# NI 43-101 Technical Report and Mineral Resource Estimate for the Lundberg Deposit, Buchans Area, Newfoundland and Labrador, Canada

**Prepared For:**

**Canterra Minerals Corporation**

580 - 625 Howe Street,

Vancouver, B.C., V6C 2T6, Canada

**Prepared By:**

Matthew Harrington, P.Geo., Mercator Geological Services Limited

Effective Date: March 12th, 2024

Report Date: May 16th, 2024

**Report prepared for**

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| Client Name | Canterra Minerals Corporation |
| Project Name | Lundberg Deposit, Buchans |
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**CERTIFICATE OF QUALIFIED PERSON**

Matthew D. Harrington, P. Geo.
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I, Matthew D. Harrington, P. Geo., am employed as President and Senior Resource Geologist with Mercator Geological Services Limited.

This certificate applies to the technical report titled "NI 43-101 Technical Report and Mineral Resource Estimate for the Lundberg Deposit, Buchans Area, Newfoundland and Labrador, Canada" with an effective date of March 12, 2024 (the "Technical Report").

I am a member in good standing with the Association of Professional Geoscientists of Nova Scotia (Registration Number 0254) and the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (Member Number 09541), and the Ordre des Géologues du Québec (Registration Number 2345). I graduated with a Bachelor of Science degree (Honours, Geology) in 2004 from Dalhousie University.

I have practiced my profession for 20 years. My relevant experience with respect to the Lundberg Deposit includes extensive professional experience with respect to geology, mineral deposits, Mineral Resource estimation, and exploration activities in Canada and internationally. I have specific experience in assessment of base metal and volcanogenic massive sulphide deposits.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101).

I am responsible for all Sections of the Technical Report.

I am independent of Canterra Mineral Corporation, Buchans Resources Limited, and Buchans Minerals Corporations as independence is described by Section 1.5 of NI 43–101.

I have been involved with the Lundberg Deposit as a consultant with Mercator Geological Services Limited since 2007. I last visited the property that is subject of this Technical Report on February 13, 2024. I have co-authored previous NI 43-101 Technical Reports for the Lundberg Deposit.

I have read NI 43–101, and the parts of the Technical Report that I am responsible for have been prepared in compliance with that Instrument.

As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

"signed and stamped"

Matthew D. Harrington, P. Geo.
Dated: May 16, 2024

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# 1.0 SUMMARY

## 1.1 Introduction

Canterra Minerals Corporation ("Canterra") retained Mercator Geological Services Limited ("Mercator") to prepare an independent National Instrument 43-101 ("NI 43-101") Technical Report (the "Technical Report") and Mineral Resource Estimate ("MRE") for the Lundberg Deposit (the "Lundberg Deposit"), located at the former Lucky Strike mine site, adjacent to the town of Buchans in Central Newfoundland, Newfoundland and Labrador ("NL"), Canada. The Lundberg Deposit is 100% controlled by Canterra, a TSX.V listed Issuer, with corporate office located at Suite 580 – 625 Howe Street, Vancouver, British Columbia V6C 2T6, Canada. Canterra became the registered owner of the Buchans Property (the "Property") on December 20, 2023, upon completion of its purchase of the Property from Buchans Resources Limited ("BRL"), an arms-length non-listed Reporting Issuer, and its subsidiary Buchans Minerals Corporations ("BMC").

## 1.2 Terms of Reference

This Technical Report presents the Lundberg Deposit MRE, effective date February 28, 2019, that was originally prepared for BMC and makes it current for Canterra. The February 28, 2019 MRE is made current for Canterra on the basis that the MRE methodology and reasonable prospects for eventual economic extraction used to define Mineral Resources are assessed by the Qualified Person ("QP") to still be acceptable and that no new exploration has been completed that would materially impact the MRE. This Technical Report also summarizes historical exploration and drilling completed by previous operators on the Property.

The QP understands that this Technical Report will support the public disclosure requirements of Canterra and will be filed on SEDAR+ as required under NI 43-101 disclosure regulations.

The MRE was completed in accordance with the Canadian Institute of Mining, Metallurgy, and Petroleum ("CIM") Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines, November 29, 2019 ("CIM MRMR Best Practice Guidelines") and reported in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves, May 10, 2014 ("CIM Definition Standards").

Unless otherwise stated, the units of measures used in this Technical Report conform to the metric system and the currency is expressed in Canadian ("CDN") dollars unless otherwise noted.

## 1.3 Property Description and Ownership

The Lundberg Deposit is located within Mining Lease 222 ("ML222") that is centered at 510,000mE 5,407,900mN UTM NAD 83 Zone 21. The Lundberg Deposit and ML222 are included within the "Buchans Property" that is comprised of 256 Mineral Claims, two Mining Leases and two Fee Simple Mining Grants (the "Property"). These titles assign mineral exploration and/or mineral rights underlying approximately 8,325 hectares to Canterra.

Canterra purchased the Property from the previous holder, BMC, and its parent company, BRL, on December 20, 2023. The Property was included in a portfolio of critical and precious metals projects in central NL sold to Canterra in exchange for common shares and special warrants of Canterra. As a result of the sale, ownership of the Property was transferred to Canterra on December 20, 2023. Canterra now owns a 100% interest in the Property, though portions remain subject to royalties and conditions defined in underlying agreements entered into by BMC and its predecessor companies.

The purchase was a cashless transaction whereby Canterra issued shares and warrants to the vendors. At the time of entering into the Asset Purchase Agreement, together, the Consideration Shares and the Consideration Warrants issued to fulfill the agreement were estimated to represent a total consideration value of approximately $7.5 million based on Canterra's closing price of $0.05 per share. Prior to the 2023 purchase, the Property, including preceding mineral claims, were registered to BMC's predecessor companies, the foregoer of which was Buchans River Limited ("BUV").

In September of 2020, the underlying royalty rights defined under an original Phelps Dodge Corporation of Canada Ltd.("PD") agreement were conveyed by way of an Assignment and Assumption Agreement from Freeport-McMoran of Canada Limited to Franco Nevada Corporation. By way of purchasing the Property from BMC, Canterra retains royalty buy-back rights under this agreement. This agreement is registered with the Mineral Claims Recorder for Newfoundland and Labrador (Volume 37, Folio No. 24).

In October of 2022, the underlying royalty rights defined under original agreements between BMC predecessor and Colin McKenzie, GT Exploration Ltd ("GT"), and Newfoundland Mining and Exploration Ltd. ("NME") were restated and confirmed by way of separate Net Smelter Returns ("NSR") Royalty agreements that replace the original agreements and confirm and restate respective royalty rights retained by BMC and the other parties. By way of purchasing the Property from BMC, Canterra now retains all rights to purchase portions of the existing royalties ranging between 2% and 3% NSR (i.e., vendor to retain 1% NSR after buydown) prescribed in each agreement by paying the respective agreement party CDN $1,000,000. These agreements are registered with the Mineral Claims Recorder for Newfoundland and Labrador (CBM-Volume 38, Folio No. 121; GT-Volume 38, Folio No. 114; and NME-Volume 38, Folio No. 113).

East of the main cluster of properties that comprise the Property that surrounds the former Buchans Mine Site (Town of Buchans), Canterra also holds mineral rights over an additional portion of the Property covering the Little Sandy copper prospect. This portion of the Property includes Mineral Licence 25434M (map staked claims) and two Fee Simple properties as Terra Nova Properties Fee Simple Mining Grants (registered with the Mineral Claims Recorder for Newfoundland and Labrador as Volume 1, Folio 61 and Volume 1, Folio 62). Of these properties, the Fee Simple Mining Grants are subject to an underlying agreement with Glencore Canada Corporation ("Glencore") and registered with the Mineral Claims Recorder for Newfoundland and Labrador (NOR-Volume 19, Folio No. 14). The Fee Simple Mining Grants are subject to a 2% NSR retained by Glencore. Additionally, the grants are also subject to certain back-in rights retained by Glencore whereby they will have the right to buy back a 50% interest in the Property by paying Canterra two times the cumulative exploration and development expenditure, calculated as of the date of election to buyback. Following this buyback election, Glencore would have the right to manage and operate, and reassume liabilities relevant to this management and operation role. If not exercised, this buyback right would expire 90 days following the delivery to Glencore of a positive Feasibility Study ("FS").

Most of the Mineral Licences that comprise the current Property, excluding the Property's Mining Leases and Fee Simple Grants, were originally staked by BMC or its associated predecessor companies. An exception is Mineral Licence 22214M, known as the MacLean Property. This licence was acquired under a purchase agreement (Stockley Purchase Agreement) between BMC and the original property holders (Messrs Mark and Stephen Stockley) in November of 2019. By way of purchasing the Property from BMC, Canterra now retains all rights to purchase one half of the existing 2% NSR (i.e., 1% NSR) prescribed under the Stockley Purchase Agreement by paying the vendors CDN $1,500,000.

With respect to the Lundberg Deposit and ML222, the northeast portion of the Lundberg Deposit has a 2% NSR royalty held by Franco Nevada Corporation with a buyout provision whereby Canterra has the right to purchase up to 1% of the royalty at net present value as defined at the time of sale, subject to a minimum price of CDN $1,000,000. The southern portion of the Lundberg Deposit that is situated within historic licence 4797 has no underlying royalty assigned. The northwest portion of the Lundberg Deposit has a 2% NSR retained by GT for which Canterra retains rights to purchase half of the NSR (i.e., 1% NSR) for CDN $1,000,000.

### 1.4 History

The American Smelting and Refining Company ("ASARCO") initiated mining operations at Buchans in 1928. Mining operations at Buchans continuously operated until mine reserves were depleted in 1984 (Neary, 1981). In total, ASARCO is reported to have produced 16,196,876 tonnes of ore from five major orebodies. The average grade of total production is reported to be 14.51% zinc, 7.65% lead, 1.33% copper, 126 g/t silver, and 1.37 g/t gold (Kirkham, 1987).

The Property was managed by various operators from 1985 to 2007, mainly BP Resources Canada Inc. and the Buchans River Joint Venture, and exploration was primarily focused on regional geophysical and geochemical programs that supported minor follow-up drill programs (Neary, 1981 and Thurlow, 2010).

Associated companies and predecessors of BMC, collectively Buchans River Limited ("BUV"), Royal Roads Corporation ("RRO"), Buchans Mineral Corporation ("BMC"), Minco Plc ("Minco")., and Buchans Resources Limited ("BRL"), were the operator of the Property since 2007 until the Purchase by Canterra.

- In 2008, RRO/BUV completed a 53 hole surface diamond drilling program totaling 8,058 m.
- In 2013, BMC/Minco completed a 58 hole surface diamond drilling program totaling 8,183 m.

- In 2014, BMC undertook a 5-hole (642.6 m) diamond drilling program to explore for shallow extensions to the former high-grade, Lucky Strike deposit and the lower grade Engine House and Lundberg Zones
- In 2015 Buchans undertook a drilling program focused on the area southwest of the former Lucky Strike deposit (Lundberg) where it drilled 8 holes and extended 4 existing holes, drilling a total of 2,206 m.
- Work completed in 2018 included diamond drilling (28 holes totaling 5,111 m) and subsequent borehole geophysical surveys. This drilling included 17 holes (2,205 m) drilled at the Lundberg stockwork sulphide deposit as in-fill and step-out holes and 11 holes (2,906 m) drilled to explore for higher-grade volcanogenic massive sulphide ("VMS") deposits within 3.5 km of the Lundberg Deposit.
- On January 5, 2021, BRL announced BMC (a wholly-owned subsidiary of BRL) having entered into a Collaboration Agreement with Boliden Mineral AB ("Boliden"), granting Boliden rights to undertake an evaluation of the Property for possible future investment and participation.
- On September 30, 2022, BRL announced termination of the Collaboration Agreement.
- Technical work completed during the Collaboration Agreement was primarily focused on investigations of the Property's volcanic stratigraphy, reprocessing and modeling of historic geophysical data and undertaking a variety of geological investigations including creation of a digital 3D geological model.

### 1.5 Geology and Mineralization

The Lundberg Deposit is comprised of two mineralized zones, these being the Lundberg Zone and the Engine House Zone, both of which are hosted by felsic to intermediate volcanic rocks of the Buchans Group and lie within the NE-SW trending Central Mobile Belt ("CMB") of Central Newfoundland (Williams, 1979; Kean et al., 1981; Swinden, 1990, Williams 1995). The Buchans Group is a Lower Ordovician volcanic sequence that ranges in composition from basalt to rhyolite and shows relative increase in its felsic component with height in the stratigraphic section (Thurlow and Swanson, 1981). Five main Zn-Pb-Cu-Ag-Au deposits were historically mined at Buchans and all occur in association with the same felsic stratigraphic horizon within the Buchans Group (Thurlow and Swanson, 1981). The Lundberg Deposit surrounds the former Lucky Strike mine site, where ASARCO operated a near-surface underground and glory hole mining operation until mine closure in 1984. The Lundberg Deposit is mainly comprised of stockwork mineralization surrounding and lying below the former Lucky Strike orebody but includes some massive sulphide mineralization that was not mined by former operations.

Stockwork mineralization at Buchans consists of a network of sulphide veins and veinlets that cut strongly altered and sulphidized host rocks. The largest known concentration of stockwork and disseminated mineralization at Buchans is the Lundberg Zone that underlies the former Lucky Strike deposit. The stockwork mineralization has a higher ratio of pyrite to base metal sulphides than the in situ sulphide zones and is typified by presence of fine to coarse grained pyrite with lesser amounts of chalcopyrite, sphalerite, galena and barite (Thurlow and Swanson, 1981). This mineralization occurs within felsic volcanic rocks of the Buchans River Formation below the former Lucky Strike deposit and extends into the underlying intermediate to mafic Ski Hill Formation (Jambor, 1987). The Lundberg Zone stockwork mineralization comes to surface on the eastern edge of the zone and forms an elongate, wedge-shaped body that is 250 m deep on the western end. The highest concentration of sulphide mineralization lies in close proximity to the previously mined Lucky Strike massive sulphide zone and mineralization is more diffuse away from the zone. A second zone of stockwork mineralization known as the Engine House Zone, is located immediately south of the Lucky Strike deposit, and differs slightly from the Lundberg Zone as it hosts slightly higher proportions of chalcopyrite to other base metal sulphides.

## 1.6 Exploration and Diamond Drilling

Canterra has not completed any exploration and drilling programs since their acquisition of the Property.

## 1.7 Quality Control and Data Verification

The Lundberg Deposit has been subject to many exploration programs since mining initiated in 1928, resulting in varying sampling preparation, protocols, and quality control and quality assurance ("QAQC") procedures. Core handling and sampling, sample analysis method, density measurement method, chain of custody, and QAQC procedures are well documented and were reviewed in detail for drilling programs completed by BMC and related companies during the 2007-2018 period. Drilling programs completed prior are not as well documented in respect to sample preparation and were reviewed to the extent possible.

The QAQC program for 2014/2015 and 2018 drill programs carried out by BMC included the blind insertion, at 1 in 20 frequency, of certified reference materials ("CRM" or "standard") and coarse blank samples as well as collection and analysis of quarter core duplicate split samples (2018 program only). Eastern Analytical Limited ("Eastern"), an independent, fully accredited analytical services firm based in Springdale, NL provided primary analytical services for BMC drilling programs. ALS Global ("ALS"), an independent, fully accredited analytical services firm with worldwide operations provided check sample analytical services for the drilling programs through its Vancouver, BC facilities.

In the opinion of the QP, drill core sampling, analysis and security procedures implemented by BMC and related companies during the 2007-2018 period were put in place to ensure the integrity of the assay database and were also based on a robust quality control program. Documentation of logging, sampling and analysis procedures used to support the results of assays from the various diamond drilling programs are considered by the QP as best industry practice. A review of the QAQC results of historical sampling programs did not expose any analytical issues.

Three site visits have been completed between 2018-2024, the aggregate of which provides a comprehensive independent inspection of the Property and BMC related drilling programs. The author most recently visited the site on February 13, 2024. No issues were identified during the site visits that negatively impact the findings and conclusions of this Technical Report.

A comprehensive data verification program was completed for the Lundberg Deposit drill hole database that included verification of drill hole collars, downhole surveys, analytical results, lithology, and mineralized intervals against original records, including original drill logs, plan maps, sections, original assay certificates, core photos, presentations, and reports. The QP concludes the results of the data verification program are acceptable and Lundberg Deposit drill hole results can be used in the MRE.

## 1.8 Metallurgical Testing

Metallurgical testing on the Lundberg and Engine House Zones was conducted between 2011 and 2017 by SGS - Lakefield, Tomra Sorting Solutions and Thibault & Associates.

The Lundberg Deposit minerology indicates a stockwork sulphide deposit with good liberation characteristics and no mineralogical factors that should limit the flotation performance.

The Lundberg Deposit resource material is amenable to pre-concentration with either dense media separation or sensor-based (i.e. XRT) sorting, and both technologies provided similar grade-recovery results. At 25% rejection of the initial mass, the recovery of copper, lead and zinc to the upgraded material ranged from 95% to 98%.

Two general flowsheets have been considered for flotation of copper, lead and zinc concentrates from the Lundberg/Engine House Zones. One was a bulk Cu/Pb flowsheet where the copper and lead are floated together followed by downstream separation, and zinc is floated last from the Cu/Pb flotation tailings, and the other was a sequential flowsheet where copper, lead, and zinc are floated individually and in that order. The same composite head samples were used to evaluate the two flowsheets.

Thibault & Associates (2017) used a METSIM™ mass balance simulation of the open circuit test results as an initial indication of the closed-circuit performance of the sequential flowsheet, as reported in "Centralized Milling of Newfoundland Base Metal Deposits - Bench Scale DMS and Flotation Test Program" (Thibault & Associates Inc., 2017). Projected metal recoveries with the sequential flowsheet are 83.0% Cu, 13.3% Au, and 7.84% Ag in the copper concentrate, 84.3% Pb, 10.5% Au, and 50.3% Ag in the lead concentrate, and 87.2% Zn, 8.28% Au, and 14.8% Ag in the zinc concentrate. Projected grades in concentrates are 31.1% Cu in the copper concentrate, 67.8% Pb in the lead concentrate and 58.4% Zn in the zinc concentrate.

## 1.9 Mineral Resource Estimate

The MRE for the Lundberg Deposit was prepared by Mr. Matthew Harrington of Mercator. The effective date for the MRE is February 28, 2019.

Mineral Resources were estimated in conformity with CIM MRMR Best Practice Guidelines as referred to in NI 43-101 (2014) and Form 43-101F, Standards of Disclosure for Mineral Projects. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

The Lundberg Deposit MRE is comprised of two different zones, the Lundberg Zone and the Engine House Zone. The two zones were treated collectively in all phases of block model construction, from database validation to Mineral Resource classification and reporting. The following summarizes the estimation methodology:

- Drill hole database validation;
- 3D modelling of geology and mineralization;
- Assay sample and geostatistical analysis including sample frequency, grade, density assignment, capping, compositing and variography;
- Block modelling and grade estimation;
- Block model validation;
- Assessment of reasonable prospects for eventual economic extraction;
- Mineral Resource classification;
- and Mineral Resource reporting.

The Lundberg Deposit MRE is presented in Table 1-1.

**Table 1-1: Lundberg Deposit Mineral Resource Estimate – Effective Date: February 28, 2019**

| NSR Cut-off ($US/t) | Category | Rounded Tonnes | Zn % | Pb % | Cu % | Ag g/t | Au g/t | Zn Eq. % | NSR ($US/t) |
|---|---|---|---|---|---|---|---|---|---|
| 20 | Indicated | 16,790,000 | 1.53 | 0.64 | 0.42 | 5.69 | 0.07 | 3.38 | 54.98 |
| | Inferred | 380,000 | 2.03 | 1.01 | 0.36 | 22.35 | 0.31 | 4.46 | 72.95 |

1. *Mineral Resources were prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (MRMR) (2014) and CIM MRMR Best Practice Guidelines (2019).*
2. *Mineral Resources are defined within an optimized pit shell with pit slope angles of 45$^{o}$ and an overall 2.9:1 strip ratio (waste : mineralized material)*
3. *Price assumptions used were $1.20 US/lb Zn, $1.00 US/lb Pb, $3.00 US/lb Cu, $1250 US/oz Au, and $17 US/oz Ag.*
4. *Metallurgical recoveries to concentrates are based on the "Centralized Milling of Newfoundland Base Metal Deposits - Bench Scale DMS and Flotation Test Program" (Thibault & Associates Inc., 2017). Metal recoveries are 83.0% Cu, 13.3% Au, and 7.84% Ag in the copper concentrate, 84.3% Pb, 10.5% Au, and 50.3% Ag in the lead concentrate, and 87.2% Zn, 8.28% Au, and 14.8% Ag in the zinc concentrate.*
5. *Net Smelter Return (NSR) $US/t values were determined by calculating the value of each Mineral Resource model block using an NSR calculator. The NSR calculator uses the stated metal pricing, metallurgical recoveries to concentrates, concentrate payable factors and current shipping and smelting terms for similar concentrates.*
6. *Zinc Equivalent metal grade (Zn Eq. %) was calculated as follows using metal pricing, metallurgical recoveries to concentrates, and concentrate payable factors as applied in the NSR calculator: Zn Eq % = Zn % + ((Cu % x 22.046 x 0.8020 x 3) + (Pb % x 22.046 x 0.8010 x 1) + (Au g/t / 31.10348 x 0.2198 x 1250) + (Ag g/t / 31.10348 x 0.6514 x 17))/(1.20 x 22.046 x 0.7412).*
7. *Pit optimization parameters include: mining at $3 US per tonne, processing at $15 US per tonne, and G&A at $2 US per tonne (total $20 US per tonne).*

8. *Mineral Resources are reported at a cut-off value of $20 US/t NSR within the optimized pit shell and is considered to reflect reasonable prospects for economic extraction by open pit mining methods.*
9. *Mineral Resources were interpolated using Inverse Distance Squared methods applied to 1.5 m downhole assay composites.*
10. *Results of an interpolated Inverse Distance Squared bulk density model (g/cm$^3$) were applied.*
11. *Mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.*
12. *Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.*
13. *Mineral Resource tonnages have been rounded to the nearest 10,000. Totals may vary due to rounding.*

Factors that may materially impact the Lundberg Deposit Mineral Resource include, but are not limited to, the following:

- Changes to the input values for mining, processing, and G&A costs to constrain the Mineral Resource and changes to the long-term metal prices. Parameters used in the NSR calculator and pit optimization to define reasonable prospects for eventual economic extraction were originally developed for the February 28th, 2019 MRE on behalf of BMC, including metal prices and costing parameters. While these parameters are determined to still be within an acceptable range for current purposes, they are not always consistent with more recent assessments.
- Changes to metallurgical recovery assumptions including metallurgical recoveries that fall outside economically acceptable ranges. Metallurgical recovery risks can be further reduced through implementation of future processing and flow sheet optimization programs recommended in this Technical Report.
- Changes to the deposit scale interpretations of mineralization geometry and continuity. Mineralization is interpreted on a combined metal basis through application of NSR values to develop low and high grade domains. Modelling each metal independently may provide different results with respect to mineralization geometry and continuity.
- Variance associated with density assignment assumptions and/or changes to the density values applied. Mineral Resource density is assigned using an interpolated model based on metal interpolation parameters and may not fully reflect other factors such as distributions of non-economic sulphide mineralization and minor lithological variations.
- The Mineral Resource includes 146 drill holes that were completed by Asarco between 1926 and 1981. While these drill holes are believed to have been completed using best practices current at the time, they were not subject to current industry best practices and standard QAQC protocols. Previous operator BMC made best efforts to mitigate this risk by completing re-logging, re-sampling, and twin drill holes programs.
- Potential inaccuracies in the development and assumptions of the historical mine model may impact the local accuracy of Mineral Resources. As such, no Measured Mineral Resources have been defined.
- Variations in geotechnical, hydrological, and mining assumptions. The presence of historical mine workings and stopes will need to be considered during future economic studies.

- The Lundberg Deposit is located immediately adjacent to the town of Buchans and infrastructure from historical mine operations. This will need to be considered during future economic studies.
- Changes in the assumptions of marketability of the final product.
- Issues with respect to mineral tenure, land access, land ownership, environmental conditions, permitting, and social license.

### 1.10 Conclusions and Interpretations

Mineral Resources were defined for the Lundberg Deposit. A Preliminary Economic Assessment (“PEA”) level study is warranted to assess potential economic return from an open pit mining scenario.

Metallurgical studies completed to date found the Lundberg Deposit mineralization to be well-liberated at typical grind sizes for recovery by flotation and no potential challenges related to mineralogy were identified. The Lundberg Deposit was shown to be amenable to pre-concentration by either dense media separation or sensor-based sorting. A METSIM™ simulation of the sequential copper, lead, and zinc flotation flowsheet has projected recoveries to the respective concentrates of 83.0% copper, 84.3% lead and 87.2% zinc, and these preliminary recoveries have been applied to the Mineral Resource model in this Technical Report.

Significant exploration potential is present for the Property and warrants future diamond drilling programs to test for new zones of Zn-Pb-Cu sulphide mineralization.

### 1.11 Recommendations

Recommendations have been broken into two-phases. Phase I is estimated to require expenditure of CDN $100,000 and addresses completion of a desktop study. Phase II is estimated to require expenditure of CDN $4,360,000 and addresses completion of a PEA. Phase II includes a completion of 10,000 m Property exploration drilling program as well as the metallurgical, environmental, and geotechnical programs for the PEA.

# 2.0 INTRODUCTION

## 2.1 Scope of Reporting

Canterra retained Mercator to prepare an independent NI 43-101 Technical Report and MRE for the Lundberg Deposit, located at the former Lucky Strike mine site, adjacent to the town of Buchans in Central Newfoundland, NL, Canada. The Lundberg Deposit is 100% controlled by Canterra, a TSX.V listed Issuer, with corporate office located at Suite 580 – 625 Howe Street, Vancouver, British Columbia V6C 2T6, Canada. Canterra became the registered owner of the Property on December 20, 2023, upon completion of its purchase of the Property from BRL, an arms-length non-listed Reporting Issuer, and its subsidiary BMC.

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The QP understands that this Technical Report will support the public disclosure requirements of Canterra and will be filed on SEDAR+ as required under NI 43-101 disclosure regulations.

The MRE was completed in accordance with the CIM MRMR Best Practice Guidelines and reported in accordance with the CIM Definition Standards.

Unless otherwise stated, the units of measures used in this Technical Report conform to the metric system and the currency is expressed in CDN dollars unless otherwise noted.

## 2.3 Qualified Persons (“QP”)

Author Matthew Harrington, P.Geo., is an independent QP as defined by NI 43-101 and is responsible for all sections of this Technical Repot as summarized in his Certificate of Qualified Person. The author does not have any material present or contingent interest in the outcome of this Technical Report, nor does he have any financial or other interest that could be reasonably regarded as being capable of affecting his independence in the preparation of this Technical Report. This Technical Report has been prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this Technical Report. The author is not a director, officer or other direct employee of Canterra and does not have shareholdings in this company.

## 2.4 Personal Inspection (Site Visit) and Data Verification

The author completed a personal inspection (site visit) of the Property on February 13, 2024, and was accompanied by Paul Moore, P.Geo., Vice President of Exploration for Canterra. The purpose was to verify personal inspection items completed by then Mercator employee Nate Corocran, P.Geo, between April 14th and 16th, 2021, including independent witness ("IW") check sampling of drill core, and to satisfy NI 43-101 requirements for personal inspections and data verification. The 2021 site visit by Mr. Corocran was completed to satisfy requirements for a planned Technical Report on behalf of BMC that did not advance past initial stages and results were not disclosed. The QP completed the following tasks and inspections during the 2024 site visit:

- Review and inspection of the Canterra core logging, core sampling and core storage facilities located in Buchans, NL.
- Compared select core intervals with original drill logs and sampled intervals.
- Verify 5 of 6 IW quarter core samples completed during the 2021 site visit.
- Reviewed the data collection and QAQC procedures for the historical drilling and sampling programs.
- Completed a field inspection and drill collar coordinate check program for the Lundberg Deposit.

The personal inspection completed by the author confirmed the following:

- The Canterra core and logging facility at the Property was well organized and there was evidence of proper QAQC procedures in place for core logging and sampling.
- Zinc, lead, and copper mineralization styles and descriptions were consistent with observations documented in drill logs/reporting for the reviewed drill holes. Mineralized core observed during the core review are consistent with VMS type deposits.
- Zinc, lead, and copper mineralization was evident in the core samples reviewed and sample intervals were properly documented in core boxes and in the core logging database.
- Access to most Property areas is excellent, however, heavy snow cover limited access during 2024 site visit.
- The drill collar coordinate checking program carried out provided consistent results with drill hole database records.
- No material exploration has been completed by Canterra or BMC since the February 28, 2019 MRE.

Based on a detailed review of the available historical exploration and drilling data, geophysical data, and QAQC procedures the QP is satisfied this meets the data verification requirements under NI 43-101. The BMC drilling programs were designed according to CIM MRMR Best Practice Guidelines and no issues or fatal flaws arising from the personal inspection were detected. The QP also completed a site visit on the Property between 19th and 21st of November 2018 in support of the February 28, 2019 MRE prepared for

BMC. Results from IW sampling and check assay programs completed in 2018 and 2021 are discussed in Section 12.

### 2.5 Information Sources

Information and data used in this Technical Report were obtained through compilation of results of exploration and mining activities carried out by the ASARCO (1928 – 1984), previous operators from the 1984 – 2007 period, and all BMC operated exploration programs, including previously reported programs completed in 2007, 2012, 2014-2015, and 2018. Canterra has not completed an exploration or drilling program since their acquisition of Property. Sources of information, data and reports reviewed as part of this Technical Report can be found in Section 27. The author takes responsibility for the content of this Technical Report and believes the data review to be accurate and complete in all material aspects.

The following technical reports have been previously prepared on the Property:

1) Harrington, M., Cullen, M., O'Connor, S., McKeen, T., Roy, D., Moore, P., and Butler, D., 2019: NI 43-101 Technical Report and Mineral Resource Estimate on the Lundberg Deposit, Buchans Area, Newfoundland and Labrador, Canada. Prepared for Buchans Minerals Corporation; Effective Date: February 28th, 2019; Report Date: April 15th, 2019. 199 pages.
2) Cullen, M. and Hilchey, A., 2013: Mineral Resource Estimate Technical Report on the Lundberg Deposit, Buchans Area, Newfoundland, Canada, *for* Buchans Minerals Corporation and Centrerock Mining Limited (a wholly-owned subsidiary of Minco Plc); 133 pages.
3) Coley, D., Gagnon, D., McLaughlin, M., Webster, P.C., and Ramsay, D., 2011: Preliminary Economic Assessment of the Lundberg and Engine House Deposits, Newfoundland, Canada, *for* Buchans Minerals Corporation; Tetra Tech Wardrop.
4) Webster, P.C., and Barr, P.J.F., 2008: Technical Report on the Mineral Resource Estimate for the Lundberg and Engine House Deposits, Buchans Area, Newfoundland, Canada; Mercator Geological Services Limited.
5) Webster, P.C., Nicholson, D., and Neilson, H., 2008a: Technical Report on the Buchans River Limited Properties, Red Indian Lake Area, Newfoundland; Mercator Geological Services Limited.

Author Matthew Harrington acquired mineral titles information on the Mining Lease, Mineral Claims, and Fee Simple Mining Grants, from both the Newfoundland and Labrador Department of Industry, Energy and Technology ("NLDIET") claims management system and through discussion with Canterra. This information indicated the purchased Mineral Claims between Canterra and BMC to be in good standing as of the effective date of this Technical Report.

### 2.6 Abbreviations

A list of abbreviations used in this Technical Report is presented in Table 2-1.

**Table 2-1: Table of abbreviations**

| Abbreviation | Term | Abbreviation | Term |
|---|---|---|---|
| Canterra | Canterra Minerals Corporation | oz | troy ounce (31.04 g) |
| Abitibi-Price | Abitibi-Price Company | g | gram (0.03215 troy oz) |
| Acadian | Acadian Mining Corporation | kg | kilogram |
| Acme | Acme Analytical Laboratories | lb | pound |
| AND Company | Anglo-Newfoundland Development Company | t | tonne (1000 kg or 2,204.6 lb) |
| ASARCO | American Smelting and Refining Company Limited | T | ton (2000 lb or 907.2 kg) |
| Billiton | Billiton Resources Canada Incorporated | Oz/T to g/t | 1oz/T = 34.28 g/t |
| BMC | Buchans Minerals Corporation | Au | Gold |
| BP | BP Resources Canada Limited | Cu | Copper |
| BRJV | Buchans River Joint Venture | Ag | Silver |
| BRL | Buchans Resources Limited | Sb | Antimony |
| BUV | Buchans River Limited | DGPS | Differential Global Positioning System |
| CBM | CBM Exploration Incorporated | ASL | Above sea level |
| CDN | Canadian | Oxygen | O |
| CIM | Canadian Institute of Mining and Metallurgy | Zinc | Zn |
| CMB | Central Mobile Belt | Sulphur | S |
| CSA | Canadian Securities Administrators | Lead | Pb |
| DCIP | Direct Current Resistivity and Induced Polarization | Iron | Fe |
| GT | GT Exploration Limited | Barium | Ba |
| RRO | Royal Roads Corporation | Manganese | Mn |
| IRR | Internal Rate of Return | Arsenic | As |
| LOM | Life of Mine | Potassium | K |
| Mercator | Mercator Geological Services Limited | Aluminum | Al |
| Minco | Minco Plc | Sodium | Na |
| MOD | Mineral Occurrence Database | Silica | Si |
| MT | Magneto-telluric | mm | millimetre |
| NME | Newfoundland Mining & Exploration Limited | cm | centimetre |
| NI 43-101 | National Instrument 43-101 | m | metre |

| Abbreviation | Term | Abbreviation | Term |
|---|---|---|---|
| Canterra | Canterra Minerals Corporation | oz | troy ounce (31.04 g) |
| NLDIET | Newfoundland & Labrador Department of Industry, Energy, and Technology | km | kilometre |
| NPV | Net Present Value | ha | hectare |
| NSR | Net Smelter Returns | C | Celsius |
| PEA | Preliminary Economic Assessment | UBC | United Bolero Development Corporation |
| PR | Press Release | VMS | Volcanogenic Massive Sulphide |
| TVB | Tulks Volcanic belt | Wardrop | Wardrop Engineering Inc., (a Tetra Tech company) |
| QAQC | Quality Control and Quality Assurance | PD | PD Phelps Dodge Corporation of Canada Ltd. |
| Quantec | Quantec Geoscience Limited | Glencore | Glencore Canada Corporation |

## 3.0 RELIANCE ON OTHER EXPERTS

The author has relied on information provided by Canterra and the NLDIET concerning the status of claims that form the Lundberg Deposit and the Property. The author confirmed on February 28st, 2024 that the NLDIET online mineral rights system showed that all mineral rights associated with the Lundberg Deposit and the Property that are identified in Section 4.0 of this Technical Report were in good standing at the Technical Report Date.

The author has relied upon Canterra with respect to provision of opinions and details regarding surface access agreements and mineral or other agreements that pertain to the Lundberg Deposit and the Property. More specifically, the author has relied upon information pertaining to these topics that appears in Section 4.0 of this Technical Report that was provided by Mr. Paul Moore, Vice President of Exploration for Canterra. This information was confirmed for current Technical Report purposes by Mr. Moore on February 28st, 2024.

# 4.0 PROPERTY DESCRIPTION AND LOCATION

## 4.1 Introduction

The Lundberg Deposit is located within ML222 that is centered at 510,000mE 5,407,900mN UTM NAD 83 Zone 21 (Figures 4-1 and 4-2). The Lundberg Deposit and ML222 are included within the "Buchans Property" that is comprised of 256 Mineral Claims, two Mining Leases and two Fee Simple Mining Grants (the "Property"). These titles assign mineral exploration and/or mineral rights underlying approximately 8,325 hectares to Canterra. Details of the Property holdings appear in Table 4-1 and 4-2 below. Canterra may maintain and extend Mineral Licences, Fee Simple Mining Grants, and Mining Leases beyond their respective "renewal date" by undertaking additional work and/or paying required fees and bonds.

**Table 4-1: Summary of Property Mineral Claims**

| Registered Owner | Date Issued | *Renewal Date | License Number | Claims | hectares |
|---|---|---|---|---|---|
| Canterra | 2005-01-06 | 2026-01-06 | 10524M | 5 | 125 |
| Canterra | 2005-01-06 | 2026-01-06 | 10525M | 16 | 400 |
| Canterra | 2005-12-01 | 2026-12-01 | 11431M | 3 | 75 |
| Canterra | 2005-12-01 | 2026-12-01 | 11432M | 1 | 25 |
| Canterra | 2006-03-09 | 2025-03-09 | 11796M | 17 | 425 |
| Canterra | 2007-04-09 | 2026-04-09 | 13320M | 13 | 325 |
| Canterra | 2007-04-30 | 2028-04-30 | 13423M | 1 | 25 |
| Canterra | 2007-05-25 | 2025-05-25 | 13539M | 3 | 75 |
| Canterra | 2012-11-28 | 2027-11-28 | 20606M | 6 | 150 |
| Canterra | 2013-08-15 | 2029-08-15 | 21328M | 9 | 225 |
| Canterra | 2014-06-12 | 2033-06-12 | 22211M | 1 | 25 |
| Canterra | 2014-06-12 | 2030-06-12 | 22213M | 13 | 325 |
| Canterra | 2014-06-12 | 2033-06-12 | 22214M | 6 | 150 |
| Canterra | 2014-12-17 | 2032-12-17 | 22682M | 1 | 25 |
| Canterra | 2017-10-19 | 2030-10-19 | 25434M | 4 | 100 |
| Canterra | 2018-11-22 | 2027-11-22 | 26626M | 1 | 25 |
| Canterra | 2014-06-12 | 2027-06-12 | 27186M | 56 | 1,400 |
| Canterra | 2019-08-22 | 2027-08-22 | 27276M | 42 | 1,050 |
| Canterra | 2019-11-29 | 2027-11-29 | 27493M | 20 | 500 |
| Canterra | 2020-11-08 | 2027-11-08 | 31345M | 6 | 150 |
| Canterra | 2022-09-29 | 2026-09-29 | 35054M | 22 | 550 |
| Canterra | 2023-04-27 | 2027-04-27 | 35995M | 10 | 250 |
| | | | Total | 256 | 6,400 |

**Renewal Date is determined as next date work is due.*

**Table 4-2: Summary of Property Mining Licences and Fee Simple Mining Grants**

| Registered Owner | Date Issued | *Renewal Date | License Number | Claims | hectares |
|---|---|---|---|---|---|
| Canterra | | 2024-12-31 | Terra Nova Properties Fee Simple Mining Grant Vol. 1, Folio 61 | 10.6 | 265.5 |
| Canterra | | 2024-12-31 | Terra Nova Properties Fee Simple Mining Grant Vol. 1, Folio 62 | 14.7 | 367.3 |
| Canterra | 2013-08-22 | 2024-08-22 | ML222 | 37.5 | 937.5 |
| Canterra | 2013-08-22 | 2024-08-22 | ML223 | 14 | 350 |
| | | | **Total** | **76.8** | **1,920.3** |

**Renewal Date reflects rental due date.*

### 4.2 Canterra Purchase from BMC

Canterra purchased the Property from the previous holder, BMC, and its parent company, BRL, on December 20, 2023. The Property was included in a portfolio of critical and precious metals projects in central NL sold to Canterra in exchange for common shares and special warrants of Canterra. As a result of the sale, ownership of the Property was transferred to Canterra on December 20, 2023. Canterra now owns a 100% interest in the Property, though portions remain subject to royalties and conditions defined in underlying agreements entered into by BMC and its predecessor companies.

The purchase was a cashless transaction whereby Canterra issued shares and warrants to the vendors. At the time of entering into the Asset Purchase Agreement, together, the Consideration Shares and the Consideration Warrants issued to fulfill the agreement were estimated to represent a total consideration value of approximately $7.5 million based on Canterra's closing price of $0.05 per share. Prior to the 2023 purchase, the Property, including preceding mineral claims, were registered to BMC's predecessor companies, the foregoer of which was BUV.

### 4.3 Underlying Agreements and Royalties

Some of the mineral rights that comprise the Property were acquired by BMC's predecessor BUV by execution in 2001 of certain option and purchase agreements between BUV and a number of previous licence holders ("Previous Licence Holders"), including GT, NME, PD, now Freeport-McMoRan of Canada Limited, Noranda Mining and Exploration Inc. ("NOR"), now Glencore, and CBM Resources Inc., now Colin McKenzie. These mineral rights are shown on Figure 4-3 and include portions of ML222 that hosts the Lundberg Deposit as well as Mining Lease 223 ("ML223") and the Fee Simple Mining Grants.

**Figure 4-1: Location Map – Lundberg Deposit**

**Figure 4-2: Property Mineral Claim Map**

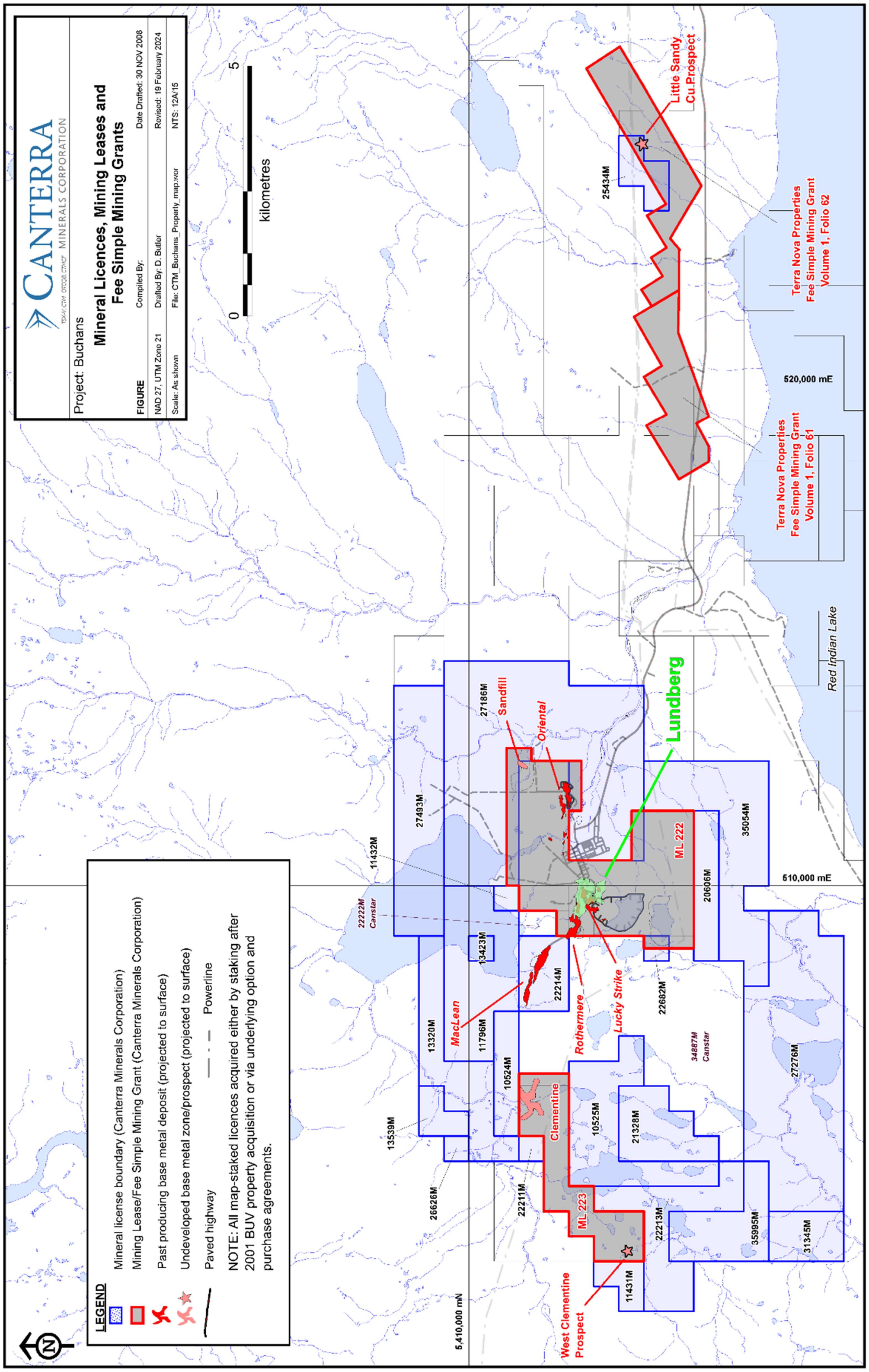
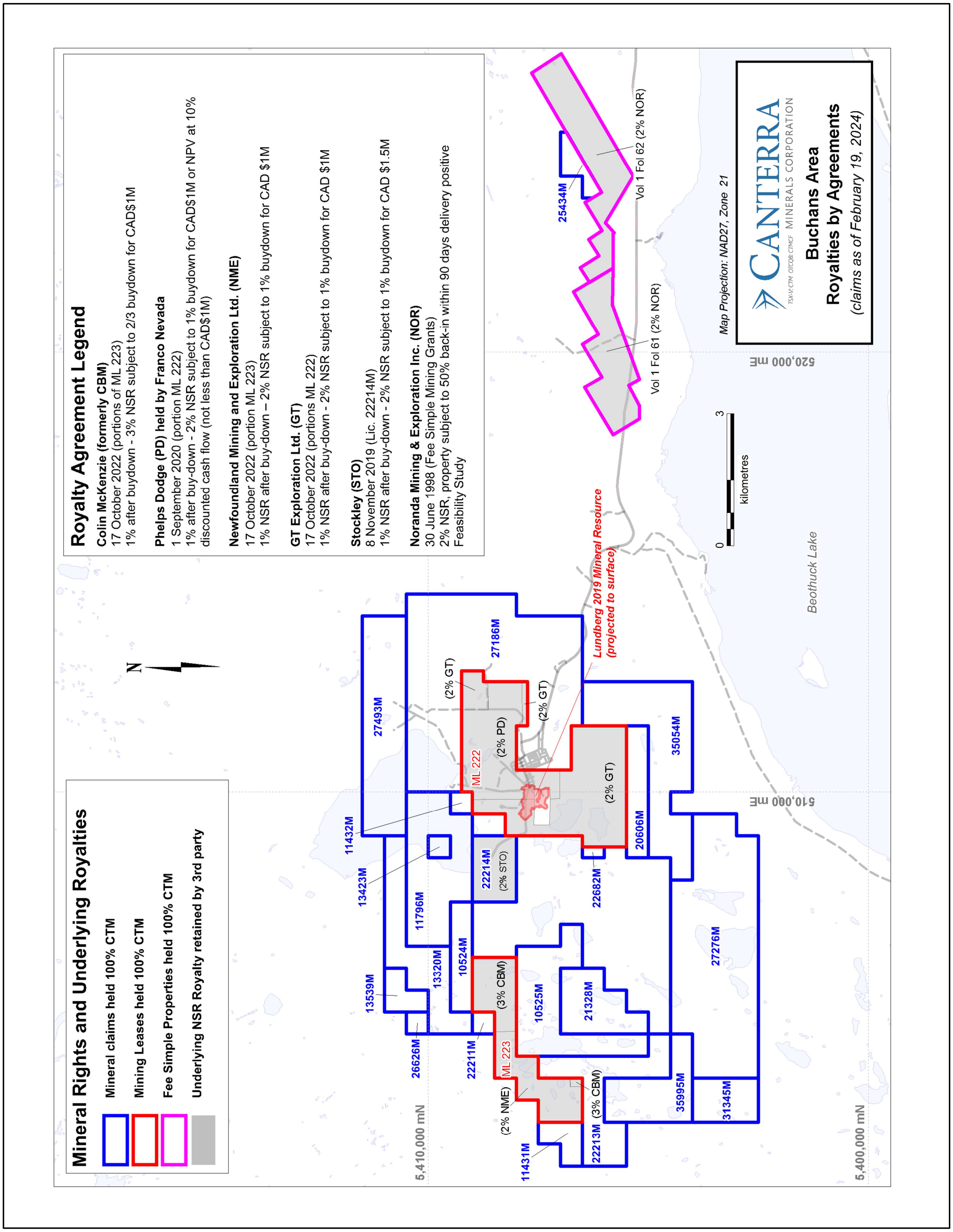


**Figure 4-3: Property Royalty/NSR Map**



In September of 2020, the underlying royalty rights defined under an original PD agreement were conveyed by way of an Assignment and Assumption Agreement from Freeport-McMoran of Canada Limited to Franco Nevada Corporation. By way of purchasing the Property from BMC, Canterra retains royalty buy-back rights under this agreement. This agreement is registered with the Mineral Claims Recorder for Newfoundland and Labrador (Volume 37, Folio No. 24).

In October of 2022, the underlying royalty rights defined under original agreements between BMC predecessor and Colin McKenzie, GT, and NME were restated and confirmed by way of separate NSR Royalty agreements that replace the original agreements and confirm and restate respective royalty rights retained by BMC and the other parties. By way of purchasing the Property from BMC, Canterra now retains all rights to purchase portions of the existing royalties ranging between 2% and 3% NSR (i.e., vendor to retain 1% NSR after buydown) prescribed in each agreement by paying the respective agreement party CDN $1,000,000. These agreements are registered with the Mineral Claims Recorder for Newfoundland and Labrador (CBM-Volume 38, Folio No. 121; GT-Volume 38, Folio No. 114; and NME-Volume 38, Folio No. 113).

East of the main cluster of properties that comprise the Property that surrounds the former Buchans Mine Site (Town of Buchans), Canterra also holds mineral rights over an additional portion of the Property covering the Little Sandy copper prospect (Figures 4-1 and 4-2). This portion of the Property includes Mineral Licence 25434M (map staked claims) and two Fee Simple properties as Terra Nova Properties Fee Simple Mining Grants (registered with the Mineral Claims Recorder for Newfoundland and Labrador as Volume 1, Folio 61 and Volume 1, Folio 62). Of these properties, the Fee Simple Mining Grants are subject to an underlying agreement with Glencore and registered with the Mineral Claims Recorder for Newfoundland and Labrador (NOR-Volume 19, Folio No. 14). The Fee Simple Mining Grants are subject to a 2% NSR retained by Glencore. Additionally, the grants are also subject to certain back-in rights retained by Glencore whereby they will have the right to buy back a 50% interest in the Property by paying Canterra two times the cumulative exploration and development expenditure, calculated as of the date of election to buyback. Following this buyback election, Glencore would have the right to manage and operate, and reassume liabilities relevant to this management and operation role. If not exercised, this buyback right would expire 90 days following the delivery to Glencore of a positive FS.

Most of the Mineral Licences that comprise the current Property, excluding the Property's Mining Leases and Fee Simple Grants, were originally staked by BMC or its associated predecessor companies. An exception is Mineral Licence 22214M, known as the MacLean Property (depicted as Stockley (STO) within the Royalty Agreement Legend on Figure 4-3). This licence was acquired under a purchase agreement (Stockley Purchase Agreement) between BMC and the original property holders (Messrs Mark and Stephen Stockley) in November of 2019. By way of purchasing the Property from BMC, Canterra now retains all rights to purchase one half of the existing 2% NSR (i.e., 1% NSR) prescribed under the Stockley Purchase Agreement by paying the vendors CDN $1,500,000.

