Val-d'Or Head Office
560, 3e Avenue
Val-d'Or (Québec) J9P 1S4

Québec Office
725, boulevard Lebourgneuf
Suite 310-12 and 310-13
Québec (Québec) G2J 0C4

Montréal Office
859, boulevard Jean-Paul-Vincent
Suite 201
Longueuil (Québec) J4G 1R3

Telephone: 819-874-0447
Toll Free: 866-749-8140
Email: info@innovexplo.com
Website: www.innovexplo.com

NI 43-101 Technical Report and Mineral Resource Estimate for the Barsele Property

Prepared for

Barsele Minerals Corp.
Suite 1130 - 1055 W. Hastings Street
Vancouver, BC Canada V6E 2E9

Project Location
Latitude 65°02' north and longitude 17°30' east,
Västerbotten Län (County), northern Sweden

Prepared by:

Carl Pelletier, P. Geo.
Harold Brisson, P. Eng.
Stéphane Faure, P. Geo.
Vincent Nadeau-Benoit, P. Geo.

InnovExplo Inc.
Val-d'Or (Québec)

Effective Date: February 21, 2019

Signature Date: April 2, 2019

SIGNATURE PAGE – INNOVEXPLO

NI 43-101 Technical Report and Mineral Resource Estimate for the Barsele Property

Prepared for

Barsele Minerals Corp.
Suite 1130 - 1055 W. Hastings Street
Vancouver, BC Canada V6E 2E9

Project Location
Latitude 65°02' north and longitude 17°30' east,
Västerbotten Län (County), northern Sweden

(Original signed and sealed)
Carl Pelletier, P. GEO.
InnovExplo Inc.
Val-d'Or (Québec)

Signed at Val-d'Or on April 2nd, 2019

(Original signed and sealed)
Harold Brisson, P. Eng.
InnovExplo Inc.
Val-d'Or (Québec)

Signed at Québec on April 2nd, 2019

(Original signed and sealed)
Stéphane Faure, P. Geo.
InnovExplo Inc.
Val-d'Or (Québec)

Signed at Longueuil on April 2nd,2019

(Original signed and sealed)
Vincent Nadeau-Benoit, P. Geo.
InnovExplo Inc.
Val-d'Or (Québec)

Signed at Val-d'Or on April 2nd, 2019

CERTIFICATE OF AUTHOR – CARL PELLETIER

I, Carl Pelletier, P.Geo., do hereby certify that:

1. I am co-president and co-founder of InnovExplo Inc. at 560 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4, with whom I remain currently employed.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Mineral Resource Estimate for the Barsele Property" (the "Technical Report") with an effective date of February 21, 2019 and a signature date of April 2, 2019. The Technical Report was prepared for Barsele Minerals Corp. (the "issuer").
3. I graduated with a Bachelor's degree in Geology (B.Sc.) from Université du Québec à Montréal (Montréal, Québec) in 1992.
4. I am a member in good standing of the Ordre des Géologues du Québec (OGQ, no. 384), the Association of Professional Geoscientists of Ontario (APGO No. 1713), the Engineers and Geoscientists British Columbia (EGBC No. 43167), the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG No. L4160) and of the Canadian Institute of Mines (CIM member 154004).
5. I have practiced my profession continuously as a geologist for a total of twenty-seven (27) years. I acquired my expertise in mining at the Silidor, Sleeping Giant, Bousquet II, Sigma-Lamaque and Beaufor mines, and my exploration expertise with Cambior Inc. and McWatters Mining Inc. I have been a consulting geologist for InnovExplo Inc. since February 2004.
6. I have read the definition of a qualified person ("QP") as set out in National Instrument 43-101/Regulation 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a QP for the purposes of NI 43-101.
7. I last visited the property in October 2018.
8. I am the responsible for the overall supervision of the Technical Report and I am co-author of items 1 to 6, 12, 14 and 25 to 27.
9. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. I have read NI 43-101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 2nd day of April 2019 in Val-d'Or, Québec, Canada.

(Original signed and sealed) ______

Carl Pelletier, P.Geo. (OGQ No. 384)
InnovExplo Inc.
carl.pelletier@innovexplo.com

CERTIFICATE OF AUTHOR – HAROLD BRISSON

I, Harold Brisson, P.Eng., Ph.D., do hereby certify that:

1. I am employed as Mineral Resources Expert with InnovExplo Inc. at 560 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Mineral Resource Estimate for the Barsele Property NI 43-101 Technical Report and Mineral Estimate on the Barsele Property" (the "Technical Report") with an effective date of February 21, 2019 and a signature date of April 2, 2019. The Technical Report was prepared for Barsele Minerals Corp. (the "issuer").
3. I graduated with a BASc degree in Geological Engineering from Université Laval in 1983 (Québec, Québec), and I also obtained an M.Sc. degree in Geology from Université Laval in 1988 and a Ph.D. in Mineral Resources from Université du Québec à Chicoutimi in 1999 (Chicoutimi, Québec).
4. I am a member of the Ordre des Ingénieurs du Québec (OIQ No. 41433) and Professional Engineer of Ontario (PEO No 100516300).
5. I have practiced my profession in mineral exploration, geoscientific research, resource geology and mine geology for a total of 35 yr since graduating from university. I acquired my expertise with Université du Québec à Chicoutimi, Ministry of Natural Resources of Québec, Aurizon Mines, Cambior Inc., IAMGOLD Corp. and Primero Mining Corp.
6. I have read the definition of a qualified person ("QP") set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a QP for purposes of NI 43-101.
7. I have not visited the property for the purpose of the Technical Report.
8. I am co-author of items 1, 11, 12, 14 and 25 to 27 of the Technical Report.
9. I am independent of the issuer applying all the tests in section 1.5 of NI 43-101.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. I have read NI 43-101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 2nd day of April 2019 in Québec (Québec, Canada).

(Original signed and sealed) ______

Harold Brisson, P.Eng. (OIQ No. 41433, PEO No. 100516300)
InnovExplo Inc.
Harold.brisson@innovexplo.com

CERTIFICATE OF AUTHOR – STÉPHANE FAURE

I, Stephane Faure, P.Geo., PhD, do hereby certify that:

1. I am employed as Geoscience Expert Geologist with InnovExplo Inc. at 560 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Mineral Resource Estimate for the Barsele Property" (the "Technical Report") with an effective date of February 21, 2019 and a signature date of April 2, 2019. The Technical Report was prepared for Barsele Minerals Corp. (the "issuer").
3. I graduated with a Bachelor's degree in Geology from Université du Québec à Montréal (Montréal, Québec) in 1987. In addition, I obtained a Master's degree in Earth Sciences from Université du Québec à Montréal in 1990, and a doctorate degree in Geology from the Institut National de la Recherche Scientifique (city of Québec, Québec) in 1995.
4. I am a member in good standing of the Ordre des Géologues du Québec (OGQ No. 306), the Association of Professional Geoscientists of Ontario (APGO No. 2662), and the Northwest Territories and Nunavut Association of Professional Engineers and Professional Geoscientists (NAPEG No. L3536).
5. I have worked as a geologist for a total of twenty-four (24) years since graduating in 1995. I acquired my expertise in mineral exploration with Inmet Mining in Central America and South America, Cambior Inc. in Canada and numerous exploration companies through the Research Consortium in Mineral Exploration. I have been a geological consultant for InnovExplo Inc. since January 2016.
6. I have read the definition of a qualified person ("QP") as set out in National Instrument 43-101/Regulation 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a QP for the purposes of NI 43-101.
7. I have not visited the property for the purposes of the Technical Report.
8. I am the author of items 7 and 8 and co-author of and share responsibility for items 1 to 3, 23 and 25 to 27 of the Technical Report.
9. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. I have read NI 43-101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 2nd day of April in Longueuil, Québec, Canada.

(Original signed and sealed) ______

Stéphane Faure, P.Geo., PhD (OGQ No. 306)
InnovExplo Inc.
stephane.faure@innovexplo.com

CERTIFICATE OF AUTHOR – VINCENT NADEAU-BENOIT

I, Vincent Nadeau-Benoit, P.Geo., do hereby certify that:

1. I am employed as project geologist with InnovExplo Inc. at 560, 3e Avenue, Val-d'Or, Québec, Canada.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Mineral Resource Estimate for the Barsele Property" (the "Technical Report") with an effective date of February 21, 2019 and a signature date of April 2, 2019. The Technical Report was prepared for Barsele Minerals Corp. (the "issuer").
3. I graduated with a Bachelor's degree in Earth and Atmosphere Science (Geology) from Université du Québec à Montréal in 2010 (Montréal, Québec)
4. I am a member of the Ordre des Géologues du Québec (OGQ No. 1535) and the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG No. L4154).
5. I have practiced my profession in mineral exploration, geoscientific research, resource geology and mine geology for a total of 8 years since graduating from university. I acquired my expertise with Royal Nickel Corporation and Glencore.
6. I have read the definition of a qualified person ("QP") set out in National Instrument 43 101 ("NI 43 101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43 101) and past relevant work experience, I fulfill the requirements to be a QP for purposes of NI 43 101.
7. I have not visited the property for the purpose of the Technical Report.
8. I am co-author of items 2 to 6, 9 to 11 and 23 of the Technical Report.
9. I am independent of the issuer applying all the tests in section 1.5 of NI 43 101.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. I have read NI 43 101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 2nd day of April 2019 in Val d'Or (Québec, Canada).

*(Original signed and sealed)*______

Vincent Nadeau-Benoit, P.Geo. (OGQ No. 1535 and NAPEG No. L4154)
InnovExplo Inc.
vincent.nadeau-benoit@innovexplo.com

TABLE OF CONTENTS

INNOVEXPLO

LIST OF FIGURES

LIST OF TABLES

1. SUMMARY

1.1 Introduction

At the request of Mr. Art Freeze, P.Geo., Director for Barsele Minerals Corp. ("Barsele Minerals" or the "issuer"), InnovExplo Inc. ("InnovExplo") was retained to prepare a technical report (the "Technical Report") to present and support the results of a mineral resource estimate (the "2019 MRE") for the Barsele Property (the "Property" or "Project") in accordance with Canadian Securities Administrators' National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects ("NI 43-101") and its related Form 43-101F1.

InnovExplo is an independent mining and exploration consulting firm based in Val-d'Or (Québec).

The 2019 MRE herein has an effective date of February 21, 2019. The estimate follows CIM Definition Standards for Mineral Resources and Mineral Reserves ("CIM Definition Standards").

1.2 Contributors

This Technical Report was prepared by the following employees of InnovExplo: Carl Pelletier, P.Geo., Co-president and Co-founder; Harold Brisson, P.Eng., PhD, Senior Engineer – Mineral Resources; Stéphane Faure, P.Geo., PhD, Geoscience Expert; and Vincent Nadeau-Benoit, P.Geo., Project Geologist. Each are independent qualified persons ("QPs") as defined by NI 43-101.

InnovExplo conducted a review and appraisal of the information used to prepare this Technical Report, including the conclusions and recommendations, and believes that such information is valid and appropriate considering the status of the Project and the purpose for which the Technical Report is prepared. The authors have fully researched and documented the conclusions and recommendations made in the Technical Report and affirm that the work program and recommendations presented herein conform to NI 43-101 and CIM Definition Standards.

1.3 Property Description and Location

The Property is situated near the village of Barsele in the county of Västerbotten in Northern Sweden. It is located approximately 20 km east-southeast from the town of Storuman. At the regional scale, Barsele lies 200 km northwest of Umeå (population of 120,000), the administrative headquarters of the county, and approximately 630 km north of Stockholm. The geographic coordinates of the Property centroid are latitude 65°03' north and longitude 17°34' east (UTM coordinates 621349E, 7217734N: SWEREF99 TM).

The Property currently consists of one block of 23 granted exploration permits and two (2) exploitation concessions issued by the Chief Mining Inspector, for an aggregate area of 43,481.96 ha (434.8196 km^2). Fifteen (15) exploration permits are registered in the name of Gunnarn Mining AB ("Gunnarn Mining") and five (5) in the name of AE Sweden. Applications have been submitted for one (1) exploration permit for an area of 3,789.71 ha (37.90 km^2), registered in the name of AE Sweden.

The operating entity is Agnico Eagle Sweden AB, an indirect wholly-owned subsidiary of Agnico Eagle Mines Limited. For the purposes of this Report, "AEM" is used to refer interchangeably to the parent and subsidiary companies.

1.4 Geology

The Barsele Project is located within Paleoproterozoic supracrustal and associated intrusive rocks in the Fennoscandian Shield, specifically at the intersection of the western extent of the east-west oriented Skellefte mining district and the northwest-southeast trending Gold Line. Bedrock in the district consists of 1.96-1.86 Ga volcanic and sedimentary rocks associated with the Svecofennian domain and intrusive rocks that were deformed and metamorphosed simultaneously during the 1.96-1.80 Ga Svecokarelian orogeny (Lundström et al., 1997; Mellqvist et al., 1999; Kathol and Weihed, 2005). To the west of Skellefte is the Stensele district. To the north are the Paleoproterozoic and reworked Archaean rocks of the Norrbotten craton, and to the south and east are the metasedimentary rocks of the Bothnian Basin, with the district representing a kind of transitional zone between those two major tectonic assemblages. The Archean-Proterozoic boundary north of the Skellefte district has been defined by a shift in ƐNd signature (Lundqvist et al., 1996; Wikström et al., 1996; Mellqvist et al., 1999) which coincides with a south-dipping seismic reflector interpreted as a northeast-verging thrust surface (BABEL Working Group, 1990).

The Project area covers a sequence of metasedimentary and volcanic rocks of the Proterozoic Svecofennian system. The volcanics are more specifically referred to as the Härnö Formation. The metasedimentary rocks consist of metamorphosed greywackes and pelites and sporadic conglomerates. The volcanic rocks of the Härnö Formation consist of felsic, intermediate and mafic volcanics, including pillow lavas and pyroclastics, probably deposited in a back-arc setting. Felsic volcanics probably represent a volcanic inlier within the Bothnian Basin, or alternatively, an outlier of the Skellefteå district.

According to Keyser (2004), there are three main phases of granitoid intrusions in the region which are referred to as early, middle and post with respect to the Svecokarelian orogeny. The early orogenic granitoids are the most important from a mineralization perspective and comprise a calc-alkaline suite of predominantly tonalites with lesser volumes of granodiorite, which were emplaced prior to the main phases of Svecokarelian metamorphism and deformation. An early orogenic granodiorite is the host rock of the Central Zone mineralization at Barsele. Several separate intrusive rocks have been identified at the Central and Avan zones including late and post-mineralization dykes.

The Barsele mineralization was affected by polyphase deformation and remobilization events including several phases of enrichment. An early D1 phase of crustal extension caused hydrothermal activity simultaneously with the emplacement of volcanic and related intrusive rocks. Two overprinting deformation events (D2 and D3) both re-mobilized and enriched the deposit along D2 and D3 high strain zones (Bauer, 2015).

1.5 Mineralization

The metallogenic area of the Project is called the Gold Line (or Gold Trend), which is the original name of a geochemical gold anomaly detected in a regional till survey in the northern part of the county of Västerbotten in the late 1980s. Since then, several gold occurrences and large amounts of As-Au-mineralized boulders have been found in the area. Two mines have been in production: the Blaiken zinc-gold mine (closed in 2007) and the Svartliden gold mine (closed in 2013), located 30 km south-southeast. Most of the gold deposits in the Gold Line metallogenic area are considered orogenic gold deposits.

Mineralization varies among the zones on the Property. Two distinct mineralized areas have been explored on the Barsele concessions: CAS (the Central, Avan and Skiråsen zones) and Norra. The current MRE concerns the CAS area. Gold mineralization in the CAS is predominantly within the granodiorite (GD-II). Mineralized zones have been interpreted as two types of lodes, D2 lodes along D2 shear zones structures (NW-SE trending, steeply dipping) and D3 lodes related to the lineation of intersection between D2 shear zones and D3 panels (N-S trending, average of 45° dipping east). Those intersections are considered to have been dilatation zones favourable for fluid circulation and gold remobilization. The panel like geometry of the vein clusters in the Central Zone is not as evident in the Skiråsen Zone (AEM, 2018).

The Central, Avan and Skiråsen zones have a combined strike length of 2.7 km. Central zone consists of 24 lodes (14 D2 type and 10 D3 type) and Skiråsen zone of 13 lodes (D2 type) with an average horizontal thickness of 5 m for D3 type and 10 m for D2 type. The lodes have to date been followed to a depth of 900 m. The Avan zone consist of 22 lodes (D2 type) with an average horizontal thickness of 10 m. The lodes can be followed for 800 m along strike and to 700 m at depth.

Several events of shearing and veining occur through the deposit, with early ductile emplacement of tourmaline-rich sulphide-poor veins predating the emplacement of gold bearing mineralization commonly hosted by quartz ± calcite veins. Based on their texture and mineralogy, the gold-bearing quartz-bearing veins have been classified into: Qtz-1 ductile quartz veins with sulfidation haloes, Qtz-2 continuous planar quartz veins with chlorite selvage, Qtz-3 quartz veins containing visible gold and scheelite, and Qtz-4 auriferous sulphide-rich (sphalerite>pyrrhotite>galena) quartz veins. Gold mineralization is mainly hosted by Qtz-2 and Qtz-3 veins, whereas Qtz-1 and tourmaline veins are more abundant in the Central Zone. Traces of pyrite are also more commonly observed.

Gold occurs as native metal alloyed with silver and demonstrates a general association with arsenopyrite, also occurring with pyrrhotite, calcite, chlorite, tourmaline and biotite. Base metal content of the deposit is typically low, although gold is seen to occur with sphalerite, galena, chalcopyrite, scheelite and rarely molybdenite. Sulphide, carbonate and quartz-tourmaline veinlets are locally mineralized. The host-granodiorite contains probably less than 2% disseminated fine-grained sulphides occurring as arsenopyrite, pyrrhotite and pyrite (Barry et al., 2006).

1.6 Data Verification

The co-author, Carl Pelletier, P.Geo., visited the Property from October 29 to October 31, 2018, accompanied by Art Freeze, P.Geo., for Barsele Minerals. During the site visit, the co-author examined the logging facilities, reviewed the drill core and collar locations, and held many discussions with on-site geologists and technicians. Some of the data validation took place before and after the site visit.

The database provided by Barsele Minerals (the “Barsele database”) contains 779 DDH, all from surface. This total includes 89 new drill holes (the 2017-2018 drilling program) completed since the database close-out date for the 2018 MRE (Pelletier & Richard, 2018).

Innovexplo's data verification is a review of drill hole collar locations, selected core intervals, gold assays, the QA/QC program, downhole surveys and the descriptions of lithologies, alteration and structures.

InnovExplo is of the opinion that the data verification process demonstrates the validity of the data and protocols for the Project. InnovExplo considers the database to be valid and of sufficient quality to be used for the mineral resource estimate herein.

1.7 Mineral Resource Estimate

The Barsele Deposit Mineral Resource Estimate (the "2019 MRE") was prepared by Harold Brisson, P.Eng., and Carl Pelletier, P.Geo., using all available information. The resource area measures 2,700 m along strike and up to 450 m wide. Although resources are defined down to 900 m, the bulk of the resource is located in the first 600 m from surface. The 2019 MRE was based on a compilation of historical and recent diamond drill holes ("DDH"). The wireframed mineralized zones were used as provided by AEM after being reviewed and approved by InnovExplo.

The mineral resources herein are not mineral reserves as they do not have demonstrated economic viability. The result of this study is a single mineral resource estimate for three (3) mineralized zones (Avan, Central and Skiråsen). The 2019 MRE includes Indicated and Inferred resources and is based on the assumption that the deposit will be developed and mined using a combination of open pit and underground (bulk, selective) methods. Specific extraction methods are used only to establish reasonable cut-off grades for various portions of the deposit. No PEA, PFS or FS studies have been completed to support economic viability and technical feasibility of exploiting any portion of the mineral resource, by any particular mining method.

The close-out date of the database is November 12, 2018 and the effective date of the estimate is February 21, 2019.

InnovExplo is of the opinion that the current mineral resource estimate can be classified as Indicated and Inferred mineral resources based on data density, search ellipse criteria, drill hole spacing and interpolation parameters. InnovExplo considers the 2019 MRE to be reliable and based on quality data, reasonable hypotheses and parameters that follow CIM Definition Standards.

The Table 1.1 below displays the results of the In Situ Barsele Deposit Mineral Resource Estimate for combined open pit, underground bulk and underground selective mining methods scenario at cut-off grades of 0.50 g/t Au (in pit), 1.50 g/t Au (bulk underground) and 1.8 g/t Au (selective underground), respectively.

Specific extraction methods are used only to establish reasonable cut-off grades for various portions of the deposit. No Preliminary Economic Analysis, Pre-Feasibility Study or Feasibility Study has been completed to support economic viability and technical feasibility of exploiting any portion of the mineral resource, by any particular mining method.

Table 1.1 - Barsele Deposit Mineral Resource Estimate for combined open pit, underground bulk, underground selective mining methods scenario

Area (mining method)	Cut-off (g/t)	Indicated Resource			Inferred Resource		
		Tonnage ('000)	Au (g/t)	Ounces	Tonnage ('000)	Au (g/t)	Ounces
Open Pit	0.5	3,452	1.32	147,000	1,819	1.59	93,000
Underground Bulk	1.5	1,442	2.53	117,000	8,759	2.58	728,000
Underground Selective	1.8	684	2.75	60,000	14,917	2.64	1 265,000
Total		5,578	1.81	324,000	25,495	2.54	2,086,000

Mineral Resource Estimate Footnotes:

1. The Independent and Qualified Persons for the Mineral Resource Estimate, as defined by NI 43-101, are Carl Pelletier, P.Geo. and Harold Brisson, P.Eng., both from InnovExplo Inc., and the effective date of the Mineral Resource Estimate is February 21, 2019.
2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability.
3. The mineral resource estimate follows current CIM definitions and guidelines for mineral resources.
4. The results are presented undiluted and are considered to have reasonable prospects for eventual economic extraction.
5. The estimate encompasses 61 gold-bearing zones, each defined by individual wireframes with a minimum true thickness of 2.0 m using the grade of the material when assayed or a value of zero when not assayed. The resource was estimated using GEOVIA GEMS 6.8.
6. High-grade capping supported by statistical analysis was carried out on assay data and established on a per domain basis for gold (g/t Au): low-grade mineralized envelope = 5.0 g/t Au, high-grade gold-bearing zones: Skiråsen = 30.0 g/t Au, Central = 30.0 to 40.0 g/t Au, Avan = 20.0 g/t Au.
7. Grade interpolation was performed by ordinary kriging on 2.0-m composites from drill-hole intersections falling within the mineralized zones in a block model using a block size of 10 m by 3 m by 5 m.
8. Density values were applied based on lithology. All mineralized zones were assigned 2.73 g/cm^3.
9. The Mineral Resource Estimate is classified as Indicated and Inferred. The Inferred category is defined with a minimum of two (2) drill holes within the areas where the drill spacing is less than 100 metres and shows reasonable geological and grade continuity. The Indicated mineral resource category is defined with a minimum of two (2) drill holes within the areas where the drill spacing is less than 25 m. Clipping boundaries were used for classification based on those criteria.
10. The cut-off grades were calculated using the following parameters: mining cost = USD 35.00 to USD 45.00; processing cost = USD 15.00; G&A = USD 5.00 to USD 8.00; refining and selling costs = USD 10.00; gold price = USD 1,300.00; and metallurgical recovery = 92.6%. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs etc.).
11. The number of metric tons were rounded to the nearest thousand, following the recommendations in NI 43-101 and any discrepancies in the totals are due to rounding effects. The metal contents are presented in troy ounces (tonnes x grade / 31.10348).
12. InnovExplo Inc. is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues, or any other relevant issue not reported in the Technical Report, that could materially affect the Mineral Resource Estimate

1.8 Interpretation and Conclusions

The objective of InnovExplo's mandate was to prepare a NI 43-101 compliant Technical Report to present and support the results of a mineral resource estimate (the "2019 MRE") for the Barsele Project. This Technical Report and the mineral resource estimate herein meet this objective.

The 2019 MRE is supported by data of sufficient quantity and quality, and by a well-founded interpretation model that demonstrates continuity of mineralization. The 2019 MRE considers a mining scenario that combines three different methods of extraction. The results of the 2019 MRE clearly show the Project's potential for extending the mineralized zones at depth and for additional mineral resources

1.9 Recommendations

Based on the results of the 2019 MRE, InnovExplo recommends additional exploration and delineation drilling and further geological interpretation to gain a better understanding of the deposit before the next update of the mineral resource estimate.

More specifically, approximately 20,000 m of infill drilling should be performed to potentially convert part of the Inferred resources to the Indicated category. This additional information would provide a better understanding of the control on mineralization and the distribution of gold in the deposit, including the D3 structures. Also, approximately 10,000 m of drilling should be dedicated to the vertical extensions of currently identified shoots, 10,000 m to the lateral extensions, and 10,000 m to additional targets across the Project.

2. INTRODUCTION

2.1 Overview

At the request of Mr. Art Freeze, P.Geo., Director for Barsele Minerals Corp. ("Barsele Minerals" or the "issuer"), InnovExplo Inc. ("InnovExplo") was retained to prepare a technical report (the "Technical Report") to present and support the results of a mineral resource estimate (the "2019 MRE") for the Barsele Property (the "Property" or "Project") in accordance with Canadian Securities Administrators' National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects ("NI 43-101") and its related Form 43-101F1.

InnovExplo is an independent mining and exploration consulting firm based in Val-d'Or (Québec).

The 2019 MRE herein has an effective date of February 21, 2019. The estimate follows CIM Definition Standards for Mineral Resources and Mineral Reserves ("CIM Definition Standards").Issuer

Barsele Minerals is a Canadian-based junior mineral exploration company trading publicly on the TSX Venture Exchange under the symbol BME. The corporate headquarters of the issuer is located at 1055 W. Hastings Street, Suite 1130, Vancouver, British Columbia, V6E 2E9.

2.2 Terms of Reference

The main asset of Barsele Minerals is the Barsele gold project located in in the county of Västerbottens in Northern Sweden within the Paleoproterozoic supracrustal and associated intrusive rocks of the Fennoscandian Shield. Barsele Minerals was the result of the spin-out of Orex's interest in the Project on September 25, 2015. Prior to this spin-out, Orex reached a joint venture agreement (the "JVA") with Agnico Eagle Sweden AB ("AE Sweden") and certain other parties on June 11, 2015. In accordance with the terms of the JVA, the issuer owns a 45% interest in the Project and AE Sweden could eventually earn a 70% interest after the completion of a pre-feasibility study, reducing the issuer's interest to 30%. A total area of 43,481.96 ha in two (2) exploitation concessions, twenty-three (23) granted exploration permits and one (1) submitted application for an exploration permit are assigned to the Project. The area of the Project has well-developed infrastructure and several active gold and base metal mines providing a ready supply of experienced mine and mill workers.

The operating entity is Agnico Eagle Sweden AB, an indirect wholly-owned subsidiary of Agnico Eagle Mines Limited. For the purposes of this Report, "AEM" is used to refer interchangeably to the parent and subsidiary companies.

2.3 Report Responsibility and Qualified Persons

This Technical Report was prepared by the following employees of InnovExplo: Carl Pelletier, P.Geo., Co-president and Co-founder; Harold Brisson, P.Eng., PhD, Senior Engineer – Mineral Resources; Stéphane Faure, P.Geo., PhD, Geoscience Expert; and Vincent Nadeau-Benoit, P.Geo., Project Geologist. Each are independent qualified persons ("QPs") as defined by NI 43-101.

Mr. Pelletier is a professional geologist in good standing with the OGQ (permit No. 384) APGO (licence No. 1713), EGBC (licence No. 43167). He is responsible for the overall supervision of the Technical Report and co-author of items 1 to 6, 12, 14 and 25 to 27.

Mr. Brisson is a professional engineer in good standing with the OIQ (permit No. 41433), and the PEO (licence No. 100516300). He is co-author of items 1 to 3, 11 and 12, 14 and 25 to 27 of this Technical Report.

Mr. Faure is a professional geologist in good standing with the OGQ (permit No. 306), the NAPEG (licence No. L3536) and the APGO (licence No. 2662). He is the author of items 7 and 8 in this Technical Report, and co-author of items 9 and 10, 23 and 25 to 27.

Mr. Nadeau-Benoit is a professional geologist in good standing with the OGQ (permit No. 1535). He is the co-author of items 1 to 6, 9 to 11, 23 and 25 to 27.

2.4 Site Visit

Carl Pelletier visited the Property from October 29 to October 31, 2018. He was accompanied by Arthur Freeze, P.Geo., representing Barsele Minerals. The site visit focused on the Property, the core logging facility and the regional exploration office. The visit comprised a general overview in the field, an examination of mineralized exploration diamond drill core, a review of the core logging and sampling procedures, and onsite data verification.

2.5 Effective Date

The effective date of the Technical Report is February 21, 2019.

2.6 Sources of Information

The reports and documentation listed in Item 3 and Item 27 were used to support the preparation of this Report. Sections from reports authored by other consultants may have been directly quoted or summarized in this Report and are so indicated, where appropriate.

InnovExplo's review of the Project was based on published material in addition to the data, professional opinions and unpublished material submitted by Barsele Mineral and AEM. InnovExplo has reviewed the data provided by the issuer and/or by its agents.

InnovExplo has also consulted other information sources, principally the Geological Survey of Sweden's online databases (mainly permits and their status), as well as technical reports, AIFs, MD&A reports, and press releases published by the issuer on SEDAR (www.sedar.com).

InnovExplo conducted a review and appraisal of the information used to prepare this Technical Report, including the conclusions and recommendations, and believes that such information is valid and appropriate considering the status of the Project and the purpose for which the Technical Report is prepared. The authors have fully researched and documented the conclusions and recommendations made in the Technical Report and affirm that the work program and recommendations presented in the report conform to NI 43 101 and CIM Definition Standards.

The QPs do not have, nor have they previously had, any material interest in the issuer or its related entities. The relationship with the issuer is solely a professional association between the issuer and the independent consultants. The Technical Report was prepared in return for fees based upon agreed commercial rates, and the payment of these fees is in no way contingent on the results of the Technical Report.

2.7 Currency, Units of Measure, and Abbreviations

A list of acronyms and a list of units used in this report are provided in Table 2.1 and Table 2.2. All currency amounts are stated in Canadian Dollars (C$), unless otherwise specified. Quantities are stated in metric units, as per standard Canadian and international practice, including tonnes (t) and kilograms (kg) for weight, km (km) or m (m) for distance, ha (ha) for area, and gram per tonne (g/t) for gold grades. Wherever applicable, imperial units have been converted to the International System of Units (SI units) for consistency (Table 2.3).

Table 2.1 – List of abbreviations and acronyms

Abbreviation or Acronym	Term
43-101	National Instrument 43-101 – Standards of Disclosure for Mineral Projects (Regulation 43-101 in Québec)
AAS	Atomic absorption spectroscopy
Au-VMS	Gold-rich volcanogenic massive sulphide
Az	Azimuth
BHEM	Borehole electromagnetic
BOT	Base of till
CAS	Central, Avan and Skiråsen zones
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CRM	Certified reference material
CV	Coefficient of variation
DC	Direct current
DDH	Diamond drill hole
EM	Electromagnetics
FS	Feasibility study
G&A	General and administration
ICP	Inductively coupled plasma
ICP-AES	Inductively coupled plasma atomic emission spectroscopy
ICP-MS	Inductively coupled plasma mass spectroscopy
ID2	Inverse distance squared
IP	Induced polarization
ISO	International Organization for Standardization
JV	Joint venture
JVA	Joint venture agreement

Abbreviation or Acronym	Term
LA-ICP-MS	Laser ablation inductively coupled plasma mass spectrometry
Mag	Magnetometer, magnetometric
MD&A	Management's Discussion and Analysis
MKB	Swedish environmental impact statement
MLA	Mineral liberation analyzer
MRE	Mineral resource estimate
MS	Mass spectrometry
MT	Magneto-telluric
NAD 83	North American Datum of 1983
NI 43-101	National Instrument 43-101 – Standards of Disclosure for Mineral Projects (Regulation 43-101 in Québec)
NSR	Net smelter return
OK	Ordinary kriging
P.Geo.	Professional geologist
P.Eng.	Professional engineer
PEA	Preliminary economic assessment
PFS	Prefeasibility study
QA/QC	Quality assurance/quality control
QP	Qualified person (as defined in National Instrument 43-101)
RQD	Rock quality designation
SEK	Swedish Krona
SGU	Geological Survey of Sweden
TDEM	Time-domain electromagnetics
UTM	Universal Transverse Mercator (coordinate system)
VMS	Volcanogenic massive sulphide

Table 2.2 – List of symbols

Symbol	Unit
$	Canadian dollar
$/t	Dollar per metric ton
%	Percent
°	Angular degree
°C	Degree Celsius
C$	Canadian dollar
CAD	Canadian dollar
cm	Centimetre
cm^3	Cubic centimetre

Symbol	Unit
Ga	Billion years
g/cm^3	Gram per cubic centimetre
g/t	Gram per metric ton (tonne)
h	Hour (60 minutes), hours
ha	Hectare
kg	Kilogram
km	Kilometre
km^2	Square kilometre
m	Metre
M	Million
m^2	Square metre
Ma	Million years
masl	Metres above mean sea level
mm	Millimetre
Moz	Million (troy) ounces
Mt	Million metric tons (tonnes)
oz	Troy ounce
ppb	Parts per billion
ppm	Parts per million
SEK	Swedish Krona
t	Metric ton (“tonne”) (1,000 kg)
US$	American dollar
USD	American dollar

Table 2.3 – Conversion Factors for Measurements

Imperial Unit	Multiplied by	Metric Unit
1 inch	25.4	mm
1 foot	0.3048	m
1 acre	0.405	ha
1 ounce (troy)	31.1035	g
1 pound (avdp)	0.4535	kg
1 ton (short)	0.9072	t
1 ounce (troy) / ton (short)	34.2857	g/t

3. RELIANCE ON OTHER EXPERTS

This Technical Report has been prepared by InnovExplo at the request of the issuer. Carl Pelletier (P.Geo.), Harold Brisson (P.Eng.), Stéphane Faure (P.Geo.) and Vincent Nadeau-Benoit (P.Geo.) of InnovExplo are the qualified and independent persons ("QP") assigned the mandate of reviewing technical documentation relevant to the Technical Report, preparing a mineral resource estimate on the Project, and recommending a work program if warranted.

The QPs relied on the following people or sources of information during the preparation of this Technical Report:

- The issuer supplied information about mining titles, option agreements, royalty agreements, environmental liabilities and permits. Neither the QPs nor InnovExplo are qualified to express any legal opinion with respect to property titles, current ownership or possible litigation. This disclaimer applies to sections 4.2 to 4.7.
- Patrick Frenette (P.Eng.) of InnovExplo provided parameters to establish the official cut-off grade for the mineral resource estimate.
- Venetia Bodycomb (M.Sc.) of Vee Geoservices provided critical and linguistic editing of a draft version of the Technical Report.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Property is situated in the town of Barsele in the county of Västerbotten in Northern Sweden. It is located approximately 20 km east-southeast from the town of Storuman. At the regional scale, Barsele lies 200 km northwest of Umeå (population of 120,000), the administrative headquarters of the county, and approximately 630 km north of Stockholm. The geographic coordinates of the Property centroid are latitude 65°03' north and longitude 17°34' east (UTM coordinates 621349E, 7217734N: SWEREF99 TM) (Figure 4.1).

The approximate centroid of the Property is UTM coordinates: 614969E and 7221117N, SWEREF99 TM.

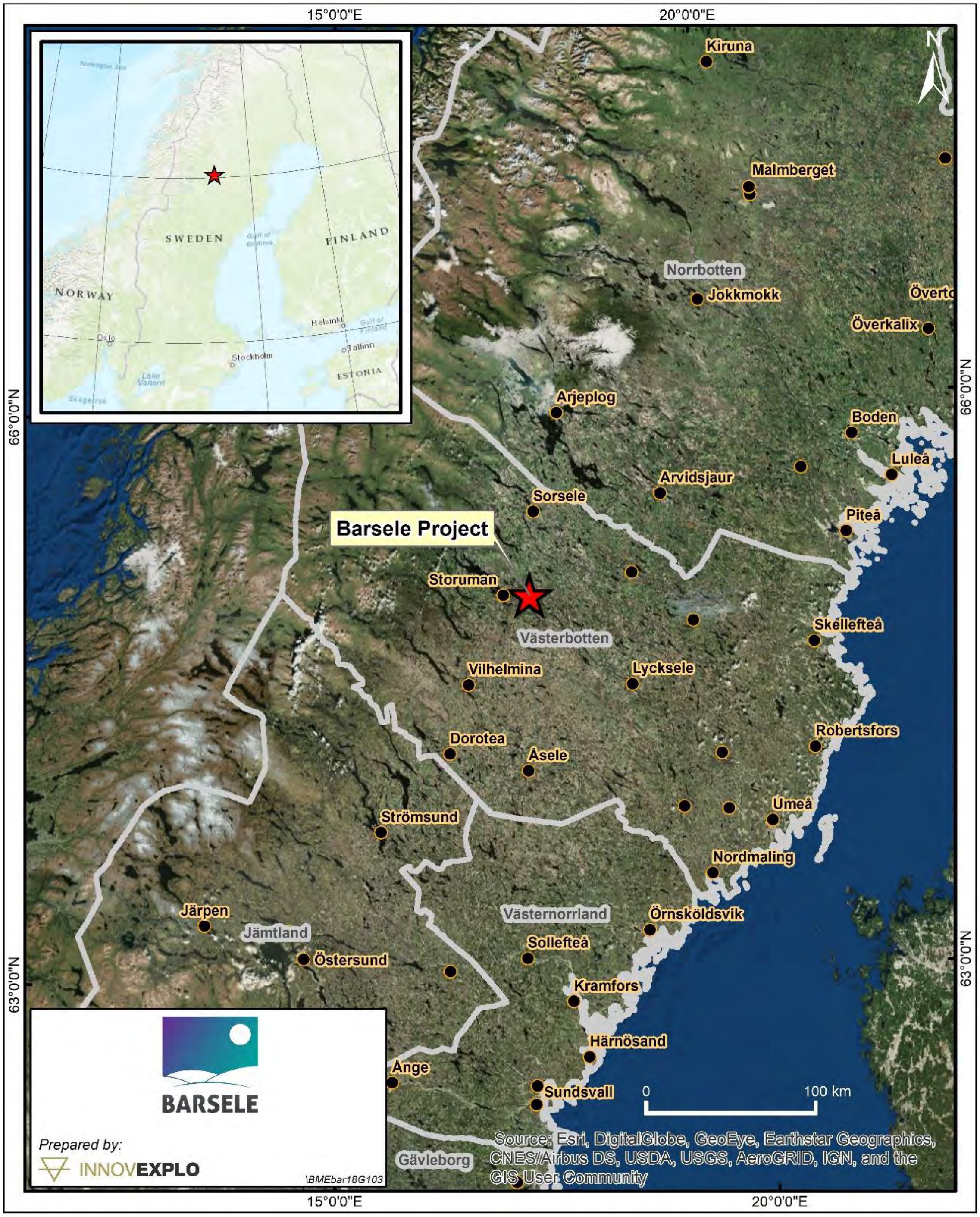


Figure 4.1 – Location of the Barsele Property in Northern Sweden

4.2 Statements regarding Swedish Mining Law

Most of the following information of this section was taken from the “Guide to Mineral Legislation and Regulation in Sweden”, published by the Geological Survey of Sweden (Sveriges geollogiska undersökning or “SGU”) (SGU, 2006). Additional sources are cited accordingly. According to Giroux et al. (2015), the underlying title to mineral resources in Sweden is held by the Crown, administered by the Mining Inspectorate. Sweden introduced a modern minerals policy in July 1992 (Minerals Act 1991:45) allowing for and governing exploration and extraction of "concession minerals" (base and precious metals, industrial minerals and hydrocarbons). Before 1992, exploration and mining were controlled by the State. The Minerals Act applies to exploration and exploitation on land regardless of surface ownership (surface and minerals are severed). Exploration and mining can only be carried out by the holders of exploration permits and exploitation concessions, respectively, as described below (SGU, 2006). There is no distinction between Swedish residents and non-residents holding exploration permits and exploitation concessions, however work must be carried out through a registered Swedish branch office (Act 1992: 160 and Ordinance 1992:308). An exploration permit, or exploitation concession is transferrable with the consent of the Mining Inspectorate.

Swedish mineral policy and mineral titles are considered safe and secure by international standards. In addition, the Swedish government offers fiscal incentives to mining and exploration companies. The mining industry is an important job creator in northern Sweden and consequently the Swedish government makes significant contributions towards mine infrastructure and the salaries and wages of Swedish citizens hired by mining companies. The interest and importance of mining in Sweden has helped ensure that there are plenty of well-trained and experienced people in the mining industry.

4.2.1 Exploration permit

An exploration permit is granted for a specific area where there is some likelihood of a successful discovery being made. It should be of suitable shape and size and no larger than may be assumed can be explored by the permit-holder in an appropriate manner. Within a distance of 1,000 m from an exploitation concession with a mine in operation an exploration permit must only be granted to the concession-holder.

