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TECHNICAL REPORT AND MINERAL RESOURCE ESTIMATE FOR THE SOUTH CONTACT ZONE PROJECT, ST LOUIS COUNTY, MINNESOTA, USA

Prepared For:

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1 Summary

1.1 Issuer and Purpose

This Technical Report (the Report) on the South Contact Zone Project (SCZ or the Project) was prepared by APEX Geoscience Ltd. (APEX) at the request of the Issuer, Green Bridge Metals Corp. (Green Bridge or the Company). Green Bridge is a Vancouver, British Columbia based junior mineral exploration company that is a reporting issuer in BC and Ontario and is focused on acquiring 'battery metal' rich mineral assets in North America.

The SCZ is comprised of four non-contiguous properties, including Wyman-Siphon, Skibo, Titac, and Boulder. The Project is situated along the southern basal contact of the Duluth Complex, which hosts a variety of mineral deposits, including copper (Cu) – nickel (Ni) - platinum group elements (PGE) sulphide, stratabound and stratiform PGE, iron (Fe) -titanium (Ti) ± vanadium (V) oxide, and silver (Ag) – (Co) cobalt fissure veins, and is located immediately south of the Mesabi Range iron ore district.

This Report summarizes a National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects Mineral Resource estimation (MRE) for the Project (the Titac South MRE) and provides a technical summary of the relevant location, tenure, historical, and geological information, and recommendations for future exploration programs. This Report summarizes the technical information available up to the Effective Date of September 18, 2024.

This Report was prepared by Qualified Persons (QPs) in accordance with disclosure and reporting requirements set forth in the NI 43-101 Standards of Disclosure for Mineral Projects (effective May 9, 2016), Companion Policy 43-101CP Standards of Disclosure for Mineral Projects (effective February 25, 2016), Form 43-101F1 (effective June 30, 2011) of the British Columbia Securities Administrators, the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Exploration Best Practice Guidelines (November 23, 2018), the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019) and the CIM Definition Standards (May 10, 2014).

1.2 Authors and Site Inspection

The authors of this Report (the authors or the QPs) are Mr. Michael B. Dufresne, M.Sc., P. Geol., P. Geo., Mr. Andrew J. Turner, B.Sc., P. Geol. P. Geo., Ms. Fallon T. Clarke, B.Sc., P. Geo., and Mr. Christian Bohm, PhD, P.Geo. of APEX. All authors are geological consultants with APEX of Edmonton, Alberta, Canada. All authors are independent of the Issuer and are QPs as defined in NI 43-101. Mr. Kevin Hon, B.Sc., P.Geo., of APEX, is a Contributor to this Report. Under the direct supervision of Mr. Dufresne, Mr. Hon and Mr. Turner completed a review of the historical 2012 Titac South MRE and assisted in the preparation of the Titac South MRE that is the subject of this Report.

Mr. Dufresne completed a site inspection of the SCZ on August 19th –21st, 2024. The inspection was conducted to assess the current site conditions and access, as well as the SCZ geology, alteration, and mineralization, and to collect independent verification samples. As outcrops are rare in the SCZ, Mr. Dufresne was unable to observe or sample bedrock at the Property. The site visit entailed a tour of the Skibo, Wyman-Siphon, and Titac properties and review of historical drill core from Titac and Skibo. Quarter drill core samples were collected from Titac South drillholes TTC-009-2010, TTC-019-2010, TTC-029-2010, and from Titac North drillhole TTC-005-2010. Four half core samples were collected from a previously unsampled portion of drillhole SK09-03 completed at the Skibo property. Observations and results from Mr. Dufresne's site visit and sampling verify the presence of Ti-Fe-V oxide mineralization, and Cu mineralization at the Titac property, as well as base metal mineralization and elevated levels of platinum (Pt) and palladium (Pd)

mineralization at the Skibo property. Rock types and mineralization observed in the drill core are consistent with the reported geology and historical exploration results.

1.3 Property Location, Description, and Access

The SCZ is an early-stage exploration project located approximately 65 kilometers (km) north of the city of Duluth, in St. Louis County, Minnesota, USA. The Project is comprised of four non-contiguous properties, including Wyman-Siphon, Skibo, Titac, and Boulder, covering an area of approximately 8,460 hectares (ha) or 20,905 acres

On May 8, 2024, Green Bridge entered into an option agreement with Encampment Minerals Inc. (EMI), a privately owned USA corporation, whereby Green Bridge was granted the option to acquire an 80% interest in the SCZ. The closing date of the agreement was June 19, 2024. Pursuant to the terms of the agreement, to earn a 60% interest in the SCZ, the Company is required to incur exploration expenditures totaling USD\$12,650,000 over a four-year period. Upon completing the option to earn the 60% interest in the SCZ, Green Bridge has the option to earn an additional 20% interest in the SCZ through payment of USD\$4 million dollars cash, completion of a NI 43-101 technical report on the SCZ Project, and by incurring expenses of USD\$10 million dollars within a period of two years from the date whereby the first 60% interest is earned.

1.4 Geology and Mineralization

The SCZ is regionally located in the southern Superior Province of the Canadian Shield, one of the world's oldest geological cratons, primarily composed of Archean rocks. Overlying these Archean basement rocks are Paleoproterozoic sedimentary cover sequences. The cover sequences were later intruded by Mesoproterozoic mafic and felsic magmas associated with the development of the Midcontinent Rift System (MCR). The SCZ is situated along the southwestern margin of the Duluth Complex within the larger MCR. The Duluth Complex spans approximately 270 km in length and up to 40 km in width in an arcing band from Duluth, northeastern Minnesota, to near the Canadian border. The Duluth Complex is characterized by the intrusion of a significant volume of mafic and ultramafic rocks, forming one of the largest mafic intrusive complexes on Earth, second only to the Bushveld Complex in South Africa.

The Project is situated along a well-defined regional structural trend formed by early to late (pre- and post-Duluth Complex emplacement), composite, differentiated mafic-ultramafic intrusions or intrusion complexes that include oxide-bearing ultramafic intrusions (OUIs).

Mineralization at the SCZ properties is generally hosted in the OUIs or at the contacts that intruded into layered series intrusions of the Duluth Complex. Most OUIs occur along the western margin of the southern portion of the Duluth Complex, and display numerous shapes (sheet-, funnel-, dike- and pipe-like geometries), and inclinations (flat-lying, moderately-dipping, and sub-vertical).

Mineralization at the Titac property includes Fe-Ti-V oxide mineralization and Cu-Ni sulphides. The Fe-Ti-V mineralization is primarily hosted within the pyroxenite and peridotite units, with disseminated to semi-massive oxide minerals, including magnetite and ilmenite, being the most prominent mineralization styles. The disseminated Cu-Ni sulphides are typically found interstitially within the silicate and oxide minerals, and locally as coarse-grained clots. Mineralization at Titac South extends 280 meters (m) east-west, 250 m north-south, and to a depth of 330 m. The complex stratigraphy of the intrusions, characterized by vertical pipe-like structures and sharp lithological contacts, suggests a dynamic emplacement history.

The primary style of mineralization at the Wyman-Siphon property is disseminated Cu-Ni sulphides, primarily chalcopyrite, pentlandite, and pyrrhotite, hosted within the troctolitic units.

The mineralization at Skibo is varied, with significant occurrences of both massive and disseminated Cu-Ni sulphides, dominantly associated with the main OUI body. The disseminated sulphides are typically hosted within the troctolitic units, while the massive sulphides are associated with the footwall zones of the OUIs. The Skibo prospect has not yet been evaluated for Ti-Fe-V oxide mineralization.

1.5 Historical Exploration

Exploration of the SCZ dates back to the latter part of the 1800s. Early exploration of the Duluth Complex was focused on disseminated low grade copper-nickel mineralization until the late 1940s. In 1967, several companies started exploration campaigns to investigate magnetic anomalies from Minnesota State geophysical surveys. This led to drilling in the southern part of the Duluth Complex which in many places intersected weak sulphide mineralization and plugs of OUIs. Limited outcrop occurs within the Project; therefore, most of the historical exploration conducted at the SCZ has consisted of geophysical surveys and drilling programs. A total of 137 drillholes for 41,398.44 m (135,822 ft) have been completed historically in the SCZ by several companies from 1959 to 2021.

Exploration has been conducted at the Titac property from the 1960s to 2019 by United States Steel Corp. (USSC), Cardero Resources Corp. (Cardero), and EMI. These companies completed a total of 52 drillholes (16,190.29 m) at the Titac property, as well as geophysical programs, relogging and resampling programs, petrographic analysis, and metallurgical testwork. The historical drilling at Titac confirmed Ti-Fe-V oxide mineralization at the Titac South Deposit and the Titac North prospect and led to the calculation of a historical mineral resource estimate for Titac South.

Exploration has been conducted at the Wyman-Siphon property from the 1960s to 2011 by Bear Creek, New Jersey Zinc, Hanna, USSC, National Resources Research Institute (NRRI), Falconbridge Ltd (Falconbridge), and EMI. These companies completed a total of 34 drillholes (11,052.64 m) at the property, as well as geophysical programs, relogging and resampling programs, and prospecting and mapping programs. Historical surface exploration by Falconbridge at the Siphon prospect identified several gossanous, Cu-Ni-PGE-bearing outcrops and float along the surface. The historical drilling at Wyman – Siphon confirmed the presence of sulphide mineralization enriched with copper, nickel, and PGEs within the property.

Exploration has been conducted at the Skibo property from the 1950s to 2020 by the International Nickel Company (INCO), Phelps Dodge, Exxon, New Jersey Zinc, Bear Creek, USSC, International Platinum, Falconbridge, and EMI. These companies completed a total of 40 drillholes (11,014.26 m) at the Skibo property, as well as geophysical programs, borehole geophysics, relogging and resampling programs. Drilling at Skibo confirmed the presence of sulphide mineralization enriched with copper and nickel with anomalous gold (Au) and PGEs at the Skibo north and Skibo south prospects.

Exploration has been conducted at the Boulder property from the 1960s to 1980s by American Shield and American Smelting and Refining Company (ASARCO), Phelps Dodge, and NRRI. These companies completed a total of 9 drillholes (1,812.94 m) at the Boulder property, as well as geophysical programs, and relogging and resampling programs. EMI acquired the Boulder claims in 2010 and completed historical data compilation, relogging and resampling of historical core. The relogging and resampling program confirmed the presence of semi-massive to massive oxide mineralization hosted in ultramafic intrusives in the North Boulder prospect.

1.6 Recent Exploration

Recent exploration by the Company at the SCZ has consisted of a geophysical data analysis of the Skibo and Wyman-Siphon properties. The data analysis provided insight into the use of virtual time domain electro-

magnetics (VTEM) geophysics to define OUI bodies within the Project. The Company will use the results of this desktop study to guide future exploration within the SCZ.

Other than the review of historical geophysical data, the Issuer has yet to conduct any exploration work at the Project.

1.7 Mineral Resource Estimate

There has been no further drilling at the Titac South Deposit of the SCZ since the effective date of the previous Technical Report written on the Titac property by SRK Consulting (Canada) Inc. that includes the historical 2012 Titac South MRE (Farrow et al., 2012). Therefore, the mineral resource outlined in this Report is an audit of the Farrow et al. (2012) Technical Report, and accompanying data, that documents the review completed and provides a current MRE for the Titac South Deposit of the SCZ (the Titac South MRE). The MRE utilized 24 drillholes completed between 2010-2011 by Cardero Resource Corp.

Mr. Dufresne has reviewed the work by Farrow et al. (2012) and finds no significant issues with the key assumptions, parameters, and methods used to prepare the previous MRE. In the opinion of the QP, the MRE by Farrow et al. (2012) is completed in accordance with the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines," dated November 29, 2012, and the CIM "Definition Standards for Mineral Resources and Mineral Reserves," dated May 10, 2014. As a result, Mr. Dufresne accepts the Titac South MRE disclosed by Farrow et al. (2012) and considers it current as of the date of this report (September 18, 2024) based upon the verification completed by the QP. The QP is reporting the MRE by Farrow et al. (2012) constrained within a pit shell using modern cost scenarios. The updated costs result in a 2% change compared to the cost scenarios used by Farrow et al. (2012).

The Titac South MRE consists of a constrained TiO₂ inferred resource reported at a lower cutoff off 8% TiO₂ of 46.6 Mt at a grade of 15.0% TiO₂ and an adjusted ferric oxide (Fe₂O₃) grade of 14.74%. The resource has been quantified in terms of Fe₂O₃ and TiO₂, however any potential mining scenario would produce ilmenite (FeTiO₃). Based on the assumption that titanium would be found within ilmenite, the contained ilmenite metals from the MRE would be 45.1 Mt with a grade of 28.5% ilmenite for a contained ilmenite total of 12.9 Mt. The Titac South MRE is presented in Table 1.1.

Table 1.1 Titac South Deposit mineral resource statement.

Classification	Tonnes (Mt)	Average Grade	
		TiO ₂ (%)	Adjusted Fe ₂ O ₃ (%)
Inferred	46.6	15.0	14.74

Notes:

1. The independent and qualified person for the mineral resources estimate, as defined by NI 43-101, is Michael Dufresne, P.Geo., from APEX Geoscience Ltd.
2. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no guarantee that any part of the mineral resources discussed herein will be converted into a mineral reserve in the future. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues. The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on mineral resources and reserves, definitions, and guidelines prepared by the CIM standing committee on reserve definitions and adopted by the CIM council (CIM 2014 and 2019).
3. The Mineral Resources Estimate is underpinned by data from 24 diamond drillholes totaling 4,751.17 m of drilling that intersected the mineralized domains.
4. The mineral resource is reported at a lower cut-off of 8.0 % TiO₂ for the conceptual open pit. The lower cut-off grades and potential mining scenarios were calculated using the following parameters: mining cost = US\$5.00/t; G&A = US\$2.00/t;

processing cost = US\$10.00/t; recoveries = 70%; Ilmenite Price = US\$350/t, to meet the requirement that the reported Mineral Resources show "reasonable prospects for eventual economic extraction".

5. Original TiO₂ assays were composited to 1.8 m with 2,702 composites generated overall in the mineralized domains including 370 composites generated for the peridotite domain, 646 for the mixed domain, and 1,693 for the pyroxenite domain.
6. Grade interpolation was performed by ordinary kriging (OK) using 1.8-meter composites (block size of 10 m x 10 m x 10 m).
7. Bulk density ranges from 2.27 g/cm³ to 4.28 g/cm³ depending on the domain.
8. The mineral resources estimate is categorized as inferred and classified based on data density, data quality, confidence in the geological interpretation and confidence in the robustness of the grade interpolation. The inferred category was defined using a search of up to 250 m and requiring at least 4 samples per drillhole from a minimum of 2 drillholes.
9. Domains were investigated for high-grade capping, and statistical analysis agrees with the decision to not apply capping.
10. The number of metric tonnes was rounded to the nearest thousand and gold ounces was rounded to the nearest hundred, and any discrepancies in the totals are due to rounding effects. Metal content is presented in tonnes (rock mass tonnes x grade (%)).
11. The author is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issue not reported in the technical report that could materially affect the mineral resource estimate.
12. The effective date of the Mineral Resources Estimate is September 18, 2024.

1.8 Conclusions and Recommendations

In the opinion of the QP, historical exploration completed by companies other than Green Bridge, along with the Titac South MRE, and Mr. Dufresne's recent site inspection, outline the SCZ as a property of merit prospective for the discovery of additional Fe-Ti-V oxide mineralization and Cu-Ni mineralization. This contention is supported by knowledge of:

- The historical results of drilling, geophysical surveys, and metallurgical testwork – as outlined in this Report.
- The Titac South MRE that is the subject of this Report. The MRE is based on validation of the historical drilling and assay data, a review of the SRK block model and geological model, and confirmation of the SRK model parameters.
- The QP site inspection verified the presence of Fe-Ti-V oxide mineralization and Cu mineralization at the Titac property, as well as base metal mineralization and elevated levels of Pt and Pd mineralization at the Skibo property.

As a property of merit, a 2-phase work program is recommended to delineate additional mineralization at the SCZ to support future Mineral Resource expansion and to test exploration targets within the Project.

Phase 1 should include a geophysical VTEM survey over the Titac-Boulder prospect areas of the SCZ to refine future drill targets, followed by an infill drill program at Titac South and Titac North to fill in gaps in the database, to upgrade the classification of existing resources at the Titac South deposit, and to provide adequate data for a maiden mineral resource estimate at Titac North. In addition, Phase 1 should include a historical core review and re-sampling program of historical core drilled at Skibo. Only half of the Skibo historical diamond holes have been sampled and analysed, and the analyses have been limited to copper, nickel and PGE. The Skibo prospect has not yet been evaluated for Fe-Ti-V oxide mineralization. The resampling program should consist of full trace element suite analysis, as well as whole rock analysis of the Skibo drill core to gain additional information on the geochemical vectors in the mineralized magmatic system. Following this, drill testing of the recently identified OUIs should be completed at the Skibo property. The estimated cost of the Phase 1 drilling and exploration program for the SCZ Project totals CDN\$1,450,000, not including contingency funds or taxes.

Phase 2 exploration is contingent on positive results from Phase 1 and includes additional diamond drilling at known prospects within the Property, as well as greenfield regional targets, and metallurgical testwork. Phase 2 should also include an updated MRE for Titac South, a maiden MRE for Titac North and the accompanying technical report. The estimated cost of the Phase 2 exploration program for the Property totals CDN\$2,150,000, not including contingency funds or taxes.

Collectively, the estimated cost of the recommended work programs for the SCZ Property totals CDN\$3,600,000, not including contingency funds or taxes (Table 1.2).

Table 1.2 Budget for proposed exploration at the South Contact Zone Project.

Phase	Item	Approximate Cost (CDN\$)
Phase 1	All in cost for core drilling (3,000 m @ \$350/m)	\$1,050,000
	Skibo core re-sampling program	\$150,000
	VTEM Geophysical Survey (~740-line km)	\$250,000
	Sub-total:	\$1,450,000
Phase 2	All in cost for core drilling (5,000 m @ \$350/m)	\$1,750,000
	Metallurgical Testwork	\$250,000
	Mineral Resource Estimate and Technical Report	\$150,000
	Sub-total:	\$2,150,000
Phase 1 & 2	Total:	\$3,600,000

2 Introduction

2.1 Issuer and Purpose

This Technical Report has been prepared by APEX Geoscience Ltd. (APEX) for the Issuer, Green Bridge Metals Corp. (Green Bridge or the Company), a Vancouver, British Columbia (BC), Canada based, junior mineral exploration company that is a reporting issuer in BC and Ontario. Green Bridge entered a letter of intent (the LOI) with Encampment Minerals Inc. (EMI), dated February 5, 2024, whereby the Company has an option to earn up to an 80 per cent (%) interest in the South Contact Zone Project (SCZ or the Project).

The SCZ is an early-stage exploration project located approximately 65 kilometres (km) north of the city of Duluth, in St. Louis County, Minnesota, USA (Figure 2.1). The Project is comprised of four non-contiguous properties, including Wyman-Siphon, Skibo, Titac, and Boulder, covering an area of approximately 8,460 hectares (ha) or 20,905 acres. The SCZ is situated along the southern basal contact of the Duluth Complex, which hosts a variety of mineral deposits, including copper (Cu) – nickel (Ni) - platinum group elements (PGE) sulphide, stratabound and stratiform PGE, iron (Fe) -titanium (Ti) ± vanadium (V) oxide, and silver (Ag) – (Co) cobalt fissure veins, and is located immediately south of the Mesabi Range iron ore district.

This Report summarizes a National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects Mineral Resource estimation (MRE) for the Project (the Titac South MRE) and provides a technical summary of the relevant location, tenure, historical, and geological information, and recommendations for future exploration programs. This Report summarizes the technical information available up to the Effective Date of September 18, 2024.

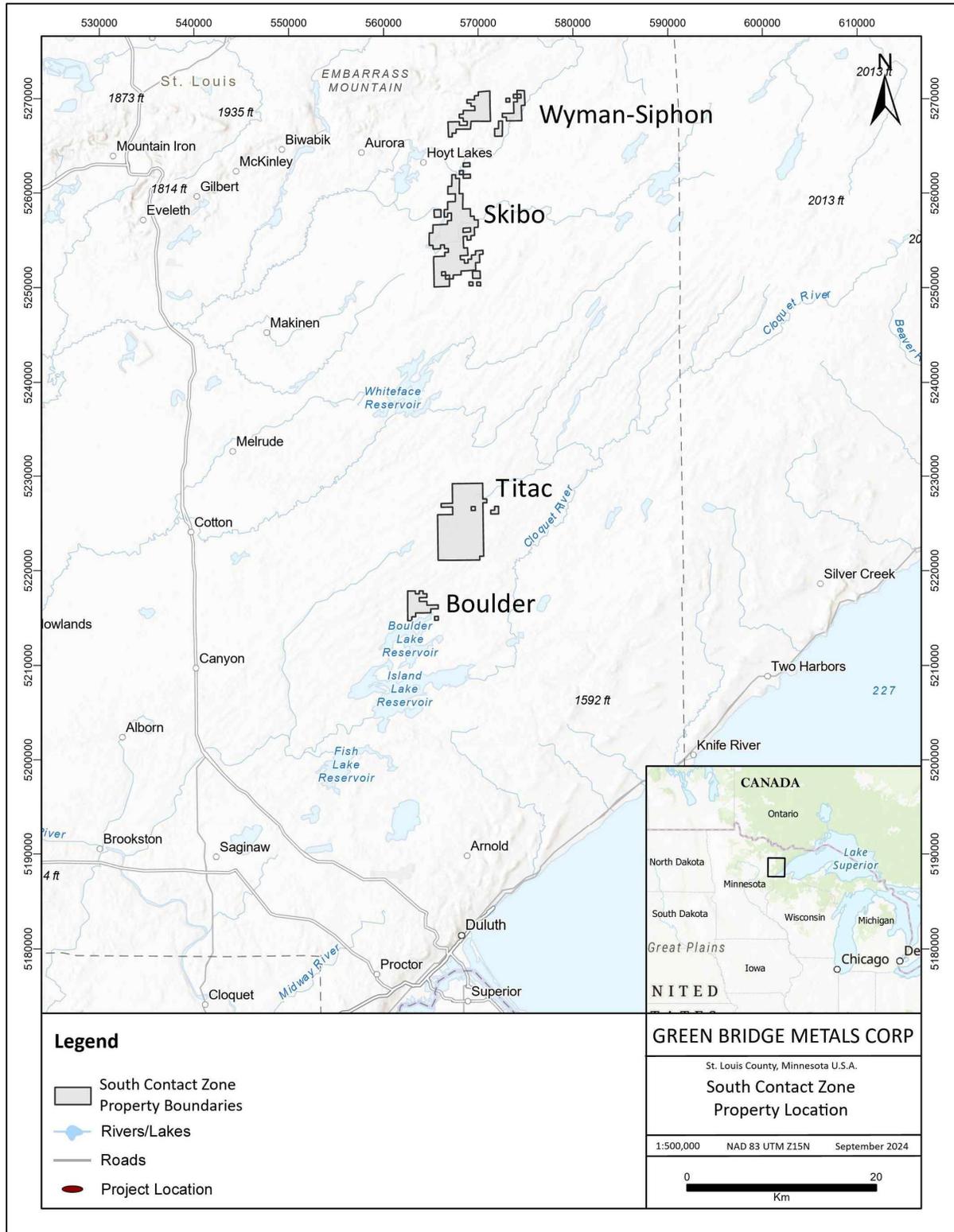
This Report was prepared by Qualified Persons (QPs) in accordance with disclosure and reporting requirements set forth in the NI 43-101 Standards of Disclosure for Mineral Projects (effective May 9, 2016), Companion Policy 43-101CP Standards of Disclosure for Mineral Projects (effective February 25, 2016), Form 43-101F1 (effective June 30, 2011) of the British Columbia Securities Administrators, the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Exploration Best Practice Guidelines (November 23, 2018), the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019) and the CIM Definition Standards (May 10, 2014).

2.2 Authors and Site Inspection

The authors of this Report (the authors or the QPs) are Mr. Michael B. Dufresne, M.Sc., P. Geol., P. Geo., Mr. Andrew J. Turner, B.Sc., P. Geol. P. Geo., Ms. Fallon T. Clarke, B.Sc., P. Geo., and Mr. Christian Bohm, PhD, P.Geo. of APEX. The authors are independent of the Issuer and are QPs as defined in NI 43-101. NI 43-101 and CIM define a QP as “an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a professional association.” The QPs and the Report sections for which they are taking responsibility are presented in Table 2.1.

Mr. Dufresne is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA; Member #: 48439), a Professional Geoscientist with Engineers and Geoscientists of British Columbia (EGBC; Member #: 37074), the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG; Member #: L3378), the Association of Professional Engineers & Geoscientists of New Brunswick (APEGNB; Member #: F6534) and the Professional Geoscientists of Ontario (PGO; Member #: 3903), and has worked as a mineral exploration geologist for

Figure 2.1 General location of the South Contact Zone Project.



more than 40 years since his graduation from university. Mr. Dufresne has been involved in all aspects of mineral exploration and Mineral Resource estimations for precious and base metal, titanium, and iron mineral projects and deposits in Canada and globally.

Table 2.1 Qualified Persons and division of responsibilities.

Qualified Person	Professional Designation	APEX Position	Report Section
Michael B. Dufresne	P.Geol., P.Geo.	Senior Consultant and Principal	1.7, 1.8, 12.2, 13, 14, 25.4-25.6, 26
Andrew J. Turner	P.Geol., P.Geo.	Senior Consultant and Principal	10-12.1, 12.3-12.4
Fallon T. Clarke	P.Geo.	Senior Geologist	1.1-1.3, 1.5-1.6, 2-6, 9, 23-24, 25.2-25.3, 27
Christian Bohm	P.Geo.	Senior Geologist	1.4, 7-8, 25.1

Mr. Turner is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA; Member #: 49901) and the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG; Member #: L2456). He has worked as a geologist for more than 30 years since his graduation. Mr. Turner has been involved in all aspects of mineral exploration and mineral resource estimations for precious and base metals, titanium, and iron ore projects and deposits in Canada, the United States, and Central and South America.

Ms. Clarke is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS; Member #: 27238). She has worked as a geologist for more than 12 years since her graduation from the University of Saskatchewan. Ms. Clarke has experience with exploration for precious metal, base metal and iron deposits of various deposit types in North America and Australia.

Mr. Bohm is a Professional Geologist with the Engineers Geoscientists Manitoba (EGM; Member #: 38564) and l'Ordre des Géologues du Québec (OGQ; Member #: 2442). He has worked as a geologist for more than 25 years since his graduation from ETH Zurich in Switzerland. Mr. Bohm's academic background is in structural geology, geochemistry and geochronology, and he has experience with exploration for precious metal, base metal and various deposit types in North America.

Mr. Dufresne completed a site inspection of the SCZ on August 19th –21st, 2024. The inspection was conducted to assess the current site conditions and access, as well as the SCZ geology, alteration, and mineralization, and to collect independent verification samples. As outcrops are rare in the SCZ, Mr. Dufresne was unable to observe or sample bedrock at the Property. The site visit entailed a tour of the Skibo, Wyman-Siphon, and Titac properties and review of historical drill core from Titac and Skibo. Quarter drill core samples were collected from Titac South drillholes TTC-009-2010, TTC-019-2010, and TTC-029-2010, and from Titac North drillhole TTC-005-2010. Four half core samples were collected from a previously unsampled portion of drillhole SK09-03 completed at the Skibo property. Observations and results from Mr. Dufresne's site visit and sampling verify the presence of Ti, Fe, V, and Cu mineralization at the Titac property, as well as base metal mineralization and elevated levels of platinum (Pt) and palladium (Pd) mineralization at the Skibo property. Mr. Turner, Ms. Clarke, and Mr. Bohm did not visit the Property, as Mr. Dufresne's site inspection was deemed sufficient by the QPs.

2.3 Sources of Information

This Technical Report is a compilation of proprietary and publicly available information, including a previous technical report on the Titac Property titled "Technical Report on the Titac Ilmenite Exploration Project,

Minnesota, USA” prepared for Cardero Resource Corp. by Farrow et al. (2012), as well as previous summary reports written on the Project by EMI. Additional information was sourced from Green Bridge publicly available company listings. Journal publications listed in Section 27 “References” were used to verify background geological information regarding the regional and local geological setting and mineral deposits of the SCZ.

The QPs have reviewed all government and miscellaneous reports, and commercial laboratory analytical data. The QPs have deemed that these reports and information, to the best of his knowledge, are valid contributions. The authors take ownership of the ideas and values as they pertain to the current Technical Report.

2.4 Units of Measure

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

- 1) Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006);
- 2) Bulk weight is presented in both United States short tons (tons; 2,000 lbs or 907.2 kg) and metric tonnes (tonnes; 1,000 kg or 2,204.6 lbs.);
- 3) Geographic coordinates are projected in the Universal Transverse Mercator (UTM) system relative to Zone 15 of the North American Datum (NAD) 1983; and,
- 4) Currency in Canadian dollars (CDN\$), unless otherwise specified (e.g., U.S. dollars, US\$).

3 Reliance on Other Experts

The QP is not qualified to provide an opinion or comment on issues related to legal agreements, mineral titles, royalties, permitting and environmental matters. Accordingly, the author disclaims portions of this Technical Report in Section 4, Property Description and Location.

The author relied on the Company to provide all pertinent information concerning the legal status of the Company. The author relied on the following documents to summarize the legal status and mineral tenure status of the SCZ in Section 4:

- Section 4.2.1: “Option and Earn-In Agreement” between Green Bridge Metals Corp. and Encampment Minerals Inc., dated May 8, 2024, provided to the QP by the Green Bridge management team via email on September 18, 2024.
- Section 4.2.2: “Mining Lease for the Titac Prospect” between RGGGS Land & Minerals Ltd. and Encampment Minerals Inc., dated May 1, 2016, provided to the QP by the Green Bridge management team via Dropbox on July 29, 2024.
- Section 4.2.3: “Mining Lease for the Wyman Creek Prospect” between RGGGS Land & Minerals Ltd. and Encampment Minerals Inc., dated December 1, 2007, provided to the QP by the Green Bridge management team via Dropbox on July 29, 2024.
- Section 4.2.4: “Mining Lease for the Skibo Prospect” between RGGGS Land & Minerals Ltd. and Encampment Minerals Inc., dated December 1, 2007, provided to the QP by the Green Bridge management team via Dropbox on July 29, 2024.
- Section 4.2.5: “Mining Lease for the Skibo South Prospect” between RGGGS Land & Minerals Ltd. and Encampment Minerals Inc., dated June 1, 2008, provided to the QP by the Green Bridge management team via Dropbox on July 29, 2024.

4 Property Description and Location

4.1 Description and Location

The SCZ Project is comprised of four non-contiguous properties, including (from north to south) Wyman-Siphon, Skibo, Titac, and Boulder. The SCZ covers a land position totaling 8,460 ha (20,905 acres) in St. Louis County, Minnesota. The SCZ properties are comprised of 40 Minnesota Department of Natural Resources (DNR) State Leases and 4 private leases with RGGGS Land and Minerals Ltd. (RGGGS), as listed in Tables 4.1 to 4.2 and shown in Figures 4.1 to 4.4.

The Project is located within seven Townships and Ranges, including Township 59N, Range 13W; Township 59N, Range 14W; Township 58N, Range 14W; Township 57N, Range 14W; Township 55N, Range 14W; Township 54N, Range 14W; and Township 53N, Range 14W. The Wyman-Siphon property is centered on Universal Transverse Mercator (UTM) grid coordinates 569534 m Easting (E) and 5268473 m Northing (N) (NAD 1983, Zone 15N). The Skibo property is centered on UTM grid coordinates 567424 m E and 5255073 m N. The Titac property is centered on UTM grid coordinates 568364 m E and 5224839 m N. The Boulder property is centered on UTM grid coordinates 563643 m E and 5216406 m N.

Table 4.1 State Mineral Leases and RGGGS Mining Leases, SCZ Project.

Type	Number	Acres	Hectares
Minnesota State Leases	40	12,743.53	5157.24
RGGGS Mining Leases	4	8,161.58	3302.95
Total	44	20,905.11	8460.18

Land in Minnesota is held by a combination of private, state, and federal ownership. The State of Minnesota leases state-owned mineral interests and surface interests for minerals exploration and mining through public sales and negotiations. Minnesota DNR is responsible for the issuing of state leases to explore, mine, and remove non-ferrous metallic minerals. State leases may be held for a period of up to 50 years. To keep state leases in good standing, quarterly and/or annual payments must be made to the State and/or County. Rental payments must be made to the State and are due quarterly, as follows: 1) USD\$1.50 per acre for years 1 to 3, 2) USD\$5.00 per acre for years 4 to 6, 3) USD\$15.00 per acre for years 7 to 11, and 4) USD\$30.00 per acre for years 12 and onwards. The SCZ State Leases are held by EMI and are currently in good standing.

State Leases in Minnesota grant the lessee the right to use surface lands owned by the State within the leased land. Where surface rights are owned by third parties, the State Leases provide that written notice to the owner of the surface estate must be provided at least 20 days in advance of surface activities and contemplate compensation payable by lessees to surface owners for any disturbance of the surface estate.

The State of Minnesota has an option to cancel a mineral lease after the end of the 20th year if, by that time, a lessee is not actively engaged in mining mineralized material under the lease from the mining unit, a mine within the same government township as the mining unit, or an adjacent government township, and has not paid at least USD\$100,000 to the State in earned royalty under a State Lease in any one calendar year. The State must exercise that option within the 21st year of the lease. If the State does not cancel within the 21st year, the lessee has until the end of the 35th calendar year to meet the conditions. If the lessee has not met the conditions by the end of the 35th year, the State has another window to cancel the lease during the 36th calendar year of the lease.

Table 4.2 SCZ Project State Leases. All leases are held by Encampment Minerals Inc.

Area	Section-Township-Range	Serial No.	Acres	Hectares	Date Leased	Term	Base Royalty	Additional Royalty
Wyman-Siphon	20-59-13	MLMB200290	240.00	97.13	2017-09-17	50 years	3.95%	0.720%
Wyman-Siphon	21-59-13	MLMB200091	160.00	64.75	2017-09-13	50 years	3.95%	0.720%
Wyman-Siphon	29-59-13	MLMB200292	480.00	194.25	2017-09-13	50 years	3.95%	0.720%
Wyman-Siphon	30-59-13	MLMB200293	40.00	16.19	2017-09-13	50 years	3.95%	0.720%
Wyman-Siphon	31-59-13	MLMB200294	240.00	97.13	2017-09-13	50 years	3.95%	0.720%
Wyman-Siphon	25-59-14	MM-10210-N	400.00	161.88	2008-09-11	50 years	3.95%	0.500%
Wyman-Siphon	26-59-14	MM-10211-N	40.00	16.19	2008-09-11	50 years	3.95%	0.500%
Skibo	03-57-14	MM-10207-N	320.00	129.50	2008-09-11	50 years	3.95%	0.400%
Skibo	04-57-14	MM-10208-N	359.20	145.37	2008-09-11	50 years	3.95%	0.400%
Skibo	09-57-14	MM-10209-N	240.00	97.13	2008-09-11	50 years	3.95%	0.400%
Skibo South	16-57-14	MM-10222-N	600.00	242.82	2009-03-12	50 years	3.95%	0.319%
Skibo	03-57-14-A	MM-10256-N	39.86	16.13	2009-12-15	50 years	3.95%	0.400%
Skibo	04-57-14-A	MM-10257-N	159.20	64.43	2009-12-15	50 years	3.95%	0.400%
Skibo	10-57-14-A	MM-10258-N	400.00	161.88	2009-12-15	50 years	3.95%	0.400%
Skibo	22-58-14	MM-10293	400.00	161.88	2010-02-26	50 years	3.95%	0.741%
Skibo	27-58-14	MM-10294	40.00	16.19	2010-02-26	50 years	3.95%	0.741%
Skibo	33-58-14	MM-10295	240.00	97.13	2010-02-26	50 years	3.95%	0.741%
Skibo	02-57-14	MM-10470	200.00	80.94	2013-10-26	50 years	3.95%	0.510%
Skibo	11-57-14	MM-10472	40.00	16.19	2013-10-26	50 years	3.95%	0.510%

Area	Section-Township-Range	Serial No.	Acres	Hectares	Date Leased	Term	Base Royalty	Additional Royalty
Skibo	21-57-14	MM-10477	520.00	210.44	2013-10-26	50 years	3.95%	0.510%
Skibo	23-57-14	MM-10479	240.00	97.13	2013-10-26	50 years	3.95%	0.510%
Skibo	14-58-14	MM-10483	160.00	64.75	2013-10-26	50 years	3.95%	0.510%
Skibo	15-58-14	MM-10484	80.00	32.38	2013-10-26	50 years	3.95%	0.510%
Titac	02-054-14	MLM200037	400.00	161.88	2016-03-03	50 years	3.95%	0.551%
Titac	11-054-14	MLM200038	400.00	161.88	2016-03-03	50 years	3.95%	0.551%
Titac	14-054-14	MLM200039	320.00	129.50	2016-03-03	50 years	3.95%	0.551%
Titac	21-054-14	MLM200040	640.00	259.00	2016-03-03	50 years	3.95%	0.551%
Titac	22-054-14	MLM200041	640.00	259.00	2016-03-03	50 years	3.95%	0.551%
Titac	23-054-14	MLM200042	560.00	226.63	2016-03-03	50 years	3.95%	0.551%
Titac	35-055-14	MLM200043	320.00	129.50	2012-03-03	50 years	3.95%	0.551%
Titac	3-54-14	MM-10283	320.00	129.50	2010-02-26	50 years	3.95%	0.741%
Titac	9-54-14	MM-10285	600.00	242.82	2010-02-26	50 years	3.95%	0.741%
Titac	10-54-14	MM-10286	480.00	194.25	2010-02-26	50 years	3.95%	0.741%
Titac	15-54-14	MM-10287	318.00	128.69	2010-02-26	50 years	3.95%	0.741%
Titac	16-54-14	MM-10288	640.00	259.00	2010-02-26	50 years	3.95%	0.741%
Titac	34-55-14	MM-10290	120.00	48.56	2010-02-26	50 years	3.95%	0.741%
Boulder North	5-53-14	MM-10279	80.00	32.38	2010-02-26	50 years	3.95%	0.741%
Boulder North	6-53-14	MM-10280	535.35	216.65	2010-02-26	50 years	3.95%	0.741%
Boulder North	7-53-14	MM-10281	451.92	182.89	2010-02-26	50 years	3.95%	0.741%
Boulder North	8-53-14	MM-10282	280.00	113.31	2010-02-26	50 years	3.95%	0.741%

Figure 4.1 Wyman-Siphon property land tenure, SCZ.

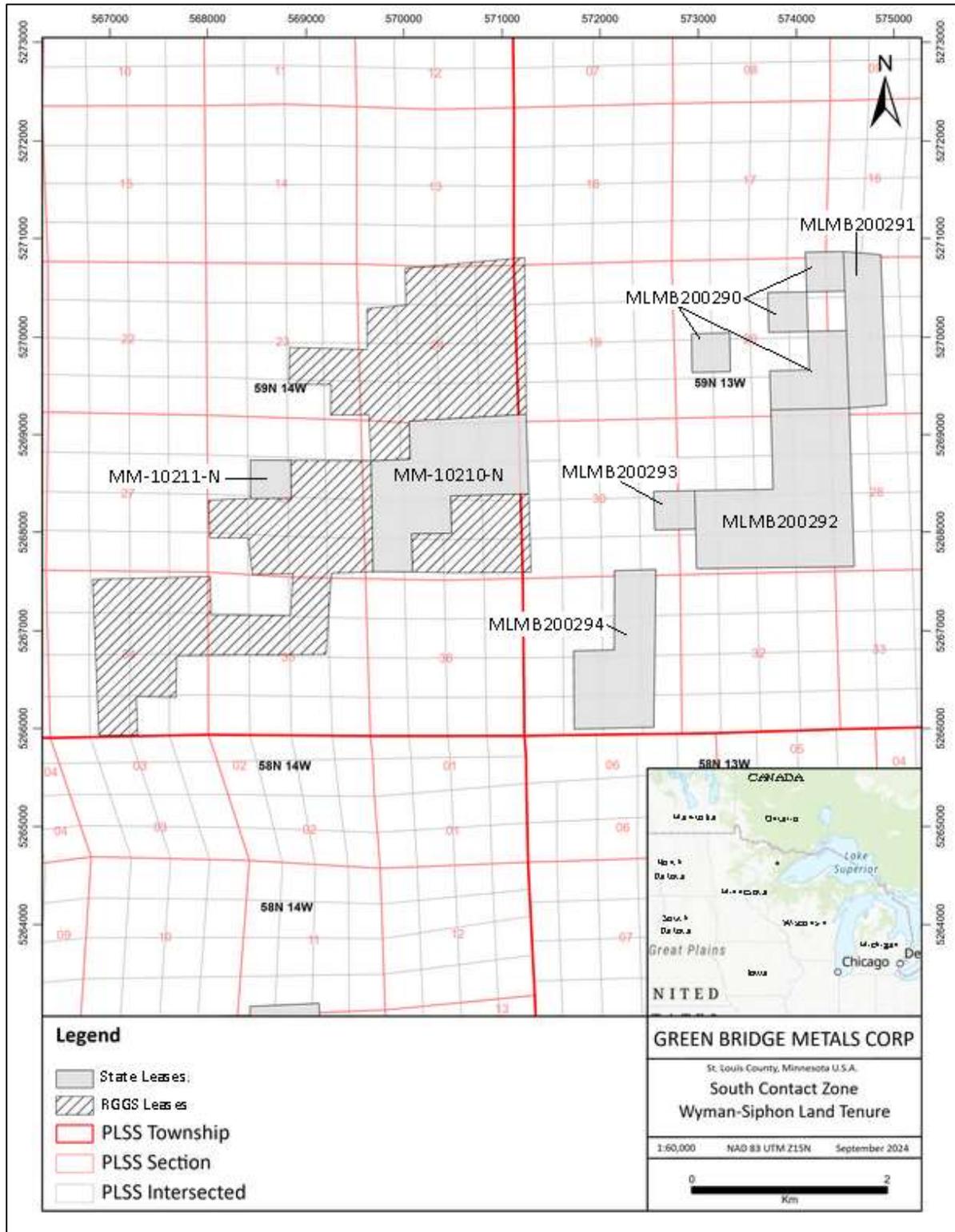


Figure 4.2 Skibo property land tenure, SCZ.

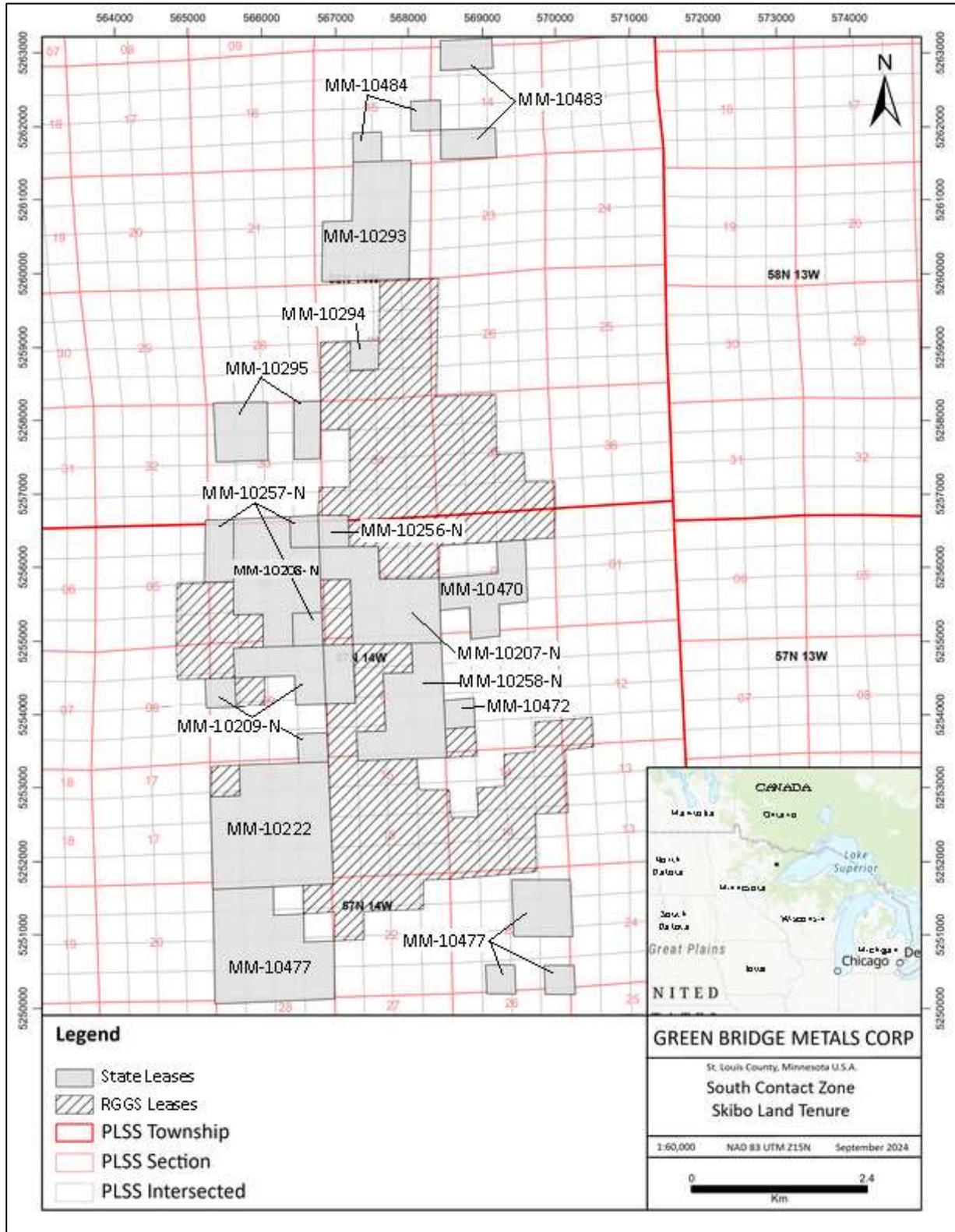


Figure 4.3 Titac property land tenure, SCZ.

