NI 43-101
MINERAL RESOURCE ESTIMATE
FOR THE
WHISTLER PROJECT

South Central Alaska
Centred at 6,872,000 N and 520,000 E (NAD 83)

Submitted to:
GoldMining Inc.
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Effective Date: 11 June 2021
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DATE & SIGNATURE PAGES

Herewith, our report entitled "NI 43-101 Mineral Resource Estimate for the Whistler Project" with an effective date of 11 June 2021.

"Signed and Sealed"

Signature of Sue Bird
M.Sc., P.Eng.
Moose Mountain Technical Services

Dated: October 29, 2021

"Signed and Sealed"

Signature of Kirstin Girdner
M.Sc., P.E.
Moose Mountain Technical Services

Dated: October 29, 2021

"Signed and Sealed"

Signature of Arthur Barnes
M.Sc.Eng., P.Eng.
MPC Metallurgical Process Consultants Limited

Dated: October 29, 2021

CERTIFICATE OF QUALIFIED PERSON – SUE BIRD

I, Sue Bird, P.Eng., am employed as a Geological Engineer with Moose Mountain Technical Services, with an office address of #210 1510 2nd Street North Cranbrook, BC V1C 3L2. This certificate applies to the technical report titled "NI 43-101 Mineral Resource Estimate for the Whistler Project" that has an effective date of June 11, 2021 (the "technical report").

- I am a member of the self-regulating Association of Professional Engineers and Geoscientists of British Columbia (#25007). I graduated with a Geologic Engineering degree (B.Sc.) from the Queen's University in 1989 and a M.Sc. in Mining from Queen's University in 1993.
- I have worked as an engineering geologist for over 25 years since my graduation from university. I have worked on precious metals, base metals and coal mining projects, including mine operations and evaluations. Similar resource estimate projects specifically include those done for Artemis' Blackwater gold project, Ascot's Premier Gold Project, Spanish Mountain Gold, all in BC; O3's Marban and Garrison, gold projects in Quebec and Ontario, respectively, as well as numerous due diligence gold projects in the southern US done confidentially for various clients.
- As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101).
- I have not visited the property.
- I am responsible for all Sections: 1.1 through 1.10, 1.15, 1.16.3, 1.17.3, 1.17.6, 2 through 9, 14 through 24, 25.4, 25.5.3, 26.4, and 27 of the technical report.
- I am independent of GoldMining Inc. as independence is described by Section 1.5 of NI 43–101.
- I have previously prepared resource estimates for the Whistler Deposit for Kiska Metals Corporation in March, 2011 which was re-issued by Brazil Resources Inc. (now GoldMining Inc.) in May, 2016.
- I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Amended Date: 29 October 2021

"Signed and Sealed"

_____

Signature of Qualified Person
Sue Bird, P.Eng.

CERTIFICATE OF QUALIFIED PERSON – KIRSTIN GIRDNER

I, Kirstin Girdner, P.E., am employed as a Geological Engineer with Moose Mountain Technical Services, with an office address of #210 1510 2nd Street North Cranbrook, BC V1C 3L2. This certificate applies to the technical report titled "NI 43-101 Mineral Resource Estimate for the Whistler Project" that has an effective date of June 11, 2021 (the "technical report").

- I am a registered Professional Engineer (Geological) in the State of Arizona, license #51851.
- I graduated with a Civil Engineering degree (B.S.) from Worcester Polytechnic Institute in 1987 and a Master of Science in Civil Engineering degree from the University of Arizona in 1991. I have completed substantial additional graduate level Geological Engineering coursework in the Mining and Geological Engineering department at the University of Arizona.
- I have worked as a Geological Engineer for over 20 years since my graduation from university. I have worked on precious metals, base metals and industrial minerals projects. Similar projects specifically include Artemis' Blackwater gold project and Ascot's Premier Gold Project in BC; and O3's Marban and Garrison, gold projects in Quebec and Ontario, respectively.
- As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101).
- I visited the property on May 21, 2021.
- I am responsible for Sections: 1.11, 1.12, 1.13, 1.16.1, 1.17.1, 1.17.4, 10, 11, 12, 25.1, 25.2, 25.5.1, 26.1, and 26.2 of the technical report.
- I am independent of GoldMining Inc. as independence is described by Section 1.5 of NI 43–101.
- I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Amended Date: 29 October 2021

"Signed and Sealed"

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Signature of Qualified Person
Kirstin Girdner, P.E.

CERTIFICATE OF QUALIFIED PERSON – ARTHUR BARNES

I, Arthur Barnes, P.Eng., am President of MPC Metallurgical Process Consultants Limited, with an office address of 90-2400 Oakdale Way, Kamloops , BC, V2B 6W7. This certificate applies to the technical report titled "NI 43-101 Mineral Resource Estimate for the Whistler Project" that has an effective date of June 11, 2021 (the "technical report").

- I am a registered Professional Engineer (Metallurgical) in the Provinces of Ontario, (license #100501305) and British Columbia (Reg No 49594).
- I graduated with a B.Sc. (Honours) degree in Metallurgy from the University of Pretoria in 1974 and a Master's Degree in Engineering degree (M.Sc.Eng.) from the University of the Witwatersrand in 1981.
- I am a Fellow of the Southern African Institute of Mining and Metallurgy (#18967) and a Member of the Canadian Institute of Mining Metals and materials (#146931).
- My company is permitted to practice in BC as Metallurgical Consultants (Permit#1000357).
- I have worked as a Metallurgical Process Engineer for over 35 years. I have worked on numerous precious metal and base metal projects. Recent resource projects in BC include Southern Silver's Cerro Las Minitas project.
- As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101).
- I have not visited the property.
- I am responsible for Sections: 1.14, 1.16.2, 1.17.2, 1.17.5, 13, 25.3, 25.5.2, and 26.3 of the technical report.
- I am independent of GoldMining Inc. as independence is described by Section 1.5 of NI 43–101.
- I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Amended Date: 29 October 2021

"Signed and Sealed"

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Signature of Qualified Person
Arthur Barnes P. Eng. FSAIMM.

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1 SUMMARY

1.1 Introduction

The authors have prepared an updated Mineral Resource Estimate (MRE) for GoldMining Inc. (GoldMining) of the Whistler Project located in Alaska, U.S.A. The Whistler Project resource estimate includes the Whistler, Raintree, and Island Mountain deposits.

1.2 Mineral Resource Estimate

The Whistler Project total Mineral Resource Estimate includes the Whistler, Raintree and Island Mountain deposits and is summarized in Table 1-1 for the base case cut-off grade. Mineral Resources were estimated using the 2019 CIM Best Practice Guidelines and are reported using the 2014 CIM Definition Standards.

The MRE utilizes pit shells to constrain resources at the Whistler, Island Mountain, and Raintree West gold-copper deposits, as well as an underground potentially mineable shape to constrain the resource estimate for the deeper portion of the Raintree West deposit. The current estimate has been updated with new metal prices of US$1,600/oz gold price, US$3.25 copper and US$21/oz silver, updated recoveries, smelter terms, costs, as summarized in the notes to Table 1-1. Geologic modelling has also been updated, with drilling and exploration work completed prior to 2016. No additional work was completed on the project after 2016.

These mineral resource estimates include inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The estimate of Mineral Resources may be materially affected by environmental permitting, legal, title, taxation, sociopolitical, marketing, or other relevant factors. The Qualified Person (QP) is not currently aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing, or other relevant issue that could materially affect this MRE.

Table 1-1 Mineral Resource Estimate for the Total Whistler Project (Effective date: June 11, 2021)

Class	Deposit	Cut-off	ROM tonnage	In situ Grades					In situ Metal			
		(US$/t)	(ktonnes)	NSR (US$/t)	AuEqv (gpt)	Au (gpt)	Cu (%)	Ag (gpt)	AuEqv (Koz)	Au (koz)	Cu (klbs)	Ag (koz)
Indicated	Whistler	10.5	107,771	26.44	0.79	0.50	0.17	1.95	2,738	1,749	399,396	6,757
	Raintree-Pit	10.5	7,756	20.61	0.67	0.49	0.09	4.88	166	121	14,893	1,216
	Indicated Open Pit	**10.5**	**115,527**	**26.05**	**0.78**	**0.50**	**0.16**	**2.15**	**2,904**	**1,871**	**414,289**	**7,973**
	Raintree-UG	US$25 shell	2,675	34.02	1.03	0.79	0.13	4.18	89	68	7,690	359
	Total Indicated	varies	118,202	26.23	0.79	0.51	0.16	2.19	2,993	1,939	421,979	8,332
Inferred	Whistler	10.5	153,536	19.17	0.57	0.35	0.13	1.48	2,829	1,706	455,267	7,306
	Island Mountain	10.5	111,901	18.99	0.57	0.47	0.05	1.06	2,042	1,701	130,751	3,814
	Raintree-Pit	10.5	11,774	24.28	0.77	0.62	0.07	4.58	291	235	17,988	1,732
	Inferred Open Pit	**10.5**	**277,211**	**19.32**	**0.58**	**0.41**	**0.10**	**1.44**	**5,162**	**3,642**	**604,006**	**12,851**
	Raintree-UG	US$25 shell	39,772	32.65	1.00	0.80	0.12	2.51	1,284	1,027	107,411	3,208
	Total Inferred	varies	316,983	20.99	0.63	0.46	0.10	1.58	6,446	4,669	711,417	16,060

Notes to Table 1-1:

1. *Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources will be converted into mineral reserves.*
2. *Resources are reported using the 2014 CIM Definition Standards and were estimated using the 2019 CIM Best Practices Guidelines.*
3. *The Mineral Resource for Whistler deposit and the upper portions of the Raintree West deposits have been confined by an open pit with "reasonable prospects of eventual economic extraction" using the following assumptions:*
   - *Metal prices of US$1,600/oz Au, US$3.25/lb Cu and US$21/oz Ag;*
   - *Payable metal of 99% payable Au, 90% payable Ag and 1% deduction for Cu;*
   - *Offsite costs (refining, transport and insurance) of US$136/wmt proportionally distributed between Au, Ag and Cu;*
   - *Royalty of 3% NSR;*
   - *Pit slopes are 50 degrees;*
   - *Mining cost of US$1.80/t for waste and US$2.00/t for mineralized material; and*
   - *Processing, general and administrative costs of US$10.50/t.*
4. *The lower portion of the Raintree West deposit has been constrained by a mineable shape with "reasonable prospects of eventual economic extraction" using a US$25.00/t cut-off.*
5. *Metallurgical recoveries are: 70% for Au, 83% for Cu, and 65% Ag for Ag grades below 10g/t. The Ag recovery is 0% for values above 10g/t for all deposits.*
6. *The NSR equations are: below 10g/t Ag: NSR (US$/t)=(100%-3%)*((Au*70%*US$49.273g/t) + (Cu*83%*US$2.966*2204.62 + Ag*65%*US$0.574)), and above 10g/t Ag: NSR (US$/t)=(100%-3%)*((Au*70%*US$49.256g/t) + (Cu*83%*US$2.965*2204.62)) ;*
7. *The Au Equivalent equations are: below 10g/t Ag: AuEq=Au + Cu*1.5733 +0.0108Ag, and above 10g/t Ag: AuEq=Au + Cu*1.5733*
8. *The specific gravity for each deposit and domain ranges from 2.76 to 2.91 for Island Mountain, 2.60 to 2.72 for Whistler with an average value of 2.80 for Raintree West.*
9. *Numbers may not add due to rounding.*

1.3 Terms of Reference

The report supports disclosures in GoldMining's press release entitled "GoldMining Announces and Updated Mineral Resource Estimate for the Whistler Project, Alaska" dated June 21, 2021. The issuer for which this report has been prepared is GoldMining Inc., a company under the laws of Canada.

1.4 Project Setting

The Whistler Project is a gold-copper exploration project located in the Yentna Mining District of Alaska, approximately 150km northwest of Anchorage.

The Whistler Project comprises 304 State of Alaska mining claims covering an aggregate area of approximately 172 km^2. The center of the property is located at 152.566° longitude west and 61.983° latitude north. The project is located in the drainage of the Skwentna River. Elevation varies from about 400m above sea level in the valley floors to over 5,000m in the highest peaks resulting in quite a spectacular landscape. The Whiskey Bravo gravel airstrip established adjacent to the Skwentna River is compliant for wheel-based aircraft up to DC-3s. A fifty-person camp is equipped with diesel generators, a satellite communication link, tent structures on wooden floors and several wood-frame buildings. Although chiefly used for summer field programs, the camp is winterized.

1.5 Mineral Tenure

Rights to the Whistler Project were acquired by GoldMining, through its wholly-owned subsidiary, BRI Alaska Corporation ("BRIA"), in August 2015 pursuant to an Asset Purchase Agreement (the "Asset Purchase") with Kiska Metals Corporation ("Kiska") in exchange for the issuance of 3,500,000 common shares in the capital of GoldMining Inc. as disclosed by news releases on July 21 and August 6, 2015. The project is subject to three underlying agreements, which were assigned to BRIA under the transaction.

1.5.1 Royalties and Encumbrances

The first underlying agreement is a Royalty Purchase Agreement between Kiska Metals Corporation, Geoinformatics Alaska Exploration Inc. and MF2, LLC, dated December 16, 2014. This agreement grants MF2 a 2.75 percent NSR royalty over all 304 claims, and extending outside the current claims over an Area of Interest defined by the maximum historical extent of claims held on the project as indicated on Figure 4-1. GoldMining can buy back 0.75 percent of the 2.75 percent NSR royalty for a payment of US$5,000,000 to MF2. Pursuant to an assignment agreement dated January 11, 2021, this right was conveyed to Gold Royalty U.S. Corp.

The second underlying agreement is an earlier agreement between Cominco American Incorporated and Mr. Kent Turner, (whose rights and obligations thereunder were assumed by BRIA) dated October 1, 1999. This agreement concerns a 2.0 percent net profit interest to Teck Resources, recently purchased by Sandstorm Gold, in connection with an Area of Interest specified by standard township sub-division as indicated in Figure 4-2.

The third underlying agreement is a Purchase and Sale agreement between Kent Turner, Kiska Metals Corporation and Geoinformatics Alaska Exploration Inc. (whose rights and obligations thereunder were assumed by BRIA) dated December 16, 2014 that terminates the "Turner Agreement" (an agreement that grants Kennecott and its successors a 30-year lease on twenty-five unpatented State of Alaska Claims; see Figure 4-2) and transfers to Kiska and Geoinformatics, and their successors, an undivided 100 percent of the legal and beneficial interest in, under, to, and respecting the Turner Property free and clear of all Encumbrances arising by, through or under Turner other than the Cominco American net profit interest. In addition to the above royalties, pursuant to a royalty agreement dated January 11, 2021 between BRIA and Gold Royalty U.S. Corp, Gold Royalty U.S. Corp holds a 1% NSR royalty covering the Whistler Project.

1.6 Surface Rights

Under AS 38.05.255, the surface uses of land or water included within a state mining location that the owners, lessees, or operators of the location may undertake by virtue of such location are (a) are limited

to those necessary for the prospecting for, extraction of, or basic processing of minerals and (b) shall be subject to reasonable concurrent uses (Stoel Rives, 2021).

1.7 Accessibility, Climate, Local Resources, Infrastructure and Physiography

1.7.1 Accessibility and Climate

The Whistler Project is located in the Alaska Range approximately 150km northwest of Anchorage and 76km west of the township of Skwentna as illustrated in Figure 4-1. Access to the project area is by fixed wing aircraft to a gravel airstrip located adjacent to the Whistler exploration camp. The project area is between regions of maritime and continental climate and is characterized by severe winters and hot, dry summers. Annual precipitation ranges from 500 to 900mm. Winter snow accumulation usually begins in October and by mid to late May the snow has melted sufficiently to allow for fieldwork.

1.7.2 Local Resources and Infrastructure

The nearest public infrastructure for the Whistler Project is the town of Petersville, located approximately 100km west of Whistler; Petersville is connected to Anchorage by an all-weather road and highway. The Whistler Project is supported by a fifty person, all season camp located on the banks of the Skwentna River approximately 2.7km from the Whistler Deposit and 22km from the Island Mountain prospect. The camp is connected to the Whistler Deposit by a 6km access road.

1.7.3 Physiography

The project is located in the drainage of the Skwentna River that forms a large network of interconnected low-elevation U-shaped valleys cutting through the rugged terrain of the southern Alaska Range. Elevation varies from about 400m above sea level in the valley floors to over 5,000m in the highest peaks resulting in a quite spectacular landscape.

1.8 History

Mineral exploration in the Whistler area was initiated by Cominco Alaska Inc. in 1986, and continued through 1989. During this period, the Whistler and the Island Mountain gold-copper porphyry occurrences were discovered and partially tested by drilling. In 1990, Cominco's interest waned and all cores from the Whistler region were donated to the State of Alaska. The property was allowed to lapse.

In 1999, Kent Turner staked twenty-five State of Alaska mining claims at Whistler and leased the property to Kennecott. From 2004 through 2006 Kennecott conducted extensive exploration of Whistler region, including geological mapping, soil, rock and stream sediments sampling, ground induced polarization, the evaluation of the Whistler gold-copper occurrence with fifteen core boreholes and reconnaissance core drilling at other targets in the Whistler region totalling 12,449m Over that period Kennecott invested over USD$6.3 million in exploration.

From 2007 through 2008, Geoinformatics drilled thirteen holes for 6,027m on the Whistler Deposit and five holes for 1,597m on other exploration targets in the Whistler area. Drilling by Geoinformatics on the Whistler Deposit was done to infill the deposit to sections spaced at 75m and to test for the north and south extensions of the deposit. Exploration drilling by Geoinformatics in the Whistler area targeted geophysical anomalies in the Raintree and Rainmaker areas, using the same basic porphyry exploration model as Kennecott.

Kiska was formed in 2009 by the merger of Geoinformatics Exploration Inc. and Rimfire Minerals Corporation in order to advance exploration on the Whistler Project. The rights to the property were acquired by Geoinformatics from Kennecott in 2007 subject to exploration expenditures totalling a minimum of USD$5.0 million over two years, two underlying agreements, and certain back-in rights retained by Kennecott to acquire up to sixty percent of the project. In September 2010, Kennecott's back-in right was extinguished after the completion and review of a geophysical and drilling program (the "Trigger Program") whose technical direction was guided by Kiska and Kennecott. From that time forward, Kiska continued to explore the project and completed a total of 48,498m of drilling, several large geophysical surveys, and an updated Whistler Deposit resource estimate, for a total expenditure of USD$29.4 million. Kiska's primary objective was to explore the entire project area and test porphyry targets other than the Whistler Deposit, including Raintree West and the Island Mountain Breccia Zone (hereafter referred to as the Island Mountain Deposit).

1.9 Geologic Setting and Mineralization

Alaskan geology consists of a collage of various terrains that were accreted to the western margin of North America as a result of complex plate interactions through most of the Phanerozoic. The southernmost Pacific margin is underlain by the Chugach–Prince William composite terrain, a Mesozoic-Cenozoic accretionary prism developed seaward from the Wrangellia composite terrain. It comprises arc batholiths and associated volcanic rocks of Jurassic, Cretaceous, and early Tertiary age.

The Alaska Range represents a long-lived continental arc characterized by multiple magmatic events ranging in age from about 70 million years ("Ma") to 30Ma and associated with a wide range of base and precious metals hydrothermal sulphide bearing mineralization. The geology of Whistler Project is characterized by a thick succession of Cretaceous to early Tertiary (ca. 97 to 65 Ma) volcano-sedimentary rocks intruded by a diverse suite of plutonic rocks of Jurassic to mid-Tertiary age.

Two main intrusive suites are important in the Whistler Project area:

1) The Whistler Igneous Suite comprises alkali-calcic basalt-andesite, diorite and monzonite intrusive rocks approximately 76Ma with restricted extrusive equivalent. These intrusions are commonly associated with gold-copper porphyry-style mineralization (Whistler Deposit).
2) The Composite Suite intrusions vary in composition from peridotite to granite and their ages span from 67 to about 64Ma. Gold-copper veinlets and pegmatitic occurrences are characteristics of the Composite plutons (e.g. the Mt. Estelle prospect, the Muddy Creek prospect).

The Whistler Project was acquired for its potential to host magmatic hydrothermal gold and copper mineralization. Magmatic hydrothermal deposits represent a wide clan of mineral deposits formed by the circulation of hydrothermal fluids into fractured rocks and associated with the intrusion of magma into the crust. Exploration work completed by Kennecott, Geoinformatics, and Kiska has discovered several gold-copper sulphide occurrences exhibiting characteristics indicative of magmatic hydrothermal processes and suggesting that the project area is generally highly prospective for porphyry gold-copper deposits.

1.10 Exploration

Kennecott completed airborne helicopter geophysical surveys during 2003 and 2004. Results from these airborne surveys were used to interpret geological contacts, fault structures and potential mineralization in the Whistler, Island Mountain, and Muddy Creek areas. In particular, the airborne magnetic data showed that the Whistler Deposit displays a strong 900m by 700m positive magnetic anomaly attributed to the magnetic Whistler Diorite intrusive complex (host to the Whistler Deposit) in addition to a contribution from secondary magnetite alteration and veining associated with Au-Cu mineralization.

Cominco acquired 8.4 line-km of 2D Induced Polarization geophysics with results used to target the deposit area with subsequent drilling. From 2004 to 2006, Kennecott completed 39.4 line-kilometres of 2D IP geophysics in the Whistler area. Subsequent lines targeted magnetic anomalies at the Round Mountain, Canyon Creek, Canyon Ridge, Canyon Mouth, Long Lake Hills, Raintree, and Rainmaker prospects. In 2007-2008, Geoinformatics completed 8.8 line-km of 2D IP from six separate reconnaissance lines in the Whistler area targeting airborne magnetic highs. Anomalous results from this survey in the Raintree area led to the Raintree West discovery. In 2009, Kiska completed 224 line-kilometres of a 3D Induced Polarization geophysical survey. This was executed on two grids (Round Mountain; Whistler Area). This survey reaffirmed that the Whistler Deposit is coincident with a discrete 3D chargeability anomaly.

1.11 Drilling

No drilling has been done on the Whistler Project by GoldMining. A total of 70,247m of diamond drilling in 257 holes are documented in the Whistler database for drilling on the Whistler Project by Cominco, Kennecott, Geoinformatics, and Kiska from 1986 to the end of 2011. Of these drillholes 21,132m in 52 holes have been drilled in the Whistler Deposit area, 20,479m in 94 holes have been drilled in the Raintree area, and 14,410m in 36 holes comprise the Island Mountain resource area. There are 14,226m in 75 holes in areas outside the three resource areas.

1.12 Sample Preparation Analysis and Security

No sampling has been done by GoldMining. Nothing is known about sampling and analysis by Cominco. Previous operators Kennecott, Geoinformatics, and Kiska used industry standard practices to collect, handle and assay soil, rock and core samples collected during the period 2004-2011. These procedures are documented in detailed reports describing pertinent aspects of the exploration data collection and management.

All assay samples were assayed at either the Alaska Assay Laboratory (2004 and 2009) in Fairbanks, Alaska, or the accredited ALS-Chemex laboratory in Vancouver, British Columbia for all other years. Sample preparation was accomplished in Alaska, either at the Alaska Assay Lab or ALS-Chemex preparation lab in Anchorage, Alaska. Samples were assayed for gold by fire assay and a suite of elements including silver and copper by aqua regia or multi-acid digestion and inductively coupled plasma atomic emission spectroscopy. Operators Kennecott, Geoinformatics, and Kiska used industry standard quality control practices during exploration at Whistler. Analysis of the QAQC data indicates the assay data is of sufficient quantity and quality for resource estimation.

1.13 Data Verification

A site visit was conducted on May 21, 2021 by Kirstin Girdner, an author of this report. No observations contradicting previously published information were made. The assay database did not have certificate numbers attached to the sample IDs, this was accomplished by the authors to the extent possible. Certificate checks revealed some minor errors which were corrected prior to resource modeling. Not all assay data in the database is supported by certificates and QAQC these percentages are consistent with similar projects that have undergone several changes in ownership. The assay database is determined to be of sufficient quality and accuracy for resource estimation.

1.14 Metallurgy

The metallurgical testwork upon which the recoveries applied to Au, Ag, and Cu as stated in the Resource estimate are based involved: selection of appropriate drill core standard sample preparation of drill core sections at various metallurgical laboratories followed by batch froth flotation to recover pay metals in a copper sulphide concentrate. The laboratories used performed their testing in a competent manner within the scope of their investigations. Full details are provided in Section 13 of this report. Conceptual process plant parameters derived from test data are outlined in Section 17.

1.15 Permitting

GoldMining has submitted an Application for Permit to Mine in Alaska (APMA) to Alaska's Department of Natural Resources (ADNR) for the issuance of permits that will allow for future exploration work on the property. The status of the APMA is pending and GoldMining expects to receive approval in due course.

1.16 Risks and Opportunities

1.16.1 Sampling, Preparation, Analysis and Data Risks and Opportunities

GoldMining has the opportunity to add QAQC data for silver and to collect and complete the missing certificate numbers in the database. This information would more completely support the assay database.

The drill core is currently stored in wood boxes that are subject to weathering on site, which as contributed to some deterioration. An opportunity exists to protect these samples from further weathering by moving them or building a dry storage facility. The risk of continued decay is that the historic core may no longer be available to future potential owners for review and verification.

A collar survey that was to have been done in 2012 does not appear to have been completed. Review of three collar locations during the site visit suggests that more accurate drillhole locations are possible.

1.16.2 Metallurgical Testwork Risks and Opportunities

Analyses and accounting of Ag were omitted from the metallurgical testwork, which focused on Cu and Au grades and recoveries in what was anticipated initially to be a Cu-Au resource. Future testwork which includes Ag accounting would likely result in improved estimates of silver recovery and revenue contribution.

1.16.3 Resource Estimate Risks and Opportunities

Risk in the geologic interpretations relating to the continuity of the mineralization exist and can be mitigated by additional geologic modelling for use in controlling the block model interpolations. A

description of additional potential risk factors concerning the resource estimate is given in Table 1-2 along with either the justification for the approach taken or mitigating factors in place to reduce any risk.

Table 1-2 List of Risks and Mitigations/Justifications

#	Description	Justification/Mitigation
1	Classification Criteria	Classification based on the Range of the Variogram and therefore the variability of the mineralization within each deposit.
2	Gold and Silver Price Assumptions	Based on three year trailing average (Kitco, 2021)
3	Capping	CPP, swath plots and grade-tonnage curves show model validates well with composite data throughout the grade distribution.
4	Processing and Mining Costs	Based on comparable projects in Alaska.

Opportunities to increase the confidence in the resource through infill drilling and to expand the resource from step-out and exploration drilling are discussed in the recommendations section below.

1.17 Conclusions and Recommendations

The QPs make the following conclusions regarding sampling, analysis, metallurgical testwork and the resource estimate.

1.17.1 Sampling, Preparation, Analysis Conclusions

In the opinion of the QP, sampling preparation, analysis, and security by previous operators are consistent with industry standard practices. Review and analysis of the assay database and QAQC data shows the assay database is of sufficient quality for resource estimation.

1.17.2 Metallurgical Testwork Conclusions

The recoveries used for Resource estimate are reasonable for this level of study based on the metallurgical testing to date.

1.17.3 Resource Estimate Conclusions

In the opinion of the QP the block model resource estimate and resource classification reported herein are a reasonable representation of the global gold, copper, and silver mineral resources found in the Whistler, Raintree West, and Island Mountain deposits. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

The QPs make the following conclusions regarding sampling, analysis, metallurgical testwork and the resource estimate.

1.17.4 Sampling, Preparation, Analysis Recommendations

- QAQC for silver was not available, data for blanks and duplicates should be collected from the database. Future drilling should include CRMs for silver.
- Future programs should ensure that QAQC sample failures are identified and affected samples are re-assayed.
- Survey of 10% of collar locations be accomplished and all resurveyed as necessary.
- GoldMining continue to amend the assay database with certificate numbers and locate missing certificates as necessary.

1.17.5 Metallurgical Recommendations

- Mineralogical studies to better understand the gold associations
- Comminution testing specifically to address SAG mill power requirements and design
- Variability testing
- Confirmatory locked cycle flotation testing at the coarser primary grind size
- Testwork to include feed material containing Pb, Zn sulphide, and higher Ag grade material

1.17.6 Resource and Exploration Recommendations

- Further step-out and infill drilling at Raintree West and Island Mountain to upgrade the resource classification and to potentially add new resources.
- Construction of a geological model and mineral domains at Raintree West.
- Preliminary metallurgical testwork for Raintree West.
- Additional geological modelling and mineral domain definition at the Whistler Deposit in order to further determine potential lithological and structural controls on mineralization, with potential updates to the resource estimate.
- The collection of additional specific gravity measurements from existing drillholes at all deposits to augment the database.
- Additional in-fill drilling at the Whistler Deposit to upgrade the classification of Inferred to Indicated with 50m drillhole spacing.
- Top-of-bedrock grid drilling in the Whistler area to define new targets.
- A new and full review of all exploration data, with an outlook to review, and rank all targets for further exploration drilling.

2 INTRODUCTION

GoldMining Inc. (GoldMining) is a public mineral exploration company who holds the rights to the Whistler gold-copper property located 150km northwest of Anchorage, Alaska. GoldMining is a public mineral exploration company focused on the acquisition and development of gold assets in the Americas. Through its disciplined acquisition strategy, GoldMining now controls a diversified portfolio of resource-stage gold and gold-copper projects in Canada, U.S.A., Brazil, Colombia, and Peru.

Moose Mountain Technical Services (MMTS) and the authors were retained by the issuer, GoldMining to produce an updated resource estimate on the Whistler Project for the Whistler, Raintree West, and Island Mountain deposits. The effective date for this estimate is June 11, 2021.

2.1 Terms of Reference

The report supports disclosures in GoldMining's press release entitled "GoldMining Announces and Updated Mineral Resource Estimate for the Whistler Project, Alaska" dated June 21, 2021.

All measurement units used in this Report are metric, and currency is expressed in US dollars unless stated otherwise. Mineral Resources and Mineral Reserves are estimated using the 2019 edition of the Canadian Institute of Mining, Metallurgy and Exploration (CIM) Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Best Practice Guidelines), and are reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (2014 CIM Definition Standards).

2.2 Qualified Persons

The following serve as the qualified persons (QPs) for this Technical Report as defined in National Instrument 43-101, *Standards of Disclosure for Mineral Projects*, and in compliance with Form 43-101F1:

- Sue Bird, P.Eng., Moose Mountain Technical Services; responsible for Sections 1.1 through 1.10, 1.15, 1.16.3, 1.17.3, 1.17.6, 2 through 9, 14 through 24, 25.4, 25.5.3, 26.4, and 27 of the technical report.
- Kirstin Girdner, P.E., Moose Mountain Technical Services; responsible for Sections: 1.11, 1.12, 1.13, 1.16.1, 1.17.1, 1.17.4, 10, 11, 12, 25.1, 25.2, 25.5.1, 26.1, and 26.2 of the technical report.
- Arthur Barnes, P.Eng., MPC Metallurgical Consultants Ltd. responsible for Sections: 1.14, 1.16.2, 1.17.2, 1.17.5, 13, 25.3, 25.5.2, and 26.3 of the technical report.

2.3 Site visits and Scope of Personal Inspection

Kirstin Girdner, PE, of MMTS, visited the Whistler Project site on May 21, 2021. Observations of the core storage, drill core, core shed, unoccupied camp and several drillhole locations and drill pads were made during this site visit.

2.4 Effective Date

The overall Report effective date is June 11, 2021.

2.5 Sources of Information

Sources of information are listed in the references, Section 27.

3 RELIANCE ON OTHER EXPERTS

The QP authors of this Report state that they are qualified persons for those areas as identified in the "Certificate of Qualified Person" for each QP, as included in this Report. The QPs have relied, and believe there is a reasonable basis for this reliance, upon the following other expert reports, which provided information regarding mineral rights, surface rights, and environmental status in sections of this Report as noted below.

3.1 Mineral Tenure and Surface Rights

The QPs have not reviewed the mineral tenure, nor independently verified the legal status, ownership of the Project area or underlying property agreements. The QPs have fully relied upon, and disclaim responsibility for, information supplied by GoldMining experts and experts retained by GoldMining for this information through the following documents:

- Letter from Stoel Rives, LLP dated Aug 3, 2021 and titled: Limited Title Review for Alaska State Mining Claims.

This title information is used in Section 4.0 and 4.1 of the Report.

3.2 Royalties and Incumbrances

The QPs have not reviewed the royalty agreements nor independently verified the legal status of the royalties and other potential incumbrances. The QPs have fully relied upon, and disclaim responsibility for, information supplied by GoldMining experts and experts retained by GoldMining for this information through the following documents. This information was provided as a series of letters from GoldMining:

- Letter from Stoel Rives, LLP dated January 11, 2021 and titled: Net Smelter Return royalty Agreement

This title information is used in Section 4.1 of the Report.

4 PROPERTY DESCRIPTION AND LOCATION

The Whistler Project is located in the Alaska Range approximately 150km northwest of Anchorage. The centre of the property is located at 152.57 degrees longitude west and 61.98 degrees latitude north.

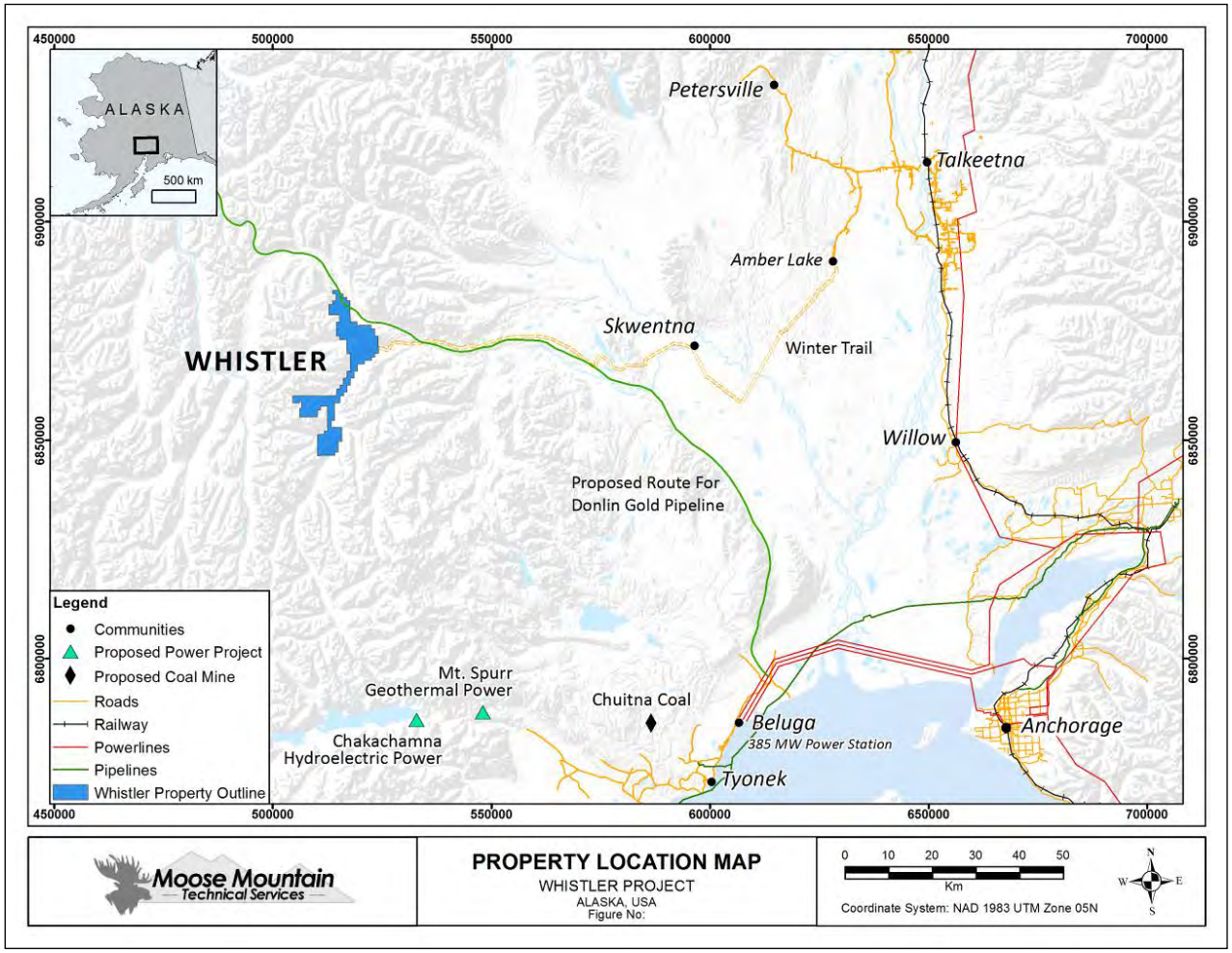


Figure 4-1 Location of the Whistler Project (Source: MMTS, 2016, modified from Roberts, 2011a)

The Whistler Project comprises 304 State of Alaska mining claims covering an aggregate area of approximately 172km^2 in the Yentna Mining District of Alaska. All of the claims are owned by GoldMining. The property boundaries have not been legally surveyed.

An all season camp facility exists near the confluence of Portage Creek and the Skwentna River, approximately 15km southeast of the Rainy Pass Hunting Lodge. The camp is serviced with a 1,000m gravel airstrip for wheel-based aircrafts. The camp is equipped with diesel generators, a satellite communication link, tent structures on wooden floors, and several wood-framed buildings.

GoldMining, through its subsidiary BRIA, acquired its rights to the project on August 5, 2015 pursuant to an asset purchase agreement date August 5, 2015 between GoldMining, BRIA, Kiska Metals Corporation

and Geoinformatics Alaska Exploration, Inc. in exchange for the issuance of 3,500,000 GoldMining shares as set out in GoldMining's news release of August 6, 2015. Copy of the agreement is attached.

A full Claims List can be found in Appendix A at the end of this report. Annual Labor requirements:

- $400 for each quarter section MTRS claim
- $100 each for any other type of claim

Labor must be performed by September 1 of each year and the statement of annual labor must be recorded by November 30. Excess labor from previous years may be carried forward.

4.1 Royalties and Encumbrances

The first underlying agreement is a Royalty Purchase Agreement between Kiska Metals Corporation, Geoinformatics Alaska Exploration Inc. and MF2, LLC, dated December 16, 2014. This agreement grants MF2 a 2.75 percent NSR royalty over all 304 claims, and extending outside the current claims over an Area of Interest defined by the maximum historical extent of claims held on the project as indicated on Figure 4-1. GoldMining can buy back 0.75 percent of the 2.75 percent NSR royalty for a payment of US$5,000,000 to MF2. Pursuant to an assignment agreement dated January 11, 2021, this right was conveyed to Gold Royalty U.S. Corp.

The second underlying agreement is an earlier agreement between Cominco American Incorporated and Mr. Kent Turner (whose rights and obligations thereunder were assumed by BRIA) dated October 1, 1999. This agreement concerns a 2.0 percent net profit interest to Teck Resources, recently purchased by Sandstorm Gold, in connection with an Area of Interest specified by standard township sub-division as indicated in Figure 4-2.

The third underlying agreement is a Purchase and Sale agreement between Kent Turner, Kiska Metals Corporation and Geoinformatics Alaska Exploration Inc. (whose rights and obligations thereunder were assumed by BRIA) dated December 16, 2014 that terminates the "Turner Agreement" (an agreement that grants Kennecott and its successors a 30-year lease on twenty-five unpatented State of Alaska Claims; see Figure 4-2) and transfers to Kiska and Geoinformatics, and their successors, an undivided 100 percent of the legal and beneficial interest in, under, to, and respecting the Turner Property free and clear of all Encumbrances arising by, through or under Turner other than the Cominco American net profit interest. In addition to the above royalties, pursuant to a royalty agreement dated January 11, 2021 between BRIA and Gold Royalty U.S. Corp, Gold Royalty U.S. Corp holds a 1% NSR royalty covering the Whistler Project.

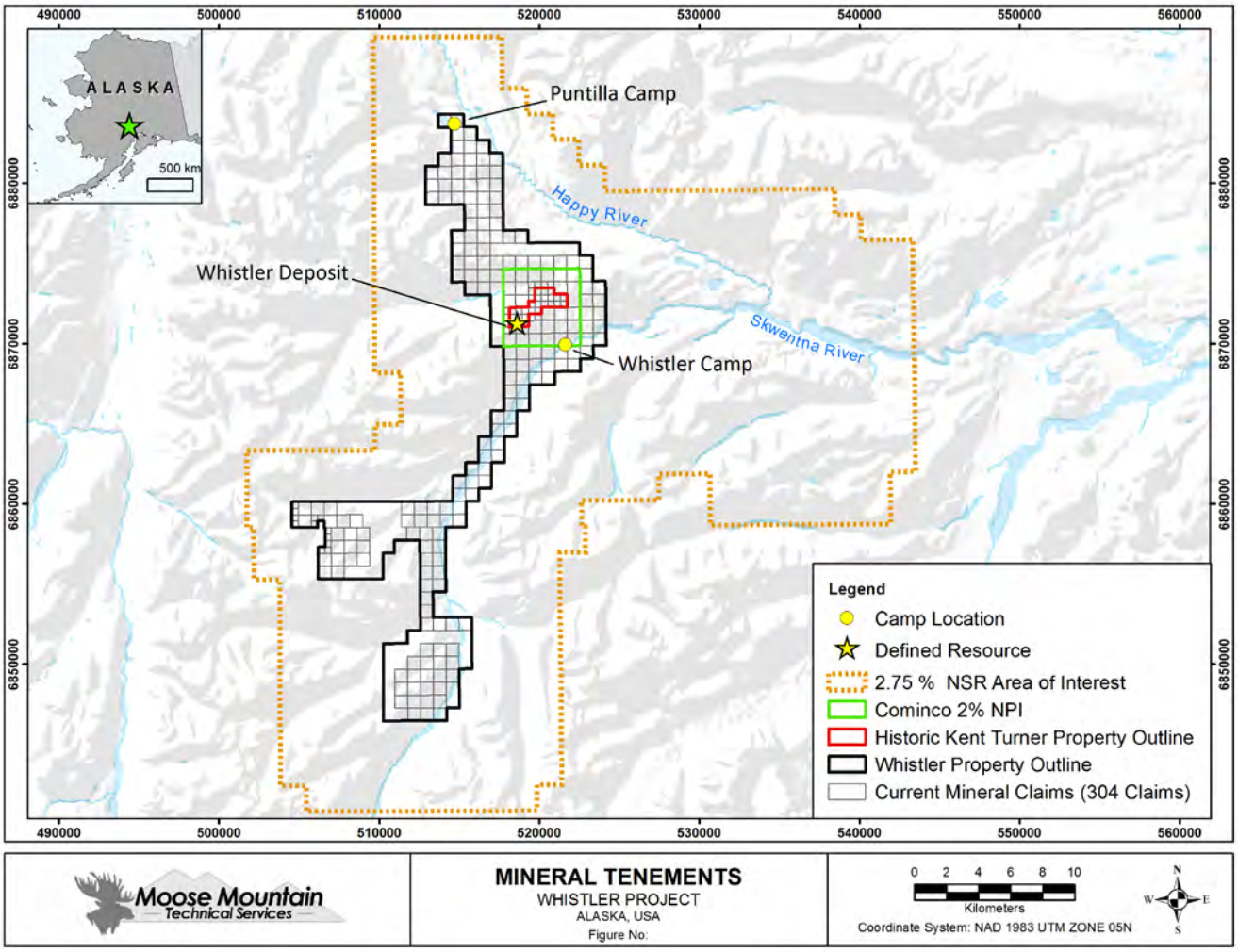


Figure 4-2 Tenement Map (Source: MMTS, 2016)

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Whistler Project is located in the Alaska Range approximately 150km northwest of Anchorage and 76km west of the township of Skwentna as illustrated in Figure 4-1. Access to the project area is by fixed wing aircraft to the Whiskey Bravo gravel airstrip located adjacent to the Whistler exploration camp. In the winter of 2011, Kiska had constructed a temporary winter trail to the Whistler Project that was then used for the inbound transportation of fuel, earth moving equipment, and bulk items for the camp and exploration programs. A 1,000m compacted gravel runway provides a nearly year round landing surface. The runway is capable of landing DC-3 class aircraft and smaller and is currently shared with the Estelle Gold Project by Nova Minerals (Figure 5-1).

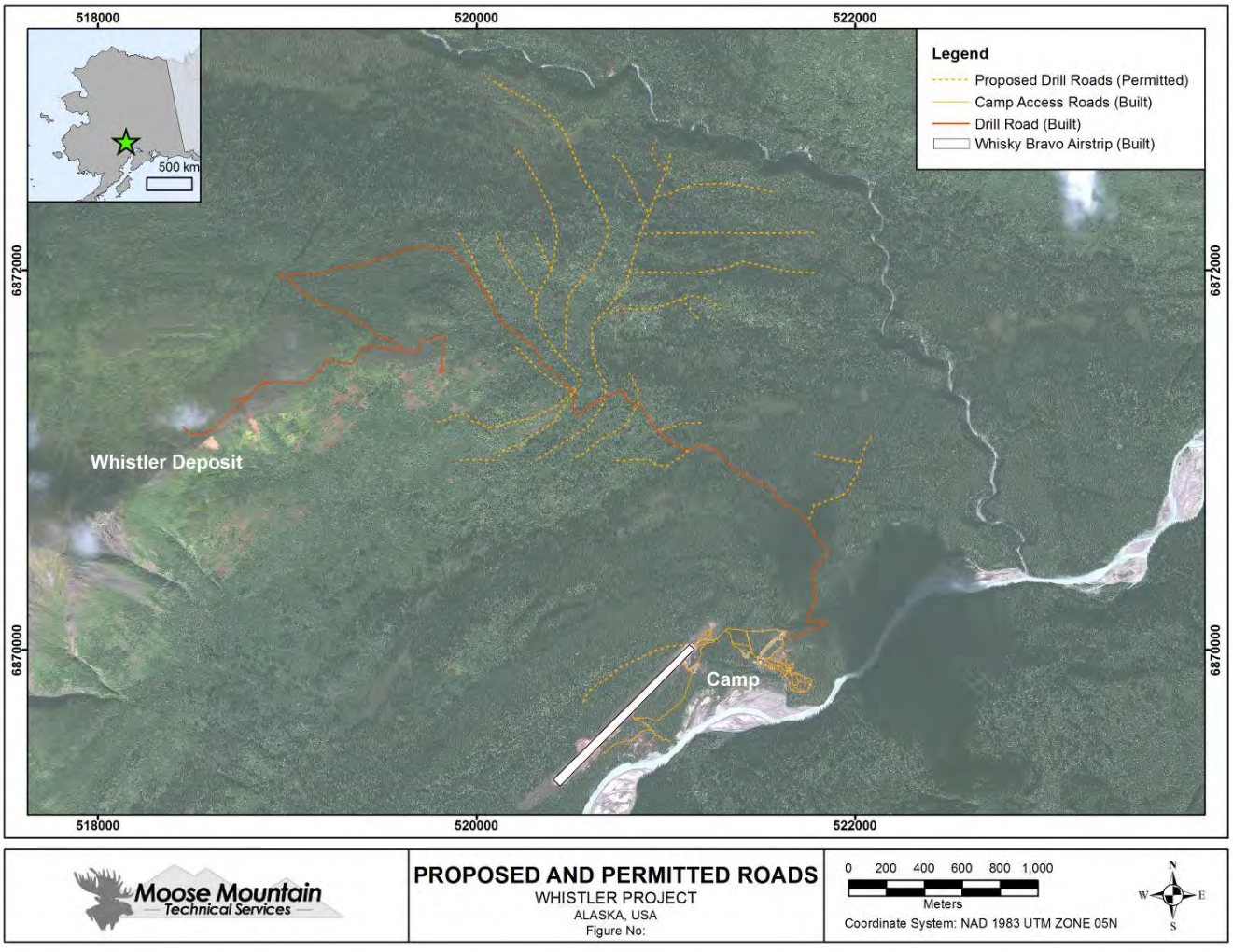


Figure 5-1 Layout of Built and Proposed (and permitted) Roads in the Whistler Area (Source: MMTS, 2016)

5.2 Climate

The project area is between regions of maritime and continental climate and is characterized by severe winters and warm, dry summers. The maritime climatic influence provides for dry, mild and temperate summers. Fog and low clouds are common in mid-summer and fall especially around higher elevation areas. Average summer temperatures range between 5° and 20° C, whereas winter temperatures range from -15° to -5° C. Occasionally, arctic cold fronts will propagate across the Alaska Range from the interior, causing cold dry air to seep into the watershed. These infrequent stationary high pressure systems can lead to clear days with temperatures dropping to a low of -35° C during the winter. Strong winds persist during the winter months. Annual precipitation ranges from 500 to 900mm. Winter snow accumulation usually begins in October and by mid to late May the snow has melted sufficiently to allow for fieldwork.

5.3 Local Resources

The nearest public infrastructure for the Whistler Project is the town of Petersville, located approximately 100km west of Whistler; Petersville is connected to Anchorage by an all-weather road and highway. The project is also located approximately 150km north of the Beluga coalfield project and the Tyonek gas power station on the Cook Inlet coast.

5.4 Infrastructure

The Whistler Project is supported by a fifty person, all season camp located on the banks of the Skwentna River approximately 2.7km from the Whistler Deposit and 22km from the Island Mountain prospect. The camp is connected to the Whistler Deposit by a 6km access road, as illustrated in Figure 5-2.

The camp is served by a 38 kilowatt generator, water well, septic system, showers and flush toilets, and a modern kitchen. A smaller 16 kilowatt backup and low peak need generator is also installed in the well/generator house. The camp has 37 sleeper tents, 3 wood frame cabins, a cook tent, a recreational tent, First Aid Tent, a wood frame well/generator house and a wood frame men's and women's shower/restroom building.

Core processing facilities consist of one insulated core cutting tent that houses two core saws. The core logging facilities consist of two 7m by 14m structures. One is an insulated tent and the other is a well-insulated, well lit, wood-frame building. All core cutting and logging facilities have decks that are designed for ease of handling large volumes of core with skid steer fork lifts. All areas around camp have graveled travel ways that connect camp facilities with runway facilities.

There is a wood-frame shop building that is for general camp maintenance and all rolling stock. The shop and core cutting facilities are supplied electricity by a separate generator building. A 20 kilowatt generator supplies power during peak months when both saws are running. A 16 kilowatt generator is available for lower peak needs and back-up.

Heavy equipment and ground transport machines at the Whistler Project include one Cat D6 bulldozer; one Cat 226B track skid-steer; one Bobcat skid-steer; one Volvo A-30 haul truck; ten snowmobiles; five ranger-style ATVs; and three 4-wheeler "Quad" ATVs.

An area, the size of a sports field, has been cleared and graveled for core storage. Adjacent areas can be cleared for more storage as the project grows. There are also two wooden-deck helicopter pads with a small building for helicopter support.

Figure 5-2 Layout of the Whiskey Bravo Camp and Facilities (Source: MMTS, 2016, modified from Roberts, 2011a)

The runway for the camp is illustrated in Figure 5-3. A 113,400 litre fuel storage facility is located at the north east end of the runway. All tanks are stored in separate lined containments. They are designed to contain at least 1.5 times the volume of the largest tank in the containment. All pumping is done through aircraft approved filter systems. Two buildings are located just off the runway for drilling company shop/warehouses and there is ample room for lay down areas for parts and materials storage.

Figure 5-3 Layout of the Runway relative to Camp (2016, modified from Roberts, 2011a)

Communications is provided by a wireless satellite system. There is also a cell phone repeater at the satellite communications station located on Whistler Ridge. It provides fair-quality cell phone service in camp.

5.5 Physiography

The project is located in the drainage of the Skwentna River that forms a large network of interconnected low-elevation U-shaped valleys cutting through the rugged terrain of the southern Alaska Range. Elevation varies from about 400m above sea level in the valley floors to over 5,000m in the highest peaks resulting in a quite spectacular landscape. The Alaska Range is a continuation of the Pacific Coast Mountains extending in an arc across the northern Pacific. Mount McKinley, North America's highest peak at 6,194 m, is located approximately 130km northeast of the project area. The vegetation in the Whistler region is quite variable. The valley floors and lower slopes are usually characterized by dense vegetation giving way above about 750m elevation to dense bushy shrubs rendering ground access difficult. At higher elevations, vegetation is absent and active glaciers with terminal and lateral moraines are present. The timber line is located at elevations varying between 800m to 1,100m. Bedrock exposures within the project area are scarce except at elevations above 1,000m and along incised drainage.

The Whistler Project mineral claims provide the area that is sufficient for the development of a potential open pit project, including tailings storage, waste disposal, potential processing plant sites and water sources. A source of power has yet to be determined and mining personnel would likely have to be housed in a camp.

6 HISTORY

During the late 1960s, regional mapping and geochemical sampling by the United States Geological Survey ("USGS") identified several base and precious metal occurrences over a very large area in the southern Alaska Range including southern portions of the Whistler project area.

Following the results of that work, limited exploration was conducted in the area during the 1960s and 1980s. Falconbridge (or their operator St. Eugene) was involved in exploring the nearby Stoney Vein in the late 1960s. A local prospector, Arne Murto (deceased), was active in the Long Lake Hills area from at least 1964 and AMAX staked at least four claims over the Lower Discovery showing at Mount Estelle (circa 1982).

Mineral exploration in the Whistler area was initiated by Cominco Alaska in 1986 and continued through 1989. During this period, the Whistler and the Island Mountain gold-copper porphyry occurrences were discovered and partially tested by drilling. In 1990, Cominco's interest waned and all core from the Whistler region were donated to the State of Alaska. The property was allowed to lapse.

In 1999, Kent Turner staked twenty-five State of Alaska mining claims at Whistler and leased the property to Kennecott. From 2004 through 2006 Kennecott conducted extensive exploration of the Whistler region, including geological mapping, soil, rock and stream sediments sampling, ground induced polarization and they conducted an evaluation of the Whistler gold-copper occurrence with fifteen core boreholes (7,948 m) and reconnaissance core drilling at other targets in the Whistler region (4,184 m). Over that period, Kennecott invested over USD$6.3 million in exploration.

In June 2007, Geoinformatics Exploration Inc. ("Geoinformatics") announced the conditional acquisition of the Whistler Project as part of a strategic alliance with Kennecott Exploration Company ("Kennecott"). Between July and October 2007, Geoinformatics drilled seven core boreholes (3,321 m) to infill the deposit to sections spaced at seventy-five metres and to test for the north and south extensions of the deposit.

In August 2009, Geoinformatics acquired Rimfire Minerals Corporation and changed its name to Kiska Metals Corporation ("Kiska"). In 2009 and 2010, Kiska completed three phases of exploration on the property to fulfill the terms of the Standardization of Back-In Rights ("SOBIR") Agreement between Kennecott Exploration Company and Kiska Metals Corporation.

In total, Kiska completed 224 line-km of 3D induced polarization ("IP") geophysics, 40 line-km of 2D IP geophysics, 327 line-km of cut-line, geological mapping on the 3D IP grid, detailed mapping of significant Au-Cu prospects, collection of 109 rock samples and 61 soil samples, 8,660m of diamond drilling from 23 drillholes (all greater than 200m in total length), petrographic analysis of mineralization at Island Mountain, a preliminary review of metallurgy at the Whistler Resource, and metallurgical testing of mineralization from the Discovery Breccia at Island Mountain. This program was executed by Kiska geologists, independent geologists and multiple contractors, under the supervision of Kiska personnel. All aspects of the exploration program were designed and monitored by a Technical Committee comprised of two Kennecott employees and two Kiska employees. In August of 2010, Kiska delivered a Technical Report (Roberts, 2010) to Kennecott summarizing the results of the completed Trigger Program. In September of 2010, Kennecott informed Kiska that it would not exercise its back-in right on the project and hence retained a 2% Net Smelter Royalty on the property.

From this point forward, Kiska continued to drill and explore the Whistler Project for the duration of the 2010 and 2011 field seasons. The majority of this work included shallow grid drilling (25m to 50m top of bedrock drilling) in the Whistler Area (also referred to as the Whistler Corridor), conventional step-out drilling from prospects in the Whistler Area, step-out drilling at the Island Mountain Breccia Zone, an airborne EM survey of the Island Mountain area, reconnaissance drilling at Muddy Creek, and minor infill drilling at the Whistler Deposit, followed by the publication of an updated NI43-101 resource estimate (MMTS, 2011).

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Geological Setting

The Whistler Project is situated within the Wrangellia Composite Terrane ("WCT"), one of three composite terranes accreted to the Alaskan portion of the North America Cordilleran margin in the Mesozoic and Cenozoic. This margin records a complex history of terrane accretion, basin formation, basin exhumation, subduction, and multiple pulses of magmatism.

In south-central Alaska, the WCT is comprised of three significant tectono-magmatic assemblages (Figure 7-1): 1) the Paleozoic-Triassic basement rocks upon which the Early to Late Jurassic Talkeetna island arc was built, including volumetrically significant plutonic rocks; 2) the Kahiltna assemblage, consisting of Jura-Cretaceous flysch sediments that formed in basins initiated by the convergence of Wrangellia with the former continental craton; and 3) voluminous Upper Cretaceous and Paleocene-Oligocene igneous rocks, dominantly plutons, that stitch the Wrangellia composite terrane with the inboard autochthonous terranes. The latter two assemblages dominate the regional geology of the Whistler area.

The Kahiltna assemblage occurs as a broad 100km by >300km belt extending across the Alaska Range. This assemblage is comprised of mostly marine sediments with fossils indicating deposition from the Late Jurassic to Early Cretaceous.

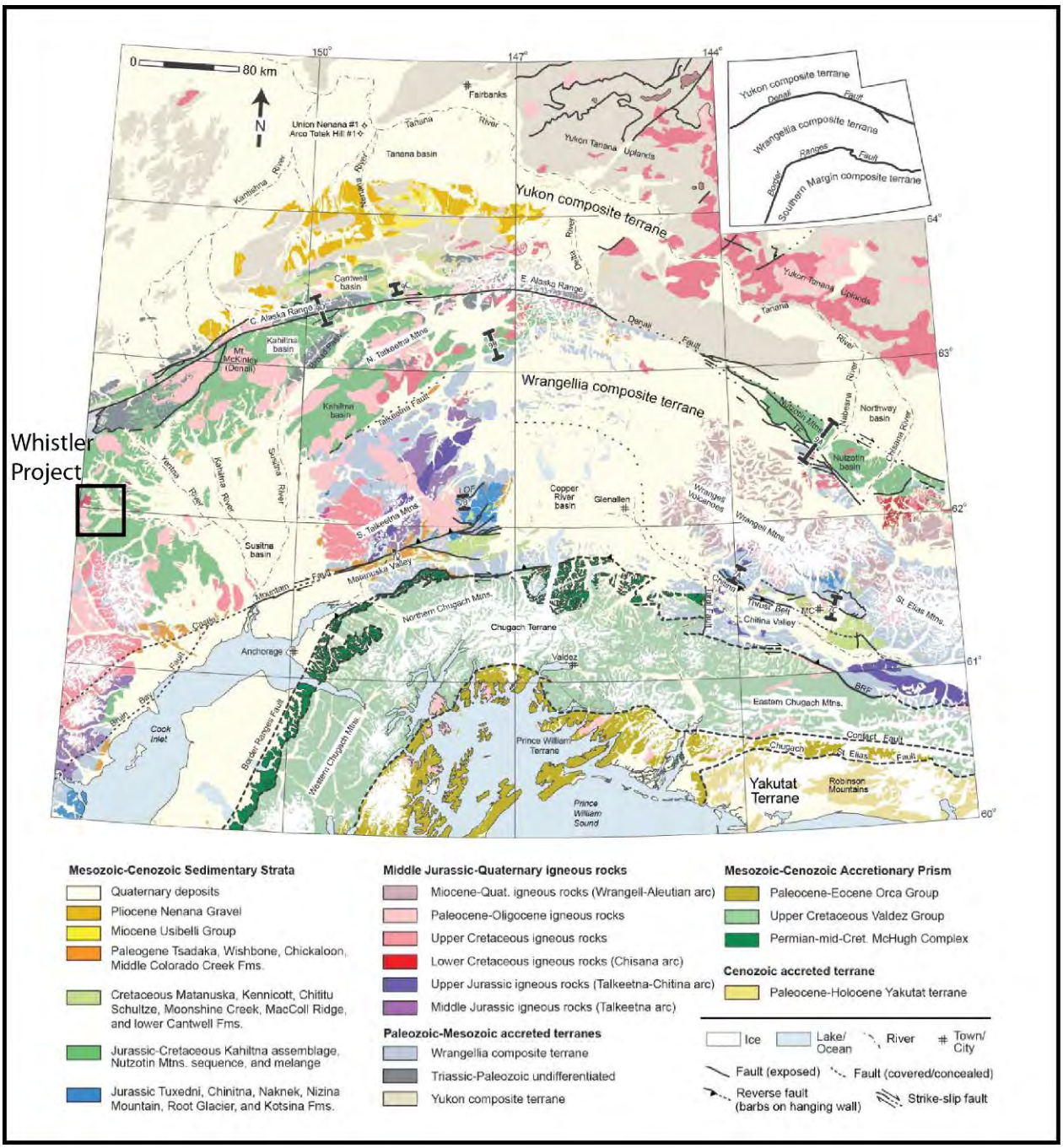


Figure 7-1 Regional Geological Map of South-central Alaska (Source: Trop and Ridgeway, 2007)

The black inset box shows the location of Whistler area and map extent in Figure 7-1 above.

Uplift and shortening of the Kahiltna basin was followed by the construction of a continental-margin arc as defined by an extensive belt of 80-60Ma plutons extending from the Alaska Range south-eastwards into the Coast Range of Canada. In the Alaska Range, these arc rocks are dominated by plutons interpreted to be the deeper roots of subvolcanic and volcanic centres; however extrusive sections are locally preserved.

There are four intrusive suites associated with this epoch of magmatism that are recognized in the Whistler region, including (from oldest to youngest): 1) the Whistler Intrusive Suite or "WIS" (host to the Whistler Deposit); 2) the Summit Lake Suite; 3) the Composite Suite; and 4) the Crystal Creek Suite (Figure 7-1).

The Whistler Intrusive Suite consists of intermediate to mafic extrusive and intrusive rocks, including diorite porphyries. These diorite porphyries are host to, and genetically associated with, gold-copper porphyry mineralization on the Whistler Project area. This is the only suite where comagmatic extrusive rocks and shallow subvolcanic intrusive rocks are recognized in the region. On a district scale the intrusions generally occur as sills and less commonly as dikes and small stocks. New U-Pb age dating of zircons from the mineralized diorite porphyry in the Whistler Deposit, and other mineralized porphyries on the Whistler Project, indicate igneous ages of 76.36Ma ±0.3Ma (Hames, 2014). One of the least-altered diorite porphyry intrusions located on the Whistler Ridge has a hornblende Ar-Ar age date of 75.5 ± 0.3Ma (Young, 2005).

The Summit Lake intrusions are regionally represented by 74 to 61Ma calc-alkaline granodiorite to diorite, becoming more monzonitic and of alkali-calcic affinity in the Whistler area. East and northeast from Whistler, these intrusions are associated with local gold prospects and have been called the Kichatna plutons and more locally, the “Old Man Diorite”.

The Composite Plutons include the Emerald, Mount Estelle, Stoney, and Kohlsaat plutons, and are locally associated with gold mineralization. The Composite Plutons are seen to be somewhat concentrically zoned magmatic series, with an early border phase of alkaline mafic to ultramafic rock, inwards towards less alkaline monzonites to granites. The common age range is 67 to 64 Ma.

The regional geology of the Whistler deposit area is shown in Figure 7-2. The Crystal Creek sequence, located south of Whistler, is mainly calc-alkaline granite or rhyolite and ranges in age from 61 to 56 Ma. More mafic rocks, including the 61Ma Porcupine Butte andesite and Bear Cub (diorite) pluton, may represent higher level/border phases to the Crystal Creek sequence.

Continental arc magmatism in the Latest Cretaceous is responsible for some of the most significant gold and copper-gold deposits in Alaska. These include the Pebble gold-copper porphyry deposit (89 Ma; Schrader et al., 2001), the Donlin Creek gold deposit (70 Ma, Szumigala et al, 2000), the Fort Knox gold deposit (95 – 89 Ma, Mortenson et al., 1995), and the Livengood gold deposit (Late Cretaceous).