If mining operations do not commence within three (3) years from the granting of the concession, exploration permits can be issued until the mining activity begins. An exploration permit is valid for a period of three (3) years from the date of issue. After that, on application, it may be extended by another period of up to a maximum of three (3) years if suitable exploration has been carried out within the area. The same is valid if the permit-holder has plausible reasons for the exploration not yet having been carried out but nonetheless shows it likely that the area will be explored during the period referred to in the application. In exceptional cases the period of validity of the permit may be further extended but for no more than a total of four (4) years and, in extreme cases, by a further maximum of five (5) years. This means that the longest possible valid period for any one permit is 15 years.

When an exploration permit has expired, an application will not be considered for the same area or part of it during the first year after the permit was terminated. If special reasons apply, the Mining Inspector may allow an exception to be made from this provision.

Exploration and exploitation cannot be carried out in national parks. Such activities are also seldom permitted in other areas such as: closer than 30 m to a publicly owned transportation infrastructure, within 200 m of any inhabited building, in churchyard or other burial grounds, etc.

Before exploration work begins the permit-holder must set up a working plan. The plan shall contain a description of the work planned, a timetable, and an assessment of the impact on private rights and public interests. The plan shall be communicated to all landowners and other parties affected. A working plan will enter into force if there are no objections. It will also enter into force if the applicant and the objecting party can agree on the plan. If they cannot agree, the matter can be tried by the Chief Mining Inspector, who in some cases can set up conditions for the exploration work. The explorer has to submit security for the compensation of damage and encroachment from exploration work. Before any work can start the sum of security has to be guaranteed.

Permits titled “Prohibited” reflect a level of exploration work below the obligation value under Swedish mineral title law. After a permit has been declared lapsed from insufficient exploration or development activity there is a period of one (1) year where no one can apply for a permit in the lapsed permit areas and no work can be carried out on the prohibited permit areas by anyone. After the “prohibited year”, the permits become available for relocation. Generally, permits located within a group of valid permits are offered to the surrounding permit holder first. This has been the case for the prohibited permits for “surrounded lapsed” areas on the Barsele Project.

4.2.2 Exploitation concession

A concession is valid for a definite area, which is decided on the basis of the extent of the deposit, the purpose of the concession and other circumstances. A concession shall be granted if:

A mineral deposit has been found which can probably be exploited economically;

The location and nature of the deposit does not make it inappropriate that the applicant is granted the concession requested.

The Environmental Code (1998:808) shall be applicable in matters concerning the granting of a concession, which means, among other things, that an environmental impact statement (a miljökonsekvensbeskrivning or “MKB”) shall be contained in an application for the concession.

An exploitation concession is granted for a period of 25 years. The concession period is extended by ten (10) years at a time without application if regular exploitation is in progress when the period of validity expires. A shorter period may be granted at the request of the concession-holder.

A legal proceeding for designation of land is held at the request and cost of the concession-holder (see Minerals Act, Chapter 9, Section 20) This determines the land within the concession area that the concession-holder may use for exploitation of the mineral deposit. A decision is also taken regarding the land, within or outside the concession area, which the concession-holder may use for activities related to the exploitation. In this connection the nature of the activity shall be stated. When an exploitation concession is terminated, the concession-holder shall, at that date, forfeit the right to land assigned to him.

4.3 Taxes and other fees

The normal corporate income tax rate was reduced, as part of a government reform, from 22% to 21.4%, on December 31, 2018. It is supposed to be reduced again on

December 31, 2020 to 20.6%. Apart from this tax, there are no additional special tax regulations which apply to mining. When mining is active, the holder of an exploration concession pays the landowners of the concession area an annual minerals fee of 0.15% of the value of the minerals mined and an additional 0.05% to the State (SGU, 2006).

Current application and exploration fees are nominal. An application fee of SEK 500 (CAD 73) and the same amount for every additional 2 km2 is payable when applying for an exploration permit. An exploration fee of SEK 2,000 (CAD 293) per square kilometer is charged for the first three-year period, increasing to SEK 2,100 (CAD 307) per square kilometer, per year, for a second three-year period, and SEK 5,000 (CAD 732) per square kilometer, per year, applying to further extensions. Exploration and application fees are paid in advance for the exploration period and extended periods to the Mining Inspectorate. The application fee for an exploitation concession is SEK 80,000 (CAD 11,706) for each concession area regardless of the number of hectares (exchange rates as of early December 2018).

4.4 Exploration and Exploitation Title Status

Title status in Sweden was supplied by the SGU on February 9, 2019. They provided the status of all exploration permits and exploitation concessions in the form of shapefiles, a file format used to store the geometric location and attribute information of geographic features. Kåre Höglund, Project Manager for Agnico Eagle Sweden AB ("AE Sweden"), confirmed on February 22, 2019 that the exploration and exploitation titles status comprising the Property were identical to the records of AEM. Table 4.1 shows the titles status as of that date.

The Property currently consists of one block of 23 granted exploration permits and two (2) exploitation concessions issued by the Chief Mining Inspector, for an aggregate area of 43,481.96 ha (434.8196 km^2; Figure 4.2). Fifteen (15) exploration permits are registered in the name of Gunnarn Mining AB ("Gunnarn Mining") and five (5) in the name of AE Sweden. Applications have been submitted for one (1) exploration permit for an area of 3,789.71 ha (37.90 km2), registered in the name of AE Sweden. A detailed list of mining titles, ownership and expiration dates is provided in Table 4.1.

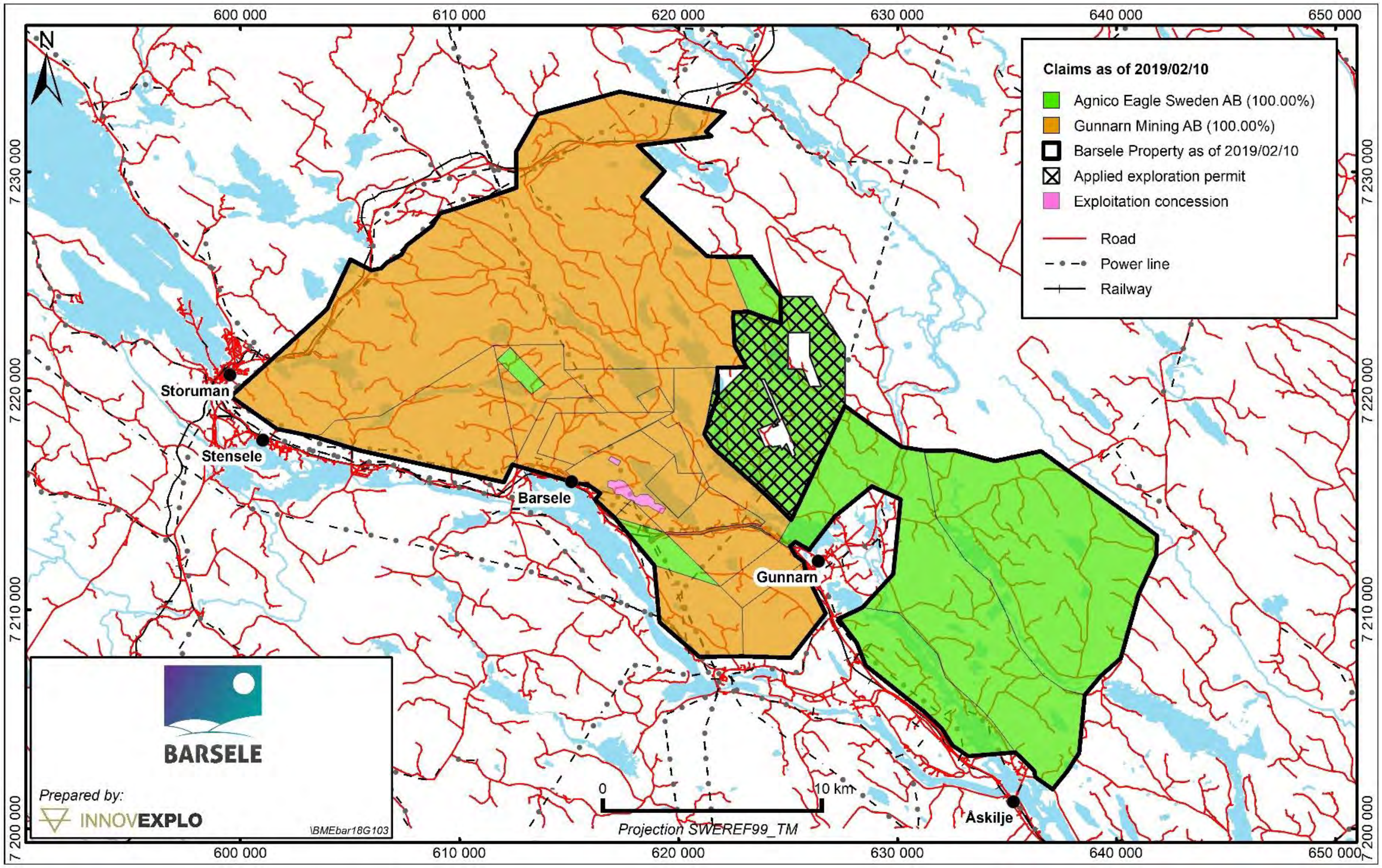


Figure 4.2 – Location of the Barsele Property exploration permits and exploitation concessions

Table 4.1 – Title status of the Barsele Property as of February 22, 2019

Valid Permits								
STATUS	**NAME**	**AREA**	**APPL_DATE**	**VALIDFROM**	**VALIDTO**	**COUNTY**	**MAP**	**OWNERS**
Granted	Gunnarn nr 28	707.40	2015-02-11	2015-04-21	2021-04-21	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 31	1916.17	2017-10-13	2018-02-28	2021-02-28	Västerbottens	23H	Agnico Eagle Sweden AB (100.00%)
Granted	Gunnarn nr 23	895.91	2014-10-21	2014-12-16	2020-12-16	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Risberget nr 4	1178.00	2010-10-07	2011-06-27	2020-06-27	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 27	1459.47	2015-02-11	2015-04-21	2021-04-21	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 110	369.13	2010-12-08	2011-09-09	2020-09-09	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 26	118.05	2015-02-10	2015-04-21	2021-04-21	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 36	440.23	2018-01-24	2018-04-25	2021-04-25	Västerbottens	23H	Agnico Eagle Sweden AB (100.00%)
Granted	Gunnarn nr 25	323.46	2014-09-23	2014-11-26	2020-11-26	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 30	2750.02	2017-01-19	2017-05-11	2020-05-11	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 116	119.50	2010-12-08	2011-09-05	2020-09-05	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)
Granted	Risberget nr 2	1066.45	2010-10-07	2011-06-27	2020-06-27	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 34	6730.13	2017-10-13	2018-02-28	2021-02-28	Västerbottens	23H, 23I	Agnico Eagle Sweden AB (100.00%)
Granted	Risberget nr 5	490.27	2014-10-08	2014-11-24	2020-11-24	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 24	680.07	2014-09-23	2014-11-17	2020-11-17	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 68	518.94	2010-12-08	2011-07-14	2020-07-14	Västerbottens	23HSO, 23HSV	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 22	805.39	2009-07-03	2009-10-06	2019-10-06	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 32	176.39	2017-10-10	2017-12-12	2020-12-12	Västerbottens	23H	Agnico Eagle Sweden AB (100.00%)
Granted	Gunnarn nr 116 A	1259.71	2010-12-23	2011-09-07	2020-09-07	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 33	411.98	2017-10-10	2017-12-12	2020-12-12	Västerbottens	23H	Agnico Eagle Sweden AB (100.00%)

Valid Permits								
Granted	Gunnarn nr 29	61.19	2016-01-15	2016-03-10	2019-03-10	Västerbottens	23H	Gunnarn Mining AB (100.00%)
Granted	Gunnarn nr 35	7005.42	2017-10-13	2018-02-28	2021-02-28	Västerbottens	23H, 23I	Agnico Eagle Sweden AB (100.00%)
Granted	Storuman nr 1	17383.67	2011-01-13	2011-09-19	2020-09-19	Västerbottens	23HNO, 23HNV, 23HSO, 23HSV	Gunnarn Mining AB (100.00%)
Applied Permits								
STATUS	**NAME**	**AREA**	**APPL_DATE**	**VALIDFROM**	**VALIDTO**	**COUNTY**	**MAPPAGE**	**OWNERS**
Applied	Gunnarn nr 37	3789.71	2019-02-05			Västerbottens	23H	Agnico Eagle Sweden AB (100.00%)
Concessions Permits								
STATUS	**NAME**	**AREA**	**APPL_DATE**	**VALIDFROM**	**VALIDTO**	**COUNTY**	**MAPPAGE**	**OWNERS**
Granted	Barsele K nr 2	11.25	1999-02-02	2007-06-21	2032-06-21	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)
Granted	Barsele K nr 1	123.24	1999-01-25	2007-06-21	2032-06-21	Västerbottens	23HSO	Gunnarn Mining AB (100.00%)

4.5 Acquisition of the Barsele Project

On September 25, 2015, Orex Minerals Inc. ("Orex") and Barsele Minerals announced completion of the spin-out of Orex's interest in the Barsele Project. The previously announced plan of arrangement (the "Arrangement") pursuant to which all of the common shares of Barsele Minerals (the "Barsele Shares") were distributed (the "Spinout") to the shareholders of Orex (the "Orex Shareholders"). Immediately prior to the Spinout, Orex transferred its 45% interest in the Barsele Project, CAD 500,000 in cash and all of Orex's right, title and interest in and to, and all of its benefits and obligations under, the joint venture agreement (the "JV Agreement") dated June 11, 2015 between Orex, AE Sweden and certain other parties. Orex retained all of the other assets held by Orex immediately prior to the Arrangement.

Under the Arrangement, each common share of Orex (an "Old Orex Share") outstanding immediately before the effective time of the Arrangement (the "Effective Time") was exchanged for one new common share of Orex (a "New Orex Share") and one Barsele Share. Also, under the Arrangement, outstanding options and warrants of Orex to purchase Old Orex Shares were exchanged for options and warrants, respectively, of both Orex and Barsele Minerals to purchase New Orex Shares and Barsele Shares, as applicable. As a result of the Arrangement, existing Orex Shareholders maintained their interest in Orex and obtained a proportionate interest in Barsele by receiving all of the issued and outstanding New Orex Shares and Barsele Shares immediately upon completion of the Arrangement.

The Supreme Court of British Columbia issued a final order approving the Arrangement on September 24, 2015 and the Arrangement became effective on September 25, 2015.

In connection with the assignment of the JV Agreement to Barsele Minerals under the Spinout, Orex was released from substantially all of its obligations under the JV Agreement, other than liabilities arising in respect of conduct that occurred prior to the assignment and Orex's obligations to provide its proportionate share of funds to Gunnarn Mining, the corporate entity in Sweden that owns the Project, to satisfy environmental and other obligations of Gunnarn Mining that arose out of activities conducted prior to such assignment.

4.6 Previous Agreements and Encumbrances

On March 22, 2011, the final agreement to acquire the Barsele Project was signed with Northland Resources S.A. ("Northland"), replacing the Letter of Intent previously announced October 27, 2010. Under the terms of the final agreement, Northland would receive a total of USD 5 million in cash over two (2) years from the date of signing, and USD 3.5 million worth of Orex shares to be issued over a period of four (4) years from signing. Orex was also guaranteed a minimum USD 3 million to be spent on the Barsele Project in the first two (2) years. Finally, Northland would retain a 2% NSR, which can be purchased at any time by Orex for USD 4 million in cash.

There are no other known royalties, back-in rights, payments or other agreements and encumbrances to the property.

On October 3, 2013, Northland and Orex agreed to amend their agreement as follows:

1. The USD 2 million cash payment which was to be paid on April 29, 2013 would be satisfied by the payment of USD 250,000 and the issuance of 3.5 million common shares of Orex to Northland at a deemed price of USD 0.50 per common share (the "Cash Payment Shares");
2. The remaining two share payments under the agreement would be accelerated and would be satisfied by the issuance of 4 million common shares of Orex to Northland at a deemed price of USD 0.50 per common share (the "Share Payment Shares"); and
3. Orex would issue the Cash Payment Shares and the Share Payment Shares (totaling 7.5 million common shares of Orex) to Northland upon receipt of TSX Venture Exchange approval of these amendments.

Orex has confirmed that these payments were made prior to October 21, 2013 and that as a result Orex obtained a 100% interest in the Project.

On June 11, 2015, AEM, through its indirect, wholly-owned subsidiary AE Sweden, acquired a 55% interest in Gunnarn Mining in consideration of an initial payment to Orex of USD 6 million. An additional USD 2 million will be payable by AE Sweden, or by AEM on AE Sweden's behalf, to Orex in cash or common shares of AEM at AE Sweden's election on each of the first and second anniversaries of the closing of the transaction.

As part of the transaction and in accordance with the terms of a joint venture agreement dated June 11, 2015 (the "JVA") between Orex, Gunnarn Mining, AEM and AE Sweden, AE Sweden has committed to spend USD 7 million on project expenditures over three years. Pursuant to the JVA, if AEM or AE Sweden prepares a pre-feasibility study on the Project and contributes it to Gunnarn Mining, AE Sweden's interest in Gunnarn Mining will increase to 70% and Orex's interest in Gunnarn Mining will be reduced to 30%. Until such pre-feasibility study is contributed to Gunnarn Mining by AEM or AE Sweden, all costs and expenses of Gunnarn Mining will be for the account of AE Sweden and, following the completion of such pre-feasibility study, all costs and expenses of Gunnarn Mining will be shared by AE Sweden and Orex in accordance with their proportionate interest in Gunnarn Mining.

Pursuant to the transaction, Orex was also granted a 2% NSR on production from the Project, which may be repurchased by AEM at any time for USD 5 million.

4.7 Permits

As explained in Section 4.2.1, before exploration work begins, the permit holder must set up a working plan (plan of operations). The plan shall contain a description of the work planned, a timetable, and an assessment of the impact on private rights and public interests. The plan shall be communicated to the landowners, the holder of any special right who is affected, the municipality and the county administrative board. The plan shall be concurrently submitted to the Mining Inspector. If the exploration work is to be performed in a reindeer herding district, a valid plan of operations must also be sent to Sametinget (the Sami Parliament).

A working plan will enter into force if there are no objections, or, if the applicant and objecting party can agree on a plan. Objections to the contents of the plan shall be made in writing and shall reach the permit holder within three weeks of the plan being served. If the applicant and objecting party cannot agree, the matter can be tried by the Mining Inspector, who can set up the conditions of the exploration work.

The time period for obtaining a plan of operations is normally less than six weeks. Airborne surveys and other non-surface disturbance activities do not require a formal plan or individual landowner contact but must be posted in a local newspaper or filed with the news service.

The explorer shall submit security for compensation of damage and encroachment from exploration work. Before any work can commence the sum of security must be guaranteed. Such compensation is set by guidelines established by the Mining Inspectorate. In the case of Barsele Minerals, compensation is generally awarded to the landowners for any timber or seedlings that are damaged or removed during drilling and trenching operations. The amount of compensation is considered nominal.

4.8 Environment

To the extent known, the Project is in compliance with the Swedish environmental regulations and standards and has no environmental liabilities. All Canadian based mining companies and exploration professionals are expected, by the public and their professional associations, to use best practices to ensure minimal damage to the environment. Regional water sampling, fauna and flora inventory and some hydrological investigations and studies are on-going.

Reindeer migratory routes and resting places are present in the exploration permits and exploitation concession Knr2 and pass near exploitation concession Knr1 (Figure 4.3). Reindeer herding is a traditional way of life for some of the Sami people.

AEM and the Ubmeje Tjäldie Saami village council hold meetings when necessary and have been working together in the best interest of both.

InnovExplo’s opinion is that the relation between Sami citizens and AEM is good.

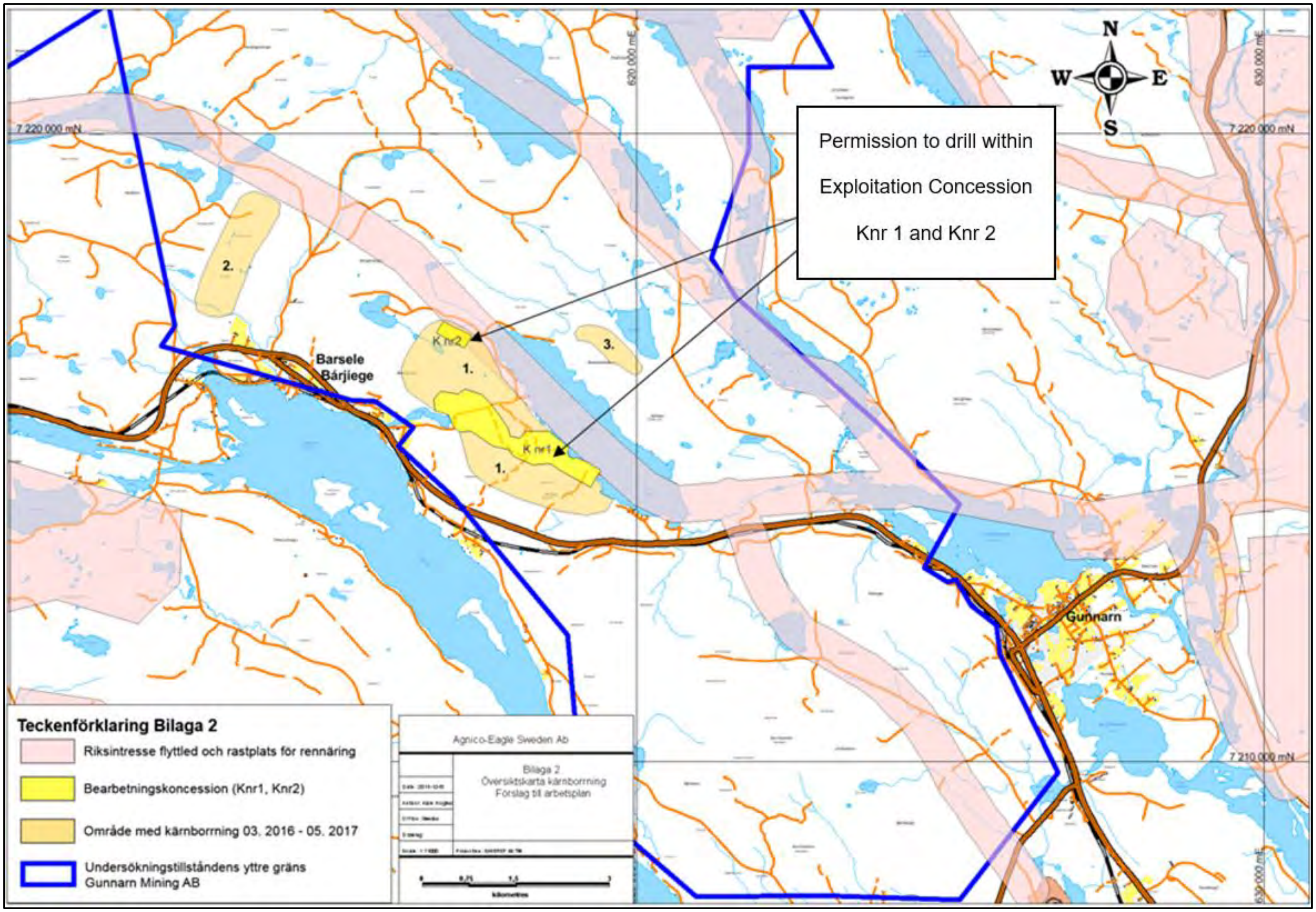


Figure 4.3 – Reindeer migratory routes and resting places on the Barsele Property (Agnico Eagle and Barsele, 2017)

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

Access from the town of Storuman (population 2,200) to the village of Barsele is via Highway E-12 (20 km east-southeast; Figure 5.1), where a secondary road to the east leads to the Property (2 km). Highway E-12 is a principal transnational corridor linking Mo i Rana on the west coast of Norway to Umeå in Sweden on the Gulf of Bothnia where there is a ferry service to Vaasa in Finland. The project area is crossed by several forestry and drill access roads.

There are regularly scheduled flights from Stockholm's Arlanda international airport to the nearby cities of Lycksele (80 km to the southeast), Umeå (210 km to the southeast) and Luleå (315 km to the east). Although operational, there are no longer regularly scheduled flights to Storuman's Gunnarn Airport. This airport is 12 km southeast of the Property (modified from Giroux et al., 2015).

5.2 Climate

The region of Barsele experiences a continental subarctic climate according to the Köppen-Geiger climate classification. The climate is characterized by a long cold winter season with short clear days and little precipitation. Summers are short and cool to mild. Climate data from the nearest weather station in Forsvick (10 km west), indicate that daily average temperatures range from -13°C in January to 13°C in July (Weatherbase, 2018). The average amount of precipitation for the year in Forsvick is 486 mm with the most precipitation in July (average 76.0 mm) and the least precipitation in February (average 21.0 mm). Despite the region's northern latitude, the climate is relatively mild compared to other places of similar latitude due to the warming effect of the Gulf Stream. Snow cover is from mid-November to early-May with highest average in February and March (57 and 56 cm, respectively) (SMHI, 2018).

Exploration work can be performed year around except for spring thaw during late April. There is some limitation to field work in the winter when daylight hours are diminished (between 4 to 4.5 h in December) but drilling can continue throughout the winter. There are a number of operating mines in the region that maintain full production throughout the year.

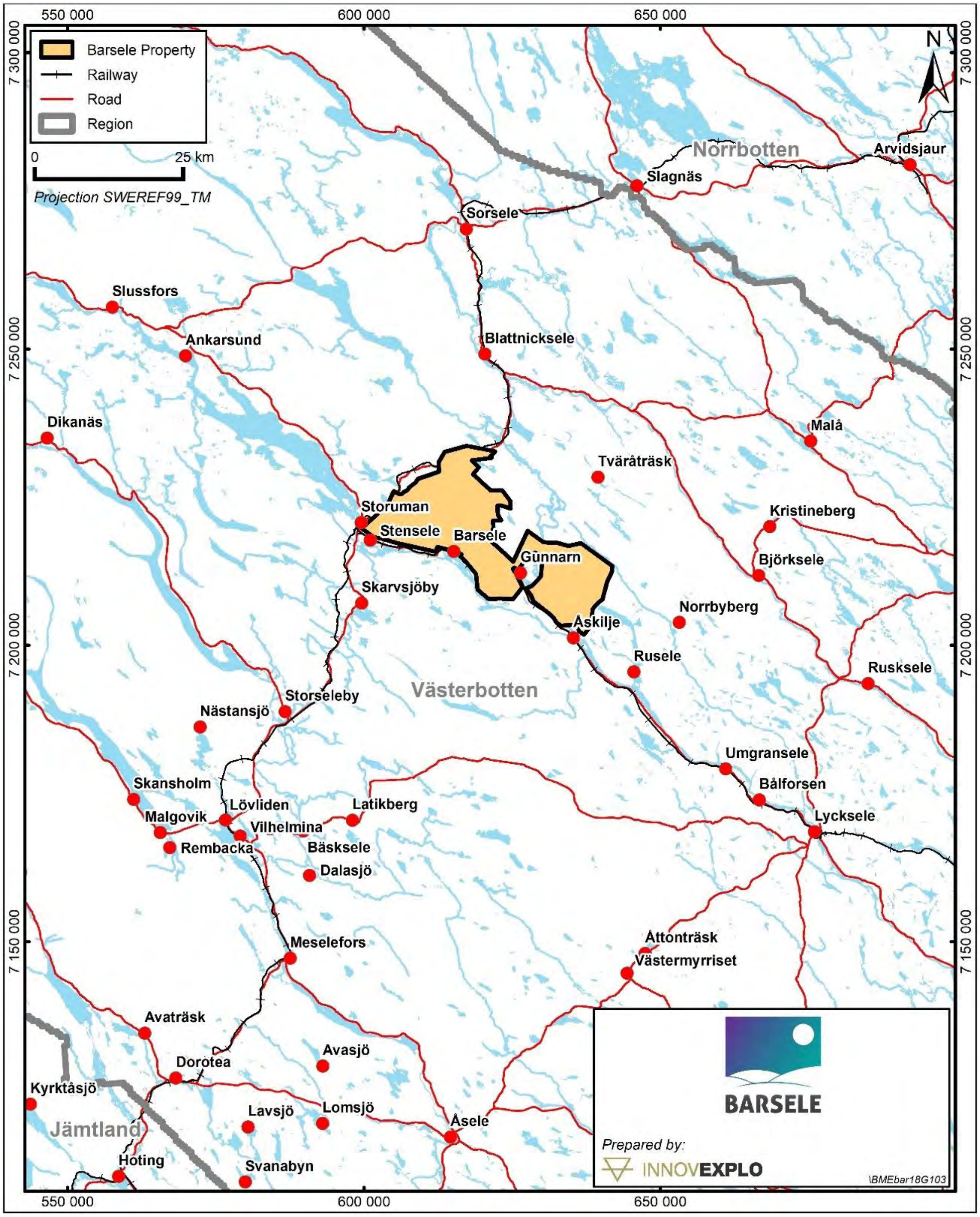


Figure 5.1 – Accessibility of the Barsele Property and surrounding region

5.3 Local Resources

The towns of Storuman and Lycksele (1-hour drive southeast, population 8,500) have sufficient services to accommodate mineral exploration and development programs. Storuman is at the crossroads of two major highways, E-12 and E-45, and both towns have regular scheduled freight, bus and rail service. The town of Storuman has hotels, restaurants and other support services and lies only 20 km away from the main working area. The SGU has a regional office in the town of Malå approximately 100 km drive east of the Project. Furthermore, ALS Minerals operates a commercial sample preparation laboratory in Malå and MS-Analytical operates one in Storuman. The region has active gold and base metal mines and a ready supply of experienced mine and mill workers.

5.4 Infrastructure

A major high-voltage electrical transmission line runs through the Avan and Norra parts of the Property. Hydroelectric power is generated locally in Storuman at the Grundfors hydroelectrical power plant, located 10 km southeast of the Project. Hydroelectric power in the region is considered relatively inexpensive for commercial use.

There is enough space on the property for a future tailings management facility and ancillary infrastructure. There is ample water for processing.

5.5 Physiography

The Property has an extensive cover of Pleistocene glacial sediments ranging from 0 to 20 m thick, but mostly less than 10 m (Figure 5.2). Outcrops are scarce (less than 10%) and are limited to ridges and deeply incised drainage channels (Giroux et al., 2015). Most of the area is covered by mixed forests of pine, spruce, alder and birch with sporadic clearings of low-growth shrubs and bushes. Approximately 50% of the area has been logged and is actively managed for silviculture.

The overall trend of the low ridges in the area is NW-SE with maximum peak elevations of approximately 570 masl. The lake near the exploitation concession is at 290 masl. The elevation of major lakes on the Property varies between 360 and 270 masl. Drainage is toward the southeast and is part of the Umeälven drainage basin.

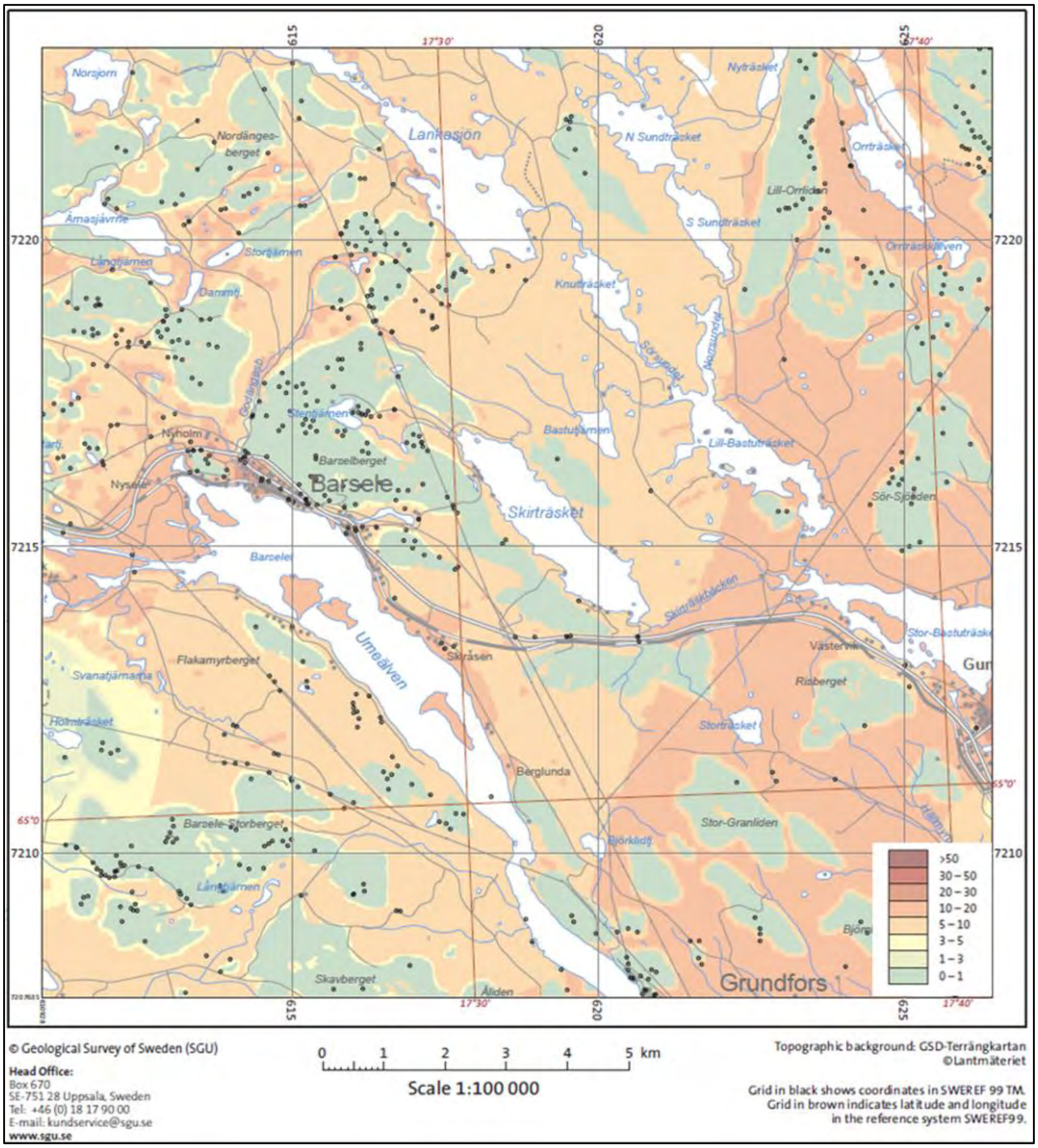


Figure 5.2 – Thickness of surficial deposits over bedrock (SGU, 2017)

6. HISTORY

The following information on the history of the Project and its vicinity is mostly taken from three technical reports: Barry et al. (2006), Giroux et al. (2015) and Pelletier and Richard (2018).

All mineral exploration in Sweden was State-controlled prior to 1993. Systematic exploration started in 1920 in the valley of the Skellefteå River. The world-class Boliden polymetallic deposit was discovered shortly afterwards in 1924. The Boliden deposit produced some 4 Moz of gold from ore averaging 15 g/t Au. The gold at Boliden is combined with significant quantities of copper, zinc and silver (Sunblad, 2003).

In 1980, two geologists, Christer Löfgren and Stephan Bååth founded Terra Mining and initiated a countywide, reconnaissance, geochemical till sampling program focused primarily on gold. In 1983, Terra's exploration culminated with the discovery of the Björkdal gold deposit. Terra required project financing to bring Björkdal into production, and in 1985 Norsk Hydro became a major shareholder together with Svetab, the latter evolved into Euroventures Nordica in 1986. Björkdal which is located 150 km east of Barsele went into commercial production in 1988 and became Europe's largest gold mine during the 1990s.

6.1 1981 Exploration Program – Swedish Geological Survey

The earliest recorded exploration in the Barsele area was in 1981. Six (6) holes were drilled for a total length of 695 m. InnovExplo is not aware of the owner of the property at that time but it may have been Terra Mining. In 1986, the SGU completed two drill holes on the Tattartjärnliden prospect.

6.2 1988-1998 – Terra Mining

By 1988, Terra's regional till sampling program at Barsele had identified anomalous gold concentrations both in surface and basal till. In 1989, drilling of till anomalies identified bedrock gold mineralization in what later became known as the "Barsele Central Zone".

Terra completed increasingly more detailed till-geochemistry surveys culminating in the discovery of an additional six mineralized occurrences by 1995 established by follow-up drilling. Between 1989 and 1998, Terra collected a total of 10,533 soil samples on ground now covered by the Barsele group of exploration concessions. In an area extensively mantled with glacial till, none of the new discoveries were exposed at the surface. Terra excavated trenches at the Norra, Avan and Central zones exposing the bedrock and providing valuable information on the style of mineralization and controlling structures.

Terra followed up these encouraging exploration results by drill-testing priority targets within geochemical anomalous zones. From 1989 to 1997, Terra contracted the drilling of 319 diamond and reverse circulation ("RC") percussion drill holes for a total of 28,876 m, which led to the delineation of the Norra, Avan, Central, Skiråsen, Skirträskbacken and Risberget zones. During this time, Terra also completed preliminary metallurgical testing and resource estimations.

In 1995, Terra contracted Anamet Services to conduct mineralogical and preliminary metallurgical testwork on a 1-tonne bulk sample of mineralized rock excavated from a trench in the northwestern part of the Central Zone (Reynolds, 1996).

In 1998, Terra Mining calculated a resource estimation for the Central, Norra, Avan and Skiråsen zones based on 6,616 m of percussion drilling and 11,721 m of core drilling (Pearson, 1998). The estimated resource based on a cutoff grade of 0.75 g/t Au is shown in Table 6.1.

Table 6.1– Terra Mining 1998 resource estimate (Barry et al., 2006)

Category	Zones	Tonnes (millions)	Grade (g/t Au)	Contained (oz)
Indicated	Central, Norra and Avan	3.56	1.8	207,000
Inferred	Central and Skiråsen	5.92	1.8	342,000

These "resources" are historical in nature and should not be relied upon. They predated NI 43-101 and CIM Definition Standards, and more drilling and geological information have become available since the estimate. Additionally, assumptions used to determine cut-off grades have likely changed since that time. Consequently, these "resources" cannot be considered as current. They are included in this section for illustrative purposes only and should not be disclosed out of context.

In 1998, Terra Mining ceased trading after their unfavourable assessment of the potential economic viability of mining low-grade gold resources during a sustained and significant period of lower gold prices. In the same year, a British resource company called William Resources Ltd, together with Dormant Properties AB and International Gold Exploration AB, acquired all of Terra's assets. Williams Resources did not carry out any further exploration work.

6.3 2003-2004 – MinMet

In 2003, MinMet acquired all of Terra's former assets, including the Björkdal gold mine and the Barsele gold project. In 2003, MinMet drilled seven (7) holes at Barsele, four (4) in the Central Zone and three in the Norra Zone, for a total of 1,045 m. At the time, there had been no drilling at the Norra Zone since 1994. Boliden was contracted by MinMet to carry out a combined total field Mag and EM survey over the Norra Zone. The magnetic survey covered an area of 2.5 km^2 and was completed on 51.6 km of NE-SW grid lines spaced 50 m apart. The EM survey was conducted within the same grid area on 26.7 km of grid lines spaced 100 m apart. The surveys generated 1,362 EM survey points and 2,632 magnetic survey points.

6.4 2004-2010 – Northland Resources Inc.

On November 3, 2004, North American Gold entered into two option agreements to separately acquire 60% interests in the Barsele and contiguous Norra gold projects. At the annual general meeting of North American Gold held on July 12, 2005, the shareholders approved a change of the company's name to Northland Resources Inc. ("Northland"). On May 10, 2006, Northland acquired a 100% equity control of the Barsele Gold Property.

Working under a "Heads of Agreement", Northland drilled 30 diamond drill holes totalling 4,988 m on the Barsele and Norra projects during the 2004 field season. Of the 30 holes, 10 predominantly infill holes were drilled in the Central Zone, 17 targeted the westward strike-extension of mineralization in the Norra Zone, and the final 3 tested the Skiråsen

Zone. In 2004, a total 2,311 m of core were drilled in the Central and Skiråsen zones and 2,677 m were drilled in the Norra Zone.

In addition to drilling, Northland contracted Boliden to conduct a Mise-à-la-Masse (downhole conductivity/resistivity) survey on four Norra holes, a gravity survey north of the Norra deposit, and an IP survey in the Risberget area. Geovista, a Swedish geophysical team, completed a comprehensive geophysical interpretation using regional, private and public geophysical information.

In 2005, Northland drilled 21 holes on the project. Thirteen (13) in-fill holes were drilled on the Central Zone for a total of 2,447 m: 6 of these were RC and the other 7 were 76-mm diameter core holes. Eight (8) additional core holes totalling 862 m were drilled at Norra to test the westward extension of mineralization.

Two Northland resource estimates were prepared by Bart Stryhas in 2005 and 2006. Both were audited by CAM who reported that they were compliant with NI 43-101 and published them in two separate 43-101 reports dated April 15, 2005 and April 12, 2006 (Barry et al., 2006).

Table 6.2 and Table 6.3 provide a breakdown of the April 2006 resource estimate by category.