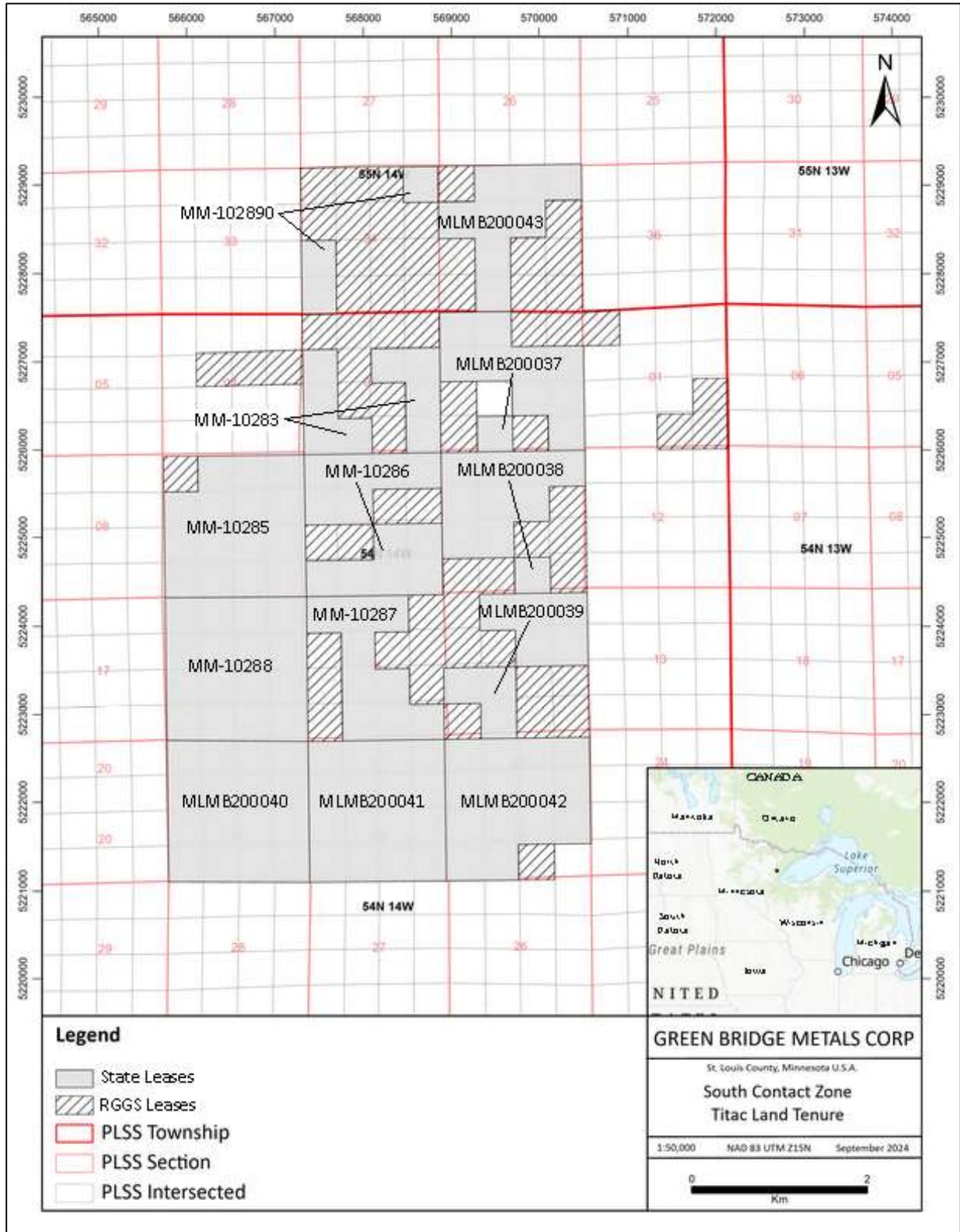
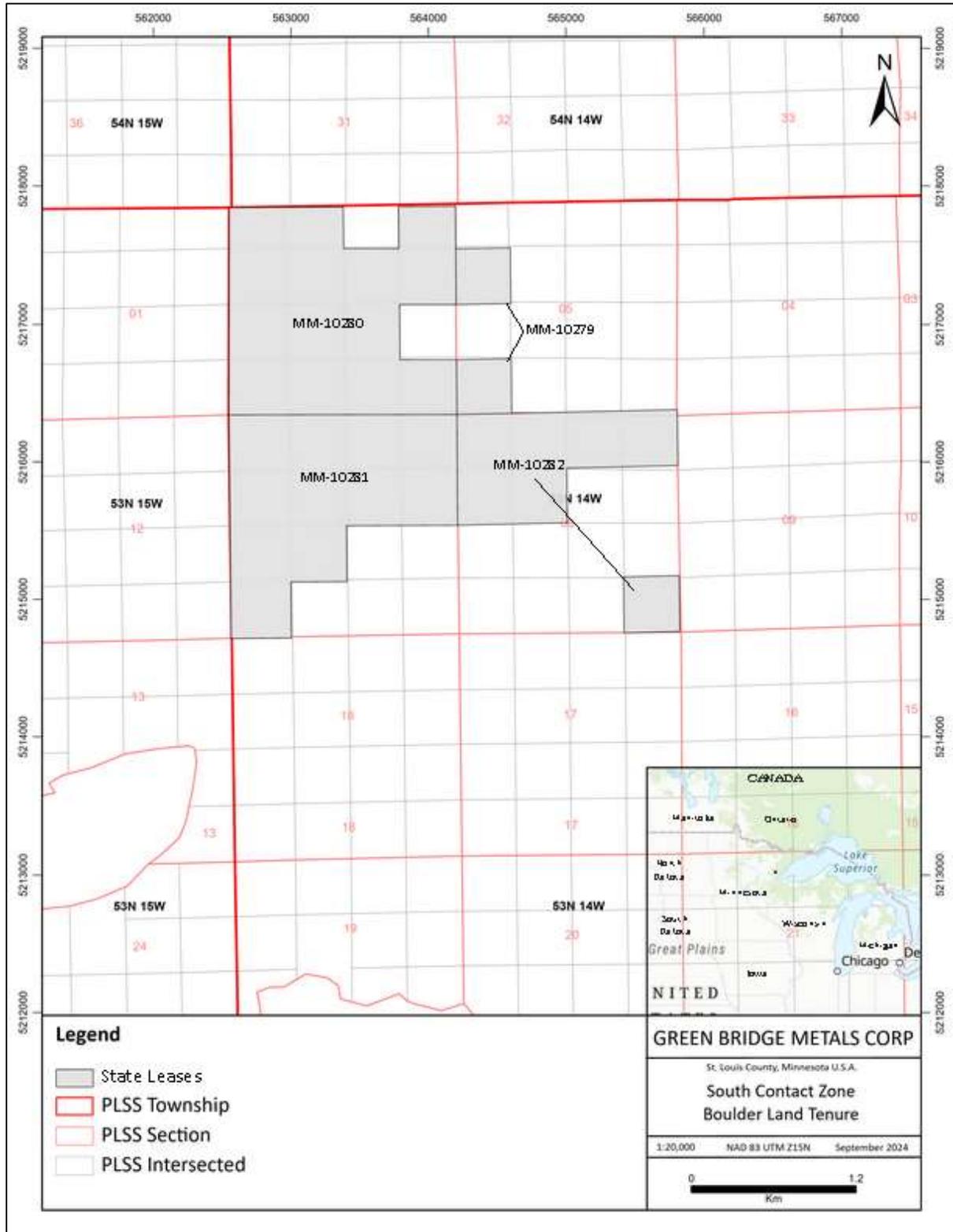


Figure 4.4 Boulder property land tenure, SCZ.



4.2 Royalties and Agreements

4.2.1 Option Agreement

On May 8, 2024, Green Bridge entered into an option agreement with Encampment Minerals Inc. (EMI), a privately owned USA corporation, whereby Green Bridge was granted the option to acquire an 80% interest in the South Contact Zone Project (SCZ). The closing date of the agreement was June 19, 2024. Pursuant to the terms of the agreement, to earn a 60% interest in the SCZ, the Company is required to incur the following exploration expenditures totaling USD\$12,650,000 over a four year period:

- A minimum of USD\$1,275,000 prior to the first anniversary of the closing date of the agreement;
- A minimum of USD\$2,900,000 prior to the second anniversary of the closing date of the agreement;
- A minimum of USD\$6,150,000 prior to the third anniversary of the closing date of the agreement; and
- A minimum of \$USD2,325,000 prior to the fourth anniversary of the closing date of the agreement.

Upon completing the option to earn the 60% interest in the SCZ, Green Bridge has the option to earn an additional 20% interest in the SCZ through payment of USD\$4 million dollars cash, completion of a NI 43-101 technical report on the SCZ Project, and by incurring expenses of USD\$10 million dollars within a period of two years from the date whereby the first 60% interest is earned.

Furthermore, upon completion of the initial 60% interest, Green Bridge has the option of entering into a joint venture agreement with EMI (Green Bridge Metals, 2024).

EMI's interest in the SCZ may not be diluted to less than 8% interest in the SCZ (the EMI dilution cap). In the event that EMI's interest is reduced to 8% interest, Green Bridge shall have the right, at its sole discretion, to purchase the remainder of EMI's interest in the SCZ (the carried interest buyout right) at a purchase price that equals 8% of the undiscounted net present value of the SCZ. The purchase price may be made in 50% cash and 50% cash and/or shares in Green Bridge's election (Green Bridge Metals, 2024b).

4.2.2 Wyman Mining Lease

EMI entered into a Mining Lease agreement with RGGS Land & Minerals Ltd. (RGGS) on December 1, 2007, over an aggregate of approximately 1,760 acres (712.2 ha) of mineral rights located in sections 23 to 26 and 34 to 35 of Township 59 North, Range 14 West, St. Louis County. The mining lease includes any mineral substance of a metalliferous nature, including those intermingled or associated materials or substances recovered from each ton of crude ore, except iron ores and taconite ores.

The initial term of the mining lease is for a period of 20 years, commencing December 1, 2007, provided that the lease may be extended for an additional 5 year period if EMI gives notice at least 180 days prior to the end of such term, and has either paid to the owner at least USD\$10,000,000 in royalties or pays to the owner the difference between the royalties actually paid and USD\$10,000,000. In like manner, the lease can be extended for up to three additional 5 year terms for a total lease term of 40 years, provided that the appropriate notice is given and that EMI has paid to the owner at least USD\$5,000,000 in royalties during the previous 5 year term (or pays any deficiency in cash).

Regarding royalties, EMI shall pay to RGGS a non-recoverable payment of USD\$2,500 and rental fees as shown in Table 4.3.

These rental payments cease upon the commencement of commercial production, following which yearly minimum royalty payments of USD\$200,000 apply. Following the commencement of commercial production, EMI is required to pay 5% of the net return values on product obtained from the lease area.

Table 4.3 Royalty payment schedule: Wyman, Skibo, Skibo South mining leases.

Anniversary (Years)	Amount USD\$
1-2	\$2 per acre or \$2,500 (whichever is greater)
3-5	\$5 per acre or \$5,000 (whichever is greater)
6-10	\$10 per acre or \$7,500 (whichever is greater)
11-15	\$25 per acre or \$10,000 (whichever is greater)
16-20	\$50 per acre or \$50,000 (whichever is greater)

4.2.3 Skibo Mining Lease

EMI entered into a Mining Lease agreement with RGGGS on December 1, 2007, over an aggregate of approximately 1,881.6 acres (761.5 ha) of mineral rights located in sections 2 to 4 of Township 57 North and sections 27, 34 and 35 of Township 58 North, both in Range 14 West, St. Louis County. The mining lease includes any mineral substance of a metalliferous nature, including those intermingled or associated materials or substances recovered from each ton of crude ore, except iron ores and taconite ores.

The initial term of the mining lease is for a period of 20 years, commencing December 1, 2007, provided that the lease may be extended for an additional 5 year period if EMI gives notice at least 180 days prior to the end of such term, and has either paid to the owner at least USD\$10,000,000 in royalties or pays to the owner the difference between the royalties actually paid and USD\$10,000,000. In like manner, the lease can be extended for up to three additional 5 year terms for a total lease term of 40 years, provided that the appropriate notice is given and that EMI has paid to the owner at least USD\$5,000,000 in royalties during the previous 5 year term (or pays any deficiency in cash).

Regarding royalties, EMI shall pay to RGGGS a non-recoverable payment of USD\$2,500 and rental fees as shown above in Table 4.3.

These rental payments cease upon the commencement of commercial production, following which yearly minimum royalty payments of USD\$200,000 apply. Following the commencement of commercial production, EMI is required to pay 5% of the net return values on product obtained from the lease area.

4.2.4 Skibo South Mining Lease

EMI entered into a Mining Lease agreement with RGGGS on June 1, 2008, over an aggregate of approximately 1,760 acres (712.2 ha) of mineral rights located in sections 5, 8 to 12, 14 to 15, 21 and 22 of Township 57 North, Range 14 West, St. Louis County. The mining lease includes any mineral substance of a metalliferous nature, including those intermingled or associated materials or substances recovered from each ton of crude ore, except iron ores and taconite ores.

The initial term of the mining lease is for a period of 20 years, commencing December 1, 2007, provided that the lease may be extended for an additional 5 year period if EMI gives notice at least 180 days prior to the

end of such term, and has either paid to the owner at least USD\$10,000,000 in royalties or pays to the owner the difference between the royalties actually paid and USD\$10,000,000. In like manner, the lease can be extended for up to three additional 5 year terms for a total lease term of 40 years, provided that the appropriate notice is given and that EMI has paid to the owner at least USD\$5,000,000 in royalties during the previous 5 year term (or pays any deficiency in cash).

Regarding royalties, EMI shall pay to RGGGS a non-recoverable payment of USD\$3,930 and rental fees as shown above in Table 4.3.

These rental payments cease upon the commencement of commercial production, following which yearly minimum royalty payments of USD\$200,000 apply. Following the commencement of commercial production, EMI is required to pay 5% of the net return values on product obtained from the lease area.

4.2.5 Titac Mining Lease

EMI entered into a Mining Lease agreement with RGGGS on May 1, 2016, over an aggregate of approximately 2,760 acres (1,117 ha) of mineral rights located in sections 1 to 4, 9 to 11, 14 to 15, and 23 of Township 54 North and sections 34 and 35 of Township 55 North, all Range 14 West, St. Louis County. The mining lease includes any mineral substance of a metalliferous nature, including iron, titanium, vanadium, copper, nickel, cobalt, silver, gold, platinum group metals, and other metallic minerals.

The initial term of the mining lease is for a period of 20 years, commencing May 1, 2016, provided that the lease may be extended for an additional 5 year period if EMI gives notice at least 180 days prior to the end of such term, and has either paid to the owner at least USD\$10,000,000 in royalties or pays to the owner the difference between the royalties actually paid and USD\$10,000,000. In like manner, the lease can be extended for up to three additional 5 year terms for a total lease term of 40 years, provided that the appropriate notice is given and that EMI has paid to the owner at least USD\$5,000,000 in royalties during the previous 5 year term (or pays any deficiency in cash).

Regarding royalties, EMI shall pay to RGGGS a non-recoverable payment of USD\$5,000 and rental fees as shown in Table 4.4.

Table 4.4 Royalty payment schedule, Titac Mining Lease.

Anniversary (Years)	Amount USD\$
1,2	\$5,000
3-5	\$10,000
6-8	\$20,000
9	\$30,000
10-20	\$50,000

These rental payments cease upon the commencement of commercial production, following which yearly minimum royalty payments of USD\$200,000 apply. Following the commencement of commercial production, EMI is required to pay a royalty of USD\$0.85 per ton of crude iron ore (adjusted quarterly based on variation in the quoted price of certain iron ore products) and 5% of the net return values (calculated in accordance with the provisions of the lease) for any other products produced (subject to a minimum royalty of USD\$0.02 per pound of titanium).

EMI is currently behind in its work commitment required by the various RGGs leases. As of December 31, 2023, EMI was in arrears by approximately USD\$80,000. By May 1, 2024, EMI will be in arrears by approximately an additional USD\$50,000 for the leases in this Agreement, bringing the total arrears to approximately USD\$130,000. EMI has a Letter of Understanding effective January 1, 2023, with RGGs concerning work commitments on the RGGs leases.

4.2.6 State Lease Royalties

Production royalties are included in the State Leases and comprise a base rate of 3.95%, as well as an additional bid rate which is multiplied by the net return value of metallic minerals and associated mineral products recovered from each ton of dried crude ore. The additional bid rate varies between each State Lease. The production royalties for each State Lease are presented above in Table 4.2.

4.3 Environmental Liabilities, Permitting and Significant Factors

The SCZ is an early-stage exploration project. Prior to commencing exploration work in Minnesota, the Company must submit an exploration plan to the Minnesota Department of Natural Resources (DNR) for review and approval. After receipt of the exploration plan, the DNR has up to 20 calendar days to complete a review. Part of the review process includes sending the exploration plan to potentially impacted administrators, including the county, and DNR Forestry, Wildlife, and Fisheries. The Company must be a Licensed Explorer Company with the MDH and a Licensed Exploratory Borer with the Minnesota DNR to conduct drilling activities at the SCZ. In addition, a permit for drilling in wetlands from the U.S. Army Corp of Engineers is required to work on specific properties within the SCZ, and a Storm Water Pollution Prevention Plan from the Minnesota Pollution Control Agency is required for each property.

SCZ properties with approved exploration plans include Skibo North (State Lease MM-10207 and RGGs Lease), Skibo South (partially controlled by State Lease MM-10258-N), and Siphon East (State Lease MM-10210). U.S. Department of Agriculture Forest Service (USFS) access road permits have been approved for Skibo North (State Lease MM-10207 and RGGs Lease), Skibo South (partially controlled by State Lease MM-10258-N), Siphon West (RGGs Lease), and Siphon East (State Lease MM-10210). USFS Plan of Operations (POO) have been submitted and are pending approval for Skibo North, Skibo South, Siphon West, and Siphon East. EMI has an approved MN DNR permit as an Explorer that is Engaged in Exploration Boring that was approved on June 26, 2023; however, it must be renewed annually.

Exploration plans for Boulder Creek East and Titac South will need to be granted prior to any future work.

To the best of the QP's knowledge, there are no other environmental liabilities, or other significant factors and risks other than discussed above, that would affect the Company's ability to perform work at the Property.

5 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

5.1 Accessibility

Accessibility to the four property areas of the SCZ is generally very good, with full access provided by paved county roads, or a combination of partial access by paved roads and maintained forestry service roads (Figure 2.1).

The Wyman-Siphon property is located approximately 7 km northeast of the nearby city of Hoyt Lakes, Minnesota. Access to Wyman-Siphon from Hoyt Lakes is along Kennedy Memorial Drive, head east to the intersection with Dorchester Drive, turn left and continue on Dorchester Drive for 350 m to the intersection with Kensington Dr., turn right and continue on Kensington Drive/County Road 666 for 3.6 km. At the intersection with Forestry Road 117, turn right off of County Road 666, and follow for 2 km to reach the outskirts of the Wyman-Siphon property area.

The Skibo property is located approximately 21 km southeast of the nearby city of Hoyt Lakes, Minnesota. Access to Skibo from Hoyt Lakes is along Kennedy Memorial Drive, head east following Kennedy Memorial Drive which becomes the Superior National Forest Scenic Byway or Lake County Highway 15 outside of the city for approximately 13.4 km. Turn right at the intersection with Forest Route 129 and follow this west for 7.7 km to reach the center of the Skibo property.

The Titac property is located approximately 45 km north of the city of Duluth, Minnesota. Access to the property from Duluth is north along Mesaba Avenue for 3 km. At the intersection with West Arrowhead Road turn left and proceed west for 290 m to the intersection with Rice Lake Road. At Rice Lake Road, turn right and proceed north-northwest for 28.4 km where the road becomes Rudy Perpich Memorial Drive/Vermilion Trail. Proceed north on Rudy Perpich Memorial Drive/Vermilion Trail for 12 km to reach the center of the Titac property.

The Boulder property is located approximately 45 km northwest of the city of Duluth, Minnesota. Access to the property from Duluth is north along Mesaba Avenue for 3 km. At the intersection with West Arrowhead Road turn left and proceed west for 290 m to the intersection with Rice Lake Road. At Rice Lake Road, turn right and proceed north-northwest for 28.4 km where the road becomes Rudy Perpich Memorial Drive/Vermilion Trail. Proceed north for a further 6.7 km and turn left at the intersection with 3 Lakes Road and continue west for 4.8 km to the northern outskirts of the Boulder property.

5.2 Site Topography, Elevation and Vegetation

The SCZ Project has generally low topographic relief characterized by flat-lying ground with elevations ranging from approximately 430 m to 485 m.

The lowest elevations are found on the Boulder property, with the Wyman-Siphon, Skibo, and Titac properties having elevations greater than 455 m to the upper limit of 485 m. Ground cover in the area is a mixture of marsh and forested wetlands at lower elevations, and dry forested ground at higher elevations. Various small creeks, waterways, and rivers cross the various properties; the Partridge River and Wyman Creek cross the Wyman-Siphon property, the St. Louis River crosses the Skibo property, Bug Creek and Boulder Creek cross the Titac property, and drainages leading into the Boulder Lake Reservoir cross the Boulder property. The Wyman-Siphon property boundaries are near to both the Longnose and Wetlegs Creeks which flow into the

Partridge River. Nearby major water features to the Boulder property include the Boulder Lake Reservoir which feeds into Island Lake Reservoir with its connected network of reservoir lakes and waterways.

The Wyman-Siphon and Skibo properties lie within the Superior National Forest which comprises 1.2 million hectares and is administered by the United States Forest Service (USFS). The Titac and Boulder properties lie within the Cloquet Valley State Forest which comprises 132,000 hectares and is administered by the Minnesota DNR.

The bedrock underlying the four project areas is almost entirely overlain by overburden composed of pebbles, cobbles, and boulders with a mixed sand and clay matrix. This overburden is interpreted to be of glacial origin and is approximately 20 m to 30 m thick in most places.

5.3 Climate

The climate in northeastern Minnesota is classified as continental. Winter conditions usually begin in mid-November and last until mid-March. During winter conditions in northeastern Minnesota, the majority of precipitation falls as snow and the ground is frozen. Northern Minnesota averages 140 days of snow cover each year, with an average of two blizzards per winter season. Spring thaw conditions generally begin in mid-March and end in late April. Dry, stable spring, summer, and fall conditions occur from the end of spring thaw in April to the onset of winter conditions in November. The average high, low, and precipitation per month for the Hoyt Lakes area is found below in Table 5.1

Table 5.1 Average monthly temperatures and precipitation for Hoyt Lakes, Minnesota.

Month	Average High Temperature (°C)	Average Low Temperature (°C)	Average Precipitation (cm)
January	-9	-19	27
February	-6	-18	28
March	3	-9	27
April	9	-2	27.3
May	17	4	9.3
June	22	10	9.5
July	25	13	6.4
August	24	12	5.9
September	19	7	8.5
October	11	2	10.1
November	3	-5	17.6
December	-6	-15	26

Source: The Weather Network (2024)

5.4 Local Resources and Infrastructure

Several nearby population centers are located in close proximity to the SCZ. This includes the city of Hoyt Lakes, Minnesota, which is located approximately 7 km from the Wyman-Siphon project area and 21 km from the Skibo project area, with a population of 2,020 in 2020. Additionally, the city of Duluth, Minnesota, which is located approximately 45 km from the Titac and Boulder project area, with a population of 88,697 in 2020. Other nearby communities include Aurora (population of 1,678 in 2020), Biwabik (population of 961 in 2020), and Two Harbors (population of 3,633 in 2020). Other cities in the area include Virginia (population of 8,423 in 2020) and Hibbing (population of 16,214 in 2020).

Air travel is easily accommodated in northeastern Minnesota with three significant airports located within 100 km of the city of Hoyt Lakes. These include Eveleth Virginia Municipal Airport in Virginia, Minnesota, the Range Regional Airport in Hibbing, Minnesota, and Duluth International Airport in Duluth, Minnesota. The Minneapolis-Saint Paul International Airport is approximately 325 km south of the city of Hoyt Lakes and offers connecting flights to the airports in both Duluth and Hibbing.

The infrastructure in northeastern Minnesota includes paved state and county highways, access to railroads, international shipping ports, grid electricity, trained mining personnel and professionals, and numerous mining equipment suppliers. International shipping ports are located along the northern shores of Lake Superior which include Duluth-Superior, Two Harbors, and Silver Bay that are linked to an already connected rail system.

The Syl Laskin Energy Center is located 2 km northeast of Hoyt Lakes, Minnesota and is capable of providing 116 megawatts of electric service. The Laskin Energy Park (located next to the Laskin Energy Center) is a provider of natural gas, water, wastewater, and industrial steam power services. The Laskin Energy Park is serviced by a railway system that is interconnected with the surrounding area.

The lands around the project areas are generally a mix of rural homestead, seasonal, and recreational properties. Some of the lands to the north and northwest of the Wyman-Siphon project area are owned and operated by the PolyMet Erie Plant. This is an extensive processing facility with crushing, milling, tailings, and extensive mining infrastructure. Within the project areas of Wyman-Siphon, Skibo, Titac, and Boulder, the land ownership is a mix of private, State, and United States Forest Service holdings.

Based on the location, access, and climate, exploration and mining work at the SCZ can be conducted year-round. There are no other significant factors or risks that the QP is aware of that would affect access or the ability to perform work on the Project. In the opinion of the QP, the Project is of sufficient size to accommodate potential exploration and mining facilities, including waste rock disposal, potential tailings storage areas, and processing infrastructure.

6 History

The South Contact Zone is situated in northeastern Minnesota along the southern basal contact of the Duluth Complex. Exploration of the Duluth Complex dates back to the latter part of the 1800s, with the discovery of significant titaniferous iron deposits in the area. Further exploration in the mid to late 1900s uncovered additional deposits of copper, nickel, and PGE in the Duluth Complex. Several copper-nickel and platinum group element deposits such as Mesaba, NorthMet, and Maturi (Minnesota Department of Natural Resources, 2024) are located north of the Project area within the Duluth Complex (off-Property). These deposits follow a trend of mafic flows, intrusives, and related sedimentary rocks that cut into basement rock during the development of the Mesoproterozoic Midcontinental Rift.

Up until the late 1940s, exploration in the Duluth Complex was focused on disseminated low grade copper-nickel mineralization. In 1967, several companies started exploration campaigns to investigate magnetic anomalies from Minnesota State geophysical surveys. This led to drilling in the southern part of the Duluth Complex which in many places intersected weak sulphide mineralization, in addition to plugs of oxide-bearing ultramafic intrusions (OUIs). The following section summarizes exploration completed within SCZ properties.

6.1 Titac

Historically, the Titac property of the SCZ (Titac) was known as Section 34 and was explored by United States Steel Corp (USSC) in the 1960s.

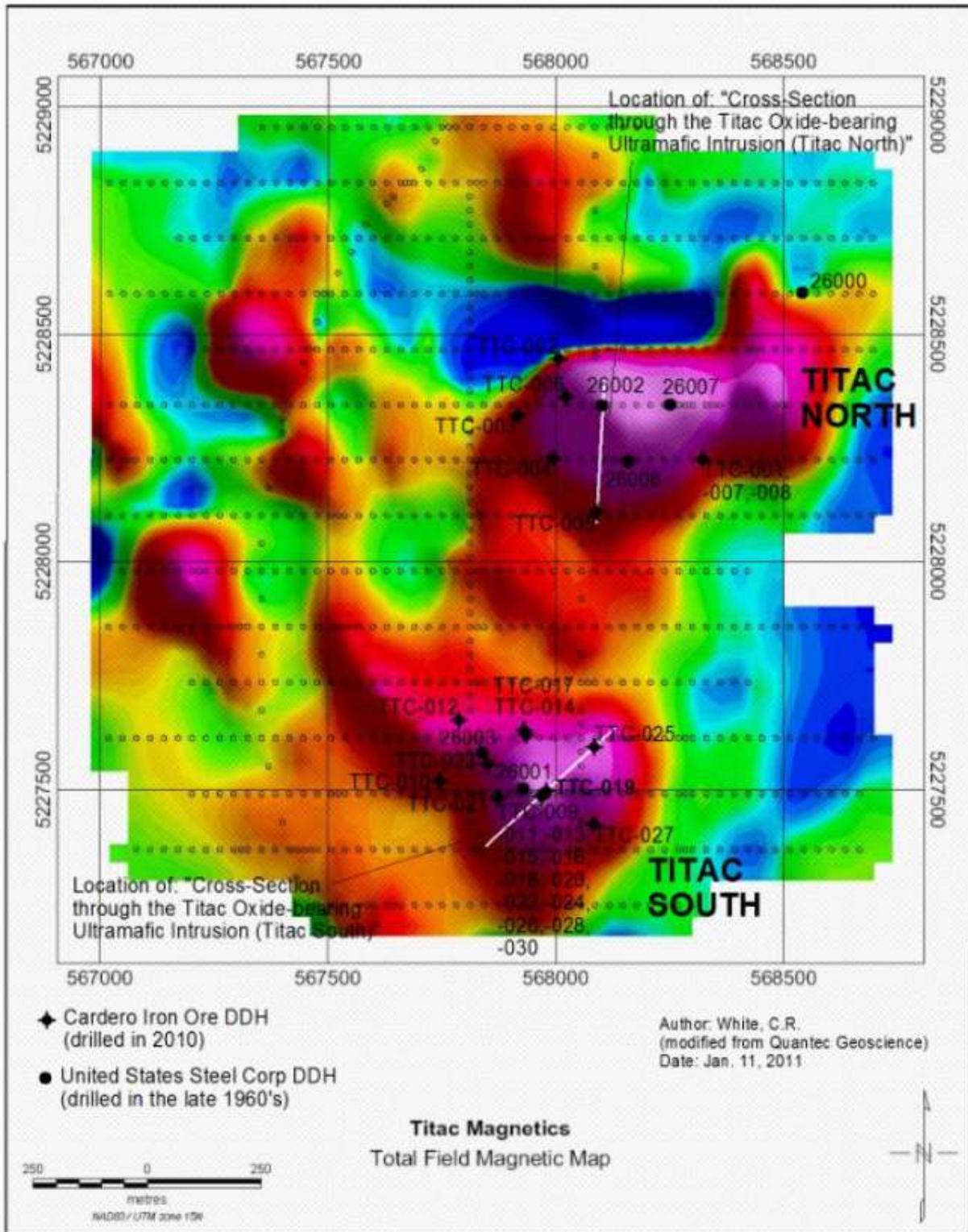
Interest was first sparked at Titac by data garnered from airborne Barringer geophysical surveys that were commissioned by USSC in 1966 (Severson and Heine, 2007). This led to a ground magnetic study that was conducted in 1967. The geophysical surveys delineated several magnetic anomalies and led to a diamond drilling program.

In 1967 to 1968, USSC completed six diamond drillholes for 1,172 m at Titac (drillhole IDs 26000 to 26008). Of these drillholes, two holes were drilled at the “Titac South” intrusion, three holes at the “Titac North” intrusion, and one hole was drilled to the northeast of the “Titac North” intrusion. The three “Titac North” holes were drilled vertically and intersected titanium-iron oxide mineralization. The two “Titac South” holes were drilled vertically and intersected intervals of titanium-iron oxide mineralization. The one hole drilled to the northeast of the intrusion was angled and missed any significant mineralization zones (Farrow et al., 2012). The Titac magnetics and locations of the historical drillholes are presented in Figure 6.1, with cross-sectional views of Titac North and Titac South illustrated in Figures 6.2 and 6.3, respectively. The results of the Titac drilling by USSC were not used in the Titac South MRE detailed below in Section 14. In addition to the geophysical programs and diamond drilling, USSC completed limited metallurgical testing on drill material taken from “Titac North”, as summarized below in Section 13.

In 2004, USX Corporation (USSC parent company) sold most of the mineral rights that were held by USSC to RGGGS Lands and Minerals Ltd., a Houston-based land holding company (Severson & Heine, 2007). This included the Titac property.

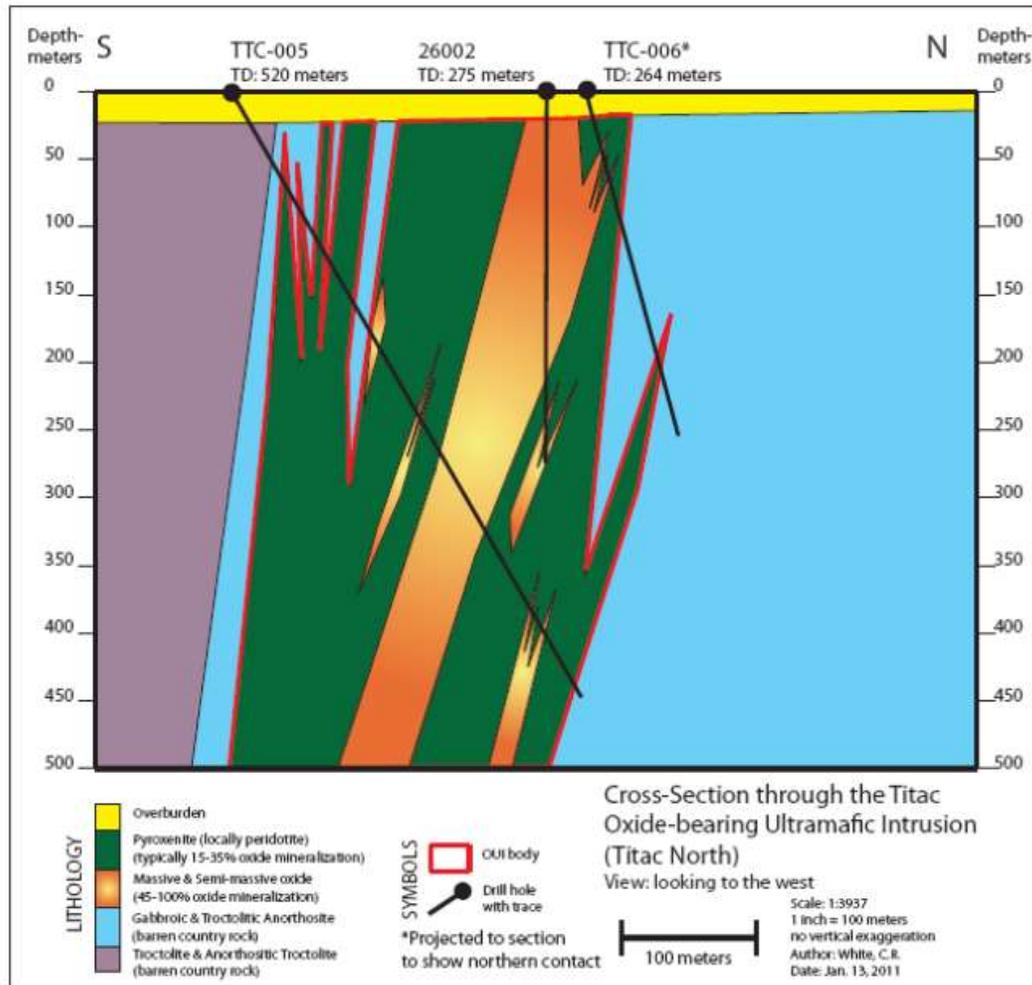
Cardero Iron Ore USA Inc. (Cardero) acquired the mineral leases for the Titac properties from RGGGS in 2009. Review and reinterpretation of exploration data that was gathered by USSC re-confirmed the presence of multiple titaniferous intrusions at Titac and led to a diamond drilling program. Cardero’s reinterpretation of the 1967 ground magnetic data and historical drilling at Titac is shown in Figure 6.1.

Figure 6.1 Total field magnetics and historical drill collars at Titac.



Source: Farrow et al. (2012)

Figure 6.2 Schematic cross section showing historical drillholes TTC-005, 26002, TTC-006 at Titac North.



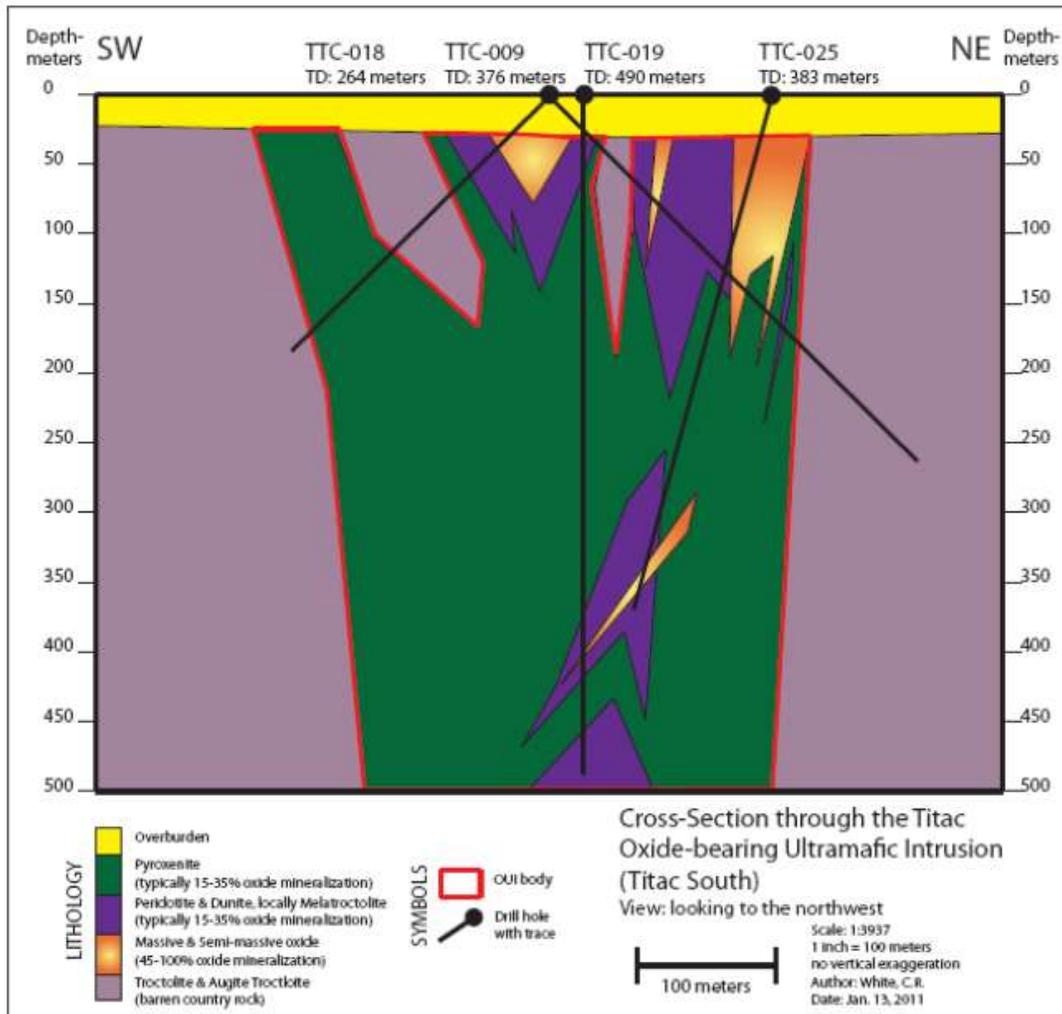
Source: Farrow et al. (2012)

Between February 2010 and April 2011, 32 diamond drillholes were completed by Idea International Drilling Ltd on behalf of Cardero for a total of 11,034 m (Figures 6.1 to 6.3; Farrow et al., 2012). The result of this drilling confirmed titanium-iron oxide mineralization in the project area, as detailed in Section 10 of this Report, and led to the calculation of a historical MRE for Titac South (Section 6.1.1.) No further exploration work was undertaken by Cardero, and the property was abandoned in 2015.

In 2016, EMI acquired the lease for Titac from RGGS. EMI re-analysed the historical drilling data, conducted petrographic analysis on fifteen rocks from two drillholes at Titac, and completed relogging and resampling of select holes previously drilled by Cardero (Crawford, 2018; DeMatties, 2018). Drillhole TTC-019-2010 was completely re-logged and drillhole TTC-012-2010 was partially re-logged by EMI.

The petrographic analysis used fifteen rock samples containing representative Fe-T-V mineralization styles from drillholes TTC-005 and TTC-009. The aim of the petrographic work was to determine if: 1) titanium and vanadium are cleanly separated into different minerals; 2) obvious impurities such as chrome and magnesium are present; and 3) copper is present.

Figure 6.3 Schematic cross section showing historical drillholes TTC-009, 018, 019, 029 at Titac South.



Source: Farrow et al. (2012)

The petrographic analysis indicates that further work is needed to define if the drillholes intersected different intrusions, or different zones with the intrusions with varying mineral characteristics, as the results from each drillhole are dissimilar. The results of the petrographic analysis are summarized from Crawford (2018) as follows:

- Drillhole TTC-005
 - Clinopyroxene rich and categorized as a clinopyroxenite rock containing 10-95% Fe-Ti oxide minerals that comprise a mixture of ilmenite and vanadiferous titanomagnetite (a Fe-Ti-V oxide mineral)
 - Ratio of ilmenite to vanadiferous titanomagnetite averages 1.5:1 and ranges from 1:1 to 4:1
 - The ilmenite is coarse grained and free of inclusion. Compared to the vanadiferous titanomagnetite it is relatively high in Ti and low in Fe and V.

- The vanadiferous titanomagnetite contains numerous inclusions of ilmenite. Compared to the ilmenite it is relative high in Fe and V, and low in Ti.
- Drillhole TTC-009
 - Olivine rich and categorized as a dunite/wehrlite/olivine-clinopyroxenite rock containing 10-85% Fe-Ti oxide minerals that comprise a mixture of ilmenite and vanadiferous titanomagnetite.
 - Ratio of ilmenite to vanadiferous titanomagnetite averages 5:1 and ranges from 3:1 to 10:1
 - The ilmenite is coarse grained and free of inclusion. Compared to the vanadiferous titanomagnetite it is relatively high in Ti and low in Fe and V.
 - The vanadiferous titanomagnetite contains numerous inclusions of ilmenite. Compared to the ilmenite it is relative high in Fe and V, and low in Ti.

The relogging program and petrographic analysis suggest that the OUI at Titac North contains higher amounts of titanomagnetite relative to ilmenite, and the Titac South OUI contains higher concentrations of ilmenite (Severson, 2019). Further work should be completed to assist in the definition of an oxide mineralogical model and possible mineral zonations within Titac South.

In 2021, EMI contracted Process Research Ortech Inc. (PRO) to conduct metallurgical testing of mineralized material from Titac to determine the feasibility of upgrading and processing, as discussed below in Section 13 of this Report.

6.1.1 Historical Mineral Resource Estimate

The following text summarizes a historical mineral resource estimate (MRE) for the Titac South deposit of the SCZ (the historical 2012 Titac South MRE; Tables 6.1 and 6.2).

The historical 2012 Titac South MRE was prepared by SRK Consulting (Canada) Inc. (SRK) for Cardero Resources (Cardero) and was supported by a technical report titled, "Technical Report on the Titac Ilmenite Exploration Project, Minnesota, USA", by Farrow et al. (2012), with an effective date of January 19, 2012. The historical MRE discussed in this Section was not completed on behalf of the current Issuer. The author is referring to the 2012 Titac South MRE as a "historical resource" and the reader is cautioned not to treat it, or any part of it, as a current mineral resource. The authors of this Report have reviewed the information in this section, as well as that within the cited references, and have determined that it is suitable for disclosure. The historical resource summarized below has been included to provide the reader with a complete history of the Project. A current MRE, the Titac South MRE, for the SCZ presented in Section 14 is an audit of the Farrow et al. (2012) technical report and historical 2012 Titac South MRE. No additional drilling has been completed at the Titac property since the effective date of the historical 2012 Titac South MRE.

The historical 2012 Titac South MRE shown in Table 6.1 has been quantified in terms of TiO_2 and Fe_2O_3 , the analytical components captured for assays of titanium and iron. With regards to potential future mining, ilmenite ($FeTiO_3$) and potentially titaniferous magnetite ($TiFe_2O_4$) and magnetite (Fe_3O_4) would be produced as a by-product. The Fe_2O_3 values in the historical MRE were reduced to reflect Fe found within the ilmenite associated with the TiO_2 ; however, accurately quantifying magnetite was not possible as of the effective date of the historical MRE as additional mineralogical work was necessary. Based on the assumption that all Ti is within ilmenite, the contained ilmenite metal in the historical MRE is listed in Table 6.2. The following information on the historical 2012 Titac South MRE is sourced from Farrow et al. (2012).

Table 6.1 Historical 2012 Titac South MRE, effective date of January 19, 2012 (adapted from Farrow et al., 2012).

Category	Estimated Quantity (Mt)	TiO ₂ (%)	Adjusted Fe ₂ O ₃ *** (%)
Open Pit**			
Inferred	45.1	15.0	14.74

*Mineral resources are reported in relation to a conceptual pit shell. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

**Open pit mineral resources are reported at a cut-off grade of 8% TiO₂. Cut-off grades are based on a price of US\$170 per tonne of ilmenite back calculated to TiO₂ and recoveries of 70%, without considering revenues from other metals.

***Reported Fe₂O₃ has been lowered to reflect the amount of Fe estimated to be contained in ilmenite based on the assumption that all Ti has been assigned to ilmenite. As of the effective date of the historical MRE, accurately quantifying the amount of magnetite contained within this estimate was not possible.

Table 6.2 Summary of ilmenite contained within the historical 2012 Titac South MRE (adapted from Farrow et al., 2012).

Category	Estimated Quantity (Mt)	Ilmenite Grade FeTiO ₃ (%)	Contained Ilmenite FeTiO ₃ (Mt)
Inferred	45.1	28.5	12.9

The historical 2012 Titac South MRE was prepared by Darrell Farrow, Pr. Sci. Nat. under the supervision of Mike Johnson, P.Geo., both QPs as this term is defined by NI 43-101. The historical MRE was classified using the definitions set out in the CIM Definition Standards for Mineral Resources and Mineral Reserves (December 2005).

The historical MRE was completed using Gemcom's Gems™ 6.3.1 software on an SRK validated drillhole database. All historical data pertaining to drillhole location and depth, survey data such as strike and dip, lithologies, magnetic susceptibility, specific gravity, and chemical analytical records, was compiled into the drillhole database used for the resource estimation. A total of 24 drillholes from Titac South deposit area, including 2,837 TiO₂ and Fe₂O₃ diamond drillhole assay intervals, and 855 specific gravity measurements fall within the modelled solids.

Three geological domains were modelled for the estimation process, including peridotite dominated oxide bearing ultramafic rocks, pyroxenite dominated oxide bearing ultramafic rocks, and a marginal zone of mixed peridotite, pyroxenite, and country rock (Figure 6.4). The block dimensions used in the block model for all blocks was 10 m x 10 m x 10 m in multiple passes. Grade estimates were based on 1.8 m composited samples. Capping of TiO₂ and Fe₂O₃ assays was not applied in any of the three domains.

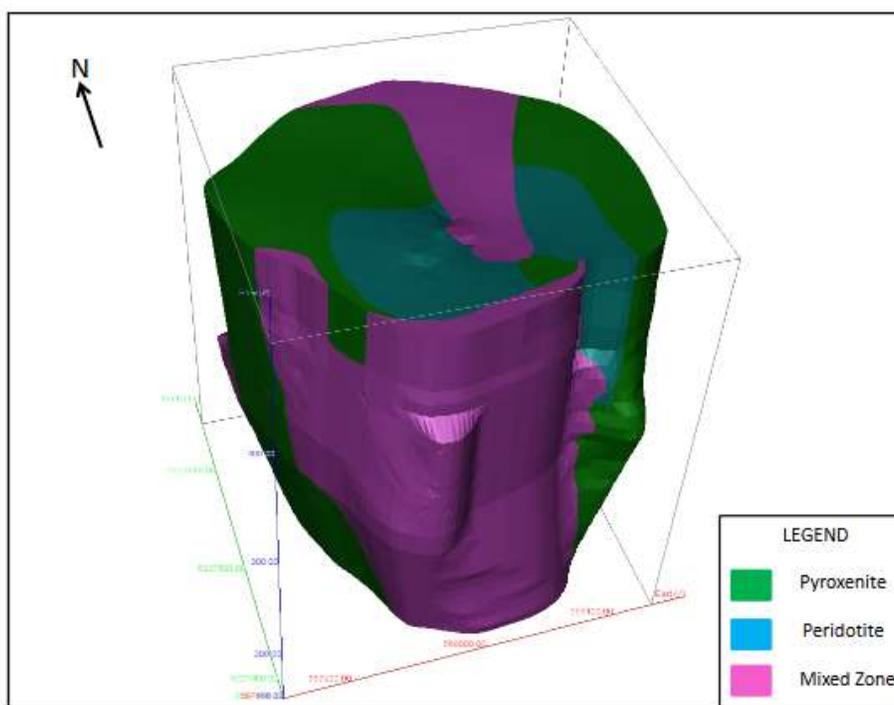
Ordinary Kriging (OK) of composite values was used for the estimation of grade to each of the block model blocks. For TiO₂ and Fe₂O₃, a two-pass series of expanding ellipsoids was used for sample selection and estimation with the primary and secondary axes of the search ellipsoid defined by the semi-variogram ranges. The inverse distance squared (ID2) method was used to estimate the specific gravity data and was compiled from the same criteria and compared against the OK estimate. Using the OK and ID2 data, scatter plots were created to compare the model estimations and average composite sample grades for all blocks. Good correlation was found between the OK, ID2, and average composite samples for TiO₂ and Fe₂O₃ grades in the pyroxenite and peridotite domains. The mixed domain had a lesser degree of good correlation with regard to TiO₂ grades.

