascot Resources Ltd. (Technical Report available at www.sedar.com).

Figure 23.1. Notable exploration projects adjacent to the Kitsault Valley Project



23.2 Kinskuch Property

The following summary is adapted from Hecla Mining website (Hecla Mining, 2023):

On May 24, 2016, Hecla purchased 100 percent of the Kinskuch property which consists of 156 mining claims totaling 59,400 ha. The Kinskuch property is favorably located within the Iskut-Stewart-Kitsault Belt north of the tidewater communities of Alice Arm and Kitsault, BC with historic road access to the western part of the property.

Between 1918 and 2016, a total of 37 exploration/mining companies have conducted exploration work within the extents of the Kinskuch Claims looking for precious metal enriched volcanogenic massive sulfides (VMS) and porphyry copper ± molybdenum-gold-silver ore deposits. The property hosts potential for the discovery of epithermal silver-gold, gold-rich porphyry, and volcanogenic massive sulfide (VMS) deposits that ultimately could lead to an economic mine.

23.3 Kitsault Project

The following summary is adapted from New Moly LLC website (New Molly, 2022):

The Kitsault Mine Project is one of the largest and highest-grade primary molybdenum deposits in the world. The project is owned by Avanti Kitsault Mine Ltd. (AKML), in which New Moly has an 100% interest. The Kitsault Mine is located in northwestern British Columbia within the Regional District of Kitimat-Stikine, approximately 140km northeast of Prince Rupert and south of the head of Alice Arm, an inlet of the Pacific Ocean.

Kitsault Mine is a brownfield site with considerable past mining activity and basic infrastructure in place. From as early as 1968, and intermittently until 1982, the mine produced approximately 30 million pounds of molybdenum from open-pit mining. Rehabilitation of the 1981 – 1982 mining program was started under an approved reclamation program in the mid-1990s and was completed in 2006.

AKML completed the purchase of an undivided, 100 percent (%) direct interest in the Kitsault Mine (molybdenum mine and surrounding mineral tenures) from Aluminerie in October 2008. Under AKML, permits have been well advanced with key provincial and federal permits in place for development of an estimated mine life of 15 years with an ore production rate of 16.2 Mt/year. Kitsault Mine development includes construction of a new access road and process plant, upgrade of the existing powerline, expansion of the existing open pit, construction of a low-grade ore stockpile, waste rock management facility, and a tailings management facility with associated water management ponds.

24 Other Relevant Data and Information

The authors are not aware of any other relevant data or information pertaining to the Kitsault Valley Project.

25 Interpretation and Conclusions

25.1 Results and Interpretations

The Kitsault Valley Project is located near the central west coast of BC, approximately 39 km southeast of Stewart and 27 km northeast of Alice Arm, BC. The total Project area is 15,311.01 hectares (with non-owned land removed) comprising 7 mineral leases, 75 mineral claims, and 57 crown granted mineral claims. The Project was created in February 2022 when Dolly Varden announced the completion of its acquisition of Homestake Resource Corporation from Fury Gold Mines and the consolidation of its flagship Dolly Varden project with its newly acquired (100%) Homestake Ridge Project.

The Property is situated within the Stewart Complex, which is part of the more widely known and referenced "Golden Triangle" of northwestern BC, which is a metallogenic region hosted by Triassic-Jurassic age island arc terranes that hosts some 200 mineral occurrences and deposits including precious metal vein type, skarn, porphyry and massive sulphide styles of mineralization. Several styles of mineralization have been identified at the Kitsault Valley Project, these include: 1) exhalative stratiform silica-sulphide-rich mineralization; 2) exhalative stratiform pyrite, sphalerite, galena, chert, carbonate-rich mineralization; 3) stratabound, infill and replacement Ag-sulphosalt rich mineralization; 4) quartz-silica, carbonate and variably barite-rich epithermal Ag mineralization; and 5) quartz-sericite-pyrite altered zones containing Cu-Ag- (+/-) Au mineralization in quartz-sulphide stockwork, hydrothermal breccias and veins. Historic and recent exploration on the Property, coupled with recent studies on the area, suggest a potential for the Property to host volcanogenic massive sulphide deposits and epithermal precious metal deposits.