Table 6.2 – Northland 2006 indicated resource estimate for the Barsele-Norra Project at a cut-off of 0.8 g/t Au.

Barsele Project Indicated Resources			
Zone	Indicated Resources		
	Tonnes	Grade Au g/t	Contained Onces
Norra	193,038	2.90	17,987
Avan	1,306,125	1.49	62,701
Central	4,531,872	1.79	261,246
Skiråsen	534,147	1.50	25,815
Barsele/Norra	6,565,182	1.74	367,749

Table 6.3 – Northland 2006 inferred resource estimate for the Barsele-Norra Project at a cut-off of 0.8 g/t Au

Barsele Project Inferred Resources			
Zone	Inferred Resources		
	Tonnes	Grade Au g/t	Contained Onces
Norra	61,487	2.76	5,451
Avan	2,629,699	1.61	136,458
Central	3,549,812	1.76	200,411
Skiråsen	1,190,103	1.47	56,310
Barsele/Norra	7,431,101	1.67	398,630

On May 26, 2006, Northland acquired a 100% interest in the combined Barsele and Norra projects. Golder and Associates completed the Barsele MKB (environmental impact statement) and submitted this and other documentation on December 27, 2006 to the Mining Inspectorate and County Administration Board as part of the application process to convert the CAS (Central, Avan and Skiråsen) and Norra resource areas to exploitation concession status. The Barsele Knr1 and Knr2 concessions were subsequently awarded on June 21, 2007.

After the NI 43-101 resource estimate of April 2006, work performed by Northland included the drilling of 22 core holes in the Central Zone for a total length of 3,927 m and seven exploration drill holes totalling 1,403 m. The exploration holes targeted coincident Mag anomalies and EM conductors in an area between the Norra and Avan resource areas. In addition to drilling, Northland conducted the following: trenching and a geophysical downhole conductivity survey of a high-grade gold-polymetallic quartz-sulphide occurrence in the Central Zone; a BOT sampling program consisting of 942 samples on outside resource targets; and reconnaissance prospecting and mapping of approximately 70 km^2, including the collection of 638 rock chip and float samples.

6.5 2010-2015 – Orex Minerals Inc.

On October 27, 2010, Orex Minerals Inc. ("Orex") signed a binding Letter of Intent (BLOI) to acquire a 100% interest in the Barsele Project subject to certain conditions previously described in this report. On March 22, 2011, Orex signed an agreement with Northland to purchase all of the issued and outstanding shares of Gunnarn Mining. Both agreements were approved by the regulators at the TSX Venture Exchange on April 29, 2011.

In 2011, an NI 43-101 mineral resource was calculated based on the historical data amassed before the 2011 drilling program. The resource estimate is shown in Table 6.4 and Table 6.5.

Table 6.4 – Orex 2011 43-101 mineral resource estimate for the CAS zones (Giroux and Thornsberry, 2011)

Au Cut-off (g/t)	Zone	Resource Category	Tonnes	Au Grade (g/t)	Contained Ounces Au
0.40	Central	Indicated	10,740,000	1.12	387,000
	Central- Skiråsen	Inferred	10,950,000	0.90	317,000
	Avan	Indicated	670,000	0.81	17,000
		Inferred	20,440,000	0.75	494,000
	TOTAL	Indicated	11,440,000	1.10	404,000
		Inferred	31,390,000	0.80	811,000
0.50	Central	Indicated	10,210,000	1.16	381,000
	Central- Skiråsen	Inferred	8,870,000	1.01	288,000
	Avan	Indicated	670,000	0.805	17,000
		Inferred	20,440,000	0.751	494,000
	TOTAL	Indicated	10,880,000	1.14	398,000

Au Cut-off (g/t)	Zone	Resource Category	Tonnes	Au Grade (g/t)	Contained Ounces Au
		Inferred	29,310,000	0.83	782,000
0.60	Central	Indicated	9,530,000	1.20	368,000
	Central- Skiråsen	Inferred	7,350,000	1.11	262,000
	Avan	Indicated	440,000	0.973	14,000
		Inferred	13,690,000	0.876	386,000
	TOTAL	Indicated	9,970,00	1.19	382,000
		Inferred	21,040,000	0.96	648,000

Table 6.5 – Orex 2011 43-101 mineral resource estimate for the Norra Zone

Au Cut-off (g/t)	Tonnes> Cut-off (Tonnes)	Grade > Cut-off							
		Au (g/t)	Ag (g/t)	Cu (%)	Zn (%)	Au Oz	Ag Oz	Cu lbs	Zn lbs
INDICATED									
0.40	140,000	2.46	27.26	0.45	0.66	11,000	123,000	1,389,000	2,037,000
0.50	120,000	2.76	28.38	0.48	0.68	11,000	109,000	1,270,000	1,799,000
0.60	110,000	3.13	30.27	0.53	0.72	11,000	107,000	1,286,000	1,746,000
INFERRED									
0.40	330,000	1.55	12.44	0.26	0.41	16,000	132,000	1,892,000	2,983,000
0.50	320,000	1.59	12.56	0.26	0.42	16,000	129,000	1,835,000	2,964,000
0.60	310,000	1.62	12.69	0.26	0.42	16,000	126,000	1,777,000	2,871,000

In May 2011, Orex completed an airborne survey covering the entire property of 31,687 ha. The 2,159 line-km airborne survey was helicopter supported with a deep-penetrating TDEM system. A Mag survey was completed at the same time. Line spacing ranged from 100 to 200 m. The survey was completed by SkyTEM Surveys ApS of Denmark.

From mid-August to mid-November 2011, Orex contracted Finland-based Suomen Malmi Oy ("SMOY") and Canada-based LeBel Geophysics ("LeBel") to perform follow-up ground surveys using the results of the airborne geophysical survey. SMOY carried out the IP survey to detect the disseminated-style mineralization of the CAS where gold mineralization is associated with non-magnetic intrusive rocks characterized by magnetic lows. Grid locations are shown in Figure 6.1.

VMS targets were surveyed by LeBel using the VLF-EM method, which proved efficient and successful in characterizing the airborne TDEM-generated VMS targets.

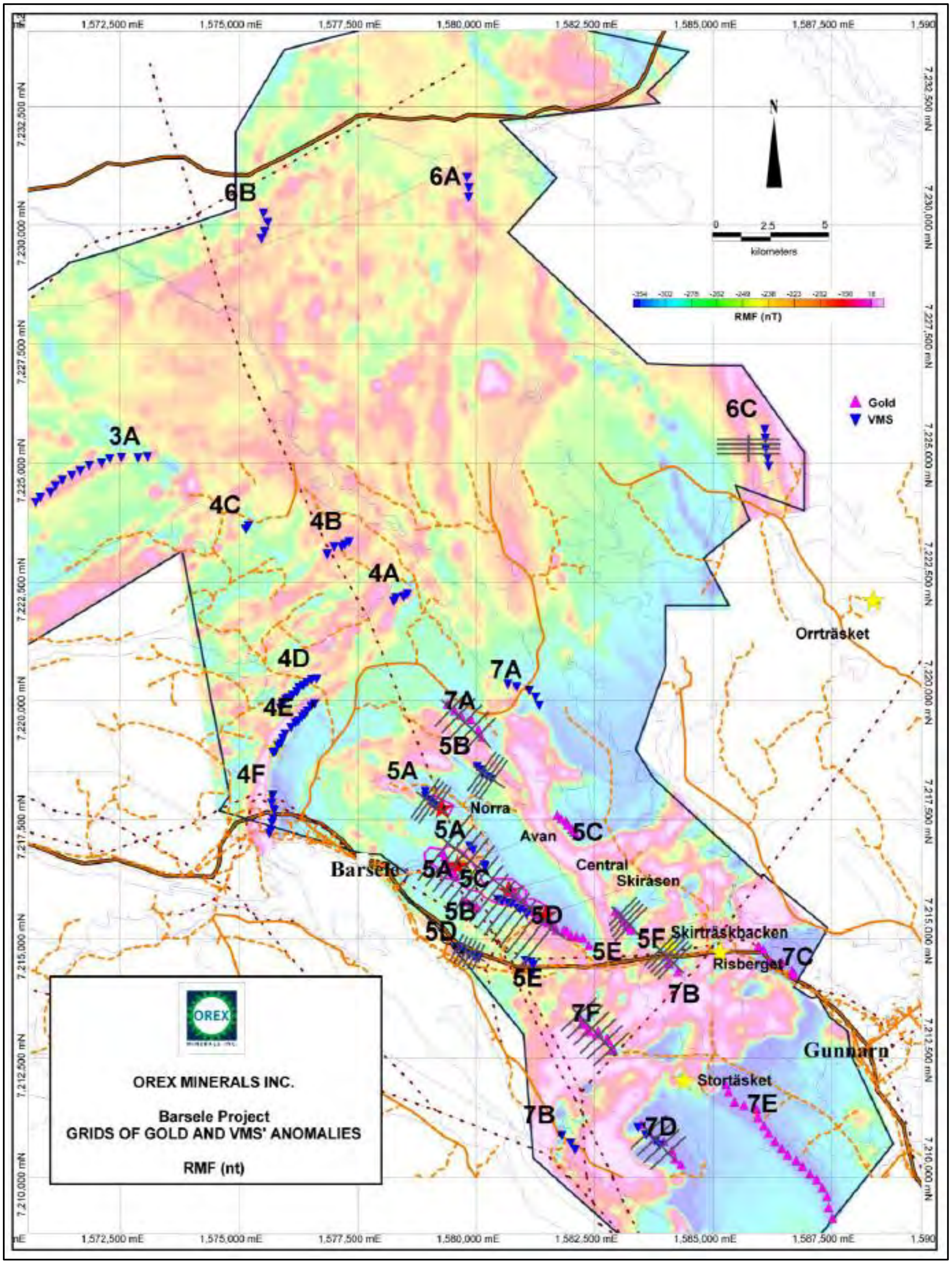


Figure 6.1 – Residual magnetic field (nT) of the Barsele 2011 airborne survey and IP grid locations with interpreted gold and VMS targets included as triangles. (source: Orex Minerals Inc.)

In November 2011, Protek Norr AB of Skellefteå Sweden was retained to carry out a diamond drill program on the gold project. Orex drilled 16 diamond drill holes (NQ2-size) in 2011 and 2012, 12 on the Central Zone (5,075 m) and 4 on the Avan Zone (1,136 m).

In 2012, Orex completed the following work: mapping of rock exposures using prospecting methods, locating or attempting to trace mineralized boulders, rock sampling, and relogging of drill core. The Tattartjärnliden, Näsvattnet and two other target areas generated by the airborne geophysical survey were the focus. A geologist and two summer students did the field work (Alain et. al., 2012).

In November 2012, a new mineral resource estimate (Table 6.6) was prepared based on the results of the 2011 drilling program (Giroux et al., 2012).

Table 6.6 – Summary of the 2012 mineral resource estimates for the CAS zones

<table>
<tr><th>Au Cut-off (g/t)</th><th>Zone</th><th>Resource Category</th><th>Tonnes</th><th>Au Grade (g/t)</th><th>Contained Ounces Au</th></tr>
<tr><td rowspan="6">0.40</td><td>Central</td><td>Indicated</td><td>15,500,000</td><td>1.13</td><td>563,000</td></tr>
<tr><td>Central- Skiråsen</td><td>Inferred</td><td>14,390,000</td><td>0.89</td><td>413,000</td></tr>
<tr><td rowspan="2">Avan</td><td>Indicated</td><td>830,000</td><td>0.77</td><td>21,000</td></tr>
<tr><td>Inferred</td><td>19,460,000</td><td>0.69</td><td>433,000</td></tr>
<tr><td rowspan="2">TOTAL</td><td>Indicated</td><td>16,470,000</td><td>1.12</td><td>595,000</td></tr>
<tr><td>Inferred</td><td>34,180,000</td><td>0.78</td><td>862,000</td></tr>
<tr><td rowspan="6">0.50</td><td>Central</td><td>Indicated</td><td>14,740,000</td><td>1.16</td><td>552,000</td></tr>
<tr><td>Central- Skiråsen</td><td>Inferred</td><td>11,890,000</td><td>0.98</td><td>376,000</td></tr>
<tr><td rowspan="2">Avan</td><td>Indicated</td><td>650,000</td><td>0.87</td><td>18,000</td></tr>
<tr><td>Inferred</td><td>14,650,000</td><td>0.77</td><td>363,000</td></tr>
<tr><td rowspan="2">TOTAL</td><td>Indicated</td><td>15,390,000</td><td>1.15</td><td>570,000</td></tr>
<tr><td>Inferred</td><td>26,540,000</td><td>0.87</td><td>739,000</td></tr>
<tr><td rowspan="6">0.60</td><td>Central</td><td>Indicated</td><td>13,610,000</td><td>1.22</td><td>532,000</td></tr>
<tr><td>Central- Skiråsen</td><td>Inferred</td><td>9,840,000</td><td>1.08</td><td>340,000</td></tr>
<tr><td rowspan="2">Avan</td><td>Indicated</td><td>490,000</td><td>0.97</td><td>15,000</td></tr>
<tr><td>Inferred</td><td>10,360,000</td><td>0.86</td><td>287,000</td></tr>
<tr><td rowspan="2">TOTAL</td><td>Indicated</td><td>14,100,000</td><td>1.21</td><td>547,000</td></tr>
<tr><td>Inferred</td><td>20,200,000</td><td>0.97</td><td>627,000</td></tr>
</table>

6.6 2015-2018 – AEM-Barsele Minerals JVA (current)

Pursuant to the joint venture agreement (JVA), if AEM or AE Sweden prepares a pre-feasibility study on the Project and submits it to Gunnarn Mining. In September 2015, Orex and Barsele completed the spin-out of Orex's interest in the project and Orex transferred its 45% interest to Barsele Minerals.

Between 2015 and 2017, AEM as project operator drilled a total of 197 holes (90,526 m) with oriented measurements. Out of those, 82 were drilled on the Central Zone (40,645 m), 58 on Avan (23,023 m) and 29 on Skiråsen (18,191 m). The other holes (28) were drilled on the Norra Zone, the Risberget Zone, and other regional prospects. In March 2017, AEM decided to reduce the coring diameter from WL-26 to NQ-2 as they concluded that both drilling methods yielded similar gold grade results.

shows a summary of the historical diamond drilling on the Project from 1981 to 2017.

Table 6.7 shows a summary of the historical diamond drilling on the Project from 1981 to 2017.

Table 6.7 – Summary of historical diamond drilling on the Barsele Project

Year	DDH count	Length (m)
1981	6	695
1989	70	5,621
1990	76	7,616
1991	42	2,370
1994	12	1,755
1995	68	3,900
1996	40	7,144
1997	2	310
2003	7	1,045
2004	30	4,986
2005	21	3,309
2006	29	5,330
2011	5	1,987
2012	11	4,224
2015	15	9,238
2016	81	33,601
2017	101	47,687
TOTAL	616	140,818

During the same period, AEM conducted a BOT sampling program at 415 sites. Rock chips taken from the bedrock were also collected for a lithogeochemistry study. A comparison with the regional map of that time, mostly based on airborne geophysical data and some historical mapping, showed discrepancies with the results of these sampling campaigns. AEM concluded that the surface geology needed to be updated.

In 2015, a trench was dug on the Central Zone and channel samples were collected. GeoVista AB carried out structural mapping and structural analysis on this exposed trench. From these analyses and an interpretation of the local and regional geology, they concluded that the Barsele mineralization was affected by polyphase deformation and remobilization events, including several phases of enrichment (Bauer, 2015).

In 2017, the trench was expanded to approximately 670 m2. Structural mapping of the trench was completed, and more channel samples collected and analyzed. Channel sample results are presented in Figure 6.2.

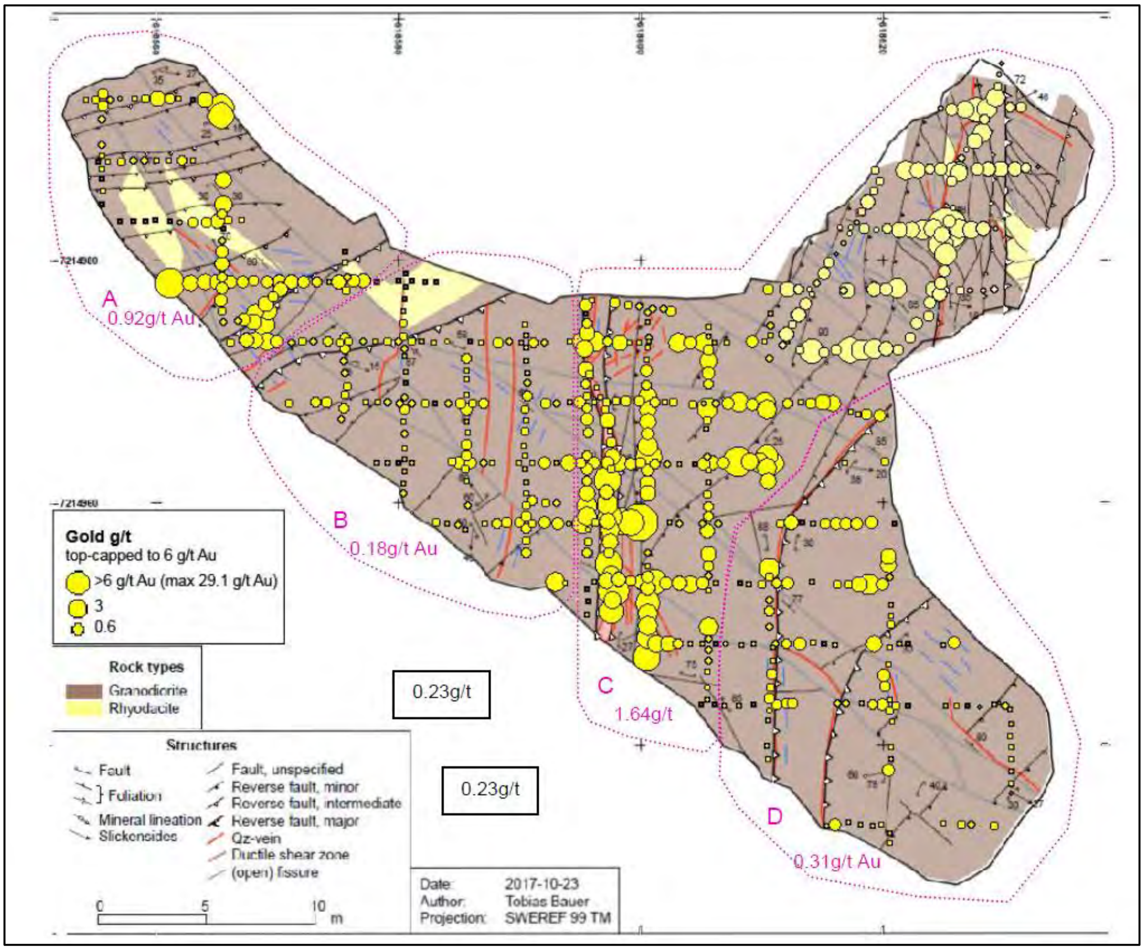


Figure 6.2 – Channel sample results (Au) showing averages for the A to D areas in the expanded 2017 Barsele Trench (Agnico Eagle, 2017c)

In 2015, spectral imaging was done on 1,382 m of core (the full length of holes 11CNT005, 12CNT008 and 12CNT012). Hyperspectral results indicated broad (>300 m) and intense alteration at the Central Zone.

From 2015 to February 2016, AEM, contracted GeoVista AB to compile and evaluate historical geophysical work by previous operators on the Project, and then identify potential mineralized targets and target areas (Isaksson et al., 2016). Aside from general geophysical patterns, some major structures were also identified in gravity, magnetometry and topography.

In 2016, a Titan-24 geophysical survey (IP chargeability, DC resistivity, MT resistivity) was carried over the Knr1 exploitation concession and adjacent exploration claims, about 10km2. The survey was done on six parallel lines of 3,100 to 3,200 m, oriented NNE-SSW (N32°). The MT model seemed to correlate well with surface geology.

Bauer and Imaña (2017) produced a local-scale structural framework for the Project's gold mineralization for AEM in order to incorporate a kinematic temporal model related to quartz-vein emplacement. The study was based on the analysis of 3,101 structural measurements from 79 oriented drilled holes, a geochemical dataset of 29,109 samples and 1,500 structural measurements from field mapping campaigns in previous years.

Ore grades and drill core assays were also used to correlate structures with alteration and mineralization. Geophysical data was used for the geometrical interpretation of structures. The most prominent fractures, the fault zones and the major shear zones in the Barsele area were also modelled.

In 2017, a preliminary petrographic study on gold and sulphides from the CAS deposits was conducted by AEM's exploration geologists. The main purpose of the study was to investigate the mode of occurrence of free gold as well as sulphide petrography in samples with varying gold grades and sulphide associations. It provided the foundation for LA-ICP-MS and MLA work investigating both refractory and free gold deportment at Barsele.

In April 2018, a new mineral resource estimate (was prepared, for Barsele Minerals, based on the results of the 2015 to 2017 drilling campaigns (Pelletier and Richard, 2018).

Table 6.8) was prepared, for Barsele Minerals, based on the results of the 2015 to 2017 drilling campaigns (Pelletier and Richard, 2018).

Table 6.8 – Summary of the 2018 mineral resource estimate for the CAS gold zones (Pelletier and Richard, 2018)

Inferred Mineral Resource Estimate (Underground Resources)			
Gold Cut-off grade (g/t)	Tonnage (metric)	Gold Grade (g/t)	Contained Ounces
1.75	15,279,000	2.91	1,427,000

Indicated Mineral Resource Estimate (Underground Resources)			
Gold Cut-off grade (g/t)	Tonnage (metric)	Gold Grade (g/t)	Contained Ounces
1.75	2,399,000	2.50	193,000

Since acquiring 55% interest in the Barsele project, AEM has completed their own annual mineral resource estimates starting in 2016 (AEM, 2017, 2018). The AEM resource estimates combine open pit and underground scenarios (Table 6.9).

Table 6.9 – Barsele deposit mineral resource estimates by AEM

Release Date	Cut-off grade (g/t)	Category	Tonnes	Grade Au (g/t)	Ounces (Au)
Feb 15, 2017	0.41 (open pit) 1.21 (underground)	Indicated	-	-	-
		Inferred	21,717,000	1.72	1,202,000
Feb 10, 2018	0.40 (open pit) 1.66 (underground)	Indicated	6,282,000	1.25	252,000
		Inferred	18,620,000	2.31	1,384,000

6.7 Historical Mineral Resource Estimates

A summary of the historical mineral resource estimates for the Project from 1998 to 2018 are presented in Table 6.10.

Table 6.10 – Historical mineral resource estimates on the Barsele Project

Company	Release Date	Cut-off Grade (g/t)	Category	Tonnes	Grade Au (g/t)	Ounces (Au)
Terra Mining	1998	0.75	Indicated	3,560,000	1.80	207,000
			Inferred	5,920,000	1.80	342,000
Northland	April 2005	0.80	Indicated	5,177,000	1.75	290,800
			Inferred	6,623,000	1.64	348,200
Northland	April 2006	0.80	Indicated	6,565,000	1.74	367,750
			Inferred	7,431,000	1.67	398,630
Orex Minerals	March 2011	0.40	Indicated	11,550,000	1.12	415,000
			Inferred	31,720,000	0.81	827,000
Orex Minerals	November 2012	0.60	Indicated	14,210,000	1.22	558,000
			Inferred	20,510,000	0.98	643,000
Agnico Eagle	February 2017	0.41 (open-pit) 1.21 (underground)	Indicated	-	-	-
			Inferred	21,717,000	1.72	1,202,000
Barsele Minerals	February 2018	1.75	Indicated	2,399,000	2.50	193,000
			Inferred	15,279,000	2.91	1,427,000

6.8 Historical Production

There has been no historical mining production on the Project.

7. GEOLOGICAL SETTING AND MINERALIZATION

The following description of regional and local geology is mostly from the reports by Bauer (2015) and Giroux et al. (2015). Other references are cited accordingly.

7.1 Regional Geology

The Barsele Project is located within Paleoproterozoic supracrustal and associated intrusive rocks of the Skellefte mining district in the Fennoscandian Shield (Figure 7.1). Bedrock in the district consists of 1.96-1.86 Ga volcanic and sedimentary rocks associated with the Svecofennian domain and intrusive rocks that were deformed and metamorphosed simultaneously during the 1.96-1.86 Ga Svecokarelian orogeny (Figure 7.2). (Lundström et al., 1997; Mellqvist et al., 1999; Kathol and Weihed, 2005). To the west of Skellefte is the Stensele district. To the north are the Paleoproterozoic and reworked Archaean rocks of the Norrbotten craton, and to the south and east are the metasedimentary rocks of the Bothnian Basin, with the district representing a kind of transitional zone between those two major tectonic units . The Archean-Proterozoic boundary north of the Skellefte district has been defined by a shift in ƐNd signature (Lundqvist et al., 1996; Wikström et al., 1996; Mellqvist et al., 1999) which coincides with a south-dipping seismic reflector interpreted as a northeast-verging thrust surface (BABEL Working Group, 1990).

The lowest stratigraphic unit in the district consists of metasedimentary and intercalated volcanic rocks of the Bothnian Supergroup (Kathol and Weihed, 2005; Skyttä et al., 2012). A metadacite in the Barsele area with an age of 1959±14 Ma (Eliasson et al., 2001) is regarded to form a part of this Supergroup. The Bothnian Supergroup forms the inferred basement to the 1.89-1.88 Ga, mainly felsic volcanic rocks of the Skellefte Group (Allen et al., 1996; Billström and Weihed, 1996; Montelius 2005; Skyttä et al., 2011). The stratigraphic thickness of the Skellefte Group volcanic rocks is approximately 3 km in the northern part of the district (Allen et al., 1996). The Skellefte Group is overlain in the Skellefte district, east of the Stensele area by a 1.88- 1.87 Ga, dominantly sedimentary unit called the Vargfors Group (Allen et al., 1996). Exposure of contact relationships between both groups is generally poor but detailed studies in the Vargfors syncline suggest that varying contact relationships such as primary conformable, discordant and tectonic exist (Allen et al. 1996; Bauer et al. 2011, 2013). Metasedimentary rocks which occur immediately south of the central Skellefte district are regarded to belong to the Vargfors Group due to their similar lithologies. The transition from rocks of the Vargfors Group to metasedimentary rocks of the Bothnian Supergroup to the south of the district is somewhat arbitrary (Kathol and Weihed, 2005).

The oldest intrusive rocks in the district are early orogenic, 1.89-1.88 Ga granitoids, diorites and gabbros, including the oldest phase (GI) of the so-called Jörn intrusive complex (Wilson et al., 1987; Gonzales Roldan, 2010; Bejgarn et al., 2012) and the Viterliden intrusion (Skyttä et al., 2011). A quartz-monzodiorite in Barsele has been dated at 1880±4 Ma (Eliasson et al., 2001), hence fitting into this group. These early orogenic rocks are suggested to be co-magmatic with the volcanic rocks of the Skellefte Group. Younger phases of intrusives are assigned to the Perthite-Monzonite suite (Witschard, 1984), which formed between 1.88 and 1.86 Ga (Bejgarn et al., 2012) and post-date the deposition of the volcanic rocks. The Skellefte, Vargfors and Bothnian Groups to the south and west and in between the Skellefte and Stensele districts are all truncated by large intrusions of 1.82-1.78 Ga, late- to post-Svecokarelian Revsund-type

(GSDG) intrusive rocks of the Transscandinavian Igneous Belt (Kathol and Weihed, 2005).

Figure 7.1 – Location of the most significant mines and mining camps in Fennoscandia (Eilu, 2012)

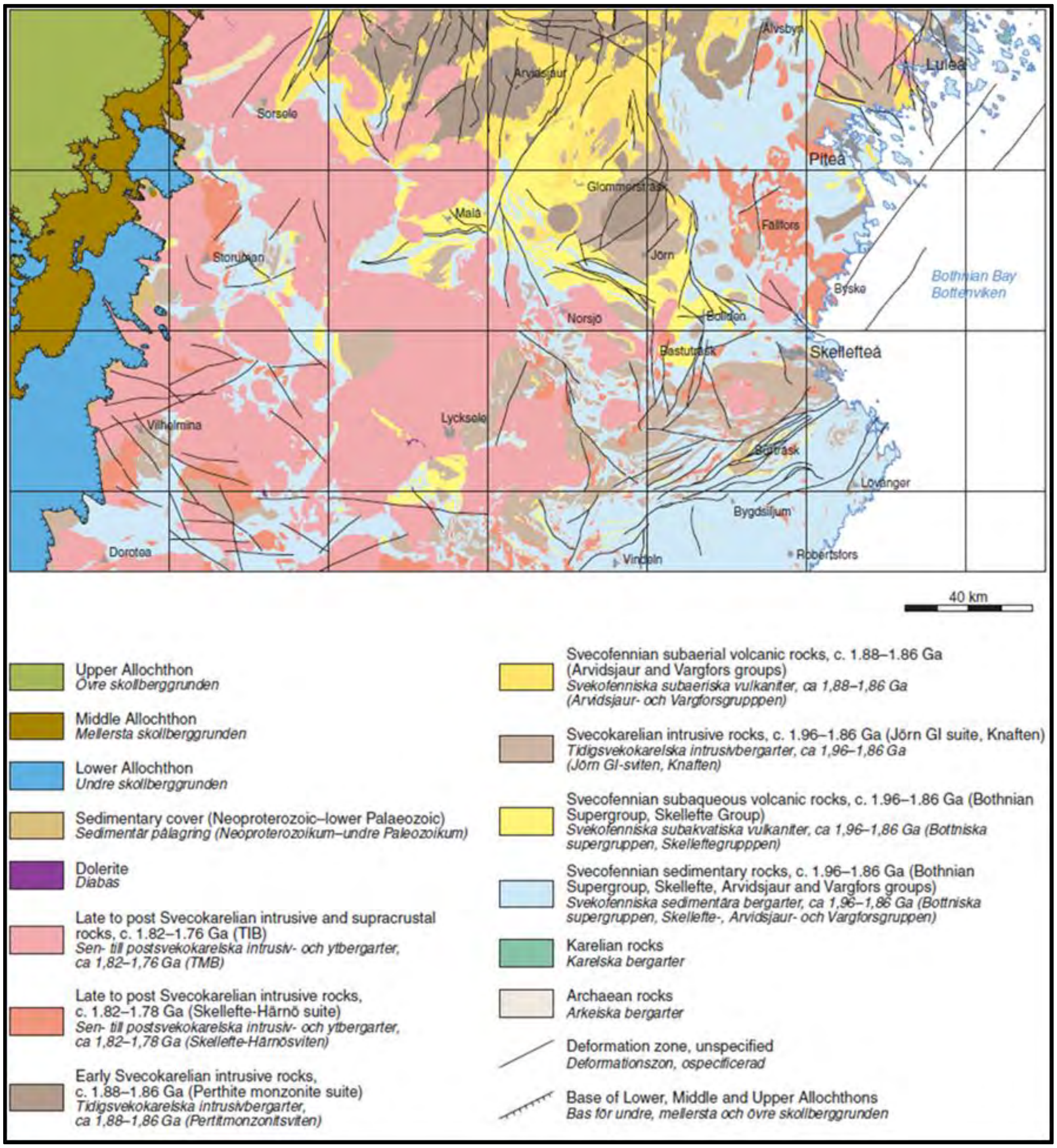


Figure 7.2 – Simplified bedrock map of the Skellefte district and surrounding areas (Kathol et al., 2005)

The metallogenic area of the Barsele Project is called the "Gold Line", which is the original name of a geochemical gold anomaly detected in a regional till survey in northern Västerbotten County in the late 1980s (Figure 7.3). Since then, several gold occurrences and large amounts of As-Au-mineralized boulders have been found in the area. Two mines have been in production: the Blaiken zinc-gold mine (closed in 2007) and the Svartliden gold mine (closed in 2013), located 30 kilometres south-southeast. Most of the gold deposits in the Gold Line metallogenic area are considered orogenic gold deposits.

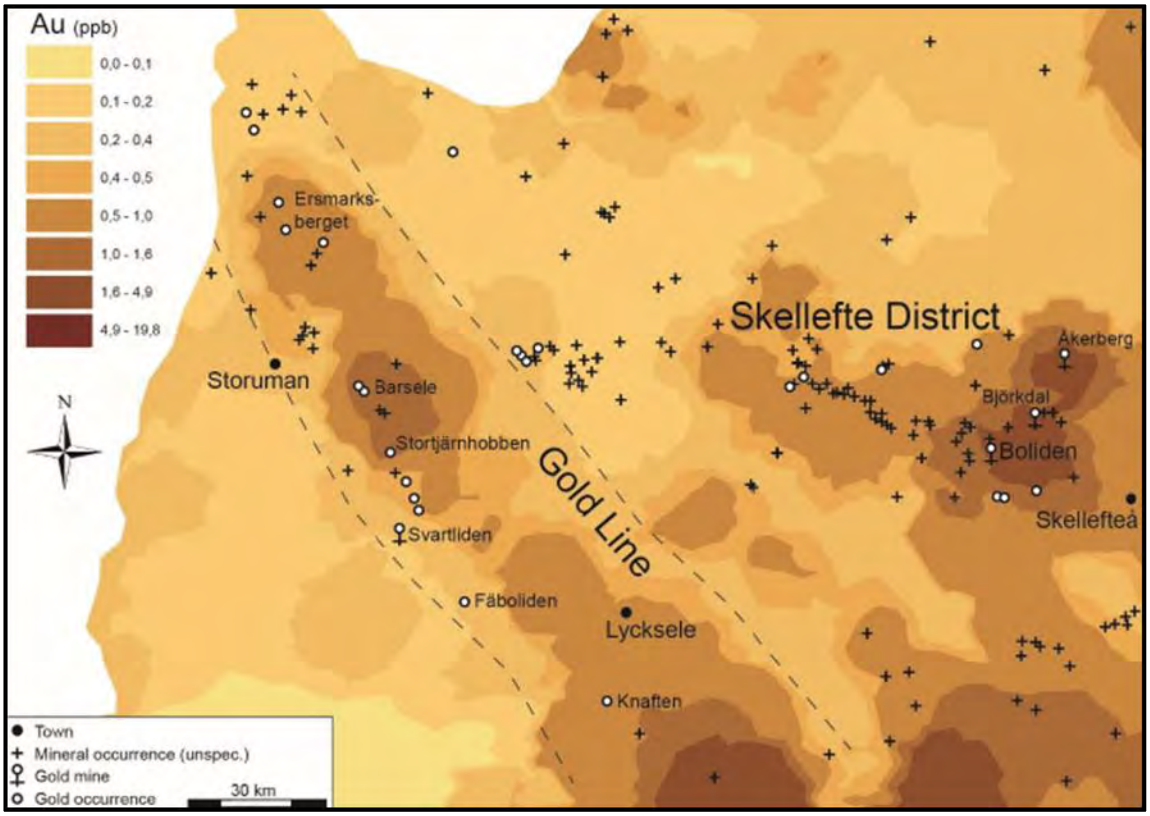


Figure 7.3 – Gold content in till overburden showing the Gold Line and Skellefte district anomalies (Bauer, 2015; modified from Bark, 2008)

The geology of the Gold Line metallogenic area consists of metasedimentary rocks and metabasalts of the Bothnian Supergroup, which was intruded by several phases of granitoids (Kathol and Weihed 2005). The metabasalts were emplaced as sills or submarine lava flows. Pillow lavas, spilites and volcanoclastic breccias are common. Granodiorites intruded at an early stage of the orogeny and were deformed with the supracrustal rocks. Late- to post-orogenic granites (Revsund-type granites) occur as large massifs in the region.

In 2005, the Svartliden gold deposit was put into production (Figure 7.3). The deposit is found at the contact between amphibolite, banded iron formation (BIF) and meta-sediments, and has been recognized as an orogenic, lode-style gold deposit (Schlöglova et al. 2013). Ore bodies are associated with a quartz mylonite and contain massive calc-silicate and silica-rich mineral assemblages. Minerals detected in the ore include native silver, native gold, electrum, actinolite, grunerite, diopside, amphibole, pyroxene, löllingite, arsenopyrite, native bismuth and pyrrhotite (Eklund, 2007).

7.2 Property Geology

Most of the following information concerning the local geology was taken from Barry et al. (2006).

7.2.1 Lithologies

The Project area is extensively covered by glacial overburden; consequently, bedrock exposure is sporadic and limited. Geological interpretations rely heavily on drill-core data and trenches excavated in the Central, Avan and Norra zones. Outside these areas, geological interpretations are much less constrained and heavily reliant on inference from geophysical data. The area straddles the southeast-trending Umeå-River shear zone and parallels this dominant structural fabric, which controls drainage and glacial vectors.

The Project area covers a sequence of metasedimentary and volcanic rocks of the Proterozoic Svecofennian system (Figure 7.5). The volcanics are more specifically referred to as the Härnö Formation. The metasedimentary rocks consist of metamorphosed greywackes and pelites and sporadic conglomerates. The volcanic rocks of the Härnö Formation consist of felsic, intermediate and mafic volcanics, including pillow lavas and pyroclastics, probably deposited in a back-arc setting. Felsic volcanics probably represent a volcanic inlier within the Bothnian Basin, or alternatively, an outlier of the Skellefteå district.

According to Keyser (2004), there are three main phases of granitoid intrusions in the region which are referred to as early, middle and post with respect to the Svecofenian orogeny. The early orogenic granitoids are the most important from a mineralization perspective and comprise a calc-alkaline suite of predominantly tonalites with lesser volumes of granodiorite, which were emplaced prior to the main phases of Svecofennian metamorphism and deformation. An early orogenic granodiorite is the host rock of the Central Zone mineralization at Barsele. In detail, at least seven separate intrusive pulses have been identified at the Central and Avan zones including late and post-mineralization dykes.

Imaña (2016) conducted an immobile element lithogeochemistry and structural review to determine the magmatic affinity, fractionation and igneous protoliths. Figure 7.4 is based on the analysis of 11,811 samples and show the different protoliths of the Skiråsen, Central and Avan regions. The report concluded that the Barsele vein-hosted gold deposit is associated with several phases of a coarse- to fine-grained granodiorite intrusion. The bulk of the veins with economic interest are located within intrusive phase GD-II. A shear zone transects the GD-II granodiorite body and splits the deposit into two zones: Central Zone to the north and Skiråsen Zone to the south. These zones show distinct structural, geochemical and mineralogical patterns that point toward variable tectonic transposition and rotation of different parts of the system. For the Central Zone, it is conceivable that thrust faulted panels were tectonically uplifted along the hanging wall side of the shear under a hypothetical transpressional regime on a dextral strike-slip fault.

Early veining in the deposit contains tourmaline; although this phase is not a significant carrier of gold, it is believed to represent an essential event that contributed to form favourable structural tracts via rock hardening.

The gold-rich volcanic-hosted, semi-massive to massive sulphide style of mineralization at the Norra Zone is quite distinct from the mesothermal intrusive-hosted gold mineralization of the Central and Avan zones. The Norra Zone occurs within a lens of felsic metavolcanics and pelitic sediments of the Härnö Formation. In detail at the outcrop scale, based on trenching, the lithologies consist of a WNW-trending, steeply-dipping sequence of dacitic to rhyolitic flows, felsic volcaniclastics and fine-grained tuffs. The mineralized host-lithology appears to be a quartz-phyric volcaniclastic unit. Alteration is characterized by a network of veinlets and discontinuous patches of sulphides, chlorite and carbonate. The host rock is cut by felsic and mafic intrusions which are probably sills. It is likely that intrusions range in timing from pre- to syn to post sulphide mineralization (Keyser, 2004)

At Norra, there is clear evidence that gold concentration is independent of sulphide intensity within the mineralizing system. Local lenses of dark mudstones, slates and mafic hyaloclastites probably indicate a submarine depositional environment. Late-stage faults and shear zones introduce further complexity to the deposit geology.

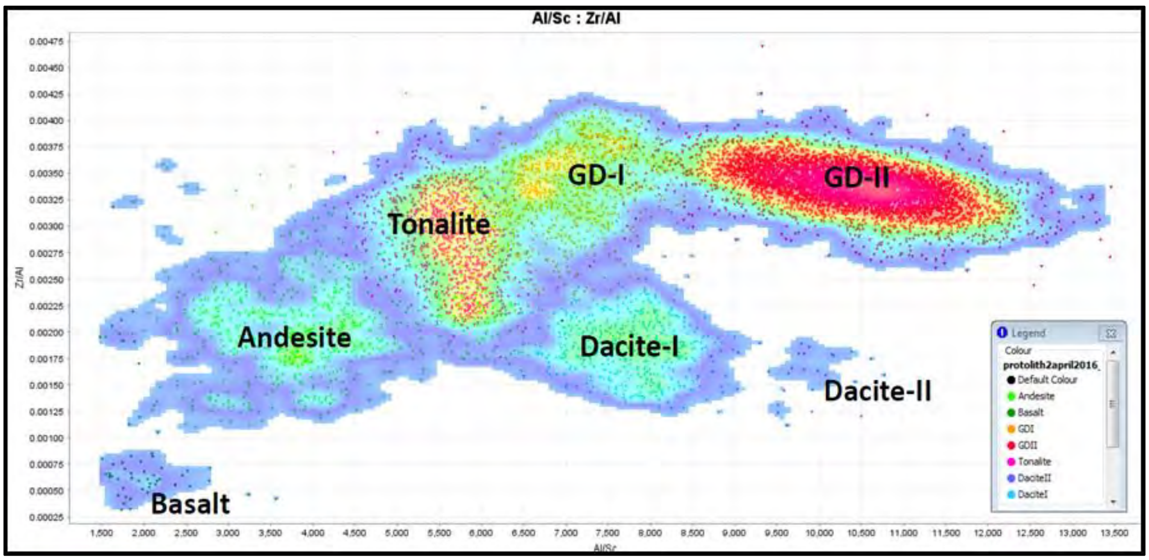


Figure 7.4 – Protolith of the Skiråsen, Central and Avan region based on 11,811 samples Imaña (2016)

7.2.2 Structural elements

The latest structural geological mapping and interpretation was done by Bauer (2015) and Bauer and Imaña (2017). The study concluded that the Barsele mineralization was affected by poly-phase deformation and remobilization events including several phases of enrichment. An early D1 phase of crustal extension caused hydrothermal activity simultaneously with the emplacement of volcanic and related intrusive rocks. Two overprinting deformation events (D2 and D3) both re-mobilised and enriched the deposit along D2 and D3 high strain zones (Figure 7.6).