All drill samples were composited to a length of 1.8 m length weighted intervals within the modeled domains. Drillhole assay lengths were compiled in a histogram of sample lengths prior to model creation. It was found that approximately 75% of the samples were less than 1.8 m, and therefore 1.8 m was selected as an

appropriate compositing interval. Grade capping analysis was performed on the domain categorized assay data to limit the effect of extreme assay values on the estimation. SRK determined that capping was unnecessary for TiO_2 and Fe_2O_3 in all 3 domains using histograms and cumulative frequency plots.

The composite samples were compiled and analyzed via histograms to come up with averages for each domain. TiO_2 composites were found to have an average of 17.63%, 16.41%, and 9.64% for the peridotite, pyroxenite, and mixed domains respectively. Fe_2O_3 composites were found to have an average of 36.26%, 30.58%, and 23.69% for the peridotite, pyroxenite, and mixed domains respectively.

Figure 6.4 Interpreted geological domains in three dimensional view of the historical 2012 Titac South MRE.



Source: Farrow et al. (2012)

6.2 Wyman-Siphon

The Wyman-Siphon property has historically been referred to as its separate members (Siphon-Wyman Creek, Siphon, or Wyman Creek). As such, the Wyman prospect area refers to the western block of the Wyman-Siphon property, and the Siphon prospect area refers to the eastern block of the Wyman-Siphon Creek property.

The Wyman area was first discovered and explored by USSC prior to 1960. A drill program of 6 core holes was jointly conducted with the International Nickel Company (INCO) in 1954. Three of these drillholes intersected mineralized rocks with various thicknesses and copper grades (Severson and Heine, 2007).

The Siphon prospect was first explored in the 1960s to mid-1970 with a series of airborne induced pulse transient (INPUT) electromagnetic surveys. These were conducted by several companies including Bear Creek, USSC, New Jersey Zinc, and Hanna. During this time, 3 drillholes were also completed on the Siphon prospect, 2 of which were drilled by Exxon and 1 by Bear Creek (DeMatties, 2018a).

No further exploration took place on the Wyman prospect until 1972 when USSC renewed its interest in the area possibly due to an opportunity to lease 13 large parcels from nearby areas. This led to a drill program of 13 holes being drilled between 1972 and 1974, with the drilling data used to partially define two continuous zones of >0.5% Cu over 7 m thick which appear to be structurally controlled by the nearby Siphon Fault Zone (Severson & Heine, 2007). The historical drilling intersected typical low-grade, strata-bound disseminated (magmatic) sulphide zones (1-5% pyrrhotite > chalcopyrite + bornite > cubanite) hosted by heterogeneous troctolite-augite troctolite to olivine gabbro rock units along the gently dipping basal contact or at stratigraphically higher levels of the Partridge River intrusions (PRI). The most significant results from the drilling were the shallow (25 m vertically) high-grade Cu-Ni intercept in hole DDH-W-3 stratigraphically located approximately 450 m above the basal contact. Additionally, anomalous PGE mineralization was detected by fire assay after drilling, but these results were not reproducible when re-tested.

Very little information is available from the period of 1974 to 1997.

In 1997, researchers from the University of Minnesota and the National Resources Research Institute (NRRI) collected a few samples for PGE testing from the Wyman area (Severson & Hauck, 1997). Their investigation found weakly anomalous PGE concentrations which seem to suggest a regional relationship with the Dunka Road deposit (Severson & Hauck, 1997).

From 2000 to 2001, Falconbridge Ltd. performed a re-logging and re-sampling campaign of the Siphon prospect area. In addition, Falconbridge also carried out prospecting and mapping of outcrop in the area. Reconnaissance mapping by Falconbridge in 2001 identified several gossanous, Cu-Ni-PGE-bearing (< 0.61% Cu, < 0.11% Ni, < 0.710 ppm Pd + Pt + Au) outcrops and float along the surface traces of both main structures. These showings consist of disseminations/blebs, poorly developed net-texture and thin (<0.3 m) discontinuous veins/veinlets of chalcopyrite-pyrrhotite hosted by altered/unaltered augite troctolite and thin pegmatitic augite troctolite veins/dikes.

Falconbridge relogged a high-grade Cu-Ni intercept from historical drillhole DDH-W-3 which intersected mineralization above the basal contact. The relogging indicated this important mineralized section (80-111 ft; 24-33.8 m) consists of two sulphide-bearing plagioclase-augite pegmatite dikes and a thin (0.7 ft; 0.21 m) massive sulphide vein that occupies a fault zone or splay parallel to and within 120 m of the main western Siphon structure. Disseminated (3-10%) to massive (60%) sulphide (pyrrhotite, pentlandite, chalcopyrite and bornite) mineralization is hosted in the moderately altered (saussuritization, actinolite-chlorite alteration and bleaching) pegmatite dikes. The massive (90%) sulphide vein is fragment-bearing (altered pegmatite fragments) and chalcopyrite rich. Similar thin (<0.3 m), Cu-bearing sulphide-rich, altered and unaltered fracture-controlled pegmatite dikes and massive sulphide veins (veinlets) were mapped at surface by Falconbridge along the main western Siphon structure.

In 2004, USX Corporation (USSC parent company) sold most of the mineral rights that were held by USSC to RGGGS (Severson & Heine, 2007). This included Siphon, Wyman, and other nearby surrounding properties and prospects.

In late 2007 to 2008, EMI finished acquiring the mineral lands claims from RGGGS and the State of Minnesota to be fully in control of the Wyman-Siphon property. In 2008, EMI acquired all historical exploration data from both RGGGS and the Department of Natural Resources. This led to a 61 core pulps being resampled for Cu-Ni grade accuracy and PGE content, and the calculation of a historical mineral resource estimate for Wyman (DeMatties, 2018). The resource area correlates with a chargeability anomaly (>25 ms) and an area of broad EM conductance. The historical mineral estimate is summarized below in Section 6.2.1.

In 2008, EMI commissioned GeoTech Ltd. (GeoTech) to conduct an airborne versatile time domain electromagnetic (VTEM) geophysical survey of the area. This survey was approximately 444 line-km in length

and located five new isolated anomalies that were considered good targets for further exploration (DeMatties, 2018; Encampment Minerals Inc., 2013).

In 2009, a small drill program of 2 holes was conducted by EMI at the Siphon prospect. The results of this drilling demonstrated the presence of sulphide mineralization enriched with copper, nickel, and PGEs, with SP-09-1 returning 0.57% Cu and 0.61% Ni over 3.5 ft core length and 0.65% Cu and 0.58% Ni over 5.2 ft core length (Encampment Minerals, 2019). Borehole geophysical surveys completed by Crone Geophysics detected multiple pulse EM anomalies downhole. Drill collar locations, select drill intercepts (core length), and rock grab results are illustrated in Figure 6.5.

In 2010, a follow up airborne VTEM survey was conducted by GeoTech on behalf of EMI to stitch together the previously completed grid over the Wyman-Siphon property and the completed grid over the Skibo property. In 2011, a limited geophysical program was conducted on the Wyman prospect in the form of a two-line, fixed loop pulse EM survey by Crone Geophysics. The grid lines were selected to further investigate the area around 3 of the isolated anomalies identified by VTEM in 2008 (Encampment Minerals Inc., 2013). The results of the geophysical survey indicate that Conductor 14 extends to the east and identified additional conductors for follow up exploration.

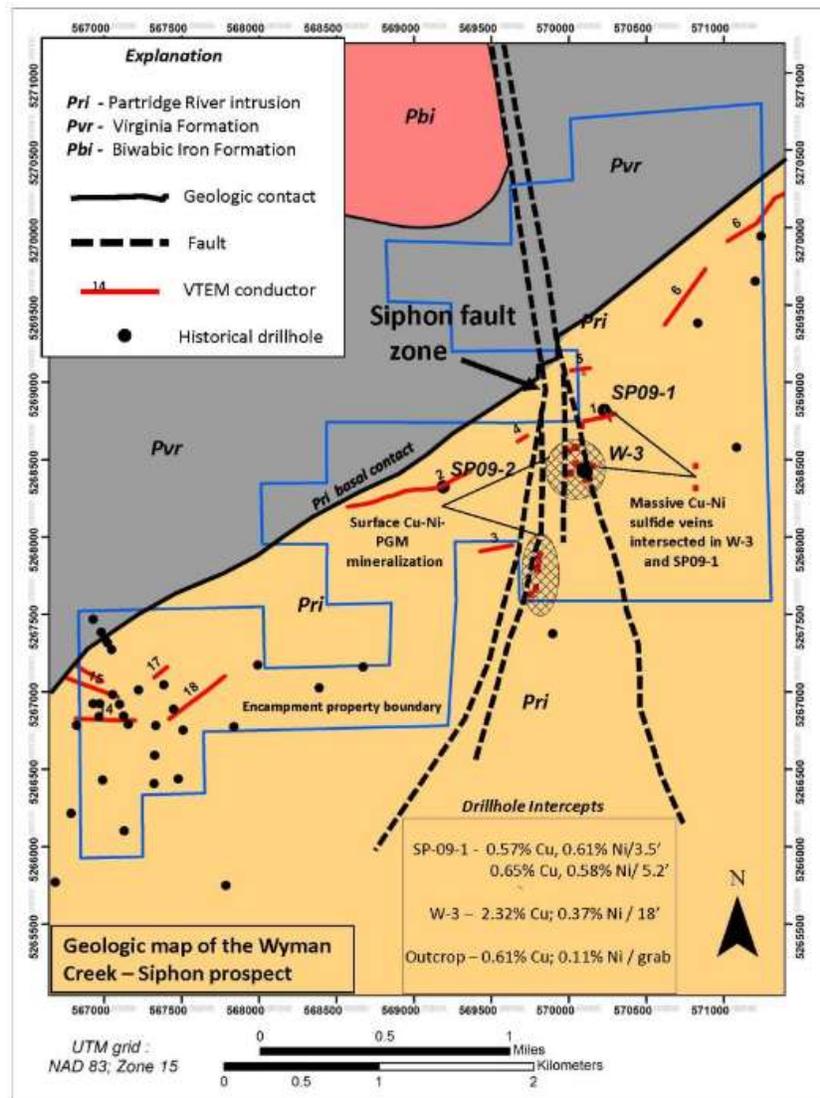
6.2.1 Historical Mineral Resource Estimate

The following text summarizes a historical mineral resource estimate (MRE) for the Wyman deposit of the SCZ (the historical 2008 Wyman MRE).

The historical 2008 Wyman MRE is an inferred resource of approximately 47 million short tons grading 0.29% Cu and 0.11% Ni. The historical 2008 Wyman MRE was not prepared in accordance with NI 43-101, Canadian Institute of Mining (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014), and CIM Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines (November 2019). The historical 2008 Wyman MRE was an internal resource estimate prepared for EMI and was not supported by a technical report.

The historical 2008 Wyman MRE was supported by an internal memorandum with the subject “Wyman Creek resource estimate” prepared by T. DeMatties and dated August 31, 2008. The historical MRE discussed in this section was not completed on behalf of the current Issuer. The author is referring to the 2008 Wyman MRE as a “historical resource” and the reader is cautioned not to treat it, or any part of it, as a current mineral resource. The authors of this Report have reviewed the information in this section, as well as that within the cited references, and have determined that it is suitable for disclosure. The historical resource summarized below has been included to demonstrate the potential of the SCZ, and to provide the reader with a complete history of the Project. A qualified person has not done sufficient work to classify the historical mineral resource estimate as a current mineral resource. The Company would need to complete additional exploration, including twinning of historical drillholes, to verify the historical estimate as a current mineral resource.

Figure 6.5 Geological map of Siphon prospect showing historical drillhole locations, VTEM conductors, and select drillhole intercepts (core length) from EMI drilling. True width is unknown.



Source: Encampment Minerals (2019)

The historical 2008 Wyman MRE used drill data from 13 closely spaced (approximately 200 to 650 ft; 61 to 200 m) BQ diameter diamond drillholes completed by USSC between 1972 and 1974 and was calculated via polygonal estimation. Using an Arc Map 9.2 GIS program, polygons and areas of influence were defined by perpendicular bisectors in plan around 13 vertical holes; construction of polygons was in part constrained by interpreted geology and RGGs mineral land boundaries. Area of influence for each polygon was calculated by the Arc Map program. Volumes were computed based on estimated true thickness of the assay horizons intersected in each drillhole. Tonnage was assigned to each resulting block by using a factor of 10.75 cubic feet/short ton (similar that used by Polymet). The average Cu and Ni grades for the resource were derived from weighted assays calculated for each block (Dematties, 2008). The resource polygons are presented in plan and in cross section view in Figures 6.6 and 6.7.

Parameters and assumptions included the following, as summarized from Dematties (2008):

- The historical 2008 Wyman MRE is for undiluted tonnages and uncut grades.
- The assay horizon did not follow any obvious geological boundaries.
- No cut-off grades were used. Defined assay boundaries logged in drill core and correlated between drillholes were used to define the grade zones in order to avoid artificial constraints imposed by a cut-off grade. This was considered acceptable due to the early-stage of exploration.
- The historical MRE reasonably assumes, and is reported as locally verified, that there is grade continuity between drillholes.

The inferred resource category was used as no new drilling had been conducted by EMI at the time of the resource calculation. The PGE and gold content of the deposit were unknown at the time of estimation as core samples were not analyzed for PGE or gold.

6.1 Skibo

The Skibo property, historically referred to as Skibo North, Skibo South, and Section 22, was first explored by INCO in 1959. This consisted of an airborne electromagnetic geophysical survey that located several strong anomalies (Severson & Heine, 2007). The claims lease for the Skibo property was first acquired by INCO from USSC in 1957.

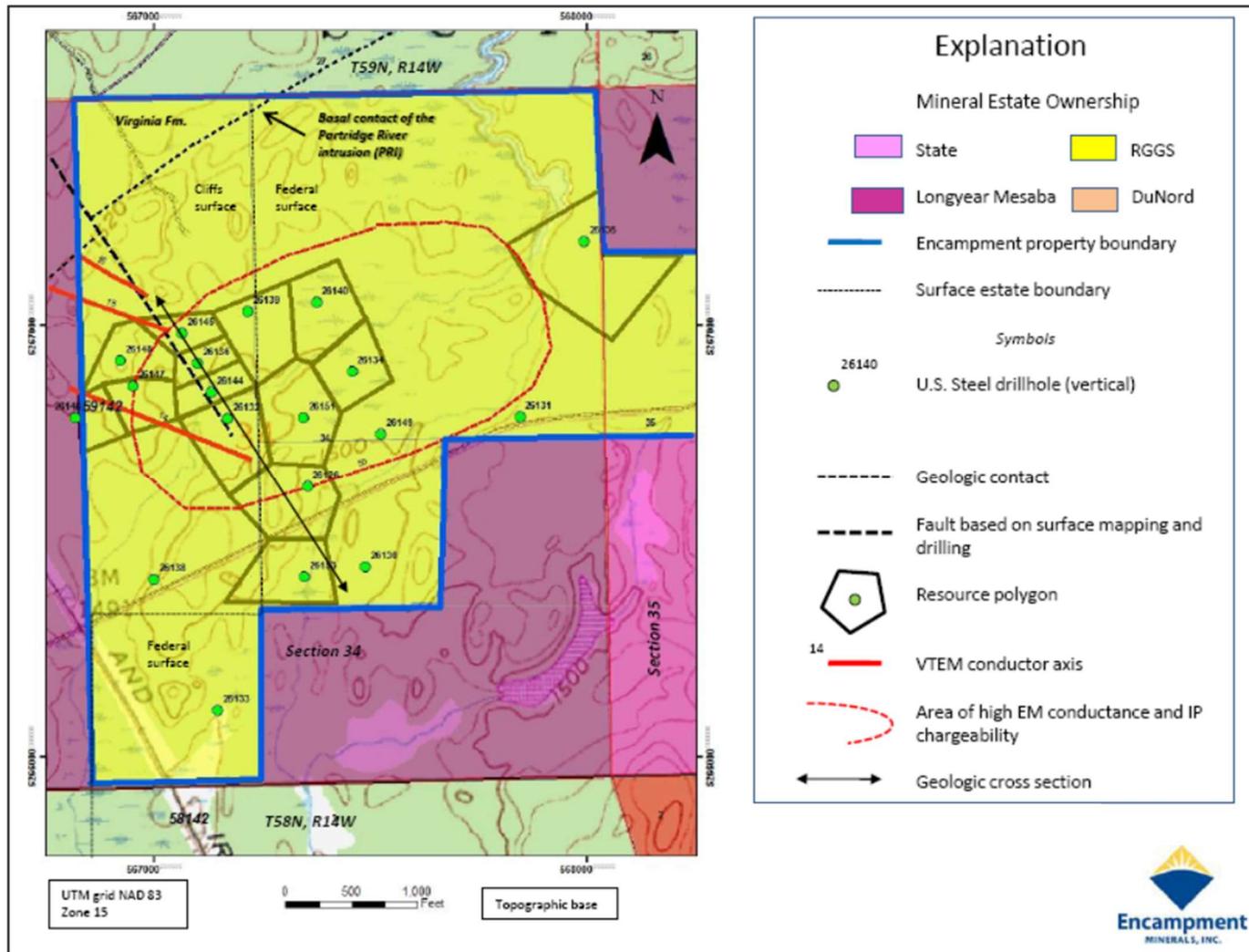
In the 1960s, a drill program to investigate the previously identified electromagnetic anomalies was undertaken by INCO. This resulted in 19 drillholes for a total of 6,421 m drilled by the end of 1969 (DeMatties, 2018a). Select highlights of the drilling program are presented in Table 6.3 and 6.4. INCO held the lease for 15 years, and this expired and was subsequently dropped in 1972.

Table 6.3 Select INCO and USSC historical drill intercepts for low-grade copper and nickel mineralization in the Skibo OUI (adapted from DeMatties, 2013).

Drillhole ID	From (ft)	To (ft)	From (m)	To (m)	Interval* (ft)	Interval* (m)	Cu (%)	Ni (%)
11547	72	356	21.94	108.50	284	86.56	0.32	0.27
34898	78	280	23.77	85.34	202	61.57	0.15	0.097
34898	320	595	97.53	181.35	275	83.82	0.13	0.082
11549	170	263.5	51.81	80.31	93.5	28.50	0.19	0.11
11549	315	784	96.01	238.95	469	142.94	0.18	0.1
11549	818	921	249.31	280.71	103	31.39	0.37	0.16
27016	218	273	66.44	83.21	55	16.76	0.25	0.13
13615	63	397	19.20	121.00	334	101.80	0.23	0.14
13615	419	518	127.70	157.88	99	30.17	0.28	0.14
13615	540	618	164.58	188.36	78	23.77	0.22	0.11
13616	78	191.6	23.77	58.40	113.6	34.62	0.16	0.13

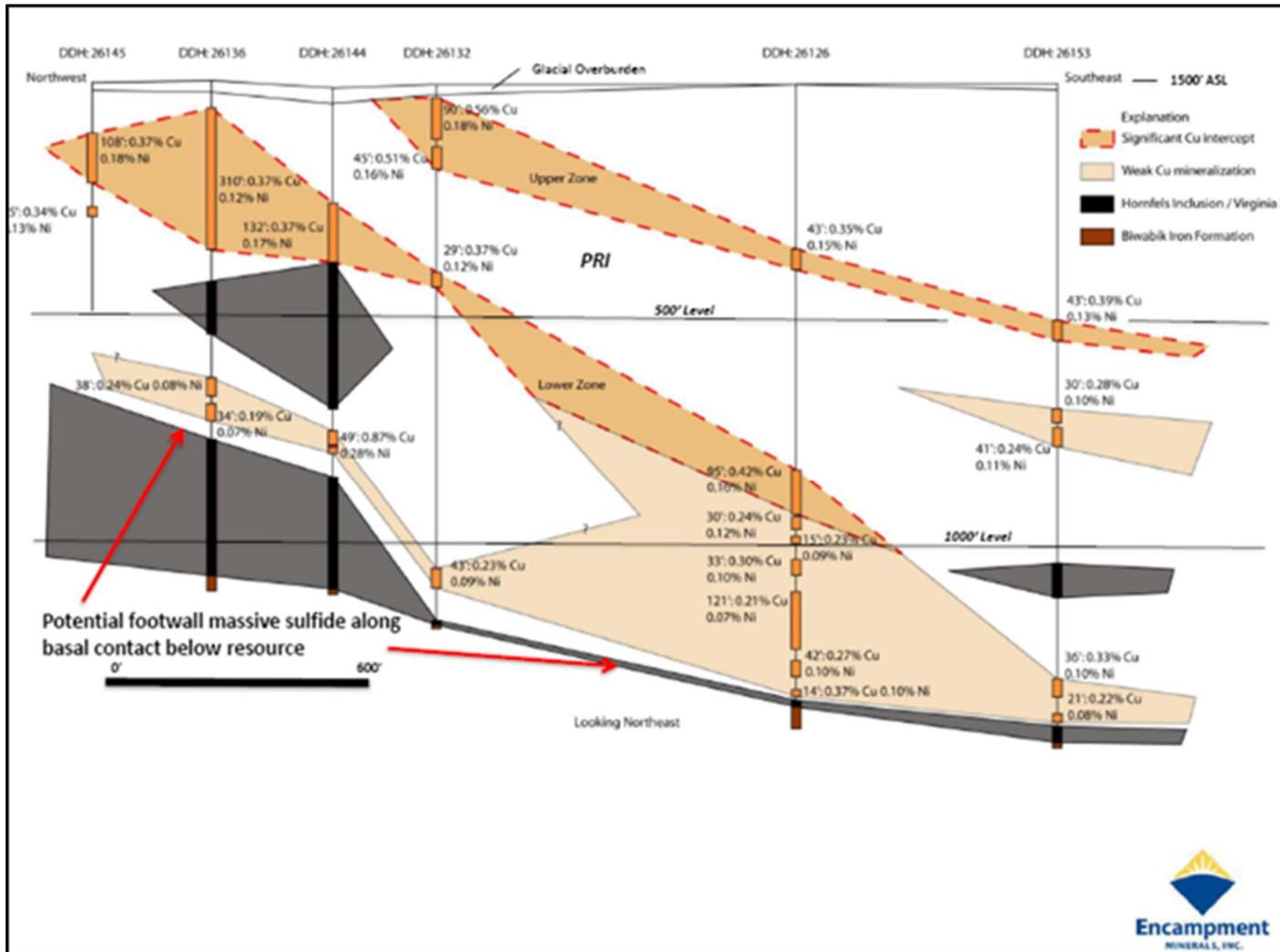
*Intervals represent core length. True width is unknown.

Figure 6.6 2011 historical MRE polygons and drillhole collars at Wyman prospect, Wyman-Siphon property.



Source: DeMatties (2011)

Figure 6.7 Schematic cross section showing Wyman drill intercepts and historical resource area (modified from DeMatties, 2011). Refer to Figure 6.6 for the cross section line location in plan view.



Phelps Dodge completed an airborne INPUT electromagnetic-magnetic survey of the Skibo South prospect. In 1968, Phelps Dodge acquired the state-owned leases in Skibo South and followed up magnetic anomalies on the property with ground based geophysical surveys. This included both magnetic and horizontal loop electromagnetic surveys. A drill program of 7 holes for a total length of 1,599 m followed, targeting three prominent features identified by the previous geophysical surveys (DeMatties, 2018a). Results from the drilling identified mineralized fault zones and poorly mineralized OUIs.

In the 1970s, a total of 6 drillholes were completed in the state and privately leased Section 22 (in the north of the Skibo property). Five of these drillholes were completed by Exxon and 1 hole by New Jersey Zinc for a total of 1,405 m (DeMatties, 2018a). The exploration in this area was targeting the Section 22 OUI and the basal contact with the Partridge River Intrusion.

Table 6.4 Select INCO and USSC historical drill intercepts for high-grade copper and nickel mineralization in the Skibo OUI (adapted from DeMatties, 2013).

Drillhole ID	From (ft)	To (ft)	From (m)	To (m)	Interval* (ft)	Interval* (m)	Cu (%)	Ni (%)
27016	1340	1344	408.41	409.63	4	1.22	1.05	0.35
34898	1010	1015	307.83	309.36	5	1.52	0.01	0.14
13615	861	861.8	262.42	262.66	0.8	0.24	3.54	2.54
13615	907.4	909.3	276.56	277.14	1.9	0.58	1.17	0.35
13615	921.3	922	280.80	281.01	0.7	0.21	2.82	0.35
13615	971	971.3	295.95	296.04	0.3	0.09	1.60	0.68
13615	1130.5	1131.3	344.56	344.80	0.8	0.24	3.80	6.42

*Intervals represent core length. True width is unknown.

Throughout the 1970's, multiple airborne electromagnetic surveys were flown over the property by Bear Creek and Phelps Dodge. Several strong electromagnetic anomalies were delineated; however, neither company was able to acquire the lease from USSC.

In 1975, USSC undertook further exploration work in the form of ground based magnetic geophysical surveys and geochemical surveys. The results from these surveys coupled with previous exploration data was favorable for drilling. However, drilling never did occur likely due to budgeting within the company.

By 1981, exploration interest had again peaked in the Skibo area which prompted USSC to re-evaluate the company's geophysical data. This led to a single drillhole of 503 m to be drilled by early 1982 (DeMatties, 2018a). Select highlights of the drilling program are presented in Tables 6.4 and 6.5. Following this, limited work was completed on the Skibo property, though USSC continued to hold onto the mineral rights.

In 1989, International Platinum acquired the state-owned leases in the Skibo South prospect. International Platinum's goal was to re-sample all the Phelps Dodge drill cores to check for PGE mineralization or enrichment. The company only managed to re-sample 2 of the drillholes completely and noted that there were a number of shallow anomalous gold and PGE values in hole DDH-II-3.

Very little information is available between 1990 and 2000.

Between 2000 and 2001, Falconbridge acquired the state-owned Section 16 lease that is part of the current Skibo South prospect. However, Falconbridge was unable to acquire the land leases for the previously drilled mineral areas that USSC owned. As such, Falconbridge never conducted any new ground exploration in the area.

Table 6.5 Select Phelps Dodge historical drill intercepts re-sampled by International Platinum for anomalous copper, gold, and platinum group element mineralization in the Skibo South prospect.

Drillhole ID	From (ft)	To (ft)	From (m)	To (m)	Interval* (ft)	Interval* (m)	Cu (%)	Ni (%)	Ag (ppm)	Au (ppb)	Pd (ppb)	Pt (ppb)
II-3	187	194.7	57	59.34	7.7	2.34	0.25	0.11	2.5	37	1	7.5
II-3	200	203.3	60.96	61.97	3.3	1.01	0.19	0.09	2.5	2.5	1	7.5

*Intervals represent core length. True width is unknown.

In 2004, USX Corporation (USSC parent company) sold most of the mineral rights that were held by USSC to a Houston-based land holding company called RGGS Lands and Minerals Ltd. (Severson & Heine, 2007). This included the Skibo property and other nearby surrounding properties and prospects.

In late 2007 to 2008, EMI acquired the mineral lands claims from RGGS for the Skibo North prospect and claims from the State of Minnesota for the Skibo South prospect. In 2008, EMI acquired all historical exploration data from both RGGS and the Department of Natural Resources. The data was subsequently reanalyzed and compiled to direct further exploration efforts.

In 2008, EMI commissioned GeoTech to conduct a 391 line-km helicopter-borne VTEM survey of the Skibo prospect (DeMatties, 2018a). The geophysical survey delineated several VTEM anomalies that were the first priority of further exploration via a drill program (Figure 6.8).

In 2009, EMI completed a drill program of 4 holes totaling 1,733 m in length in the Skibo North prospect (Figure 6.8; DeMatties, 2018a). All completed holes were then subjected to a pulse downhole EM survey by Crone Geophysics. The 2009 drill program confirmed the presence of a mineralized oxide OUI, referred to as the Skibo OUI, characterized by low grade disseminated to massive Cu-Ni mineralization and a stratigraphically lower and higher-grade Cu-Ni-PGE bearing stockwork sulphide zone (DeMatties, 2013). Additionally, the pulse EM surveys identified several in and off hole anomalies. This pointed toward further continuity of a vein system and assisted in future drill targeting. Highlights from EMI drilling at Skibo are presented in Table 6.6.

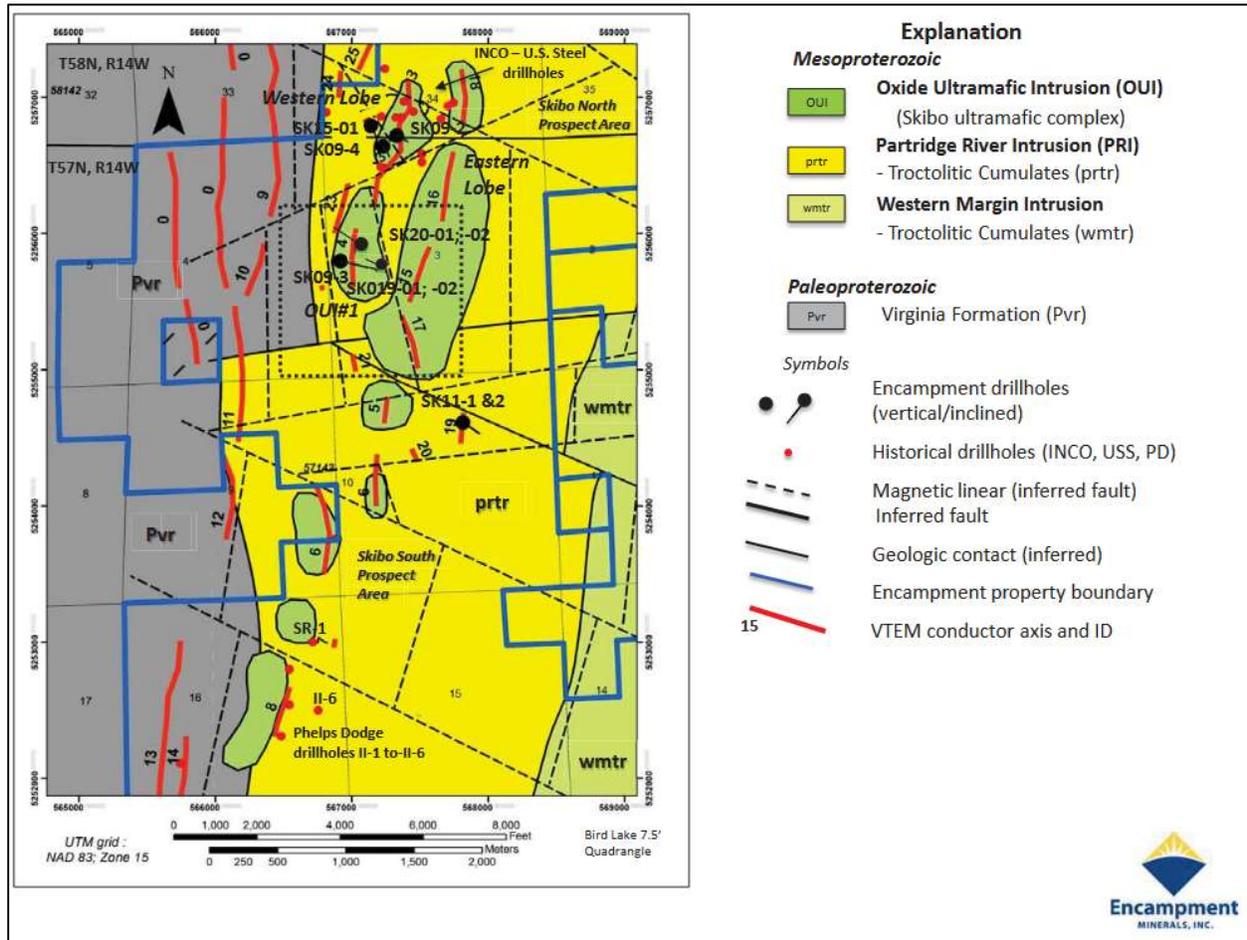
In 2010, an additional airborne VTEM survey was conducted by GeoTech to stitch together the previously completed grid over the Skibo property and the completed grid over the Wyman-Siphon property. This resulted in almost all the land leased by EMI in the area being covered by the geophysical survey.

From 2010 to 2011, EMI commissioned Crone Geophysics to conduct a ground pulse EM survey in the South Skibo prospect. The results of this geophysical survey refined the placement of potential drillholes around VTEM Conductor 19. Around this conductor site, 2 holes were drilled in 2011 with the first hole missing the target, and the second hole intersecting it. The results were weakly mineralized and suggested that further exploration should be undertaken to the northwest of the prospect area.

In 2015, a single drillhole of 472 m was completed by EMI in the Skibo North prospect area (Figure 6.8; DeMatties, 2018a). This hole was targeting one of the conductors that had previously been detected via borehole pulse EM survey.

In 2019, 2 angled holes were drilled by EMI in the Skibo North prospect area to test VTEM Conductor 4 and two pulse EM anomalies that were detected from borehole surveys in 2009. The total length drilled was 635 m and the drillholes intersected several mineralized zones and ultramafic units (DeMatties, 2020).

Figure 6.8 SCZ Skibo property showing interpreted OUIs, VTEM conductors, and historical drillholes.



Source: DeMatties (2020)

In 2020, 2 more angled holes were drilled by EMI to further explore OUIs that were previously drilled near in 2009 and 2019. These holes accounted for 647 m in total length and both intersected multiple ultramafic intrusions and several mineralized zones (DeMatties, 2020). The drill results were found to be encouraging for further exploration in the area and specifically testing the remaining unexplored VTEM conductor sites.

Table 6.6 EMI historical drilling results (adapted from DeMatties, 2020).

Drillhole ID	From (ft)	To (ft)	From (m)	To (m)	Interval* (ft)	Interval* (m)	Cu (%)	Ni (%)	Co (%)
SK09-02	533.3	536.3	162.55	163.46	3	0.91	0.74	0.8	0.097
SK09-02	1139.2	1140.5	347.23	347.62	1.3	0.39	3.23	2.52	0.13
SK09-02	1230	1231.3	374.9	375.3	1.3	0.4	9.85	0.34	0.01
SK09-02	1231.9	1233.9	375.48	376.09	2	0.61	6.91	2.38	0.08
SK09-02	1266.7	1268.9	386.09	386.76	2.2	0.67	7.80	0.58	0.014
SK09-03	60.7	67.9	18.5	20.7	7.2	2.2	0.87	0.75	0.15
SK09-03	967.7	968.4	294.95	295.17	0.7	0.22	1.26	1.29	0.12

Drillhole ID	From (ft)	To (ft)	From (m)	To (m)	Interval* (ft)	Interval* (m)	Cu (%)	Ni (%)	Co (%)
SK09-04	871.4	872.4	265.6	265.91	1	0.31	2.61	0.56	0.024
SK15-01	384.5	387	117.2	117.96	2.5	0.76	6.39	1.15	0.06
SK19-01	470.6	478	143.44	145.69	7.4	2.25	2.06	1.06	0.13
SK19-01	646	764	196.96	232.87	118	35.91	0.21	0.13	0.02
SK19-02	855.8	857	260.85	261.21	1.2	0.36	1.39	0.88	0.10
SK19-02	889.2	889.6	271.03	271.15	0.4	0.12	0.79	1.01	0.09
SK20-01	775	779	236.22	237.44	4	1.22	0.99	0.259	0.012
SK20-02	591	592.2	180.14	180.50	1.2	0.36	5.69	1.02	0.09
SK20-02	865.1	869.2	263.68	264.93	4.1	1.25	0.702	0.191	0.01

*Intervals represent core length. True width is unknown.

6.1 Boulder

The Boulder property is comprised of the historically named Boulder Lake North and Boulder Lake South prospects.

In 1968, American Shield and American Smelting and Refining Company (ASARCO) first explored the North Boulder prospect with the drilling of 3 vertical core holes.

In 1969, Phelps Dodge acquired the Boulder property and initiated its own exploration campaign with an INPUT (induced pulse transient) airborne electromagnetic survey, ground geophysical surveys, and diamond drilling. Three conductor zones were identified from the airborne surveys and ground horizontal loop electromagnetic and magnetic geophysical surveys were utilized to further define the geophysical targets (DeMatties et al., 2012).

In 1969, Phelps Dodge acquired and explored the South Boulder prospect by drilling around a moderately strong conductor identified by a previous INPUT survey (DeMatties et al., 2012). A 3-core hole program was completed, and all drillholes intersected thick sections of an OUI with variable sulphide enrichment (Severson, 1995). Between 1969 and 1970, Phelps Dodge used the previously gathered and interpreted geophysical data to embark on a drill program. In 1970, Phelps Dodge completed 6 shallow, angled core holes at the North Boulder prospect. Copper sulphide mineralization was intersected in 3 of the 6 holes, with select drillhole intercepts listed in Table 6.7.

Table 6.7 Phelps Dodge drillhole intercepts (adapted from Green Bridge Metals, 2024c).

Drillhole ID	Interval* (m)	Cu (%)	Ni (%)	TiO ₂ (%)	V ₂ O ₅ (%)
IV-1	57.0	0.22	0.03	23.2	0.42
IV-1	36.6	0.19	-	26.8	0.52
IV-6	15.8	0.28	0.06	16.1	0.19
IV-8	32.2	0.25	0.03	21.8	0.27
IV-8	18.3	0.24	-	25.8	0.30

*Intervals represent core length. True width is estimated at 70-90% of core length.

In the 1980s, the NRRI began a limited campaign of relogging and sampling program of the South Duluth Complex, which included the relogging of drill core from drillholes IL-1, IV-7, and IV-9 situated in the North and South Boulder prospects. NRRI confirmed the presence of a large ultramafic complex composed of OUIs emplaced within a sequence of oxide gabbro, oxide bearing augite troctolite and anorthositic units. In addition, NRRI observed widespread disseminated sulphide and oxide mineralization within the ultramafic units in the North Boulder prospect area (Severson, 1995).

No further exploration took place in the area and was idle until EMI acquired the state-owned leases in 2010.

Work by EMI at Boulder included the compilation of historical data, re-logging of historical drill core and re-sampling of 65 core samples. EMI's re-logging program confirmed that the source of the HLEM geophysical conductors is semi-massive to massive oxide mineralization hosted in OUI bodies and interpreted several linear OUI bodies within the contoured magnetic data suggesting block faulting that potential controlled the late emplacement of the OUI bodies in northeast to northwest trending structural intersections or potential feeder zones in the ultramafic rocks (DeMatties et al., 2012).

Core samples were sent to ACME laboratories (ACME) in Vancouver, BC, for analysis via inductively coupled plasma – mass spectrometry (ICP-MS) for 41 elements including Cu, Ni, and Co, and overlimit analysis via ICP – emission spectroscopy (ES). Gold, palladium and platinum were analysis using fire assay with an ICP-MS finish. X-ray Fluorescence (XRF) was used to analyze TiO_2 and V_2O_5 . ACME laboratory is independent of the Issuer and the authors of this Report.

7 Geological Setting and Mineralization

7.1 Regional Geology

The SCZ is regionally located in the southern Superior Province of the Canadian Shield, one of the world's oldest geological cratons, primarily composed of Archean rocks. Overlying these Archean basement rocks are Paleoproterozoic sedimentary cover sequences. The cover sequences were later intruded by Mesoproterozoic mafic and felsic magmas associated with the development of the Midcontinent Rift System (MCR). The MCR formed around 1.1 billion years ago and represents a significant geological feature characterized by rifting and extensive volcanic and intrusive activity associated with the emplacement of large igneous provinces.

The MCR, extending from Lake Superior south to Iowa, remains mostly buried under sedimentary cover except for exposed portions in the Lake Superior area. In the northeastern Minnesota region, the MCR is composed of several groups of rocks including the North Shore Volcanic Group (NSVG) and the Duluth Complex. The roof zone of the MCR is largely composed of NSVG lava flows, and the Duluth Complex generally represents the basal, intrusive equivalent of the NSVG lava flows.

7.1.1 Geology of the Duluth Complex

The SCZ is situated along the southwestern margin of the Duluth Complex within the larger MCR, which is also referred to as the Southern Contact Zone. The Duluth Complex spans approximately 270 km in length and up to 40 km in width in an arcing band from Duluth, northeastern Minnesota, to near the Canadian border (Figure 7.1). The Duluth Complex is characterized by the intrusion of a significant volume of mafic and ultramafic rocks, forming one of the largest mafic intrusive complexes on Earth, second only to the Bushveld Complex in South Africa.

The Duluth Complex is physically defined as a continuous mass of mafic to felsic plutonic rocks bounded by a footwall of predominantly Paleoproterozoic and Archean rocks, a hanging wall of largely mafic volcanic rocks and hypabyssal intrusions, and internally, it contains only scattered bodies of strongly granoblastic mafic volcanic and sedimentary hornfels.

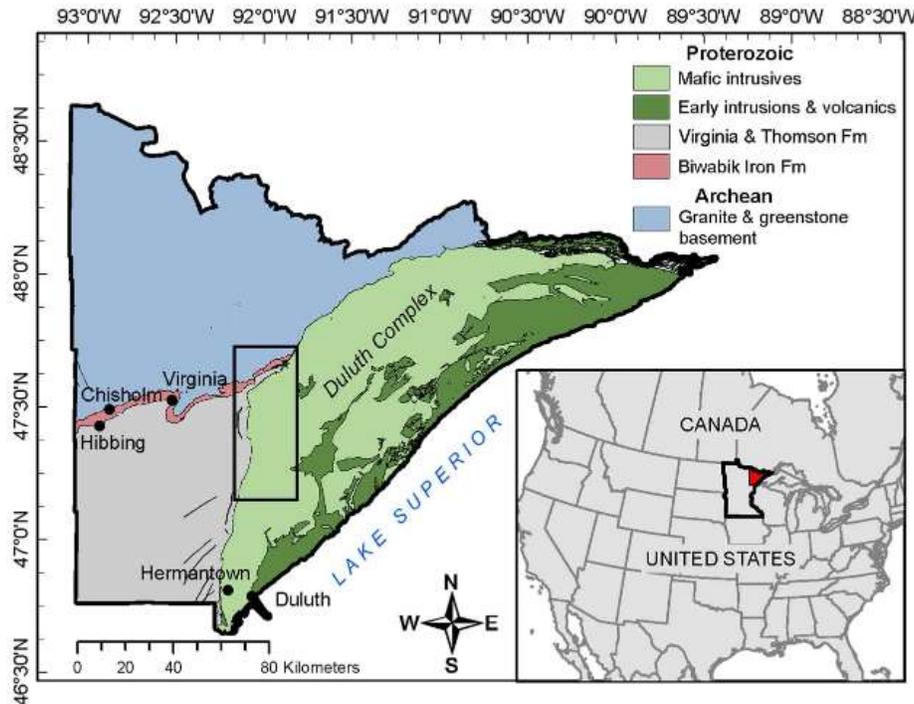
Miller et al. (2002) provides the most recent comprehensive report review of the geology and mineral potential of the Duluth Complex. Miller et al. (2001), built around the 1:200,000 scale M119 geologic map of the Duluth Complex, provides a principal geological framework to aid identification of new exploration targets throughout the Duluth Complex.

The largely tholeiitic Duluth intrusive complex emplaced into comagmatic flood basalts along a portion of the ca. 1.1 Ga MCR. The complex includes a series of anorthositic, troctolitic, gabbroic, granodioritic and granitic intrusions. Of these the most important for mineral exploration is the "layered series" (aka "troctolite series") composed of troctolitic to gabbroic cumulates that constitute numerous, discrete, layered intrusions scattered throughout the complex.

The Duluth Complex comprises multiple intrusive phases, episodically emplaced into the base of a comagmatic volcanic edifice between ca. 1108 and 1098 Ma (Miller et al., 2002), which are divided into four primary series based on lithology, apparent relative age, and internal structure: the felsic series, the early gabbroic series, the anorthositic series, and the layered series. Field and geochronological studies indicate a complex but short emplacement history, where the layered series intruded into an anorthositic substrate, which was likely still hot or partially molten, allowing for the intricate interplay between these units. Recent geochronology demonstrated that the emplacement of these intrusions occurred at 1096 Ma, within a

geologically brief period of less than one million years, likely driven by upwelling mantle plumes associated with lithospheric extension during the rift's development (Swanson-Hysell et al., 2021).

Figure 7.1 Bedrock geological map of northeastern Minnesota showing the major rock units of the Duluth Complex.



Source: Kleinsasser et al. (2024)

7.1.2 Geology and Mineralization of the Duluth Complex and the Southern Contact Zone

The Project is situated along a well-defined regional structural trend formed by early to late (pre- and post-Duluth Complex emplacement), composite, differentiated mafic-ultramafic intrusions or intrusion complexes that include OUIs. This trend, which is likely related to a structural splay(s) off the deep-seated Great Lakes Tectonic Zone, extends south-southwest mainly along the western margin of the Duluth Complex and crosses its southern basal contact into the Lower Proterozoic Animikie basin.

Along the southern basal contact of the Duluth Complex lies a zone known for hosting large sulphide mineralization, termed here the Southern Contact Zone. In comparison, the basal contact zone along the northwestern margin of the Duluth Complex is estimated to contain about 4.4 billion tons of sulphide mineralization, grading approximately 0.66% Cu and 0.20% Ni, highlighting the exploration potential of the entire basal contact zone. The mineralized northwestern margin of the Duluth Complex makes a dramatic strike and dip reorientation in the Wyman property area at the north end of the Southern Contact Zone. Here, a major structural flexure occurs that is characterized by a rapid change from northeast-southwest striking and 15-25° dip to a north-south strike and > 60° dip along the Southern Contact Zone.

While the northeastern margin of the Duluth Complex is reasonably well exposed, the Southern Contact Zone is mostly covered by thick (up to 60 m) Pleistocene glacial deposits. Because outcrops are rare, geologic mapping along the Southern Contact Zone has largely relied on information from exploration drillholes

supplemented by regional geophysical data. As a result, the igneous stratigraphy of the Southern Contact Zone is not as well-known compared to the northwestern basal contact area.

The layered series intrusions in the Southern Contact Zone are known hosts to mineral deposits in the Duluth Complex. These intrusions are characterized by significant differentiation, leading to the accumulation of metal-rich layers, particularly those bearing Cu, Ni, and platinum-group elements (PGE). Published and unpublished exploration data generated from the Skibo, Water Hen and Tamarack prospects along the Southern Contact Zone suggest a spatial and likely genetic association between dominantly ultramafic to OUIs and the potential to host magmatic Cu-Ni-PGE sulphide mineralization. A working model based on these associations was developed by the U.S. Geological Survey and others and subsequently refined by EMI after completion of work at their Skibo and Siphon prospects and an assessment of the Water Hen prospect data (DeMatties, 2018a).