Other than the aforementioned properties' underlying royalties, the remainder of the Property is comprised of Mineral Claims staked by BMC or its associated predecessor companies. By way of purchasing the Buchans Property from BMC, Canterra now retains all rights to these Mineral Claims that are not subject to underlying royalties or other conditions (depicted as blue outlined Mineral Claims lacking grey shading on Figure 4-3).

With respect to the Lundberg Deposit and ML222 (Figure 4-3), the northeast portion of the Lundberg Deposit has a 2% NSR royalty held by Franco Nevada Corporation with a buyout provision whereby Canterra has the right to purchase up to 1% of the royalty at net present value as defined at the time of sale, subject to a minimum price of CDN $1,000,000. The southern portion of the Lundberg Deposit that is situated within historic licence 4797 has no underlying royalty assigned. The northwest portion of the Lundberg Deposit has a 2% NSR retained by GT for which Canterra retains rights to purchase half of the NSR (i.e., 1% NSR) for CDN $1,000,000 (Figure 4-3).

ML222 and ML223, each have a 25-year term from 2013 and are in their second 5-year term, requiring annual lease rental payments equal to CDN $120 per hectare (~ CDN $154,500) to maintain the Mining Leases.

## 4.4 Status of Titles at Effective Date of Report

All mineral titles comprising the Property (Mineral Claims, Mining Leases and Fee Simple Mining Grants) were deemed by Canterra to be current and in good standing with the NLDIET at the effective date of this Technical Report.

## 4.5 Summary of Exploration Title and Regulatory Framework

As licence holder, Canterra has the exclusive right to explore for designated minerals within the boundaries of the Mineral Claims comprising the Property but this right does not reflect ownership of corresponding title to surface rights. Canterra has secured land access agreements with certain surface right holders, particularly the Province of Newfoundland and Labrador in the case of the Lundberg Deposit area, by way of a Mining Lease Agreement executed between BMC and the Province of Newfoundland and Labrador on August 22, 2015. Title to this Mining Lease and the remainder of the Property was transferred to Canterra on December 20, 2023. Further land access rights have also been previously granted to BMC by way of various routine exploration and operating permits issued from time to time for the purpose of conducting mineral exploration. The author is not aware of any reasons why similar routine exploration and operating permits would not be issued to Canterra in the future.

Work requirements of the provincial government for Mineral Licenses are defined by the Mineral Regulations under the Mineral Act (O.C. 96-299) (Mineral Act) and include a work expenditure of CDN $200 per claim in the first year, rising by CDN $50 per claim until year 5. The work requirement then rises to CDN $600 per claim per year from year 6 to year 10, CDN $900 per claim per year for years 11 to 15, and CDN $1,200 per claim per year for years 16 to 20. Recent amendments to the Mineral Regulations allow a Mineral Licence to be held for 30 years, with expenditures of CDN $2,000 per claim per year for years 21 to 25, and CDN $2,500 per claim per year for years 26 to 30. The type of acceptable work for assessment purposes is defined under the Mineral Regulations and includes most conventional exploration survey methods.

Mining Leases are issued under the Mineral Act and are maintained in good standing through payment to the provincial government of annual lease rental fees equivalent to CDN $120 per hectare. Mining Leases have an initial 5-year term and are renewable after five years. If production has not commenced on the leases within 5 years, an extension for another 5-year term may be sought, and is routinely granted, provided the lease holder can demonstrate the extension to be warranted.

## 4.6 Environmental Liability and Other Potential Risks

### 4.6.1 Environmental Liability

Environmental liability for past mining in Buchans by entities related to Abitibi Consolidated Inc., including ASARCO, was addressed in a Supreme Court of Canada ruling handed down on December 7th, 2012. That decision assigned responsibility to the government of Newfoundland and Labrador for environmental clean-up of impacts associated with past mining activities at Buchans as a result of the expropriation by the Province of various assets of Abitibi Consolidated Inc. Since 2012, the Province has undertaken work to remediate certain impacts associated with past mining operations at Buchans, including occurrence of lead in soils within the community, and to stabilize the historic tailings dam.

Canterra's liability at the effective date of this Technical Report is limited to the activities carried out under the exploration permits issued by the provincial government. These permits cover site activities related to core drilling and general site access that occurred since the current Property was Issued, but do not include any impacts associated with historic site use. If a decision to pursue mining of the Lundberg Deposit is made by Canterra, the issue of site liabilities will be addressed in the related mining and environmental permitting process.

Previous Property operator BMC has undertaken initial reviews of environmental studies, permitting and social or community impact as deemed appropriate to identify and initiate further studies and assessments required to prepare a Pre-Feasibility Study ("PFS") for the Lundberg Deposit This work primarily consists of a Phase One report prepared by Sikumiut Environmental Management Ltd. ("Sikumiut") In November 2012 (Ledrew, 2012), as well as limited follow-up field investigations consisting of water sampling undertaken within the Lucky Strike glory hole, immediately above the Lundberg Deposit (Sikumiut, 2013).

Neither Canterra nor BMC has undertaken additional environmental studies or assessments of the Lundberg Deposit site since 2013, but it is understood that additional monitoring and assessment have been undertaken by the government of Newfoundland and Labrador as the current holders of liabilities related to legacy issues associated with historic mining at the Buchans Mine Site.

### 4.6.2 Sikumiut Report

The 2012 Phase One report prepared by Sikumiut for BMC included an initial review of previous reports and studies, consultation with selected regulators, client representatives and local contacts, and a site visit. The report presents a brief overview of the project and summary of information collected prior to the date of the report. The report recognized the Lundberg Deposit area as a "brownfield" site with legacy issues related to past mining operations, as well as having an abundance of previous environmental monitoring and assessment studies related to previous mining.

The report also provided an overview description of the existing environment, in terms of the Buchans mining legacy. This includes environmental data, a review of the regulatory regime applicable to environmental processes and identification of approvals required to progress the Lundberg Deposit through the PFS assessment phase. Also included in the report was a brief discussion and analysis of environmental issues, approval strategy, and legacy/liability concerns. Recommendations were provided for additional actions as required to progress the project through PFS and/or Feasibility ("FS") assessment phases.

Sikumiut's 2013 report documented a field program to collect water and sediment quality information within the Lucky Strike glory hole, as recommended in the 2012 Phase One report. The recommend sampling program was one of many recommended actions and confirmed legacy issues related to the "glory hole", a site of past mining.

### 4.6.3 Community Relations

Previous Property operator BMC maintained a positive and cooperative relationship with the immediately adjacent town of Buchans. This included open communication conducted by face-to-face meetings and other correspondence, as well as inclusion of the Buchans Town Council (Mayor and Town Manager) on applications and correspondence related to field operations and provision of informal project updates. Canterra has established communication with the Mayor of Buchans and continues to operate in a similar open fashion as did BMC.

The management of Canterra include the same individuals that managed the Property for BMC and have found the Town of Buchans to be generally receptive and supportive of past efforts to advance the Lundberg Deposit towards development. As a former mining town originally established to support mining operations over the mine's 56 year period of production, as well as having being home to many employees of Teck Resources Limited's ("Teck") former Duck Pond Mine located 60 km distant, the population is believed to be generally aware of both potential impacts and benefits of future mine development.

### 4.6.4 Other Risks

No other significant factors or risks that may affect access, title, or the right or ability to perform work on the Property were apparent at the effective date of this Technical Report.

### 4.7 Availability of Land for Exploration and Future Development

Previous Property operator BMC accessed lands in the Buchans area for the purpose of exploration activities under terms of exploration permits issued by the provincial government. BMC also accessed lands controlled by the municipality of Buchans and was required to advise the municipality of on-going activities of this nature that occur within its boundaries. Canterra will have the same obligations.

Agreements have not been established to access any lands for the purposes of future mine development and establishment of associated infrastructure.

Canterra is of the opinion that sufficient lands exist in the Lundberg Deposit area to potentially accommodate future open pit mine development and establishment of required milling infrastructure plus tailings impoundment and waste rock storage areas. The author has reviewed site information and concurs with this statement, recognizing that at this time a spatial limit to future mining operations was not developed by BMC. Provision of such will require completion of a PFS or FS.

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

## 5.1 Accessibility

The Lundberg Deposit is situated adjacent to the community of Buchans in Central NL. The community is located approximately 530 km by highway west of the provincial capital city of St. John's, and is accessible via paved Route 370 from its junction with the Trans-Canada Highway at the town of Badger, approximately 70 km north of Buchans. The nearest major airports are Gander International Airport and Deer Lake Regional Airport, which are located 128 km east and 181 km west of the town of Badger, respectively. The community of Buchans is located approximately 4 km north of Beothuk Lake (formerly Red Indian Lake), which measures approximately 60 km in maximum length and 5.5 km in maximum width. The Lundberg Deposit is situated within lands associated with the past-producing Lucky Strike mine.

Access to the Lundberg Deposit area is excellent, with most of the area required for drilling assessment having been cleared for historical mining operations. Winter access typically necessitates use of snowmobiles, since road networks surrounding the deposit are not actively used and not typically cleared of snow.

## 5.2 Climate

The climate in Central NL is characterised by relatively cool, northern Atlantic temperate conditions with a short summer season from July through early September and a long winter period from November through late March or early April. Environment Canada records show the daily mean temperature during the winter months to be -5° C, ranging from 0° C to -10°C, and daily mean temperature from May to October is 10° C, range from 5° C to 15° C. Daily winter minimums can exceed -30° C and summer daily maximum values in the 25° C + also occur. Average annual precipitation ranges from 200 cm to 300 cm with much of this occurring as snow.

Exploration activities can be carried out in all seasons in this area, assuming that appropriate allowances are made for heavy snow conditions during winter months and thawing ground during spring break-up.

## 5.3 Physiography

The Buchans area is generally flat to gently rolling with elevation ranging from 155 m to 165 m above sea level at Red Indian Lake to approximately 350 m above sea level inland. There are numerous bogs and small brooks in the area that drain into Red Indian Lake with spruce and fir growing on the slopes and in upland areas. The northern portion of the greater Property area is poorly drained and covered by areas of shallow bogs and extensive muskeg in flat areas. The depth of till is typically less than 5 m and the area is generally considered to have less than 5% outcrop exposure.

The area hosting the Lundberg Deposit is for the most part relatively flat with minimal low vegetation, including low bushes and grass as well as area of uncovered gravel. The main topographic feature near the deposit is a water-filled pit over the central portion of the deposit that is known as the Lucky Strike "glory hole". This feature extends to a depth of approximately 65 m and represents an excavated area established by past underground mining operations at the former Lucky Strike mine site that extended to surface. The glory hole connects to other flooded and backfilled underground workings and access tunnels that connect to the other historic mining sites at Buchans.

Historic mining infrastructure in the form of various buildings and roads also exist within the Lundberg Deposit area.

### 5.4 Local Resources and Infrastructure

The town of Buchans has a population of approximately 700 and is supported by services such as a medical clinic, hotel, gravel air strip, as well as grocery, gas and hardware retailers. Field supplies, fuel and logistical support are available in Buchans and contract geotechnical personnel including drill companies and analytical laboratories are typically available in either Grand Falls or Springdale. Other supplies and heavy equipment can be brought to Buchans by highway from Deer Lake, Corner Brook, or St. John's.

The closest deep-water ports are located approximately 140 km to the east-northeast at Botwood, which was formerly used as the concentrate loading terminus for the past-producing Buchans Mine; or approximately 130 km to the northeast at Goodyears Cove, an active concentrate storage and shipping facility operated by Rambler Metals and Mining.

The main power line from Grand Falls to Corner Brook passes through Buchans and the town has full industrial electrical services. Two main arteries of the provincial power grid cross the property, these being a 230 kV transmission line that extends approximately 40 km southwest of Buchans to an 18.4 MW hydroelectric plant at Star Lake, and an east-west, 230 kV line that runs between Grand Falls and Corner Brook.

Water, both industrial and potable, is in ample supply and is drawn from Buchans Lake and Beothuk Lake, as well as several nearby ponds.

The Duck Pond copper-zinc mine, formerly operated by Teck until its closure in 2015, is located approximately 60 km east of the Lundberg Deposit. At the Technical Report date, the Duck Pond mill/concentrator and mine site are understood to have been dismantled and removed from the site while Teck continues to execute the final stages of its closure and remediation plans. The Duck Pond site is vehicle accessible from Buchans by approximately 38 km of public paved roads to Millertown followed by an additional 30 km of secondary gravel roads that extend to the former mine site.

A core storage and logging facility operated by the NLDIET is available for use at Buchans. This facility is used by government, industry and academic interests and much of the core from historic drilling on the Buchans area properties is stored at this location. Viewing and re-sampling of core can be arranged under government supervision.

Historic mine buildings and two large tailing ponds remain on the property from past mining by ASARCO. The tailings ponds are located south of the Lundberg Deposit and are not currently permitted for additional use, though one of the ponds is partially covered by a Mining Lease that is exclusive to barite in the tailings. These barite rights are leased by the Province to a local private company that has in the past operated seasonally to produce barite for sale to the local offshore oil industry.

The community of Buchans is very small and could not be expected to provide a substantial proportion of any mining and industrial work force associated with a future development of the Lundberg Deposit. However, Central and Western NL have a diverse workforce that currently supports mining operations as well as other industrial and natural resource-based activities such as the forestry industry. This workforce, augmented by workers from other regions could contribute to a future mining operation at Buchans.

# 6.0 HISTORY

## 6.1 Introduction

The earliest report of lead-zinc mineralization in the Buchans area was in 1905, when local prospector Matty Mitchell discovered high grade base metal mineralization in the banks of Buchans River, east of the current main Buchans mine site at Lucky Strike. The Anglo-Newfoundland Development Company ("AND Company") owned mineral rights at that time in Central Newfoundland, including the Buchans area, and formed a joint venture ASARCO in 1926 to pursue evaluation of the area.

This resulted in exploration and development of mining operations at Buchans that operated continuously from 1928 until mine reserves were depleted in 1984 (Neary, 1981). In total, the Buchans ore deposits are reported to have produced 16,196,876 tonnes of ore from the five major orebodies. The average grade of total production is reported to be 14.51% zinc, 7.65% lead, 1.33% copper, 126 g/t silver, and 1.37 g/t gold (Kirkham, 1987). A complete history of the discovery and early exploration and development of the Buchans Mine can be found in Neary (1981) and Thurlow (2010).

The following chronological summary of exploration history in the Buchans area was substantially excerpted or summarized from previous Technical Reports completed on the Property in 2008 (Webster and Barr, 2008), 2013 (Cullen and Hilchey, 2013), and 2020 (Harrington and Cullen, 2020) as well as the 2019 JEA Submission Report (Moore and Butler, 2019) unless otherwise indicated. Diamond drilling completed on the Property, including the Lundberg Deposit area prior to 2014 is also addressed more extensively in those reports. Drilling completed post-2014 is as presented in the 2019 Technical Report (Harrington and Cullen, 2019).

## 6.2 Exploration History

### 6.2.1 Early Work (1905-1926)

In 1905 Matty Mitchell, employed as a prospector to explore lands held by the AND Company for sulphur or other minerals of economic interest and travelling up a tributary to Beothuk Lake, now known as Buchans River, discovered outcropping base metal-bearing sulphides in the banks of the river that would ultimately lead to discovery of the original Old Buchans orebody (Neary, 1981). After further investigations, a small-scale failed attempt at mining, and visits by several groups in 1911, a report was commissioned by the New York firm Weed and Probert to assess the economic value of the Buchans sulphide deposit (now known as Old Buchans) and to make recommendations for further exploration. In 1925, a geological examination was conducted as part of an economic assessment completed by consulting engineer J.G. Baragwanath for ASARCO (Thurlow, 1991) and concluded the area held great potential for finding further ore. In 1926 ASARCO entered into a formal agreement with the AND Company's subsidiary, Terra Nova Properties, granting ASARCO certain rights to the property. At this time, ASARCO contracted a Swedish-American prospecting company, led by Mr. Hans Lundberg, while the orebody was being prepared for mining, to conduct a geophysical survey known as the equipotential line method. This survey detected two anomalies in the area over the Oriental and Lucky Strike deposits. Trenching and a small amount of diamond drilling were subsequently conducted over these areas in 1926 leading to the discovery of the Lucky Strike and Oriental orebodies in 1926. Dr. W. H. Newhouse was commissioned to create a geological map of the area surrounding the mine in 1927. Small scale spot drilling programs were also carried out in the region to the south and southwest of the Lucky Strike and Oriental orebodies (Thurlow, 1991).

### 6.2.2 1928–1984 ASARCO

ASARCO initiated mining operation at Buchans in 1928. Between 1930 and 1984, extensive drilling programs and a variety of exploration activities including geological, geochemical and geophysical surveys were undertaken. This work included completion of more than 3,500 surface and underground holes, totalling 375,000 m of drilling that lead to the discovery of most of the known mineralized zones and orebodies. Almost all surface drilling was vertical, with core sizes varying from 22 mm (EX core) to 47.6 mm (NQ core), and typically testing to depths of 200 m or less, and a maximum depth of approximately 1,100 m. As ASARCO was focused on high-grade mineralization comparable to the Lucky Strike and Oriental massive sulphide orebodies, much of the intersected mineralization was defined as sub-economic, and as such, limited drill core assay data is available from this period. Early ASARCO drill programs were closely spaced and concentrated primarily on near surface equipotential anomalies outlined by Hans Lundberg. Later expansion of exploration consisted of systematic outward extension of drilling and led to discovery of the Rothermere (1947), Maclean (1950), Oriental No. 2 (1953), Clementine (1960), and Maclean Extension (1979) orebodies (Swanson, 1981, Calhoun and Hutchinson, 1981; Thurlow, 2010).

The Lundberg Deposit is located immediately below the former Lucky Strike orebody, the largest and highest grade of the Buchans orebodies. At Lucky Strike, ASARCO mined 5.6 million tonnes of high-grade massive sulphide ore with an average head grade of 18.4% Zn, 8.6% Pb, 1.6% Cu, 112 g/t Ag & 1.7 g/t Au (Thurlow and Swanson, 1981). Discovery and mining of the former Lucky Strike orebody underpinned subsequent exploration and development of additional ore deposits at Buchans, as ASARCO established its main infrastructure, including support buildings, and mill at this site. Historic mining at Lucky Strike, particularly within that portion of the orebody mined from the Lucky Strike glory hole, ultimately exposed a significant portion of the Lundberg Deposit's mineralization that extends to the top of the current bedrock surface.

In 1976, imposition of the Mineral Holdings Impost Act ended the concession mineral rights system and much of the Buchans mine property was converted to ground staked claims. At this time, a Co-tenancy agreement was negotiated with Abitibi-Price (51%) (successor to AND Company), the mineral rights holder as exploration manager, and ASARCO (49%), as mine operator.

#### 6.2.3 1985–1991 BP Resources Canada Inc.

BP Resources Canada Inc. ("BP") optioned all or most of Abitibi-Price's mineral properties throughout Central NL, including the Abitibi-Price-ASARCO Co-tenancy Buchans mine property in 1985. In 1991, BP returned the Buchans property to the Co-tenants.

BP commenced work on the Buchans property in 1986 and completed an Input Airborne Electromagnetic ("EM") survey over the area, plus a variety of other work that included borehole TDEM surveys, ground geophysical surveys (including, IP, gravity, TDEM, Mag-VLF, HLEM and CSAMT) and diamond drilling of at least 30 holes totalling 7,980.16 m, including deepening of several historic holes (Desnoyers et al., 1992; Barbour et al., 1991; Barbour et al., 1990; Thurlow and Barbour, 1986; Thurlow et al., 1987; Barbour et al., 1988; and Barbour et al., 1989). This work also included limited Vibroseis seismic and limited supplementary seismic surveying over the current Property, including immediately north of the Lundberg Deposit (Thurlow et al., 1992).

It was during this period that thrust belt tectonic models emerged for the Buchans Camp, resulting in a simplified stratigraphic interpretation of the camp's geology; but a significantly more complex structural interpretation that recognized duplex structures, antiformal stacks, multiple thrusts and related features (Thurlow and Swanson, 1987). This recognition of complex faulting and shuffling of the camp's geology was a turning point in the camp's exploration and came after the mines had closed, leaving ASARCO's successors to explore the camp with a geological understanding that was absent during the camp's productive lifetime.

#### 6.2.4 1995-2001 Buchans River Joint Venture - Billiton/GT/NME/Buchans River Limited

In August 1995, GT/NME/Buchans River Limited acquired a large land position by staking that includes portions of the current Property covering the Lundberg Deposit (see Section 4, Figure 4-3). In addition, other portions of the Property were optioned from competing junior and senior mining companies (e.g. CBM Resources, PD, and NOR, Figure 4-3).

Between 1995 and 1998, exploration consisted of various geophysical and geochemical surveys largely consisting of soil and whole rock geochemistry, gravity, IP, surface and borehole TDEM geophysical surveys, and limited diamond drilling. Aside from limited relogging and whole-rock sampling of archived drill cores, the bulk of this work was conducted outside of the Lundberg Deposit area.

In 1997, a core relogging program dedicated to re-interpreting results of past drilling programs was initiated. This program was initiated to better appreciate the effects of thrusting on the stratigraphy in and around the former mine sites, including the Lundberg Deposit area. During this period between 1997 to 2000, most of the surface drill holes drilled within the Property were relogged, however, the Lundberg Deposit area received only cursory attention as the operators were focused on less explored areas with perceived greater potential for discovery of new high-grade orebodies.

In September of 1998, Billiton Resources Canada Inc. ("Billiton"), Buchans River Limited, NME, and GT formed the Buchans River Joint Venture ("BRJV"). This agreement granted Billiton an option to earn 51% interest in all the claims held by the joint venture partners in the Buchans area, including the Lundberg Deposit area, by spending CDN $3.5 million on exploration over 4 years, with a further option to earn an additional 19% by spending an additional CDN $4 million on exploration and paying Buchans River Limited CDN $1 million.

Work undertaken by the joint venture included a variety of geophysical and geochemical surveys, including airborne EM surveys, as well as ground IP, gravity and TDEM surveys, and diamond drilling. The bulk of this work was undertaken outside the immediate Lundberg Deposit area and failed to discover new high-grade Buchans-style ore deposits. Upon Billiton leaving the joint venture in 2001, Buchans River Limited amalgamated the properties explored by the joint venture through a series of option and purchase agreements that issued shares and warrants of Buchans River Limited to various vendors for 100% interests in the properties, subject to various underlying royalties (see Section 4).

During the Billiton joint venture, ERA-Maptec Ltd. of Dublin, Ireland, was contracted by Billiton to conduct a structural reinterpretation of the Buchans mines. The study utilized 3D modeling in an attempt to map and predict the location of ore horizon rocks at depth (Millar, 2001).

Prior to entering into the joint venture with Billiton, NME initiated a lithogeochemical sampling study in 1997 that continued throughout the joint venture before concluding in 2001. Researchers at Memorial University of Newfoundland conducted the work that collected and analyzed 468 rock samples by X-Ray Fluorescence ("XRF") or Inductively Coupled Plasma Mass Spectrometry (ICP-MS). Results of this study suggested hanging wall and footwall rocks from the Lucky Strike deposit area can be differentiated based on their major and trace element signatures.

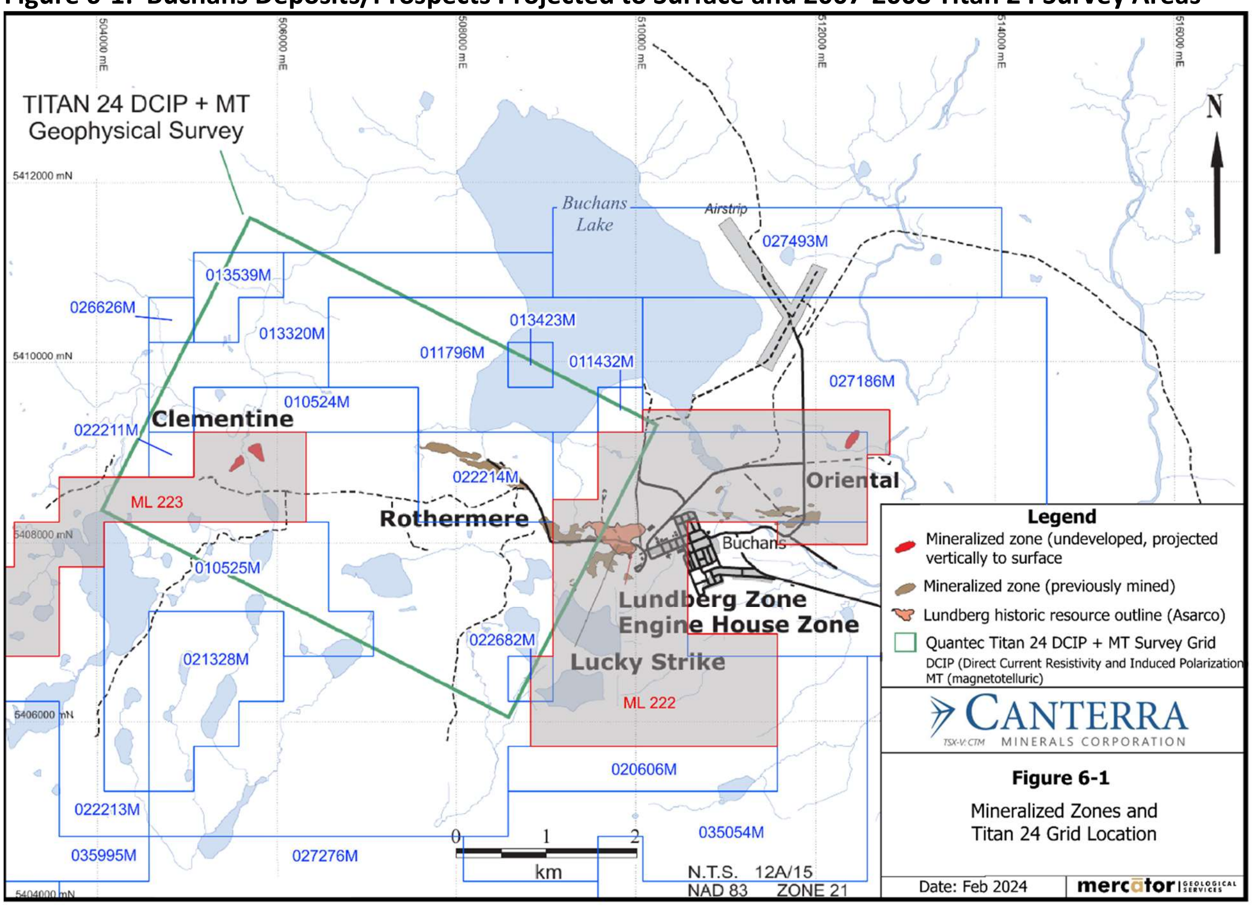
The joint venture was terminated in September 2001 without Billiton retaining interests (Halpin, 2001). Billiton spent CDN $2.4 million in exploration on the property and authored a final report in 2001 that presented a list of 126 targets totalling 46,020 m of proposed drilling for high-grade massive sulphide deposits similar in size and grade to the former Lucky Strike mine. These targets were not tested by the joint venture and not located within the immediate Lundberg Deposit area.

#### 6.2.5 2007–2008 Buchans River Limited

In 2007, Buchans River Limited contracted Quantec Geoscience Limited ("Quantec") to complete a Titan 24 Direct Current Resistivity and Induced Polarization ("DCIP") & Magnetotelluric ("MT") survey to assess a 3.6 x 5.1 km portion of the Buchans area extending over the past producing Lucky Strike, Rothermere and MacLean deposits, as well as the undeveloped Clementine prospect (Figure 6-1). This area included coverage over the Lundberg Deposit and extended over several deposits that account for a large proportion of Buchans' historical mine production. As historical geophysical surveys at Buchans were considered to have only tested to depths down to 250 m, the Titan 24 DCIP & MT surveys were selected to explore for sulphide rich zones at depths between 500 m and 750 m using the DCIP component of the surveys and potentially to depths to 1,500 m depth using the MT survey component.

Also in 2007, Buchans River Limited retained Mercator to undertake an extensive compilation of available geoscientific information from the Buchans area, including the Lundberg Deposit area. This program was designed to convert historic hard copy files into a comprehensive digital record and assist with identification of new targets on the Property. This program included review and compilation of government assessment reports, government and industry technical reports, digital government data, published maps and diamond drill logs. All reviewed information was compiled and cross-checked with original survey files. The compilation also focused on compiling and digitizing historical diamond drilling information, including logs for over 3,000 historical drill holes dating back to 1928. Hard copy drill logs were acquired from a number of sources including company files, NLDIET assessment files and website resources and historic government archives. Using this information, a digital drill hole database was established for the project that included collar co-ordinates, down hole survey files, assays and lithological data.

**Figure 6-1: Buchans Deposits/Prospects Projected to Surface and 2007-2008 Titan 24 Survey Areas**




In addition to the historical drill hole compilation, information pertaining to previous exploration work on the Property, including the Lundberg Deposit area, was compiled in a MapInfo GIS database. Data included results of past ground and airborne surveys using information obtained from previous assessment reports, the online NLDIET Mineral Occurrence Database ("MOD") and various internal company documents.

### 6.2.6 2008-2010 Royal Roads Corporation/Buchans Minerals Corporation

In July 2008, Royal Roads Corp. ("RRO") and Buchans River Limited combined their assets and operations in Central NL's Victoria Lake and Buchans mining camps. These properties included the historic Buchans mine area held by Buchans River Limited and the Daniels Pond Zn-Pb-Cu deposit held by RRO.

#### 6.2.6.1 Regional Exploration

In July of 2008, results of the Titan 24 survey were received. The survey covered a portion of the Lundberg Deposit area as well as the former Lucky Strike, Rothermere and MacLean mines, and the undeveloped Clementine prospect (Moore and Butler, 2010). The survey identified 130 targets mostly defined as chargeability highs that were subsequently determined to often coincide with hematitic mafic volcanic and intrusive rocks. Additionally, it was observed that underground rails and wiring associated with underground access levels for the mines had essentially rendered the survey ineffective near the former orebodies, as initial processing of the Titan 24 data overwhelmed weaker responses throughout the remainder of the survey area that may be associated with accumulations of base metal sulphide mineralization.

Quantec subsequently recollected Titan MT data in select areas, including within the immediate Lundberg Deposit area, using the Spartan Tensor Magnetotelluric Survey system and issued a logistics report along with revised dataset.

#### 6.2.6.2 Lundberg Deposit

In September 2007, RRO/BUV's review of historic files located data outlining an uncategorized MRE for a zone of stockwork style base metal mineralization peripheral to the former Lucky Strike mine (ASARCO, 1974; Buchans River Limited PR #14-07). This MRE is historical in nature and was not prepared in accordance with NI 43-101 and CIM Definition Standards. A QP has not done sufficient work to classify the historical estimate as a current Mineral Resource and Canterra is not considering it as a current Mineral Resource. It is superseded by the current MRE (effective date February 28, 2019). ASARCO documents from 1974 included plans and sections that referred to this mineralization as the "Lucky Strike Low Grade" mineralization. In 2007, RRO/BUV renamed this deposit the "Lundberg Zone".

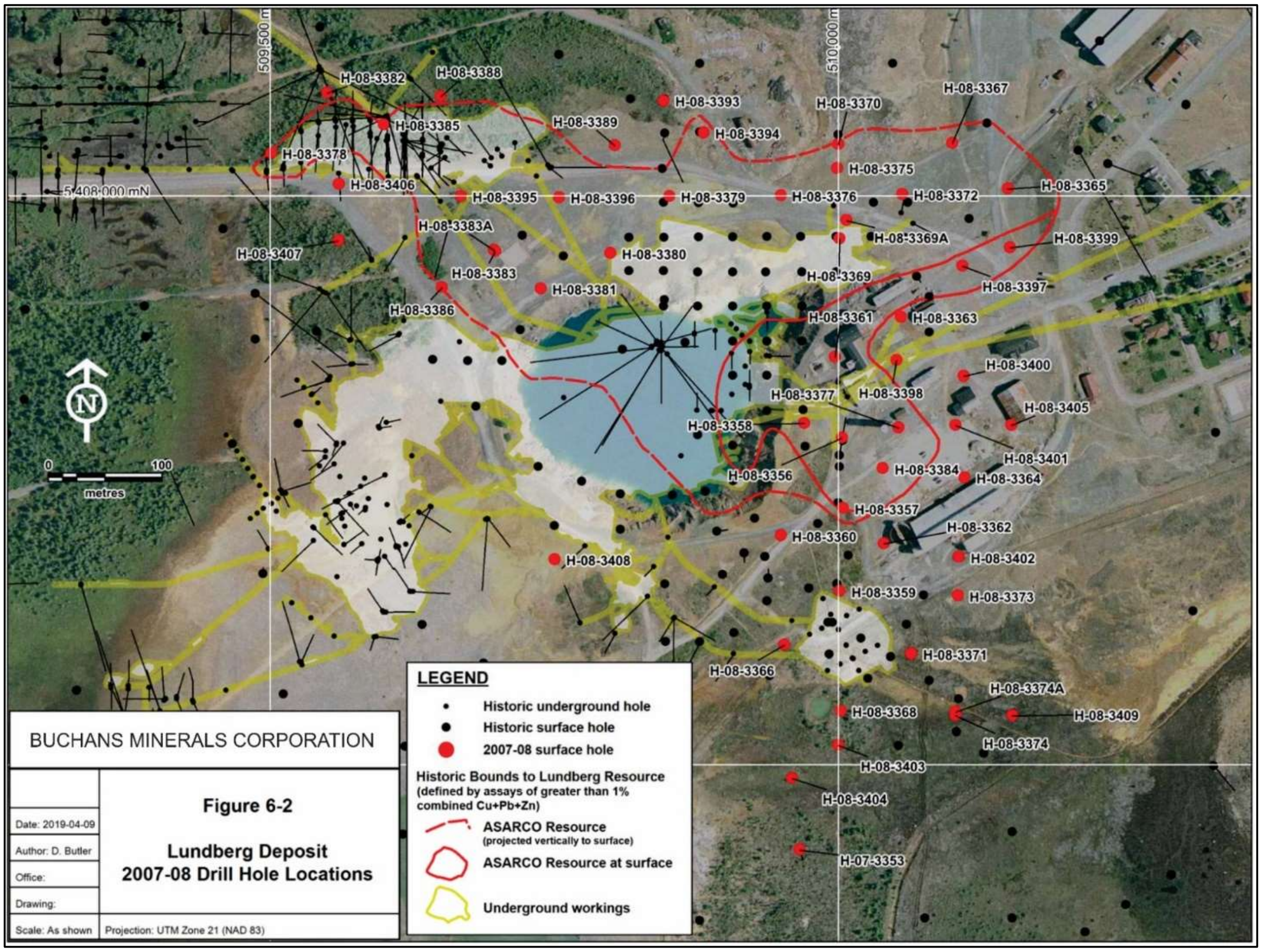
The Lundberg Zone's stockwork mineralization had previously been described by Thurlow and Swanson (1981) as a network of sulphide veins cutting strongly altered and sulphide-impregnated host rocks occurring beneath the Lucky Strike deposit. They described a wedge-shaped zone of mineralization up to 360 m wide, extending 600 m down dip with thicknesses up to 100 m. Thurlow and Swanson (1981) also noted this mineralization subcrops under shallow (<1.5m depth) surface material at the east end of the

Lucky Strike glory hole, where it contains sulphide-rich mineralization intercepted in historic drill holes completed by ASARCO.

Mercator was retained by RRO/BUV in 2007 and 2008 to help plan, manage and carry out a diamond drilling program to support a MRE on the Lundberg and Engine House stockwork zones. Over this period, 53 surface drill holes comprising 8,058 m of NQ core drilling were completed on the Lundberg Zone and adjacent and similar Engine House Zone (H-08-3356 to H-08-3409; Figure 6-2). Mercator compiled analytical data for zinc, lead, copper, silver, gold and barite from this drilling, in addition to historical assay results from previous drilling in this area.

The results of this work resulted in a historical Inferred MRE with an effective date of November 3, 2008, that was prepared in accordance with NI 43-101 and CIM Definition Standards active at the time (Webster and Barr, 2008). A QP has not done sufficient work to classify the historical estimate as a current Mineral Resource and Canterra is not considering it as a current Mineral Resource. The historical MRE is superseded by the current MRE (effective date February 28, 2019). The 2008 estimate was derived from a three-dimensional deposit block model developed by Mercator using Surpac© Version 6.0.3 deposit modelling software. Analytical results for 178 diamond drill holes were used in the estimate, of which 42 drill holes were from 2007-2008 drilling and 136 drill holes from validated historic data. The model utilized 1 m down-hole assay composites individually calculated for Zn (%), Pb (%), Cu (%), Ag (g/t), Au (g/t) and $BaSO_4$ % database values.

**Figure 6-2: Lundberg Deposit 2007-2008 Drill Holes**




### 6.2.7 2010-2012 Buchans Mineral Corporation

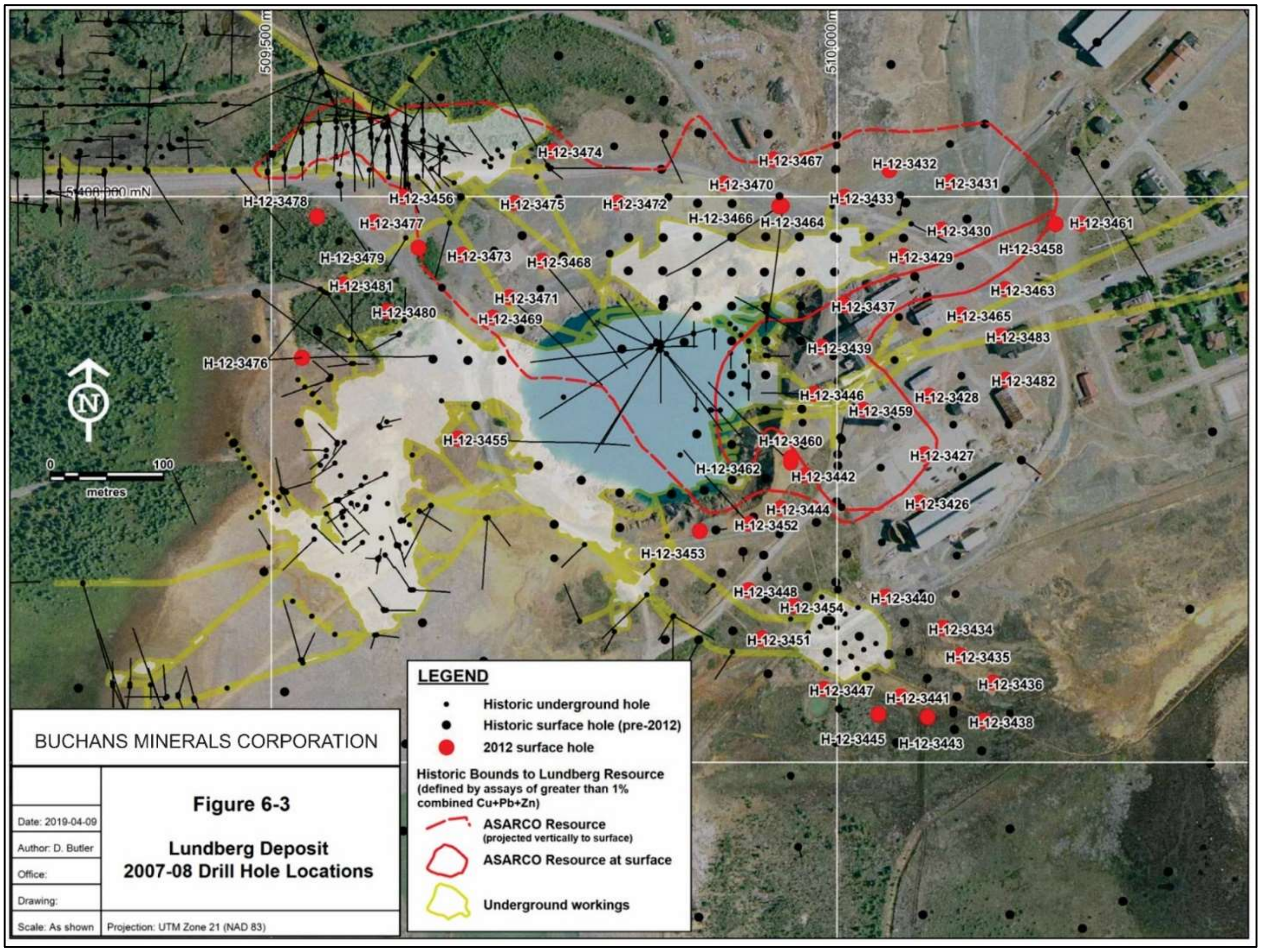
RRO changed its name to Buchans Minerals Corporation ("BMC") in July 2010 (BMC PR #16-10 Jul 2, 2010). In August 2010, BMC engaged Wardrop Engineering Inc. ("Wardrop") to complete a now historical PEA of the Lundberg and Engine House Zones, based on the now historical MRE prepared by Mercator in 2008. Results of the study were reported in accordance with NI 43-101 in a Technical Report dated August 11, 2011 and titled "Preliminary Economic Assessment on the Lundberg and Engine House Deposits, Newfoundland, Canada" by Daniel Coley, P.Eng., Daniel Gagnon, P.Eng., Mike McLaughlin, P.Eng., and Doug Ramsey, R.P. of Tetra Tech Wardrop and Peter C. Webster, P. Geo., of Mercator Geological Services Limited. The 2011 PEA was restricted to open pit scenarios. The open pit design process was optimized using Lerchs-Grossman pit optimization methods and included design of catch berms and in-pit ramps. Once open pit mine development and production schedules were developed, mine equipment items were selected, and capital and operating costs were estimated, SGS Canada Inc. completed a two-phase metallurgical test work program to support the PEA project and results of this work are presented in Section 13.0 of this Technical Report. Both the 2008 MRE and 2011 PEA are historical in nature. The historical mining study is no longer relevant or reliable.

### 6.2.8 2012-2013 Minco Plc./Buchans Mineral Corporation

In 2012, BMC entered into an option and joint venture agreement with Minco Plc ("Minco") giving Minco the option to earn, through a wholly owned subsidiary, a 51% interest in the Property. BMC completed a 58-hole, 8,183 m, NQ core drilling program to upgrade the historical Mineral Resource used in the 2011 PEA (Figure 6-3) (Moore and Butler 2013a).

Highlights from 2012 Lundberg drilling included several higher-grade intersections returned from holes along the southern margin of the Lundberg Deposit, including an intercept of 4.0 m downhole, approximately 3 m true thickness, grading 2.06% Cu, 5.94% Pb, 11.62% Zn, 119.0 g/t Ag and 0.72% Au in drill hole H-12-3453.

**Figure 6-3: Lundberg Deposit 2012 Drill Holes**




These higher-grade intercepts were interpreted to represent remnants of the high-grade Lucky Strike mineralization presumably left behind by past mining either because of their narrow widths, location relative to infrastructure, or because they were not known to exist at the time of mining.

In July of 2013, Minco acquired BMC by way of a Plan of Arrangement and the joint venture was terminated.

The Lundberg Deposit MRE was updated by Mercator in 2013 to consist of an Indicated Historical Mineral Resource of 23.44 million tonnes averaging 1.41% Zn, 0.60% Pb, 0.35% Cu, 5.31 g/t Ag and 0.07 g/t Au as well as Inferred Historical Mineral Resources of 4.31 million tonnes grading 1.29% Zn, 0.54% Pb, 0.27% Cu, 4.47 g/t Ag and 0.08 g/t Au at a NSR cut-off value of $15 US/t. This historical MRE is documented in a NI 43-101 Technical Report titled "Mineral Resource Estimate Technical Report on the Lundberg Deposit, Buchans Area, Newfoundland, Canada – Effective Date February 22nd, 2013" that was prepared by M. Cullen, P. Geo. and A. Hilchey, P. Geo., of Mercator Geological Services Limited for Buchans Minerals Corporation and Centrerock Mining Limited (a wholly-owned subsidiary of Minco Plc). The historical Mineral Resource was prepared in accordance with NI 43-101 and the CIM Standards current at the time. A QP has not done sufficient work to classify the historical resource estimate as current Mineral Resources and Canterra is not treating the historical resource estimate as current Mineral Resources. The MRE disclosed in Section 14 of this Technical Report supersede all prior historical estimates for the Project.

The 2013 historical MRE did not include pit optimization for definition of Mineral Resources and was spatially constrained by the NSR cut-off, grade solid modelling and a 250 m maximum depth extent below the surface elevation. It was based on validated results of 231 diamond drill holes, including 51 of the 58 surface diamond drill holes totaling 7,235 m completed in 2012 by Minco and BMC, for a total of 24,519 m of diamond drilling. Modelling was performed using Gemcom Surpac® 6.3.1 modeling software with zinc, lead, copper, silver, gold and barite grades estimated using inverse distance squared ($ID^2$) interpolation methodology and 1 m down hole assay composites. The resource block model was set up as a partial percentage model with a block size of 5m (x) by 5m (y) by 5m (z). The author is of the opinion that this estimate and associated modelling approach provided at its effective date a valid and relevant perspective on deposit geometry and grade distribution trends that reflected the assumptions and constraints applied at the time.

### 6.2.9 2014 to 2017 Buchans Minerals Corporation

In 2014, BMC undertook additional work to further advance the Lundberg project towards Pre-feasibility, including additional metallurgical test work by SGS (Roman and Imeson, 2011; Legault, 2013; & Patsias and Imeson, 2014) and pre-concentration test work using Optical Ore sorting technology by Tomra (2014) as previously described in Moore and Butler (2015). Environmental studies were also undertaken, contracted to Sikumiut (Ledrew, 2012 and Sikumiut, 2013) that included collection and analyses of water from the Lucky Strike glory hole (Moore and Butler, 2014).

BMC undertook exploration activities to further assess the Lundberg Deposit and immediate surrounding area (Moore and Butler, 2015). These exploration activities included relogging of archived drill core from the Lucky Strike and Engine House orebodies, including more than 9,200 m of core from 87 archived drill holes. Work also included limited assay sampling of archived cores to provide confirmation assays within a portion of the historical 2013 Inferred Mineral Resource located beneath the glory hole that was inaccessible to drilling (Cullen and Hilchey, 2013; Moore and Butler, 2013). The remaining split core (half of 7/8" diameter core) was logged, photographed, and sampled in its entirety. At total of 17 samples were taken with widths corresponding to the original sample intervals that ranged between 0.9 to 1.5 m. Results showed a strong correlation between the original metal grades and the re-sampled metal grades, providing increased confidence in historic analytical data.

As follow-up to relogging and re-sampling program, BMC undertook a 5-hole (642.6 m) diamond drilling program to explore for shallow extensions to the high-grade, former Lucky Strike orebody and the lower grade Engine House and Lundberg zones (Moore and Butler, 2015). All five holes (H-14-3487, -3488, -3489, -3490, -3491) were drilled south of the glory hole on the margins of the Lundberg Mineral Resource that was current at the time. Summary details for the 2014 Lucky Strike South (Lundberg area) drill holes are provided in Table 6-1.

**Table 6-1: Summary of Drill Holes Completed in the Lucky Strike South Area in 2014**

| Hole | UTM m E | UTM mN | Elev. (m) | Length (m) | Dip ° |
|---|---|---|---|---|---|
| H-14-3487 | 509875 | 5407675 | 287.2 | 199 | -90 |
| H-14-3488 | 509830 | 5407690 | 291.3 | 200 | -90 |
| H-14-3489 | 509775 | 5407639 | 288.7 | 191 | -90 |
| H-14-3490* | 509843 | 5407625 | 288 | 86.6 | -90 |
| *hole abandoned in underground workings, moved and re-drilled as H-14-3491 | | | | | |
| H-14-3491* | 509841 | 5407615 | 288 | 152 | -90 |
| * NAD83, Zone 21 UTM coordinates. Elevations relative to mean sea-level. | | | | | |

Drilling was undertaken over the period of September to October 2014 and was contracted to Springdale Forest Resources of Springdale, NL. NQ (47.6 mm diameter) core was recovered using a Duralite 500 drill rig, and the program was managed by BMC staff. Hole orientation tests were collected by Springdale Forest Resources at a nominal spacing of 50 m using a Flexit test system. All holes were surveyed using differential GPS by Red Indian Surveys of Grand Falls-Windsor (NL) to determine accurate, sub metre collar locations and elevations. All cores were logged and sampled by BMC geological and technical staff with core descriptively logged on site, aligned, marked for sampling and split longitudinally using a diamond saw. Samples consisted of halved NQ-size diamond core (47.6 mm diameter core) with the remaining half of the core is preserved in core boxes for future reference. All sampling and assaying were completed in keeping with BMC's 2014-2015 QAQC protocols that are described below in Section 11. Drill hole H-14-3490 was abandoned due to drilling problems. Drill core recovery for the program was excellent. Summary results for the 2014 program are provided in Table 6-2.

**Table 6-2: Summary of results for the 2014 drill program**

| Hole | From (m) | To (m) | Length (m)* | Zn (%) | Cu (%) | Pb (%) | Ag (g/t) | Au (g/t) |
|---|---|---|---|---|---|---|---|---|
| H-14-3487 | 52.85 | 55.55 | 2.7 | 6.07 | 0.53 | 3.27 | 103.5 | 1.65 |
| H-14-3488 | 64.75 | 69.55 | 4.8 | 3.3 | 0.22 | 1.43 | 118.7 | 0.81 |
| H-14-3488 | 105 | 112.8 | 7.8 | 3.43 | 1.85 | 1.3 | 22.9 | 0.14 |
| H-14-3489 | 108 | 109 | 1 | 1.36 | 0.1 | 0.31 | 6 | 0.05 |
| H-14-3489 | 135.75 | 136.25 | 0.5 | 0.41 | 0.16 | 0.25 | 66 | 0.68 |
| H-14-3489 | 163.35 | 163.95 | 1 | 2.31 | 0.08 | 1.49 | 24.6 | 0.47 |
| H-14-3491 | 81 | 84.5 | 3.5 | 2.47 | 0.15 | 1.32 | 20.86 | 0.27 |
| H-14-3491 | 111.7 | 115 | 3.3 | 1.23 | 3.29 | 1 | 12.59 | 0.02 |

** Core length - True widths are estimated as being 75% to 95% of core length*

The 2014 drilling confirmed extensions to the Lucky Strike massive sulphide horizon, with 2 holes intersecting high-grade mineralization at the Lucky Strike horizon, while 3 holes intersected the deeper Engine House horizon, approximately 40 to 50 m below the Lucky Strike horizon. Hole H-14-3488 intersected significant mineralization at the top of the Engine House Zone, including an intercept of 7.80 m (core length) averaging 3.43% Zn, 1.85% Cu, 1.30% Pb, 22.9 g/t Ag, that included 1.45 m (core length) of massive sulphides assaying 17.00% Zn, 2.51% Cu, 6.54% Pb, 92.5 g/t Ag and 0.14 g/t Au. This horizon of mineralization is interpreted to have a shallow to moderate dip towards the southwest with an estimated true thickness of approximately 75 to 95% of the core length.