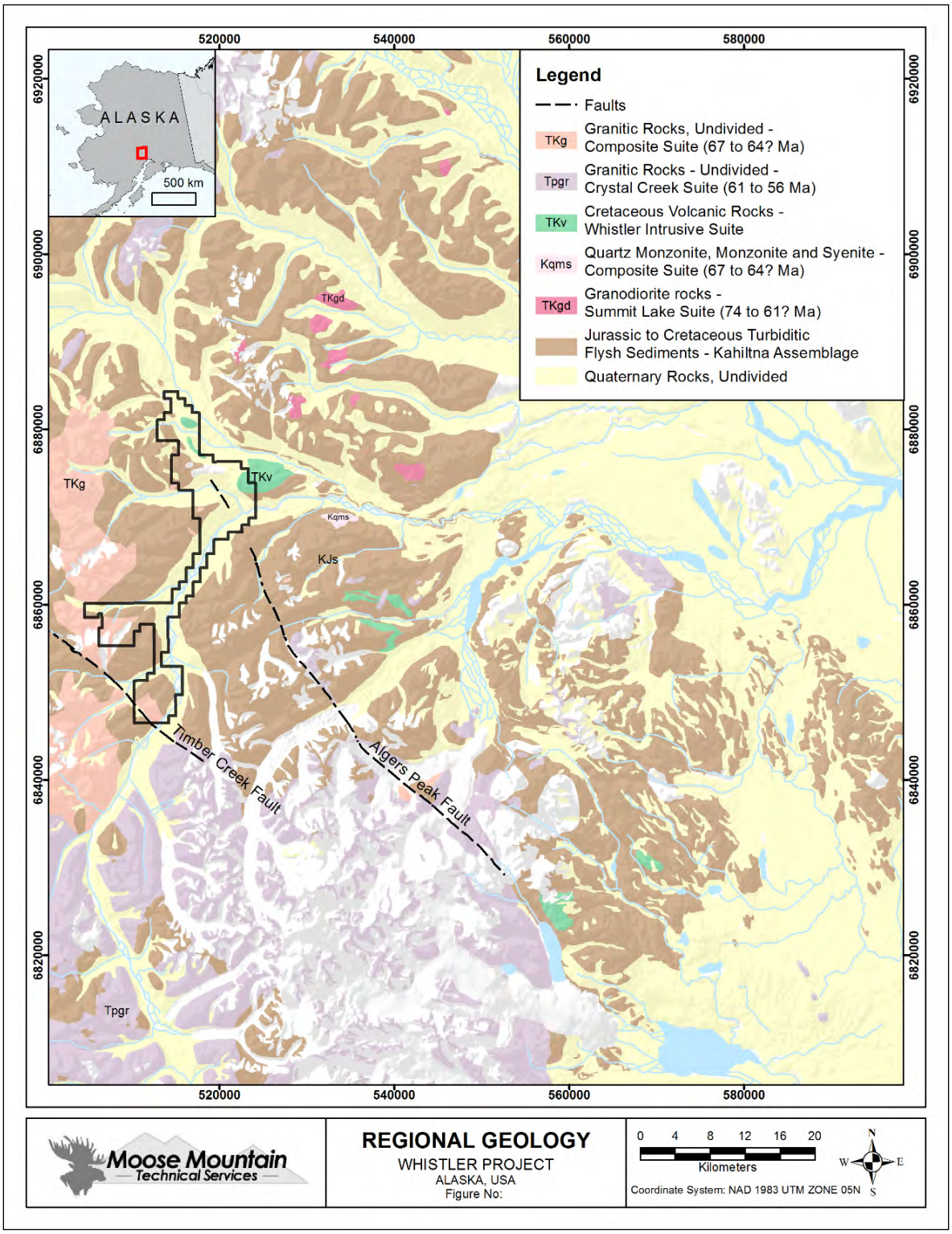


Figure 7-2 Regional Geology of the Whistler Project (Source: Wilson et al., 2009)

7.2 Property Geology

The property geology of the Whistler area is well documented and described in detail by Young (2005) and Franklin (2007). The property can be subdivided into three main areas based on distinctive intrusive rocks and their association with gold-copper and gold-only mineralization: 1) The Whistler Corridor; 2) Island Mountain; and 3) Muddy Creek as illustrated in Figure 7-3.

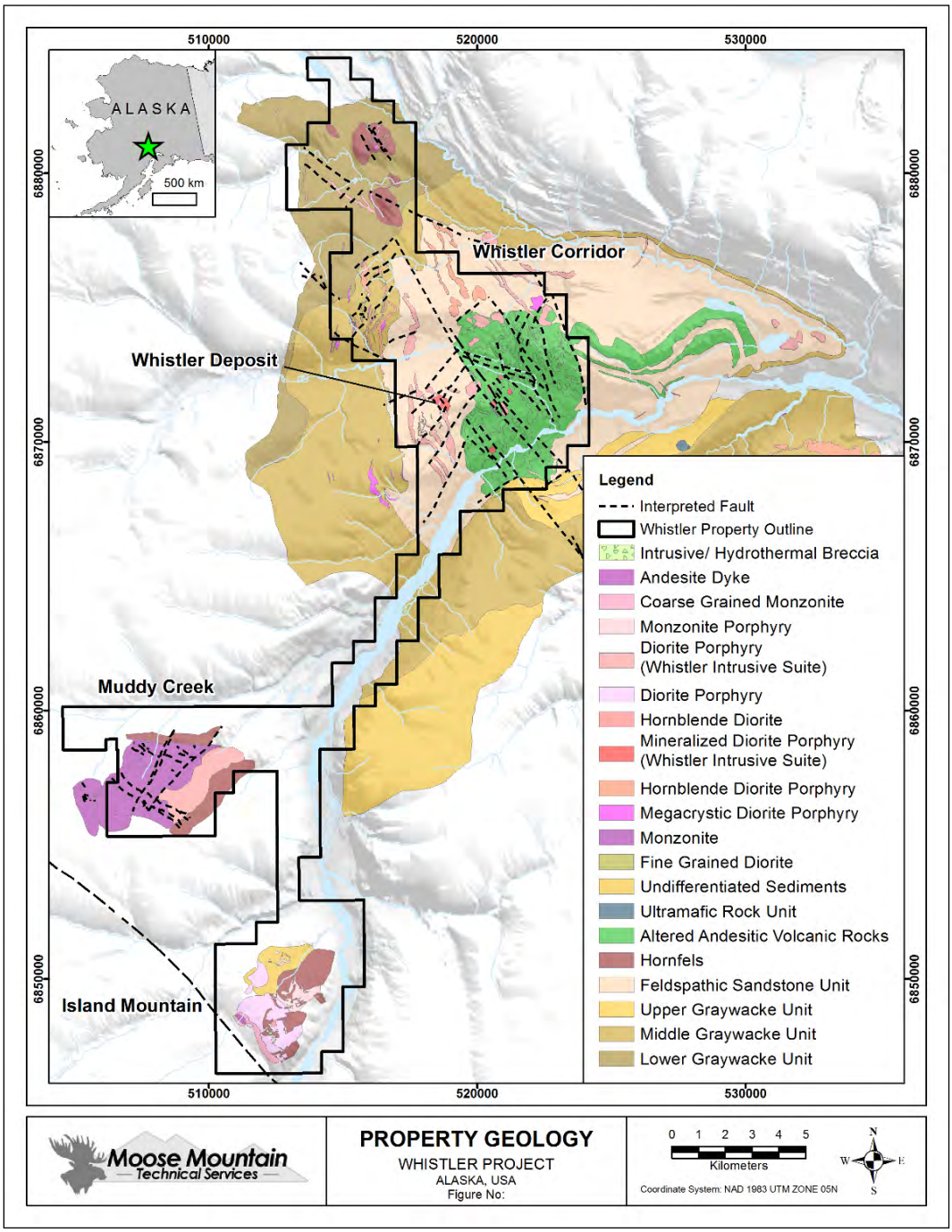


Figure 7-3 Geological Map of the Whistler Corridor (Source: MMTS, 2016, modified from Roberts, 2011a)

7.2.1 Whistler Corridor

The bulk of the Whistler property is underlain by flysch sediments of the Kahiltna assemblage, while the Whistler Corridor is dominated by a largely fault bounded block of andesitic volcanic rocks, interpreted to represent a local volcanic-dominated basin as illustrated in Figure 7-4. The sedimentary and volcanic rocks are host to a variety of dioritic to monzonitic dykes, sills and stocks of the WIS. Much of the low-lying areas in this region are covered by 5 to 15m of glacial till, and hence much of the geological map is based on drilling and interpretation of geophysical data.

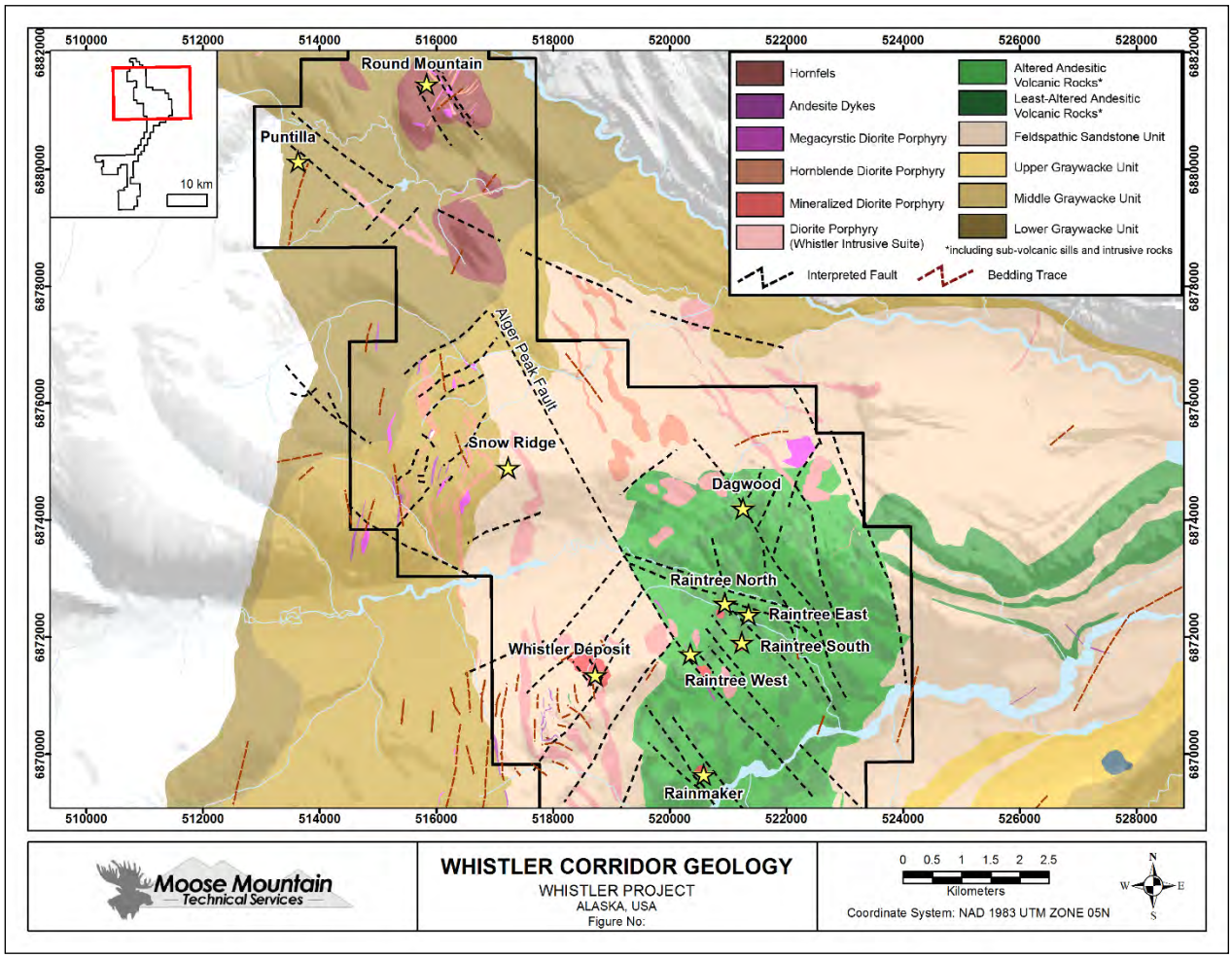


Figure 7-4 Whistler Project Geology (Source: MMTS, 2016, modified from Roberts, 2011a)

The Whistler Deposit is hosted by a multi-phase diorite porphyry intrusive complex of the WIS nested within sediments of the flysch package, whereas prospects in the Whistler Area (Raintree, Rainmaker) are hosted by similar diorite porphyry intrusive centres within the volcanic basin. Age dating of mineralized and barren diorite porphyry units on the Whistler ridge indicates that magmatism occurred at approximately 75 to 76Ma (Young, 2005; Hames, 2011). The mineralogy and composition of the intrusive rocks and the andesitic volcanic rocks are quite similar, suggesting that they are broadly comagmatic (Young, 2005). Inversion modeling of the airborne geophysical data suggests that there is a

large 5 kilometre diameter batholith possibly situated 1 kilometre below the surface and that some of the diorite porphyry intrusive centres are cupolas at the apices of the batholith.

The detailed geology of the volcanic stratigraphy remains uncertain, largely due to glacial cover and the extensive amount of texturally destructive, hydrothermal alteration. Volcanic rocks are comprised of coherent andesites and volcanic breccias that define a variety of depositional facies. Based on the occurrence of common argillaceous interflow sediments Young (2005) inferred a sub-aqueous marine setting for the bulk of the volcanic rocks. In the eastern Long Lake Hills area, volcanic flows are interbedded with Feldspathic Sandstones, and Young (2005) interpreted this to represent the onset of volcanism in a shallower marine setting. In addition to these extrusive rocks, a large volume of the volcanic rocks are interpreted to be comprised of porphyritic, subvolcanic units, as either large sills or stocks. These subvolcanic units can be difficult to differentiate from coherent volcanic rocks, particularly porphyritic flows, and in areas of intense texturally-destructive phyllic alteration. The stratigraphy of the volcanic rocks are currently unresolved. The current geological map only differentiates “least-altered” from “altered” volcanic rocks based on the extrapolation of airborne magnetic data from the grid and scout drilling. All of the volcanic and subvolcanic rocks encountered in drilling are magnetic when they are least-altered, and magnetism is generally destroyed by sulphidation during phyllic alteration.

In addition to least-altered volcanic rocks, magnetic high anomalies also occur in association with northwest-elongated linear to oval-shaped diorite dykes and stocks hosted by flysch sediments and in association with zones of near-surface secondary magnetite alteration and veining, such as the Whistler Deposit, and the Rainmaker and Raintree North prospects.

The bulk of the flysch sediments on the Whistler Project area have north to northeast striking and steeply dipping bedding orientations due to compressional deformation that resulted in chevron-style folding. These folds are north-east striking, and fold limbs are typically moderate to steep or overturned (Young, 2005). A dioritic sill exposed on the Whistler Ridge is likewise folded, suggesting that a component of dioritic magmatism pre-dated regional deformation.

Several northeast-trending faults have been interpreted based on topographic linear features and the truncation and offset of magnetic features. These are considered to be the earliest structure features on the property since they are truncated by north-northwest-oriented faults with left-lateral offset, such as the Alger Peak Fault.

7.2.2 Island Mountain

The Island Mountain area is comprised of a suite of nested intrusions, ranging compositionally from hornblende diorite to hornblende-biotite monzonite, emplaced within flysch sediments of the Kahiltna assemblage as illustrated in Figure 7-5. Texturally, these intrusions range from equigranular to strongly porphyritic, suggesting a relatively high level of emplacement typical of the porphyry environment. Unlike the Whistler area, no coeval volcanic rocks are recognized. Based on limited whole-rock geochemistry (Young, 2005) the Monzonite at Island Mountain plots within the silica-saturated alkalic field of Lang et al. (1995) and is the intrusive equivalent of trachyandesite on a total alkali versus silica diagram. This suite of intrusions is mapped as part of the circa 67 to 64Ma Composite Suite of intrusions, similar to the Muddy Creek area, however recent age dating suggests some complexity with dates ranging from 77Ma down to 64Ma (Gross, 2014). Compared to Muddy Creek, the intrusive rocks at Island Mountain are generally more mafic (diorite and monzonites as opposed to quartz monzonite

and granites at Muddy Creek), are magnetite-bearing rather than ilmenite-bearing, are commonly more porphyritic rather than coarse equigranular, lack the strong, pervasive gold-arsenic association, and lack the evenly distributed northwest-oriented sheeted fracture set that typifies mineralized structures at Muddy Creek. For these reasons, it is likely that igneous rocks at Island Mountain represent a unique intrusive suite separate from the Composite Suite.

This unique intrusive centre is broadly situated at the intersection between the regionally significant northwest-striking Timber Creek Fault, which can be traced for 10's of kilometres, and the Skwentna River valley, postulated as a possible fault zone (Young, 2005). The bulk of the nested intrusions occur on the southeast side of Island Mountain and this is where sediments in the contact metamorphic aureole of these intrusions are hornfelsed. The hornfels, especially on the southwest corner of Island Mountain, occur as irregular rafts and possibly roof pendants that appear to form a slope-parallel skin of country rock that demarks the roof zone of this intrusive complex. Sediments consist of dark mudstone, shale, thin-to-medium-bedded siltstone and dark grey sandstone and minor dirty calcareous sedimentary beds and a few local thin pebble conglomerate units. These units predominate on the northwest portion of Island Mountain.

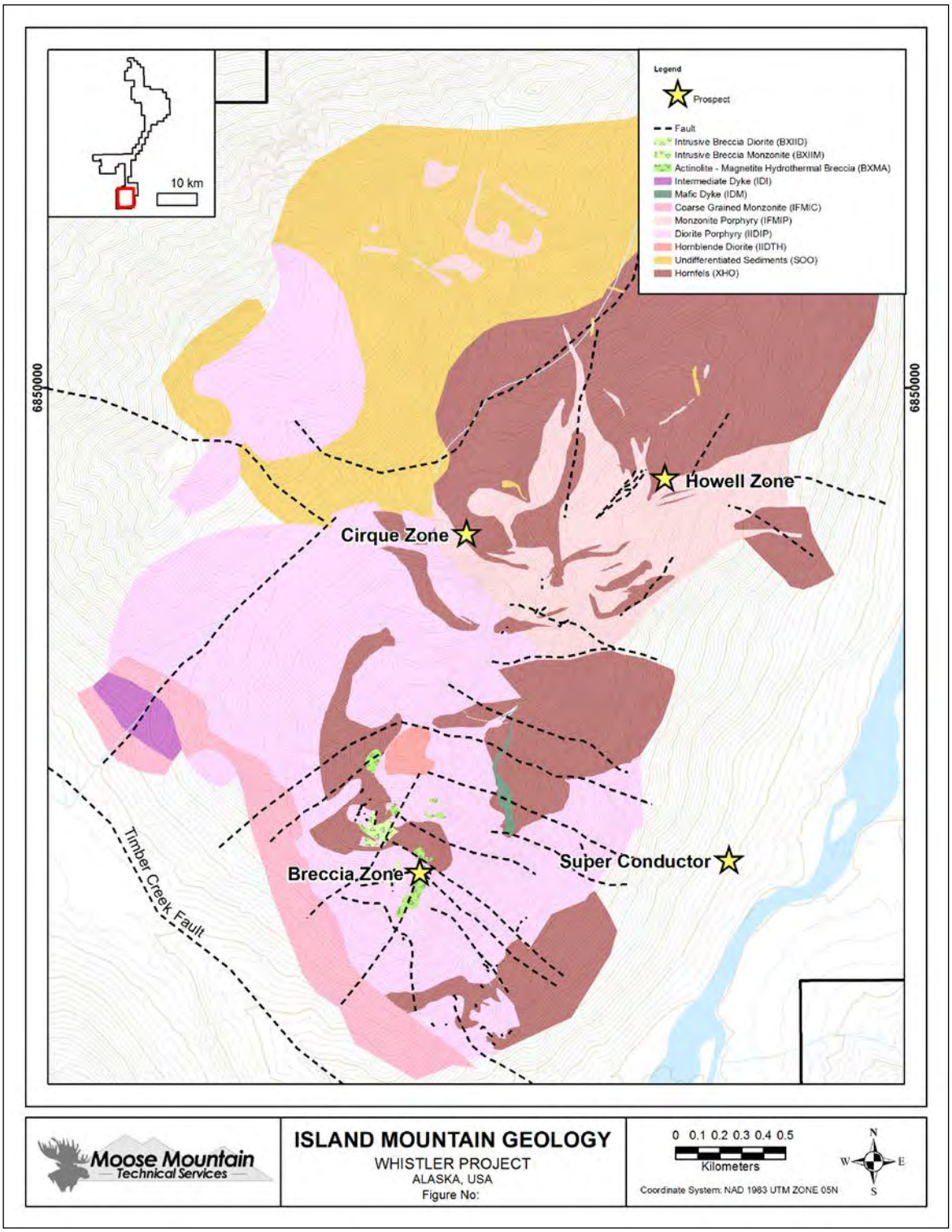


Figure 7-5 Property Geology of the Island Mountain Area (Source: MMTS, 2016, modified from Roberts, 2011b)

The earliest recognized intrusive phase is the Island Mountain Diorite Porphyry. This unit has been observed to be cut by all other igneous units and is the host to gold-copper porphyry mineralization associated with intrusive and hydrothermal breccias at the Island Mountain Deposit (previously referred to as the "Breccia Zone").

The next most volumetrically significant intrusive phase is a Monzonite Porphyry (IFMIP) that occurs in the northeast corner of Island Mountain, and which is generally the host of gold-copper porphyry-style mineralization at the Cirque and the Howell zones. Unlike the Diorite Porphyry, this unit contains magnetite phenocrysts and is thus well delineated by airborne magnetic survey data.

In the Breccia Zone, Diorite- and Monzonite-cemented intrusive breccias occur as sub-vertical, 100-150 metre diameter, sub-circular to irregularly shaped pipes that grade into actinolite-magnetite-cemented hydrothermal breccias with pyrrhotite-pyrite-chalcopyrite mineralization, which together define magmatic-hydrothermal conduits that host the bulk of gold-copper porphyry mineralization in this area. Not all the Intrusive Breccia bodies are altered or mineralized, suggesting that either some of these breccias post-date the main phase of mineralization, or that some pre-mineral intrusive breccias were not affected by hydrothermal fluid. Together, these intrusive and hydrothermal breccias have been the focus of the majority of the exploration drilling at Island Mountain since 2009. A series of these breccias extend discontinuously for 700m from the "Breccia Zone" on a north-northwest trend along the south-western slope of Island Mountain. The Breccia Zone also contains narrow, pencil-like bodies of Coarse Porphyritic Hornblende Diorite that are syn-to-post gold-copper mineralization.

This corridor of breccias is flanked by strong pervasive albite alteration with local zones of vein and disseminated pyrrhotite that constitutes significant Au-only mineralization within and flanking the Breccia Zone. Similar intrusive and hydrothermal breccias with peripheral sodic alteration and pyrrhotite mineralization occur in areas of gold and copper soil anomalies at the Howell Zone, suggesting the occurrence of multiple magmatic-hydrothermal centres. The Howell Zone remains untested by drilling.

The last volumetrically significant phase of magmatism is represented by a coarse grained equigranular monzonite that occurs as a northwest-striking dyke or sill exposed near the base of slope on the south-western side of Island Mountain. This unit lies adjacent and strikes parallel to the regional Timber Creek Fault, suggesting a possible regional control on the emplacement of this unit. Likewise, all of the above-mentioned units are cut by narrow, post-mineral, fine-grained mafic to intermediate dykes that generally strike to the northwest and dip steeply.

7.2.3 Muddy Creek

Muddy Creek is located in rugged terrain along the western edge of the Whistler Project and is comprised of several steep, north-east facing U-shaped glacial valleys separated by razor-back ridges with small remnant glaciers at the heads of each valley. This prospect is largely underlain by a monzonitic intrusive complex, part of the Composite Suite (or Estelle Suite) of intrusions that were emplaced within sediments of the Kahiltna Assemblage in the late Cretaceous (Figure 7-6). An argon-argon analysis of igneous biotite from a granodiorite on the western margin of the intrusive complex returned an age date of 67.4Ma ± 0.4Ma (Solie et al., 1991a). A steep, east-west trending contact between the intrusive complex and hornfels sediments is well-exposed in the ridgelines in the northern portion of the prospect and is comprised of a conspicuous and extensive red-brown colour anomaly. Hornfels also comprises the eastern-contact of the intrusive complex.

The bulk of the geological mapping at Island Mountain was completed by Kennecott and the following descriptions are from Young (2005). The core of the intrusive complex is monzonitic, grading outwards to progressively more mafic and older intrusive phases (Crowe et al., 1991), with pendants of ultramafic rocks at the margins (Millholland, 1998). The pluton intrudes very steeply north-dipping sedimentary rocks of the middle Graywacke Sandstone subunit and Tabular Sandstone unit. Local matrix-supported pebble conglomerate and spherical concretions along Muddy Creek support a correlation with the Tabular Sandstone unit.

The majority of the Mount Estelle pluton consists of biotite-monzonite, with an increasing proportion of augite phenocrysts towards the margins. Monzonite is medium- to coarse-grained and idiomorphic granular and occurs at the central and southern portions of the mapped area at Muddy Creek. Mafics, principally biotite books (to 5 mm) and subordinate to absent stubby dark augite generally constitute 15 to 35% of the monzonite. Twinned 3mm to 1cm orthoclase phenocrysts are a fundamental component. Groundmass consists of a medium-grained equigranular mixture of feldspar and quartz. Rounded xenoliths are rare, but widespread, and consist of biotitized sediments and more strongly mafic (biotite and augite)-rich intrusive rock of earlier intrusive phases. Intrusion breccia's with rounded clasts are a very local feature as are sinuous to linear aplitic dikes.

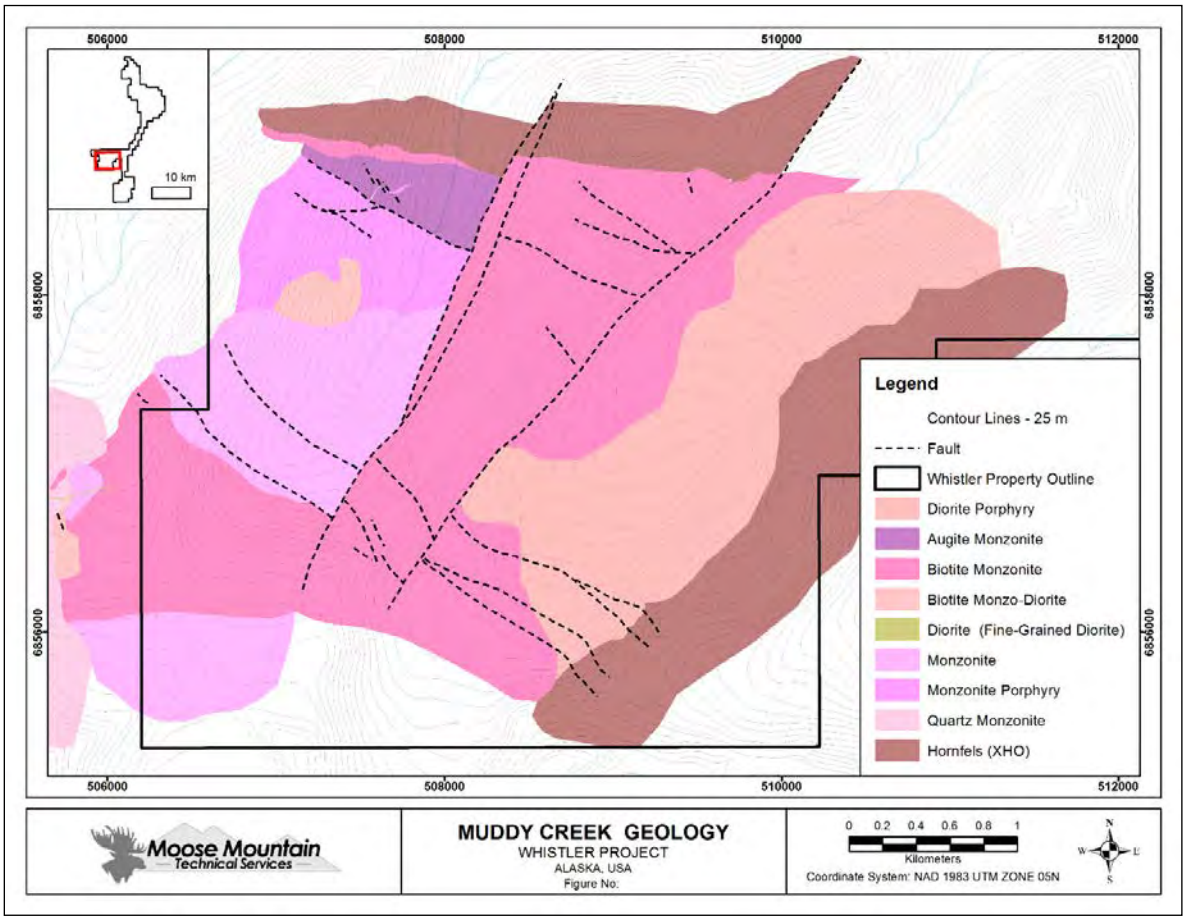


Figure 7-6 Geological Map of Muddy Creek (Source: MMTS, 2016, modified from Roberts, 2011c)

7.3 Mineralization

Exploration on the Whistler Project by Kennecott, Geoinformatics and Kiska has identified three primary exploration targets for porphyry-style gold-copper mineralization. These include the Whistler Deposit, Raintree West, and the Island Mountain Breccia Zone as shown in Figure 7-7. The Whistler and Island Mountain areas also host multiple secondary porphyry-like prospects defined by drilling, anomalous soil samples, alteration, veining, surface rock samples, induced polarization chargeability/resistivity anomalies, airborne magnetic anomalies and airborne electromagnetic anomalies. These include the Raintree North, Rainmaker, Round Mountain, Puntilla, Snow Ridge, Dagwood, Super Conductor, Howell Zone and Cirque Zones. The Muddy Creek area represents an additional exploration target with the potential to host a low-grade, bulk tonnage, Intrusion-Related Gold mineralization.

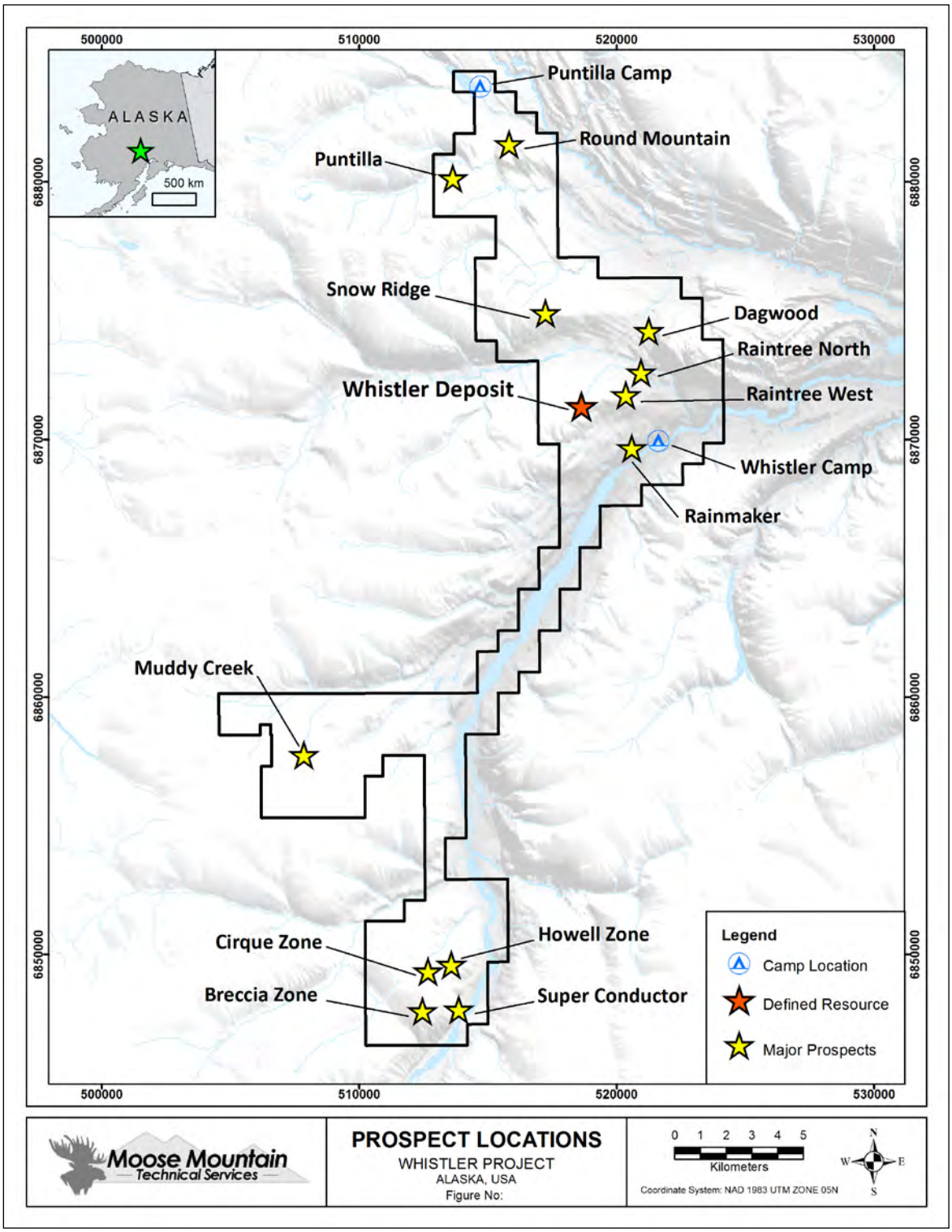


Figure 7-7 Prospect Areas (Source: MMTS 2016)

7.3.1 Whistler Area and Whistler Deposit Mineralization Overview

The Whistler Deposit and prospects in the Whistler Area (Raintree West, Raintree North and Rainmaker) display a common pattern of alteration, vein paragenesis, and mineralization styles that suggest these spatially separate porphyry centres share a common genetic association. These features are hosted by, and genetically linked to, pulses of diorite porphyry intrusive bodies that are nested in pipe-like centres. Geophysical inversion models of the airborne magnetic data suggest that these pipes may be cupolas that occur above a common batholith. That these porphyry centres are genetically associated is corroborated by common alteration assemblages, vein types, mineralization styles and paragenetic relationships. At the Whistler Deposit, the earliest Diorite Porphyry phase (Main Stage Whistler Diorite Porphyry) is associated with the main stage of gold-copper mineralization, whereas subsequent phases are less mineralized, and thus are either weak metal contributors or diluting bodies.

The earliest recognized alteration event recognized at the Whistler Deposit and the porphyry prospects in the Whistler Area, referred to as "Magnetite" alteration, occurs as patchy magnetite alteration of mafic minerals (dominantly hornblende and possibly pyroxenes) and narrow, irregular magnetite veinlets ("M-veins"). Magnetite in this event is occasionally intergrown with trace chalcopyrite. This stage may include the partial replacement of feldspars by secondary K-feldspar, particularly in the selvages to M-veins, and hence may be part of the earliest, weakest stage of Potassic alteration (see Figure 7-8 below). This stage is recognized in both the Main Stage and Intermineral Stage Diorite Porphyry generally in the core zone of mineralization at the Whistler Deposit. In addition, it has been observed to occur within andesitic volcanic and volcaniclastic rocks within 50m of similarly altered diorite intrusions in the Whistler Area, however not within the Feldspathic Sandstones that host the Whistler Deposit.

Figure 7-8 Photo of irregular M-veins in dark magnetite alteration of mafics (upper) and pervasive pink-black blotchy k-feldspar and magnetite alteration (lower) with wormy quartz + magnetite + chalcopyrite A-veins (Whistler Deposit) (Source: MMTS, 2016)

The subsequent stage of alteration is "Potassic" alteration, defined by the occurrence of pinkish K-feldspar replacing plagioclase and matrix, which generally occurs as halos to, or pervasively in zones of, A-style and B-style quartz veins. Potassic alteration also includes the replacement of mafic phases by fine-grained secondary "shreddy" biotite, however this is generally difficult to observe due to overprinting Chlorite-Sericite alteration (see Figure 7-9, below). Strong Potassic alteration (pink rock) is generally accompanied by strong patchy magnetite alteration, and overall this leads to strong textural destruction such that the rock is mottled pink-black without an obvious porphyritic texture. Potassic alteration is associated with the bulk of gold-copper mineralization, which occurs as chalcopyrite and rare bornite in A- and B-style quartz veins and as fine-grained disseminations in adjacent wall rock. At the Whistler Deposit, gold occurs predominantly as electrum associated with chalcopyrite. There exists a spectrum of A- and B-style quartz veins. A-veins are millimetre wide, sugary quartz ± magnetite with wormy margins. These are generally observed to cut M-veins, however occasional M-veins have been seen to transition into A-like quartz veins. B-veins are generally comprised of slightly coarser, equigranular quartz with centre-line septa of chalcopyrite, and have straight sides. Intense zones of B-style veining form strong stockwork zones are associated with high-grade zones (>1 gpt Au, >0.5% Cu). Potassic alteration and quartz veining may include minor pyrite, yet these zones have relatively low total sulphide content (<1-2%).

Figure 7-9 Photo of a classic B-style quartz vein with a chalcopyrite-filled centre-line cutting an irregular, wormy A-style quartz vein (Whistler Deposit, WH 08-08, ~123.0m) (Source: MMTS, 2016)

In general, core zones of Potassic alteration and Au-Cu mineralization are partially to completely overprinted by "Chlorite-Sericite" alteration, This "green rock" alteration is ubiquitous and the most macroscopically obvious alteration in zones of Au-Cu mineralization, even though it is a later event. As shown in Figure 7-10, bright green chlorite replaces secondary biotite and any primary mafic phases remaining, and waxy green sericite replaces feldspars. Pyrite is part of this assemblage, partly replacing mafics and magnetite. Calcite or carbonate may be part of this assemblage, as well as trace epidote. Kennecott referred to this alteration assemblage as "Intermediate Argillic", which is also equivalent to SCC alteration in the porphyry literature (see Sillitoe, 2010). Kiska interpreted the Chlorite-Sericite alteration to be transitional to "Phyllic" alteration, overprinting (telescoping) and immediately peripheral to core zones of mineralization. This pervasive style of alteration is not obviously associated with any veining event, however there is a continuum of glassy quartz veins with pyrite>>chalcopyrite + molybdenite that appears to only occur in zones of Chlorite-Sericite and Phyllic alteration.

Figure 7-10 Photo or chlorite-sericite (+calcite) alteration overprinting potassic – magnetite alteration in a zone of quartz vein stockwork, subsequently cut by later Dpy veinlets with sericitic and iron-carbonate halos (Whistler Deposit) (Source: MMTS, 2016)

Potassic and Chlorite-Sericite alteration is variably overprinted by "Phyllic" alteration. The Phyllic assemblage consists of sericite + pyrite + quartz. Moderate to strong Phyllic alteration is typically bleached grey-tan, where mafic minerals are completely to strongly replaced by sericite and pyrite, magnetite is replaced by pyrite, and feldspars are replaced by sericite (and clays). Phyllic alteration commonly occurs in halos to pyritic stringers ("Dpy") and quartz + pyrite veins ("D-veins"). In areas with intense D-style veining, phyllic halos coalesce to give pervasive Phyllic alteration, as illustrated in Figure 7-11. Strong to intense Phyllic alteration is texturally destructive, which often leads to difficulty in distinguishing intrusive from volcanic rocks. It is also suspected that intense Phyllic alteration is grade-destructive. At the Whistler Deposit and other prospects Phyllic alteration forms an outer and upper, commonly gradational halo to Chlorite-Sericite alteration, and is also preferentially developed in structural zones, including faults and hydrothermal breccias. Hydrothermal breccias commonly occur along the boundaries of different units (sediment/diorite; volcanic/diorite; diorite/diorite) and are comprised of variably milled wall rock fragments cemented by quartz-sericite-pyrite ("pyritic rock flour breccias"). These breccias occasionally contain tourmaline.

In the Whistler Area, strong Phyllic alteration and high pyrite content (10-15%) is common peripheral to individual porphyry centres extending for hundreds of metres into surrounding volcanic rocks. This has led to significant demagnetization of the volcanic stratigraphy such that the magnetic signature in the area is a function of alteration (dominantly Phyllic) rather than primary rock types. In contrast, the Phyllic halo at the Whistler Deposit only extends 50m into the surrounding Feldspathic Sandstone. In addition to pyrite, porphyry centres in the area are also large sulphur anomalies, in the form of sulphates. Anhydrite appears to span several alteration and vein types: anhydrite occurs within B-type quartz-chalcopyrite veins and within cross-cutting D-veins and Dbm veins (see below). Fine-grained anhydrite, of an uncertain alteration affiliation, also replaces feldspars at the microscopic scale. Gypsum locally replaces vein anhydrite and also occurs as very narrow and abundant hairline veinlets in zones of strong to intense and pyritic phyllic alteration.

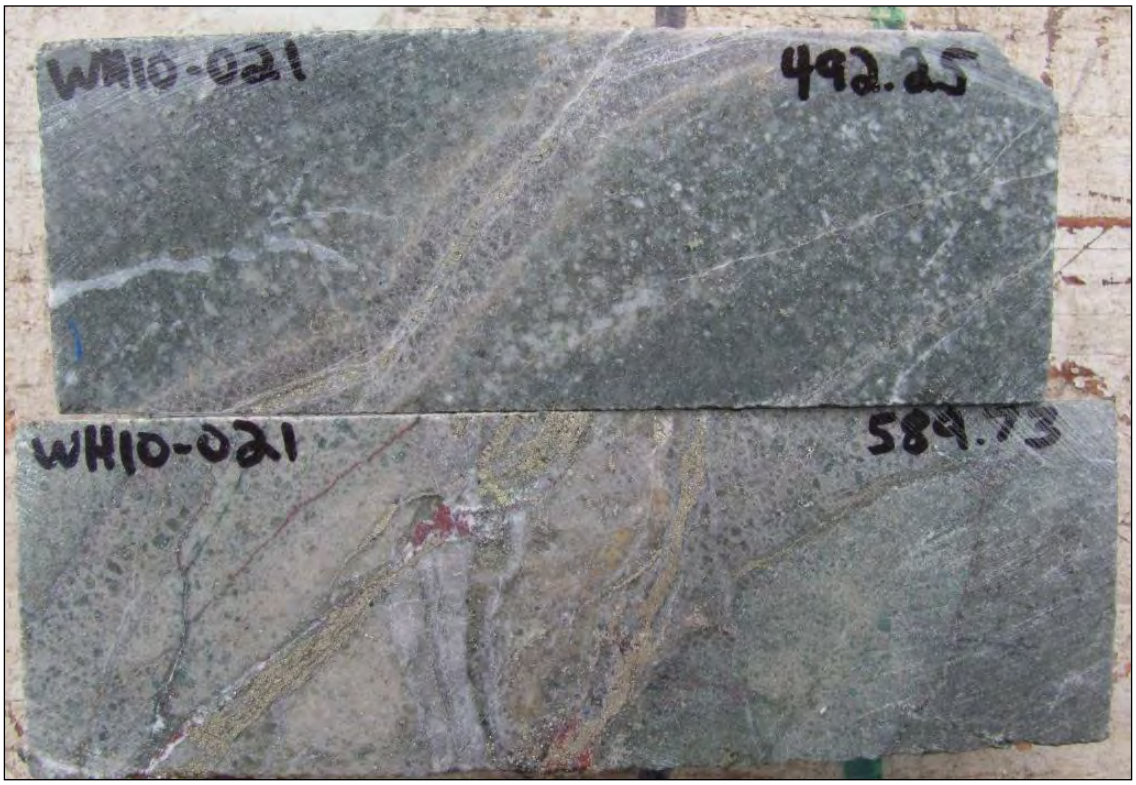


Figure 7-11 D-style pyrite veins with well-developed phyllic halos (Whistler Deposit), that cut and off-set B-style quartz veins (lower sample). Also note the local occurrence of hematite at the intersection of both vein types (magnetite>hematite?) (Source: MMTS, 2016)

At the Whistler Deposit and other prospects in the Whistler Area, the latest stage of precious and base metal mineralization is associated with quartz-carbonate (dolomite and calcite)-sphalerite-galena ± chalcopyrite veins ("Dbm" or "D-base metal veins"). These veins have been observed to cut Potassic and Chlorite Sericite alteration (including Au-Cu mineralization and A- and B-vein stockwork), Dpy and D veins, and sericite-quartz-pyrite cemented hydrothermal breccias. In the Whistler Area, these veins are commonly most abundant in the outer, intense phyllic halo within volcanic rocks within 100-200m of the diorite intrusive centres. The veins can range from narrow veins (0.5-1cm wide) up to 2-5 metre wide (generally as vein breccias). Veins minerals, including sulphides, are medium to very coarse-grained (Figure 7-12), have local colliform banding, and vein quartz is occasionally chalcedonic. Based on their cross-cutting relationships, textures, mineralogy and spatial relationship to porphyry centres, these veins are interpreted to have formed syn-to post-Phyllic stage alteration. That these veins typically cut phyllic-stage hydrothermal breccias and have open-space fill colliform banding, suggests that these veins formed in a much different hydrologic/structural regime (hydrostatic, possible incursion of meteoric waters) relative to Magnetite through to Phyllic events. Relative to the Whistler Deposit, these veins are much more abundant in the host rocks to porphyry centres in the volcanic-hosted prospects in the Whistler Area, particularly Raintree West. This observation, in addition to the epithermal-like textures of these veins, supports the notion that porphyry centres in the Whistler Area may have formed at shallower stratigraphic levels compared to the Whistler Deposit.

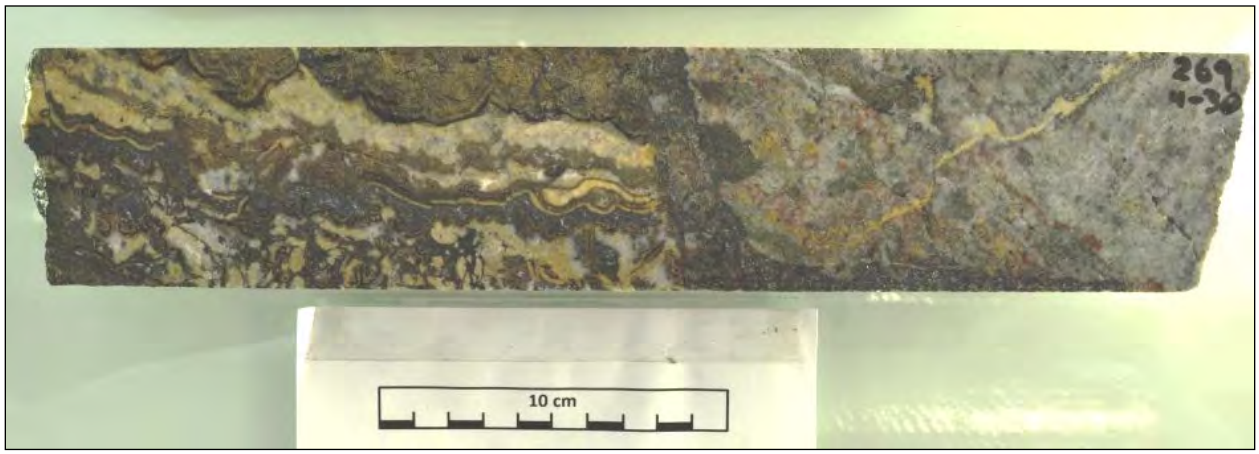


Figure 7-12 Photo of quartz-carbonate vein from Raintree West (WH11-030) showing well-developed colliform banding and coarse-grained sphalerite and galena (Source: MMTS, 2016)

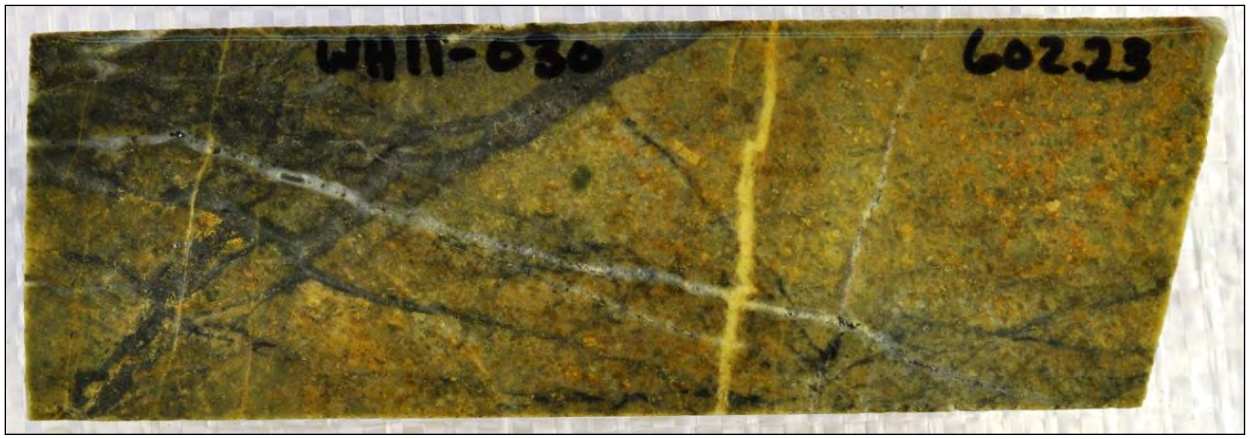


Figure 7-13 Common vein paragenesis in all porphyry occurrences in Whistler Area: dark grey quartz vein stockwork with chalcopyrite (A- and B-style), cut by quartz-calcite-carbonate-sphalerite-galena veinlet (Dbm veins, top left down to bottom right), cut by narrow Fe-carbonate veinlets with Fe-carbonate alteration halos (Raintree West example) (Source: MMTS, 2016)

The most significant style of post-mineral alteration is Fe-carbonate alteration as illustrated in Figure 7-13 above. This occurs as pervasive alteration of feldspars in structural zones and as selvages to ankerite veins. Primary igneous magnetite and secondary magnetite is commonly altered to hematite in these zones. Ankerite veins, typically as brittle tension gashes, cross-cut all vein styles, including the Dbm veins. The degree and extent of this style of alteration is typically not obvious until the core has weathered for a year or more, and is therefore not well-documented in the core logs.

7.3.2 Mineralization: Whistler Deposit

Gold and copper mineralization at the Whistler Deposit is hosted by a Late Cretaceous, multi-phase diorite porphyry intrusive complex that intrudes the Feldspathic Sandstone unit of the Kahiltna assemblage (Figure 7-14). The Feldspathic Sandstone is comprised of sandstone with minor interbeds of mudstone, siltstone and conglomerate. Sedimentary bedding in the vicinity of the deposit primarily strikes to the northeast and dips steeply to the northwest.

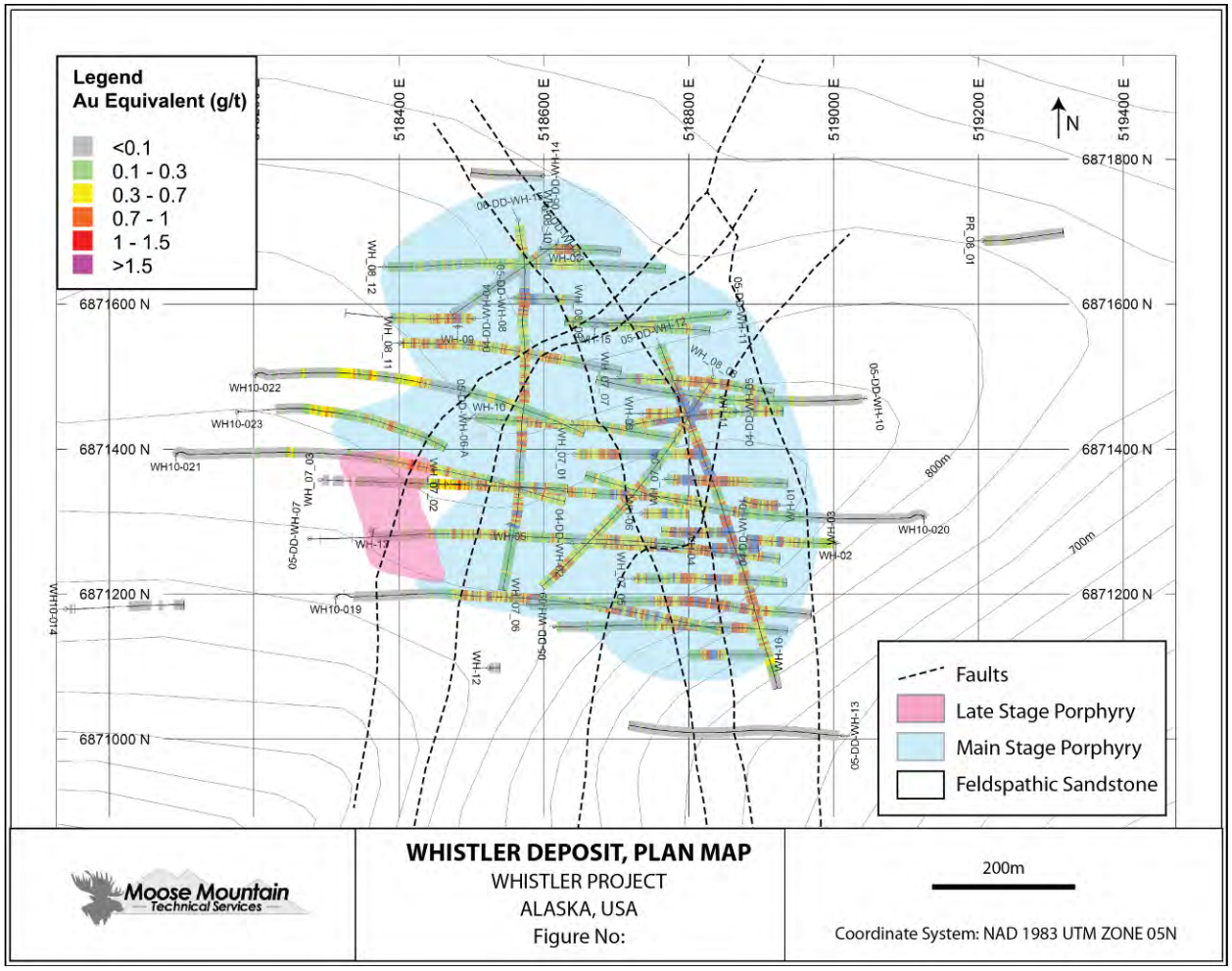


Figure 7-14 Geological Map of the Whistler Deposit (Source: MMTS, 2016, modified from AMC, 2012)

The diorite porphyry intrusive complex is ovoid-shaped and vertically plunging (Figure 7-15). The long axis of the ovoid is 700m long and oriented in a northwest-southeast direction. The short axis of the ovoid is 500m wide and oriented in a northeast-southwest direction. Deep drilling indicates that the intrusive complex is open below a depth of 800m from surface.

The intrusive complex is composed of at least three diorite porphyry phases that are compositionally and texturally similar: they are comprised of 60%-80%, euhedral to subhedral blocks of plagioclase feldspar phenocrysts (0.2-3.0mm diameter), 5%-20% hornblende laths (0.2-3.0 mm) that are usually altered to sericite, chlorite, pyrite, or a combination of these, and a fine grained, granular groundmass of

feldspar and minor quartz, that is usually altered to silica, chlorite, sericite, clay or potassium feldspar. In places within the deposit, three intrusive phases are recognized on the basis of cross-cutting relationships with mineralization and alteration. The oldest intrusive phase, the "main stage diorite porphyry", carries the earliest recognized veining and alteration associated with gold-copper mineralization (see below); the second phase, the "inter-mineral diorite porphyry" is recognized where it clearly cuts main stage diorite porphyry mineralization (i.e. intrusive contact cutting mineralized veins), and is itself veined and mineralized. The third and youngest phase, the "late stage diorite porphyry" is barren except for local mineralized xenoliths of main or inter-mineral porphyry.

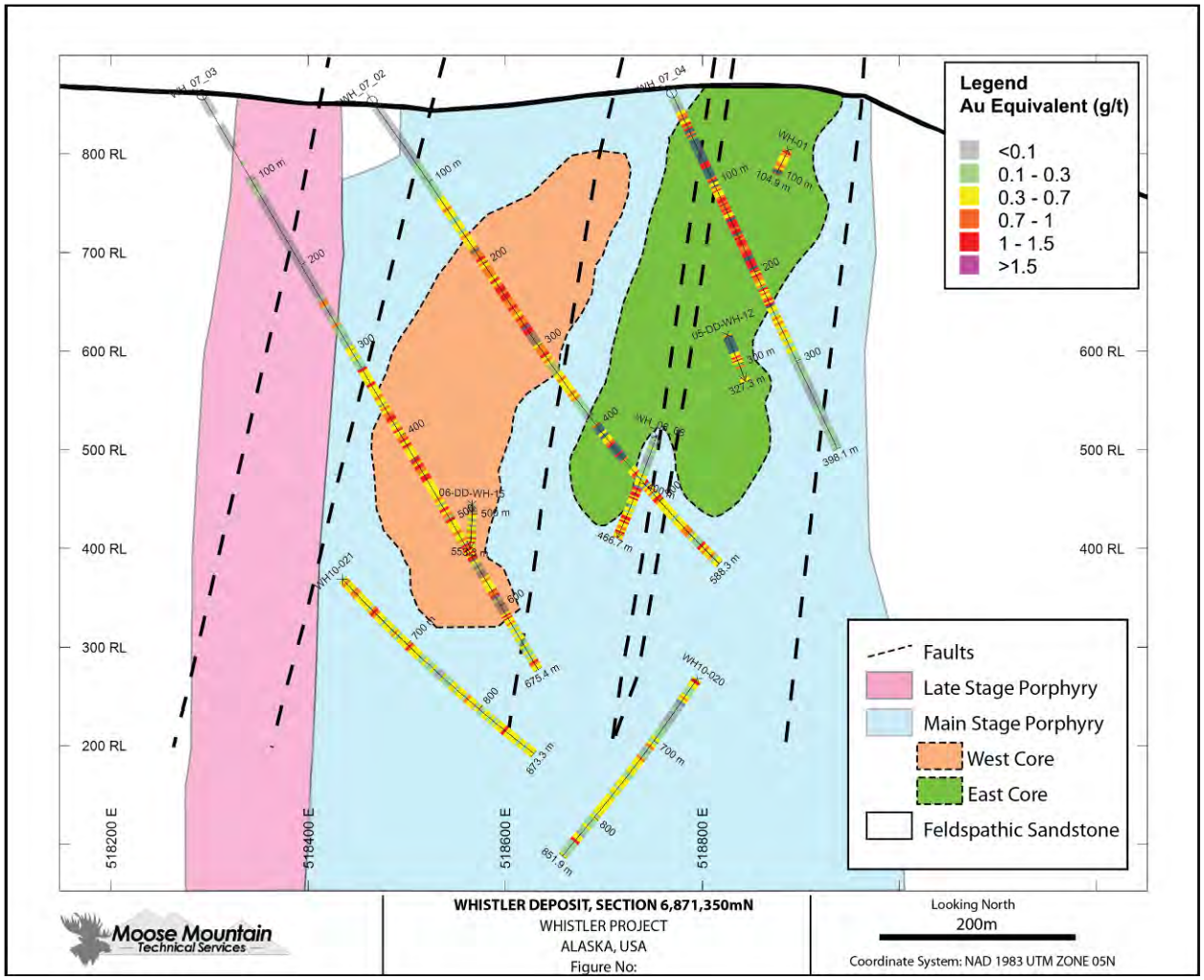


Figure 7-15 Geological Cross-section (6,871,350mN) of the Whistler Deposit (Source: MMTS, 2016, modified from AMC, 2012)

Due to the compositional and textural similarity of the main stage and inter-mineral stage porphyries and hence the difficulty in consistently identifying these stages in areas that lack clear cross-cutting relationships with mineralization or alteration, Kiska geologists modeled these phases as a single mineralized porphyry unit. For consistency these phases are therefore referred to as the "Main Stage Porphyry". Further re-logging of drill core and future in-fill drilling may be able to clearly and consistently differentiate these phases.

The Main Stage Porphyry ("MSP") comprises the bulk of the volume of the intrusive complex and is cut by the Late Stage Porphyry. This latter phase clearly post-dates mineralization and truncates grade. It occurs as narrow, sub-vertical dykes and pencil-like bodies, generally 2 to 10m wide but up to 150m wide on the north and western edges of the MSP. This phase generally has strong pervasive phyllic alteration, and occasionally xenoliths or rafts of the MSP, which locally contribute grade.

Gold and copper mineralization in the Main Stage Porphyry is comprised of 1-3% chalcopyrite and trace bornite as grains within magnetite and quartz veins (see below) and as disseminations in the host porphyry generally within the halos to these veins. Petrography indicates that gold occurs predominantly as electrum associated with chalcopyrite (Petersen, 2004). This mineralogy and style of mineralization is typical of diorite-hosted gold-copper porphyry deposits (Sillitoe, 2010).

Recent, preliminary modeling has identified two zones within the MSP which should be incorporated with further resource modeling. These zones of gold-copper mineralization occur in two areas within the Main Stage Porphyry: the East Core ("ECORE") and West Core ("WCORE") domains (Figure 7-16). These domains are interpreted as discrete, near-vertical, ovoid-shaped fluid flow conduits (interconnected vein networks) that delivered and trapped the bulk of the metals in the MSP. The ECORE is defined by coincident 0.40 gpt gold and 0.20% Cu grade contours and extends approximately 500m in the north-south dimension, 250m in the east-west dimension and is 600m deep (from surface). The WCORE is defined by a 0.30 gpt gold grade shell with lower and irregular Cu grades relative to the ECORE. This domain is approximately 400m long in the north-south direction, 200m wide in the east-west orientation and is 450m deep in a vertical dimension starting from 75m below surface.

These domains have the highest gold-copper grades relative to the remainder of the MSP domain, yet the boundaries of the ECORE and WCORE domains with the MSP are geologically gradational. Outside of the ECORE and WCORE domains, the MSP lacks any volumetrically significant zones of potassic and magnetite alteration, or significant volumes of mineralized quartz veining. However, wide-spaced drilling in the northern portion of the deposit has encountered gold-copper mineralization association with magnetite and quartz veining, suggesting that further drilling may define other zones of mineralization similar to the ECORE and WCORE.

Both the ECORE and WCORE domains contain inner zones of strong potassic and magnetite alteration (see below), which are dominantly overprinted by pervasive chlorite-sericite alteration and local phyllic alteration. These domains are also defined by the consistent occurrence and highest concentration of M-veins and mineralized quartz veins (A- and B-veins). In these domains, mineralized quartz veins generally range in volume from 1 to 5%. Local high grade mineralization within these domains occurs in zones of high density quartz vein stockwork (locally >20% quartz vein volume) and quartz + magnetite + chalcopyrite cemented hydrothermal breccias. Minor 1cm to 10cm wide quartz-carbonate (ankerite and calcite)-barite-sphalerite-galena ± chalcopyrite veins (Dbm veins) cross-cut mineralized and unmineralized portions of the Main Stage Porphyry and are interpreted as intermediate sulphidation epithermal veins that have telescoped on the porphyry system. These sparse veins contain minor Au, Ag, Pb, Zn, and Cu, yet do not contribute significantly to the economic resource.

The structure of the intrusive complex is not well constrained with the widely spaced drilling. However, five faults that cross-cut the deposit are currently geologically modeled (Figure 7-16): Big Gulley Fault, Little Gulley Fault, Divide Fault, Conquer Fault and Ridge Fault. All of these faults have been modelled

based on topographic features, fault textures in drill core intercepts, breaks in the airborne magnetic data (50 metre line-spacing) and breaks in the drill core magnetic susceptibility readings. These faults are generally between 0.5 and 5m wide, and display a variety of textures in drill core, included silica and/or carbonate cemented fault breccias, shear textures, clay gouge, brittle fractures and/or a combination of these features. Fault structures in the deposit are commonly associated with narrow zones of strong to intense sericite, clay, pyrite and carbonate alteration. This generally results in the conversion of magnetite to either pyrite and/or hematite, and therefore leads to demagnetization.