Exploration in the region along the Southern Contact Zone has confirmed that high-Cu-Ni-PGE-grade massive sulphide mineralization can occur at and below basal contacts, along margins or in feeder conduits of these ultramafic bodies as magmatic segregations as well as structurally controlled injections. Magmatic injections can migrate outward and downward some distance from their source intrusion into the structural footwall rock sequence (e.g., nearby Tamarack deposit; Off-Property). These factors have guided exploration along the Southern Contact Zone.

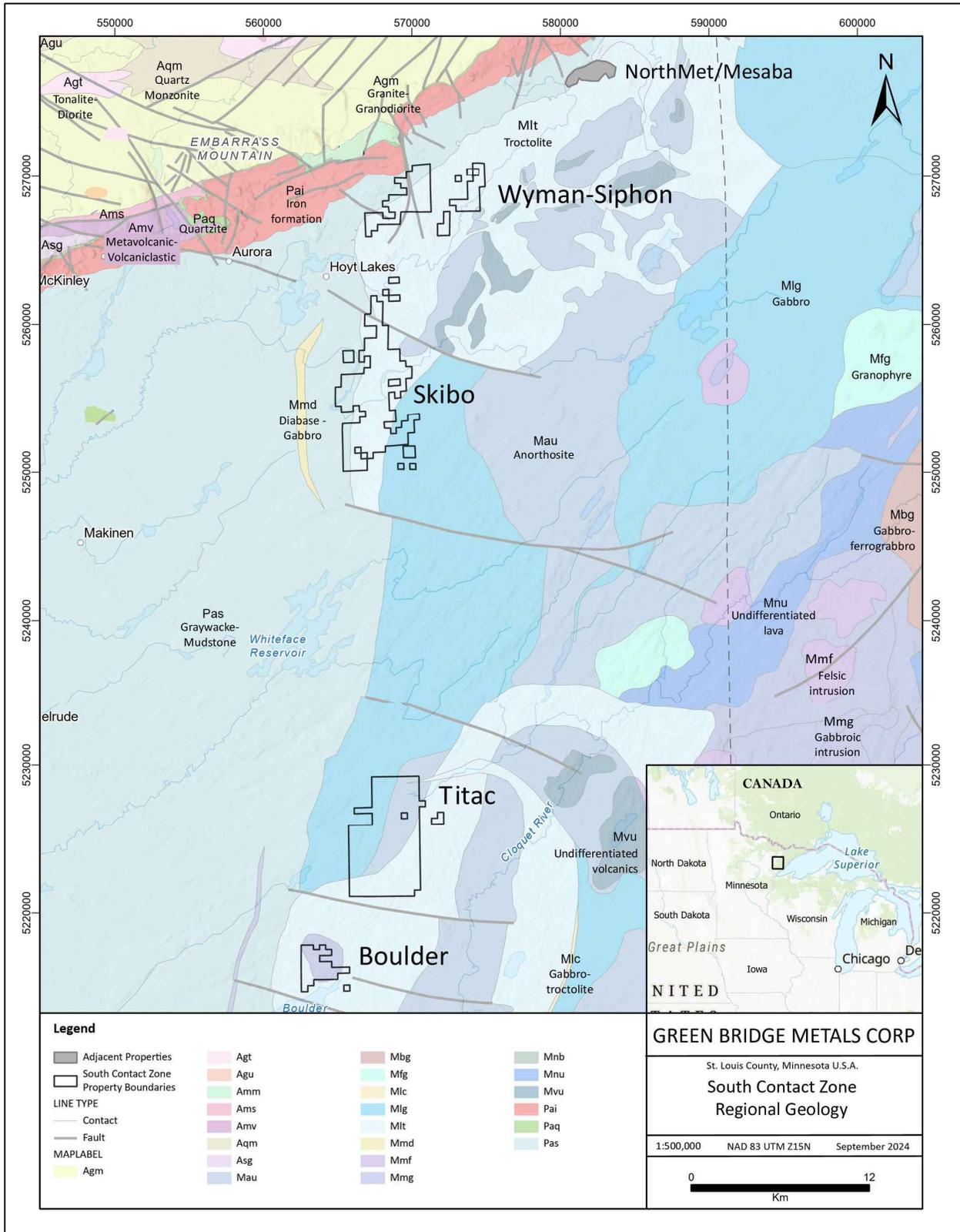
The SCZ properties discussed in this Report are underlain, from north to south, by the following principal layered mafic-ultramafic intrusions: Partridge River, Western Margin, and Boulder Lake (e.g., Miller et al., 2001, 2002). The level of exposure of layered series intrusions varies from very good for those along the north end of the SBZ (e.g., Partridge River intrusions) to very poor for those in the central and southern part (e.g., Boulder Lake intrusions).

The Partridge River intrusions (PRI), which are characterized by subdued magnetic anomaly pattern, contain poorly differentiated troctolitic cumulate bodies with inclusions and a roof zone of anorthositic, gabbroic, and hornfels rocks (Severson and Miller, 1999).

With only a handful of outcrops, the geology of the SCZ is largely defined by high-resolution aeromagnetic data and available drill core. South-southwest of the PRI, a single, large, troctolitic intrusion forms the western margin of the SCZ and was named Western Margin intrusion (WMI) by Miller and Chandler (1999). The intrusion is 5-10 km in width and has a strike length of over 40 m. Like other predominantly troctolitic bodies, the WMI has a subdued aeromagnetic pattern and a subtle striping that probably reflects some stratiform variability in rock type. An aeromagnetic "ledge" characterizes the basal contact against strongly recrystallized graywacke and slate of the Virginia Formation (Paleoproterozoic). The basal contact and the internal striping of aeromagnetic anomalies are offset in several places by inferred east-northeast- and west-northwest-trending faults (Miller et al., 2001).

Further to the south, aeromagnetic survey and drill core data infer the southeast-dipping, sheetlike Boulder Lake intrusion (BLI), interpreted to be composed of troctolite to oxide-rich gabbro. The outline and contact relationships of the BLI to adjacent rock types is largely based on interpretation of aeromagnetic data. A subdued aeromagnetic signature characterizes the outer (lower) troctolitic parts of each cycle, and a narrow magnetic high corresponds to gabbroic intervals. Much of the drilling into the BLI focused on circular highs related to transgressive OUIs. The interpreted regional geology of the SCZ is illustrated in Figure 7.2.

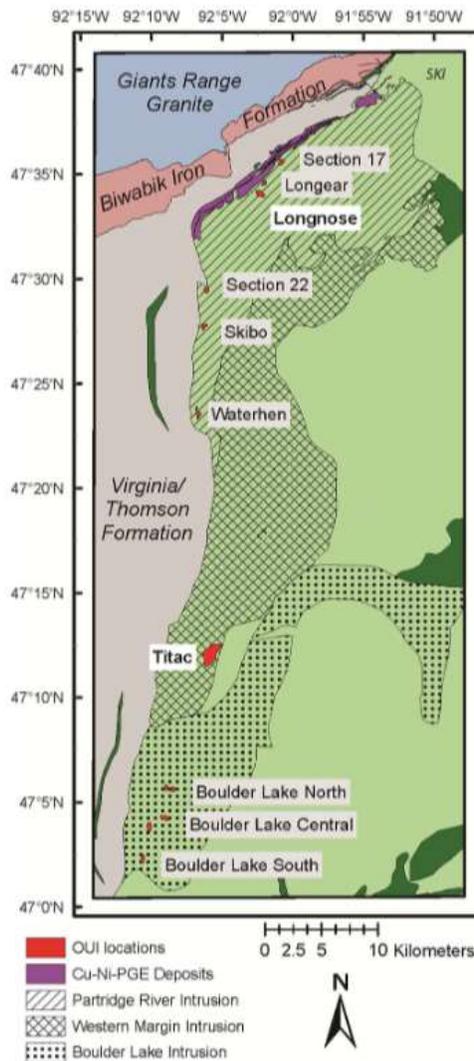
Figure 7.2 Regional geology of the SCZ Project.



7.1 Property Geology

The SCZ is comprised of four non-contiguous properties, including (from north to south) Wyman-Siphon, Skibo, Titac, and Boulder. Most known exploration targets defined within the SCZ are related to the OUIs that occur proximal to the western contact of the Duluth Complex in a straight line along the Southern Contact Zone beginning just south of Babbitt, Minnesota, and ending just north of Duluth, Minnesota. Known OUI intrusions in the Duluth Complex include Section 17 (off-Property), Longear (off-Property), Longnose (off-Property), Section 22 (Skibo), Skibo, Water Hen (off-Property), Section 34 (Titac), Boulder Creek, Boulder North, and Boulder South (Figure 7.3). Oxide Ultramafic intrusions cut the layered series intrusions and are generally regarded as late occurring events in the development of the MCR. Geometrically, OUIs have various shapes and sizes including pipe-like, sheet-like, and funnel-like, and their emplacement may be structurally controlled (Severson, 1995).

Figure 7.3 Bedrock geological map of the Western Margin of the Duluth Complex showing OUI hosting intrusions. Section 22 (Skibo), Skibo, Titac, Boulder (Lake) North, Boulder (Lake) Central, and Boulder (Lake) South are within the SCZ Project.



Source: Kleinsasser et al. (2024)

7.1.1 Wyman – Siphon

Wyman-Siphon is underlain by mafic-ultramafic intrusive rocks that host magmatic massive to disseminated Cu-Ni (\pm PGE) sulphide deposits located within the Duluth Complex. Specifically, the Property is strategically located along the basal contact of the PGI, one of the key intrusive bodies within the Duluth Complex. The bedrock geology of Wyman-Siphon is dominated by troctolitic and gabbroic rocks of the PRI. The geology of the Wyman-Siphon property is illustrated in Figure 7.4.

The geology of the Wyman property is largely based on exploration drilling and limited government mapping due to sparse outcrops. The host unit to Cu-Ni mineralization is the layered PRI, which emplaced into gently dipping Paleoproterozoic Virginia Formation and Biwabik Iron Formation rocks. The layered PRI is commonly intersected by up to 30 m wide OUI dikes and sills. No large OUI body like the Skibo complex has been identified in the resource area. The PRI itself has a sheet-like geometry consisting of several stacked igneous units each representing a separate magmatic pulse. Its basal unit is a heterogeneous mix of augite troctolite and olivine gabbro with noritic contamination zones and abundant graphitic inclusions of the Virginia Formation. Above the basal contact zone are more homogeneous augite and coarse-grained troctolite units. Structurally, both the PRI and Paleoproterozoic footwall rocks are transected by a prominent, northeast trending, rift related fault, and a northwest trending basement structure. The northeast trending fault bifurcates at its southwest end and is flooded by late troctolite intrusions. It is noteworthy that the PRI basal contact forms a major structural flexure that is characterized by a rapid change from northeast-southwest striking and 15-25° dip to a north-south strike and > 60° dip, resulting in a regional synclinal fold structure plunging gently to the southeast.

The Siphon property forms the northeast part of the Wyman-Siphon property area, with thin (up to 3 m) glacial overburden and abundant outcrops. The Siphon property is underlain by gabbro and troctolite units of the basal portion of the PRI, and footwall sedimentary rocks of the Biwabik Iron and Virginia formations (Severson, 1995). This area occurs along the well-defined north-northwest trending, basement-related Siphon fault system developed along the northwest margin of the PRI. The system is at least 8 km long and composed of two high-angle faults (east and west structures) that disrupt and displace footwall Biwabik Iron and Virginia formations before extending into the intrusion.

7.1.2 Skibo

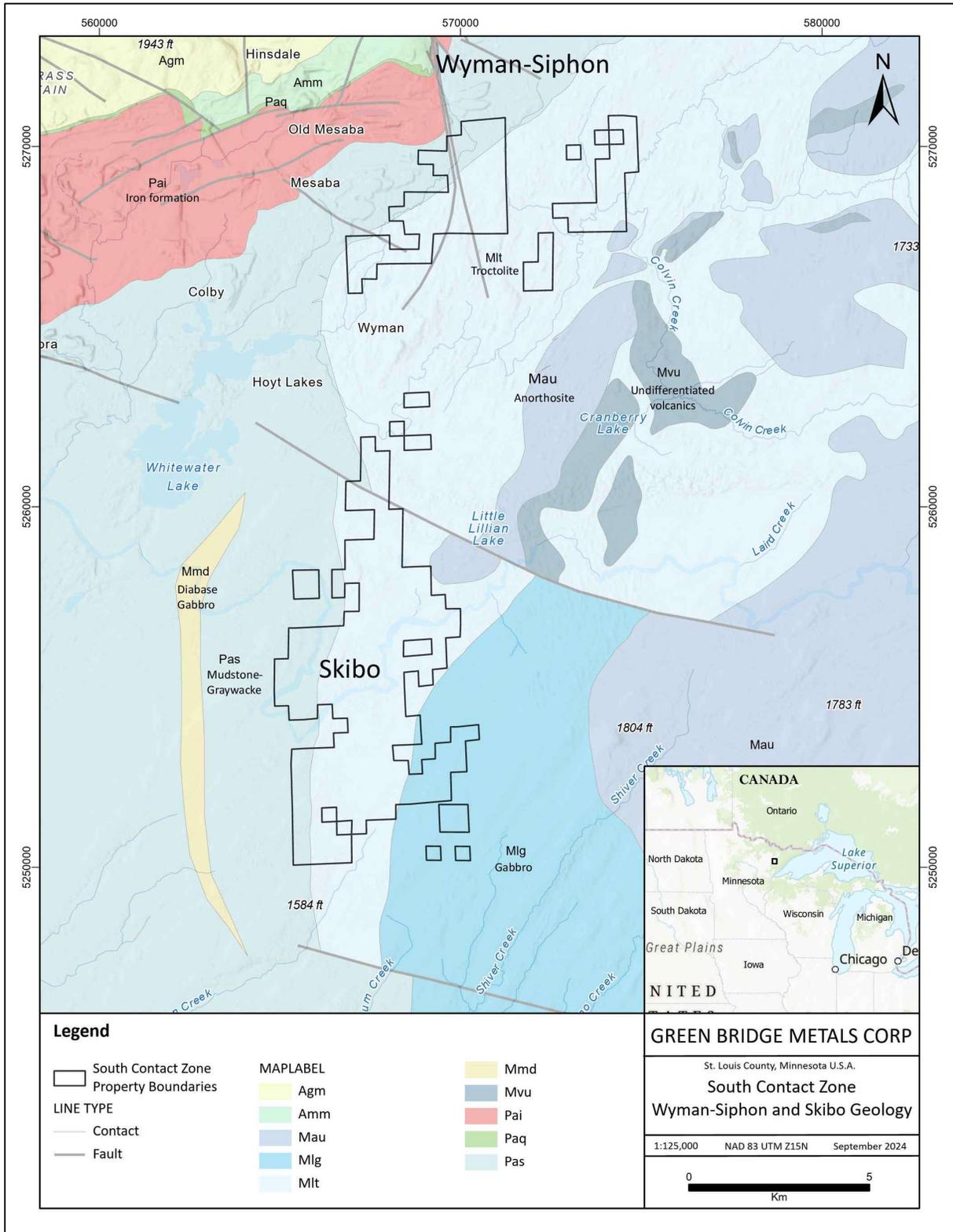
The bedrock geology of the Skibo property includes a sequence of troctolitic and gabbroic rocks, similar to those found at the Wyman-Siphon Property. However, the presence of OUIs at Skibo adds a significant dimension to its exploration potential, as these intrusions are often associated with high-grade Fe-Ti-V mineralization, in addition to Cu-Ni sulphides. The geology of the Skibo property is illustrated in Figure 7.4.

The Skibo Property area is partially covered by up to 30 m of glacial overburden. The underlying PRI is composed of a mixed sequence of gabbroic and troctolitic units (Severson, 1995). A hornfels chill margin along the stratigraphic base of the sequence is locally preserved. Virginia Formation sedimentary rocks form the footwall to the PRI. Within the contact metamorphic aureole, graphitic and/or sulphide-bearing meta-argillite are recrystallized, disrupted, deformed, and commonly contain cordierite.

At stratigraphically higher levels, a series of sheets and irregularly shaped OUI bodies are intrusive into the PRI along northeast trending rift-related faults. Drilling indicates the OUIs consist of dominantly peridotite with lesser feldspathic dunite and local interlayers of troctolite. Hornfels inclusions, potentially of the Virginia Formation, of up to 10 m thick are common.

The basal contact of the PRI has been segmented and locally displaced by sets of west-northwest trending (basement-related) and northeast trending (rift-related) fault structures. As a result, several fault blocks have

Figure 7.4 Property geology of Wyman-Siphon and Skibo, SCZ Project



developed in which the basal contact varies, from north to south on the property, from a 40° dip to a more typical steep dip of 70°. Larger OUI bodies are interpreted to be structurally controlled by fault intersections (northeast rift-related and northwest reactivated basement faults) developed in this system.

Skibo is characterized by a prominent magnetic anomaly that extends for over 3.5 km in a north-south direction. This anomaly is associated with the presence of several OUIs within the layered series of the PRI. Skibo has been a focus of exploration due to its potential for hosting both massive and disseminated Cu-Ni sulphide mineralization.

7.1.3 Titac

The Titac property is underlain by (augite) troctolites of the Western Margin Intrusion (WMI). Troctolitic and gabbroic anorthosite to anorthosite inclusions of the Anorthosite Series with local layers of picrite are common in the igneous sequence. Cross cutting this section are two large OUI bodies (Titac North and Titac South) and numerous sub-horizontal OUI apophyses. These intrusions are primarily composed of coarse-grained to pegmatitic pyroxenite and peridotite, with significant zones of massive and semi-massive Fe-Ti-V oxide mineralization. The geology of the Titac property is presented in Figure 7.5.

Titac is characterized by the presence of large OUIs, interpreted to have been emplaced during the late stages of the MCR development. Drilling by Cardero suggests both OUIs have a pipe-like geometry with the northern body 600 m long, 18-330 m wide, and at least 450 m thick; and the southern body 270 m long, 180 m wide, and over 490 m thick (Farrow et al., 2012). The OUI bodies are dominantly composed of oxide peridotite and oxide pyroxenite. These units can grade into oxide feldspathic peridotite, oxide picrite, oxide melagabbro and oxide gabbro. Massive oxide zones and pods are common. Disseminated to semi-massive oxides generally range from 10-40% in the peridotite and pyroxenite with >60% in massive oxide zones. Early sampling suggested average grades of 15.7% TiO₂ (maximum of 26.7% TiO₂) and 0.26% V (maximum 0.40% V; Severson, 1995).

The massive oxide zones are characterized by coarse-grained, intergranular titanomagnetite grains with exsolution lamellae of ilmenite and discrete ilmenite grains/grain aggregates. Generally, titanomagnetite is greater than ilmenite.

In addition to Fe-Ti-V oxide mineralization, both OUIs are well mineralized in sulphides. The peridotite and pyroxenite contain up to 2% sulphides with chalcopyrite as the dominant mineral. Lesser pyrrhotite and cubinite, bornite, pentlandite and sphalerite have all been reported. Most of the chalcopyrite has been cut by fine stringers of magnetite developed during serpentinization (Severson, 1995). Although very few intervals have been sampled, maximum values of 0.16% Cu and 0.03% Ni have been documented.

7.1.4 Boulder

The Boulder property, is located south of the Titac property in southern portion of the SCZ (Figure 7.1), is underlain by the Boulder Lake intrusion (BLI) of the Duluth Complex. Significant magnetic anomalies indicate the presence of additional OUIs. The geology of the Boulder Property is less well understood than that of Titac, primarily due to limited historical drilling and lack of outcrop. The interpreted geology of the Boulder property is presented in Figure 7.5.

Historical drilling coupled with state geophysical data indicate that the Boulder property area hosts a large, structurally controlled ultramafic complex. The ultramafic complex is a regional magnetic high feature that is believed to represent a late ultramafic complex similar to Skibo that has been emplaced within the Boulder Lake intrusion (Boulder North prospect). The area is covered by up to 15 m glacial overburden

with only rare outcrops of bedrock. Magnetic and electromagnetic trends indicate that several linear OUI bodies are juxtaposed to each other, trending at high angles to each other. This magnetic pattern may suggest block faulting that likely controlled the late emplacement of the OUIs along northeast and northwest trending structures (faults) that may coincide with feeder zones in the ultramafic complex.

7.2 Mineralization

7.2.1 Wyman–Siphon

The primary style of mineralization at the Wyman-Siphon property is disseminated Cu-Ni sulphides, primarily chalcopyrite, pentlandite, and pyrrhotite, hosted within the troctolitic units. Data compiled by EMI indicates that two stacked, gently dipping mineralized horizons (averaging 25 m in thickness for the upper horizon and 45 m for the lower) subcrop below <15 m of glacial overburden (DeMatties, 2013; 2018b). The thickest portion of each identified horizon lies within 120 m off surface. Both mineralized horizons are characterized by 1-3% disseminated pyrrhotite (+ pyrite) >>chalcopyrite (+ rare pentlandite) in inclusion-rich (graphitic Virginia Formation), heterogeneous (mela)troctolite. The Siphon Fault Zone, a prominent structural feature, is believed to have acted as a conduit for mineralizing fluids, leading to the formation of high-grade massive sulphide veins within the fault's vicinity.

The mineralization hosted by the PRI and defined by two gently dipping (0-30°), stratigraphically stacked, strata-bound Cu-Ni assay horizons. These mineralized zones contain 1-3% (locally greater) fine- to medium-grained, interstitial magmatic pyrrhotite + pyrite with lesser chalcopyrite + cubanite and rare pentlandite disseminations and coarser composite grains (blebs). The mineralization has a strike length of at least 650 m and is covered by generally less than 10 m of glacial overburden. The mineralization is geophysically expressed by a broad zone of high EM conductance and IP chargeability (DeMatties, 2018b).

On the Siphon Property, geological mapping coupled with drill core results demonstrates that significant magmatic Cu-Ni-bearing massive sulphide mineralization is associated with the Siphon fault zone. These data suggest the structural zone focused the movement of magmatic sulphide liquid melts (and possibly late magmatic - hydrothermal fluids) in middle or upper levels of the PRI.

Reconnaissance mapping by Falconbridge in 2001 identified several gossanous, Cu-Ni-PGE-bearing (< 0.61% Cu, < 0.11% Ni, < 0.710 ppm Pd + Pt + Au) outcrops and float along the surface traces of both main structures. These showings consist of disseminations/blebs, poorly developed net-texture and thin (<0.3 m) discontinuous veins/veinlets of chalcopyrite-pyrrhotite hosted by altered/unaltered augite troctolite and thin pegmatitic augite troctolite veins/dikes. Drilling intersected typical low-grade, strata-bound disseminated (magmatic) sulphide zones (1-5% pyrrhotite > chalcopyrite + bornite > cubanite) hosted by heterogeneous troctolite-augite troctolite to olivine gabbro rock units along the gently dipping basal contact or at stratigraphically higher levels of the PRI.

The most significant results from the drilling were the shallow (25 m vertically) high-grade Cu-Ni intercept in hole DDH-W-3 stratigraphically located approximately 450 m above the basal contact. Relogging by Falconbridge indicated this important mineralized section (80-111 feet; 24.4-33.8 m) consists of two sulphide-bearing plagioclase-augite pegmatite dikes and a thin (0.7 ft; 0.2 m) massive sulphide vein that occupies a fault zone or splay parallel to and within 120 m of the main western Siphon structure. Disseminated (3-10%) to massive (60%) sulphide (pyrrhotite, pentlandite, chalcopyrite and bornite) mineralization is hosted in the moderately altered (saussuritization, actinolite-chlorite alteration and bleaching) pegmatite dikes. The massive (90%) sulphide vein is fragment-bearing (altered pegmatite fragments) and chalcopyrite rich. Similar thin (<0.3 m), Cu-bearing sulphide-rich, altered and unaltered

fracture-controlled pegmatite dikes and massive sulphide veins (veinlets) were mapped at surface by Falconbridge along the main western Siphon structure.

7.2.2 Skibo

The mineralization at Skibo is varied, with significant occurrences of both massive and disseminated Cu-Ni sulphides, dominantly associated with the main OUI body. The disseminated sulphides are typically hosted within the troctolitic units, while the massive sulphides are associated with the footwall zones of the OUIs. These massive sulphide zones are characterized by high concentrations of Cu-Ni-PGE, making them high-priority exploration targets. The Skibo Property has not been systematically assayed for Ti or V, despite the known presence of OUIs.

Results from EMI's 2009 and 2015 drilling on the Skibo Property confirm the presence of a large, strongly mineralized OUI characterized by widespread but low Cu-Ni grade disseminated to massive sulphide mineralization and a stratigraphically lower, high-grade Cu-Ni-PGE-bearing stockwork sulphide zone (DeMatties, 2018a). The overlying sulphide enriched OUI intrusions are interpreted as the source for the base- and precious-metal-enriched stockwork zone including massive to semi-massive, poorly defined sulphide veins identified at shallower levels.

DeMatties (2018a) discusses the likelihood of the PRI at Skibo to have been injected upward during one or more magma pulses along a major rift-related northeast trending fault and emplaced at intersections with northwest trending basement structures. The lack of alteration envelopes around massive sulphide veins supports the notion that the troctolite host was still very hot and only partially consolidated during the time of flooding by sulphide liquids (insignificant thermal gradient). However, late magmatic - hydrothermal fluids are at least locally associated with or in some cases overprint parts of the stockwork sulphide zone as evidenced by the presence of mineralized pegmatitic zones, biotite-chlorite alteration, and the remobilizing of chalcopyrite into fracture-controlled veinlets.

7.2.3 Titac

Mineralization at the Titac property includes Fe-Ti-V oxide mineralization and Cu-Ni sulphides. The Fe-Ti-V oxide mineralization is primarily hosted within the pyroxenite and peridotite units, with disseminated to semi-massive oxide minerals, including magnetite and ilmenite, being the most prominent mineralization styles. The disseminated Cu-Ni sulphides are typically found interstitially within the silicate and oxide minerals, and locally as coarse-grained clots.

Exploration drilling at Titac North and Titac South has confirmed that the mineralization extends to considerable depths, with the intrusions remaining open at depth. Mineralization at Titac South extends 280 m east-west, 250 m north-south, and to a depth of 330 m.

The Titac OUI consists of two main intrusions located approximately 500 m apart: Titac North and Titac South. Both main intrusions are sub-vertical and pipe-like and consist of oxide-bearing pyroxenite. Titac North is hosted in gabbroic and troctolitic anorthosite of the WMI and Titac South is hosted in troctolite and augite troctolite of the WMI. The complex stratigraphy of the intrusions, characterized by vertical pipe-like structures and sharp lithological contacts, suggests a dynamic emplacement history. However, recent work by Kleinsasser et al. (2024), indicates that the origin of the intrusions is magmatic, with the ilmenite and titanomagnetite textures indicating a protracted cooling process and $\delta^{34}\text{S}$ values of sulphides revealing little assimilation of the footwall Virginia Formation, a fine-grained pelitic unit containing sulphide-rich bands.

Limited mineralogical analysis by Process Research Ortech indicates that the major host for the TiO₂ is ilmenite (35-68%), including a high percentage of free, unassociated ilmenite indicating that a high-grade concentrate can be produced with appropriate upgrading methods. Other main minerals present in the studied samples are pyroxene (16-55%), magnetite/hematite (1.5-18%), chalcopyrite (0.3-2.7%), and a modest percentage of rutile present in all samples (Process Research Ortech, 2021).

7.2.4 Boulder

Historical drilling at Boulder has intersected zones of disseminated to semi-massive titanium-iron oxide mineralization, although these results have not been systematically followed up. The Boulder Lake intrusions also show potential petrologic attributes favorable for reef formation, providing potential for PGE reef deposits.

Relogging of Phelps Dodge drill core by NRRI in the 1990s and EMI in 2010-2012 (De Matties et al., 2012) confirmed the presence of a large oxide-bearing ultramafic complex that includes a series of late OUIs (sulphide-bearing oxide-dunite, peridotite and pyroxenites) intruding a gently dipping sequence of oxide gabbro, oxide-bearing augite troctolite as well as anorthositic units. Most significant drill intercepts include two overlapping mineralized horizons of low-grade disseminated sulphides and high Ti-grade semi-massive to massive oxides in the ultramafic units (generally <1-3% chalcopyrite >>cubanite + bornite with minor pyrrhotite; and 10-100% magnetite + ilmenite + titaniferous magnetite).

At the Boulder North prospect, the most significant sulphide mineralization located on the Property occurs within the main OUI body. Drill intercepts of the main body revealed oxide peridotite with lesser feldspathic peridotite, picrite and dunite. Oxide content is generally low ranging from 1-15% (magnetite > ilmenite). Zones of conductive graphite (up to 10%) are locally present.

The Boulder South prospect covers a large OUI that is emplaced within a sequence of troctolitic-gabbroic rock units (of the Boulder Lake intrusion) and an inclusion of hornfels basalt. The OUI consists dominantly of oxide peridotite and oxide pyroxenite with 10-15% oxides (>90% ilmenite), 6-10% sulphides (pyrrhotite>> chalcopyrite + cubanite >> pentlandite), and locally graphite.

8 Deposit Types

The following is largely after Miller et al. (2002) and references within, which in the view of the QP provides a relevant overview of the main mineral deposit types and their distribution and controls in the Duluth Complex and the SCZ.

8.1 Titaniferous Iron Oxide (Fe-Ti ± V) Mineralization

Titaniferous iron oxide bodies in the Duluth Complex have been mostly explored along its base. Oxide mineralization is also associated with late plug-like OUIs along the western margin of the Duluth Complex. Hauck et al. (1997a) classified the titaniferous ores, composed principally of ilmenite and/or titanomagnetite, into three general types: iron-rich metasedimentary inclusions, magmatic banded oxide segregations, and oxide ultramafic inclusions.

Massive to semi-massive oxide layers of ilmenite and/or titanomagnetite that range in thickness from a few cm to 3 m occur in many places within the Duluth Complex. These layers commonly alternate with plagioclase-rich bands and ferrogabbroic cumulate layers. For example, magmatic semi-massive oxide layers are present within the Boulder Lake gabbro in the Boulder North area. The oxide layers are titanomagnetite-rich, range from 0.02-1.5 m thick, and are associated with ferrogabbroic cumulates that contain clinopyroxenite lenses (Severson, 1995). Ferrogabbroic cumulates that contain 5-10% titanomagnetite are also present in the Western Margin intrusion in the Boulder Creek exploration area.

Oxide ultramafic intrusions that are believed prospective for magmatic massive Cu-Ni sulphide deposits are generally expressed as aeromagnetic highs, commonly with an associated electromagnetic conductor, and thus they were initially drilled in search of conductive sulphide mineralization. The OUIs are plugs or pipe-like bodies that commonly have irregular apophyses. They intruded the troctolitic rocks of the layered mafic-ultramafic intrusions. In general, the OUIs are spatially arranged along linear trends, suggesting that structural control was important to their genesis. All OUIs are crosscutting except at Boulder Creek, where they appear roughly stratabound with a crosscutting feeder zone. Rock types include coarse-grained to pegmatitic clinopyroxenite, dunite, peridotite, melatroctolite, and minor melagabbro; all rock types are oxide bearing.

8.2 Copper-Nickel (-Platinum Group Elements) Sulphide Mineralization

The fundamental characteristics of this style of mineralization involve sulphur contamination of mafic magmas by pre-Keweenaw footwall rocks, and mineralization occurring in the vicinity of the basal contact of mafic intrusions. The variants of this style of mineralization that may potentially exist in the Duluth Complex include:

- Disseminated Cu-Ni (-platinum group element (PGE)) sulphide mineralization in basal contact zones of mafic intrusions
- Massive sulphide mineralization at the basal intrusive contact and in footwall rocks
- Sulphide mineralization in major feeder zones (e.g., Noril'sk/Voisey's Bay-type; Naldrett, 1997)

Only disseminated Cu-Ni sulphide mineralization and basal massive sulphide mineralization are presently known to occur in the Duluth Complex and will be described in the following sections.

8.2.1 Disseminated Sulphide Mineralization

Large resources of low-grade Cu-Ni sulphide mineralization that locally contain anomalous PGE concentrations are well documented by drilling in the basal zone of the PRI (off-Property). Sulphur isotope analyses indicate that the source of sulphur was from the pelitic country-rocks of the Virginia Fm., which form much of the footwall to the PRI (Ripley, 1986). The disseminated sulphide minerals occur as interstitial grains that make up between trace amounts and 10% of the rock by volume. The average sulphide mineral content is 1-5%. Major sulphide minerals are pyrrhotite, chalcopyrite, cubanite, and pentlandite. Mineralized zones are extremely erratic in their spatial extent and mineralized material grades. Zones that are barren of sulphides commonly interfinger with mineralized zones in a random pattern. This erratic pattern of mineralization, in part, mirrors the lithologic heterogeneity of the basal units. This diverse nature makes it difficult to predict the overall spatial distribution of mineralization zones based on widely scattered drillholes and little to no outcrop, requiring more in-fill drilling to address mineralization controls.

8.2.2 Basal Massive Sulphide Mineralization

Severson (1995) grouped massive sulphide mineralization into two categories: i) Footwall-controlled pyrrhotite-dominated (generally <2% Cu, with a 2:1 Cu: Ni ratio); and ii) Structurally controlled Cu-rich (5-25% Cu) with anomalous to high-grade PGE values. In the SCZ, the most important is the rare structurally controlled massive sulphide mineralization that is considered prospective for high-grade mineralized material. It occurs within structurally controlled zones developed within the footwall rocks stratigraphically below the basal contact of the Layered Series intrusions that host major disseminated Cu-Ni deposits. The most significant occurrence identified to date is the Local Boy zone stratigraphically below the Mesaba (Babbitt) Cu-Ni deposit (off-Property). In localized areas along the basal zone of the PRI and Central Boulder Lake intrusion, semi-massive to massive sulphide mineralization is present at the basal contact, proximal to either sulphide-rich footwall rocks or structures such as faults and pre-complex folds. These massive sulphides are pyrrhotite-rich and present at or slightly above the basal contact. A bedded pyrrhotite unit in the footwall Virginia Fm acted as a local sulphur source that generated a copper-poor, sulphide-rich melt that was concentrated along the basal contact, via gravity settling. In the Skibo area, Severson (1995) reported massive sulphide veins up to 11.23% Cu and 6.42% Ni associated with troctolitic rocks near the basal contact.

The occurrence of local massive sulphide veins near and below the basal contact of the Duluth Complex is an indication that larger, potentially economic footwall massive sulphide deposits may yet be found. In the Sudbury Complex, pooling of a mono-sulphide solid solution melt at the basal contact appears to be an important prerequisite to the injection of fractionated sulphide melts (Naldrett, 1997). Peterson (1997) compiled the available Cu-Ni data for the lower 150 m of the PRI to evaluate if Cu-rich sulphide melts were generated by fractionation of mono-sulphide solid solution and defined some interesting target areas.

8.2.3 Feeder Zone Sulphide Mineralization

Some of the attributes of the Duluth Complex Cu-Ni (-PGE) sulphide deposits resemble those of deposits at Noril'sk, Russia, and Voisey's Bay, Canada, that are associated with sulphide mineralization in intrusive feeder zones. The common attributes include occurrence in shallow tholeiitic intrusions associated with plateau basalt volcanism, an external sedimentary source of sulphur, and openness to repeated magma influx and expulsion. A critical attribute of the high-grade Noril'sk and Voisey's Bay deposits, not yet positively identified in the Duluth Complex deposits, is the location of a magma conduit. A conduit that experienced repeated influxes of magma appears to be key to the formation of high-grade Cu-Ni-PGE deposits (Naldrett, 1997). Possible feeder zone conduits could be major faults.

8.3 Platinum Group Element Mineralization

PGE-enriched zones in the Duluth Complex and related intrusions can be classified into two categories—stratabound and stratiform. Stratabound PGE horizons are located within the lower portions of the intrusions where they are intimately associated with Cu-Ni sulphide mineralization and with one or more ultramafic layers that indicate magma recharge events. The stratiform PGE horizons differ from the stratabound ones because they are consistently sulphide-poor and tend to occur at midlevels of well-differentiated intrusions. Stratabound PGE horizons appear to be related to magma mixing and hydrothermal remobilization, whereas stratiform PGE horizons tend to form by the saturation of magmas in sulphide caused by orthomagmatic processes of fractional crystallization, decompression due to magma venting, cumulus phase changes, as well as magma recharge.

8.3.1 Stratabound and Stratiform PGE Mineralization

Stratabound PGE-enriched horizons, with low to moderate sulphide concentrations, are commonly associated with ultramafic layers in intrusions outside the Properties this Report focuses on. Stratiform PGE mineralization in well-differentiated tholeiitic intrusions are similar to classic PGE reef deposits hosted by ultramafic-mafic complexes, such as the Bushveld and Stillwater complexes, in that they occur as sulphide-poor (less than 1 weight percent), PGE-rich intervals that are several meters thick and are conformable with igneous layering. In comparison, stratiform PGE mineralization in tholeiitic intrusions differs from the classic PGE reefs because it is:

- Exclusively associated with mantle plume-influenced, continental rift environments
- Of Middle Proterozoic age or younger
- Associated with aluminous, olivine tholeiitic parent magma compositions that experience Fenner-type crystallization differentiation
- Hosted by ferrogabbroic cumulate rocks
- Associated with copper-rich, nickel-poor sulphide
- Associated with significant gold that is stratigraphically offset above peak PGE concentrations

Stratiform PGE mineralization in tholeiitic intrusions may be orthomagmatic and formed by the saturation, exsolution, and settling of sulphide melt from silicate magma, or may be hydrothermal in origin. The basic conditions required to generate stratiform PGE mineralization imply that all initially sulphide-undersaturated, well-differentiated, tholeiitic mafic layered intrusions can potentially host PGE reef deposits. This is true whether the magma systems are open or closed. Intrusions related to igneous provinces generated by mantle plumes appear to hold the greatest potential to make PGE reefs by virtue of their more PGE-rich composition; however, prolonged fractional crystallization prior to sulphide saturation can theoretically compensate for intrusions formed from parent magma with low initial PGE concentrations.

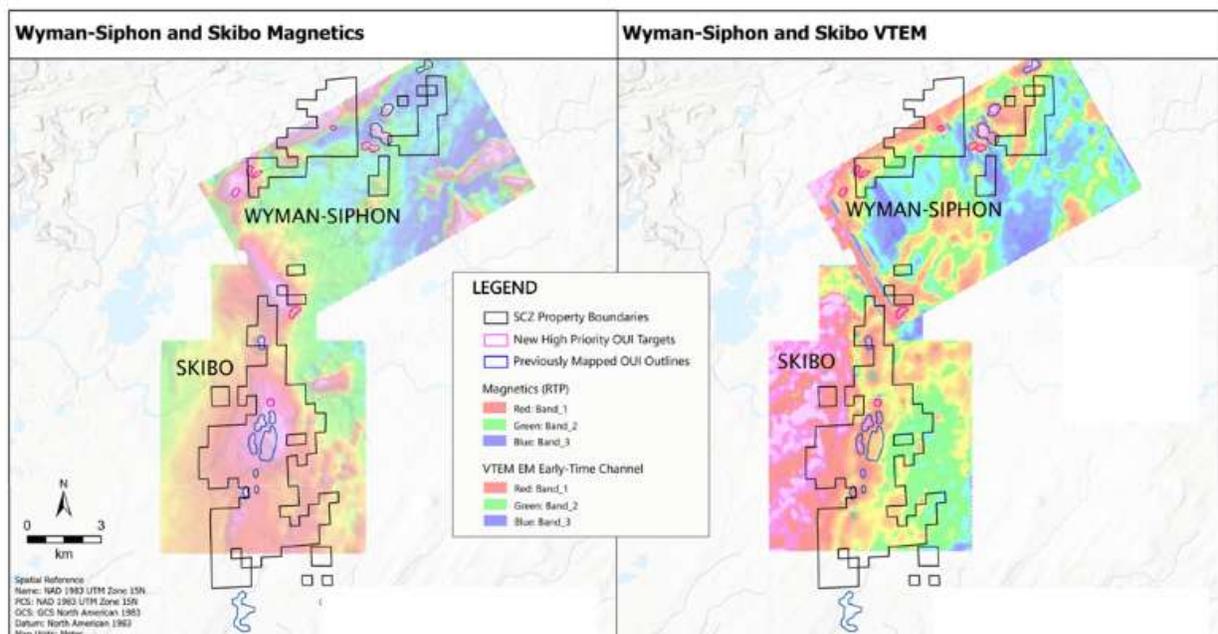
PGE exploration should focus on locating the horizon of initial sulphide saturation as it has the greatest chance of encountering the most PGE-enriched silicate magma. Most intrusions of the Duluth Complex were similarly undersaturated at the time of their emplacement. Notably, the Boulder Lake intrusion with its two major differentiation cycles represents a well-differentiated intrusion. The PRI, in comparison, may hold less potential for stratiform PGE mineralization as this open-system intrusion apparently did not differentiate beyond olivine-plagioclase (troctolite) crystallization (Miller and Ripley, 1996) and was contaminated by extramagmatic sulphur upon emplacement.

9 Exploration

Work by the Company at the South Contact Zone Project has consisted of a historical geophysical data analysis of the Skibo and Wyman-Siphon properties. The data analysis provided insight into the use of virtual time domain electro-magnetics (VTEM) to define OUI bodies within the Project (Figure 9.1). The Company will use the results of this desktop study to guide future exploration within the SCZ.

Other than the review of historical geophysical data and delineation of geophysical targets warranting further exploration, the Issuer has yet to conduct any exploration work at the SCZ. Historical exploration completed at SCZ by previous companies is summarized above in Section 6.

Figure 9.1 Reduction to Pole magnetics and VTEM geophysical review and interpretation of the Wyman-Siphon and Skibo properties showing newly delineated OUI targets.



Source: Green Bridge (2024d)

10 Drilling

The Issuer has yet to conduct drilling at the Property. A total of 137 drillholes totalling 41,398.44 m (135,822 ft) have been completed historically in the SCZ by several companies from 1959 to 2021 (Table 10.1). Collar locations contained in the SCZ database are illustrated in Figures 10.1 to 10.4, with representative cross sections of drilling at the Titac South Deposit shown in Figures 10.5 to 10.6.

Table 10.1 SCZ Project summary of historical drilling (1954-2020).

Year	No. of Drillholes	Drilling Type	Total Depth (m)	Company
Titac				
1967	4	Core	807.41	USSC
1968	2	Core	363.93	USSC
1969	14	Core	3,984.65	Phelps Dodge
2010	30	Core	10,523.5	Cardero
2011	2	Core	510.8	Cardero
Wyman-Siphon				
1954	6	Core	689.45	USSC & INCO
1956-1957	3	Core	858.31	INCO
1968-1971	2	Core	1,865.98	Bear Creek
1972	3	Core	1,357.27	USSC
1973	9	Core	3,163.51	USSC
1974	7	Core	2,041.87	USSC
1976	1	Core	520.6	Exxon
1984	1	Core	183.49	American Shield
2009	2	Core	372.16	EMI
Skibo				
1959	18	Core	4,113.29	INCO
1960-1970	5	Core	1,233.21	Humble Oil
1969-1970	7	Core	1,662.99	Phelps Dodge
1982	1	Core	489.2	USSC
2009-2020	9	Core	4,248.3	EMI
Unknown	2	Core	595.58	Ulland and Unknown
Boulder				
1968	3	Core	509.01	American Shield
1969	1	Core	249.02	Phelps Dodge
1970	5	Core	1,054.91	Phelps Dodge

Figure 10.1 Titac property historical drill collars.

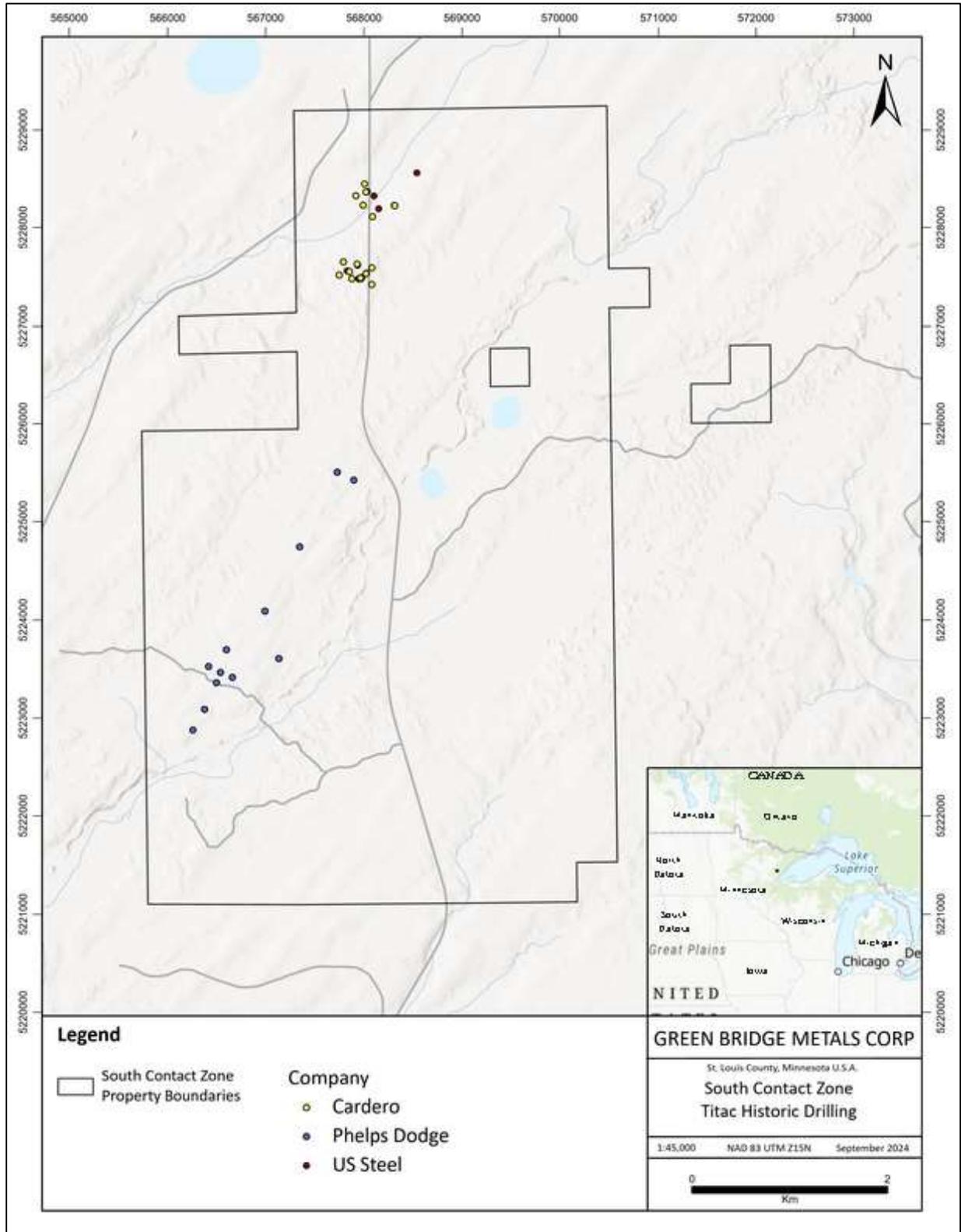


Figure 10.2 Wyman-Siphon property historical drill collars.