This Technical Report discusses recent exploration activities and summarizes the current mineral resource estimates on the recently formed Kitsault Valley Project, which resulted from Dolly Varden Silver Corporation's recent acquisition of the adjacent Homestake Ridge Project and its addition to the Company's former flagship property comprising the Dolly Varden project. Specifically, this report updates previous Technical Reports on the Homestake Project by Hough et al. (2022) as well as a previous Technical Report on the Dolly Varden Project by Turner and Nicholls (2019). In the opinion of the authors of this Technical Report, exploration techniques and sampling and analytical techniques employed by the Company are consistent with industry standards and are appropriate for the types of mineral deposit(s) being explored. In addition, it is the opinion of the authors of this Technical Report that the Kitsault Valley Project remains a 'Property of Merit' and warrants continued exploration, as detailed below.

25.2 Kitsault Valley Project Mineral Resource Estimate

The Kitsault Valley Project includes mineral resource estimates for 7 discrete deposits or zones including the Homestake Main, Homestake Silver and South Reef zones located in the Homestake area is the northern part of the Project and the Wolf, North Star, Torbrit

and Dolly Varden deposits in the southern part (former Dolly Varden portion) of the Project.

This Technical Report includes a review of previous Mineral Resource Estimates (MRE's) from the Kitsault Valley Project as discussed in previous Technical Reports by Turner and Nicholls (2019), including MRE's for the silver deposits of the former Dolly Varden portion of the Property (Dolly Varden, Torbrit, North Star and Wolf deposits), as well as Hough et al. (2022), which discusses MRE's for the gold-silver mineralization at the Homestake Main, Homestake Silver and South Reef zones on the former Homestake portion of the Property.

APEX has completed a review of these Mineral Resource Estimates that included evaluations of their respective "reasonable prospects for eventual economic extraction" (RPEEE), including evaluations of cut-off grades, grade continuity and potential mining ("stope") shapes. As a result of these evaluations, APEX has not identified any factors that would materially change the Kitsault Valley MRE's and accepts them as current. The current Kitsault Valley Project MRE's are summarized in Table 25.1 below.

Furthermore, APEX has conducted a review of the Kitsault Valley Project MRE's with respect to recent drilling that has been completed by the Company since their respective original effective dates and has concluded that the recent drilling results, including 2022 drill results received as of the writing of this report, a) may have an effect on the categorization of certain of the deposits, but b) is not likely to have a material affect on the overall global resources. That said, once the results of the 2022 Kitsault Valley Project drilling program have been fully compiled and evaluated, APEX recommends that revised geological modeling should be completed at all of the Project's resources/deposits and, where appropriate, that revised mineral resource estimation should be produced.

Table 25.1. Summary of Current Kitsault Valley Project Mineral Resources.

Resource Area	Cutoff	Deposit	Tonnes (Mt)	Silver (g/t)	Gold (g/t)	Copper (%)	Lead (%)	Silver (Moz)	Gold (koz)	Copper (Mlb)	Lead (Mlb)
Indicated											
Homestake	2.0 g/t AuEq	HM	0.736	74.8	7.02	0.18	0.08	1.80	166.0	2.87	1.25
		HS	-	-	-	-	-	-	-	-	-
		SR	-	-	-	-	-	-	-	-	-
Dolly Varden	150 g/t Ag	TB	2.623	296.8	-	-	-	25.025	-	-	-
		DV	0.156	414.2	-	-	-	2.078	-	-	-
		WF	0.402	296.6	-	-	-	3.834	-	-	-
		NS	0.236	262.8	-	-	-	1.994	-	-	-
		Total	4.153	-	-	-	-	34.731	166.0	2.87	1.25
Inferred											
Homestake	2.0 g/t AuEq	HM	1.747	35.9	6.33	0.35	0.11	2.0	355.6	13.32	4.14
		HS	3.354	146.0	3.13	0.03	0.18	15.7	337.0	2.19	13.2
		SR	0.445	4.9	8.68	0.04	0.001	0.1	124.2	0.36	0.00
Dolly Varden	150 g/t Ag	TB	1.185	278.0	-	-	-	10.588	-	-	-
		DV	0.086	271.5	-	-	-	0.754	-	-	-
		WF	0.010	230.6	-	-	-	0.070	-	-	-
		NS	0.005	223.6	-	-	-	0.035	-	-	-
		Total	6.831	-	-	-	-	29.2	816.8	15.87	17.34