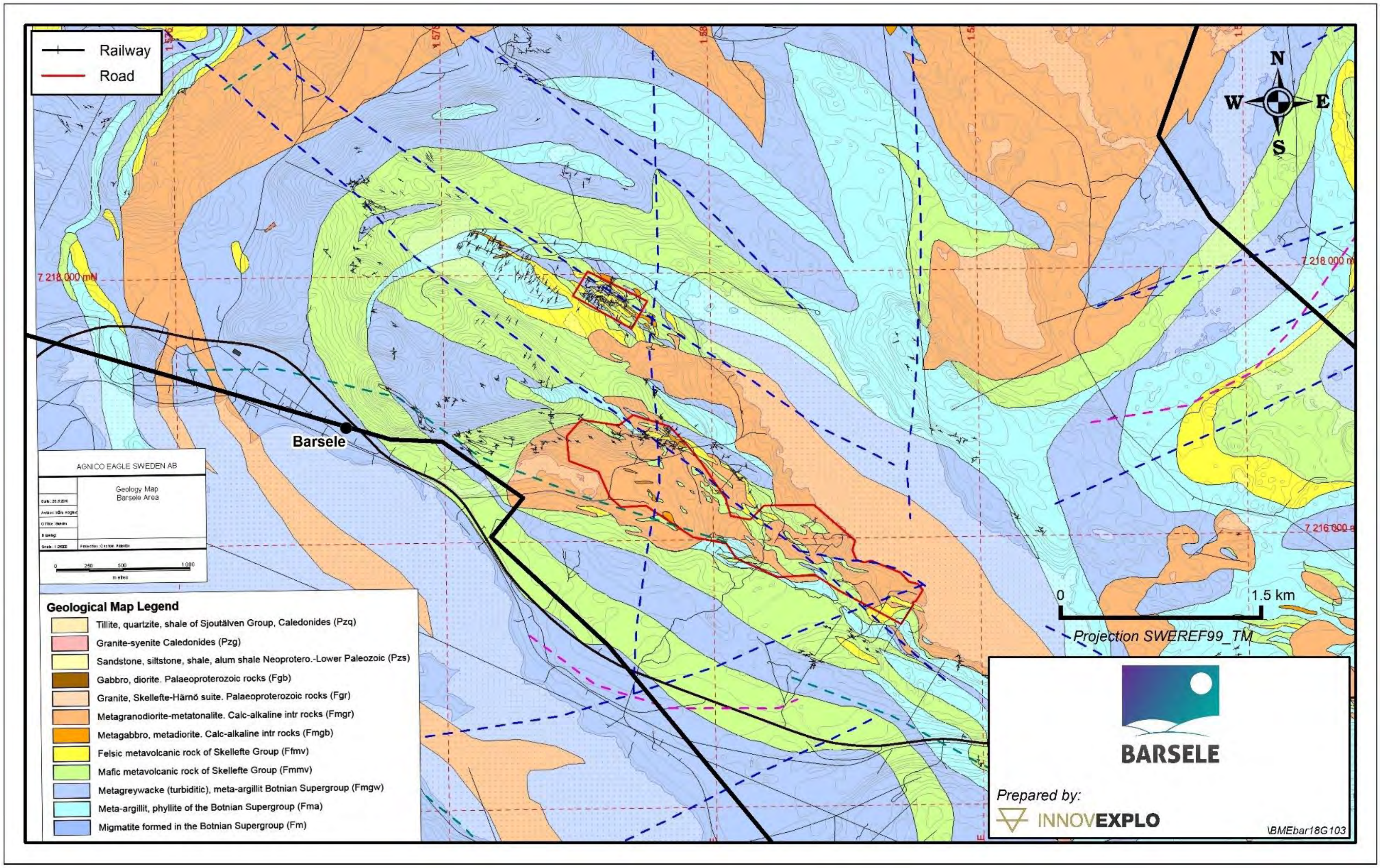
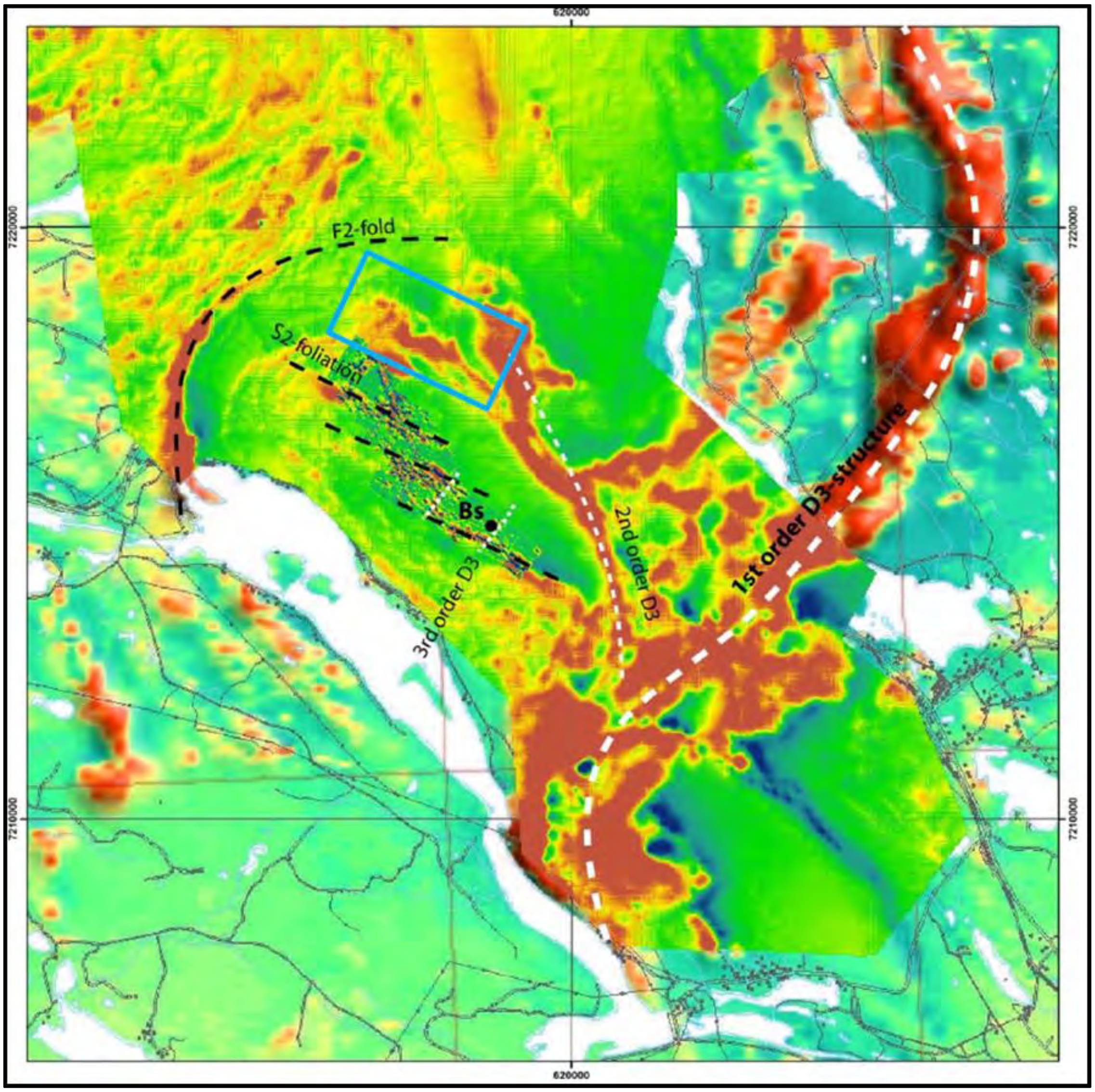


Figure 7.5 – Local geology of the Barsele Property and the surrounding area



Bs= Barsele prospect. Blue rectangle= intersection of interpreted D2 high-strain zones with lower-order D3-structures. Blue to red colours denote low to high magnetic intensity, respectively (Bauer, 2015; modified after Kathol et al., 2005)

Figure 7.6 – Magnetic anomaly map of the Barsele area showing the tentative relationship between the 1st, 2nd and 3rd order D3 high strain zones (white dashed lines) and the main S2 ductile foliation (black dashed lines) and interpreted F2-folded bedding. Bs= Barsele prospect. Blue rectangle= intersection of interpreted D2 high-strain zones with lower-order D3-structures. Blue to red colours denote low to high magnetic intensity, respectively (Bauer, 2015; modified after Kathol et al., 2005)

According to Bauer and Imaña (2017), compressional deformation has triggered the reactivation of an old shear zone (S2), with brittle interconnected flat and steep fractures (S3) developed in its proximity. Brittle structures (D3) formed as flat-lying panels with reverse, SE-side up kinematics as a response on SE-NW-directed crustal shortening. The angular relation between steep quartz veins and steep fractures or shears favours higher gold grades. Quartz veins that form at an angle to pre-existing structures open faster than structures re-using older ones. The steeply dipping (truly tensional) veins are richer in gold than flat veins (thrust induced) veins. Early steeply dipping tourmaline veins are devoid of gold enrichment. The angular relations of quartz veins in relation to the main shear and the fractures suggest that all quartz veins formed within the dextral Riedel-system (Figure 7.7) whereas the quartz veins represent the tensile component (T). The crustal architecture of the Barsele area is the result of one ductile deformation phase (D2) and an overprinting brittle (to semi-brittle) deformation phase (D3).

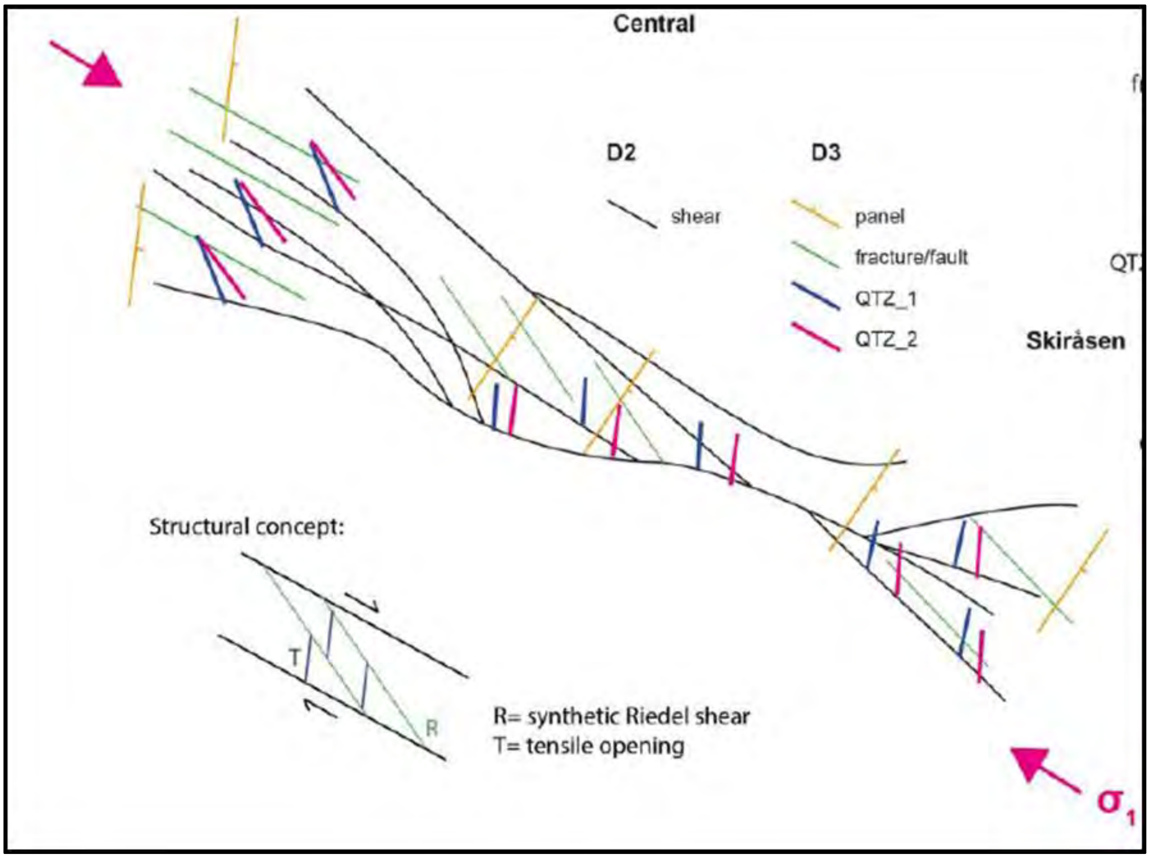
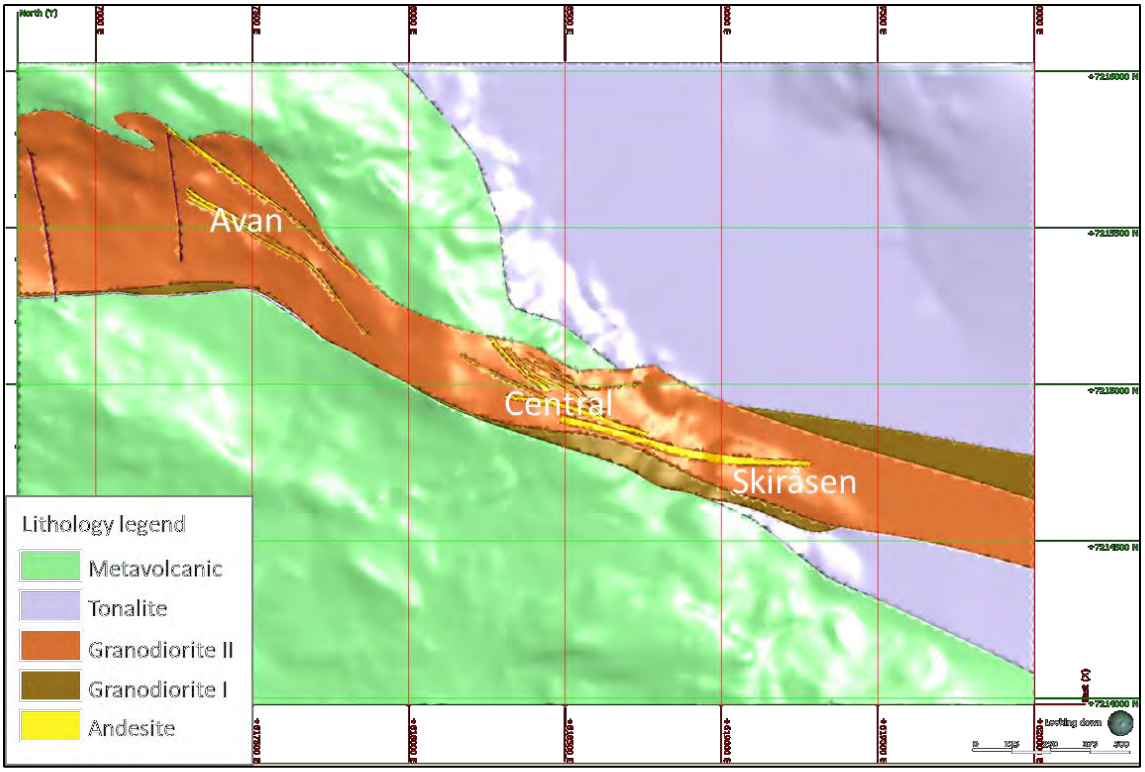


Figure 7.7 – Structural concept and the formation of a Riedel system during D3 deformation (Bauer and Imaña, 2017)

AEM's interpretation is that the intrusion is either a primary shape or the result of crustal shortening during D2 deformation (Figure 7.8). In the former case, the shear zone at Barsele has a syn-extensional D1 origin and the intrusion could have used the already existing structure for emplacement.

If the shear zone formed during D2 deformation, the shear zone could have exploited primary heterogeneities in the intrusion and the intrusion was flattened during compression. The lack of widespread penetrative deformation in the intrusion indicates that the stress was partitioned and preferentially into volcanic enclaves and Fe-Mg portions of the intrusion. The model indicates that the type of deposit for the Skiråsen, Central and Avan zones is an intrusion-hosted orogenic gold deposit.



Note that extrapolation of metavolcanics and tonalite is only arbitrary outside of drilling area (NE and SW direction)

Figure 7.8 – Geological 3D model of the CAS area. Plan view. Based on lithogeochemical classification (Agnico Eagle and Barsele, 2018)

7.3 Mineralization

The following discussion is mainly from Imaña (2016) and Giroux et al. (2015) and retains the references therein. Mineralization varies among the zones on the Property. Two distinct mineralized areas have been explored on the Barsele concessions: CAS (the Central, Avan and Skiråsen zones) and Norra.

7.3.1 CAS (Central, Avan and Skiråsen zone)

Gold mineralization in the CAS is predominantly within the granodiorite (GD-II). Mineralized zones have been interpreted as two types of lodes, D2 type lodes along D2 shear zones structures (NW-SE trending, steeply dipping) and D3 type lodes related to the lineation of intersection between D2 shear zones and D3 panels (N-S trending, average of 45° dipping toward East). Those intersections, presented on Figure 7.9, are considered to have been dilatation zones favorable for fluid circulation and gold remobilization. The panel like geometry of the vein clusters in the Central Zone is not as evident in the Skiråsen Zone (AEM, 2018).

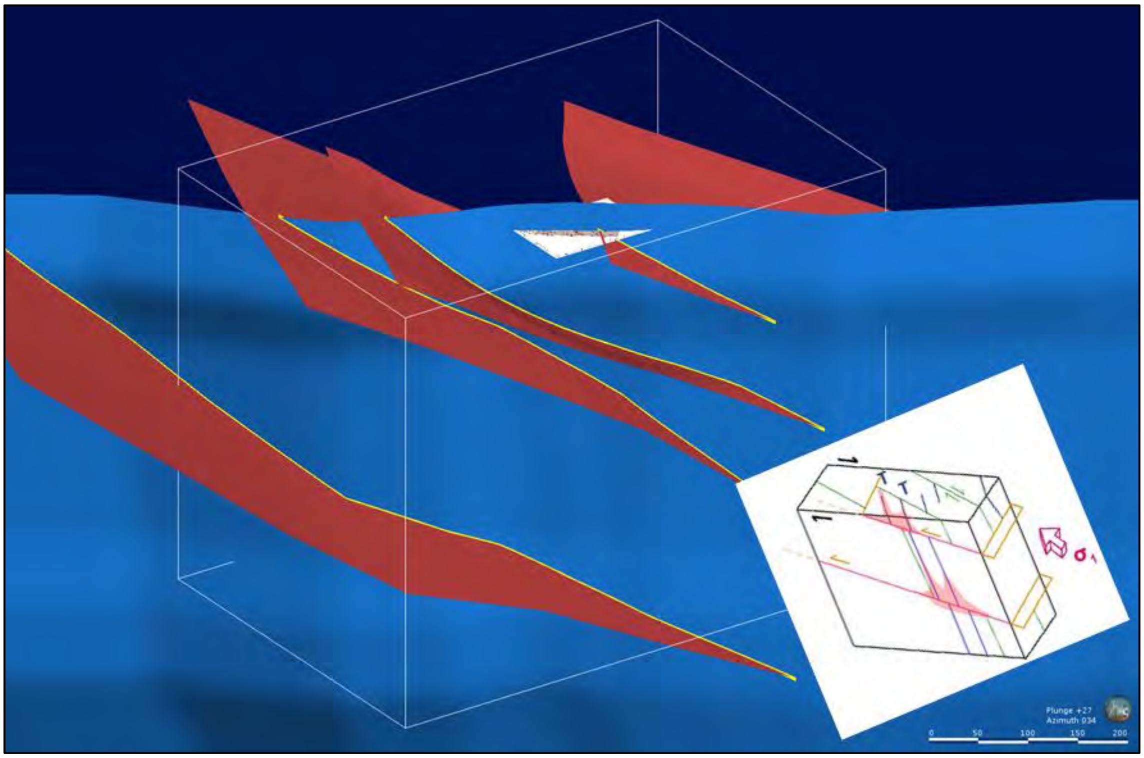


Figure 7.9 –Structural concept and the formation of D3 type lodes related to the lineation of intersection between D2 shear zones and D3 panels (AEM, 2018)

The Central and Skiråsen zones have a combined strike length of 1.8 km. The Central Zone consists of 24 lodes (14 D2 type and 10 D3 type) and the Skiråsen Zone of 13 lodes (D2 type) with an average horizontal thickness of 5 m for the D3 lodes and 10 m for the D2 lodes. The lodes can be followed to a depth of 900 m. The Avan Zone consists of 22 D2-type lodes with an average horizontal thickness of 10 m. The lodes can be followed for 800 m along strike and 700 m at depth.

The Skiråsen Zone contains rock units (GD-SK, Dacite-II and basalt) that do not occur in the Central Zone. Gold mineralization is mainly hosted by QTZ-2 and QTZ-3 veins, whereas QTZ-1 and tourmaline veins are more abundant in the Central Zone. Traces of pyrite are also more commonly observed.

Type-1 quartz veins (Qtz-1) are associated with sulphidized altered zones (bleached zones). Type-2 quartz veins (Qtz-2) are quartz-calcite veins, variably sulphidized with chlorite halos. Type-3 quartz veins (Qtz-3) are visible gold-bearing quartz veins characterized by scarce sulphides and limited sulphidization and alteration of the host rock. They contain traces of pyrite and pyrrhotite, and fractures filled with late chlorite and calcite.

Gold occurs as native metal alloyed with silver and demonstrates a general association with arsenopyrite, also occurring with pyrrhotite, calcite, chlorite and biotite. Base metal content of the deposit is typically low, although gold is seen to occur with sphalerite, galena, chalcopyrite and scheelite. Sulphide, carbonate and quartz-tourmaline veinlets are locally mineralized. The host granodiorite contains probably less than 2% disseminated fine-grained sulphides occurring as arsenopyrite, pyrrhotite and pyrite (Barry et al., 2006).

Imaña (2016) concluded that the Barsele vein-hosted gold deposit is associated with several phases of a coarse- to fine-grained granodiorite intrusion. The bulk of the veins with economic interest are located within intrusive phase GD-II.

Early veining in the deposit contains tourmaline. Although this phase is not a significant carrier of gold, it is believed to represent an essential event that contributed to form favourable structural tracts via rock hardening. Qtz-2 type veins are also a minor gold-bearing structure.

The main gold-bearing structures are Qtz-1, Qtz-3 and Qtz-4 type veins. Enrichment of gold is at times associated with W enrichment. A moderate to strong correlation with S, Ag and As is also observed and is linked to specific vein parageneses.

The shear zone that divides the two domains (the Central and Skiråsen zones) is Au- and W-poor, but Zn- and Mn-enriched. Within the shear region, there is a superposition of relatively high grades of Sn and Bi. Thus, the shear is interpreted as having been subjected to several hydrothermal phases at different temperatures. This is most likely to have occurred as the systems cooled down after gold deposition, with telescoping events occurring along fault-shear reactivations during progressive exhumation of the region. These two zones show distinct structural, geochemical and mineralogical patterns that point toward variable tectonic transposition and rotation of different parts of the system. At the Central Zone, it is conceivable that thrust faulted panels were tectonically uplifted along the hanging wall side of the shear under a hypothetical transpressional regime on a dextral strike-slip fault.

The mineralogy, vein patterns and geochemistry at Barsele suggest that ore fluids (veins) and host rock intrusions could be cogenetic; the lack of accessory magnetite in unaltered granodiorite and the reduced and sulphur deficient sulphide mineralogy in Au-W veins indicates a similar magmatic geochemical affinity. Furthermore, vein formation is principally hosted in GD-II and GD-I.

7.3.2 Norra Zone

According to Giroux et al. (2015), massive sulphide mineralization is exposed in two open trenches (14 m x 6 m) in the centre of the drilled zone. The footprint of the main mineralized body at Norra, based on drilling, is some 300 m in strike length and ranges from 5 to 50 m in width.

The Norra prospect has a complex stratigraphy (Figure 7.9) comprising a variety of volcanic units intercalated within a succession of grey-black mudstone and thin sandstone beds (greywacke). The mudstone-sandstone succession between the volcanic units is interpreted to be marine hemipelagic mudstone with abundant, generally thin, sandstone turbidite beds. These sedimentary rocks were most likely deposited in a deep-sea environment. At the Norra prospect, the mudstone-sandstone succession contains one or more intervals 3 m to 30 m thick carrying disseminated, semi-massive and locally massive pyrrhotite-sphalerite mineralization with less common chalcopyrite and galena. This mineralization is fine-grained, diffusely stratified and variably overprinted by coarser recrystallized pyrrhotite-sphalerite patches and veinlike zones. The fine-grained, massive to diffusely stratified sulphide is interpreted to be stratiform mineralization originally deposited on or just below the sea floor in a deep-water volcanically active basin. The coarser sulphide patches and veins are interpreted to be younger generations of sulphide that were formed by recrystallization and remobilization of the earlier stratiform sulphides during metamorphism and deformation (Allen, 2007).

In addition to this pyrrhotite-sphalerite mineralization, the Norra prospect also contains relics of fine-grained massive arsenopyrite with disseminated to veinlet chalcopyrite. These arsenopyrite-rich patches correspond to some of the highest gold values encountered in the Norra prospect. Furthermore, they are virtually indistinguishable from similar fine-grained arsenopyrite patches and lenses that occur in several of the VMS deposits in the nearby Skellefte mining district (for example the Boliden, Holmtjärn and Maurliden deposits). In the Skellefte district and at Barsele, the patches of fine-grained arsenopyrite are overprinted by subsequent stages of mineralization and consequently appear to represent an early stage of syn-volcanic mineralization (Allen, 2007).

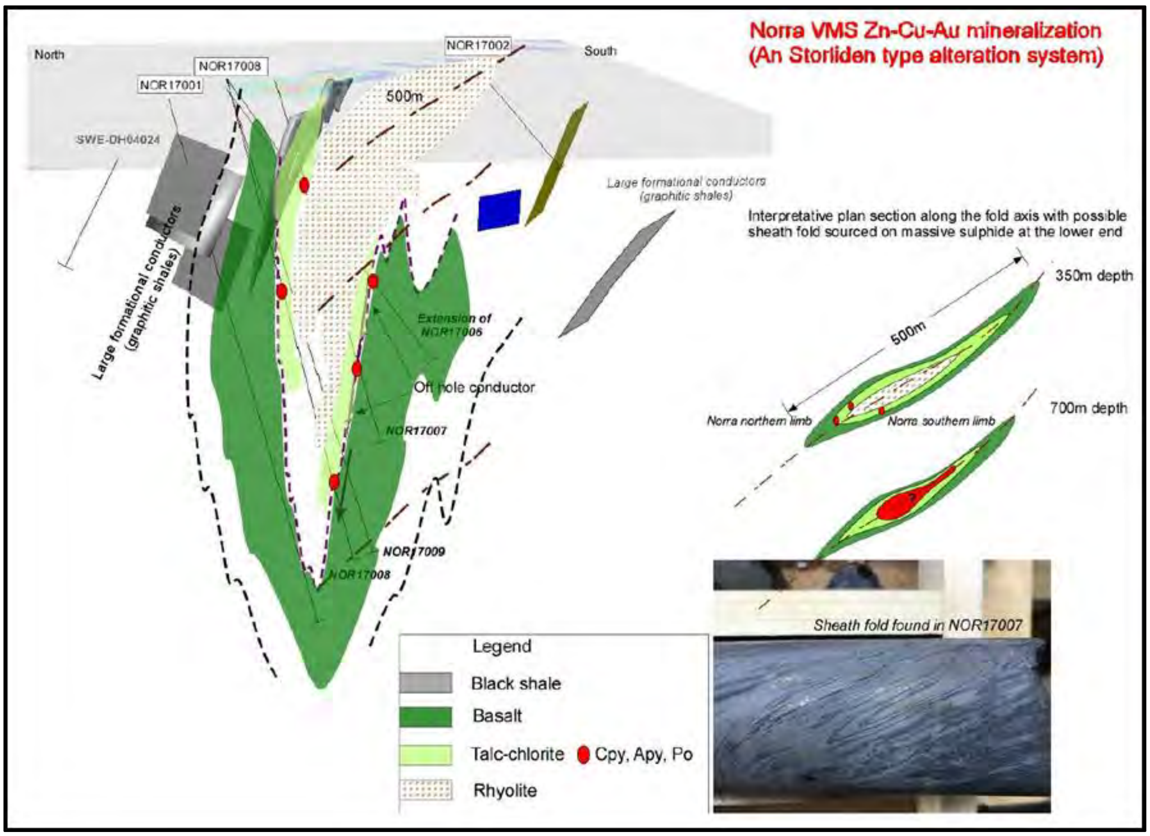


Figure 7.10 – Interpretative section on the Norra Zone (Imaña, 2017)

8. MINERAL DEPOSIT TYPES

There are three styles of mineralization at the Barsele Project: 1) orogenic intrusive-hosted gold related to the Gold Line (see section 7.1); 2) epithermal gold-rich volcanogenic massive sulphides; and 3) high-grade gold-silver-lead-zinc mineralization hosted by syn-tectonic quartz-sulphide veins.

The Project, with its VMS (Norra) and gold (CAS) deposits, is situated in the Gold Line at its intersection with the east-west Skellefte metallogenic trend (VMS belt). The CAS intrusion-hosted gold deposits and associated high-grade veins are similar to other Gold Line deposits, which are dominantly deeper mesothermal, structurally controlled gold mineralization (Giroux et al., 2015) whereas Norra is more similar to the Skellefte deposits, which are more commonly shallow syngenetic to epithermal gold-rich base metal deposits.

The shallow volcanic-related Skellefte mineralization would appear to be unrelated to the intrusive-hosted orogenic-style gold mineralization which forms at considerably deeper levels in the crust. However, the spatial coincidence of the three styles of mineralization suggests that they may represent a vertical continuum related to a 1.8 Ga igneous intrusive event (Giroux et al., 2015).

8.1 Orogenic Intrusive-Hosted Gold

Metamorphic belts are complex regions where accretion or collision has added to, or thickened, continental crust. Gold-rich deposits can be formed at all stages of orogen evolution, so that evolving metamorphic belts contain diverse gold deposit types that may be juxtaposed or overprint each other (Groves et al., 2003).

The majority of gold deposits in metamorphic terranes are located adjacent to first-order, deep-crustal fault zones, which show complex structural histories and may extend along strike for hundreds of kilometres with widths of as much as a few thousand metres (Goldfarb et al., 2005). Fluid expulsion from crustal metamorphic dehydration along such zones was driven by episodes of major pressure fluctuations during seismic events. Ores formed as simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins of second- and third-order shears and faults, particularly at jogs or changes in strike along the major deformation zones. Mineralization styles vary from stockworks and breccias in shallow, brittle regimes, through laminated crack-seal veins and sigmoidal vein arrays in brittle-ductile crustal regions, to replacement- and disseminated-type orebodies in deeper, ductile environments (Groves et al., 2003). Most orogenic gold deposits occur in greenschist facies rocks, but significant orebodies can be present in lower and higher grade rocks. The mineralization is syn- to late-deformation and typically post-peak metamorphism. They are typically associated with iron-carbonate alteration. Gold is largely confined to the quartz-carbonate vein network but may also be present in significant amounts within iron-rich sulphidized wall-rock selvages or within silicified and sulphide-rich replacement zones (Dubé and Gosselin, 2007). One of the key structural factors for gold mineralization emplacement is the late strike–slip movement event that reactivated earlier-formed structures within the orogeny (Goldfarb et al., 2001).

Generally, veins can be found in any of the rock types present in a given district. However, there are a number of lithological associations which are repeated at the scale of the deposits, and which are partly reflected in the geometric or hydrothermal characteristics of these. Those associations reflect variations in structural and chemical controls exerted by host lithologies on the formation of vein network (Robert, 1996).

Orogenic intrusion-hosted gold deposits occur within the Skellefte district along the Gold Line (Fig 7.3) in Västerbotten includes a series of gold deposits, mineralized occurrences and gold targets in different geological environments loosely aligned along a regional tectonic zone that stretches from the Caledonian mountains in northwest Västerbotten through the towns of Sorsele, Storuman and Lycksele and onwards towards the Gulf of Bothnia in the southeast. This zone may potentially represent an older rift zone, the age of which could be about 2 Ga. The gold mineralization is primarily associated with arsenopyrite and pyrrhotite. The tonnage of some intrusion-hosted gold deposits can be economically significant in some deposits, such as Björkdal in the eastern part of the Skellefteå district (Barry et al., 2006).

The gold discoveries were made using classic boulder tracing, regional till sampling and then follow-up geophysical surveys and drilling. A number of gold occurrences and deposits in the Gold Line have been discovered by various companies during the past 15 years of active exploration, including: Svartliden (Dragon Mining ASX), Ersmarksberget and Svarttrask (ScanMinina AB), Knaften, Stortjärnhobben, Sandviksträsk and Fäboliden (Lappland Goldminers AB), and Barsele (Orex-Northland) (Giroux et al., 2015).

8.2 Volcanogenic Massive Sulphides

The Norra deposit is a gold-rich VMS deposit. The following section is slightly modified from Galley et al. (2007) and Franklin et al. (1998).

Volcanogenic massive sulphide deposits typically occur as lenses of polymetallic massive sulphide that form at or near the seafloor in submarine volcanic environments, and are classified according to base metal content, gold content, or host-rock lithology. These deposits types are discovered in submarine volcanic terranes that range in age from 3.4 Ga to actively forming deposits in modern seafloor environments. The most common feature among all types of VMS deposits is that they are formed in extensional tectonic settings, including both oceanic seafloor spreading and arc environments.

As a result of large-scale fluid flow, VMS mining districts are commonly characterized by extensive semi-conformable zones of hydrothermal alteration that intensifies into zones of discordant alteration in the immediate footwall and hanging wall of individual deposits. They form from metal-enriched fluids associated with seafloor hydrothermal convection. VMS deposits are major sources of Zn, Cu, Pb, Ag and Au.

Deposits of the copper-zinc group are within volcanic sequences that are dominated by mafic volcanic rocks, with locally volumetric felsic rocks. Felsic ash-flow tuff beds are usually prominent immediately below the deposits, and felsic domes may immediately underlie or enclose the ore.

Alteration occurs in two distinct zones. Alteration pipes occur immediately below the massive sulphide zones. The pipes are silicified and sericitized; chlorite is subordinate and is most abundant on the periphery of the pipes. Aluminosilicate minerals are prominent. Lower, semi-conformable alteration zones occur several hundreds of metres or more below the massive sulphide deposits. This zone contains epidote, actinolite, and quartz.

Pyrite typically constitutes 50-90% of the massive ore, with sphalerite, chalcopyrite, and galena forming about 10%. Deposits formed in deep water contain only sphalerite and chalcopyrite as their principal ore minerals. Those that formed in shallow water contain recoverable galena. Deposits of the copper-zinc group are concordant to semi-conformable massive iron sulphide bodies, commonly underlain by stringer ore.

It is probable that a host of different ore-forming systems were active in the Skellefte district, including the dominant VMS, epithermal and mesothermal systems. The Skellefte district contains some 80 distinct VMS deposits and lode gold deposits. The gold contents in the Skellefte massive sulphide ores are unusually rich in gold, and it is still uncertain whether the gold is a result of simple volcanic hydrothermal processes or if some massive to semi-massive sulphide deposits were epigenetically enriched in gold (Barry et al., 2006).

8.3 High-grade gold-silver-lead-zinc mineralization hosted by syn-tectonic quartz-sulphide veins

According to Giroux et al. (2015), the intersection of a base-metal-rich polymetallic vein associated with higher grades of gold in the western end of the Central Zone in 2006 may provide a clue as to how the VMS and orogenic styles of gold mineralization are related.

Base metals and gold may have been remobilized during deformation after intrusion of the granodiorite. The granodiorite likely intruded into sulphide-rich shales or a massive sulphide horizon resulting from earlier volcanism. Evidence for such an interpretation are sulphide-rich argillites and felsic volcanics oriented parallel to the core axis of drill hole CNDTH06-012 (Corkery, 2007).

Drill hole logging on the Central area suggests a corresponding geological break along the geophysical anomaly near CNTDH06-012, with lithologies toward the north dominated by andesite porphyry dikes and felsic volcanics, and the south dominated by granodiorite, quartz veins and sulphide bearing metasedimentary argillites. This interpreted structural break may have acted as the main conduit or one of several major feeders for hydrothermally remobilized gold which formed the enveloping lower grade disseminated gold resource.

9. EXPLORATION

AEM conducted relevant exploration work as project operator in 2018 (Pelletier and Richard, 2018). The work has included till sampling (surface and basal), geophysical survey and geological compilation and interpretation. Drilling is also underway and is covered in Item 10.

9.1 Base of Till Sampling and Surface Till Sampling

Base of till ("BOT") sampling resumed in 2018 with 93 holes drilled in January and February. The campaign was put on hold during the thaw period and restarted in June. A total of 434 BOT boreholes were completed and 1247 samples in the overburden and the bedrock were collected for assaying.

A total of 846 surface till samples out of the 901 initially planned sites were collected in the YM-1 to YM-8 areas (Figure 9.1) during the summer field campaign of 2018. All surface till samples were prepared and sent for assaying. Due to unsuitable terrain conditions, 55 sites were skipped (not sampled).

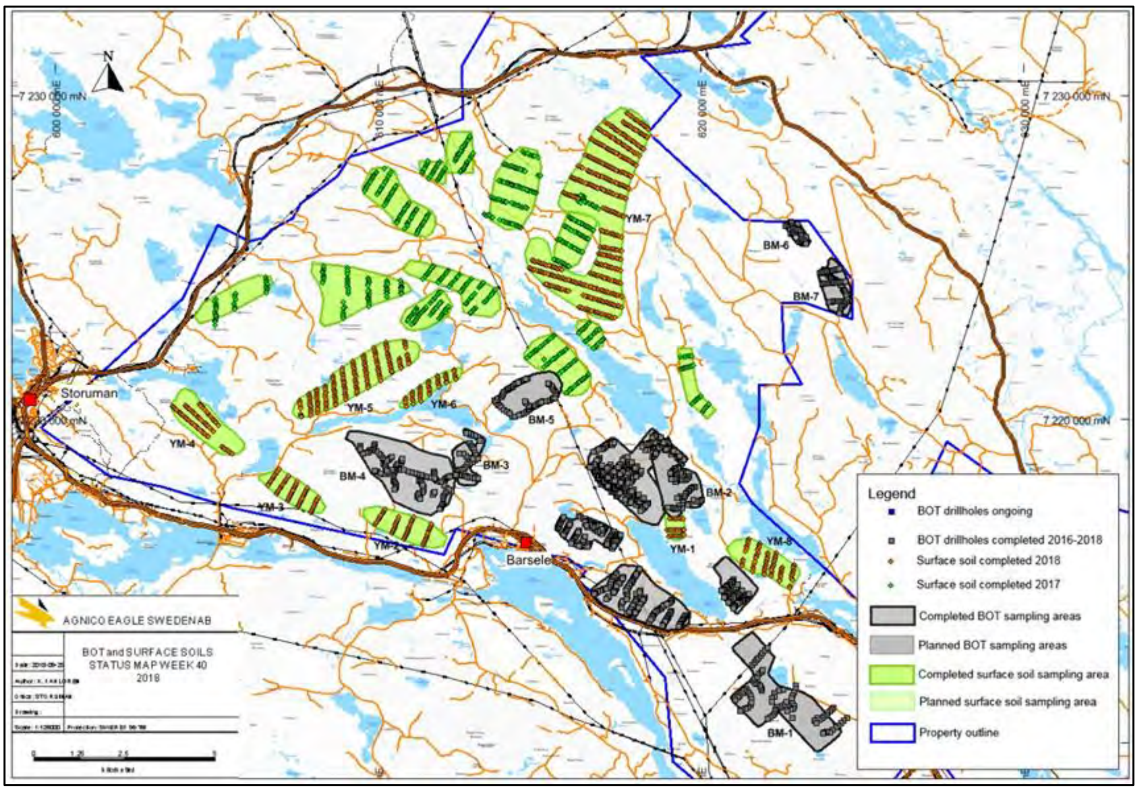


Figure 9.1 – The regional BOT drilling and surface till sampling program completed on October 31, 2018 (Agnico Eagle, 2018e)

Gold anomalies do not exhibit any significant clustering in areas sampled in 2018 with the exception of YM-7: this area's distribution correlates well with some samples classified as graphite-sulfide metasediments. The highest anomalies (28, 32 and 42 ppb Au), are in YM-7. Although, the correlation with N-S striking graphite-sulfide metasediments is obvious, the anomalies may also be associated with E-W striking structural trend (D2), hence D2/D3 intersections. These anomalies will be followed up in 2019 with additional work.