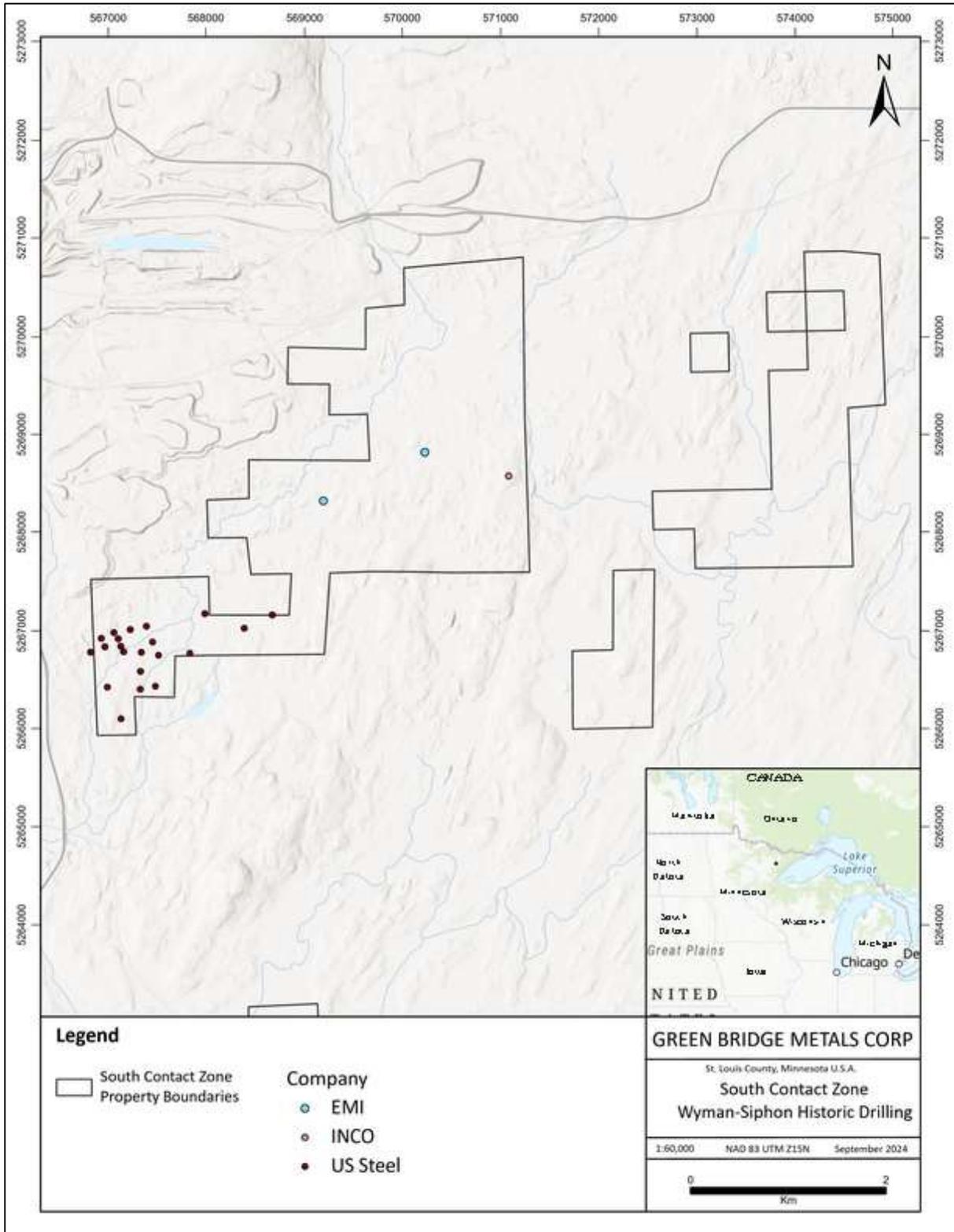


Figure 10.3 Skibo property historical drill collars.

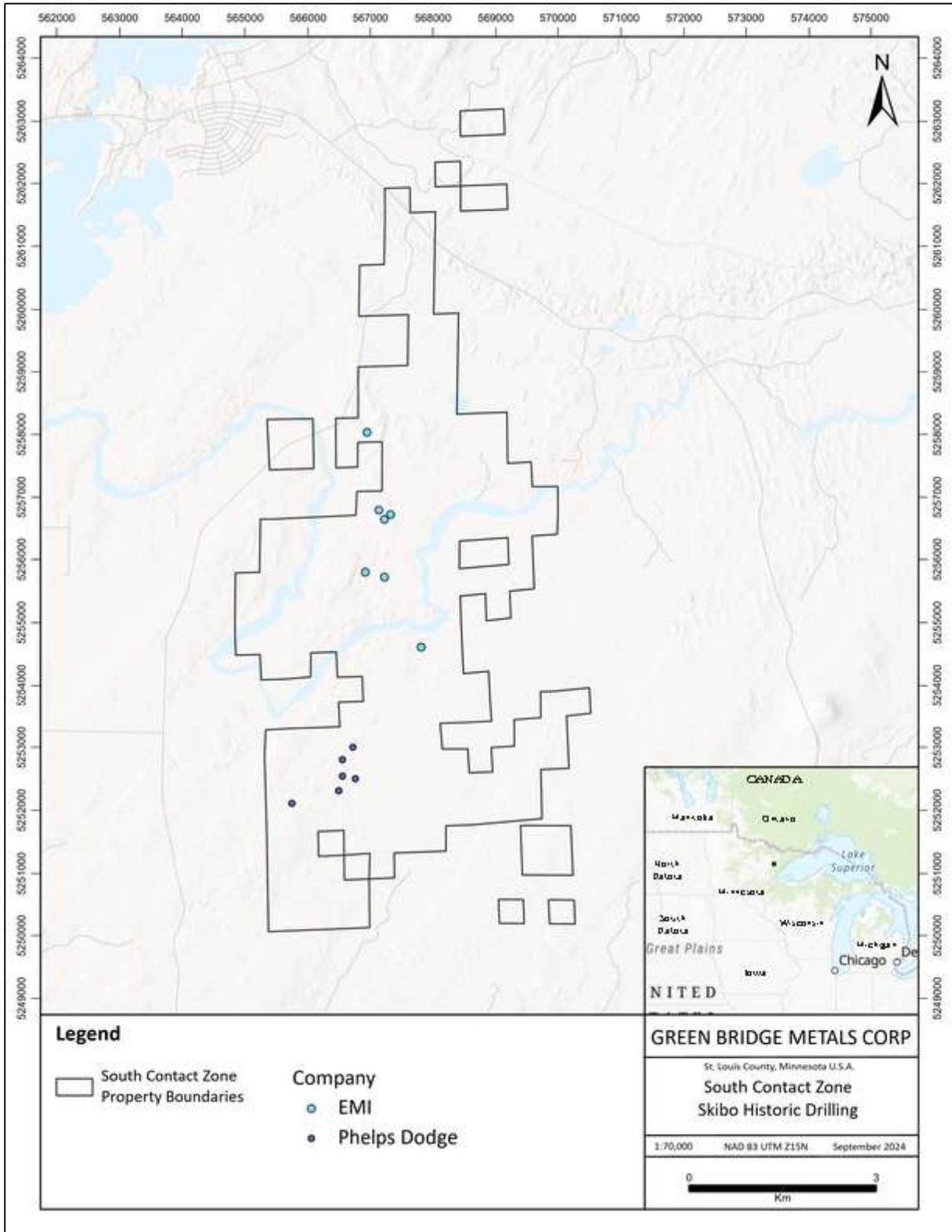


Figure 10.4 Boulder historical drill collars.

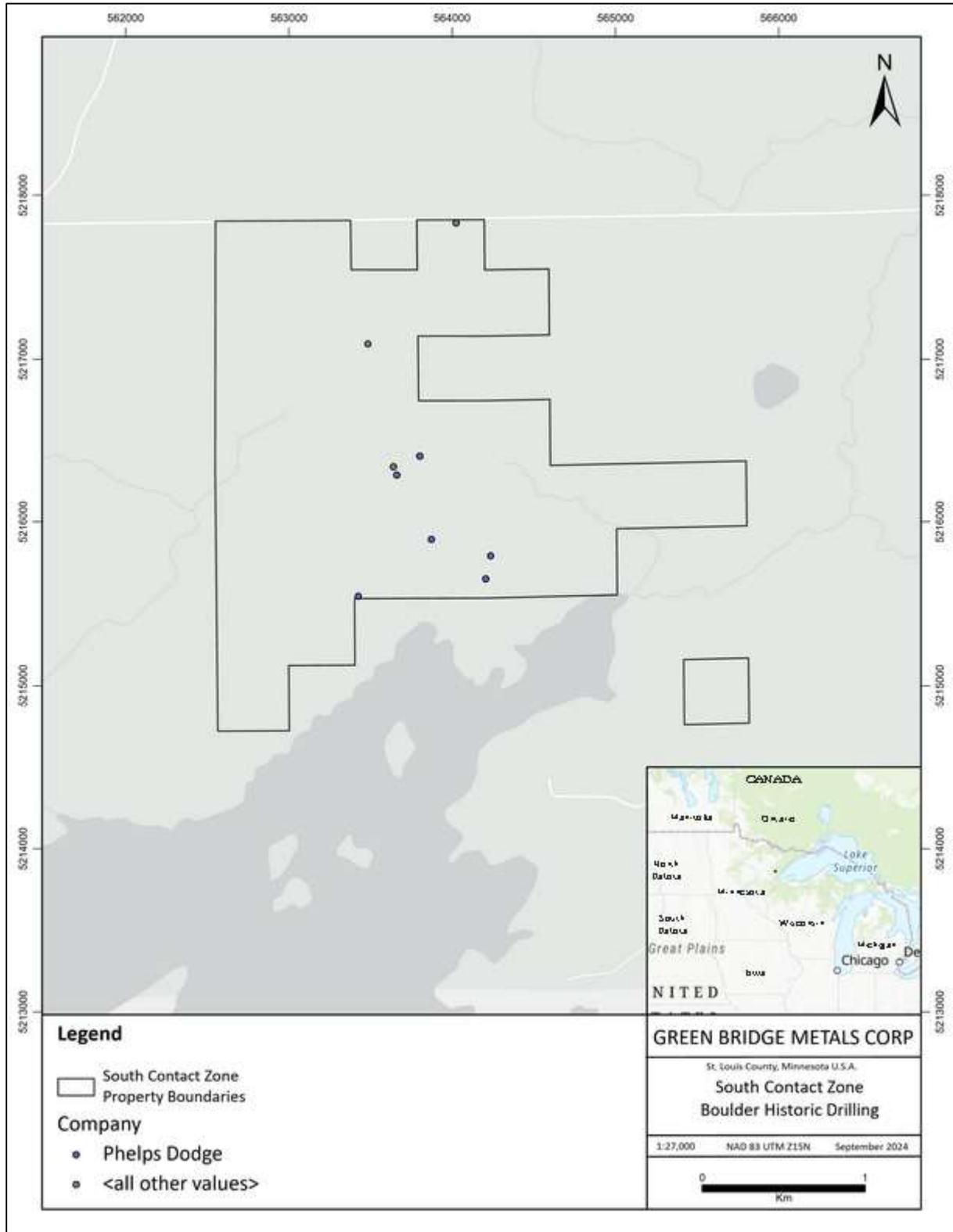


Figure 10.5 Titac South Deposit cross section at 5227500 m E showing TiO₂ (%), looking north.

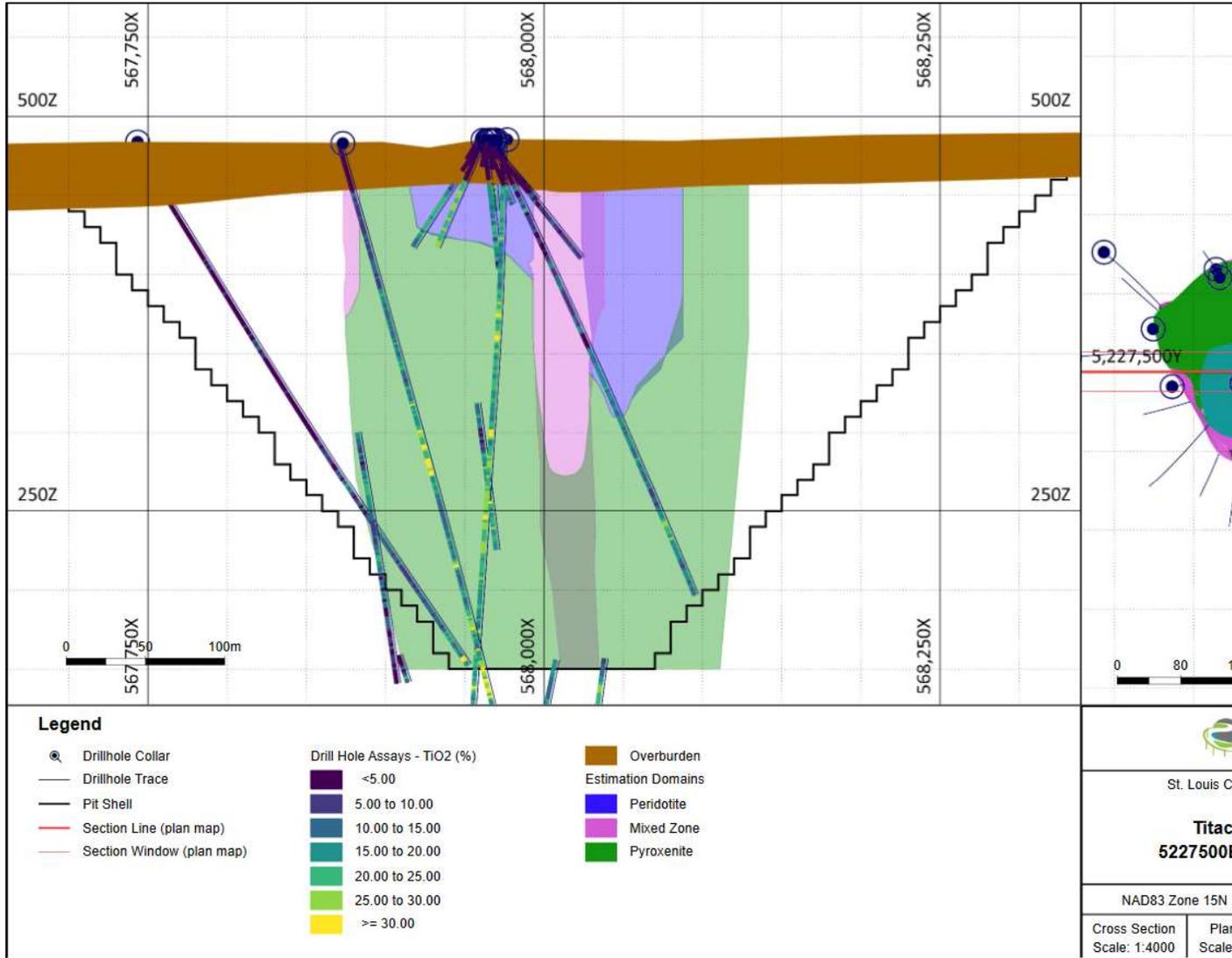
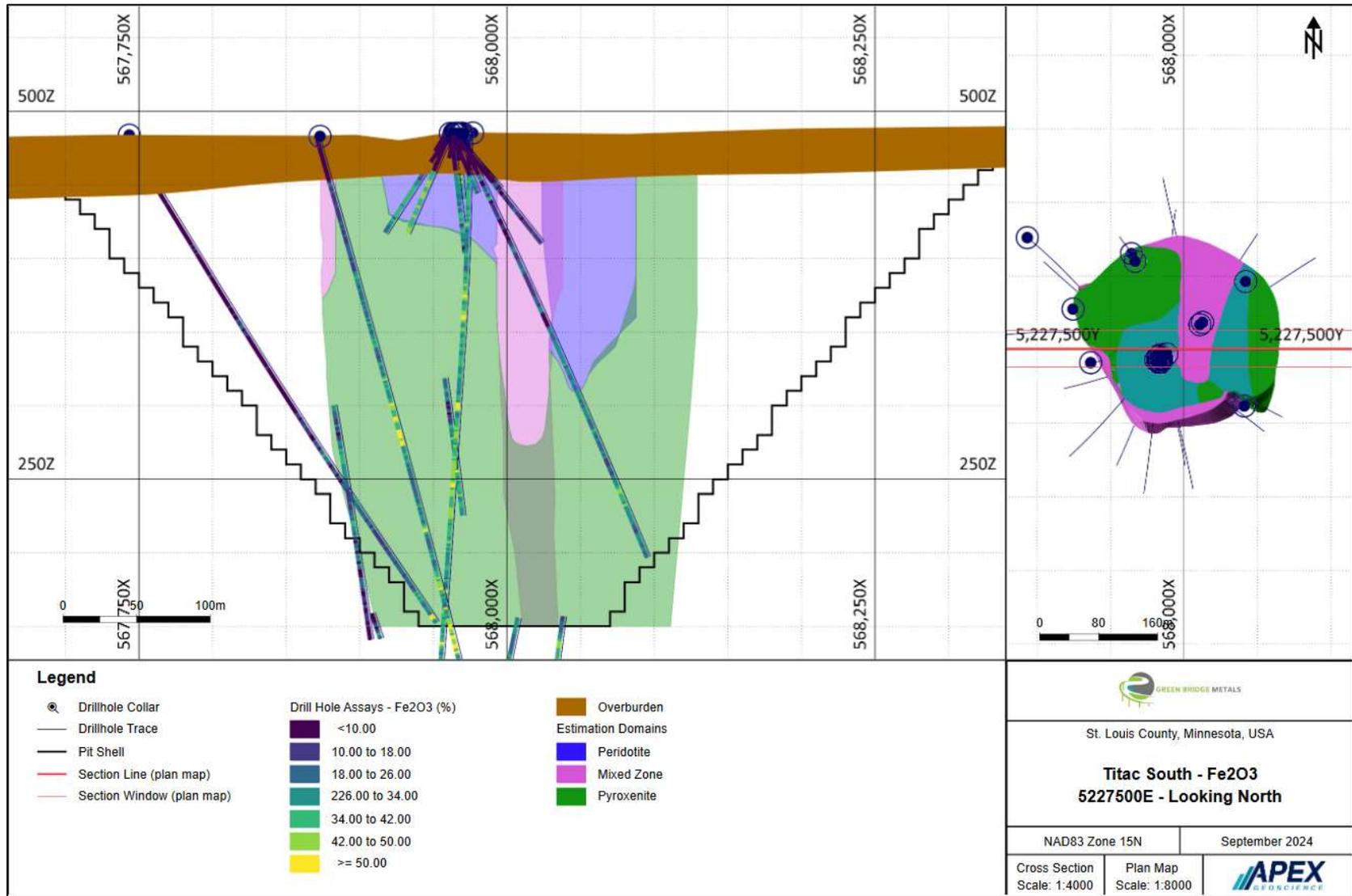


Figure 10.6 Titac South Deposit cross section at 5227500 m E showing Fe₂O₃ (%), looking north.



The following text summarizes drilling in the SCZ Titac South Deposit, with focus on the 24 drillholes totalling 8,349 m contained in the Titac South MRE, that is the subject of this Technical Report. Additional information and results of historical drilling of other properties of the SCZ are summarized in Section 6.

The drillholes contained in the Titac South MRE were completed between February 2010 and April 2011 as part of Cardero Resource Corp. (Cardero)'s diamond drill program of 32 NQ2 diamond drillholes totaling 11,034.4 m (36,202 ft). The drillholes were completed with varying orientations, and azimuths ranging from 0 to 341° and inclinations ranging from -45 to -90°. The depths of the holes ranged from 235.6 to 605.3 m and averaged 347.9 m. Collar information for the drillholes contained in the MRE is presented in Table 10.2.

Table 10.2 Drillholes contained within the Titac South MRE.

Hole ID	Easting NAD27Z13	Northing NAD27Z13	Elevation (m)	Azimuth (°)	Dip (°)	Hole Length (m)
TTC-009-2010	567966.69	5227486.00	484.99	55	-45	376.4
TTC-010-2010	567743.43	5227519.26	483.74	90	-60	392
TTC-011-2010	567965.69	5227490.87	484.94	90	-45	272.5
TTC-012-2010	567786.71	5227652.23	483.65	130	-60	388.9
TTC-013-2010	567967.05	5227493.05	484.90	125	-45	253
TTC-014-2010	567933.38	5227620.01	484.53	165	-60	605.3
TTC-015-2010	567970.01	5227486.18	485.01	165	-45	260.6
TTC-016-2010	567968.89	5227488.06	485.14	187	-45	272.8
TTC-017-2010	567928.39	5227630.44	484.27	332	-85	319.1
TTC-018-2010	567961.52	5227486.05	484.96	219	-45	263.7
TTC-019-2010	567976.64	5227494.02	485.25	0	-90	489.8
TTC-020-2010	567968.24	5227482.75	484.88	6	-45	309.4
TTC-021-2010	567873.03	5227482.28	482.89	82	-75	374
TTC-022-2010	567964.53	5227489.49	484.88	15	-65	349.9
TTC-023-2010	567848.99	5227555.15	484.01	129	-75	352.7
TTC-024-2010	567970.03	5227486.73	484.88	72	-65	383.4
TTC-025-2010	568083.83	5227592.61	485.52	206	-75	383.4
TTC-026-2010	567965.45	5227482.77	485.05	112	-65	383.4
TTC-027-2010	568081.88	5227423.49	483.40	309	-75	383.4
TTC-028-2010	567966.35	5227483.88	485.00	205	-65	367.9
TTC-029-2010	567964.08	5227486.59	484.96	250	-65	334.4
TTC-030-2010	567964.16	5227489.67	484.79	310	-50	322.2
TTC-031-2011	568025.16	5227536.98	485.52	341	-45	275.2
TTC-032-2011	568021.57	5227533.92	485.73	32	-50	235.6

The Cardero drilling targeted an oxide bearing ultramafic intrusion defined by a geophysical anomaly at Titac South. The Titac North and Titac South oxide bearing ultramafic intrusions both appear to be oriented sub-vertically and have complex igneous stratigraphy, which have been considered difficult regarding drill planning. The drill program intersected titanium-iron-oxide mineralization at Titac South and led to the calculation of the current MRE detailed in Section 14 of this Report. Select highlights from this drilling program are presented in Table 10.3.

Table 10.3 Cardero drilling assay highlights, Titac South (Green Bridge, 2024c).

Hole ID	Interval** (m)	Cu%	Ni%	TiO ₂ %	V ₂ O ₅ %
TTC-010-2010	39.6	0.27	0.03	22.2	0.15
TTC-014-2010	571.5	0.19	0.18	14.3	0.08
Including	145.1	0.39	0.02	20.6	0.08
TTC-015-2010	199.3	0.21	0.02	10.2	0.05
TTC-019-2010	461.9	0.37	0.02	20.6	0.07
TTC-027-2010	356.0	0.25	0.02	14.1	*N/A
TTC-029-2010	101.9	0.19	0.03	17.1	*N/A

*Not analyzed.

**Intervals are core length and generally thought to represent 70 to 90* true width.

The Cardero drilling was conducted by licensed drilling contractor Idea International Drilling Ltd. (Idea). In 2010 Idea conducted drilling operations using four different drill rigs (Atlas Copco CS1000, Atlas Copco Diamec U6, Atlas Copco CT14, and a Sandvik DE130) with two rigs operating at any given point in time. Drill rigs were skid-mounted (with the exception of the Atlas Copco CT14) and maneuvered in the field using Caterpillar D5M and D7G tractors. In 2011, one Morooka mounted drill rig (Boart Longyear LF70) was utilized. All drillholes were permanently abandoned per Minnesota Department of Health standards, by setting a plug at least 300 ft (91.4 m) below the surface of bedrock and filling the portion of the boring above the plug with neat cement. Drilling depths were recorded in feet, as is the standard in the US (Farrow et al., 2012).

Drillhole collars were surveyed using a handheld Garmin GPS unit with accuracy to +/- 6 m. Casing was pulled upon completion of each drillhole and a steel fence post was used to mark the location of each hole. A location survey was completed by the Idea survey crew upon completion of drilling operations. Licensed surveyors Northern Lights Surveying and Mapping Inc. (Virginia, Minnesota) were contracted by Idea to place 4-5 location pins on site. Upon installation of these pins Idea surveyed drillhole locations with accuracy to 2/10ths of a foot, recording the easting, northing, and elevation of each drillhole (Farrow et al., 2012).

Downhole surveys were completed using a Gyro-based tool, with survey readings collected every 20 ft (6.1 m). Data consists of a dip reading in degrees, and easting and northing readings in feet relative to the starting position of the survey. The Idea survey crew conducted down-hole surveys of each respective drillhole following completion of each hole.

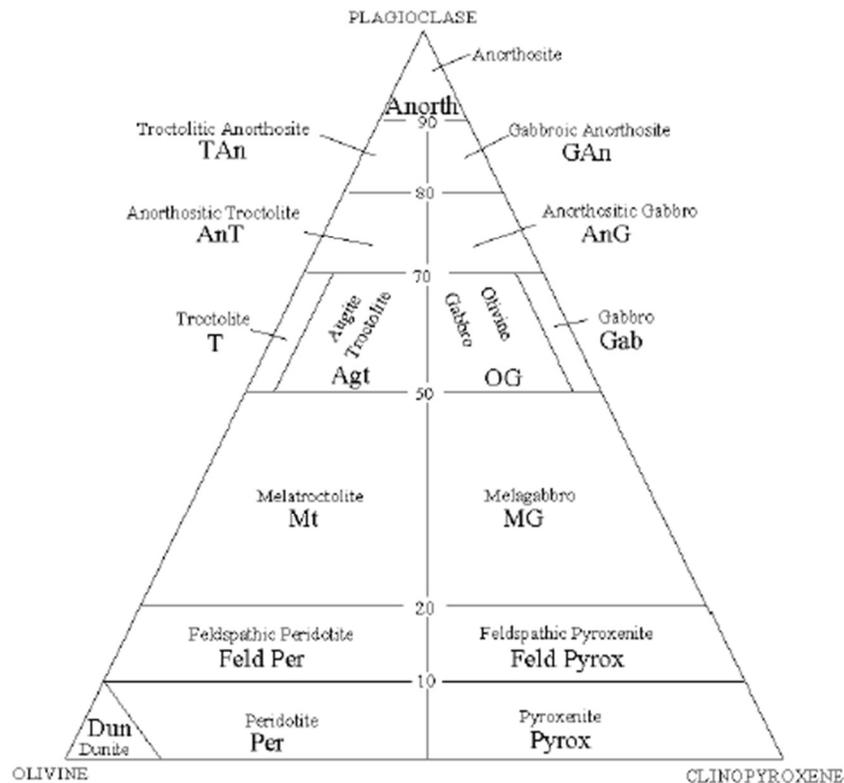
Cardero samples were based on lithological contacts and visual estimation of oxide and sulphide mineralization, with sample size averaging between 0.2 and 2.5 m in core length. The core was cut in half with half core kept in the original box in Cardero storage. All core was geologically logged. Cardero inserted QA-QC samples including standards, blanks, and field duplicates into the drill sample stream. The 2010 and 2011 Cardero drill core samples were prepared for assay analysis by ALS Laboratory Group (ALS) at their Thunder Bay, Ontario facility. The sample pulps were then shipped to the ALS facility in Vancouver, British Columbia for assay, while the coarse sample was put in temporary storage at ALS in Thunder Bay (and eventually shipped back to Cardero's field office in Aurora, Minnesota). ALS Laboratory Group laboratories are ISO 17025 certified and are independent of the Company and the authors of this Report.

Nine Titac South holes (TTC-009, 012, 019, 023, 025-027, 029, 030-2010) were relogged visually by EMI geologists in 2019 to estimate the relative amounts of ilmenite versus titanomagnetite and to reclassify the rock based on the relative amounts of plagioclase, Olivine, and clinopyroxene based on the scheme of Phinney (1972) shown in Figure 10.6. The oxide bearing ultramafic intrusives at Titac South consist mainly of oxide-bearing (in decreasing order of abundance): pyroxenite, peridotite, feldspathic peridotite, feldspathic pyroxenite, and dunite, as well as massive oxide zones (>70% oxides) to semi-massive oxide zones (40-70% oxides). These rock types often alternate over both thin (<0.3-1.5 m) and thick (>3 m) intervals. Oxide-bearing

melatroctolite, melagabbro and gabbro are present locally, especially towards the outer margin of the oxide bearing ultramafic intrusive body. Also, the outer margins of the oxide bearing ultramafic intrusives are typically messy in that there are a variable amount of thin apophyses of oxide bearing ultramafic intrusives that intrude troctolitic and anorthositic country rocks of the Western Margin intrusion (Severson, 2019).

Most of the Oxide bearing ultramafic intrusive rocks at Titac are coarse-grained to pegmatitic and contain in excess of 10% oxides. Both ilmenite and titanomagnetite are present together whether as disseminations, in irregular clusters (sometimes on only one side of the drill core), and in the semi-massive to massive oxide zones. The ratios of ilmenite to titanomagnetite show some variability. Olivine-rich rocks generally contain more oxides than the pyroxenitic rocks. Pegmatitic pyroxenite patches (<6 m thick which cannot be correlated laterally to an adjacent hole) contain the least oxides. Finally, ilmenite to titanomagnetite ratios are not controlled by rock type (Severson, 2019).

Figure 10.7 Rock classification scheme (Phinney, 1972).



11 Sample Preparation, Analyses and Security

The QP has reviewed the sampling procedures, analysis, and QA-QC procedures used in the historical drilling programs completed at the Titac South Deposit and summarized in the following text and deems that they follow industry standards. Mr. Michael Dufresne accepts the drillhole database used to calculate the MRE reported herein.

The 24 drillholes totalling 8,349 m contained in the Titac South MRE were completed between February 2010 and April 2011, as part of Cardero's diamond drill program of 32 NQ2 diamond drillholes totaling 11,034.4 m (36,202 ft). There has been no further drilling or sampling at the Titac South Deposit since the effective date of the SRK (2012) Technical Report (Farrow et al., 2012).

The information in this section has largely been sourced, or taken directly, from Farrow et al. (2012). The QP has reviewed this report and confirms that it contains all relevant information on sample preparation, analyses, and security of samples collected in the drillholes utilized to calculate the Titac South MRE. The QP takes responsibility for the information presented in Section 11.

11.1 Sample Collection, Preparation and Security

The following information is from Farrow et al. (2012):

All sample intervals were determined by visual inspection of drill core, generally based on a visual estimation of oxide and sulphide mineralization. Attempts were made to not cross lithology boundaries within sample intervals; however given the intrusive, locally lithologically heterogeneous nature of drill core this was not always possible. Drill core was pieced together and a line was drawn parallel to the long axis of all drill core to be sampled. Sample intervals range in length from 0.2 m to approximately 2.5 m, with most sample intervals from 1.5-2.0 m in length. Sample tags were stapled into boxes, and sample identification numbers were written on core for future reference. Sample intervals were recorded, noting the type of sample (i.e. core, ¼ core original, ¼ core duplicate, prep duplicate, standard, or blank), and the general lithology of the sample.

Blank material was collected locally in Minnesota from bedrock outcroppings of the Pokegama quartzite near Virginia, Minnesota. Pokegama quartzite is a suitable blank reference because it is dominantly composed of SiO₂.

Samples were collected by sawing core in half along the line drawn parallel to the long axis of core with a diamond tipped blade. The core cutting saw was cleaned at the end of each day, or after 400 feet of core had been cut (whichever is earlier), and the saw was filled with clean water at the time of cleaning. The left half of drill core was kept and remains in the original cardboard boxes, which are securely stored at Cardero's field office in Aurora, Minnesota. The right half of core was collected and packaged in clear poly bags, along with a sample tag designating the sample identification number. Bags were labeled in black permanent marker with the corresponding sample identification number and a zip tie was used to close each poly bag. The weight of each sample was then recorded (in grams). Poly bags were packaged in white sand bags (typically five samples per sand bag). Each sand bag was labeled with the sample identification numbers that it contains, and the batch number that the samples belong to. Sand bags were first secured with a standard zip tie, and then a second individually numbered zip tie was placed over the standard zip tie for security. The security number was recorded along with the sample numbers that it represented. The sand bags were then transferred to a standard shipping pallet (generally 10-15 sand bags per pallet). The pallets were shrink wrapped, and labeled with the sample batch numbers. Generally, each drillhole was given a unique sample batch number.

Drill core was retrieved from drill sites on a daily basis by Cardero staff and delivered directly to the Cardero field office in Aurora, Minnesota. Drill core is stored on-site at the field office until sampling can be conducted by Cardero personnel. The Cardero field office is locked at night and when personnel are not present at the facility and the local Aurora police force regularly patrol the area. There are no issues regarding drill core security.

Upon collection of samples, they were packaged as described above and shipped via chartered and bonded independent carrier Valley Carthage Transport and Manitoulin Transport for customs brokerage to ALS Laboratory Group Laboratories in Thunder Bay, Ontario, Canada. There have been no reported incidents regarding the individually numbered security zip ties placed on each sandbag, and thus there are no issues regarding the security of sample shipment.

There were no issues regarding drill core or sample security.

11.2 Analytical Procedures

The 2010 and 2011 Cardero drill core samples were prepared for assay analysis by ALS Laboratory Group (ALS) at their Thunder Bay, Ontario facility. The laboratory prepared samples for assay using code prep-31, in which samples were crushed, and 250 grams of material from each sample was split off and pulverized so that better than 85% pass through 75-micron mesh. Samples were dried if necessary, using code DRY-21. The sample pulp was then shipped to the ALS facility in Vancouver, British Columbia, Canada for assay, while the coarse sample was put in temporary storage at ALS in Thunder Bay (and eventually shipped back to Cardero's field office in Aurora, Minnesota).

ALS Laboratory Group laboratories are ISO 17025 certified and are independent of the Company and the authors of this Report. The ALS laboratory used for sample preparation is located at 1160 Commerce Street, Thunder Bay, Ontario, Canada P7E 6EP. The ALS laboratory used for sample analysis is located at 2103 Dollarton Hwy, North Vancouver, British Columbia, Canada V7H 0A7.

Whole rock multielement analysis was conducted on all samples via fused bead, acid digestion and Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) (ALS laboratory code ME-ICP06). Base metals were analyzed via four acid digestion and ICP-AES (ALS laboratory code ME-4ACD81). Numerous samples were analyzed for rare earth and trace elements using sample method ME-MS81, lithium borate fusion followed by acid dissolution and ICP-AES.

11.3 Quality Assurance – Quality Control

The following information is sourced from Farrow et al. (2012):

Cardero inserted quality control samples including duplicates, blanks, and standards into the 2010-2011 drill core sample stream to ensure the integrity of sample analyses. The QA-QC procedures followed for all drill core sampling conducted by Cardero at the Titac property are summarized in the following text and in Figure 11.1.

Quality control samples (duplicates, blanks and standards) were used to monitor laboratory sample preparation, potential for contamination and analytical accuracy. A total of 308 reference materials and 146 Pokegama quartzite blank samples were submitted blindly to the laboratory during the core sampling campaign at Titac in 2010 and 2011. A total of 316 quarter core duplicate pairs were collected and submitted to the laboratory and 305 preparation duplicate pairs were prepared by the laboratory. Only the quarter core

duplicates were blind to the laboratory. All analytical data including quality control samples were checked and verified by Cardero’s senior geochemist, Tansy O’Connor-Parsons.

Duplicate and umpire analysis performed very well and blank samples performed adequately. The results of analytical standards are less ideal. Both internal standard results showed a large amount of scatter and standard TTC-1 showed a slight high bias. In addition, Cardero did not complete full round robin testing on the standards, making them difficult to properly use as a reference. If internal reference materials are to be used, these should be submitted to various laboratories to establish an average value and standard deviation for these materials.

APEX’s review of the SRK results of the QA-QC program used by Cardero presented in Farrow et al. (2012) provides sufficient support that the analytical data is viable to support the exploration analysis and the Titac South MRE. The QP concurs with the adequacy of the samples taken, the security of the shipping procedures, and the sample preparation and analytical procedures at the laboratory.

Figure 11.1 Cardero QA-QC procedures for all sampled drill core.

01	Field Duplicate 1
02	Field Duplicate 2
03	Routine Sample
04	Routine Sample
05	Routine Sample
06	Routine Sample
07	Routine Sample
08	Routine Sample
09	Preparation Duplicate
10	Standard
11	Routine Sample
12	Routine Sample
13	Routine Sample
14	Routine Sample
15	Routine Sample
16	Routine Sample
17	Routine Sample
18	Routine Sample
19	Routine Sample
20	Routine Sample
21	Field Duplicate 1
22	Field Duplicate 2
23	Routine Sample
24	Routine Sample
25	Routine Sample
26	Routine Sample
27	Routine Sample
28	Routine Sample
29	Preparation Duplicate
30	Standard
31	Routine Sample
32	Routine Sample
33	Routine Sample
34	Routine Sample
35	Routine Sample
36	Routine Sample
37	Routine Sample
38	Routine Sample
39	Routine Sample
40	Routine Sample

- Field duplicates (FDUP) are inserted 1/20 (sample numbers are pre-determined as 01/02, 21/22, 41/42, etc.); these samples are collected by quartering the core over the designated interval and placing each quarter into separate sample bags.
- Preparation duplicates (CDUP) are inserted 1/20 (sample numbers are pre-determined as 09, 29, 49, 69, 89). Submit an empty bag with a ticket number, alerting the preparation lab to prepare the duplicate from the previous sample.
- Standards are inserted 1/20 (sample numbers are pre-determined as 10, 30, 50, 70, 90). Skip the number in the sample sequence for later insertion of the standard reference material. The type of standard (certified reference material) inserted must be at appropriate levels that the geologist determines will bracket the expected values to be encountered in the sample.
- Blanks are inserted randomly as determined by the geologist, in place of a routine sample. Blanks are inserted at the rate of 1 sample in every 40, (1/40). It is recommended to insert a blank sample between mineralized samples or at the end of a mineralized intersection.

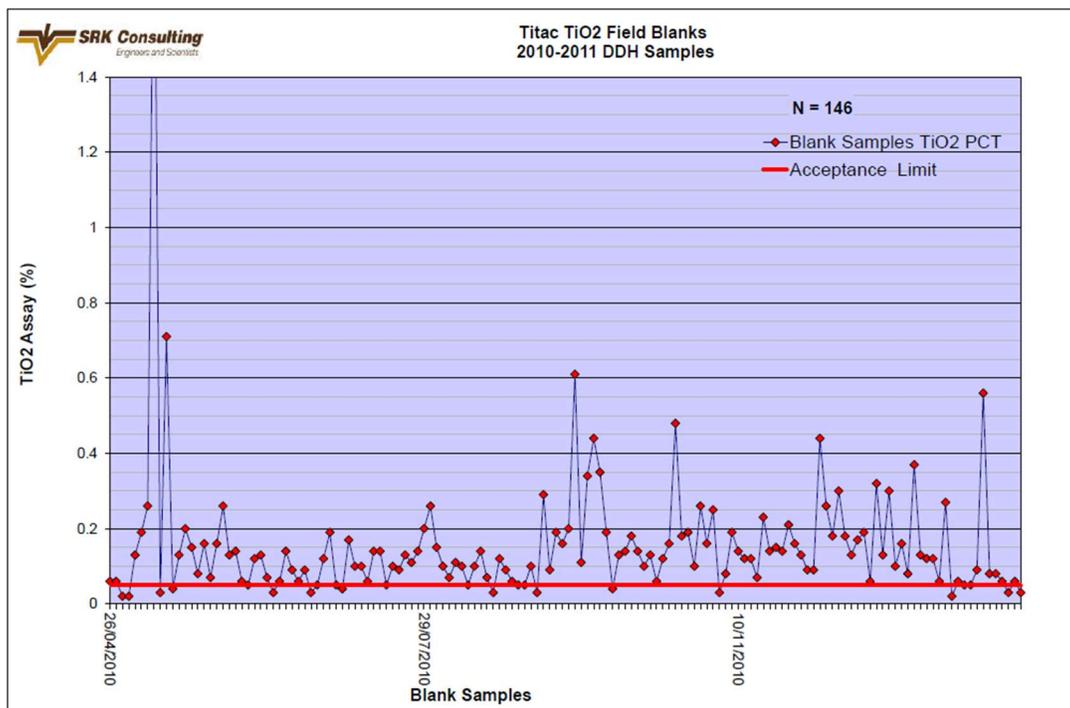
Source: Farrow et al. (2012)

11.3.1.1 Blanks

Blank material was collected locally in Minnesota from bedrock outcroppings of the Pokegama quartzite near Virginia, Minnesota. Pokegama quartzite was chosen as a suitable blank reference because it is dominantly composed of SiO₂.

Coarse blank samples (Figure 11.2) show a slightly higher than background value for TiO₂, indicating that the blank is not devoid of titanium. Figure 11.2 indicates an average TiO₂ value is 10 times the detection limit. When the individual values are compared to a low baseline value of 0.1% TiO₂ the blank sample results indicate low-level carryover contamination during the preparation through to analytical stage.

Figure 11.2 Blank analytical results over time for Pokegama Quartzite Blank samples submitted with Titac deposit samples.



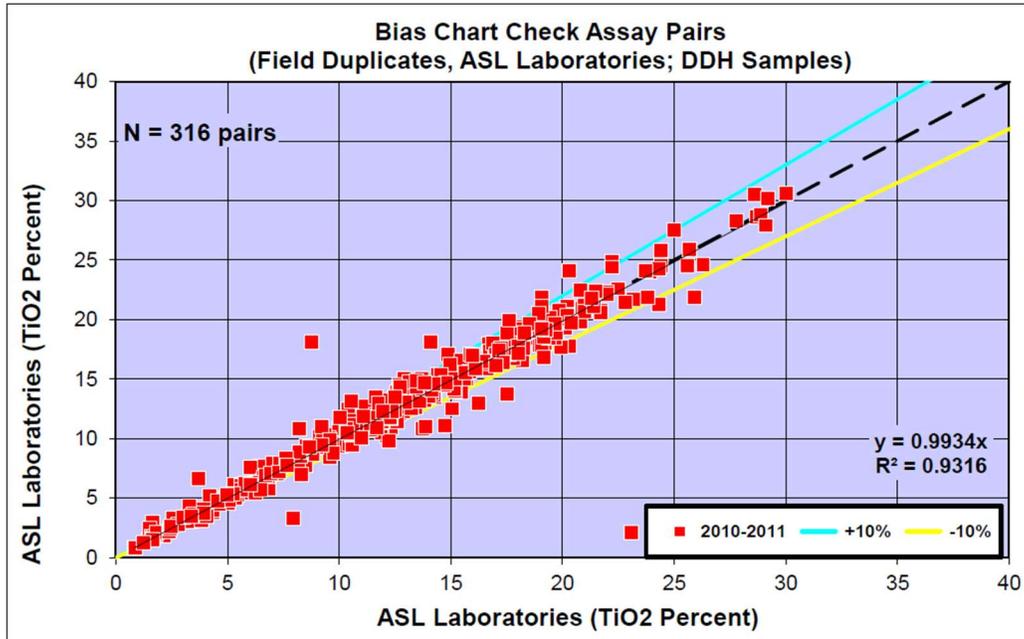
Source: Farrow et al. (2012)

11.3.1.2 Field and Preparation Duplicates

Cardero field duplicates (FDUP) were ¼ core duplicates of the same sampling interval. A preparation duplicate (CDUP) consisted of a poly bag containing only a sample tag with instructions for laboratory personnel to prepare the sample from the preceding standard drill core analysis by taking a split after the coarse crushing stage. Scatter plots, percent relative difference plots and percentile rank charts for quarter-core duplicate titanium data are presented in Figures 11.3 to 11.5 respectively. Good correlation is seen between quarter-core duplicate samples with 94% of duplicate pairs having a half absolute relative difference of less than 10%.

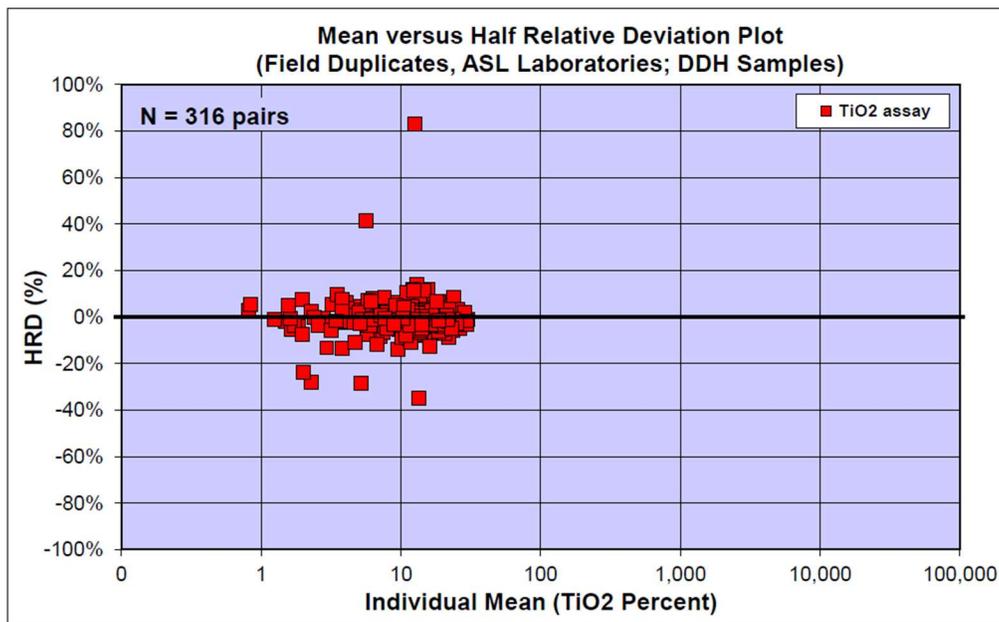
Scatter plots, percent relative difference plots and percentile rank charts for preparation duplicate titanium data are presented in Figures 11.6 to 11.8 respectively. Excellent correlation is seen between preparation duplicate samples with 97.7% of duplicate pairs having a half absolute relative difference of less than 10%.

Figure 11.3 Scatterplot graph of TiO₂ data for quarter core field duplicates for the Titac property.



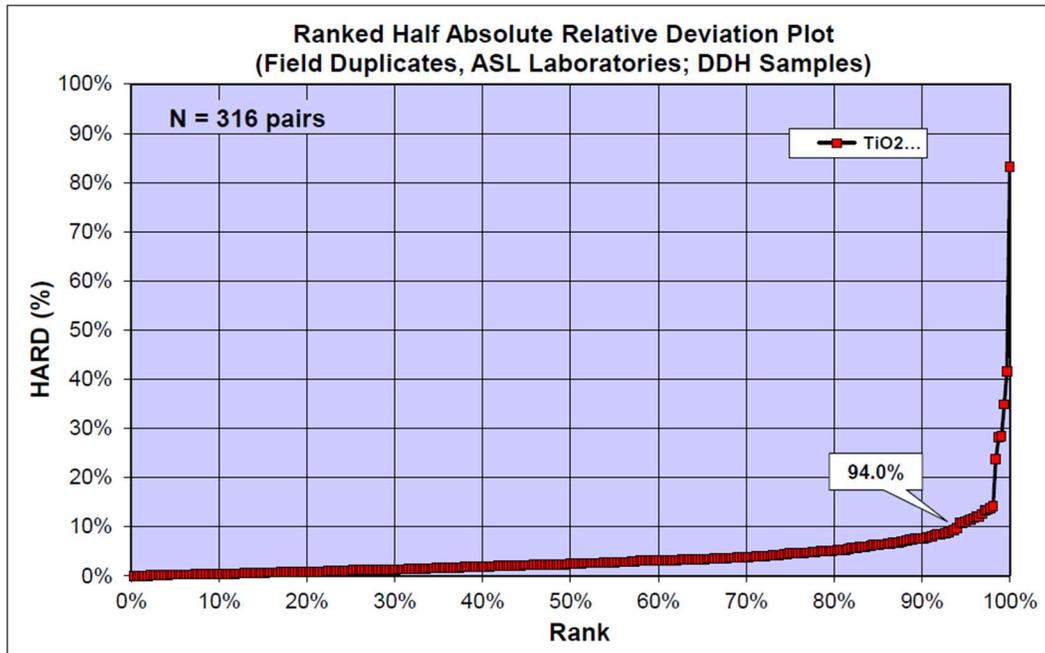
Source: Farrow et al. (2012)

Figure 11.4 Half Relative Deviation Plot of TiO₂ data for quarter core field duplicates for the Titac property.