Notes:

1. *Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability although, as per CIM requirements, the Mineral Resources reported above have been determined to have demonstrated reasonable prospects for eventual economic extraction.*
2. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
3. *The Mineral Resources for the HM (Homestake Main), HS (Homestake Silver), and SR (South Reef) Zones were originally reported in Hough et al (2022) – QPs Andrew J. Turner, P.Geol., and David Stone, P. Eng., effective date January 20, 2022.*
4. *The Mineral Resources for the TB (Torbrit), DV (Dolly Varden), NS (North Star) and WF (Wolf) Deposits were originally reported in Turner and Nicholl (2019) – QP Andrew J. Turner, P.Geol., effective date May 8, 2019.*
5. *The resources reported above are reviewed in detail within this report and are accepted as current by the Qualified Person, Mr. Andrew J. Turner, B.Sc., P.Geol., of APEX Geoscience LTD.*
6. *The Cut-off grade for the former Homestake Ridge property Mineral Resources is 2.0 g/t AuEq, which was determined using average block grade values within the estimation domains and a Au price of $1300/ tr oz, a Ag price of US$20.00/ tr oz, and a Cu price of U$2.50/lb, and Mill Recoveries of 92% for Au, 88% from Ag and 87.5% for Cu and combined mining, milling and G&A costs of approximately US$109/ton.*
7. *The Cut-off grade for the former Dolly Varden property Mineral Resources is 150 g/t Ag, which was determined using a Ag price of US$20.00/ tr oz, a recovery of 90% and combined mining, milling and G&A costs of US$80/ton and was supported by comparison to similar projects.*
8. *Sufficient sample density data existed to allow for estimation of block density within the estimation domains of the HM, HS and SR zones, which ranged from 2.69 t/m3 to 3.03 t/m3.*
9. *Bulk density values ranging from 2.79 t/m3 to 3.10 t/m3 were assigned to individual estimation domains based on available SG measurements for the DV, TB, NS and WF deposits.*
10. *Differences may occur in totals due to rounding.*

25.3 Exploration Results and Conclusions

25.3.1 2015 – 2018 Exploration

Exploration work completed from 2015 to early 2019 includes geological mapping, geochemical sampling, a LiDAR geophysical survey and geophysical studies based on 2010 and 2011 geophysical surveys conducted at the Property. The interpretations and conclusions derived from the exploration programs are summarized in the following sub-sections.

25.3.1.1 Geological Mapping and Rock Sampling Results and Conclusions

Geological mapping and lithogeochemical sampling was conducted at various prospects throughout the Property in two main programs in 2015 to 2016; 1) 2015 geological mapping underground at Torbrit and North Star and on surface at Musketeer, Ace-Galena Trout and Kitsol; and 2) 2016 geological mapping at Summit Ridge, Ace-Galena Trout, Chance Creek, Trout Hanging Wall, Northeast Sediment-Volcanic Contact and Medallion. Sporadic geological mapping and sampling was conducted throughout the Property in 2017 and 2018.

The geological mapping and lithogeochemical sampling provided information on the stratigraphy and structure of prospect areas and identified multiple zones of mineralization, as well as anomalous zones warranting further exploration within the Property. The mapping and sampling work completed at Ace Galena-Trout identified multiple zones of mineralization, including: 1) Ag-sulphosalt-rich sulphide mineralization; 2) sulphosalt-galena-rich mineralization; 3) Exhalative disseminated to laminated Pb-Zn mineralization; and 4) Discordant native silver-rich mineralization. The mineralization indicates extensive hydrothermal circulation within the Trout Horizon, notably the lower portion. The lithogeochemical sampling at Ace-Galena Trout showed the following:

- Ag, As, Hg, Pb, Zn anomalies within the upper portion of the Trout Horizon in samples taken along the Bluebird Fault.
- Elevated Sb within the Trout Horizon.
- Cu anomalies appear to be associated with Ag-sulphosalt type mineralization.
- Trout Zone volcaniclastic package is characterized by broad sodium depletion and potassium enrichment.