The elements Zn, Cu, As, and Sb show relatively good spatial correlation and form clusters clearly associated with presence of graphite-sulfide metasediments. Large, predominantly N-S anomalies are present in YM-7 and YM-1. On the other hand, YM-4, YM-5 and 6 anomalies are oriented ESE-WNW, corresponding to a structural trend observed in the AeroMAG interpreted data. Those areas have been recognized as highly prospective for VMS and follow-ups with BOT sampling is planned for 2019.

9.2 Geophysics

9.2.1 Ground magnetic survey

In June 2018, GRM-Services Oy carried out a ground Mag survey covering approximately 3.7 km^2 over the Risberget area. The resulting geophysical (Mag) maps and the diamond drilling data from the area were used to reinterpret the geology of Risberget. Significant changes were made to geological units and their orientation. The Mag maps and drilling data indicate a NE-SW trend to the supracrustal sequence rather than previously interpreted NW-SE trend, as well as a steep dip to the NW. This orientation fits with the structural data, such as foliation, contacts and shear zones observed in oriented drill core. At the regional scale, the Risberget area is positioned within the high deformation corridor which is consistent with the interpreted first-order D3 structure (Agnico Eagle, 2018a).

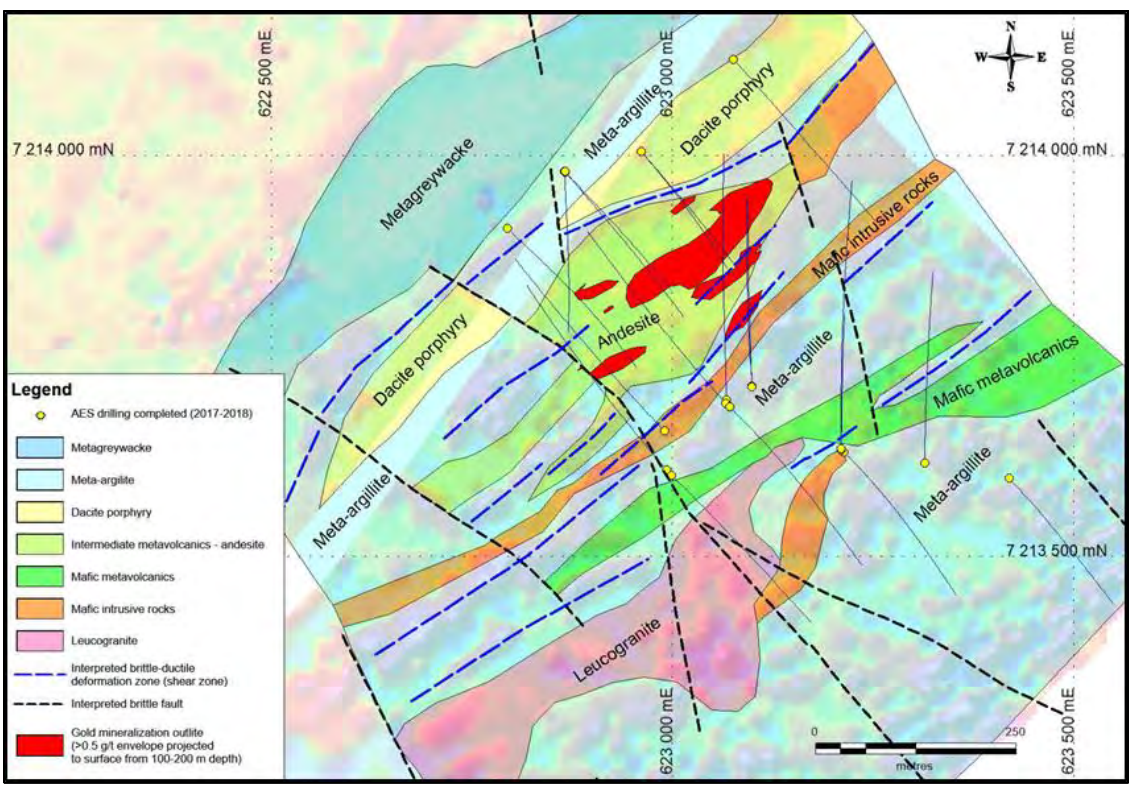


Figure 9.2 –New interpreted geological map of the Risberget area over 1VD ground magnetic map (Agnico Eagle, 2018a)

9.2.2 Gravity survey

A detailed gravity survey was carried by GRM-Services over the Property with 1059 measurement sites with a 120 m spacing between each site. The survey started at the end of August and finished in October. Final maps resulting from collected data and a preliminary inversion model have been interpreted and delivered; 22 high-gravity anomaly targets were modelled, and their depth varies from near surface to 600 m. Drilling on some of these targets will be planned for 2019 following a multidisciplinary evaluation (geochemistry, geology, and geophysics) of each target. The Figure 9.3 shows the gravity station of this survey.

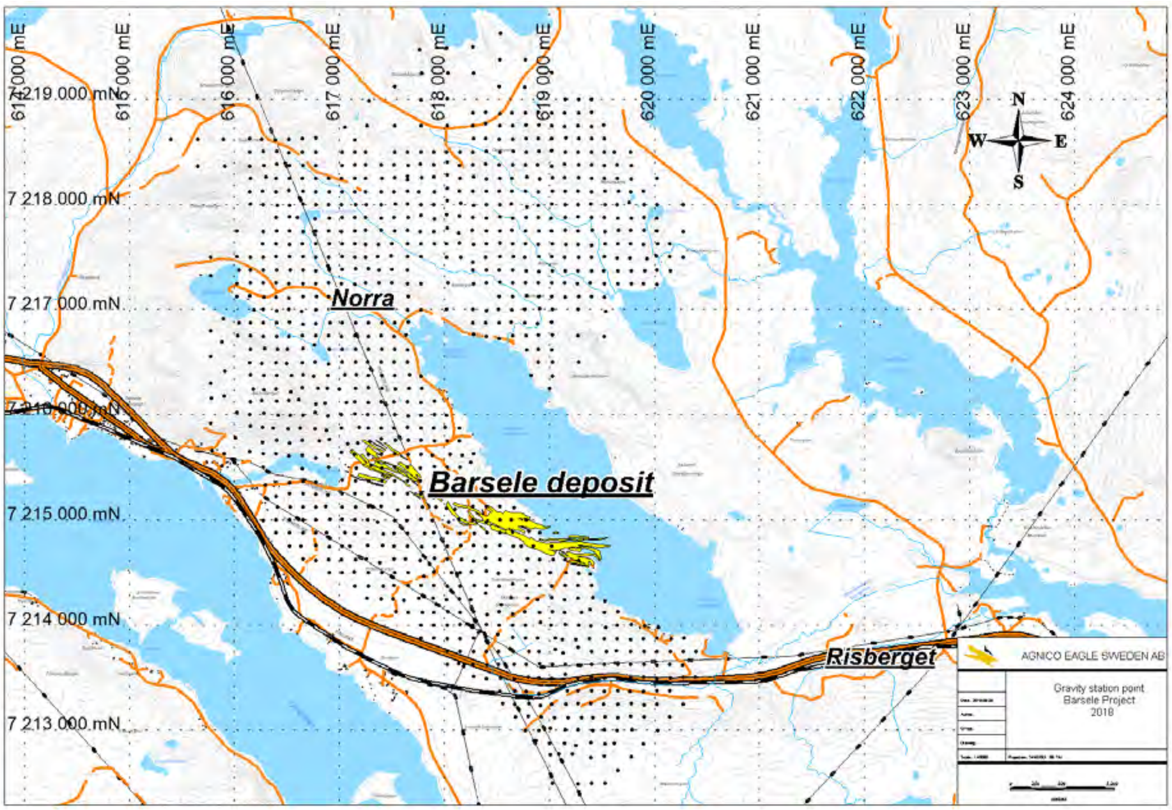


Figure 9.3 – Map of gravity stations over the Barsele Property (Agnico Eagle, 2018d)

9.2.3 Borehole electromagnetic (BHEM)

A BHEM survey was carried out, by GRM services Oy, in hole SKL18001 (length of 1,331 m), located in the Skirliden area. The hole was primarily testing the strong-magnetic and geochemical anomalies at a shallow depth and the eastern extension of the mineralized granodiorite from the Skiråsen Zone at greater depth. The hole intersected 13 m of semi-massive and massive sulphide mineralization (pyrrhotite) at a vertical depth of 800 m (from 1247.0-1260.0 m). The strong magnetic anomalies were explained by the presence of graphite-pyrrhotite-bearing metasediments and few minor diabase dikes at the beginning of the drill hole.

Using two loops, BHEM demonstrated a strong continuous electromagnetic signal vertically upwards of the intersection resulting in a modelled conductor with a 175 m strike length and at least 500 m of vertical extent.

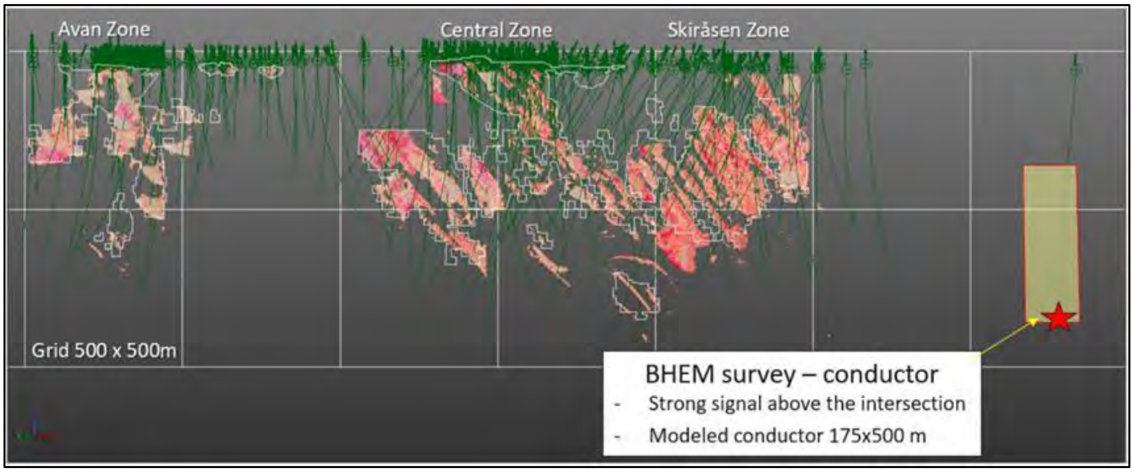


Figure 9.4 – Longitudinal section showing the position of SKL18001 drill hole area with semi-massive to massive sulphide intersections; Yellow rectangle outlines are interpreted conductors from the BHEM survey (Agnico Eagle, 2018b)

9.3 Geological Compilation

For a bachelor's degree thesis, AEM summer geologist, Joel Krispinsson, collaborated with AE Sweden to produce a GIS-based re-evaluation of the surface geology of the Barsele Property and its surrounding area. The most recent interpretation had been done in 2016.

New data used for the compilation and interpretation included infield outcrop observations, BOT drill data, geochemical assays, geophysical data and structural measurements. The new interpretation of the geology included additions and modifications to previous geological borders where possible.

Compared with the previous version, the resulting updated geological map shows that a significant amount of what was previously interpreted as metasedimentary rocks is now classified as mafic metavolcanic rocks. Felsic metavolcanics that are of interest are more frequent than previously thought. The new data also confirms the geological interpretations of the previous map in several areas, proving that the accuracy of the map in these areas is of good quality.

10. DRILLING

This item pertains to the holes drilled between November 14, 2017, the close-out date of the database for the previous mineral resource estimate (Pelletier and Richard, 2018), and November 12, 2018, the close-out date of the database for the current 2019 MRE. Previous drilling programs were summarized in Item 6.

10.1 Drilling Program

Between November 14, 2017 and November 12, 2018, one hundred and twelve (112) holes were drilled for a total of 42,040 m (The program tested a variety of targets—regional geophysical anomalies, BHEM modelled conductors, areas of anomalous gold in BOT samples—as well as defining and expanding the Avan, Central and Skiråsen zones. Infill drilling within these zones was also part of this campaign (AEM, 2018; Barsele, 2018).

Forty (40) holes were drilled in the Avan-Central-Skiråsen zones during this period (AVA, CNT and SKI prefixes) for a total of 19,545 m. The drilling results appear to confirm the continuity of these zones and, by November 12, 2018, they remained open in every direction (Barsele, 2018).

Holes SKI18009 and SKI18010, respectively 827.7 m and 749.4 m long, were drilled 600 m to the east of the Skiråsen Zone to test a regional VMS target and to follow up on previously intersected massive pyrrhotite/pyrite mineralization. Hole SKI18009 intersected 1.12 g/t Ag and 0.12% of Zn over 6 m (estimated true thickness) associated with semi-massive, banded to brecciated pyrrhotite mineralization from 770 m to 792 m downhole. Another anomalous base metal zone was encountered in black schist with late carbonate-sulphide veins at a downhole depth of 728.0 m, grading 7.13 g/t Ag, 0.04% Cu, 0.41% Pb and 0.61% Zn over 2.25 m (estimated true thickness). Hole SKI18010 did not return any significant gold or base metal grades (AEM, 2018).

Twenty-two (22) holes (8,138 m) were drilled in the Risberget Zone to expand known mineralization, mainly down dip. The zone remains open down dip, but holes RIS18001 and RIS18004 constrained the zones to the east and west, respectively, as no significant gold intervals were encountered at the depths where the lodes was expected.

At the Norra VMS Zone, the holes tested a down-hole BHEM-conductor, but did not yield any significant intercepts although occurrences of sphalerite (zinc) and chalcopyrite (copper) were noted in the drill logs (Barsele, 2018).

Along the Stentjärnen trend, which is characterized by a magnetic low zone running parallel to the CAS zones, hole NOR18007 cut a core length of 3.2 m (estimated 2.3 m true thickness) grading 2.97 g/t Au. Apart from three holes with minor zinc intercepts, and a fourth hole with a minor gold intercept, the majority of the holes did not encounter mineralization along the Stentjärnen trend (AEM, 2018; Barsele, 2018).

In the Skirliden Zone, approximately 800 m SE from the Skiråsen Zone, hole SKL18001 intersected 13 m of semi-massive and massive sulphide (pyrrhotite) mineralization from 1,247 m to 1,260 m down hole, at a vertical depth of 800 m. Assay results indicate only anomalous gold values with the best being 0.18 g/t Au over 1 m and 0.15% Zn over 4 m, but the host rock setting and the nature of the sulphides suggest a distal expression of a VMS system. The BHEM survey demonstrates a strong continuous EM signal vertically upwards (see Section 9.2.3) (AEM, 2018). Holes SKL18002 to SKL18007 and SKL18009 tested shallower targets (conductors and magnetic anomalies) but did not return significant results. Hole SKL18008 tested a possible VMS target at a shallow level and the extension of the mineralized granodiorite in the Skiråsen Zone at greater depth. It intersected mineralized and altered zones at the following depths: 335 m to 424 m, 778 m to 833 m, 873 m to 889 m, 924.75 m to 953.5 m, and 1093 m to 1094 m. It returned only one narrow, gold-bearing zone of 1.7 g/t Au over 1.5 m hosted in a major shear structure of the Skiråsen Zone.

A regional program (holes NOR17010 to NOR17015, NOR18022 to NOR18026 and all holes with prefixes ASP, ESB and KOH) tested shallow regional VMS targets associated with processed SkyTEM airborne EM and Mag anomalies and till geochemical anomalies. None of these holes intersected significant gold or other metals associated with VMS deposits.

Table 10.1). The program tested a variety of targets—regional geophysical anomalies, BHEM modelled conductors, areas of anomalous gold in BOT samples—as well as defining and expanding the Avan, Central and Skiråsen zones. Infill drilling within these zones was also part of this campaign (AEM, 2018; Barsele, 2018).

Forty (40) holes were drilled in the Avan-Central-Skiråsen zones during this period (AVA, CNT and SKI prefixes) for a total of 19,545 m. The drilling results appear to confirm the continuity of these zones and, by November 12, 2018, they remained open in every direction (Barsele, 2018).

Holes SKI18009 and SKI18010, respectively 827.7 m and 749.4 m long, were drilled 600 m to the east of the Skiråsen Zone to test a regional VMS target and to follow up on previously intersected massive pyrrhotite/pyrite mineralization. Hole SKI18009 intersected 1.12 g/t Ag and 0.12% of Zn over 6 m (estimated true thickness) associated with semi-massive, banded to brecciated pyrrhotite mineralization from 770 m to 792 m downhole. Another anomalous base metal zone was encountered in black schist with late carbonate-sulphide veins at a downhole depth of 728.0 m, grading 7.13 g/t Ag, 0.04% Cu, 0.41% Pb and 0.61% Zn over 2.25 m (estimated true thickness). Hole SKI18010 did not return any significant gold or base metal grades (AEM, 2018).

Twenty-two (22) holes (8,138 m) were drilled in the Risberget Zone to expand known mineralization, mainly down dip. The zone remains open down dip, but holes RIS18001 and RIS18004 constrained the zones to the east and west, respectively, as no significant gold intervals were encountered at the depths where the lodes was expected.

At the Norra VMS Zone, the holes tested a down-hole BHEM-conductor, but did not yield any significant intercepts although occurrences of sphalerite (zinc) and chalcopyrite (copper) were noted in the drill logs (Barsele, 2018).

Along the Stentjärnen trend, which is characterized by a magnetic low zone running parallel to the CAS zones, hole NOR18007 cut a core length of 3.2 m (estimated 2.3 m true thickness) grading 2.97 g/t Au. Apart from three holes with minor zinc intercepts, and a fourth hole with a minor gold intercept, the majority of the holes did not encounter mineralization along the Stentjärnen trend (AEM, 2018; Barsele, 2018).

In the Skirliden Zone, approximately 800 m SE from the Skiråsen Zone, hole SKL18001 intersected 13 m of semi-massive and massive sulphide (pyrrhotite) mineralization from 1,247 m to 1,260 m down hole, at a vertical depth of 800 m. Assay results indicate only anomalous gold values with the best being 0.18 g/t Au over 1 m and 0.15% Zn over 4 m, but the host rock setting and the nature of the sulphides suggest a distal expression of a

VMS system. The BHEM survey demonstrates a strong continuous EM signal vertically upwards (see Section 9.2.3) (AEM, 2018). Holes SKL18002 to SKL18007 and SKL18009 tested shallower targets (conductors and magnetic anomalies) but did not return significant results. Hole SKL18008 tested a possible VMS target at a shallow level and the extension of the mineralized granodiorite in the Skiråsen Zone at greater depth. It intersected mineralized and altered zones at the following depths: 335 m to 424 m, 778 m to 833 m, 873 m to 889 m, 924.75 m to 953.5 m, and 1093 m to 1094 m. It returned only one narrow, gold-bearing zone of 1.7 g/t Au over 1.5 m hosted in a major shear structure of the Skiråsen Zone.

A regional program (holes NOR17010 to NOR17015, NOR18022 to NOR18026 and all holes with prefixes ASP, ESB and KOH) tested shallow regional VMS targets associated with processed SkyTEM airborne EM and Mag anomalies and till geochemical anomalies. None of these holes intersected significant gold or other metals associated with VMS deposits.

Table 10.1 – Drilling summary: November 14, 2017 to November 12, 2018

Hole ID	Northing	Easting	Elevation	Length	Year
ASP18001	7225375	616509	388	174	2018
ASP18002	7225816	616422	417	217	2018
ASP18003	7226309	616608	383	177	2018
ASP18004	7227230	614386	399	240	2018
ASP18005	7226605	614358	346	117	2018
ASP18006	7226755	613660	335	161	2018
ASP18007	7228290	612770	313	172	2018
AVA18001	7215478	617171	302	448	2017
AVA18002	7215319	617320	303	444	2018
AVA18003	7215319	617321	303	309	2018
AVA18004	7215319	617320	303	371	2018
AVA18005	7215264	617478	305	428	2018
AVA18006	7215264	617478	305	411	2018
AVA18007	7215513	617031	303	461	2018
AVA18008	7215507	617026	302	144	2018
AVA18009	7215912	617451	362	491	2018
AVA18010	7215017	617790	320	414	2018
AVA18011	7215263	617478	305	464	2018
AVA18012	7215467	617576	313	450	2018
AVA18013	7215480	617748	323	434	2018
CNT18001	7215262	618311	319	499	2018
CNT18002	7214707	618412	331	770	2018
CNT18003	7215264	618311	318	779	2018
CNT18004	7214748	618285	330	914	2018

Hole ID	Northing	Easting	Elevation	Length	Year
CNT18005	7215080	617910	341	480	2018
CNT18006	7215028	617992	347	308	2018
CNT18007	7215110	618664	300	51	2018
CNT18007B	7215111	618660	300	938	2018
CNT18008	7214963	618662	313	125	2018
CNT18009	7214943	618662	315	125	2018
CNT18010	7214983	618664	312	134	2018
CNT18011	7214323	618144	330	251	2018
CNT18012	7214664	618974	311	551	2018
ESB18001	7222690	616584	297	192	2018
KOH18001	7218934	612798	394	230	2018
NOR17010	7218031	617602	352	299	2017
NOR17011	7218156	618317	335	314	2017
NOR17012	7218046	617611	353	228	2017
NOR17013	7217868	617290	351	323	2017
NOR17014	7218543	618063	322	241	2017
NOR17015	7218101	617385	362	221	2017
NOR18001	7216914	617032	339	604	2018
NOR18002	7216671	616878	338	509	2018
NOR18003	7216869	616365	340	245	2018
NOR18004	7216778	616394	340	218	2018
NOR18005	7216779	616394	340	263	2018
NOR18006	7216670	616878	338	851	2018
NOR18007	7216634	616663	342	365	2018
NOR18008	7216629	616660	342	286	2018
NOR18009	7216496	616786	337	227	2018
NOR18010	7216502	616789	338	332	2018
NOR18011	7216501	616789	338	326	2018
NOR18012	7216817	616518	341	326	2018
NOR18013	7216822	616521	341	232	2018
NOR18014	7217045	616404	342	374	2018
NOR18015	7216323	617199	340	167	2018
NOR18016	7216576	616951	338	308	2018
NOR18017	7216840	616867	334	254	2018
NOR18018	7216329	617202	340	125	2018
NOR18019	7216321	617198	341	101	2018
NOR18020	7216253	617389	326	143	2018

Hole ID	Northing	Easting	Elevation	Length	Year
NOR18021	7216257	617391	325	229	2018
NOR18022	7218507	617061	360	268	2018
NOR18023	7218702	617519	349	212	2018
NOR18024	7219012	618949	300	222	2018
NOR18025	7217482	619954	282	158	2018
NOR18026	7217767	619426	299	243	2018
RIS17011	7213962	621882	281	406	2017
RIS17012	7213843	621769	281	175	2017
RIS17013	7213839	621770	281	344	2017
RIS17014	7213601	622999	303	348	2017
RIS17015	7213686	623072	295	356	2017
RIS17016	7213980	622866	276	384	2017
RIS17017	7213591	622330	304	412	2018
RIS17018	7213630	623213	297	458	2017
RIS17019	7213980	622866	276	420	2017
RIS17020	7214005	622961	276	311	2017
RIS17021	7213617	623314	308	312	2017
RIS17022	7213979	622866	276	284	2017
RIS17023	7214005	622961	276	396	2017
RIS17024	7213597	623420	308	284	2017
RIS18001	7214119	623076	270	362	2018
RIS18002	7213909	622794	278	447	2018
RIS18003	7213864	622684	276	513	2018
RIS18004	7213686	622635	288	479	2018
RIS18005	7213643	622420	296	480	2018
RIS18006	7213865	622689	276	497	2018
RIS18007	7213897	622957	280	257	2018
RIS18008	7213901	622959	280	213	2018
SKI17014	7214625	619201	297	852	2017
SKI17014B	7214627	619199	297	56	2017
SKI17015	7214541	619034	315	896	2017
SKI17016	7214625	619201	297	816	2017
SKI18001	7214411	619351	301	610	2018
SKI18002	7214412	619351	301	701	2018
SKI18003	7214413	619350	301	53	2018
SKI18003B	7214414	619350	301	890	2018
SKI18004	7214522	619173	304	700	2018

Hole ID	Northing	Easting	Elevation	Length	Year
SKI18005	7214625	619201	297	276	2018
SKI18006	7214202	619379	311	899	2018
SKI18007	7214625	619200	297	391	2018
SKI18008	7213684	618370	319	452	2018
SKI18009	7213665	619650	327	762	2018
SKL18001	7214672	620647	297	1331	2018
SKL18002	7214680	620652	296	71	2018
SKL18003	7214923	620876	309	173	2018
SKL18004	7214539	621074	296	185	2018
SKL18005	7214685	621236	292	128	2018
SKL18006	7215546	620690	319	77	2018
SKL18007	7215547	620690	319	189	2018
SKL18008	7215122	620098	294	1154	2018
SKL18009	7214603	621206	293	152	2018

10.2 Drilling Methodology

The list below outlines the procedure followed during the drilling programs covered by this item (slightly modified from the Barsele Minerals website):

- AE Sweden geologists lay out drill-hole locations in the field. AE Sweden staff supervise pad construction (and later reclamation). Fore-sight/back-sight markers are set to align the direction of drilling;
- Drilling is conducted by ADC Drilling Company of Rovaniemi, Finland, and Kati Drilling of Rautio, Finland. The drills are track-mounted rigs, capable of drilling to 2,000 m. The diamond drill core is NQ2 size, which provides a large sample, as recommended for the testing of precious metal deposits. Oriented core measurements are done every 3 m;
- Down-hole surveys are conducted at 3-m to 5-m intervals along the drill hole using a GyroSmart or Deviflex survey device, or similar unit, to measure the azimuth and dip of the hole;
- The driller is responsible for ensuring that the core is placed in boxes in the correct order, and for marking the length on tags after each rod-length of core. This step is supervised by the on-duty project geologist;
- After each drill shift, the drillers deliver the core to the AEM core logging facility in the nearby town of Storuman;
- Boxes are then laid out on logging tables and checked to make sure that the core is continuous and in the right order in each box;
- Oriented core is routinely done at the start of each rod run. If oriented marks are present on the core, it is aligned in a 4 m core tray holder so the oriented mark can

be fully drawn with arrows indicating the downhole direction. It is always the down (lower) side of the core that is marked;

- The metres are marked by a technician or a geologist on the boxes with blue marker. If core loss occurred, it is systematically marked on the box;
- Measurements of core are taken to determine drill core recovery percentages;
- The boundaries of sections with significantly different rock quality are marked with a green marker on the core boxes. The proportions of core fragments shorter than 10 cm in length are determined for each section to obtain an RQD value. The total length of fragments shorter than 10 cm is recorded, the number of naturally occurring fractures in each section are counted, and if core loss occurs this is also entered in the RQD log that automatically calculates the RQD value for the section. Core recovery percentages are calculated over the same sections;
- All core boxes are then clearly labelled with “from” and “to” lengths in metres;
- Susceptibility measurements are taken at every metre mark along the hole;
- Geological logging is then performed, with the following features recorded in Fusion software:
    - Lithological boundaries
    - Grain size and texture
    - Rock color
    - Alteration type and strength
    - Sulphide type and amount
    - Structural features (e.g., foliation, shearing, brecciation, faulting) and strength
    - Vein type, width and density
    - Alpha and beta angles of features (if core is oriented)
- Sampling intervals are marked with a red marker. Sample boundaries respect lithological boundaries and/or major changes in alteration/mineralization. Sample numbers are written on the core boxes corresponding to the pre-printed sample tags placed in the box for each sample interval;
- A photographic record, both dry and wet, is made for every core box and and stored on the computer and an external backup drive.

Figure 10.1 – Photography of marked drill core following the logging and sampling procedure established by AE Sweden at the Storuman core logging facility (Höglund, 2018a)

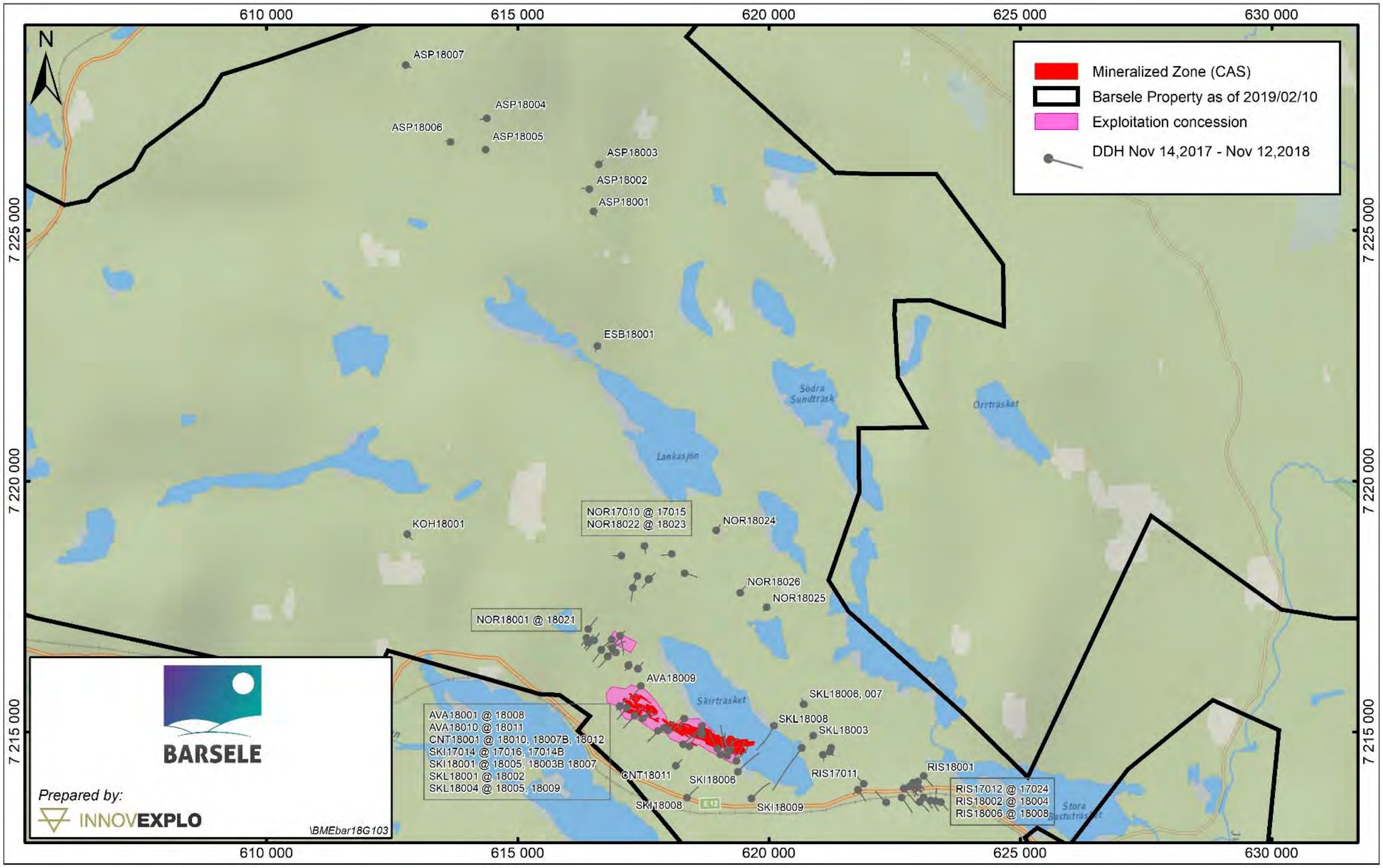


Figure 10.2 – Distribution of drill holes on the Barsele Property in relation to the mineralized zones involved in the current 2019 MRE

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

This item pertains to AEM's sample preparation, analysis and security procedures for the diamond drill holes between November 14, 2017 and November 12, 2018; that is, the drill holes considered in the current resource estimate. The information was taken from the Barsele QA/QC protocol (Höglund, 2018a). InnovExplo reviewed the QA/QC procedures and results for the holes drilled during the time window mentioned above. The reader is referred to Pelletier and Richard (2018) for details on the 2015, 2016 and 2017 programs.

11.1 Core Handling, Sampling and Security

11.1.1 At the core logging facility

As mentioned in section 10.2, core boxes are delivered after each shift at AE Sweden logging facility. Drill core is logged and sampled by experienced geologists or by a geologist-in-training under the supervision of a qualified geologist. Samples usually range from 0.5 m to 1.5 m in length (mainly 1.0 m long) and sample contacts respect lithological contacts as well as changes in the appearance of mineralization or alteration (type and/or strength). Sample numbers are written on the sampled core intervals corresponding to pre-printed sample tags for each interval.

11.1.2 Sample preparation

- An AEM geologist or technician emails the sawing list in "xlsx" and "pdf" format and prints out shipping/batch numbers on paper to be included with the pallet shipped to the MS Analytical facilities of A2 Global ("MS Analytical") as they are responsible for core cutting;
- The core boxes are then moved from the logging facility to the MS Analytical core sample preparation area in Storuman;
- MS Analytical pre-labels sample bags with bar coded tags containing information about; client, sample type, sample number, position in the sampling sequence and batch number;
- Sawing is done with an automated NTT Coresaw; one box row is sawed at a time and half the core is placed in its respective sample bag along with an AEM sample tag. If oriented core is sawed, the part with the orientation line remains in the box and the other half is sent to the laboratory;
- SG measurements are done after sawing;
- Commercial geostandard samples, blank sample of barren rock or duplicate sample, are inserted every 10^{th} sample as an analytical check for laboratory batches. These geostandards represent a range of values for gold;
- Sample bags are then closed and packed in large wooden shipping crates. These crates are labelled with the batch number and the company name. The laboratory instruction sheet is placed in crate #1 of each sampling batch;
- The remaining half of the drill core is transported to a secure core storage facility;
- AEM personnel move the crates with the half core samples from the MS Analytical core sample preparation area in Storuman. Thereafter an external transport company

(Karlssons Åkeri AB) transports them to the ALS Laboratory ("ALS") in Malå, Sweden;

- From this point onward, ALS takes responsibility for the samples. This is where the samples are crushed and a sub-sample is pulverized. The pulverized pulp is placed in kraft sample bags and the un-pulverized portions are returned to the original sample bags;
- ALS ships the remainder of the crushed samples, referred to as sample rejects, back to Storuman for storage. The sample rejects are thus available for re-testing when required. The sample pulps are shipped to ALS in Romania for gold analysis, and to Ireland for multi-element ICP analysis;
- In Ireland, the sample pulps are analyzed by ICP-AES (ME-MS61) for 48 elements and gold is tested by fire assay with AAS or gravimetric finish depending on the grade (Au-AA24 and Au-GRA22). Each method has a lower and upper calibration range for which results are accurately determined;
- Samples returning grades above the method limit are assayed with the over-limit method ME-062 for Ag, Cu, Pb and Zn;
- ALS puts in 2 standards and 3 duplicates for every 35 sample runs. Check assay samples are done if any of these in-house standards fail, or if some other deviations are observed (e.g., an individual high-grade sample occurs or contamination is suspected).

Approximately 10% of assays are also sent to MS Analytical in Langley, British Columbia (Canada) for secondary laboratory check assays.

11.1.3 QA/QC and database compilation at Barsele Minerals in Sweden

- Results are tabulated on spreadsheets and emailed to AEM geologists. Originals of the assay certificates are sent as PDF files and the certificates are printed out and stored on location in Storuman;
- Upon receiving completed analytical results, geologists then extract the duplicate and standard samples to compare the expected values versus tested values;
- The spreadsheet information for drill hole samples is then matched with sampling intervals and geological observations for interpretation;
- Results of the merged data are then sent to AEM management, along with a statement of the QA/QC acceptability of the analytical batch, for inclusion into the project database.

Once verified by AEM, Barsele Minerals management periodically prepares news releases to publicly disclose NI 43-101 compliant drilling data. A QP signs off on news releases containing technical data.

11.2 Analytical methods (ALS Minerals and MS Analytical)

Table 11.1 lists the methods used for the Project at the primary laboratory, ALS Minerals.

On July 6, 2018, AE Sweden changed the fine crushing method from -70% <2mm (CRU-31) to -85% <2mm (CRU-36). The change was based on the outcome of a study on 60 samples reported to contain visible gold during core logging. The purpose of the study was to compare the assay results between the current preparation and assay method for gold (AU-AA24) with metallic screen (Au-SCR24) and cyanide leach (Au-

AA15). Although results from all 3 methods were “more or less the same” (Höglund, 2018b), substantial gold was, sometimes, left in the metallic screen +fraction. It was concluded that one way to potentially upgrade the assay protocol and to lower the amount of +fraction material was to use the CRU-36 crushing method instead of CRU-31.

Table 11.1 – ALS analytical methods

Preparation	**Description**
WEI-21	Received Sample Weight
CRU-QC	Crushing QC test
PUL-QC	Pulverizing QC test
DRY-21	High temperature drying of wet samples in drying oven
LOG-22	Log sample in tracking system, barcode and weight
Log-24	Pulp login – Rcd w/o BarCode
GRU 36	Fine crushing -85%<2mm (changed on the 6th of July 2018 from CRU-31 to CRU-36)
SPL-21	Split sample using riffle splitter
PUL-32b	Pulverizing 1kg sample >95% passing 75µm
Assay method	Description
Au-AA24	Au Fire Assay – AA on 50g; above 3ppm Au Fire Assay – Gravimetric
Au-GRA22	Au by fire assay and gravimetric finish. 50g nominal sample weight
ME-MS61	48 elements for acid ICP-MS (four acid digestion)
ME-O62	Default over limit methods for Ag-OG62, Cu-OG62, Pb-OG62, Zn-OG62
ME-ICP41	35 elements Aqua Regia ICP-AES
ME-0G46	Default over limit methods for Ag-OG46, Cu-OG46, Pb-OG46, Zn-OG46
OA-GRA08	Specific gravity of core sample

Two different multi-element options, ME-MS61 or ME-ICP41, can be used with their associated over-limit methods. ME-MS61 and ME-O62 are known as the SWED-Edh6 package, and ME-ICP41 and ME-OG46 are the SWED-Edh7 package.

shows the methods used for the Barsele check-assay at the secondary laboratory, MS Analytical Services.

Table 11.2 shows the methods used for the Barsele check-assay at the secondary laboratory, MS Analytical Services.

Table 11.2 – MS-Analytical Services analytical methods

Preparation	**Description**
PLG-100	Log sample received as pulp
Assay method	Description
FAS-121	Au (0.005-10ppm) by fire assay (50g nominal sample weight), aqua regia digest and analysis by AAS

Preparation	Description
FAS-425	Over limit analysis – Au (0.5-1000ppm) by fire assay (50g nominal sample weight) and gravimetric finish. Used for Au over limits >3ppm from method FAS-121

The pulps are also homogenized at either the ALS preparation laboratory in Piteå, Sweden or the MS Analytical preparation laboratory in Storuman before sending a 150 g split of the pulp sample to MS Analytical for the check-assay.

11.3 Laboratory Preparation and Assays

The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) form the specialized system for worldwide standardization. ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories sets out the criteria for laboratories wishing to demonstrate that they are technically competent, operating an effective quality system, and able to generate technically valid calibration and test results. The standard forms the basis for the accreditation of competence of laboratories by accreditation bodies. ISO 9001 applies to management support, procedures, internal audits and corrective actions. It provides a framework for existing quality functions and procedures.

For the drilling program, the ALS Minerals sample preparation facilities (Roşia Montană in Romania and Loughrea in Ireland) were used. Both facilities received ISO/IEC 17025:2017 accreditation. Both laboratories are commercial laboratories independent of Barsele Minerals and neither has an interest in the Project.

11.4 Quality Control and Quality Assurance (QA/QC)

The drill core quality control program established by AEM includes the insertion of blanks, standards (certified reference material) and duplicates in the flow stream of core samples. QA/QC sample locations are predetermined.

QA/QC reference samples are numbered with same core sample ID series (e.g., for Barsele SEEXD). Standards have been used since AEM has been the project operator. One of three different gold standards: low-, moderate- and high grade or one blank sample has been inserted in the sample sequence. Since mid-December 2015 (since batch E15535), a coarse reject duplicate (previous sample in the sequence is the mother sample) is also inserted into the sample sequence. Since September 13, 2016 (batch E16583) a field duplicate is also part of the QA/QC protocol. This field duplicate sample gets its own sample number and is the ¼ core sample of the previous sample, leaving a ¼ core as a reference sample in the core box instead of ½ core. Only gold is assayed on field duplicates, no multi-element suites.