In addition to positive results obtained from the Lucky Strike and Engine House horizons, hole H-14-3489 tested a lesser known, deeper horizon referred to as the Ore Clast horizon (historically referred to as the "HAG" horizon) where it cut a 1 m (core length) intercept assaying 2.31 % Zn, 0.08% Cu, 1.49% Pb, 24.6 g/t Ag and 0.47 g/t Au. While little was known about the Ore Clast horizon, results from limited and widely spaced historic drilling were reviewed and noted to host potentially significant mineralization (below Lundberg and Engine House mineralization). This horizon of mineralization is interpreted to be sub-horizontal with an estimated true thickness of approximately 90% of the core length (1.09 m to 1.38 m).

Given the positive results returned from the 2014 Lucky Strike South drill program BMC carried out additional relogging and diamond drilling in 2015 to explore for additional extensions to high-grade massive sulphides occurring on the Lucky Strike and Engine House horizons, as well as to explore the deeper Ore Clast horizon southwest of the Lucky Strike glory hole (Moore and Butler, 2016).

In 2015, BMC continued its ongoing relogging program by relogging archived drill cores stored at the NLDIET's core library facility in Buchans and undertook a drilling program southwest of Lucky Strike (Lundberg) where it drilled 8 holes and extended 4 existing holes for a total of 2,206 m of core drilling. The program was managed by BMC staff with drilling undertaken over the period from April to May 2015. Drilling was completed under contract by CABO Drilling Corp ("CABO") of Springdale, NL, who recovered NQ core using an Atlas Copco B320 drill rig supported by a Cat D-5 bulldozer and Cat 315 excavator. Hole orientation tests were collected by CABO at a nominal downhole spacing of 50 m using a Flexit test system.

All core was handled exclusively by CABO and BMC personnel with a chain of custody protocol maintained throughout the program, including delivery of core samples to Eastern assay laboratory in Springdale, NL. Summarized information for the 2015 Lucky Strike South (Lundberg area) drill holes is provided in Table 6-3. Eastern is an independent, accredited analytical services firm registered to the ISO 17025 standard for applicable analytical techniques.

**Table 6-3: Summary of Drill Holes Completed in the Lucky Strike South Area in 2015**

| Hole | UTM m E | UTM m N | Elev.(m) | Dip° | Azim.° | Length (m) |
|---|---|---|---|---|---|---|
| H-15-3457EXT | 509664.2 | 5407785.9 | 291.8 | -88.4 | 315 | 317.6 |
| H-15-3449EXT | 509968.8 | 5407539.0 | 286.4 | -89.7 | 327 | 175.0 |
| H-15-3450EXT | 509688.5 | 5407749.1 | 291.1 | -90.0 | | 242.0 |
| H-15-3487EXT | 509875.0 | 5407675.0 | 287.2 | -90.0 | | 164.0 |
| H-15-3492 | 509600.0 | 5407566.0 | 291.1 | -90.0 | | 250.0 |
| H-15-3493 | 509634.0 | 5407672.0 | 287.3 | -89.7 | 53 | 246.0 |
| H-15-3494 | 509690.0 | 5407710.0 | 288.0 | -90.0 | | 228.0 |
| H-15-3498 | 509700.0 | 5407666.9 | 287.5 | -90.0 | | 239.0 |
| H-15-3495 | 509766.5 | 5407667.5 | 287.7 | -51.0 | 45 | 249.5 |
| H-15-3497 | 509775.0 | 5407589.0 | 286.2 | -90.0 | | 200.0 |
| H-15-3496 | 509789.0 | 5407691.0 | 289.0 | -65.0 | 45 | 125.0 |
| H-15-3499 | 509639.8 | 5407715.5 | 287.7 | -90.0 | | 252.0 |

** NAD83, Zone 21 UTM coordinates. Elevations relative to mean sea-level.*

All cores were logged and sampled by BMC geological and technical staff with core descriptively logged on site with core aligned, marked for sampling and split longitudinally using a diamond saw. All cores were photographed prior to sampling and archived in BMC's digital records. All sampling and assaying were completed using the same parameters as the 2014 QAQC protocols as further described in Section 11. Drill core recovery for the program was excellent. Summary results for the 2015 program are provided in Table 6-4.

**Table 6-4: Summary of results for the 2015 drill program**

| Hole | From (m) | To (m) | Length (m)* | Zn (%) | Cu (%) | Pb (%) | Ag (g/t) | Au (g/t) |
|---|---|---|---|---|---|---|---|---|
| H-15-3492 | 175 | 176 | 1 | 0.34 | 0.37 | 0.77 | 6.2 | 0.11 |
| H-15-3492 | 220 | 221 | 1 | 0.12 | 0.83 | 1.26 | 5.1 | 0.05 |
| H-15-3493 | 115.35 | 116.2 | 0.85 | 2.42 | 0.03 | 0.05 | 6.46 | 0.03 |
| H-15-3493 | 225 | 227.1 | 2.1 | 0.94 | 1.85 | 2.63 | 19.5 | 0.09 |
| H-15-3494 | 100 | 101 | 1 | 0.08 | 0.67 | 0.24 | 6.9 | 0.06 |
| H-15-3494 | 204.4 | 213.5 | 9.1 | 0.41 | 0.33 | 0.41 | 6.96 | 0.07 |
| H-15-3495 | 129.06 | 131 | 1.94 | 0.25 | 2.23 | 4.28 | 48.4 | 0.83 |
| H-15-3495 | 220.4 | 221.6 | 1.2 | 0.15 | 0.25 | 0.45 | 5.4 | 0.05 |
| H-15-3496 | 76.25 | 81.3 | 5.05 | 0.2 | 2.15 | 3.63 | 8.86 | 0.05 |
| H-15-3496 | 100.45 | 102 | 1.55 | 1.25 | 0.44 | 0.42 | 6.56 | 0.01 |
| H-15-3497 | 120.2 | 120.7 | 0.5 | 0.2 | 3.6 | 4.43 | 32.2 | 0.29 |

| Hole | From (m) | To (m) | Length (m)* | Zn (%) | Cu (%) | Pb (%) | Ag (g/t) | Au (g/t) |
|---|---|---|---|---|---|---|---|---|
| H-15-3497 | 170.5 | 171.5 | 1 | 0.32 | 1.55 | 3.83 | 53.15 | 0.2 |
| H-15-3497 | 174 | 174.3 | 0.3 | 0.37 | 0.72 | 4.76 | 20.1 | 0.16 |
| H-15-3498 | 108.3 | 108.9 | 0.6 | 1.14 | 0.88 | 1.96 | 126.8 | 0.52 |
| H-15-3498 | 131.4 | 132.4 | 1 | 1.18 | 0.11 | 0.18 | 3.6 | 0.04 |
| H-15-3498 | 187.1 | 201.4 | 14.3 | 0.09 | 0.33 | 0.57 | 8.68 | 0.1 |
| H-15-3499 | 95.45 | 95.75 | 0.3 | 0.28 | 2.9 | 4.33 | 67.9 | 1.02 |
| H-15-3499 | 228.4 | 229.2 | 0.8 | 0.2 | 1.11 | 1.33 | 14 | 0.14 |
| H-15-3499 | 240.4 | 242.7 | 2.3 | 0.16 | 0.44 | 0.77 | 5.9 | 0.04 |
| H-14-3487 Extension | 128.7 | 130.1 | 1.4 | 1.03 | 0.23 | 0.39 | 9.1 | 0.04 |
| H-14-3487 Extension | 132.9 | 135.6 | 2.7 | 0.2 | 0.9 | 1.31 | 4.36 | 0.08 |
| H-12-3450 Extension | 220.65 | 221 | 0.35 | 0.11 | 1.16 | 1.52 | 4.2 | 0.03 |
| H-12-3450 Extension | 231.3 | 235.9 | 4.6 | 0.16 | 0.52 | 0.83 | 5.09 | 0.12 |
| H-12-3457 Extension | 264 | 275 | 11 | 0.06 | 0.36 | 0.63 | 1.19 | 0.03 |
| H-12-3457 Extension | 285 | 288 | 3 | 0.02 | 0.45 | 0.73 | 6.93 | 0.06 |

** Core length - True widths are estimated as being 90% of core length*

Two holes (H-15-3495 & 3496) drilled west and northwest of high-grade massive sulphides previously intersected at Engine House in 2014 (hole H-14-3488), intersected only weak mineralization at the Engine House horizon. The extension of H-12-3449 intersected no additional mineralization.

Holes drilled south of the Lucky Strike deposit met with success as H-15-3496 intersected mineralization immediately south of former mine workings cutting 5.05 m averaging 5.98% combined base metals as 0.20% Cu, 2.15% Pb, 3.63% Zn, 8.9 g/t Ag, and 0.05 g/t Au, including 2.70 m averaging 7.41% combined base metals as 0.23% Cu, 2.74% Pb, 4.44% Zn, 10.1 g/t Ag, 0.06 g/t Au. Further south, holes testing the southernmost lobe of the Lucky Strike deposit intersected 0.94 m assaying 12.04% combined base metals as 0.44% Cu, 3.80% Pb, 7.80% Zn, 88.4 g/t Ag, and 1.62 g/t Au in hole H-15-3495; and 0.5 m averaging 8.23% combined base metals as 0.20% Cu, 3.60% Pb, 4.43% Zn, 32.2 g/t Ag, and 0.29 g/t Au in hole H-15-3497. This horizon of mineralization is interpreted to have a shallow to moderate dip towards the west-southwest with an estimated true thickness of approximately 90% of the core length (0.85 m).

Among encouraging result returned from the 2015 program was the consistent intersection of the Ore Clast horizon, the deepest of the three horizons tested, which is located from 50 m to 75 m below the Lucky Strike and Engine House horizons. All 10 holes designed to test the Ore Clast horizon intersected mineralization containing mineralized clasts composed of high-grade massive sulphides or heavily mineralized and altered felsic volcanic clasts up to 15 cm in diameter. Highlights include a drilled intercept of 0.5 m averaging 13.32% combined base metals in hole H-15-3493 (1.80% Cu, 5.20% Pb, 6.32% Zn, 53.3 g/t Ag, and 0.18 g/t Au) as well as hole H-15-3497 that intersected a 1.0 m section averaging 6.16% combined base metals (0.35% Cu, 1.72% Pb, 4.10% Zn, 63.4 g/t Ag, and 0.27 g/t Au). The Ore Clast horizon appears to be thickening to the west where it may hold potential for discovery of new mineralized zones composed of "breccia" or "transported" styles of mineralization. These styles of mineralization account for approximately 52% of this area's historic production. This horizon of mineralization is interpreted to be sub-horizontal and true thicknesses of the two referenced drill hole intercepts are approximately 90% of respective core lengths (0.45 m for hole H-15-3493 and 0.90 m for hole H-15-3497).

In 2016-17, Buchans continued its core relogging program to further assess exploration potential. Initial relogging of historic drill holes focused on the immediate Lundberg Deposit area, and then stepped out to several of the historic orebodies and undeveloped prospects. The latter areas were assessed in this way as potential target areas where additional exploration may discover additional mineralization that might complement Lundberg Deposit development, or perhaps be developed as additional stand-alone deposits of high-grade Buchans-style mineralization. As of 2017, BMC relogging initiative has included approximately 420 historic holes within the Lundberg Deposit area. Significant portions of this work have been entered into a digital drilling database for the project. Hardcopy interpreted paper sections have been compiled in each of the areas and used to refine the current geological interpretation (map) for the Property. Mercator has adapted scanned sections for the Lundberg Deposit area for incorporation into use for Mineral Resource estimation.

In August 2017, as part of a Scheme of Arrangement whereby Minco was acquired by Dalradian Resources Inc., Minco completed a demerger and spin-out of certain of its assets to its shareholders and all of the shares of its then wholly owned subsidiary BRL were distributed to the former shareholders of Minco. BMC remains a wholly owned subsidiary of BRL. There was no change in ownership under the 2017 Arrangement as the ultimate beneficial shareholders remained the same.

#### 6.2.10 2018 to 2020 Buchans Mineral Corporation

Drilling was undertaken on the Property, including the Lundberg Deposit area, over the period of June to December 2018 and included completion of 28 new holes (5,111 m), as well as cleaning out of several holes for borehole geophysical surveys. The program was completed under contract to ICM Petro Drilling Ltd. ("Petro") of Springdale, NL, who cored NQ core using up to 3 drill rigs and support equipment including Atlas Copco B20, Atlas Copco S2, and Duralite T800 drill rigs supported by a 315c Cat excavator and a D5 Cat bulldozer. The program was managed by BMC staff with support from professional consultant geologist, James Harris, P.Geo., and further supported by locally hired technicians. All hole collars, except H-18-3526, were surveyed using DGPS by Red Indian Surveys who recorded collar locations in NAD 83 coordinates, as well as collar elevations relative to mean sea-level. Hole H-18-3526, being the last hole of the program, and located outside of the perceived Lundberg Zone, had its collar location established using hand-held GPS (+/- 8 m accuracy) and will be surveyed by DGPS in the future. Down-hole orientation tests were recorded by Petro at a nominal spacing of 50 m using a Flexit test system. All core was handled exclusively by Petro and BMC personnel and contractors, with chain of custody maintained throughout the program, including delivery of assay samples to Eastern in Springdale, NL.

All core handling, sampling and sample handling procedures were undertaken in line with BMC's previous QAQC protocols; however were modified and enhanced as field duplicates were added to the QAQC procedure (one sawed quarter core sample every 20 samples), while Ore Grade check assays were also completed by ALS on a select number of samples. The 2018 QAQC program is further described in Section 11. Drill core recovery for the program was excellent.

An additional 17 holes (2,205 m) were drilled at the Lundberg Deposit as in-fill and step-out holes in preparation for the February 28th, 2019 MRE as well as 3 holes (1,122 m) drilled immediately north of the Lundberg Deposit to explore for extensions to the Lucky Strike deposit within the Lucky Strike North (Two Level) target area (holes H-18-3523-3524-3526). Summary details for the 2018 Lundberg area drill holes (including Lucky Strike North Target holes H-18-3523, -3524, & -3526) are provided in Table 6-5. Summary results for the 2018 program are provided in Table 6-6.

**Table 6-5: Summary of Drill Holes Completed in the Lundberg Area in 2018**

| Hole | UTM m E | UTM m N | Elev.(m) | Dip° | Azim.° | Length (m) |
|---|---|---|---|---|---|---|
| H-18-3500 | 509682.673 | 5407824.873 | 291.2 | -58 | 90 | 152 |
| H-18-3501 | 510193.296 | 5408000.695 | 286.8 | -90 | | 149 |
| H-18-3502 | 510196.391 | 5407921.898 | 286.1 | -90 | | 75 |
| H-18-3503 | 510199.351 | 5407876.475 | 286.3 | -90 | | 52 |
| H-18-3504 | 510185.892 | 5407835.811 | 285.5 | -90 | | 53 |
| H-18-3505 | 509766.81 | 5407936.745 | 292.6 | -90 | | 248 |
| H-18-3506 | 509840.353 | 5407691.548 | 291.1 | -45 | | 182 |
| H-18-3507 | 510153.835 | 5407509.254 | 281.7 | -90 | | 50 |
| H-18-3514 | 510174.358 | 5408041.495 | 287.0 | -90 | | 173 |
| H-18-3515 | 509837.037 | 5407960.316 | 292.1 | -84 | 180 | 251 |
| H-18-3516B | 509834.756 | 5407959.718 | 292.2 | -45 | 180 | 114.9 |
| H-18-3517 | 509886.57 | 5407965.078 | 291.1 | -45 | 180 | 55 |
| H-18-3518 | 509886.555 | 5407965.52 | 291.4 | -48 | 180 | 134 |
| H-18-3519 | 510140.453 | 5408033.671 | 287.5 | -90 | | 176 |
| H-18-3520 | 510153.809 | 5408078.57 | 287.2 | -90 | | 143 |
| H-18-3521 | 510186.016 | 5408086.184 | 286.4 | -90 | | 192.8 |
| H-18-3523 | 509646.507 | 5408164.796 | 292.1 | -90 | | 430 |
| H-18-3524 | 509575.857 | 5408146.203 | 289.4 | -90 | | 392 |
| H-18-3526** | 510125 | 5408175 | 285 | -90 | | 300 |

** NAD83, Zone 21 UTM coordinates, elevations relative to mean sea-level (** hole not surveyed by DGPS).*

**Table 6-6: Summary of results for the 2018 drill program**

| Hole | From (m) | To (m) | Length (m)* | Zn (%) | Cu (%) | Pb (%) | Ag (g/t) | Au (g/t) |
|---|---|---|---|---|---|---|---|---|
| H-18-3522 | 564.70 | 565.00 | 0.30 | 0.16 | 0.00 | 0.07 | 162.80 | 0.05 |
| H-18-3523 | No significant mineralization | | | | | | | |
| H-18-3524 | 244.50 | 246.30 | 1.80 | 5.57 | 0.76 | 3.15 | 90.53 | 0.37 |
| H-18-3514 | 50.00 | 60.00 | 10.00 | 0.55 | 0.31 | 0.15 | 1.52 | 0.05 |
| H-18-3514 | 69.00 | 81.00 | 12.00 | 0.81 | 0.11 | 0.16 | 1.53 | 0.03 |
| H-18-3515 | 51.00 | 74.80 | 23.80 | 5.75 | 0.35 | 3.01 | 94.04 | 1.00 |
| H-18-3515 | 115.00 | 179.00 | 64.00 | 0.63 | 0.34 | 0.28 | 2.19 | 0.02 |
| H-18-3516b | 56.55 | 61.35 | 4.80 | 9.98 | 0.50 | 5.01 | 149.06 | 0.69 |
| H-18-3516b | 66.30 | 101.00 | 34.70 | 2.84 | 0.62 | 1.08 | 7.31 | 0.13 |
| H-18-3516b | 78.00 | 101.00 | 23.00 | 3.91 | 0.85 | 1.42 | 7.59 | 0.16 |
| H-18-3516b | 95.00 | 98.00 | 3.00 | 9.17 | 0.88 | 4.65 | 11.87 | 0.13 |
| H-18-3517 | abandoned | | | | | | | |
| H-18-3518 | 25.50 | 26.00 | 0.50 | 3.41 | 0.12 | 1.69 | 7.70 | 0.13 |
| H-18-3518 | 65.30 | 101.00 | 35.70 | 1.34 | 0.53 | 0.71 | 11.54 | 0.07 |
| H-18-3518 | 107.00 | 111.00 | 4.00 | 0.49 | 1.37 | 0.15 | 3.70 | 0.10 |
| H-18-3518 | 117.00 | 120.00 | 3.00 | 1.41 | 0.68 | 0.56 | 3.13 | 0.03 |
| H-18-3519 | 57.00 | 86.00 | 29.00 | 1.15 | 0.14 | 0.57 | 2.12 | 0.04 |
| H-18-3519 | 117.00 | 121.00 | 4.00 | 1.37 | 0.09 | 0.48 | 1.88 | 0.03 |
| H-18-3520 | 58.70 | 59.20 | 0.50 | 3.63 | 0.31 | 2.94 | 16.30 | 0.03 |
| H-18-3520 | 73.00 | 79.00 | 6.00 | 0.72 | 0.04 | 0.47 | 1.75 | 0.03 |
| H-18-3521 | 107.40 | 107.90 | 0.50 | 1.92 | 0.15 | 1.47 | 0.90 | 0.02 |
| H-18-3521 | 170.40 | 170.90 | 0.50 | 1.79 | 0.03 | 0.85 | 82.30 | 0.79 |
| H-18-3506 | 81.85 | 81.95 | 0.10 | 8.50 | 5.53 | 22.50 | 83.30 | 0.02 |
| H-18-3507 | 21.20 | 22.00 | 0.80 | 0.12 | 1.49 | 0.09 | 7.50 | 0.15 |
| H-18-3508 | 20.60 | 29.00 | 8.40 | 1.40 | 0.19 | 0.90 | 82.01 | 0.59 |
| H-18-3509 | 22.00 | 27.60 | 5.60 | 1.39 | 0.06 | 0.85 | 41.57 | 0.41 |
| H-18-3510 | no significant mineralization | | | | | | | |
| H-18-3511 | 31.70 | 35.00 | 3.30 | 2.80 | 0.27 | 0.48 | 7.59 | 0.12 |
| H-18-3512 | 39.00 | 43.50 | 4.50 | 1.03 | 0.04 | 0.46 | 10.34 | 0.09 |
| H-18-3513 | 306.00 | 321.00 | 15.00 | 2.74 | 0.36 | 0.87 | 22.25 | 0.15 |
| H-18-3513 | 350.00 | 353.10 | 3.10 | 4.19 | 0.22 | 1.99 | 52.04 | 0.25 |
| H-18-3500 | 43.60 | 44.60 | 1.00 | 13.50 | 0.59 | 7.90 | 109.90 | 1.93 |
| H-18-3500 | 44.60 | 46.50 | 1.90 | mine workings - void | | | | |
| H-18-3500 | 46.50 | 48.30 | 1.80 | 16.30 | 4.29 | 11.62 | 85.37 | 1.39 |
| H-18-3500 | 58.10 | 59.10 | 1.00 | 0.23 | 1.23 | 0.24 | 47.50 | 0.94 |
| H-18-3501 | 22.10 | 23.00 | 0.90 | 1.86 | 0.26 | 0.37 | 4.10 | 0.07 |
| H-18-3501 | 52.00 | 80.00 | 28.00 | 1.47 | 0.34 | 0.83 | 3.00 | 0.05 |
| H-18-3502 | 22.00 | 43.00 | 21.00 | 0.08 | 0.06 | 0.04 | 0.77 | 0.02 |

| Hole | From (m) | To (m) | Length (m)* | Zn (%) | Cu (%) | Pb (%) | Ag (g/t) | Au (g/t) |
|---|---|---|---|---|---|---|---|---|
| H-18-3503 | 23.00 | 50.00 | 27.00 | 0.27 | 0.09 | 0.12 | 0.75 | 0.03 |
| H-18-3504 | 17.30 | 36.00 | 18.70 | 0.49 | 0.05 | 0.16 | 0.95 | 0.04 |
| H-18-3505 | 68.00 | 220.00 | 152.00 | 1.50 | 0.27 | 0.71 | 4.20 | 0.05 |

** Core length - True widths are estimated as being 80% to 100% of core length*

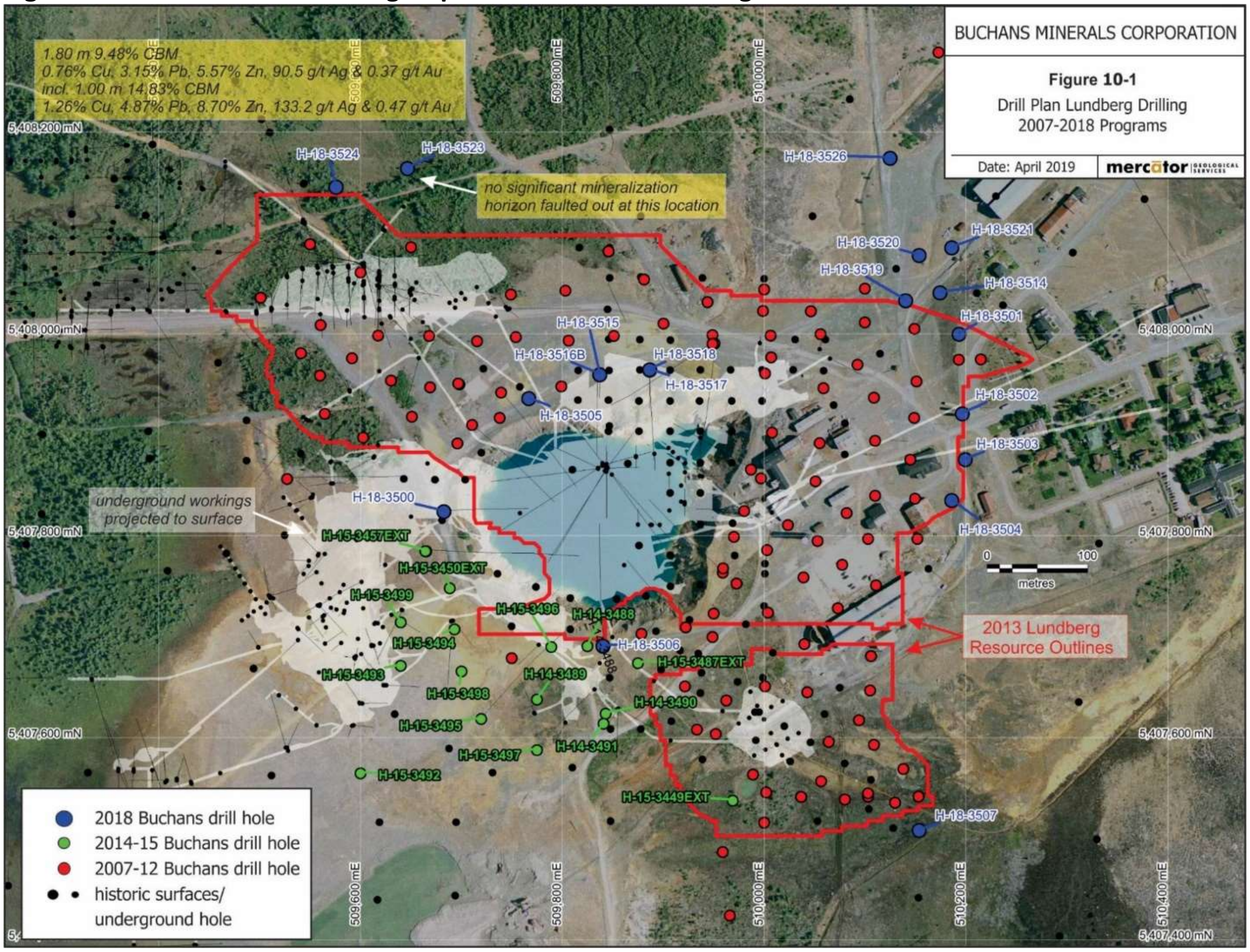
Results from the 2018 drilling provide further support for the definition of Mineral Resources. This drilling also identified additional higher-grade mineralization located immediately above the stockwork zone as remnant high-grade mineralization left behind by historical mining of the former Lucky Strike massive sulphide deposit. Intersections of remnant Lucky Strike mineralization included hole H-18-3515 that intersected what was formerly called the North Orebody (historical nomenclature) zone as high-grade massive sulphides, including an intercept of 8.0 m averaging 0.69% Cu, 6.81% Pb, 12.88% Zn, 159.94 g/t Ag and 1.254 g/t Au; as well as hole H-18-3516b that intersected 4.80 m of 0.50% Cu, 5.01% Pb, 9.98% Zn, 149.06 g/t Ag and 0.686 g/t Au. Other highlight intersections of remnant high-grade massive sulphides of the former Lucky Strike orebody include 1.0 m of 0.59% Cu, 7.90% Pb, 13.50% Zn, 109.9 g/t Ag & 1.93 g/t Au and 1.8 m of 4.29% Cu, 11.62% Pb, 16.30% Zn, 85.4 g/t Ag & 1.39 g/t Au in hole H-18-3500. The zone of mineralization is interpreted to have a shallow dip to the north and the Lucky Strike mineralization is interpreted to be sub-horizontal. Estimated true thicknesses are approximately 80 to 100% of the intersected core lengths.

Drilling on the northeast margin of the Lundberg Zone extended stockwork mineralization to the northeast, including intersections of 28.0 m of 0.34% Cu, 0.83% Pb, 1.47% Zn, 3.0 g/t Ag & 0.05 g/t Au in hole H-18-3501, and 29.0 m of 0.14% Cu, 0.57% Pb, 1.15% Zn, 2.12 g/t Ag & 0.043 g/t Au hole H-18-3519. Drilling within the north-central part of the Lundberg Deposit also returned positive results, as hole H-18-3505 intersected 152 m of stockwork mineralization averaging 0.27% Cu, 0.71% Pb, 1.50% Zn, 4.20 g/t Ag & 0.05 g/t Au. Other positive confirmatory results from the central portion of the Lundberg stockwork zone include hole H-18-3518 that intersected 35.7 m of 0.53% Cu, 0.71% Pb, 1.34% Zn, 11.54 g/t Ag, and 0.065 g/t Au. The Lundberg Zone stockwork mineralization has a moderate plunge to the northwest and estimated true thicknesses are approximately 80 to 100% of the core length.

In addition to the 2018 Lundberg Zone holes, exploration drill holes H-18-3523 and -3524, drilled within the Lucky Strike North target area (Two Level area) returned favorable results as hole H-18-3524 intersected 1.8 m of 0.76% Cu, 3.15% Pb, 5.57% Zn, 90.5 g/t Ag and 0.37 g/t Au, including 1.0 m assaying 1.26% Cu, 4.87% Pb, 8.70% Zn, 133.2 g/t Ag and 0.47 g/t Au. This hole, drilled near the end of the 2018 program, extends mineralization 70 m north of historic underground workings at the Two Level deposit and indicate that the deposit extends northwards. Potential remains in this area to identify additional higher-grade mineralization. This mineralized zone is interpreted to be shallowly dipping to the north and its true thickness is estimated to be 80-100% of reported widths.

Drilling completed on the Lundberg Deposit between the period of 2007 through 2018 is presented in Figure 6-4.

**Figure 6-4: Drill Plan of Lundberg Deposit 2007-2018 Drill Programs***




** "CBM" refers to combined weight percent base metals (Cu % + Pb % + Zn %)*

Work completed in 2019 including additional relogging of archived drill core, continuing with the initiative that began in 2014. As of 2020, BMC relogged more than 680 holes totalling more than 134,000 m of drill core. Relogging undertaken in 2019 focused on historic drill holes from the Sandfill and Middle Branch prospect areas.

In 2019 Buchans expanded its land position surrounding the Lundberg Deposit through the acquisition of Mineral Claims (Licence 22214M) covering the former MacLean mine (Section 4.3; Stockley Purchase Agreement) and staking of the Wiley Claims (Licence 27276M). The MacLean mine claims are comprised of six Mineral Claims covering 1.5 km$^2$, 2 km northwest of the Lundberg Deposit. The claims include the past producing MacLean mine where ASARCO is reported to have mined approximately 3.6 million tonnes of ore grading 1.1% Cu, 7.5% Pb, 13.5% Zn, 118 g/t Ag & 0.9 g/t Au from 1959 until mine closure in 1984 (Kirkham, 1987). The claims cover the inferred strike extension of favourable geology extending westward from exploration drilling completed by BMC on its adjoining claims in 2018. This drilling includes hole H-18-3524 that intersected 1.0 m assaying 14.83% combined base metals, including 8.70% Zn, 4.87% Pb, 1.26% Cu, 133.2 g/t Ag and 0.47 g/t Au, beginning at a downhole depth of 244.5 m (Moore and Butler, 2019). The 10.5 $km^2$ Wiley Claims cover under-explored favourable stratigraphy located approximately 4 km southwest of the Lundberg Deposit.

Mercator prepared a new updated pit-constrained MRE for the Lundberg Deposit (effective date February 28, 2019) on behalf of BMC (Harrington et al., 2019; report dated April 15, 2019). The MRE incorporated information and data acquired by BMC's 2018 diamond drilling program and applied an optimized pit shell to define reasonable prospects for eventual economic extraction by open pit mining methods. The February 28, 2019 MRE is made current for Canterra on the basis that the MRE methodology and reasonable prospects for eventual economic extraction used to define Mineral Resources are determined to still be valid and that no new exploration has been completed that would materially impact the MRE. Details of the February 28, 2019 MRE are presented in Section 14.

In November of 2019, following after recommendations made in the 2019 Technical Report, Stantec Consulting Ltd. completed a conceptual (order of magnitude) study of the Lundberg Deposit evaluating various development, mining and processing options and scenarios for possible open pit development including reviewing tailings disposal and shipping port options (McKeen, 2019). The study incorporated updated parameters determined by BMC's continued technical assessments of the Lundberg Deposit since completion of the historical PEA in 2011. These parameters included prevailing metal pricing forecasts and currency exchange rates, revised metallurgical assumptions determined by bench-scale metallurgical test work completed by BMC in 2017, as well as additional inputs relating to capital and operating costs as well as other operational considerations. The study was prepared as a high-level options assessment for internal use by BMC to assist with planning future work and included considerations that may be addressed by future assessments of the deposit's economic potential. Recommendations from the study included that locked cycle testing of the proposed sequential flotation flowsheet be undertaken to confirm closed-circuit concentrate grades and recoveries and that additional test work be undertaken to assess potential to improve copper recovery without impacting zinc recovery. Other recommendations included further evaluation of possible ore stockpiling strategies and tailings management options [BMC news release dated November 12, 2019]. The conceptual study was prepared for BMC and is now historical in nature and should no longer be considered relevant or reliable.

In 2020 BMC suspended field work due to the Covid 19 pandemic, however expanded the Property by staking 6 additional Mineral Claims to the southwest (Licence 31345M; see Figure 4.2**)**.

#### 6.2.11 2021 to 2023 Buchans Mineral Corporation

On January 5, 2021, BRL announced BMC (a wholly-owned subsidiary of BRL) having entered into a Collaboration Agreement with Boliden, a leading European mining and metals producer in zinc, copper, lead and nickel, granting Boliden rights to undertake an evaluation of the Property for possible future investment and participation. Under this agreement Boliden expended approximately $635,000 on the Property in 2021 to conduct a variety of exploration initiatives including compilation of previous exploration data, relogging of select archived drill core, reviews of archived geophysical datasets, and initial construction of a Property scale digital 3D geological model. Meant to have concluded by the end of 2021, the Agreement was extended by subsequent amendments granting Boliden additional time to negotiate terms for option and joint ventures agreements and complete its due diligence. Under the amendments, Boliden approved a CDN $2,000,000 Budget and Program for 2022, including a minimal expenditure of CDN $320,000 to maintain the project while the balance of the Budget and Program remained contingent on Boliden and BMC entering into an Earn in/ Option agreement and agreeing on terms for a Joint Venture to be formed upon Boliden earning an initial interest in the Property [BRL news release dated August 25, 2022].

On September 30, 2022, BRL announced termination of Collaboration Agreement, citing that the parties were unable to reach agreement on terms for a Joint Venture to be formed upon Boliden earning an initial interest in the Property. BRL cited the unresolved terms as having been specifically related to future financing of any mine that might be developed on the Property, terms of any off-take rights, and residual interests to be retained by a non-participating and diluting party. As a result of the termination, Boliden retains no interest or rights to the Property whatsoever [BRL news release dated September 30, 2022].

During the Collaboration Boliden invested approximately CDN $1.1 million on the Property and undertook considerable technical reviews. With respect to negotiations, the parties were able to reach agreement on terms of an Earn in/ Option agreement, namely the cumulative optional expenditure of CDN $8.6 million by Boliden over four years to earn a 51% interest, excluding the area of the Lundberg deposit. The Earn in/ Option agreement also included an option for Boliden to increase its interest to 75% by incurring further expenditures of CDN $10 million over an additional three years, for a cumulative expenditure of CDN $18.6 million [BRL news release dated September 30, 2022].

As a result of the Collaboration with Boliden, advances were made at the Property on several fronts. Technical work was primarily focused on investigations of the Property's volcanic stratigraphy, reprocessing and modeling of historic geophysical data and undertaking a variety of geological investigations including creation of a digital 3D geological model. Among the outcomes of this work were the recognition of more technologically advanced and potentially more effective exploration methods including geophysical applications and modern volcanological and geochemical concepts. Together, these initiatives were determined to be capable of generating new exploration targets for discovery of buried high-grade mineralization and identified target areas. Several of these targes were conditionally approved for drill testing in 2022 should the parties have successfully entered into Earn in/ Option and Joint Venture agreement.

Subsequent to termination of the Boliden Collaboration (September 30, 2022) and prior to BMC vending the Property to Canterra (December 20, 2023), BMC continued with its program of relogging archived drill core and concluded its volcanological/lithogeochemical study of the project. These initiatives followed on from recommendations made within the Budget and Program compiled by BMC and Boliden prior to the termination of the Collaboration. BMC also expanded the Property to its current size (8,320 ha: 83.25 $km^2$) by staking additional Mineral Claims south of the Lundberg Deposit, including Mineral Licences 35054M (22 claims) and 35995M (10 claims; Figure 4-2).

Relogging undertaken up to the end of 2023 increased the total metreage of core relogged since BMC initiated its systematic relogging program in 2013 to more than 190,000 m of core from 935 drill holes. This program largely focused on the Property's main deposits and undeveloped prospects. Also initiated under the Collaboration Agreement between BMC and Boliden in 2022, the volcanological/lithogeochemical study was completed in 2023 during which BMC technical staff collaborated with leading geological consultant and volcanologist, Rodney Allen, PhD, who led the study. The latter entailed graphical relogging of 11,953 m of archived drill core from 35 drill holes and collection and interpretation of approximately 154 high-precision whole rock lithogeochemical analyses. This study characterized the host volcanic units and the attendant alteration associated with several of the past producing orebodies and undeveloped prospects. The study also differentiated lithogeochemical signatures associated with the camp's footwall, hanging wall and host stratigraphy. While Canterra intends to further apply results obtained from this study in future exploration; this work has not impacted the interpretation supporting the February 28$^{th}$, 2019 MRE.

# 7.0 GEOLOGICAL SETTING AND MINERALIZATION

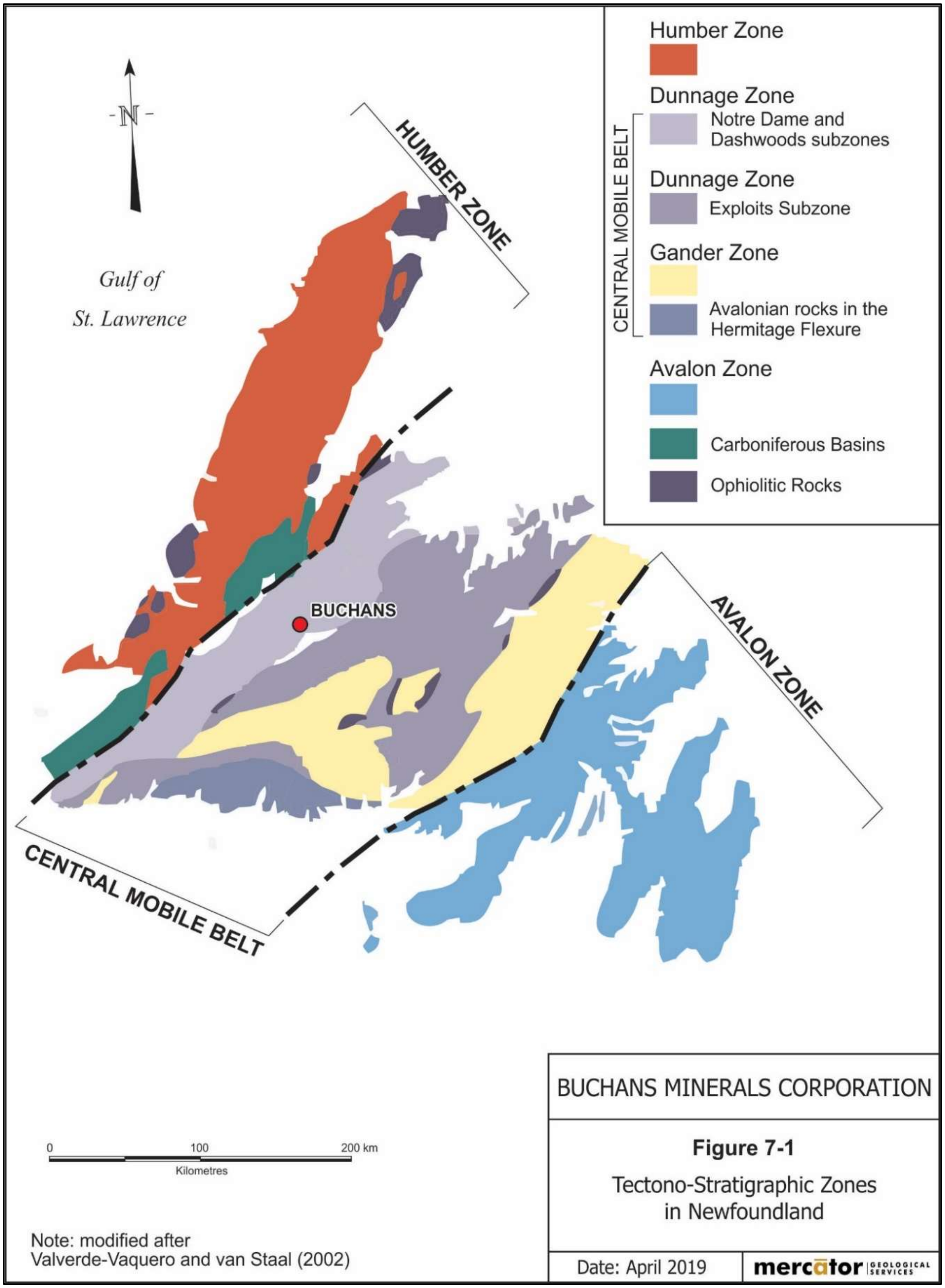
## 7.1 Regional Geology

NL is comprised of several tectono-stratigraphic zones which include from north to south, the Humber Zone, Dunnage and Gander Zones of the NE-SW trending CMB, and the Avalon Zone (Figure 7-1). The Property lies within the Dunnage Zone.

The Dunnage Zone represents volcanic vestiges of Cambro-Ordovician continental and intra-oceanic crust, back-arc basins, and ophiolites that formed in the Iapetus Ocean (Williams, 1979; Kean et al., 1981; Swinden, 1990, Williams 1995). The Zone is divided by an extensive fault system (the Red Indian Line) into a western peri-Laurentian segment (Notre Dame and Dashwoods Subzones), and an eastern peri-Gondwanan segment (Exploits Subzone) (Figure 7-1). In the immediate Property area, the Red Indian Line separates the Notre Dame Subzone (Buchans Group), which formed on the Laurentian or North American side of the Iapetus Ocean, from the Exploits Subzone (Victoria Lake Supergroup), which formed on the Gondwanan side of Iapetus.

Deformation associated with the final closure of Iapetus culminated during the Late Silurian, at which time thrusting and folding juxtaposed these initially geographically distinct geologic Groups and their associated volcanic belts (Colman-Sadd et al., 1992). The two main Subzones of the Dunnage Zone (i.e., Notre Dame and Exploits Subzones) have been conclusively differentiated based on stratigraphic, structural, faunal, and isotopic characteristics (Williams et al., 1988).

**Figure 7-1: Tectonostratigraphic Zones, Newfoundland**



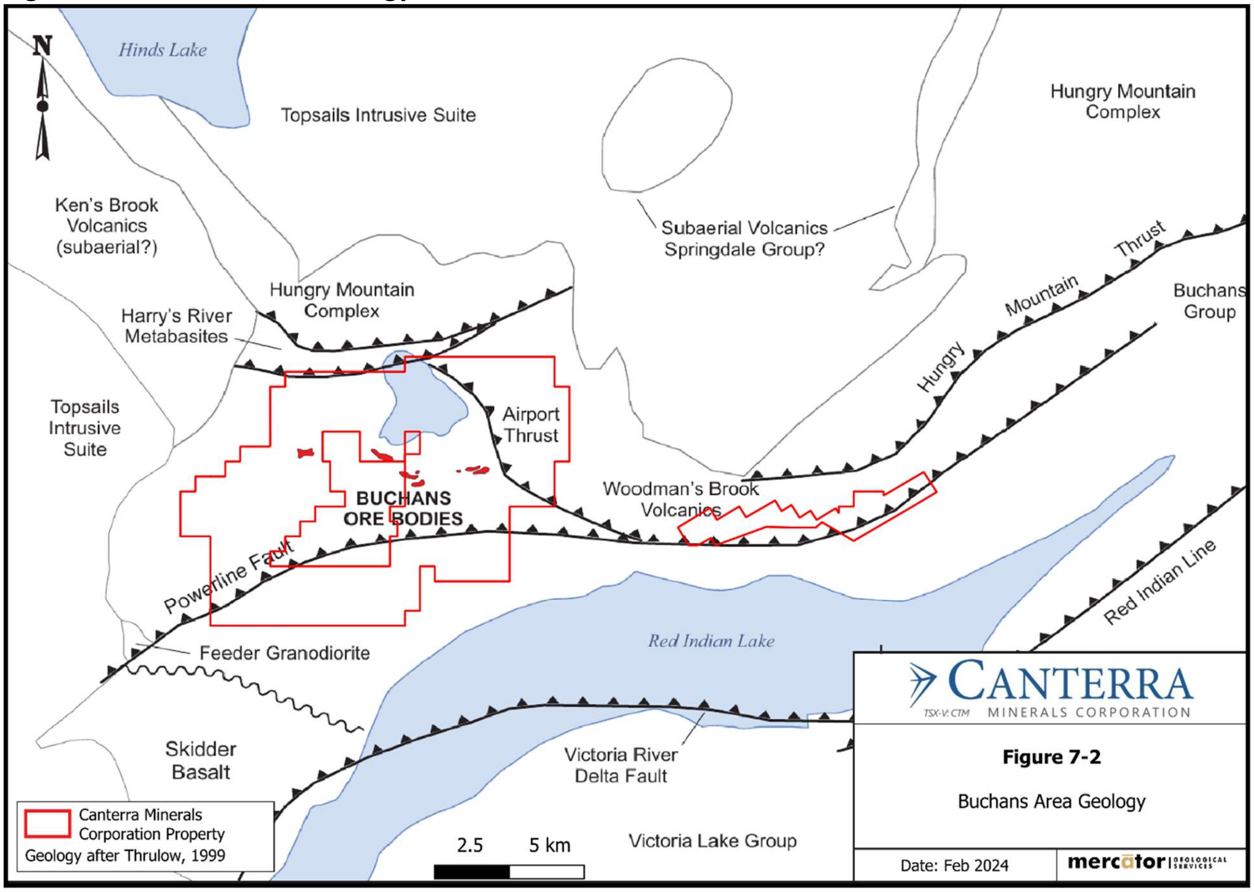
### 7.2 Property Geology

The Property is primarily underlain by subaqueous volcanic and volcano-sedimentary rocks of the Buchans Group of the Norte Dame Subzone and may be correlative with the Roberts Arm Group of Notre Dame Bay area to the north (Thurlow and Swanson, 1981). Volcanic rocks within this Group range in composition from basalt to rhyolite with a generally increasing proportion of felsic rocks with stratigraphic height (Thurlow and Swanson, 1981). This variation from mafic to felsic volcanism is repeated several times within the Buchans Group and repetition was originally interpreted as repeating volcanic cycles (Thurlow et al., 1975). A revised and more generally accepted geological interpretation explains this repetition as being largely attributable to thrusting (Thurlow and Swanson, 1981).

The five main ore bodies historically mined at Buchans are thought to occur within a single felsic stratigraphic horizon within the Buchans Group. The Buchans Group lies structurally above the ophiolitic Skidder Basalt in the southwest, and the Victoria Lake Supergroup of Cambro-Ordovician origin to the southeast (Thurlow and Swanson, 1981) (Figure 7-2). The Feeder Granodiorite is an intrusive body interpreted to represent part of the subvolcanic magma chamber which fed the Buchans Group in some areas (Thurlow and Swanson, 1987). Geochemical evidence suggests the Feeder Granodiorite is the source of granitic boulders found within the breccia-conglomerate deposits within the transported ores at Buchans (Thurlow and Swanson, 1981).

Poly-deformed intrusive rocks of the Cambro-Ordovician Hungry Mountain complex are thrust over the Buchans Group in the north and are intruded by the Devonian Topsails Granite in the northeast. In the northwest, Silurian subaerial volcanics unconformably overlie the Buchans Group and Carboniferous red beds overlie the Buchans Group in the Red Indian Lake basin. The Ken's Brook Volcanics are also thought to overlie the Buchans Group, but this relationship is not clearly understood (Thurlow and Swanson, 1987 and Thurlow, 1999). Rocks of the Harry's River Metabasites have recently been reinterpreted as ophiolitic rocks of the more widespread Lloyds River ophiolite complex (Zagorevski et al., 2007) and have no stratigraphic linkage with the Buchans Group (Zagorevski et al., 2015). The rocks in the Buchans area are metamorphosed to low-grade prehnite-pumpellyite facies and were originally determined to have an age of 473 +/- 2Ma derived from U-Pb zircon age dating of Buchans Group rhyolite (Dunning et al., 1987). Subsequent age dating by the Geological Survey of Canada suggested the Buchans rocks to have ages closer to 462±3 Ma and 465±3 Ma (Zagorevski and Rogers, 2008; Zagorevski et al., 2007; Whalen et al., 2013; Zagorevski et al., 2015) based on U-PB zircon (SHRIMP – sensitive high mass-resolution ion microprobe) dating conducted on rhyolites near the former Oriental mine. More recent age dating by Sparkes et al., (2021) derived from reanalysis of archived material from a felsic volcanic unit underlying mineralization at the past producing MacLean deposit (located in the Buchans area) has provided a new age of 471 +/- 1.6 Ma using TIMS (thermal ionisation mass spectrometry).

**Figure 7-2: Buchans Area Geology**




## 7.3 Stratigraphy and Rock Types

As mentioned above, the five main ore bodies historically mined at Buchans are thought to occur within a single felsic stratigraphic horizon within the Buchan Group, but recognition of this stratigraphy on a regional basis is difficult. Thurlow et al. (1975) noted that the mafic to felsic volcanism was repeated several times within the Buchans Group and initially explained this as cyclical re-occurrence.

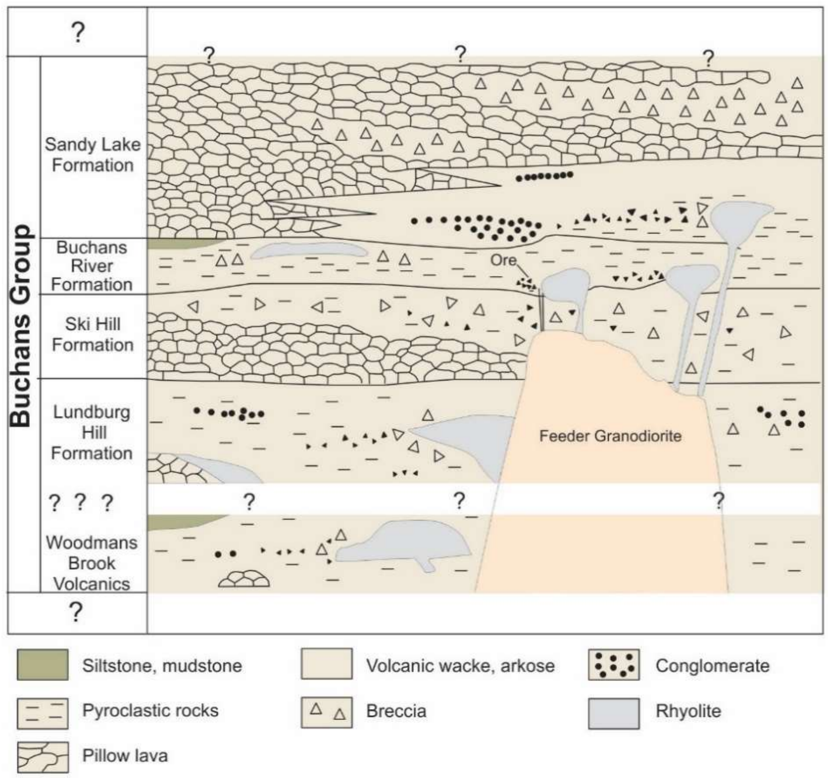
Subsequent studies completed following the closure of mining operations in 1984 resulted in recognition of regional thrusting and structural repetition of geology, resulting in re-interpretation of Buchans Group stratigraphy (Thurlow and Swanson, 1987). The stratigraphic re-interpretation of the Buchans Group was largely based on the relationship of fault bound mineralized blocks and led to the establishment of four sub-units or formations within the Buchan Group. These are felsic and mafic volcanic sequences identified as the Lundberg Hill, Ski Hill, Buchans River, and Sandy Lake formations, in addition to the Feeder Granodiorite, as well as an unresolved unit named the Woodman's Brook Volcanics (Thurlow, 1999) (Figure 7-3).