The Summit Ridge geological mapping and geochemical sampling programs provided information on the stratigraphy of the area and highlighted potential similarities and connections to the Trout Horizon. Notably, the composition and attitude of the lithologies within a creek drainage located 400 m up-slope and east of the McKay trench area suggests further extension of the Trout strata approximately 270 m to the east of the McKay trenches. Additionally, a mineralized vein occurring sub-parallel to a west-northwest trending fault suggests the potential for hydrothermal fluid flow through west-

northwest trending structures in the area. The lithogeochemical sampling at Summit Ridge showed the following:

- A 1 km long anomaly over the Chance prospect with elevated Ag, Pb, Sb, As, Hg, Zn, Cu, Ba and Tl.
- Ag, Zn, As highlighted in dacite tuff and in tuffaceous sandstone lithologies.
- K enrichment of basalt and dacitic rocks

The reconnaissance mapping and sampling program at the Trout Horizon Hanging Wall and northeast sediment-volcanic contact provided information regarding the stratigraphy of the area and helped to define the extent of certain lithologies, particularly to the northwest side of the Bluebird Fault. Additionally, the program identified structurally controlled sericite alteration and geochemical anomalies. The alteration observed in the Trout Horizon Hanging Wall occurs in structural zones of faults and fractures with orientations varying from the east-northeast to the northwest. The lithogeochemical sampling at the Trout Horizon Hanging Wall and Northeast Sediment-Volcanic Contact showed the following:

- A weak anomaly of Sb, As, Pb along the eastern bank of Clearwater Creek. This anomaly coincides with a zone of Na depletion.
- Ba anomalies in several zones within the Property. The two largest anomalies occur in andesite tuffs northwest of Bluebird Creek and in andesite and basalt toward the east bank area of Clearwater Creek.

The 2016 geological mapping and sampling program identified extensive alteration, structure features and precious metal mineralization within structurally controlled veins at Medallion. The lithogeochemical sampling at Medallion showed the following:

- A Cu anomaly in the area north of Homestead Creek.
- A weak Au anomaly on the south side of Homestead Creek.
- Altered rocks show elevated values of As and Pb. Altered intermediate lapilli and ash tuffs show moderate to strong Na depletion.
- Sb is anomalous along the Medallion prospect.

25.3.1.2 Soil Sampling Interpretations and Conclusions

A soil sampling program was conducted over a portion of the Property in late 2015 with focus on the Wolf, Silver Horde, Chance and Ace-Galena Trout target areas. A total of 1823 soil samples were collected over the Property. Three main anomalous areas were identified by the sampling program. Anomalous zones of elevated metals were defined near the Wolf prospect and at Silver Horde, as indicated by Ag, Pb, Zn, Sb and Ba results. Additionally, an anomalous zone of elevated metals was highlighted, starting from the

Chance prospect and trending to the northeast for approximately 1.2 km. This zone appears to run parallel to the historic Ace-Galena soil anomaly.

In 2016, an orientation line totalling ten soil samples was conducted near Ace-Galena and analyzed in the field using a portable XRF (X-ray fluorescence) unit. It is important to note that although the XRF analysis data is semi-quantitative, it does provide an excellent means of determining relative abundances (concentrations) of various key elements in the samples. The soil line shows weakly to moderately anomalous Cu and Zn values.

25.3.2 2015 – 2018 Diamond Drilling Results and Conclusions

Four drilling programs have been completed at the Property from 2015 to 2018, with 152 diamond drill holes, totalling 49,199 m, drilled by the Company. The drill programs focused on exploration and reconnaissance drilling, as well as resource delineation and verification of the known Project deposits. The drilling programs successfully achieved the following: 1) identified high grade Ag mineralization at three new prospect areas, including Moose-Lamb, Torbrit North and Torbrit East; 2) extended mineralization at several known prospects, including Ace-Galena, Kitsol, Torbrit and Dolly Varden; 3) expanded the current mineral resources at Torbrit and Dolly Varden; and 4) confirmed the presence of VMS style and epithermal mineralization within the Property.

25.3.3 2019 – 2022 Exploration

Exploration work completed by the Company during 2019 to 2022 at the Kitsault Valley Project includes rock sampling, geological mapping, whole rock geochemical sampling, an Induced Polarization ground geophysical survey, and a LiDAR airborne survey.