Every 30th sample is a field duplicate and each 10th sample in between is either one of three standards a blank sample or a coarse reject duplicate.

ALS puts in two standards and three duplicates for every 35 sample runs. Check assay samples are done if any of these in-house standards fails or if some other deviations are observed such as individual high-grade sample occur or if contamination is suspected.

The tolerance levels used by ALS are:

- Au-AA24: 10% and 6% for the CRM (certified reference material);
- ME-MS61: 10% for each element except for Ba (15%), Cu (7%), Sb (15%), Tl (15%), W (15%) and the same tolerance levels for the CRMs.

11.4.1 Certified reference materials (standards)

For gold mineralization, three different CRMs are used (low, moderate, high-grade) and for VMS-type mineralization, three other CRMs are used (low, moderate, high-grade). The CRM used for VMS-type mineralization is certified for five elements: Au, Ag, Cu, Pb and Zn.

InnovExplo has validated the results of the CRMs used by AEM for the drilling program of November 2017 to November 2018 on the Project. Of the 1,342 CRM inserted, 15 failed, resulting in 98.9% passing the quality control (InnovExplo is of the opinion that AEM's QC procedure of using blanks to monitor contamination in drilling programs is valid and the data reliable.

Table 11.3).

InnovExplo is of the opinion that AEM's QC procedure of using blanks to monitor contamination in drilling programs is valid and the data reliable.

Table 11.3 – Gold results for standards used by AEM between November 14, 2017 and November 12, 2018.

CRM Type	Laboratory	Quantity Inserted	Accuracy %	Precision %	Outliers	Gross Outliers	% passing QC
Au-LG	ALS	340	1.3	3.8	5	0	98.5
Au-MG	ALS	430	1.6	3.6	0	0	100.0
Au-HG	ALS	377	0.1	2.5	0	0	100.0
Au-LG(2)	ALS	86	0.5	3.1	9	0	89.5
VMS-LG	ALS	46	-0.2	3.0	1	0	97.8
VMS(MG)	ALS	32	-1.2	1.0	0	0	100.0
VMS-MG(2)	ALS	2	-1.4	3.8	0	0	100.0
VMS-HG	ALS	29	-0.3	2.4	0	0	100.0

(LG=Low grade; MG=Moderate grade; HG=High grade. Au-LG2 replaced Au-LG when the CRM became unavailable. VMS-MG(2) replaced VMS-MG when the CRM became unavailable).

11.4.2 Blank samples

The blank rock material originates from an olivine diabase quarry in Finland. The composition has been studied by the Geological Survey of Finland (2012) and 10 new samples were sent to Actlabs in Finland for assaying in September 2015. All samples returned gold grades below detection limit <5 ppb Au (Höglund, 2018b). The fist-sized rocks from the quarry are packed in a numbered sample bag together with an AE Sweden barcoded sample tag. Contamination is monitored by the routine insertion of a barren sample (blank) which goes through the same sample preparation and analytical procedures as the core samples. The blanks are submitted with samples for crushing and pulverizing to determine if there has been contamination or sample cross-contamination in preparation. Elevated values for blanks may also indicate sources of contamination in the fire assay procedure (contaminated reagents or crucibles) or sample solution carry-over during instrumental finish. Of the 490 analyzed blank samples, one (1) returned a grade above the maximum accepted value of three times the detection limit (0.015 ppm; Figure 11.1).

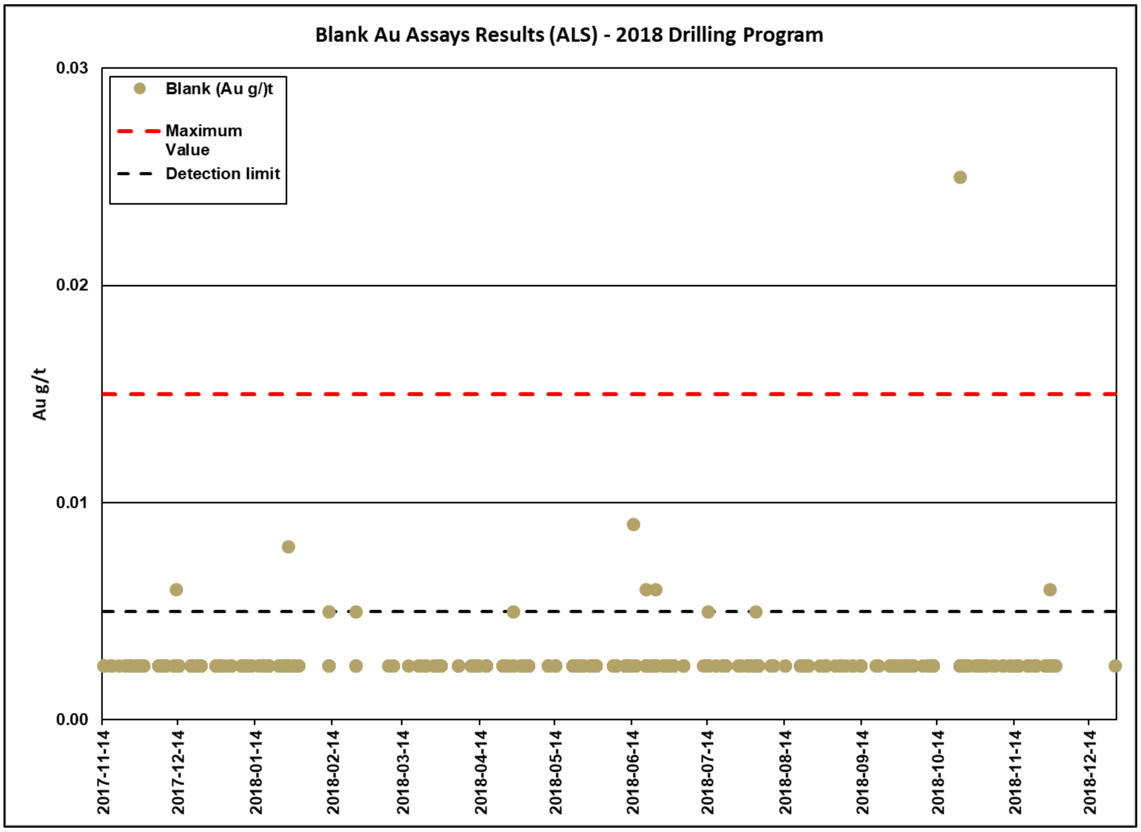


Figure 11.1 – Results for blanks (n=490) used by AEM during the 2018 drilling program on the Barsele Gold Project

11.4.3 Duplicates

11.4.3.1 Coarse reject duplicates

Coarse-reject duplicate samples are prepared from original samples by splitting the crushed sample into two equal samples, which are then pulverized and analyzed separately. Duplicate samples were introduced on February 15, 2016 to the QA/QC protocol. For the current period a total of 432 coarse-reject samples have been assayed. Repeatability has been good with R^2 = 0.939 (Figure 11.2).

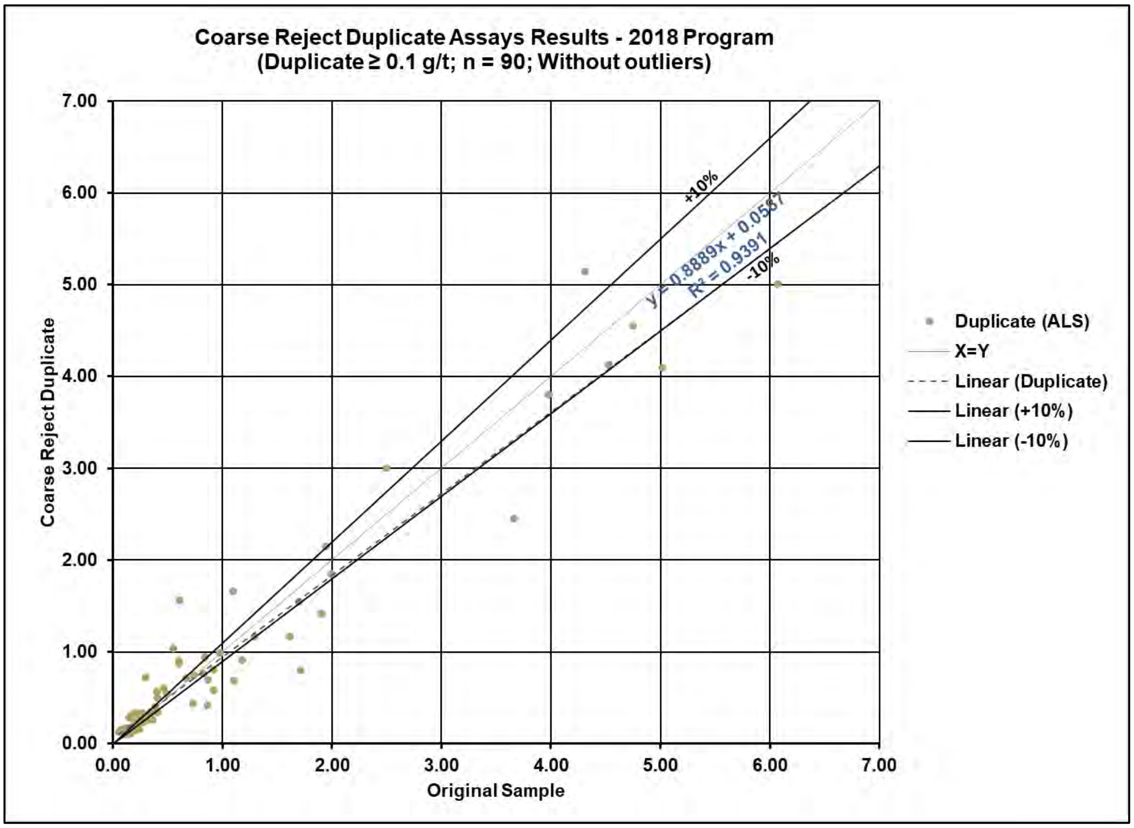


Figure 11.2 – Linear graph comparing original samples and coarse reject duplicate samples above 0.1 g/t (n=90) on holes drilled between November 14, 2017 and November 12, 2018

11.4.3.2 Field duplicates

Field duplicate sample are taken every 30th sample and sent for assaying) . For the period, a total of 1,032 field duplicate samples have been assayed. Repeatability has been moderate with R2 = 0.679. This field duplicate sample gets its own sample number and is ¼ core sample of the previous sample. That means that ¼ core is left as a reference sample in the core box instead of ½ core. According to AE Sweden, the lower R2 value and the difference in basic statistics can be expected in field duplicates since the Barsele deposit contains free visible gold (Figure 11.3). InnovExplo agrees with this statement. The moderate repeatability shows that gold distribution in the core is heterogenous.

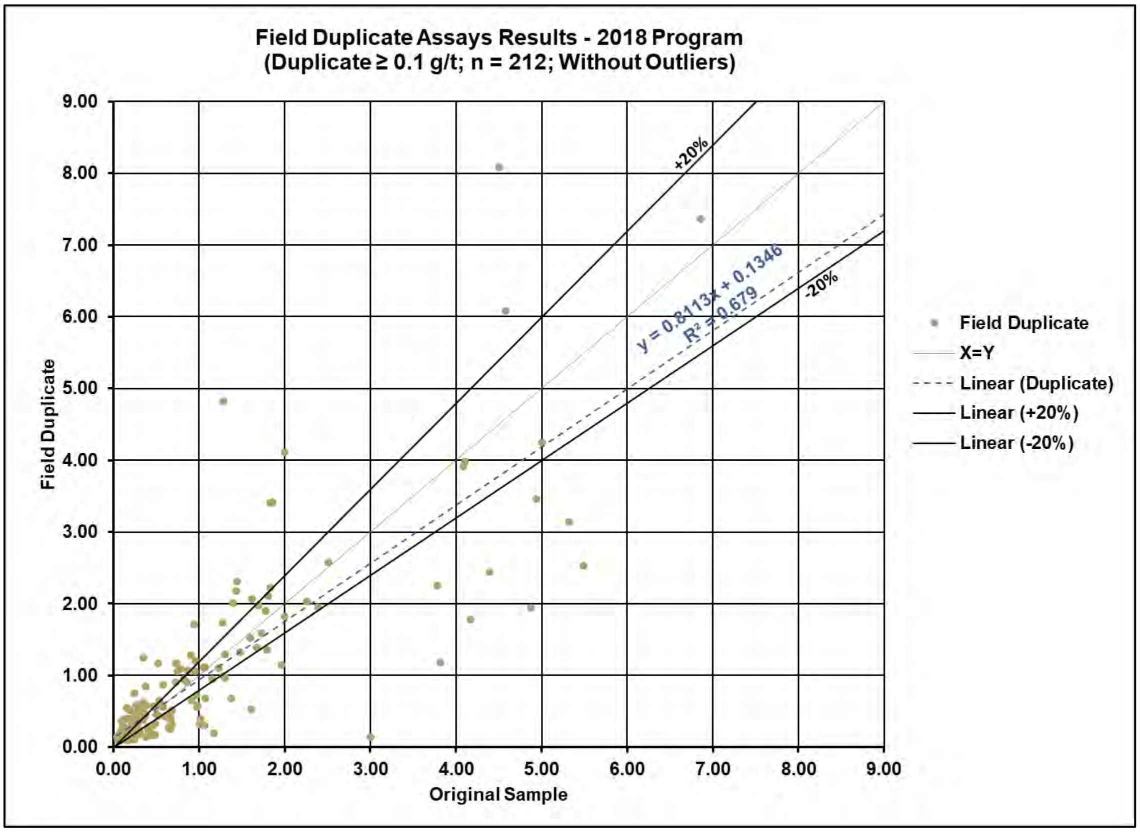


Figure 11.3 – Linear graph comparing original samples and field duplicate samples above 0.1 g/t (n=212) on holes drilled between November 14, 2017 and November 12, 2018

11.4.4 Check assays

Check assays are part of AEM's QA/QC protocol. For the perio d, a total of 3,582 samples analyzed by the AA24 method (including standards, blanks and duplicates) were sent to the secondary laboratory (MS Analytical) for check assays (Figure 11.4). Repeatability has been good with $R^2 = 0.9517$. A total of 94 samples from the GRA22 method were sent to MS Analytical (Figure 11.5). Repeatability has been good with $R^2 = 0.9998$.

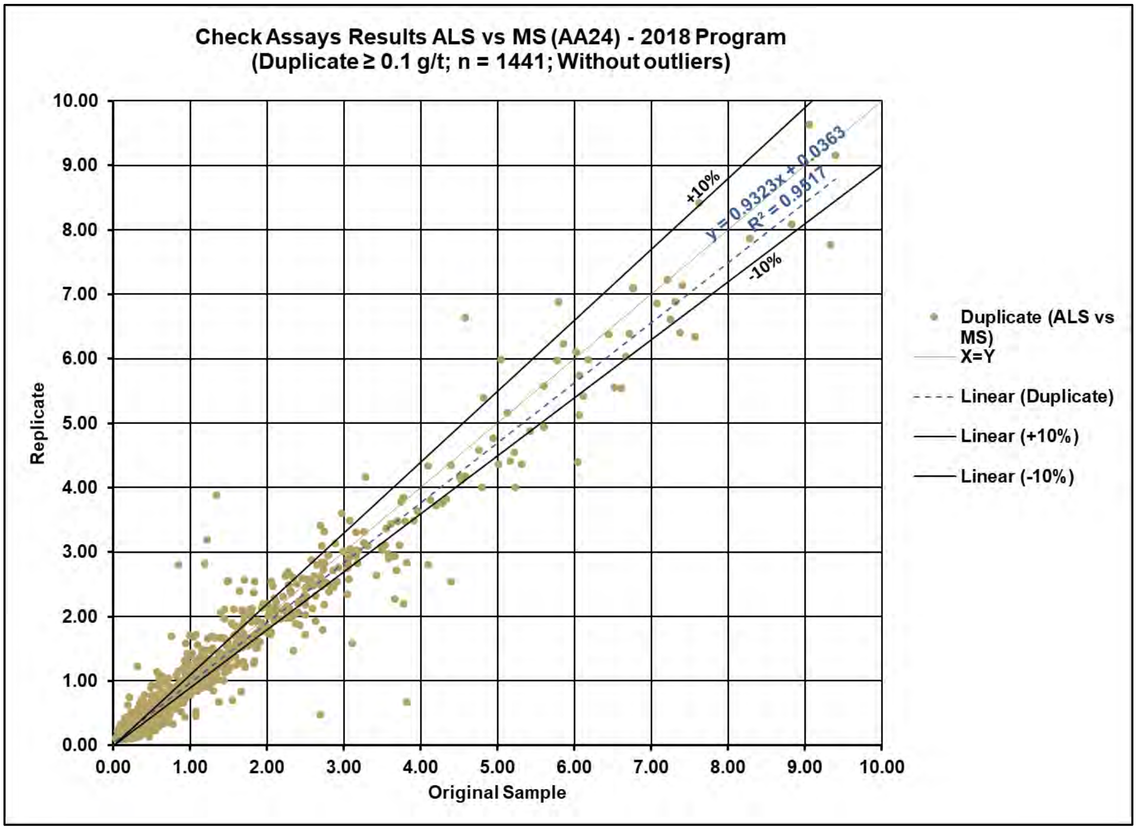


Figure 11.4 – Linear graph comparing original samples (ALS) and check assays (MS Analytical) above 0.1 g/t (n=1,441) on holes drilled between November 14, 2017 and November 12, 2018

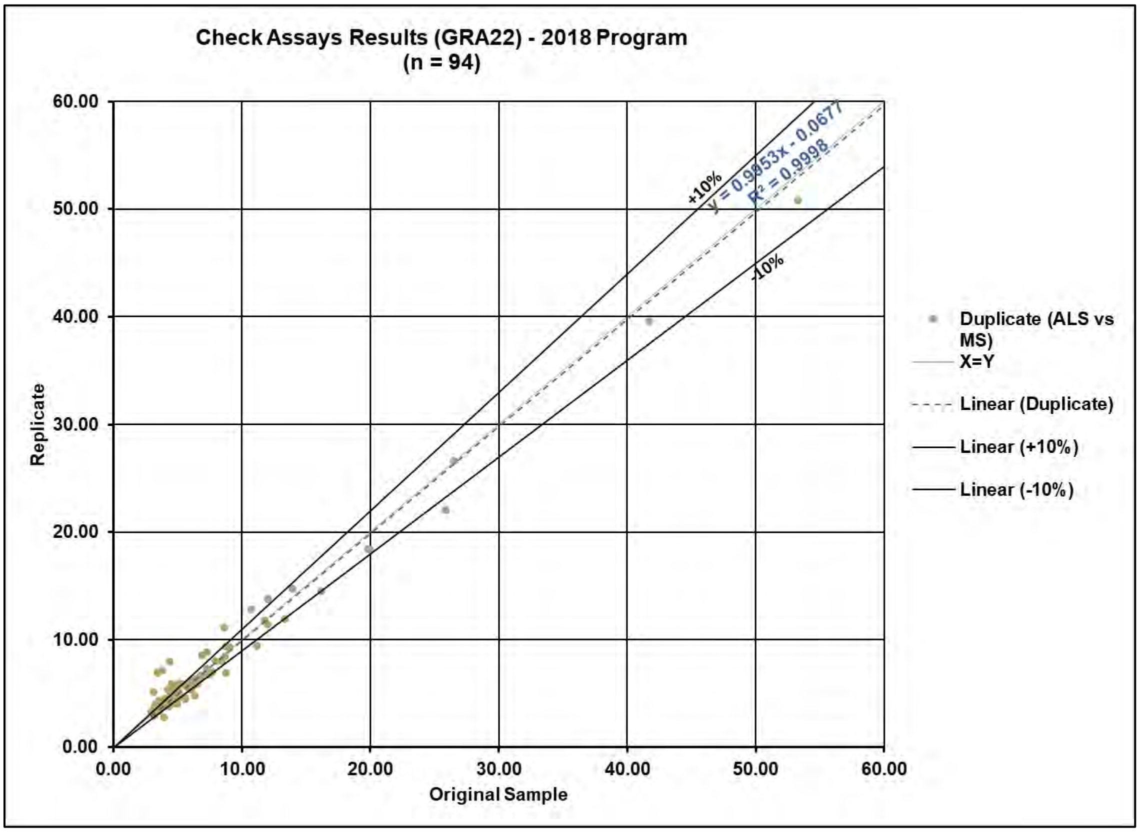


Figure 11.5 – Linear graph comparing original samples (ALS) and check assays (MS Analytical) for the GRA22 method (n=94) on holes drilled between November 14, 2017 and November 12, 2018

11.4.5 Agnico Eagle Sweden QA/QC review

Control charts are created in Fusion when the geologist is importing the assay results. If any of the standards or the blank results fail (= outside ±2SD) these are logged into a table called "Failed-batches" (see appendix 5). The geologist reports this to the project manager Kåre Höglund who decides case by case if any action is to be taken; e.g., a) no action needed, b) part of batch re-assayed or c) re-assaying of entire batch is required. If two or more standards in a batch are clearly outside the ±2SD then selected parts of the batch or the entire batch are re-assayed if no other logical explanation is found to the outliers. No action has been taken on batches that have had 1-2 failed standards returning grades just at the margin of the upper or lower ±2SD limits.

11.5 InnovExplo Opinion

InnovExplo is of the opinion that the sample preparation, analysis, QA/QC and security protocols used for the Project follow generally accepted industry standards (Rafini, 2013), and that the data is valid and of sufficient quality to be used for mineral resource estimation.

12. DATA VERIFICATION

The co-author, Carl Pelletier, P.Geo., visited the Property from October 29 to October 31, 2018, accompanied by Art Freeze, P.Geo., for Barsele Minerals. During the site visit, the co-author examined the logging facilities, reviewed the drill core and collar locations, and held many discussions with on-site geologists and technicians. Some of the data validation took place before and after the site visit.

The database provided by Barsele Minerals (the "Barsele database") contains 779 DDH, all from surface. This total includes 89 new drill holes (the 2017-2018 drilling program) completed since the database close-out date for the 2018 MRE (Pelletier & Richard, 2018).

Innovexplo's data verification is a review of drill hole collar locations, selected core intervals, gold assays, the QA/QC program, downhole surveys and the descriptions of lithologies, alteration and structures.

12.1 Historical Work

Historical work subject to verification consisted of the DDH included in the 2018 MRE (Richard et al., 2018). Basic cross-check routines were performed between the Barsele database and the previously validated database for the 2018 MRE (i.e., collar, down-hole surveys, assay field "Au"). Any discrepancies were corrected and incorporated into the current resource database.

12.2 Barsele Database

12.2.1 Drill hole location

Every collar on the deposit was surveyed by an AEM technician using a Trimble Geo7x high precision GPS.

Drilling was underway when the author visited the site (Figure 12.1).

The author was able to confirm the location of many casings using a handheld GPS during the site visit. Good accuracy was obtained when the onsite readings were compared to the coordinates in the GEMS database (Figure 12.2). The database of collar locations is considered adequate and reliable.

Project coordinates are in SWEREF99.

Figure 12.1 – Photograph of drill rig visited by the author during the site visit

Figure 12.2 – Examples of onsite collar location verification

12.2.2 Downhole survey

Downhole surveys were conducted on the majority of the holes. Most recent drill holes (2015-2018) had DeviFlex and DeviShot multi-shots taken every 3, 4 or 5 m. For drilling programs before 2015, measurements were generally taken every 4 metres.

The survey information was verified for 5% of the 2017-2018 drilling program. Any discrepancies found were corrected and incorporated into the current resource database.

12.3 Assays

InnovExplo was granted access to the assay certificates for all requested drill holes. The reviewed holes represent 5% of the 2017-2018 drilling program. Very few errors were noted in the database, and these were considered minor and of the type normally encountered in a project database.

None of the observed errors would affect the integrity of the database and it is considered to be of very good overall quality. InnovExplo considers the database for the Project to be valid and reliable.

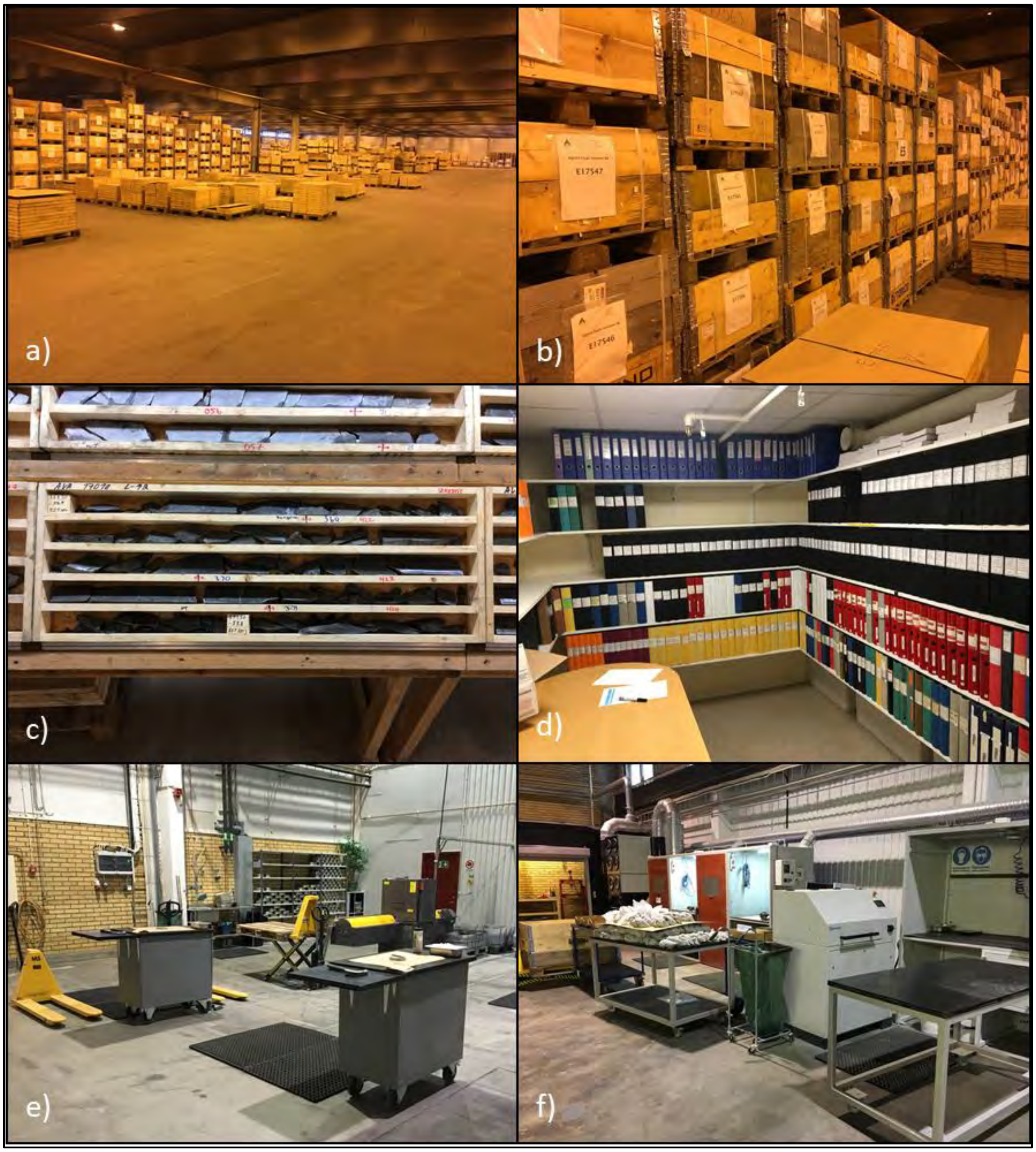
12.4 Mined Out Voids

No underground or open-pit historical depletions are present on the Project.

12.5 Logging, Sampling and Assaying Procedures

The author reviewed several mineralized core sections while visiting the core storage facility in the vicinity of the property (Figure 12.3). All core boxes were labelled and properly stored outside. Sample tags were still present in the boxes and it was possible to validate sample numbers and confirm the presence of mineralization in half-core reference samples from the mineralized zones. QA/QC samples were clearly identified.

The author reviewed the entire path taken by the drill core, from the drill rig to the logging and sampling facility, it was deemed adequate. Core sample lengths were also reviewed.



A and B) Core storage building; C) Proper labelling of the drill core boxes; D) Assay certificate records storage; E) Sawing facility; F) Sampling facility

Figure 12.3 – Observations made during a core review, site visit of October 2018

12.6 Conclusions

Overall, InnovExplo is of the opinion that the data verification process demonstrates the validity of the data and protocols for the Project. InnovExplo considers the database to be valid and of sufficient quality to be used for the mineral resource estimate herein.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

The information on the test work done before the JV with AEM presented in this section was obtained from the June 2015 NI 43-101 report by Giroux et al. (2015).

In 1992, Terra Mining completed a number of copper and zinc flotation tests from a large bulk sample of Norra mineralization (sample size unknown) at the Boliden plant. The specific gravity used in the Norra model was derived from this bulk-test conducted by Boliden for Terra Mining in 1992. The conclusions derived from this test are from Noren and Bolin (1992) as presented in Giroux et al. (2015):

- A copper concentrate with a grade of 16.5% Cu and a copper recovery of 78% is possible to produce. The gold recovery to this concentrate is low (32%) and at the same time there is a selectivity problem towards arsenopyrite. The selectivity copper-arsenopyrite is improved when dextrin is added in the flotation;
- A zinc concentrate with a grade of 50% Zn grade and a zinc recovery of 75% is possible. The low zinc grade is caused by co-floating arsenopyrite;
- The results for gold indicate that a high percentage of gold content is included in arsenopyrite and thereby difficult to recover with good economy.

The Norra V-HMS style of mineralization is not the primary focus of future exploration programs.

As far as InnovExplo is aware, the only other mineralogical or metallurgical studies before 2004 are summarized in a report by Barry et al. (2006) and reproduced in Giroux et al. (2015):

- In 1995, Anamet Services in Bristol, England carried out mineralogical and preliminary metallurgical testwork on a 1,000-kilogram split of a 100-ton bulk sample of mineralized rock [collected by Terra Mining personnel] excavated from a trench at the northwestern part of the Barsele Central Zone (Reynolds, 1996);
- The gold mineralization predominantly consists of particles of electrum (natural alloy of gold and silver), ranging up to 160 microns but rarely exceeding 15 microns. Most of the electrum is present along grain boundaries within phyllosilicate-rich concentrations consisting of chlorite, biotite and sericite;
- Refractory gold content was about 8 percent by weight, mostly consisting of tiny inclusions of electrum encapsulated in arsenopyrite. Knelson gravity concentrator tests were not successful in generating satisfactory recoveries to produce commercially viable gold-concentrates. Energy requirements for grinding the mineralized material are predicted to be high – the Bond work index (Wi) determination carried out on minus 3.35-millimetre (mm) material yielded a Wi value of 14.5 kilowatt-hour/tonne;
- Direct cyanidation of samples wet ground to 80 percent passing 170 microns and 62 microns (after leaching for 24 hours) yielded gold dissolutions of 85.9 percent and 92.9 percent, respectively. Calculated cyanide consumptions were 0.84 kilograms/tonne (kg/t) and 1.41 kg/t, respectively;
- Direct cyanidation of samples crushed to pass 5.56 mm, 3.35 mm and 2.00 mm yielded gold dissolutions of 52.9 percent, 66.1 percent and 72 percent after 72 hours; calculated cyanide consumptions were 0.55 kg/t, 0.69 kg/t and 1.42 kg/t;

- The average head-grade of the sample was 5.1 g/t Au and 4.3 g/t Ag, and therefore significantly higher in grade and may not be representative of the Barsele Central Zone as a whole.

In 2004, as part of their QA/QC, Northland sent 21 drill core pulp samples from the Barsele Property, ranging in value from 1.12 g/t Au to 6.49 g/t Au, to ALS Chemex Vancouver for accelerated cyanide leach determination. The results indicated an average cyanide soluble recovery of 93.5%. An additional 11 pulp samples from the Property, ranging in value from 1.10 to 14.08 g/t Au, were analyzed by a similar method in 2005 by Omac Laboratories of Galway, Ireland. Results were similar, indicating 92% cyanide soluble recovery. Three bottle roll tests were conducted on prepared core by Kappes Cassidy in 2004 with an 86 indicated average recovery of 87%. Seven specific gravity determinations were completed by Golder and Associates on whole core from the Property in 2004. The results ranged from 2.71 to 2.75 with an arithmetic average of 2.73.

In 2017 AEM conducted tests on Master Composite (MC) and individual ore zones. The following text is extract from an internal AEM memorandum. Test work was conducted internally with the AEM Centre of Services and Development (CSD). First of all, the optimal conditions were developed with the master composite and then it was applied to each zone. The standard test procedure, which includes gravity concentration follow by cyanide leach of gravity tails and gravity concentrate.

Three process flowsheets were tested in phase II in the evaluation of gold recovery from the Barsele master composite sample (Table 13.1):

- Option 1: Whole ore leach;
- Option 2: Flotation followed by cyanidation of the flotation concentrate and flotation tailings;
  Option 3: Gravity gold recovery followed by cyanidation of the gravity tailings;

Table 13.1 – Barsele gold normalized gold extraction for each options

Process (options)	Grind size P80 μm	Calculated head grade g/t	Normalized extraction %	Cyanide consumption kg/t	Lime consumption kg/t	Tail grade
Whole rock cyanidation (option 1)	76	1.86	92.5	0.13	0.35	0.137
	85	1.68	91.5	0.12	0.49	0.153
	144	1.96	88.0	0.04	0.42	0.217
Flotation and cyanidation (option 2)	150	1.68	90.2	0.84	0.49	0.178
Continuous gravity and cyanidation (option 3)	150	1.92	92.5	0.51	0.54	0.136
	90	1.70	94.2	0.57	0.38	0.106

The option 3, the selected flowsheet (Figure 13.1) includes a pre-concentration step to produce a concentrate from the gravity process follow by regrinding the concentrate finer than 80% passing 35 microns to improve gold extraction. The gravity tailings are cyanide leach.

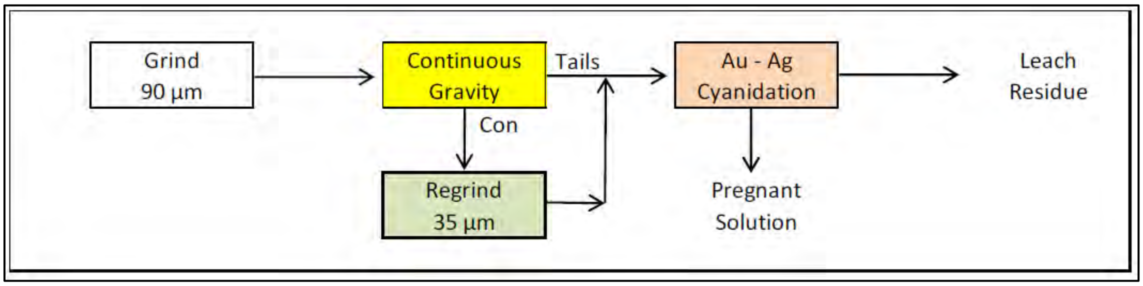


Figure 13.1 – Option 3 Flowsheet

A global gold recovery of 92.6 % has been estimated for the process. This value is based on assumptions made about the testwork results. The gold dissolution obtained in the test performed with the chosen flowsheet is applied individually on gravity concentrate and tailings streams. A gravity recovery of 60 % is used at industrial scale (Table 13.2).

Finally, a 99.5 % gold adsorption efficiency is estimated to account for liquid losses.

Table 13.2 – Gold and silver golbal recovery

Product	Weight %	Assays		Recovery	
		Au g/t	Ag g/t	% Au	% Ag
Mill feed	100.0	2.15	1.00	100.0	100.0
Gravity conc	8.40	15.4	10.0	60.0	84
Gravity conc leaching				57.8	75.6
Gravity conc leach residue	8.40	0.55	1.00	2.2	8.4
Gravity tails	91.6	0.94	0.17	40.0	16.0
Gravity tails leaching				35.2	10.4
Gravity tails leach residue	91.6	0.11	0.06	4.8	5.6
Final tails	100.0	0.16	0.31	7.4	31.2
Precious metal				92.6	68.8

14. MINERAL RESOURCE ESTIMATE

The Barsele Deposit Mineral Resource Estimate (the "2019 MRE") was prepared by Harold Brisson, P.Eng., and Carl Pelletier, P.Geo., using all available information. The resource area measures 2,700 m along strike and up to 450 m wide. Although resources are defined down to 900 m, the bulk of the resource is located in the first 600 m from surface. The 2019 MRE was based on a compilation of historical and recent diamond drill holes ("DDH"). The wireframed mineralized zones were used as provided by AEM after being reviewed and approved by InnovExplo.

The mineral resources herein are not mineral reserves as they do not have demonstrated economic viability. The result of this study is a single mineral resource estimate for three (3) mineralized zones (Avan, Central Skiråsen). The 2019 MRE includes Indicated and Inferred resources and is based on the assumption that the deposit will be developed and mined using a combination of open pit and underground (bulk, selective) methods.

The close-out date of the database is November 12, 2018 and the effective date of the estimate is February 21, 2019.

14.1 Methodology

The 2019 MRE was prepared using GEOVIA GEMS v.6.8 ("GEMS") software. GEMS was used for the grade estimation and block modelling. Basic statistics, capping, variography and validations were established using a combination of GEMS, Snowden Supervisor v.8.6 ("Supervisor"), Microsoft Excel and Access software.

The main steps in the methodology were as follows:

- Database validation for the diamond drill holes used in the mineral resource estimate;
- Review of the geological interpretation;
- Generation of drill hole intercepts for each mineralized zone;
- Basic statistics and capping study on assay data;
- Grade compositing;
- Variography;
- Block model creation;
- Grade interpolations;
- Validation of selected grade model;
- Resource categorization;
- Cut-off grade evaluation; and
- Final volumetric and official resource estimate table.

14.2 Drill Hole Database

The GEMS diamond drill hole database provided by Barsele Minerals (the "GEMS database") contains 779 surface DDH. As part of the current mandate, all holes were compiled and validated before the estimate was initiated, which led to 235 being discarded for various reasons (doubts about the collar location or the downhole survey measurements, pending assay results, type of hole, etc.). The validation process identified all holes intersecting mineralized zones, producing a final resource database of 349 DDH for 174,595 m of core drilled between 1989 and 2018.

All 349 holes include lithological descriptions taken from drill core logs. They cover the strike-length of the deposit at a variable drill spacing, ranging mostly from 15 to 120 m and averaging approximately 60 m.

In addition to the basic tables of raw data, the GEMS database includes several tables of wireframe solid intersections and the calculated drill hole composites required for statistical evaluation and resource block modelling.

InnovExplo's data verification included a site visit to the Project and a review of the logging and core storage facilities. It also included a review of selected core intervals, drill hole collar locations, assays, the QA/QC program, downhole surveys, and the descriptions of lithologies, alteration and structures.