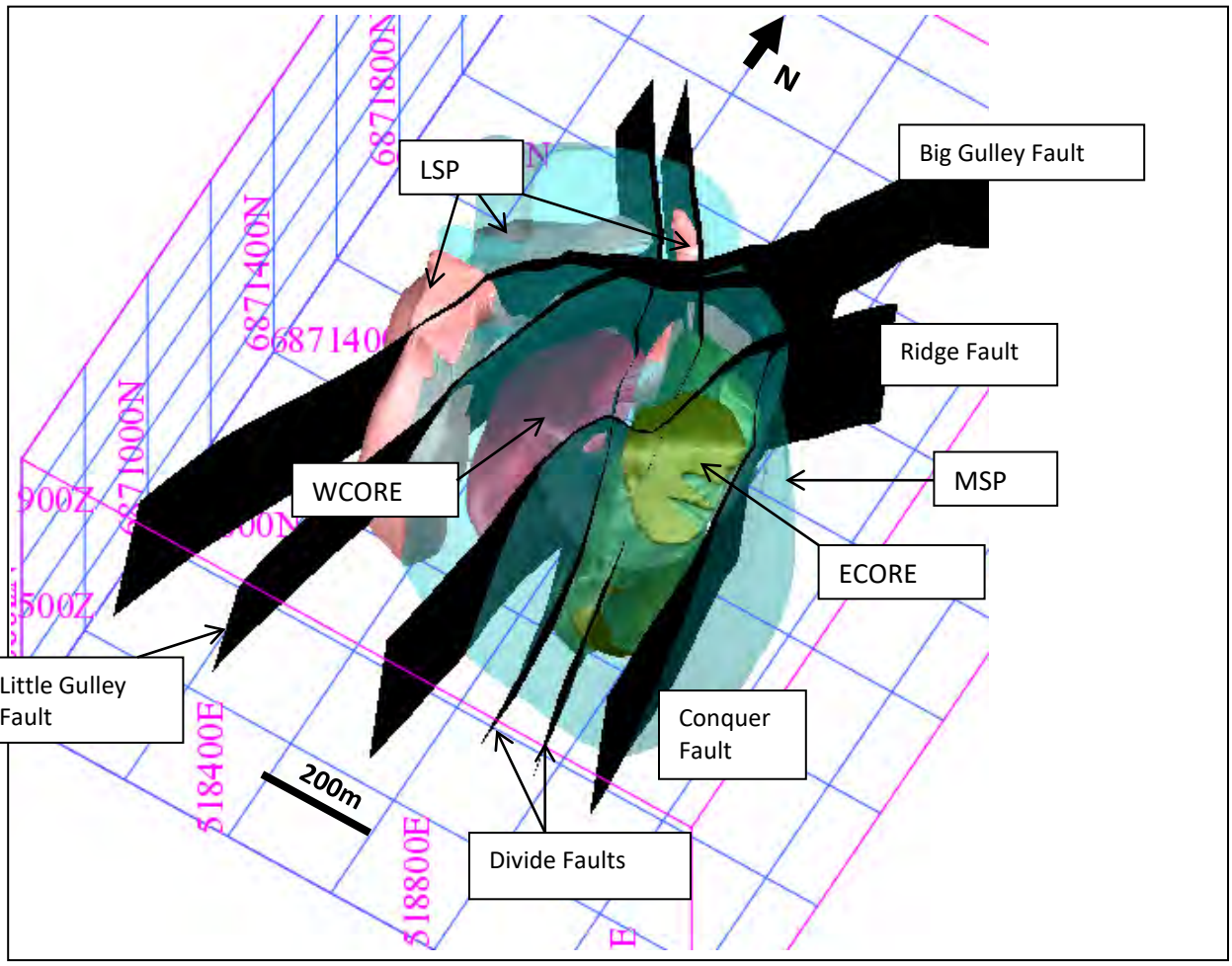


Figure 7-16 Oblique view of geological domains and faults at the Whistler Deposit (the host Feldspathic Sandstone is not shown) (Source: MMTS, 2016, modified from AMC, 2012)

The Big and Little Gulley Faults strike to the northeast and dip steeply to the northwest. The strike of these faults is based on a prominent set of northeast-trending gulley's that traverse the northern portion of the deposit, whereas the dip of the faults is based on drill core intercepts.

The Ridge Fault is a steeply northwest dipping (80° dip), curvi-planar fault that strikes sub-parallel to the Gulley Fault and is coincident with a significant northwest-dipping break-in-slope near the apex of the Whistler Ridge. The irregular strike of the fault is modelled based on a best fit between faults in drill

core and an axis of demagnetization along this fault from the magnetic susceptibility data. Based on the staircase geometry of topography downwards across the Gulley and Ridge faults to the northwest, Kiska geologists interpret these faults as possible normal faults with upper plate blocks downs to the northwest. These faults do not appear to truncate Au-Cu grade, and hence they have not been modelled as hard boundaries. The actual sense of motion and amount of potential offset across this fault zone is unknown.

The Divide Fault (modelled as two strands) and the Conquer Fault are northwest-striking faults that dip steeply to the southwest (70-80° dip). These faults are modelled based on drill core intercepts and prominent breaks in the downhole magnetic susceptibility readings. These faults likely comprise strands within a fault zone. Where these faults intersect the Gulley and Ridge faults, the latter have a kinked geometry suggesting possible right-lateral offset of approximately 25-50m.

All of these faults generally show evidence that the latest movement within these faults post-dates mineralization (i.e. clay altered gouge and wall rock overprinting higher temperature alteration assemblages, carbonate-filled tension veins). However, both the ECORE and WCORE occur near the intersection of the Divide and Ridge Faults, suggesting that they may have been active prior to or during mineralization, and hence may have acted as important controls on mineralization.

7.3.3 Mineralization: Raintree West

The Raintree West prospect occurs 1500m to the east of the Whistler Deposit, just off the nose of Whistler Ridge. This prospect occurs below a thin veneer of glacial till (5 to 15 m) and hence is not exposed at surface. Outside of the Whistler Deposit, Raintree West is currently the most advanced prospect in the Whistler Area on the basis of drill metres, with a total of 8,538m since the original discovery hole drilled by Geoinformatics in 2008. The discovery drillhole, RN-08-06, targeted an airborne magnetic high anomaly that is coincident with an IP chargeability high detected on a 2D IP reconnaissance line that crossed the Whistler Area. This hole discovered a significant zone of near surface (below 5m of till cover) gold-copper porphyry mineralization (160m grading 0.59 gpt gold, 6.02 gpt silver, 0.10% copper).

Mineralization at Raintree West occurs as two main types: 1) early, porphyry-style gold-copper mineralization hosted by diorite porphyry stocks and consisting of quartz and magnetite stockwork veining, with vein and disseminated chalcopyrite associated with potassic alteration, and 2) later cross-cutting silver-gold-lead-zinc mineralization in quartz-carbonate veins (Dbm) that contain pyrite, sphalerite, galena and chalcopyrite, with occasional banded epithermal-like textures. The early gold-copper mineralization is best developed within, and controlled by, early diorite porphyry intrusions (akin to Main Stage Porphyry at the Whistler Deposit), whereas the later silver-gold-lead-zinc veins surround and locally overprint the porphyry mineralization, and are most abundant in the host volcanic rocks in zones of strong to intense phyllic alteration vertically above and adjacent to the diorite porphyries. In places, 25m to 50m wide diorite porphyry dykes cut both types of mineralization and are barren (akin to Late Stage Porphyry at the Whistler Deposit).

Current drilling at Raintree West has defined two significant zones of gold-copper porphyry mineralization: 1) a near surface zone on the east side of the Alger Peak fault; and 2) a deep zone on the west side of the fault (Figure 7-17).

The near surface porphyry gold-copper mineralization is coincident with a northwest-elongate airborne magnetic high anomaly that measures 250m long and 150m wide, which pinches to the northwest and southeast. Drilling has only intersected this mineralization on two 100 metre-spaced east-west sections (6,871,350mN and 6,871,450mN). Gold-copper mineralization occurs from the top of bedrock to a maximum depth of approximately 170 m, where it is either truncated by post-mineral diorite porphyry intrusions or faulting, and has a true width of approximately 150m. Gold-copper mineralization is closed to the north, and potentially open to the south, however grade diminishes and the airborne magnetic high anomaly pinches out just south of the most southerly hole (WH10-025).

The deep zone of porphyry gold-copper mineralization on the west side of the fault has a maximum apparent width and vertical extent of 300 by 300m at its widest (6,871,650N), is open to depth, and occurs at its shallowest at 470m below surface. This deep zone of mineralization can be traced along a northwest-trending strike extent for at least 325m where it appears fault bound to the northwest and is open to depth to the southeast. The mineralization is essentially blind to the airborne magnetic data and the 3D IP due to the limited depth penetration of these techniques.

Porphyry mineralization at Raintree West is essentially similar to that at the Whistler Deposit with respect to veining and alteration, although Raintree West is mantled by intensely altered volcanic rocks with epithermal-texture quartz-carbonate veins. These veins (Dbm), interpreted to have formed in a shallow environment post-dating the main phase of porphyry gold-copper mineralization, may have developed through hydrothermal/thermal downward collapse onto to earlier formed high temperature porphyry system, contributing base and precious metals to the mantle of volcanic rocks and porphyry mineralization.

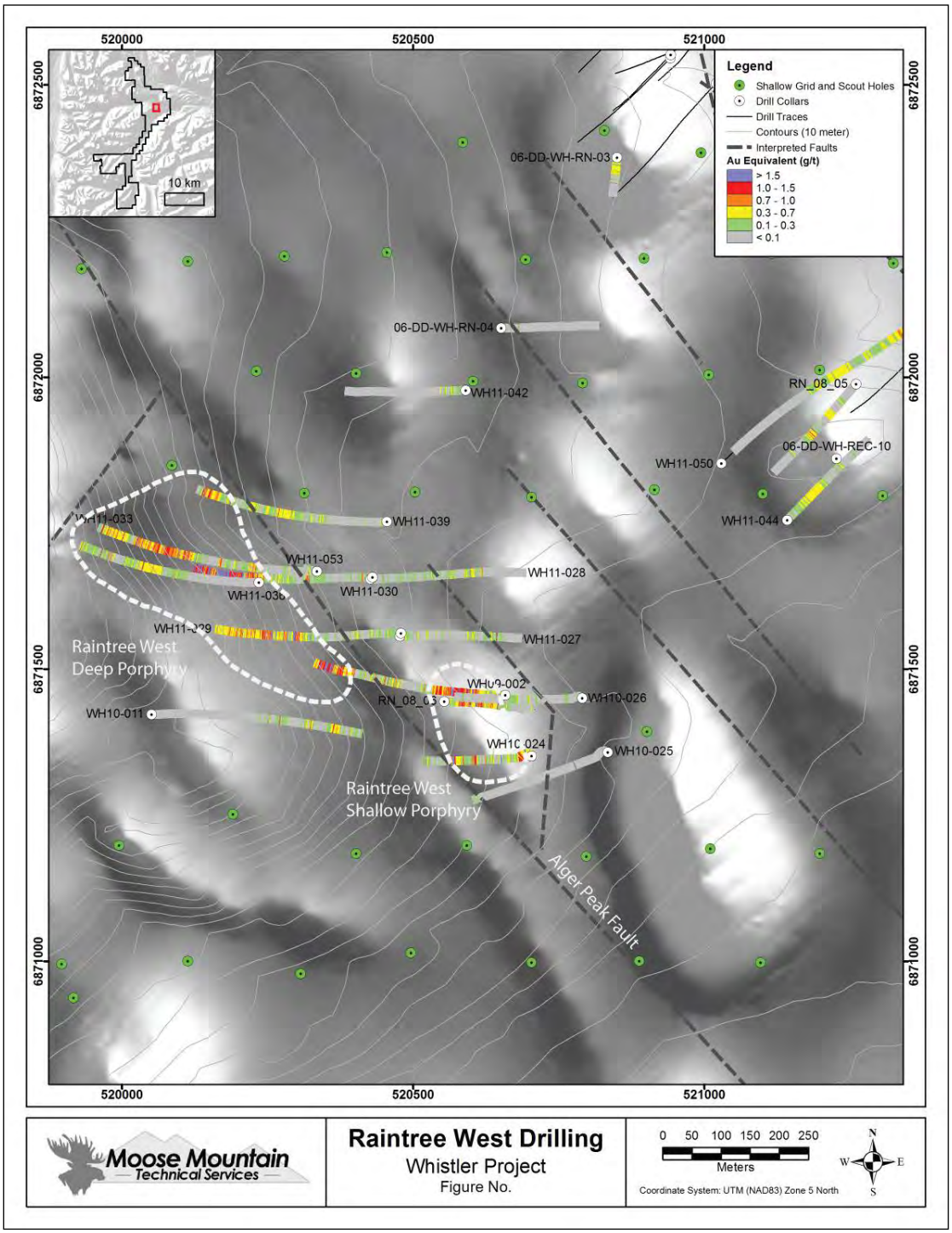


Figure 7-17 Plan Map of the Raintree West Prospect on a Background of greyscale airborne magnetic data, (magnetic high anomalies shown as lighter shades of grey) (Source: MMTS, 2016, modified from Roberts, 2011a)

7.3.4 Mineralization: Island Mountain

The Island Mountain prospect area is host to several mineralized zones interpreted to represent a cluster of individual porphyry centres within this large intrusive complex. These include the Breccia (the "Island Mountain Deposit"), Cirque and Howell Zones, and other prospects defined by surface geochemistry and geophysical anomalies that require further field assessment. Exploration activity and the majority of diamond drilling by Kiska have concentrated on mineralization associated within the Breccia Zone on the southwest slope of Island Mountain. Here, at least three styles of significant gold and copper mineralization are currently recognized: 1) gold-copper mineralization hosted by k-feldspar altered monzonitic intrusive breccia, 2) gold-copper mineralization hosted by intrusive and hydrothermal breccias associated with strong sodic-calcic alteration, and 3) gold-only mineralization associated with vein and disseminated pyrrhotite ("pyrrhotite-gold").

At the Breccia Zone, the first two styles of mineralization occur within a 300m diameter, sub-circular, sub-vertical breccia pipe, which appears to have been a conduit for inter-mingled intrusive and hydrothermal breccias hosted by the Diorite Porphyry. Gold-copper mineralization hosted by the k-feldspar altered monzonitic intrusive breccia is volumetrically smaller than the subjacent hydrothermal breccias and is interpreted as being the earliest stage of mineralization, since this breccia body is cut by actinolite veinlets. Mineralization is associated with trace to 2% disseminated chalcopyrite in the k-feldspar altered intrusive cement of the breccia, as illustrated in Figure 7-18 below.

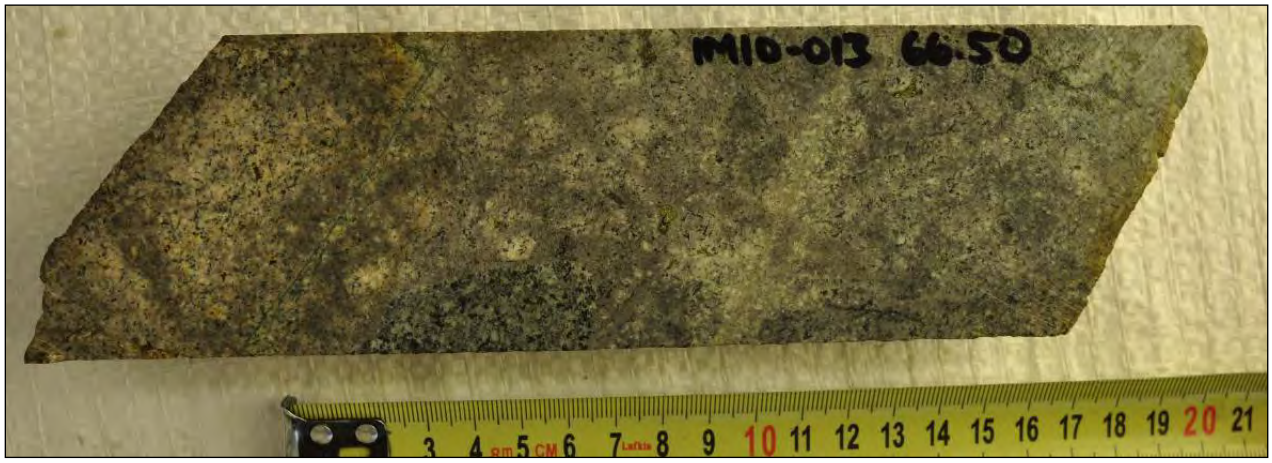


Figure 7-18 Photo of monzonite-matrix intrusive breccia with patchy albite alteration, silicification and disseminated chalcopyrite (Source: MMTS, 2016)

The bulk of gold-copper mineralization at the Breccia Zone is hosted by intrusive and hydrothermal breccias with strong sodic-calcic alteration with pyrrhotite as the predominate sulphide and trace to 1% chalcopyrite. Chalcopyrite is most abundant in the matrix of the hydrothermal breccias and is commonly intergrown with pyrrhotite and actinolite ± magnetite. Pyrrhotite, ranging from 1 to 5%, occurs as disseminations within the breccia matrix and as large blebs cementing the matrix as illustrated in Figure 7-19. The deportment of gold in the breccia zone is not known. Weaker gold-copper mineralization extends 50-75m beyond the breccia zone and is associated with actinolite stockwork veining.

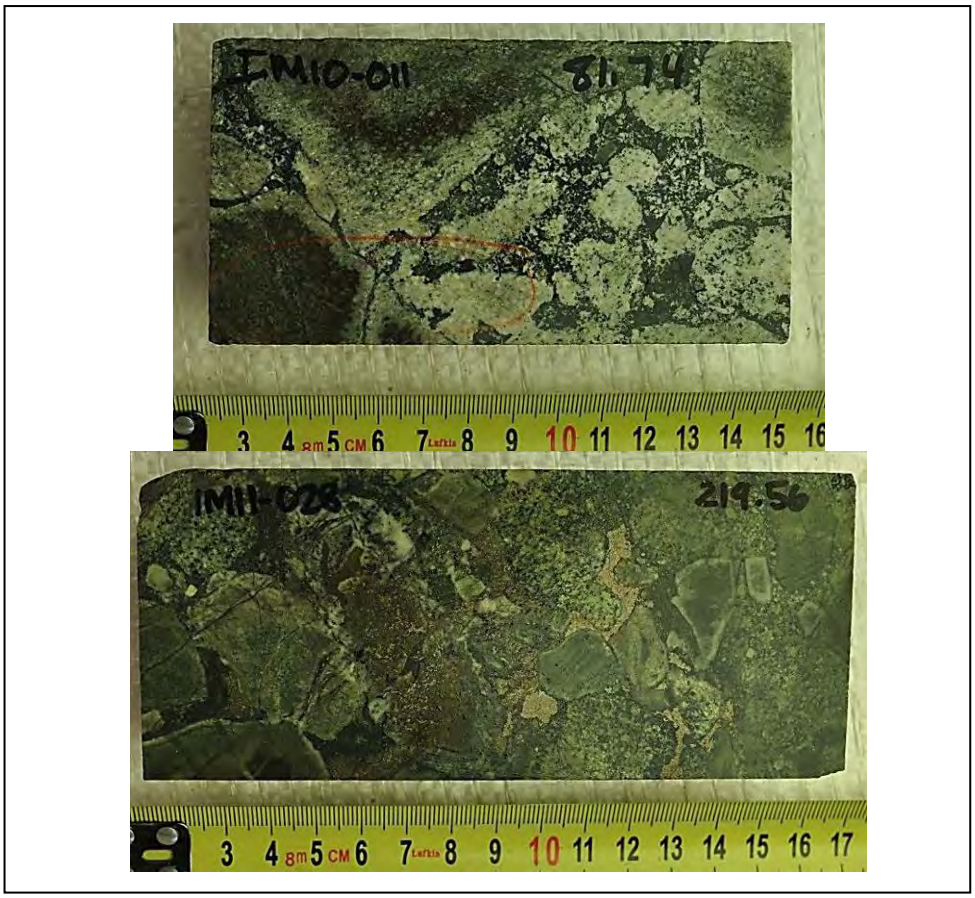


Figure 7-19 Photos of various textures of actinolite-magnetite hydrothermal breccia (BXMA), showing strong albitization in monomict breccia (left), pyrrhotite matrix in polymict breccia (right) (Source: MMTS, 2016)

Gold-only mineralization in the Breccia Zone (referred to as "Pyrrhotite-Gold" mineralization) occurs 100-200m peripherally to the intrusive-hydrothermal breccia body and occurs in association with vein and disseminated pyrrhotite within the Diorite Porphyry. Pyrrhotite veins occur in irregular, possibly sheeted sets, and are typically 1-10 millimetres wide and have pyrrhotite-rich (up to 15-20%) net-textured vein selvages (i.e. replacing the igneous matrix of the Diorite Porphyry). Petrography and SEM studies indicate that gold occurs as electrum intergrown within and marginal to pyrrhotite grains. The orientation and continuity of these veins is currently undefined.

The relationship between the breccia-hosted gold-copper mineralization and the pyrrhotite-associated gold-only mineralization is not fully understood. The current working hypothesis is that the gold-copper and gold-only mineralization are associated with the same hydrothermal fluid, such that copper was precipitated in the hotter parts of the system within the hydrothermal breccia, and copper-depleted, gold-bearing fluids persisted into cooler, structural zones beyond the breccia and were subsequently precipitated as illustrated schematically in Figure 7-20 below (Rowins, 2011).

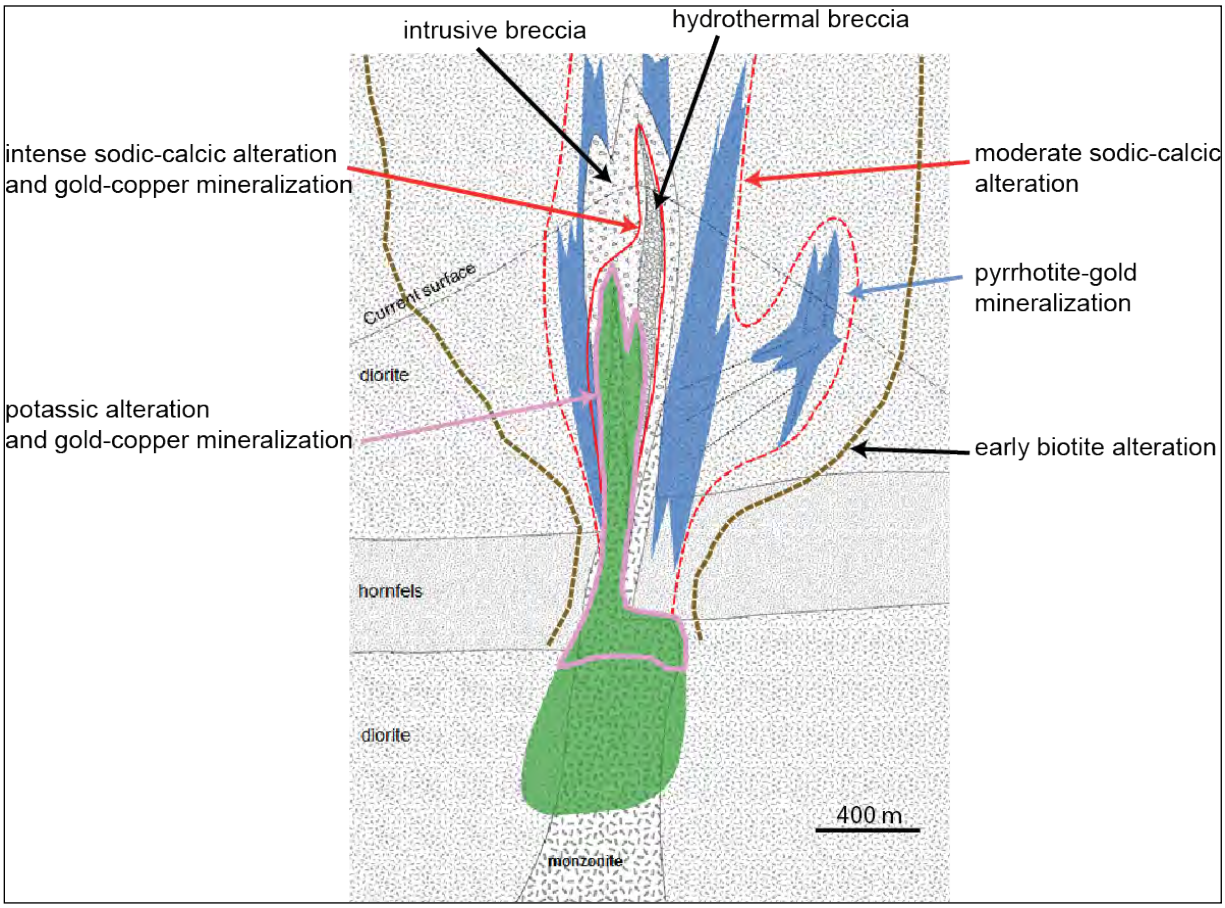


Figure 7-20 Schematic Model of Breccia Zone Alteration and Mineralization. (Source: Roberts, 2011b)

7.3.5 Mineralization: Muddy Creek

Gold mineralization at Muddy Creek is hosted throughout the core of the plutonic complex and is controlled by northwest-striking and steeply southwest-dipping, mm- to locally cm-wide veinlets of sulphides and quartz, manifest as rusty-weathering sub-parallel fracture sets, commonly spaced a metre or more apart (Figure 7-21). These veinlets may contain any combination of chalcopyrite, arsenopyrite, pyrite, stibnite, pyrrhotite and native gold, with minor amounts of galena, sphalerite and molybdenite. Moderate sericitic alteration is typically restricted to cm-wide selvages to these veins, whereas the bulk of the interleaving rock is relatively unaltered and unmineralized. Cone sheets and circular onion skin-type joints that resemble bubbles or mariolites also carry gold mineralization, and elevated gold and copper values are also found in cm-scale pegmatites. Coarse- to very coarse-grained feldspar-quartz pegmatite with chalcopyrite and subordinate molybdenite occur along joint planes and intersections, centered in aplitic dikes and at the cores of circular joint sets or cone sheets. Lastly, massive sulfide veins occur locally along Muddy Creek in hornfelsed sedimentary wall rock. Previous workers report gold in all mineralization types to range from ppm to more than 1 oz/t in select samples (Millholland, 1998).

Figure 7-21 Detail view of Biotite Monzonite Northwest of Muddy Creek, cut by sub-vertical limonite-stained fracture fillings of chalcopyrite-arsenopyrite (~1-3 per metre) (Source: MMTS, 2016)

Accessory minerals associated with mineralization in veins include vuggy quartz and K-spar, with greatly subordinate ilmenite, tourmaline, apatite, beryl, and possibly corundum. Unlike most other mineral

types of the Whistler region, magnetite is completely absent and the only measurable magnetism in hand samples is imparted by ilmenite and pyrrhotite.

Previous exploration has largely been focused on areas where the vein/fracture density is highest. This includes structural zones near the top of Discovery Creek, Phoenix Creek, Prospect Creek and Muddy Creek that occur along the strike extent of a significant northwest-striking fault zone. Two diamond drillholes drilled by Kiska in 2011 focused on a high density vein/fracture zone at the top of Prospect Creek. Here drilling returned a highlight result of 0.44 gpt gold over 44.2m from 297.0 downhole (MC11-002). True widths on mineralization in this area may be approximately 80% of drilled widths, yet the full extent of mineralization down-dip or along strike is unknown due to a lack of drilling.

8 DEPOSIT TYPES

Exploration on the Whistler Project by Kennecott, Geoinformatics and Kiska has identified three primary exploration targets for porphyry-style gold-copper deposits. These include the Whistler Deposit, Raintree, and the Island Mountain Breccia Zone. These deposits and their exploration criteria, conform to the porphyry deposit model as described in Sillitoe (2010). All of the porphyry prospects in the Whistler Area share similar styles of alteration, mineralization, veining and cross-cutting relationships that are generally typical of porphyry systems associated with relatively oxidized magma series (A- and B-type quartz vein stockwork, chalcopyrite-pyrite ore assemblage, presence of sulphates, core of potassic alteration with well-developed peripheral phyllic alteration zones). The Whistler area also hosts multiple secondary porphyry-like prospects defined by drilling, anomalous soil samples, alteration, veining, surface rock samples, Induced Polarization chargeability/resistivity anomalies and airborne magnetic anomalies. These include the Raintree North, Rainmaker, Dagwood, Round Mountain, Puntilla, Canyon Creek, and Snow Ridge prospects.

In contrast, Island Mountain has significantly different alteration, veining and sulphide assemblages associated with mineralization, principally the occurrence of pyrrhotite and to a lesser extent arsenopyrite associated with Au-Cu mineralization, Au-Cu association with strong sodic-calcic alteration, lack of significant sulphates, very minor hydrothermal quartz and weak to insignificant phyllic alteration. For these reasons, the porphyry system at Island Mountain may belong to the “reduced” subclass of porphyry copper-gold deposits (see Rowins, 2000).

The Muddy Creek area represents an additional exploration target with the potential to host a bulk tonnage, Intrusion Related Gold (IRG) deposit. Explorations by Millrock Resources Inc. on claims directly adjacent to the Muddy Creek area, which are geologically analogous, have returned encouraging preliminary results. Like Island Mountain, the Muddy Creek mineralization is distinct from the Whistler Porphyry systems and shares more similarity with IRG systems characteristic of the Tintina Gold Belt. The intrusive complex at Muddy Creek is predominantly monzonitic grading to more mafic marginal phases, yet is generally more felsic in composition relative to the diorites of the Whistler Area. Mineralization is restricted to sheeted vein zones with narrow millimetre scale veinlets and pegmatitic veinlets of quartz, feldspar, tourmaline and sulphides that include arsenopyrite, minor chalcopyrite and pyrite-pyrrhotite. Gold mineralization is largely confined to the minute veinlets whereas the intervening intrusive rocks are largely unaltered and unmineralized.

9 EXPLORATION

A summary of all exploration work conducted by various operators from 1986 to present is summarized in Table 9-1. Cominco Alaska Inc. is attributed with the discovery of the Whistler Deposit in 1986. The only exploration activity documented by Cominco for which Kiska has records are 8.4 line-kilometres of 2D Induced Polarization geophysics over the Whistler Deposit and sixteen diamond drillholes (1,677 m) in the Whistler Deposit.

Table 9-1 Summary of Exploration on the Whistler Project

Operator	Field Seasons	Mapping	Geophysics	Rocks	Soils	Silts
Cominco	1986-1989	n/a	• 8.4 line-km of 2D IP over the Whistler deposit	n/a	n/a	n/a
Kennecott	2003-2006	Property-wide mapping	• 39.4 line-km of 2D IP • Property-wide AM (400m line spacing) • Snow Ridge AM (79 line-km at 200m line spacing) • Whistler Area AM (1,365 line-km at 50m line spacing)	1312	2446	103
Geoinformatics	2007-2008	Prospect-scale mapping	• 8.8 line-km of 2D IP (Whistler area)	20	195	nil
Kiska	2009-2011	Prospect-scale mapping	• 40 line-km of 2D IP (Whistler area, Muddy Creek, Island Mountain) • 224 line-km of 3D IP (Whistler area) • Island Mountain EM (635 line-km at 100m line spacing)	315	1425	46

AM=Airborne Magnetic survey
EM=Airborne Electro-Magnetic survey
IP=Induced Polarization survey

9.1 Geological Mapping

The bulk of the detailed geological mapping and interpretation on the property was undertaken by Kennecott and summarized in a report by Young (2006). This work laid the foundation for the geological interpretation of porphyry-style mineralization in the Whistler area (including the Whistler Deposit and the Raintree - Rainmaker prospects), the Breccia Zone at Island Mountain, and Intrusion-Related Au mineralization in the Muddy Creek area.

9.2 Airborne Geophysics

An airborne helicopter geophysical survey was commissioned from Fugro Airborne Surveys ("Fugro") by Kennecott during 2003. This survey covered the entire property with a high sensitivity cesium magnetometer and a 256-channel spectrometer.

Additional airborne magnetic data were acquired by Kennecott in 2004 over two smaller areas using a helicopter equipped by a Rio Tinto bird operated by Fugro and a Kennecott geophysicist. One area over the Snow Ridge target was investigated at 200m line spacing (79 line kilometres). The other grid was

flown over the Whistler Deposit and surrounding area using fifty-metre line spacing (1,365 line kilometres).

Results from these airborne surveys were used by Kennecott to interpret geological contacts, fault structures and potential mineralization in the Whistler, Island Mountain and Muddy Creek areas. In particular, the airborne magnetic data showed that the Whistler Deposit displays a strong 900m by 700m positive magnetic anomaly attributed to the magnetic Whistler Diorite intrusive complex (host to the Whistler Deposit) in addition to a contribution from secondary magnetite alteration and veining associated with Au-Cu mineralization. This observation formed that basis for exploration targeting in the Whistler area, particularly those areas covered by a thin veneer of glacial sediments, such as the Raintree and Rainmaker prospects. These surveys, in addition to 2D Induced Polarization ground geophysical surveys targeted over airborne magnetic anomalies, were instrumental in the "blind" discovery of the Rainmaker and Raintree prospects by Kennecott in 2005 and 2006, respectively.

Kiska commissioned a helicopter-borne AeroTEM survey over the Island Mountain area by Aeroquest Airborne in June 2011. The principal geophysical sensor was an AeroTEM III time domain electromagnetic system, employed in conjunction with a caesium vapour magnetometer. Navigation was provided by a real-time differential GPS navigation system, plus a radar altimeter and a video recorder mounted in the nose of the helicopter.

The survey was flown on east-west flight lines with a spacing of 100m. Control lines were flown north-south, perpendicular to the survey lines, with a spacing of 1,000m. The nominal terrain clearance of the EM bird was 30m. The magnetometer sensor was mounted in a smaller bird connected to the tow rope 33m above the EM bird and 20m below the helicopter. Nominal survey speed was 75km/hr., resulting in a geophysical reading about every 1.5 to 2.5m along the flight path. The total survey coverage, including tie lines, was 635km. Mira Geoscience was subsequently engaged to produce a 3D inversion of the data. The survey was designed to target potential zones of disseminated and net-textured pyrrhotite mineralization similar to the pyrrhotite-associated gold-only zone of mineralization on the flanks of the Breccia Zone. The survey did detect a large 1.5km long by 1.0km wide conductivity low anomaly on the southeast side of the Island Mountain area, referred to as the Super Conductor target. This anomaly was subsequently tested by three drillholes that did suggest that the conductivity anomaly may be associated with disseminated pyrrhotite mineralization with elevated gold values, yet further drilling is required to be conclusive and fully test the target.

9.3 Ground Geophysics

Cominco acquired 8.4 line-km of 2D Induced Polarization geophysics from six east-west oriented lines centred over the Whistler Deposit discovery outcrops. Anomalous results from these lines were used to target the deposit area with subsequent drilling. From 2004 to 2006, Kennecott completed 39.4 line-km of 2D IP geophysics in the Whistler area. Within this survey, two IP lines were run over the Whistler Deposit magnetic anomaly and showed that mineralization is coincident with a strong chargeability anomaly. Subsequent lines targeted magnetic anomalies at the Round Mountain, Canyon Creek, Canyon Ridge, Canyon Mouth, Long Lake Hills, Raintree and Rainmaker prospects. In 2007-2008, Geoinformatics completed 8.8 line-km of 2D IP from six separate reconnaissance lines in the Whistler area targeting airborne magnetic highs. Anomalous results from this survey in the Raintree area led to the Raintree West discovery.

In 2009, Kiska undertook a significant 2D and 3D IP survey over most of the prospective areas in the Whistler, Island Mountain and Muddy Creek areas. Kiska commissioned Aurora Geoscience to complete 224 line-km of a 3D Induced Polarization geophysical survey. This was executed on two grids (Round Mountain; Whistler Area) which were comprised of grid lines ranging from 4 to 9km long with a line-spacing of 400m. From November to December, 2009, the raw data was delivered to Mira Geoscience for detail data quality control and error analysis prior to the construction of a 3D inversion model. This survey reaffirmed that the Whistler Deposit is coincident with a discrete 3D chargeability anomaly and showed that much of the Whistler area contains broad areas of anomalous chargeability (Figure 9-1). In conjunction with the airborne magnetic data, these zones of anomalous chargeability formed the basis for exploration drilling in the Whistler Area in 2010.

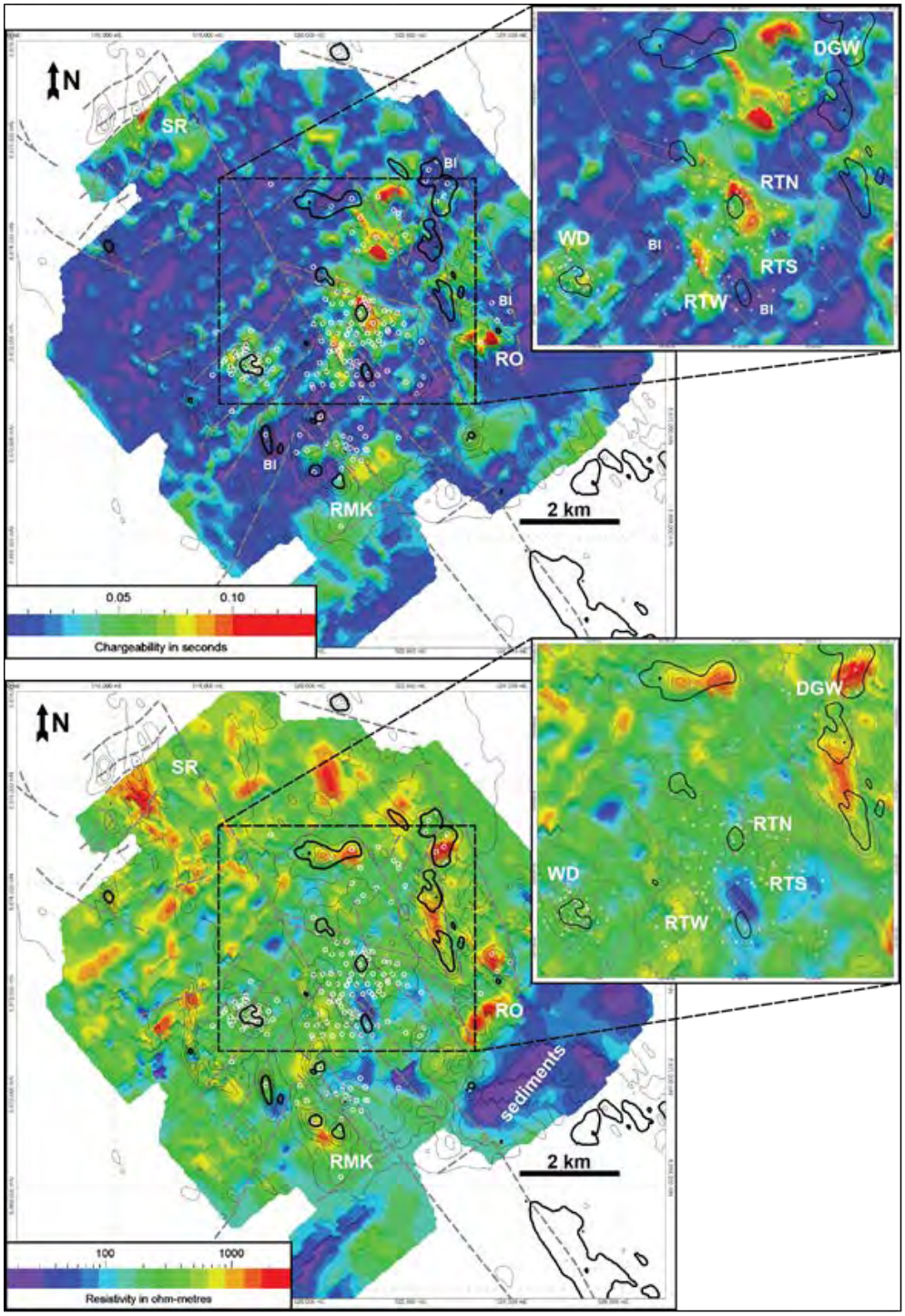


Figure 9-1 Depth slices (100m) of the chargeability (top) and resistivity (bottom) inversion model of the 3D IP data in the Whistler Area (with contours of the 400m line-spacing AMAG RTP). WD, Whistler Deposit; RTW, Raintree West; RTN, Raintree North; RTS, Raintree South, DGW, Dagwood; RMK, Rainmaker. (Source: Roberts, 2011a)

In 2009 Kiska commissioned SJ Geophysics to complete 40 line-km of a 2D Induced Polarization geophysical survey. Survey lines were generally semi-straight reconnaissance-type lines over areas of interest at Alger Peak, Island Mountain and Muddy Creek. The geophysical survey was acquired with a pole – dipole 2DIP technique with 100m dipoles.

9.4 Soil and Rock Sampling

From 2004 to 2006 Kennecott collected 1,300 rock samples, close to 2,500 soil samples and 103 stream sediments samples in the Whistler, Island Mountain and Muddy Creek areas. Within this program, a soil grid over the Whistler Deposit returned anomalous Au-Cu results coincident with the magnetic high. Other reconnaissance soil lines in the Whistler area with anomalous Au-Cu results helped to define areas of interest at the Round Mountain, Canyon Creek, Canyon Ridge, Canyon Mouth, and Long Lake Hills prospects. In addition, soil reconnaissance lines at Island Mountain led to the Discovery of the Breccia Zone and broad zones of anomalous Au at Muddy Creek. In 2009 and 2010, Kiska collected 1,417 soil samples and 293 rocks samples, which largely confirmed areas of interest in the Whistler, Island Mountain, and Muddy Creek areas previously defined by Kennecott.

Rock samples consist of approximately one kilogram of rock collected over a small area surrounding each sampling site using a rock hammer. The sampling location is located using a hand held GPS unit and marked in the field with a metallic tag. Descriptive information about the geology of the sample was recorded and aggregated into the project database.

Soil samples are collected from the surface soils (generally the B-horizon) by extracting approximately one kilogram of soil into a plastic bag usually with a hand auger. Each sampling site is located using a GPS unit. Descriptive information such sampling depth and physical attributes are recorded and aggregated into the project database. Typically field duplicates are collected at a rate of one every twenty samples.

Soil samples were collected along traverses as part of multi-kilometre reconnaissance programs, generally at 100 metre spacing. In two areas (Whistler Deposit and Snow Ridge), samples were collected at a more regular 100 metre grid spacing. This area is illustrated in Figure 9-2 with the whistler-Rainmaker terrain shown in Figure 9-3.

Figure 9-2 From the Whistler Area looking North to the Snow Ridge Area (Source: MMTS, 2016)

Figure 9-3 From the Whistler Area looking South to the Rainmaker Area (Source: MMTS, 2016)

10 Drilling

A total of 70,247m of diamond drilling in 257 holes are documented in the Whistler database for drilling on the Whistler Project by Cominco, Kennecott, Geoinformatics, and Kiska from 1986 to the end of 2011 as shown in Table 10-1. Of these drillholes 21,132m in 52 holes have been drilled in the Whistler Deposit area, 20,479m in 94 holes have been drilled in the Raintree area, and 14,410m in 36 holes comprise the Island Mountain resource area. There are 14,226m in 75 holes in areas outside the three resource areas.

Table 10-1 Summary of Diamond Drilling on the Whistler Project

Operator	Year	Whistler		Raintree		Island Mountain		Outside Resource Areas		Total	
		No. Holes	Length (m)	No. Holes	Length (m)	No. Holes	Length (m)	No. Holes	Length (m)	No. Holes	Length (m)
Cominco	1986-1989	16	1,677							16	1,677
Kennecott	2004	5	1,997					1	310	6	2,307
	2005	9	5,251	1	213			8	1,479	18	6,943
	2006	1	705	4	1,115			6	1,378	11	3,199
	Kennecott Sub-Total	15	7,953	5	1,328			15	3,168	35	12,449
Geoinformatics	2007	7	3,321							7	3,321
	2008	6	2,707	2	622			3	975	11	4,303
	Geoinformatics Sub-Total	13	6,027	2	622			3	975	18	7,624
Kiska	2009	1	228	1	479	1	387	2	424	5	1,518
	2010	7	5,247	8	3.255	11	4,991	10	3,182	36	16,674
	2011			78	14,795	24	9,032	45	6,478	147	30,305
	Kiska Sub-Total	8	5,475	87	18,529	36	14,410	57	10,084	188	48,498
Total		**52**	**21,132**	**94**	**20,479**	**36**	**14,410**	**75**	**14,226**	**257**	**70,247**

Figure 10-1 through Figure 10-3 are plan views of each deposit illustrating the drillholes by Year / Owner for Whistler, Raintree and Island Mountain respectively. The resource pit outline is shown in black on all figures, with the underground resource confining shape in grey for the Raintree deposit.

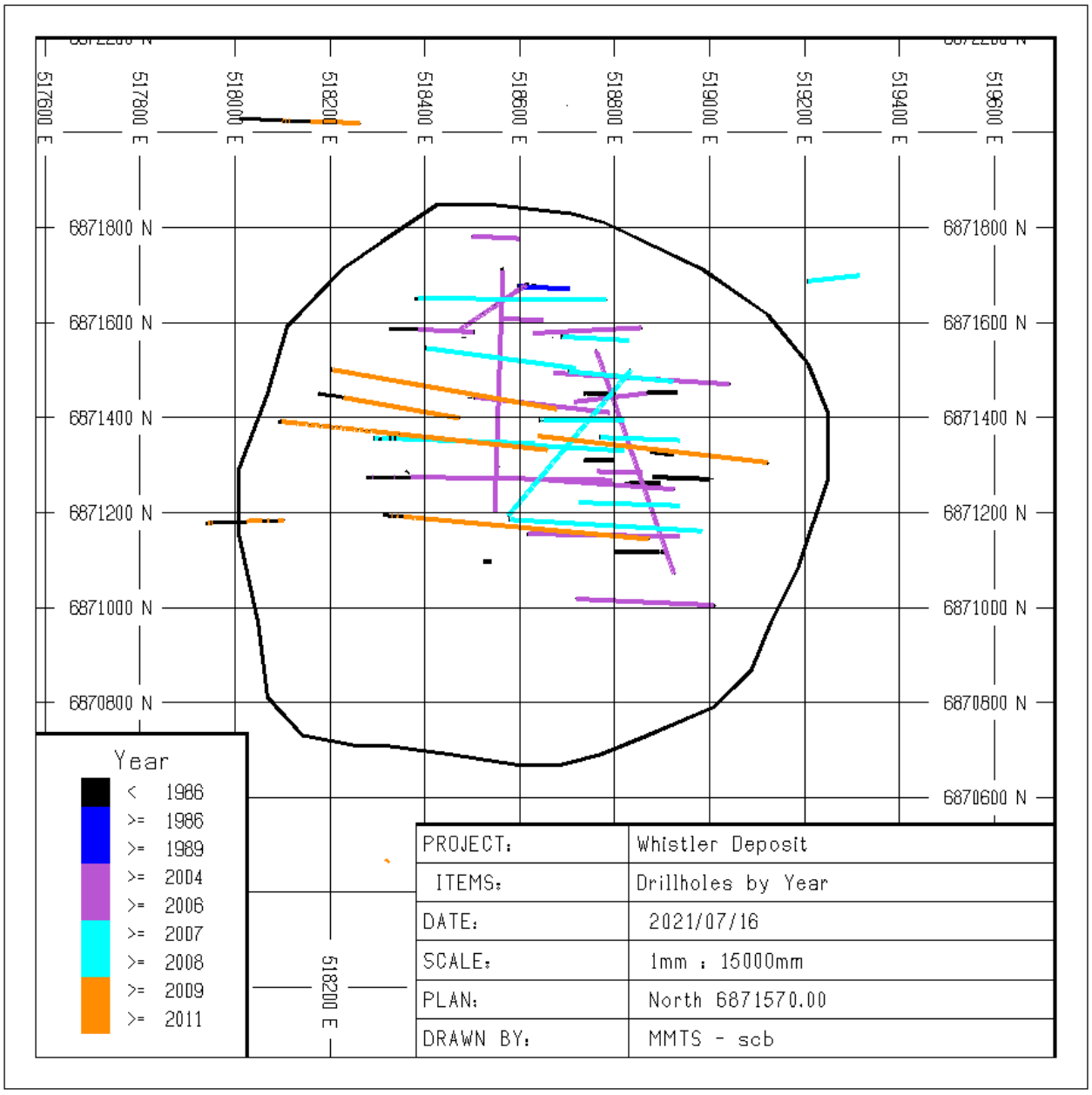


Figure 10-1 Plan View of Drillholes by Year/Owner – Whistler (Source: MMTS, 2021)

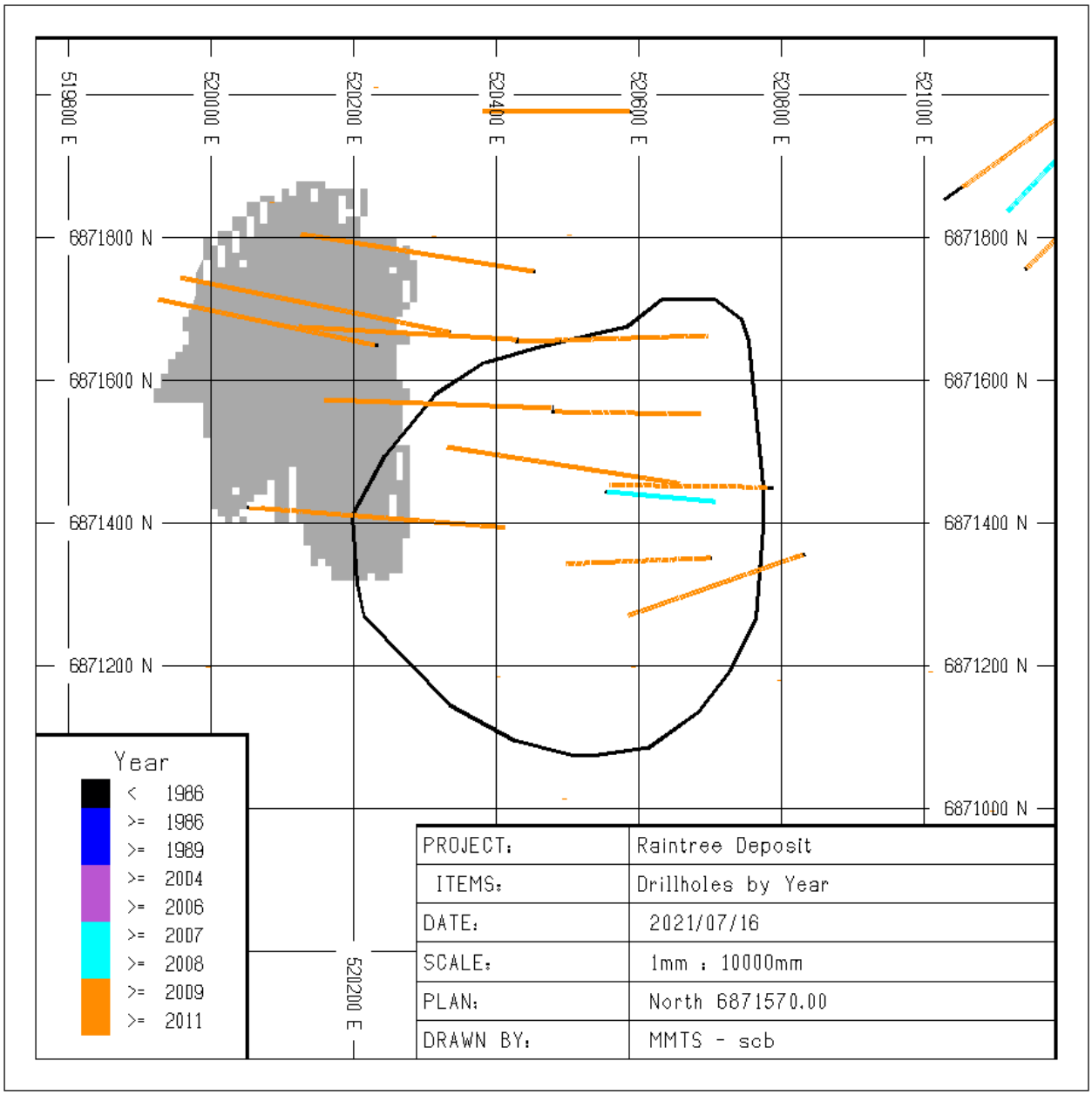


Figure 10-2 Plan View of Drillholes by Year/Owner – Raintree (Source: MMTS, 2021)

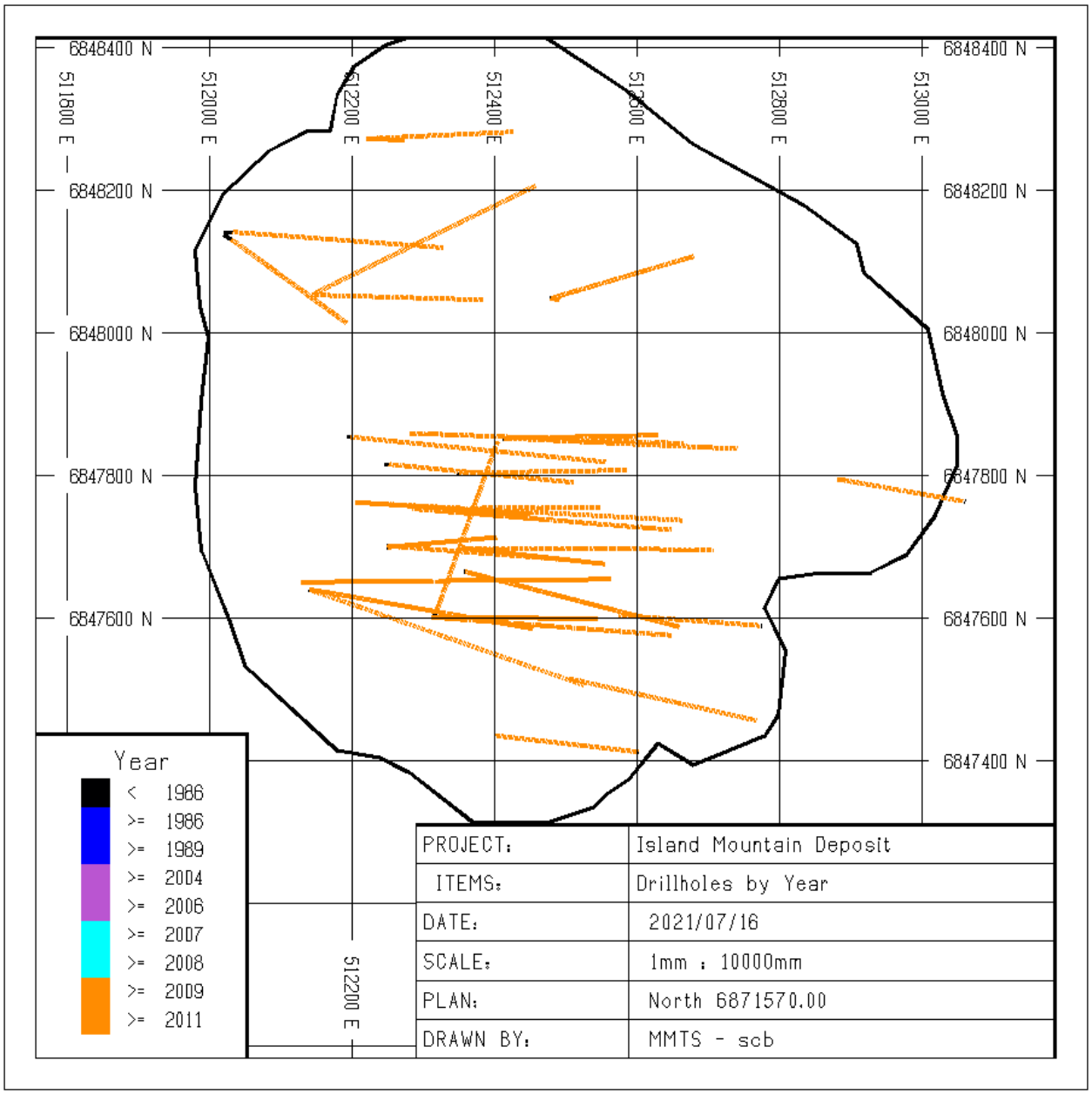


Figure 10-3 Plan View of Drillholes by Year/Owner – Island Mountain (Source: MMTS, 2021)

10.1 Drilling by Cominco Alaska Inc.

Partial records documenting the sixteen shallow core boreholes (1,677 m) drilled by Cominco on the Whistler gold-copper deposit in 1988 and 1989 including descriptions of the core, drilling logs and assay results are described by Couture, 2007.

Kennecott resurveyed the locations of several holes using either a hand held GPS or with a Trimble ProXr receiver providing real-time sub-metre accuracy. Three holes were unable to be located. The core from the Cominco holes was reportedly donated to the State of Alaska in 1990 and may be stored at a core library in Eagle River, Alaska (Couture, 2007).

10.2 Drilling by Kennecott

Between 2004 and 2006, Kennecott drilled a total of thirty-five core holes (12,449 m) on the Whistler Project, with fifteen of those core holes (7,953 m) intersecting the Whistler Deposit. The Kennecott core is partly stored at the site camp with some in a secured warehouse in Wasila, Alaska. Drilling operations were conducted by NANA-Dynatec and NANA-Major drilling out of Salt Lake City, Utah using up to three drill rigs supported by helicopter. Core size was HQ-diameter in 2004 and subsequently NQ in 2005 and 2006 (Couture, 2007).

Drilling was documented by Kennecott personnel. The collar position of each borehole was laid out with a hand GPS unit, while azimuth and inclination were determined with a compass. Individual collars were subsequently surveyed using a Trimble ProXr receiver providing real-time sub-metre accuracy. Flex It Multi-shot readings at twenty foot (six metre) intervals were taken to monitor downhole deviation. Magnetic susceptibility and gravity data were also recorded. Drilling, logging and sampling were directly supervised by a suitably qualified geologist. Core retrieved from drilling was oriented using EzMark or an ACE device. All casing was pulled after drilling. Core recovery, geotechnical point load test, and rock quality determination were collected before the geologist recorded detailed information about lithology, mineralogy, alteration, vein density, and structure. All recorded descriptive data were entered into an acQuire database (Couture, 2007).

Twenty boreholes (4,746 m) were drilled by Kennecott to investigate exploration targets outside the Whistler deposit. Targets selected for drilling were typically chosen based on a combination of geology, geochemical and geophysical criteria believed to be indicative of magmatic hydrothermal processes. Selected targets were explored with vertical or angled drillholes in an effort to validate the geological model. One or more boreholes were drilled with the intent to identify the potassic core of a magmatic hydrothermal system known to be associated with better copper and gold sulphide mineralization in this area (Couture, 2007).

10.3 Drilling by Geoinformatics

In 2007 and 2008, Geoinformatics drilled twelve holes totalling 5,784m on the Whistler Deposit, and six holes totalling 1,841m on Raintree and other exploration targets in the Whistler project area. Geoinformatics used the same drilling contractor and drilling procedures as previously Kennecott except that oriented core was not obtained. Exploration drilling by Geoinformatics in the Whistler area targeted geophysical anomalies in the Raintree and Rainmaker areas, using the same basic porphyry exploration model as Kennecott (Roberts, 2011a).

10.4 Drilling by Kiska

During the 2009-2011 Kiska drilling campaigns, diamond drilling was performed by Quest America Drilling and Falcon Drilling Ltd., and supervised by geological staff from Kiska. Drilling was performed by helicopter-portable diamond drill rigs. Drillholes were collared with HQ diameter tools (6.35cm) and reduced to NQ diameter tools (4.76cm) when the rig reached the depth capacity of the HQ equipment. Collar locations were determined with hand-held GPS devices by Kiska staff. Downhole surveys for all holes were conducted by the drill contractor at 60m intervals down-hole using a Reflex EZ Shot down-hole camera (Roberts, 2011a).

During the 2009-2011 Kiska drilling campaign a total of 188 diamond drillholes were completed for a total of 48,498m. All drillholes were logged by Kiska geologists at the core logging facility at the Whistler

exploration camp. Logged geological information included lithology type, alteration type and intensity, vein types, percent vein volume and vein orientations (to core axis), structures (to core axis), the percent of sulphides and oxides, and magnetic susceptibility at meter intervals. Geotechnical information logged included core recovery and rock quality designation (RQD). All logging data was entered on paper logging forms in 2009 and transcribed digitally info LogChief software in 2010 and 2011 (Roberts, 2011a).

10.4.1 Whistler Deposit

A total of 8 holes totalling 5,475m were drilled on the Whistler Deposit by Kiska. These holes were targeted to in-fill gaps from the previous drill campaigns and to test the edges and depth of the intrusive complex that hosts the deposit.

10.4.2 Raintree Deposit

The Raintree deposit is located 1,800m to the east of the Whistler Deposit in the area formerly called Raintree West, just off the nose of Whistler Ridge. The discovery drillhole, RN-08-06, targeted an airborne magnetic high anomaly that is coincident with an IP chargeability high anomaly detected on a 2D IP reconnaissance line that crossed the Whistler Area. This hole discovered a significant zone of near surface (below 5m to 15m of till cover) gold-copper porphyry mineralization (160m grading 0.59 gpt gold, 6.02 gpt silver, 0.10% copper). Kiska expanded on this discovery in 2009 with a scissor hole drilled on the same section as RN-08-06 (WH09-02). This was successful at duplicating the gold-copper mineralization zone in RN-08-06, and identified a second, deeper zone of porphyry mineralization on the west side of the Alger Peak fault zone. In 2010, Kiska followed up with an additional four drillholes, and in 2011 further tested the shallow zone and the deep zone with a total of eight holes for a total of 5,997m. The majority of drillholes in Raintree were drilled on east-west sections with section spacing of 100m.

10.4.3 Whistler Area Exploration Drilling

A total of 133 exploration holes for 27,464m of drilling in the Whistler area were completed by Kiska in 2009-2011. A majority of these holes were drilled in the area that includes much of the broad valley floor to the north, east and south of the Whistler Ridge, that includes the parts of the Raintree and Rainmaker prospect areas (Figure 10-4). Targeting for this drilling program was developed by a technical team comprised of Kiska and Kennecott geologists based on blind geophysical targets heavily weighted by the results of the 2009 3D IP survey (chargeability and resistivity anomalies), airborne magnetic anomalies, anomaly size, and proximity to areas of known mineralization or anomalous surface geochemistry. A majority of these holes intersected andesitic volcanic rocks with moderate to strong sericite-clay-pyrite alteration and occasional sphalerite- and galena-bearing quartz-carbonate veins with banded and colliform epithermal-like textures. The holes were spaced on average greater than 500m apart and alteration and veining indicate that broad areas in the Whistler Area define the upper, cooler margins of a large porphyry-related hydrothermal system or a cluster of smaller, coalescing porphyry-related hydrothermal systems. Within this broad area, drilling returned Whistler-like, porphyry-style Au-Cu mineralization with significant intercepts at the Raintree, Raintree North, and the Rainmaker prospects, and anomalous alteration and geochemistry at the Dagwood prospect.

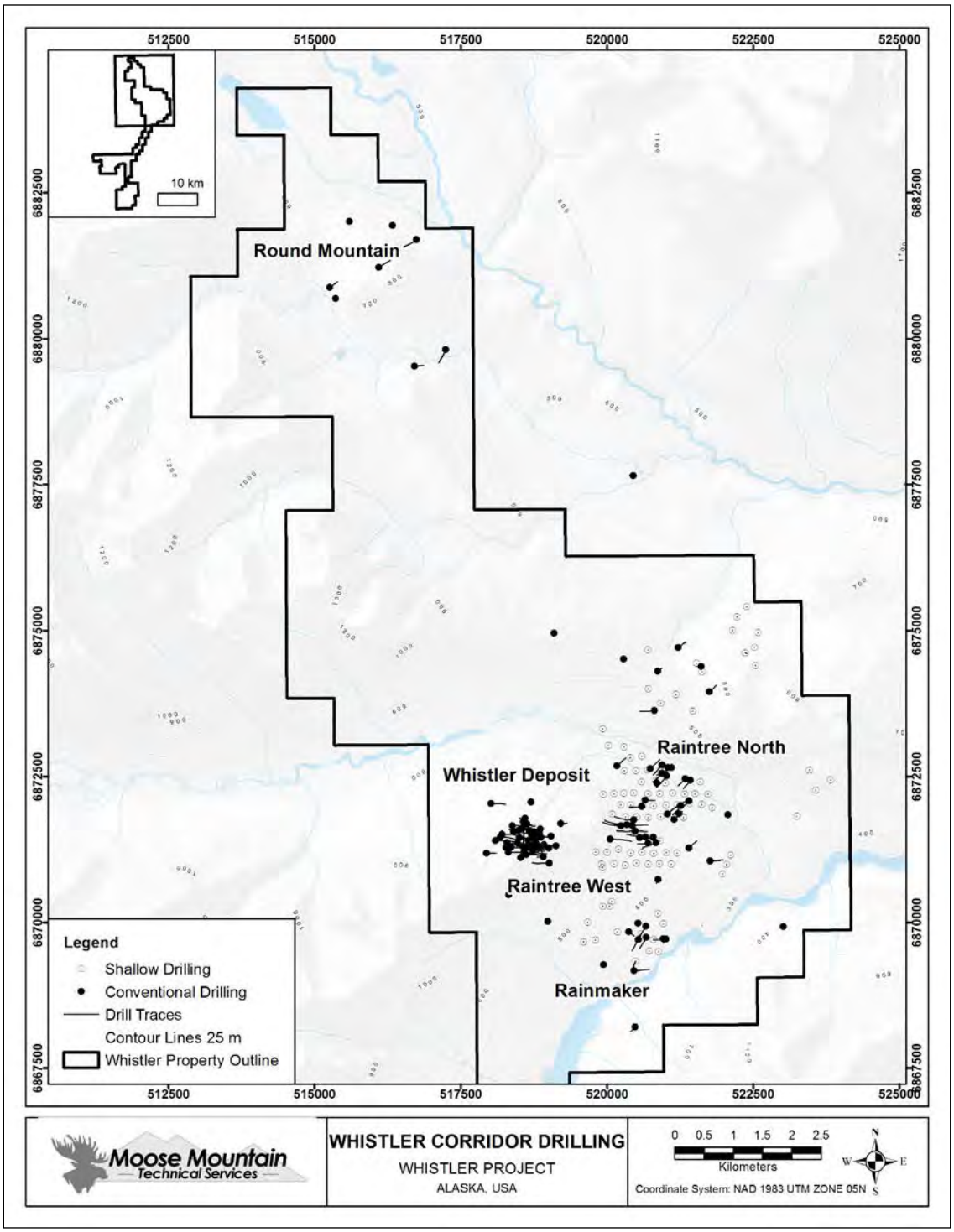


Figure 10-4 Whistler Area Drilling (Source: MMTS, 2016)

10.4.4 Island Mountain Drilling

The 35 out of 42 holes completed by Kiska in the Island Mountain area between 2009 and 2011 targeted the Breccia Zone. The remainder targeted zones of either anomalous surface rock geochemistry and alteration (Cirque Zone) or geophysical anomalies (Super Conductor). Significant results were only

returned from the Breccia Zone and are summarized below. The alteration patterns and geochemical pathfinder elements from the other areas may be useful for future drill targeting.