25.3.3.1 Rock Sampling and Geological Mapping Results and Conclusions

Rock sampling and geological mapping programs were completed at the Dolly Varden project during 2019, 2020, and 2022, and at the Homestake Ridge project in 2022. A total of 49 rock samples were collected from exploration targets in the Dolly Varden project area, and 119 rock samples were collected from areas at the Homestake Ridge project. Results of the rock sampling programs show the following:

- Anomalous Ag and Au values from the Surprise, Red Point, Kitsol, V-Vein, Goldbelt and Starlight exploration areas at the Dolly Varden Project.
- Cu anomalies present at Red Point, V-Vein, Surprise, Starlight, and Goldbelt areas at the Dolly Varden Project.
- Anomalous Pb and Zn values from the V-Vein, 44 Zone, Starlight, and Surprise exploration targets at Dolly Varden.
- At Homestake Ridge, anomalous Ag, Pb, and Zn values from Vanguard Copper, Vanguard Gold, Rambler, Homestake Camp, and Old Homestake Camp target areas.

- Anomalous Au and Cu results from the Vanguard Copper, Vanguard Gold, Rambler, Old Homestake Camp, Homestake Camp, Lucky Strike, Gold Leaf and North Dome exploration areas.

In conjunction with the rock sampling program, geological information such as rock descriptions and structural measurements were collected from geostations throughout the property. A total of 96 geostations were recorded at the Dolly Varden project in 2022 and 502 geostations were recorded at the Homestake Ridge project in 2022.

25.3.3.2 Whole Rock Geochemistry Results and Conclusions

The Company completed lithogeochemical sampling surveys over the Kitsault Valley Project from 2019 – 2022, with the objective of characterizing lithologies and alteration types located on the property based on whole rock geochemistry results. At the Dolly Varden project, rock sampling was completed in 2019, 2020, and 2022, and a total of 196 samples were collected. A total of 44 rock samples were collected from the Homestake Ridge project in 2022.

25.3.3.3 LiDAR Airborne Survey and Induced Polarization Ground Geophysical Survey Results and Conclusions

In July 2022, a LiDAR (Light Detection and Radar) airborne survey was completed by McElhanney Ltd. over the Homestake Ridge project and the southern Kitsault Valley region. Results of the 2022 LiDAR survey will be added with previous results from the 2017 LiDAR survey completed at the Dolly Varden project.

During 2022, an Induced Polarization (IP) ground geophysical survey was completed over the Red Point area at Dolly Varden. Four IP lines were completed by Simcoe Geoscience Ltd. for a total of 4.6 line kilometres. Final interpretations of the IP survey results are pending.

25.3.4 2019 – 2022 Diamond Drilling Results and Conclusions

From 2019 to 2022, five diamond drill programs were completed at the Property, where 223 diamond drill holes were completed for a total of 70,829.05 m. At the Dolly Varden project, 167 diamond drill holes were completed between 2019 and 2022 for a total of 52,380.95 metres drilled. In 2022, 56 diamond drill holes were completed at the Homestake Ridge project for a total of 18,448.1 metres drilled. The drilling programs at the Dolly Varden project focused on reconnaissance and exploration drilling, confirming historical drilling results, as well as the infilling and expansion of the current Project deposits. The drilling programs at the Dolly Varden project accomplished the following: 1) Identified high-grade Ag intercepts at the Chance exploration target. 2) Delineated and expanded high-grade ore zones within the Torbrit deposit. 3) Identified anomalous Au-Ag-Cu mineralization at the Western Gold Belt area. 4) Extended mineralization at the Kitsol Vein and Wolf Deposit. At Homestake Ridge, the drilling program had the objective of infilling and upgrading the current Inferred Mineral Resources at Homestake Main and

Homestake Silver, as well as testing the extension of known mineralized zones. The 2022 diamond drill program at the Homestake Ridge project achieved the following: 1) Identified new targets down-dip of the current Homestake Main deposit. 2) Defined increased continuity of high-grade ore zones within the Homestake Main Deposit.

25.4 Risks and Uncertainties

As part of APEX's review of the current Kitsault Valley Project mineral resources, as discussed in this report, a number of sources of risk and uncertainty were identified and are discussed below.