More recent geological interpretations for the Buchans Camp rocks have attempted to re-assign the geology in and around Buchans within a revised tectono-stratigraphic framework based on trace element geochemical and age-dating studies (e.g., Zagorevski et al., 2015). While potentially significant with respect to regional correlation of mineralized host stratigraphy of the Buchans Group, this re-interpretation has limited bearing where more detailed work has assigned the geology to the Buchans Group and its formations as proposed by Thurlow et al., (1987), particularly the Lundberg Hill, Ski Hill, Buchans River and Sandy Lake formations, as well as the still poorly constrained Woodman's Brook Volcanics that have been tentatively assigned by Zagorevski et al., 2015, to the slightly younger (ca 461 Ma+/- 4 Ma) proposed Mary March Brook Group. The latter interpretation being largely based upon these rocks possessing predominantly tholeiitic chemistries compared to the predominantly calc-alkalic compositions observed within the Buchans Group.

The lowermost unit of the Buchans Group is the Lundberg Hill Formation, which is characterized by felsic pyroclastic rocks, coarse pyroclastic breccia, rhyolite, tuffaceous wacke, siltstone, and lesser basalt with minor chert and magnetic iron-formations. The Lundberg Hill Formation has a maximum thickness which ranges from 200 to 1000 m (Thurlow and Swanson, 1987). The Lundberg Hill Formation is conformably overlain by the Ski Hill Formation which is dominantly composed of dark green mafic pillow lavas, breccias and pyroclastic rocks (Thurlow and Swanson, 1987).

The Buchans River Formation hosts the historic ore deposits mined at the Lucky Strike, Engine House, Oriental, Rothermere and MacLean mines and is comprised of felsic tuff, rhyolite breccia, pyritic siltstone, wacke, polylithic breccia-conglomerate and granite boulder conglomerate, plus both in situ and transported sulphide zones. This formation ranges from 200-400 m in thickness in the mines area and smaller amounts of the formation are found locally throughout the Buchans area (Thurlow and Swanson, 1987) (Figure 7-3).

**Figure 7-3: Stratigraphic Column for Buchans Group**




**Stratigraphy of the Buchans Group**

| Formation | Maximum Thickness in Orientall Block | Maximum Thickness | Lithologies |
|---|---|---|---|
| Sandy Lake Formation | 200m | 2000m? | Basaltic pillow lava, pillow breccia intertonguing with coarse grained, redeposited clastic rocks of felsic volcanic derivation (arkosic conglomerate, arkose, wacke, siltstone). Local abundant tuff, breccia, polylithic pyroclastic breccia and tuffaceous sedimentary rocks. |
| Buchans River Formation | 200m | 400m? | Felsic tuff, rhyolite breccia, pyritic siltstone, wacke, polylithic breccia-conglomerate, granite boulder conglomerate, high-grade in situ and transported orebodies. |
| Ski Hill Formation | 1000m | 1000m? | Basaltic to andesite hyaloclastic breccia, pillow lava and massive flow with local polylithic breccia near the stratigraphic top. Minor felsic tuff. |
| Lundburg Hill Formation | 200m minimum | 1000m? | Felsic pyroclastic rocks, coarse pyroclastic breccia, rhyolite, tuffaceous wacke, siltstone, lesser basalt, minor chert and magnetic iron-formation |

Geology after Thurlow and Swanson, 1987

BUCHANS MINERALS CORPORATION

**Figure 7.3**

Generalized Stratigraphy of the Buchans Group

Date: April 2019 | mercator GEOLOGICAL SERVICES

### 7.4 Structural Geology and Metamorphism

The Buchans Group has been subjected to two major periods of deformation. The first was a Silurian episode of south-easterly-directed thrusting during which the Hungry Mountain Complex, which consists largely of pre-deformed granitoid rocks, was emplaced upon the Buchans Group. In addition, this period of thrusting caused repetition of units within the Buchans Group, including the possible repetition of an originally continuous sulphide bearing sequence that hosts the past-producing ore deposits. The second deformational event resulted in development of broad open folds during the Devonian, which show associated weak, northeast-trending axial planar cleavage in all rock types. A large northeast-trending syncline in the Buchans Group is related to this event (Thurlow, 1981).

### 7.5 Mineralization

#### 7.5.1 Buchans Area

Mineralization in the Buchans area is associated with the three main genetically related mineral deposit types: 1) massive in situ sulphide; 2) transported sulphide clasts; and 3) stockwork and stringer sulphides.

The Lucky Strike and Oriental #1 deposits are the best-known examples of the in situ sulphide style of mineralization, contain the highest metal grades mined in the Buchans area and occur on the Property (Thurlow and Swanson, 1981). Massive in situ sulphides exhibit various textures, but massive, fine-grained, streaky texture is most common and occurs in aggregates of sphalerite, galena, barite and lesser chalcopyrite. Thurlow et al. (1975) reported presence of trace amounts of enargite, native silver and argentite, ruby silver and gold tellurides, in addition to native silver and gold in this style of mineralization. Minor sulphides also include tetrahedrite-tenantite, chalcocite and bornite. Pyrite forms a relatively minor part of the massive sulphide assemblage but is more common in association with stockwork sulphides (Thurlow and Swanson, 1981). The paragenetic sequence of mineral deposition is complex and includes resorption, fracturing and re-deposition. Pyrite appears to be the first mineral deposited and sphalerite, chalcopyrite and galena are thought be deposited at the same time. However, chalcopyrite is also seen as blebs, lamellae and veins (Strong, 1981).

Transported mineralization occurs as elongate, tabular accumulations of discrete fragments of high-grade sulphides (Thurlow and Swanson, 1981). These deposits reflect transport by density flows that were controlled by paleo-topographic lows that extended down slope from in situ sulphide zones. The MacLean, Rothermere, Clementine and Oriental #2 deposits are examples of transported sulphide styles of mineralization. Together with the massive style, they represent 98% of the production from Buchans deposits. The transported mineralization occurs as mechanically transported sulphide breccia lenses composed of sulphide bearing fragments derived from in situ sulphide zones (Thurlow and Swanson, 1981). These deposits potentially demonstrate transport of as much as 2 km from source areas. Sulphide fragments range from angular to sub-rounded and display streaky textures, with sphalerite, galena, chalcopyrite and barite being the main minerals. Unlike the in situ sulphide ore deposits, these deposits have no associated stockwork zone. Stockwork mineralization is typically associated spatially with in situ sulphide zones and the best example on the Property is the Lundberg Zone.

Mineralization is also found in association with high-grade clasts noted from drilling within the Buchans area and their source is not clearly understood. Clasts range in size from grains and pebbles to 30 cm boulders of high-grade sulphide mineralization. The clasts contain galena, sphalerite, pyrite, chalcopyrite and gold and silver and are similar in metal grades to the in situ Buchans ores. They occur in polylithic conglomerates within the same stratigraphic horizon as the in situ ore but also at distances of up to 6.7 km away from any known in situ ore body (Thurlow and Swanson, 1981).

#### 7.5.1.1 Lundberg and Engine House Zones

The Lundberg Zone sits below the former Lucky Strike orebody and consists of sulphide veins and veinlets plus disseminated sulphide mineralization predominantly hosted by strongly altered felsic to intermediate volcanics and to a lesser extent footwall mafic volcanics correlated with the Ski Hill Formation (Moore et al., 2023). The stockwork mineralization comes to surface on the eastern edge of the zone and forms an elongate, wedge-shaped body that is 250 m deep on the western end. The highest concentration of sulphide mineralization lies in close proximity to the Lucky Strike massive sulphide zone and mineralization is more diffuse away from the zone. Unlike the in situ sulphides, fine- to coarse-grained euhedral pyrite is the dominate sulphide and occurs with varying amounts of chalcopyrite, sphalerite, galena and barite (Thurlow and Swanson, 1981). Current drilling has defined the Lundberg Zone stockwork to measure approximately 800 m in length, 400 m in width, and between a few metres to over 250 m in true thickness.

A second zone of stockwork mineralization is associated with the Engine House Zone, located immediately south of the Lucky Strike deposit, and this zone has a higher proportion of chalcopyrite. This stockwork mineralization comes to surface in the eastern edge of the zone and forms a tabular, sheet-like body that occurs at a depth of 125 m below surface at its western end. Current drilling has defined the Engine House Zone stockwork as measuring 300 m in length, 200 m in width and between a few metres and over 30 m in true thickness.

## 8.0 DEPOSIT TYPES

The Buchans area deposits and showings are classified as being of VMS association, primarily comprised of base-metal sulphides and barite and show strong similarities to the Kuroko style deposits of Japan (Thurlow, 1981).

The Buchans deposits include three distinct but genetically related deposit types, and occur as in situ sulphides, mechanically transported sulphides, and stockwork sulphides (Thurlow and Swanson, 1981). The high-grade in situ and transported styles were the focus of historic mining in the area and the stockwork style, associated with lower grade sulphide mineralization at the Lundberg Deposit, has been the focus of exploration programs by BMC.

The zoned massive sulphides of the in situ deposits are interpreted to have formed in close proximity to volcanic discharge zones. They consist of thick lenses of high-grade sulphide and form the largest deposits in the Buchans area. The in situ sulphides are overlain by a cap of massive barite that is characteristic of the historically mined Buchans deposits and may provide an important lithogeochemical exploration tool. The felsic volcanics also host lower grade, base metal enriched sulphide systems of hydrothermal alteration that manifest as stockwork mineralization (Thurlow et al., 1975).

The largest known concentration of stockwork and disseminated mineralization is the Lundberg Zone that underlies the Lucky Strike deposit. Stockwork mineralization consists of a network of sulphide veins and veinlets that cut strongly altered and sulphide-impregnated hosts rocks. The stockwork mineralization has a higher ratio of pyrite to base metal sulphides than the in situ sulphide zones and is typified by presence of fine- to coarse-grained pyrite with lesser amounts of chalcopyrite, sphalerite, galena and barite. This mineralization occurs within felsic volcanic rocks of the Buchans River Formation below the Lucky Strike deposit and extends well into the underlying Ski Hill Formation, where sulphide-bearing stockwork mineralization occurs at tens to hundreds of metres below the deposit (Jambor, 1987). In that instance, mineralization thins and feathers out into lower grade, semi-conformable zones of alteration (Moore, pers. com., 2013).

Transported sulphide deposits are coarser grained and are interpreted to be debris flows originating from the in situ deposits that have accumulated in paleo-channels and other downslope regions. The transported sulphide deposits at Buchans are elongate, tabular accumulations of high-grade massive sulphide fragments and lithic fragments that most commonly occur within paleo-topographic channels. Six of these channels, containing at least seven economic and sub-economic sulphide deposits have been recognized in the Buchans area including the former Two-Level/North orebody (Lucky Strike), Rothermere, Oriental #2, MacLean-MacLean Extension orebodies, as well as the undeveloped Clementine and Sandfill prospects.

Transported sulphide deposits are characterized by massive sulphide and lithic fragments in a matrix of finer grained material that is compositionally similar to the fragments. Clasts include various volcanic, sedimentary and plutonic lithologies, all of which are interpreted to have been locally derived. Granitoid fragments show an anomalous composition and a higher degree of rounding than other fragments and are interpreted based upon age dating as well as geochemical and isotopic evidence to represent exhumed and eroded felsic plutonic rocks related to the felsic volcanic host rocks to the Buchans deposits (Stewart, 1987; Whalen et al., 2013). Massive sulphides and barite occur both as clasts and matrix material (Thurlow, 2001).

## 9.0 EXPLORATION

Canterra has not completed any exploration programs since their acquisition of the Property.

## 10.0 DRILLING

Canterra has not completed any drilling programs since their acquisition of the Property. Diamond drilling completed on the Property by previous operators is summarized in Section 6.0, with pre-2014 programs addressed more extensively in previous Technical Reports by Webster and Barr (2008) and Cullen and Hilchey (2013) that were filed on SEDAR by BMC.

# 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

## 11.1 Introduction

Sample preparation, analysis, QAQC, and security aspects of programs prior to 2014 drilling, including BMC and earlier operators, were presented in previous Technical Reports prepared by Mercator for BMC and/or related firms (Webster and Barr, 2008, Cullen and Hilchey, 2013, Harrington and Cullen, 2020). These are filed on SEDAR and are publicly available. They show that various levels of documentation are available for the pre-2014 programs, with the most detailed information with respect to sample preparation, analysis and security being found in reporting prepared by BMC and related predecessors. After consideration of all factors, it was concluded that the major drilling programs reflected in the February 28th, 2019 MRE drilling database had been carried out under protocols consistent with industry standards of the respective times and to be of acceptable quality for use in a MRE prepared in accordance with NI 43-101. This assertion is accepted for current Technical Report purposes with respect to pre-2014 drilling programs. Procedures and protocols implemented by BMC and associated companies for pre-2014 programs are very similar to those for the post-2013 programs presented below.

## 11.2 Sampling Method and Approach

### 11.2.1 BMC 2014 - 2015

Core logging, sampling and QAQC programs were carried out by BMC personnel during the 2014-2015 exploration drilling programs under direction of Vice President of Exploration Paul Moore, P. Geo., and Exploration Manager, David Butler, P. Geo. All logging, sampling and sample shipment preparation activities were carried out under secure conditions at Buchans, core logging and storage facility in Buchans.

After mark-up by BMC geologists, core was sawn by BMC staff technicians to create half core samples, that were then given a unique sample number and recorded in the digital logging database. Samples consisted of halved NQ-size core (47.6 mm diameter core) with the remaining half of the core preserved in core boxes for future reference. In keeping with previous BMC QAQC protocols, samples were bagged, tagged, sealed and delivered directly to Eastern in Springdale, NL, by BMC personnel. Samples were typically selected to be 1 m in length, except where specific geologic parameters required a different interval be sampled. In addition to regular samples, blank samples (one per 20 samples) and CRMs (one per 20 samples) were also submitted for sample preparation and assay. Unlike previous (i.e., 2008 and 2012) and subsequent (2018) drilling programs, no field duplicates were collected or submitted for sample preparation and assay during the 2014 and 2015 drilling programs.

### 11.2.2 BMC - 2018

Core logging, sampling and QAQC programs were carried out by BMC personnel during the 2018 exploration drilling program under direction of Vice President of Exploration Paul Moore, P. Geo., Exploration Manager, David Butler, P. Geo., and consulting geologist James Harris, P. Geo., a member of

BMC exploration staff. All logging, sampling and sample shipment preparation activities were carried out under secure conditions at Buchans' core logging and storage facility in Buchans.

After mark-up by BMC geologists, core was sawn by BMC staff technicians to create half core samples, that were then given a unique sample number and recorded in the digital logging database. Samples consisted of halved NQ-size core (47.6 mm diameter core) with the remaining half of the core preserved in core boxes for future reference.

In keeping with previous BMC QAQC protocols applied to the 2008 and 2012 drilling programs, samples were bagged, tagged, sealed and delivered directly to Eastern in Springdale, NL, by BMC personnel. Samples were typically selected to be 1 m in length, except where specific geologic parameters required a different interval be sampled. In addition to regular samples, blank samples (one per 20 samples) and CRMs (one per 20 samples) were also submitted for sample preparation and assay. Field duplicates, consisting of quartered core were also collected once for every 20 samples and submitted for sample preparation and assay. Check sample splits for third party laboratory analysis were selected later, after receipt of initial analytical results.

### 11.3 Quality and Quality Control

#### 11.3.1 Introduction

The purpose of the QAQC programs implemented by BMC was to monitor accuracy and precision of analytical results and to detect instances of potential sample contamination. The QAQC program carried out during both the 2014-2015 and 2018 BMC exploration programs included blind insertion of blank and CRM samples. The program was expanded to include quarter core field duplicate samples in 2018.

#### 11.3.2 2014/2015 and 2018 CRM Program

Canadian Resource Laboratories of Delta, BC provided CRM samples for use in the 2014-2015 and 2018 drilling programs and these were selected by BMC on the basis of mineral composition and grade range. Materials CDN-HL-HZ, CDN-HZ-HZ-2, CDN-FCM-4, CDN-FCM-6, CDM-FCM-7, CDN-SE-01 CDN-ME-1402, CDN-MP-1b, were used and certified values for these appear in Table 11-1.

**Table 11-1: CRMs for 2014-2015 and 2018 Programs**

| Certified Material | Certified Mean Value ± 2 Standard Deviations | | | | |
|---|---|---|---|---|---|
| | Au g/t | Ag g/t | Cu % | Pb % | Zn % |
| CDN-FCM-4 | 0.97 ± 0.08 | 54.9 ± 6.4 | 0.702 ± 0.042 | 0.34 ± 0.028 | 1.28 ± 0.08 |
| CDN-FCM-6 | 2.15 ± 0.16 | 156.8 ± 7.9 | 1.251 ± 0.064 | 1.52 ± 0.06 | 9.27 ± 0.44 |
| CDN-FCM-7 | 0.896 ± 0.084 | 64.7 ± 4.1 | 0.526 ± 0.026 | 0.629 ± 0.042 | 3.85 ± 0.19 |
| CDN-HL-HZ | 1.31 ± 0.16 | 101.2 ± 10.8 | 0.76 ± 0.097 | 0.815 ± 0.06 | 7.66 ± 0.36 |
| CDN-HZ-HZ-2 | 0.124 ± 0.024 | 61.1 ± 4.1 | 1.36 ± 0.06 | 1.62 ± 0.11 | 7.2 ± 0.35 |
| CDN-SE-01 | 0.480 ± 0.034 | 712 ± 57 | 0.097 ± 0.005 | 1.92 ± 0.09 | 2.65 ± 0.20 |
| CDN-ME-1402 | 13.9 ± 0.8 | 131 ± 7 | 2.9 ± 0.16 | 2.48 ± 0.11 | 15.23 ± 0.67 |
| CDN-MP-1b | NA | 47 ± 7 | 3.069 ± 0.178 | 2.091 ± 0.144 | 16.67 ± 0.44 |

CRM samples were inserted blindly in the analytical core sample stream at every even 20$^{th}$ sample number and marked accordingly in the sample record book. Results returned for each were checked by BMC staff during the program to monitor trends on an on-going basis. Figures 11-1 through 11-5 present results for 101 samples submitted to Eastern for the 2014-2015 and 2018 drill programs. Results were aggregated for each metal, chronologically ordered, and then normalized by standard deviation and graphed for review purposes.

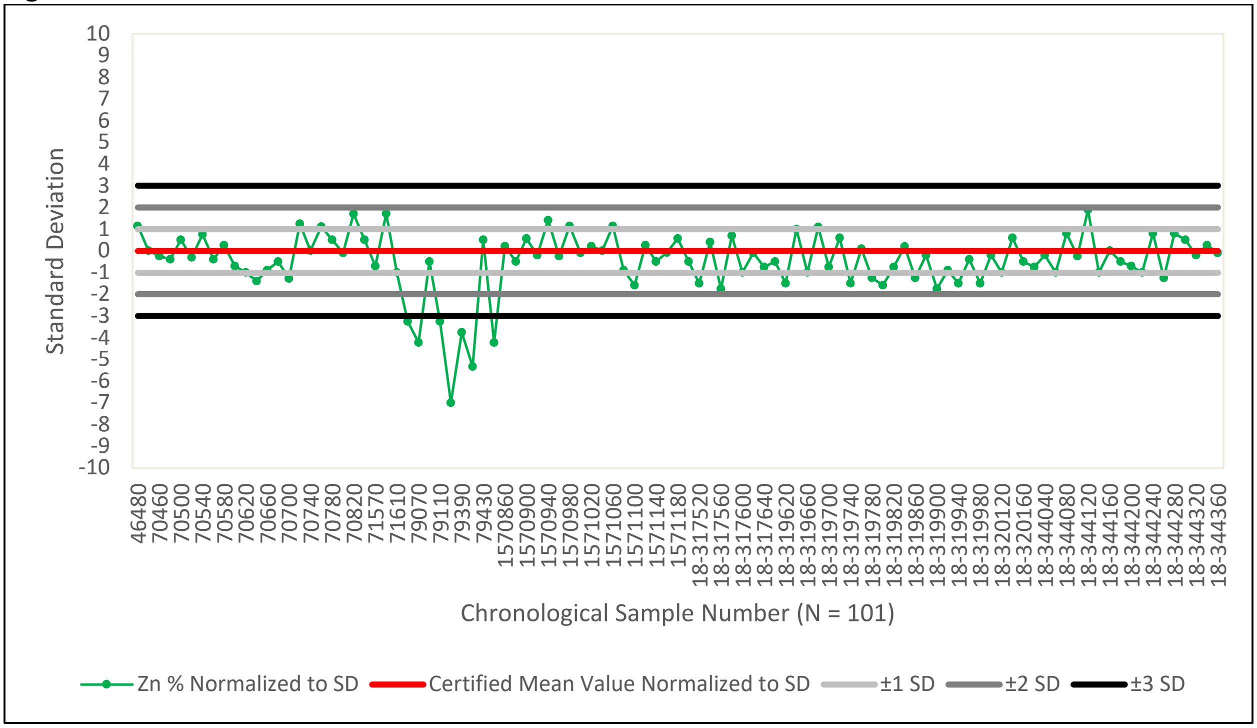
Control limits considered for review of data were set as the certified mean value, plus or minus 1, 2 and 3 standard deviations for each metal. Results returned for Zn, Pb, and Au consistently fall within the 2 standard deviation control limits with the exception of a series of samples from the 2015 program that fall below the 3 standard deviations control limit. These are clearly visible in Figures 11-1 through 11-5. Follow-up showed that these results are associated with CRMs HL-HZ and FCM-4. Results for Cu show greater range than those for the other metals and values exceeding the +3 standard deviations control limit typically assign to CRM SE-01 that was used in the 2014-2015 drill program. Zn, Pb and Cu results define a slight low bias trend that increases through the 2014-2015 and 2018 period. Ag and Au results consistently fall within the 2 standard deviations control limits for all programs but also show a slight, consistent low bias trend.

During the 2014-2015 drilling program, BMC requested Eastern to re-analyze sample batches that included 3 Cu and 2 Zn results near or above the 3 standard deviations control limit for CRMs and re-issued results returned values within the 2 standard deviations control limits. The project drilling database was updated to include the revised analytical results. Cu results above the 3 stand deviations control limit for CRM SE-01 also returned acceptable results for the other metals. This suggests that subsamples of the CRM may have become inhomogeneous with respect to distribution of some constituent metals.

An explanation for the long-term, slightly increasing low bias trend in CRM analytical results for Zn, Pb and Cu and the slight but consistent low bias trend for CRM Au and Ag results is not readily apparent. Both trends are primarily defined within the range of the 2 standard deviations CRM control limits and corresponding laboratory QAQC results do not define similar trends. Mercator recommends that an evaluation of possible contributing factors to these trends be undertaken by BMC, with this to include assessment of CRM age, storage conditions, sub-sampling methodology and potential for progressive oxidation of materials.

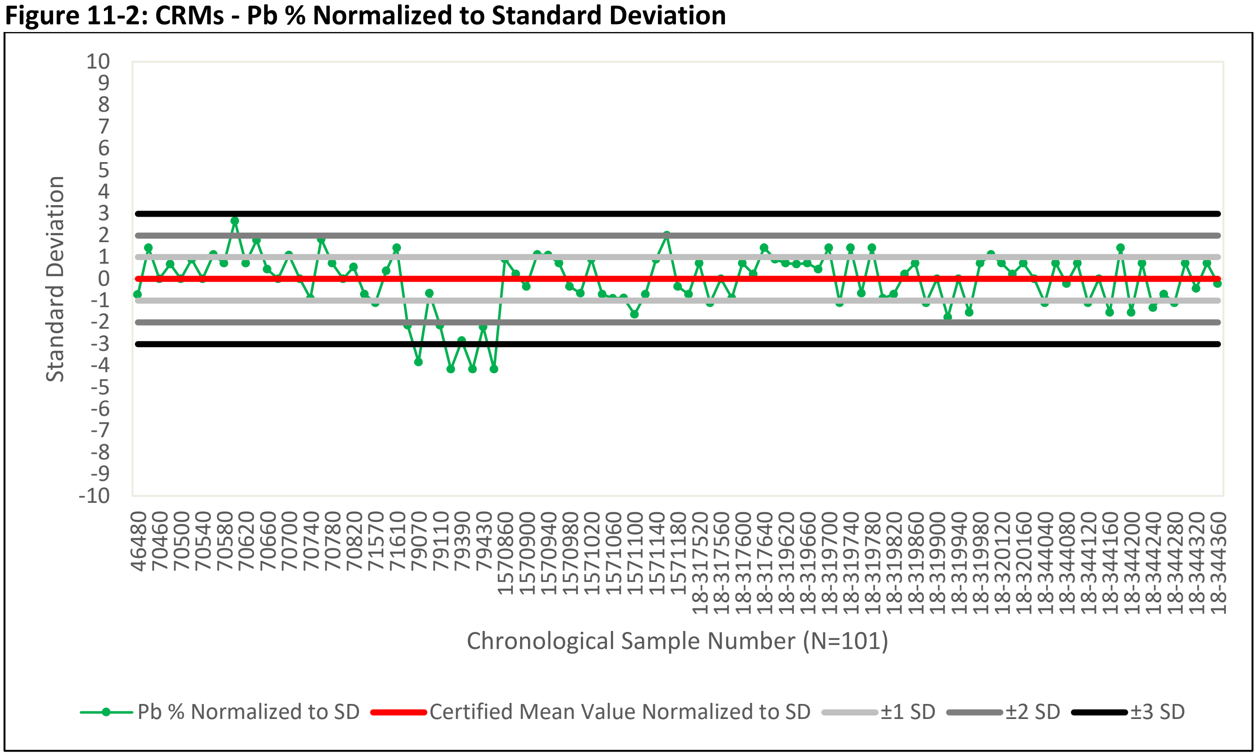
Based upon review of all 2014-2015 and 2018 drilling program CRM results, inclusive of the slight low bias trends noted above, the QP is of the opinion that associated core sample analytical results are of sufficient quality for use in a MRE.

**Figure 11-1: CRMs - Zn % Normalized to Standard Deviation**



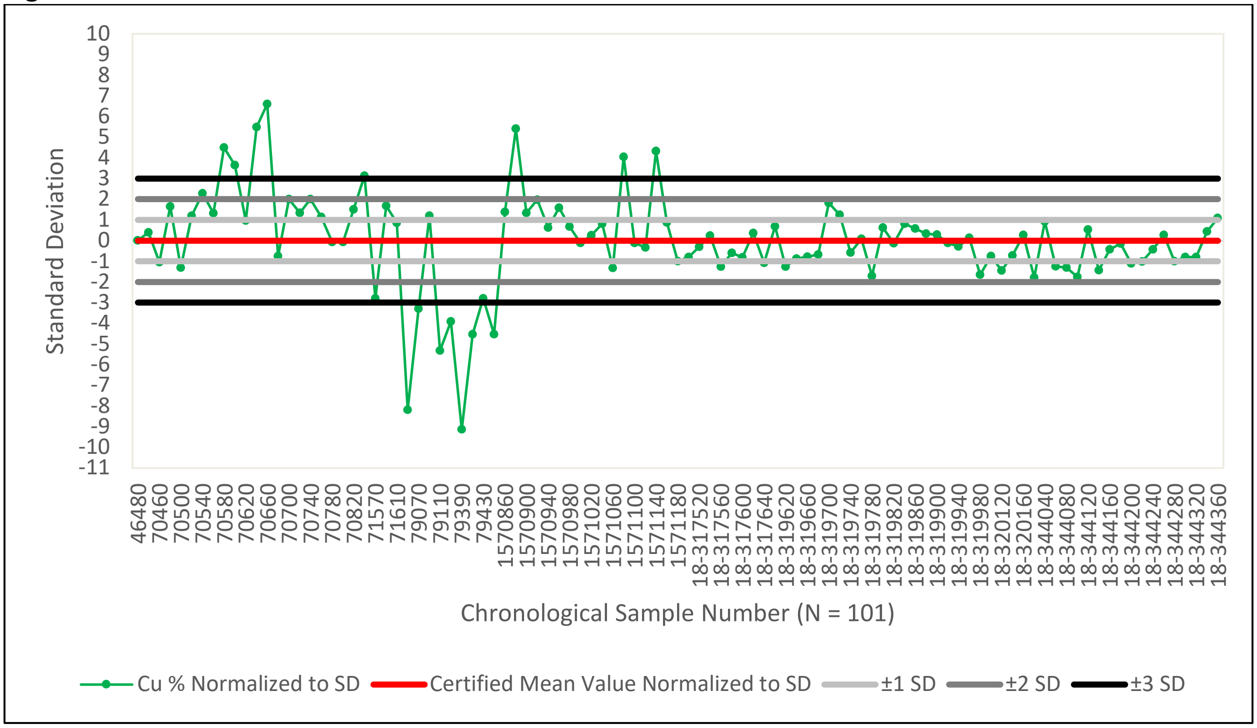

*Source: Mercator, 2019*

**Figure 11-2: CRMs - Pb % Normalized to Standard Deviation**



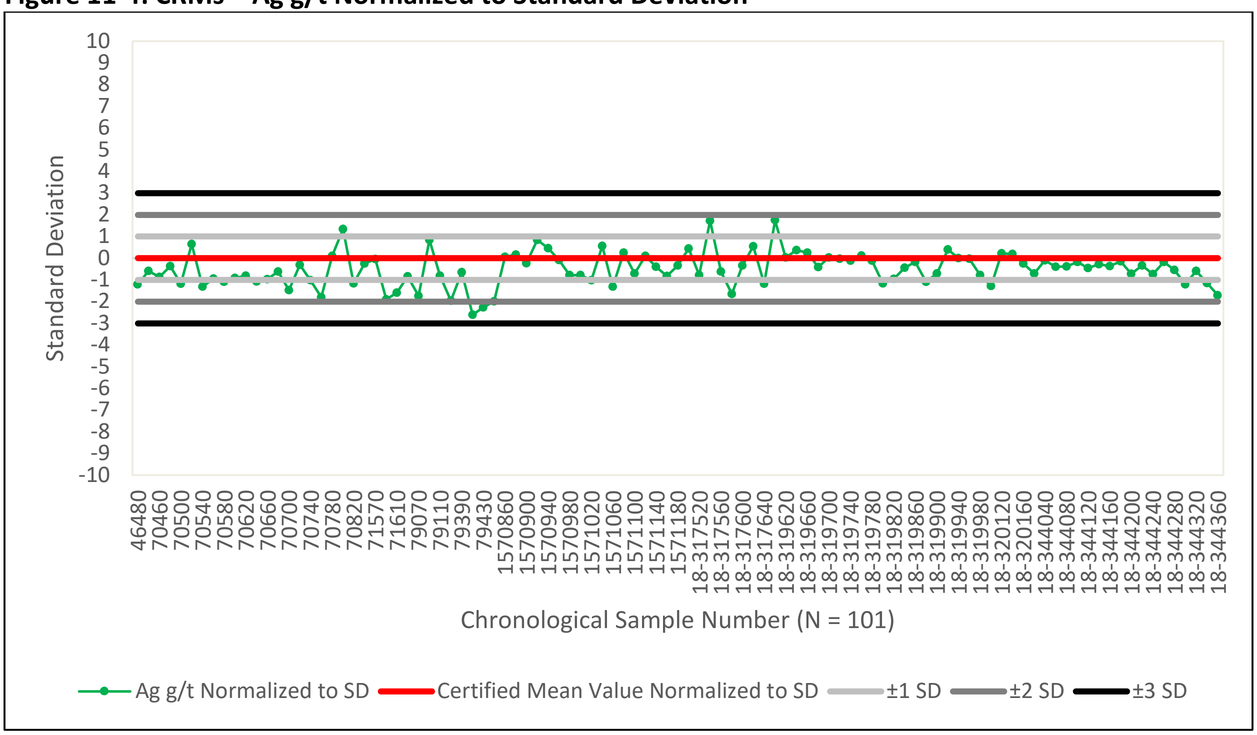

*Source: Mercator, 2019*

**Figure 11-3: CRMs - Cu % Normalized to Standard Deviation**



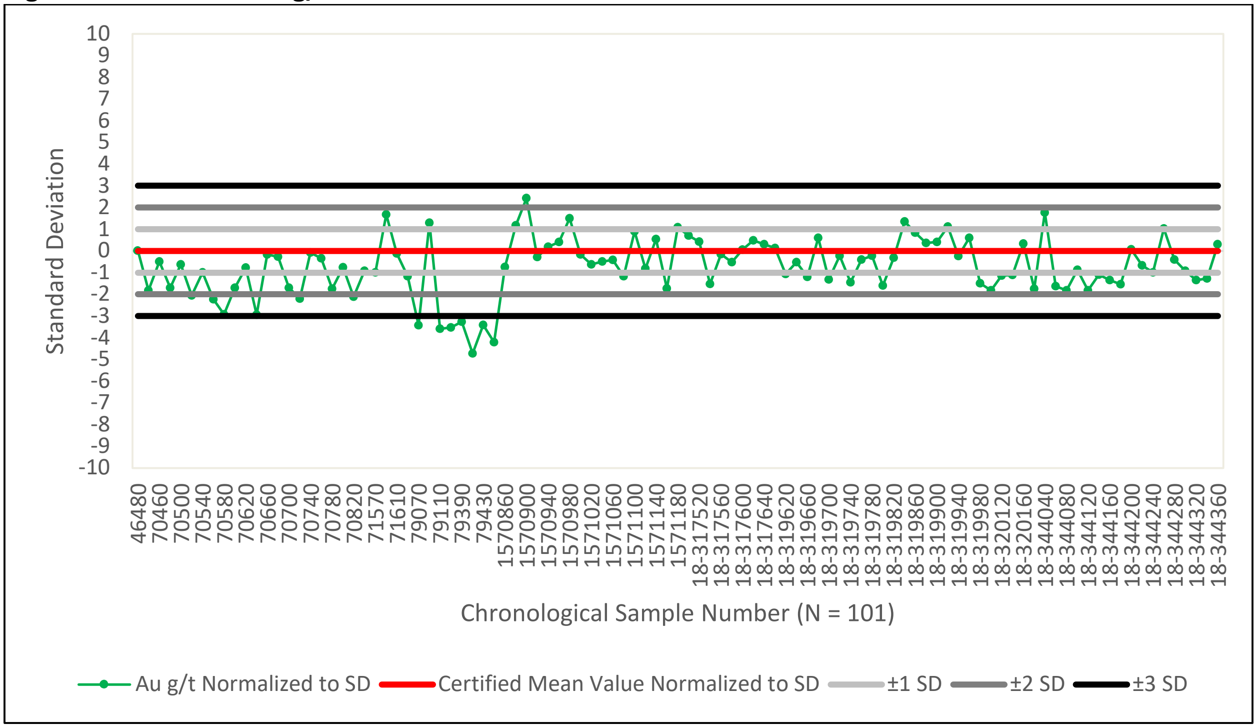

*Source: Mercator, 2019*

**Figure 11-4: CRMs – Ag g/t Normalized to Standard Deviation**




*Source: Mercator, 2019*

**Figure 11-5: CRMs – Au g/t Normalized to Standard Deviation**

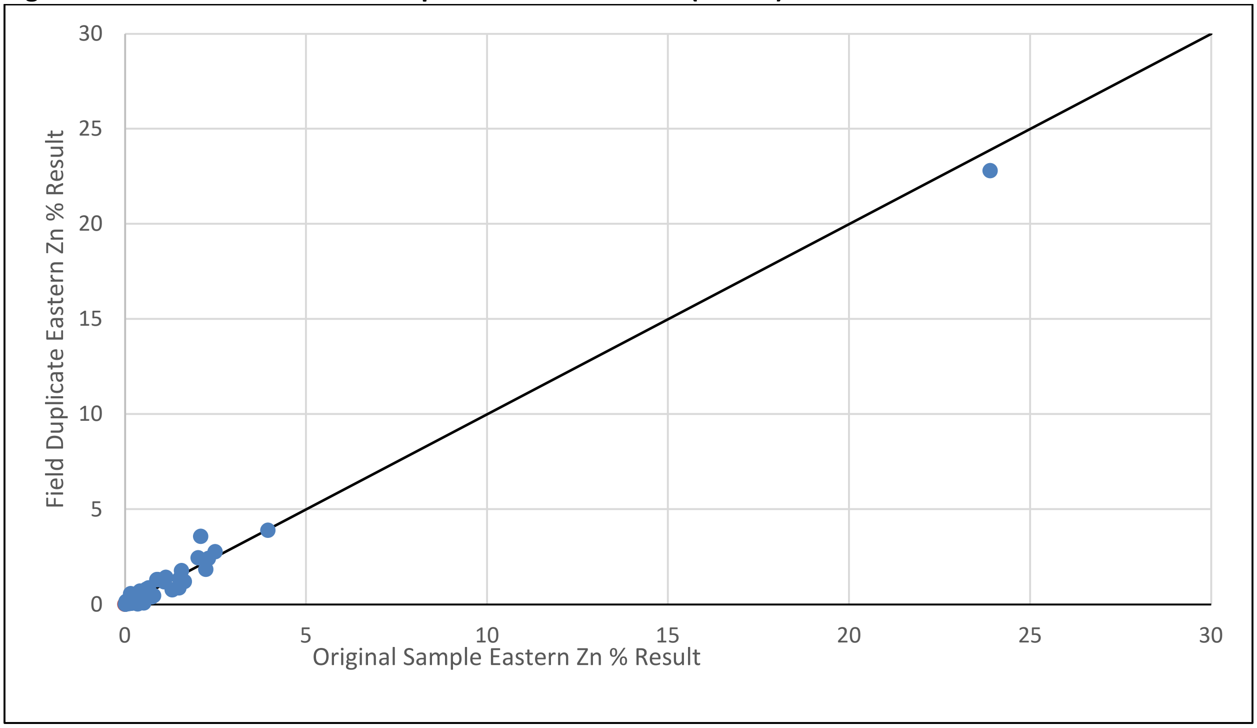



*Source: Mercator, 2019*

### 11.3.3 2018 Quarter Core Duplicate Sample Program

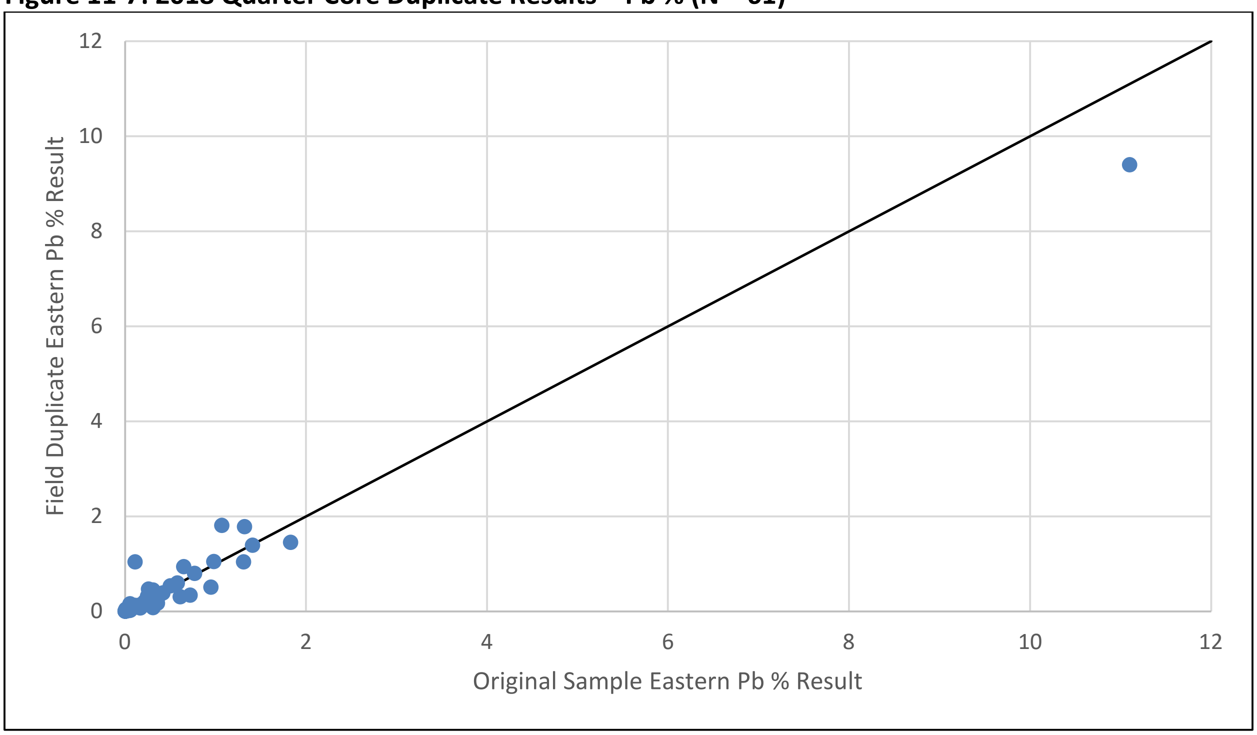
A quarter core field duplicate was prepared by BMC for every 20th sample during the 2018 drill program. Results for the 2018 duplicate pairs for Zn, Pb, Cu, Ag and Au are presented below in Figures 11-6 through 11-10. Duplicate split pairs for all metals correlate well along a 1:1 trend (blackline in figures). This is interpreted as indicating that grade distributions at the core scale are relatively homogenous and that associated analyses reflect acceptable precision.

**Figure 11-6: 2018 Quarter Core Duplicate Results – Zn % (N = 61)**



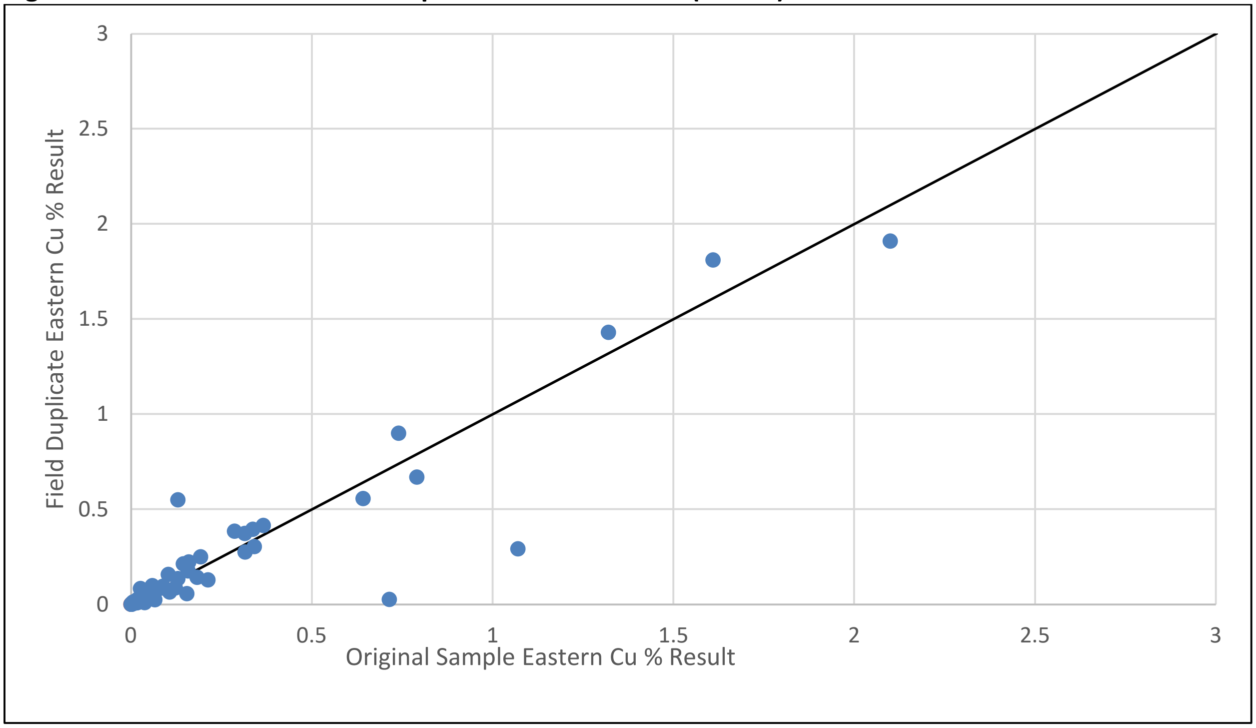

*Source: Mercator, 2019*

**Figure 11-7: 2018 Quarter Core Duplicate Results – Pb % (N = 61)**



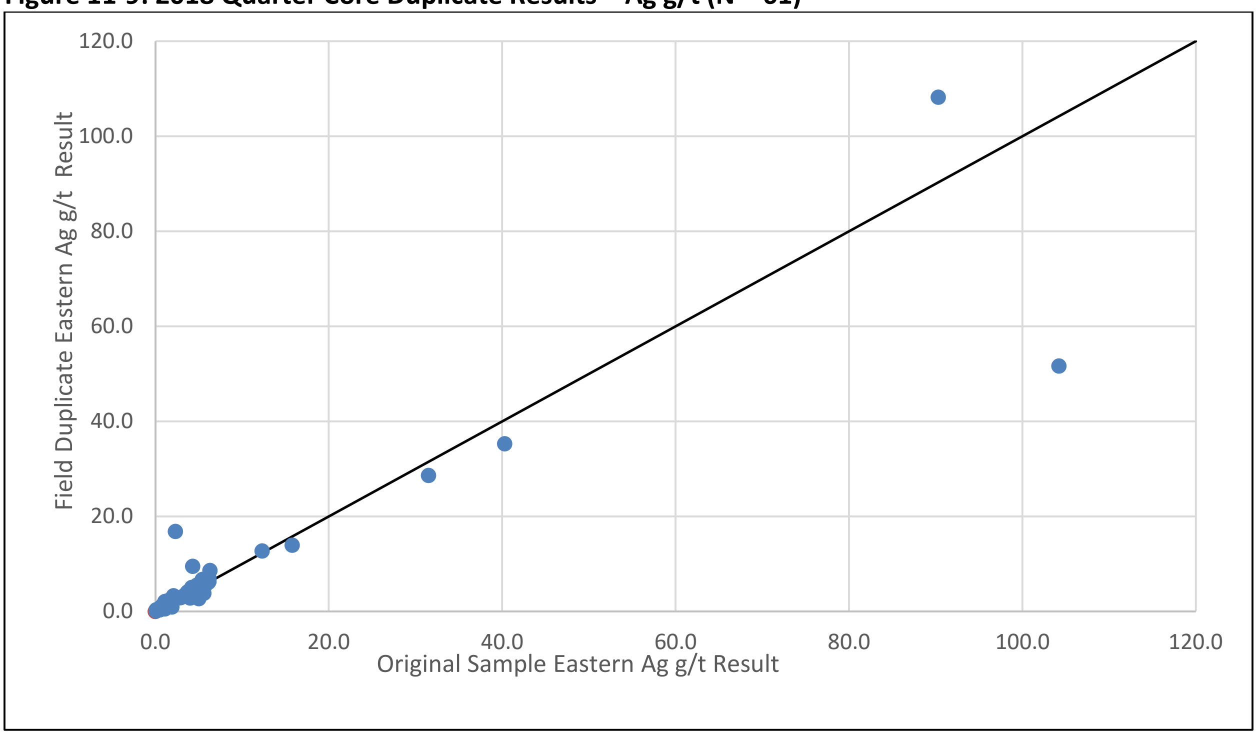

*Source: Mercator, 2019*

**Figure 11-8: 2018 Quarter Core Duplicate Results – Cu % (N = 61)**



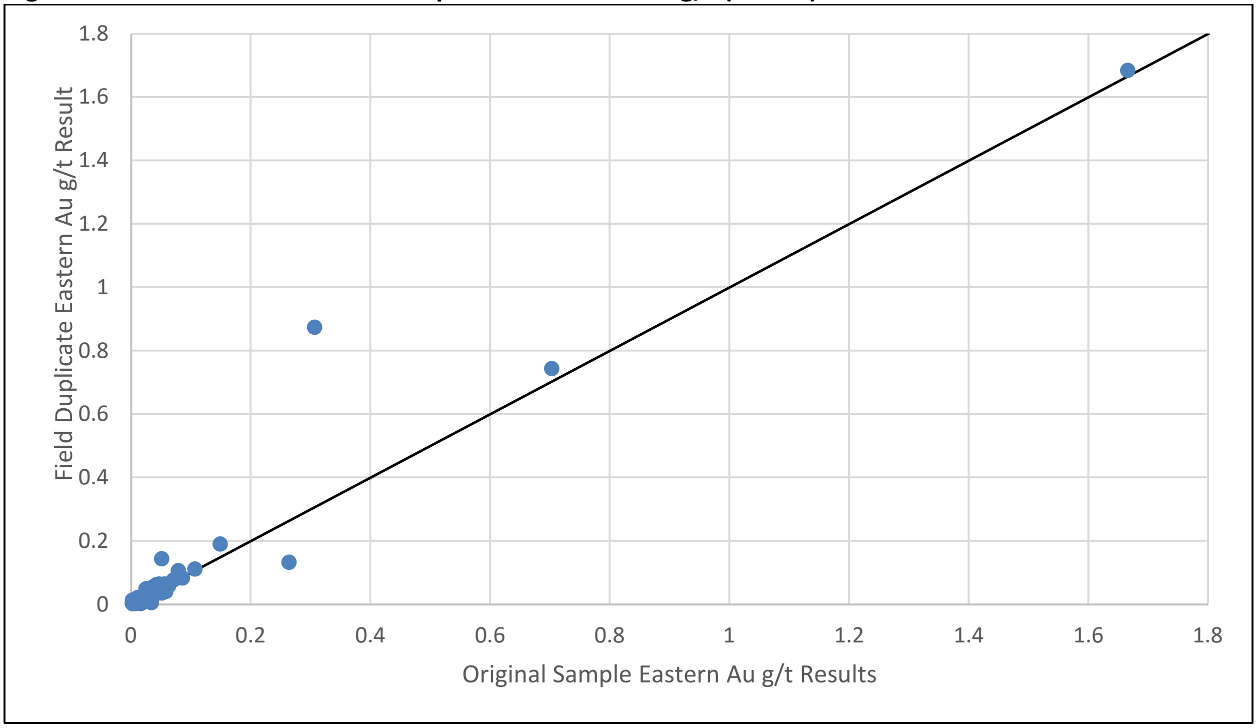

*Source: Mercator, 2019*

**Figure 11-9: 2018 Quarter Core Duplicate Results – Ag g/t (N = 61)**




*Source: Mercator, 2019*

**Figure 11-10: 2018 Quarter Core Duplicate Results – Au g/t (N = 61)**




*Source: Mercator, 2019*

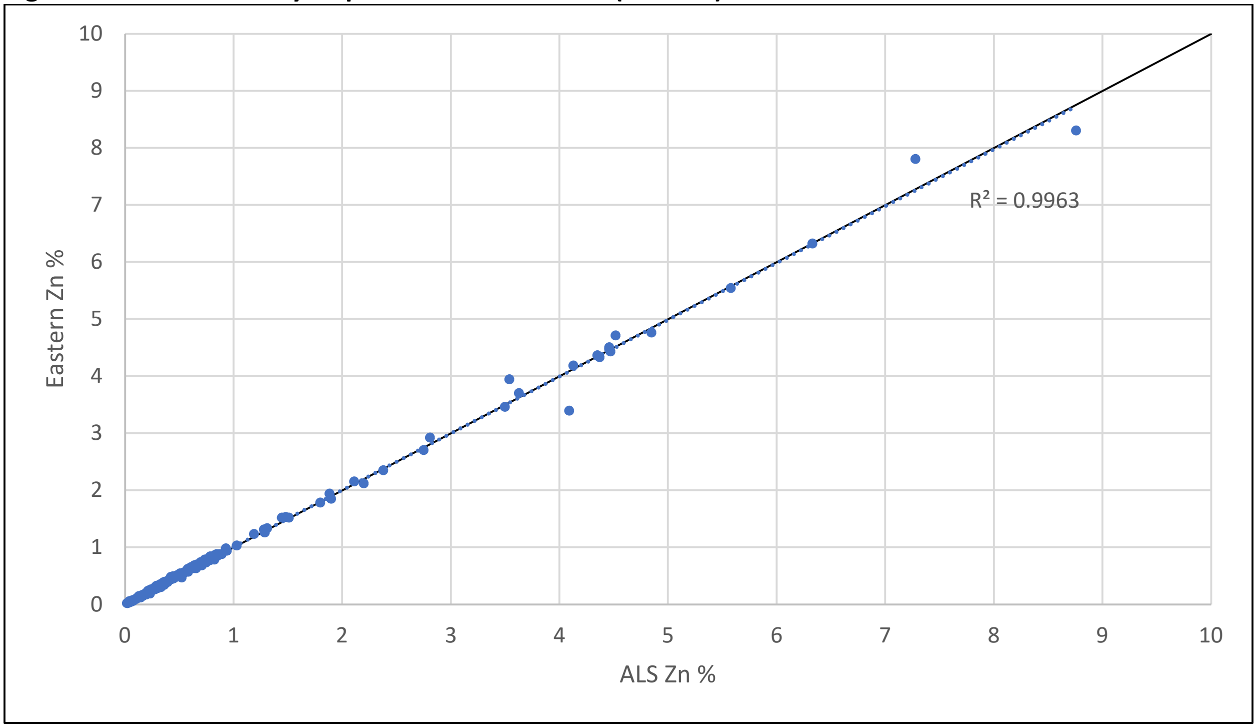
### 11.4 2014-2015 and 2018 Check Sample Program

BMC carried out an independent laboratory check sample program for both the 2014-2015 and 2018 drilling campaigns. The program consisted of analysis at ALS of selected core sample pulps that were initially prepared and analyzed at Eastern. Samples were selected on the basis of their elevated metal levels as determined in the initial analysis at Eastern. As a result, a sampling bias toward higher base metal grade levels characterizes the data set. Analytical procedures applied at both laboratories were the same. A total of 165 pulp splits for the 2014-2015 program were submitted for analysis, as well as 32 from the 2018 program.