At the Island Mountain Deposit, drilling included in the resource estimate includes 36 drillholes for 14,410m of drilling. The majority of these holes were completed on seven east-west cross-sections spaced 50m apart in a 300 square metre area from 6847600N to 6847900N (Figure 10-5). The lithologies, alteration and mineralization of the breccia-related mineralization indicate that the magmatic-hydrothermal breccia complex defines an irregular pipe-shaped body approximately 300m by 300m in plan which from the surface down 500m. Similar to the strike of the faults in the area, this breccia complex is sub-vertical and appears to trend in a northwest-southeast orientation (Roberts, 2011a).

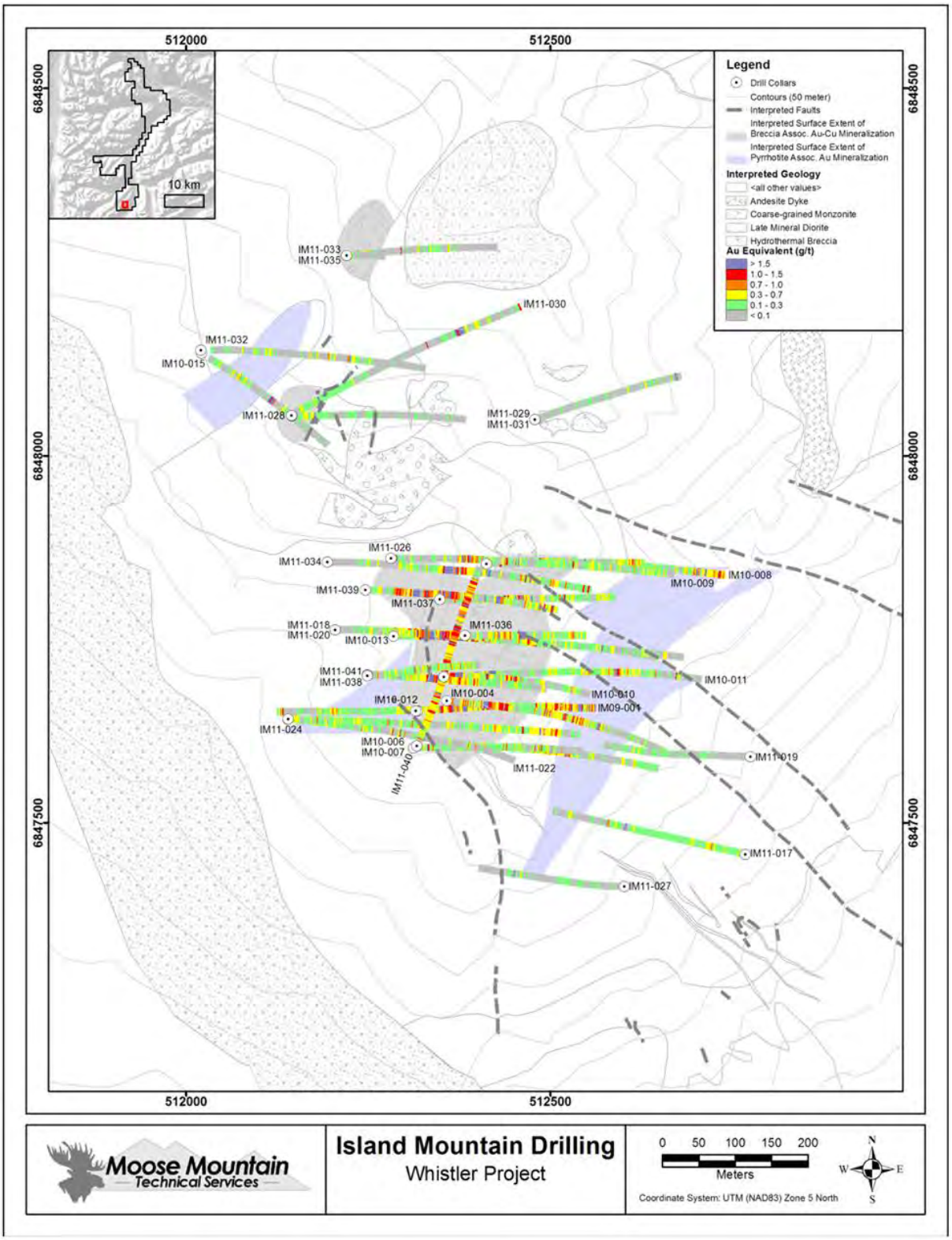


Figure 10-5 Plan Map of Drillholes and Mineralization Style at the Breccia Zone (Source: MMTS, 2016, modified from Roberts, 2011b)

Surface mapping, soil geochemistry and drilling has defined other distinct breccia bodies with zones of alteration, surface anomalism and significant mineralization up to 700m to the north - northwest of this breccia complex. Significant zones of mineralization are shown in Table 10-2.

Table 10-2 Examples of Significant Drill Results North of the Island Mountain Deposit

Hole	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	Cu (%)
IM10-015	74.3	111.0	36.7	0.27	0.37	0.01
and	166.8	212.9	46.1	1.19	0.53	0.01
Including	168.5	182.2	13.7	3.69	0.56	0.01
and	274.0	276.0	2.0	10.5	2.30	0.04
IM11-030	20.0	63.0	43.0	0.32	1.12	0.03
and	364.1	438.0	73.9	0.72	2.24	0.09
including	364.1	390.0	25.9	1.79	5.05	0.09
IM11-032	104.0	137.0	33.0	0.21	0.62	0.02
and	246.0	300.0	54.0	0.29	0.28	0.01
IM11-033	2.8	58.0	55.2	0.41	1.54	0.03
including	2.8	42.0	39.2	0.56	1.18	0.02
IM11-035	3.0	44.0	41.0	0.44	2.19	0.03

11 Sample Preparation, Analyses, and Security

11.1 Sample Preparation and Analyses

11.1.1 Sample Preparation and Analysis -Cominco

There is no available documentation that describe the sampling used by Cominco. The core is not available for data verification. The sample preparation and analytical procedures used by Cominco are not known. Core samples were assayed for gold, silver and copper and occasionally for a suite of eight other metals (arsenic, cobalt, iron, manganese, molybdenum, nickel, strontium and zinc) at an unknown laboratory. No certificates of these analyses are available. It is unknown if quality control samples were inserted into the sampling stream, if they were, no records of these samples were available.

11.1.2 Sample Preparation and Analysis – Kennecott and Geoinformatics

Sample preparation protocols for drilling programs on the Whistler project documenting procedures describing all aspects of the field sampling and sample description process, handling of samples, and preparation for dispatch to the assay laboratory, were initially developed by Kennecott and subsequently adopted by Geoinformatics (SRK, 2007).

All soil, rock chips, core, and stream sediments samples were organized into batches of samples of a same type for submission to Alaska Assay Laboratories Inc. in Fairbanks, Alaska (AAL) for preparation using standard preparation procedures. The AAL laboratory is part of the Alfred H. Knight group an established international independent weighing, sampling and analysis service company (SRK, 2007).

Kennecott used two primary independent laboratories for assaying samples prepared by AAL. The samples collected during 2004 were assayed at AAL, however, all prepared pulps collected in 2005 and 2006 were submitted to ALS-Chemex Laboratory in Vancouver, British Columbia for assaying. The ALS Chemex Vancouver laboratory is accredited to ISO 17025 by the Standards Council of Canada and participates in a number of international proficiency tests, such as those managed by CANMET and Geostats (SRK, 2007).

It is reported that Kennecott used two secondary laboratories for check assaying. ALS-Chemex re-assayed 191 pulp samples from the 2004 sampling programs, and Acme Analytical Laboratories Ltd. of Vancouver, British Columbia ("Acme") was used as a secondary laboratory in 2005 and 2006. Acme is also an ISO 17025 accredited laboratory (SRK, 2007).

Core samples were prepared for assaying using industry standard procedures. Splits of 500g of coarsely crushed core samples were pulverized to ninety percent passing a -200 mesh screen. Splits of 250g samples were pulverized to eighty-five percent passing a -150 mesh screen. In 2004, 30g pulp samples were assayed by Alaska Assay Laboratories in Fairbanks for gold by fire assay with atomic absorption finish (AA), and for a suite of nine metals by aqua regia digestion with inductively coupled plasma (ICP). Core and rock samples collected after 2004 were assayed by ALS-Chemex for gold by fire assay with AA finish on thirty gram sub-samples and for a suite of thirty-four elements (including copper and silver) by aqua regia digestion and ICP-AES on 0.5g sub-samples. Elements exceeding concentration limits of ICP-AES were re-assayed by single element aqua regia digestion and atomic absorption spectrometry (SRK, 2007).

Kennecott included quality control (QAQC) samples with all samples submitted for assaying. Each batch of twenty core samples submitted for assaying contained one sample blank, one of three project specific certified reference materials (CRMs), a field duplicate and a coarse crushed duplicate. These QAQC samples inserted blind to the assay laboratory except for the coarsely crushed sample duplicates that were inserted by the preparation laboratory (SRK, 2007).

Geoinformatics used the sample preparation and assaying protocols and quality control measures developed by Kennecott. All samples collected by Geoinformatics were submitted to Alaska Assay Laboratories for preparation. Pulps were submitted to ALS-Chemex by the preparation laboratory for assaying using the same tests described previously (SRK 2008).

Two sample blank materials were collected locally Kennecott. An andesite rock (OPPBLK-1) collected on outcrop (522,399m east and 6874,144m north; NAD27, zone 5) and porphyritic andesite (WP-BLK-1) intersected in borehole 04-DD-WP-01 (SRK, 2007)

For the Whistler Project, Kennecott fabricated three in house CRMs (WPCO1, WP-MG1 and WP-HG1; from coarse rejects from two boreholes drilled at Whistler (WP04-04-17 and WH04-01-17) that were used through 2010. Coarse rejects from core samples were selected to create three composite samples yielding low, medium and high copper and gold values. Each composite sample was prepared at AAL to yield homogenized pulverized samples for inclusion in the sample stream. Five samples of each standard were then submitted to five commercial laboratories for round-robin assaying. Each standard sample was assayed twice at each laboratory yielding fifty assay results that were analyzed to determine the expected values and standard deviation for QAQC analysis (Franklin, et al 2006).

11.1.3 Sample Preparation and Analysis – Kiska

Kiska geologists marked out samples for assay after logging the drill core, typically 2m to 3m in length, honoring lithological and alteration contacts. In general the drillholes were sampled top to bottom, excepting holes that were partially sampled due to a lack of significant mineralization. After the sample tags were inserted into the core boxes, the core was photographed wet and dry before being cut in half with a diamond saw. One half was submitted for assay, one half was retained (Roberts, 2011a).

In 2009, Kiska used AAL in Fairbanks as the primary assay lab, but switched to ALS-Chemex for the 2010 and 2011 drilling, both laboratories were independent of Kiska. At AAL samples were dried then crushed to 70% passing 10 mesh, a 250g split was pulverized to 90% passing 150mesh. A 30 element suite was conducted by three-acid digestion with ICP-AES and gold was analyzed using 30g samples by fire assay with AAS finish (Roberts, 2011a).

At ALS Chemex samples were crushed to 70% passing 2 mm, split and pulverized to 85% passing 75µm. Gold was analyzed with a 30g sample by fire assay with AA finish, 33 element analysis and ore grade were done with four-acid digestion on ICP-AES finish.

Kiska included QAQC samples at the rate of one CRM, one blank, and one field duplicate (quarter core) in each batch of 20 samples which were blind to the laboratory. CRMs purchased from Ore Research & Exploration and silica sand was used for blanks. A sample tag was included for a lab duplicate. (Roberts, 2011).

11.2 Sample Security

Kennecott devised a documented chain of custody procedure to monitor and track all sample shipments departing the base camp until the final delivery of the pulp to the assaying laboratory. Geoinformatics is reported to have adopted all procedures developed by Kennecott. These procedures included the use of security seals on containers used to ship samples, detailed work and shipping orders. Each transfer point was recorded on the chain of custody form up to the final delivery of the pulp to the assay laboratory (SRK, 2007).

Kiska used rice bags closed with security tags to contain the samples for submission as shown in Figure 11-1. The bags were loaded onto Regal Air flights direct to Anchorage and met by an Alaska Minerals representative who delivered them initially to Lynden transport to be shipped to the ALS preparation lab in Fairbanks, AK, or later directly to the ALS preparation lab Anchorage, AK. Prepared pulp samples were shipped from to the ALS lab in North Vancouver for assay. Chain of custody tracking was documented on the form shown in Figure 11-2 (Roberts, 2011).

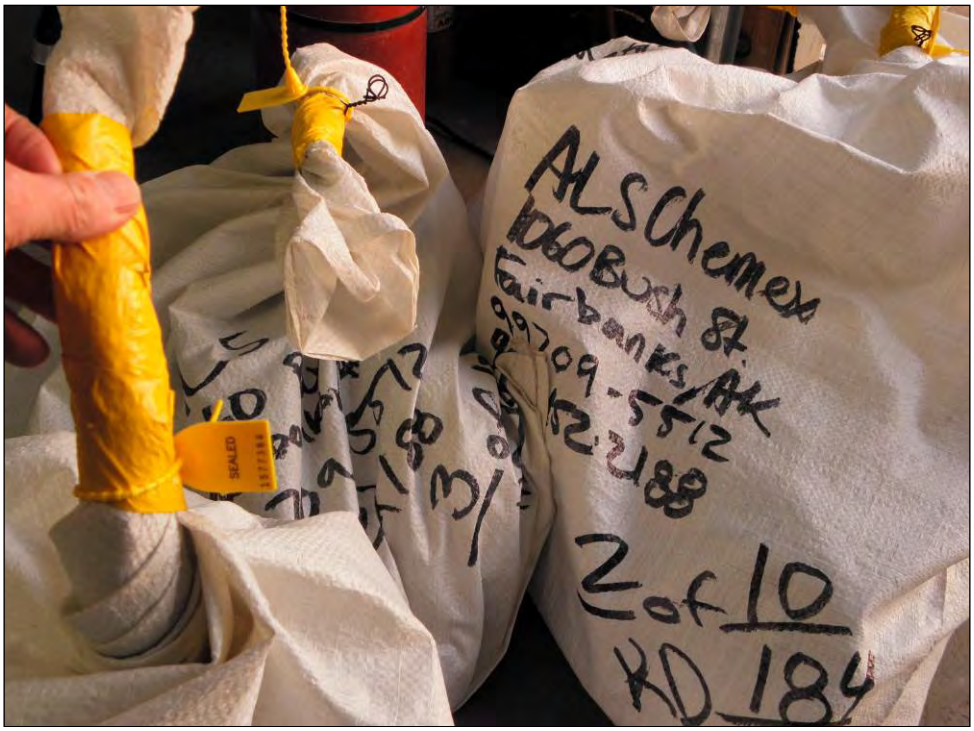


Figure 11-1 Sample Bags with Security Tags (Source: Roberts, 2011a)

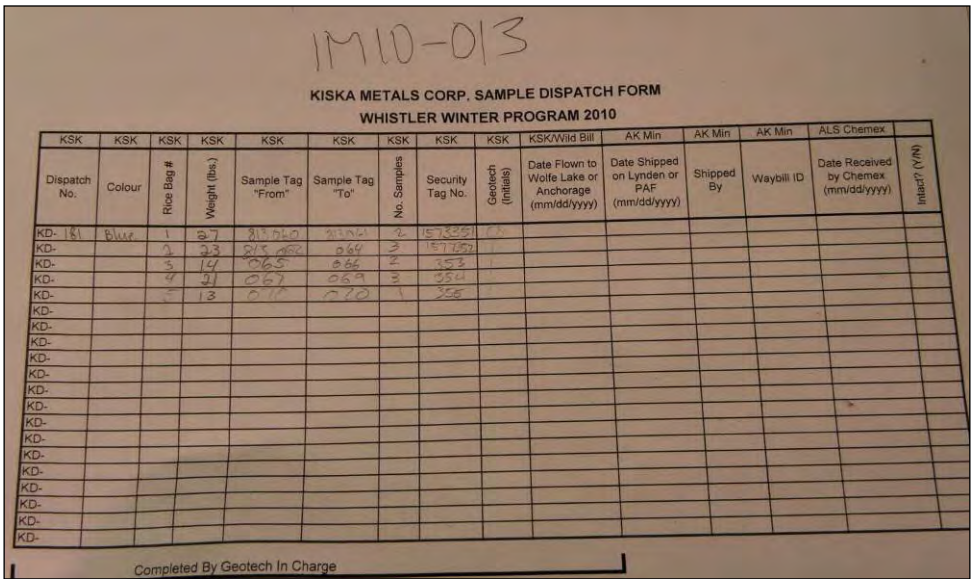


Figure 11-2 Sample Dispatch Form (Source: Roberts, 2011a)

11.3 QAQC Summary

The total number of assays and QAQC samples including samples identified as Certified Reference Materials (CRMs), blanks, field duplicates and coarse duplicates in the provided database is given in Table 11-1 and shows that the percent of included QAQC samples is 11.4% in Whistler, 18.7% in Raintree and 19.3% in Island Mountain. The year in which the QAQC is counted is by year of analysis, not drilling. The samples in the Whistler area are slightly lower than industry standards, the number of included samples in the Raintree and Island Mountain areas meet or exceed industry standards. QAQC data for copper and gold only have been provided and are presented here. The analysis of the QAQC samples by deposit follows.

Table 11-1 QAQC Sample Summary (All Areas and Years)

Deposit	Year	Assay Samples	CRMs	Blanks	Field Dups	Coarse Dups	QAQC Samples	% QAQC
Whistler	1986-1989	697					0	
	2004	918		2			2	0.2%
	2005	2,602	131	157			288	10.0%
	2006	353	21	40			61	14.7%
	2007	1,347	50	74		47	171	11.3%
	2008	1,180	98	81		35	214	15.4%
	2009	116				14	14	10.8%
	2010	1,726	111	101	108	108	428	19.9%
	Whistler All	9,114	411	455	108	204	1,178	11.4%
Raintree	2005	72	4	4			8	10.0%
	2006	383	22	20			42	9.9%
	2008	249	18	18		9	45	15.3%
	2009	262				33	33	11.2%
	2010	1,298	81	77	80	83	321	19.8%

Deposit	Year	Assay Samples	CRMs	Blanks	Field Dups	Coarse Dups	QAQC Samples	% QAQC
	2011	5,136	324	319	303	317	1,263	19.7%
	Raintree All	7,463	449	438	383	442	1,712	18.7%
Island Mountain	2009	194				21	21	9.8%
	2010	2,140	128	133	130	129	520	19.5%
	2011	3,110	185	195	186	192	758	19.6%
	Island Mountain All	5,444	313	328	316	342	1,299	19.3%
Total		**22,021**	**1,173**	**1,221**	**807**	**988**	**4,189**	**16.0%**

11.3.1 QAQC Whistler Deposit

11.3.1.1 Whistler Blanks

The summary of the gold assays of blindly included samples of blank material used to assess contamination in the Whistler deposit sample stream is given in Table 11-2. The results show an overall 2% failure rate at 10 times detection limit (DL) which is more than would normally be expected. A possible reason for this is the use of locally sourced andesite and porphyritic andesite as blank material by both Kennecott and Geoinformatics. It is seen that in the drilling by Kiska in 2010, that there are no failures when the silica sand is used for blanks.

Table 11-2 Summary of Gold Assays of Blanks, Whistler Deposit

Year	Gold Blank Assays	Fails at 5*DL	% Fail at 5*DL	Fails at 10*DL	% Fail at 10*DL
2004	2	0	0.0%	0	0.0%
2005	158	3	1.9%	2	1.3%
2006	40	1	2.5%	1	2.5%
2007	74	0	0.0%	0	0.0%
2008	81	13	16.0%	6	7.4%
2010	101	0	0.0%	0	0.0%
Total	455	17	3.7%	9	2.0%

A sequential plot of gold assays of blanks normalized by the DL is presented in Figure 11-3. The grey line indicates the year of drilling and it is clearly seen that the performance of the blank material in increased in the 2010 samples, with all results below the 5* DL line, coincident with the use of silica sand for blank material. The nine failures at the 10*DL level have been assessed and they follow samples of moderate gold mineralization with the highest being 0.82g/t and in zones of 0.2 to 0.6g/t. Usually failures due to contamination are seen following gold assays of much greater magnitude, but this does not preclude that there may have been some minor contamination.

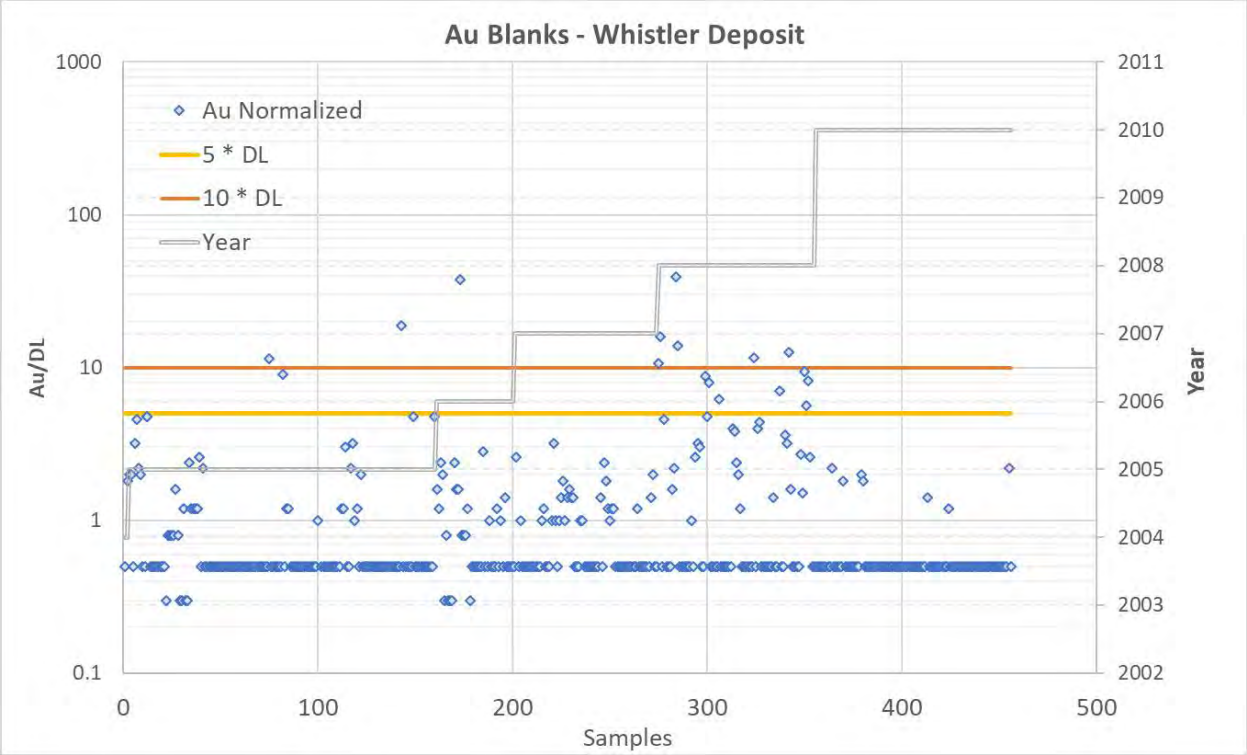


Figure 11-3 Sequential Plot of Gold Assays of Blanks, Whistler Deposit (Source: MMTS, 2021)

The DL for copper assays at the Whistler deposit is either 1 or 5ppm depending on the analysis lab and year, and applying a criteria of 5 or 10 times DL results in an extremely high failure rate. The copper assays are compared against a level of 100 ppm, or 0.01%, and results are given in Table 11-3. The highest percentages with blank sample assays greater than 100ppm, occurs in years 2005 through 2008 when the locally sourced material was used as a blank.

Table 11-3 Summary of Copper Assays of Blanks, Whistler Deposit

Year	Copper Blank Assays	Number >100 ppm	%>100 ppm
2004	2	0	0.0%
2005	158	40	25.3%
2006	40	7	17.5%
2007	74	7	9.5%
2008	81	26	32.1%
2010	105	0	0.0%
Total	460	80	17.4%

The sequential plot of copper assays of blanks in the Whistler deposit is presented in Figure 11-4. Of the six failures for copper blanks with assays greater than 500ppm, one appears to be mislabeled, as the same sample number appears in the primary database, one follows an assay at DL, and 4 follow assays of similar magnitude, indicative of some possible problems with contamination and some spurious

results. The overall high rate of failures in results from 2004 through 2008 is consistent with the possibility of trace copper in the locally sourced blank material.

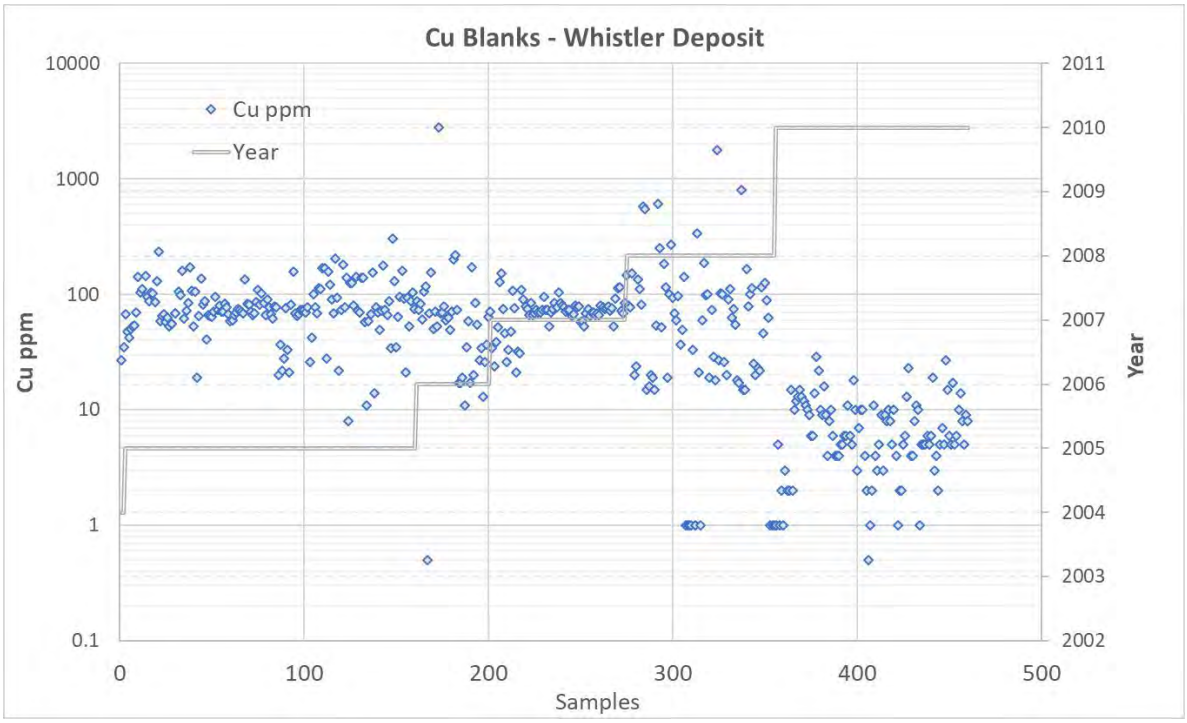


Figure 11-4 Sequential Plot of Copper Assays of Blanks, Whistler Deposit (Source: MMTS, 2021)

11.3.1.2 Whistler CRMs

There are 411 samples of CRMs certified for both gold and copper included in the Whistler sample stream which are used to assess the accuracy of the laboratory assays. The results of analysis of these samples is given in Table 11-4 in order of increasing grade of the expected value (EV) and shows that the overall failure rate is 2.2%. The average percent error is -1.5%, indicating a minor negative bias to the laboratory gold assays. The CRM with the greatest percent error, has only two samples. The coefficients of variation indicate reasonably consistent results among assays of the CRMs.

Table 11-4 Whistler Deposit CRM Summary, Gold

CRM	Used	Samples	Average of Au (g/t)	Std Dev of Au (g/t)	CV	EV (g/t)	% Error	Low Fail	High Fails	% Fail
OREAS-52Pb	2010	2	0.334	0.011	3.4%	0.307	8.1%	0	0	0.0%
OREAS-52c	2010	51	0.343	0.016	4.6%	0.346	-1.0%	1	0	2.0%
WP-CO1	2005-2010	135	0.472	0.030	6.4%	0.480	-1.7%	2	2	3.0%
OREAS-53Pb	2010	15	0.620	0.015	2.4%	0.623	-0.4%	0	0	0.0%
OREAS-50c	2010	12	0.827	0.031	3.8%	0.836	-1.1%	0	0	0.0%
WP-MG1	2005-2008	98	1.675	0.080	4.8%	1.715	-2.4%	0	0	0.0%
OREAS-54Pa	2010	25	2.878	0.096	3.3%	2.900	-0.8%	1	0	4.0%
WP-HG1	2005-2010	73	4.651	0.231	5.0%	4.693	-0.9%	3	0	4.1%
Total	2005-2010	411					-1.5%	7	2	2.2%

The normalized process control chart showing results for all CRMS is given in Figure 11-5 and shows the acceptable results across all CRMs. It does not appear that quality control procedures were always followed. For instance, the high failure in 2008, plotting at almost +6 SD is sample 514915 in drillhole WH-08-08, and follows an assay value of 0.902g/t. This control sample and the neighboring primary samples should have been reassayed and replaced in the database if strict control measures were in place. Although individual lapses control procedures can be identified, the overall impact of these is not considered material as the number of failures is relatively small.

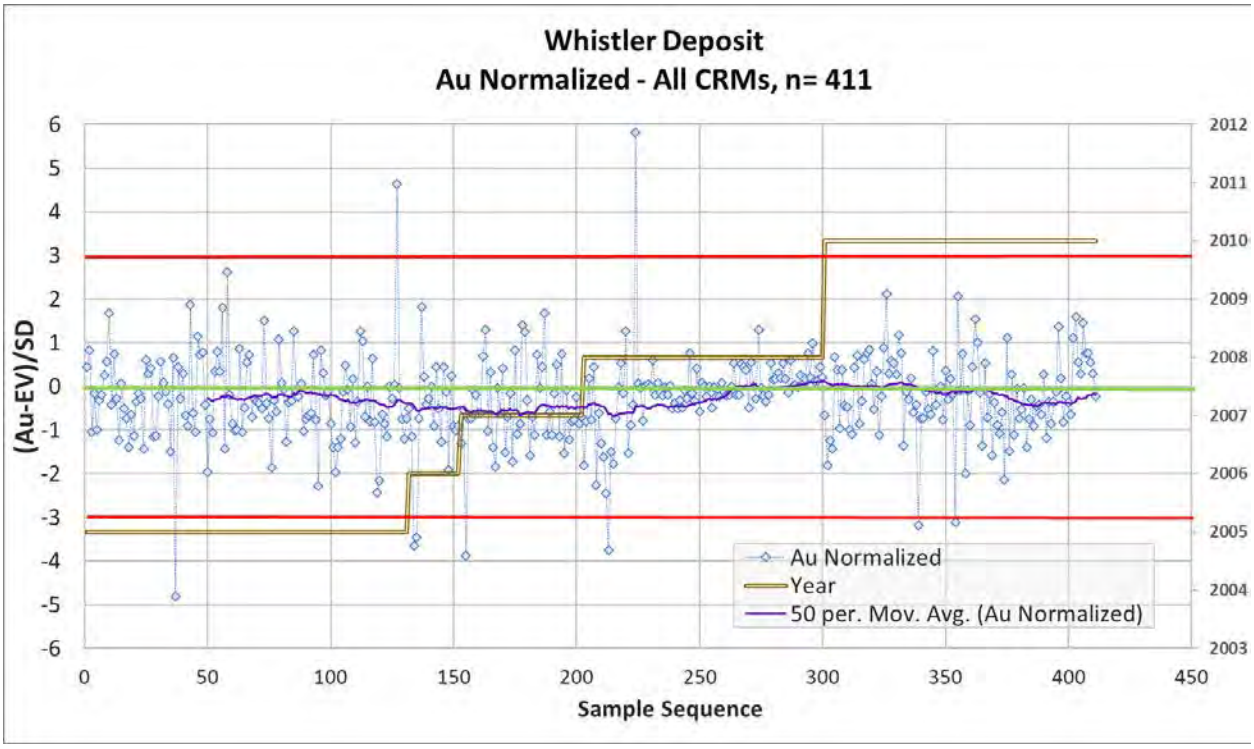


Figure 11-5 Whistler Deposit Normalized Process Control Chart, Gold (Source: MMTS, 2021)

A process control chart for CRM WP-MG1 used from 2005 to 2008 is given in Figure 11-6 and shows the slight negative bias (2.4%) of the average of the assays and no failures.

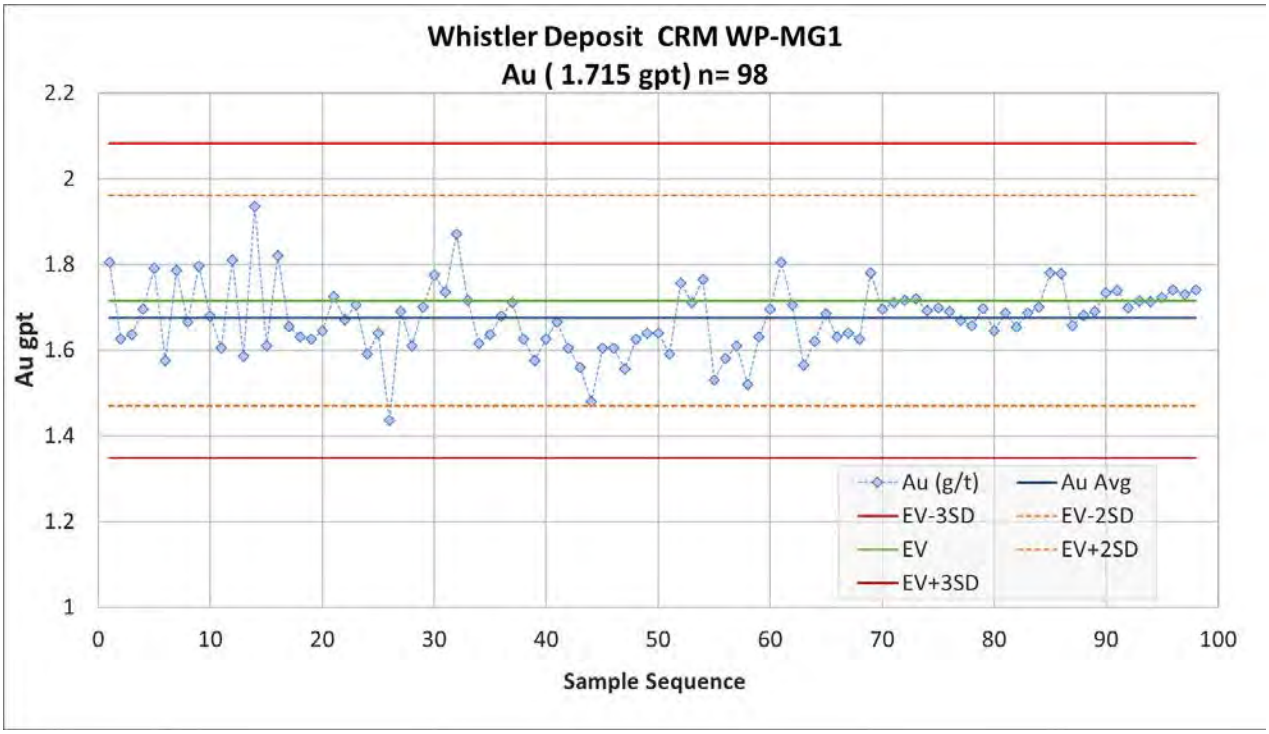


Figure 11-6 Process Control Chart Whistler Deposit CRM WP-MG1, Gold (Source: MMTS, 2021)

The summary of copper assays of the CRMs is given in Table 11-5 in order of increasing grade and shows the overall failure rate to be 2.9% and the percent error to be negligible. The CV values again are low indicating good repeatability of the assays of the standards.

Table 11-5 Whistler Deposit CRM Summary, Copper

CRM	Used	Samples	Average of Cu Pct	Std Dev of Cu Pct	CV	EV Pct	% Error	Low Fail	High Fails	% Fail
WP-MG1	2005-2008	98	0.258	0.006	2.3%	0.259	-0.7%	0	0	0.0%
WP-CO1	2005-2010	135	0.279	0.009	3.2%	0.280	-0.5%	5	2	5.2%
OREAS-52Pb	2010	2	0.345	0.024	7.0%	0.334	3.2%	0	1	50.0%
OREAS-52c	2010	50	0.352	0.011	3.1%	0.344	2.3%	0	0	0.0%
OREAS-53Pb	2010	15	0.541	0.010	1.8%	0.546	-0.9%	0	0	0.0%
WP-HG1	2005-2010	72	0.617	0.013	2.1%	0.616	0.1%	0	0	0.0%
OREAS-50c	2010	13	0.766	0.020	2.6%	0.742	3.1%	0	2	15.4%
OREAS-54Pa	2010	24	1.511	0.025	1.6%	1.550	-2.5%	2	0	8.3%
Total	2005-2010	409					-0.1%	7	5	2.9%

The normalized process control chart is given in Figure 11-7 in order of processing and shows the acceptable results with few failures.

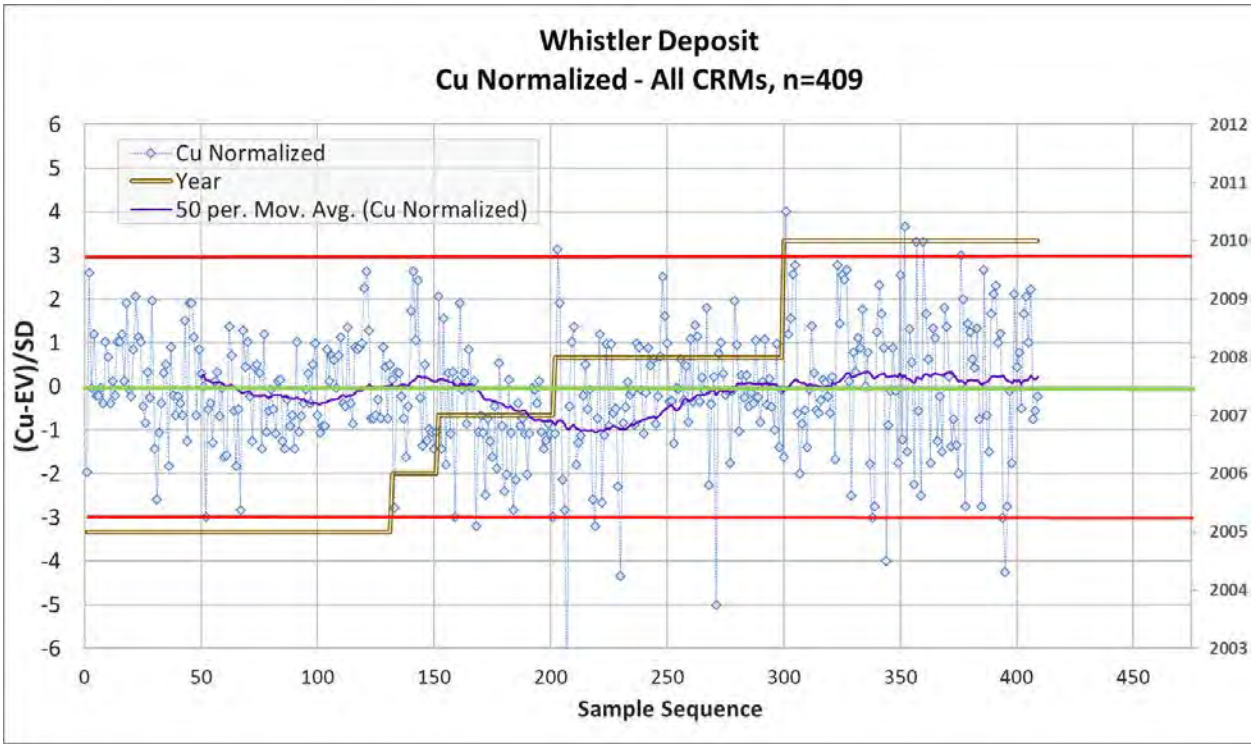


Figure 11-7 Whistler Deposit Normalized Process Control Chart, Copper (Source: MMTS, 2021)

The process control chart for WP-CO1 used from 2005 through 2010 is given in Figure 11-8 and shows the few failures and overall acceptable results with little bias. Again, the lack of strict quality control measures is evidences by sample 515893 in drillhole WH-08011 which failed with a value of 0.24%. This sample follows a sample with an assay value of 0.20 in a zone of mineralization. The control and the neighboring samples should have been submitted for re-assay, if this was done the database is not correctly updated.

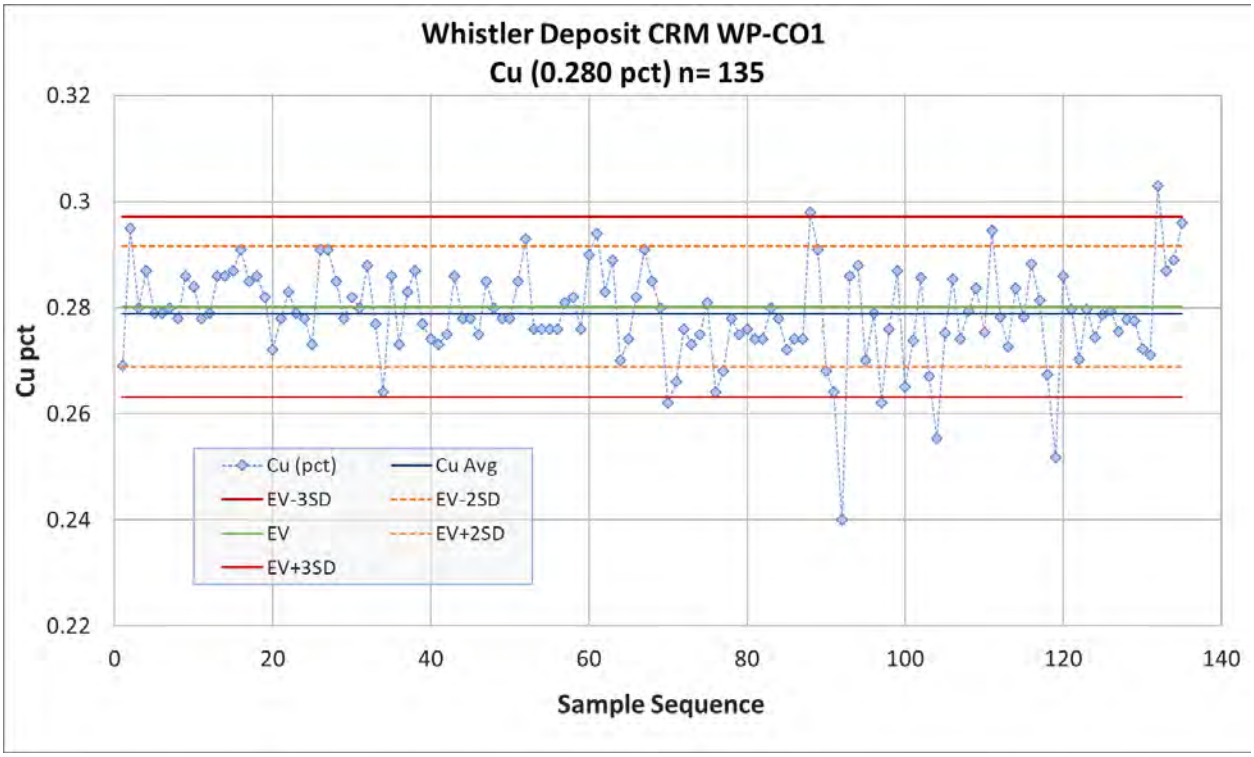


Figure 11-8 Process Control Chart Whistler Deposit CRM WP-CO1, Copper (Source: MMTS, 2021)

The performance of both gold and silver CRMs in the Whistler deposit indicate acceptable accuracy but highlight some potential lapses in quality control procedures.

11.3.1.3 Whistler Duplicates

The simple statistics of the field (core) duplicates in the Whistler deposit in 2010 drilling are given in Table 11-6. It is seen in the means of the gold assays that the % difference of the means is 4.6% indicating there is a small positive bias to the primary samples as compared to the duplicates. There is a negligible difference in the means of the copper assays. The percent below 10% Half Absolute Relative Difference (HARD) is 68% for gold and 72% for copper. The expectation for field duplicates is that 70% or more are below 10%, this is met for copper and nearly met for gold. The 68% is actually quite good for gold, indicating the gold mineralization in Whistler is not highly heterogenous.

Table 11-6 Whistler Field Duplicates Simple Statistics

Samples	Element	Units	Average			% below 10% HARD	Standard Deviation	
			Primary	Duplicate	% Difference		Primary	Duplicate
108	Gold	g/t	0.131	0.125	-4.6%	68	0.207	0.194
	Copper	ppm	886.2	879.5	-0.8%	72	1084.1	1062.1

The small positive bias of gold assays in the primary samples is also observed in the scatter plot in Figure 11-9 with the slope of the best fit line below 1.0. The relative high correlation coefficient reflects the somewhat homogenous nature of the duplicate samples.

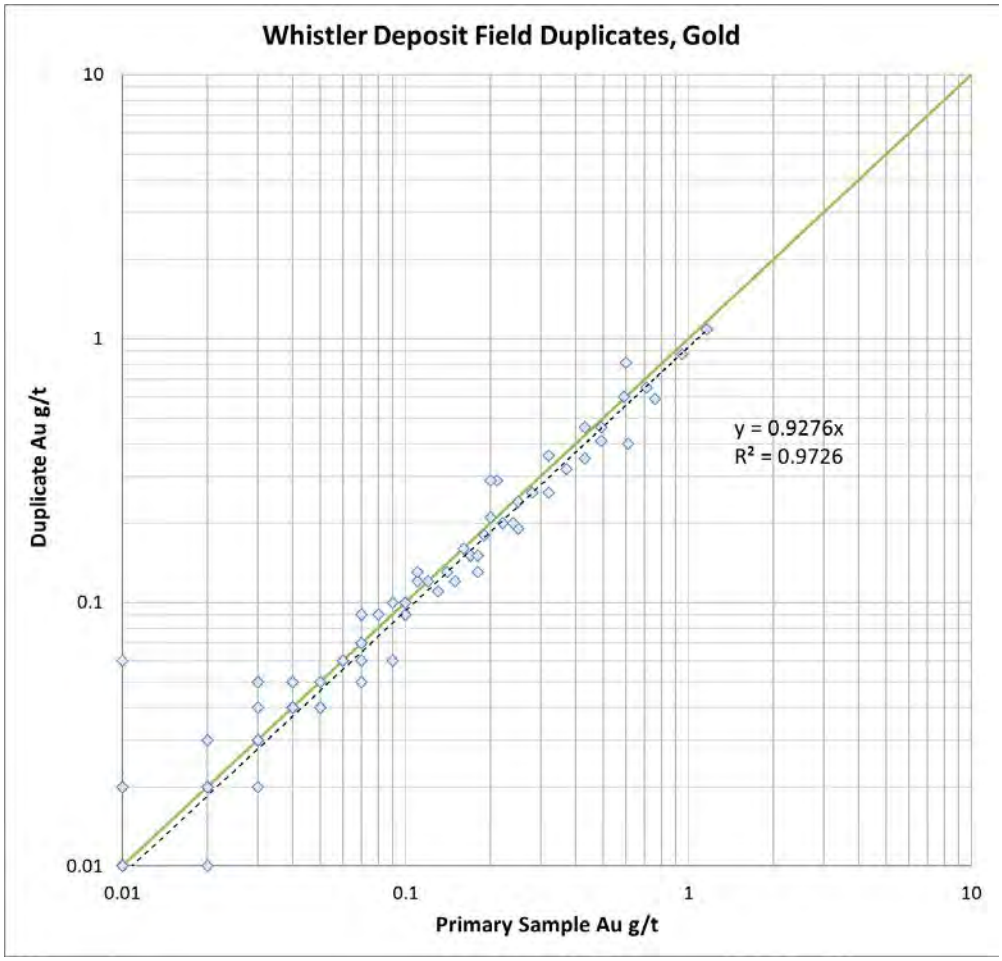


Figure 11-9 Whistler Deposit Field Duplicate Scatter Plot, Gold (Source: MMTS, 2021)

The scatter plot of copper field duplicates is given in Figure 11-10 and shows the good correlation between duplicate pairs with slope of best fit line slightly below 1.0 and high correlation coefficient.

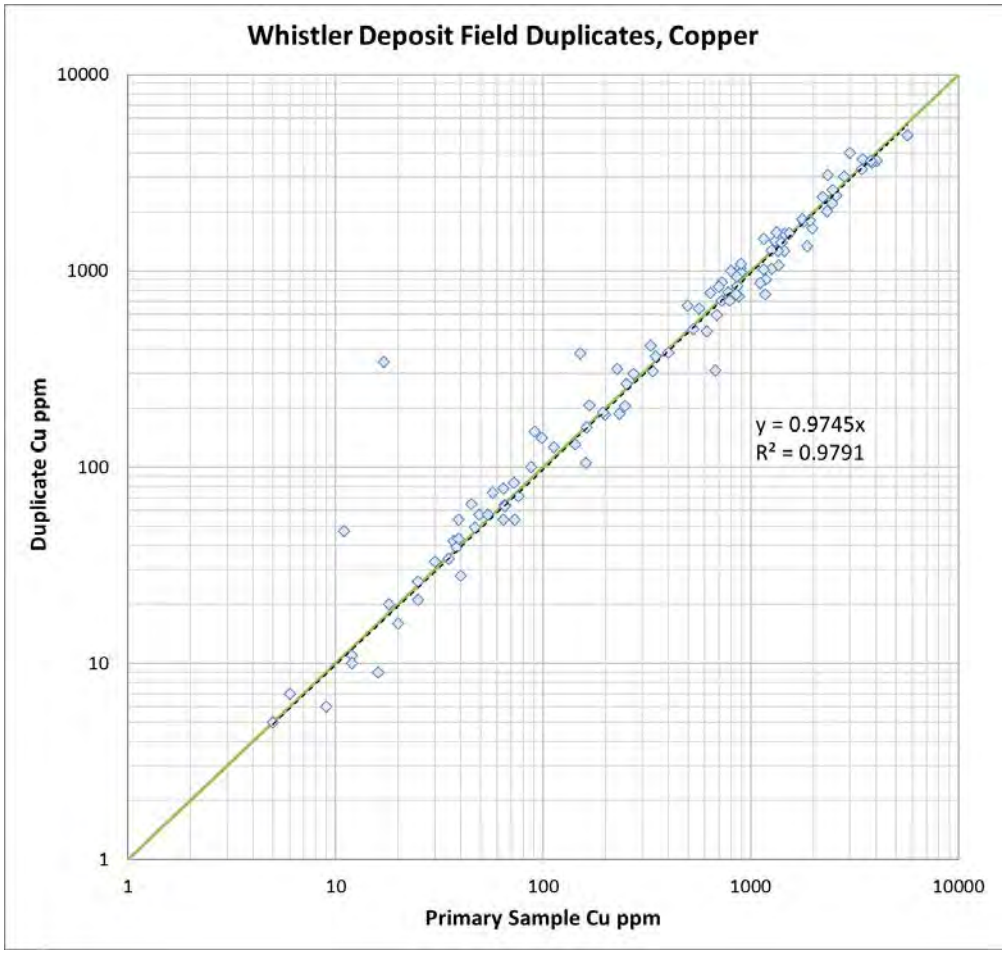


Figure 11-10 Whistler Deposit Field Duplicate Scatter Plot, Copper (Source: MMTS, 2021)

The simple statistics of the coarse (preparation) duplicates in Whistler in 2007 through 2010 is given in Table 11-7. There are two outliers in the gold results which cause the percent difference of means of the entire set to be 5.4%, with the assays of the duplicate samples higher than primary. The means of the pairs without the two outliers have a percent difference of 0.4%. The means of the copper assays have a percent difference of 2.6%. The expectation for coarse duplicates is that 80% is less than 10% HARD which is more than met for copper and not met for gold, which is typical.

Table 11-7 Whistler Coarse Duplicate Simple Statistics

Samples	Element	Units	Average			% below 10% HARD	Standard Deviation	
			Primary	Duplicate	% Difference		Primary	Duplicate
204	Gold	g/t	0.178	0.188	5.4%	71	0.294	0.350
202	Gold	g/t	0.168	0.169	0.4%	71	0.259	0.268
204	Copper	ppm	944.5	969.5	2.6%	89	1007.4	1191.9

The scatter plot of coarse duplicates for gold is given in Figure 11-11, without the outliers. The slope nearly matches 1.0 and the coefficient of correlation is high. Most of the variation in sample pairs is seen in pairs below 0.2g/t, sample above 0.2g/t are seen to be closely matched.

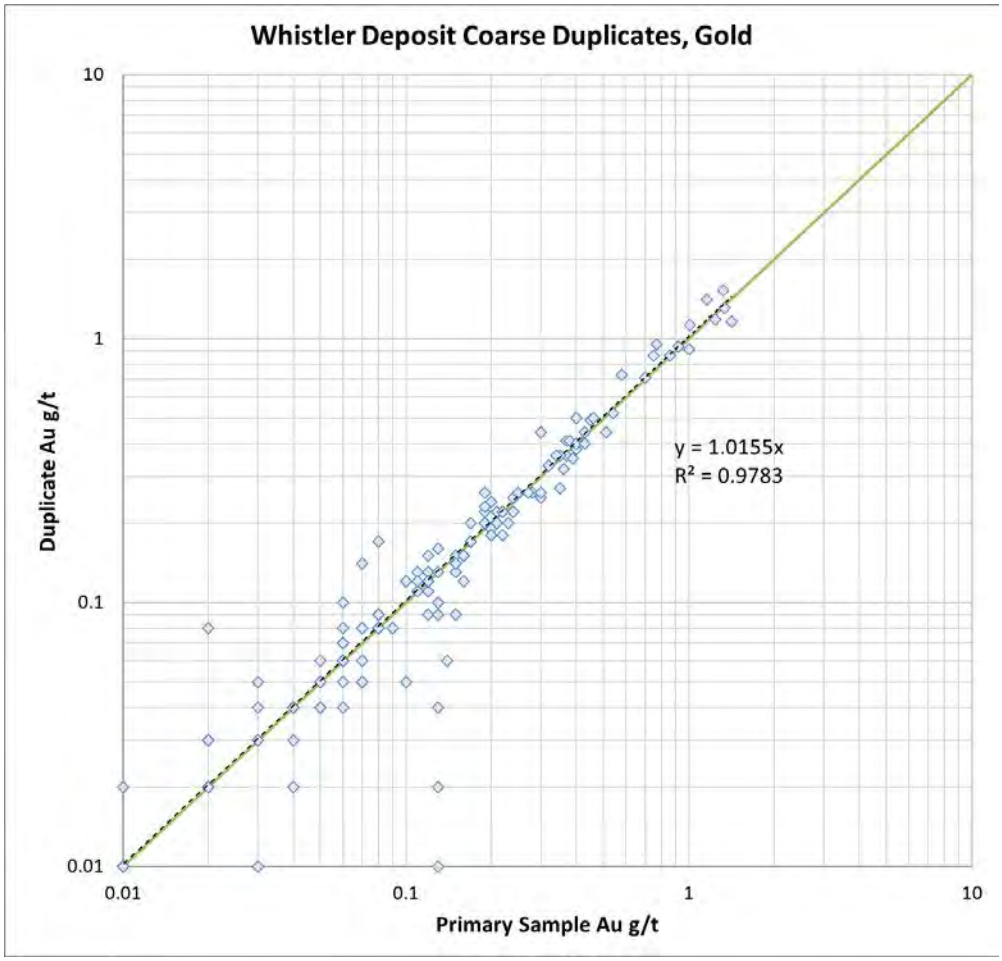


Figure 11-11 Whistler Deposit Coarse Duplicate Scatter Plot, Gold, no outliers (Source: MMTS, 2021)

The scatter plot of copper coarse duplicates is given in Figure 11-12 and shows a slope slightly above 1 and low coefficient of correlation. There are five clear outliers, with the remainder of the pairs very close to each other along the 1:1 line.

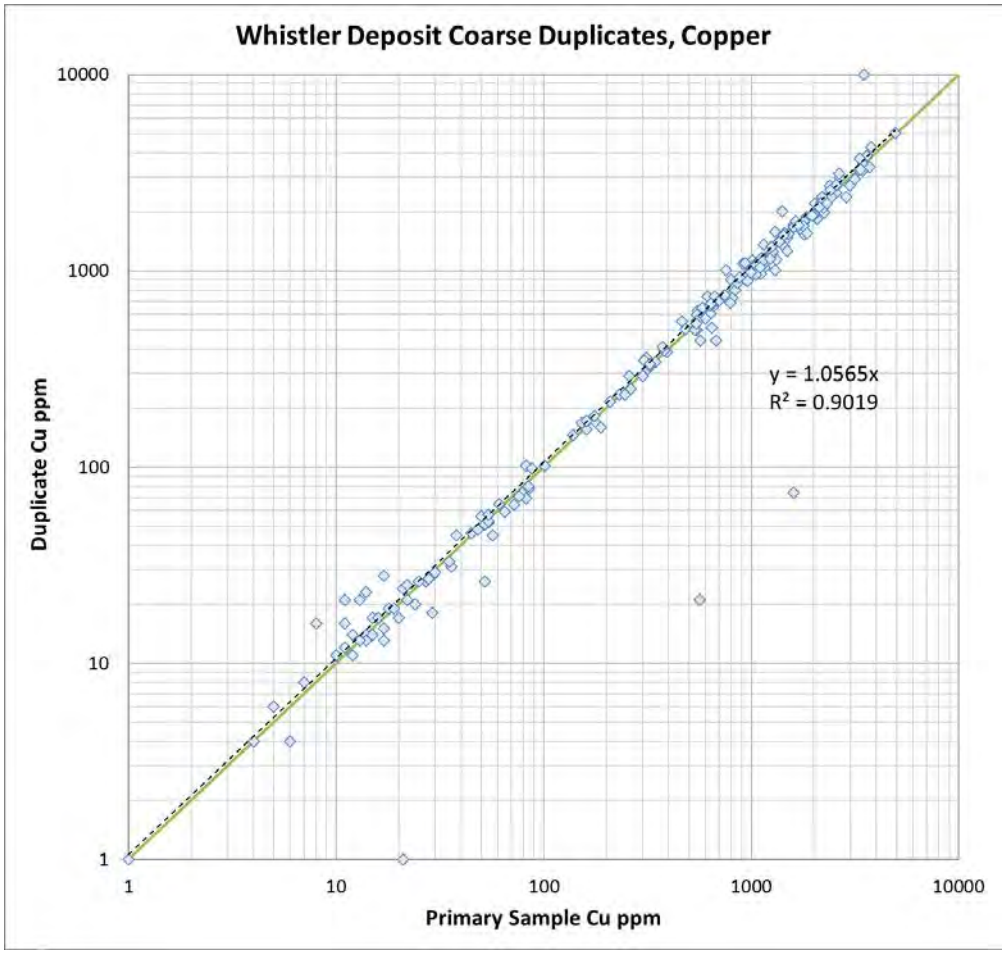


Figure 11-12 Whistler Deposit Coarse Duplicate Scatter Plot, Copper (Source: MMTS, 2021)

Analysis of duplicate samples in Whistler do not show evidence of selection bias at the core sampling level, indicate moderate heterogeneity of gold mineralization, and show that significant bias is not introduced at the sample preparation stage.

11.3.2 QAQC Raintree Deposit

11.3.2.1 Raintree Blanks

The summary of gold assays of blanks in the Raintree sample stream is presented in Table 11-8 and show acceptable results with only 0.9% of samples failing at the 5*DL level, and a single failure at the 5*DL level.

Table 11-8 Summary of Gold Assays of Blanks, Raintree Deposit

Year	Gold Blank Assays	Fails at 5*DL	% Fail at 5*DL	Fails at 10*DL	% Fail at 10*DL
2005	4	0	0.0%	0	0.0%
2006	22	0	0.0%	0	0.0%
2008	18	0	0.0%	0	0.0%
2010	77	1	1.3%	1	1.3%
2011	319	3	0.9%	0	0.0%
Total	440	4	0.9%	1	0.2%

The sequential plot of gold assays of blanks is shown in Figure 11-4 and shows acceptable results indicating contamination is not likely to be a problem in the Raintree assay stream.

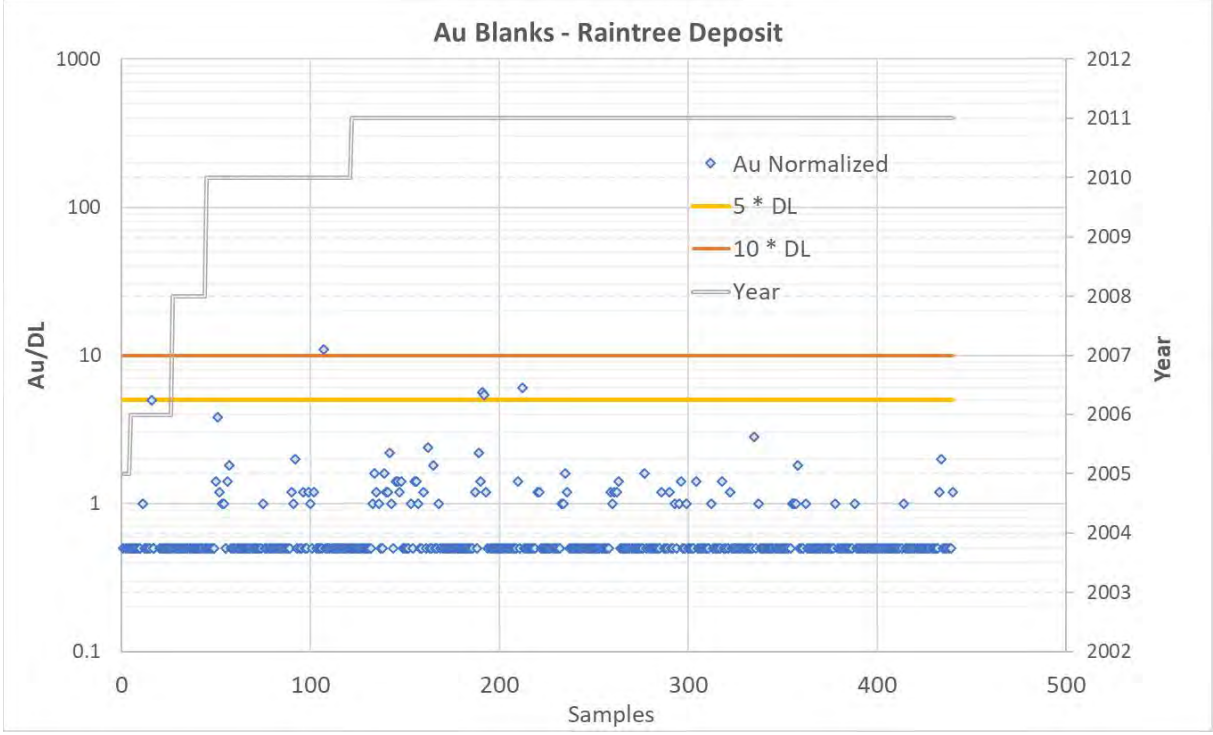


Figure 11-13 Sequential Plot of Gold Assays of Blanks, Raintree Deposit (Source: MMTS, 2021)

The summary of results of copper assays of blanks is given in Table 11-9 and shows a higher than expected failure rate of 1.4% at >100 ppm. This is mostly due to failures in 2008 and before when the locally sourced material was used for blanks.

Table 11-9 Summary of Copper Assays of Blanks, Raintree Deposit

Year	Copper Blank Assays	Number >100 ppm	%>100 ppm
2005	4	1	25.0%
2006	22	2	9.1%
2008	18	1	5.6%
2010	81	1	1.2%
2011	319	1	0.3%
Grand Total	444	6	1.4%

The sequential plot of copper assays of blanks is given in Figure 11-14 and shows the higher assay results in 2008 and earlier samples potentially to due trace copper in the blank material. The assays in 2010 and 2011 have only two failures at the 100ppm level and are predominantly at 10ppm and below, indicating little evidence of contamination in the majority of the sample stream in Raintree.