In the opinion of the authors of this report, the most significant risk/uncertainty pertaining to the Kitsault Valley Project MRE's is the accuracy and completeness of the historical workings and stopes at the property, which could potentially affect the MRE's for the Torbrit and Dolly Varden (and possibly the North Star) deposits. The Company has made efforts to locate, validate and digitize historical maps, sections and level plans from various historical reports that has resulted in the current set of underground workings at these deposits. Although this information is quite detailed, there remains a risk that additional unreported, and thus as yet unknown, workings exist within these past-producing mines. At some point in the near future, APEX recommends that efforts be made to secure and re-open access to the Dolly Varden and Torbrit deposits to further survey and examine (sample) their respective historical workings.

The existing drillhole and assay database, particularly for the Homestake Main and Silver deposits and the Dolly Varden and Torbrit deposits includes analytical data from a significant number of older (pre-2000's) drillholes. Although significant efforts have been made to verify the locations of these holes there is a risk that some are not properly locate and/or may have analyses that were not performed up to today's high standards of accuracy and precision. The Company is working to mitigate this risk by slowly "replacing" older drillholes with newer infill drilling. Over time, this risk will be further reduced.

Metallurgical characterization has not yet been definitively established at any of the deposits on the Kitsault Valley Project. Further metallurgic test work is recommended in order to increase the understanding of the mineralization and to better delineate any zones with low (poor) recovery that would help to increase confidence in the resources for the Kitsault Valley Project.

Currently, there is no orientated core to support the orientation of the structurally controlled high-grade domains at the Homestake area. Additional infill drilling is recommended at all of the Kitsault Valley resource areas in order to provide greater certainty in the current geological models at each deposit. Along with additional drilling, detailed structural measurement collection (utilizing oriented drill core) is also recommended for future infill and expansion drill programs, particularly at the Homestake area deposits, in order to provide data to further support current structural interpretations.

Unsampled intervals within, or adjacent to, mineralization zones represent a source of uncertainty, particularly within historical (older) drillholes. If possible (if core is available), all unsampled intervals proximal to mineralized zones should be sampled. If not available, follow-up drilling should be targeted so as to verify or replace older drillholes with possible sampling issues.

The authors are not aware of any other significant material risks to the MRE other than the inherent risks to mineral exploration and development in general. The authors of this report are not aware of any specific environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that might materially affect the results of this resource estimate, and there appear to be no obvious impediments to developing the MRE at the Homestake Project.

26 Recommendations

Based upon the author's site visit, the currently identified Ag-Au resources present on the Kitsault Valley Property, and the potential for additional discoveries (based on geology and the results of exploration work discussed in this report), it is the opinion of the authors that the Kitsault Valley Property is a "Property of Merit" warranting significant continued exploration work. This section describes recommended work at the Property and estimated costs for these work programs are provided in Table 26.1, below and comprises a total expenditure of approximately $21 million. In the opinion of the authors of this report, all of the recommended work is warranted at this time and none of the different work programs are dependent upon the results of any of the others.

In addition to various administrative costs, a significant exploration program is recommended for the Kitsault Valley Project. This includes detailed mapping, prospecting and rock sampling, and geophysical surveying at several areas with an emphasis recommended at the North Dome area, north of the Homestake deposits, and the "Cu-belt" alteration zone south of the Homestake deposits, as well as the remainder of "the gap" between the Homestake and Dolly Varden resource areas.

Additional in-fill and step-out drilling is recommended for the currently defined mineral resource areas at the Project comprising the Dolly Varden, Torbrit, North Star, Wolf and the three (3) main zones of mineralization at the Homestake silver-gold deposit area. New drilling should be completed in order to tighten drillhole spacing and increase confidence in the current geological models. Priority should thus be given to drillholes that test areas that currently have hole spacing greater than average. Priority should also be given to drillholes that test areas of the deposits that currently comprise mainly historical data points, which will a) validate or replace historical data and b) provide additional multi-element data for potential addition to future mineral resource updates (i.e. Cu, Pb and Zn).