Figures 11-11 through 11-15 present combined check sample program results for Cu, Pb, Zn, Au and Ag, respectively. In all cases, good correlation exists between the two data sets, as exemplified by close grouping of data along the 1:1 correlation trend line included in each plot.

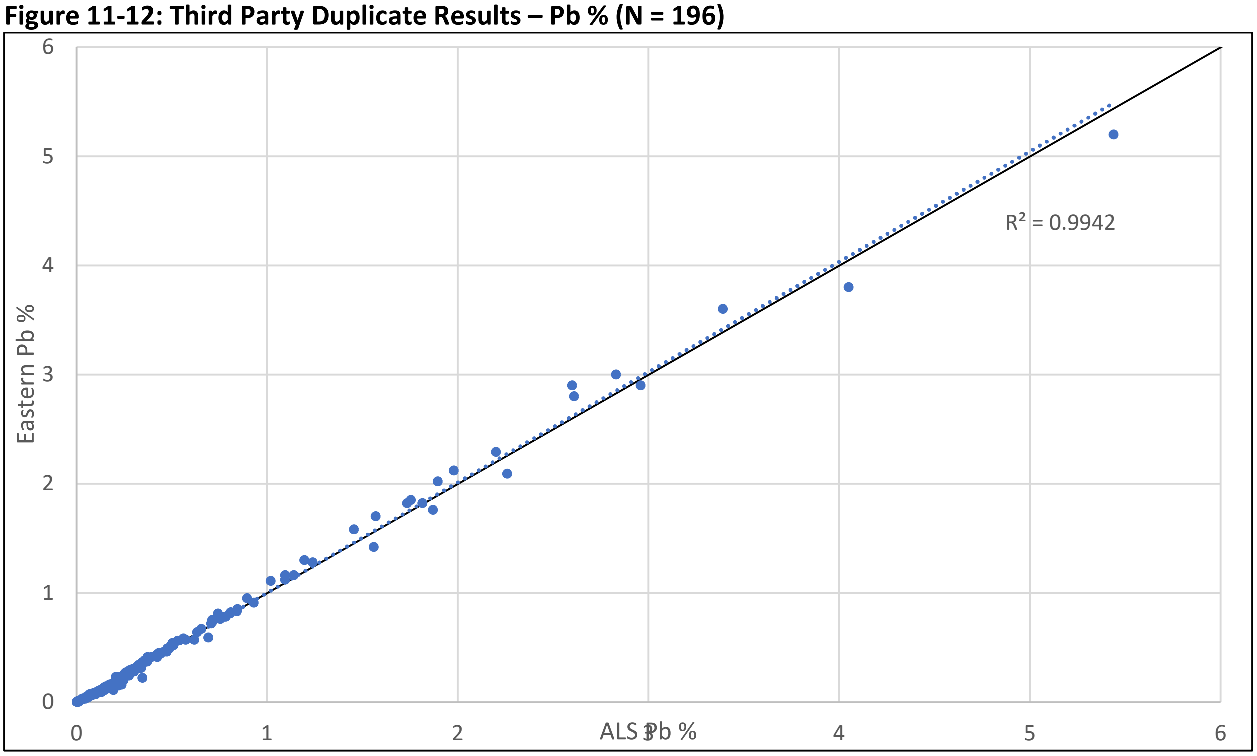
The Figure 11-13 Cu plot shows a slight positive bias for Eastern Cu values relative to ALS results, but this is not considered significant. $R^2$ values for each data set are displayed on respective plots. The Figure 11-17 gold plot excludes a single outlier value of 12.3 g/t Au that was repeated at 8.3 g/t Au at ALS.

**Figure 11-11: Third Party Duplicate Results – Zn % (N = 196)**



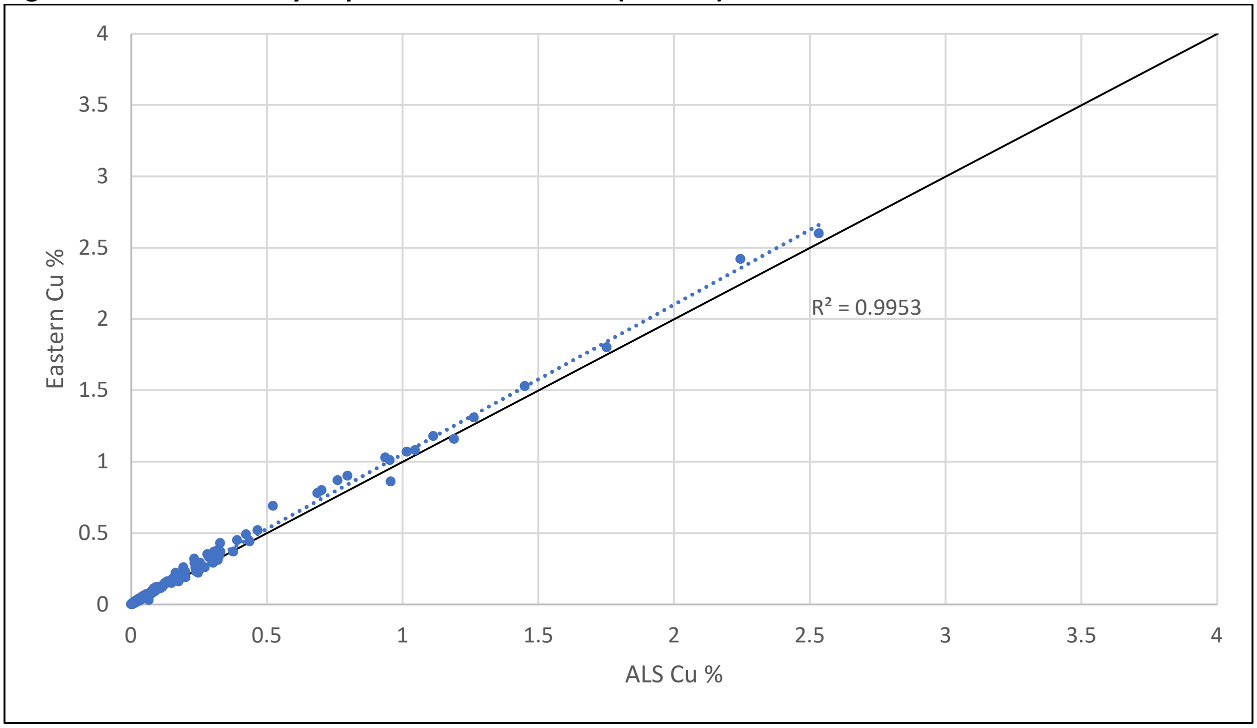

*Source: Mercator, 2019 (Blue dashed - data linear regression)*

**Figure 11-12: Third Party Duplicate Results – Pb % (N = 196)**



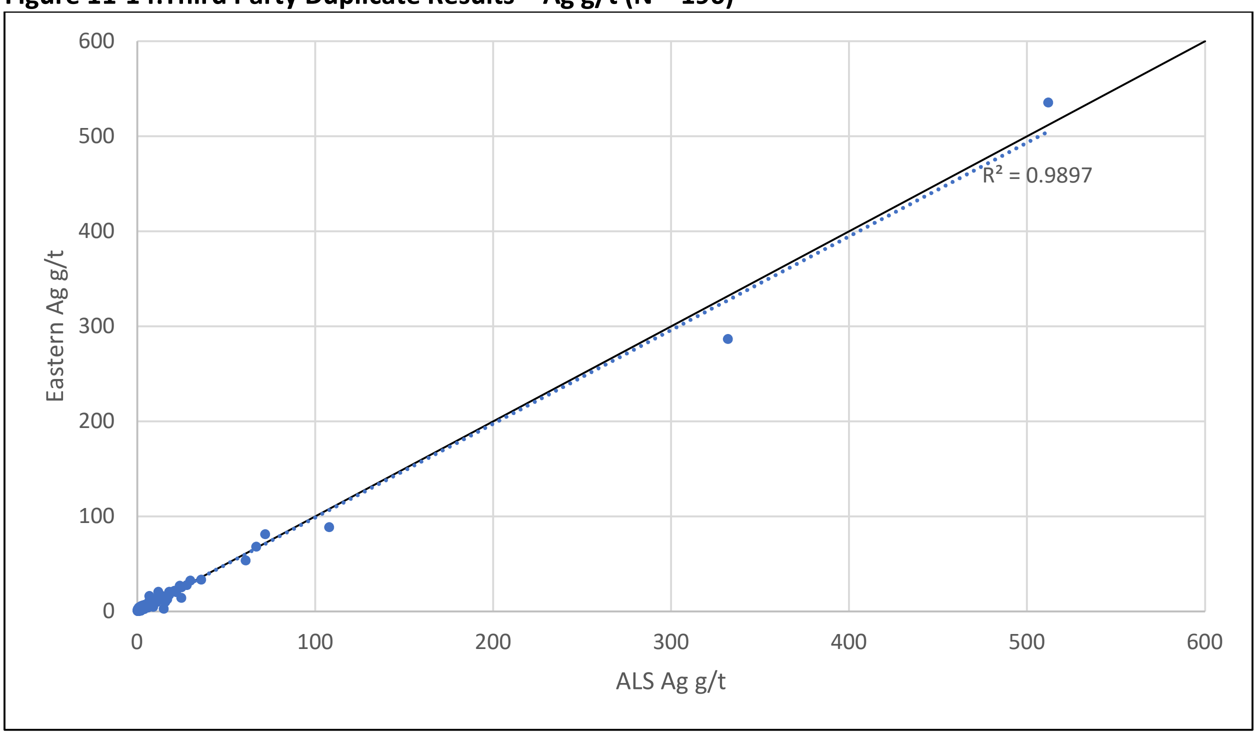

*Source: Mercator, 2019 (Blue dashed - data linear regression)*

**Figure 11-13: Third Party Duplicate Results – Cu % (N = 196)**



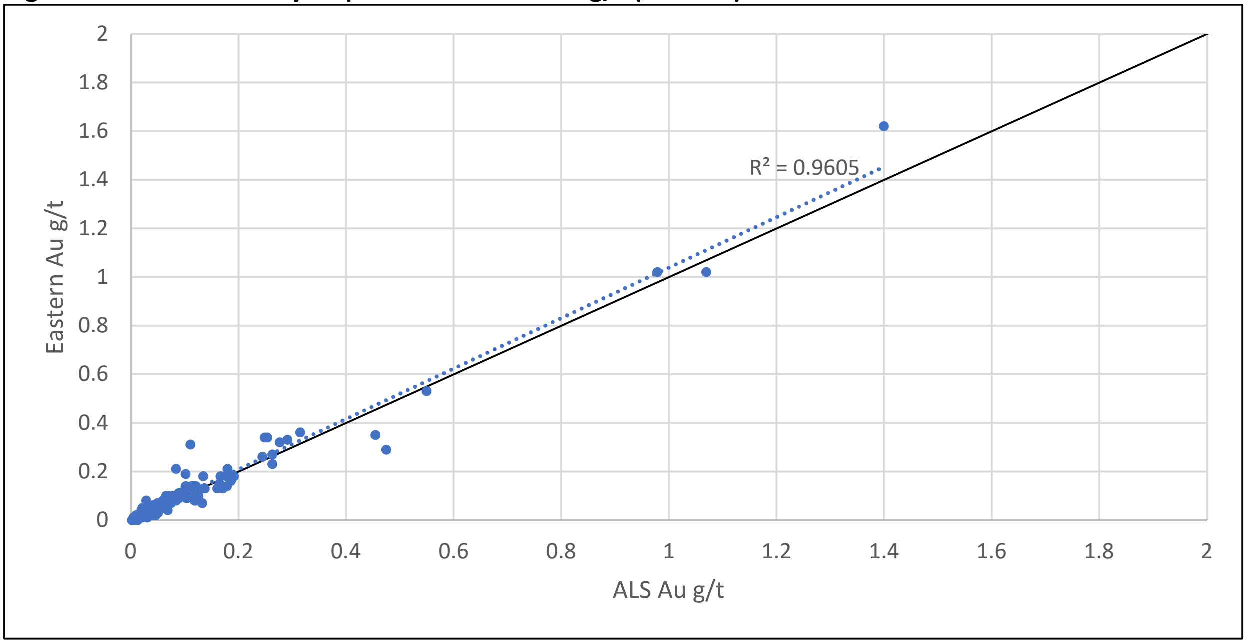

*Source: Mercator, 2019 (Blue dashed - data linear regression)*

**Figure 11-14:Third Party Duplicate Results – Ag g/t (N = 196)**




*Source: Mercator, 2019 (Blue dashed - data linear regression)*

**Figure 11-15: Third Party Duplicate Results – Au g/t (N = 196)**




*Source: Mercator, 2019 (Blue dashed - data linear regression)*

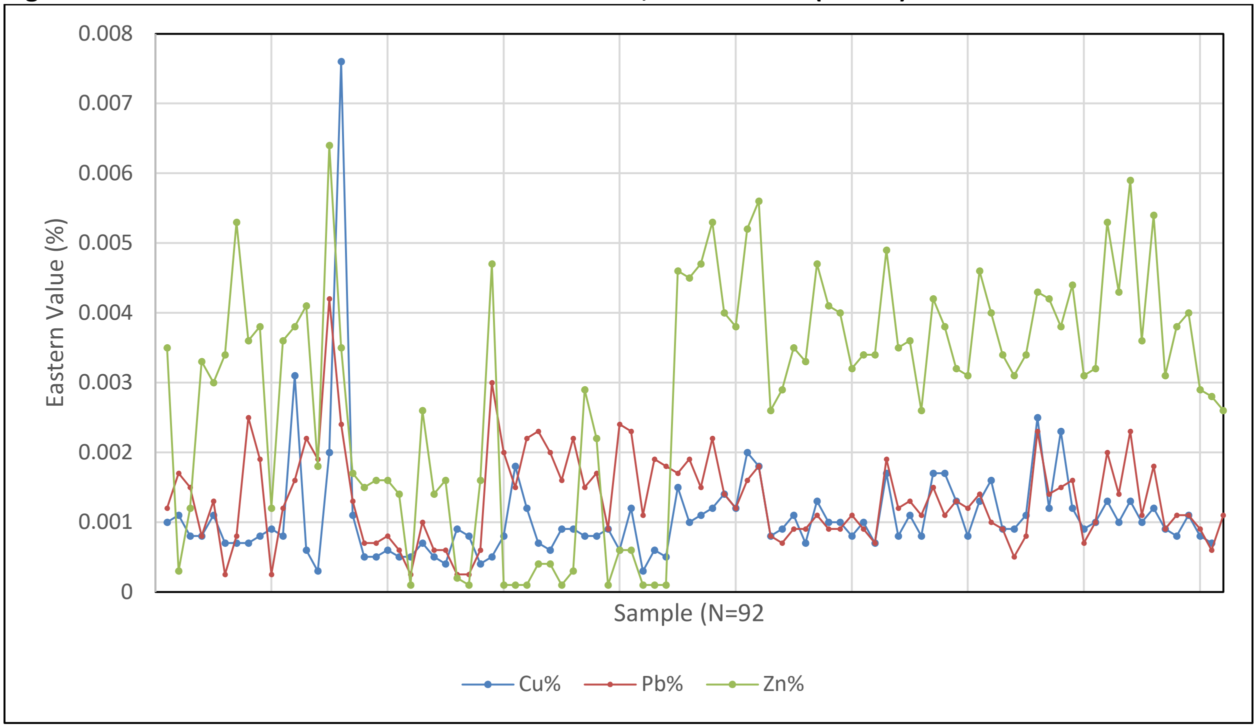
The QP is of the opinion that results of the BMC check sample program for both 2014-2015 and 2018 programs show that the primary laboratory (Eastern) performed consistently well with respect to the check laboratory (ALS). There is no indication of significant systematic or irregular discrepancy between the laboratories that would be of concern with respect to application of data in a MRE.

### 11.4.1 2014-2015 and 2018 Blank Sample Program

Blank samples were blindly inserted in chronological succession, at an interval of every 20th sample, for both the 2014-2015 and 2018 program. Blank sample status was noted in the project sample record books and the material consisted of non-mineralized, siliceous sandstone collected from a roadside outcrop on the southern side of Beothuk Lake. This material was used previously by BMC for analytical blank purposes in 2008 and 2012 programs. Blank samples for the recent programs were analyzed by Eastern along with the associated core sample stream.

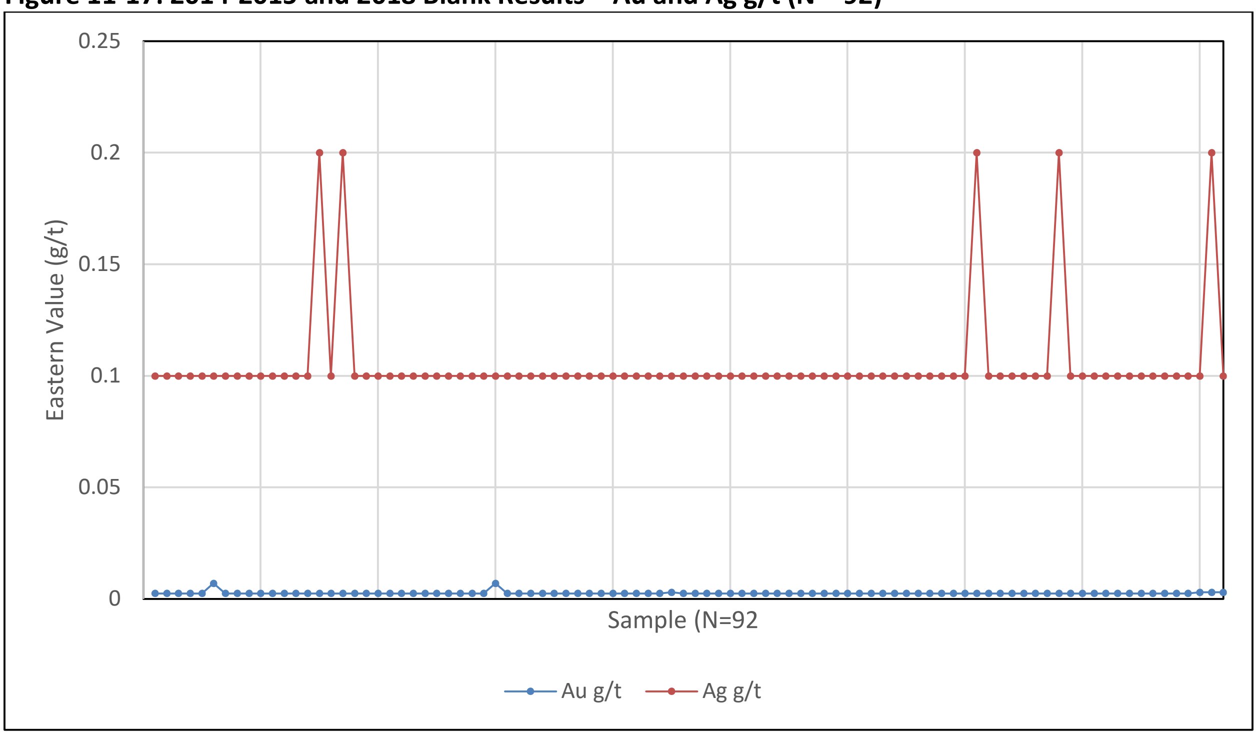
Results for the blank program samples appear in Figures 11-16 (Zn, Pb, and Cu) and Figure 11-17 (Au and Ag). Cu and Pb results define trends at values less than 20 ppm that are close to respective method detection limits and Zn values define a trend at or below approximately 50 ppm. Ag and Au values all fall within ranges of twice their respective detection limits. Although low in absolute terms, peak values for all metals except Au correspond with two consecutive samples. Based on the results described above, the QP has concluded that no evidence of problematic sample cross-contamination is present in the 2014-2015 and 2018 dataset.

**Figure 11-16: 2014-2015 and 2018 Blank Results – Zn, Pb and Cu % (N = 92)**




*Source: Mercator, 2019*

**Figure 11-17: 2014-2015 and 2018 Blank Results – Au and Ag g/t (N = 92)**




*Source: Mercator, 2019*

## 11.5 Sample Security

### 11.5.1 BMC 2014 - 2018

All logging, sampling and sample shipment preparation activities were carried out under secure conditions at the BMC core logging and storage facility in Buchans. Drill core was under custody of BMC personnel from the time it was delivered from the drill site by the drilling contractor to the time associated samples were delivered to the primary laboratory for preparation and analysis.

## 11.6 Sample Preparation & Analysis

### 11.6.1 BMC 2014 - 2018

Sample preparation was completed by Eastern with each sample crushed to approximately -10 mesh and split using a riffle splitter to approximately 300 g. Each sample split was pulverized using a ring mill to approximately 98% -150 mesh. All assays were completed by Eastern by the ICP method (ICP-34 Multi-Acid package) for base metals (Cu, Pb, Zn), and by Ore Grade Assay (atomic absorption, AA) for Cu, Pb and Zn, if upper detection limits by ICP were exceeded for either element (upper detection limits; Cu 10,000 ppm, Pb 2,200 ppm, Zn 2,200 ppm). ICP analyses were completed using a 0.50 g sample digested in four acids (nitric and hydrochloric acid and analyzed by ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy). Base metal Ore Grade Assays (Cu, Pb, Zn) were completed using a 0.200 g to 2.0 g sample digested in nitric and hydrochloric acid and analyzed by the AA method. Silver assays were completed using a 1,000 mg sample digested in hydrochloric and nitric acid and analyzed by AA. Gold assays were completed by standard ½ assay ton fire assay using the AA method. All samples analyzed by the Ore Grade Assay method were also re-assayed as by ALS at the firm's Vancouver, BC facility for Specific Gravity (SG) determinations (OA-GRA08b; Specific Gravity on pulps using pycnometer) by the as well as barium by Fusion XRF (XRF10 and or Ba-GRA81 for Ba>45%). A subset of these samples were also analysed as check assays for QAQC purposes (ME-OG46 for Ag, Cu, Pb, Zn; assay-grade Aqua regia digestion, multi-element ICP; and gold by fire assay and AAS using a 30 g nominal sample weight). Eastern and ALS also implemented independent QAQC protocols that included insertion of blanks and certified reference materials as part their routine analyses.

Both Eastern and ALS are independent, fully accredited, analytical services firms registered to the ISO 17025 standard.

## 11.7 Author Comment on Post-2013 Sample Preparation, Analysis and Security Programs

The QP has concluded that the sample preparation, analysis, QAQC, and security procedures implemented by BMC for post-2013 drill programs are consistent with current industry standards and that associated analytical results are acceptable for Mineral Resource estimation purposes.

# 12.0 DATA VERIFICATION

## 12.1 Overview

Data verification procedures carried out by the author to support the Lundberg Deposit MRE and associated Technical Report consisted of 6 main components:

- Review of public record and internal source documents cited by previous operators and Canterra with respect to key geological interpretations, previously identified geochemical or geophysical anomalies; and historical exploration and drilling results;
- Completion of a MRE Database Verification Program of historical exploration and drilling results;
- Completion of a site visit to the Project on February 13, 2024 by author Mr. Matthew Harrington, P.Geo., on behalf of Canterra. No issues were identified that negatively impact the findings and conclusions of this Technical Report;
- Review and verify site visit items completed by then Mercator employee Nate Corocran, P.Geo, between April 14th and 16th, 2021, including IW check sampling of drill core. No issues were identified that negatively impact the findings and conclusions of this Technical Report;
- Review site visit items completed by the author between November 19th to November 21st, 2018, on behalf of BMC. No issues were identified that negatively impact the findings and conclusions of this Technical Report.
- Review data verification work reported previously in Technical Reports by Webster and Barr (2008) and Cullen and Hilchey (2013)

## 12.2 Review of Supporting Documents, Databases, and Assessment Reports

The author obtained copies of relevant historical assessment work reports and historical Technical Reports as part of the data validation procedures. Key aspects of historical reporting are in part referenced in this Technical Report and were obtained through online searching of historical assessment reports available through the NLDIET online report database and through engagement with Canterra staff. Results of the reference documentation checking program showed that in all instances considered, digital and hard copy records accurately reflect content of referenced source documents. The author and his employer Mercator have been actively involved with the Property through engagement with BMC since 2008, including preparing MRE and Technical Reports. As such, the author had readily access and very good familiarity with historical reporting in advance of this Technical Report.

## 12.3 Mineral Resource Estimate Drill Hole Database Validation Program

The drillhole database validation procedure in support of the MRE was originally completed on behalf on BMC for the MRE associated with the 2019 Technical Report (Harrington and Cullen, 2019). No additional exploration or drill hole results have been completed by either Canterra or previous operator BMC since completion of the drill hole database verification program. In addition, the author is not aware of any new information that would negatively impact the finding and conclusions of the drill hole database validation program. The MRE drill hole database validation program is described below as originally completed.

BMC provided the QP with a compiled drill hole database for the Property in Microsoft Access® GEMS Logger format. The database is coordinated in the NAD83 UTM Zone 21 system and consists of 3,717 drill holes for a total length of 438,527 m and 23,540 associated core samples. The QP imported the complete database into Surpac and implemented validation routines that detect specific data entry logical errors associated with sample records, drill hole lithocode intervals, collar tables and down hole survey tables.

Initial compilation of pre-2007 drill hole data was completed to support the historical 2008 MRE (Webster and Barr, 2008) and several corrections, assumptions, and adjustments have been made with respect to the pre-2007 drill hole dataset. Historical drill hole collar elevations have been converted to metre elevations relative to sea level and have had 8 m added to the values used historically in order to match them with the modern survey datum surveyed by Red Indian Surveys of Grand Falls, NL.

Since the 2013 MRE, BMC has relogged more than 935 holes totalling more than 190,000 m of drill core, including 146 historic holes within the Lundberg Deposit. Relevant portions of this work have been entered into the current digital drilling database but much of the detailed relogging information remains to be entered. Hardcopy interpreted paper sections have been compiled in the area of interest, including results from the relogging program, and were used to refine the current geological interpretation for the Property.

A detailed validation procedure against original assay records, including review of digital certificates and assay samples sheets, was performed. Several drill programs operated by BMC (2008, 2012, 2014-2015, 2018) include samples that have been analyzed at both Eastern and ALS and when both were present, results provided by Eastern were given priority. Barite analysis and density determinations were provided by ALS. The Lundberg Deposit is defined by 7,972 core samples from 263 diamond drill holes within the MRE limits.

Periodic verification of drill hole collar locations, downhole surveys, lithological coding, and analytical values has been completed under the supervision by a Mercator QP since the completion of the now historical 2008 MRE on behalf of BMC. In addition, Mercator was actively involved in the construction and maintenance of Property drill hole database, including implementation of validation and verification protocols.

Implementation of the database validation and review procedures described above resulted in minor litho-code and assay entry corrections. These were incorporated to create the validated and functional drilling database used in the MRE.

### 12.4 Site Visits

Three site visits have been completed between 2018 and 2024 and are presented here in the chronological order. The data verified during winter site visits was partially restricted due to seasonal issues related to accessing some drill collar locations. The February 13th, 2024 site visit is the most recent site visit completed by the author.

#### 12.4.1 2018 Independent Data Verification and Site Visit

From November 19th to November 21st, 2018 author Harrington visited the Lundberg Deposit site accompanied by Canterra staff (then BMC staff), Paul Moore, P. Geo., Vice President of Exploration, David Butler, P. Geo, Exploration Manager, and Derrick Keats, Senior Geological Technician. At that time, drill core was reviewed and sampled at BMC's core logging and storage facilities and a review of BMC drill program components, including discussion of protocols for sampling of drill core was carried out.

A survey plan of drill collars was available during the site visit and field checks were undertaken where possible to validate hole numbers, locations and casing orientations with respect to digital database records. Although heavy snow cover was present, six casings from the 2014-2015 and 2018 programs were located and collar coordination check data were collected at each location. Evidence of recent drill activity such as drill pads, drill trails and site markers were located for all drilling areas inspected. NAD83 UTM Zone 21 coordinates for located collars and drill site areas were collected using a Garmin E-trek handheld GPS instrument and these were recorded for later checking of database drill collar location coordinates. Results showed acceptable correlation between datasets, with variance of a few metres recorded. Observations regarding character of forest cover, site elevations, surface drainage, road and drill pad features, exploration conditions and coordination, and general access road conditions were also noted during the site visit.

Review of core from both drilling programs provided characterization of lithology, alteration and mineralization styles intersected by recent drill holes. These were found to be consistent with descriptions presented in the digital drill hole database and drill logs. Drill core reviewed came from five holes, these being H-14-3448, H-15-3496, H-18-3515, H18-3516B, and H-18-3519. Drill core review during the site visit confirmed the presence of both stockwork style sulphide mineralization that characterizes the Lundberg and Engine House Zones and massive sulphide mineralization that occurs as remnants of the previously mined Lucky Strike and North Orebodies, an extension to the former Two Level orebody, and additional mineralization associated with the Airport Thrust. In all instances, good correlation was recognized between drilling program lithological logging and sampling program documentation and the physical evidence of such present in the archived core.

After a careful review of the drill hole database, two drill holes from the recent BMC drill programs were selected for re-sampling by to obtain representative samples of the various lithologies and grades found within the deposit (H-14-3488 and H-18-3516B). Samples were collected at the BMC core logging and storage facility in Buchans in November of 2018. Seven quarter core samples of previously half-core sampled core were collected from these holes, ensuring a quarter of the core remained for archival purposes. Drill core cutting was carried out under supervision of author Harrington using a diamond saw. Efforts were made during the core sampling program to obtain representative samples across the deposit grade ranges. Samples were identified using tags from a three-tag sample book system and placed in plastic bags and sealed. Mr. Harrington maintained secure possession of the check samples until preparation of an analytical shipment by commercial carrier to ALS in Sudbury, ON.

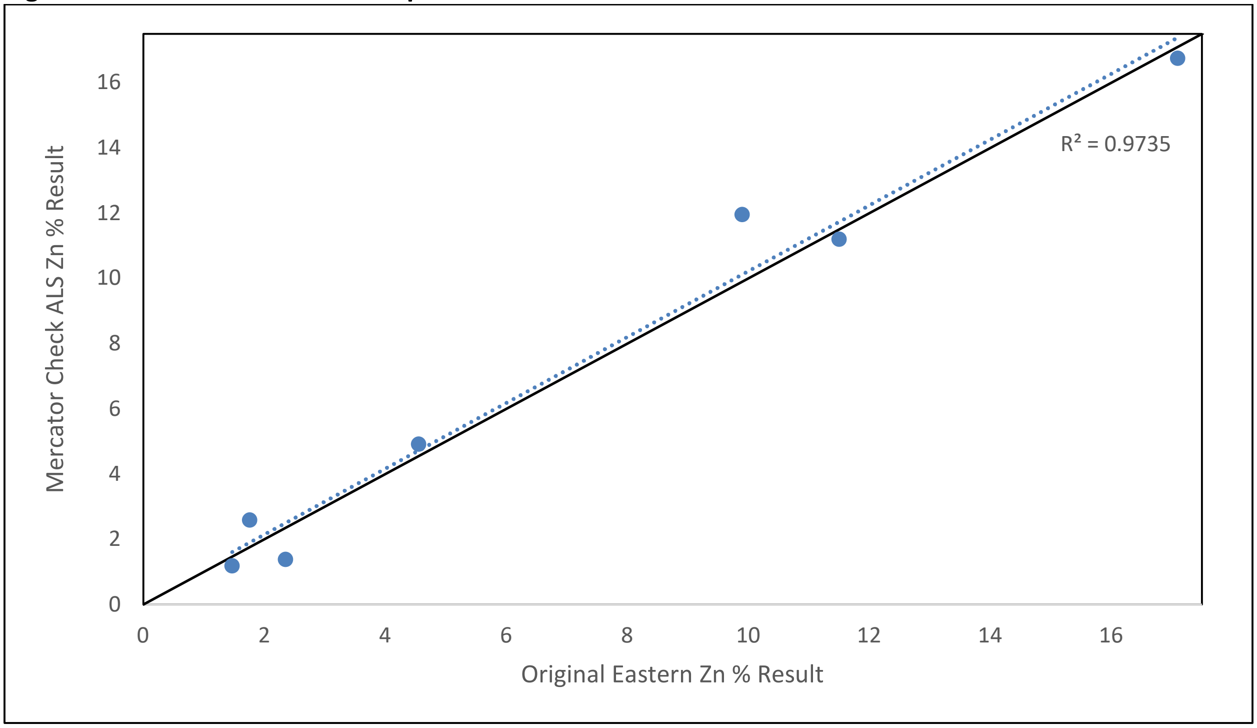
### 12.4.2 2018 Check Sampling Program

Core samples collected during the 2018 site visit were transported by the author to Mercator's Dartmouth office, where a single blind standard and blank were inserted before shipment for analysis. Preparation of sample shipment documentation, checking, and packing of samples were carried out prior to shipment by commercial courier to ALS. Samples remained in the secure possession of M. Harrington, P. Geo., of Mercator prior to shipment to the laboratory.

Sample preparation was completed by ALS with each sample crushed to approximately 70% < 2 mm and split using a riffle splitter. Each sample split was pulverized to approximately 85% < 75 µm. Ag, Cu, Pb, and Zn were assayed by ore grade ME-OG46 protocol, which employs Inductively Coupled Plasma Atomic Emission Spectroscopy ("ICP-ES") analysis after digestion in 75% aqua regia for 120 minutes. This protocol may default to gravimetric or titration techniques if very high metal levels (> 15-20 %) are present. Au was assayed by Au-GRA21 protocol whereby samples are analyzed fire assay fusion using AAS from a 30 g nominal sample weight. Specific Gravity determinations (OA-GRA08b; determinations on pulps using pycnometer) were completed as well as Ba analysis by Fusion XRF protocol (XRF10, and or Ba-GRA81 for Ba > 45 %). ALS also implemented independent QAQC protocols that included insertion of blanks and certified CanMet standards as part their routine analyses. ALS is an independent, fully accredited, analytical services firm registered to the ISO 17025 standard.

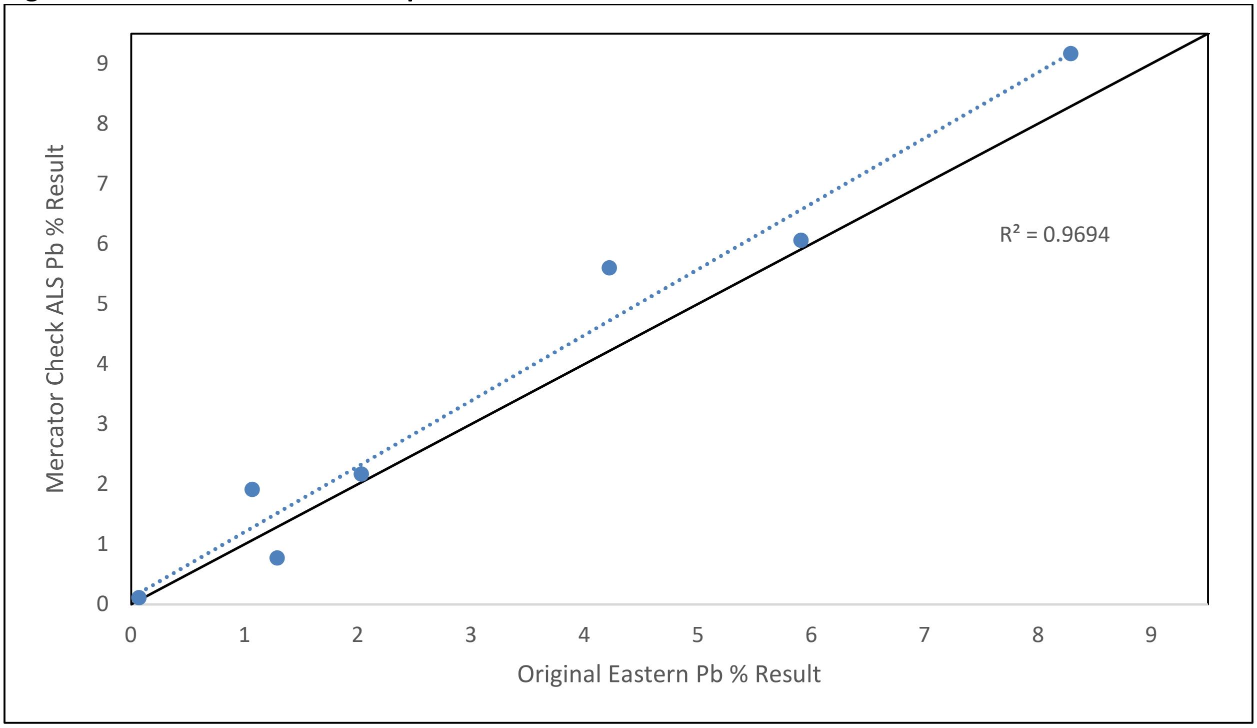
Check sample results for the 7 quarter-core splits are plotted against the original assay values recorded by BMC in Figures 12-1 to Figure 12-5. Cu, Pb, Zn, Ag and Au results returned from ALS show acceptable correlation with original sample values reported in the Property database and no issues were identified with respect to the blank sample and CRM results. $R^2$ values for each data set are displayed on respective plots. Variability between the two sample sets is considered to be primarily influenced by core-scale heterogeneity of metal distribution.

**Figure 12-1: Mercator Check Sample Results – Zn %**



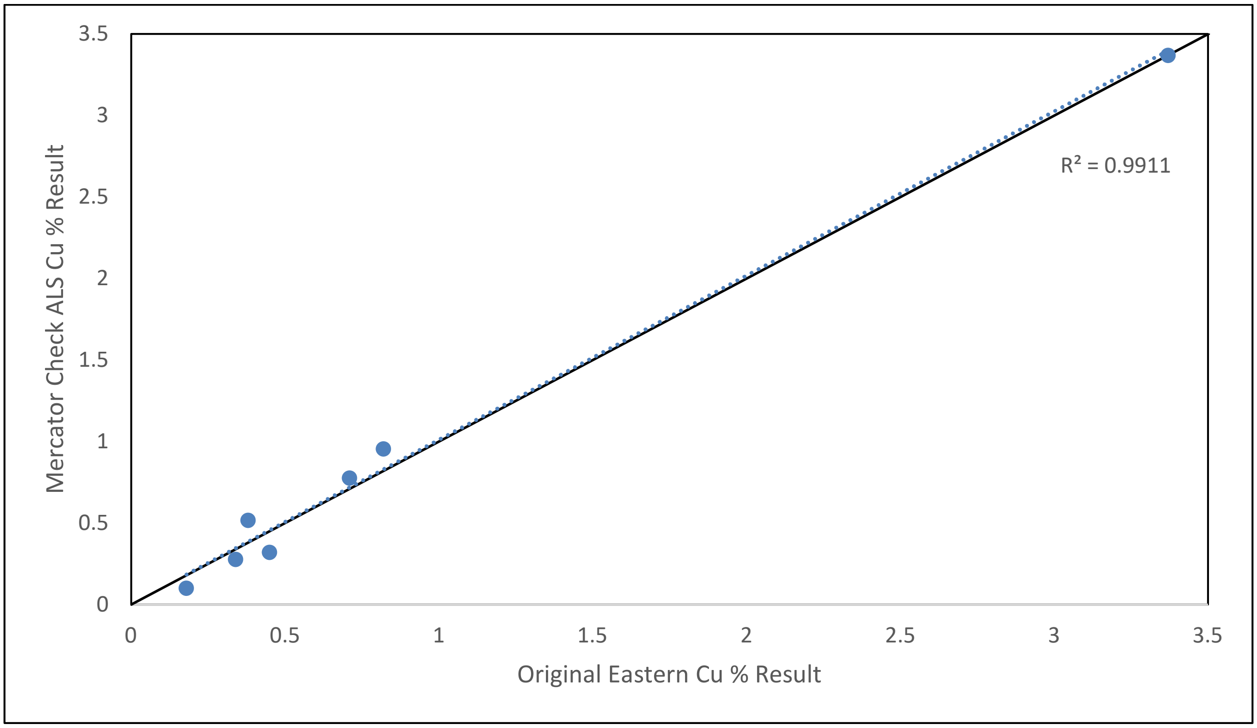

*(Source: Mercator, 2019. Black line denotes 1:1 correlation; Blue dashed - data linear regression.)*

**Figure 12-2: Mercator Check Sample Results – Pb %**



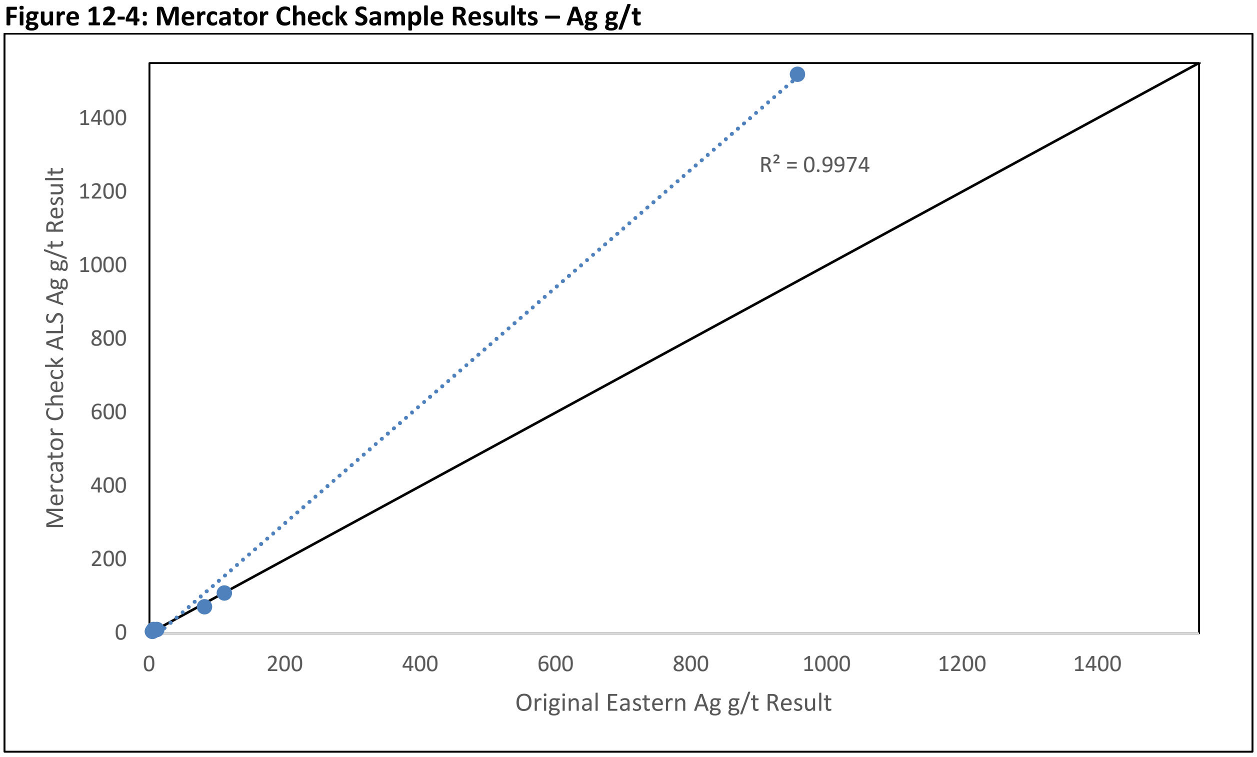

*(Source: Mercator, 2019. Black line denotes 1:1 correlation; Blue dashed - data linear regression.)*

**Figure 12-3: Mercator Check Sample Results – Cu %**



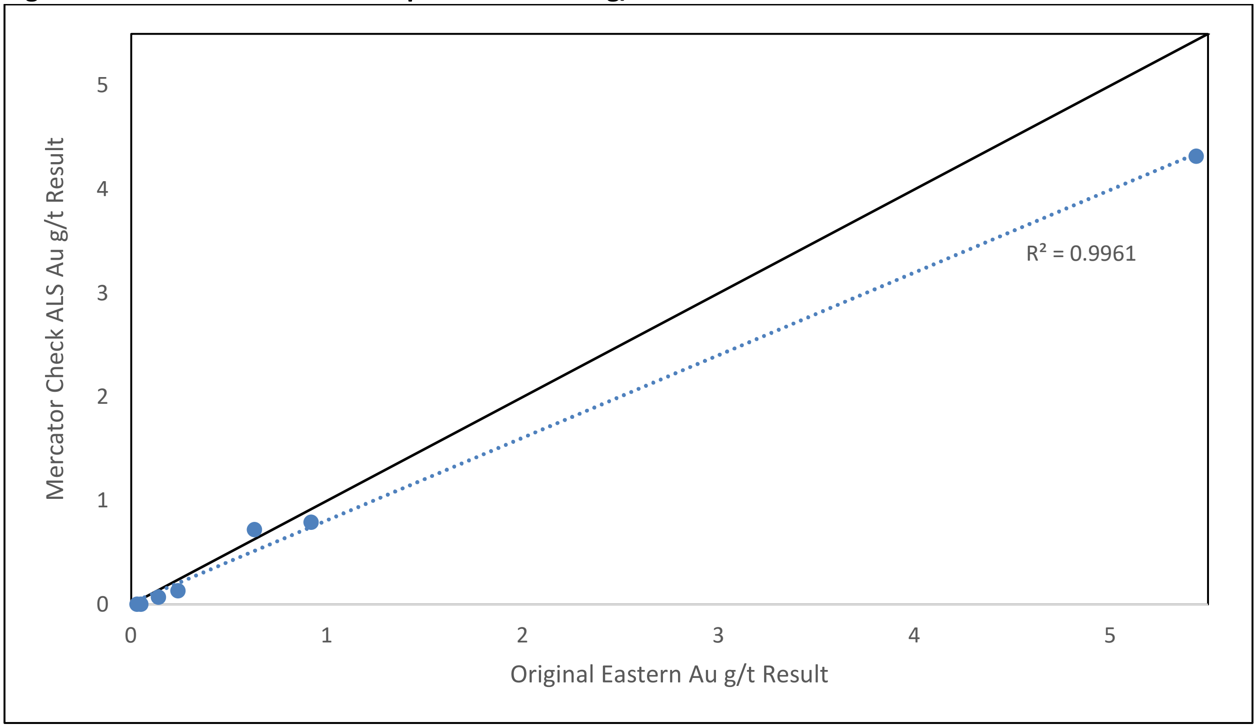

*(Source: Mercator, 2019. Black line denotes 1:1 correlation; Blue dashed - data linear regression.)*

**Figure 12-4: Mercator Check Sample Results – Ag g/t**




*(Source: Mercator, 2019. Black line denotes 1:1 correlation; Blue dashed - data linear regression.)*

**Figure 12-5: Mercator Check Sample Results – Au g/t**




*(Source: Mercator, 2019. Black line denotes 1:1 correlation; Blue dashed - data linear regression.)*

### 12.4.3 2021 Independent Data Verification and Site Visit

Nate Corcoran, P.Geo., employed by Mercator at the time, completed a site visit to the Property between April 14th to 16th, 2021, assisted by Derek Keats, then a Senior Geological Technician for BMC. Mr. Corcoran completed a personal inspection of the Property by roadside observations and by foot around the Buchans town area (Figure 12-6)

**Figure 12-6: Lucky Strike 'glory hole' – Buchans, NL (April, 2021)**

*Source: Mercator, 2021*

As part of the personal site inspection, Mr. Corcoran examined 4 drill holes and completed 6 quarter core check samples at the Canterra (then BMC) core storage facility in Buchans, NL (Figure 12-7). The 6 samples were mindfully chosen to include a variety of samples that span the typical lithologies and grades that would be exemplary from the Lundberg Deposit. Samples ranged from high grade semi-massive to massive sulphide to moderately high grade to a moderate grade disseminated sulphide to low grade host rock samples.