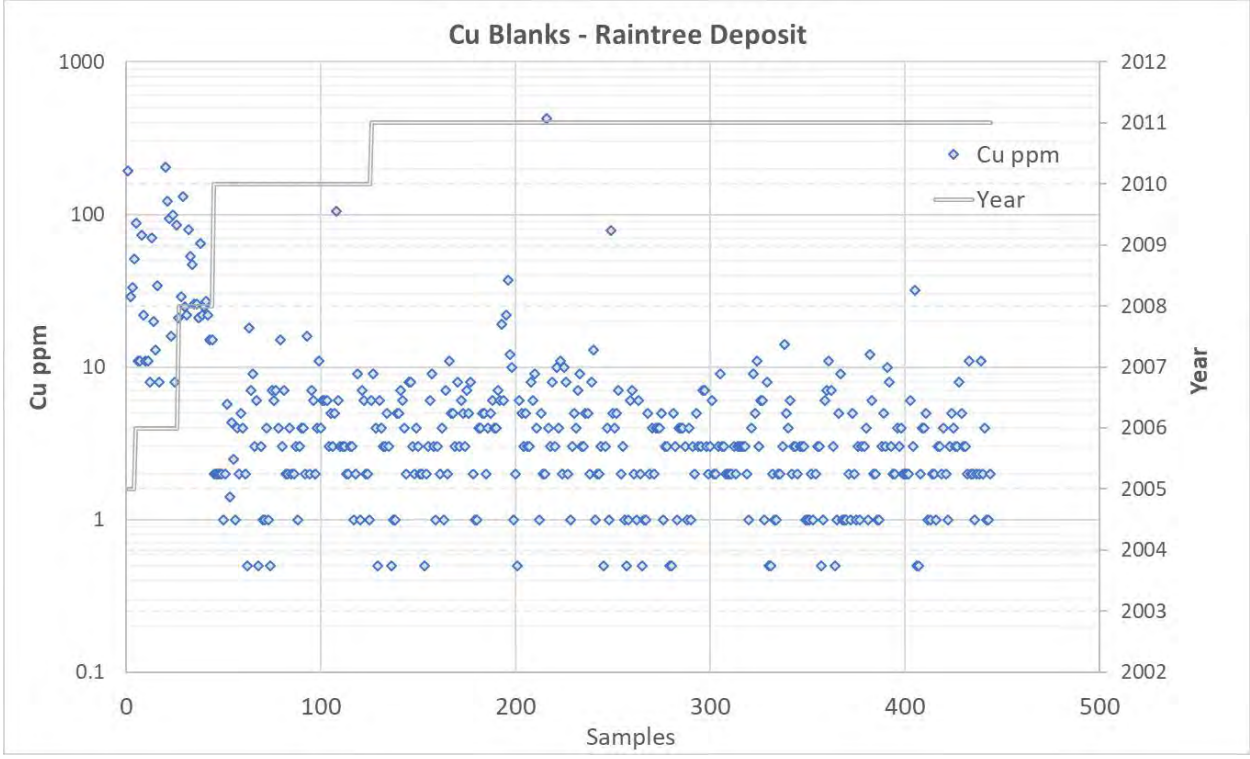


Figure 11-14 Sequential Plot of Copper Assays of Blanks, Raintree Deposit (Source: MMTS, 2021)

11.3.2.2 Raintree CRMs

The summary of CRM gold analyses for samples included in drilling in the Raintree Deposit is given in Table 11-10. It is seen that the overall failure rate is 2.9% and there is a marginal overall negative bias of -0.3%. Three samples, OREAS-52c, WP-MG1 and OREAS-54Pa have CV values over 10% which indicates some undesirable scatter in results. Samples WP-MG1 and WP-HG-1 also have failure rates approaching significant values, but are used in only 15 and 11 instances respectively.

Table 11-10 Raintree Deposit CRM Summary, Gold

CRM	Used	Samples	Average of Au (g/t)	Std Dev of Au (g/t)	CV	EV (g/t)	% Error	Low Fail	High Fails	% Fail
OREAS-52Pb	2010	14	0.324	0.013	3.9%	0.307	5.3%	0	0	0.0%
OREAS-52c	2010-2011	117	0.342	0.039	11.3%	0.346	-1.1%	3	0	2.6%
WP-CO1	2005-2008	18	0.478	0.024	5.1%	0.480	-0.4%	0	0	0.0%
OREAS-53Pb	2010	37	0.625	0.017	2.7%	0.623	0.4%	0	0	0.0%
OREAS-50c	2010-2011	183	0.840	0.034	4.1%	0.836	0.5%	3	4	3.8%
WP-MG1	2005-2008	15	1.624	0.201	12.4%	1.715	-5.6%	1	0	6.7%
OREAS-54Pa	2010-2011	54	2.860	0.396	13.8%	2.900	-1.4%	1	0	1.9%
WP-HG1	2005-2008	11	4.711	0.267	5.7%	4.693	0.4%	1	0	9.1%
Total		**449**					**-0.3%**	**9**	**4**	**2.9%**

The normalized process control chart of all gold assays of CRMs in Raintree drilling is presented in Figure 11-15 and shows the reasonable overall results.

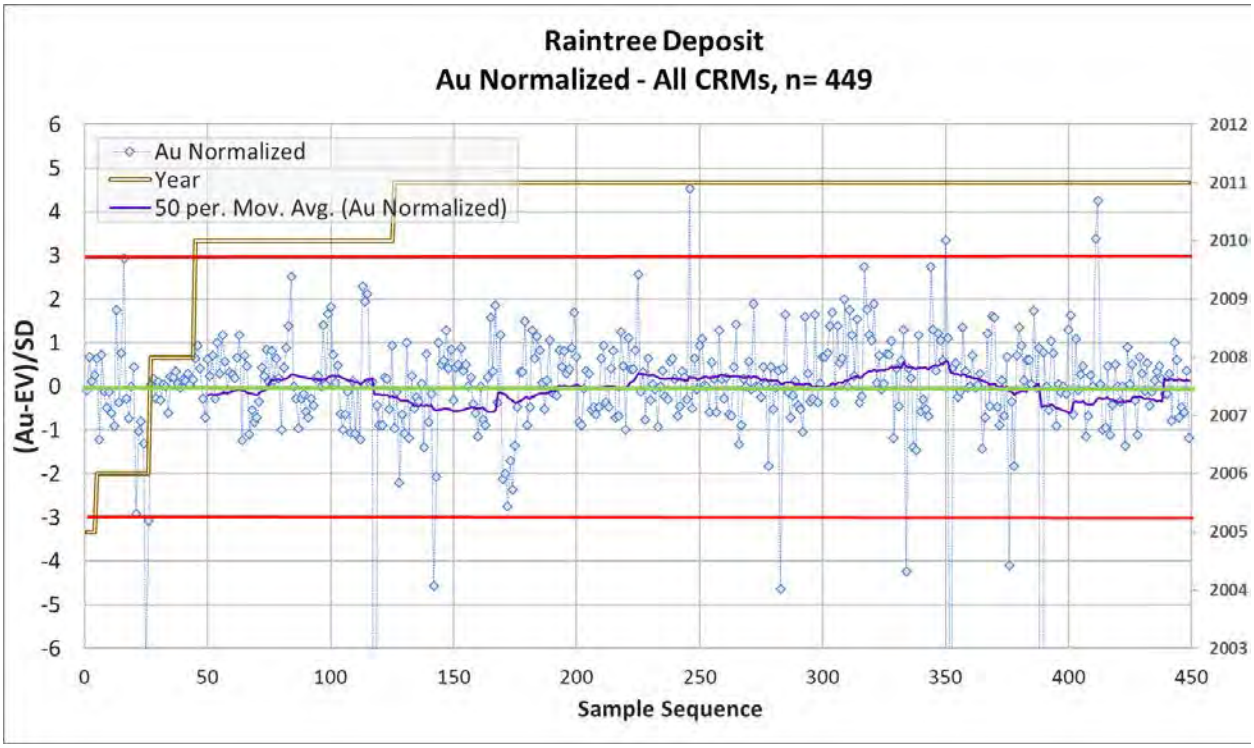


Figure 11-15 Raintree Deposit Normalized Process Control Chart, Gold (Source: MMTS, 2021)

The process control chart for OREAS-52c identified for the high CV value is presented in Figure 11-16 and shows that the three low failures are extreme outliers responsible for the high CV and that the remaining results are generally very good.

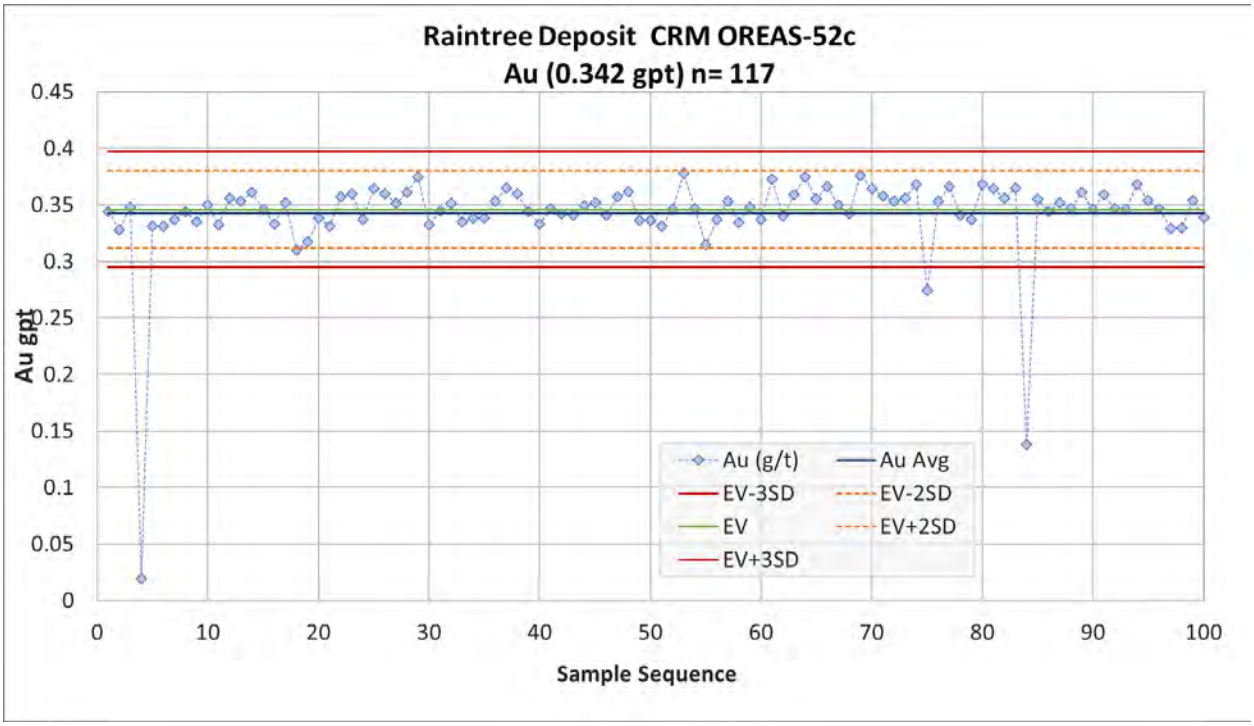


Figure 11-16 Process Control Chart Raintree CRM OREAS-52c (Source: MMTS, 2021)

The process control chart for OREAS-50c in Raintree drilling is given in Figure 11-17 and shows the 4 high and 3 low failures with otherwise good results and little bias.

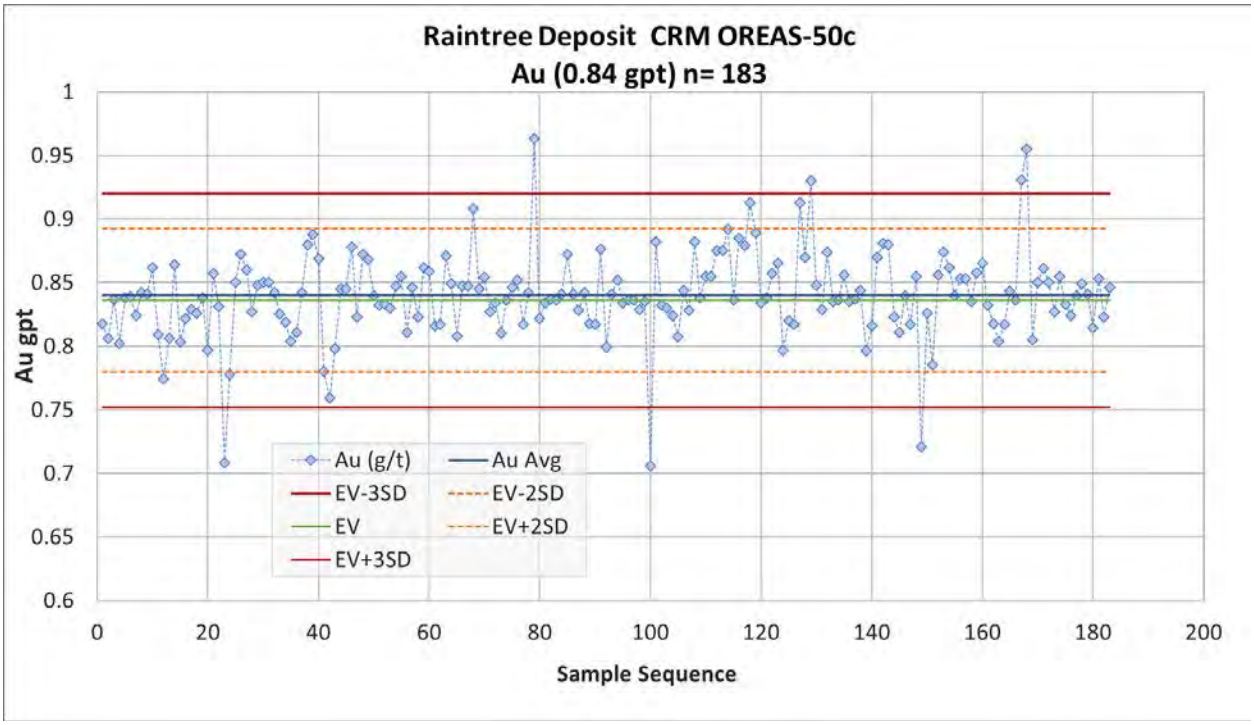


Figure 11-17 Process Control Chart Raintree CRM OREAS-50c (Source: MMTS, 2021)

The results of the 451 copper analyses of CRMs in Raintree drilling are presented in Table 11-11 and show an overall failure rate of 12.4% which is significant. The failures are seen to concentrate in three CRMs, OREAS-52c, OREAS-50c and OREAS-54Pa, also the CRMs with the most entries. The overall % error is slightly negative at 0.8%.

Table 11-11 Raintree Deposit CRM Summary, Copper

CRM	Used	Samples	Average of Cu Pct	Std Dev of Cu Pct	CV	EV Pct	% Error	Low Fail	High Fails	% Fail
WP-MG1	2005-2008	15	0.259	0.006	2.2%	0.259	-0.2%	0	0	0.0%
WP-CO1	2005-2008	18	0.276	0.005	1.9%	0.280	-1.4%	0	0	0.0%
OREAS-52Pb	2010	14	0.335	0.011	3.2%	0.334	0.4%	0	0	0.0%
OREAS-52c	2010-2011	118	0.343	0.051	14.9%	0.344	-0.3%	5	6	9.3%
OREAS-53Pb	2010	38	0.531	0.016	3.1%	0.546	-2.8%	2	0	5.3%
WP-HG1	2005-2008	11	0.615	0.015	2.5%	0.616	-0.1%	0	0	0.0%
OREAS-50c	2010	183	0.741	0.064	8.7%	0.742	-0.1%	9	18	14.8%
OREAS-54Pa	2010-2011	54	1.502	0.043	2.8%	1.550	-3.2%	16	0	29.6%
Total		451					-0.8%	32	24	12.4%

The normalized process control chart is given in Figure 11-18 and shows the some trends with samples in the 2010 drilling giving generally lower than expected results and the changing to generally higher than expected in early 2011 with a decreasing trend.

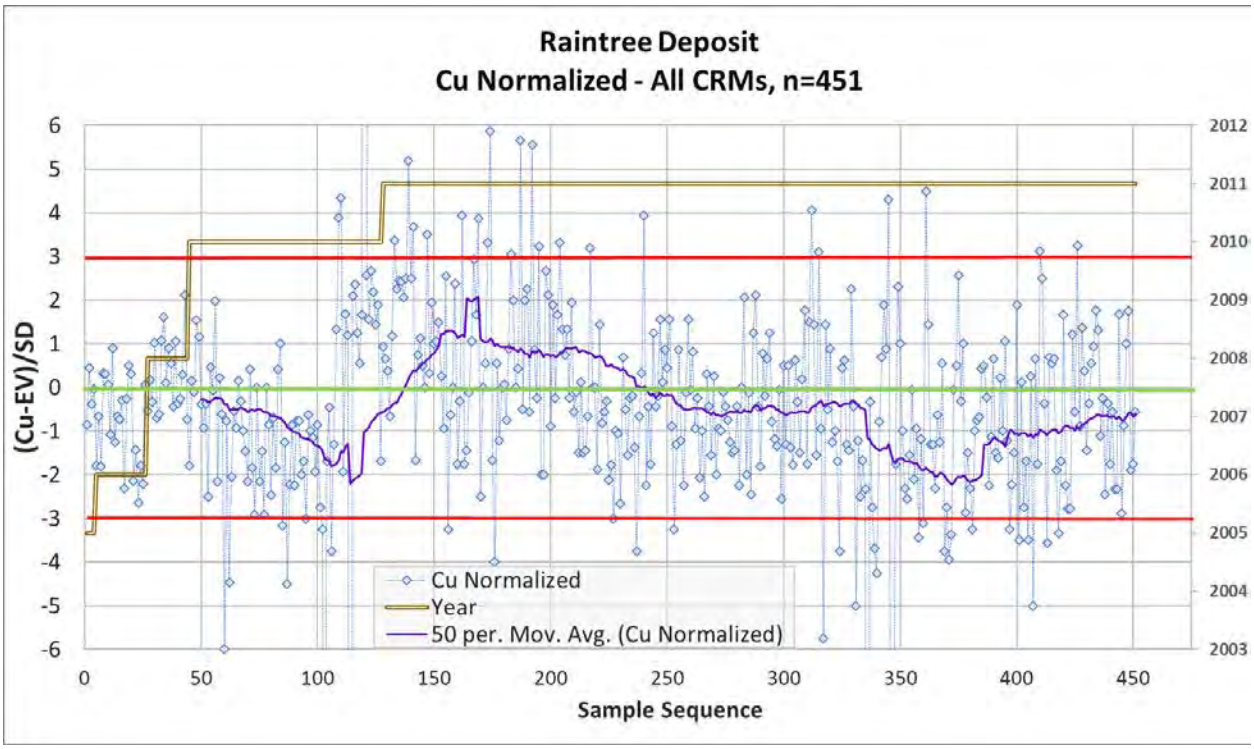


Figure 11-18 Raintree Deposit Normalized Process Control Chart, Copper (Source: MMTS, 2021)

Results for CRM OREAS-50c, with the most samples and highest failure rate, are given in Figure 11-19 and show that despite the significant failure rate the mean is very close to the expected value of 0.742. Similar results are seen for OREAS-52c in Figure 11-20 and therefore the results are considered acceptable.

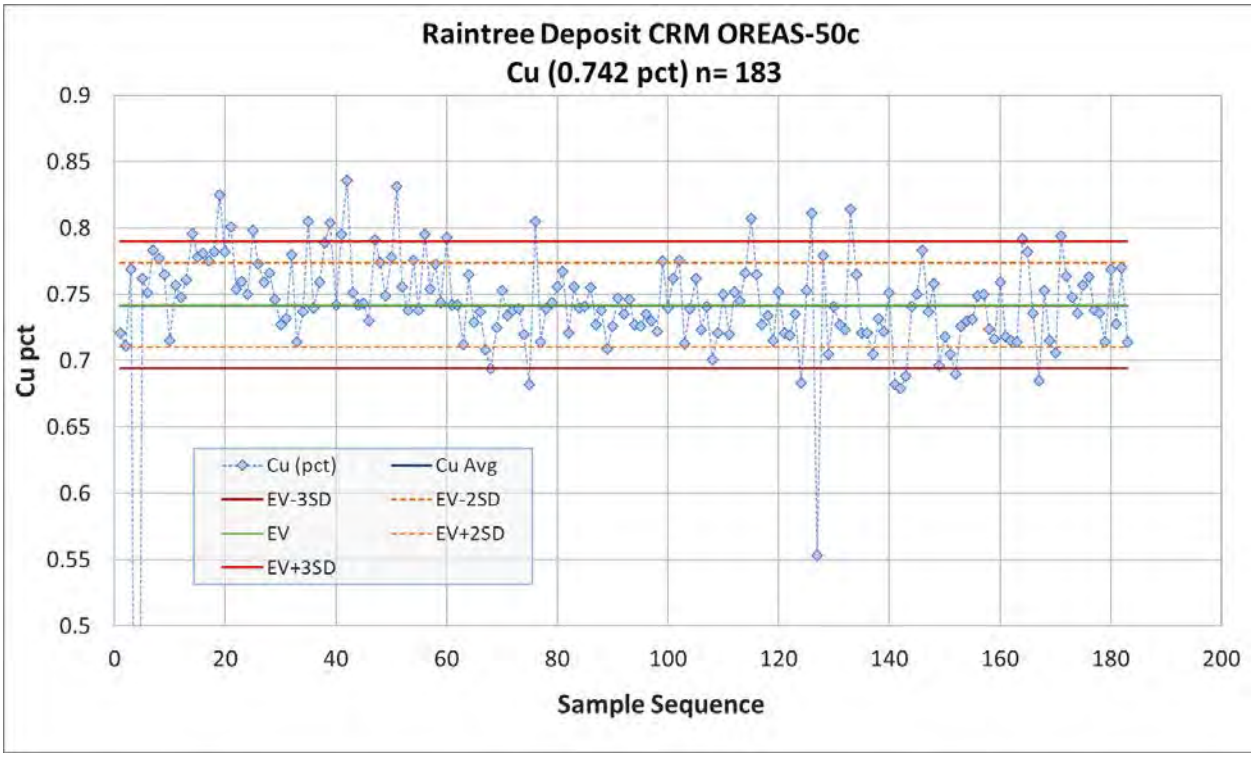


Figure 11-19 Process Control Chart Raintree OREAS-50c, Copper (Source: MMTS, 2021)

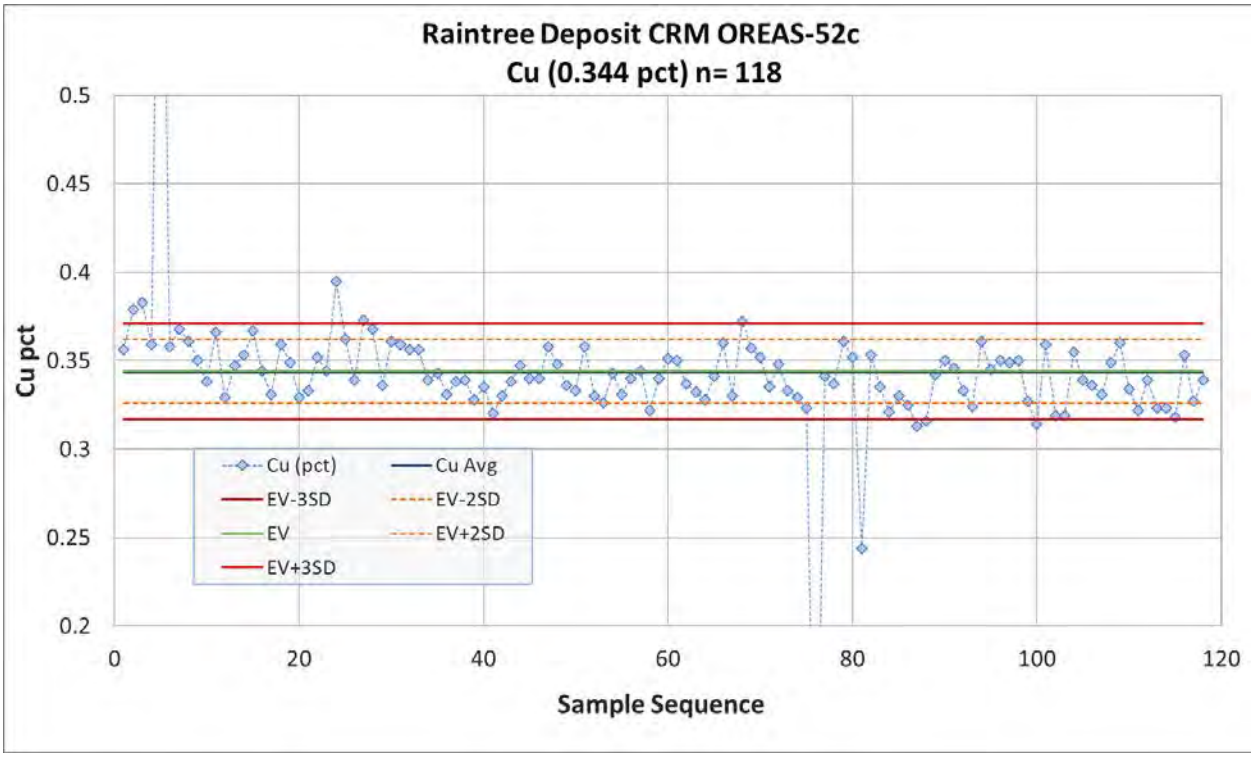


Figure 11-20 Process Control Chart Raintree OREAS-52c, Copper (Source: MMTS, 2021)

Both copper and gold CRMs in Raintree show little bias and acceptable results despite significant numbers of failures for copper CRMs. The high failure rates indicate that consistent re-assays of failed control samples is not likely to have been done.

11.3.2.3 Raintree Duplicates

The simple statistics of the field duplicates from drilling in 2010 and 2011 in the Raintree deposit are given in Table 11-12. Little difference is seen in the means of the gold assays, the copper assays show a slight bias with the primary samples being higher than the duplicates. Both sets of pairs meet the expectation for the HARD statistic.

Table 11-12 Raintree Field Duplicates Simple Statistics

Samples	Element	Units	Average			% below 10% HARD	Standard Deviation	
			Primary	Duplicate	% Difference		Primary	Duplicate
383	Gold	g/t	0.119	0.121	1.0%	72	0.271	0.292
	Copper	ppm	237.6	229.5	-3.5%	82	553.8	486.2

The scatter plot of duplicate pairs of gold assays is given in Figure 11-21, and does not give concern of selection bias and paired with the HARD statistic, show the gold mineralization to not be highly heterogenous.

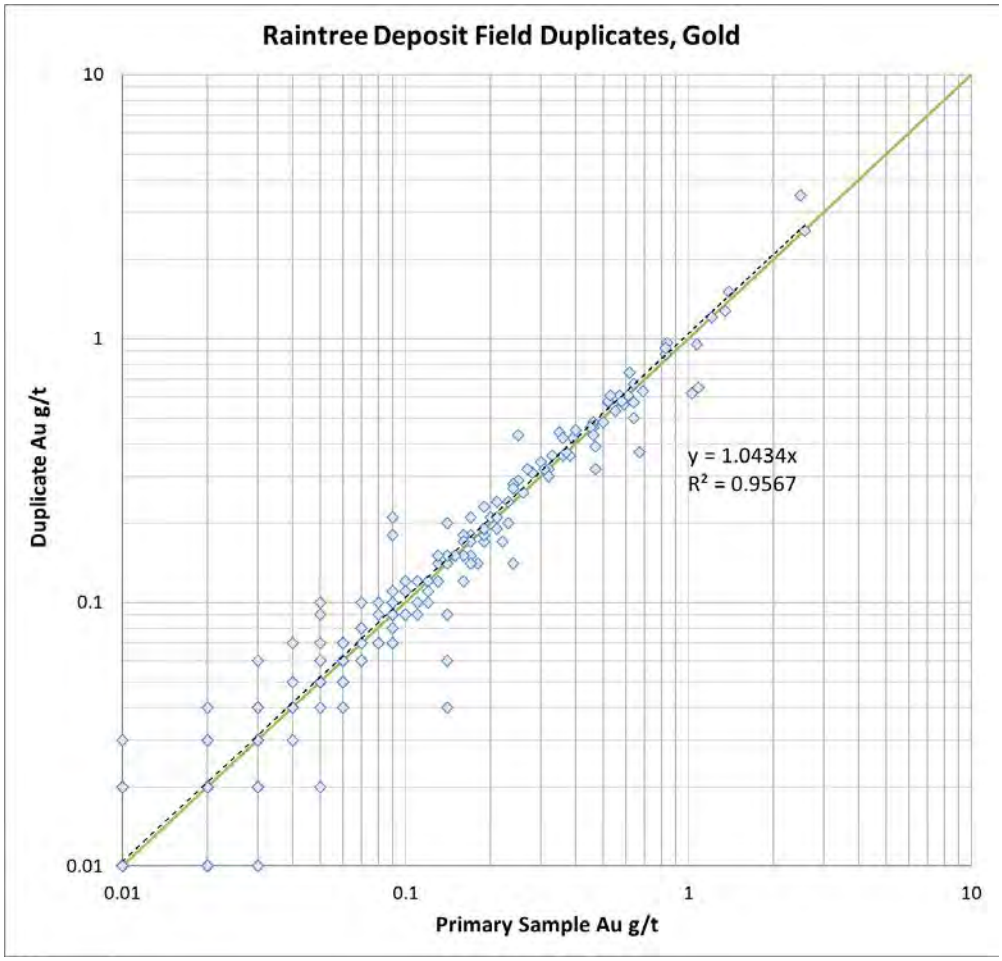


Figure 11-21 Raintree Deposit Field Duplicate Scatter Plot, Gold (Source: MMTS, 2021)

The scatter plot of copper assays of field duplicates is given in Figure 11-22, the slope of the best fit line plots below 0.9. The slope of the line without the three samples plotting clearly below the 1:1 line above 1,000ppm is 1.00, indicating there may be a small bias at the upper end of the copper results, but overall the results are acceptable.

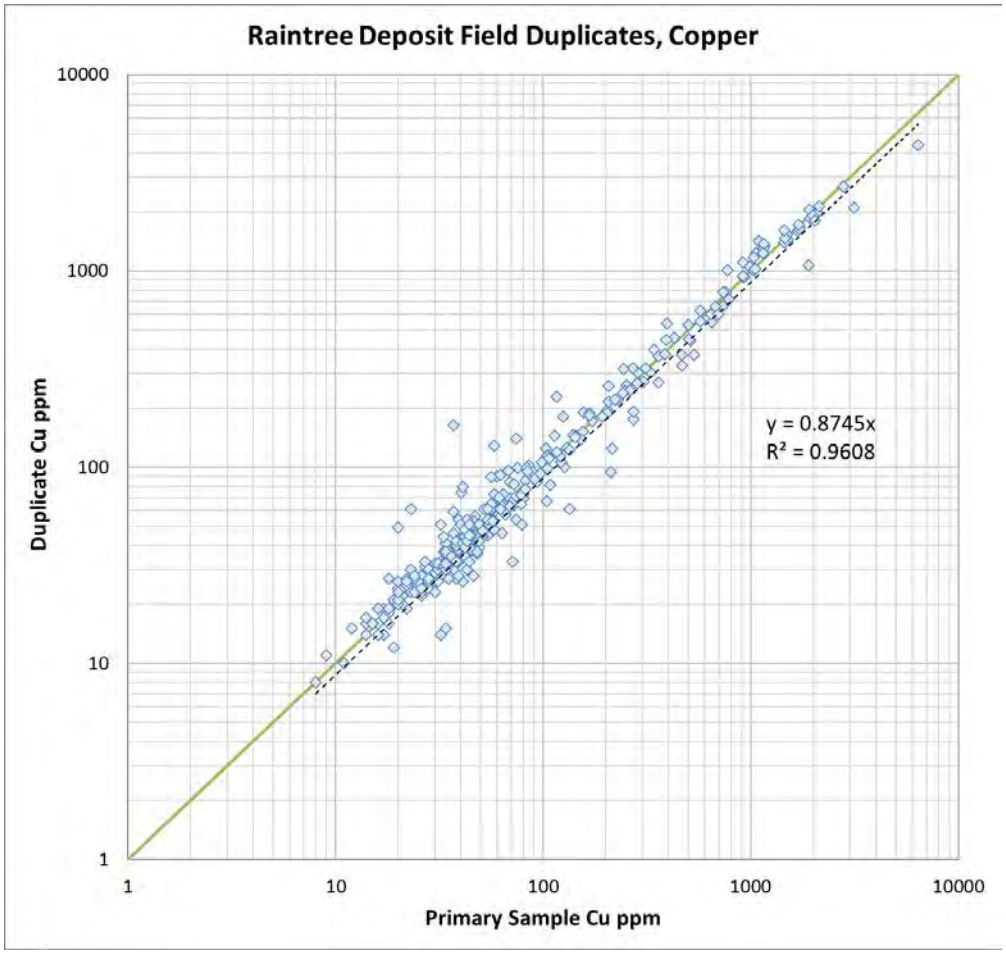


Figure 11-22 Raintree Deposit Field Duplicate Scatter Plot, Copper (Source: MMTS, 2021)

The simple statistics of the coarse duplicates in the Raintree deposit from 2008 to 2011 are given in Table 11-13. The percent difference between the means of the gold and copper assays is small. The target of 80% below 10% HARD for coarse duplicates is met for copper pairs, and not for gold, which is typical.

Table 11-13 Raintree Coarse Duplicates Simple Statistics

Samples	Element	Units	Average			% below 10% HARD	Standard Deviation	
			Primary	Duplicate	% Difference		Primary	Duplicate
445	Gold	g/t	0.201	0.195	-2.8%	72	0.864	0.833
	Copper	ppm	304.5	309.0	1.5%	91	603.2	633.4

The scatter plot of coarse duplicate pairs for gold assays is given in Figure 11-23 and shows reasonable results with some significant scatter, but overall acceptable results.

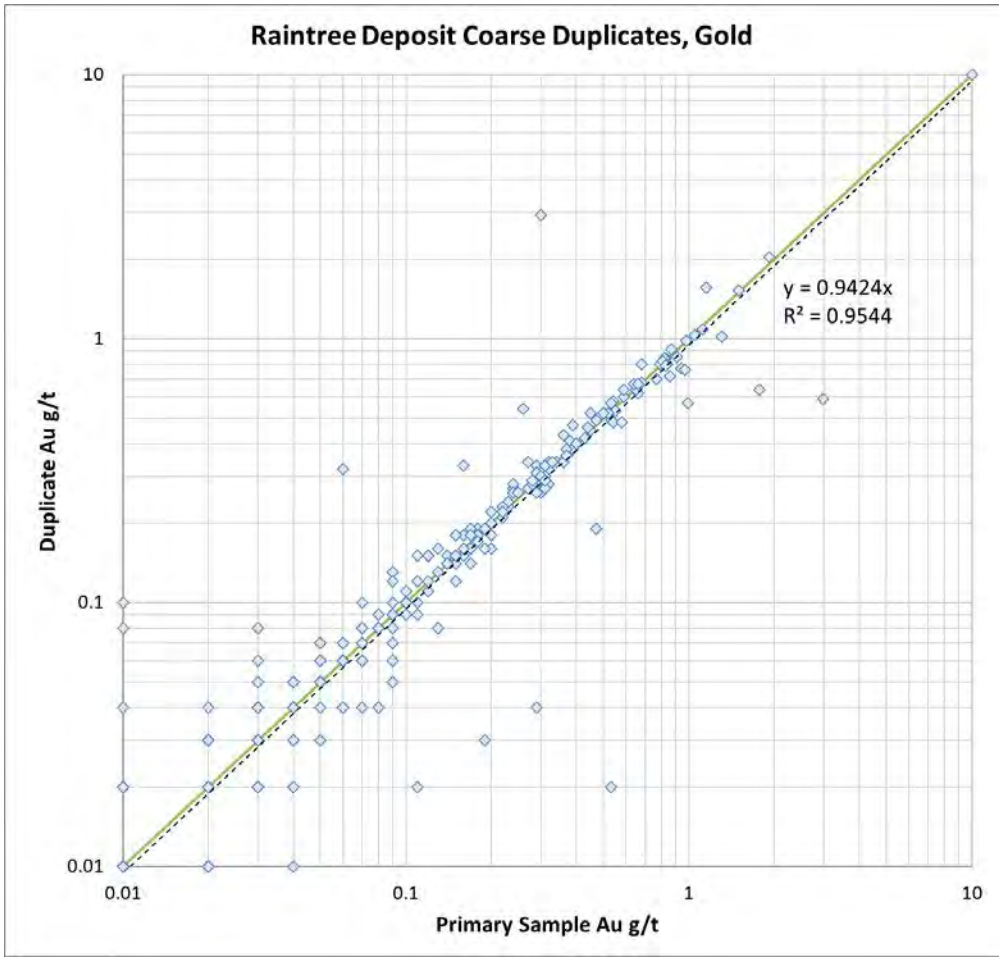


Figure 11-23 Raintree Deposit Coarse Duplicate Scatter Plot, Gold (Source: MMTS, 2021)

The scatter plot of copper assays of coarse duplicates is given in Figure 11-24 and show acceptable results.

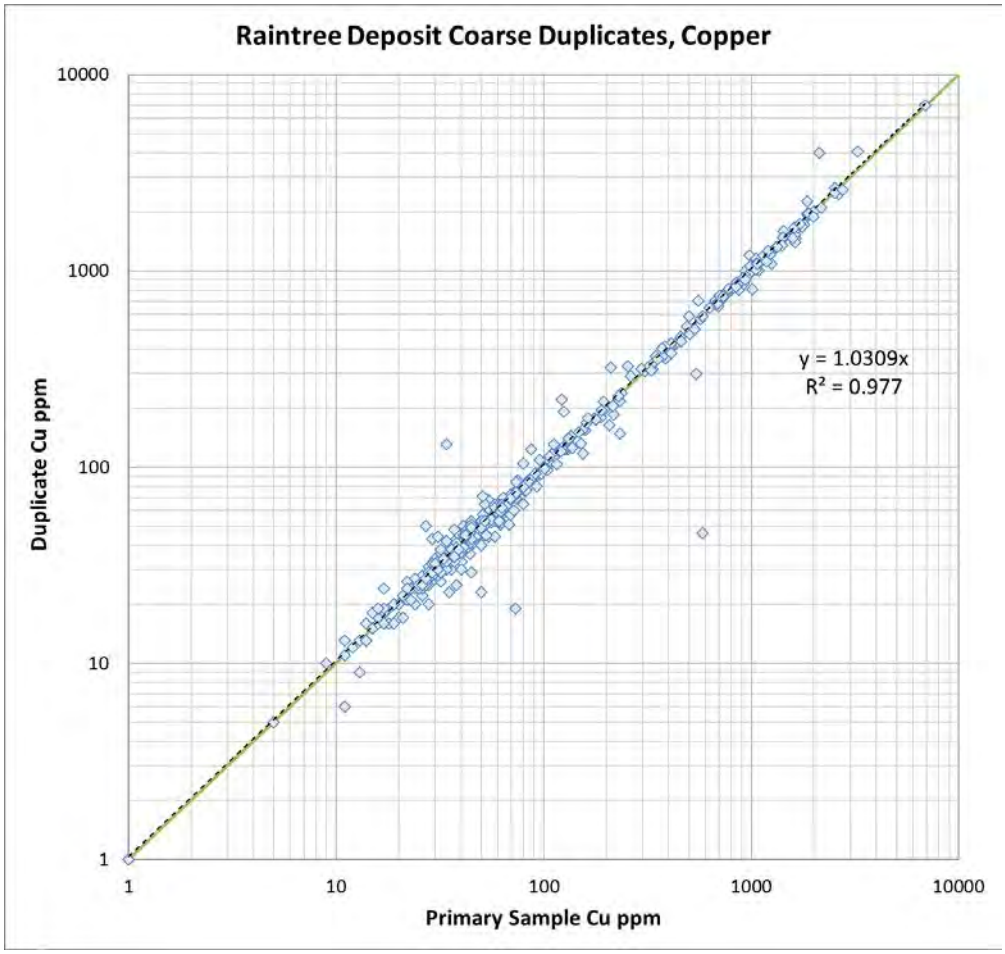


Figure 11-24 Raintree Deposit Coarse Duplicate Scatter Plot, Copper (Source: MMTS, 2021)

Analysis of duplicate samples in Raintree do not show evidence of selection bias at the core sampling level, indicate moderate heterogeneity of gold mineralization, and show that significant bias is not introduced at the sample preparation stage.

11.3.3 QAQC Island Mountain Deposit

11.3.3.1 Island Mountain Blanks

The summary of gold assays of blanks in the Island Mountain sample stream is given in Table 11-14 and shows an overall failure rate of just over one half of one percent. These results are acceptable with little evidence of contamination.

Table 11-14 Summary of Gold Assays of Blanks, Island Mountain Deposit

Year	Gold Blank Assays	Fails at 5*DL	% Fail at 5*DL	Fails at 10*DL	% Fail at 10*DL
2010	133	4	3.0%	2	1.5%
2011	195	0	0.0%	0	0.0%
Total	328	4	1.2%	2	0.6%

The sequential plot of gold assays of blank material is given in Figure 11-25.

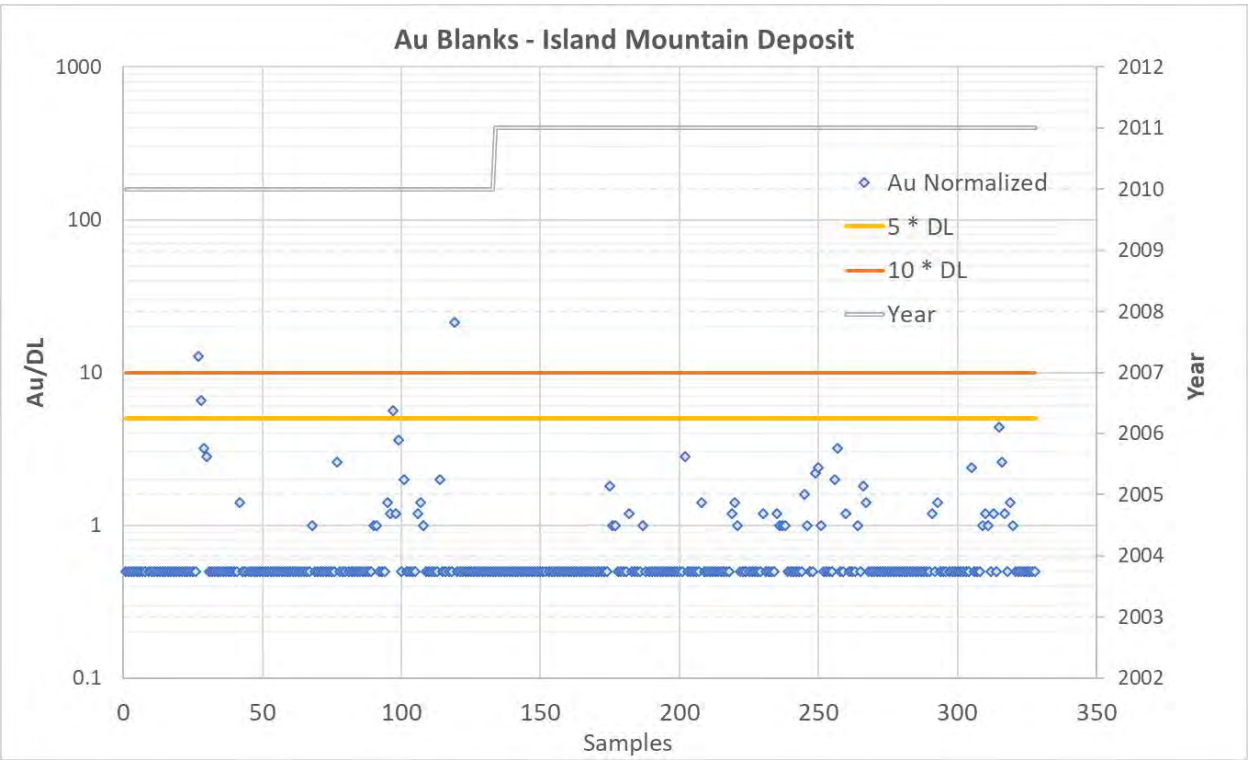


Figure 11-25 Sequential Plot of Gold Assays of Blanks, Island Mountain Deposit (Source: MMTS, 2021)

The results of copper assays of blank material in the Island Mountain sample stream is given in Table 11-15 and show acceptable results with a single failure.

Table 11-15 Summary of Copper Assays of Blanks, Island Mountain Deposit

Year	Copper Blank Assays	Number >100 ppm	%>100 ppm
2010	135	0	0.0%
2011	195	1	0.5%
Grand Total	330	1	0.3%

The sequential plot of copper assays of samples of blank material is given in Figure 11-26 and shows the single failure at just over 200 ppm.

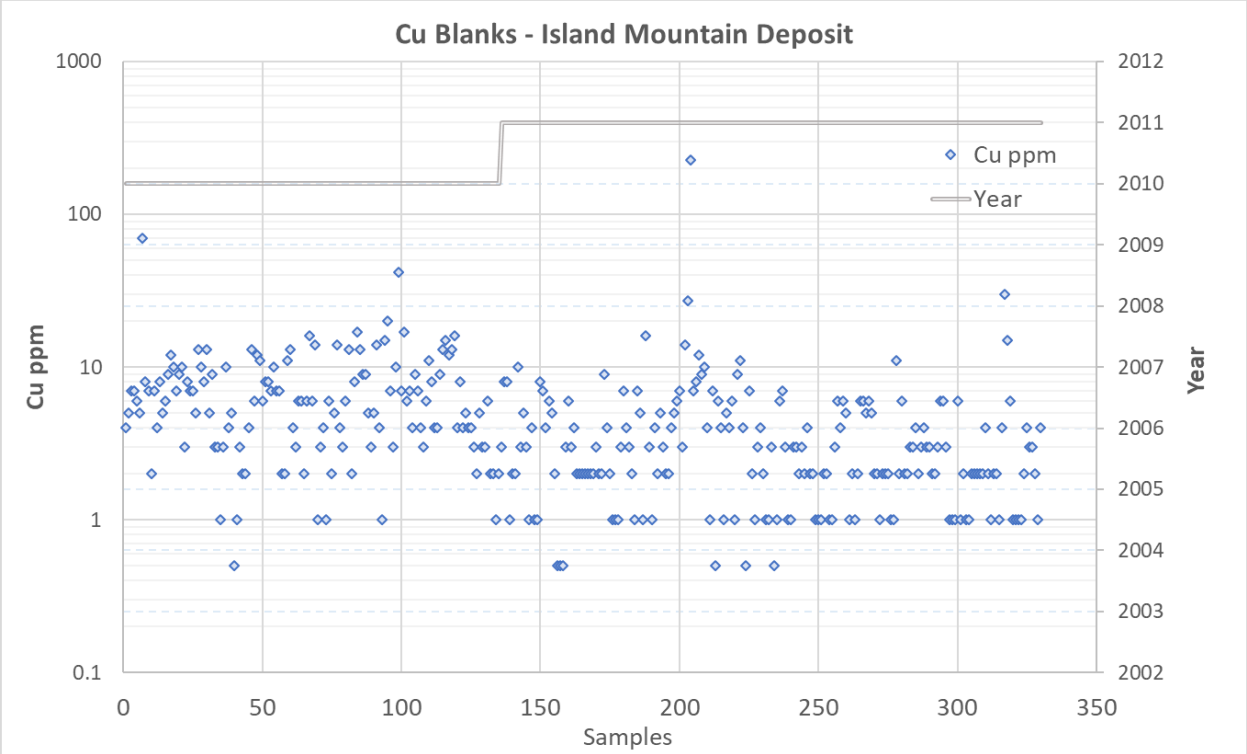


Figure 11-26 Sequential Plot of Copper Assays of Blanks, Island Mountain Deposit (Source: MMTS, 2021)

11.3.3.2 Island Mountain CRMs

The summary of results of gold assays for CRM samples included in drilling in Island Mountain are presented in Table 11-16. The overall percent of failures is 2.2% and the error is 0.5% indicating a slight positive bias. The CV values are all below 10% indicating reasonable repeatability.

Table 11-16 Island Mountain Deposit CRM Summary, Gold

CRM	Used	Samples	Average of Au (g/t)	Std Dev of Au (g/t)	CV	EV (g/t)	% Error	Low Fail	High Fails	% Fail
OREAS-52Pb	2010	17	0.329	0.022	6.6%	0.307	6.6%	0	1	5.9%
OREAS-52c	2010-2011	135	0.347	0.024	6.8%	0.346	0.4%	1	0	0.7%
OREAS-53Pb	2010	26	0.617	0.028	4.6%	0.623	-1.0%	2	0	7.7%
OREAS-50c	2010-2011	105	0.837	0.043	5.1%	0.836	0.1%	2	1	2.9%
OREAS-54Pa	2010-2011	30	2.920	0.093	3.2%	2.900	0.7%	0	0	0.0%
Total		313					0.5%	5	2	2.2%

The normalized process control chart of gold assays in the Island Mountain drilling is presented in Figure 11-27 showing the mean close to the expected value and the few failures.

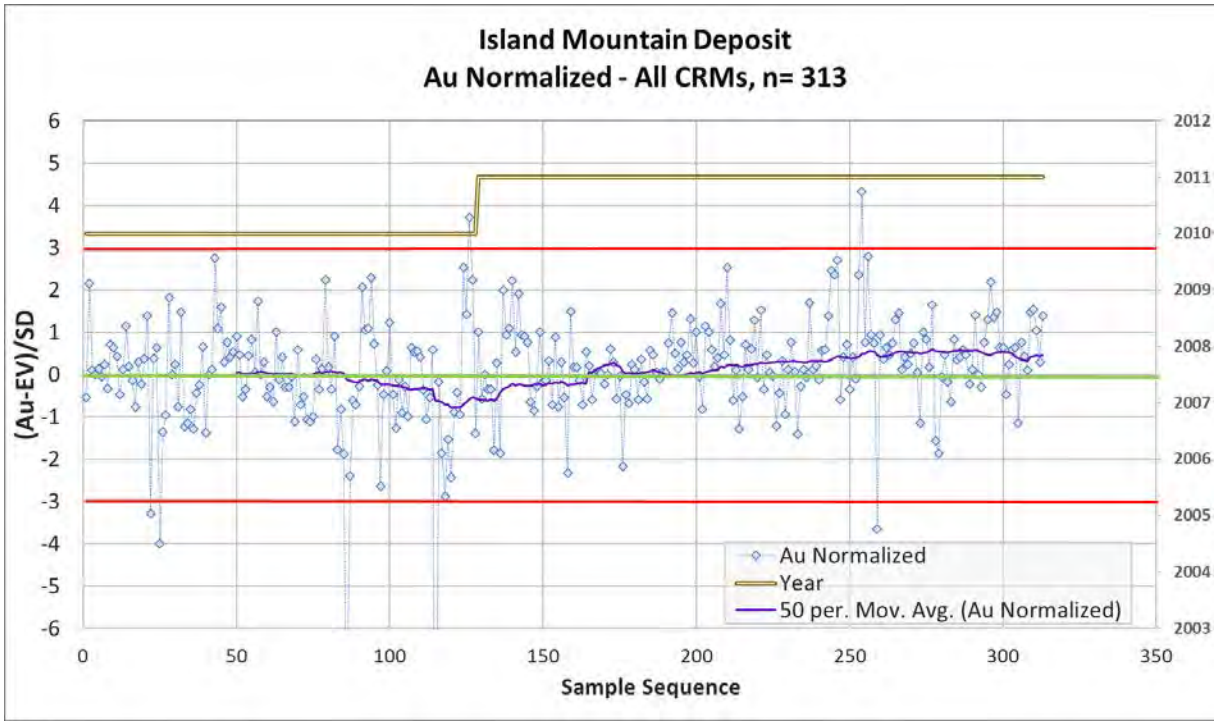


Figure 11-27 Island Mountain Deposit Normalized Process Control Chart, Gold (Source: MMTS, 2021)

Figure 11-28 gives the process control chart for OREAS-52c with expected value of 0.346g/t and 135 samples. It shows the overall good results with mean close to the expected value.

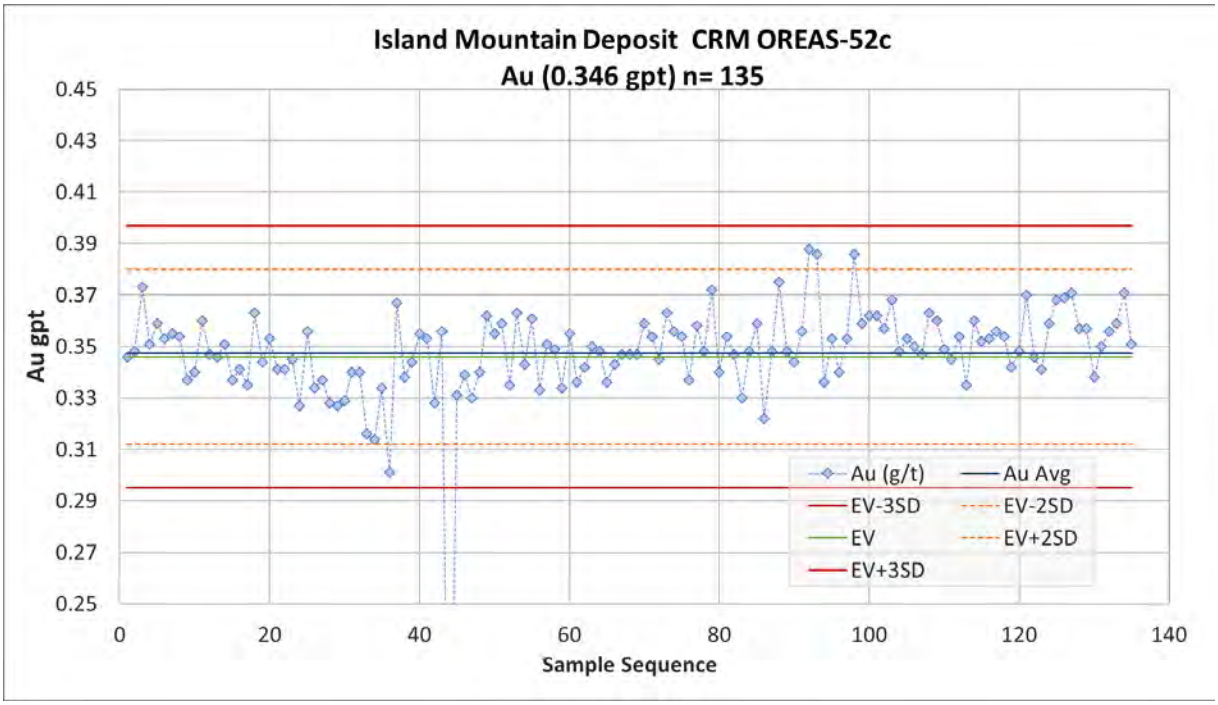


Figure 11-28 Process Control Chart Island Mountain CRM OREAS-52c, Gold (Source: MMTS, 2021)

The summary of results of 308 copper assays of CRMs in Island Mountain is given in Table 11-17 and shows a higher than expected overall failure rate of 12.7% with overall percent error of -1.2 indicating a small negative bias to the copper assays of the CRMs.

Table 11-17 Island Mountain Deposit CRM Summary, Copper

CRM	Used	Samples	Average of Cu Pct	Std Dev of Cu Pct	CV	EV Pct	% Error	Low Fail	High Fails	% Fail
OREAS-52Pb	2010	16	0.336	0.022	6.5%	0.334	0.7%	0	2	12.5%
OREAS-52c	2010-2011	133	0.342	0.054	15.7%	0.344	-0.7%	7	5	9.0%
OREAS-53Pb	2010	26	0.531	0.020	3.7%	0.546	-2.8%	1	0	3.8%
OREAS-50c	2010-2011	103	0.735	0.029	3.9%	0.742	-0.9%	7	4	10.7%
OREAS-54Pa	2010-2011	30	1.488	0.053	3.6%	1.550	-4.2%	13	0	43.3%
Total		308					-1.2%	28	11	12.7%

The normalized process control chart is presented in Figure 11-29 and shows that most failures occurred in 2010 and the 2011 results are more consistently within the +-3 SD line.

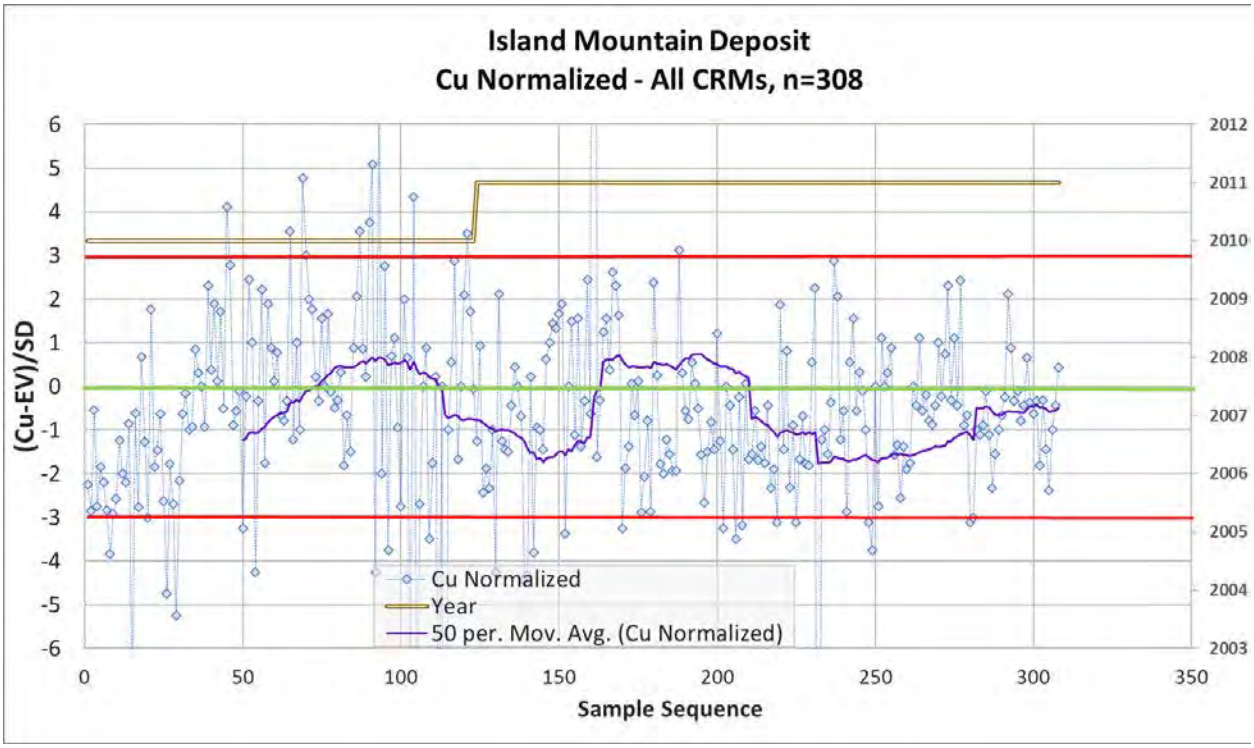


Figure 11-29 Island Mountain Deposit Normalized Process Control Chart, Copper (Source: MMTS, 2021)

The process control chart for CRM OREAS-50c is given in Figure 11-30 and shows that despite the high failure rate of 10.7% the results are seen to indicate little bias with the mean close to the expected value.

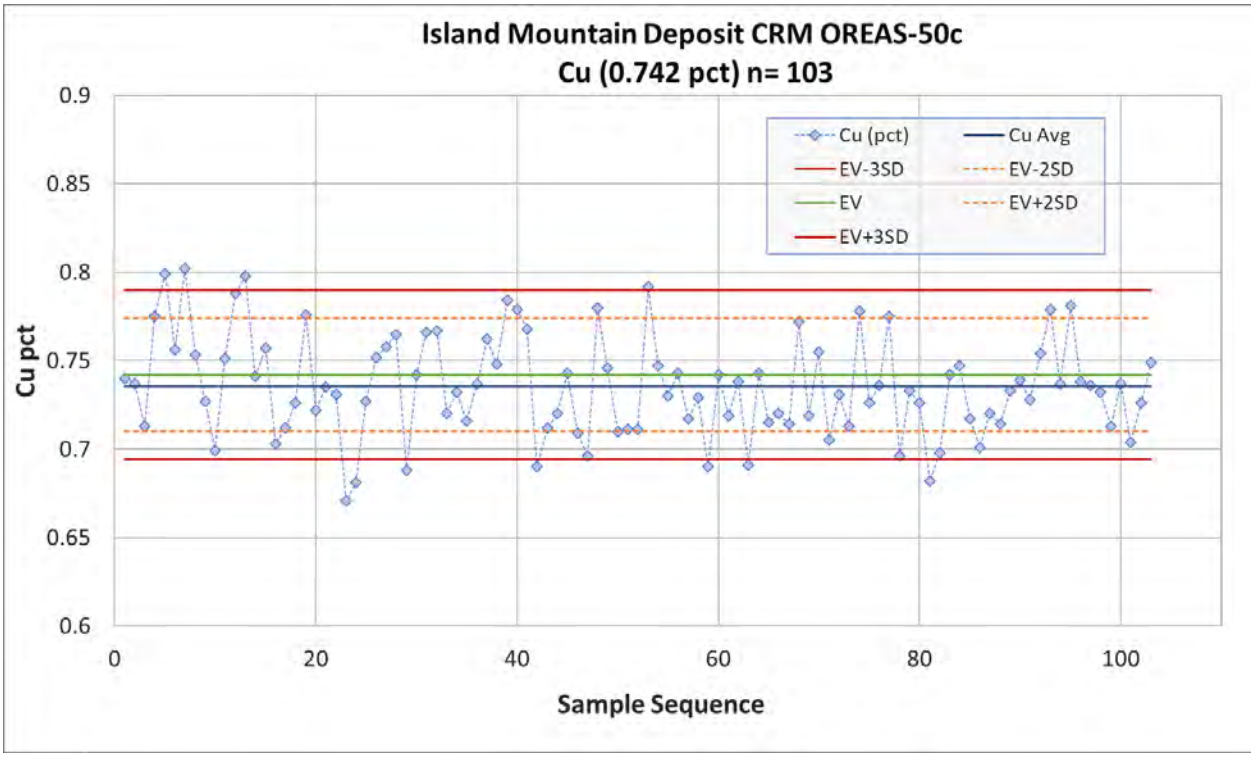


Figure 11-30 Process Control Chart Island Mountain CRM OREAS-50c, Copper (Source: MMTS, 2021)

For drilling in Island Mountain, analysis of the CRMs shows acceptable results and little indication of bias material to the resource estimate.

11.3.3.3 Island Mountain Duplicates

The simple statistics of the gold and copper assays of the field duplicates from drilling in 2010 and 2011 in Island Mountain is given in Table 11-18. The means of the gold assays of the duplicate pairs show a 8.2% difference with the duplicates higher, while the duplicate pairs of the copper assays are slightly lower. The HARD statistic expectation of 70% is more than met for copper and only 57% for gold, indicating high heterogeneity.

Table 11-18 Island Mountain Field Duplicate Simple Statistics

Samples	Element	Units	Average			% below 10% HARD	Standard Deviation	
			Primary	Duplicate	% Difference		Primary	Duplicate
316	Gold	g/t	0.252	0.274	8.2%	57	0.508	0.586
	Copper	ppm	421.8	411.9	-2.4%	87	587.1	557.7

The scatter plot of field duplicate assays for gold is given in Figure 11-31 and shows the considerable scatter with low coefficient of correlation. The nearly 1:1 slope does not reflect the potential bias seen in the means.