With respect to the Dolly Varden area resources (Dolly Varden, Torbrit, North Star and Wolf), continued drill testing of their respective stratigraphic strike extensions and depth projections is recommended. This includes the continued drill testing of the northwest extension of the Torbrit stratigraphic horizon, marked by increased K and Na depletion of volcanics, to identify additional basins that might contain additional volcanic-hosted mineralization. Cross-cutting structures should also be tested for their potential to host epithermal (structurally-hosted) mineralization. Continued drill testing for the Torbrit horizon is recommended within the altered Hazelton group stratigraphy which runs through the Wolf deposit to the Ace Galena and Chance prospects.

With respect to the Homestake area resources, continued drill testing of their respective along-strike and down-dip (down-plunge) extensions is also recommended. Specifically, infill drilling was conducted at the Homestake Main zone in 2022 and similar infill drilling is recommended for the Homestake Silver zone in 2023. Additional drilling to test down-plunge and northern strike extensions of the Homestake Main zone is recommended.

Table 26.1. Estimates Costs For The Recommended Work Programs At The Kitsault Valley Project.

Administrative/General				
Administration and Project Management				$300,000
Camp and Logistics				$500,000
Property Maintenance/Permitting				$50,000
Environmental, Permitting, Pty Maintenance				$250,000
initiation of baseline sampling				$150,000
wildlife surveys				$50,000
hydrogeology (test wells and sampling)				$150,000
Exploration - Fieldwork	**people**	**days**	**rate**	
Prospecting (mapping/sampling)	4	60	$500	$120,000
samples		100	$50	$5,000
Geological Mapping & Consulting	2	90	$1,000	$180,000
Geophysics (Mag/IP - various targets)		40	$5,000	$200,000
Drilling	**Total (m)**	**Estimated All-in Cost**		
Resource Areas - infill and step-out drilling				
Homestake Main	2,000	$300 /m		$600,000
Homestake Silver	10,000	$300 /m		$3,000,000
South Reef	5,000	$300 /m		$1,500,000
Torbrit	10,000	$300 /m		$3,000,000
Dolly Varden	5,000	$300 /m		$1,500,000
North Star	5,000	$300 /m		$1,500,000
Wolf	10,000	$300 /m		$3,000,000
Exploration Area				
(i.e. North Dome, "Cu-belt", etc.)	10,000	$300 /m		$3,000,000
Geotechnical Drilling				
Homestake resource area	5,000	$300 /m		$1,500,000
Other				
Metallurgical Test Work				
Homestake (HM, HS, SR)				$250,000
Torbrit (+ NS and DV)				$200,000
Wolf				$50,000
			Total	**$21,055,000**

There is currently no significant subsurface structural data available to assist/support geological modelling efforts at any of the Property's resource areas. As a result, core orientation and subsequent structural measurements is recommended as part of the recommended infill and step-out drill programs at the Project. This will provide data that will help support correlations and geological interpretations thereby supporting grade continuity, which will improve geological models and thereby potentially improve classification within future updated Mineral Resource Estimates (MREs). Additional Specific Gravity (SG) testing is recommended, and consideration should be given to making SG determination a regular part of the Company's geotechnical core logging program.

In addition to the infill and step-out resource area drilling that is recommended for the Homestake area resources, a small (~5,000m) geotechnical drill program is also recommended in order to provide more detailed structural and rock quality information for potential future advanced assessments of the respective resources. This program has been separated from the recommended resource evaluation drilling at these prospects as they may or may not provide any additional analytical data.

Additional metallurgical sampling and testing is recommended, particularly for the Dolly Varden and Torbrit deposits in order to provide the data necessary for a more thorough metallurgical characterization of the deposits. This will then allow for a formal evaluation of potential mineral processing options and their respective Ag (+/- Pb/Zn) recoveries, which in turn allow for more formal economic evaluations of these deposits.

Similarly, additional metallurgical testing is recommended for the Homestake resource area. Preliminary Acid-Base Accounting (ABA) and other environmental test work has been carried out at the Homestake resource area to determine the acid generating potential of the waste rock and tailings, but additional work is required to include all of the major rock types from each of the three Homestake resources. Once the acid potential can be mapped to each of the major rock types it will be possible to generate volumetric estimates of PAG versus NAG rock at each deposit.