**Figure 12-7: Canterra's core logging and storage facility on Scott Street, Buchans NL (April, 2021)**

*Source: Mercator, 2021*

During the core storage facility visit, Mr. Corcoran confirmed the presence of Zn-Pb-Cu mineralization in drill core at the depths specified in logs and verified all lithological descriptions in logs against corresponding core intervals. Mr. Corcoran completed a thorough review of the BMC core log descriptions and lithographic codes against the styles of mineralization and geological structures observed in core samples.

A total of 21 drill hole collars were located for position verification, including the 4 holes in which check samples were taken from (2010, 2015 and 2018 drilling programs). At each collar site, a GPS coordinate was taken in NAD 83 UTM Zone 21N and displayed in the photo of each drill collar (Figure 12-8). There were 6 drill holes that had the caps removed, 3 of which staff did not know the hole number off hand. These locations were documented on the GPS and these points were referenced on the map afterwards to identify the proper hole name and location. Results showed acceptable correlation between datasets, with variance of a few metres recorded. Observations regarding character of forest cover, site elevations, surface drainage, road and drill pad features, exploration conditions and coordination, and general access road conditions were also noted during the site visit.

**Figure 12-8: Drill collars H-18-3524 and H-18-3501 (April, 2021)**

*Source: Mercator, 2021*

### 12.4.4 2021 Check Sample Program

Mr. Corcoran carried out all aspects of core marking and bagging for the quarter core check samples. Mr. Keats completed the core sawing of the samples under supervision of Mr. Corcoran and he was instructed to cut the intervals listed and put the samples back in place in the core box. Each sample was then prepared by Mr. Corcoran and flagging tape was put in the box underneath the core for the length of the sample indicating company, personnel, and resample number (Mercator, Nate Corcoran, resample number) as well as a resample tag. Wet and dry photos were taken of the sample intervals before and after the core was cut and after it was sampled (Figure 12-9). Sample tags used were supplied from BMC [Eastern Analytical tag book 344501-344550].

**Figure 12-9: Quarter-core check sample completed for drill holes H-10-3421 (April, 2021)**


*Source: Mercator, 2021*

Core samples collected during the 2021 site visit were maintained in Mr. Corcoran secure possession until received by Fedex for delivery to ActLabs in Fredricton, NB for preparation and subsequent sent to Actlabs in Ancaster, ON for analysis using ICP-OES methods. A single blind CRM and blank were inserted before shipment for analysis. Preparation of sample shipment documentation, checking, and packing of samples were carried out prior to shipment by commercial courier. ActLabs is an independent commercial analytical firm that is accredited by the Canadian Association for Laboratory Accreditation (CALA) and also holds ISO 9001 and ISO/IEC 17025 registrations.

Zinc, lead, and copper results for the 6 quarter-core splits are tabulated against the original assay values recorded by BMC in Table 12-1. Results returned show acceptable correlation with original sample values reported in the Property database and no issues were identified with respect to the blank sample and CRM results. Variability between the two sample sets is considered to be primarily influenced by core-scale heterogeneity of metal distribution, similar as with the 2018 check sample program.

**Table 12-1: CRMs for 2014-2015 and 2018 Programs**

| | | | Original BMC Sample | | | | Mercator Check Sample | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Hole No.** | **From (m)** | **To (m)** | **Sample No.** | **Zn %** | **Pb %** | **Cu %** | **Sample No.** | **Zn %** | **Pb %** | **Cu %** |
| H-18-3524 | 244.5 | 245.5 | 18-344361 | 8.70 | 4.87 | 1.26 | 344501 | 11.40 | 7.83 | 1.41 |
| H-10-3421 | 376.5 | 376.8 | 25812 | 7.60 | 1.72 | 0.22 | 344502 | 8.64 | 2.74 | 0.24 |
| H-10-3421 | 379.3 | 379.6 | 25817 | 3.10 | 1.80 | 0.40 | 344503 | 3.13 | 1.97 | 0.45 |
| H-18-3501 | 54.0 | 55.0 | 18-317554 | 2.38 | 2.83 | 0.66 | 344504 | 3.53 | 1.92 | 0.88 |
| H-18-3501 | 73.0 | 74.0 | 18-317575 | 2.21 | 0.64 | 0.44 | 344505 | 2.15 | 0.66 | 0.55 |
| H-15-3457 | 64.0 | 65.0 | 79387 | 0.11 | 0.05 | 0.04 | 344506 | 0.16 | 0.11 | 0.12 |
| Blank | | | | | | | 344507 | 0.007 | 0.004 | 0.001 |
| CRM | | | | 2.65 | 1.92 | 0.097 | 344508 | 2.75 | 2.02 | 0.098 |

### 12.4.5 2024 Independent Data Verification and Site Visit

On February 13th, 2024 author Harrington visited the Lundberg Deposit site accompanied by Canterra's Vice President of Exploration Paul Moore, P. Geo. The purpose of the personal inspection was to verify items completed by then Mercator employee Nate Corocran, P.Geo., between April 14th and 16th, 2021, including IW check sampling of drill core, and to satisfy NI 43-101 requirements for personal inspections and data verification. Drill core was reviewed at Canterra's core logging and storage facility in Buchans and review of previous BMC drill program components, including discussion of protocols for sampling of drill core, was also carried out.

Field checks were undertaken where possible to validate hole numbers, locations and casing orientations with respect to digital database records. Heavy snow cover was present, however Senior Geological Technician Derrick Keats flagged out a series of drill holes in advance of the site visit and the QP was subsequently able to uncover the drill collars to verify information. The QP verified 7 casings between the 2012, 2014-2015 and 2018 programs. Evidence of recent drill activity such as drill pads, drill trails and site markers were located for all drilling areas inspected. NAD83 UTM Zone 21 coordinates for located collars and drill site areas were collected using a Garmin E-trek handheld GPS instrument and these were recorded for later checking of database drill collar location coordinates. Results showed acceptable correlation between datasets, with variance of a few metres recorded. Observations regarding character of forest cover, site elevations, surface drainage, road and drill pad features, exploration conditions and coordination, and general access road conditions were also noted during the site visit.

Review of core provided characterization of lithology, alteration and mineralization styles intersected by drilling. These were found to be consistent with descriptions presented in the digital drill hole database and drill logs. The QP reviewed the data collection and QAQC procedures for the drilling and sampling programs completed by BMC with Mr. Moore and they agree with previous inspections in this regard. The QP was able to review 5 of the 6 IW check sample intervals completed in 2021. The reviewed intervals belong to drill holes H-18-3524 (sample 344501), H-10-3421 (samples 344502 and 344503), and H-18-3501 (samples 344504 and 344505). The QP was able to verify that archival and documentation of the 2021 IW check samples reflect descriptions provided by Mr. Corocran. With no new drilling or sampling programs completed by Canterra and previous operator BMC since the effective date of MRE, the author did not complete any additional IW check samples.

## 12.5 Author Comment on Post-2013 Data Verification Programs

Based on observations made during the 2024 site visit and further discussions with Canterra staff, author Harrington has determined that, to the extent reviewed during the site visit, evidence of work programs carried out to date on the Property are consistent with descriptions reported and that procedures employed during BMC programs are consistent with current industry standards and of good quality.

Author Harrington is also of the opinion that data verification procedures carried out with respect to the 2014-2015 and 2018 drilling programs, plus earlier data verification work reported previously in Technical

Reports by Webster and Barr (2008) and Cullen and Hilchey (2013) with regards to the respective historical MRE, have produced acceptable results. Associated data are considered acceptable for MRE purposes.

## 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The information presented in the 2019 Technical Report (Harrington and Cullen, 2019) with respect to mineral processing and metallurgical testing authored by Tomothy McKeen, P.Eng., is considered to be still acceptable for use in this Technical Report. A summary of this information is presented below, and the reader is directed to the 2019 Technical Report (Harrington and Cullen, 2019) for a more comprehensive discussion of historical mineral processing and metallurgical testing. Canterra has not completed any mineral processing and metallurgical testing programs.

The following metallurgical test programs have been conducted on samples from the Lundberg and/or Engine House Zones:

- SGS Mineral Services – Lakefield (Roman and Imeson, 2011): Mineralogy, grindability, heavy liquid separation, batch flotation and locked cycle flotation tests.
- SGS Mineral Services – Lakefield (Legault et. al., 2013): Mineralogy, grindability, batch flotation, locked cycle flotation, solid-liquid separation tests.
- SGS Mineral Services – Lakefield (Patsias and Imeson, 2014): Sample preparation and assays for ore sorting bulk test by Tomra (2014).
- Tomra Sorting Solutions (Tomra, 2014): XRT sensor-based sorting bulk test.
- Thibault & Associates (McKeen and Thibault, 2017): Bench scale dense media separation and batch flotation tests.

Test work to date has shown that the sulphide minerals in the Lundberg Deposit are well-liberated for recovery by flotation at typical grind sizes. The testing completed by SGS in 2011 was used as the basis for the historical 2011 PEA Report (Coley et. al., 2011), and development of the process flowsheet continued in subsequent studies.

Metal recoveries used in the NSR calculator for this study have been taken from the metallurgical projection in the most recent work by Thibault & Associates in 2017. The Thibault (2017) study was jointly undertaken between BMC and Canadian Zinc Corporation and funded in part by the Research & Development Corporation of Newfoundland and Labrador through the GeoEXPLORE Industry-lead program. The test program evaluated dense media separation as a potential pre-concentration technology and development of a bench scale flotation process based on the metallurgical characteristics of the deposit. The Thibault (2017) study also included a process simulation and a conceptual/order of magnitude economic model to identify and evaluate the key factors impacting the economics of the proposed milling facility for producing base metal concentrates.

In the studies from 2011 to 2017, process options that have been evaluated for the Lundberg and Engine House Zones include pre-concentration of the resource material, and flotation for recovery of copper, lead and zinc concentrates.

Being a stockwork deposit, pre-concentration by dense media separation (Thibault, 2017) or XRT sensor-based sorting (Tomra, 2014) was evaluated as a potential means to reject non-sulphide mineralization ahead of flotation. The use of pre-concentration would increase the feed grades to the mill, reduce the size of the grinding and flotation plant and reduce transportation costs if an off-site milling facility was considered. Dense media separation and XRT sensor-based sorting were both found to be technically viable pre-concentration methods with similar results, with both technologies providing similar results of 95% to 98% recovery of copper, lead and zinc after rejection of 25% of the initial mass. Further evaluation is required to determine if there is an economic advantage to either or both technologies.

Improvement of the flotation process has been achieved as the testing has progressed in the various studies. The evaluation of flotation options has included two main flowsheets. The first was the bulk Cu/Pb flowsheet where copper and lead are floated together followed by downstream separation into copper and lead concentrates. The second flowsheet option involved sequential flotation of copper, lead, and zinc into individual concentrates from the outset.

In the most recent open circuit bench scale tests by Thibault (2017), the sequential flotation of copper, lead and zinc from the Lundberg samples has been shown to be more selective, yielding improved copper and zinc concentrate grades compared to the bulk Cu/Pb flowsheet used in the historical 2011 PEA. The preliminary results show that selective zinc, lead and copper concentrates can be produced at marketable grades relative to smelter schedules. These results have been used in the NSR calculator for the February 28$^{th}$, 2019 MRE. Projected metal recoveries with the sequential flowsheet are 83.0% Cu, 13.3% Au, and 7.84% Ag in the copper concentrate, 84.3% Pb, 10.5% Au, and 50.3% Ag in the lead concentrate, and 87.2% Zn, 8.28% Au, and 14.8% Ag in the zinc concentrate. Projected grades in concentrates are 31.1% Cu in the copper concentrate, 67.8% Pb in the lead concentrate and 58.4% Zn in the zinc concentrate. Locked cycle flotation testing needs to be conducted to confirm the sequential flowsheet performance, and the results to date support continuing with the development of the sequential flotation flowsheet.

# 14.0 MINERAL RESOURCE ESTIMATE

## 14.1 Introduction

The definition of Mineral Resource and associated Mineral Resource categories used in this Technical Report are those recognized under NI 43-101 and set out in the CIM Definition Standards. Assumptions, metal threshold parameters, and deposit modeling methodology associated with the MRE are discussed below in Sections 14.2 through 14.8.

The Lundberg Deposit MRE, effective date February 28, 2019, was originally prepared for BMC. The February 28, 2019 MRE is made current for Canterra on the basis that the MRE methodology and reasonable prospects for eventual economic extraction used to define Mineral Resources are assessed to still be valid by the QP and that no new exploration has been completed that would materially impact the MRE.

## 14.2 Geological Interpretation Used in Resource Estimation

Stockwork mineralization at Buchans consists of a network of sulphide veins and veinlets that cut strongly altered and sulphidized host rocks. The largest known concentration of stockwork and disseminated mineralization is the Lundberg Zone that underlies the former Lucky Strike deposit. The stockwork mineralization has a higher ratio of pyrite to base metal sulphides than the in situ sulphide zones and is typified by presence of fine to coarse grained pyrite with lesser amounts of chalcopyrite, sphalerite, galena and barite (Thurlow and Swanson, 1981). This mineralization occurs within felsic volcanic rocks of the Buchans River Formation below the Lucky Strike deposit and extends into underlying mafic to intermediate volcanic rocks of the Ski Hill Formation. The Lundberg Zone stockwork mineralization comes to surface on the eastern edge of the zone and forms an elongate, wedge-shaped body that is 250 m deep on the western end. The highest concentration of sulphide mineralization lies in close proximity to the Lucky Strike massive sulphide zone and mineralization is more diffuse away from the zone. A second zone of stockwork mineralization is associated with the previously mined Engine House zone, which is located immediately south of the Lucky Strike deposit, and this zone has a higher proportion of chalcopyrite compared to other base metal sulphides.

## 14.3 Methodology of Resource Estimation

### 14.3.1 Data Validation

BMC provided the QP with a compiled drill hole database for the Property in Microsoft Access® GEMS Logger format. The database is coordinated in the NAD83 UTM Zone 21 system and consists of 3,717 drill holes for a total length of 438,527 m and 23,540 associated core samples. The QP imported the complete database into Surpac and implemented validation routines that detect specific data entry logical errors associated with sample records, drill hole lithocode intervals, collar tables and down hole survey tables.

Initial compilation of pre-2007 drill hole data was completed to support the historical 2008 MRE (Webster and Barr, 2008) and several corrections, assumptions, and adjustments have been made with respect to the pre-2007 drill hole dataset. Historical drill hole collar elevations have been converted to metre elevations relative to sea level and have had 8 m added to the values used historically in order to match them with the modern survey datum surveyed by Red Indian Surveys of Grand Falls, NL. Where historical drill logs listed “Tr” (trace) as an assay value, it was assumed that this was a trace amount above detection and was given a numerical value of 0.001 in the database in their respective unit of measure. Where historical drill logs listed “NIL” as an assay value, it was assumed that this was an amount below detection and was given a numerical value of 0.0001 or 0 (zero) in the database in their respective unit of measure.

Since the 2013 MRE, BMC has relogged more than 935 holes totalling more than 190,000 m of drill core, including 146 historic holes within the Lundberg Deposit. Significant portions of this work have been entered into the current digital drilling database but much of the detailed relogging information remains to be entered. Hardcopy interpreted paper sections have been compiled in each of the areas, including results from the relogging program, and were used to refine the current geological interpretation for the property.

A detailed validation procedure against original assay records, including review of digital certificates and assay samples sheets, was performed. Several drill programs operated by BMC (2008, 2012, 2014/2015, 2018) include samples that have been analyzed at both Eastern and ALS and when both were present, results provided by Eastern were given priority. Barite analysis and density determinations were provided by ALS. The Lundberg Deposit is defined by 7,972 core samples from 263 diamond drill holes within the MRE limits.

Included un-sampled intervals for drill holes with partial sampling were assigned “0” grade (zero % or g/t) grade for all metals. Included un-sampled intervals for drill holes with limited to no sampling were either assigned “0” grade (zero % or g/t) for all metals or ignored. Such intervals were assigned a sample identification attribute in the drilling database of MGS_NS (Mercator Geological Services No Sample). Un-sampled drill holes were ignored in areas of the deposit where geological drill hole data were compiled and supported the presence of a well mineralized stockwork zone, but analytical results were not available. Unsampled or partially sampled intervals in historic drill holes that were later twinned and sampled during a BMC operated drill program were also ignored and the more recent BMC information was relied upon.

A NSR calculator spreadsheet was prepared by Stantec and used by the QP in combination with the optimised pit shell developed by Douglas Roy, P.Eng., to define Reasonable Prospects for Eventual Extraction for the Lundberg Deposit Mineral Resource. Assay metal grades for each sample were input into the NSR calculator and an NSR value was appended to each sample in the drill hole assay database.

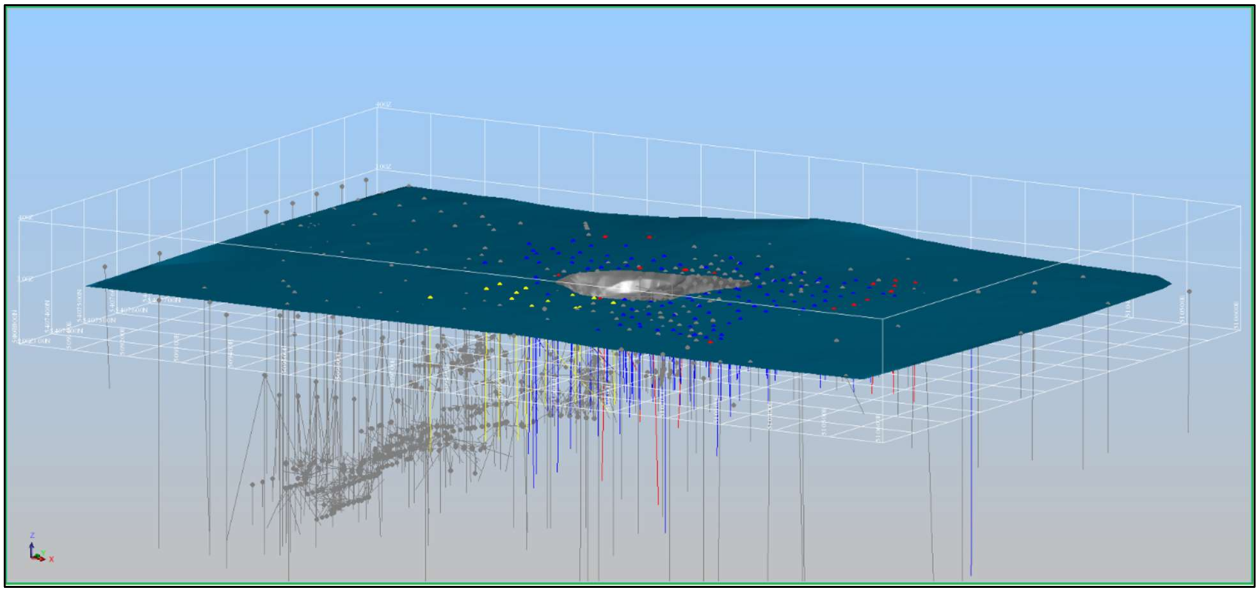
Implementation of the database validation and review procedures described above resulted in minor litho-code and assay entry corrections. These were incorporated to create the validated and functional drilling database used in the MRE.

### 14.3.2 Surface, Lithological, and Domain Modelling

#### 14.3.2.1 Topography

The digital terrain model ("DTM") of contoured topography developed by Mercator staff for the historical 2008 and 2013 MREs was retained. The majority of the Mineral Resource solid models are constrained by the upper boundary of the Buchans River Formation or the bedrock-overburden interface. Where applicable, the topographic surface DTM was applied as the top surface constraint (Figure 14-1).

**Figure 14-1: Isometric View to the Northwest of the Topographic Surface**



*Source: Mercator, 2019*

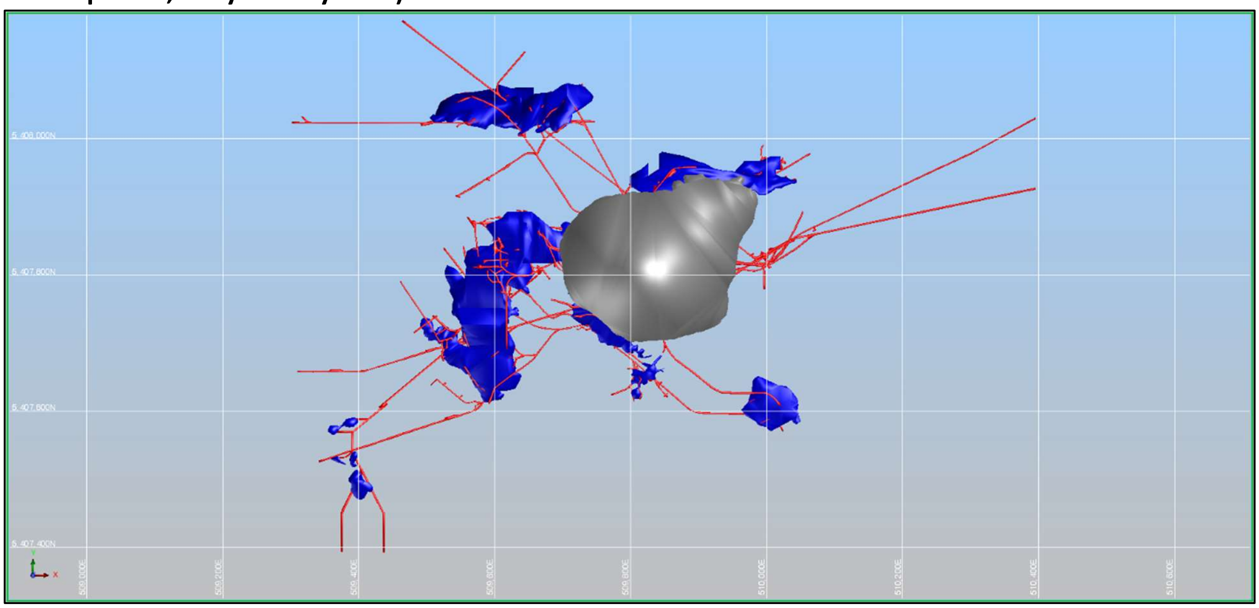
#### 14.3.2.2 Historic Mine Workings Model

The historic underground workings and open pit digital model developed by Mercator staff for the historical 2008 and 2013 MRE was revised for use in the current MRE. The original three-dimensional solid model was based on digitized workings outlines from archived hard copy maps and sections. Mercator staff and BMC collectively reviewed scanned historic maps and sections for the Lucky Strike, Lucky Strike Extension, North Orebody Zone, Engine House Zone, Two Level Zone, Low Grade Two Level, New Years Extension, and the West Orebody Zone (historical nomenclatures) to develop the digital solid model of mine workings. Based on additional digital capture from historic maps and sections, continued compilation of historic drill hole data carried out, and results from port-2013 drill programs, revisions were made to the earlier stope solid models for the Lucky Strike, North Orebody Zone, Two Level Zone and Low Grade Two Level solids. Completely new stope solid models were developed for the Lucky Strike Extension, Lucky Strike Low Grade, New Years Extension and West Orebody Zone. Underground development solid models were also locally modified and/or expanded where appropriate. The glory hole DTM surface and the Engine House stope solid model were retained as previously developed.

The Lucky Strike glory hole was modelled in 2007 by Eagle mapping from stereographic triangulation of historic aerial photography. The elevation of the glory hole and surrounding surface DTM elevations were provided in UTM (NAD83) co-ordinates and the elevation datum for these data was increased by 3 m to match the modern survey datum surveyed by Red Indian Surveys of Grand Falls, NL in 2007.

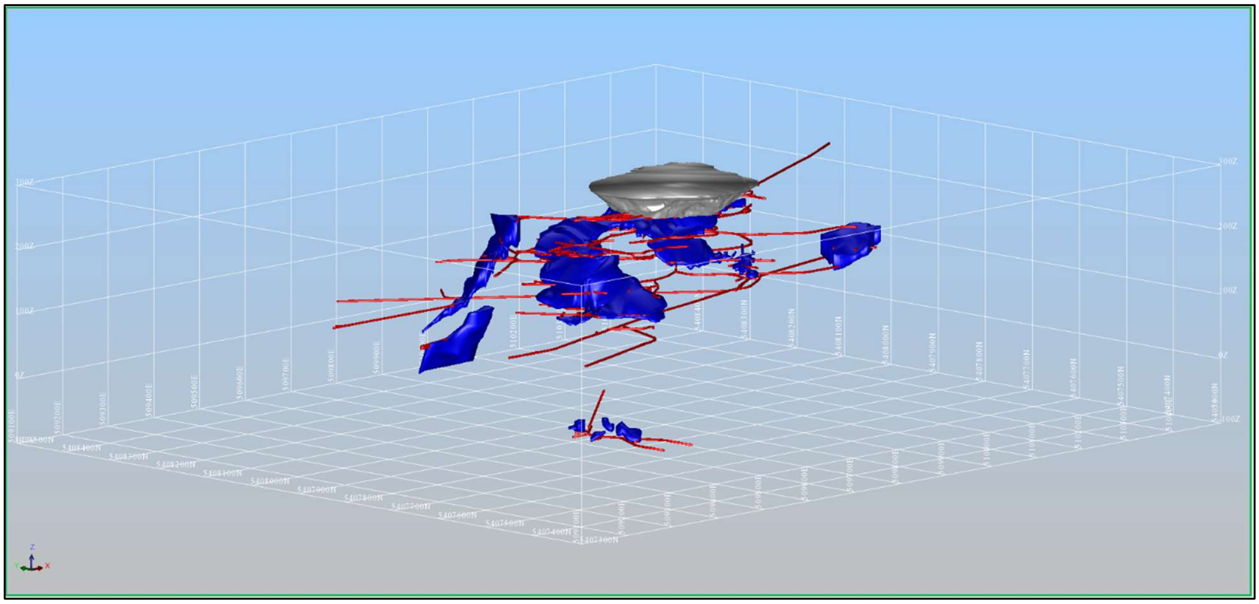
Partial percent volume assignment was used to estimate the block volume of stope and underground development solid models. Stopes are assumed to be predominantly back-filled, based on historical records and BMC drilling results, and were assigned a bulk density of 1.92 g/cm$^3$. Underground development and the glory hole were assumed to be open and were treated as void space. Historic mine workings solid models appear in Figure 14-2 and 14-3.

**Figure 14-2: Plan View to the Historic Mine Workings Solid Models (Blue = Stopes, Red = Underground Development, Grey = Glory Hole)**



*Source: Mercator, 2019*

**Figure 14-3: Isometric View to the Northeast of the Historic Mine Workings Model (Blue = Stopes, Red = Underground Development, Grey = Glory Hole)**

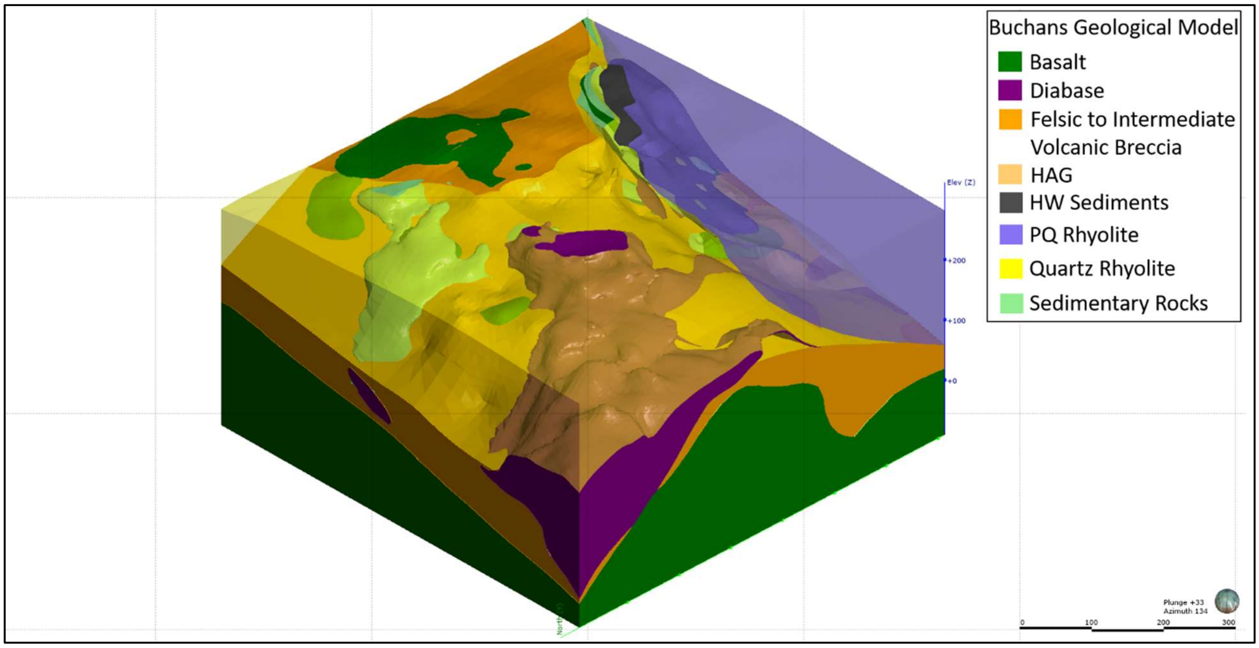


*Source, Mercator 2019*

### 14.3.3 Lithological and Grade Domain Solid Models

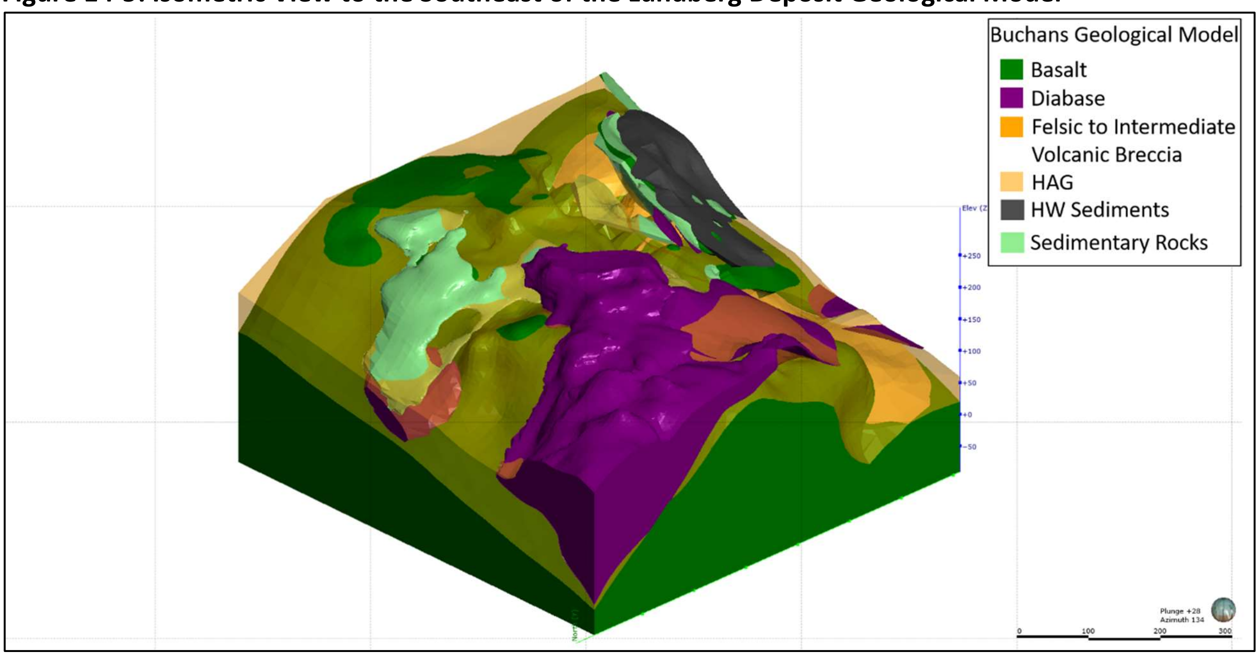
To support development of a revised geological model, BMC provided Mercator staff with new interpreted geological cross sections for the entire Lundberg Deposit. The cross sections reflect interpretations developed by BMC staff based on the 2014-2015 drilling data and relogging results completed since the historical 2013 MRE. The detailed cross-sections and surface geological maps from BMC were geo-referenced in Leapfrog and then displayed in relation to the drill hole data to develop contact points for the major lithological intervals. The structural and chronological relationships represented on section and communicated by BMC staff informed the generation of a series of 15 m resolution surface meshes which were subsequently used to created individual lithological bedrock solid models (Figure 14-4 and Figure 14-5). The Leapfrog geological model and the associated relogged drill hole data supported the interpretation and development of the grade domain solid models.

**Figure 14-4: Isometric View to the Southeast of the Lundberg Deposit Geological Model**




*Source: Mercator, 2019*

**Figure 14-5: Isometric View to the Southeast of the Lundberg Deposit Geological Model**



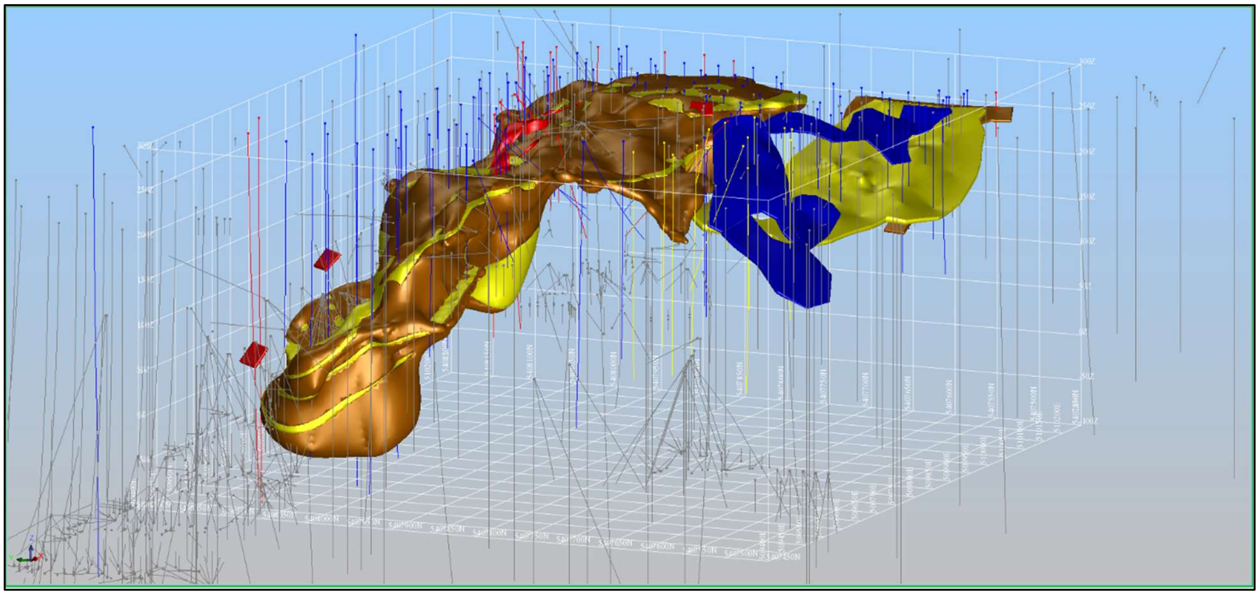

*Source: Mercator, 2019*

Geological solid models were developed using both Surpac and Leapfrog modelling software. Drill holes were first displayed sectionally with the geological model unit assignment and drill hole assay data included. Stockwork style mineralized intercepts were developed using a minimum width factor of five downhole metres supporting a minimum average NSR value of $40 US/t for definition of high grade domains. A minimum width factor of five downhole metres supporting a minimum average NSR value of $15 US/t was used for definition of low grade domains. Massive sulphide and transported style mineralization intercepts were developed with a minimum width of three downhole metres supporting a minimum average NSR value of $50 US/t. The outer contact points of each intercept were used to generate hanging wall and footwall surface meshes, and the meshes were subsequently used to develop 3D solid models for each unit with a 2.5 m mesh resolution. Solid models were projected along strike and down dip by half the distance to the nearest drill hole or by 25 m where constraining drill hole data was not present. The developed solid models, presented in Figure 14-6, were reviewed on a sectional basis, validated, and subject to a query-based drill hole snap check to ensure integrity.

The Lundberg Zone is defined by four high grade and one low grade stockwork solid models. High grade stockwork solids form tabular bodies elongated northwest-southeast with gentle northwest plunges below and to the east of the Lucky Strike glory hole and steep northwest plunges to the west of the Lucky Strike glory hole. The peripheral low grade solid model consists of a tabular body elongated northwest-southeast with a pronounced keel at depth. It has the same general orientation as the high grade domains (Figure 14-7 and 14-8). The Engine House Zone stockwork is defined by one high grade solid model forming a tabular body that dips to the west and one irregular, tabular, low grade solid model that occurs along the footwall of the high grade domain (Figure 14-9). Three discrete tabular solid models striking southeast and dipping steeply to the southwest were developed above the hanging wall, or to the west of the Engine House Zone, that define semi-massive to massive sulphide mineralization associated with the Airport Thrust (Figure 14-10). An additional 10 solid models were developed that define massive sulphide style mineralization that occurs as restricted dimension, square to rectangular shapes. Seven of these were developed to define remnant mineralization associated with the previously mined North Orebody, two were developed to define a northwest extension of the previously mined Two Level mineralization, and one was developed to model isolated pods of massive sulphide mineralization intersected east of the Lucky Strike glory hole (Figure 14-11).

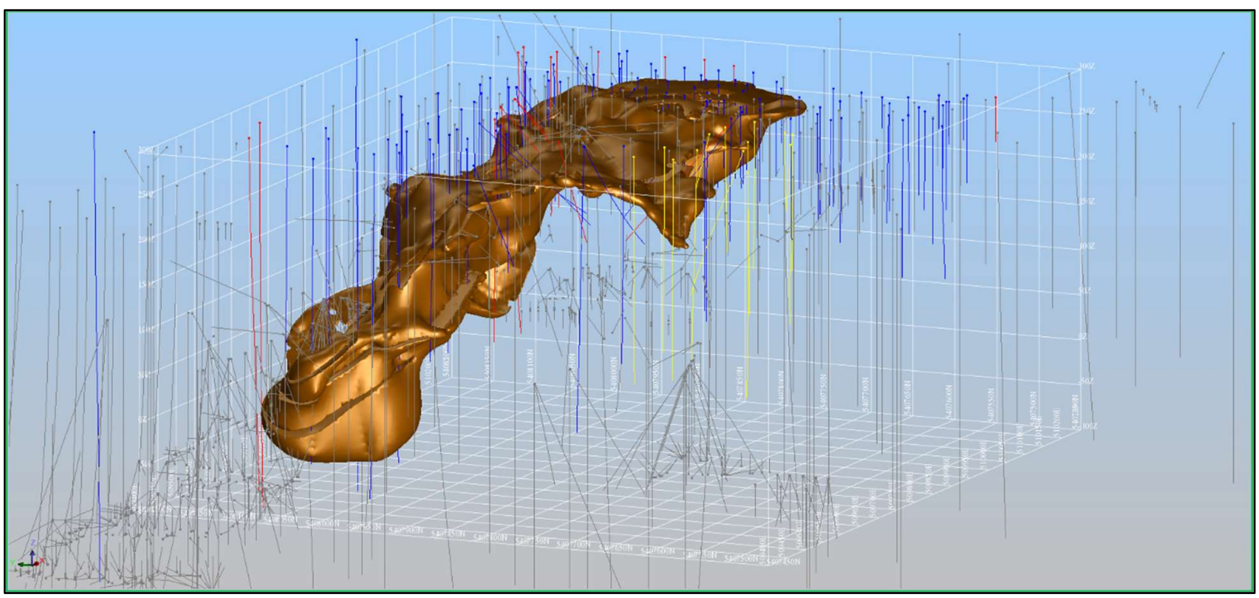
Grade domain solid models were depleted for volume associated with the historic mine workings solid models. Partial percent volume assignment was used to estimate the block volume of the depleted grade domain solid models.

**Figure 14-6: Isometric View to the Northeast of all Lundberg Mineral Resource Grade Domain Solid Models (Brown = NSR $15 US/t, Yellow = NSR $40 US/t, Blue (Airport) and Red (MS) = NSR $50 US/t)**



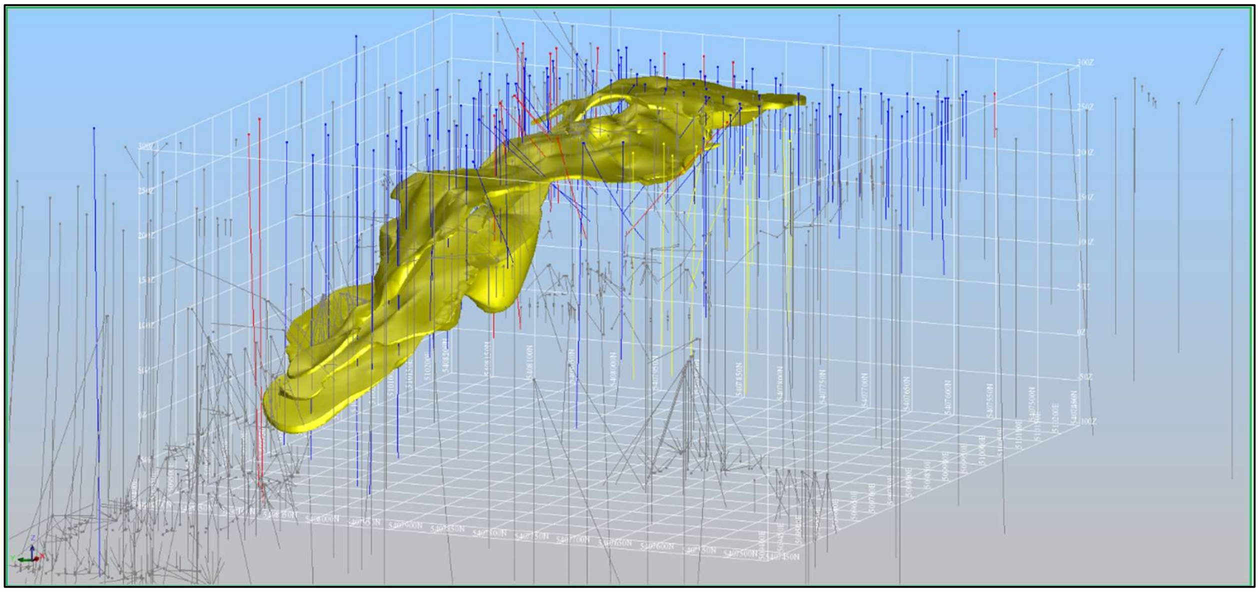
*Source: Mercator, 2019*

**Figure 14-7: Isometric View to the Northeast of the Lundberg NSR $15 US/t Mineral Resource Grade Domain Solid Model**



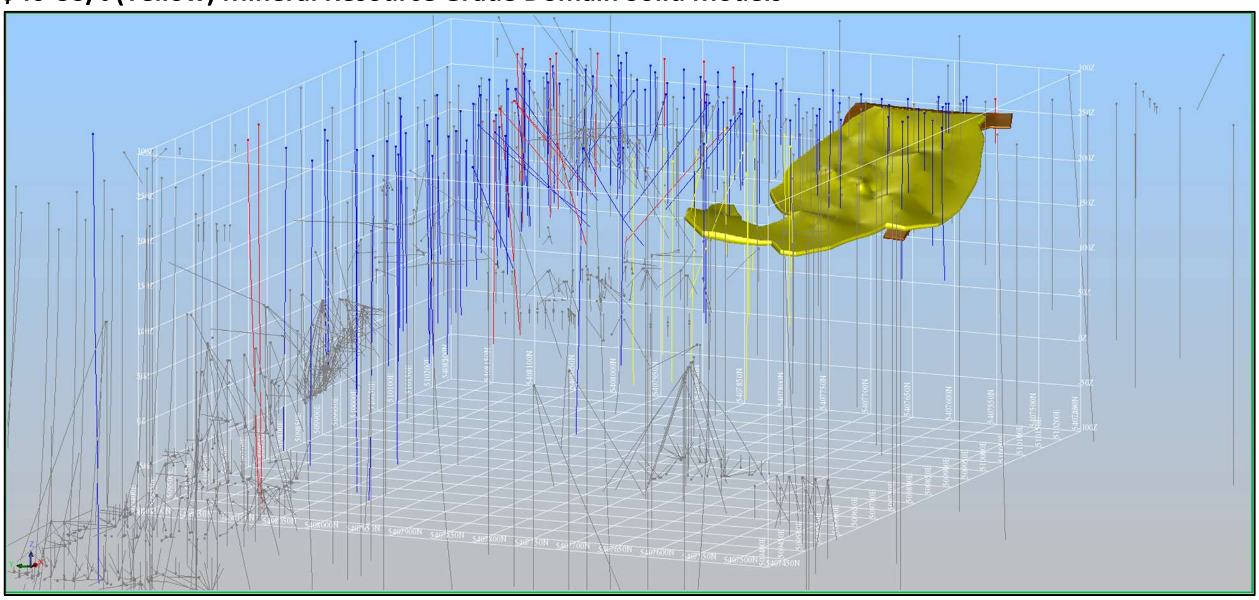
*Source: Mercator, 2019*

**Figure 14-8: Isometric View to the Northeast of the four Lundberg NSR $40 US/t Mineral Resource Grade Domain Solid Models**



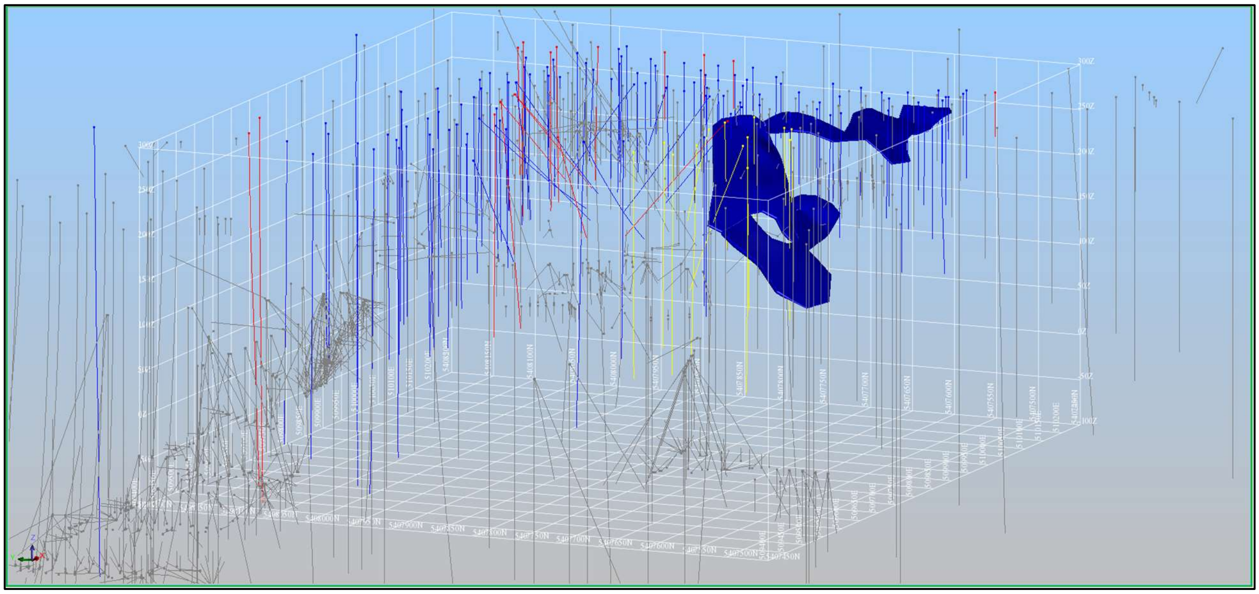
*Source: Mercator, 2019*

**Figure 14-9: Isometric View to the Northeast of the Engine House Zone NSR $15 US/t (Brown) and NSR $40 US/t (Yellow) Mineral Resource Grade Domain Solid Models**



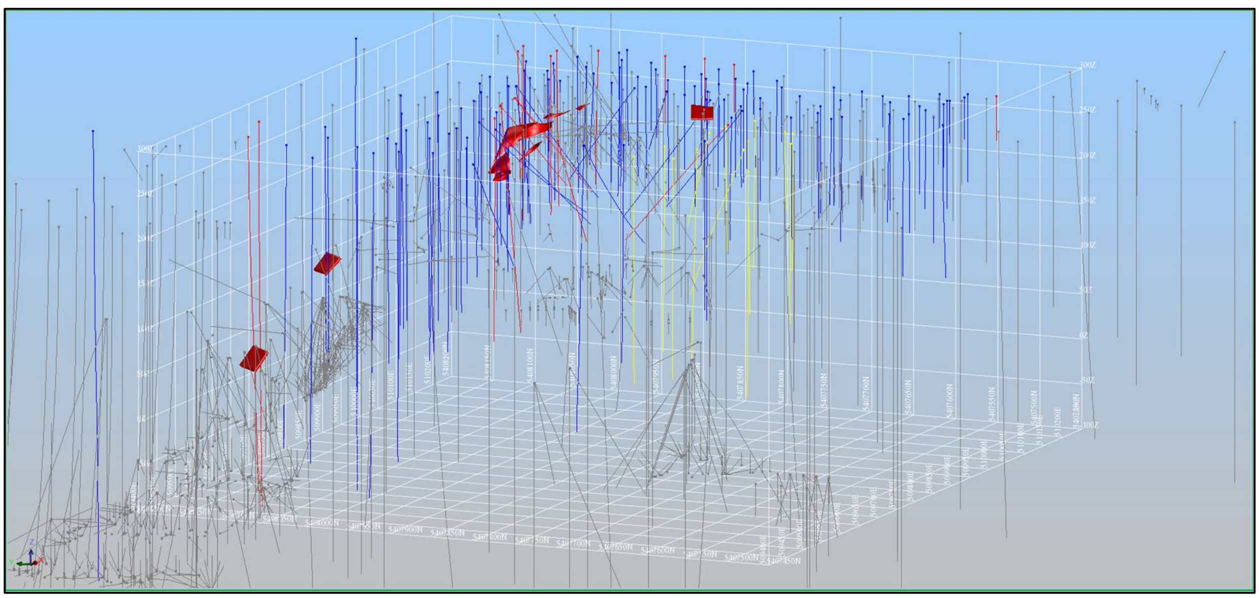
*Source: Mercator, 2019*

**Figure 14-10: Isometric View to the Northeast of the three Airport Thrust NSR $50 US/t Mineral Resource Grade Domain Solid Models**



*Source: Mercator, 2019*

**Figure 14-11: Isometric View to the Northeast of the ten Massive Sulphide NSR $50 US/t Mineral Resource Grade Domain Solid Models**



*Source: Mercator, 2019*

### 14.3.4 Drill Hole Assays and Downhole Composites

To facilitate compositing of downhole assay data, a drill hole intercept table consisting of drill hole intervals to be composited for each area was created using solid model drill hole intersections. Assay sample length statistics showed a mean sample length of 1.12 m, minimum length of 0.1 m, maximum length of 25.3 m, and a 1.53 m length corresponding to the 90th percentile. Downhole assay composites measuring 1.5 m in length and constrained to the drill hole intercepts for each area were created for zinc (%), lead (%), copper (%), silver (g/t), gold (g/t) and barium (%) using Surpac's "best-fit" method. Minimum and maximum acceptable composite lengths were selected at 1.125 m and 1.875 m, respectively, and composites created outside the minimum and maximum support thresholds were manually modified to meet the selection criteria.