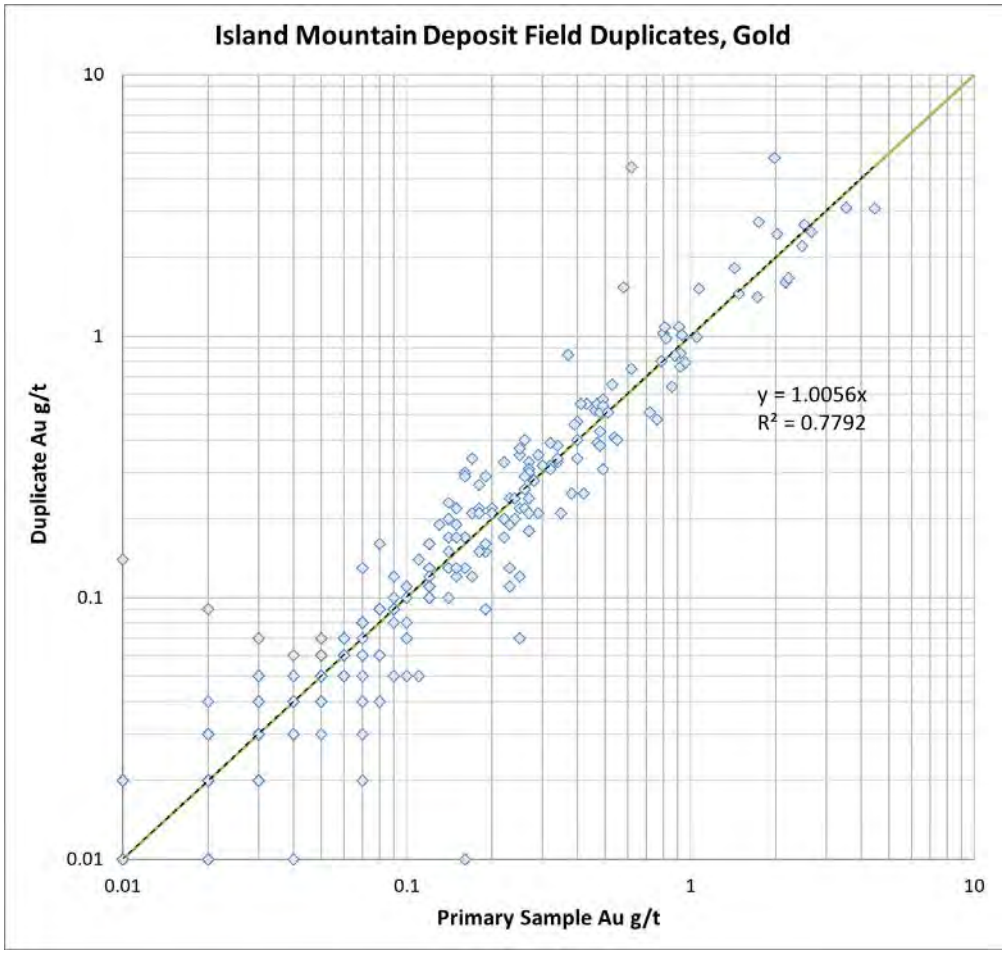


Figure 11-31 Island Mountain Deposit Field Duplicate Scatter Plot, Gold (Source: MMTS, 2021)

The scatter plot of copper field duplicate assays is given in Figure 11-32 and shows the excellent correlation of the pairs with slight low bias of the duplicate samples.

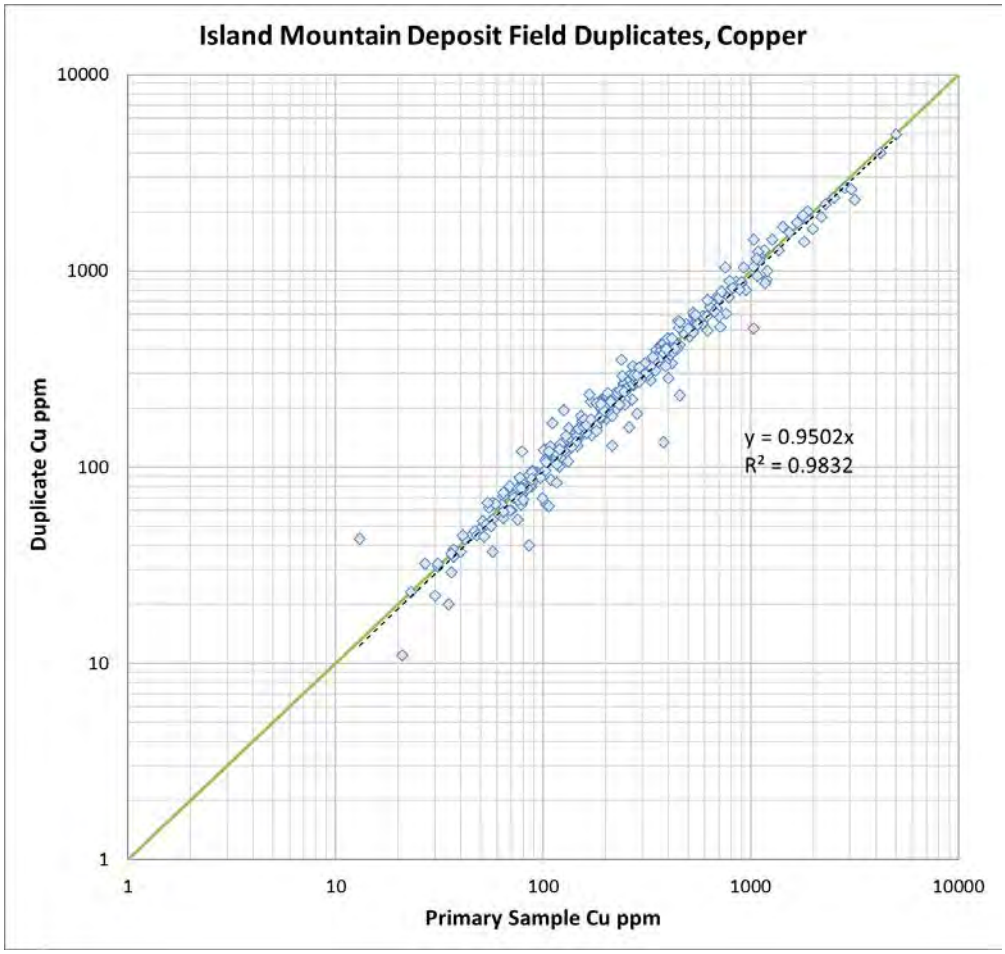


Figure 11-32 Island Mountain Deposit Field Duplicate Scatter Plot, Copper (Source: MMTS, 2021)

The simple statistics of the coarse duplicate assays in Island Mountain from 2009-2011 is given in Table 11-19. There are minor differences between the primary and duplicate means. The expectation of 80% below 10% HARD is more than met for copper and the 72% is not unreasonable for gold.

Table 11-19 Island Mountain Coarse Duplicates Simple Statistics

Samples	Element	Units	Average			% below 10% HARD	Standard Deviation	
			Primary	Duplicate	% Difference		Primary	Duplicate
342	Gold	g/t	0.247	0.253	2.3%	72	0.498	0.481
	Copper	ppm	540.7	536.2	-0.8%	94	1022.3	982.7

The scatter plot of gold assays of coarse duplicates is given in Figure 11-33. It shows reasonable correlation between the pairs and no cause for concern.

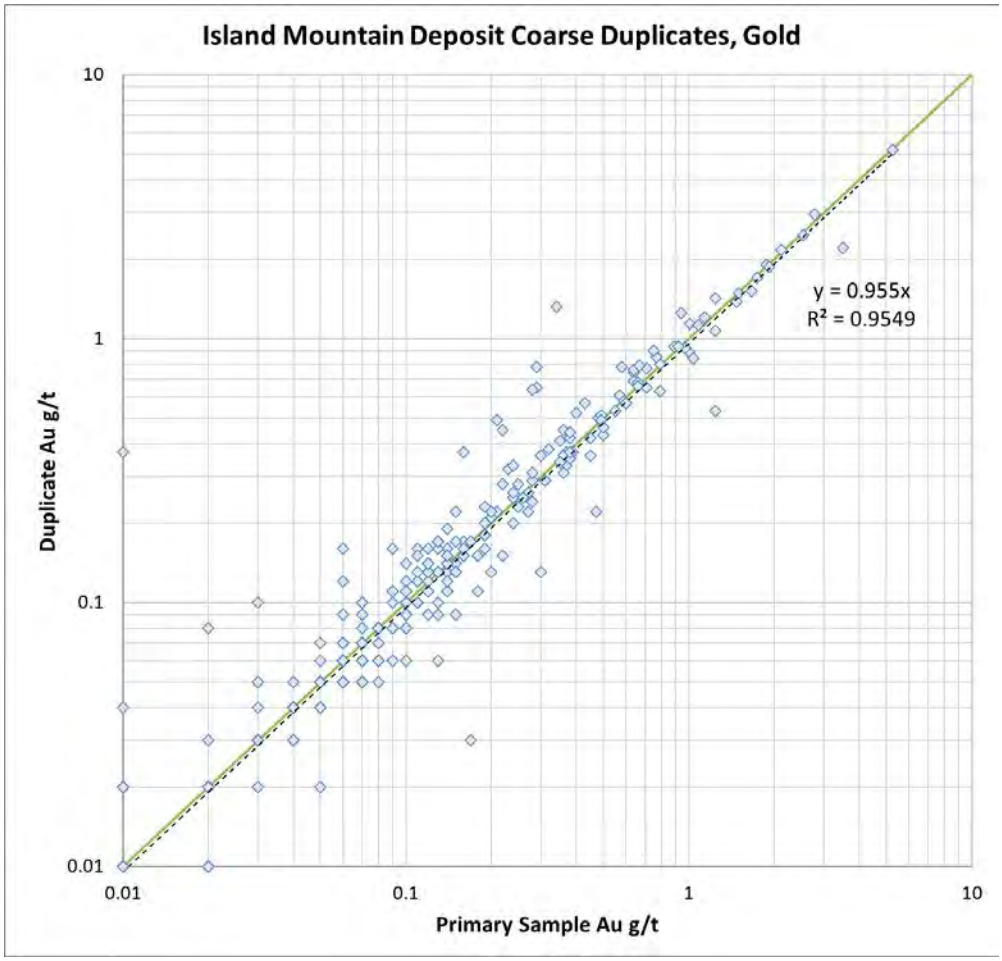


Figure 11-33 Island Mountain Deposit Coarse Duplicate Scatter Plot, Gold (Source: MMTS, 2021)

The scatter plot of copper assays of coarse duplicate pairs is given in Figure 11-34 and shows the excellent agreement between the paired assays.

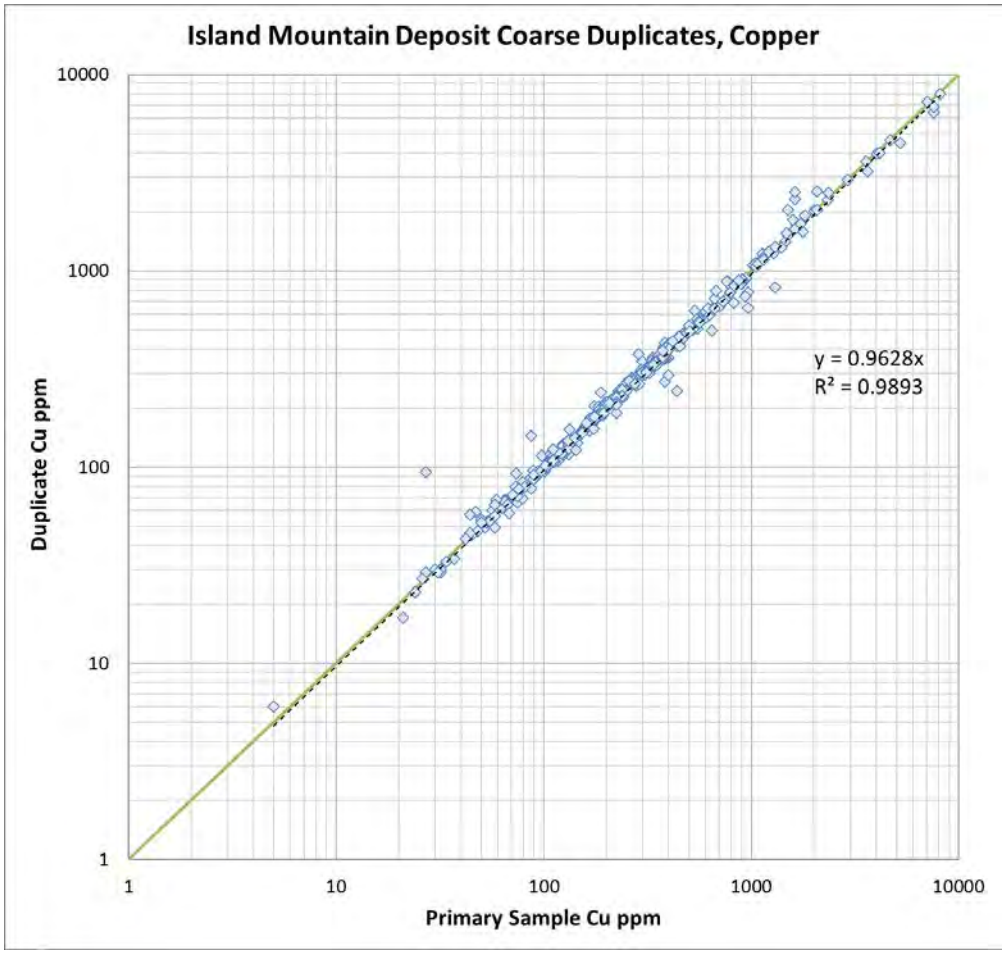


Figure 11-34 Island Mountain Deposit Coarse Duplicate Scatter Plot, Copper (Source: MMTS, 2021)

Analysis of duplicate samples in Island Mountain do not show evidence of selection bias at the core sampling level, indicate higher heterogeneity of gold mineralization in comparison to the Whistler and Raintree deposits, and show that significant bias is not introduced at the sample preparation stage.

11.4 Sample Preparation, Analyses and Security Conclusions and Recommendations

The author concludes that the sample preparation, analysis and security are of sufficient quantity and quality for resource estimation. The author further recommends that:

- For completeness, QAQC data for silver blanks and duplicates be collected from the historical database for analysis in future studies that include silver in the resource estimate. None of the CRMs used to date are certified for silver. New CRMs should be sourced and included in any future drilling. The lack of silver QAQC samples is not of material significance at this time because silver is a minor contributor to the resource estimate.
- The locally sourced material for blanks used prior to 2009 gives inconclusive results for assessing contamination as it appears to contain trace mineralization. This is particularly pronounced in

the Whistler Deposit where most of the sampling was in 2008 and earlier. Future drilling should continue to use the silica sand or a commercially prepared blank material.

- Individual instances of lapse in control procedures where failed samples and the neighboring primary assays samples are not seen to be re-assayed are identified. If this was indeed done, the database has not been correctly maintained. The number of failures does not appear to be of material significance at this time. Future programs should ensure that adherence to control procedures is maintained.

12 Data Verification

12.1 Site Visit

A site visit was conducted on May 21, 2021 by Kirstin Girdner, P.E. of MMTS who was accompanied by TJ Oldenkamp of GoldMining. Observations of the core storage, core shed, unoccupied camp and three drillholes were made. An aerial view of the camp is given in Figure 12-1. The maintenance of the unoccupied camp is currently coordinated by Mr. Oldenkamp.

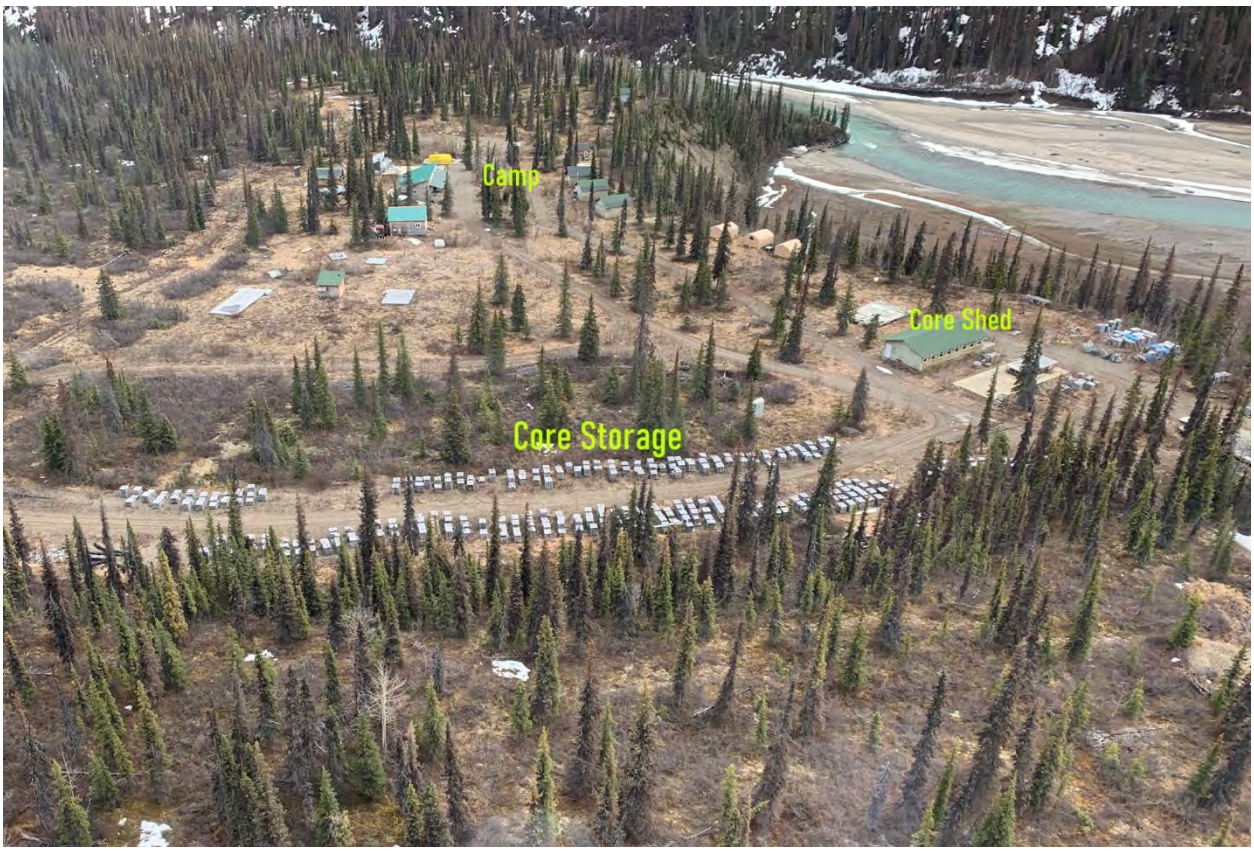


Figure 12-1 Aerial view of Whistler Camp (Source: MMTS, 2021)

The remaining core is in stacked in banded wooden boxes in various stages of weathering as shown in Figure 12-2.

Figure 12-2 Drillcore Boxes in Storage Area (Source: MMTS, 2021)

Significant intervals of core from five drillholes in years 2008, 2010 and 2011 were located and photographed. Figure 12-3 shows drillhole IM010-013 with core from 111.4m to 113.4m which includes most of interval 112m to 114m with assays of 3g/t Au, 2g/t Ag and 0.24% Cu.

Figure 12-3 Stored drillcore from DH IM010-013 (Source: MMTS, 2021)

The abandoned core shed shows evidence of a well run logging program with reference rock boards as shown in Figure 12-4, remaining log books, sample tags and various pieces of equipment.

Figure 12-4 Reference Rock Board (Source: MMTS, 2021)

Three drillholes were located using hand held GPS. Two were found to be within 2m of the documented location and one within 10m. The located drillholes were found in cleared drill pads but were not marked as shown in Figure 12-5 which shows collar WH11-047.

Figure 12-5 Drillhole Collar WH11-047 (Source: MMTS, 2021)

12.2 Data Audit

The assay database was received from GoldMining on May 12, 2021. The database contains 26,957 intervals including all areas in the Whistler project. The database was checked for overlapping intervals and missing assays, no errors were noted.

12.2.1 Certificate Checks and Database Corrections

The assay database as received did not have certificate numbers attached to the assay intervals. The author was able to update this information for 25,459 of the assayed intervals in the database. Results of certificate checks are presented in Table 12-1. The resource areas include 20,861 assayed intervals in the database, of which 4,253 were checked for a rate of 20.4%. Of these, only one true error was found in which the Au value in the database was 452ppb instead of 468ppb for an error rate of 0.02%.

The random checks led to the discovery that two corrected certificates (EL05037720 and EL05037279) from the Elko ALS laboratory in 2005 affecting 321 intervals, had not been updated in the database. The author made these correction before proceeding with resource modeling.

It is also noted that 107 assayed intervals on two certificates (FA04052589 and FA04054343) show only values for gold and copper, the silver values appearing in the database are not on the found certificates.

Table 12-1 Certificate Check Results

Assayed Intervals in Resource Areas	**20,861**
Intervals Checked	4,253
% Checked	20.4%
Errors	1
% Errors	0.02%
Lab corrections not updated in database	321
Certificates missing Ag values	107
Total Findings	435

The amount of data by interval length that is supported by certificate and QAQC data (blanks CRMs and field duplicates) is given in Table 12-2 and is reported by drilling year, not analysis as previously presented in the QAQC section. The percentage of assayed length fully supported by certificate and QAQC in Whistler is 76%, in Raintree it is 90% and in Island Mountain it is 93%. Although resource estimates are ideally supported 100% by certificates and QAQC, the author finds the percentages reported here typical or better for similar projects with several changes in ownership and the majority of drilling completed before 2010. It is recommended that GoldMining make further attempts to match up sample numbers with certificate number and locate missing certificates.

Table 12-2 Summary of Data Suppported by Certificate and QAQC

Year	Whistler				Raintree				Island Mountain			
	Assayed Length (m)	Has Certificate (m)	Has QAQC (m)	% With Certificate and QAQC	Assayed Length (m)	Has Certificate (m)	Has QAQC (m)	% With Certificate and QAQC	Assayed Length (m)	Has Certificate (m)	Has QAQC (m)	% With Certificate and QAQC
1986-1989	1,566			0%								
2004	1,865	1,777	1,863	95%								
2005	5,061	5,061	5,061	100%	208	208	208	100%				
2006	696	696	696	100%	845	845	772	91%				
2007	3,243	3,243	3,243	100%								
2008	2,660	2,660		0%	615	615		0%				
2009	214			0%	479			0%	387			0%
2010	4,500	4,500	4,209	94%	3,164	3,164	2,827	89%	4,956	4,908	4,520	91%
2011					13,799	13,796	13,351	97%	8,943	8,943	8,706	97%
Total	**19,804**	**17,936**	**15,072**	**76%**	**19,110**	**18,628**	**17,158**	**90%**	**14,287**	**13,852**	**13,226**	**93%**

12.2.2 Check assays

Check assays by Kennecott in 2004 have been documented (SRK,2007) however this data was not available to the author for review. No other third party lab verification data are reported or provided.

12.3 Collar Survey

In 2011, it was reported that collar locations for Island Mountain holes had been re-captured using a Trimble Geoexplorer 6000 GPS instrument (<1m accuracy) and that the intention was to re-survey the majority of the holes on the property in 2012 (Roberts, 2011a). Documentation that this was accomplished is not apparent. Spot checks of collar locations during the site visit indicate there may be some deviations from recorded locations that could be significant.

12.4 Data Verification Conclusions and Recommendations

The author concludes that the resource database provided is of sufficient quality for resource estimation. It is further recommended that:

- At least 10% of collar locations in each resource area, to include drilling from all years, be surveyed with GPS equipment with <1m accuracy. If significant deviations are determined from the recorded values, all collars would need resurvey.
- GoldMining continue to pursue matching of assay samples to certificates and collection of missing certificates.
- Future drilling should include third party check assays and the data should be appropriately maintained.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

The information contained in Section 13 regarding metallurgical testwork is intended to support and substantiate the metallurgical recoveries used in the Resource Estimate. The information provided is the best available data but may not fully optimised with respect to the current resource. The metallurgical testwork was intermittently performed by different laboratories with different primary objectives on select portions of the overall resource. Metallurgical testing for the Whistler and Island Mountain Deposits had previously been reported by MMTS in 2015 and is repeated verbatim below solely for the benefit of continuity of data.

No metallurgical testing was carried out on rocks from the Raintree West deposit, however given the similarities in geological setting, host rock, mineralization and alteration between Raintree West and the Whistler Deposit, it has been assumed that metallurgical processes and metal recoveries determined for the Whistler Deposit are a reasonable approximation for the Raintree West Deposit at this time.

Metallurgical testing has been carried out in three phases starting with the 2004/05 preliminary testing in Salt Lake City under the general supervision of Kennecott and culminating in the two phases under Kiska Metals and conducted at G&T Laboratories in Kamloops during 2010-2012. These three phases are described separately below.

13.1 Summary of Preliminary Metallurgical Testing, Whistler Deposit (Phase One)

Preliminary metallurgical test-work was carried out at Dawson Metallurgical Laboratories Inc. (DML) in Salt Lake City, Utah from September 2004 until early 2005 with a final report being issued in March of 2005 by George Nadasdy. (Nadasdy, 2005) The work was carried out under the direction of Rio Tinto Technical Services representing Kennecott.

Three different sample composites were tested. The samples were differentiated by sample history and particle size and also by lead/zinc content. The three designations were Original Composite, New Core Sample and Low Lead-Zinc Composite.

13.1.1 Sample Preparation

A total of approximately 180, coarse assay reject interval samples were received at DML on September 13, 2004 from Kennecott Exploration. All of the individual samples from the entire drillhole WH-04-05-21 (from 2.32 to 328.56 m) were received. Kennecott selected a mineralized interval (from 117.6 to 200.2 m) from this drillhole for testing.

The original composite was produced by including every other individual assay reject sample from the 117.6 to 200.2 metre mineralized interval. The original composite represented a total of 42.2m of material and weighed 88.7 kg. The composite was air dried and stage crushed to minus 10 mesh in preparation for testing. The minus 10 mesh composite was mixed in a "V" cone blender and split into batches. A 50 kg test sample was rotary table split into 2.0 kg test charges. A 37.6 kg reserve sample was also made. All samples were kept in the DML freezers to reduce sample oxidation.

Initial testwork on the original composite produced low rougher concentrate copper grades due to sulfide activation (pyrite, galena and sphalerite floating along with the chalcopyrite). On November 10, 2004, a second Whistler mineralized sample was received for testing. This second sample was the remaining ½ of Kennecott's cut core from the same drillhole (WH-04-05-21) and represented material

from 140.6 to 155.3m. Some of the higher grade lead-zinc core was removed by Kennecott geologists and not included in this second sample. This core sample was designated by as the "new core sample". The new core sample weighed 20 kg; it was stage crushed to minus 10 mesh mixed in a “V” cone blender and then rotary table split into 2 kg test charges.

A third Whistler mineralized sample was prepared at DML at the end of November for continued testwork and was designated by as the low lead-zinc composite. The low lead-zinc composite was made from the remaining individual coarse assay reject samples not used in the original composite (from 117.6 to 200.2 m). At the direction of Kennecott, selected high grade lead-zinc samples were omitted from this low lead-zinc composite. The low lead-zinc composite weighed 71 kg and was prepared in a similar fashion to the original composite.

13.2 Testing

Three (3) separate mineralized samples from the gold-copper bearing Whistler Project in Alaska were tested from September 2004 through March 2005. Preliminary metallurgical testwork included gravity concentration or flotation to recover the copper and gold. The three (3) mineralized samples were designated as: the original composite, the new core sample and the low lead-zinc composite, as previously described.

Testwork conducted on the three (3) Whistler mineralized samples included the following:

1. **Original Composite**: DML comparative (ball mill) grind work index test; a gravity centrifugal concentration and amalgamation test; a head assay screen at a (RM) P80=140µm grind; rougher kinetic-reagent scoping tests; rougher kinetic-pH tests (pH 9.3, 10.0 and 10.8); three (3) stage cleaning tests at different primary and regrind sizes and cleaner tests at pH 9.3 or 11.0.
2. **New Core Sample**: a gravity concentration and amalgamation test; a rougher kinetic grind series P80=162, 111, 80 and 66 microns and a three (3) stage cleaner test at a P80=80µm primary grind, a P80=48µm regrind size and a cleaner pH of 9.3.
3. **Low Lead-Zinc Composite**: a rougher kinetic test at a P80=80µm grind; three (3) stage cleaning tests at a P80=80µm primary grind and P80=37µm regrind and a cleaner pH of 9.3 or 11.0. A cleaner test was also conducted with SO_2 added to the first cleaner. A final cleaner test was conducted to generate a third cleaner concentrate for a suite of assays for smelter evaluation.

13.2.1 Results from Preliminary Testing

The initial work on the Original Sample resulted in lower than expected rougher and cleaner grades and high levels of lead and zinc reporting to the cleaner concentrate. This was attributed to both the high lead and zinc in the feed and the fact that the composite was created from assay rejects that had potentially aged at a relatively fine crush between core preparation and metallurgical testing.

The high lead and zinc values in the Original Sample were essentially concentrated in two of the twenty-five intervals used to make up the composite. For the two subsequent composites the high lead-zinc intervals were left out of the mix. In addition, the second sample to be tested (New Core Sample) was produced from ½ section core that provided less opportunity for the deleterious effects of ageing when stored under ambient atmospheric conditions at finer sizes.

In general, it was found in the early work that gravity recovered gold was in the finer size ranges with an average gold grain size of minus 400 mesh (37 microns) so this avenue was not pursued in later testwork on the assumption that liberated gold would be recovered through flotation.

In addition, it was also found that a primary grind of ~80% passing 80 microns was required for best recovery of both copper and gold.

Below is the excerpted table from the Dawson report indicating cleaning test results for the three composites (Table 13-1). The 3rd Cleaner copper grade increased from 16% to 21% to 23% for the Original, Low Pb-Zn and New Core samples respectively. Copper recoveries were 80% to 84% with gold ranging from 60% to 65%.

Table 13-1 Three Stage Cleaning Tests

P – 2825: Kennecott – Whistler Project Three Stage Cleaning Test – pH 9.3 in Rougher and Cleaner												
			Calc. Head		Final Trail		No.3 Cleaner Concentrate				Percent Recovery	
Test No.	Sample	Grind Prim/RG P80=µm	% Cu	ppm AU	% Cu	ppm AU	Wqt.%	% Cu	ppm Au	% Insol.	Cu	Au
14	Orig. Comp.	140/53	0.642	2.36	0.128	0.749	3.80	12.4	39.4	7.1	73.5	63.5
23	Orig. Comp.	80/34	0.635	2.56	0.087	0.842	3.20	16.4	51.9	7.2	82.6	64.8
21	New Core	80/48	0.804	3.21	0.087	0.983	2.99	22.5	64.4	4.9	83.5	60.0
30	Low Pb-Zn	80/37	0.531	2.54	0.077	0.942	2.04	20.8	74.1	5.5	79.9	59.4
Cytec 3477 in grind at 0.015 lb/ton and NaIPX in scavenger at 0.004 lb/ton. No additional collector added to either regrind or cleaners.												

The poor performance on the original composite material was attributed to the high lead and zinc content and the effects of sample size and ageing. The New Core material responded best and the results with the Low Pb-Zn were close but not up to the level of the New Core material. Thus there was a significant improvement with the exclusion of the high Pb-Zn intervals and a further improvement with the "fresh" half core. Crushed assay rejects are generally problematic for testwork with samples containing copper, lead and zinc minerals.

As per the table above, regrind sizes ranged from 34 to 53 microns. This leaves some potential for finer regrinding to improve cleaner separations if necessary in the future. In addition, there is further potential for copper cleaner enhancement with a higher pH regime in that part of the circuit as long as it does not have a significant negative effect on gold recoveries.

The DML report further indicates that in an analysis of cleaner test products the gold values tend to track closely with the deportment of the copper as opposed to following the iron.

13.2.2 Preliminary Conclusions

In any future work care must be taken to ensure the material to be tested is as fresh as possible and has been stored in such a manner as to minimize the potential for surface oxidation. The resource data must be analyzed to assess the presence, level and distribution of lead and zinc throughout the deposit and appropriate samples selected for metallurgical testing so that they reflect the nature of the resource and the likely plant feed. Care must also be taken to ensure that the copper and gold grades of the feed for any further testwork reflect the expected levels in the resource.

For first pass metallurgical testing reasonable copper and gold recoveries were achieved at less than optimum concentrate copper grades. Care and attention to sample preparation and handling (as mentioned above) along with more in depth testing should allow for improvements in both recoveries and grades. Further reagent screening should be carried out both to enhance recoveries and selectivity and to attempt to allow for processing at a coarser primary grind.

Combined cleaner and scavenger tails accounted for the loss of 29% to 35% of the contained gold and 10% to 14% of the copper. These preliminary cleaning tests all involved open circuit cleaning. In the normal course of more detailed flowsheet development (reagent and regrind optimization plus closure of the cleaning circuit) one could potentially expect to be able to improve copper recoveries to ~85% into a concentrate with a copper grade in the range of 25% to 27%. A combination of the flotation improvements and the application of additional gold recovery techniques in the cleaner circuit might potentially improve gold recovery to the 75% range.

In addition, as mentioned above, future test-work should be carried out on material with feed grades reflecting the likely grade that would be mined and sent to the plant. Lower feed grades tend to somewhat reduce metal recoveries.

13.3 Summary of Preliminary Metallurgical Testing, Island Mountain Deposit (August 21, 2010) (Phase 2)

13.3.1 Introduction

Two holes (IM09-001 and IM09-002) were drilled at Island Mountain in 2009. These holes produced interesting gold and copper values and also what appeared to be “interesting” associations between the contained gold, copper, pyrrhotite and magnetite. It was decided to carryout preliminary metallurgical testwork on the available sample material in order to assess the mineralogical associations and the potential for effective treatment of the rock to recover gold and copper. Core logging indicated an apparent difference between the upper and lower mineralized intervals of the drillhole. The upper mineralized interval had higher copper, but lower gold values, and the lower mineralized interval tended to contain more pyrrhotite. The lower region also represented the greater tonnage potential.

13.3.2 Sample Selection

The drill data had been assessed in terms of a gold equivalent whereby copper and silver values were added to the gold value based on assumed recoveries of 75% for Au and Ag and 80% for Cu. Assumed prices were $US550/oz, $US8/oz, $US1.50/lb respectively for the three metals. A simple gold equivalent cut-off of 0.30 gpt ($US5.30/tonne at $US550/oz) was taken. Based on this cut-off, 72 out of 81 two metre intervals were selected from the upper 162m of IM09-001 to form an Upper Composite. Similarly 75 out of 111 two metre intervals were selected to form a Lower Composite from the lower 222m of the hole. From hole IM09-002, only 20 of 99 two-metre intervals surpassed the selected cut-off. As higher

grade intervals were distributed erratically throughout the length of the hole none of this material was used for the metallurgical work.

Quarter core was available for composite preparation and it was shipped to G&T Metallurgical in Kamloops BC for composite assembly and the metallurgical testing.

13.3.3 Feed Grade

Table 13-2 provides the analyses of the elements of interest in the two composites.

Table 13-2 Summary of Analysis of Composites from IM09-001 and IM09-002

	Cu	Pb	Zn	Fe	S	Ag	Au	C
	%	%	%	%	%	gpt	gpt	%
Upper Comp Head - 1	0.15	0.06	0.02	8.50	2.36	3.20	0.49	0.10
Upper Comp Head - 2	0.15	0.06	0.02	8.30	2.08	3.70	0.44	0.09
Average	**0.15**	**0.06**	**0.02**	**8.40**	**2.22**	**3.45**	**0.46**	**0.09**
Lower Comp Head - 1	0.050	0.06	0.01	5.70	2.77	2.30	0.80	0.17
Lower Comp Head - 2	0.048	0.06	0.01	5.90	2.82	1.60	0.90	0.19
Average	**0.049**	**0.06**	**0.01**	**5.80**	**2.80**	**1.95**	**0.85**	**0.18**

The copper values in the Upper Composite are on the lower side of normal feed grades whereas the copper values in the Lower Composite are well below where one would generally expect to make saleable copper concentrate grades with any significant recovery. The gold however, particularly in the Lower Composite, contributes a significant value to the feed.

13.3.4 Test Program

Various processing options were applied to the sample material in order to assess both the association between the gold and the other minerals and to assess the potential for economic recovery of the copper and gold.

The preferred and simplest option would be to produce a saleable copper concentrate containing the bulk of the copper and also the bulk of the gold. Another possible route would be to leach the gold from the whole ore with cyanide. The leaching approach could possibly produce good gold recovery but would not recover copper values and would likely involve significant cyanide consumption due to the copper content of the feed. Hybrid approaches would involve the selective flotation of a saleable copper concentrate with some of the gold and leaching of some or all of the flotation tailings to recover un-floated gold values.

As well as recovery considerations, a significant concern in cyanide leaching arises from the consumption of cyanide by other metals and minerals in the feed material. Of particular interest are copper and pyrrhotite. Depending on the form and activity of the copper and iron minerals significant quantities of cyanide can be tied up as copper and iron cyanides.

The current test program included bulk flotation of copper and gold, selective flotation of copper, cyanidation of the feed material and cyanidation of the combined tailings from selective open circuit cleaning tests performed on each of the composites. Due to the expectation that the Lower Composite likely represented the greater portion of “minable” material testwork addressed this sample with confirmatory work then being applied to the Upper Composite.

13.3.5 Metallurgical Results

Bulk Flotation

Various grinds plus some pH modification were applied to the bulk rougher flotation of both composites. In general the best copper recoveries were achieved with flotation at a grind of ~80% passing 100 microns and a pH of 10. Gold recoveries were not as sensitive to the changes. Table 13-3 shows a summary of the bulk flotation results.

Table 13-3 Bulk Flotation Results

Material	Feed % Cu	Copper Conc % Cu	Rec %	Feed gpt	Gold Conc gpt	Rec %
Upper Composite Rougher	0.15	0.90	79.66	0.50	2.82	74.41
Lower Composite Rougher	0.05	0.41	89.15	0.96	7.12	80.41
Lower Composite Rougher	0.05	0.31	87.94	0.94	5.41	81.02
Lower Composite Cleaner	0.05	1.40	76.02	0.94	39.40	70.73

Copper recoveries were reasonable considering the low head grades – particularly in the case of the Lower Composite. However, given the value of gold in the feed, gold recoveries were considered to be too low. In addition, a saleable copper concentrate would require a 15 to 20 fold increase in the copper grade which would further reduce the recovery of both metals.

The low gold recoveries also indicate that there is gold associated with some other mineral that is not floating in the non-selective bulk circuit.

Selective Flotation

Reagent changes were made to try and float a cleaner copper concentrate using open circuit cleaning.

Table 13-4 Selective Cleaner Flotation

Material	Feed % Cu	Conc % Cu	Rec. Cu - %	Rougher Rec.	Feed Au gpt	Conc Au gpt	Rec. Au - %	Rougher Rec.
Upper	0.14	22.5	63.4	77.3	0.50	51.3	42.7	61.5
Lower	0.05	23.3	70.6	84.1	0.99	294	44.0	45.6

The selective flotation produced similar but somewhat lower copper rougher recoveries than those achieved in the bulk flotation circuit (Table 13-4). There is a potential to improve these with further optimization. The copper loss between roughing and cleaning was similar to that experienced in the bulk circuit. Both these aspects can be addressed by further reagent and operating condition adjustments. Further testwork with closed circuit cleaning will significantly reduce the cleaning circuit losses. Gold recovery was much lower during roughing and was significantly reduced during cleaning for the Upper Composite. This confirms the earlier suggestion that there is a significant portion of the gold that is associated with some mineral or minerals other than the copper bearing ones.

13.3.6 Whole Ore Leach

The whole ore leach approach worked well – particularly for the Lower Composite (Table 13-5).

Table 13-5 Whole Ore Cyanidation

	Feed (gpt)	Residue (gpt)	Recovery (%)	Cyanide Strength (kgpt)	Cyanide Consumption (kgpt)
Upper Composite	0.54	0.06	89.06	2.00	1.82
Lower Composite	0.82	0.08	90.22	0.50	0.46

For both composites ~90% of the gold was extracted in 48 hours. Higher solution strength was required for the Upper Composite and this resulted in significantly higher cyanide consumption.

13.3.7 Leaching of Selective Flotation Tails

Based on the results of the whole ore leach and the selective cleaner flotation, the flotation tailings for both composites were leached in cyanide for 48 hours at solution strength of 0.50 kgpt (Table 13-6).

Table 13-6 Cyanidation of Selective Flotation Tailings

	Feed (gpt)	Residue (gpt)	Recovery (%)	Cyanide Strength (kgpt)	Cyanide Consumption (kgpt)	Flotation + Cyanidation Recovery (%)
Upper Composite	0.18	0.08	56.52	0.50	0.40	75.08
Lower Composite	0.51	0.09	81.44	0.50	0.38	89.60

Leaching results were particularly good for the Lower Composite at 81% and the overall recovery by flotation and cyanidation was almost 90%. Similar to the results of the whole ore leach, the leaching conditions for the Upper Composite can likely be optimized to improve the extent and rate of leaching for the flotation tailings from the Upper material.

13.3.8 Overall Recoveries

Potentially 90% of the gold in the Lower Composite can be recovered either by direct cyanidation or by flotation followed by cyanidation of the flotation tailings. Similarly almost 90% of the gold can be leached from the Upper Composite and further work should improve the overall gold recovery from this material by the combined flotation-leach approach.

More in depth work should be performed to improve flotation grades and recoveries. In addition, once an optimized flotation approach has been established the opportunities to produce a high grade copper concentrate followed by the production of a low grade gold concentrate for subsequent leaching should be investigated. This could substantially reduce the capital and environmental ramifications of whole ore or full tailings leaching.

13.3.9 Conclusions

The preliminary testing Indicated that the Island Mountain material tested is amenable to copper recovery by flotation and that the gold is relatively free milling. This is particularly true of the greater portion of the material represented by the Lower Composite. The results indicate that in the range of 90% of the gold in the Lower Composite can be recovered by either whole ore leaching or a combination of flotation and leaching of the tailings. With further development work, copper flotation recoveries will likely rise to the 80% range for the Lower Composite.

Similarly, gold recovery in the range of 90% can be achieved by whole ore leaching of the Upper Composite. Further flotation work on the Upper Composite will improve both copper and gold recoveries to concentrate.

For both materials it was concluded that further metallurgical development and assessment work would still be required to develop the best flowsheet with respect to capital and operating costs, metal recoveries and overall economics.

13.4 Summary of Whistler Deposit Testwork (2012) (Phase 3)

The final round of work was also carried out at G&T Metallurgical Laboratories, now part of ALS Metallurgy, there being continuity of personnel and experience with the Island Mountain testwork previously reported.

The work commenced in August 2012 and was completed by year end and the results presented in its report KM3499 of January 2013.

13.4.1 Metallurgical Samples

Initial work was conducted on core from the 2008 drilling campaign, on sample 08-08 which had been kept in carefully controlled conditions and was believed to be still fresh. Arrangements had been made to obtain a sample from a similar hole planned for the summer 2012 drilling campaign as a "calibration" check to validate its freshness, especially in view of the aging effects reported in the Kennecott testwork. Unfortunately the cancellation of the 2012 campaign negated this process; however, as is evident from the results presented below, there is no reason to suspect any impact of oxidation on flotation response.

What was a greater concern with respect to this sample was that, following the update to the geological model reported in AMC's letter report of November 2012, it might have been insufficiently representative of the bulk of the mineralization being predominantly in the central quartz-breccia zone, representing only 20% of the tonnage, although 30% of the metal content.

Accordingly a second sample, 10-19 from the 2010 drilling campaign, more representative of the Main Stage Porphyry, although right on the margin of the proposed ultimate pit, was selected for additional tests and in fact became the basis for setting the predicted metallurgical parameters.

Both samples had been divided into high grade, medium grade and low grade samples in accordance with gold grades, with most of the work carried on the medium grade samples, being closer to Resource grades.

Sample grades are tabulated in Table 13-7.

Table 13-7 Sample Head Grades

Sample	%Cu	%Fe	%S	Au gpt	%C
08-08 MG (master)	0.12	5.8	3.6	0.53	0.76
08-08 HG	0.50	4.9	1.8	1.78	0.67
08-08 LG	0.08	4.1	2.7	0.34	1.30
10-19 MG	0.22	2.6	1.9	0.51	1.09
10-19 HG	0.17	3.3	1.1	0.96	1.42
10-19 LG	0.22	3.4	1.7	0.38	1.24

No mineralogical work was carried out. However normative mineralogy calculations show that Sample 08-08 generally has almost twice the pyrite content of Sample 10-19. Sample 08-08 was similar to Island Mountain in this respect.

The testwork program focused mainly on conventional copper flotation; however it soon became evident that improving gold recovery was key so, similar to the direction taken with Island Mountain, the program included work on cyanidation of cleaner tails and also investigation of enhancing gold recovery with pyrite concentrate production.

The flotation and cyanidation testwork flowsheets are shown in Figure 13-1 (abstracted from the ALS KM3499 report).

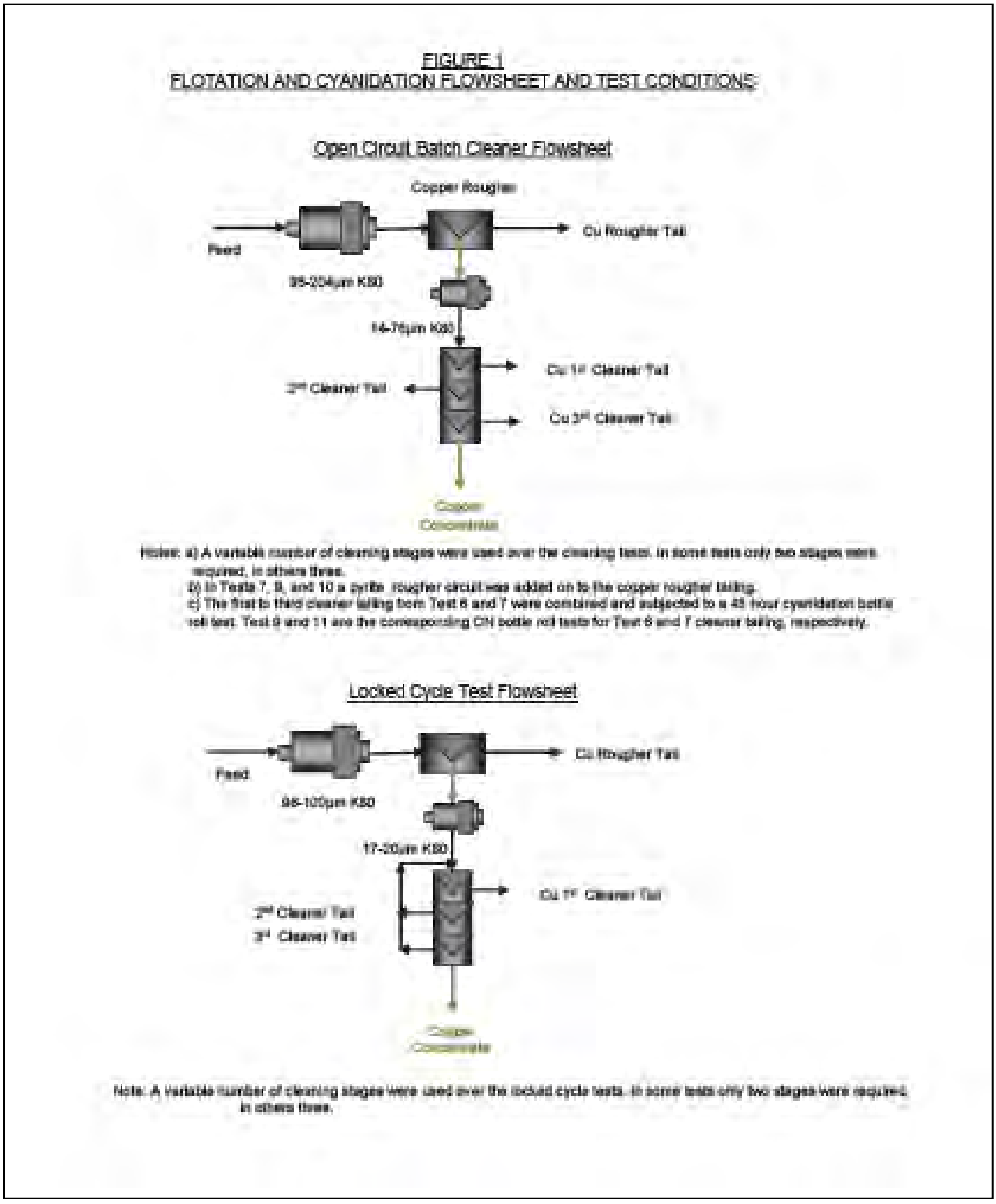


Figure 13-1 Flotation and Cyanidation Flowsheet and Test Conditions (MMTS, 2015).

13.4.2 Results

The results of the metallurgical testwork for a conventional comminution/flotation flowsheet are summarized below.

13.4.2.1 Comminution

A single standard Bond ball mill work index test was carried out on 10-19MG composite towards the end of the program, and at a closing size of 106µm.

The Bond ball mill work index (BWI) was found to be 19.9 kWh/t (compared to the Island Mountain value assumed for the initial flowsheet design of 18.5 kWh/t). This result puts Whistler in the very hard range of ball mill hardness.

No SAG mill testing (e.g.) JK Drop weight or SMC tests were included in the program, nor indeed any Bond rod mill work index tests. The QP has used some industry benchmarks and approximations in setting appropriate SAG mill design criteria (see Section 17.2.3) and recommends that these additional comminution tests be a high priority for the next stage of testwork.

13.4.2.2 Flotation

Key parameters in the copper flotation tests were:

- Primary grind target was generally 100µm (some later tests, following the receipt of the BWI result, were done in the 150-200µm range).
- Regrind target was generally 20µm (test 1 at 76µm was a procedural error).
- Cytec 3418A, a specialist copper/precious metal flotation reagent, was used as the primary copper sulphide mineral collector.
- pH in the rougher and cleaner circuits was generally maintained at 10 and 11 respectively, using hydrated lime.

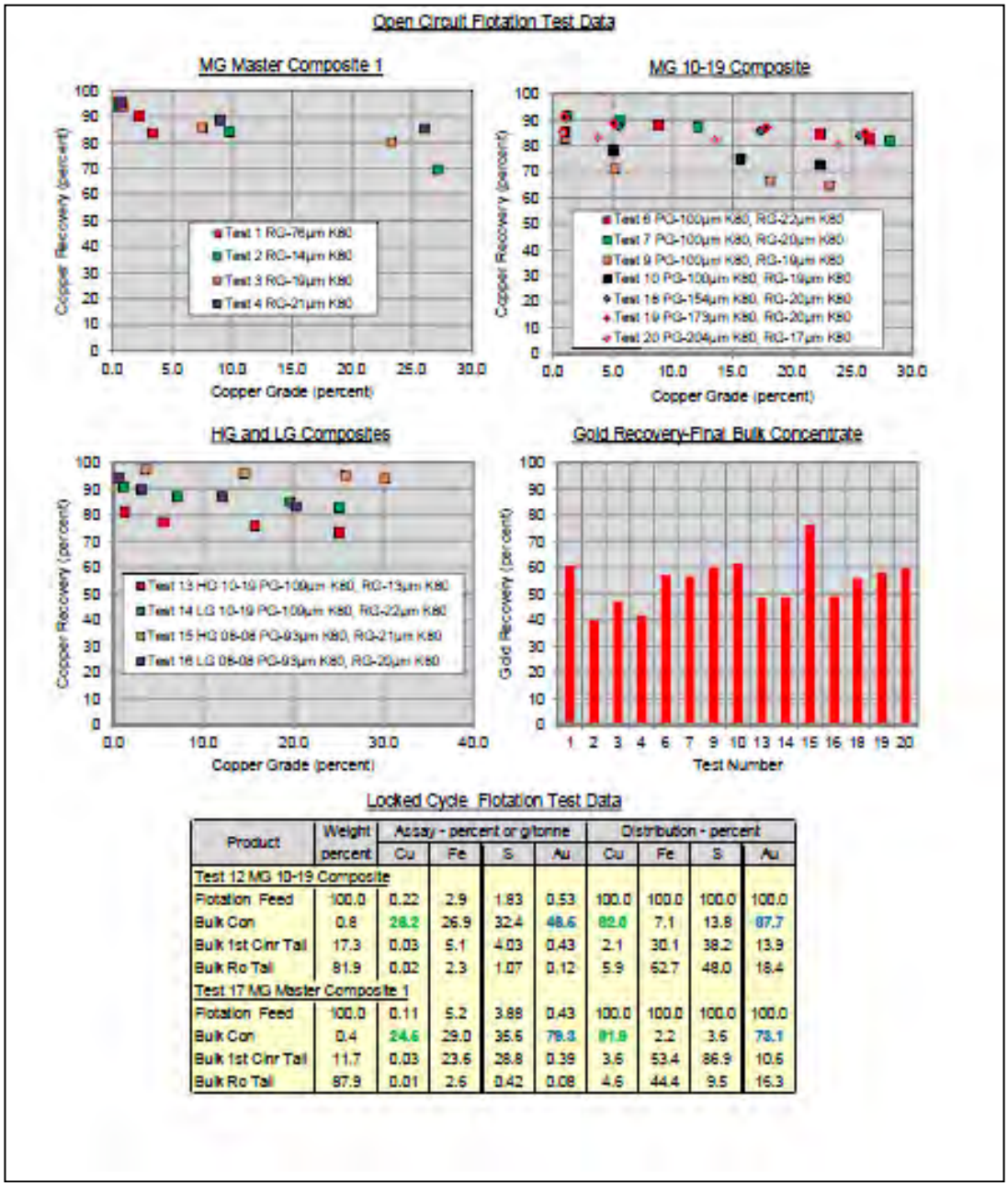
The key results are tabulated and graphed in Figure 13-2 (abstracted from the ALS metallurgy KM3499 report).

In summary the main findings were as follows:

- Open-circuit batch flotation testing achieved fairly consistently 80-85% copper recovery to a 25% Cu concentrate grade; however gold recovery was lower (40-50%) due to lower rougher recoveries and also low cleaner recoveries with significant deportment of gold to cleaner tailings streams.
- From the flotation results, the gold associations were inferred as follows:
  - 60% with chalcopyrite
  - 20% with pyrite (± chalcopyrite)
  - 20% with gangue minerals

The QP strongly recommended that mineralogical studies be a high priority for the next phase of testwork.

- Some attempts were made at recovering gold to a pyrite concentrate for subsequent treatment (a possible alternative to cyanidation of cleaner tails), but overall recovery fell and later work focused on the locked cycle tests as a means of recovering gold reporting in recirculating streams that were not accounted for in simple batch tests.
- Locked cycle tests on both the 08-08 and 10-19 samples proved to be the key to unlocking gold value with substantial improvements to gold recovery from the recycle of intermediate streams (short of pilot-plant testing, locked cycle tests are the best way of replicating a full scale flotation plant). Averaging the results from both and rounding numbers appropriately yielded the following:
  - 92% copper recovery to a 25% Cu concentrate grade
  - 70% gold recovery
- On receipt of the higher than expected BWI results with a significant impact on both capex and opex, some final open circuit batch flotation tests were conducted at coarser primary grinds (154 µm, 173µm and 204 µm) but retaining the same 20µm regrind size. The results were analyzed in grade-recovery terms and are presented in graphical form in Figure 13-3 and Figure 13-4. Copper grade-recovery performance was retained up to 173 µ but showed a significant deterioration at the coarsest grind, whereas gold recovery seemed largely insensitive to primary grind size. Although further work, including definitive locked cycle testing, is required to validate this, the QP believes it is reasonable to assume a primary grind size of 175µm (in round figures) as an option for capex/opex sensitivities.
- Some very preliminary variability tests (four in total) were carried out on the low grade and high grade samples for each main composite. The results showed a high degree of variability in the 70-90% range for copper recovery and 20-30% Cu in final concentrates. Gold recovery was generally constant at around 50% although the 08-08 high grade sample did show a significantly higher recovery of 76%. The QP does not attach much importance to this limited number of results, their having no spatial relationship to the deposit, and would recommend that future variability work be based on spatial and mineralogical/textural parameters rather than grade.



Locked Cycle Flotation Test Data

Product	Weight percent	Assay - percent or g/tonne Cu	Fe	S	Au	Distribution - percent Cu	Fe	S	Au
Test 12 MG 10-19 Composite									
Flotation Feed	100.0	0.22	2.9	1.83	0.53	100.0	100.0	100.0	100.0
Bulk Con	0.8	28.2	26.9	32.4	48.6	82.0	7.1	13.8	87.7
Bulk 1st Clnr Tail	17.3	0.03	5.1	4.03	0.43	2.1	30.1	38.2	13.9
Bulk Ro Tal	81.9	0.02	2.3	1.07	0.12	5.9	62.7	48.0	18.4
Test 17 MG Master Composite 1									
Flotation Feed	100.0	0.11	5.2	3.88	0.43	100.0	100.0	100.0	100.0
Bulk Con	0.4	24.6	29.0	35.6	79.3	91.9	2.2	3.6	78.1
Bulk 1st Clnr Tail	11.7	0.03	23.6	26.8	0.39	3.6	53.4	86.9	10.6
Bulk Ro Tal	87.9	0.01	2.6	0.42	0.08	4.6	44.4	9.5	15.3

Figure 13-2 Flotation Test Results (MMTS, 2015)

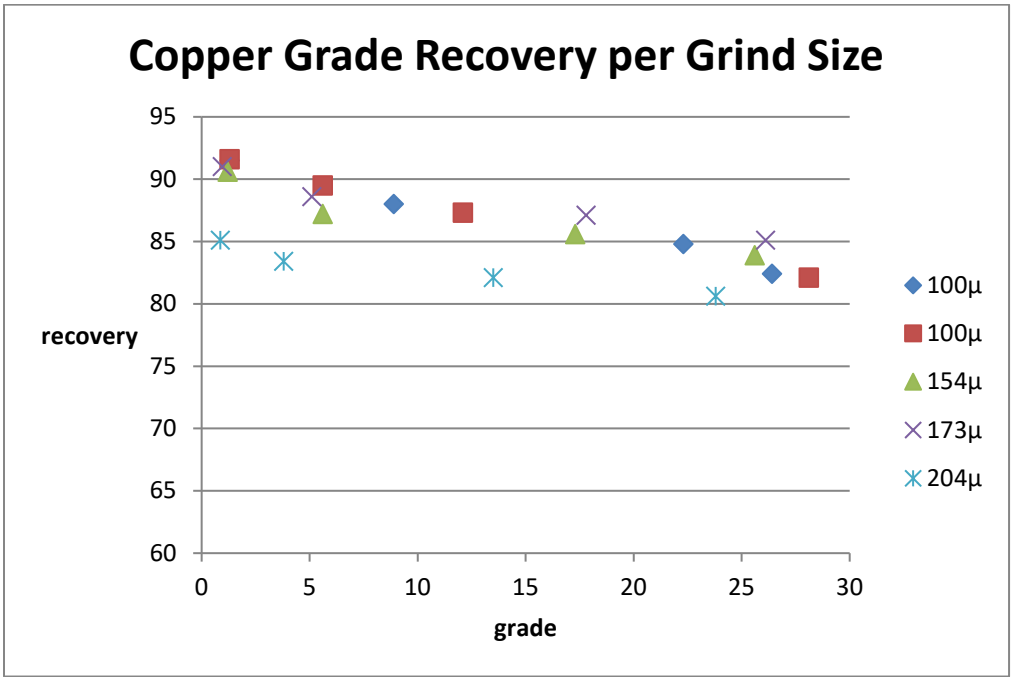


Figure 13-3 Copper Grade Recovery (MMTS, 2015)

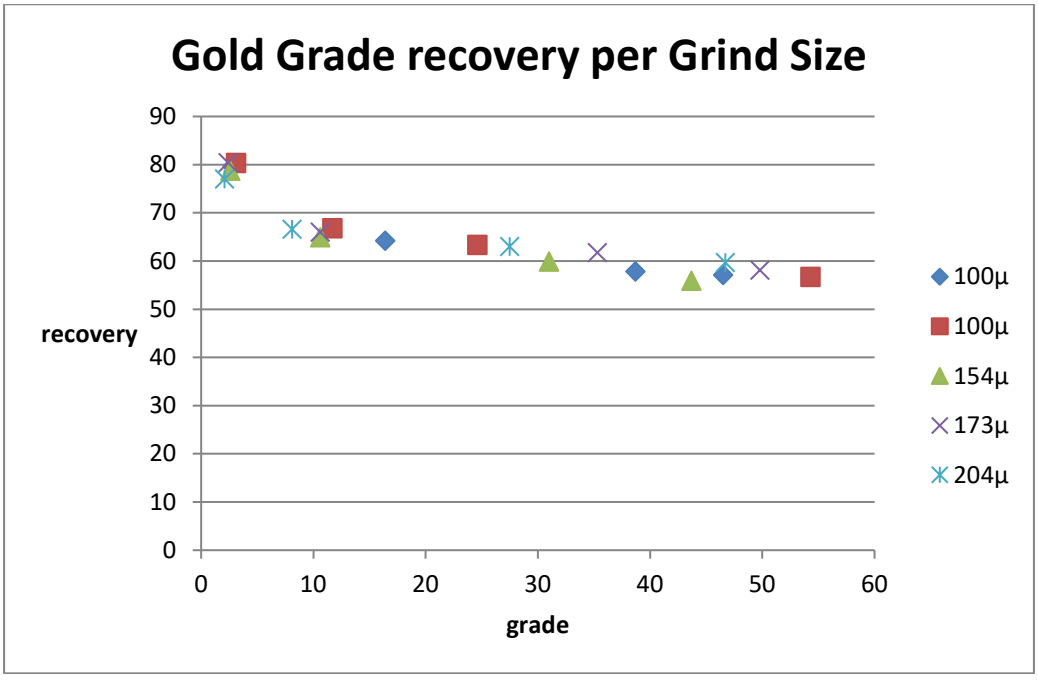


Figure 13-4 Gold Grade Recovery (MMTS, 2015)

13.5 Cyanidation

The batch flotation tests had indicated a substantial amount of the gold was reporting to cleaner tails and, pending the results of the locked cycle tests, some cyanidation tests were carried out on combined cleaner tails from tests 6 and 7 on 10-19 samples where 23% of the gold was accounted for in the cleaner tails.

Forty-eight hour gold extractions were 77% to solution, thus overall gold recovery would improve from 57% to approximately 74%. However although cyanide consumption was moderate for a sulphidic stream, the absolute gold grades in cyanidation feed were still low and the marginal return versus costs at current gold and cyanide prices exactly that, marginal. Also the use of cyanide requires a different level of onsite management and therefore is more complicated in terms of its cost benefit.

Given the excellent locked cycle test results already reported, and with overall gold recoveries by flotation being only in the region of 70%, it was decided not to pursue further cyanidation testwork.

13.6 Concentrate Specifications

The final bulk concentrates from cycles II-V of the locked cycle tests 12 (10-19 MG) and 17 (08-08 MG) were analyzed for potentially deleterious elements and the results are shown in Table 13-8.

Concentrates from both samples are remarkably clean and would indicate that the specifications would fall well within typical smelter limits for penalty elements, with no penalty payable.

Normative mineralogy calculations, assuming a simple chalcopyrite:pyrite sulphide blend, suggest the pyrite concentrate from the 08-08 sample to be almost twice that of 10-19, i.e. similar to what was observed in the head samples.

Table 13-8 Minor Element Data

Element	Symbol	Units	Test 12 (10-19)	Test 17 (08-08)
Aluminium	Al	%	0.92	0.68
Antimony	Sb	%	0.02	0.17
Arsenic	As	gpt	135	344
Bismuth	Bi	gpt	<1	<1
Cadmium	Cd	gpt	30	20
Calcium	Ca	%	0.44	0.31
Carbon	C	%	0.33	0.39
Cobalt	Co	gpt	46	36
Copper	Cu	%	26.1	24.9
Fluorine	F	gpt	133	123
Iron	Fe	%	26.7	29.3
Lead	Pb	%	0.18	0.19
Magnesium	Mg	%	0.17	0.09
Manganese	Mn	%	0.014	0.014
Mercury	Hg	gpt	1	4
Molybdenum	Mo	%	0.006	0.010
Nickel	Ni	gpt	74	94
Phosphorus	P	gpt	118	143
Selenium	Se	gpt	86	30
Silicon	Si	%	2.73	2.33
Sulphur	S	%	32.2	35.1
Silver	Ag	gpt	108	134
Zinc	Zn	%	0.46	0.32

13.7 Conclusions

From the metallurgical testwork results and subsequent analysis it appears that the Whistler Deposit is metallurgically very amenable to a conventional flotation route to produce saleable high quality copper concentrates with gold credits, despite the low head grade, and that the levels of recovery and upgrade for both copper and gold are relatively insensitive to feed grade. There are no processing factors or deleterious elements that could have significant effect of potential economic extraction.

Although some late testwork on ore hardness revealed the ore to be harder than expected with a Bond Work Index of 19.9 kWh/t, some batch flotation work also showed that the primary grind size could be increased from 100µm to 175 µm, subject to confirmation with further locked cycle tests, with net savings in comminution power.

13.8 Overall Metallurgical Observations and Comments for 2021 Resource Estimate

As noted in the history of exploration of the Whistler deposit, which expanded from an initial Cu-Au porphyry deposit centered on Whistler and expanding over time to include Raintree West and Island Mountain in the Resource tonnage, as well as additional revenue potential from Ag, each phase of metallurgical testwork had focused exclusively on the exploration objectives at the time. As a result the cumulative metallurgical understanding lags the geological understanding by a considerable margin.