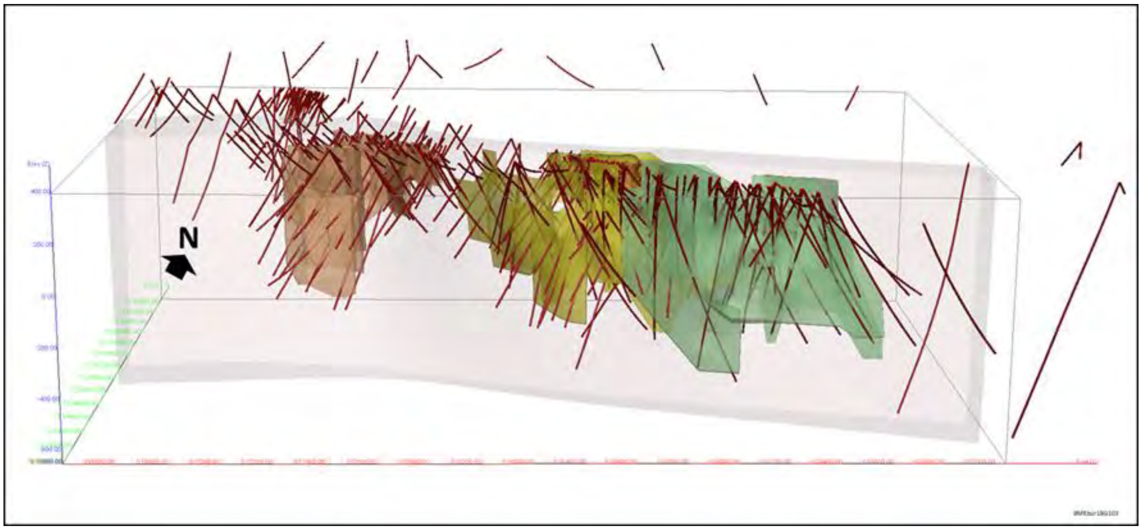


Figure 14.1 - 3D view of all drill holes used for the Barsele resource estimate. Coloured shapes represent mineralized zones

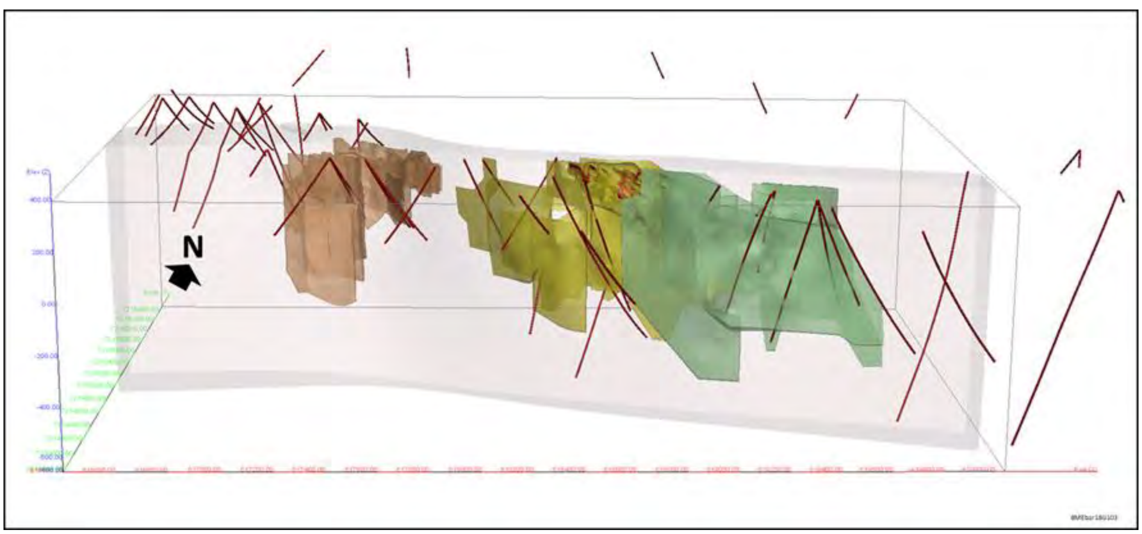


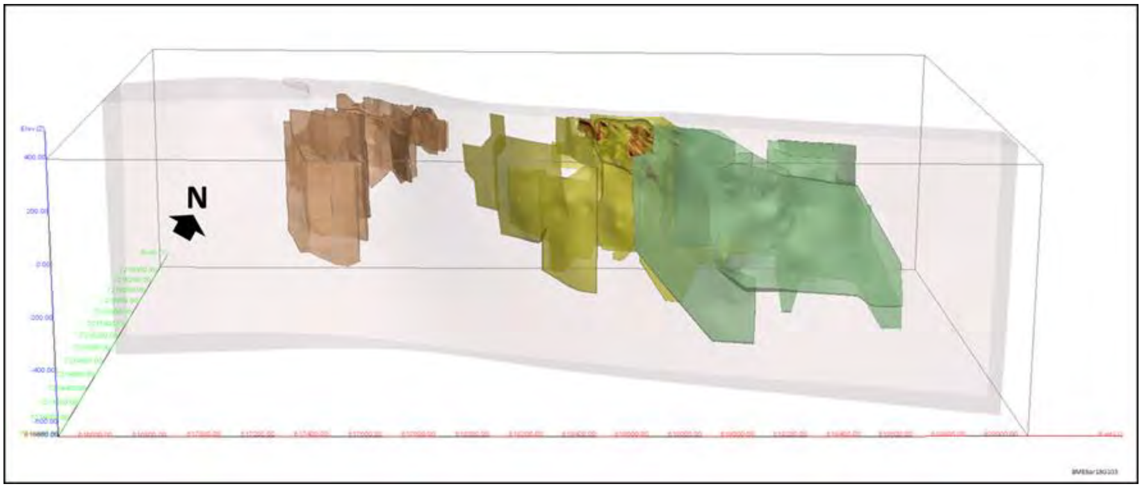
Figure 14.2 - 3D view of the 2018 drill holes used for the Barsele resource estimate. Coloured shapes represent mineralized zones

14.3 Interpretation of Mineralized Zones

The model for the mineralized zones uses 61 wireframes provided by AEM: 13 for Skiråsen D2, 1 for Skiråsen Bulk, 14 for Central D2, 10 for Central D3, 1 for Central Bulk, 22 for Avan D2, and 1 low-grade envelope. The wireframes honour the GEMS database with a minimum true thickness of 2.0 m. AEM used Surpac and Leapfrog to generate the wireframes. InnovExplo reviewed and approved the wireframes before using them for the 2019 MRE.

AEM also provided two surfaces for the topography and the overburden. These surfaces were generated from drill hole descriptions and survey information.

Figure 14.3 presents a 3D view of the mineralized model.



Orange = Avan; yellow = Central D2; red = Central D3; green = Skiråsen; pink = low-grade envelope

Figure 14.3 – 3D view of the mineralized model for the Barsele deposit, looking north with a slight plunge

14.4 High-grade Capping

For drill hole assay intervals that intersect interpreted mineralized-zone wireframes, codes were automatically attributed based on the name of the 3D wireframe, and these coded intercepts were used to analyze sample lengths and generate statistics for high-grade capping and compositing.

Basic univariate statistics were performed on the raw assay datasets for each mineralized zone.

The following criteria were used to decide if capping was warranted:

- The coefficient of variation of the assay population is above 2.5;
- The quantity of metal contained in the top 10% highest grade samples is above 40%, and/or the quantity of metal in the top 1% highest grade samples is higher than 10%;
- The probability plot of grade distribution show abnormal breaks or scattered points outside of the main distribution curve;
- The log normal distribution of grades shows erratic grade bins or distanced values from the main population.

The capping threshold decided for all zones is consistent with the combination of three criteria: 1) a break in the probability plot; 2) a coefficient of variation below 2.5 after capping and; 3) the total metal of the top 1% highest grade samples is below 20% after capping.

A total of 101 of the 86,976 raw assays from the mineralized zones were capped. Table 14.1 presents a summary of the statistical analysis for each dataset. Figure 14.4 to Figure 14.8 show graphs supporting the capping threshold decisions for the Avan, Central, and Skiråsen zones. Figure 14.9 shows graphs supporting the capping threshold decisions for the low-grade envelope.

Table 14.1 – Summary statistics for the raw assays by dataset

Zone	Zone Block Code	No. of Samples	Max. Grade (Au g/t)	Uncut Mean (Au g/t)	High Grade Capping (Au g/t)	No. of Cut Samples	Cut Samples (%)	Cut Mean (Au g/t)	CV	Metal Factor Loss (%)
Skiråsen	2000 to 2120	9,290	331	1.15	30	22	0.24	0.98	2.48	10.9
Central D3	4401 to 4410	4,233	71.7	1.69	None	0	0	1.69	1.95	0
Central D2	4010 to 4140	7,108	137.5	0.94	30	11	0.15	0.9	2.42	3.72
Central Bulk	4000	6,496	218	0.52	40	1	0.02	0.50	2.03	2.71
Avan	6040 to 6850	3,320	1,165	1.27	20	9	0.27	0.89	2.27	12.0
Low Grade	991	56,529	247	0.16	5	58	0.1	0.15	2.41	7.11

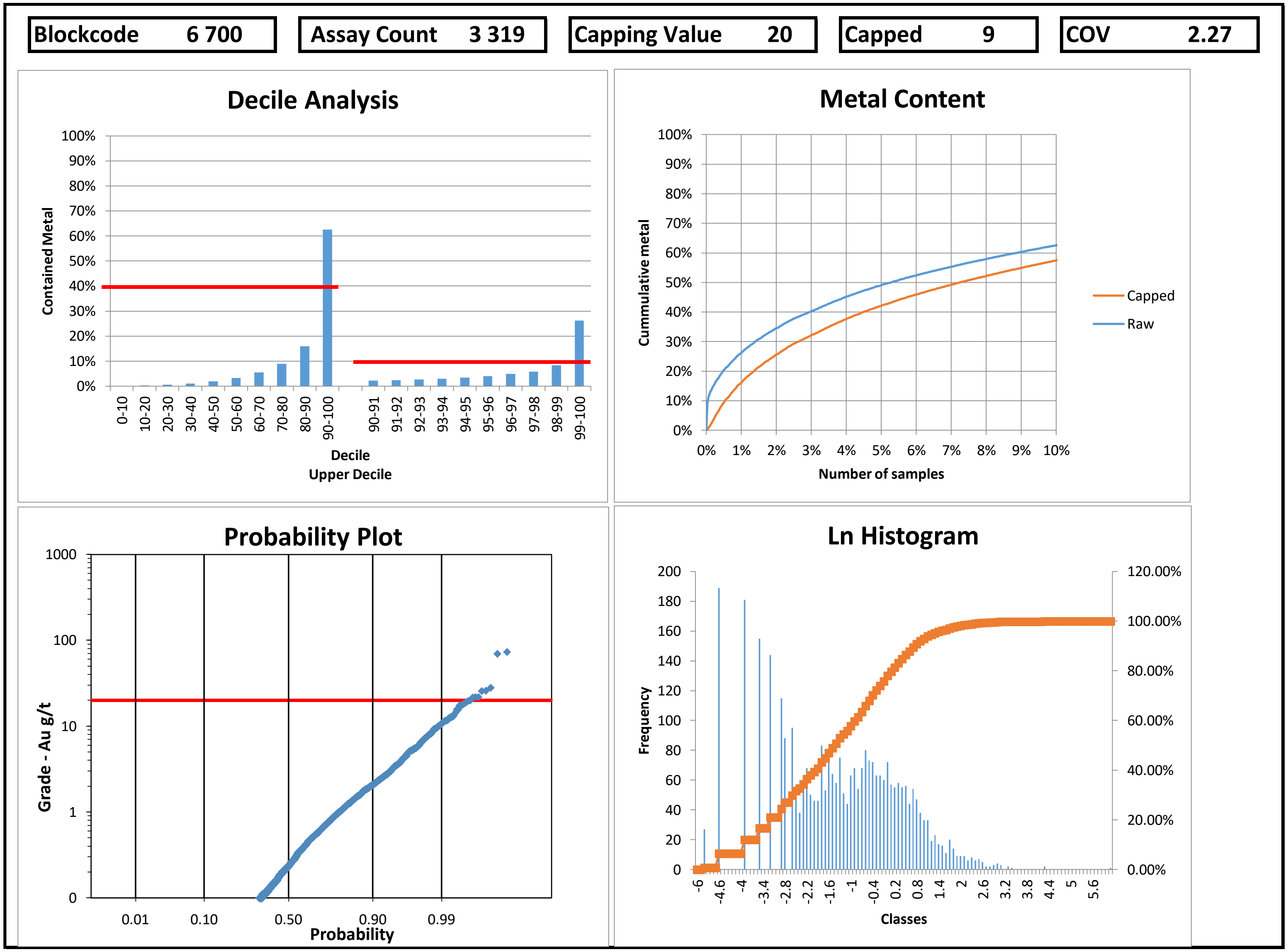


Figure 14.4 – Graphs supporting a capping grade of 20 g/t Au for the Avan Zone

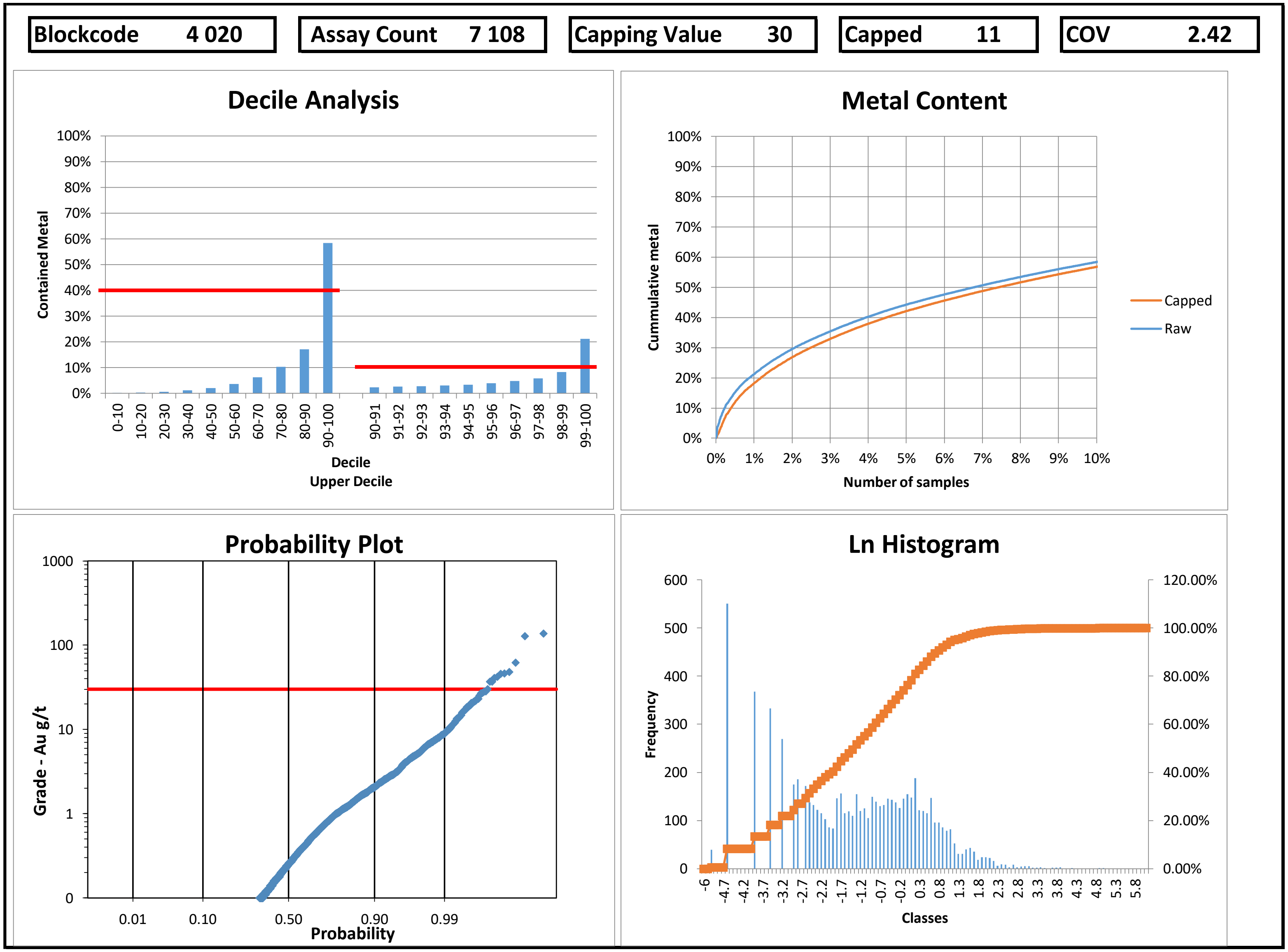


Figure 14.5 – Graphs supporting a capping grade of 30 g/t Au for the Central D2 Zone

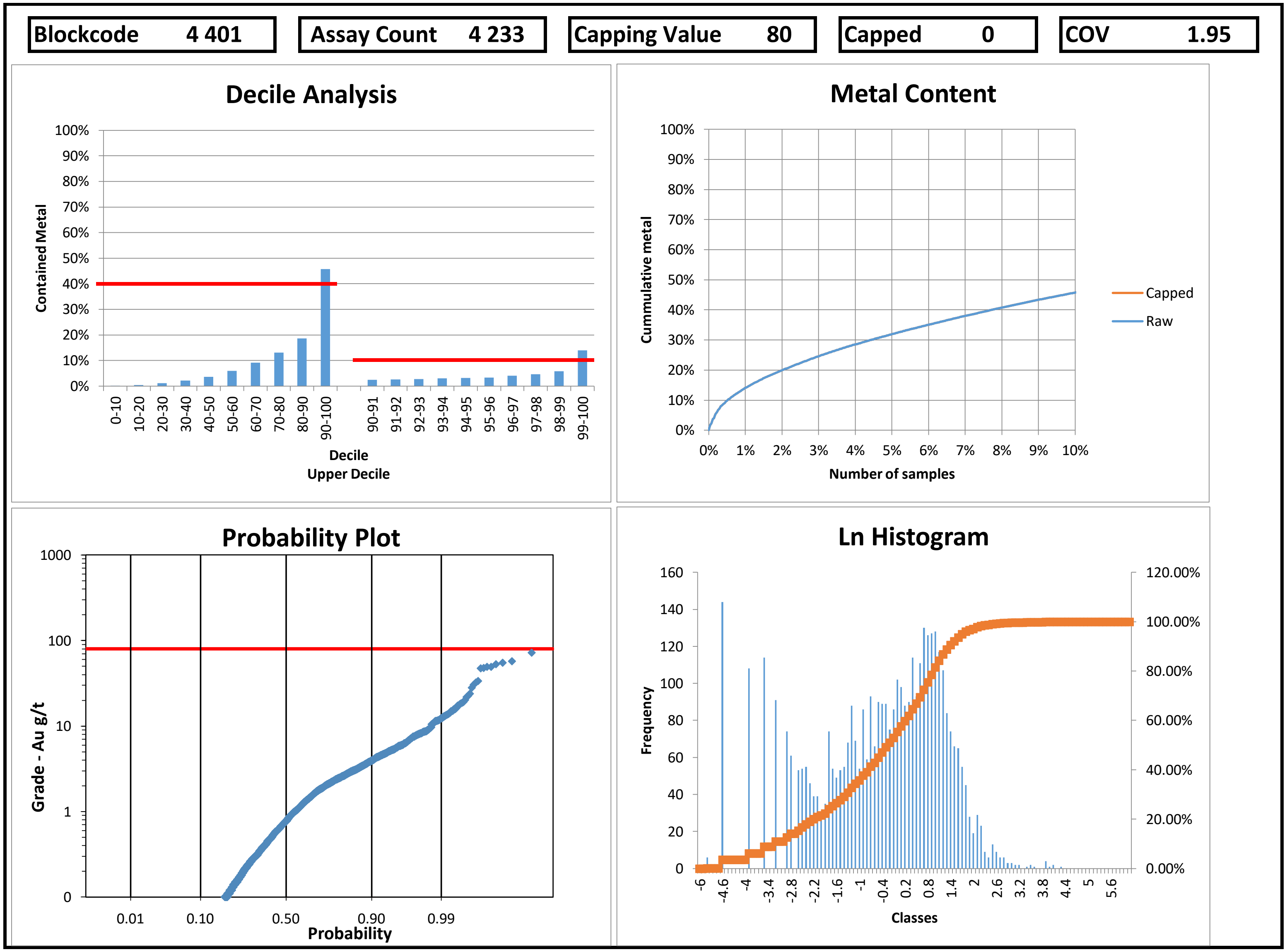


Figure 14.6 – Graphs supporting no capping for the Central D3 Zone

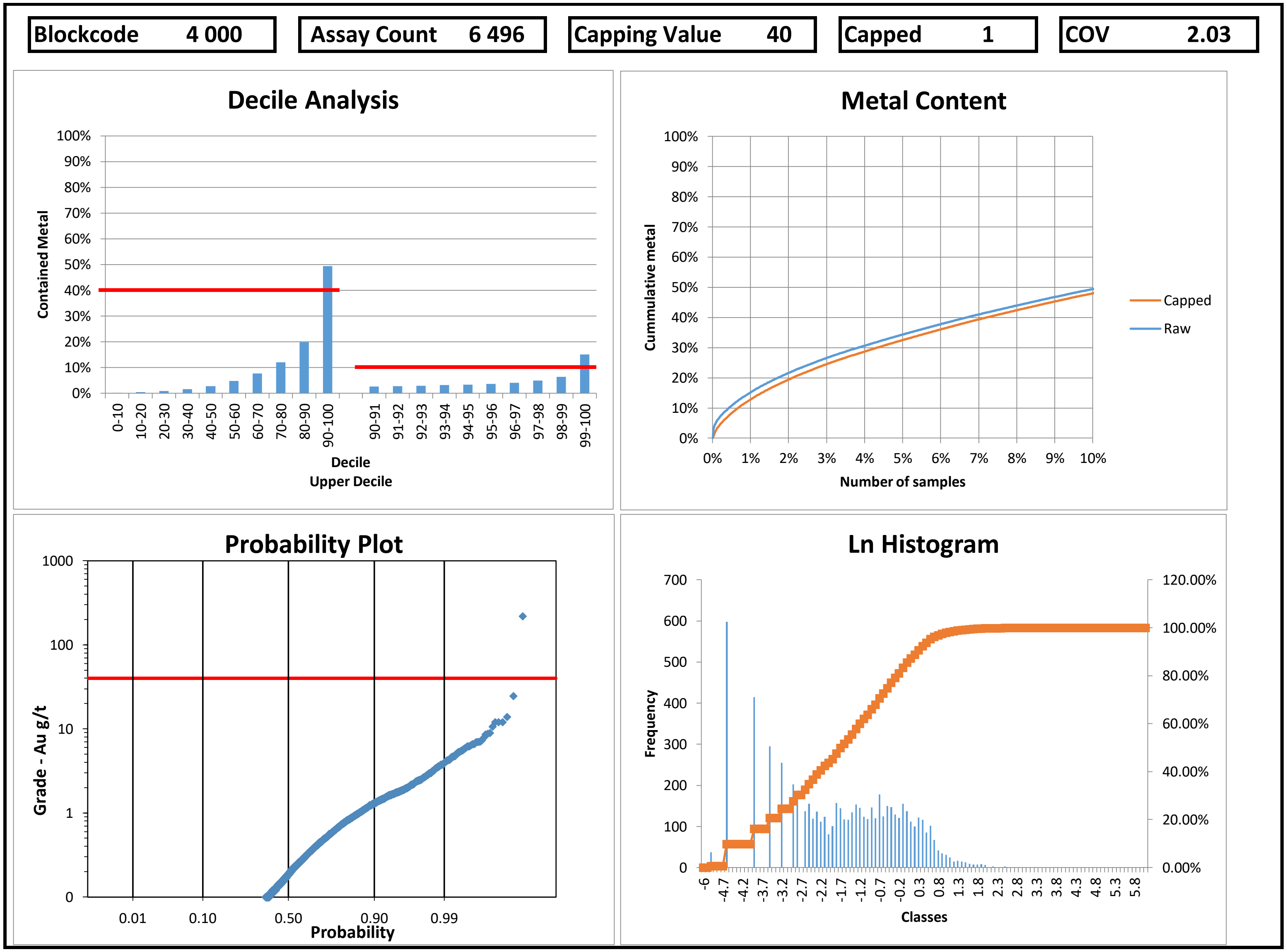


Figure 14.7 – Graphs supporting a capping grade of 40 g/t Au for the Central Bulk Zone

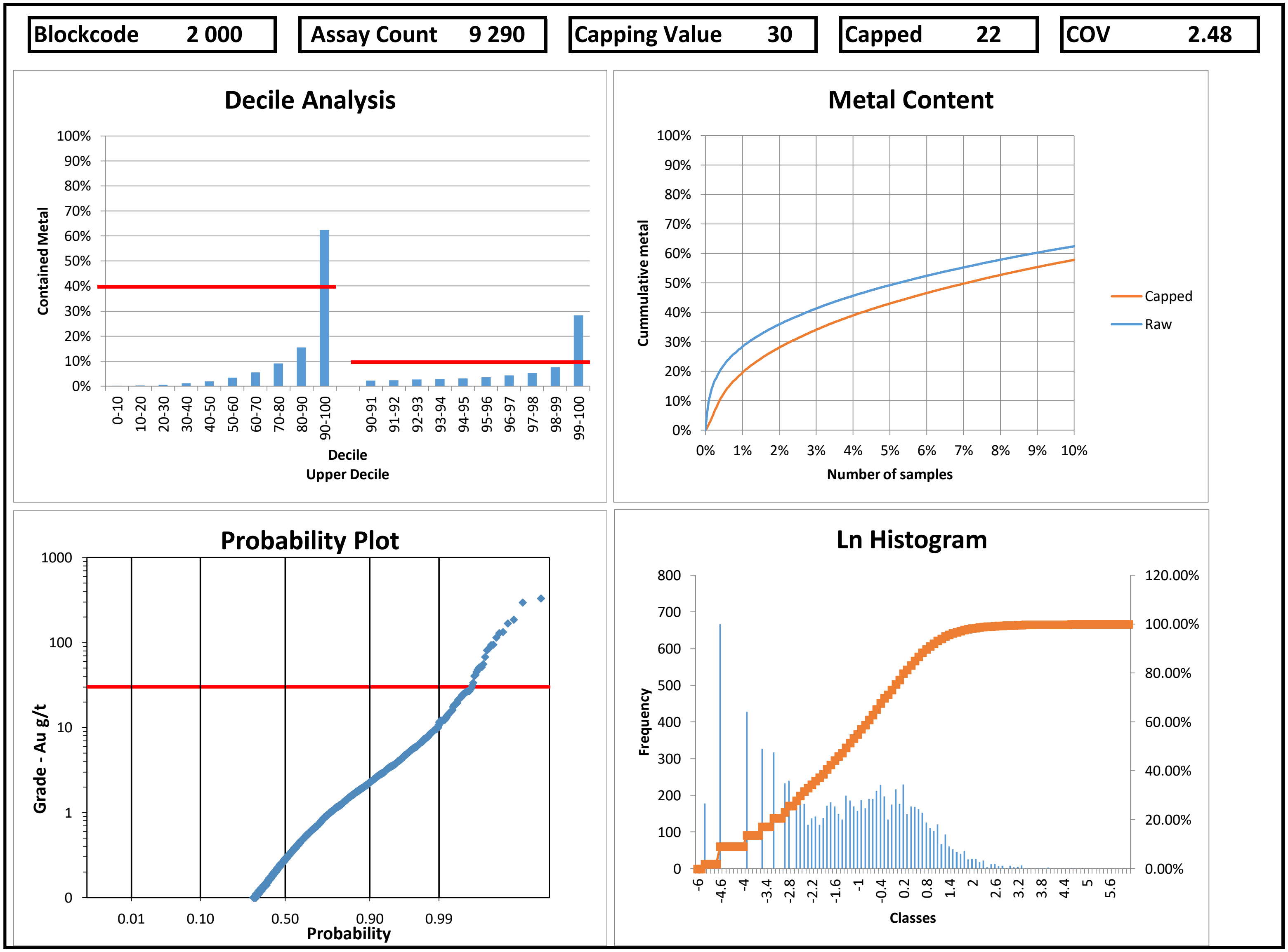


Figure 14.8 – Graphs supporting a capping grade of 30 g/t Au for the Skiråsen Zone

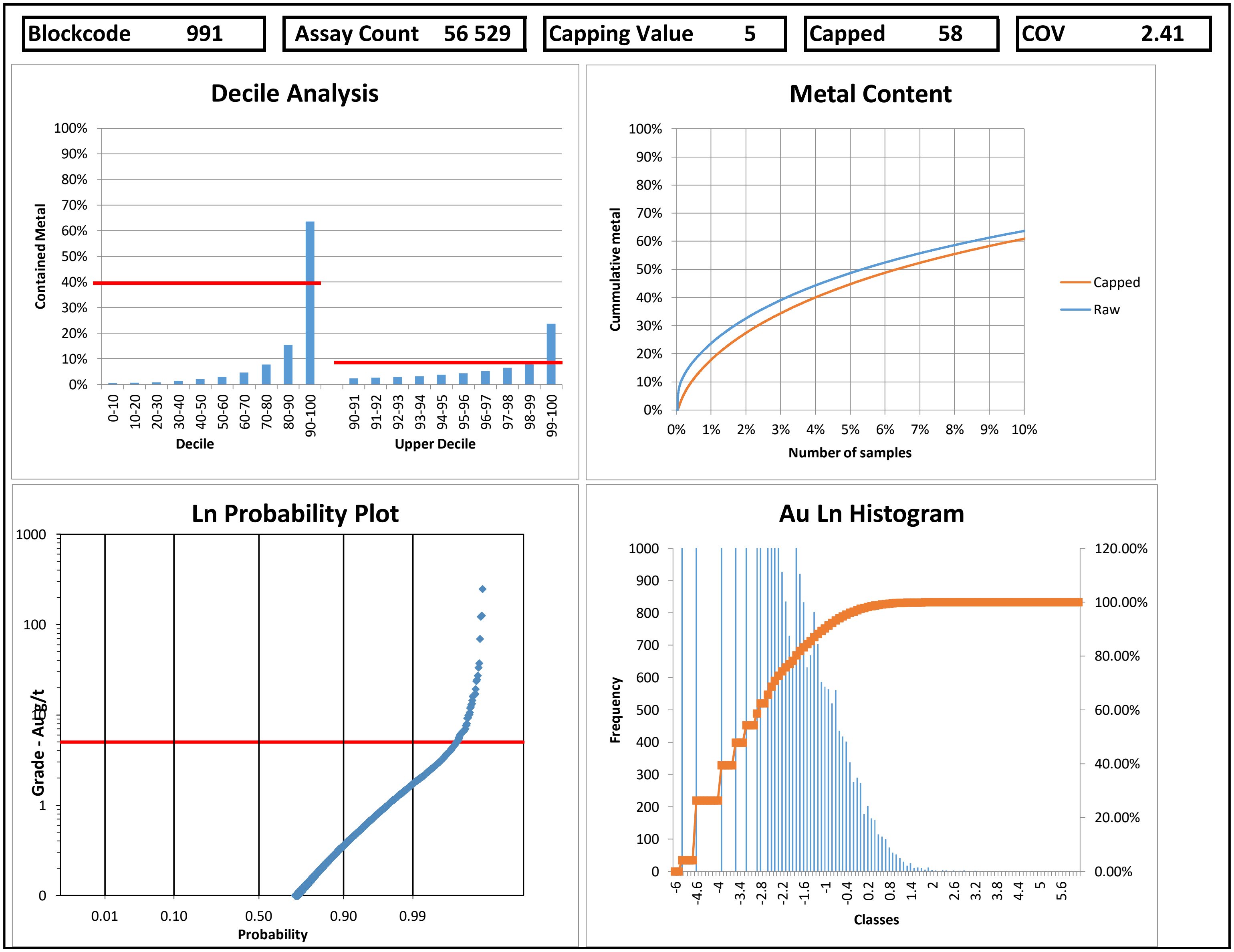


Figure 14.9 – Graphs supporting a capping grade of 5 g/t Au for the low-grade envelope

14.5 Compositing

In order to minimize any bias introduced by variable sample lengths, the DDH assays were composited.

For geological and statistical reasons, a 2.0-m composite was selected for the Barsele deposit, with an allowable spread of 1 to 3 m.

A total of 45,984 composites were generated. A grade of 0.00 g/t Au was assigned to missing sample intervals. Table 14.2 shows the basic statistics for composites by zones (Avan, Central, Skiråsen).

Table 14.2 - Summary statistics for the 2.0-m composites

Zone	Zone Block Code	No. of Composites	Max. Au Cut (g/t)	Mean Au Cut (g/t)	SD	CV
Avan	6000-series	1,670	12.34	0.85	1.44	1.71
Central	4000-series	9,057	36.20	0.92	1.46	1.61
Skiråsen	2000-series	4,752	19.42	0.94	1.76	1.87
Low-grade Envelope	600	30,463	5.00	0.13	0.27	1.97

14.6 Density

Densities are used to calculate tonnage from the estimated volumes in the resource-grade block model.

The GEMS database includes 4,852 density measurements of the various lithologies. Based on this information, InnovExplo used a fixed value based on lithology solids. The average of all samples found within said solids was used, resulting in the following values (g/cm^3):

- Andesite: 2.76
- Granodiorite: 2.76
- Altered Granodiorite: 2.73
- Mafic Dykes: 2.87
- Metavolcanics: 2.85
- Tonalite: 2.76

The mineralized zones are contained within the altered granodiorite, therefore a density of 2.73 g/cm^3 was applied. Overburden was attributed a density of 2.00 g/cm^3.

14.7 Block Model

A block model was generated for the purpose of the current MRE. Table 14.3 provides the properties of the block model. The block model is rotated and extends down to a depth of approximately 1,000 m below surface. The block model covers an area sufficient to host an open pit and the individual block dimensions reflect the sizes of the mineralized zones and plausible mining methods.

Table 14.3 – Block model properties

Properties	X (Columns)	Y (Rows)	Z (Levels)
Origin coordinates (UTM SWEREF99)	616,400	7,215,200	400
Number of blocks	335	475	210
Block size (m)	10	3	5
Block extent (m)	3350	1425	1050
Rotation	-25		

The block model is a multi-folder percent model. All blocks with more than 0.001% of their volume falling within a selected solid were assigned the corresponding solid block code in their respective folder with the corresponding percent inside every solid (i.e., individual mineralized zones, individual lithological domains, the overburden and the country rock).

Table 14.4 provides details about the naming convention for the corresponding GEMS solids, as well as the rock codes and precedence assigned to each individual solid.

Table 14.4 – Block model naming convention and codes

Workspace	Description	Rock code	GEMS Triangulation Name			Precedence
			NAME1 Block Code	NAME2	NAME3	
Mineralized Zones	Skiråsen Bulk	2000	2000	5	2019	4
	Skiråsen	2010	2010	1	2019	5
	Skiråsen	2020	2020	3	2019	5
	Skiråsen	2030	2030	2	2019	5
	Skiråsen	2040	2040	1	2019	6
	Skiråsen	2050	2050	2	2019	5
	Skiråsen	2060	2060	1	2019	6
	Skiråsen	2070	2070	2	2019	5
	Skiråsen	2080	2080	2	2019	5
	Skiråsen	2090	2090	2	2019	5
	Skiråsen	2100	2100	1	2019	5
	Skiråsen	2110	2110	2	2019	5
	Skiråsen	2120	2120	1	2019	5
	Central Bulk	4000	4000	5	2019	4
	Central D2	4010	4010	1	2019	5
	Central D2	4020	4020	2	2019	5
	Central D2	4030	4030	1	2019	5
	Central D2	4040	4040	1	2019	6
	Central D2	4050	4050	2	2019	5
	Central D2	4060	4060	3	2019	5
	Central D2	4070	4070	2	2019	5
	Central D2	4080	4080	1	2019	6

Workspace	Description	Rock code	GEMS Triangulation Name			Precedence
			NAME1 Block Code	NAME2	NAME3	
	Central D2	4090	4090	3	2019	5
	Central D2	4100	4100	2	2019	5
	Central D2	4110	4110	1	2019	5
	Central D2	4120	4120	3	2019	6
	Central D2	4130	4130	2	2019	5
	Central D2	4140	4140	1	2019	5
	Central D3	4401	4401	2	2019	3
	Central D3	4402	4402	2	2019	3
	Central D3	4403	4403	4	2019	3
	Central D3	4404	4404	4	2019	3
	Central D3	4405	4405	4	2019	3
	Central D3	4406	4406	2	2019	3
	Central D3	4407	4407	4	2019	3
	Central D3	4408	4408	2	2019	3
	Central D3	4409	4409	4	2019	3
	Central D3	4410	4410	2	2019	3
	Avan	6040	6040	2	2019	5
	Avan	6050	6050	1	2019	5
	Avan	6100	6100	2	2019	5
	Avan	6130	6130	1	2019	5
	Avan	6150	6150	2	2019	5
	Avan	6160	6160	1	2019	5
	Avan	6250	6250	2	2019	5
	Avan	6350	6350	3	2019	5
	Avan	6355	6355	1	2019	6
	Avan	6360	6360	2	2019	5
	Avan	6400	6400	2	2019	5
	Avan	6440	6440	1	2019	6
	Avan	6450	6450	2	2019	5
	Avan	6500	6500	1	2019	5
	Avan	6550	6550	2	2019	5
	Avan	6600	6600	3	2019	5
	Avan	6620	6620	2	2019	5
	Avan	6650	6650	2	2019	5
	Avan	6700	6700	1	2019	5
	Avan	6750	6750	2	2019	5
	Avan	6800	6800	1	2019	5
	Avan	6850	6850	2	2019	5
Low-grade envelope	Altered Granodiorite	600	991	Central_GDII	2019	20
Lithology solids	Andesite	610	610	Central_Andesite	2019	21
	Mafic Dyke	700	700	Mafic_Dyke	2019	22
	Granodiorite	601	601	North_GDI	2019	23
	Granodiorite	602	602	South_GDI_Avan	2019	24
	Granodiorite	603	603	South_GDI_Ski	2019	25
	Metavolcanics	651	651	South_MV	2019	26

Workspace	Description	Rock code	GEMS Triangulation Name			Precedence
			NAME1 Block Code	NAME2	NAME3	
	Metavolcanics	650	650	North_MV	2019	27
	Tonalite	670	670	North_Ton_Ski	2019	28
	Tonalite	671	671	South_Tonalite_Avan	2019	29
	Tonalite	672	672	South_Tonalite_Ski	2019	30
	Overburden	OVB	50		2019	50

14.8 Variography and Search Ellipsoids

14.8.1 Variography

Three-dimensional directional variography was completed on capped composites for all grouped domains (Avan, Central, Skiråsen, low-grade envelope). The study was carried out in Supervisor.

Performed in connection with the geological knowledge of the deposit and the QA/QC information, the mains steps in the variography process are:

- Examine the strike, dip and dip plane of the mineralized zones to define the direction and plunge of the best continuity in the mineralization;
- Estimate the nugget effect (C_0) based on the downhole variogram;
- Model the major, semi-major and minor axes of continuity.

Table 14.5 documents the variogram model parameters of each zone, and Figure 14.10 shows examples of the variography study for the Avan, Central (D2, D3, Bulk) and Skiråsen zones.

Table 14.5 - Variogram model parameters by mineralized zone

Dataset	Variogram Components								
	Nugget (C_0)	First Structure - Spherical				Second Structure - Spherical			
		Sill	Ranges			Sill	Ranges		
			X (m)	Y (m)	Z (m)		X (m)	Y (m)	Z (m)
Skiråsen	0.47	0.37	20	8	7	0.16	90	30	22
Central D3	0.40	0.21	8	10	9	0.39	60	30	30
Central D2	0.48	0.25	22	11	8	0.37	53	30	16
Central Bulk	0.40	0.27	11	12	6	0.33	90	50	10
Avan	0.37	0.07	30	25	10	0.56	71	60	30
Low-grade envelope	0.54	0.13	18	11	10	0.33	75	60	30

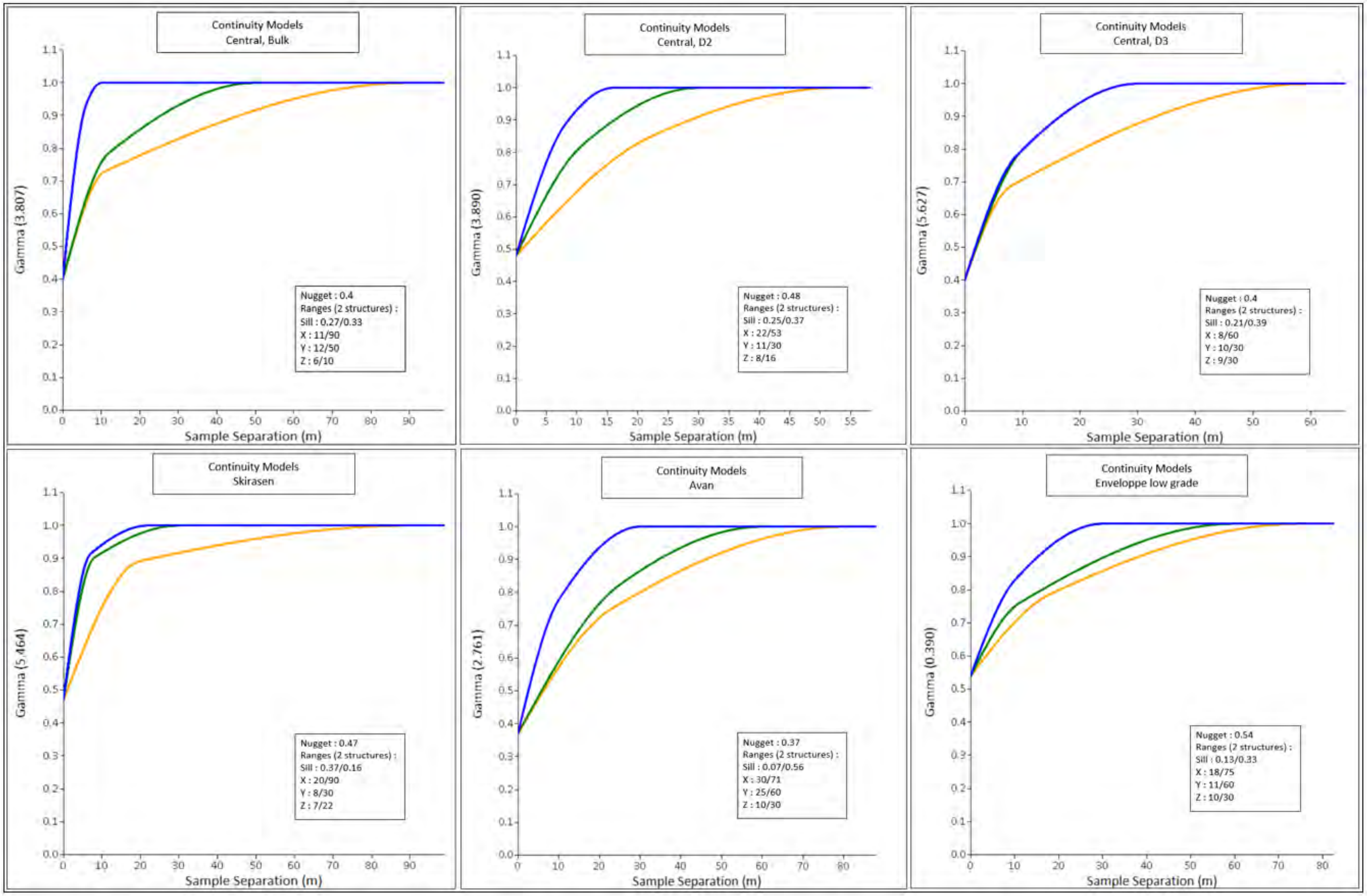


Figure 14.10 - Examples of the variography study for the Avan, Central (D2, D3, Bulk) and Skiråsen zones

14.8.2 Search ellipsoid

The 3D variography yielded the best-fit model along an orientation that roughly corresponds to the strike and dip of the mineralized zones. This best-fit model was adjusted to fit the mean orientation of each mineralized zone.