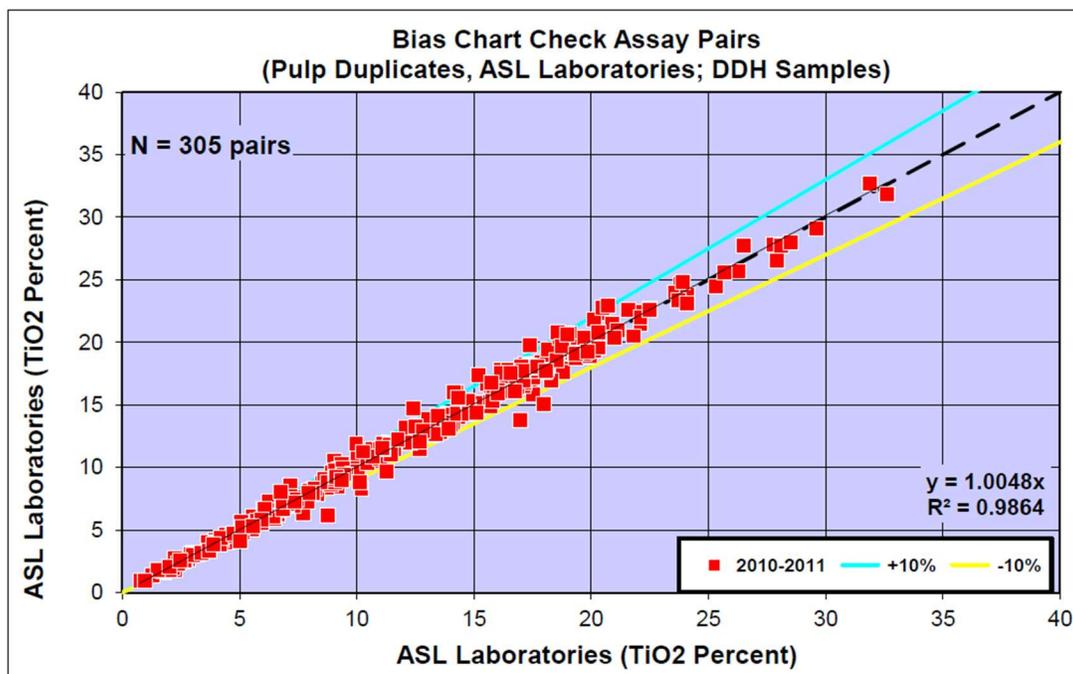
Source: Farrow et al. (2012)

Figure 11.5 Ranked Half Absolute Relative Deviation Plot of TiO₂ data for quarter core field duplicates for the Titac property.



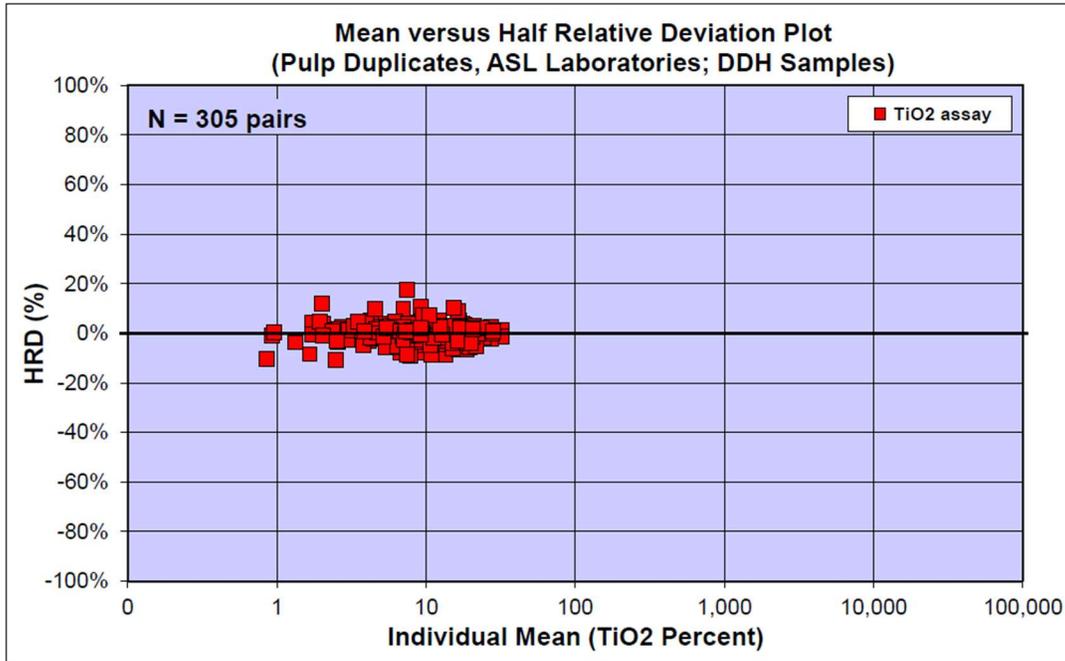
Source: Farrow et al. (2012)

Figure 11.6 Scatterplot graph of TiO₂ data for preparation duplicates for the Titac property.



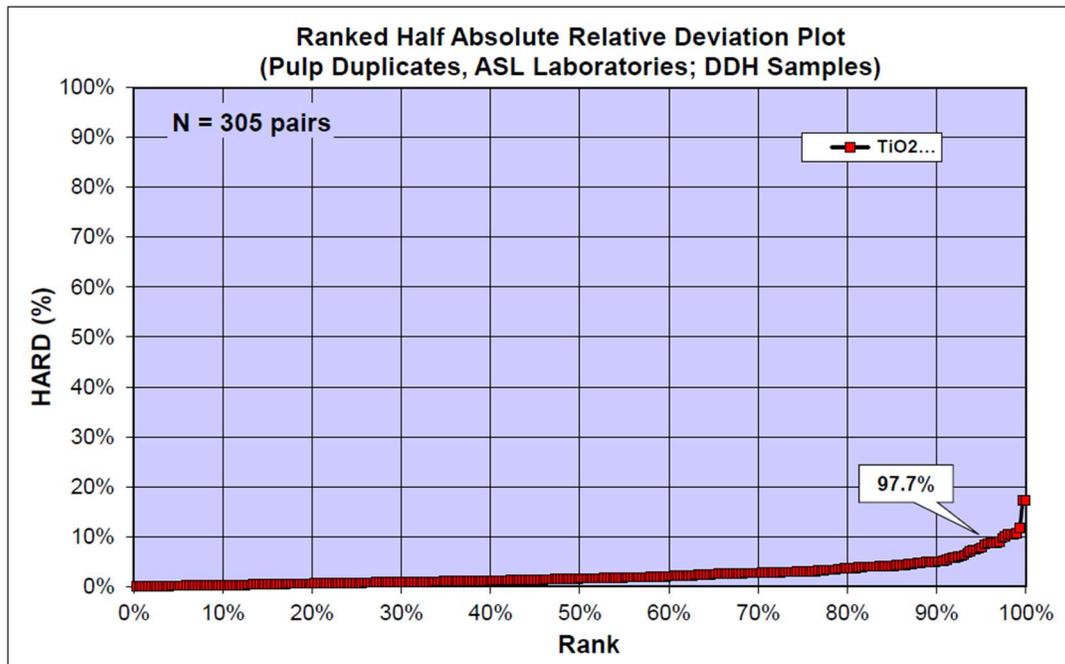
Source: Farrow et al. (2012)

Figure 11.7 Half Relative Deviation Plot of TiO₂ data for preparation duplicates for the Titac property.



Source: Farrow et al. (2012)

Figure 11.8 Ranked Half Absolute Relative Deviation Plot of TiO₂ data for preparation duplicates for the Titac property.



Source: Farrow et al. (2012)

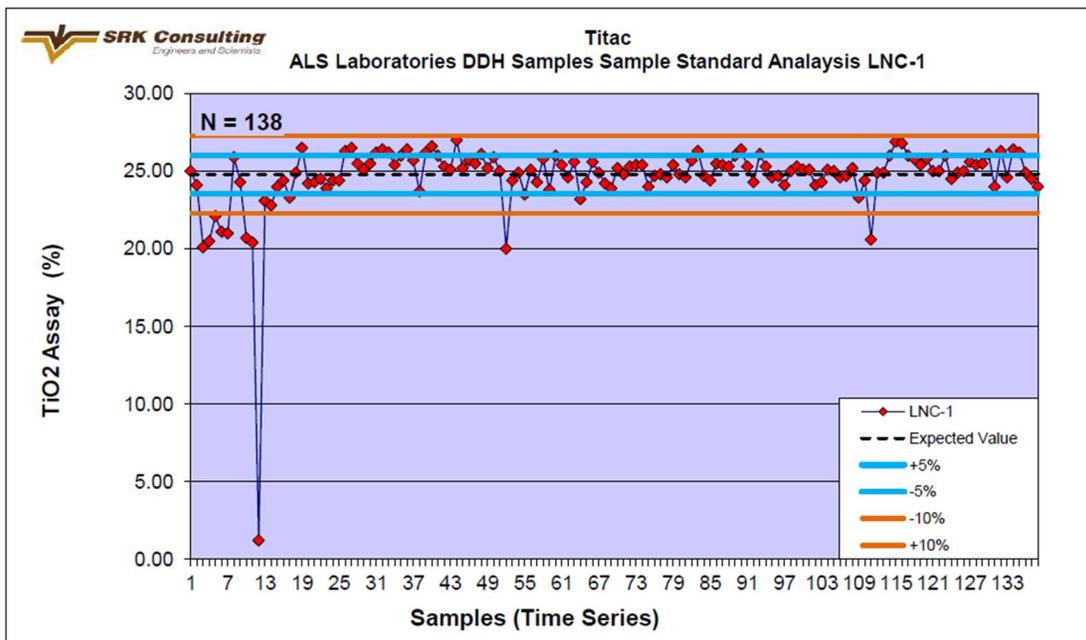
11.3.1.3 Standards

Three different reference materials were used in the sampling program at Titac, including TTC-1, LNC-1, and SX67-05. Standards TTC-1 and LNC-1 are in-house reference materials created by Cardero; and SX67-05 is a certified reference material manufactured for Brammer Standard Company, Inc. (14603 Benfer Road, Houston, Texas 77069, United States of America) by accredited laboratory Dillinger Hutte Laboratory (GAZ; Association for the Accreditation and Certification GmbH, Attestation no. 91021).

Reference material results are plotted against their known TiO_2 concentration with tolerance levels within 10%, as illustrated in Figures 11.9 to 11.11 respectively.

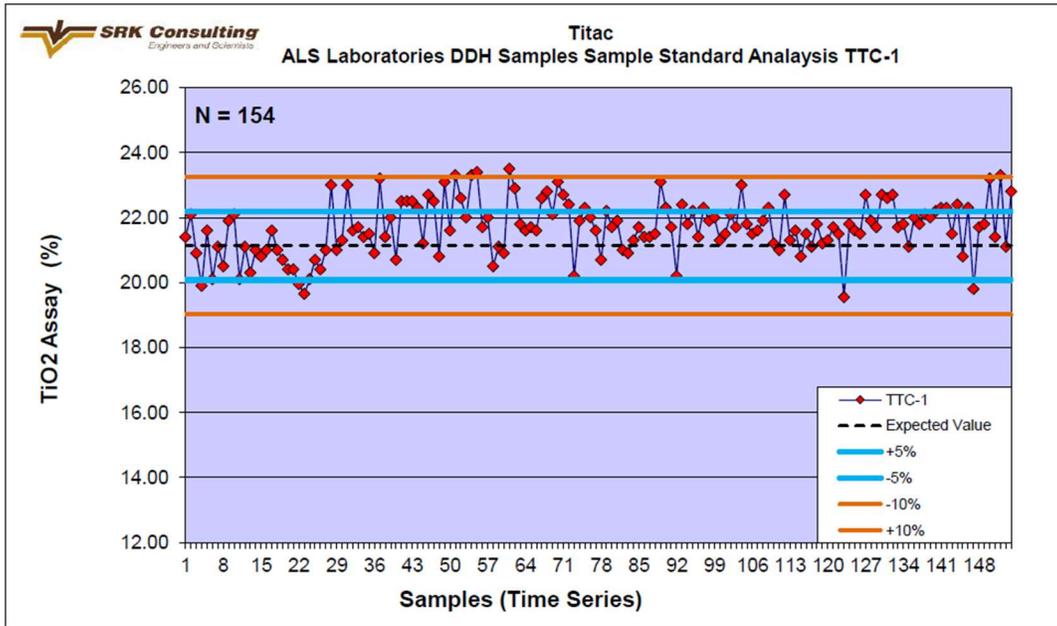
A number of results for LNC-1 reported TiO_2 values similar to the average TiO_2 value for internal reference material TTC-1. The corresponding Fe_2O_3 values reported for these samples were also representative of the expected Fe_2O_3 values for TTC-1. In these cases, the reference materials have been mislabelled. One result for LNC-1 is clearly more in line with a blank sample, again a case of mislabelling of control samples. TTC-1 shows a slightly high bias and relatively large scatter. A slight negative bias for some SX6705 samples were noted at the beginning of the program, however re-analysis of the reference material and surrounding samples resulted in comparable results.

Figure 11.9 Internal reference material LNC-1 performance for TiO_2 .



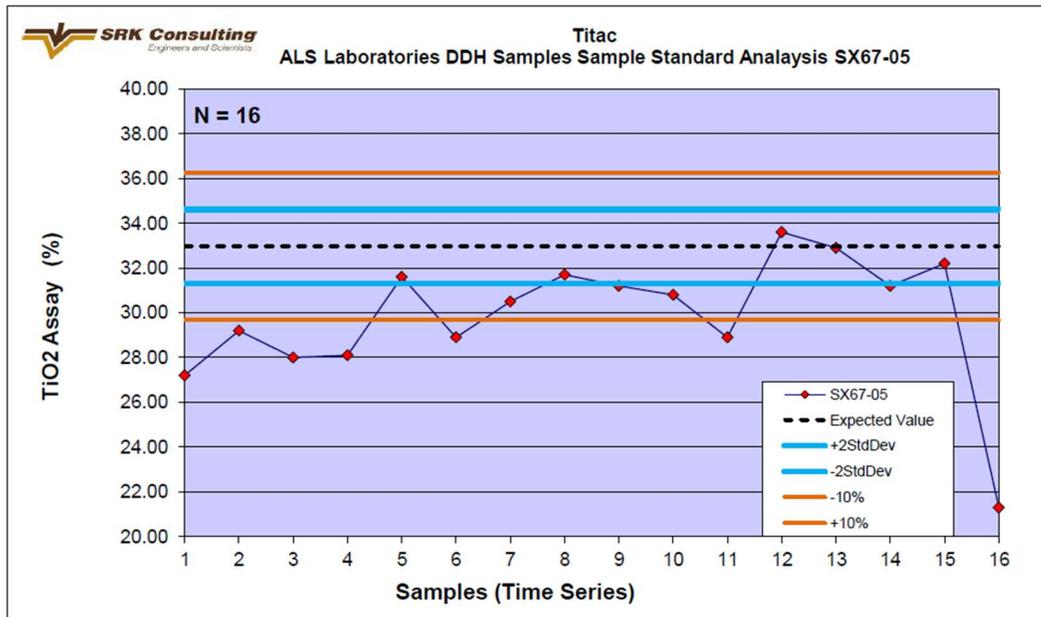
Source: Farrow et al. (2012)

Figure 11.10 Internal reference material TTC-1 performance for TiO₂.



Source: Farrow et al. (2012)

Figure 11.11 Standard reference material SX67-05 performance for TiO₂.

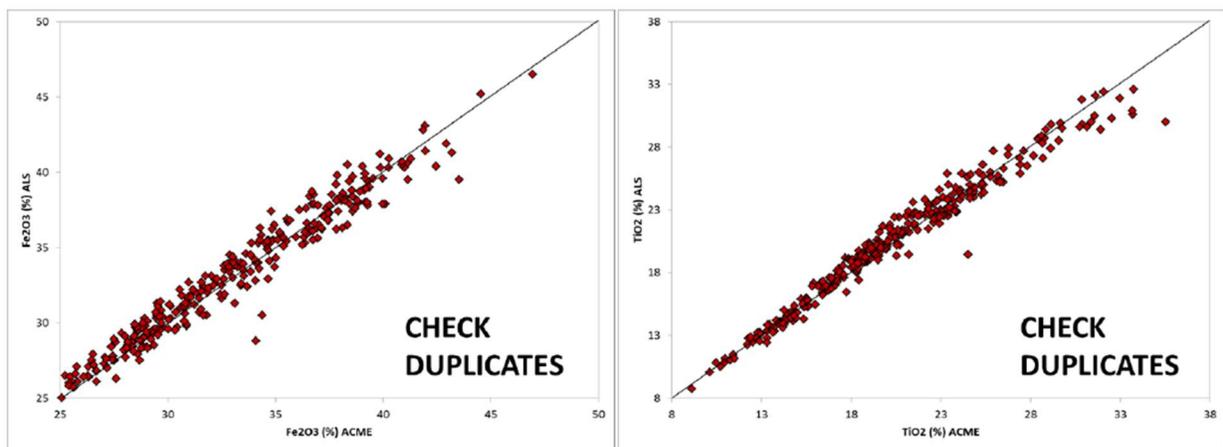


Source: Farrow et al. (2012)

11.3.1.4 Umpire Checks

To monitor the analytical accuracy of the laboratory, umpire/check assays were submitted to a second laboratory, ISO certified 9001:2008 and independent ACME laboratory in Vancouver, BC where the sample pulps were analyzed by the 4A04 package (lithium metaborate fusion/ICP-ES finish). All 303 samples from a single drillhole (TTC-019) were submitted for the umpire assay, as the drillhole intersected all levels of ferro-titanium mineralization. The results for TiO_2 and Fe_2O_3 are presented in Figure 11.12. The data correlate very well for both analytes; however, there is a slight low bias at the concentrations of $> 27\%$ TiO_2 for the data from the ALS Minerals laboratory. This is not considered to be significant, as the data is within 10% analytical precision.

Figure 11.12 Scatterplots presenting analytical umpire (check) assays versus original assay results for Fe_2O_3 (left) and TiO_2 (right) data.



Source: Farrow et al. (2012)

11.4 Adequacy of Sample Collection, Preparation, Security and Analytical Procedures

The QP recommends that all future sampling programs at the SCZ utilize a different blank material, as the Pokegama quartzite analytical results indicate that it is not devoid of Titanium. In addition, high-quality certified reference materials sourced from a third party should be chosen to ensure accuracy, more precise values, and greater consistency across batches.

The QP concurs with the adequacy of the samples taken, the security of the shipping procedures, and the sample preparation and analytical procedures at ALS. In the QP's opinion, the QA-QC program as designed and implemented by Cardero is adequate and the assay results within the database are suitable for use in the mineral resource estimate presented in Section 14.

12 Data Verification

12.1 Data Verification Procedures

APEX personnel, under the direct supervision of the QP, conducted data verification on the following historical information and data; the details of the investigation are presented in the text below:

- Historical drillhole data, including assay analytical results, laboratory certificates, and drillhole collar locations.
- Historical metallurgical test work data and reports.

Data verification efforts were focused on the drilling used to audit and re-estimate the Titac South MRE, as detailed in Section 14. The 24 drillholes for 8,349 m contained in the Titac South MRE were completed between February 2010 and April 2011, as part of Cardero's diamond drill program. Historical information and data, including drilling data, drill logs, assay analytical results, and metallurgical testwork information were provided by Green Bridge to the QP as electronic files on July 29, 2024.

The initial verification procedure reviewed the data verification procedure conducted by SRK prior to the calculation of the historical 2012 Titac South MRE by SRK on behalf of Cardero, as reported in Farrow et al. (2012). In the opinion of the QP, SRK utilized adequate database quality control and verification procedures, resulting in a digital database suitable for use in the Titac South MRE that is the subject of this Report. SRK completed a series of verifications to ensure that the exploration data was reliable enough for the creation of the historical 2012 Titac South MRE. The verification work by SRK included a review of field procedures, reviewing analytical quality control data, independent sampling and independent verification of the assay results.

Validation specific to Green Bridge was conducted by APEX personnel under the direct supervision of the QP. Approximately 10% of samples with $\geq 15\%$ TiO_2 from the 2010 SCZ Cardero drill program at Titac were selected for validation. Sample intervals were validated against raw data files and sample tags where available, while Ti values were cross-checked with original laboratory certificates. Overall, the assay database was found to be in adequate condition, with no discrepancies identified.

The calculation of the Titac South MRE detailed in Section 14 utilized data extracted from the Company's Geotech database to four Microsoft Excel data tables, including: assays, lithology, downhole surveys and collar surveys. The validation efforts focused on drillholes contained within the relevant historical 2012 Titac South MRE area. Green Bridge provided APEX with all the drillhole information used for the historical 2012 Titac South MRE. Data verification procedures included verifying drill assays, collar, geology, survey information from the SRK files against raw assay certifications, geology logs, and downhole surveys.

Approximately 10% of the collars within the historical Titac South MRE were selected for validation, prioritizing the holes with the highest TiO_2 values and using criteria such as hole depth and centralized location. Collar coordinates for five drillholes were successfully validated against drill logs and georeferenced maps.

Overall, the database is deemed to be accurate and acceptable for resource estimation.

12.2 Qualified Person Site Inspection

The senior author of this Technical Report, Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo., a QP and principal of APEX Geoscience Ltd. conducted a site inspection of the SCZ on August 19th–21st, 2024. The inspection was conducted to assess the current site conditions and access, verify the geology, alteration, and mineralization of the SCZ, and to collect independent verification samples.

As outcrops are rare in the SCZ, the author was unable to observe or sample bedrock at the Property. The site visit entailed a tour of the Skibo, Wyman-Siphon and Titac properties and review of historical drill core from Titac and Skibo. Quarter drill core samples were collected from Titac South drillholes TTC-009-2010, TTC-019-2010, and TTC-029-2010, and from Titac North drillhole TTC-005-2010. Four half core samples were collected from a previously unsampled interval of drillhole SK09-03 completed at the Skibo property. The collar locations are presented in Figures 12.1 and 12.2.

Samples were processed as core samples for geochemical analyses. The samples were grouped, banded together and sealed. The samples were then shipped to ALS Geochemistry Lab in Vancouver, BC, Canada by Mr. Dufresne. No issues with respect to sample shipment and/or security were noted. ALS Minerals is an internationally accredited independent analytical company with ISO9001 and ISO/IEC 17025 certification. ALS has a comprehensive internal QA-QC program which was utilized during analysis of the 2024 confirmation samples. ALS is independent of the QPs of this Report and the Company. The samples were logged into a computer-based tracking system, sorted, weighed and dried. The entire sample is crushed so that +70% passes a 2 mm screen. A 250 g (~0.5 pound) split is then selected and pulverized to better than 85% passing a 75-micron screen. Multi-element geochemical analysis for 48 elements was completed via four acid digestion with an ICP-MS finish (ALS laboratory code ME-MS61). Gold, platinum, and palladium were analyzed via fire assay with an ICP-MS finish. All samples from the Titac property returned >10% Ti and overlimit analysis was completed by ALS via sodium peroxide fusion with an ICP-AES finish (ALS laboratory code ME-ICP81). The TiO₂ and Fe results of the QP verification drill core samples from Titac are presented in Table 12.1.

The Titac property core samples returned between 9.91% to 14.1% Ti and 19.45 to 29.3% Fe. Regarding iron, all results show comparable and proportional decrease which coincides with oxidation. In addition, the core samples from Titac returned copper values ranging from 1,955 to 5,010 ppm Cu, cobalt values ranging from 111 to 197.5 Co, and vanadium results ranging from 1,010 to 1,430 ppm V.

The Skibo core interval from drillhole SK09-03 was not previously sampled. The QP verification samples were collected from 1,312.1 ft (400.0 m) to 1,318.0 ft (401.7 m), which is an interval with pyrrhotite and chalcopyrite massive sulphide visual mineralization. Select geochemical results of the QP verification samples from drillhole SK09-03 are presented in Table 12.2. The samples returned copper values ranging from 1,260 to 7,040 ppm Cu, nickel values ranging from 526 to 1,760 ppm Ni and elevated Fe mineralization. The samples returned titanium results ranging from 0.903 to 1.210% Ti and vanadium results ranging from 0.1 to 0.5 ppm V.

Observations and results from Mr. Dufresne's site visit and sampling verify the presence of Fe-Ti-V oxide mineralization and Cu mineralization at the Titac property, as well as base metal mineralization and elevated levels of Pt and Pd mineralization at the Skibo property. Rock types and mineralization observed in the drill core are consistent with the reported geology and historical exploration results.

12.1 Validation Limitations

Based on the site inspection, verification sampling, and data review, the QP has no reason to doubt the reported geology and exploration results.

Figure 12.1 Location of Titac historical drillholes sampled during 2024 QP site visit.

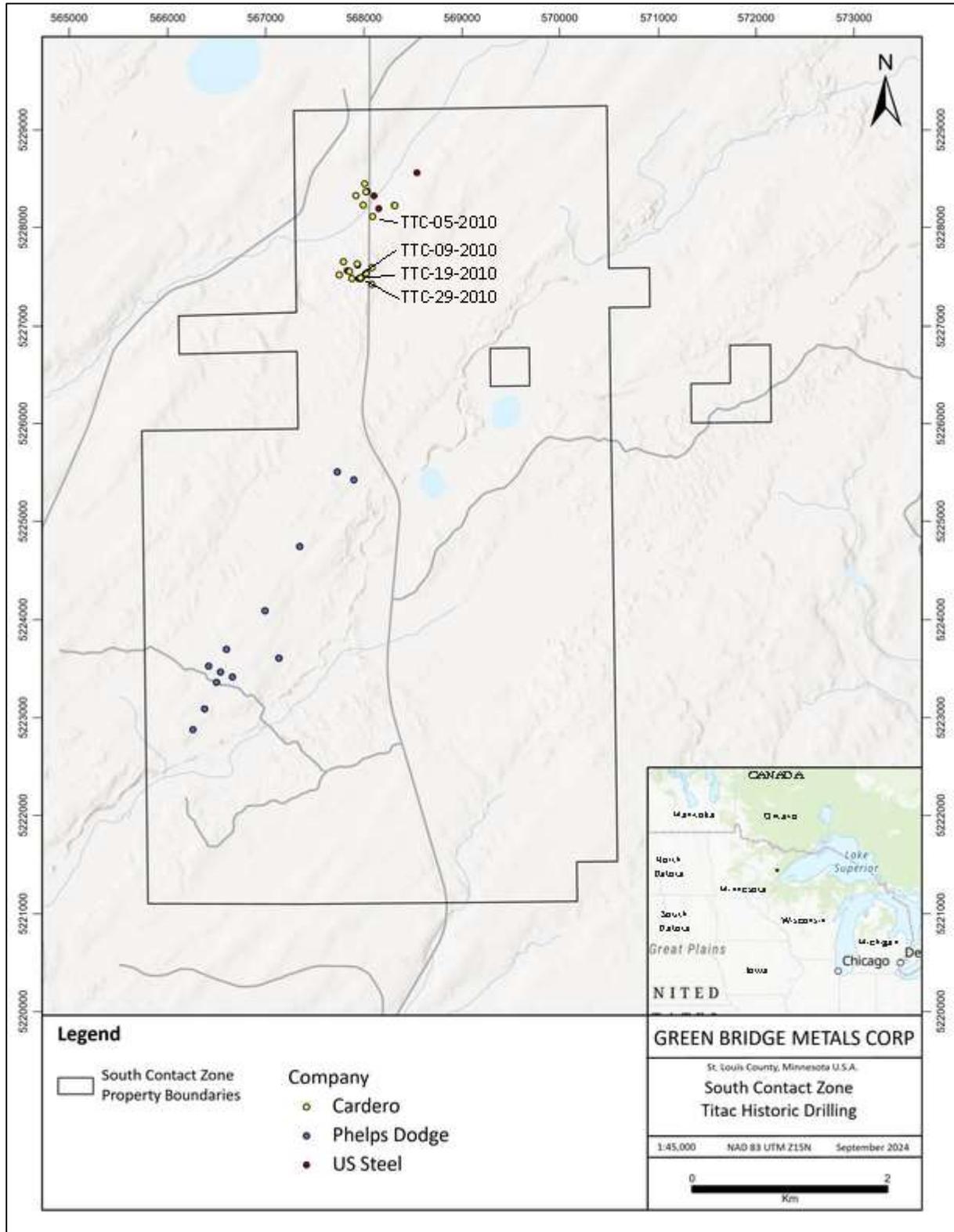


Figure 12.2 Location of Skibo historical drillhole SK09-03, sampled during 2024 QP site visit.

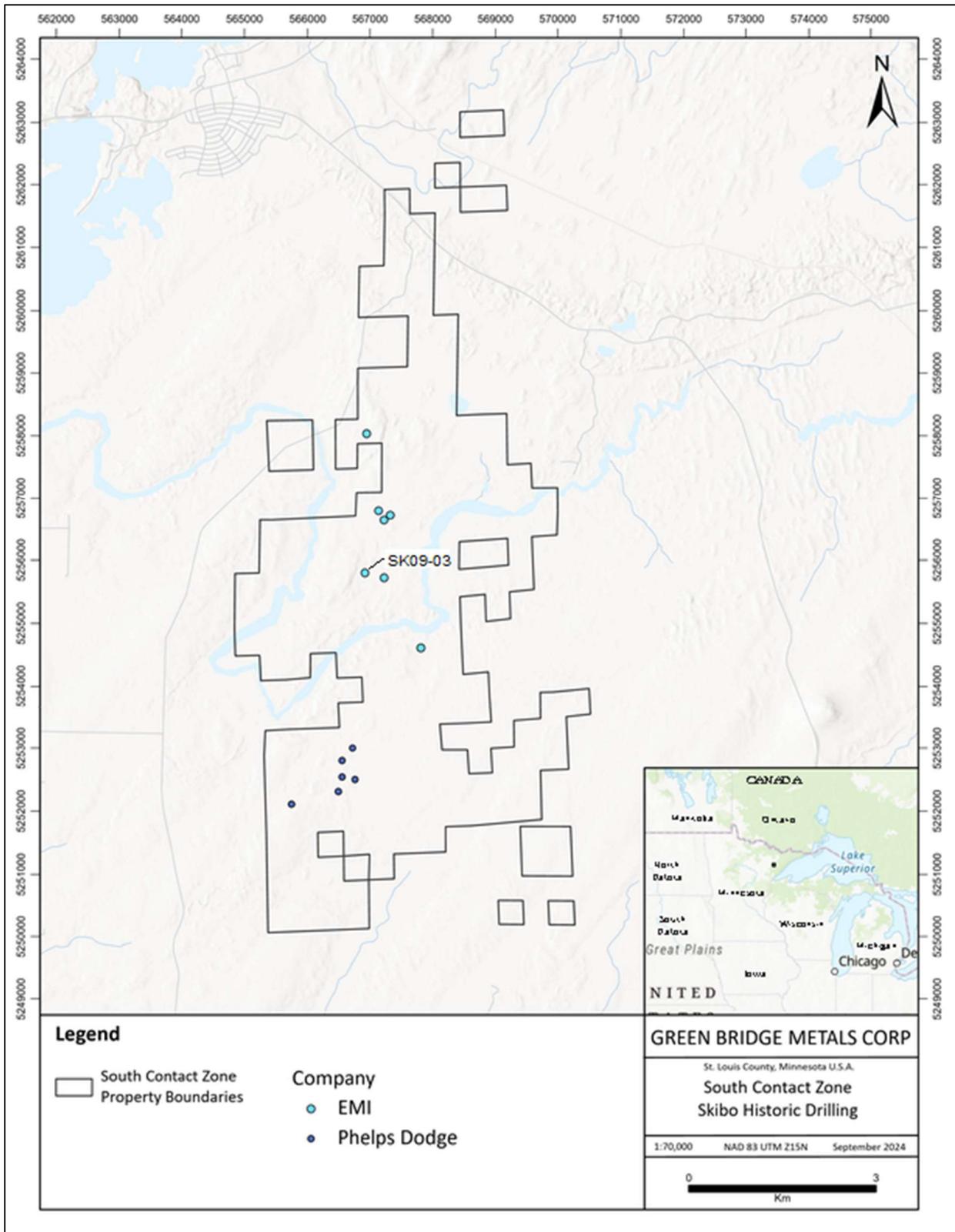


Table 12.1 2024 QP verification samples, Titac drill core.

Sample Interval	Original Sample	Original Sample	QP Site Visit	QP Sample	Original Sample	QP Site Visit
(ft) (m)	TiO2 (%)	ID	TiO2 (%)	ID	Fe2O3 (%)	Fe (%)
Drillhole TTC-029-2010; 567964 m E;5227486m N; UTM Nad83 Zone 15						
142 to 147 ft 43.28 to 44.81 m	24.9	J976661	14.1	303657	43.7	29.3
Drillhole TTC-009-2010; 567966 m E; 5227486 m N; UTM Nad83 Zone 15						
825 to 830 ft 251.46 to 252.98 m	15.65	I909617	9.91	303658	30.4	23.6
Drillhole TTC-019-2010; 567976 m E; 5227494 m N; UTM Nad83 Zone 15						
472 to 477 ft 143.87 to 145.39 m	19.65	J973493	10.85	303659	29.5	19.45
Drillhole TTC-005-2010; 568089 m E; 5228109 m N; UTM Nad83 Zone 15						
871 to 876 ft 265.48 to 267 m	17.35	I909192	9.77	303660	35.1	22.8

Table 12.2 2024 QP verification samples, Skibo drillhole SK09-03 (566918 m E; 5255797m N; UTM NAD83 Z15).

Sample ID	From	To	Cu (ppm)	Ni (ppm)	Co (ppm)	Fe (%)	Pt (ppm)	Pd (ppm)	Au (ppm)
303661	1,312.1 ft 399.91 m	1,313.5 ft 400.34m	3,180	647	88.3	10.55	0.042	0.105	0.047
303662	1,313.5 ft 400.34 m	1,315 ft 400.79 m	7,040	1,760	167	12.7	0.071	0.135	0.061
303663	1,315 ft 400.79 m	1,316.5 ft 401.25 m	1,260	526	75.2	10.5	0.024	0.041	0.014
303664	1,316.5 ft 401.25 m	1,318 ft 401.71 m	2,470	1,100	105	10.9	0.034	0.066	0.023

12.2 Adequacy of the Data

The QP has reviewed the adequacy of the exploration information and the visual, physical and geological characteristics of the Property and has found no significant issues or inconsistencies that would cause one to question the validity of the data. The authors consider the Titac South drilling database, including the historical 2010-2011 Cardero data, suitable for the preparation of the MRE presented in Section 14 of this Report.

13 Mineral Processing and Metallurgical Testing

The Issuer has yet to conduct mineral processing and metallurgical testing. Historical metallurgical testing is summarized in the following text.

13.1 Historical Metallurgical Testwork

Three metallurgical studies have been conducted on the Titac property of the SCZ, to evaluate iron (Fe) concentration and assess the potential for mineralized material processing. These studies, spanning from 1971 to 2021, provide valuable insights into the mineralogical and metallurgical characteristics of the deposit. The timeline of the studies is as follows:

- 1971 – United States Steel Corp (USSC) conducted Davis Tube tests.
- 2011 – Cardero conducted Davis Tube tests.
- 2021 – EMI completed a metallurgical reconnaissance investigation.

The first two studies focused on Davis Tube testing, which is commonly used in magnetite-dominant deposits to estimate the proportion of magnetite at various Fe grades and to convert Fe_2O_3 or Fe% values into magnetite content estimates. While this method offers valuable information on the magnetic properties and Fe content of the material, in deposits where ilmenite is present, some Fe is likely partitioned into the ilmenite. As a result, a small but unknown amount of ilmenite may have been included in the magnetic concentrate, suggesting that further work is needed to accurately quantify the magnetite content.

The third study, conducted in 2021, expanded beyond Davis Tube testing to include a broader metallurgical reconnaissance investigation aimed at assessing the viability of ore processing and upgrading techniques for the Titac property.

13.1.1 USSC (1971)

United States Steel Corp (USSC) completed limited metallurgical testing on drill material taken from Titac North (then “Section 34”) in 1971. Using a composite sample, Davis Tube testing was conducted on approximately 158 m of drill core split into 2 samples. The heavy liquid concentrates averaged 49% Fe and 27.5% TiO_2 , compared to sample head grades of 42.7% Fe and 22.5% TiO_2 , and the magnetic separation produced a non-magnetic concentrate ranging from 45 to 47% TiO_2 (Niles and Williams, 1971).

13.1.2 Cardero Resources (2011)

Cardero completed Davis Tube tests in 2011. The archived drill core (split in half) was stored in core boxes at the CMRL core storage facility and the “assay rejects” from the Cardero drilling remained and was stored in boxes according to their five-foot assay intervals. In July 2008, a composite sample was prepared out of 111 separate boxes of -20 mesh crushed material. One fourth of each box was representatively sampled by riffing and combined into a composite sample. The composite sample was from approximately 199 m of drilling. A representative half of the sample was used for gravity/density separation by shaking table testing and the other half remains for future work. A head (feed) and screen sample were also split out for analysis.

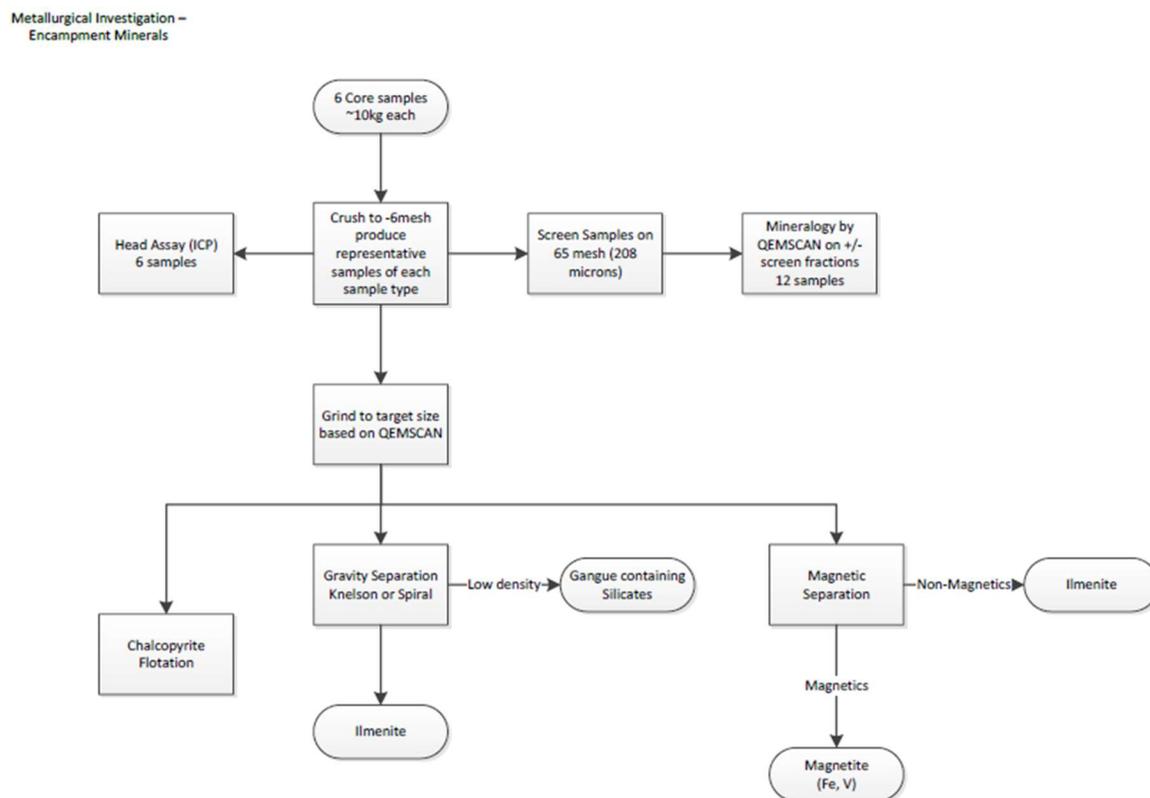
The test sample of the -20 mesh Titac mineralized material was wet separated based on density by a shaking table. Then the table concentrate (higher density fraction) was separated by a magnetic separator. The

magnetic concentrate and tails along with the table tails were analyzed for Fe, TiO₂, SiO₂, MgO, and V₂O₅. The magnetic fraction was then weighed and the magnetic concentrate re-assayed for Fe%. The wet table separated concentrates averaged 50% Fe and 25% TiO₂ versus a calculated head grade of 40% Fe and 15% TiO₂. The table concentrated was separated by a magnetic separator. The magnetic concentrate produced a concentrate of 62% Fe and 23% TiO₂.

13.1.3 Encampment Minerals (2021)

In 2021, Encampment Minerals (EMI) engaged Process Research Ortech (PRO) to assess the viability of mineralized material processing and upgrading (Process Research Ortech, 2021). Six representative samples from the Titac property were submitted to PRO for metallurgical testing, which was carried out as part of a comprehensive investigation program. The test work is summarized in the flowsheet presented in Figure 13.1.

Figure 13.1 2021 PRO metallurgical investigation test program flowsheet.



Source: Process Research Ortech (2021)

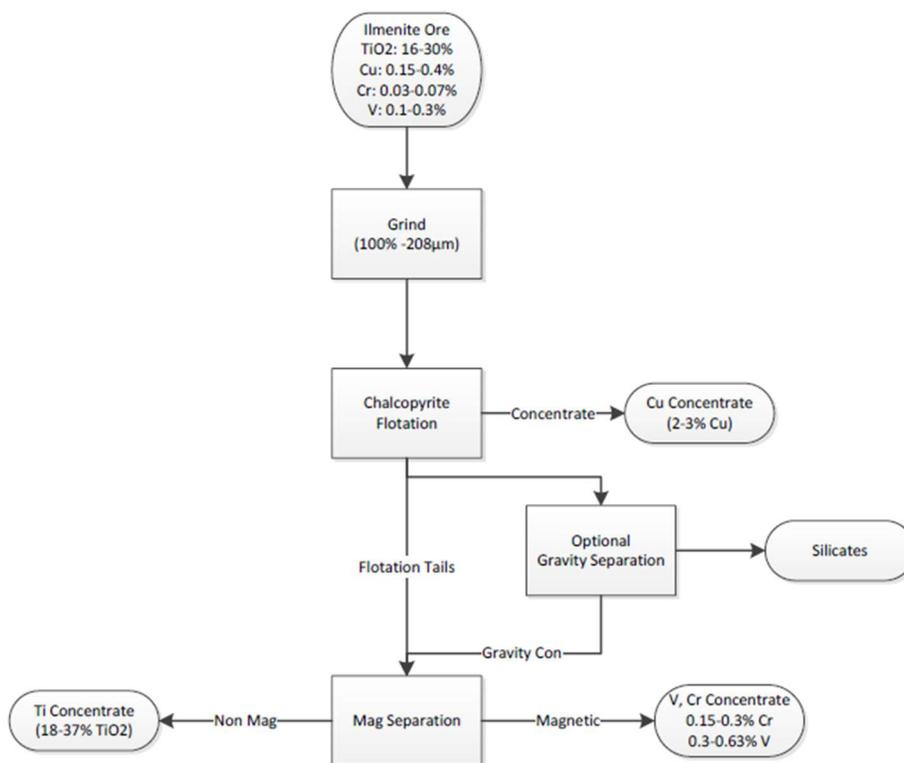
Conclusions from the 2021 study are listed as follows (from Process Research Ortech, 2021) :

- The major host for TiO₂ appears to be ilmenite based on the mineralogical analysis by QEMSCAN. The materials contain a high percentage of free, unassociated, ilmenite ranging between 40-90% indicating that a high-grade concentrate can be produced with appropriate upgrading methods.

- Centrifugal concentration separation did not produce significant segregation in terms of TiO_2 , Fe_2O_3 , V, Cr and Cu. Gravity concentration by Knelson concentrator did not prove to be effective as the separation factor; the apparatus did not provide clear separation between the more dense ilmenite and less dense gangue (ie silicates).
- Magnetic separation did not produce significant segregation in terms of TiO_2 , Fe_2O_3 , V, Cr and Cu, with the exception of one sample, 94804. For sample 94804 magnetic separation did generate a significant segregation in mass of magnetic vs. non-magnetic with separation and concentration of Fe, Cr and V in the magnetic fraction.
- V_2O_5 tends to be enriched in magnetite per the EPMA analysis, in some samples up to about 4% V_2O_5 present in magnetite, whereas the V_2O_5 in the ilmenite tends to be substantially lower, usually substantially less than 1%.
- Copper flotation was successful in recovering all Cu in a rougher concentrate. The grade of the concentrate may be enhanced by optimizing the flotation process.
- The dominant host of the V_2O_5 appears to be in the magnetite, and the dominant host of the copper appears to be chalcopyrite, with both minerals potentially amenable to conventional separation techniques.

Based on the observations and conclusions from this 2021 study, PRO presented the following flow sheet for consideration, Figure 13.1.

Figure 13.2 2021 PRO suggested Flow Sheet for consideration.



Source: Process Research Ortech (2021)

Recommendations from the study included the following:

- Separation of Cu by flotation has been shown to be effective and improving the flotation stage for recovery of Cu with respect to concentrate grade should be performed.
- Perform further study for gangue removal and concentration of ilmenite by gravity or dense media separation.
- Examination of the economics to process the material streams produced via magnetic separation.
 - Assess potential process routes to process the Ti rich non-mag fraction including hydrometallurgical processes using mineral acids ie. HCl or H₂SO₄, or pyrometallurgical process routes to produce an intermediate or final Ti bearing product.
 - Assess if the V/Cr rich magnetic fraction is amenable to further processing either by pyrometallurgical or hydrometallurgical routes (Process Research Ortech, 2021).

13.2 Metallurgical Studies from an Analogous Deposit – Longnose

More detailed metallurgical test work has been conducted on the nearby Longnose OUI Deposit, located approximately 40 km north of the Titac property. The Longnose deposit, which shares geological characteristics to the Titac deposits offers valuable insights into potential metallurgical processes applicable to the SCZ Project. Given the similarity in deposit style, the results from Longnose provide a useful analog for understanding the processing methods that may be effective in optimizing the recovery of iron and titanium at the SCZ project.

In 2017, a pilot-scale demonstration of ilmenite processing technology was conducted through a collaboration between PRO and the Natural Resources Research Institute (NRRI). The primary objective was to demonstrate the technical feasibility of producing high-quality iron oxide and titanium dioxide (TiO₂) products from Minnesota ilmenite ore, utilizing beneficiation in combination with Canadian Titanium Limited's (CTL) proprietary hydrometallurgical processing technology.