A total of 2,746 assay composites were created for the NSR $40 US/t grade domains, with lengths ranging from 1.125 m to 1.825 m and a mean length of 1.51 m. A total of 3,101 assay composites were created for the NSR $15 US/t grade domains, with lengths ranging from 1.125 m to 1.83 m and a mean length of 1.49 m and 220 assay composites were created for the NSR $50 US/t grade domains, with lengths ranging from 1.125 m to 1.8 m and a mean length of 1.50 m.

Included un-sampled intervals for drill holes with partial sampling were diluted to "0" (zero % or g/t) grade for all metals. Included un-sampled intervals for drill holes with limited to no sampling were either diluted to "0" (zero % or g/t) grade for all metals or ignored. Diluted intervals were assigned a sample identification of MGS_NS (Mercator Geological Services No Sample). Ignored un-sampled drill hole holes reflect areas of the deposit where geological drill hole data has been compiled and supports the presence of a well mineralized stockwork zone, but analytical results are lacking. Unsampled intervals or partially sampled intervals in historic drill that were twinned and sampled during a later BMC operated drill program were ignored in favor of the newer BMC data.

Assay composite descriptive statistics were reviewed independently for NSR $40 US/t (Lundberg and Engine House Zone), NSR $15 US/t (Lundberg and Engine House Zone) and NSR $50 US/t (Airport Thrust and massive sulphide) grade domains and results are presented in Table 14-1, 14-2, and 14-3 respectively. No high-grade capping factors were applied to drill core sample analytical results. Through analysis of metal grade distribution, it was determined that high metal values in the assay dataset occur within zones where drill log descriptions of lithology and mineralogy support the presence of spatially correlative higher grade material. Maximum metal levels present are also considered to be consistent with the mineralization styles present.

**Table 14-1: Descriptive Statistics for the 1.5m Downhole Assay Composites within the NSR $40 US/t Grade Domain Solid Models (Lundberg Zone and Engine House Zone)**

| Parameter | Zinc (%) | Lead (%) | Copper (%) | Silver (g/t) | Gold (g/t) | *Barium (%) |
|---|---|---|---|---|---|---|
| Mean Grade | 2.30 | 0.94 | 0.66 | 7.97 | 0.09 | 0.88 |
| Maximum Grade | 23.10 | 9.81 | 6.42 | 283.35 | 3.36 | 48.79 |
| Minimum Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Variance | 5.93 | 1.13 | 0.60 | 221.03 | 0.04 | 13.31 |
| Standard Deviation | 2.43 | 1.06 | 0.77 | 14.87 | 0.21 | 3.65 |
| Coefficient of Variation | 1.06 | 1.13 | 1.18 | 1.86 | 2.22 | 4.16 |
| Number of Composites | 2,746 | 2,746 | 2,746 | 2,746 | 2,746 | 2,746 |

** Barium is converted to barite ($BaSO_4$) by barite % = barium % / 0.58*

**Table 14-2: Descriptive Statistics for the 1.5m Downhole Assay Composites within the NSR $15 US/t Grade Domain Solid Models (Lundberg Zone and Engine House Zone)**

| Parameter | Zinc (%) | Lead (%) | Copper (%) | Silver (g/t) | Gold (g/t) | *Barium (%) |
|---|---|---|---|---|---|---|
| Mean Grade | 0.64 | 0.26 | 0.14 | 2.29 | 0.03 | 0.30 |
| Maximum Grade | 11.2 | 7.1 | 4.65 | 71.04 | 0.90 | 18.04 |
| Minimum Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Variance | 0.48 | 0.13 | 0.04 | 18.00 | 0.00 | 0.86 |
| Standard Deviation | 0.69 | 0.37 | 0.21 | 4.24 | 0.06 | 0.93 |
| Coefficient of Variation | 1.09 | 1.40 | 1.54 | 1.85 | 1.78 | 3.12 |
| Number of Composites | 3,101 | 3,101 | 3,101 | 3,101 | 3,101 | 3,101 |

** Barium is converted to barite ($BaSO_4$) by barite % = barium % / 0.58*

**Table 14-3: Descriptive Statistics for the 1.5m Downhole Assay Composites within the NSR $50 US/t Grade Domain Solid Models (Airport Thrust and Massive Sulphide zones)**

| Parameter | Zinc (%) | Lead (%) | Copper (%) | Silver (g/t) | Gold (g/t) | *Barium (%) |
|---|---|---|---|---|---|---|
| Mean Grade | 6.23 | 3.51 | 0.65 | 83.17 | 0.89 | 2.77 |
| Maximum Grade | 26.2 | 18.47 | 8.91 | 483.84 | 5.53 | 48.94 |
| Minimum Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Variance | 29.75 | 10.14 | 1.07 | 7850.65 | 0.71 | 87.53 |
| Standard Deviation | 5.45 | 3.18 | 1.04 | 88.60 | 0.84 | 9.37 |
| Coefficient of Variation | 0.86 | 0.91 | 1.60 | 1.07 | 0.95 | 3.38 |
| Number of Composites | 220 | 220 | 220 | 220 | 220 | 220 |

** Barium is converted to barite ($BaSO_4$) by barite % = barium % / 0.58*

### 14.3.5 Variography

The QP prepared experimental downhole variograms from the 1.5 m assay composite dataset and also created experimental directional variograms. Best results were obtained from assessment of Zn and NSR values restricted to the NSR $40 US/t grade domains.

Acceptable spherical model results were obtained for experimental Zn and NSR downhole variograms, thereby providing assessment of global nugget values and creating a basis of consideration for interpolation ellipsoid minor axis ranges (Figure 14-12 and Figure 14-13). Directional Zn variogram modelling provided ranges of 90 m for the major axis of continuity and 50 m for the semi-major axis of continuity, showing primary trends oriented west-northwest and secondary trends oriented north-northeast (Figure 14-14). No plunge or dip component was identified during the directional Zn variogram assessment. Directional NSR variogram modelling provided ranges of 40 m for the major axis of continuity and 30 m for the semi-major axis of continuity, showing primary trends oriented northeast and secondary trends oriented northwest (Figure 14-15). Gentle to moderate plunges were defined in both orientations.

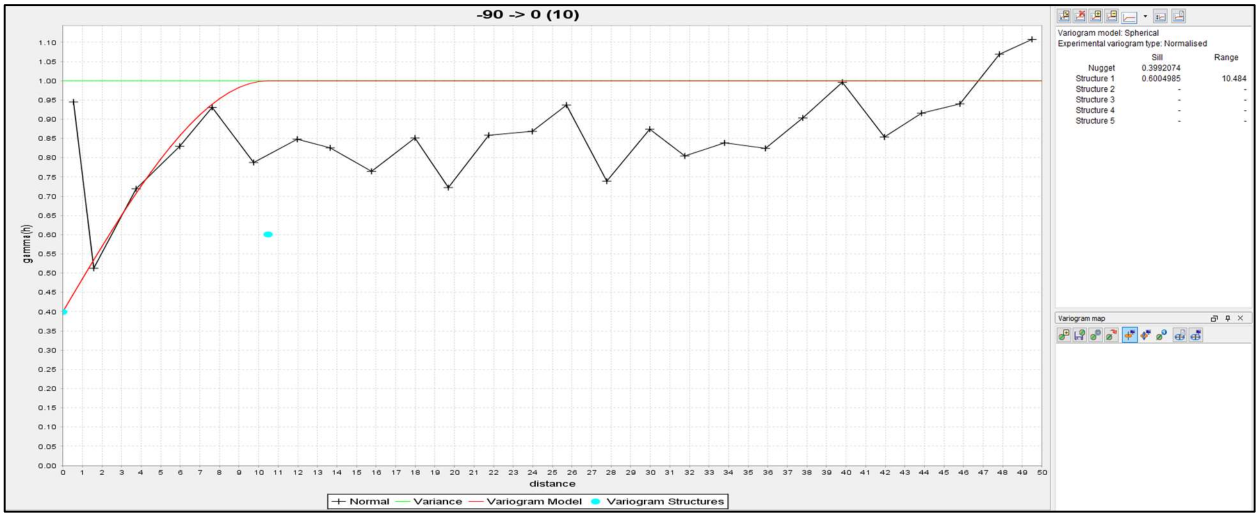
Experimental variogram results routinely showed sills significantly above or below the variance and are heavily influenced from local data clustering. Grade, thickness and distribution homogeneity of the stockwork mineralization in the minor axis direction, or the downhole direction, appears to affect variograms results for the primary grade trends.

Interpolation ellipsoid ranges were developed through consideration of the variogram assessment, geological interpretation, project history, drill hole spacing, and Mineral Resource categorization requirements. A multi-pass interpolation approach consisting of three separate stages was developed to populate the block model using progressively increasing ellipsoid ranges for each pass (Table 14-4).

**Table 14-4: Interpolation Ellipsoid Ranges (m) and Experimental Variogram Parameters**

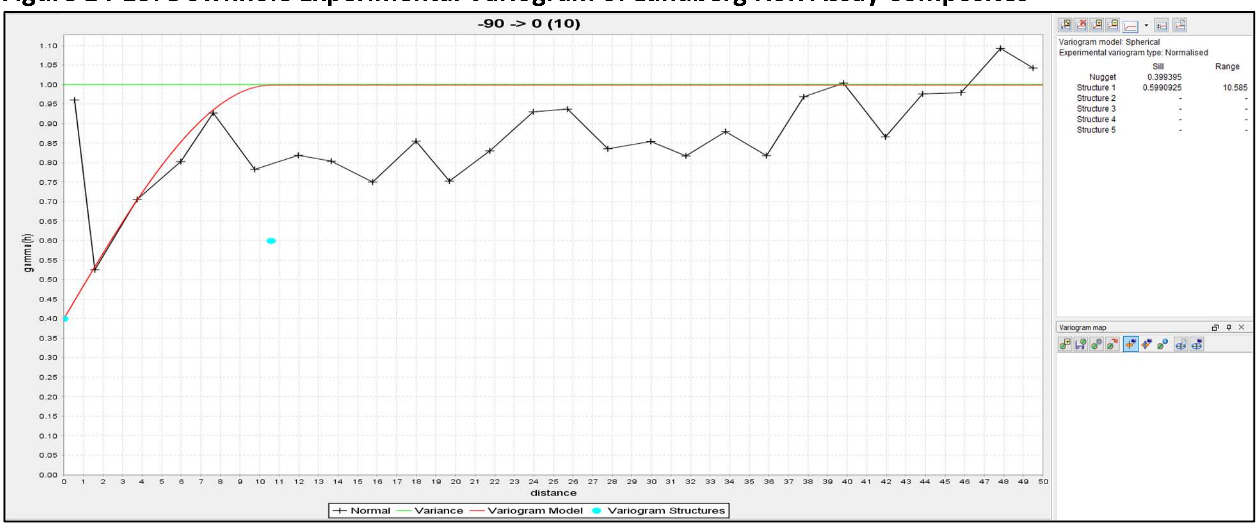
| | Range (m) | | |
|---|---|---|---|
| **Interpolation Pass** | **Major** | **Semi- Major** | **Minor** |
| 1 | 50.00 | 33.33 | 16.67 |
| 2 | 75.00 | 50.00 | 25.00 |
| 3 | 112.50 | 75.00 | 37.50 |

**Figure 14-12: Downhole Experimental Variogram of Lundberg Zn Assay Composites**



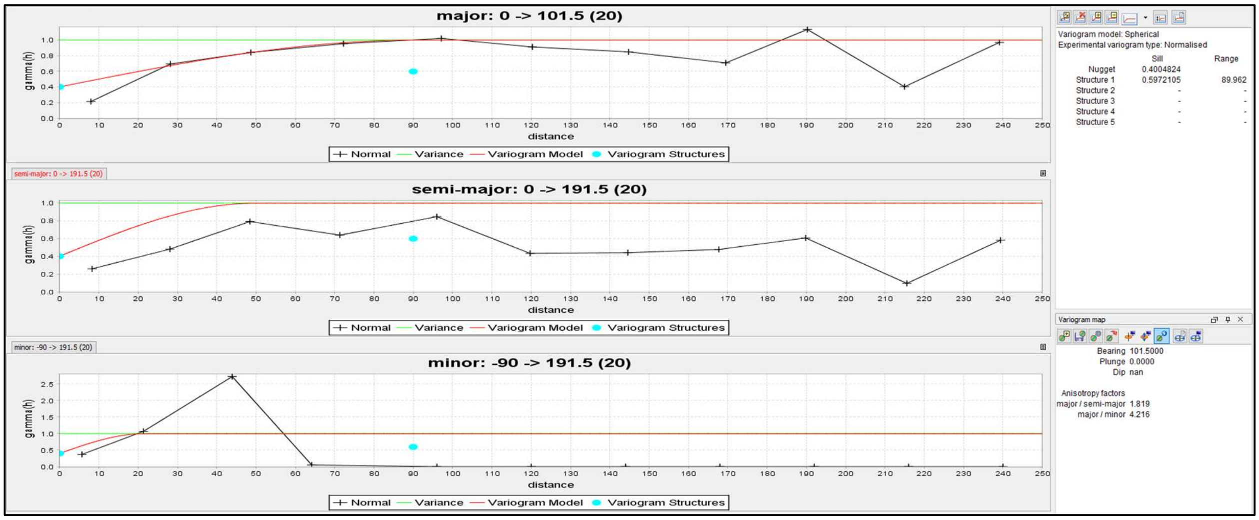

*Source: Mercator, 2019*

**Figure 14-13: Downhole Experimental Variogram of Lundberg NSR Assay Composites**



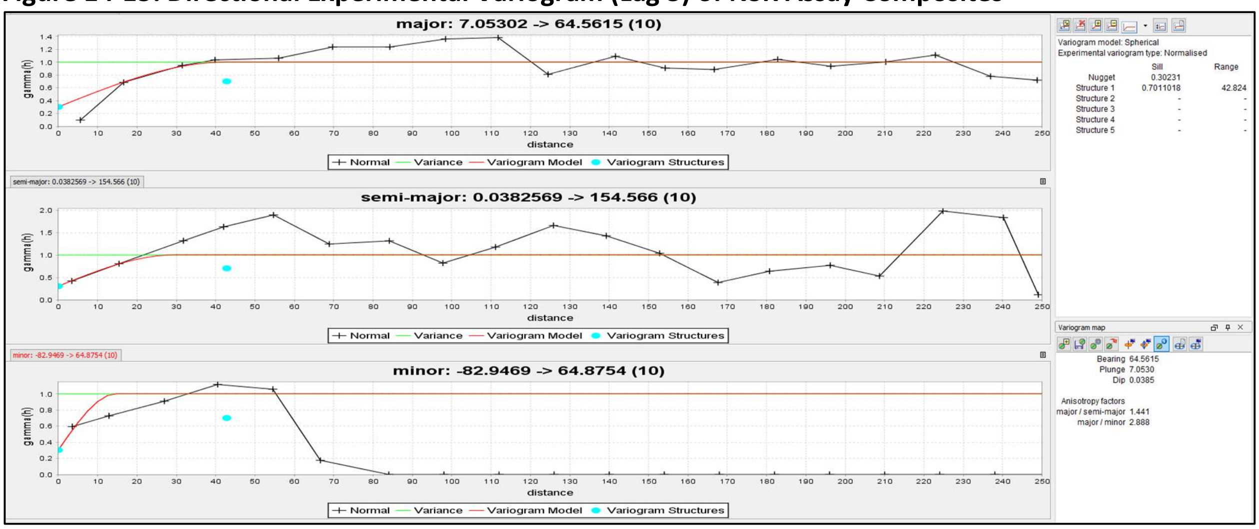

*Source: Mercator, 2019*

**Figure 14-14: Directional Experimental Variogram (Lag 24) of Lundberg Zn Assay Composites**




*Source: Mercator, 2019*

**Figure 14-15: Directional Experimental Variogram (Lag 5) of NSR Assay Composites**




*Source: Mercator, 2019*

Interpolation ellipsoids were oriented along the general geological trends identified for each deposit area solid and locally modified for changes in solid geometry. Ellipsoids for the Lundberg Zone strike northwest and show moderate to steep plunges in the strike direction and moderate dips towards the northeast. The primary direction of continuity is oriented in the strike direction. Ellipsoids for the Engine House Zone strike south and have moderate to steep dips towards the west. The primary direction of continuity is oriented in the dip direction. Ellipsoids for the Airport Thrust strike southeast and have moderate to steep dips towards the southwest. The primary direction of continuity is oriented in the dip direction. Ellipsoids for the North Orebody Zone massive sulphide domain strike west and show steep dips towards north. The primary direction of continuity is oriented in the strike direction. The number of interpolation domains for each deposit area are summarized in Table 14-5.

**Table 14-5: Lundberg Deposit Interpolation Sub-domains**

| Zone | Grade Domain | Interpolation Domains |
|---|---|---|
| Lundberg | NSR $40 US/t | 13 |
| Lundberg | NSR $15 US/t | 7 |
| Lundberg/Massive Sulphide | NSR $50 US/t | 4 |
| Engine House | NSR $40 US/t | 3 |
| Engine House | NSR $15 US/t | 2 |
| Engine House/Airport | NSR $50 US/t | 4 |
| | Total | 33 |

### 14.3.6 Setup of Three-Dimensional Block Model

The Lundberg Deposit MRE is coordinated in the NAD83 UTM Zone 21 coordinate system and the minimum and maximum extents are presented in Table 14-6. The block model is based on a standard block size of 5m (x) by 5m (y) by 5m (z) with no sub-blocking or rotation applied.

**Table 14-6: Lundberg Deposit Block Model Extents**

| *Minimum Coordinates | | | *Maximum Coordinates | | |
|---|---|---|---|---|---|
| Y (m) | X (m) | Z (m) | Y (m) | X (m) | Z (m) |
| 5,407,370 | 509,075 | -150 | 5,408,360 | 510,530 | 350 |

**NAD83 UTM Zone 21 coordinate system.*

### 14.3.7 Mineral Resource Estimation

Inverse distance squared ($ID^2$) grade interpolation methodology was used to assign block grades for zinc (%), lead (%), copper (%), silver (g/t), gold (g/t), and barite (%) within the Lundberg Deposit block model based on the 1.5 m assay composites. As reviewed earlier, interpolation ellipsoid orientation values and ranges used in the estimation reflect trends determined from variography as well as sectional interpretations of geology and grade distributions for the deposit. Block volumes were estimated from solid models using partial percentage volume calculation with a precision of 4.

Grade interpolation was constrained to the block volumes defined by solid models using the 3 interpolation pass approach previously discussed. Interpolation passes, implemented sequentially from pass one to pass three, progressed from being restrictive to more inclusive in respect to the composites available and number of composites required to assign block grades. Table 14-7 summarizes the included composite parameters. Block discretization was set at 2 (Y) x 2 (X) x 2 (Z).

**Table 14-7: Included Composite Parameters for Each Interpolation Pass**

| Interpolation Pass | Included Composite Parameters | | |
|---|---|---|---|
| | Minimum | Maximum | Maximum/Hole |
| 1 | 7 | 12 | 3 |
| 2 | 5 | 8 | 2 |
| 3 | 1 | 4 | 4 |

Grade domain boundaries were set as hard boundaries for grade estimation purposes and grade interpolation was restricted to the 1.5 m assay composites associated with the drill hole intercepts assigned to each deposit area solid. Adjacent and connecting interpolation domain areas within a grade domain unit were assigned soft domain boundaries for grade estimation purposes. As such, the 1.5 m assay composites in adjacent and connecting related domains contribute to the overall zone grade interpolation.

### 14.3.8 Density

A comprehensive density determination dataset is present for most of the drill holes completed by BMC and these were used to develop an interpolated density model for the Lundberg Deposit. Downhole density composites measuring 1.5 m in length, constrained to the drill hole intercepts for each area, were created for density using Surpac's "best-fit" method. Intervals with no density determinations were ignored during compositing, which includes all drilling prior to 2007. Descriptive statistics of downhole assay composites are presented in Table 14-8. Interpolation parameters for the density model reflect those used during the metal grade interpolations previously described.

**Table 14-8: Descriptive Statistics for 1.5m Downhole Density Composites**

| Parameter | Density (g/cm$^3$) |
|---|---|
| Mean Density | 2.92 |
| Maximum Density | 4.64 |
| Minimum Density | 2.25 |
| Variance | 0.05 |
| Standard Deviation | 0.22 |
| Coefficient of Variation | 0.07 |
| Number of Composites | 3,038 |

## 14.4 Model Validation

Block volume estimates for each Mineral Resource solid were compared with corresponding solid model volume reports generated in Surpac and results show good correlation, indicating consistency in volume capture and block model volume reporting.

Results of block modelling were reviewed in three dimensions and compared on a section by section basis with associated drill hole data. Block grade distributions were deemed to show acceptable correlation with the drill hole data. Visual inspection of metal distribution trends also showed consistency between the block model and the independently derived geological interpretations of the deposit.

In addition, block model statistics for all interpolated blocks were reported and tabulated at a zero cut-off value to facilitate inspection of associated statistical parameters. Results appear below in Table 14-9 and Table 14-10 and include relatively low coefficient of variation values for Cu, Pb and Zn and typically higher values for Au and Ag. Block values are lower than composite values due to the large difference in population sizes.

**Table 14-9: Descriptive Statistics for the Lundberg Deposit 1.5m Downhole Assay Composites**

| Parameter | Zinc (%) | Lead (%) | Copper (%) | Silver (g/t) | Gold (g/t) |
|---|---|---|---|---|---|
| Mean Grade | 1.59 | 0.69 | 0.39 | 7.79 | 0.09 |
| Maximum Grade | 26.2 | 18.47 | 8.91 | 483.84 | 5.53 |
| Minimum Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Variance | 5.49 | 1.36 | 0.40 | 615.44 | 0.07 |
| Standard Deviation | 2.342 | 1.17 | 0.63 | 24.81 | 0.27 |
| Coefficient of Variation | 1.47 | 1.70 | 1.62 | 3.18 | 2.92 |
| Number of Composites | 6,067 | 6,067 | 6,067 | 6,067 | 6,067 |

**Table 14-10: Descriptive Statistics for the Lundberg Interpolated Blocks**

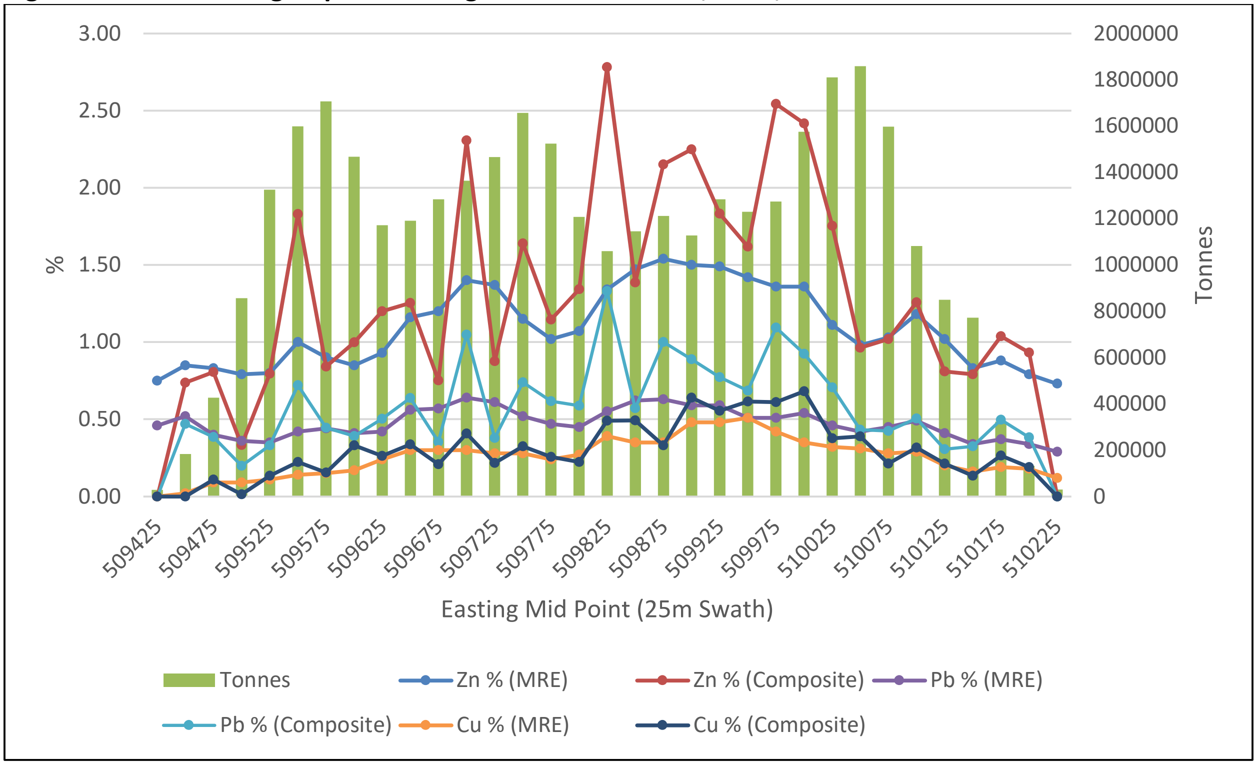
| Parameter | Zinc (%) | Lead (%) | Copper (%) | Silver (g/t) | Gold (g/t) |
|---|---|---|---|---|---|
| Mean Grade | 1.16 | 0.50 | 0.28 | 5.20 | 0.07 |
| Maximum Grade | 16.42 | 7.74 | 6.74 | 309.50 | 2.79 |
| Minimum Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Variance | 1.41 | 0.31 | 0.11 | 185.18 | 0.02 |
| Standard Deviation | 1.19 | 0.56 | 0.33 | 13.61 | 0.14 |
| Coefficient of Variation | 1.02 | 1.11 | 1.17 | 2.62 | 2.10 |
| Number of Composites | 126,054 | 126,054 | 126,054 | 126,054 | 126,054 |

Horizontal swath plots, in both northing and easting directions, and vertical swath plots were created for the global Lundberg block values, tonnages and average assay composite values. The resulting spatial distribution trends of the average assay grades and the average block grade values compare acceptably (Figure 14-16 to Figure 14-21). As noted previously in the coefficient of variation values, Au and Ag distributions are more variable than those for Cu, Pb and Zn.

Variance between the assay composite and block grade values is considered to be associated with two main factors: drill hole data clustering of underground drill holes in areas of historic mining and below the

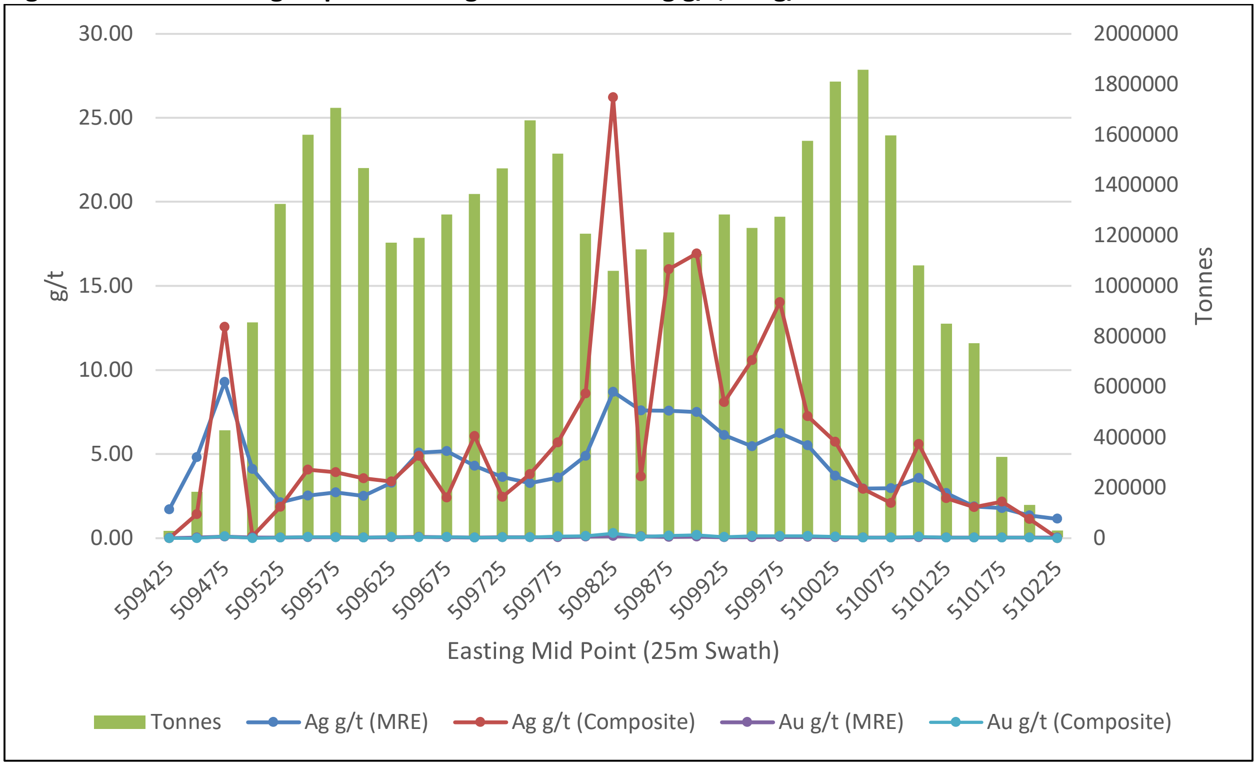
Lucky Strike glory hole, and block volume depletion of the historically mined areas. As such, assay composite grade values can locally have a high bias with respect to the block grade values.

**Figure 14-16: Lundberg Deposit Easting Swath Plot – Zn %, Pb %, Cu %**



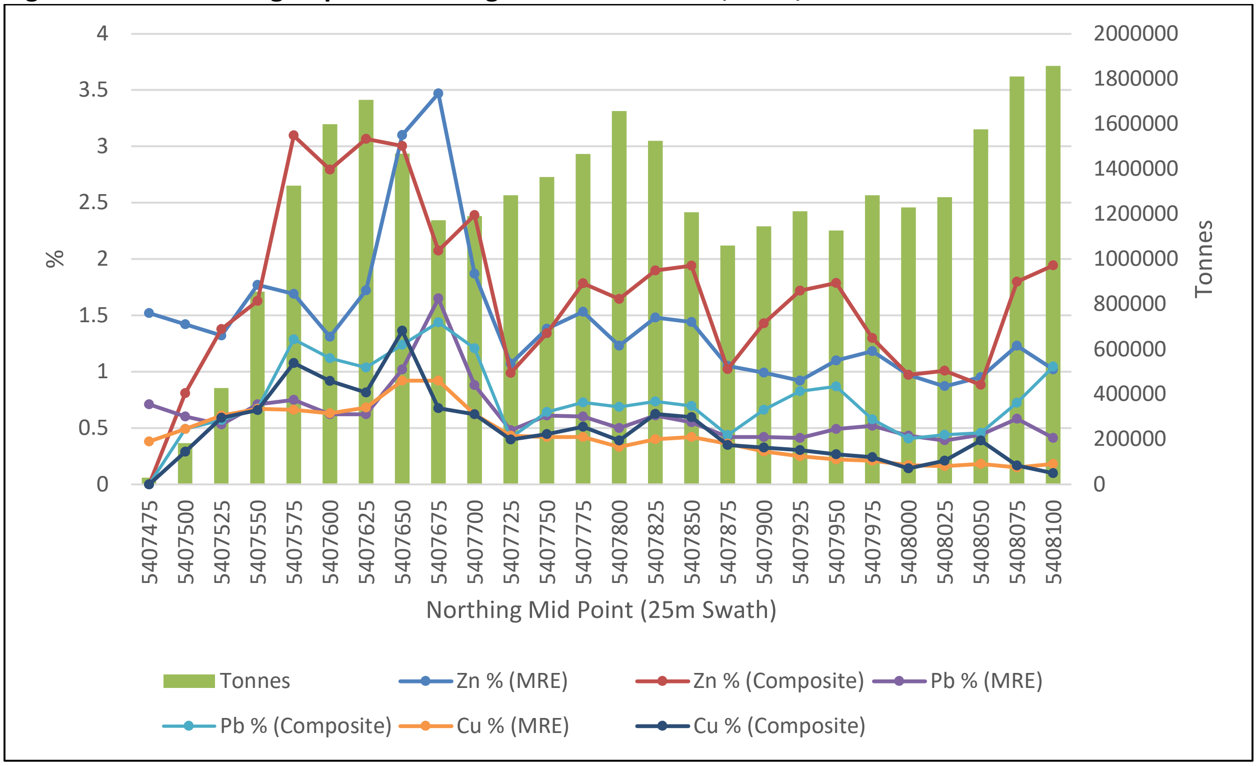

*Source: Mercator, 2019*

**Figure 14-17: Lundberg Deposit Easting Swath Plot – Ag g/t, Au g/t**



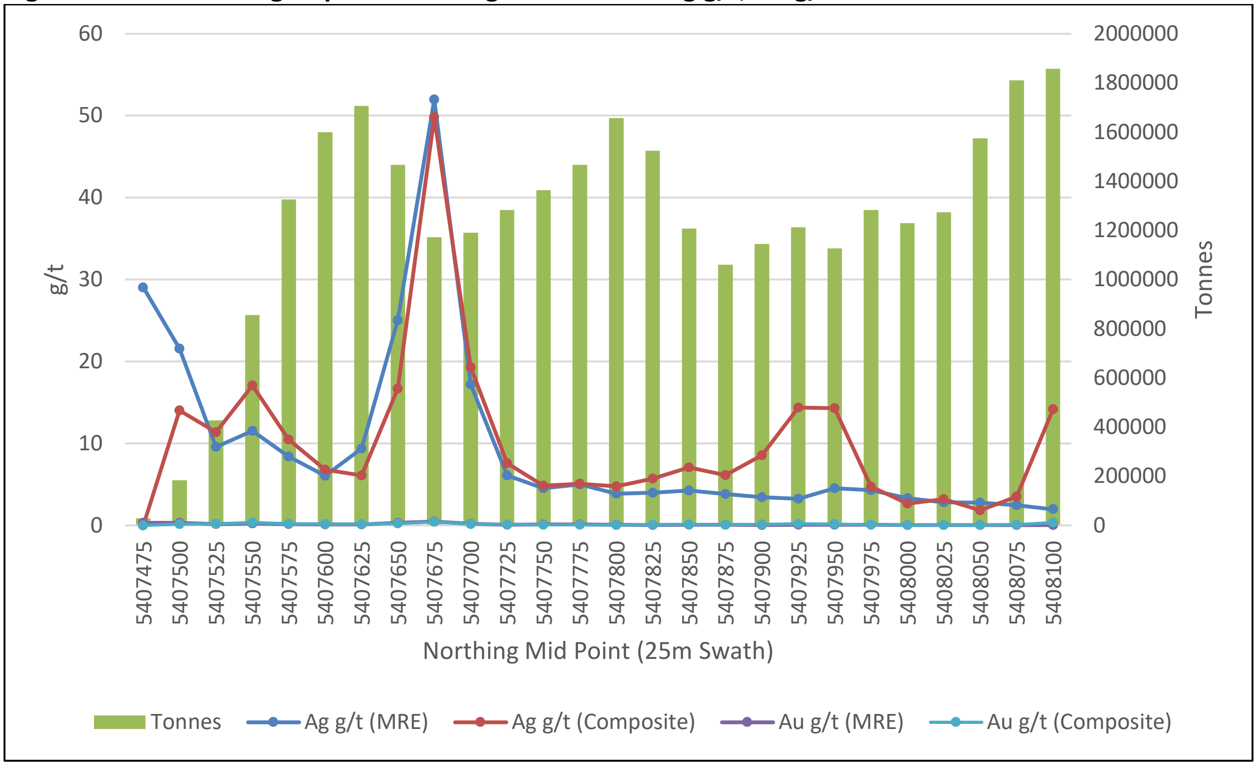

*Source: Mercator, 2019*

**Figure 14-18: Lundberg Deposit Northing Swath Plot – Zn %, Pb %, Cu %**



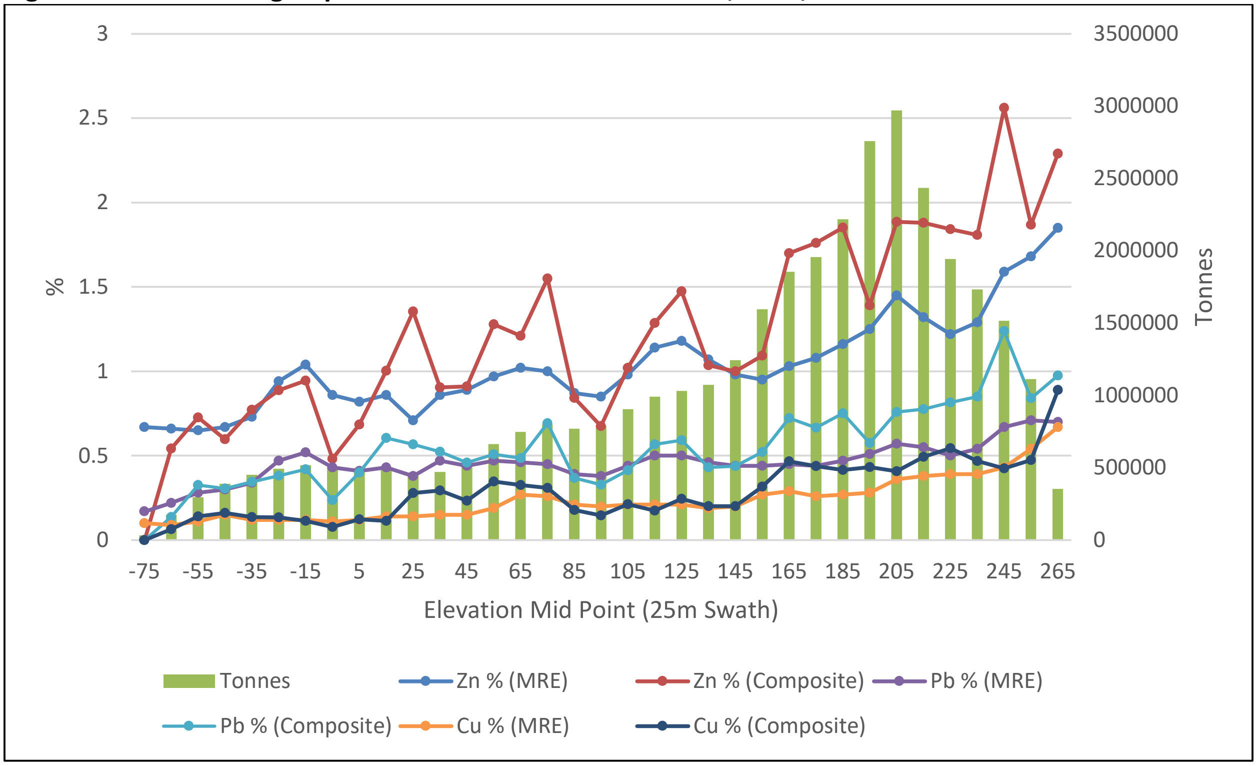

*Source: Mercator, 2019*

**Figure 14-19: Lundberg Deposit Northing Swath Plot – Ag g/t, Au g/t**



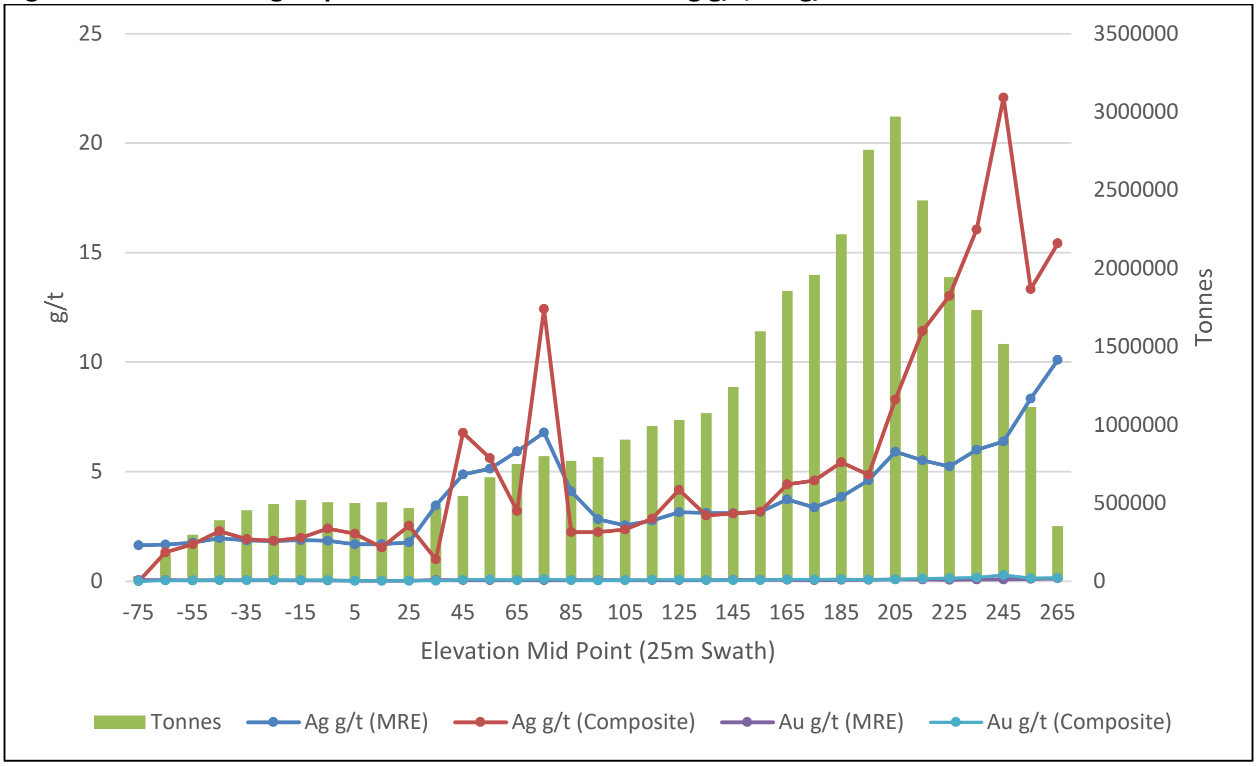

*Source: Mercator, 2019*

**Figure 14-20: Lundberg Deposit Elevation Swath Plot – Zn %, Pb %, Cu %**




*Source, Mercator, 2019*

**Figure 14-21: Lundberg Deposit Elevation Swath Plot – Ag g/t, Au g/t**




*Source, Mercator, 2019*

A Nearest Neighbour (NN) check model for the Lundberg Deposit was performed to check the ID$^2$ interpolation methodology and results appear in Table 14-11. Interpolation parameters reflect those used in the ID$^2$ model. Results of the NN modeling showed that average grades and tonnage closely match those of the ID$^2$ model. Results of the two methods are considered sufficiently consistent to provide an acceptable check.

**Table 14-11: Comparison Between ID$^2$ and NN Methodologies**

| NSR US/t Cut-off | Interpolation Method | Tonnes | Zn (%) | Pb (%) | Cu (%) | Ag (g/t) | Au (g/t) |
|---|---|---|---|---|---|---|---|
| 0 | ID$^2$ | 36,808,508 | 1.15 | 0.49 | 0.28 | 4.35 | 0.06 |
| 0 | NN | 36,808,508 | 1.15 | 0.50 | 0.29 | 4.57 | 0.06 |
| 20 | ID$^2$ | 26,653,673 | 1.42 | 0.61 | 0.36 | 5.40 | 0.07 |
| 20 | NN | 27,666,680 | 1.38 | 0.59 | 0.35 | 5.46 | 0.06 |

### 14.5 Reasonable Prospects for Eventual Economic Extraction

The reasonable prospects for eventual economic extraction requirement set out in the CIM Definition Standards was addressed for the Lundberg Deposit by means of developing an optimized pit shell to constrain Mineral Resources amenable to open pit mining methods. The pit shell was optimized against NSR block values determined through application of a NSR calculator. The methods and parameters used to define reasonable prospects for eventual economic extraction were originally developed for the February 28th, 2019 MRE prepared on behalf of BMC. The QP reviewed these methods and parameters and determined that they were still within an acceptable range for use at the Technical Report Date. Details pertaining to the NSR calculator and pit optimization are described below in Section 14.51 as they were developed at the effective date of the MRE.

The applied NSR metal prices are determined to be within an acceptable range for current purposes but may not be consistent with more recent assessments. The applied NSR metal prices for zinc and lead compare favorably with recent market trends and both short-term (2 to 3 year) and long-term (5 to 10 year) trailing averages demonstrated on the London Metals Exchange ("LME"). The applied NSR metal prices for copper, silver, and gold are lower with respect to recent market trends and short-term trailing averages (2 to 3 year) but compare more favorably with long-term (5 to 10) trailing averages demonstrated on the LME (copper) and COMEX (gold, silver). The applied NSR metal price of $1,250 Us/oz for gold shows the largest discrepancy in this regard. Given the relatively low concentration of gold in the Lundberg Deposit and the low recovery to concentrate for gold demonstrated in historical test work, an updated gold price would not be expected to materially change reasonable prospects for eventual economic extraction to define Mineral Resources. The metallurgical recoveries and grades to concentrate used in the NSR calculator are based on the most recent data available for the project. Mining and processing costs applied for pit optimization are inline with projects with similar mineralization styles and/or similar scale.

The reader is cautioned the application of the NSR calculator and optimized pit shell are solely for the purpose of addressing reasonable prospects for eventual economic extraction by an open pit mining scenario and do not represent an estimate of Mineral Reserves. The results are used as a guide to assist in the preparation of MRE and to select an appropriate Mineral Resource reporting cut-off grade.

### 14.5.1 Net Smelter Return (NSR) Calculator

A NSR calculator spreadsheet was prepared by Stantec and used by QP in the Mineral Resource estimation procedure in combination with the optimized pit shell to define the limits of the current Lundberg Deposit Mineral Resource. Interpolated metal grades for each interpolated block were input into the NSR calculator, which determined the potential cash value per tonne of each interpolated block based on the revenue from concentrate produced after consideration of net smelter treatment costs, concentrate payable factors, transportation costs and royalties. Calculated NSR block values were imported into the block model as block model attributes.

Metal prices of $3.00 US/lb Cu, $1.00 US/lb Pb, $1.20 US/lb Zn, $1,250 US/oz Au and $17.00 US/oz Ag were used in the NSR calculator and reflect a consensus developed from market forecast data available to BMC plus review of public record forecasts and analysis of trailing average pricing trends at the February 28th, 2019 effective date. Projected metallurgical recoveries and concentrate grades were based on the most recent test work reported in the report titled "Centralized Milling of Newfoundland Base Metal Deposits - Bench Scale DMS and Flotation Test Program" prepared by the metallurgical consulting firm

Thibault & Associates Inc. in 2017 (Thibault and Associates, 2017). Projected metal recoveries applied are 83.0% Cu, 13.3% Au, and 7.84% Ag in the copper concentrate, 84.3% Pb, 10.5% Au, and 50.3% Ag in the lead concentrate, and 87.2% Zn, 8.28% Au, and 14.8% Ag in the zinc concentrate. Project grades are 31 % Cu in the copper concentrate, 67.8% Pb in the lead concentrate and 58.4 % in the zinc concentrate. The NSR calculator used estimates for long-term smelter and shipping terms based on market conditions for similar concentrates.

### 14.5.2 Pit Optimization

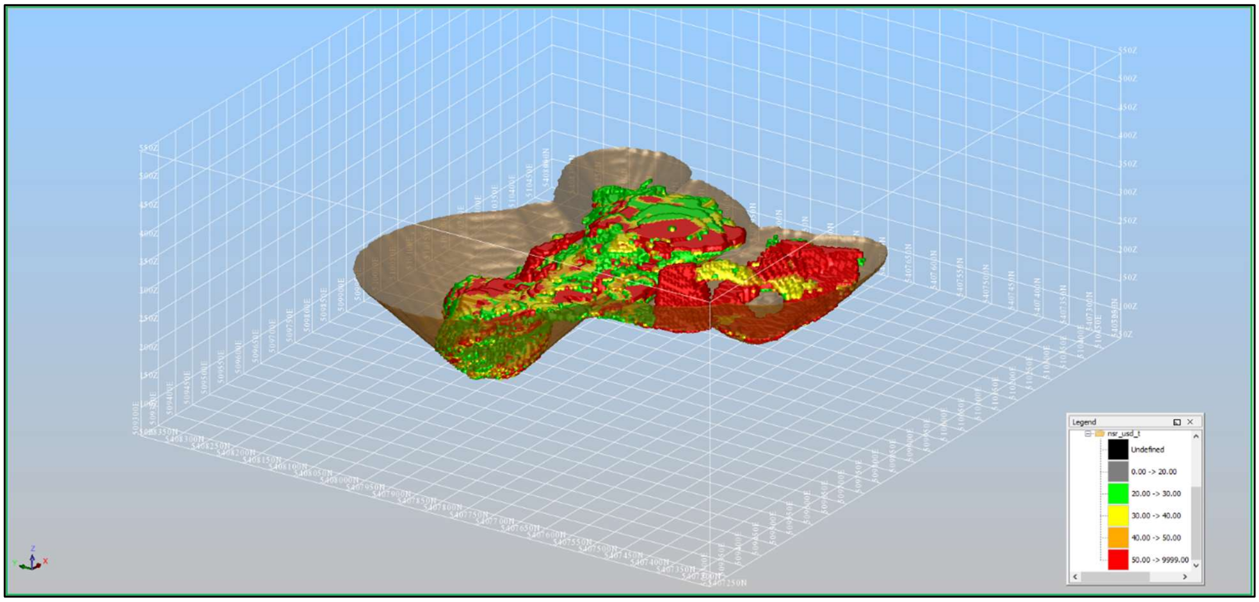
A Mineral Resource pit shell was developed and optimized by Douglas Roy, P.Eng., for the Lundberg Deposit block model. The pit shell was optimized against the NSR block value which includes metal pricing stated above against a total mining and processing cost of $20 US per tonne. Additional optimization parameters are presented in Table 14-12. The QP was provided with a vector outline of the optimized pit shell and converted the outline into a DTM surface that could be used for categorization and reporting of Mineral Resources.