The data reported in Sections 13.1 to 13.7 above are an accurate record of the testwork performed at the time, and the conclusions drawn refer to those made within the scope of the specific test program. They do not, however, provide a complete picture of overall Mineral Resource with respect to pay metal grades and recoveries for a number of reasons:

- To date no mineralogical work has been performed in spite of recommendations to that effect made in each phase of metallurgical testing.
- Assumptions in the various reports regarding gold recovery have noted that while higher Au recoveries than measured could possibly be achieved by combining flotation and cyanide leaching, it was noted that the low grades, high cyanide consumption and environmental control measures could render the additional gold recovery uneconomical.
- Copper toll smelters are loath to accept copper concentrates containing less than 25% Cu without imposing higher Cu deductions on payable metal. The early Whistler testwork identified difficulties in obtaining payable Cu grades even with 3 stages of cleaning and consequently made a decision to exclude ore samples containing elevated Pb and Zn from subsequent testwork (Section 13.2.1).
- No assays of silver were performed during the test programs, with the exception of Ag grades being reported in the minor element analysis of the two concentrates produced in the 2012 testwork (Table 13-8), which were however not linked to Ag head grades and yield unreliable metallurgical accounting results.
- Flotation testwork assays covered only Au, Cu, and some Fe and S assays were performed, but Pb, Zn and Ag assays were conspicuous by their absence.
- As seen in the notes in the Resource table (Table 1-1) the overall indicated resource grades are 0.79g/t Au; 0.13% Cu and 2.19g/t Ag. Note 5 states silver recovery for Ag grades below 10g/t are estimated at 65% while no Ag recovery is allowed for Ag grades above 19g/t as the resource model indicates a strong association of high Ag values with high Pb and Zn content samples, for which no metallurgical testwork has been performed except for the single Kennecott test which returned unsatisfactory Au and Cu results in terms of concentrate grades due to Pb and Zn dilution of the copper concentrate (Section 13.2.1).
- For all the above reasons the metallurgical recommendation of 70% Au recovery, 83% Cu recovery and 65% Ag recovery of ore containing less than 10g/t Ag should be used until such time as a more comprehensive metallurgical test program is performed which provides reliable grade and recovery results on material containing Pb and Zn as well as Au, Cu, and Ag.

14 MINERAL RESOURCE ESTIMATE

The Mineral Resource estimate for the Whistler Project has an effective date of June 11, 2021. The resource estimate was prepared by Sue Bird, P.Eng., of MMTS.

14.1 Mineral Resource Estimate

The Whistler Project total Mineral Resource Estimate (MRE) includes the Whistler, Raintree and Island Mountain deposits and is summarized in Table 14-1 for the base case cut-off grade. Mineral Resources were estimated using the 2019 CIM Best Practice Guidelines and are reported using the 2014 CIM Definition Standards.

The MRE utilizes pit shells to constrain resources at the Whistler, Island Mountain and Raintree West gold-copper deposits, as well as an underground potentially mineable shape to constrain the resource estimate for the deeper portion of the Raintree West deposit. The current estimate has been updated with new metal prices of US$1,600/oz gold price, US$3.25 copper and US$21/oz silver, updated recoveries, smelter terms, costs, as summarized in the notes to Table 14-1. Geologic modelling has also been updated, with drilling and exploration work completed prior to 2016. No additional work has been completed at the project since such date.

These mineral resource estimates include inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The estimate of Mineral Resources may be materially affected by environmental permitting, legal, title, taxation, sociopolitical, marketing or other relevant factors. The QP is not currently aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issue that could materially affect this MRE.

The sensitivity to the resource by deposits is presented in Table 14-2 through 14-4 for the Whistler, Raintree and Island Mountain deposits respectively.

Table 14-1 Mineral Resource Estimate for the Total Whistler Project (Effective date: June 11, 2021)

Class	Deposit	Cut-off	ROM tonnage	In situ Grades					In situ Metal			
		(US$/t)	(ktonnes)	NSR (US$/t)	AuEqv (gpt)	Au (gpt)	Cu (%)	Ag (gpt)	AuEqv (Koz)	Au (koz)	Cu (klbs)	Ag (koz)
Indicated	Whistler	10.5	107,771	26.44	0.79	0.50	0.17	1.95	2,738	1,749	399,396	6,757
	Raintree-Pit	10.5	7,756	20.61	0.67	0.49	0.09	4.88	166	121	14,893	1,216
	Indicated Open Pit	**10.5**	**115,527**	**26.05**	**0.78**	**0.50**	**0.16**	**2.15**	**2,904**	**1,871**	**414,289**	**7,973**
	Raintree-UG	US$25 shell	2,675	34.02	1.03	0.79	0.13	4.18	89	68	7,690	359
	Total Indicated	varies	118,202	26.23	0.79	0.51	0.16	2.19	2,993	1,939	421,979	8,332
Inferred	Whistler	10.5	153,536	19.17	0.57	0.35	0.13	1.48	2,829	1,706	455,267	7,306
	Island Mountain	10.5	111,901	18.99	0.57	0.47	0.05	1.06	2,042	1,701	130,751	3,814
	Raintree-Pit	10.5	11,774	24.28	0.77	0.62	0.07	4.58	291	235	17,988	1,732
	Inferred Open Pit	**10.5**	**277,211**	**19.32**	**0.58**	**0.41**	**0.10**	**1.44**	**5,162**	**3,642**	**604,006**	**12,851**
	Raintree-UG	US$25 shell	39,772	32.65	1.00	0.80	0.12	2.51	1,284	1,027	107,411	3,208
	Total Inferred	varies	316,983	20.99	0.63	0.46	0.10	1.58	6,446	4,669	711,417	16,060

Notes to Tables 14-1 through 14-4:

1. *Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources will be converted into mineral reserves.*
2. *Resources are reported using the 2014 CIM Definition Standards and were estimated using the 2019 CIM Best Practices Guidelines.*
3. *The Mineral Resource for Whistler, the upper portions of the Raintree West deposits have been confined by an open pit with "reasonable prospects of eventual economic extraction" using the following assumptions:*
   - *Metal prices of US$1600/oz Au, US$3.25/lb Cu and US$21/oz Ag;*
   - *Payable metal of 99% payable Au, 90% payable Ag and 1% deduction for Cu;*
   - *Offsite costs (refining, transport and insurance) of US$136/wmt proportionally distributed between Au, Ag and Cu;*
   - *Royalty of 3% NSR;*
   - *Pit slopes are 50 degrees;*
   - *Mining cost of US$1.80/t for waste and US$2.00/t for mineralized material; and*
   - *Processing, general and administrative costs of US$10.50/t.*
4. *The lower portion of the Raintree West deposit has been constrained by a mineable shape with "reasonable prospects of eventual economic extraction" using a US$25.00/t cut-off.*
5. *Metallurgical recoveries are: 70% for Au, 83% for Cu, and 65% Ag for Ag grades below 10g/t. The Ag recovery is 0% for values above 10g/t for all deposits.*
6. *The NSR equations are: below 10g/t Ag: NSR (US$/t)=(100%-3%)*((Au*70%*US$49.273g/t) + (Cu*83%*US$2.966*2204.62 + Ag*65%*US$0.574)), and above 10g/t Ag: NSR (US$/t)=(100%-3%)*((Au*70%*US$49.256g/t) + (Cu*83%*US$2.965*2204.62)) ;*
7. *The Au Equivalent equations are: below 10g/t Ag: AuEq=Au + Cu*1.5733 +0.0108Ag, and above 10g/t Ag: AuEq=Au + Cu*1.5733*
8. *The specific gravity for each deposit and domain ranges from 2.76 to 2.91 for Island Mountain, 2.60 to 2.72 for Whistler with an average value of 2.80 for Raintree West.*
9. *Numbers may not add due to rounding.*

Table 14-2 Mineral Resource Estimate and Sensitivity – Whistler Deposit

Class	Cut-off	ROM tonnage	In situ Grades					In situ Metal			
	(US$/t)	(ktonnes)	NSR (US$/t)	AuEqv (gpt)	Au (gpt)	Cu (%)	Ag (gpt)	AuEqv (Koz)	Au (koz)	Cu (Mlbs)	Ag (koz)
Indicated	9	118,213	24.96	0.746	0.472	0.162	1.910	2,836	1,793	421	7,259
	10.5	107,771	26.44	0.790	0.505	0.168	1.950	2,738	1,749	399	6,757
	11	104,264	26.97	0.806	0.517	0.170	1.970	2,702	1,733	392	6,604
	12	97,886	27.97	0.836	0.540	0.175	2.000	2,631	1,699	377	6,294
	15	80,978	31.01	0.927	0.610	0.187	2.080	2,413	1,589	334	5,415
	20	59,842	35.85	1.072	0.726	0.205	2.170	2,062	1,397	270	4,175
	25	45,799	39.99	1.195	0.830	0.217	2.260	1,760	1,222	219	3,328
	30	34,461	44.13	1.319	0.936	0.227	2.330	1,461	1,037	173	2,582
Inferred	9	173,001	18.12	0.541	0.321	0.130	1.460	3,011	1,787	496	8,121
	10.5	153,536	19.17	0.573	0.346	0.135	1.480	2,829	1,706	455	7,306
	11	147,181	19.54	0.584	0.354	0.136	1.480	2,763	1,677	441	7,003
	12	133,303	20.38	0.609	0.375	0.139	1.500	2,610	1,605	408	6,429
	15	94,664	23.21	0.694	0.445	0.147	1.550	2,111	1,356	307	4,717
	20	51,791	28.18	0.842	0.576	0.158	1.690	1,403	959	180	2,814
	25	27,152	33.59	1.004	0.719	0.169	1.830	876	627	101	1,598
	30	14,786	38.91	1.163	0.860	0.179	1.990	553	409	58	946

Table 14-3 Mineral Resource Estimate and Sensitivity – Raintree Deposit

Class	Source	Cut-off	ROM tonnage	In situ Grades					In situ Metal			
		(US$/t)	(ktonnes)	NSR (US$/t)	AuEqv (gpt)	Au (gpt)	Cu (%)	Ag (gpt)	AuEqv (Koz)	Au (koz)	Cu (Mlbs)	Ag (koz)
Indicated	Open Pit	9	8,629	19.51	0.632	0.460	0.083	4.790	175	128	16	1,329
		10.5	7,756	20.61	0.666	0.487	0.087	4.878	166	121	15	1,216
		11	7,503	20.95	0.677	0.496	0.088	4.919	163	120	15	1,187
		12	6,991	21.64	0.699	0.513	0.091	4.957	157	115	14	1,114
		15	5,076	24.68	0.793	0.591	0.101	4.998	129	96	11	816
		20	3,043	29.63	0.947	0.724	0.113	5.243	93	71	8	513
		25	1,736	35.18	1.126	0.891	0.120	5.529	63	50	5	309
		30	929	42.12	1.343	1.109	0.120	5.608	40	33	2	167
	Underground	US$25 shell	2,675	34.02	1.034	0.795	0.130	4.179	89	68	8	359
	Total	**varies**	**10,431**	**24.05**	**0.760**	**0.566**	**0.098**	**4.699**	255	190	23	1,576
Inferred	Open Pit	9	13,462	22.46	0.714	0.572	0.066	4.454	309	247	20	1,928
		10.5	11,774	24.28	0.768	0.620	0.069	4.576	291	235	18	1,732
		11	11,171	25.01	0.789	0.640	0.070	4.621	283	230	17	1,660
		12	10,211	26.29	0.827	0.674	0.072	4.615	271	221	16	1,515
		15	7,130	31.83	0.990	0.826	0.079	4.515	227	189	12	1,035
		20	4,473	40.53	1.247	1.072	0.086	4.605	179	154	8	662
		25	2,792	51.43	1.579	1.382	0.100	5.061	142	124	6	454
		30	2,100	59.37	1.821	1.617	0.103	5.130	123	109	5	346
	Underground	US$25 shell	39,772	32.65	1.004	0.803	0.123	2.509	1,284	1,027	107	3,208
	Total	**varies**	**51,546**	**30.73**	**0.950**	**0.761**	**0.110**	**2.981**	1,575	1,262	125	4,940

Table 14-4 Mineral Resource Estimate and Sensitivity – Island Mountain Deposit

Class	Cut-off	ROM tonnage	In situ Grades					In situ Metal			
	(US$/t)	(ktonnes)	NSR (US$/t)	AuEqv (gpt)	Au (gpt)	Cu (%)	Ag (gpt)	AuEqv (Koz)	Au (koz)	Cu (Mlbs)	Ag (koz)
Inferred	9	136,875	17.30	0.517	0.43	0.05	1.00	2,276	1,887	148	4,401
	10.5	111,901	18.99	0.568	0.47	0.05	1.06	2,042	1,701	131	3,814
	11	104,617	19.57	0.585	0.49	0.05	1.09	1,967	1,639	126	3,666
	12	91,835	20.69	0.619	0.52	0.06	1.14	1,826	1,524	116	3,366
	15	59,801	24.56	0.734	0.61	0.07	1.33	1,411	1,177	90	2,557
	20	31,814	31.13	0.930	0.78	0.09	1.61	952	794	61	1,647
	25	19,050	37.12	1.110	0.93	0.10	1.85	680	570	43	1,133
	30	12,225	42.58	1.273	1.08	0.11	1.95	500	425	29	766

14.2 Key Assumptions and Data used in the Estimate

The total Whistler Project area comprises a database of 250 drillholes totaling more than 70,000m with 182 drillholes and 53,200m of assayed length within the three deposit block models.

A summary of the drillholes within each of the Whistler Project block model areas is provided in Table 14-5.

Table 14-5 Summary of Whistler Project Drillhole Data within Block Models

Operator	Year	Whistler			Raintree			Island Mountain			Total Resource Areas		
		No. Holes	Length (m)	Assayed Length (m)	No. Holes	Length (m)	Assayed Length (m)	No. Holes	Length (m)	Assayed Length (m)	No. Holes	Length (m)	Assayed Length (m)
Cominco	1986-1989	16	1,677	1,566							16	1,677	1,566
Kennecott	2004	5	1,997	1,865							5	1,997	1,865
	2005	9	5,251	5,061	1	213	208				10	5,464	5,269
	2006	1	705	696	4	1,115	845				5	1,821	1,540
	All Kennecott	15	7,953	7,621	5	1,328	1,053				20	9,281	8,674
Geoinformatics	2007	7	3,321	3,243							7	3,321	3,243
	2008	6	2,707	2,660	2	622	615				8	3,329	3,275
	All Geo.	13	6,027	5,902	2	622	615				15	6,649	6,517
Kiska	2009	1	228	214	1	479	479	1	387	387	3	1,094	1,080
	2010	7	5,247	4,500	8	3,255	3,164	11	4,991	4,956	26	13,493	12,621
	2011				78	14,795	13,799	24	9,032	8,943	102	23,827	22,742
	All Kiska	8	5,475	4,715	87	18,529	17,442	36	14,410	14,287	131	38,413	36,444
Total		**52**	**21,132**	**19,804**	**94**	**20,479**	**19,110**	**36**	**14,410**	**14,287**	**182**	**56,021**	**53,200**

14.3 Geologic Modelling

Three-dimensional wireframe solids based on geology have been used to constrain the grade interpolations.

At Whistler, a three dimensional solid of the diorite intrusion has been created based on the logged geology. The geology has also been used to define the Divide Fault as a major fault through the center of the deposit, dividing it into two domains. Dykes have not been modelled explicitly because they are too thin both to model and to separate when mining. Therefore, the un-mineralized assays within the solids have been included in the interpolations. A three dimensional view looking northeast of the Whistler domains is illustrated in Figure 14-1, also showing the resource pit.

Figure 14-2 illustrates the mineralized domain for Raintree, looking northeast and also plotting the resource pit and underground mineralized shape.

Figure 14-3 illustrates the domains for Island Mountain. There are six sub-vertical domains (plotted in shades of blue) that are based on lithology as various mineralized dykes. These were combined into one domain for the interpolations. Two domains surrounding the central core at a nominal cut-off of 0.1 gpt and 0.3 gpt AuEqv are used to confine the interpolation outside of the dyke boundaries (plotted in yellows). The outline of the resource pit on surface is also plotted for reference.

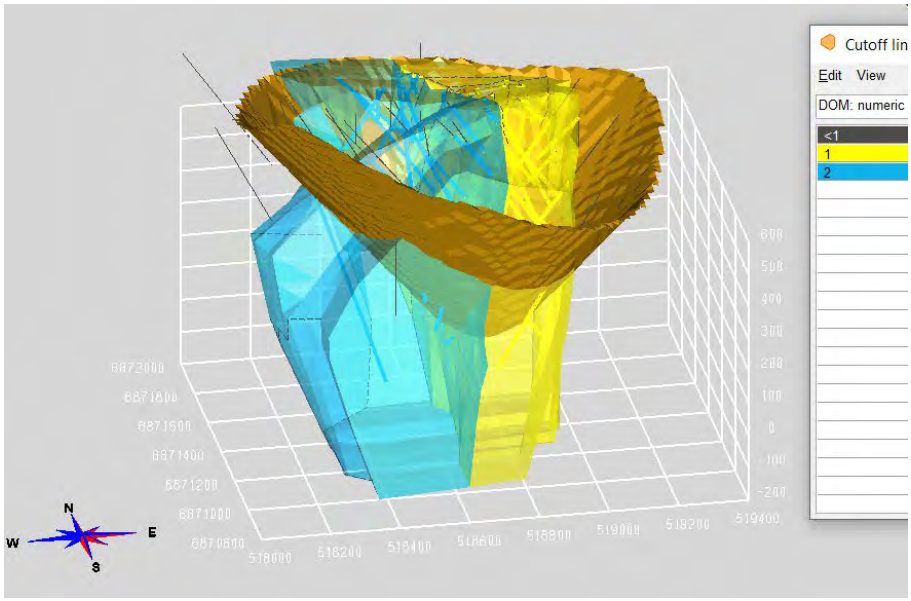


Figure 14-1 Domains – Whistler Deposit (Source: MMTS, 2021)

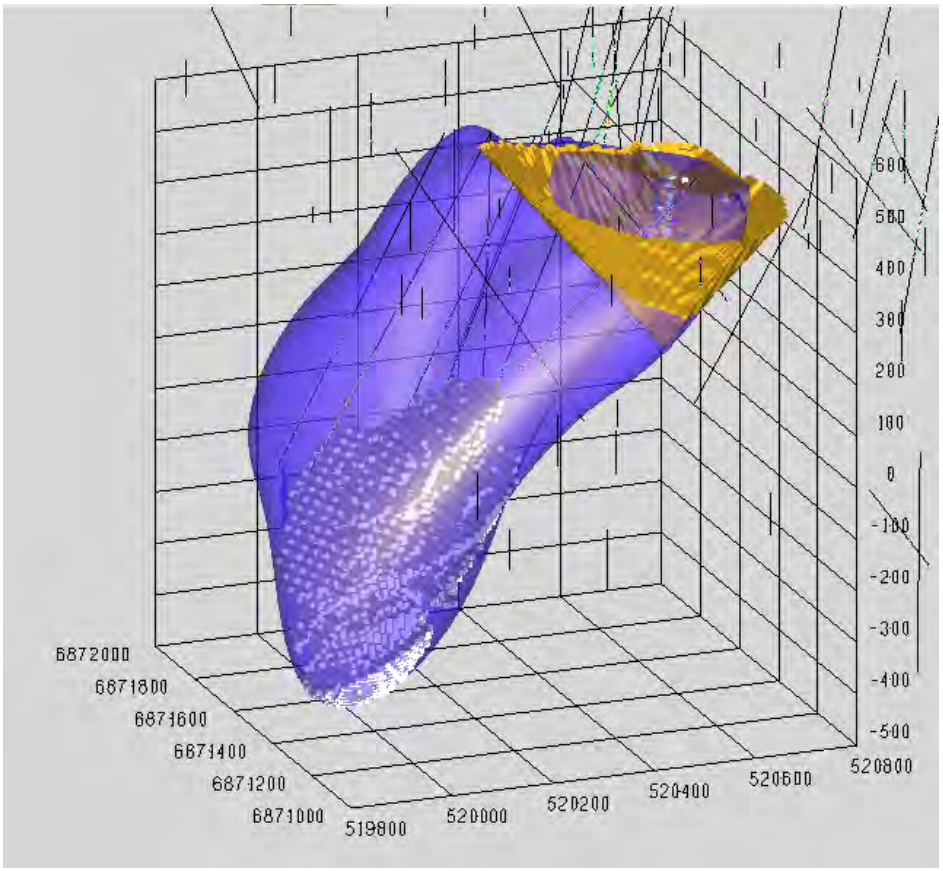


Figure 14-2 Domains Modeled for Raintree Deposit (Source: MMTS, 2021)

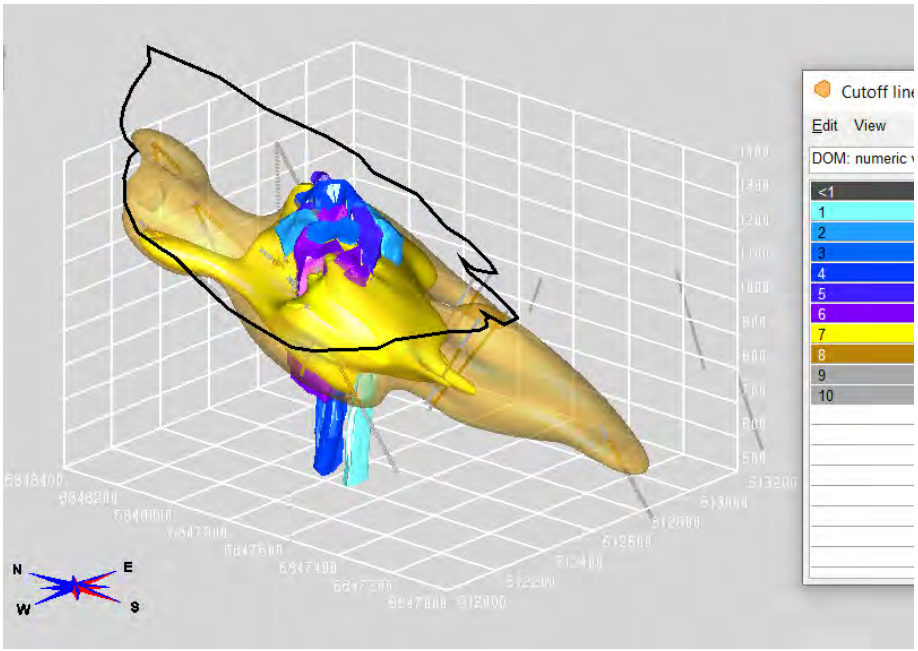


Figure 14-3 Domains Modelled for Island Mountain (Source: MMTS, 2021)

14.4 Capping

Cumulative probability plots (CPP) are used to define capping values and potential outlier restrictions during interpolations. Figure 14-4 and Figure 14-5 show the CPP plots for Au and Cu respectively for Whistler. Figure 14-6 and Figure 14-7 show the CPP plots for Au and Cu respectively for Raintree and Figure 14-8 and Figure 14-9 are the CPPs for Island Mountain for Au and Cu respectively.

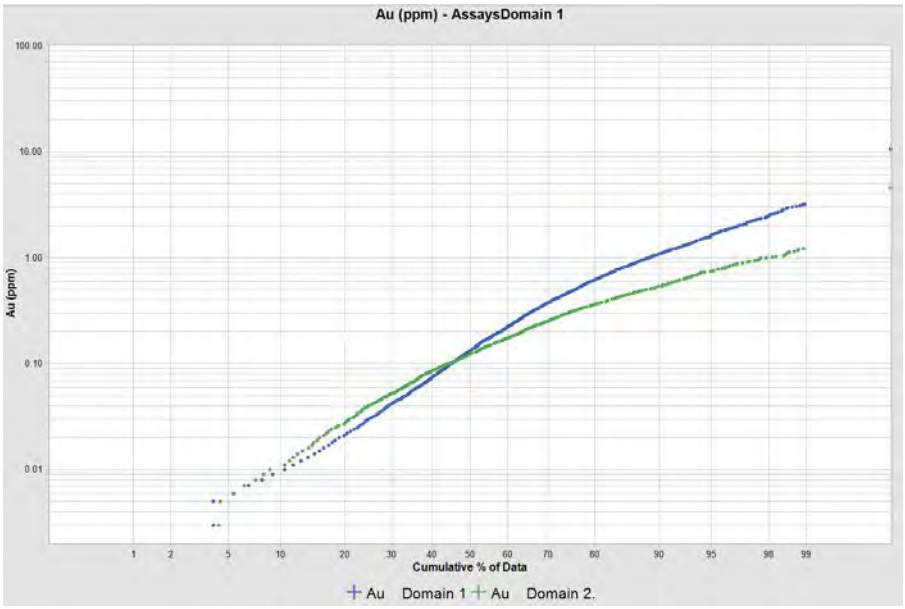


Figure 14-4 CPP of Au Assay Data by Domain - Whistler (Source: MMTS, 2021)

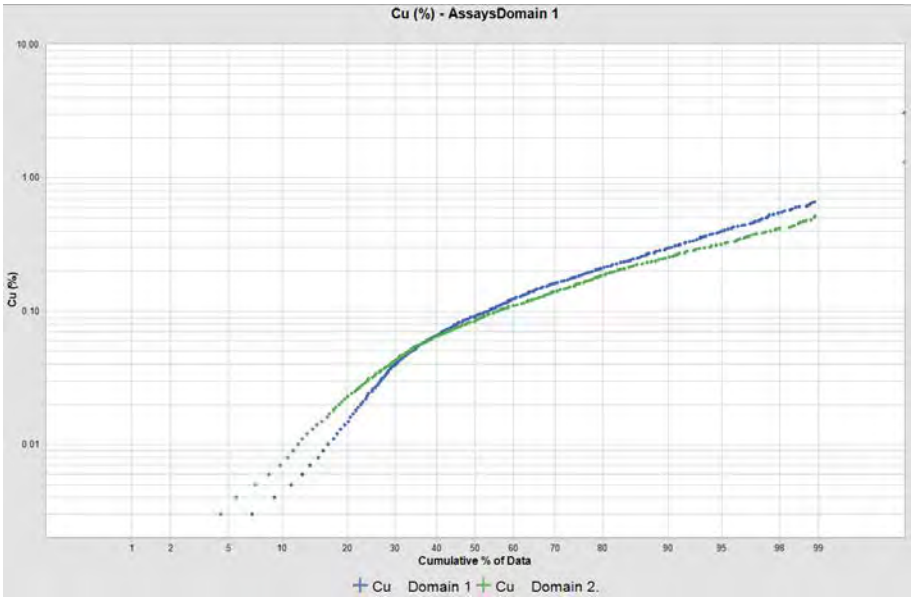


Figure 14-5 CPP of Cu Assay Data by Domain – Whistler (Source: MMTS, 2021)

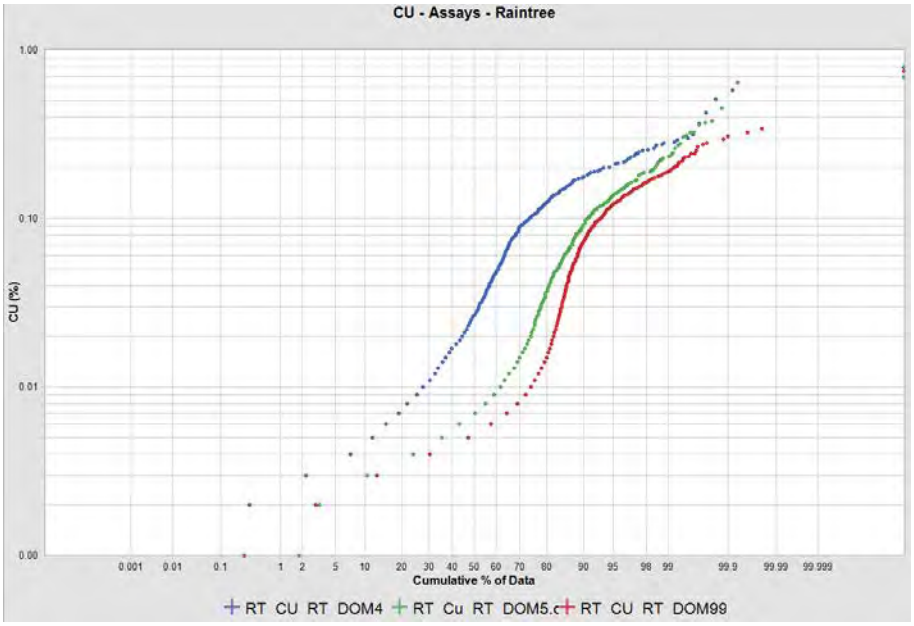


Figure 14-6 CPP of Au Assay Data by Domain – Raintree (Source: MMTS, 2021)

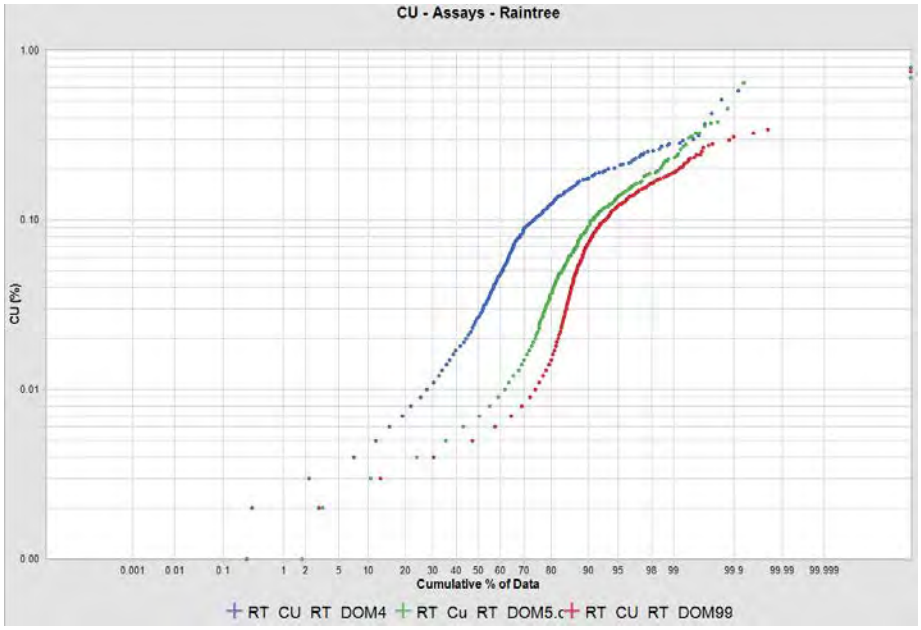


Figure 14-7 CPP of Cu Assay Data by Domain – Raintree (Source: MMTS, 2021)

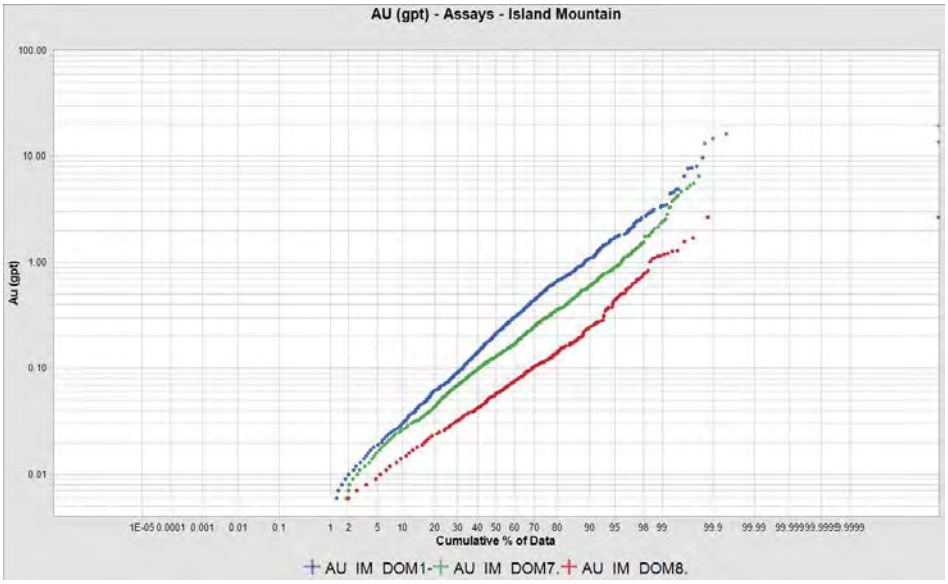


Figure 14-8 CPP of Au Assay Data by Domain – Island Mountain (Source: MMTS, 2021)

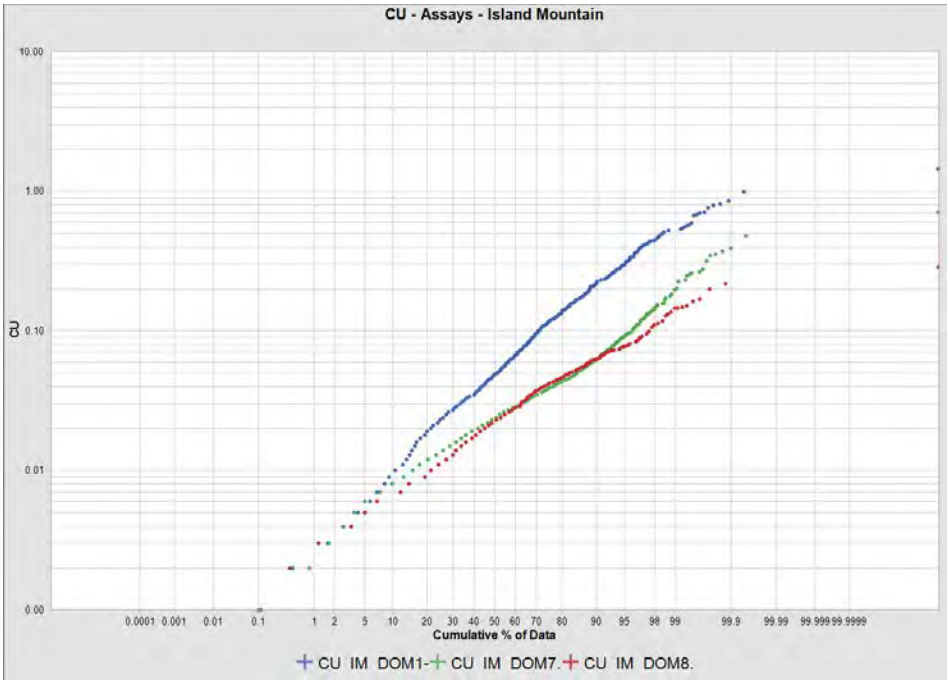


Figure 14-9 CPP of Cu Assay Data by Domain – Island Mountain (Source: MMTS, 2021)

Capping and Outlier values are summarized in Table 14-6 below. Values above the capping value are equal to the capping value in the assay file prior to compositing. Composite values above the Outlier value are restricted during interpolations to the Outlier value for distance greater than 5m from the composite interval.

Table 14-6 Summary of Capping and Outlier Restriction Values

ITEM	AREA	Domain		CAP	Outlier
		From	To		
Au (gpt)	Whistler	1	1	4	na
		2	2	2	na
	Raintree	1	1	2	10
	Island Mountain	1	6	10	5
		7	7	10	5
		8	8	3	5
Cu (%)	Whistler	1	1	1	na
		2	2	1	na
	Raintree	2	2	2	0.6
	Island Mountain	1	6	1	na
		7	7	0.6	na
		8	8	0.3	na
Ag (gpt)	Whistler	1	1	100	25
		2	2	100	30
	Raintree	1	1	100	80
	Island Mountain	1	6	30	12
		7	7	20	7
		8	8	20	7

The capped assay and composite statistics of each domain are summarized in the Table 14-7 through Table 14-9 for Au, Cu and Ag respectively. These table illustrate that no significant bias has been introduced during the compositing process. They also indicate that the distributions have low CV confirming the choice of linear interpolation methods are appropriate.

Table 14-7 Capped Assay and Composite Statistics by Domain - Au

Source	Parameters	Whistler		Raintree	Island Mountain		
		1	2	5	1-6	7	8
Assays	Num Samples	5,393	3,743	2,731	1,795	1,999	767
	Num Missing	14	21	1	12	0	1
	Min (gpt)	0.000	0.001	0.003	0.003	0.003	0.003
	Max (gpt)	10.667	4.530	14.150	10.000	10.000	2.660
	Wtd mean (gpt)	0.374	0.212	0.260	0.452	0.253	0.122
	Wtd CV	1.778	1.250	2.067	1.746	2.187	1.899
Composites	Num Samples	1,952	1,376	1,305	841	917	411
	Num Missing	3	7	1	0	0	0
	Min (gpt)	0.002	0.001	0.003	0.003	0.003	0.004
	Max (gpt)	6.075	2.097	6.068	6.412	4.626	1.167
	Wtd mean (gpt)	0.374	0.212	0.260	0.452	0.253	0.122
	Wtd CV	1.578	1.088	1.562	1.447	1.570	1.409
Difference in Wtd Means (%)		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 14-8 Capped Assay and Composite Statistics by Domain - Cu

Source	Parameters	Whistler		Raintree	Island Mountain		
		1	2	5	1-6	7	8
Assays	Num Samples	5,390	3,741	2,731	1,795	1,999	767
	Num Missing	17	23	1	12	0	1
	Min (gpt)	0.000	0.000	0.000	0.000	0.000	0.001
	Max (gpt)	2.590	1.305	0.786	1.000	0.600	0.288
	Wtd mean (gpt)	0.129	0.112	0.037	0.083	0.032	0.030
	Wtd CV	1.185	0.953	1.623	1.271	1.160	0.912
Composites	Num Samples	1,952	1,376	1,305	841	917	411
	Num Missing	3	7	1	0	0	0
	Min (gpt)	0.000	0.000	0.000	0.001	0.001	0.003
	Max (gpt)	1.233	1.051	0.317	0.654	0.397	0.223
	Wtd mean (gpt)	0.129	0.112	0.037	0.083	0.032	0.030
	Wtd CV	1.041	0.835	1.489	1.124	0.998	0.826
Difference in Wtd. Means (%)		0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 14-9 Capped Assay and Composite Statistics by Domain – Ag

Source	Parameters	Whistler		Raintree	Island Mountain		
		1	2	5	1-6	7	8
Assays	Num Samples	5,393	3,743	2,731	1,795	1,999	767
	Num Missing	14	21	1	12	0	1
	Min (gpt)	0.000	0.050	0.250	0.250	0.250	0.250
	Max (gpt)	151.800	186.000	200.000	30.000	20.000	14.700
	Wtd mean (gpt)	1.730	1.568	3.305	1.649	0.709	0.627
	Wtd CV	2.142	3.043	2.337	1.339	1.556	1.420
Composites	Num Samples	1,952	1,376	1,305	841	917	411
	Num Missing	3	7	1	0	0	0
	Min (gpt)	0.050	0.050	0.250	0.250	0.250	0.250
	Max (gpt)	53.709	76.534	83.468	11.180	5.198	3.812
	Wtd mean (gpt)	1.730	1.568	3.305	1.616	0.684	0.602
	Wtd CV	1.450	1.958	1.680	1.028	0.965	0.868
Difference in Wtd Means (%)		0.0%	0.0%	0.0%	-2.1%	-3.7%	-4.3%

14.5 Compositing

Compositing of Au, Ag and Cu grades have been done as 5m fixed length composites. Small intervals less than 2.5m are merged with the up hole composite if the composite length is less than 5m. The length of 5m is chosen to be half the size of the block height, and longer than the majority of assay lengths, as illustrated in Figure 14-10. Domain boundaries are honored during compositing.

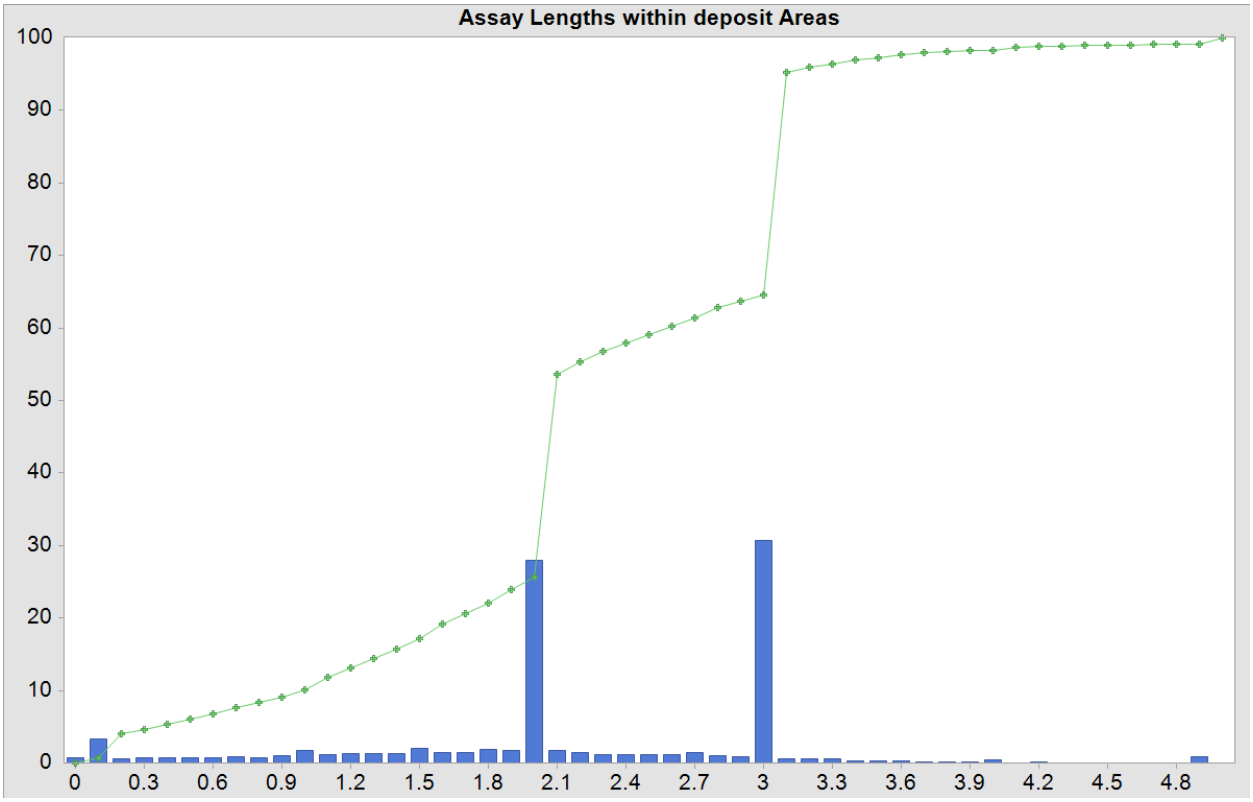


Figure 14-10 Assay Lengths

14.6 Variography

Correlograms have been created for each domain each deposit. A summary of the spherical correlogram parameters is given in Table 14-10 through Table 14-12 for Whistler, Raintree, and Island Mountain respectively.

Table 14-10 Variogram Parameters - Whistler

Element	Domain	Rotation (GSLIB-MS)		Axis	Total Range (m)	Nugget	Sill1	Sill2	Sill3	Range 1 (m)	Range 2 (m)	Range 3 (m)
CU	1	ROT	180	Major	350	0.1	0.2	0.5	0.2	40	260	350
		DIPN	-80	Minor	120					15	80	120
		DIPE	-40	Vert	80					10	40	80
	2	ROT	180	Major	220	0.2	0.25	0.15	0.4	15	70	220
		DIPN	-80	Minor	120					15	50	120
		DIPE	-40	Vert	120					15	70	120
AU	1	ROT	180	Major	350	0.2	0.3	0.3	0.2	40	160	350
		DIPN	-80	Minor	250					25	45	250
		DIPE	-40	Vert	80					25	50	80
	2	ROT	180	Major	210	0.2	0.25	0.15	0.4	15	50	210
		DIPN	-80	Minor	120					10	45	120
		DIPE	-40	Vert	150					35	60	150
AG	1	ROT	180	Major	180	0.6	0.2	0.2		50	180	
		DIPN	-80	Minor	120					30	120	
		DIPE	-40	Vert	90					15	90	
	2	ROT	180	Major	150	0.3	0.6	0.1		20	150	
		DIPN	-80	Minor	60					10	60	
		DIPE	-40	Vert	180					70	180	

Table 14-11 Variogram Parameters - Raintree

Element	Domain	Rotation (GSLIB-MS)		Axis	Total Range (m)	Nugget	Sill1	Sill2	Sill3	Range 1 (m)	Range 2 (m)	Range 3 (m)
CU	5	ROT	90	Major	500	0.1	0.4	0.4	0.1	200	300	500
		DIPN	55	Minor	350					40	200	350
		DIPE	0	Vert	300					80	200	300
AU	5	ROT	90	Major	500	0.2	0.3	0.2	0.3	50	250	500
		DIPN	55	Minor	350					30	150	350
		DIPE	0	Vert	150					20	80	150
AG	5	ROT	90	Major	140	0.2	0.4	0.4		20	140	
		DIPN	55	Minor	120					15	120	
		DIPE	0	Vert	120					15	120	

Table 14-12 Variogram Parameters – Island Mountain

Element	Domain	Rotation (GSLIB-MS)		Axis	Total Range (m)	Nugget	Sill1	Sill2	Sill3	Range 1 (m)	Range 2 (m)	Range 3 (m)
CU	1-6	ROT	0	Major	300	0.2	0.5	0.1	0.2	40	150	300
		DIPN	-90	Minor	150					60	100	150
		DIPE	0	Vert	120					20	80	120
	7,8	ROT	25	Major	150	0.1	0.3	0.3	0.3	50	80	150
		DIPN	0	Minor	150					30	80	150
		DIPE	-20	Vert	120					30	35	120
AU	1-6	ROT	0	Major	200	0.3	0.4	0.2	0.1	50	140	200
		DIPN	-90	Minor	150					50	80	150
		DIPE	0	Vert	100					20	50	100
	7,8	ROT	25	Major	100	0.2	0.4	0.3	0.1	50	80	100
		DIPN	0	Minor	150					40	90	150
		DIPE	-20	Vert	100					15	70	100
AG	1-6	ROT	0	Major	150	0.3	0.4	0.3		30	150	
		DIPN	-90	Minor	100					20	100	
		DIPE	0	Vert	100					20	100	
	7,8	ROT	25	Major	150	0.1	0.6	0.3		50	150	
		DIPN	0	Minor	160					30	160	
		DIPE	-20	Vert	75					15	75	

An example of the Variogram Model for Cu in Domain 1 in the major and minor axes directions is illustrated in Figure 14-11 for Cu and Figure 14-12 for Au in the whistler deposit. Figure 14-13 is the variograms for Cu at Raintree in Domain 5. And Figure 14-14 illustrates the variogram for Island Mountain for the major and minor axes for Au.

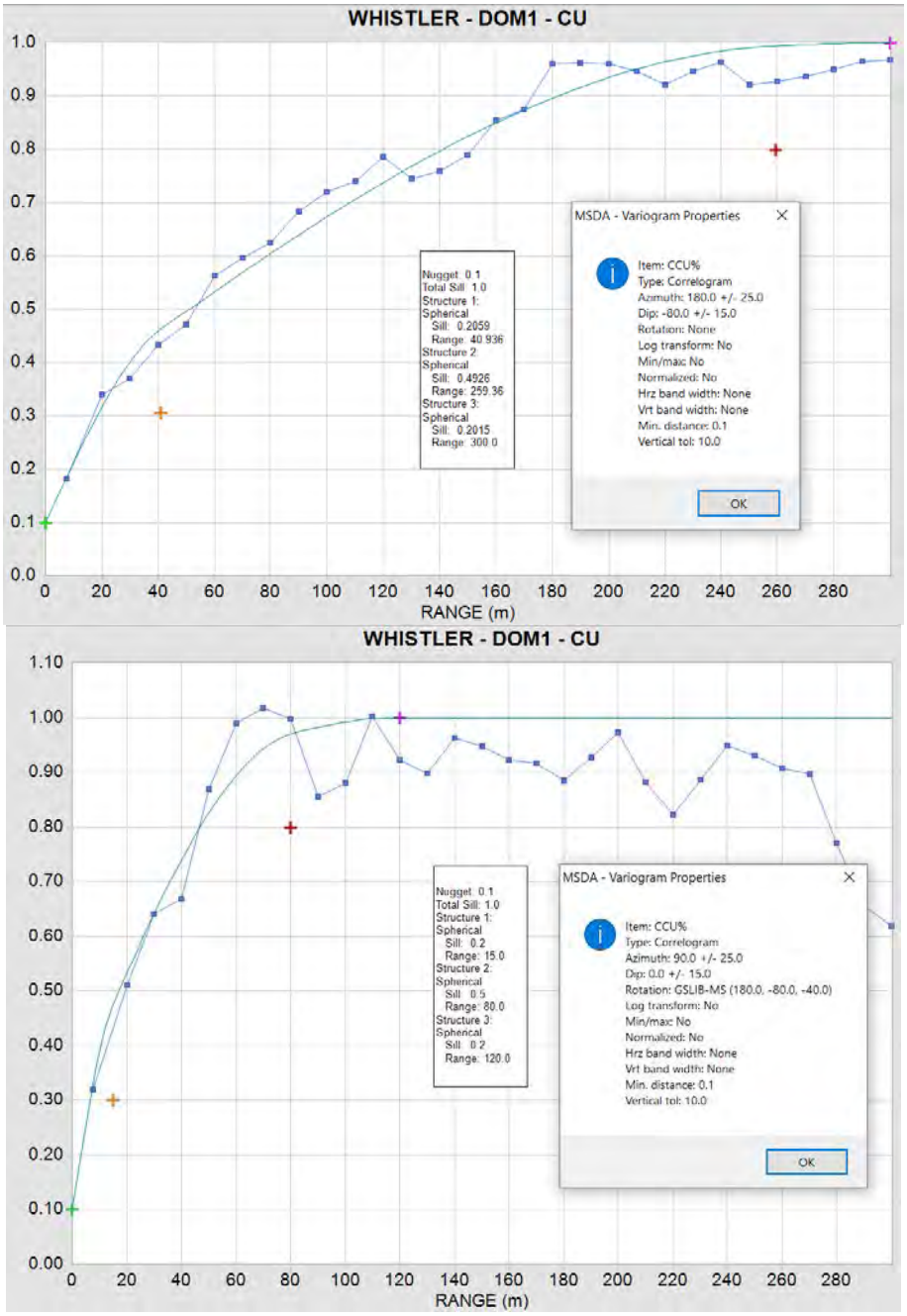


Figure 14-11 Variogram Model for Cu in Domain 1 – Major and Minor Axes – Whistler Deposit (Source: MMTS, 2021)

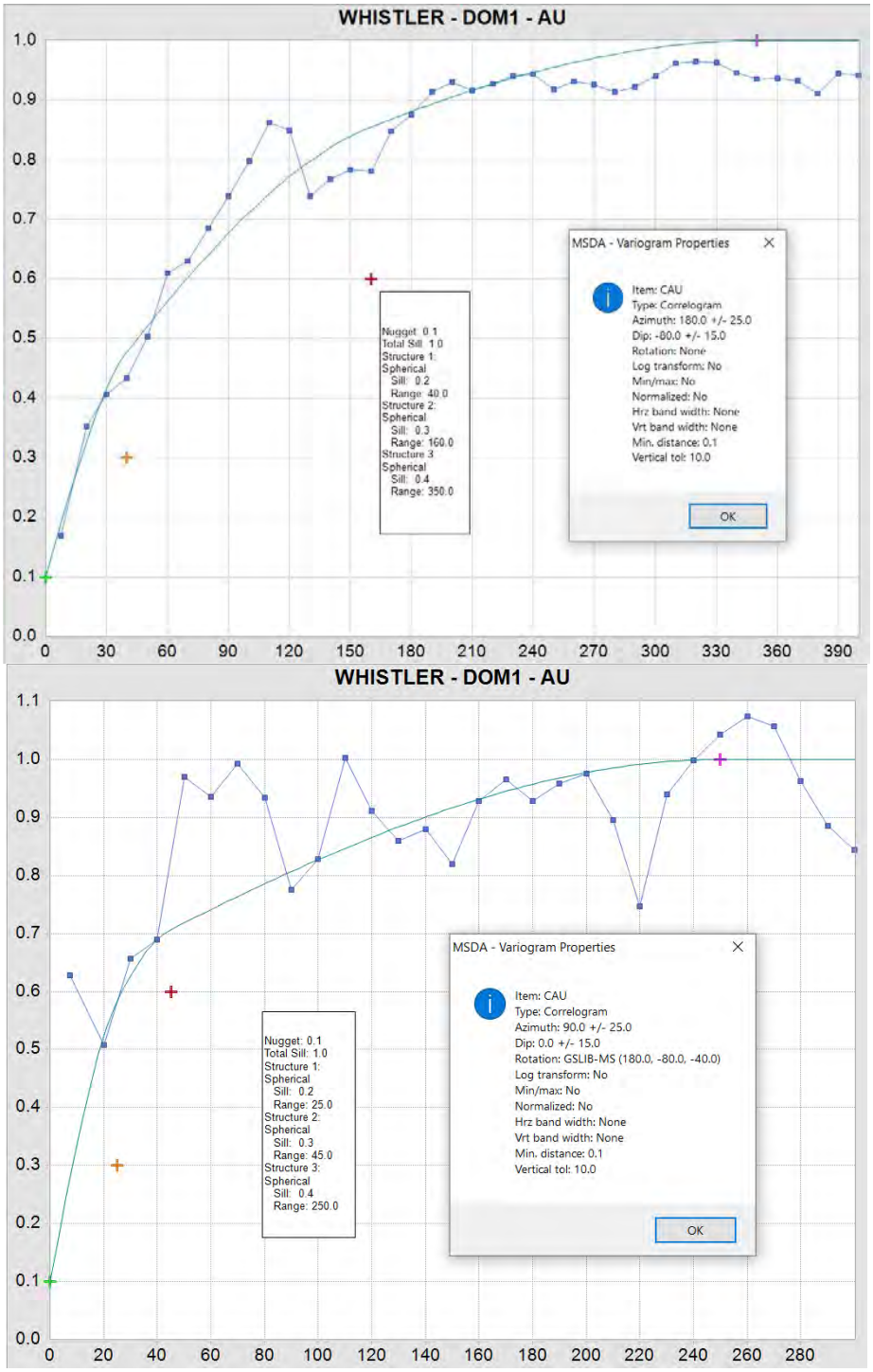


Figure 14-12 Variogram Model for Au in Domain 1 – Major and Minor Axes – Whistler Deposit (Source: MMTS, 2021)

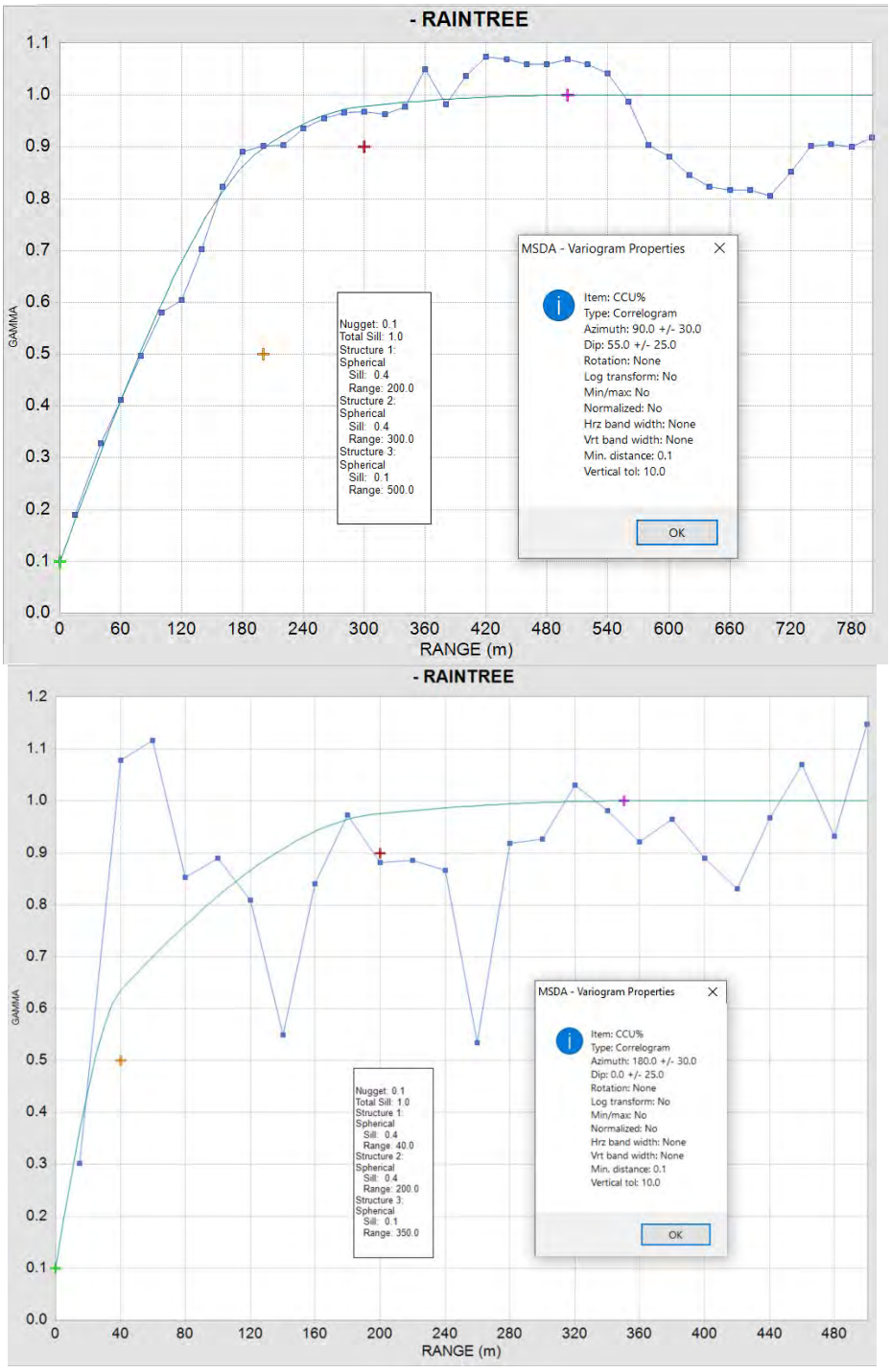


Figure 14-13 Variogram Model for Cu in Domain 5 – Major and Minor Axes – Raintree Deposit (Source: MMTS, 2021)

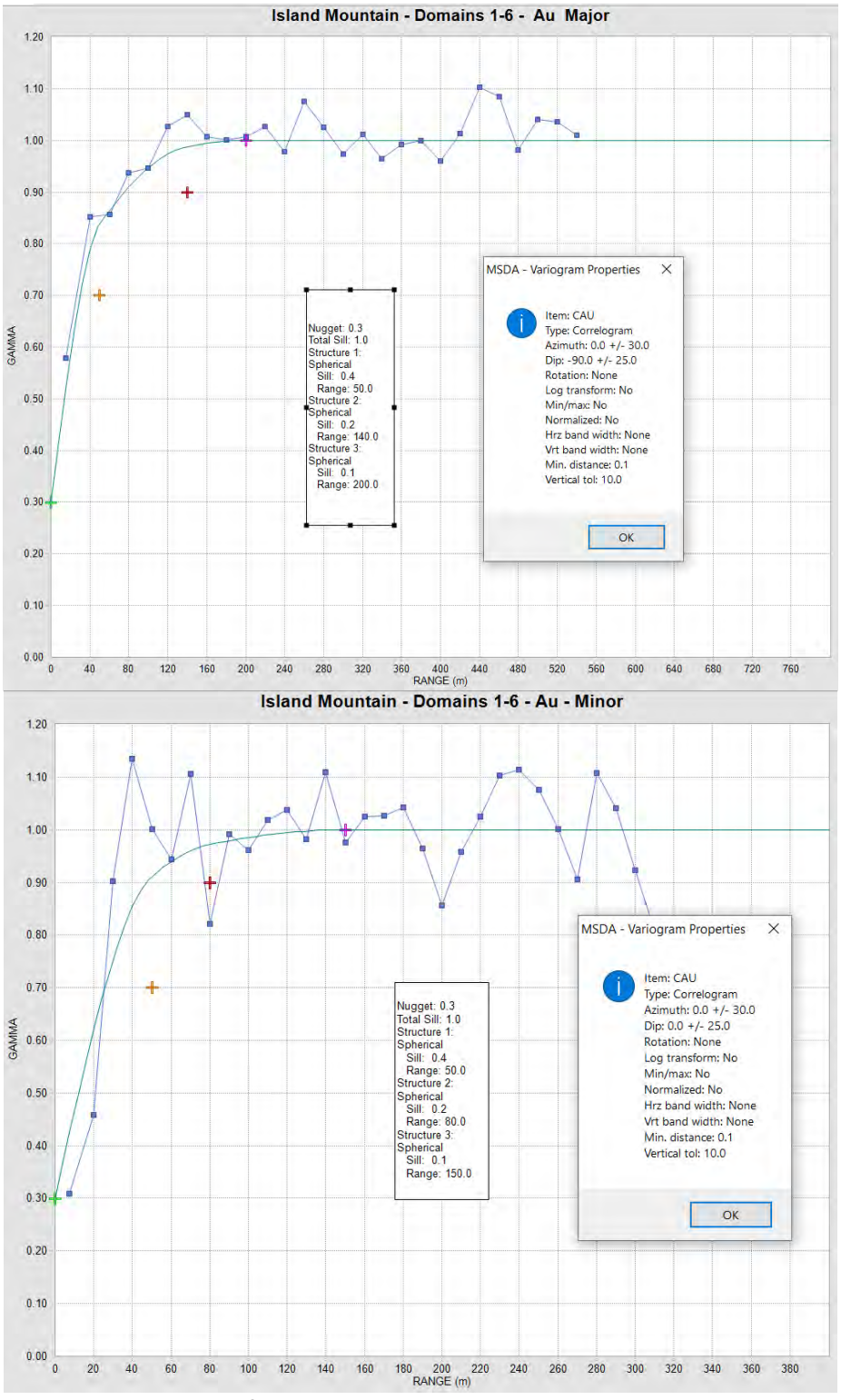


Figure 14-14 Variogram Model for Au in Domains 1-6 – Major and Minor Axes – Island Mountain Deposit (Source: MMTS, 2021)

14.7 Block Model Interpolations

The block model limits and block size for each deposit are as given in Table 14-13.

Table 14-13 Block Model Limits

Deposit	Direction	From	To	Block size	# Blocks
Whistler	East	517,200	519,860	20	133
	North	6,870,000	6,873,000	20	150
	Elevation	-50	1,280	10	133
Raintree West	East	519,700	521,100	10	140
	North	6,871,000	6,872,000	10	100
	Elevation	-260	730	10	99
Island Mountain	East	511,500	513,600	10	210
	North	6,847,000	6,848,400	10	140
	Elevation	490	1,470	10	98

Interpolation of Au, Cu and Ag values is done by ordinary kriging (OK) in four passes based on the variogram parameters. Interpolations used hard boundaries, with composites and block codes required to match within each domain. Search parameters are summarized in Table 14-14 through Table 14-16 below.

Table 14-14 Search Rotation and Distances – Whistler

Element	Domain	Rot	Dist1	Dist 2	Dist3	Dist4
CU	**1**	180	40	80	160	350
		-80	15	30	60	120
		-40	10	20	40	80
	2	180	15	30	60	220
		-80	15	30	60	120
		-40	15	30	60	120
AU	**1**	180	40	80	160	350
		-80	25	50	100	250
		-40	20	40	60	80
	2	180	53	70	105	210
		-80	30	40	60	120
		-40	38	50	75	150
AG	**1**	180	45	90	135	180
		-80	30	60	90	120
		-40	15	30	60	90
	2	180	38	50	75	150
		-80	15	20	30	60
		-40	45	60	90	180

Table 14-15 Search Rotation and Distances – Raintree

Element	Domain	Rot	Dist1	Dist2	Dist3	Dist4
CU	1	90	125	250	375	500
		55	88	175	263	350
		0	75	150	225	300
AU	1	90	125	250	375	500
		55	88	175	263	350
		0	38	75	113	150
AG	1	90	35	70	105	140
		55	30	60	90	120
		0	30	60	90	120

Table 14-16 Search Rotation and Distances – Island Mountain

Element	Domain	Rot	Dist1	Dist2	Dist3	Dist4
CU	1-6	0	40	80	160	300
		-90	37.5	75	112.5	150
		0	20	40	80	120
	7,8	25	37.5	75	112.5	150
		0	30	60	112.5	150
		-20	30	60	90	120
AU	1-6	0	50	100	150	200
		-90	37.5	75	112.5	150
		0	20	40	75	100
	7,8	25	25	50	75	100
		0	37.5	75	112.5	150
		-20	15	30	60	100
AG	1-6	0	30	60	112.5	150
		-90	20	40	75	100
		0	20	40	75	100
	7,8	25	37.5	75	112.5	150
		0	30	60	120	160
		-20	15	30	56.25	75

Additional search criteria on composite selection are summarized in Table 14-17. Search criteria are used to ensure that more than one drillhole is used for all passes, and more than one quadrant is used for the first three passes, as well as to limit smoothing of grade by limiting the maximum number of composites to be used.