NRRI's summarized the results as follows:

Ten metric tons of Longnose ilmenite sample was beneficiated using gravity and magnetic separation to produce an ilmenite concentrate for hydrometallurgical testing. The beneficiation process resulted in three final products: high silica tailings, magnetite/titanomagnetite concentrate, and ilmenite concentrate. The ilmenite concentrate was found to have the following chemical assay: 38.9% TiO₂, 31.1% Total Fe, 6.4% SiO₂, 7.6% MgO, and 0.32% V₂O₅ with an estimated weight recovery of 45.5% and a TiO₂ recovery of 71.3%. The beneficiation process rejected approximately 74.3% of the total magnesium oxide and 82.1% of the total silicon dioxide. The grinding energy consumption was estimated at 21.1 kWh per ton. The majority of the ilmenite concentrate consisted of ilmenite with gangue constituents of lizardite, chlorite, and hornblende. A mineralogical report showed losses of fine primary ilmenite and secondary ilmenite locked in gangue particles in the gravity separators and some ilmenite losses to the magnetite/titanomagnetite stream. Overall ilmenite recovery to the ilmenite concentrate stream was estimated at 64%.

The CTL process contains five major process steps: atmospheric chloride leaching, oxidation, iron solvent extraction/precipitation/calcination, titanium solvent extraction/precipitation/calcination, and recycle of titanium raffinate back into the leaching stage. A bench-scale hydrometallurgical test program involved determining the CTL magnesium chloride leaching and solvent extraction system

parameters for the ilmenite concentrate. The test program focused on the leach efficiency and extraction efficiency of the target elements; iron and titanium. When re-grinding the ilmenite concentrate to 80% passing 37 microns, a leaching efficiency of 89% for iron and 88% for titanium was achieved. The ilmenite concentrate re-grind was estimated to consume 5.8 kWh per ton; therefore, total grinding energy consumption was estimated at 26.9 kWh per ton. Estimated leaching time was four hours. For the solvent extraction of iron, an organic mixture was determined and isotherms were plotted to determine process staging. Similarly for titanium extraction, an organic mixture was tested to prepare isotherms for pilot plant operation. (Natural Resources Research Institute, 2017).

The QPs of this Report have not visited the Longnose property and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in this section is not necessarily indicative of the mineralization on the Project that is the subject of this Report.

14 Mineral Resource Estimates

APEX Geoscience Ltd. (APEX) of Edmonton, Alberta, was retained by Green Bridge to review the drilling database and mineral resource estimate (MRE) for the Titac South Deposit of the SCZ. In 2012, SRK released a technical report (Farrow et al., 2012) that contained a Mineral Resource Estimate for the Titac South Deposit for Fe_2O_3 and TiO_2 (Section 6.1.1). The MRE discussed in Farrow et al. (2012) has an effective date of January 19, 2012, and will therefore be referred to as the 'historical 2012 Titac South MRE'.

There has been no further drilling at the Titac South Deposit since the effective date of the historical 2012 Titac South MRE. The historical 2012 Titac South MRE for the Fe_2O_3 and TiO_2 mineralization is entirely based upon drillholes completed in 2010 to 2011 by Cardero Resource Corp (Cardero).

Andrew J. Turner, B.Sc., P.Geol., assisted by Kevin S. Hon, B.Sc., P.Geo. completed the historical 2012 Titac South MRE review. Michael B. Dufresne, M.Sc, P.Geol. completed an internal audit of Mr. Turner's and Mr. Hon's efforts. Mr. Dufresne and Mr. Turner are qualified persons by virtue of education, experience and membership in a professional association. They are independent of the Company applying all of the tests in section 1.5 of National Instrument 43-101. Mr. Dufresne is the QP and co-author responsible for Section 14 and the MRE reported herein.

The result of Mr. Dufresne's review of the historical 2012 Titac South MRE is that there are no significant issues identified with the drillhole database or the workflow and methodology used by Farrow et al. (2012). In the opinion of Mr. Dufresne, the 2012 Titac South Project MRE was completed in accordance with the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines," dated November 29, 2019, and the CIM "Definition Standards for Mineral Resources and Mineral Reserves," dated May 10, 2014. As a result, Mr. Dufresne takes responsibility for and accepts the Mineral Resource Estimate for the Titac South Deposit of the SCZ, as disclosed by Farrow et al. (2012), and considers it current as of the effective date of this Report (September 18, 2024).

14.1 APEX Review of the 2012 Titac South Mineral Resource Estimate

Mr. Dufresne, assisted by Mr. Hon, B.Sc., P.Geo., used Micromine commercial resource modelling and mine planning software (v.24.0), Resource Modelling Solutions Platform (RMSP; v.1.14.0), and Deswik CAD (v2022.2) to evaluate the Titac South resource data provided by Green Bridge. The review included investigations of the drillhole database, geological logs, estimation domains, statistics, block model, and resource calculations.

The following section describes the QP's methodology and conclusions from the 2012 Titac South Project MRE review.

14.1.1 Review of Database and Resource Files

Green Bridge provided APEX with the drillhole database, estimation domains, and the block model used to calculate the 2012 Titac South Project MRE by Farrow et al. (2012).

The provided drillhole database comprises 32 drillholes, each having coordinates, depths, and zone information within the collar file. Of the 32 drillholes in the database only 24 holes are drilled over the Titac South Deposit. The other 8 holes are not material to the Titac South MRE. In addition, the drillhole data comprises interval data for alteration, assays, lithology, composites, magnetic susceptibility, specific gravity, and survey information.

Green Bridge provided APEX with the 2012 block model and mineralization domains for Titac South. The block model contained coordinates, block dimensions, domain, density, and Fe_2O_3 , TiO_2 and estimated values, overburden percentage. The provided block model is a full waste model that also contains block coordinates, dimensions, and density values for overburden, and waste blocks. The block model is a percent model containing percentages for the mineralized material, waste, and overburden portions of the blocks.

Green Bridge did not provide APEX with the topographic or overburden surfaces used for the 2012 Titac South Project MRE, however the overburden values were coded in the block model and APEX was provided with collar surface coordinates as well as interval data indicating overburden.

APEX, under the direct supervision of the QP, reviewed the provided data and found no significant issues with the data. There has been no new drilling at the Titac South Deposit since the 2012 Titac South Project MRE. Mr. Dufresne takes responsibility for the drillhole database and deems that the database used to calculate the historical 2012 Titac South MRE is well validated and suitable for the mineral resource estimation.

14.1.2 Review of Estimation Domains

Mr. Dufresne, assisted by Mr. Hon, reviewed the estimation domains used by Farrow et al. (2012) to constrain the historical 2012 Titac South MRE block model. The purpose of the review was to establish if the Titac South estimation domains adequately constrain mineralization and reasonably represent the volume and tonnes of mineralized material. Moreover, Mr. Dufresne and Mr. Hon evaluated the geological data available in the drillhole database and evaluated its relationship versus the constructed estimation domains.

The Titac South estimation domains are comprised of three lithological groupings based on the geological interval data of lithology and alteration. The three groupings are peridotite or pyroxenite dominated oxide bearing ultramafic rock, and a mixed zone of pyroxenite, peridotite and country rock. Overburden material was modelled using drillhole data and coded into the block model.

The domains appear to be constructed using implicit modelling and constrain the identified mineralization in the drillholes. The peridotite and pyroxenite dominated domains exhibit higher grades for Fe_2O_3 and TiO_2 than the mixed zone. It appears the domains are limited at the upper boundary by the overburden surface; however, the lower boundary appears to be limited by a depth of 150 m. The waste portion of the block model extends below by an additional 50 m. There are only 5 drillholes with mineralization and lithological information that suggests some domains could extend deeper.

The estimation domains appear to reasonably encapsulate mineralization identified in the current drillholes and adequately represent the volume of mineralized material at the Titac South Deposit of the SCZ. The estimation domains do not appear to be expanded unnecessarily beyond drill support. Figure 14.1 and Figure 14.2 illustrate a plan and oblique view of the estimation domains. Figure 14.3 illustrates a cross-section view looking north through the domains while displaying the drillhole assay and modelled geological information.

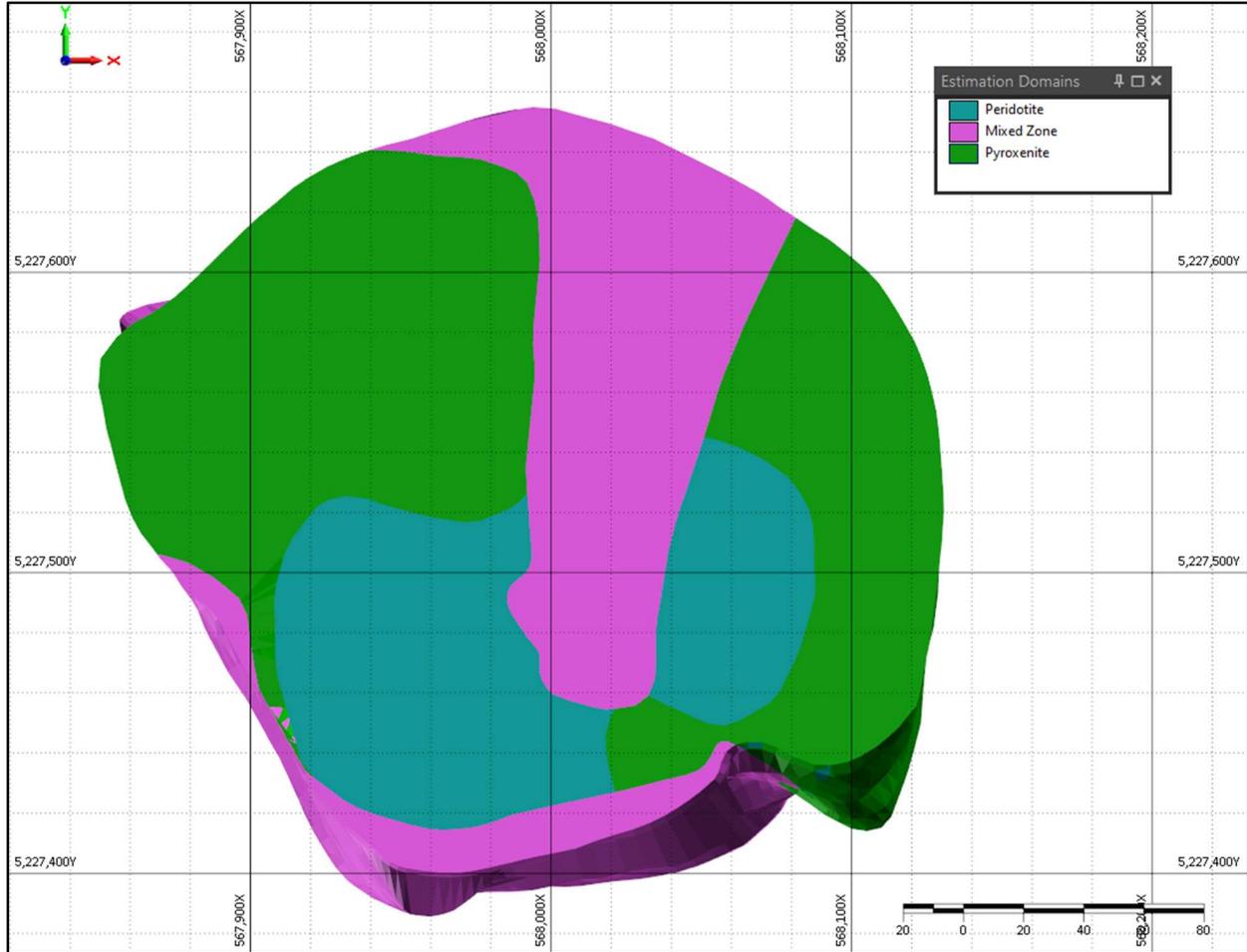
14.1.3 Review of Resource Calculation

14.1.3.1 Visual Validation

Mr. Dufresne and Mr. Hon validated the 2012 Titac South Project block model in plan view and cross-section to compare the estimated Fe_2O_3 and TiO_2 grade of the block model versus the conditioning composites. Overall, the model compares well with the composites. A minor amount of internal dilution is observed in the Mixed estimation domain; however, it is small and inconsistent. There is some local over-and under-

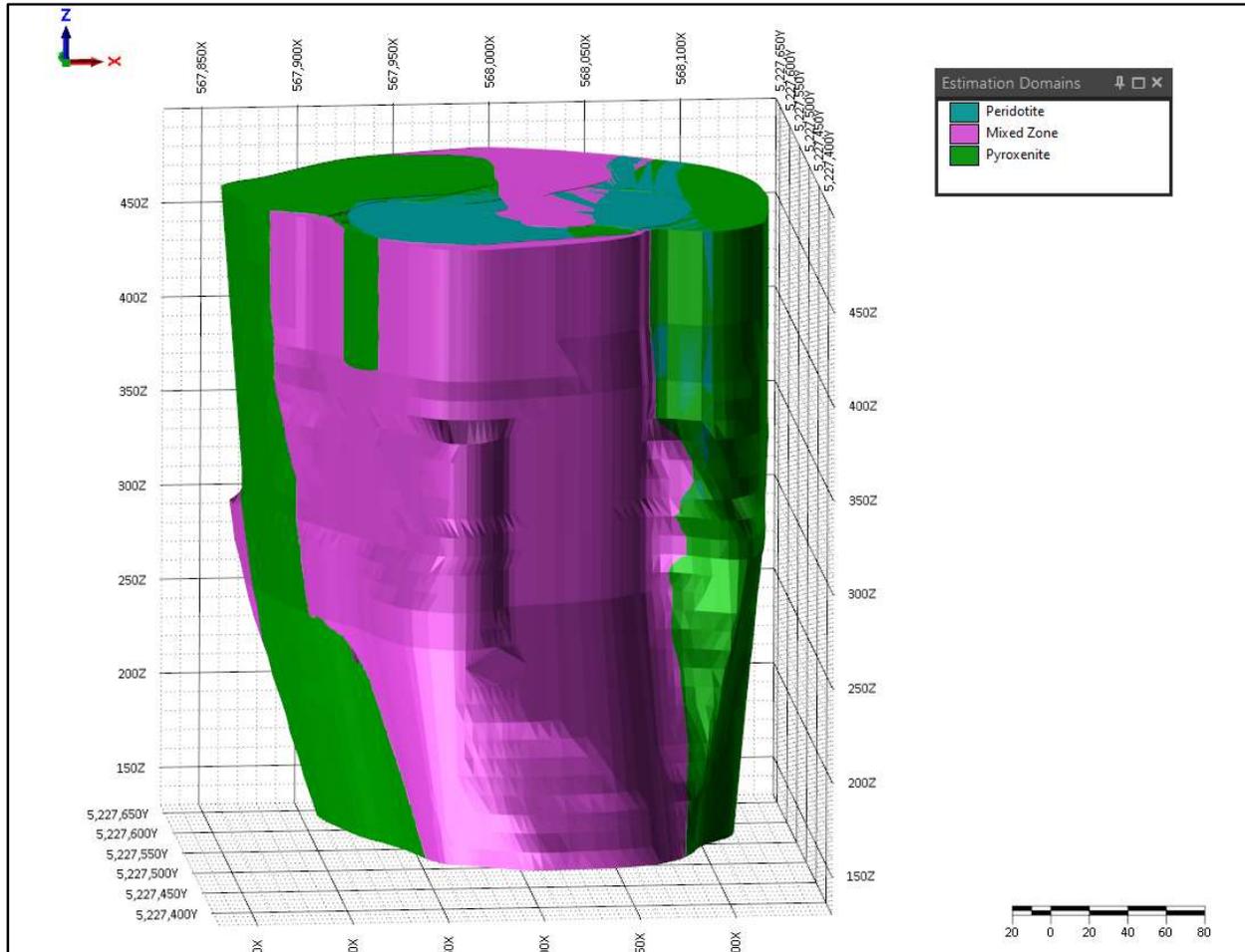
estimation observed, which is expected due to the limited conditioning data to estimate metal in those areas. Overall, the estimated block size fractions compare well with the composite Fe₂O₃ and TiO₂ grades.

Figure 14.1 Titac South plan view of estimation domains.



Source: Farrow et al. (2012)

Figure 14.2 Titac South oblique view of estimation domains.



Source: Farrow et al. (2012)

Figure 14.3 Cross-section of the Titac South estimation domains looking north.

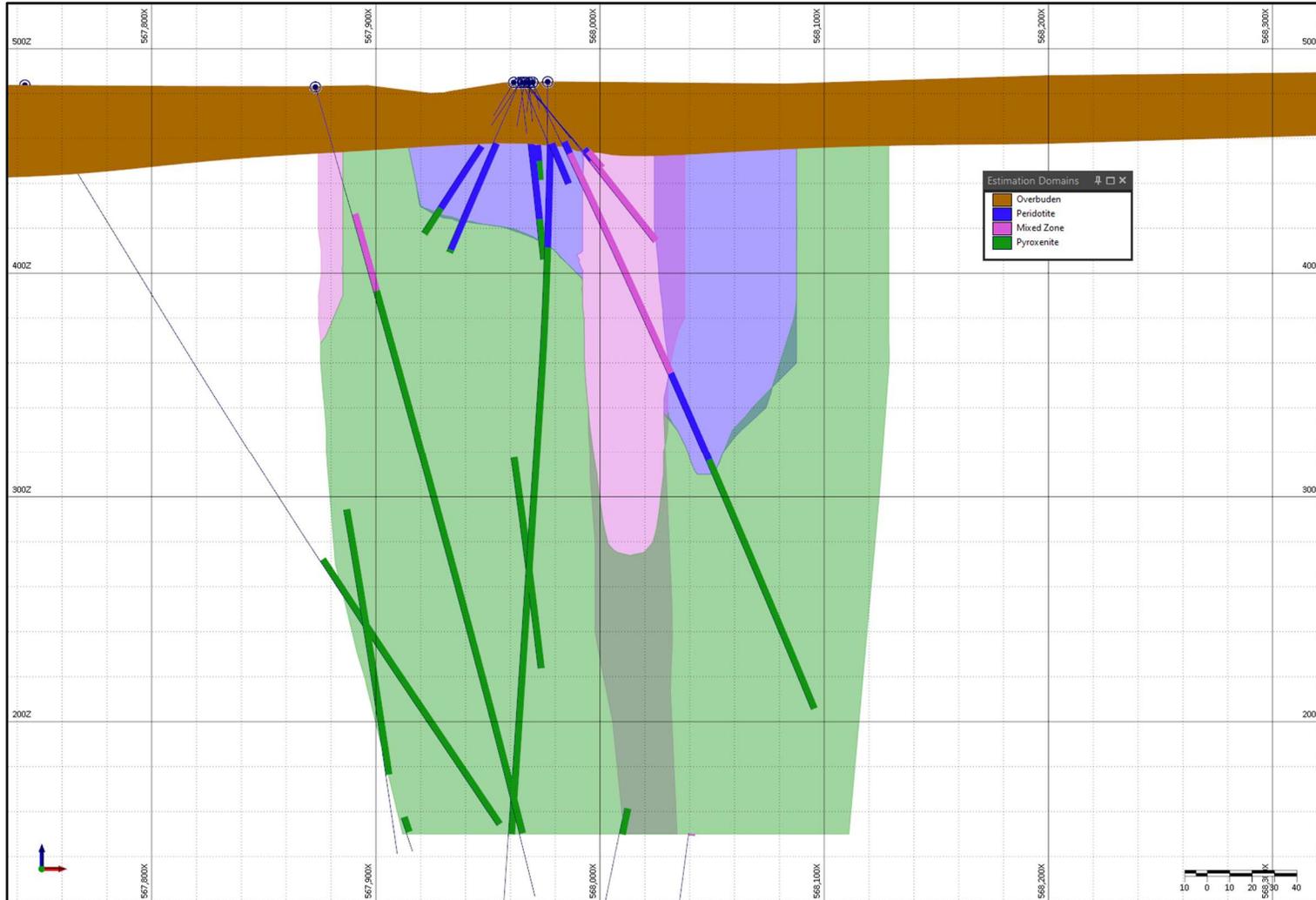


Figure 14.4 Oblique view of the Titac South block model evaluating internal dilution.

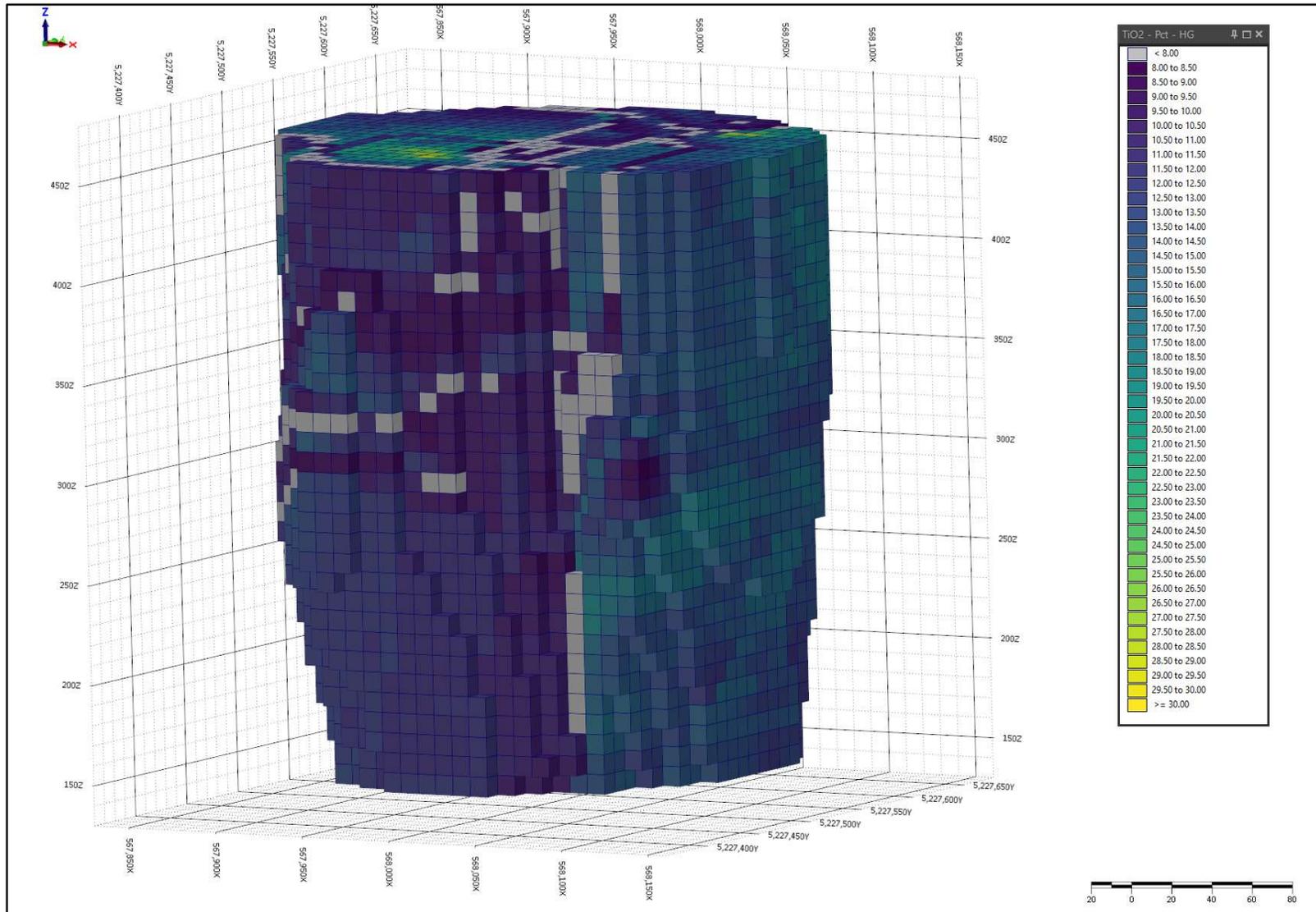
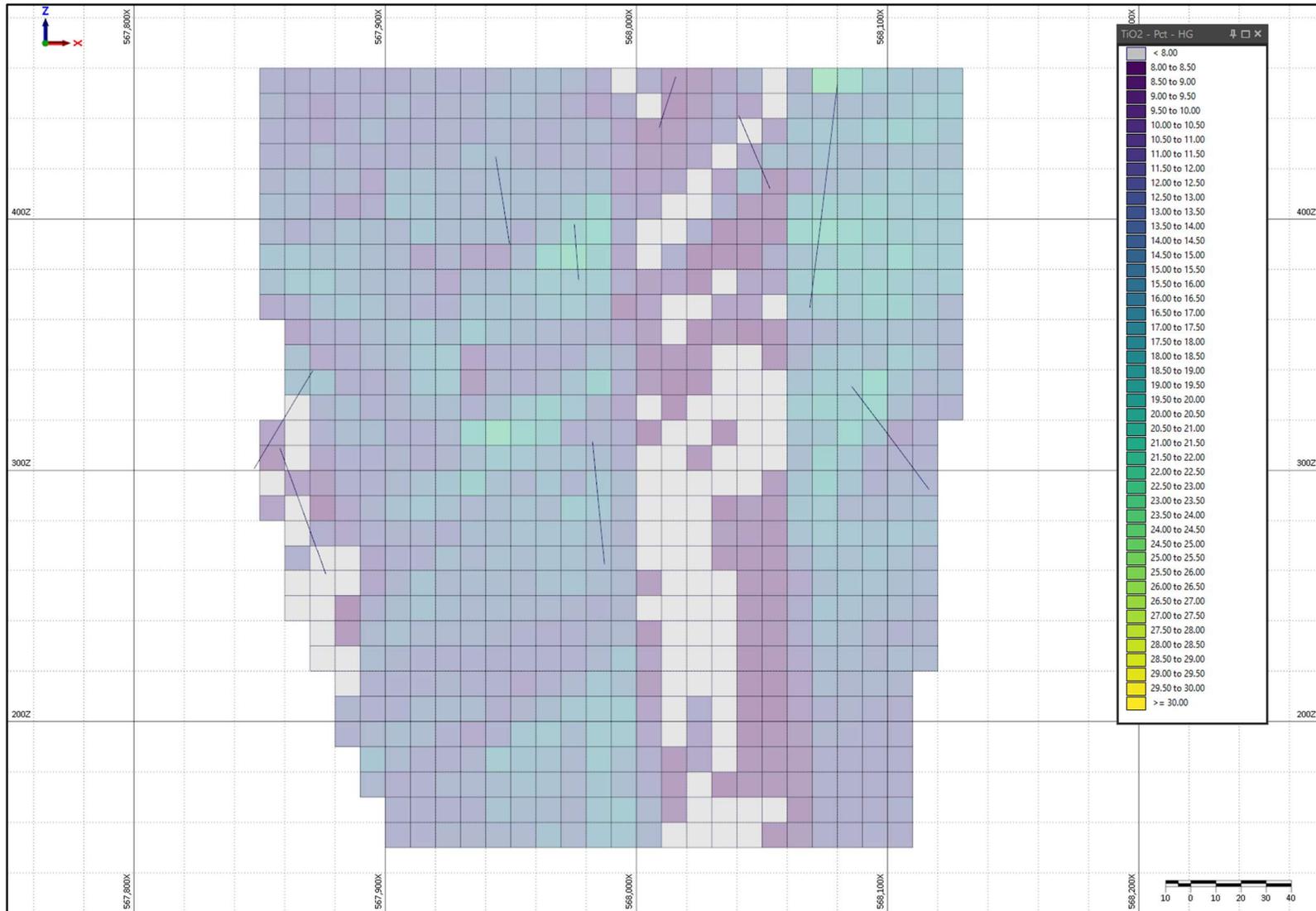


Figure 14.5 Cross section looking north along 5227575 N evaluating internal dilution.



14.1.3.2 Statistical Validation

At a minimum, resource estimations must reasonably reproduce global statistics such as the declustered mean grade of the composites used to calculate a block model within each estimation domain. Assuming the estimation domains volumes are a reasonable approximation of the volume of mineralized material contained within the deposit, the average declustered metal grade and total volume of the domains can be used to calculate the global unconstrained contained resource. The calculated global resource can help validate a calculated block model to ensure it is unbiased. Mr. Dufresne and Mr. Hon used this validation approach to verify that the block model reasonably represents the global contained metal of the deposit, given the current drilling data and estimation domain interpretation.

It is typical to collect data in a manner that preferentially samples high-value areas over low-value areas. This preferential sampling is an acceptable practice; however, it produces closely spaced measurements that result in under-represented sparse data compared to the closer-spaced data. Therefore, it is desirable to have spatially representative (i.e., declustered) statistics for global resource assessment and check estimated models. Declustering techniques calculate a weight for each datum, resulting in sparse data having a higher weight than closely spaced data. The calculated declustering weights allow spatially repetitive summary statistics to be calculated, such as a declustered mean.

Cell declustering calculates declustering weights for each composite in the estimation domains. APEX completed cell declustering on the composite data using a cell size of 30 m. The histograms in Figure 14.6 and Figure 14.7 illustrate the declustered means of composites at Titac South for both Fe_2O_3 and TiO_2 .

Figure 14.6 Probability plot of clustered, declustered, and nearest neighbor of Fe_2O_3 composites.

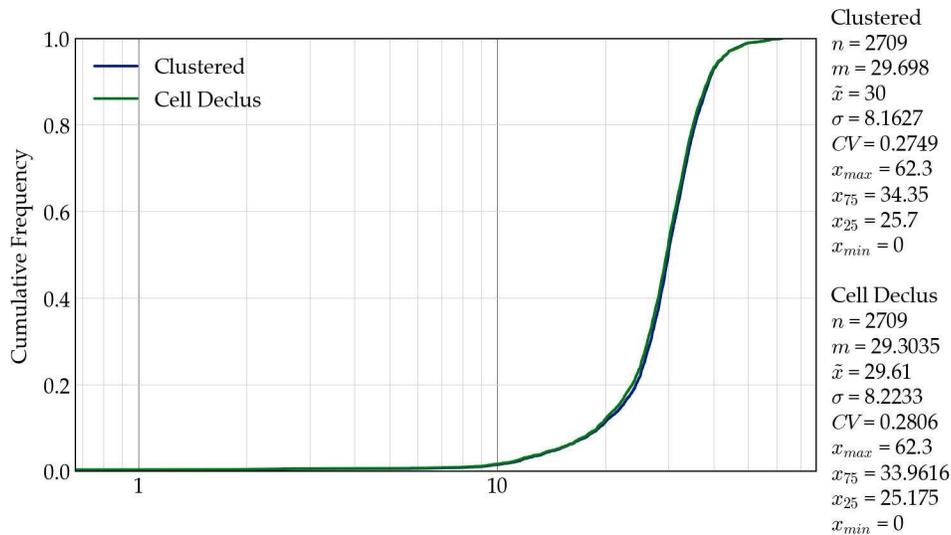
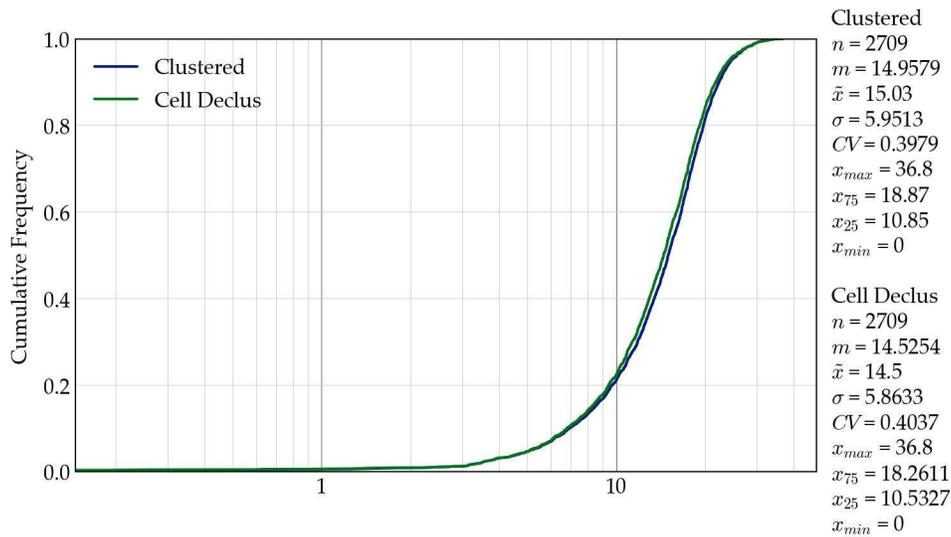


Figure 14.7 Probability plot of clustered, declustered, and nearest neighbor of TiO₂ composites



The visual validation of the drillhole data indicated consistent mineralization within the estimation domains. The 2012 MRE by Farrow et al. reported short variogram ranges (Table 14.1). APEX was unable to re-produce the variograms reported in the 2012 MRE by Farrow et al. (2012). APEX did create variogram models using the same domain and composite data from the historical 2012 Titac South MRE. The APEX variogram model (Figure 14.8 and Table 14.2 APEX variogram ranges use for validation purposes.) created for validation purposes produced ranges much longer than those reported by Farrow et al. (2012). These longer ranges align more accurately with the deposit geology and the drilling data which indicates longer range continuity of the project.

Table 14.1 Variogram ranges from the historical 2012 Titac South MRE.

Domain	Metal	Range 1			Range 2		
		X (m)	Y (m)	Z (m)	X (m)	Y (m)	Z (m)
Pyroxenite	TiO ₂	29	25	20	58	51	39

Source: Farrow et al. (2012).

Figure 14.8 APEX validation variogram mode.

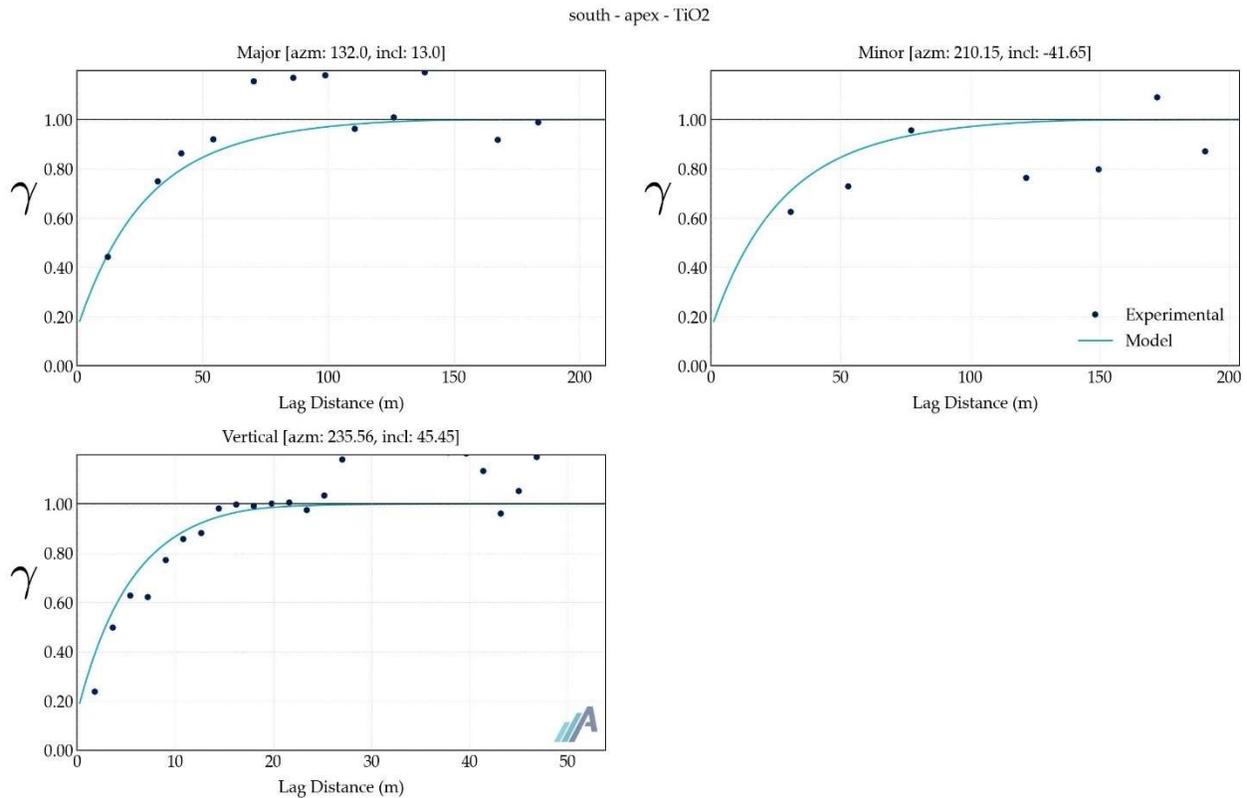


Table 14.2 APEX variogram ranges use for validation purposes.

Domain	Metal	Range 1			Range 2		
		X (m)	Y (m)	Z (m)	X (m)	Y (m)	Z (m)
Pyroxenite	TiO ₂	75	75	15	150	150	30

A critical aspect of mineral resource estimation is ensuring that the correct tonnes and grades are estimated at the specific reporting cutoff. To evaluate this, APEX calculated the target distribution using volume variance relationships and compared it against the 2012 MRE block model. Figure 14.9 and Figure 14.10 illustrate the comparison, displaying the target distribution (scaled composites) and the 2012 MRE block model across various cutoffs in grade and tonnage graphs. These figures utilized the SRK composites declustered by APEX and compared to the 2012 MRE block model and use the APEX validation variogram models. The target distribution is determined using the 2012 SRK variogram and declustering weights calculated by APEX.

Figure 14.9 Volume-variance analysis of Fe₂O₃ grade for the Titac South estimation domain.

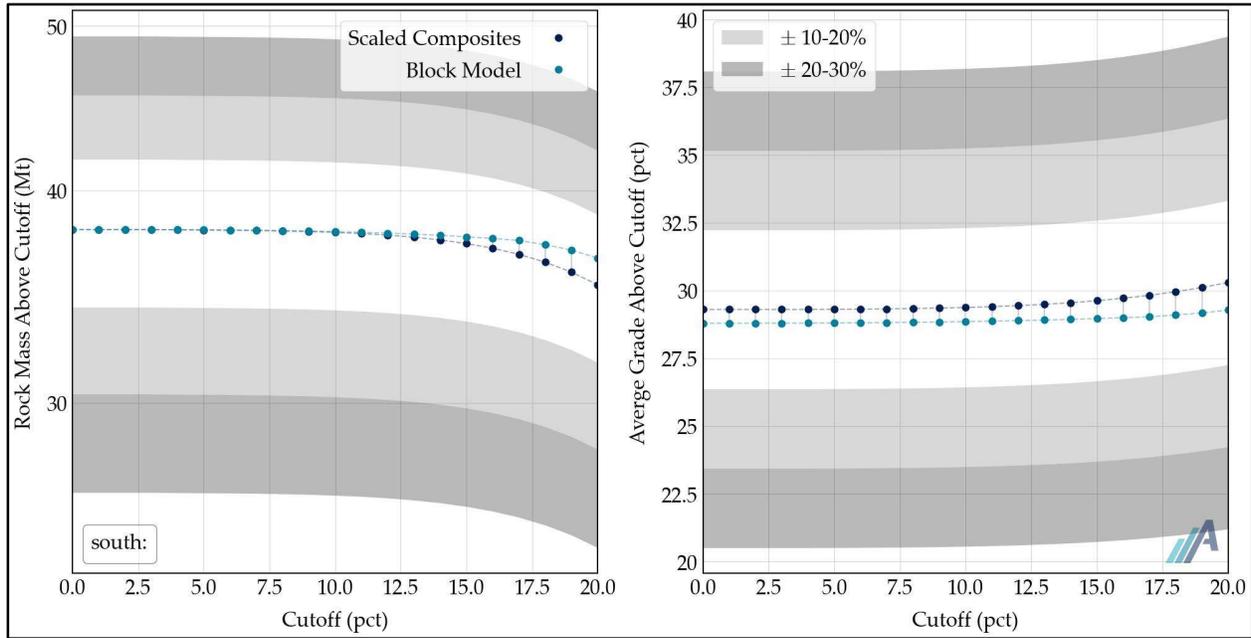
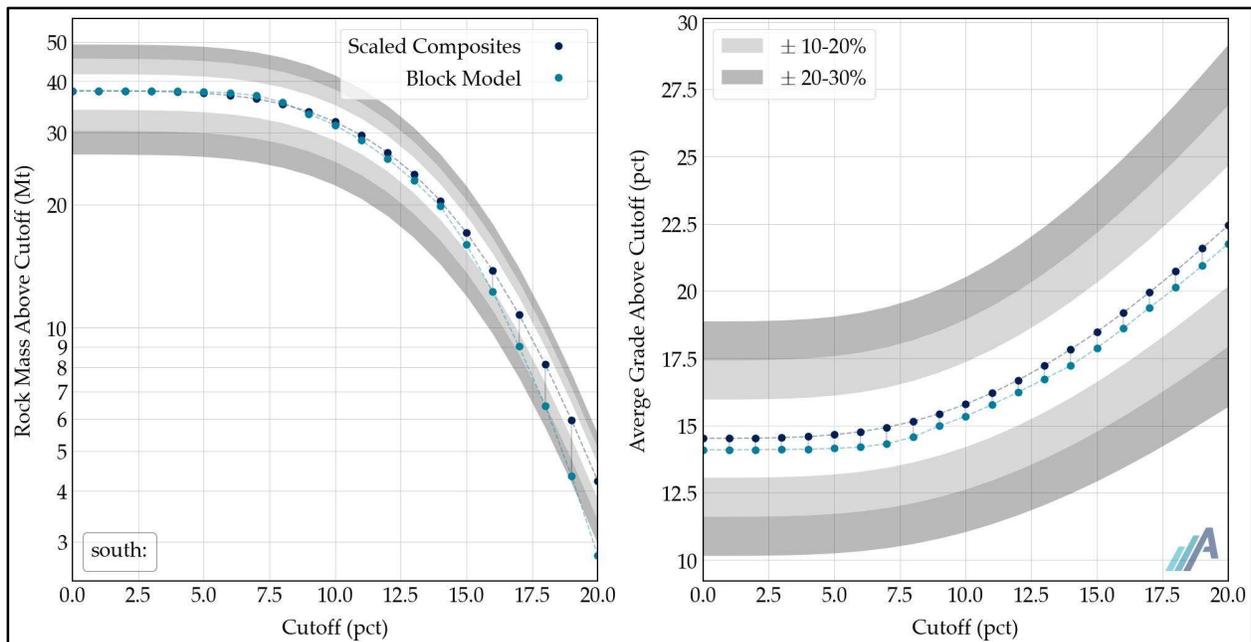


Figure 14.10 Volume-variance analysis of TiO₂ grade for the Titac South estimation domain.



14.1.4 Review of Previous MRE Assumptions, Parameters and Methodologies

- Capping levels for Fe_2O_3 and TiO_2 samples were reviewed per domain and globally. The previous MRE chose not to cap samples. Mr. Dufresne and Mr. Hon reviewed the composites and on a per domain basis there could be minor capping applied. However, on a global basis the grade distribution agrees with the decision to apply no capping. The capping assumptions and method used are accepted by the QP.
- The previous MRE modelled variograms using composites from the pyroxenite domain for TiO_2 and applied it to all domains for both Fe_2O_3 and TiO_2 . APEX calculated a new variogram model based on the same input data as the 2012 variogram model and produced models with longer ranges.
- The MRE calculated by Farrow et al. (2012) utilized Ordinary Kriging (OK) for Fe_2O_3 and TiO_2 and Inverse Distance (ID2) for density estimation. The previous MRE implemented a two-pass search strategy. The first pass search ranges are at the maximum variogram ranges, and the second pass is 3-4 times the maximum variogram ranges. However, given the validation variogram model produced by APEX, the second pass ranges use in the historical 2012 Titac South MRE are reasonable and are supported by the 2024 APEX validation variogram, as well as the deposits model and input drilling data. Therefore, the estimation and search strategy used to calculate the previous MRE is accepted by the QP.
- Bulk densities used in the resource are backed up by a significant number of density measurements and the assumed densities for each domain are considered appropriate and are accepted by the QP.
- The classification methodology used by Farrow et al. (2012) considers both geological continuity and quality of the input data. The conclusion from the previous MRE is that the geological modelling adequately honors the geological input data, however there is insufficient data density to support an indicated resource. The previous MRE classified all estimated blocks as inferred. While the variogram models from the 2012 MRE indicate short ranges of continuity, the APEX validation variogram confirms the longer ranges used in pass two for grade estimation from the 2012 MRE. These ranges align with the classification of all blocks as inferred. Based on this, the QP accepts the classification methodology used in the previous MRE and agrees more drilling information is required to support a higher level of classification.
- The previous MRE completed by Farrow et al. (2012) estimated Fe_2O_3 and TiO_2 but assumed TiO_2 would be extracted in the form of ilmenite (Fe TiO_3). The previous MRE used a TiO_2 – ilmenite ratio of 0.5264: 1, and an ilmenite price of \$170/tonne. Given the age of the MRE, Mr. Dufresne and Mr. Hon conducted pit optimization on the 2012 block model using modern cost scenarios. The modern analysis suggests a 2% increase in the contained tonnes and a less than 1% drop in the TiO_2 grade at the reported cutoff of 8%. The QP accepts the Farrow et al. (2012) MRE reported using modern cost scenarios pit parameters due to the minor change.

Table 14.3 Comparison of the 2012 SRK and the 2024 APEX pit optimization parameters.

Item	Unit / Method	APEX 2024 Classification	SRK 2012
TiO ₂ : Ilmenite Ratio		0.5264 : 1	0.5264 : 1
OP Mineralized Material Mining Cost	US\$/tonne mineralized material	\$5.0	\$2.5
OP Waste Mining Cost	US\$/tonne Waste	\$2.0	\$2.5
G&A Cost	US\$/tonne mineralized material	\$2.0	\$1.0
Process Cost	US\$/tonne mineralized material	\$10	\$8.0
Ilmenite Process Recovery	%	70%	70%
Magnetite Process Recovery	%		0%
Ilmenite Price	\$US per tonne	\$350	\$170

14.1.4.1 Conclusions

Based on Mr. Dufresne and Mr. Hon's review of the 2012 Titac South Project MRE, the APEX co author Mr. Dufresne makes the following conclusions:

- There has been no material change to the drillhole database used to calculate the 2012 Titac South Project MRE since its disclosure by the Farrow et al. (2012) Technical Report.
- No significant issues were identified during the author's validation of the drillhole database used to calculate the 2012 Titac South Project MRE.
- Visually, mineralization domains appear reasonable from a volume perspective, do not unreasonably extend beyond drill control, and are a fair representation of the volume of mineralization.
- As part of the validation of the 2012 Titac South Project resource estimation effort, Mr. Dufresne and Mr. Hon examined average grades within the 2012 block model relative to declustered composites (calculated by APEX personnel) and found that they compare favorably and represent a good approximation of the mineralization on the Project.
- Based on the statistical review the methodology used to calculate the 2012 Titac South Project MRE is reasonable.
- The 2012 Titac South Project MRE was reviewed in accordance with the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines," dated November 29, 2019, and the CIM "Definition Standards for Mineral Resources and Mineral Reserves," dated May 10, 2014.
- The parameters used for the reasonable prospects for eventual extraction by Farrow et al. (2012) were reviewed against modern equivalence. The modern parameters display minor change to the

resource. Therefore, the author is reporting the Farrow et al. (2012) resource using the modern cost scenarios.

In conclusion, co-author Mr. Dufresne, B.Sc., P.Geol. an independent QP accepts the assumptions and methodologies used to calculate the Mineral Resource Estimates for the Titac South mineralization zones disclosed by Farrow et al. (2012) and considers the resources current as of the date of this report (September 18, 2024).

14.2 Mineral Resource Reporting

The Titac South Inferred MRE is reported in accordance with the CSA NI 43 101 rules for disclosure and has been disclosed using the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019, and CIM "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10, 2014.