Environmental baseline data collection is recommended throughout the Property with an emphasis on surface water testing in proximity to the Homestake and Dolly Varden/Torbrit resource areas. Surface runoff from melting glaciers and rainfall will need to be assessed in order to create a site-wide water balance model as the project likely sits in a net positive water environment (in other words the project will produce more water than it can consume). This data will be required for any potential future economic-engineering evaluations of the Mineral Resources at the Project.

APEX Geoscience Ltd. APEGA Licence # 5284; EGBC Licence # 1003016

"Signed and Sealed"

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Andrew J. Turner, B.Sc., P.Geol.

"Signed and Sealed"

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Edmonton, Alberta, Canada
Effective Date: September 28, 2022
Signing Date: March 23, 2023

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Certificate of Author

I, Andrew J. Turner, B.Sc., P. Geol., do hereby certify that:

1. I am a Principal of, and Senior Geological Consultant with, APEX Geoscience Ltd., Suite 100, 11450 – 160th Street, Edmonton, AB, Canada, T5M 3Y7.
2. I graduated with a B.Sc. (Honors) in Geology from the University of Alberta in 1989.
3. I am, and have been, registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta ("APEGA") since 1989.
4. I have worked as a geologist for more than 33 years since my graduation from University and have been involved in exploration for, and the evaluation of, VMS and epithermal gold/silver mineral deposits in Western Canada and the USA.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am responsible for the preparation of Sections 1-6 and 11-26 (except Section 12.6) of the Technical Report titled "Technical Report on the Combined Kitsault Valley Project, British Columbia, Canada", with an effective date of September 28, 2022 (the "Technical Report"). I visited the Kitsault Valley Property on September 28-29, 2022 and can verify the Property, mineralization and the infrastructure at the Kitsault Valley Property.
7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. I am independent of the issuer and the Property applying all of the tests in section 1.5 of Companion Policy 43-101 CP.
10. I have prior involvement with the Property that is the subject of this Technical Report. I previously co-authored a Technical Report on the former Dolly Varden Project, now part of the combined Kitsault Valley Project, on behalf of the issuer entitled "Technical Report and Mineral Resource Update for the Dolly Varden Property, British Columbia, Canada" (Turner and Nicholls, 2019). Also, APEX, and myself personally, provided consulting services to the former owner of the Homestake portion of the Kitsault Valley Project in 2017 and later, on behalf of the issuer, I co-authored a Technical Report on the former Homestake Ridge Project, now part of the combined Kitsault Valley Project, on behalf of the issuer entitled "Technical Report and Updated Mineral Resource Estimate for the Homestake Ridge Gold Project" (Hough et al, 2022).

Effective date: September 28, 2022
Signing date: March 23, 2023
Edmonton, Alberta, Canada

"Signed and Sealed"

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Andrew J. Turner, B.Sc., P.Geol.

Certificate of Author

I, Rachelle Hough, do hereby certify that:

1. I am a Senior Geological Consultant of APEX Geoscience Ltd., Suite 100, 11450 – 160th Street, Edmonton, AB, Canada, T5M 3Y7.
2. I graduated with a B.Sc. in Geology from the University of Alberta in 2008.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta ("APEGA") since 2012.
4. I have worked as a geologist for more than 14 years since my graduation from University and have extensive experience with exploration for, and the evaluation of precious metal mineralization associated with epithermal, porphyry style intrusives, skarn, and volcanogenic massive sulphide style mineralization deposits in Western Canada.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am responsible for Sections 7-10 and 12.6, along with contributions to sections 1 and 25 of the Technical Report titled "Technical Report on the Combined Kitsault Valley Project, British Columbia, Canada", with an effective date of September 28, 2022 (the "Technical Report"). I visited the Kitsault Valley Property on January 20, 2022 and can verify the Property, mineralization and the infrastructure at the Kitsault Valley Property.
7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of Companion Policy 43-101 CP.
10. I have prior involvement with the Property that is the subject of the Technical Report: I previously co-authored a Technical Report on the former Homestake Ridge Project, now part of the combined Kitsault Valley Project, on behalf of the issuer entitled "Technical Report and Updated Mineral Resource Estimate for the Homestake Ridge Gold Project" (Hough et al, 2022).

Effective date: September 28, 2022
Signing date: March 23, 2023
Edmonton, Alberta, Canada

"Signed and Sealed"

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Rachelle Hough, B.Sc., P.Geo