**Table 14-12: Parameters used for Pit Optimization**

| Parameter | |
|---|---|
| Mining per Tonne ($US) | $3 |
| Waste Mining per Tonne ($US) | $2.5 |
| G&A per Tonne ($US) | $2 |
| Processing per Tonne ($US) | $15 |
| Mining Dilution % | 10% |
| Mining Recovery % | 95% |

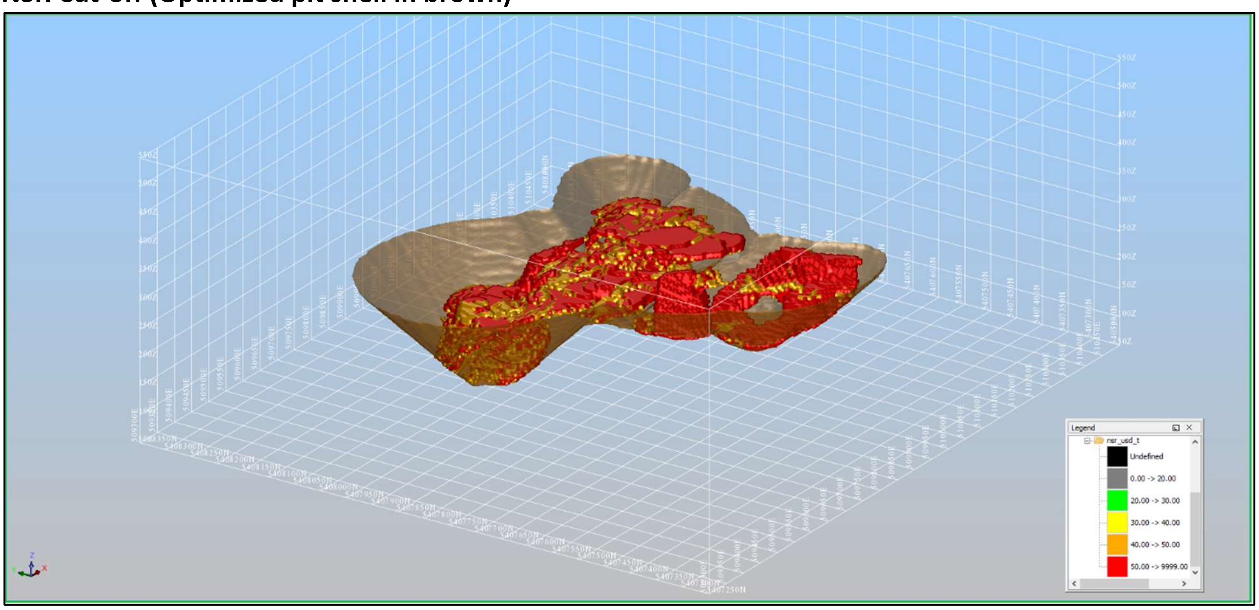
The optimized pit shell and NSR block value is presented in Figures 14-22 through 14-25.

**Figure 14-22: Isometric View to the Northeast of the Lundberg Deposit NSR Distribution at $20 US/t NSR Cut-off (Optimized pit shell in brown)**



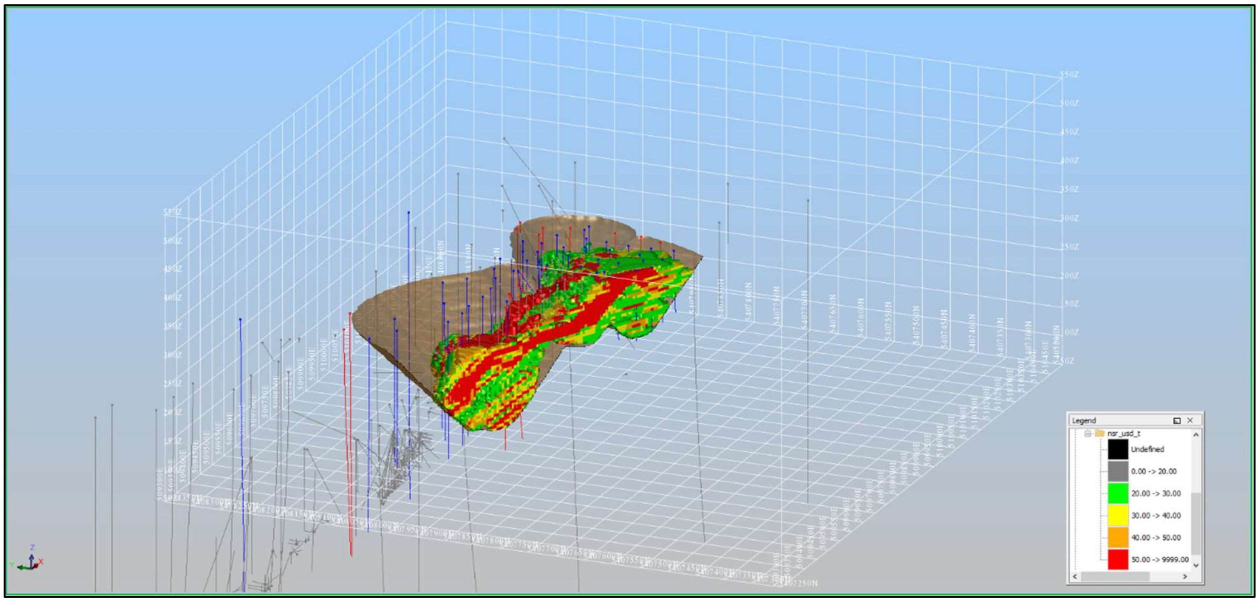

*Source: Mercator, 2019*

**Figure 14-23: Isometric View to the Northeast of the Lundberg Deposit NSR Distribution at $40 US/t NSR Cut-off (Optimized pit shell in brown)**



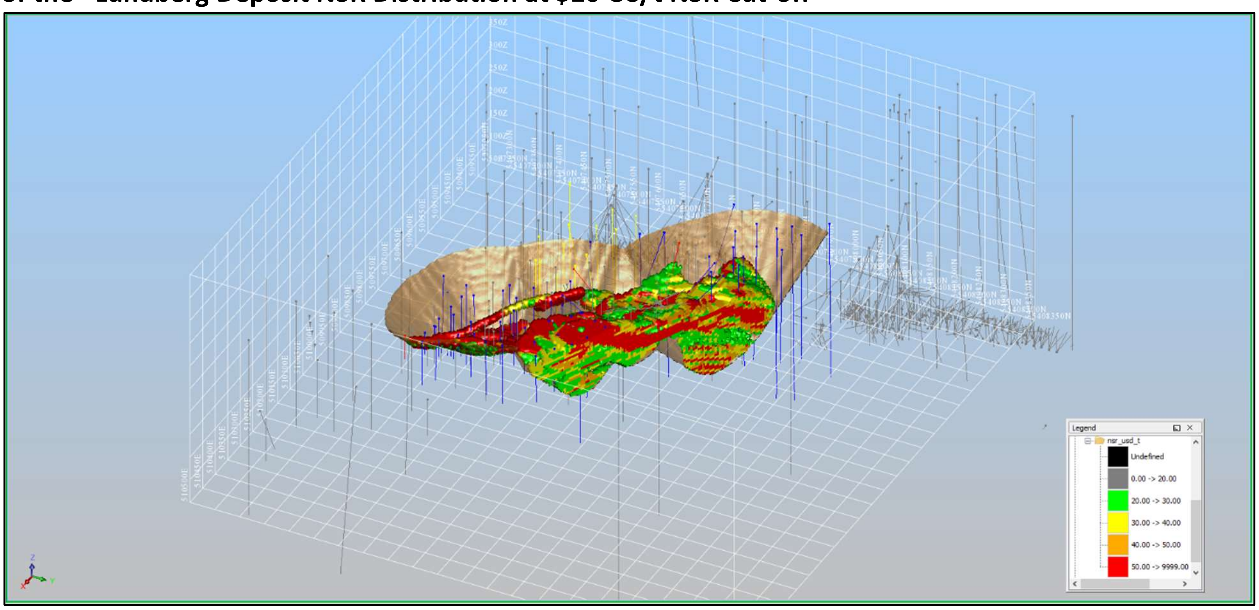

*Source: Mercator, 2019*

**Figure 14-24: Isometric View to the Northeast of a Representative Northwest-Southeast Cross-Section of the Lundberg Deposit NSR Distribution at $20 US/t NSR Cut-off (Optimized pit shell in brown)**




*Source: Mercator, 2019*

**Figure 14-25: Isometric View to the Southwest of a Representative Northwest-Southeast Cross-Section of the *Lundberg Deposit NSR Distribution at $20 US/t NSR Cut-off**




*Source: Mercator, 2019*

### 14.6 Resource Category Parameters

Definitions of Mineral Resources and associated Mineral Resource categories used in this Technical Report are those recognized under NI 43-101 and set out in the CIM Definition Standards. Mineral Resources presented in the current estimate have been assigned to Inferred and Indicated Mineral Resource categories.

*Measured Resources:* No interpolated resource blocks were assigned to this category.

*Indicated Resources:* Indicated Mineral Resources are defined as all blocks with interpolated metal grades and density values from the first or second interpolation passes that occur within the limits of the $20 US/t NSR optimized pit shell.

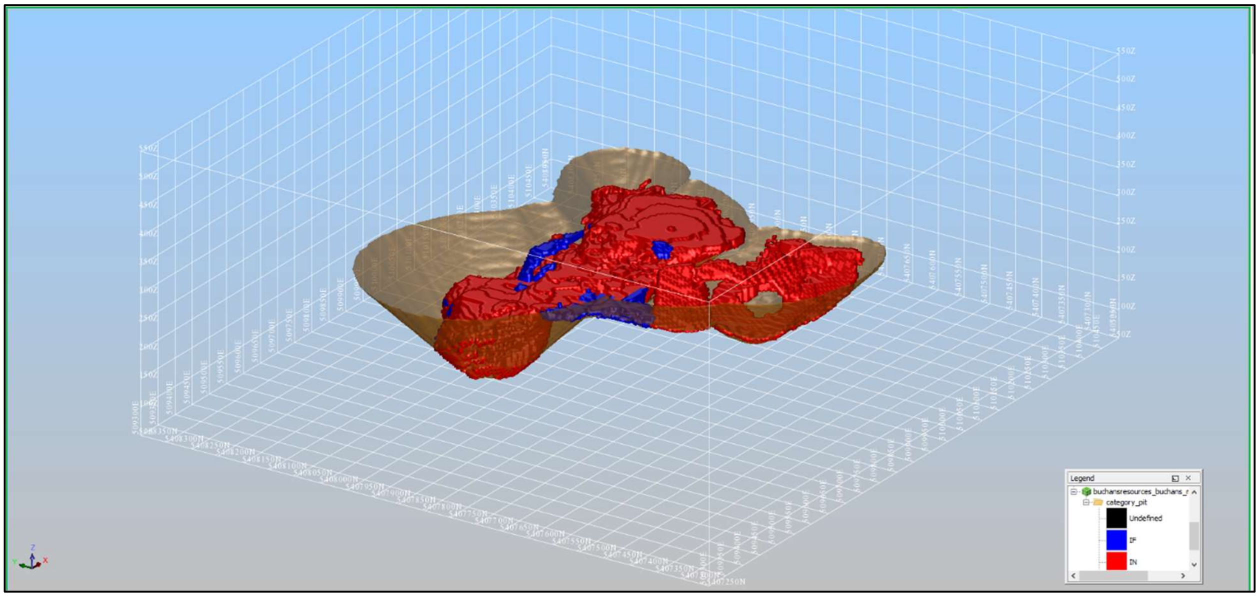
*Inferred Resources:* Inferred Mineral Resources are defined as all blocks with interpolated metal grades and density values from the first, second, or third interpolation passes, that occur within the $20 US/t NSR optimized pit shell that were not previously assigned to the Indicated Mineral Resource category.

Application of the selected Mineral Resource categorization parameters specified above provided a distribution of Indicated and Inferred MRE blocks occurring within limits of the $20 US/t NSR optimized pit shell for the Lundberg Deposit. To eliminate isolated and irregular category assignment artifacts, the peripheral limits of blocks in close proximity to each other that share the same category designation and demonstrate reasonable continuity were wireframed and developed into discrete solid models. All blocks occurring within these category solid models were re-classified to match that model's designation. This process resulted in more continuous zones of each MRE category and limited occurrences of orphaned blocks of one category occurring as imbedded patches in other category domains. All blocks identified as supporting massive sulphide mineralization or occurring within a 5 m buffer of the Low Grade Two Level stope model were assigned as Inferred Mineral Resources based on uncertainty of grade distribution and extents of historic mine workings.

The QP is of the opinion that drill hole density is sufficient to define Measured Mineral Resources in some areas of the Lundberg Deposit. However, areas of high drill hole density are typically associated with historic underground drilling around areas of historic mining. The potential uncertainty associated with the spatial extents of historic mining and respective influence of historic underground drilling have resulted in the categorization of these areas as Indicated Mineral Resources rather than Measured Mineral Resources.

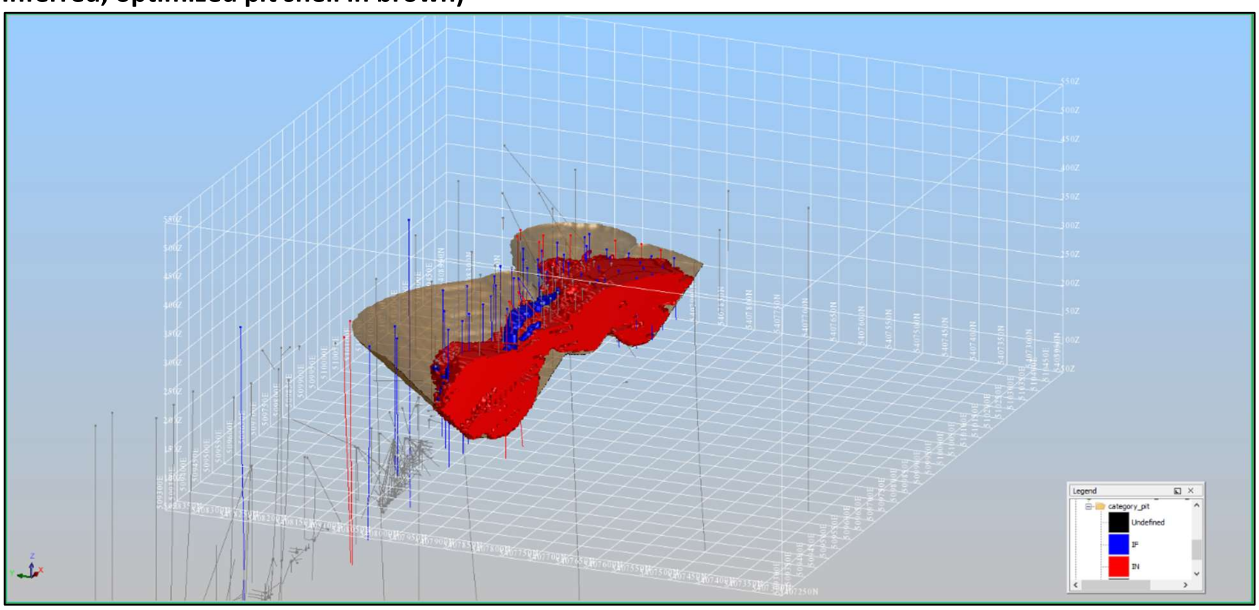
Distribution of the Mineral Resource category with respect to the optimized pit shell is presented in Figures 14-26 through 14-28.

**Figure 14-26: Isometric View to the Northeast of the *Lundberg Deposit MRE Category Distribution at $20 US/t NSR Cut-off (Red = Indicated, Blue = Inferred; optimized pit shell in brown)**



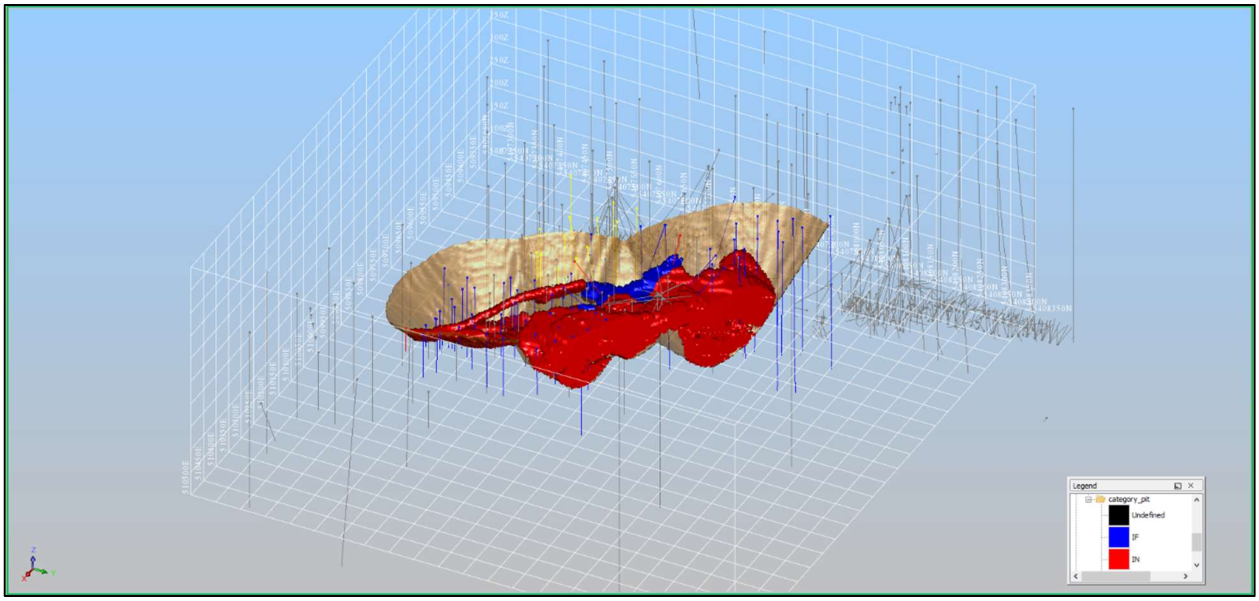
*Source: Mercator, 2019*

**Figure 14-27: Isometric View to the Northeast of a Representative Northwest-Southeast Cross-Section of the Lundberg Deposit MRE Category Distribution at $20 US/t NSR Cut-off (Red = Indicated, Blue = Inferred; optimized pit shell in brown)**



*Source: Mercator, 2019*

**Figure 14-28: Isometric View to the Southwest of a Representative Northwest-Southeast Cross-Section of the Lundberg Deposit MRE Category Distribution at $20 US/t NSR Cut-off (Red = Indicated, Blue = Inferred; optimized pit shell in brown)**




*Source: Mercator, 2019*

### 14.7 Statement of Mineral Resources

Block grade, block density and block volume parameters for the Lundberg Deposit were estimated using methods described in preceding sections of this Technical Report. Subsequent application of Mineral Resource category parameters resulted in the Lundberg Deposit MRE presented below in Table 14-13. The MRE is reported at a cut-off grade of $20 US/t NSR within the optimized pit shell and is considered to reflect reasonable prospects for economic extraction using open-pit mining methods.

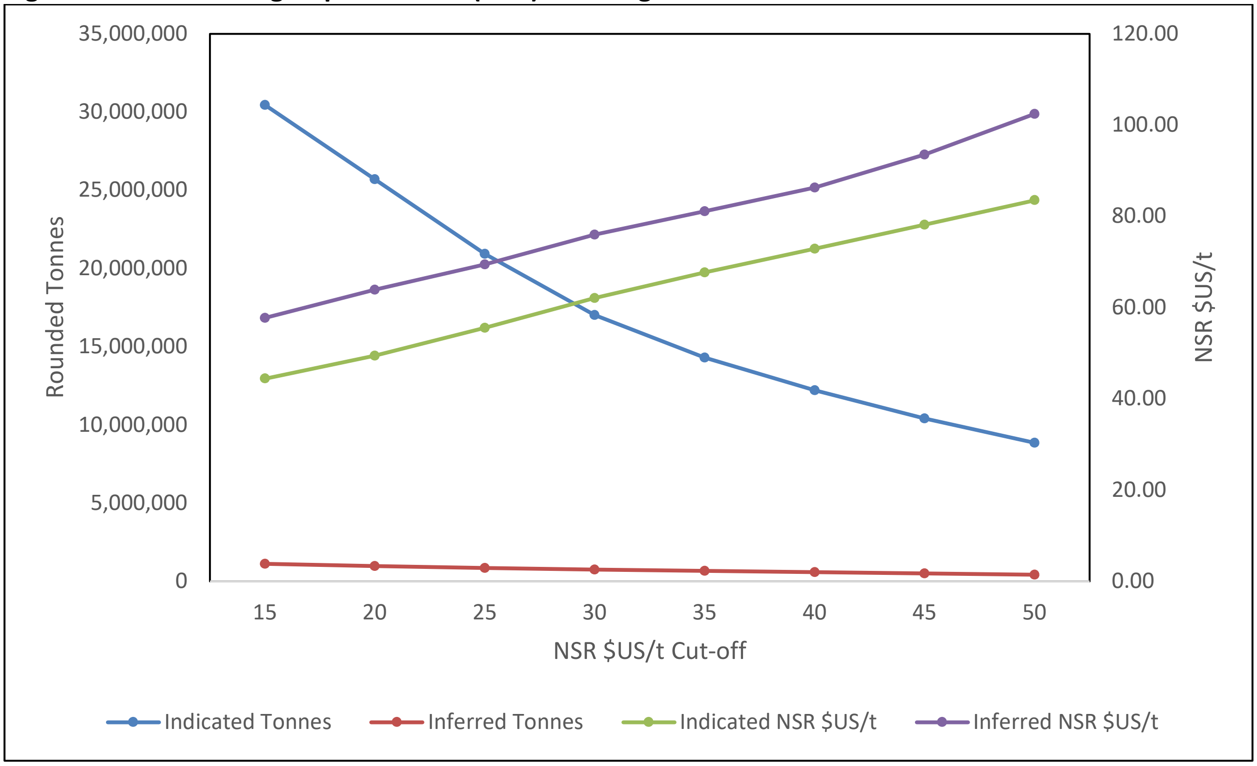
**Table 14-13: Lundberg Deposit Mineral Resource Estimate – Effective Date: February 28, 2019**

| NSR Cut-off ($US/t) | Category | Rounded Tonnes | Zn % | Pb % | Cu % | Ag g/t | Au g/t | Zn Eq. % | NSR ($US/t) |
|---|---|---|---|---|---|---|---|---|---|
| 20 | Indicated | 16,790,000 | 1.53 | 0.64 | 0.42 | 5.69 | 0.07 | 3.38 | 54.98 |
| | Inferred | 380,000 | 2.03 | 1.01 | 0.36 | 22.35 | 0.31 | 4.46 | 72.95 |

1. *Mineral Resources were prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (MRMR) (2014) and CIM MRMR Best Practice Guidelines (2019).*
2. *Mineral Resources are defined within an optimized pit shell with pit slope angles of 45$^{o}$ and an overall 2.9:1 strip ratio (waste : mineralized material)*
3. *Price assumptions used were $1.20 US/lb Zn, $1.00 US/lb Pb, $3.00 US/lb Cu, $1250 US/oz Au, and $17 US/oz Ag.*
4. *Metallurgical recoveries to concentrates are based on the "Centralized Milling of Newfoundland Base Metal Deposits - Bench Scale DMS and Flotation Test Program" (Thibault & Associates Inc., 2017). Metal recoveries are 83.0% Cu, 13.3% Au, and 7.84% Ag in the copper concentrate, 84.3% Pb, 10.5% Au, and 50.3% Ag in the lead concentrate, and 87.2% Zn, 8.28% Au, and 14.8% Ag in the zinc concentrate.*
5. *Net Smelter Return (NSR) $US/t values were determined by calculating the value of each Mineral Resource model block using an NSR calculator. The NSR calculator uses the stated metal pricing, metallurgical recoveries to concentrates, concentrate payable factors and current shipping and smelting terms for similar concentrates.*
6. *Zinc Equivalent metal grade (Zn Eq. %) was calculated as follows using metal pricing, metallurgical recoveries to concentrates, and concentrate payable factors as applied in the NSR calculator: Zn Eq % = Zn % + ((Cu % x 22.046 x 0.8020 x 3) + (Pb % x 22.046 x 0.8010 x 1) + (Au g/t / 31.10348 x 0.2198 x 1250) + (Ag g/t / 31.10348 x 0.6514 x 17))/(1.20 x 22.046 x 0.7412).*
7. *Pit optimization parameters include: mining at $3 US per tonne, processing at $15 US per tonne, and G&A at $2 US per tonne (total $20 US per tonne).*
8. *Mineral Resources are reported at a cut-off value of $20 US/t NSR within the optimized pit shell and is considered to reflect reasonable prospects for economic extraction by open pit mining methods.*
9. *Mineral Resources were interpolated using Inverse Distance Squared methods applied to 1.5 m downhole assay composites.*
10. *Results of an interpolated Inverse Distance Squared bulk density model (g/cm$^{3}$) were applied.*
11. *Mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.*
12. *Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.*
13. *Mineral Resource tonnages have been rounded to the nearest 10,000. Totals may vary due to rounding.*

Figures 14-29 and Table 14-14 illustrate the relationship of Lundberg Deposit tonnage to NSR cut-off grade and does not constitute part of the MRE. The sensitivity analysis demonstrates that considerable tonnage exists at higher cut-off thresholds. A cut-off of $40 US/t NSR per tonne results in an Indicated Mineral Resource tonnage of 9.2 million tonnes at a zinc equivalent grade of 4.67% and a cut-off of $50 US/t NSR results in an Indicated Mineral Resource tonnage of 7 million tonnes at a zinc equivalent grade of 5.32%. The sensitivity analysis also demonstrates that a high proportion of the contained metal is retained at the higher cut-off thresholds.

**Figure 14-29: Lundberg Deposit Grade (NSR) - Tonnage Chart***




** This figure shows the relationship between Lundberg Deposit tonnage to NSR cut-off grade and does not constitute part of the February 28th, 2019 MRE. See detailed note on Mineral Resources in Table 14-13.*

**Table 14-14: Lundberg Deposit Cut-Off Grade Sensitivity Report***

| NSR Cut-off ($US/t) | Category | Rounded Tonnes | Zn % | Pb % | Cu % | Ag g/t | Au g/t | Zn Eq. % | NSR ($US/t) |
|---|---|---|---|---|---|---|---|---|---|
| 15 | Indicated | 18,750,000 | 1.43 | 0.59 | 0.39 | 5.29 | 0.07 | 3.14 | 51.08 |
| | Inferred | 430,000 | 1.84 | 0.91 | 0.33 | 19.95 | 0.30 | 4.05 | 65.89 |
| 20* | Indicated | 16,790,000 | 1.53 | 0.64 | 0.42 | 5.69 | 0.07 | 3.38 | 54.98 |
| | Inferred | 380,000 | 2.03 | 1.01 | 0.36 | 22.35 | 0.31 | 4.46 | 72.95 |
| 25 | Indicated | 14,360,000 | 1.68 | 0.70 | 0.46 | 6.30 | 0.08 | 3.71 | 60.49 |
| | Inferred | 300,000 | 2.38 | 1.20 | 0.41 | 26.62 | 0.36 | 5.22 | 84.96 |
| 30 | Indicated | 12,170,000 | 1.84 | 0.77 | 0.51 | 7.00 | 0.08 | 4.08 | 66.44 |
| | Inferred | 240,000 | 2.82 | 1.43 | 0.44 | 31.78 | 0.41 | 6.06 | 99.05 |
| 35 | Indicated | 10,540,000 | 1.98 | 0.82 | 0.55 | 7.64 | 0.09 | 4.39 | 71.70 |
| | Inferred | 210,000 | 3.15 | 1.61 | 0.48 | 36.15 | 0.45 | 6.76 | 110.21 |
| 40 | Indicated | 9,240,000 | 2.10 | 0.87 | 0.59 | 8.25 | 0.10 | 4.67 | 76.52 |
| | Inferred | 180,000 | 3.44 | 1.77 | 0.51 | 40.39 | 0.50 | 7.37 | 120.20 |
| 45 | Indicated | 8,050,000 | 2.23 | 0.93 | 0.64 | 8.90 | 0.10 | 5.01 | 81.58 |
| | Inferred | 150,000 | 3.86 | 2.04 | 0.56 | 47.15 | 0.55 | 8.32 | 135.70 |
| 50 | Indicated | 6,990,000 | 2.37 | 0.98 | 0.68 | 9.61 | 0.11 | 5.32 | 86.75 |
| | Inferred | 130,000 | 4.34 | 2.33 | 0.61 | 54.78 | 0.62 | 9.36 | 152.64 |

*This table shows the relationship between Lundberg Deposit tonnage to NSR cut-off grade and does not constitute part of the February 28th, 2019 MRE. The Mineral Resource cut-off is high-lighted in *grey. See detailed note on Mineral Resources in Table 14-13.*

### 14.8 Project Risks That Pertain to the Mineral Resource Estimate

Factors that may materially impact the Lundberg Deposit Mineral Resource include, but are not limited to, the following:

- Changes to the input values for mining, processing, and G&A costs to constrain the Mineral Resource and changes to the long-term metal prices. Parameters used in the NSR calculator and pit optimization to define reasonable prospects for eventual economic extraction were originally developed for the February 28th, 2019 MRE on behalf of BMC, including metal prices and costing parameters. While these parameters are determined to still be within an acceptable range for current purposes, they are not always consistent with more recent assessments.
- Changes to metallurgical recovery assumptions including metallurgical recoveries that fall outside economically acceptable ranges. Metallurgical recovery risks can be further reduced through implementation of future processing and flow sheet optimization programs recommended in this Technical Report.
- Changes to the deposit scale interpretations of mineralization geometry and continuity. Mineralization is interpreted on a combined metal basis through application of NSR values to develop low and high grade domains. Modelling each metal independently may provide different results with respect to mineralization geometry and continuity.

- Variance associated with density assignment assumptions and/or changes to the density values applied. Mineral Resource density is assigned using an interpolated model based on metal interpolation parameters and may not fully reflect other factors such as distributions of non-economic sulphide mineralization and minor lithological variations.
- The Mineral Resource includes 146 drill holes that were completed by Asarco between 1926 and 1981. While these drill holes are believed to have been completed using best practices current at the time, they were not subject to current industry best practices and standard QAQC protocols. Previous operator BMC made best efforts to mitigate this risk by completing re-logging, re-sampling, and twin drill holes programs.
- Potential inaccuracies in the development and assumptions of the historical mine model may impact the local accuracy of Mineral Resources. As such, no Measured Mineral Resources have been defined.
- Variations in geotechnical, hydrological, and mining assumptions. The presence of historical mine workings and stopes will need to be considered during future economic studies.
- The Lundberg Deposit is located immediately adjacent to the town of Buchans and infrastructure from historical mine operations. This will need to be considered during future economic studies.
- Changes in the assumptions of marketability of the final product.
- Issues with respect to mineral tenure, land access, land ownership, environmental conditions, permitting, and social license.

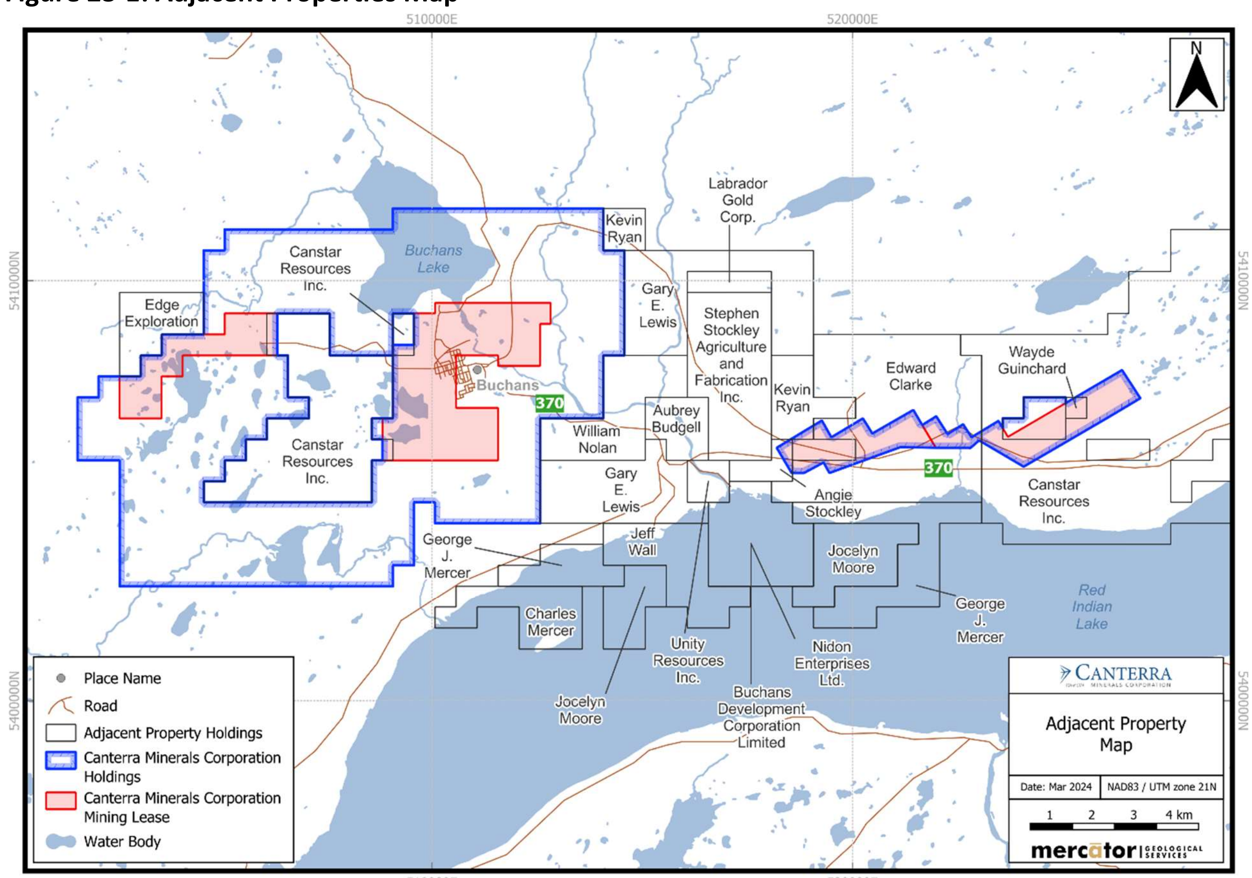
At this time, the QP does not foresee any significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the drilling information and MRE disclosed in this Technical Report.

## 23.0 ADJACENT PROPERTIES

Canstar Resources Inc. ("Canstar") holds two Mineral Licences located internal to the Property (Figure 23-1). These licences include a small licence (Licence 22222M) covering approximately 0.4 km$^2$ located less than 0.5 km northwest of the Lundberg Deposit. Canstar's other property comprises claims covering approximately 11.3 km$^2$ located less than 500 m west of the Lundberg Deposit (Licence 34887M). Neither of the Canstar licences contain known Mineral Resources, nor portions of the past producing mines previously operated by ASARCO. No new drilling or significant exploration is known to have been conducted on Canstar's licences since they were issued in July of 2012. The Canstar licences are understood to be subject to rights held by Altius Minerals whereby Altius Minerals may purchase a 1.5% NSR on the Canstar licences.

The source of information for the Canstar properties is the website https://www.canstarresources.com/projects/buchans-mary-march-project/. The QP has been unable to verify the information and the information is not necessarily indicative of the mineralization on the property that is subject of this Technical Report. The Canstar title holdings are not material to the February 28th, 2019 Mineral Resource Estimate.

**Figure 23-1: Adjacent Properties Map**



A variety of other individual title holders have interests in Mineral Licences adjacent to the Property as shown in Figure 23-1. The QP is not aware of known mineral deposits or recently completed exploration programs on these properties that would be material to Canterra and the Lundberg Deposit.

## 24.0 OTHER RELEVANT DATA AND INFORMATION

The author is not aware of any other relevant data or information that should be presented in support of this MRE Technical Report.

# 25.0 INTERPRETATION AND CONCLUSIONS

## 25.1 Summary

This Technical Report presents the Lundberg Deposit MRE, effective date February 28, 2019, that was originally prepared for BMC and makes it current for Canterra. The February 28, 2019 MRE is made current for Canterra on the basis that the MRE methodology and reasonable prospects for eventual economic extraction used to define Mineral Resources are assessed by the QP to still be acceptable and that no new exploration has been completed that would materially impact the MRE. This Technical Report also summarizes historical exploration and drilling completed by previous operators on the Property.

The QP notes the following interpretations and conclusions based on the review of data available for this Technical Report.

## 25.2 Mineral Tenure, Surface Rights Royalties

Canterra purchased the Property from the previous holder, BMC, and its parent company, BRL, on December 20, 2023. The Property was included in a portfolio of critical and precious metals projects in central NL sold to Canterra in exchange for common shares and special warrants of Canterra. As a result of the sale, ownership of the Property was transferred to Canterra on December 20, 2023. Canterra now owns a 100% interest in the Property, though portions remain subject to royalties and conditions defined in underlying agreements entered into by BMC and its predecessor companies.

The Property provides Canterra with a land position of approximately 8,325 ha that includes the Lundberg Deposit and 5 past producing deposits in the Buchans area. Canterra provided information pertaining to the mineral tenure and property agreements that supports the assumptions used in this Technical Report.

## 25.3 Geology and Mineralization

The Lundberg Deposit described herein is of VMS association and occurs within the NE-SW trending CMB of central NL. It is hosted by Lower Ordovician volcanic rocks of the Buchans Group that range in composition from basalt to rhyolite. Five main Zn-Pb-Cu-Ag-Au deposits were historically mined at Buchans and all occur in association with the same felsic volcanic stratigraphic horizon within the Buchans Group. The Lundberg Deposit surrounds the former Lucky Strike mine site, where ASARCO operated a near-surface underground and glory hole mining operation until mine closure in 1984. The Lundberg Deposit is mainly comprised of stockwork mineralization surrounding and lying below the former Lucky Strike orebody but includes some massive sulphide mineralization that was not mined by former operations.

Stockwork mineralization at Buchans consists of a network of sulphide veins and veinlets that cut strongly altered and sulphidized host rocks. The largest known concentration of stockwork and disseminated mineralization is the Lundberg Zone that underlies the Lucky Strike deposit. The stockwork mineralization has a higher ratio of pyrite to base metal sulphides than the in situ sulphide zones and is typified by presence of fine to coarse grained pyrite with lesser amounts of chalcopyrite, sphalerite, galena and barite. This mineralization occurs within felsic volcanic rocks of the Buchans River Formation below the Lucky Strike deposit and extends into the underlying Ski Hill Formation, where sulphide-bearing stockwork mineralization occurs at tens to hundreds of metres below the deposit. At depth, mineralization thins and feathers out into lower grade, semi-conformable zones of alteration. The Lundberg Zone stockwork mineralization comes to surface on the eastern edge of the zone and forms an elongate, wedge-shaped body that is 250 m deep on the western end. The highest concentration of sulphide mineralization lies in close proximity to the previously mined Lucky Strike massive sulphide zone and mineralization is more diffuse away from the zone. A second zone of stockwork mineralization known as the Engine House Zone, is located immediately south of the Lucky Strike deposit, and differs slightly from the Lundberg Zone as it hosts slightly higher proportions of chalcopyrite to other base metal sulphides.

### 25.4 Exploration and Drilling

Canterra has not completed any exploration and drilling programs since their acquisition of the Property.

### 25.5 Data Collection in Support of the Mineral Resource Estimate

Sampling, logging, core recovery, collar, and downhole survey data collected from drill programs completed between the 2007 to 2018 period are consistent with best exploration practices at the respective times. Results of the of the associated QAQC programs did not identify any systematic issues within the analytical dataset.

The QP found the quality of Lundberg Deposit analytical results sufficiently reliable to support use in Mineral Resource estimation.

On February 13th, 2024, the author visited the Property and exploration facility in Buchans and reviewed operational procedures with Canterra personnel to ensure continued best practices were applied. The author confirmed the presence of Zn-Pb-Cu sulphide mineralization in drill core and that it is accurately reflected in drill logs. Independent check samples completed during previous site visits were relied upon and show acceptable results.

### 25.6 Metallurgical

Metallurgical testing on the Lundberg and Engine House Zones was conducted between 2011 and 2017 by SGS - Lakefield, Tomra Sorting Solutions and Thibault & Associates. The sulphide minerals in the Lundberg samples were well-liberated at typical grind sizes for recovery by flotation and no potential challenges related to mineralogy were identified. Two alternative flotation flowsheets and reagent schemes have been tested on the same Lundberg samples for recovery of copper, lead and zinc concentrates: a bulk Cu/Pb flowsheet and a sequential flowsheet. Preliminary testing of the sequential flotation flowsheet has shown marketable copper, lead and zinc concentrate grades with improved flotation selectivity compared to the bulk Cu/Pb flowsheet. The sequential flotation flowsheet has been tested in open-circuit on samples from the Lundberg Deposit; locked cycle testing has not yet been completed. A METSIM™ simulation of the sequential flotation flowsheet has projected recoveries to the respective concentrates of 83.0% copper, 84.3% lead and 87.2% zinc, and these preliminary recoveries have been applied to the Mineral Resource. Continued development of the sequential flotation flowsheet with locked cycle testing is warranted to confirm the metallurgical performance.

### 25.7 Mineral Resources

The Lundberg Deposit MRE is comprised of two different zones, the Lundberg Zone and the Engine House Zone. The two zones were treated collectively in all phases of block model construction, from database validation to Mineral Resource classification and reporting. The following summarizes the estimation methodology:

- Drill hole database validation;
- 3D modelling of geology and mineralization;
- Assay sample and geostatistical analysis including sample frequency, grade relationships, density assignment, capping, compositing and variography;
- Block modelling and grade estimation;
- Block model validation;
- Assessment of reasonable prospects for eventual economic extraction;
- Mineral Resource classification;
- and Mineral Resource reporting.

Modelling is predominantly based on the occurrence Zn-Pb-Cu mineralization as sulphide veins and veinlets that cut strongly altered and sulphidized host rocks, which can, in general, be well correlated between drill hole sections. The QP considered variogram ranges, drill hole spacing, confidence in the geological interpretation, recovery methods, and accuracy of historical mine workings models to define the Mineral Resource categories. The Lundberg Deposit MRE is presented in Table 26-1.

**Table 25-1: Lundberg Deposit Mineral Resource Estimate – Effective Date: February 28, 2019**

| NSR Cut-off ($US/t) | Category | Rounded Tonnes | Zn % | Pb % | Cu % | Ag g/t | Au g/t | Zn Eq. % | NSR ($US/t) |
|---|---|---|---|---|---|---|---|---|---|
| 20 | Indicated | 16,790,000 | 1.53 | 0.64 | 0.42 | 5.69 | 0.07 | 3.38 | 54.98 |
| | Inferred | 380,000 | 2.03 | 1.01 | 0.36 | 22.35 | 0.31 | 4.46 | 72.95 |

*14. Mineral Resources were prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (MRMR) (2014) and CIM MRMR Best Practice Guidelines (2019).*

*15. Mineral Resources are defined within an optimized pit shell with pit slope angles of 45$^{o}$ and an overall 2.9:1 strip ratio (waste : mineralized material)*

*16. Price assumptions used were $1.20 US/lb Zn, $1.00 US/lb Pb, $3.00 US/lb Cu, $1250 US/oz Au, and $17 US/oz Ag.*

*17. Metallurgical recoveries to concentrates are based on the "Centralized Milling of Newfoundland Base Metal Deposits - Bench Scale DMS and Flotation Test Program" (Thibault & Associates Inc., 2017). Metal recoveries are*

*83.0% Cu, 13.3% Au, and 7.84% Ag in the copper concentrate, 84.3% Pb, 10.5% Au, and 50.3% Ag in the lead concentrate, and 87.2% Zn, 8.28% Au, and 14.8% Ag in the zinc concentrate.*

18. *Net Smelter Return (NSR) $US/t values were determined by calculating the value of each Mineral Resource model block using an NSR calculator. The NSR calculator uses the stated metal pricing, metallurgical recoveries to concentrates, concentrate payable factors and current shipping and smelting terms for similar concentrates.*
19. *Zinc Equivalent metal grade (Zn Eq. %) was calculated as follows using metal pricing, metallurgical recoveries to concentrates, and concentrate payable factors as applied in the NSR calculator: Zn Eq % = Zn % + ((Cu % x 22.046 x 0.8020 x 3) + (Pb % x 22.046 x 0.8010 x 1) + (Au g/t / 31.10348 x 0.2198 x 1250) + (Ag g/t / 31.10348 x 0.6514 x 17))/(1.20 x 22.046 x 0.7412).*
20. *Pit optimization parameters include: mining at $3 US per tonne, processing at $15 US per tonne, and G&A at $2 US per tonne (total $20 US per tonne).*
21. *Mineral Resources are reported at a cut-off value of $20 US/t NSR within the optimized pit shell and is considered to reflect reasonable prospects for economic extraction by open pit mining methods.*
22. *Mineral Resources were interpolated using Inverse Distance Squared methods applied to 1.5 m downhole assay composites.*
23. *Results of an interpolated Inverse Distance Squared bulk density model (g/cm$^3$) were applied.*
24. *Mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.*
25. *Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.*
26. *Mineral Resource tonnages have been rounded to the nearest 10,000. Totals may vary due to rounding.*

## 25.8 Opportunities

- A substantial volume of stockwork style mineralization associated with the Lundberg Zone has been defined by BMC through various historical drill programs that did not qualify for Mineral Resources. Future MREs and economic studies that reflect changes in metal prices and costing parameters have the potential to include some of this mineralization.
- Exploration opportunities are present proximal to the Lundberg Deposit with remnant mineralization or potential extensions associated with the former Lucky Strike, North Orebody, and Two Level deposits.
- Exploration opportunities are present at known Clementine and West Clementine prospects to the west of the Lundberg Deposit and the Sandfill prospect to the east of the Lundberg Deposit.
- Regional exploration targets were recently developed in 2022 through the now terminated Collaboration Agreement between Boliden and BRL and remain untested.
- The Lundberg Deposit is situated on a brownfields site with excellent infrastructure.

## 25.9 Risks

Project risks that pertain specifically to the Mineral Resource include:

- Changes to the input values for mining, processing, and G&A costs to constrain the Mineral Resource and changes to the long-term metal prices. Parameters used in the NSR calculator and pit optimization to define reasonable prospects for eventual economic extraction were originally developed for the February 28th, 2019 MRE on behalf of BMC, including metal prices and costing parameters. While these parameters are determined to still be within an acceptable range for current purposes, they are not always consistent with more recent assessments.

- Changes to metallurgical recovery assumptions including metallurgical recoveries that fall outside economically acceptable ranges.
- Changes to the deposit scale interpretations of mineralization geometry and continuity. Mineralization is interpreted on a combined metal basis through application of NSR values to develop low and high grade domains. Modelling each metal independently may provide different results with respect to mineralization geometry and continuity.
- Variance associated with density assignment assumptions and/or changes to the density values applied. Mineral Resource density is assigned using an interpolated model based on metal interpolation parameters and may not fully reflect other factors such as distributions of non-economic sulphide mineralization and minor lithological variations.
- The Mineral Resource includes 146 drill holes that were completed by Asarco between 1926 and 1981. While these drill holes are believed to have been completed using best practices current at the time, they were not subject to current industry best practices and standard QAQC protocols. Previous operator BMC made best efforts to mitigate this risk by completing re-logging, re-sampling, and twin drill holes programs.
- Potential inaccuracies in the development and assumptions of the historical mine model may impact the local accuracy of Mineral Resources. As such, no Measured Mineral Resources have been defined.
- Variations in geotechnical, hydrological, and mining assumptions. The presence of historical mine workings and stopes will need to be considered during future economic studies.
- The Lundberg Deposit is located immediately adjacent to the town of Buchans and infrastructure from historical mine operations. This will need to be considered during future economic studies.
- Changes in the assumptions of marketability of the final product.
- Issues with respect to mineral tenure, land access, land ownership, environmental conditions, permitting, and social license.

Additional Project risks include:

- Interpretation of the Property agreements may differ to what has been assumed for the purpose of this Technical Report.
- Environmental liability associated with historical mining operations currently resides with the government of NL. If a decision to pursue mining of the Lundberg Deposit is made by Canterra, the issue of site liabilities will be addressed in the related mining and environmental permitting process. Potential liabilities in this regard are not currently defined.

At this time, the QP does not foresee any significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the drilling information and MRE disclosed in this Technical Report.

# 26.0 RECOMMENDATIONS

A two-phase program is recommended. Phase I reflects a desktop study for Canterra to prepare for future exploration programs and economic studies. Phase II supports a PEA level study, including exploration drilling, base line environmental and tailings disposal studies, geotechnical studies, metallurgical testing, and a MRE update. Strategies and approaches for completion of the PEA would reflect results from Phase I.

## 26.1 Phase 1 Desktop Study

A desktop study reviewing exploration results, geological interpretations, drill hole targets, and economic studies completed by BMC and affiliated companies is recommended. This includes better resolving opportunities related with remnant mineralization associated with the former Lucky Strike, North Orebody, and Two Level deposits, exploration prospects Clementine, Clementine West, and Sandfill, and regional targets developed during the Collaboration Agreement between Boliden and BRL.

## 26.2 Exploration Drill Programs

As noted in Sections 25.8 and 26.1, significant exploration potential is present to define new semi-massive to massive sulphide mineralization on the Property. It is recommended to test these opportunities as part of the Phase II program to potentially define new Mineral Resources that could be factored into future economic studies. A drill program of 10,000 m is recommended. It is also recommended to complete borehole geophysical surveys in association with the exploration drill program.

## 26.3 Environmental and Geotechnical Studies

It is recommended to complete baseline environmental studies, tailings disposal studies, and geotechnical studies as part of the Phase II program as part of a PEA.

## 26.4 Metallurgical Programs Required for PEA and PFS

Continued development of the sequential flotation flowsheet for the Lundberg and Engine House Zones is recommended to confirm the metallurgical performance. Phase I includes a budget to complete sequential flowsheet batch flotation testing and locked cycle flotation testing on one composite sample. The budget assumes existing metallurgical samples in freezer storage (SGS Canada Inc., Lakefield, Ontario) would be used for future testing and therefore costs to acquire additional new drill core samples are not included.

## 26.5 Estimated Budget for Recommended Work Programs

Recommendations have been broken into two-phases. Phase I is estimated to require expenditure of CDN $100,000 and addresses completion of a desktop study. Phase II is estimated to require expenditure of CDN $4,360,000 and addresses completion of a PEA. Phase II also includes a completion of 10,000 m

Property exploration drilling program as well as the metallurgical, environmental, and geotechnical programs for the PEA. Estimated costs for the recommended Phase 1 and Phase II programs are presented in Table 26-1.

**Table 26-1: Recommended Work Programs Estimated Costs**

| **Phase I - Desktop Study** | **Estimated Cost ($CDN)** |
|---|---:|
| Desktop Study | 100,000 |
| **Sub-Total** | **100,000** |
| | |
| **Phase II - PEA** | |
| PEA metallurgical testing | 160,000 |
| Environmental baseline and tailings disposal studies | 100,000 |
| Initial geotechnical studies and associated drilling | 150,000 |
| Property Exploration drill program - 10,000 m | 3,750,000 |
| Completion of PEA | 200,000 |
| **Sub-Total** | **4,360,000** |
| | |
| **Grand Total** | **4,460,000** |

## 27.0 REFERENCES

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