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Table 14.4 summarizes the Farrow et al. (2012) MRE constrained by a pit shell using modern cost scenarios. Mr. Dufresne, B.Sc., P.Geol. accepts this Mineral Resource estimate as a current resource. Inferred Mineral Resources are reported within modelled mineralization solids, without any internal dilution built into the model.

Table 14.4 Titac South Deposit mineral resource statement.

Classification	Tonnes (Mt)	Average Grade	
		TiO ₂ (%)	Adjusted Fe ₂ O ₃ (%)
Inferred	46.6	15.0	14.74

Notes:

1. The independent and qualified person for the mineral resources estimate, as defined by NI 43-101, is Michael Dufresne, P.Geo., from APEX Geoscience Ltd.
2. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no guarantee that any part of the mineral resources discussed herein will be converted into a mineral reserve in the future. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues. The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on mineral resources and reserves, definitions, and guidelines prepared by the CIM standing committee on reserve definitions and adopted by the CIM council (CIM 2014 and 2019).
3. The Mineral Resources Estimate is underpinned by data from 24 diamond drillholes totaling 4,751.17 m of drilling that intersected the mineralized domains.
4. The mineral resource is reported at a lower cut-off of 8.0 % TiO₂ for the conceptual open pit. The lower cut-off grades and potential mining scenarios were calculated using the following parameters: mining cost = US\$5.0/t; G&A = US\$2.00/t; processing cost = US\$10.00/t; recoveries = 70%; Ilmenite Price = US\$350/t, to meet the requirement that the reported Mineral Resources show "reasonable prospects for eventual economic extraction".
5. Original TiO₂ assays were composited to 1.8 m with 2,702 composites generated overall in the mineralized domains including 370 composites generated for the peridotite domain, 646 for the mixed domain, and 1,693 for the pyroxenite domain.
6. Grade interpolation was performed by ordinary kriging (OK) using 1.8-meter composites (block size of 10 m x 10 m x 10 m).
7. Bulk density ranges from 2.27 g/cm³ to 4.28 g/cm³ depending on the domain.

8. The mineral resources estimate is categorized as inferred and classified based on data density, data quality, confidence in the geological interpretation and confidence in the robustness of the grade interpolation. The inferred category was defined using a search of up to 250 m and requiring at least 4 samples per drillhole from a minimum of 2 drillholes.
9. Domains were investigated for high-grade capping, and statistical analysis agrees with the decision to not apply capping.
10. The number of metric tonnes was rounded to the nearest thousand and gold ounces was rounded to the nearest hundred, and any discrepancies in the totals are due to rounding effects. Metal content is presented in tonnes (rock mass tonnes x grade (%)).
11. The author is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issue not reported in the technical report that could materially affect the mineral resource estimate.
12. The effective date of the Mineral Resources Estimate is September 18, 2024.

As stated above, the Mineral Resource has been quantified in terms of TiO_2 and Fe_2O_3 , the analytical components captured for assays of titanium and iron. In any potential mining scenario, the Project would produce ilmenite ($FeTiO_3$) and potentially titaniferous magnetite ($TiFe_2O_4$) and magnetite (Fe_3O_4) as a by-product. The Fe_2O_3 values have been reduced to reflect Fe found within the ilmenite associated with the TiO_2 , however accurately quantifying magnetite is not possible at this time as further mineralogical work is needed.

Table 14.5 Summary of ilmenite contained in the Titac South MRE.

Classification	Tonnes (Mt)	Ilmenite Grade ($FeTiO_2$) (%)	Contained Ilmenite (Mt)
Inferred	46.6	28.5	13.3

14.3 Market Demand Summary

According to Trading Economics (2024), over the last 5 years the price of titanium ranged between USD\$4,233/tonne and USD\$21,693/tonne; however, the price of titanium has remained relatively stable over the most recent 1-year period, ranging from USD\$6,194/tonne and USD\$7,473/tonne. Titanium is widely utilized by several industries, including aerospace, automotive, medical, construction, and catalytic industries, due to its resistance to extreme temperatures and corrosion, high strength to weight ratio, biocompatibility and high catalytic activity (Chen et al., 2017; Zhai et al., 2020).

The primary source of titanium in mining is mineralized material containing ilmenite ($FeTiO_3$) and rutile (TiO_2). To determine a modern cost scenario for the Titac South MRE, the QP reviewed historical and current ilmenite prices on a global scale, as well as modern costs used in analogous mineral deposits containing Fe_2O_3 and TiO_2 . The current Titac South MRE utilized an ilmenite price of \$350/tonne which is based on a TiO_2 :ilmenite ratio of 0.5264 and a TiO_2 recovery of 70%. These modern parameters result in a 2% increase in the contained tonnes and a 1% drop in the TiO_2 grade at the reported cutoff of 8% compare to the 2012 economic scenario.

According to Chemanalyst (2024), in the first quarter of 2024, the North American ilmenite market and ilmenite prices continued an upward trajectory with steady demand from downstream industries; however, market fluctuations were experienced in the United States due to challenging weather conditions disrupting terminal operations. Global Market Insights (2024) reported a global ilmenite market size of USD\$8.8 billion in 2023 with a projected compound annual growth rate (CAGR) of 8% for the forecast period of 2024 to 2032.

In the QPs opinion, based on the relatively stable price of Titanium over the past year, coupled with projections that ilmenite prices are anticipated to remain comparatively level and an 8% CAGR for ilmenite, as well as the demand for ilmenite use in the construction and automotive industries, it is reasonable to assume that the Titanium market in North America will remain stable, with the potential to increase, in 2024-2025.

14.4 Risks and Uncertainties

As part of APEX's review of the resources disclosed by Farrow et al. (2012), co-author Mr. Dufresne identified multiple sources of risks and uncertainties as described in this section.

The 2010-2011 drilling assay data was monitored using two internal standards and one coarse blank with no supportive laboratory data verifying their accuracy or precision. While there is good correlation between the QA-QC samples, future drill programs should use certified QA-QC standards supported by round robin testing to confirm the accuracy and precision of the reference material being used.

A robust geological model is not available to support the geological interpretation of the domains, making it challenging to confirm that the geology within each of them is grouped appropriately. Currently, the estimation domains are limited to a vertical depth; however, drilling suggests both mineralization and lithological material persists below this vertical depth. A more accurate geological model could identify sub-domains within the current mixed domain that may limit internal dilution. The lack of a robust geological model and the limited metallurgical testwork conducted on Titac South core material are both sources of uncertainty.

The current Titac South MRE indicates there is insufficient data to obtain a variogram model for the Peridotite dominated and mixed estimation domains. As these estimation domains make up a significant portion of the mineral resource estimate, the lack of a variogram model in these estimation domains is a source of uncertainty of the distance of continuity within these domains.

The QP is not aware of any other significant material risks to the MRE other than the inherent risks to mineral exploration and development in general. The QPs are not aware of any specific environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that might materially affect the results of this resource estimate, and there appear to be no obvious impediments to developing the MRE at the Titac South Project.

***** Items 15 to 22 omitted; this technical report is not for an advanced property *****

23 Adjacent Properties

The SCZ is situated along the southern basal contact of the Duluth Complex, which hosts a variety of mineral deposits, including Cu-Ni-PGE sulphide, stratabound and stratiform PGE, Fe-Ti-V oxide, and silver-cobalt fissure veins (Severson et al., 2002), and is located immediately south of the Mesabi Range iron ore district.

This section discusses mineral properties that occur outside of the SCZ Project. The QPs have not visited any of these projects and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in the following section is not necessarily indicative of the mineralization on the Project that is the subject of this Report. The information provided in this section is simply intended to describe examples of the type and tenor of mineralization that exists in the region and is being explored for at the SCZ. Relevant past and present producers located adjacent to the Project are presented in Figure 23.1.

23.1 Longnose

The Longnose project is owned by American Shield Titanium Group LLC and located between the Wyman-Siphon property blocks, immediately along the border of the eastern property block (Figure 23.1). Mineralization at the Longnose project consists of disseminated to net-textured, medium to coarse-grained, Ilmenite, titaniferous magnetite and magnetite hosted in OUIs that intruded not layered series intrusions of the Duluth Complex. The Longnose OUI is interpreted to be a late-stage intrusion that cut Early Duluth Complex Stratigraphy and is associated with the midcontinent rift system. Mineralization in the OUI varies from disseminated, semi-massive, and massive ilmenite and titaniferous magnetite mineralization hosted in olivine rich ultramafic rocks (Johnson et al., 2012).

The mineral resource estimate for the Longnose project is presented in Table 23.1. The summary of Longnose project ilmenite content within the mineral resource is listed in Table 23.2. At the time of calculation, the Longnose MRE was estimated in accordance with CIM Definition Standards and reported in accordance with NI 43-101; however, the Longnose MRE pre-dates the disclosure and reporting requirements set forth in the NI 43-101 Standards of Disclosure for Mineral Projects (effective May 9, 2016), Companion Policy 43-101CP Standards of Disclosure for Mineral Projects (effective February 25, 2016), the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Exploration Best Practice Guidelines (November 23, 2018), the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019) and the CIM Definition Standards (May 10, 2014).

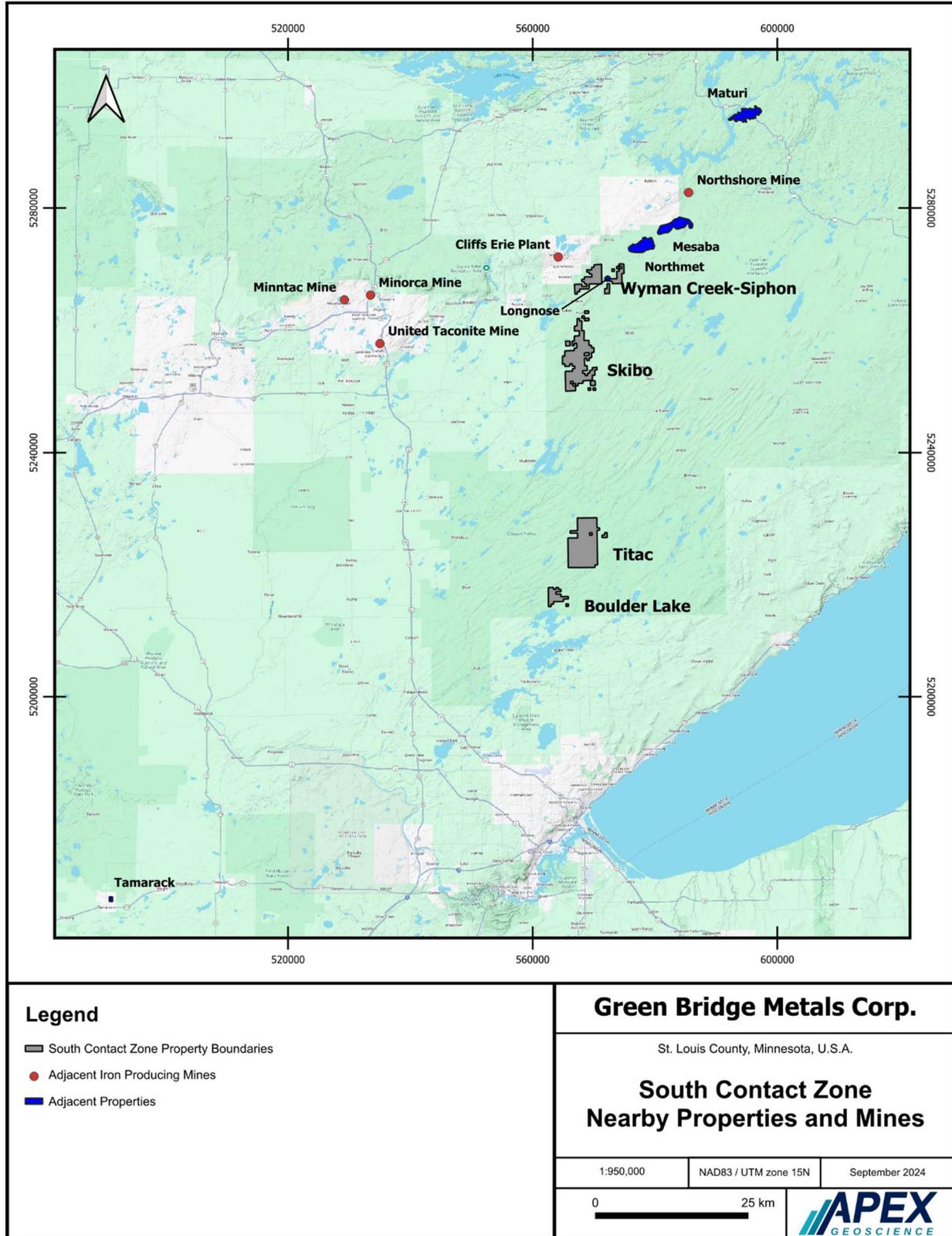
Table 23.1 Longnose mineral resource statement (effective date of January 19, 2012; Johnson et al. (2012)).

Category	Estimated Quantity (Mt)	TiO ₂ (%)	Adjusted Fe ₂ O ₃ (%)
Indicated	58.1	16.6	18.8
Inferred	65.3	16.4	19.4

Table 23.2 Longnose mineral resource estimate ilmenite content (Johnson et al., 2012).

Category	Estimate Quantity (Mt)	Ilmenite Grade (FeTiO ₃ %)	Contained Ilmenite (FeTiO ₃ Mt.)
Indicated	58.1	31.5	18.30
Inferred	65.3	31.2	20.40

Figure 23.1 Properties situated adjacent to the SCZ.



The QPs of this Report has not visited the Longnose property and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in this section is not necessarily indicative of the mineralization on the Project that is the subject of this Report.

23.1 NorthMet

NorthMet is interpreted to be an igneous and mafic intrusion hosted copper-nickel-platinum group element deposits that is located approximately 7 km northeast of the Wyman-Siphon property (Figure 23.1). The mineralization at NorthMet is dominated by sulphides, including chalcopyrite, cubanite, pentlandite, and pyrrhotite. Concentrations of gold, palladium, and platinum are associated with bismuthides and tellurides on the property. The NorthMet deposit is hosted by the PRI and the mineralization bearing units are primarily hosted in the basal unit of the Duluth Complex.

NorthMet is currently held by NewRange Copper Nickel LLC (New Range), which is a joint venture company that was established by Teck Resources Ltd. and PolyMet Mining Corporation (PolyMet) in February 2023. NewRange was established to investigate and develop the NorthMet deposit and nearby Mesaba deposit (see Section 23.2) owned by Teck. As of November 7, 2023, Glencore acquired PolyMet and now controls the venture jointly with Teck.

As of October 2022, total proven and probable mineral reserves for North Met were estimated at 289.154 million tons at 0.290% Cu, 0.084% Ni, 79 ppb Pt, 270 ppb Pd, 39 ppb Au, 74.11 ppm Co, and 1.07 ppm Ag, with all reserves stated above (Bennett et al., 2022). The mineral resource statement for NorthMet is listed in Table 23.1. As reported in Bennett et al. (2022), the NorthMet MRE was calculated in accordance with CIM Definition Standards and reported in accordance with NI 43-101.

Table 23.3 NorthMet mineral resource statement (effective date of September 20, 2022; Bennett et al. (2022)).

Classification	Tonnage (M st)	Cu (%)	Ni (%)	Pt (ppb)	Pd (ppb)	Au (ppb)	Co (ppm)	Ag (ppm)
Measured	314.5	0.257	0.077	68	240	35	72	0.94
Indicated	387.1	0.248	0.073	66	229	33	68	0.93
Total M&I	701.6	0.252	0.074	67	234	34	70	0.94
Inferred	441.1	0.254	0.070	67	243	34	55	0.92

NorthMet is currently awaiting final permitting approval prior to building and operating an open pit mining operation that will produce copper and nickel concentrates (NewRange, 2024).

The QPs of this Report has not visited the NorthMet property and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in this section is not necessarily indicative of the mineralization on the Project that is the subject of this Report.

23.2 Mesaba

Mesaba is interpreted to be a contact-type magmatic nickel, copper, platinum group element deposit hosted within intrusives that is located approximately 8 km northeast of the Wyman-Siphon property, within 1 km of NorthMet (Figure 23.1). Mineralization trends within the Mesaba deposit are thought to be structurally controlled in several areas due to the lateral sulphide trend that extends down-dip of the “Bathtub Intrusion” (Welhener & Crowie, 2022). The mineralization style is found to be dominantly disseminated sulphide with chalcopyrite, cubanite, pentlandite, and pyrrhotite being the most common sulphide minerals found in the

deposit (Welhener and Crowie, 2022). The Mesaba deposit was owned by Teck Resources and is now being investigated in joint-venture by NewRange in conjunction with the nearby NorthMet deposit.

The mineral resource statement for Mesaba is listed in Table 23.2. As reported in Welhener and Crowie (2022), the Mesaba MRE was calculated in accordance with CIM Definition Standards and reported in accordance with NI 43-101.

Table 23.4 Mesaba mineral resource statement (effective date of November 28, 2022; Welhener and Crowie (2022)).

Classification	Short ktons	Cu (%)	Ni (%)	Co (ppm)	Pt (ppm)	Pd (ppm)	Au (ppm)	Ag (ppm)
Measured	339,827	0.496	0.115	73.91	0.036	0.101	0.028	1.23
Indicated	1,866,959	0.415	0.100	76.95	0.034	0.096	0.024	1.18
Total M&I	2,206,786	0.427	0.102	76.48	0.034	0.097	0.025	1.19
Inferred	1,422,703	0.368	0.094	67.86	0.043	0.143	0.026	0.98

Scoping studies have been completed for Mesaba and baseline studies are currently underway with the aim for future development (NewRange, 2024).

The QPs of this Report has not visited the Mesaba property and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in this section is not necessarily indicative of the mineralization on the Project that is the subject of this Report.

23.3 Twin Metals Minnesota Project

The Twin Metals Minnesota Project consists of four close non-contiguous properties containing the Maturi, Maturi Southwest, Birch Lake, and Spruce Road deposits, with the Maturi deposit location shown on Figure 23.1. The deposits are located approximately 23 km northeast of the Wyman-Siphon property and are interpreted to be a composite intrusion complex hosting a copper-nickel-cobalt-platinum group element deposit. The sulphide mineralization found in the deposits are primarily chalcopyrite, cubanite, pentlandite, pyrrhotite, and talnakhite with other base and precious metals found in numerous trace minerals (Barber et al., 2014). Structurally, the deposit areas are generally minimally deformed with minor displacement on reactivated basement faults. Mapped structures are sub-vertical faults striking north-northeast with some crosscutting west-northwest faults (Barber et al., 2014).

The mineral resource and mineral reserve statements for the Twin Metals Minnesota Project are listed in Table 23.3 and Tables 23.4 and 23.5, respectively. At the time of calculation, the Twin Metals Minnesota Project MRE was estimated in accordance with CIM Definition Standards and reported in accordance with NI 43-101; however, the MRE pre-dates the disclosure and reporting requirements set forth in the NI 43-101 Standards of Disclosure for Mineral Projects (effective May 9, 2016), Companion Policy 43-101CP Standards of Disclosure for Mineral Projects (effective February 25, 2016), the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Exploration Best Practice Guidelines (November 23, 2018), the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019).

Twin Metals Minnesota has submitted a 25 year mine plan of operations to the United States Bureau of Land Management and a scoping environmental assessment worksheet data submittal to the Minnesota DNR in 2019 with the aim for future underground development of the Twin Metals Minnesota Project (Twin Metals, 2024).

The QPs of this Report has not visited the Twin Metals Minnesota property and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in this section is not necessarily indicative of the mineralization on the Project that is the subject of this Report.

Table 23.5 Twin Metals Minnesota Project mineral resource statement (Barber et al., 2014).

Deposit	Classification	Tons (Mst)	Cu (%)	Ni (%)	Pt (ppm)	Pd (ppm)	Au (ppm)	Ag (ppm)
Maturi & Maturi Southwest	Measured	308	0.63	0.20	0.146	0.339	0.083	2.26
	Indicated	924	0.57	0.18	0.147	0.332	0.079	2.04
	Total M&I	1,233	0.58	0.19	0.147	0.334	0.080	2.10
	Inferred	563	0.49	0.16	0.134	0.305	0.068	1.79
Birch Lake	Indicated	100	0.52	0.16	0.235	0.515	0.115	-
	Inferred	239	0.46	0.15	0.180	0.370	0.087	-
Spruce Road	Inferred	480	0.43	0.16	-	-	-	-

Notes: The mineral resource estimates in Table 23.3 have different effective dates: Maturi: February 4, 2014; Maturi Southwest: June 15, 2013; Birch Lake: September 15, 2012; and Spruce Road: September 15, 2012.

Table 23.6 Maturi and Maturi Southwest mineral reserve statement (effective date of July 1, 2014; Barber et al., 2014).

Deposit	Classification	Tons (Mst)	Cu (%)	Ni (%)	Pt (ppm)	Pd (ppm)	Au (ppm)	Ag (ppm)
Total Maturi & Maturi Southwest	Proven	130	0.65	0.21	0.155	0.344	0.092	2.31
	Probable	397	0.58	0.19	0.148	0.353	0.089	2.10
	Total Combined Proven and Probable	527	0.59	0.19	0.154	0.350	0.090	2.15

Table 23.7 Maturi and Maturi Southwest mineral reserve statement, contained metals (effective date of July 1, 2014; Barber et al., 2014).

Deposit	Classification	Tons (Mst)	Contained Cu (Blbs)	Contained Ni (Blbs)	Contained Pt (Moz)	Contained Pd (Moz)	Contained Au (Moz)	Contained Ag (Moz)
Total Maturi & Maturi Southwest	Proven	130	1.7	0.5	0.6	1.3	0.3	8.8
	Probable	397	4.6	1.5	1.7	4.1	1.0	24.3
	Total Combined Proven and Probable	527	6.2	2.0	2.4	5.4	1.3	33.1

23.4 Tamarack

Tamarack is a mafic to ultramafic intrusive complex that hosts a copper-nickel-cobalt-platinum group element deposit and is located approximately 90 km southwest from SCZ's Titac property (Figure 23.1). The Tamarack property is being explored and developed as a joint venture between Talon Metals Corp. and Rio Tinto since 2021 (Talon Metals Corp., 2021). The intrusion complex is well defined by a curved aeromagnetic anomaly that strikes north-south to southeast over 18 km. A 7 km long zone in the northern portion of the

Tamarack property is defined as the “Tamarack Resource Area” and is the location of significant exploration and investigation (Thomas et al., 2022). This resource area features multiples styles of mineralization and concentrations of sulphides within a range of host lithologies. These range from massive sulphides hosted in altered sediments, to textured and disseminated sulphide mineralization hosted in coarse grained ortho-cumulative olivine, to disseminated sulphide in fine grained ortho-cumulative olivine and mixed olivine, to disseminated and basal massive sulphide contained in the olivine dominant footwall (Thomas et al., 2022).

A mineral resource estimate for Tamarack was compiled in December 2022 (Thomas et al., 2022) which used Datamine RM software to interpolate wireframes based off previous exploration data. The mineral resource estimate was reported on using a cut-off of 0.5% nickel, which resulted in good continuity and reasonable projection for future extraction. The 2022 technical report estimates an indicated mineral resource of 8,564,000 tonnes with 1.73% nickel, 0.92% copper, 0.05% cobalt, 0.34 g/t platinum, 0.21 g/t palladium, and 0.17 g/t gold, and an inferred resource of 8,461,000 tonnes with 0.83% nickel, 0.55% copper, 0.02% cobalt, 0.23 g/t platinum, 0.13 g/t palladium, and 0.13 g/t gold (Thomas et al., 2022). As reported in Thomas et al. (2022), the Tamarack MRE was calculated in accordance with CIM Definition Standards and reported in accordance with NI 43-101.

The Tamarack property is currently in the permitting stage of mine development with the Department of Natural Resources of Minnesota. The proposed plan is for Tamarack to be a small footprint, high grade underground nickel mine pending environmental assessment.

The QPs of this Report has not visited the Tamarack property and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in this section is not necessarily indicative of the mineralization on the Project that is the subject of this Report.

23.5 Iron Producing Mines

Historically, the Duluth Complex has been a source of iron ore, with many companies mining and upgrading the mineral nearby. United States Steel Corporation (USSC) controls the Minntac iron mine which is located 38 km west of the Wyman-Siphon property. The Minntac mine processes 2.2 billion tons of crude ore to produce 16 million tons of iron pellets annually (Iron Ore Alliance, 2021). Cleveland-Cliffs Inc. also operates owns and operates the Minorca, Northshore, and United Taconite Mines which are all approximately within 30 km of the Wyman-Siphon property. Individually, these mines are responsible for the production of between 3 to 5.5 million tons of iron ore and taconite pellets per year (Cleveland Cliffs, 2024).

The QPs of this Report has not visited these properties and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in this section is not necessarily indicative of the mineralization on the Project that is the subject of this Report.

24 Other Relevant Data and Information

The QP is not aware of any other information of a material nature relating to the SCZ Project. There is no information relating to the Property, mineralization, metallurgical, environmental or social issues known to the QP not mentioned in this Report.

25 Interpretation and Conclusions

The South Contact Zone Project (SCZ) is an exploration project comprised of four non-contiguous properties, including Wyman-Siphon, Skibo, Titac, and Boulder. The Project is situated along the southern basal contact of the Duluth Complex, which hosts a variety of mineral deposits including copper (Cu) – nickel (Ni) - platinum group elements (PGE) sulphide, stratabound and stratiform PGE, iron (Fe) -titanium (Ti) ± vanadium (V) oxide, and silver (Ag) – (Co) cobalt fissure veins, and is located immediately south of the Mesabi Range iron ore district.

25.1 Geology and Mineralization

The SCZ is regionally located in the southern Superior Province of the Canadian Shield, one of the world's oldest geological cratons, primarily composed of Archean rocks. Overlying these Archean basement rocks are Paleoproterozoic sedimentary cover sequences. The cover sequences were later intruded by Mesoproterozoic mafic and felsic magmas associated with the development of the Midcontinent Rift System (MCR). The SCZ is situated along the southwestern margin of the Duluth Complex within the larger MCR. The Duluth Complex spans approximately 270 km in length and up to 40 km in width in an arcing band from Duluth, northeastern Minnesota, to near the Canadian border. The Duluth Complex is characterized by the intrusion of a significant volume of mafic and ultramafic rocks, forming one of the largest mafic intrusive complexes on Earth, second only to the Bushveld Complex in South Africa.

The Project is situated along a well-defined regional structural trend formed by early to late (pre- and post-Duluth Complex emplacement), composite, differentiated mafic-ultramafic intrusions or intrusion complexes that include oxide-bearing ultramafic intrusions (OUIs).

Mineralization at the SCZ properties is generally hosted in the OUIs that intruded into layered series intrusions of the Duluth Complex. Most OUIs occur along the western margin of the southern portion of the Duluth Complex, and display numerous shapes (sheet-, funnel-, dike- and pipe-like geometries), and inclinations (flat-lying, moderately dipping, and sub-vertical).

Mineralization at the Titac property includes Fe-Ti-V oxide mineralization and Cu-Ni sulphides. The Fe-Ti-V oxide mineralization is primarily hosted within the pyroxenite and peridotite units, with disseminated to semi-massive oxide minerals, including magnetite and ilmenite, being the most prominent mineralization styles. The disseminated Cu-Ni sulphides are typically found interstitially within the silicate and oxide minerals, and locally as coarse-grained clots. Mineralization at Titac South extends 280 meters (m) east-west, 250 m north-south, and to a depth of 330 m. The complex stratigraphy of the intrusions, characterized by vertical pipe-like structures and sharp lithological contacts, suggests a dynamic emplacement history.

The primary style of mineralization at the Wyman-Siphon property is disseminated Cu-Ni sulphides, primarily chalcopyrite, pentlandite, and pyrrhotite, hosted within the troctolitic units.

The mineralization at Skibo is varied, with significant occurrences of both massive and disseminated Cu-Ni sulphides, dominantly associated with the main OUI body. The disseminated sulphides are typically hosted within the troctolitic units, while the massive sulphides are associated with the footwall zones of the OUIs. The Skibo prospect has not yet been evaluated for Fe-Ti-V oxide mineralization.

25.2 Historical Exploration

Exploration of the SCZ dates back to the latter part of the 1800s. Early exploration of the Duluth Complex was focused on disseminated low grade copper-nickel mineralization until the late 1940s. In 1967, several companies started exploration campaigns to investigate magnetic anomalies from Minnesota State geophysical surveys. This led to drilling in the southern part of the Duluth Complex which in many places intersected weak sulphide mineralization and plugs of OUIs. Limited outcrop occurs within the Project; therefore, most of the historical exploration conducted at the SCZ has consisted of geophysical surveys and drilling programs. A total of 137 drillholes for 41,398.44 m (135,822 ft) have been completed historically in the SCZ by several companies from 1959 to 2021.

Exploration has been conducted at the Titac property from the 1960s to 2019 by United States Steel Corp. (USSC), Cardero Resources Corp. (Cardero), and Encampment Minerals Inc. (EMI). These companies completed a total of 52 drillholes (16,190.29 m) at the property, as well as geophysical programs, relogging and resampling programs, petrographic analysis, and metallurgical testwork. This historical drilling at Titac confirmed Fe-Ti-V oxide mineralization at the Titac South Deposit and the Titac North prospect and led to the calculation of a historical mineral resource estimate for Titac South.

Exploration has been conducted at the Wyman-Siphon property from the 1960s to 2011 by Bear Creek, New Jersey Zinc, Hanna, USSC, National Resources Research Institute (NRRI), Falconbridge Ltd (Falconbridge), and EMI. These companies completed a total of 34 drillholes (11,052.64 m) at the property, as well as geophysical programs, relogging and resampling programs, prospecting and mapping programs. Historical surface exploration by Falconbridge at the Siphon prospect identified several gossanous, Cu-Ni-PGE-bearing outcrops and float along the surface. The historical drilling at Wyman-Siphon confirmed the presence of sulphide mineralization enriched with copper, nickel, and PGEs at the property.

Exploration has been conducted at the Skibo property from the 1950s to 2020 by the International Nickel Company (INCO), Phelps Dodge, Exxon, New Jersey Zinc, Bear Creek, USSC, International Platinum, Falconbridge, and EMI. These companies completed a total of 40 drillholes (11,014.26 m) at the Skibo property, as well as geophysical programs, borehole geophysics, relogging and resampling programs. Drilling at Skibo confirmed the presence of sulphide mineralization enriched with copper and nickel with anomalous gold (Au) and PGEs at the Skibo north and Skibo south prospects.

Exploration has been conducted at the Boulder property from the 1960s to 1980s by American Shield and American Smelting and Refining Company (ASARCO), Phelps Dodge, and NRRI. These companies completed a total of 9 drillholes (1,812.94 m) at the property, as well as geophysical programs, and relogging and resampling programs. EMI acquired the Boulder claims in 2010 and completed historical data compilation, relogging and resampling of historical core. The relogging and resampling program confirmed the presence of semi-massive to massive oxide mineralization hosted in ultramafic intrusives in the North Boulder prospect.

25.3 Recent Exploration

Exploration by the Company at the SCZ has consisted of a geophysical data analysis of the Skibo and Wyman-Siphon properties. The data analysis provided insight into the use of virtual time domain electromagnetics (VTEM) geophysics to define OUI bodies within the Project. The Company will use the results of this desktop study to guide future exploration within the SCZ.

Other than the review of historical geophysical data, the Issuer has yet to conduct any exploration work at the Project.

25.4 Current Mineral Resource Estimate

There has been no further drilling at the Titac South Deposit of the SCZ since the effective date of the previous Technical Report written on the Titac property by SRK Consulting (Canada) Inc. that includes the historical 2012 Titac South MRE (Farrow et al., 2012). Therefore, the mineral resource outlined in this Report is an audit of the Farrow et al. (2012) Technical Report, and accompanying data, that documents the review completed and provides a current MRE for the Titac South Deposit of the SCZ (the Titac South MRE). The MRE utilized 24 drillholes completed between 2010-2011 by Cardero Resource Corp.

Mr. Dufresne has reviewed the work by Farrow et al. (2012) and finds no significant issues with the key assumptions, parameters, and methods used to prepare the previous MRE. In the opinion of the QP, the MRE by Farrow et al. (2012) is completed in accordance with the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines," dated November 29, 2012, and the CIM "Definition Standards for Mineral Resources and Mineral Reserves," dated May 10, 2014. As a result, Mr. Dufresne accepts the Titac South MRE disclosed by Farrow et al. (2012) and considers it current as of the date of this report (September 18, 2024) based upon the verification completed by the QP. The QP is reporting the MRE by Farrow et al. (2012) constrained within a pit shell using modern cost scenarios. The updated costs result in a 2% change compared to the cost scenarios used by Farrow et al. (2012).

The Titac South MRE consists of a constrained TiO₂ inferred resource reported at a lower cutoff off 8% TiO₂ of 46.6 Mt at a grade of 15.0% TiO₂ and an adjusted ferric oxide (Fe₂O₃) grade of 14.74%. The resource has been quantified in terms of Fe₂O₃ and TiO₂, however any potential mining scenario would produce ilmenite (FeTiO₃). Based on the assumption that titanium would be found within ilmenite, the contained ilmenite metals from the MRE would be 45.1 Mt with a grade of 28.5% ilmenite for a contained ilmenite total of 12.9 Mt. The Titac South MRE is presented in Table 25.1.

Table 25.1 Titac South Deposit mineral resource statement.

Classification	Tonnes (Mt)	Average Grade	
		TiO ₂ (%)	Adjusted Fe ₂ O ₃ (%)
Inferred	46.6	15.0	14.74

Notes:

1. The independent and qualified person for the mineral resources estimate, as defined by NI 43-101, is Michael Dufresne, P. Geo., from APEX Geoscience Ltd.
2. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no guarantee that any part of the mineral resources discussed herein will be converted into a mineral reserve in the future. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues. The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on mineral resources and reserves, definitions, and guidelines prepared by the CIM standing committee on reserve definitions and adopted by the CIM council (CIM 2014 and 2019).
3. The Mineral Resources Estimate is underpinned by data from 24 diamond drillholes totaling 4,751.17 m of drilling that intersected the mineralized domains.
4. The mineral resource is reported at a lower cut-off of 8.0 % TiO₂ for the conceptual open pit. The lower cut-off grades and potential mining scenarios were calculated using the following parameters: mining cost = US\$5.00/t; G&A = US\$2.00/t; processing cost = US\$10.00/t; recoveries = 70%; Ilmenite Price = US\$350/t, to meet the requirement that the reported Mineral Resources show "reasonable prospects for eventual economic extraction".
5. Original TiO₂ assays were composited to 1.8 m with 2,702 composites generated overall in the mineralized domains including 370 composites generated for the peridotite domain, 646 for the mixed domain, and 1,693 for the pyroxenite domain.
6. Grade interpolation was performed by ordinary kriging (OK) using 1.8-meter composites (block size of 10 m x 10 m x 10 m).
7. Bulk density ranges from 2.27 g/cm³ to 4.28 g/cm³ depending on the domain.

8. The mineral resources estimate is categorized as inferred and classified based on data density, data quality, confidence in the geological interpretation and confidence in the robustness of the grade interpolation. The inferred category was defined using a search of up to 250 m and requiring at least 4 samples per drillhole from a minimum of 2 drillholes.
9. Domains were investigated for high-grade capping, and statistical analysis agrees with the decision to not apply capping.
10. The number of metric tonnes was rounded to the nearest thousand and gold ounces was rounded to the nearest hundred, and any discrepancies in the totals are due to rounding effects. Metal content is presented in tonnes (rock mass tonnes x grade (%)).
11. The author is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issue not reported in the technical report that could materially affect the mineral resource estimate.
12. The effective date of the Mineral Resources Estimate is September 18, 2024.

25.5 Conclusions

In the opinion of the QP, historical exploration completed by companies other than Green Bridge, along with the Titac South MRE, and Mr. Dufresne's recent site inspection, outline the SCZ as a property of merit prospective for the discovery of additional Fe-Ti-V oxide mineralization and Cu-Ni mineralization. This contention is supported by knowledge of:

- The historical results of drilling, geophysical surveys, and metallurgical testwork – as outlined in this Report.
- The Titac South MRE that is the subject of this Report. The MRE is based on validation of the historical drilling and assay data, a review of the SRK block model and geological model, and confirmation of the SRK model parameters.
- The QP site inspection verified the presence of Fe-Ti-V oxide mineralization and Cu mineralization at the Titac property, as well as base metal mineralization and elevated levels of Pt and Pd mineralization at the Skibo property.

25.6 Risks and Uncertainties

Regarding the Titac South MRE, a robust geological model is not available to support the geological interpretation of the domains, making it challenging to confirm that the geology within each of them is grouped appropriately. Currently, the estimation domains are limited to a vertical depth; however, drilling suggests both mineralization and lithological material persists below this vertical depth. A more accurate geological model could identify sub-domains within the current mixed domain that may limit internal dilution. The lack of a robust geological model and the limited metallurgical testwork conducted on Titac South core material are both sources of uncertainty.

The current Titac South MRE indicates there is insufficient data to obtain a variogram model for the Peridotite dominated and mixed estimation domains. As these estimation domains make up a significant portion of the mineral resource estimate, the lack of a variogram model in these estimation domains is a source of uncertainty of the distance of continuity within these domains.

Furthermore, with any exploration project there exists potential risks and uncertainties. The Company will attempt to reduce risk/uncertainty through effective project management, engaging technical experts and developing contingency plans. Potential risks include changes in the price of metals, availability of investment capital, changes in government regulations, community engagement and socio-economic community relations, permitting and legal challenge risks and general environment concerns.

There is no guarantee that further exploration at the SCZ Project will result in the discovery of additional mineralization or an economic mineral deposit. Nevertheless, in the opinion of the QP, there are no significant risks or uncertainties, other than mentioned above, that could reasonably be expected to affect the reliability or confidence in the currently available exploration information with respect to the SCZ Project.

26 Recommendations

As a property of merit, a 2-phase work program is recommended to delineate additional mineralization at the SCZ to support future Mineral Resource expansion and to test exploration targets within the Project.

Phase 1 should include a geophysical VTEM survey over the Titac-Boulder prospect areas of the SCZ to refine future drill targets, followed by an infill drill program at Titac South and Titac North to fill in gaps in the database, to upgrade the classification of existing resources at the Titac South deposit, and to provide adequate data for a maiden mineral resource estimate at Titac North. In addition, Phase 1 should include a historical core review and re-sampling program of historical core drilled at Skibo. Only half of the Skibo historical diamond holes have been sampled and analysed, and the analyses have been limited to copper, nickel and PGE. The Skibo prospect has not yet been evaluated for Fe-Ti-V oxide mineralization. The resampling program should consist of full trace element suite analysis, as well as whole rock analysis of the Skibo drill core to gain additional information on the geochemical vectors in the mineralized magmatic system. Following this, drill testing of the recently identified OUIs should be completed at the Skibo property. The estimated cost of the Phase 1 drilling and exploration program for the SCZ Project totals CDN\$1,450,000, not including contingency funds or taxes.

Phase 2 exploration is contingent on positive results from Phase 1 and includes additional diamond drilling at known prospects within the Property, as well as greenfield regional targets, and metallurgical testwork. Phase 2 should also include an updated MRE for Titac South, a maiden MRE for Titac North and the accompanying technical report. The estimated cost of the Phase 2 exploration program for the Property totals CDN\$2,150,000, not including contingency funds or taxes.

Collectively, the estimated cost of the recommended work programs for the SCZ Property totals CDN\$3,600,000, not including contingency funds or taxes (Table 26.1).

Table 26.1 Budget for proposed exploration at the South Contact Zone Project.

Phase	Item	Approximate Cost (CDN\$)
Phase 1	All in cost for core drilling (3,000 m @ \$350/m)	\$1,050,000
	Skibo core re-sampling program	\$150,000
	VTEM Geophysical Survey (~740-line km)	\$250,000
	Sub-total:	\$1,450,000
Phase 2	All in cost for core drilling (5,000 m @ \$350/m)	\$1,750,000
	Metallurgical Testwork	\$250,000
	Mineral Resource Estimate and Technical Report	\$150,000
	Sub-total:	\$2,150,000
Phase 1 & 2	Total:	\$3,600,000

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28 Certificate of Authors

28.1 Michael B. Dufresne Certificate of Author

I, Michael B. Dufresne, M.Sc., P.Geo., P.Geol., do hereby certify that:

- 1) I am a President and a Principal of APEX Geoscience Ltd. ("APEX"), with a business address of 100, 11450 – 160 St. NW, Edmonton, Alberta, Canada.
- 2) I am the Author and am responsible for Sections 1.7, 1.8, 12.2, 13, 14, 25.4-25.6, 26 of this Technical Report entitled: "Technical Report and Mineral Resource Estimate for the South Contact Zone Project, St Louis County, Minnesota, USA", with an Effective Date of September 18, 2024 (the "Technical Report").
- 3) I am a graduate of B.Sc. Degree in Geology from the University of North Carolina at Wilmington in 1983 and a M.Sc. Degree in Economic Geology from the University of Alberta in 1987. I have worked as a geologist for more than 40 years since my graduation from university and have been involved in all aspects of mineral exploration and mineral resource estimations for precious and base metal, titanium, and iron mineral projects and deposits in Canada and internationally.
- 4) I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists ("APEGA") of Alberta since 1989 and a Professional Geoscientist with the Association of Professional Engineers and Geoscientists ("EGBC") of British Columbia since 2012. I am a 'Qualified Person' in relation to the subject matter of this Technical Report.
- 5) I visited the Property that is the subject of this Technical Report on August 19-21, 2024. I have conducted a review of the South Contact Zone Project data.
- 6) I am independent of Green Bridge Metals Corp., as defined by Section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Company. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.
- 7) I have had no previous involvement with the South Contact Zone Project, that is the subject of this Technical Report.
- 8) I have read and understand National Instrument 43-101 and Form 43-101 F1 and the Report has been prepared in compliance with the instrument.
- 9) To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated and Signed this 26 day of September 2024 in Edmonton, Alberta, Canada

"Signed and Sealed"

Signature of Qualified Person
Michael B. Dufresne, M.Sc., P.Geo., P.Geol. (APEGA #48439; EGBC #37074)

28.2 Andrew Turner Certificate of Author

I, Andrew Turner, B.Sc., P.Geol., P.Geol. of Edmonton, Alberta, do hereby certify that:

- 1) I am a Senior Geologist and Principal of APEX Geoscience Ltd. ("APEX"), with a business address of 100, 11450 – 160 St. NW, Edmonton, Alberta, Canada.
- 2) I am the Author and am responsible for Sections 10-12.1, 12.3-12.4 of this Technical Report entitled: "Technical Report and Mineral Resource Estimate for the South Contact Zone Project, St Louis County, Minnesota, USA", with an Effective Date of September 18, 2024 (the "Technical Report").
- 3) I am a graduate of the University of Alberta, Edmonton, AB, with a B.Sc. in Geology (1993). I have over 30 years of experience in all aspects of mineral exploration and mineral resource estimations for precious and base metals, titanium, and iron projects and deposits in Canada, the United States, and Central and South America
- 4) I am a Professional Geologist (P.Geol., P.Geo.) registered with the Association of Professional Engineers and Geoscientists of Alberta ("APEGA"; Member #: 49901) and the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists ("NAPEG"; Member #: L2456) and I am a 'Qualified Person' in relation to the subject matter of this Technical Report.
- 5) I have not visited the South Contact Zone Project that is the subject of this Technical Report. I have conducted a review of the South Contact Zone Project data.
- 6) I am independent of Green Bridge Metals Corp., as defined by Section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Company. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.
- 7) I have had no previous involvement with the South Contact Zone Project, that is the subject of this Technical Report.
- 8) I have read and understand National Instrument 43-101 and Form 43-101 F1 and the Report has been prepared in compliance with the instrument.
- 9) To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated and Signed this 26 day of September 2024 in Edmonton, Alberta, Canada

"Signed and Sealed"

Signature of Qualified Person
Andrew Turner, B.Sc., P.Geol., P.Geo. (APEGA # 49901; NAPEG # L2456)

28.3 Fallon T. Clarke Certificate of Author

I, Fallon T. Clarke, B.Sc., P.Geo., of Victoria, British Columbia, do hereby certify that:

- 1) I am a Senior Geologist of APEX Geoscience Ltd. ("APEX"), with a business address of 100, 11450 – 160 St. NW, Edmonton, Alberta, Canada.
- 2) I am the Author and am responsible for Sections 1.1-1.3, 1.5-1.6, 2-6, 9, 23-24, 25.2-25.3, 27 of this Technical Report entitled: "Technical Report and Mineral Resource Estimate for the South Contact Zone Project, St Louis County, Minnesota, USA" with an Effective Date of September 18, 2024 (the "Technical Report").
- 3) I graduated with a B.Sc. Degree in Geology from the University of Saskatchewan in 2010. I have worked as a geologist for more than 12 years since my graduation from university and have experience with exploration for precious, base metal, and iron deposits of various types through North America and Australia.
- 4) I am a Professional Geologist (P.Geo.) registered with the Association of Professional Engineers and Geoscientists of Saskatchewan (Member # 27238) and I am a 'Qualified Person' in relation to the subject matter of this Technical Report.
- 5) I have not visited the Property that is the subject of this Technical Report. I have conducted a review of the South Contact Zone Project data.
- 6) I am independent of Green Bridge Metals Corp., as defined by Section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Company. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.
- 7) I have had no previous involvement with the South Contact Zone Project, that is the subject of this Technical Report.
- 8) I have read and understand National Instrument 43-101 and Form 43-101 F1 and the Report has been prepared in compliance with the instrument.
- 9) To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated and Signed this 26 day of September 2024 in Victoria, BC, Canada

"Signed and Sealed"

Signature of Qualified Person
Fallon Clarke B.Sc., P.Geo. (APEGS #27238)

28.4 Christian Bohm Certificate of Author

I, Christian Bohm, PhD, P.Geo., of Edmonton, Alberta, do hereby certify that:

- 1) I am a Senior Geologist of APEX Geoscience Ltd. ("APEX"), with a business address of 100, 11450 – 160 St. NW, Edmonton, Alberta, Canada.
- 2) I am the Author and am responsible for Sections 1.4, 7-8, 25.1 of this Technical Report entitled: "Technical Report and Mineral Resource Estimate for the South Contact Zone Project, St Louis County, Minnesota, USA" with an Effective Date of September 18, 2024 (the "Technical Report").
- 3) I graduated with a diploma degree in Geology in 1991 and a PhD in Geology in 1996 from ETH Zurich in Switzerland. I have worked as a geologist for more than 25 years since my graduation from university and have experience with exploration for precious and base metal deposits of various types through North America.
- 4) I am a licensed Professional Geoscientist (P.Geo.) of Engineers Geoscientists Manitoba (Certificate # 38564), and I am and have been registered as a Professional Geologist (géologue) with the L'Ordre des géologues du Québec since September 18, 2023 (permis No. 2442). I am a 'Qualified Person' in relation to the subject matter of this Technical Report.
- 5) I have not visited the Property that is the subject of this Technical Report. I have conducted a review of the South Contact Zone Project data.
- 6) I am independent of Green Bridge Metals Corp., as defined by Section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Company. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.
- 7) I have had no previous involvement with the South Contact Zone Project, that is the subject of this Technical Report.
- 8) I have read and understand National Instrument 43-101 and Form 43-101 F1 and the Report has been prepared in compliance with the instrument.
- 9) To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated and Signed this 26 day of September 2024 in Edmonton, Alberta, Canada

"Signed and Sealed"

Signature of Qualified Person
Christian Bohm, PhD, P.Geo. (EGM # 38564)