Table 14-17 Additional Search Criteria

Criteria	Pass 1	Pass 2	Pass 3	Pass 4
Minimum # composites	3	3	3	3
Maximum # Composites	12	12	12	12
Maximum / drillhole	2	2	2	2
Maximum / quadrant	2	2	2	na

14.8 Classification

Classification is based on the variogram parameters, with the required average distance to the nearest two drillholes required to be less than the distance of the range at 80% of the sill (R80 value) for each domain as summarized in Table 14-18.

Table 14-18 Classification Criteria

Deposit	Whistler		Raintree		Island Mountain	
Domain	1	2	5	99	1-6	7-8
Average Distance to 2 DHs	150	80	100	100	80	80

14.9 Block Model Validation

14.9.1 Comparison of Tonnage and Grades

Interpolations have also been completed using a Nearest neighbour method in order to essentially de-cluster the composite data for grade comparisons with the modelled grades. Table 14-19 gives a summary of the mean grades for de-clustered composites (NN interpolation), and OK grades at a 0.1% Cu cut-off. Table 14-20 gives a summary of the mean grades for de-clustered composites (NN interpolation), and OK grades at a 0.1% Cu cut-off. The tonnage, grade and metal content is variable but conservative compared to the un-capped de-clustered composites.

This comparison is illustrated more succinctly in the plots of tonnage-grade curves. Cut-off grade plots (tonnage-grade curves) are constructed for each metal to check the validity of the modelling. The NN values for Au and Cu are plotted and compared to the modelled OK values for the Whistler deposit in Figure 14-15 and Figure 14-16. For Raintree, the tonnage-grade curves for Au and Cu are presented in Figures 14-17 and 14-18. And for Island Mountain the tonnage grade curves are presented in Figure 14-19 and 14-20. The curves for Whistler and Island Mountain are within the Resource confining pit shape. For Raintree, all blocks within modelled domains are plotted due to the underground component of the resource. In each case, the distributions shows good correlation, and thus the change of support are valid.

Table 14-19 Comparison of De-clustered Composite and OK Modelled Grades for Cu

			Modelled OK			De-clustered composites (NN)			
Cut-off Cu (%)	Class	Deposit	ROM Tonnage (kt)	Grade Cu (%)	Metal (Mlbs)	ROM Tonnage (kt)	Grade Cu (%)	Metal (Mlbs)	Difference (%)
0.1	Indicated	Whistler	97,294	0.181	388.7	87,601	0.2057	397.3	-2.2%
		Raintree	2,310	0.134	6.8	3,653	0.1413	11.4	-66.8%
	Inferred	Whistler	137,697	0.146	442.0	112,648	0.1825	453.2	-2.5%
		Raintree	1,669	0.138	5.1	1,296	0.1887	5.4	-6.0%
		Island Mtn.	15,558	0.153	52.4	15,994	0.1866	65.8	-25.5%

Table 14-20 Comparison of De-clustered Composite and OK Modelled Grades for Au

			Modelled OK			De-clustered composites (NN)			
Cut-off Au (gpt)	Class	Deposit	ROM Tonnage (kt)	Grade Au (gpt)	Metal (Moz)	ROM Tonnage (kt)	Grade Au (gpt)	Metal (Moz)	Difference (%)
0.1	Indicated	Whistler	121,389	0.465	1,814.8	103,550	0.5374	1,789.1	1.4%
		Raintree	9,279	0.459	136.8	11,293	0.3856	140.0	-2.3%
	Inferred	Whistler	234,991	0.160	830.5	200,249	0.1926	850.3	-2.4%
		Raintree	16,013	0.514	264.6	20,990	0.4211	284.2	-7.4%
		Island Mtn.	209,394	0.334	2,247.2	157,142	0.4727	2,388.2	-6.3%

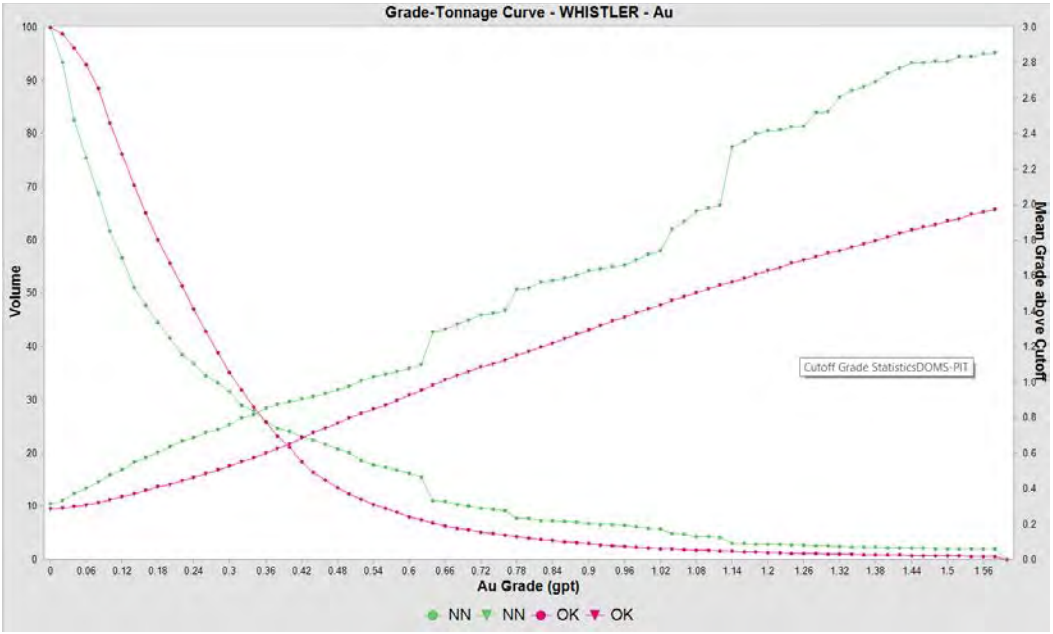


Figure 14-15 Tonnage-Grade Curves for Au – Comparison of Interpolation Methods – Whistler (Source: MMTS, 2021)

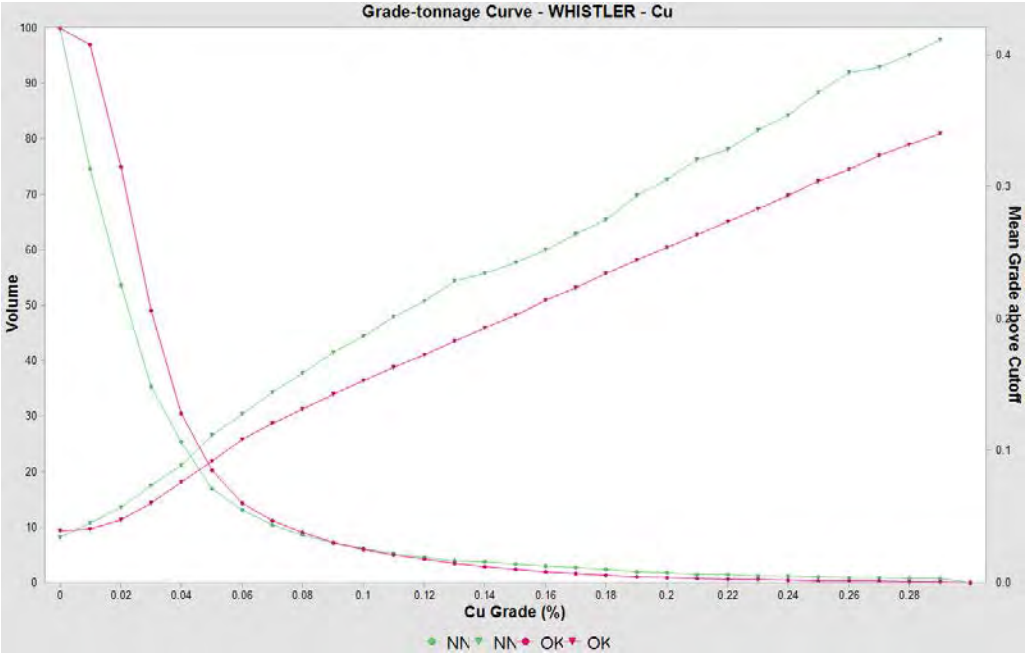


Figure 14-16 Tonnage-Grade Curves for Cu – Comparison of Interpolation Methods - Whistler (Source: MMTS, 2021)

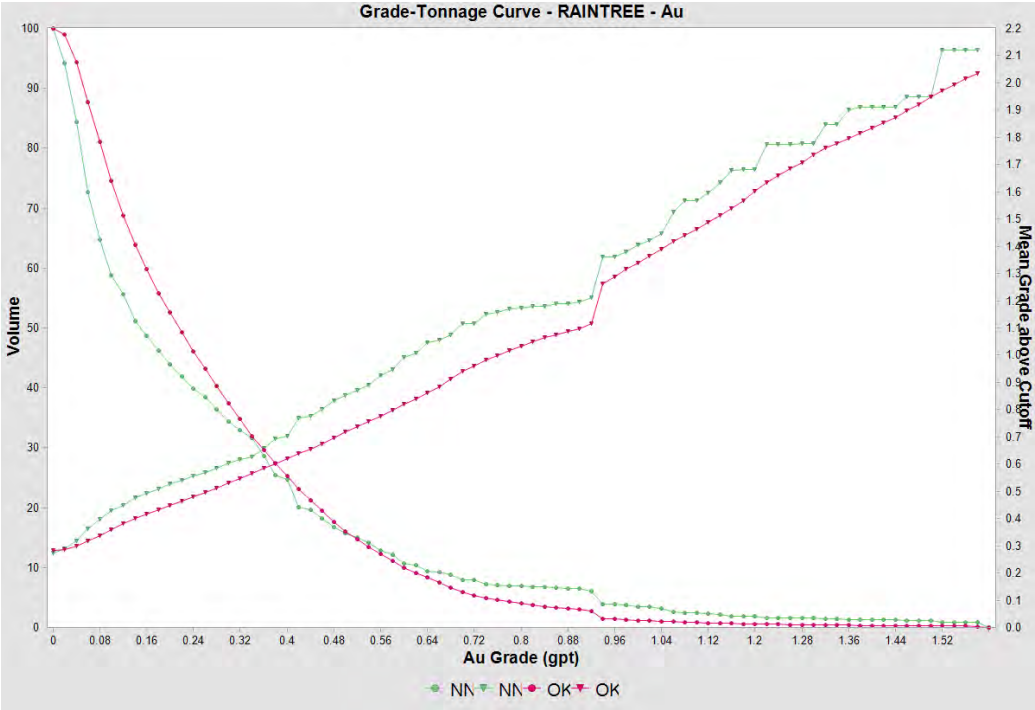


Figure 14-17 Tonnage-Grade Curves for Au – Comparison of Interpolation Methods – Raintree (Source: MMTS, 2021)

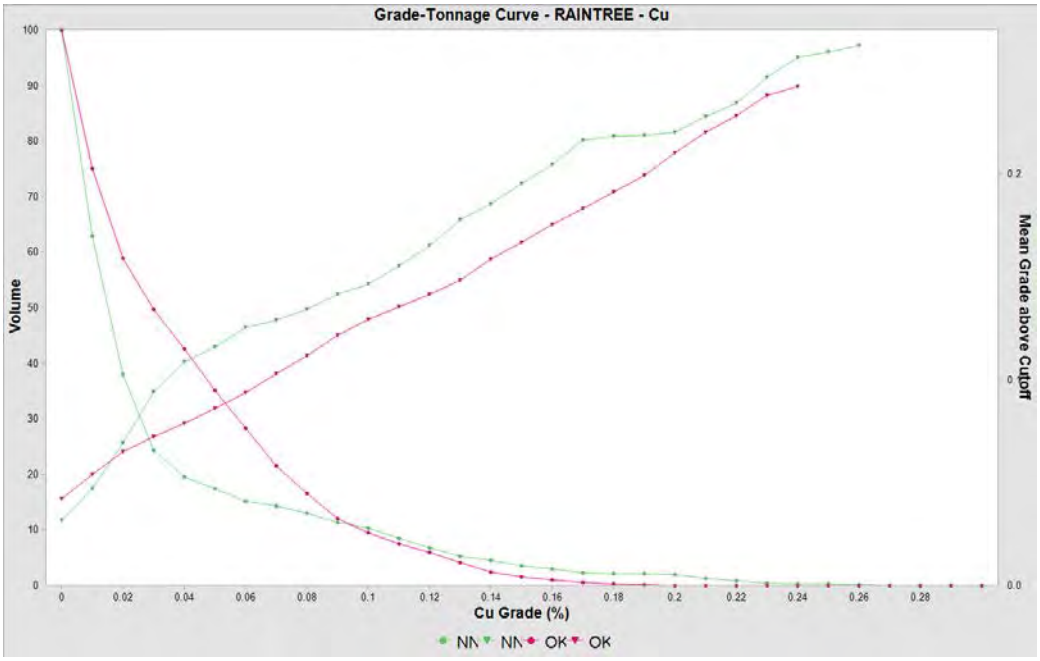


Figure 14-18 Tonnage-Grade Curves for Cu – Comparison of Interpolation Methods - Raintree (Source: MMTS, 2021)

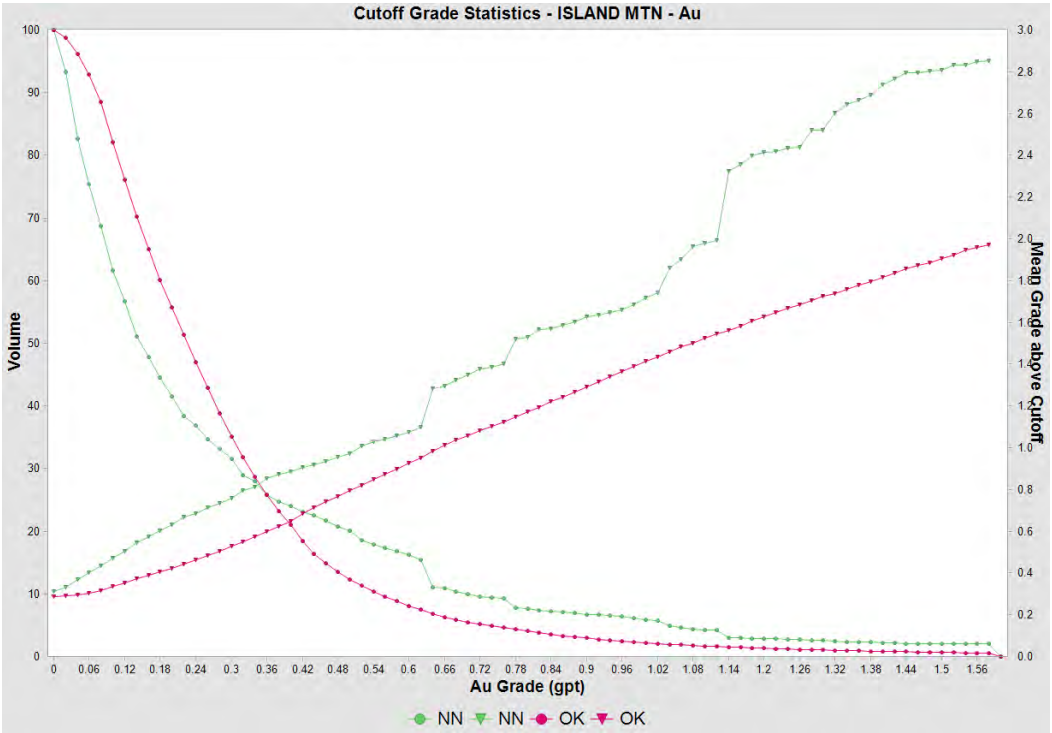


Figure 14-19 Tonnage-Grade Curves for Au – Comparison of Interpolation Methods – Island Mountain (Source: MMTS, 2021)

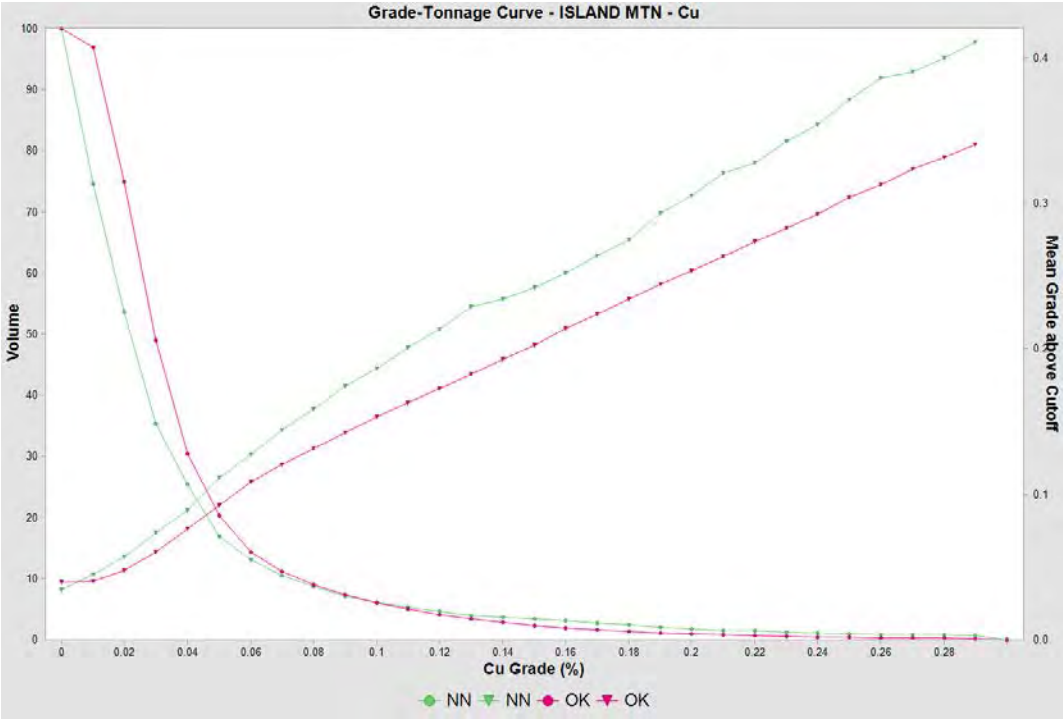


Figure 14-20 Tonnage-Grade Curves for Cu – Comparison of Interpolation Methods - Island Mountain (Source: MMTS, 2021)

14.10 Visual Validation

A series of E-W, N-S sections (every 20m) and plans (every 10m) have been used to inspect the ordinary kriging (OK) block model grades with the original assay data. Figure 14-21 and Figure 14-22 give examples of this comparison at Whistler for the E-W section at 6871330N, for Au and Cu grades respectively. Figure 14-23 and Figure 14-24 illustrate the grade comparisons at Raintree through the center of the deposit with looking SW at an azimuth of 135 degrees. Figure 14-25 and Figure 14-26 are plots of the Au and Cu grades respectively for Island Mountain through the center of the deposit at 6847740N.

Plots throughout the model confirmed that the block model grades corresponded well with the assayed grades.

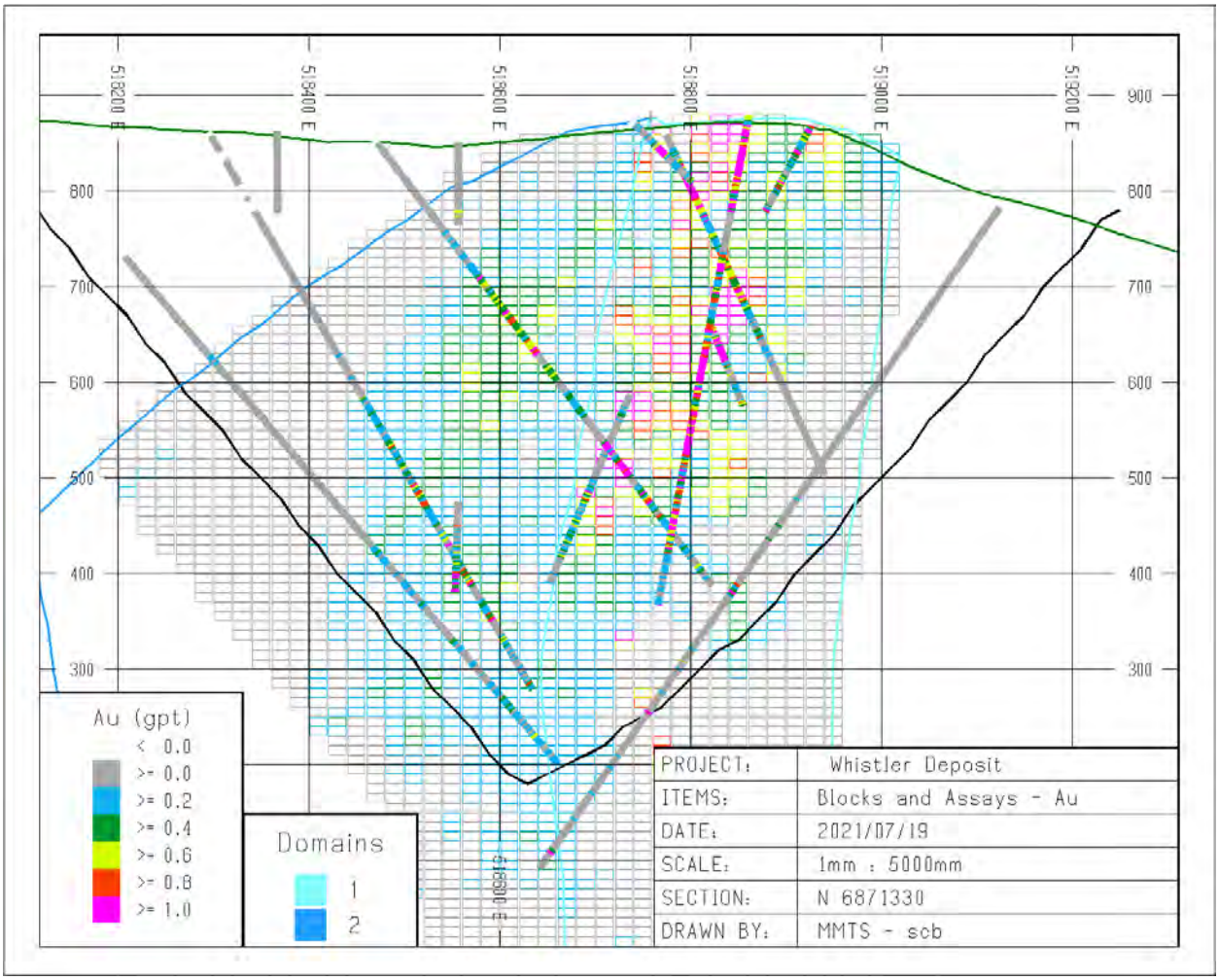


Figure 14-21 E-W Section Comparing Au Grades for Block Model and Assay Data - Whistler (Source: MMTS, 2021)

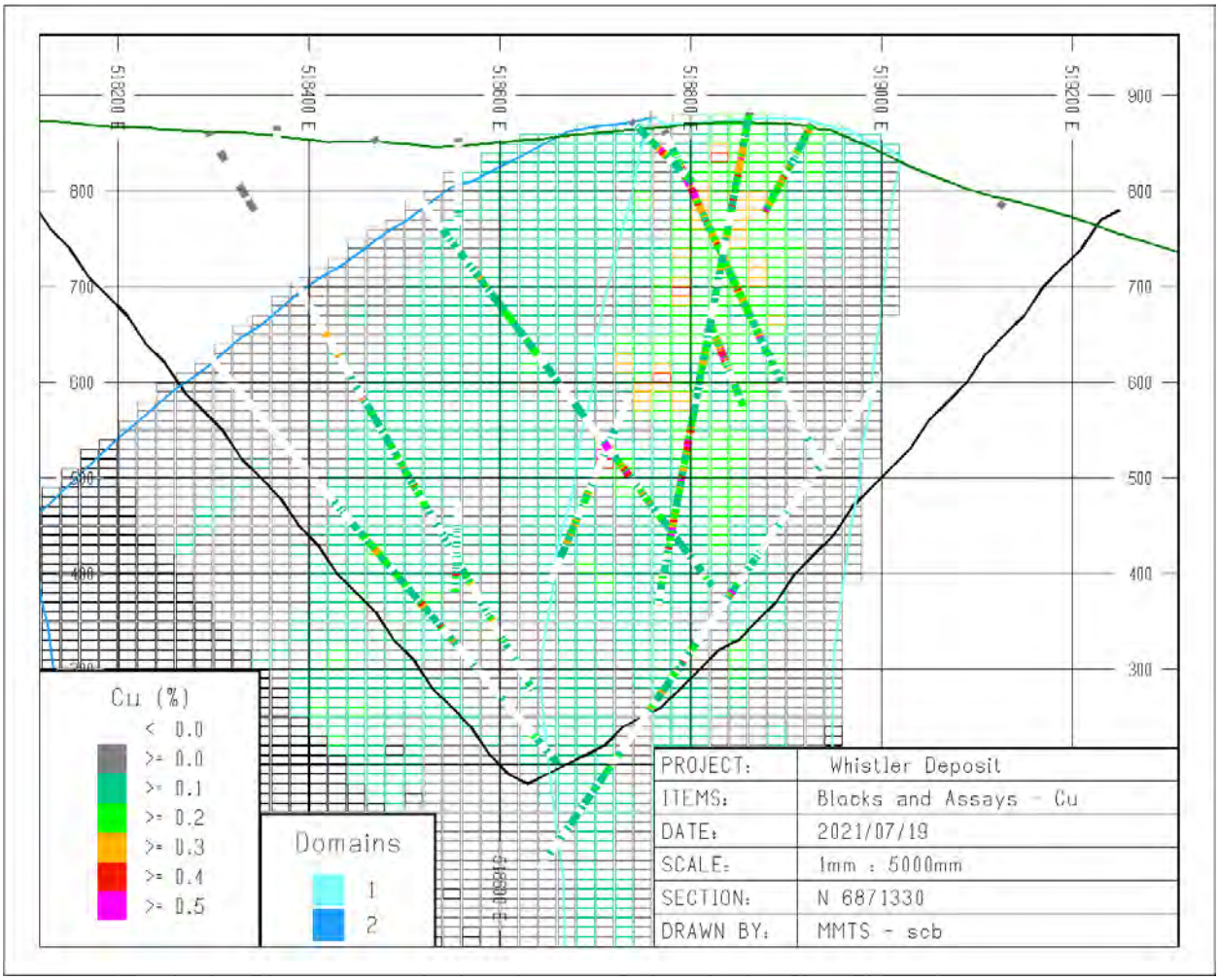


Figure 14-22 E-W Section Comparing Cu Grades for Block Model and Assay Data - Whistler (Source: MMTS, 2021)

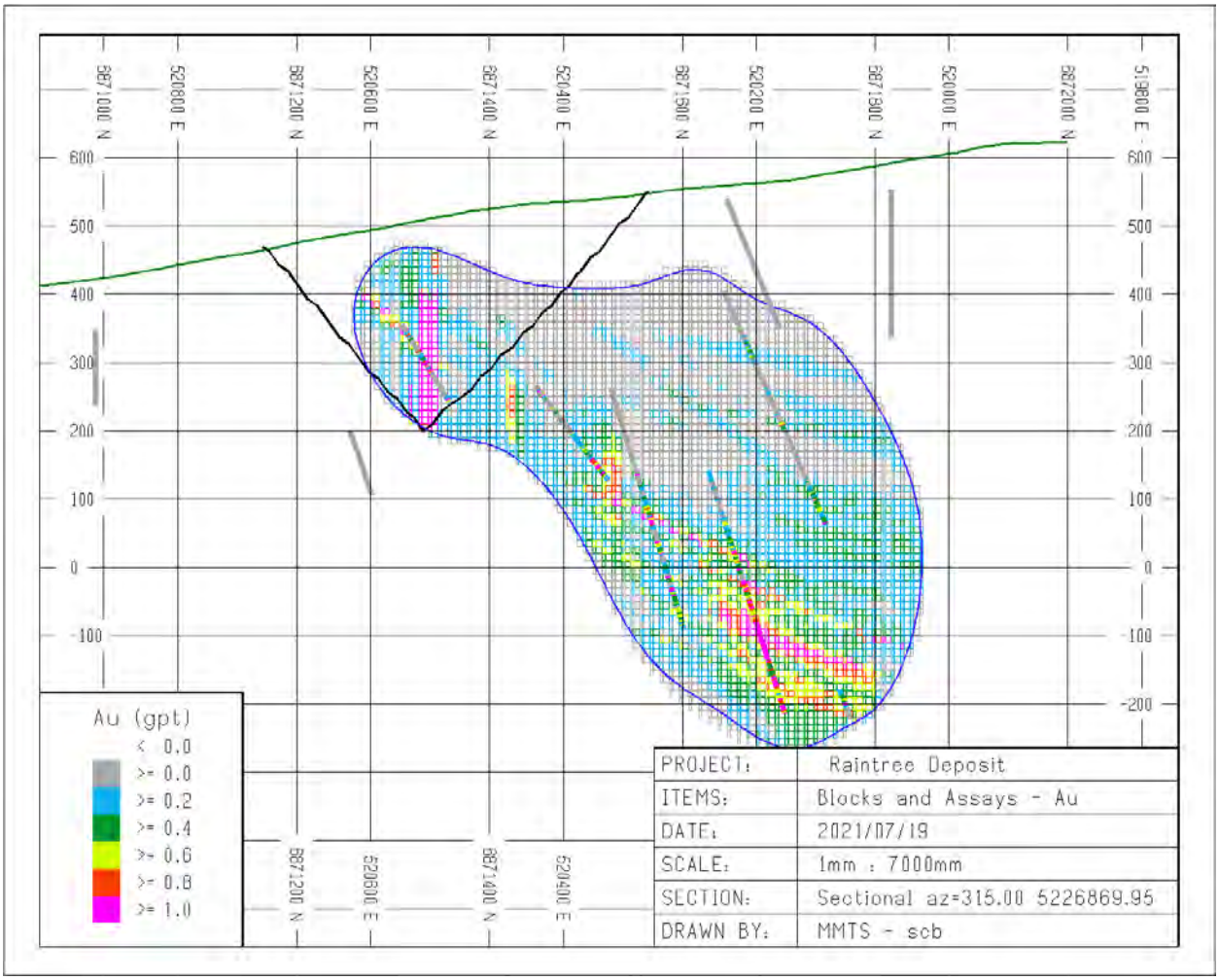


Figure 14-23 Section Looking SW - Comparing Au Grades for Block Model and Assay Data – Raintree (Source: MMTS, 2021)

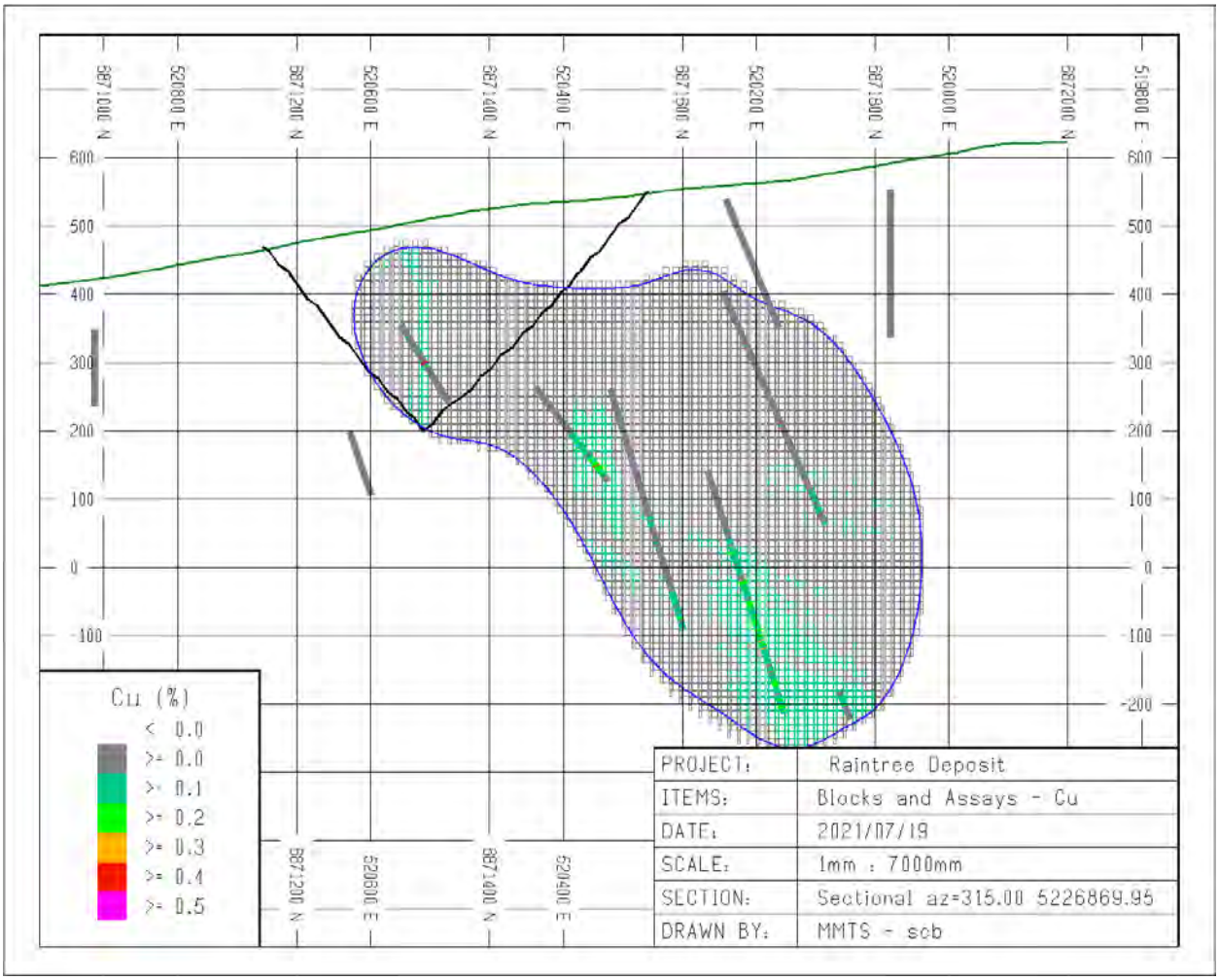


Figure 14-24 Section Looking SW - Comparing Cu Grades for Block Model and Assay Data – Raintree (Source: MMTS, 2021)

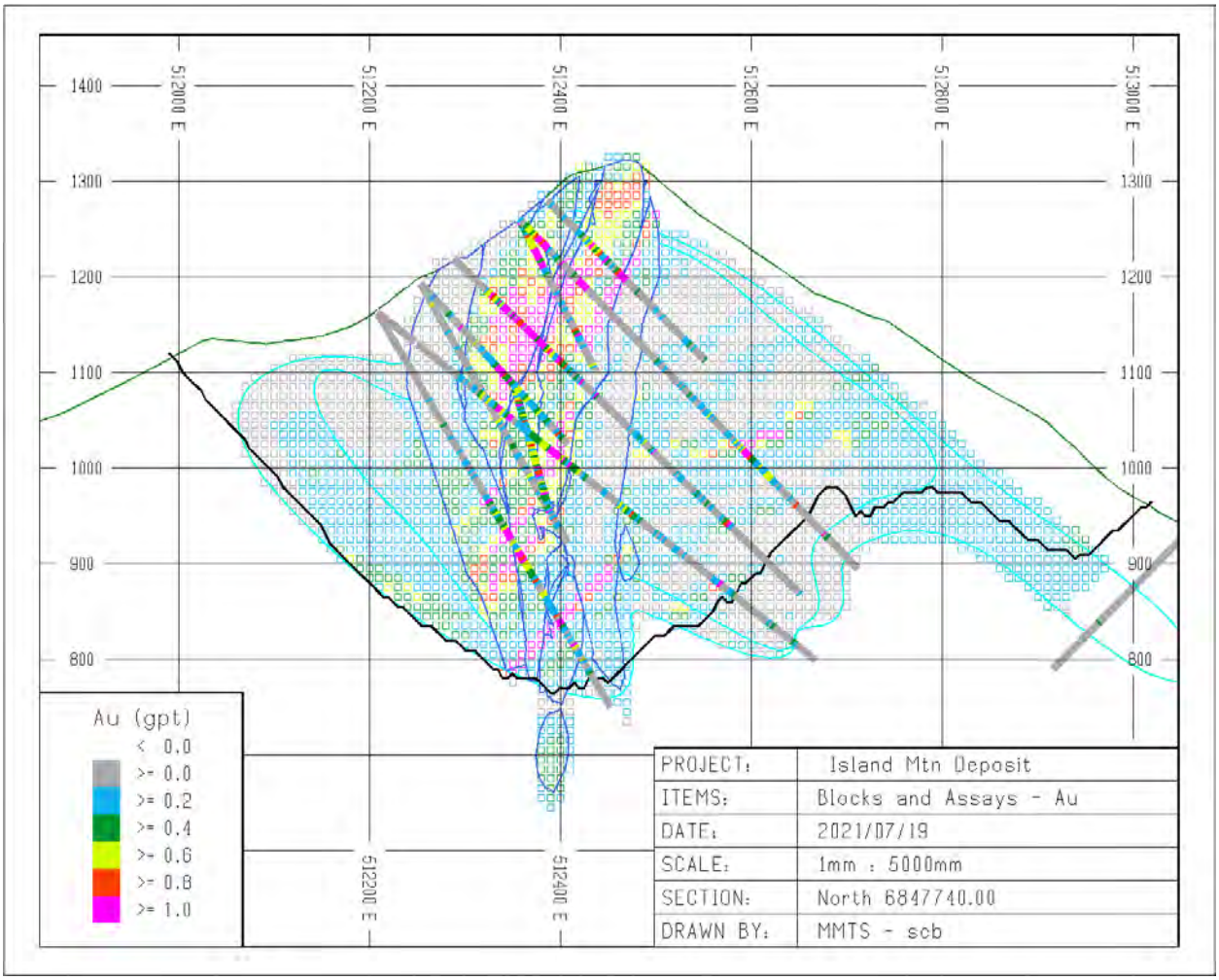


Figure 14-25 E-W Section Comparing Cu Grades for Block Model and Assay Data – Island Mountain (Source: MMTS, 2021)

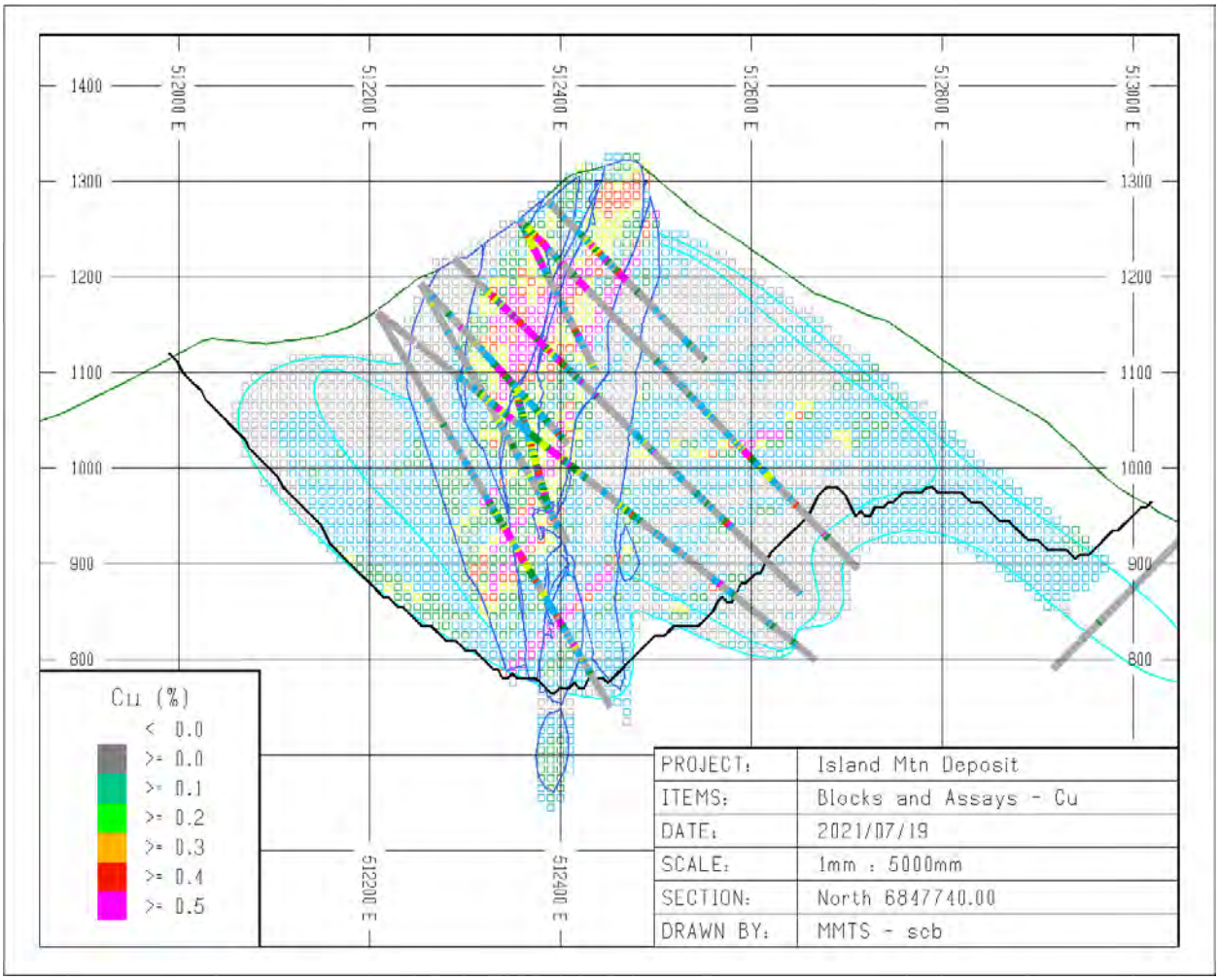


Figure 14-26 E-W Section Comparing Cu Grades for Block Model and Assay Data – Island Mountain (Source: MMTS, 2021)

14.11 Reasonable Prospects of Eventual Economic Extraction

As defined by NI43-101, the resource confining pit and/or underground shapes defines a boundary for continuous mineralization with suitable grades and with a reasonable expectation that an engineered plan will produce an economic plan. The net smelter return calculation for both the open pit and underground resources as well as the metallurgical recoveries are summarized in Table 14-21.

Lerchs-Grossman pits were run for each deposit using the following parameters:

- Pit slopes of 50 degrees;
- Mining costs of US$1.80/t for waste and US$2.00/t for mineralized material; and
- Processing, general and administrative costs of US$10.50/t.

The lower portion of the Raintree West deposit has been constrained by a mineable shape within a "reasonable prospects of eventual economic extraction" using a US$25.00/t cut-off, assuming the same

processing costs as for the open pit, and a bulk mining scenario. Material within a cohesive shape above this cutoff has been included in the Raintree underground resource estimate.

Table 14-21 Economic Inputs and Metallurgical Recoveries

Parameter	Value	Units
Gold Price	$1,600.00	US$/Oz
Cu Price	$3.25	US$/lbs
Silver Price	$21.00	US$/Oz
Gold Payable	99.00%	%
Cu payable	99.0%	%
Silver Payable	90.0%	%
Gold Refining	8.00	US$/oz
Cu Refining + PP	0.05	US$/lbs
Silver Refining	0.60	US$/oz
Gold Offsites	97.41	US$/oz
Cu Offsite	36.943	US$/lbs
Silver Offsites	1.65	US$/oz
Royalty	3.0%	%
Net Smelter Gold Price	$49.27	US$/g
Net Smelter Cu	$2.97	US$/lb
Net Smelter Silver Price	$0.57	US$/g
Gold Process Recovery	70%	%
Cu Process Recovery	83%	%
Silver Process recovery – above 10 gpt Ag	0%	%
Silver Process recovery – below 10 gpt Ag	65%	%

**Indicated and Inferred resources are used for pit optimization.*
**Pit slope angle is considered constant at 45 degrees for all cases.*

The pit delineated resource is given in Table 14-2 through Table 14-4 for each deposit and for a range of NSR cut-offs with the base case cut-off of US$10.50/tonne highlighted. Process recoveries, as well as mining, processing and offsite costs have been applied in order to determine that the pit resource has a reasonable prospect of economic extraction. The US$10.50/tonne cut-off (an Au Equivalent grade of approximately 0.31 gpt at the base case prices) yields an Indicated resource of 118.2 Mt at 0.51 gpt gold, 0.16% copper and 2.19 gpt silver (2.99Moz AuEqv.) and an Inferred resource of 317.0 Mt at 0.46 gpt gold, 0.10% copper and 1.58 gpt silver (6.45Moz AuEqv).

14.12 Factors That May Affect the Mineral Resource Estimate

Areas of uncertainty that may materially impact the Mineral Resource estimate include:

- Commodity price assumptions
- Metal recovery assumptions
- Mining and processing cost assumptions

There are no other known factors or issues known to the QP that materially affect the estimate other than normal risks faced by mining projects in the province in terms of environmental, permitting, taxation, socio-economic, marketing, and political factors.

14.13 Risk Assessment

A description of potential risk factors is given in Table 14-22 along with either the justification for the approach taken or mitigating factors in place to reduce any risk.

Table 14-22 List of Risks and Mitigations/Justifications

#	Description	Justification/Mitigation
1	Classification Criteria	Classification based on the Range of the Variogram and therefore the variability of the mineralization within each deposit.
2	Gold and silver Price Assumptions	Based on three year trailing average (Kitco, 2021)
3	Capping	CPP, swath plots and grade-tonnage curves show model validates well with composite data throughout the grade distribution.
4	Processing and Mining Costs	Based on comparable projects in Alaska.

15 MINERAL RESERVE ESTIMATES

There are no reserve estimates at this time.

16 MINING METHOD

Open pit and underground mining methods are being considered for the project, though no details have been developed at this time.

17 RECOVERY METHODS

Not applicable to the resource statement.

18 PROJECT INFRASTRUCTURE

Preliminary infrastructure is discussed in Section 5, while detailed infrastructure has not been determined at this time.

19 MARKET STUDIES AND CONTRACTS

No concentrate market studies have been done at this time.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

GoldMining has submitted an Application for Permit to Mine in Alaska (APMA) to Alaska's Department of Natural Resources (ADNR) for the issuance of permits that will allow for future exploration work on the property. The status of the APMA is pending and GoldMining expects to receive approval in due course.

21 CAPITAL AND OPERATING COSTS

Capital and operating costs have not been developed in detail at this time.

22 ECONOMIC ANALYSIS

Economic analysis has not been completed at this time.

23 ADJACENT PROPERTIES

The Estelle Gold Project owned by Nova Minerals Limited of Australia is currently in exploration phase and shares the Whiskey Bravo runway.

24 OTHER RELEVANT DATA AND INFORMATION

There is no additional relevant data and information for the Whistler, Raintree West, and Island Mountain deposits.

25 INTERPRETATION AND CONCLUSIONS

25.1 Sampling, Preparation, Analysis

The procedures documented by Kennecott, Geoinformatics and Kiska for sampling, analysis and security are deemed adequate. Analysis of the QAQC samples indicates the laboratory results are of sufficient quality for resource estimation.

25.2 Data Verification

The provided database did not have certificate numbers attached to the sample IDs, this was corrected to the extent possible as well as some minor errors that were uncovered during certificate checks. The amount of data fully supported by certificate and QAQC is 75% in Whistler, 90% in Raintree and 93% in Island Mountain, which is typical or better than similar projects with the majority of drilling completed before 2010, but not ideal. Measurements made during the site visit and previous reports indicate a collar survey is to be considered.

25.3 Metallurgical Testwork

The recoveries used for Resource estimate are reasonable for this level of study based on the metallurgical testing to date.

25.4 Resource Estimate

In the opinion of the QP the block model resource estimate and resource classification reported herein are a reasonable representation of the global gold, copper and silver mineral resources found in the Whistler, Raintree West and Island Mountain deposits. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

25.5 Risks and Opportunities

25.5.1 Sampling, Preparation, Analysis and Data Risks and Opportunities

GoldMining has the opportunity to add QAQC data for silver and to collect and complete the missing certificate numbers in the database. This information would more completely support the assay database.

The drill core is stored in wood boxes subject to weathering on site, they are beginning to fall apart. An opportunity exists to protect these samples from further weathering by moving them or building dry storage. The risk of continued decay is that the historic core may no longer be available to future potential owners for review and verification.

A collar survey that was to have been done in 2012 does not appear to have been completed. Review of three collar locations during the site visit suggests that more accurate drillhole locations are possible.

25.5.2 Metallurgical Testwork Risks and Opportunities

Analyses and accounting of Ag were omitted from the metallurgical testwork, which focused on Cu and Au grades and recoveries in what was anticipated initially to be a Cu-Au resource. Future testwork

which includes Ag accounting would likely result in improved estimates of silver recovery and revenue contribution.

25.5.3 Resource Estimate Risks and Opportunities

Risk in the geologic interpretations relating to the continuity of the mineralization exist and can be mitigated by additional geologic modelling for use in controlling the block model interpolations. A description of additional potential risk factors concerning the resource estimate is given in Table 14-21 along with either the justification for the approach taken or mitigating factors in place to reduce any risk. Opportunities to increase the confidence in the resource through infill drilling and to expand the resource from step-out and exploration drilling are discussed in the recommendations section below.

26 RECOMMENDATIONS

26.1 Sample Preparation, Analyses and Security

To ensure data quality is recommended that:

- QAQC data for silver blanks and duplicates be collected from the historical database for analysis in future studies that include silver in the resource estimate. None of the CRMs used to date are certified for silver. New CRMs should be sourced and included in any future drilling.
- Future drilling should continue to use the silica sand or a commercially prepared blank material.
- Individual instances of lapse in control procedures where failed samples and the neighboring primary assays samples are not seen to be re-assayed are identified. If this was indeed done, the database has not been correctly maintained. The number of failures does not appear to be of material significance at this time. Future programs should ensure that adherence to control procedures is maintained

26.2 Data Verification

It is recommended that:

- At least 10% of collar locations in each resource area, to include drilling from all years, be surveyed with GPS equipment with <1m accuracy. If significant deviations are determined from the recorded values, all collars would need resurvey.
- GoldMining continue to pursue matching of assay samples to certificates and collection of missing certificates.
- Future drilling should include third party check assays and the data should be appropriately maintained.

26.3 Metallurgy

Metallurgical recommendations include:

- Mineralogical studies to better understand the gold associations
- Comminution testing specifically to address SAG mill power requirements and design
- Variability testing
- Confirmatory locked cycle flotation testing at the coarser primary grind size
- Testwork to include feed material containing Pb, Zn sulphide, and higher Ag grade material

26.4 Exploration and Resource

26.4.1 Whistler

At the Whistler Deposit, recommendations include:

- A better understanding of the current known faults could be an opportunity for increasing the resource at Whistler. Particularly in the south of the deposit (south of 6,971,200N). There is a

paucity of drillhole data on both sides of the Divide fault in this area, resulting in blocks left un-interpolated within the diorite solid.

- Revision of the geologic model to provide a better understanding of how the three later stages of intrusion relate to the mineralization. This would involve re-logging of core with the current knowledge of the assay values. Through re-interpretation in section and plan it is the expected outcome that 3D solids of each intrusive phase could be constructed.
- Similarly, 3D solids of alteration and structural domains should be created from the re-interpretation.
- Additional specific gravity measurements should be obtained from existing drillholes to augment the current database.
- Additional in-fill drilling to upgrade the classification of Inferred to Indicated.

26.4.2 Raintree

For the Raintree Deposit, the following recommendations are made:

- Infill and step-out drilling to the north and south of the current deposit to potentially upgrade the classification of the current resource estimate and to potentially increase the resource. Specifically shallow holes (200 to 250 m) dipping east on sections 6,871,350 N and 6,871,400 N and 6,871,500 N should be drilled to increase the confidence in near surface mineralization.
- In concert with the new drilling, the previous drill core should be relogged and a robust geological model/domains should be constructed for future resource estimates.
- Further specific gravity measurements should be collected from current and future drillholes.
- Metallurgical testing should be conducted on Raintree West samples.

26.4.3 Island Mountain

For the Island Mountain deposit, the following recommendations are made:

- Infill and step-out drilling to the north and south of the deposit. This drilling should be done to potentially upgrade the classification of the current resource estimate and to potentially increase the resource. Drilling should aim to link the mineralized breccias drilled north of the resource area, with the main breccia complex. Deep drilling under the breccia complex is also warranted to potentially locate the causative, and potentially mineralized, intrusive driving the brecciation.

26.4.4 Exploration Program and Budget

The exploration program is divided into two phases. Phase 1 would consist of a full desktop review of all the geological, geochemical, geophysical and drilling data, concurrent with the review of drill core, in order to optimize strategic targeting in Phase 2. The specific design of Phase 2 is contingent on the results of Phase 1.

A possible Phase 2 might consist of a “top-of-bedrock” grid drilling program in the Whistler area and further surface mapping, sampling and compilation work to rank and prioritize other exploration targets on the project area (Muddy Creek, Snow Ridge, Puntilla, Round Mountain, Howell Zone, Super Conductor), with the aim to test one or more of these targets with deeper drilling (1,500 m).

The grid drilling program would penetrate the glacial cover and drill approximately 25m into bedrock to obtain geological and geochemical data. This data, in conjunction with the existing airborne magnetic

data and 3D IP data, would considerably enhance exploration targeting. Drilling on 200 metre centres from fifty holes (1,250 m) would cover the most prospective areas in the Whistler area.

In addition, the Phase 2 program should consist of follow-up drilling in the Whistler area to target anomalies generated by the grid drilling program and to expand drilling at Raintree (2,500 m). Any significant mineralized intercepts from this phase of step-out drilling should be sent for metallurgical testing with particular focus on the impact of the relatively high lead-zinc concentrations.

The Phase 2 drilling should also consist of 2,500m of diamond drilling to in-fill and expand mineralization at the Breccia Zone at Island Mountain. Mineralization is open to south and north, and undrilled breccia bodies occur for 700m to the north of the Breccia Zone.

Table 26-1 shows the proposed exploration budget.

Table 26-1 Proposed Exploration Budget

Work Program	Units		Rate	Sub-total CDN $
Phase 1: Desktop Exploration Targeting and Overview Study				
Wages – Geologists and Database support				$150,000
	Sub-total Phase 1			**$150,000**
Phase 2: Drilling Program				
Grid Drilling	1,250	**m**	$375	$468,750
Wages - Mappers and Samplers				$100,000
Rock and Soil Assays	500	samples	$50	$25,000
New target drilling - Whistler Area	1,500	m	$375	$562,500
Raintree West Drilling*	2,500	m	$375	$937,500
Raintree Metallurgical Sampling				$50,000
Island Mountain Breccia Zone Drilling*	2,500	m	$475	$1,187,500
Planning and Supervision Wages				$300,000
	Sub-total Phase 2			**$3,631,250**
Database Support (field season)				$120,000
Data Interpretation (post field season)				$120,000
	Sub-total Support			**$240,000**
Sub-total				$4,021,250
Contingency			10%	$402,125
Administration				$200,000
TOTAL				**$4,623,375**

**all-in cost includes assays, helicopter-support, camp costs*

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APPENDIX A: CLAIMS LIST

ADL Serial Number	Claim Name	Claim Owner	Reference M-T-R-S	Acres
633446	PORT 2151	BRI Alaska Corporation	2S022N018W30	40
633447	PORT 2152	BRI Alaska Corporation	2S022N018W30	40
633448	PORT 2153	BRI Alaska Corporation	2S022N018W30	40
633449	PORT 2251	BRI Alaska Corporation	2S022N018W19	40
633450	PORT 2252	BRI Alaska Corporation	2S022N018W19	40
633451	PORT 2253	BRI Alaska Corporation	2S022N018W19	40
633452	PORT 2351	BRI Alaska Corporation	2S022N018W19	40
633453	PORT 2352	BRI Alaska Corporation	2S022N018W19	40
633454	PORT 2353	BRI Alaska Corporation	2S022N018W19	40
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633457	PORT 2454	BRI Alaska Corporation	2S022N018W20	40
633458	PORT 2455	BRI Alaska Corporation	2S022N018W20	40
633459	PORT 2456	BRI Alaska Corporation	2S022N018W20	40
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646078	IM 65	BRI Alaska Corporation	2S019N019W09	160
646325	WHISPER 428	BRI Alaska Corporation	2S022N018W31	160
646327	WHISPER 430	BRI Alaska Corporation	2S021N018W06	160
646328	WHISPER 431	BRI Alaska Corporation	2S021N018W06	160
646330	WHISPER 433	BRI Alaska Corporation	2S021N018W06	160
646331	WHISPER 434	BRI Alaska Corporation	2S021N018W06	160
646338	WHISPER 441	BRI Alaska Corporation	2S021N018W07	160
646339	WHISPER 442	BRI Alaska Corporation	2S021N018W07	160

ADL Serial Number	Claim Name	Claim Owner	Reference M-T-R-S	Acres
646343	WHISPER 446	BRI Alaska Corporation	2S021N019W12	160
646344	WHISPER 447	BRI Alaska Corporation	2S021N018W07	160
646350	WHISPER 453	BRI Alaska Corporation	2S021N019W13	160
646351	WHISPER 454	BRI Alaska Corporation	2S021N018W18	160
646355	WHISPER 458	BRI Alaska Corporation	2S021N019W13	160
646356	WHISPER 459	BRI Alaska Corporation	2S021N019W13	160
646764	IM 71	BRI Alaska Corporation	2S020N019W06	160
646765	IM 72	BRI Alaska Corporation	2S020N019W05	160
646766	IM 73	BRI Alaska Corporation	2S020N019W05	160
646767	IM 74	BRI Alaska Corporation	2S020N019W04	160
646774	IM 81	BRI Alaska Corporation	2S020N019W05	160
646775	IM 82	BRI Alaska Corporation	2S020N019W04	160
646783	IM 90	BRI Alaska Corporation	2S020N019W08	160
646784	IM 91	BRI Alaska Corporation	2S020N019W09	160
646792	IM 99	BRI Alaska Corporation	2S020N019W08	160
646793	IM 100	BRI Alaska Corporation	2S020N019W09	160
646801	IM 108	BRI Alaska Corporation	2S020N019W17	160
646802	IM 109	BRI Alaska Corporation	2S020N019W16	160
646810	IM 117	BRI Alaska Corporation	2S020N019W17	160
646819	IM 126	BRI Alaska Corporation	2S020N019W21	160
646820	IM 127	BRI Alaska Corporation	2S020N019W21	160
646824	WHISPER 464	BRI Alaska Corporation	2S023N019W27	160
646825	WHISPER 465	BRI Alaska Corporation	2S023N019W27	160
646826	WHISPER 466	BRI Alaska Corporation	2S023N019W34	160
646839	WHISPER 479	BRI Alaska Corporation	2S023N019W22	160
646840	WHISPER 480	BRI Alaska Corporation	2S023N019W27	160
646841	WHISPER 481	BRI Alaska Corporation	2S023N019W27	160
646842	WHISPER 482	BRI Alaska Corporation	2S023N019W34	160
646855	WHISPER 495	BRI Alaska Corporation	2S022N019W02	160
646856	WHISPER 496	BRI Alaska Corporation	2S022N019W11	160
646857	WHISPER 497	BRI Alaska Corporation	2S022N019W11	160
646858	WHISPER 498	BRI Alaska Corporation	2S022N019W14	160
646864	WHISPER 504	BRI Alaska Corporation	2S022N019W02	160
646865	WHISPER 505	BRI Alaska Corporation	2S022N019W02	160
646866	WHISPER 506	BRI Alaska Corporation	2S022N019W11	160
646867	WHISPER 507	BRI Alaska Corporation	2S022N019W11	160
646868	WHISPER 508	BRI Alaska Corporation	2S022N019W14	160
646869	WHISPER 509	BRI Alaska Corporation	2S022N019W14	160
646927	WHISPER 567	BRI Alaska Corporation	2S021N019W24	160
646928	WHISPER 568	BRI Alaska Corporation	2S021N019W24	160
646934	WHISPER 574	BRI Alaska Corporation	2S021N019W23	160
646935	WHISPER 575	BRI Alaska Corporation	2S021N019W24	160
646942	WHISPER 582	BRI Alaska Corporation	2S021N019W26	160
646943	WHISPER 583	BRI Alaska Corporation	2S021N019W26	160
646944	WHISPER 584	BRI Alaska Corporation	2S021N019W25	160
646952	WHISPER 592	BRI Alaska Corporation	2S021N019W26	160
646953	WHISPER 593	BRI Alaska Corporation	2S021N019W26	160
646958	WHISPER 598	BRI Alaska Corporation	2S021N019W33	160
646959	WHISPER 599	BRI Alaska Corporation	2S021N019W33	160
646960	WHISPER 600	BRI Alaska Corporation	2S021N019W34	160

ADL Serial Number	Claim Name	Claim Owner	Reference M-T-R-S	Acres
646961	WHISPER 601	BRI Alaska Corporation	2S021N019W34	160
646962	WHISPER 602	BRI Alaska Corporation	2S021N019W35	160
646968	WHISPER 608	BRI Alaska Corporation	2S021N019W33	160
646969	WHISPER 609	BRI Alaska Corporation	2S021N019W33	160
646970	WHISPER 610	BRI Alaska Corporation	2S021N019W34	160
646971	WHISPER 611	BRI Alaska Corporation	2S021N019W34	160
646972	WHISPER 612	BRI Alaska Corporation	2S021N019W35	160
650959	MUD 1	BRI Alaska Corporation	2S021N019W32	160
650960	MUD 2	BRI Alaska Corporation	2S021N019W32	160
650961	MUD 3	BRI Alaska Corporation	2S021N019W31	160
650962	MUD 4	BRI Alaska Corporation	2S021N019W31	160
650963	MUD 5	BRI Alaska Corporation	2S021N020W36	160
650964	MUD 6	BRI Alaska Corporation	2S021N020W36	160
650965	MUD 7	BRI Alaska Corporation	2S021N020W35	160
650966	MUD 8	BRI Alaska Corporation	2S021N020W35	160
650967	MUD 9	BRI Alaska Corporation	2S021N020W34	40
650968	MUD 10	BRI Alaska Corporation	2S021N020W34	40
650969	MUD 11	BRI Alaska Corporation	2S021N020W34	40
650970	MUD 12	BRI Alaska Corporation	2S021N020W34	40
650971	MUD 13	BRI Alaska Corporation	2S021N020W35	160
650972	MUD 14	BRI Alaska Corporation	2S021N020W35	40
650973	MUD 15	BRI Alaska Corporation	2S021N020W35	40
650974	MUD 16	BRI Alaska Corporation	2S021N020W35	40
650975	MUD 17	BRI Alaska Corporation	2S021N020W36	160
650976	MUD 18	BRI Alaska Corporation	2S021N020W36	160
650977	MUD 19	BRI Alaska Corporation	2S021N019W31	160
650978	MUD 20	BRI Alaska Corporation	2S021N019W31	160
650979	MUD 21	BRI Alaska Corporation	2S021N019W32	160
650980	MUD 22	BRI Alaska Corporation	2S021N019W32	160
650981	MUD 23	BRI Alaska Corporation	2S020N019W06	160
650982	MUD 24	BRI Alaska Corporation	2S020N020W01	160
650983	MUD 25	BRI Alaska Corporation	2S020N020W01	160
650984	MUD 26	BRI Alaska Corporation	2S020N020W02	160
650985	MUD 27	BRI Alaska Corporation	2S020N020W02	160
650986	MUD 28	BRI Alaska Corporation	2S020N020W03	40
650987	MUD 29	BRI Alaska Corporation	2S020N020W03	40
650988	MUD 30	BRI Alaska Corporation	2S020N020W03	40
650989	MUD 31	BRI Alaska Corporation	2S020N020W03	40
650990	MUD 32	BRI Alaska Corporation	2S020N020W02	160
650991	MUD 33	BRI Alaska Corporation	2S020N020W02	160
650992	MUD 34	BRI Alaska Corporation	2S020N020W01	160
650993	MUD 35	BRI Alaska Corporation	2S020N020W01	160
650994	MUD 36	BRI Alaska Corporation	2S020N019W06	160
650995	MUD 37	BRI Alaska Corporation	2S020N020W11	160
650996	MUD 38	BRI Alaska Corporation	2S020N020W11	160
650997	MUD 39	BRI Alaska Corporation	2S020N020W10	160
650998	MUD 40	BRI Alaska Corporation	2S020N020W03	40
650999	MUD 41	BRI Alaska Corporation	2S020N020W10	160
651000	MUD 42	BRI Alaska Corporation	2S020N020W11	160
651001	MUD 43	BRI Alaska Corporation	2S020N020W11	160

ADL Serial Number	Claim Name	Claim Owner	Reference M-T-R-S	Acres
656421	MUD 44	BRI Alaska Corporation	2S020N020W12	160
656422	MUD 45	BRI Alaska Corporation	2S020N020W12	160
656423	MUD 46	BRI Alaska Corporation	2S020N020W12	160
656424	MUD 47	BRI Alaska Corporation	2S020N020W12	160
667695	BT049	BRI Alaska Corporation	2S019N019W04	160