Nine (9) sets of search ellipsoids were built using the ranges of the best-fit variogram model for each zone. For each of the zones Central, Avan, and Skiråsen, two (2) sets were created to best fit the mean orientation of specific group of D2 mineralized zones.

The interpolation strategy involved three cumulative passes characterized by increasing search ranges. The ranges of the search ellipsoids correspond to 1x the variography range results for the first interpolation pass, 1,5x the variography results for the second pass, and 2x the variography results for the third and last pass.

Table 14.6 summarizes the parameters of the search ellipsoids used to select composites. Figure 14.11 to Figure 14.15 shows those ellipsoids in isometrics views.

Table 14.6 - Search ellipsoid parameters

Zone	Block Code	Search Ellipse	Orientation			Ranges		
			Azimuth	Dip	Azimuth	X (m)	Y (m)	Z (m)
Skiråsen (Set1)	2000,2010,2020, 2030,2040,2060, 2070,2080,2090, 2100,2110	Pass 1	240	76	107	90	30	22
		Pass 2				135	45	33
		Pass 3				180	60	44
Skiråsen (Set2)	2050,2120	Pass 1	285	80	105	90	30	22
		Pass 2				135	45	33
		Pass 3				180	60	44
Central bulk	4000	Pass 1	276	60	108	90	50	10
		Pass 2				135	75	15
		Pass 3				180	100	20
Central D2 (Set1)	4010,4020,4030, 4130,4140	Pass 1	308	30	139	53	30	16
		Pass 2				79.5	45	24
		Pass 3				106	60	32
Central D2 (Set2)	4040,4050,4060, 4070,4080,4090, 4100,4110,4120,	Pass 1	282	30	114	53	30	16
		Pass 2				79.5	45	24
		Pass 3				106	60	32
Central D3	4401,4402,4403, 4404,4405,4406, 4407,4408,4409, 4410	Pass 1	238	34	161	60	30	30
		Pass 2				90	45	45
		Pass 3				120	60	60
Avan (Set1)	6040,6050,6100, 6130,6150,6160,	Pass 1	295	60	115	71	60	30
		Pass 2				106.5	90	45

Zone	Block Code	Search Ellipse	Orientation			Ranges		
			Azimuth	Dip	Azimuth	X (m)	Y (m)	Z (m)
	6250,6350,6360, 6400,6450,6500, 6550,6600,6620, 6650,6700,6750, 6800,6850	Pass 3				142	120	60
Avan (Set2)	6355,6440	Pass 1	320	60	140	71	60	30
		Pass 2				106.5	90	45
		Pass 3				142	120	60
Low-grade envelope	991	Pass 1	282	39	122	75	60	30
		Pass 2				112.5	90	45
		Pass 3				150	120	60

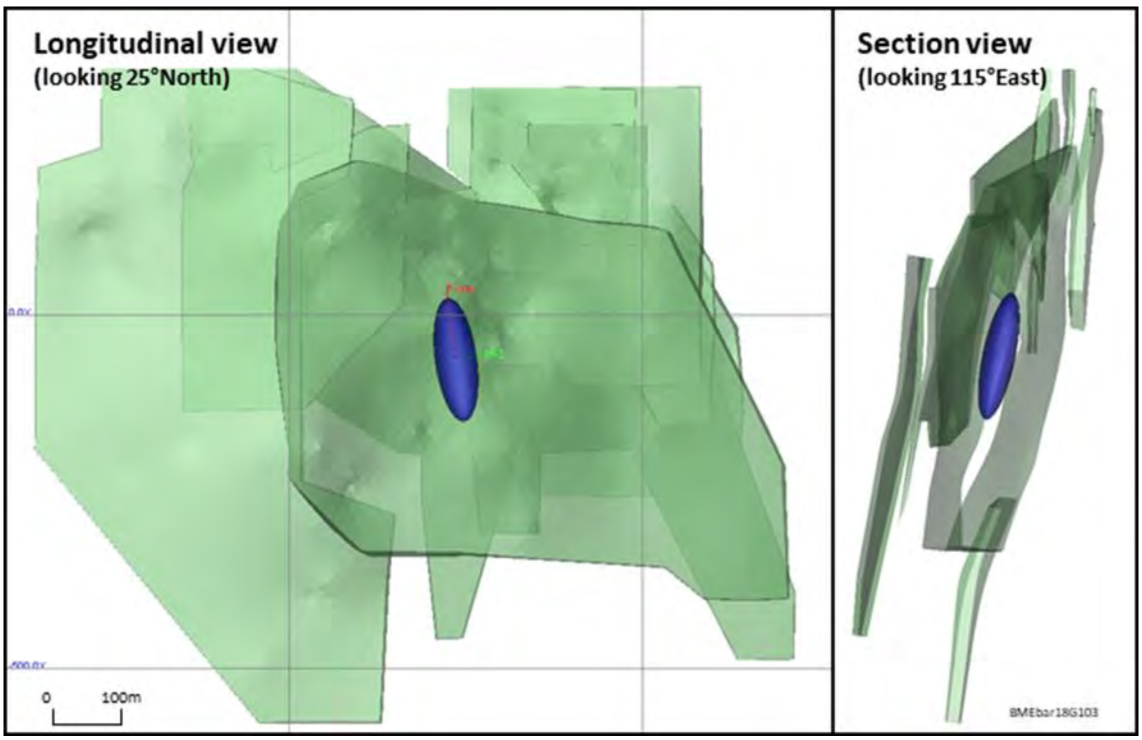


Figure 14.11 - Isometric view of the search ellipsoid used for Skiråsen (Set1) for the first pass

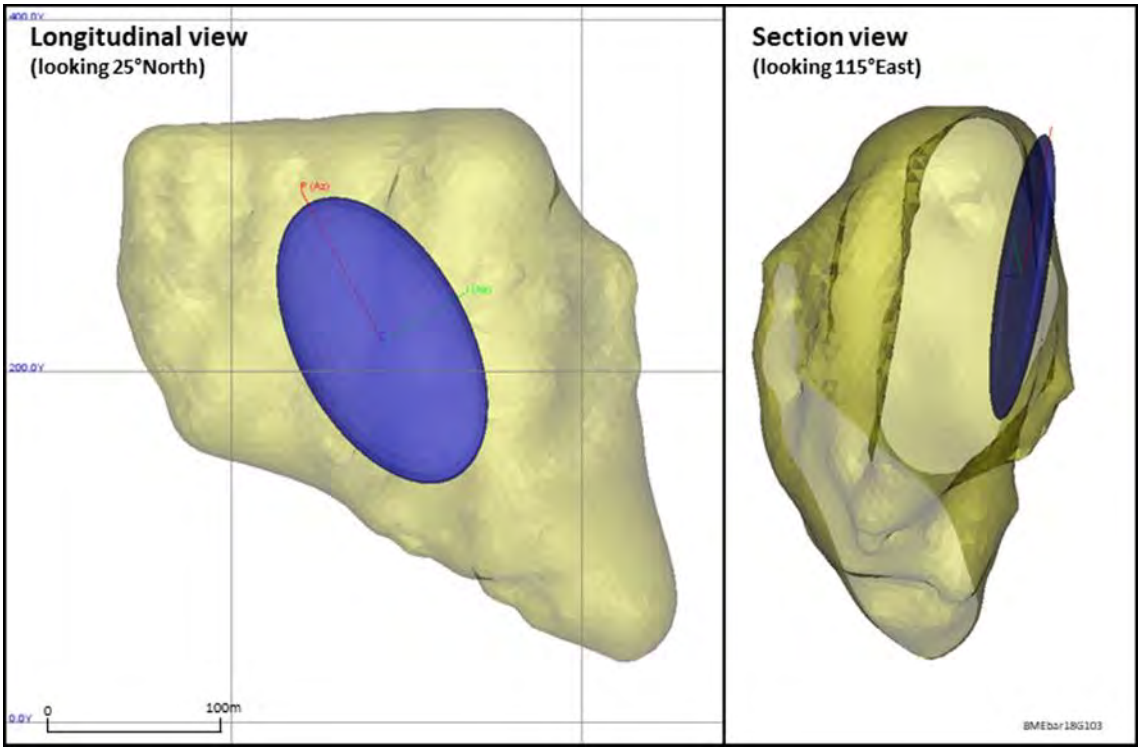


Figure 14.12 - Isometric view of the search ellipsoid used for Central Bulk for the first pass

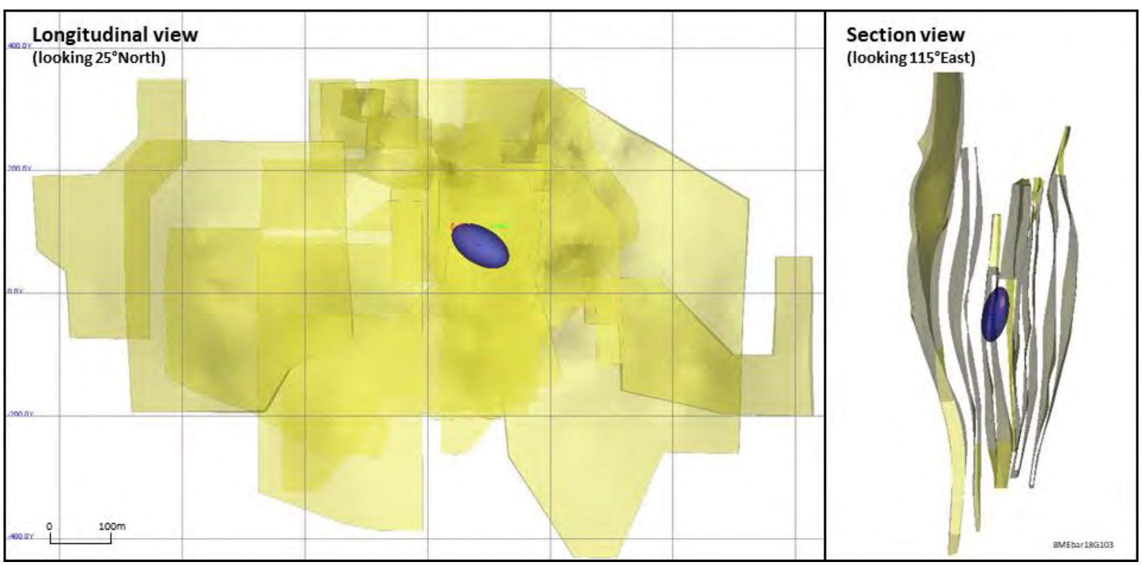


Figure 14.13 - Isometric view of the search ellipsoid used for Central D2 (Set1) for the first pass

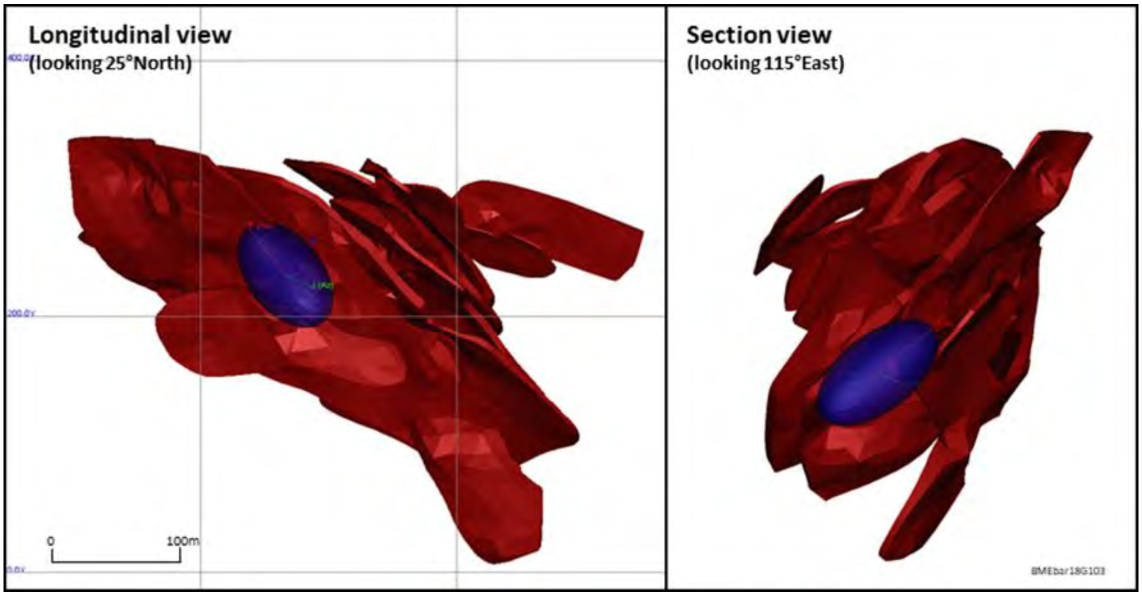


Figure 14.14 - Isometric view of the search ellipsoid used for Central D3 for the first pass

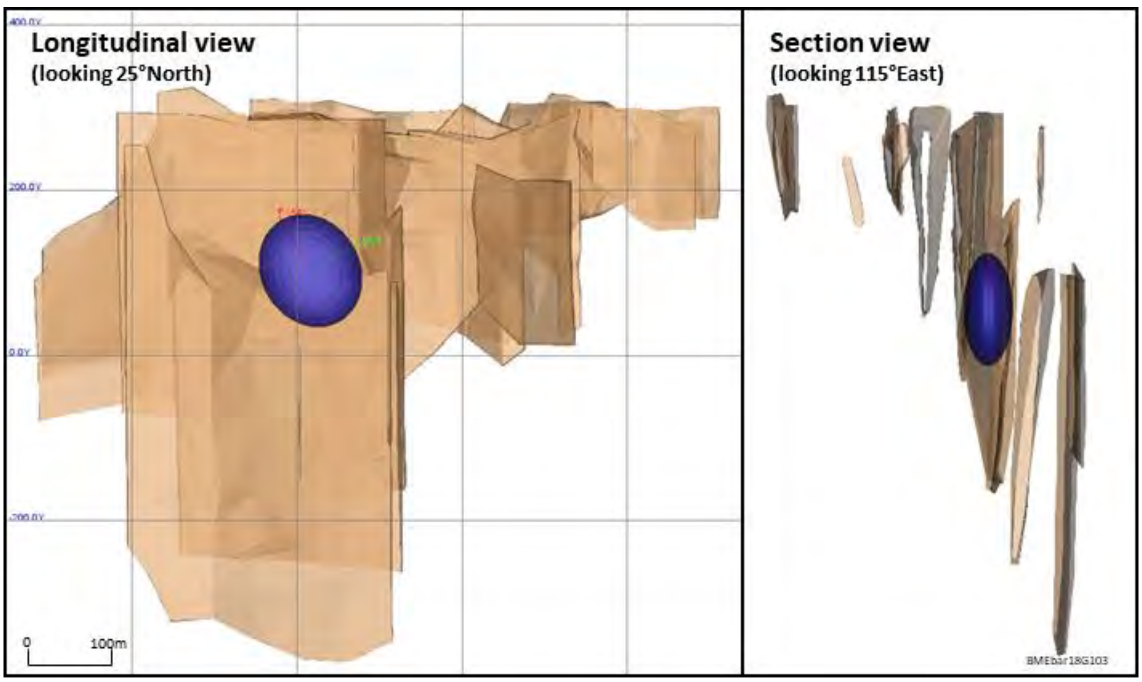


Figure 14.15 - Isometric view of the search ellipsoid used for Avan (Set1) for the first pass

14.9 Grade Interpolation

In order to produce the best possible grade estimate for the Project, the geostatistical results obtained from the 3D variography were used to interpolate the grade model on the set of points providing X, Y, Z locations and the gold grades extracted from the 2.0-m composites.

The composite points were assigned block codes corresponding to the mineralized zone in which they occur. The interpolation profiles specify a single composite block code for each mineralized-zone solid, thus establishing hard boundaries between the mineralized zones and preventing block grades from being estimated using sample points with different block codes other than the block being estimated.

The interpolation profiles were customized to estimate grades separately for each folder in the block model. The mineralized zones blocks were estimated independently. The interpolations were run in three cumulative passes characterized by increasing search ranges (defined above).

The ordinary kriging ("OK") method was used to estimate grades within the mineralized zones.

The strategy and parameters used for the grade estimation are summarized in Table 14.7.

Table 14.7 - Interpolation strategy for all zones

Pass	Number of Composites		
	Min	Max	Max per Hole
1	4	12	3
2	4	12	3
3	3	12	3

14.10 Block Model Validation

14.10.1 Visual validation

A visual comparison between block model grades, composite grades and gold assays was conducted on sections, plans and longitudinal views for both densely and sparsely drilled areas. No significant differences were observed during the comparison and it generally provided a good match in grade distribution without excessive smoothing in the block model.

14.10.2 Statistical validation

Table 14.8 compares the composite mean grades at 0.001 g/t Au cut-off to block model grades for three interpolation scenarios (OK, ID2 and NN) for the Inferred and Indicated blocks of the mineralized zones.

Table 14.8 - Comparison of composite mean grades (0.001 g/t cut-off) to block model grades for different interpolation scenarios (Inferred and Indicated blocks of high-grade zones)

2.0-m Composites Declustered	Ordinary Kriging (OK)	Inverse Distance Squared (ID2)		Nearest Neighbor (NN)	
AU (g/t)	AU (g/t)	AU (g/t)	ID2 / OK	AU (g/t)	NN / OK
1.02	1.02	1.01	99%	1.07	105%

Generally, the comparison between composite and block grade distribution did not identify significant issues between the OK and ID2 results.

Figure 14.16 illustrates an example of a cross-section swath plot to compare the block model grades to the composite grades. In general, the model correctly reflects the trends shown by the composites with the expected smoothing effect. Differences under -250 m and above 280 m are explained by the paucity of samples in those areas.

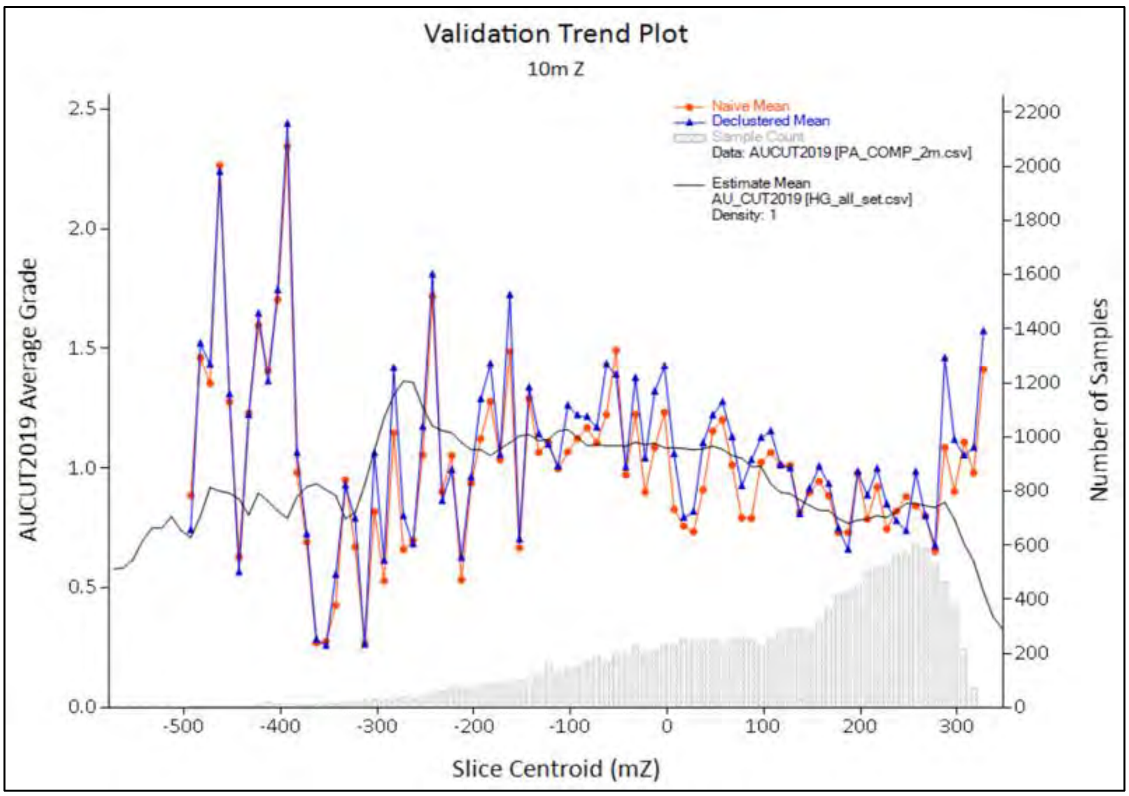


Figure 14.16 - Swath plot for all zones (elevation)

14.11 Cut-off Parameters

Mineral resources were compiled using a minimum cut-off grade for three potential extraction method scenarios: 0.5 g/t Au for open pit, 1.5 g/t Au for underground bulk and 1.8 g/t Au for underground selective.

Specific extraction methods are used only to establish reasonable cut-off grades for various portions of the deposit. No PEA, PFS or FS studies have been completed to support economic viability and technical feasibility of exploiting any portion of the mineral resource, by any particular mining method.

The cut-off grade must be re-evaluated in light of prevailing market conditions and other factors, such as gold price, exchange rate, mining method, related costs, etc.

Parameters used to determine such cut-off are presented below.

Table 14.9 - Input parameters used for the cut-off grade estimation

Parameter	Value for open pits	Value for underground selective	Value for underground bulk	Unit
Gold price	1 300	1 300	1 300	USD/oz
Royalty	2.0%	2.0%	2.0%	%
Royalty	26.00	26.00	26.00	USD/oz
Refining cost	5.00	5.00	5.00	USD/oz
Selling cost	31.00	31.00	31.00	USD/oz
Processing cost	15.00	15.00	15.00	USD/t milled
Metallurgical recovery	92.6	92.6	92.6	%
Mining dilution	0.0	0.0	0.0	%
Mineralized material premium mining cost	-	45.00	35.00	USD/t milled
Rehandle Cost	-	-	-	USD/t milled
G&A	5.00	8.00	8.00	USD/t milled
Rehabilitation	-	-	-	USD/t milled
Stay-in-business Capital	-	-	-	USD/t milled
Total Mineralized material Based Cost	20.00	68.00	58.00	USD/t milled
Cut-Off Grade	0.5	1.8	1.5	g/t Au

Using the parameters shown in the table above, cut-off grades were calculated as follows:

$$CoG_{UG} = \frac{(Processing + G\&A + Rehandle + Mining + Stay\ in\ business\ capital + Rehab.)}{(Gold\ price\ - Sell\ cost) \times Metallurgical\ recovery}$$

14.12 Mineral Resource Classification

14.12.1 Mineral resource classification definition

The resource classification definitions below were used for this report and are those published by the Canadian Institute of Mining, Metallurgy and Petroleum in their document "CIM Definition Standards for Mineral Resources and Reserves" in 2014 ("CIM Definition Standards"). The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from geologic evidence and knowledge, including sampling.

Measured Mineral Resource: that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

Indicated Mineral Resource: that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Inferred Mineral Resource: that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

14.12.2 Mineral resource classification

By default, all interpolated blocks were assigned to the “exploration potential” during the creation of the grade block model. Subsequent reclassification to either Indicated or Inferred category was done using series of outline rings (clipping boundaries) according to the following criteria:

Inferred category criteria:

- Blocks showing geological and grade continuity;
- Blocks from well defined mineralized zones only;
- Blocks interpolated by a minimum of two holes; and
- Blocks in areas where drill spacing is no more than 100 m.

Indicated category criteria:

- Blocks showing geological and grade continuity;
- Blocks from well-defined mineralized zones only;
- Blocks interpolated by a minimum of two holes; and
- Blocks in areas where drill spacing is no more than 25 m.

The classification was done keeping in mind that a significant cluster of blocks is necessary to obtain a resource domain and to avoid isolated spots within a domain. Within the Indicated Resource outlines, some Inferred blocks were upgraded to the Indicated category, whereas outside these outlines, some Indicated blocks were downgraded to Inferred. As well, near the outer boundary of the Inferred outlines, some blocks of Exploration Potential may be included in the Inferred domain. The author is of the opinion that this was a necessary step to homogenize (smooth out) the resource volumes in each category, and to avoid isolated blocks from being included in a category domain.

14.13 Mineral Resource Estimate

InnovExplo is of the opinion that the current mineral resource estimate can be classified as Indicated and Inferred mineral resources based on data density, search ellipse criteria, drill hole spacing and interpolation parameters. InnovExplo considers the 2019 MRE to be reliable and based on quality data, reasonable assumptions and parameters that follow CIM Definition Standards.

Table 14.10 displays the results of the In Situ Barsele Deposit Mineral Resource Estimate for combined open pit, underground bulk and underground selective mining methods scenario at cut-off grades of 0.15 g/t Au (in pit), 1.50 g/t Au (bulk underground) and 1.8 g/t Au (selective underground), respectively.

Specific extraction methods are used only to establish reasonable cut-off grades for various portions of the deposit. No Preliminary Economic Analysis, Pre-Feasibility Study or Feasibility Study has been completed to support economic viability and technical feasibility of exploiting any portion of the mineral resource, by any particular mining method.

Table 14.11 presents the official in-situ resource and sensitivity of the 2019 MRE at other cut-off scenarios for each area. The reader should be cautioned that the figures provided in should not be interpreted as a mineral resource statement. The reported quantities and grade estimates at different cut-off grades are presented for the sole purpose of demonstrating the sensitivity of the resource model to the selection of a reporting cut-off grade.

Table 14.10 – Barsele Deposit Mineral Resource Estimate for combined open pit, underground bulk, underground selective mining methods scenario

Area (mining method)	Cut-off (g/t)	Indicated Resource			Inferred Resource		
		Tonnage ('000)	Au (g/t)	Ounces	Tonnage ('000)	Au (g/t)	Ounces
Open Pit	0.5	3,452	1.32	147,000	1,819	1.59	93,000
Underground Bulk	1.5	1,442	2.53	117,000	8,759	2.58	728,000
Underground Selective	1.8	684	2.75	60,000	14,917	2.64	1 265,000
Total		5,578	1.81	324,000	25,495	2.54	2,086,000

Mineral Resource Estimate Footnotes:

13. The Independent and Qualified Persons for the Mineral Resource Estimate, as defined by NI 43-101, are Carl Pelletier, P.Geo. and Harold Brisson, P.Eng., both from InnovExplo Inc., and the effective date of the Mineral Resource Estimate is February 21, 2019.
14. These mineral resources are not mineral reserves as they do not have demonstrated economic viability.
15. The mineral resource estimate follows current CIM definitions and guidelines for mineral resources.
16. The results are presented undiluted and are considered to have reasonable prospects for eventual economic extraction.
17. The estimate encompasses 61 gold-bearing zones, each defined by individual wireframes with a minimum true thickness of 2.0 m using the grade of the material when assayed or a value of zero when not assayed. The resource was estimated using GEOVIA GEMS 6.8.
18. High-grade capping supported by statistical analysis was carried out on assay data and established on a per domain basis for gold (g/t Au): low-grade mineralized envelope = 5.0 g/t Au, high-grade gold-bearing zones: Skiråsen = 30.0 g/t Au, Central = 30.0 to 40.0 g/t Au, Avan = 20.0 g/t Au.
19. Grade interpolation was performed by ordinary kriging on 2.0-m composites from drill-hole intersections falling within the mineralized zones in a block model using a block size of 10 m by 3 m by 5 m.
20. Density values were applied based on lithology. All mineralized zones were assigned 2.73 g/cm^3.
21. The Mineral Resource Estimate is classified as Indicated and Inferred. The Inferred category is defined with a minimum of two (2) drill holes within the areas where the drill spacing is less than 100 metres and shows reasonable geological and grade continuity. The Indicated mineral resource category is defined with a minimum of two (2) drill holes within the areas where the drill spacing is less than 25 m. Clipping boundaries were used for classification based on those criteria.
22. The cut-off grades were calculated using the following parameters: mining cost = USD 35.00 to USD 45.00; processing cost = USD 15.00; G&A = USD 5.00 to USD 8.00; refining and selling costs = USD 10.00; gold price = USD 1,300.00; and metallurgical recovery = 92.6%. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs etc.).
23. The number of metric tons were rounded to the nearest thousand, following the recommendations in NI 43-101 and any discrepancies in the totals are due to rounding effects. The metal contents are presented in troy ounces (tonnes x grade / 31.10348).
24. InnovExplo Inc. is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues, or any other relevant issue not reported in the Technical Report, that could materially affect the Mineral Resource Estimate.

Table 14.11 - Barsele Deposit Mineral Resource Estimate cut-off sensitivity by area

Area (mining method)	Cut-off (g/t)	Indicated Resource			Inferred Resource		
		Tonnage ('000)	Au (g/t)	Ounces	Tonnage ('000)	Au (g/t)	Ounces
Open Pit	>4.00	57	4.80	8,804	45	4.62	6,678
	>3.00	193	3.78	23,436	160	3.70	19,023
	>2.00	632	2.82	57,314	574	2.88	53,123
	>1.90	723	2.71	63,007	591	2.85	54,232
	>1.80	827	2.60	69,197	610	2.82	55,366

Area (mining method)	Cut-off (g/t)	Indicated Resource			Inferred Resource		
		Tonnage ('000)	Au (g/t)	Ounces	Tonnage ('000)	Au (g/t)	Ounces
	>1.70	945	2.50	75,801	652	2.75	57,679
	>1.60	1,036	2.42	80,675	721	2.65	61,371
	>1.50	1,145	2.34	86,079	757	2.59	63,172
	>1.40	1,243	2.27	90,671	792	2.54	64,813
	>1.30	1,352	2.19	95,385	830	2.49	66,447
	>1.20	1,462	2.12	99,799	888	2.41	68,752
	>1.10	1,574	2.05	103,961	971	2.30	71,816
	>1.00	1,699	1.98	108,157	1,086	2.17	75,715
	>0.90	1,851	1.90	112,791	1,194	2.06	79,002
	>0.80	2,059	1.79	118,459	1,307	1.95	82,098
	>0.70	2,381	1.65	126,203	1,494	1.80	86,638
	>0.60	2,844	1.49	135,816	1,653	1.69	89,969
	>0.50	3,452	1.32	146,541	1,819	1.59	92,889
Underground Bulk	>4.00	109	4.82	16,920	770	5.18	128,141
	>3.00	358	3.85	44,353	2,079	4.02	268,433
	>2.00	903	3.01	87,320	5,684	3.06	559,938
	>1.90	981	2.92	92,189	6,075	2.99	584,435
	>1.80	1,081	2.82	98,131	6,504	2.92	609,965
	>1.70	1,192	2.72	104,361	7,002	2.83	637,950
	>1.60	1,321	2.62	111,228	7,819	2.71	681,221
	>1.50	1,442	2.53	117,275	8,759	2.58	727,924
	>1.40	1,567	2.44	123,078	9,913	2.45	781,658
	>1.30	1,702	2.36	128,930	10,908	2.35	824,802
	>1.20	1,882	2.25	136,171	12,164	2.24	875,305
	>1.10	2,087	2.14	143,743	13,567	2.13	927,080
	>1.00	2,320	2.03	151,596	15,095	2.02	978,744
	>0.90	2,580	1.92	159,527	16,623	1.92	1,025,452
	>0.80	2,953	1.79	169,674	18,640	1.80	1,080,307
	>0.70	3,413	1.65	180,731	20,943	1.69	1,135,875
	>0.60	4,100	1.48	195,033	23,166	1.59	1,182,268
	>0.50	4,876	1.33	208,699	25,606	1.49	1,225,540
Underground Selective	>4.00	68	4.68	10,185	1,184	5.22	198,829
	>3.00	214	3.86	26,514	3,269	4.05	426,069
	>2.00	553	2.95	52,511	11,199	2.88	1,037,774
	>1.90	608	2.86	55,930	13,038	2.75	1,153,088

Area (mining method)	Cut-off (g/t)	Indicated Resource			Inferred Resource		
		Tonnage ('000)	**Au (g/t)**	**Ounces**	**Tonnage ('000)**	**Au (g/t)**	**Ounces**
	>1.80	684	2.75	60,437	14,917	2.64	1,265,047
	>1.70	773	2.63	65,466	17,009	2.53	1,382,642
	>1.60	874	2.52	70,817	19,507	2.42	1,515,028
	>1.50	1,008	2.39	77,482	22,219	2.31	1,650,319
	>1.40	1,148	2.28	83,985	24,983	2.22	1,779,180
	>1.30	1,292	2.17	90,239	28,087	2.12	1,913,869
	>1.20	1,472	2.06	97,448	31,613	2.02	2,055,761
	>1.10	1,690	1.94	105,493	35,957	1.92	2,216,383
	>1.00	1,986	1.81	115,465	40,557	1.82	2,371,482
	>0.90	2,335	1.68	126,094	47,371	1.69	2,579,068
	>0.80	2,735	1.56	136,999	54,588	1.58	2,776,266
	>0.70	3,165	1.45	147,366	63,492	1.47	2,990,918
	>0.60	3,672	1.34	157,927	74,657	1.34	3,223,447
	>0.50	4,236	1.23	167,909	90,630	1.20	3,506,916

15. MINERAL RESERVE ESTIMATE

Not applicable at the current stage of the Project.

16. MINING METHODS

Not applicable at the current stage of the Project.

17. RECOVERY METHOD

Not applicable at the current stage of the Project.

18. PROJECT INFRASTRUCTURE

Not applicable at the current stage of the Project.

19. MARKET STUDIES AND CONTRACTS

Not applicable at the current stage of the Project.

20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

Not applicable at the current stage of the Project.

21. CAPITAL AND OPERATING COSTS

Not applicable at the current stage of the Project.

22. ECONOMIC ANALYSIS

Not applicable at the current stage of the Project.

23. ADJACENT PROPERTIES

The project is located within a north-northwest Gold Line metallogenic trend defined by geochemical gold anomalies and where numerous mines, deposits and occurrences have been highlighted. There are no known mineral deposits on properties directly adjacent to the Barsele Project, although there are numerous mineral occurrences of different types: base metal sulphides, tungsten, molybdenum and gold. Deposits and mines in the vicinity of the project area bear geological similarities to the Norra and CAS (Central, Avan and Skiråsen) mineralized areas, which are summarized in Item 7. At a distance of 17 km northwest of the Project, a 171,000 t zinc mine (Svärtträsk) was in operation in 2006-2007. In the opposite direction, 30 km south-southeast of the Project, Dragon Mining Ltd. owns the Svartliden mine that is related to an orogenic gold deposit hosted within a Paleoproterozoic volcano-sedimentary sequence. According to Dragon Mining Ltd, the mine produced 3.18 Mt at 4.05 g/t Au and the Mineral Resources Estimate amounts to 489,000 t at 3.70 g/t Au as reported on April 30, 2018. The adjacent properties of the Project are shown in Figure 23.1

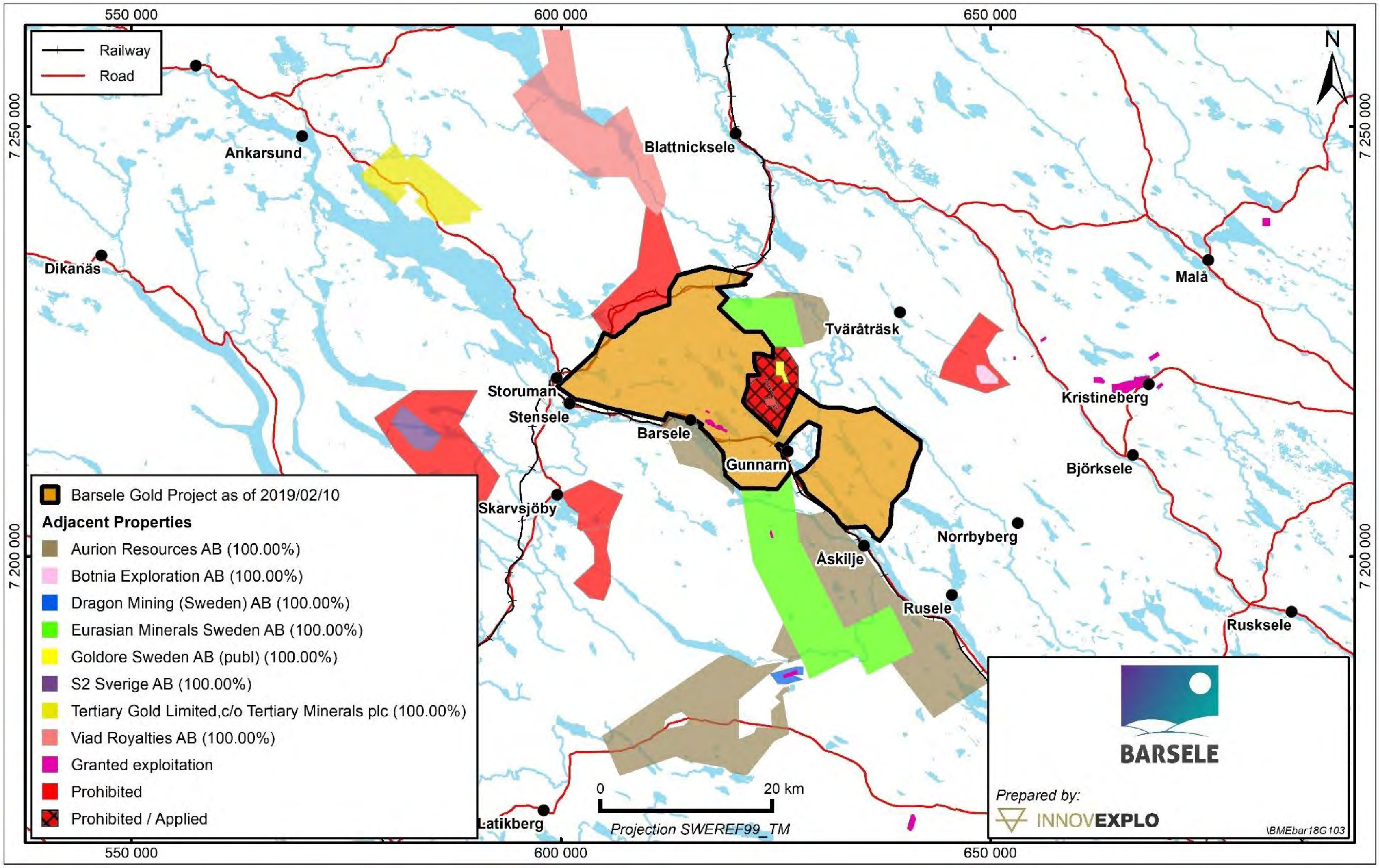


Figure 23.1 – Adjacent properties to the Barsele Project

23.1 EMX Royalty Corporation (Previously Eurasian Minerals Sweden)

Eurasian Minerals owns four properties in the vicinity of the Project including two adjacent projects named Blåbärliden (3,806.45 ha) and Paubäcken Norra (4,446,95 ha) respectively located north and southeast of the Project. The mineralization is related to orogenic gold, intrusion-related gold and gold-rich VMS deposits. The company believes that the application of refined exploration models for intrusion related and orogenic gold targets would provide an additional potential for further discoveries. However, no information have been found in the public domain about any exploration work carried out on these projects. It must be noted that an exploitation concession for gold and silver for a total area of 21.75 ha is owned by Lappland Guldprospektering within the Paubäcken Norra project.

23.2 Aurion Resources

Aurion Resources holds 13 exploration titles in the area around the Project. The Flakamyran Property (3,357.40 ha) is immediately adjacent to the Project. No information about the development of this project has been found on the public domain. The company's current focus is on the development of Finnish projects.

23.3 Goldore Sweden AB, Jan-Persmyran nr 1

The company holds an exploration permit for gold (214.07 ha) landlocked within a prohibited area in which Agnico-Eagle Sweden applied to get the exploration titles at the end of 2019. No information about this project has been found in the public domain.

23.4 Comments on prohibited exploration titles

Numerous temporarily prohibited titles (described in item 4.2.1), are directly adjacent to the Project as shown in Figure 23.1. The old zinc Svärtträsk mine and several tungsten and tin occurrences are located in a prohibited area northwestward of the Project. To the east, Agnico Eagle Sweden applied on prohibited exploration titles surrounding the Goldore Sweden's granted exploration permit. Further to the southwest (15 km), a prohibited area contains gold and has iron sulphide occurrences.

23.5 Comments on Item 23

All the information presented above for the properties adjacent to the Barsele Gold Project, come from the public domain and have not been verified by InnovExplo. The nearby mines and deposits are not necessarily indicative that the Project host similar types of mineralization.

24. OTHER RELEVANT DATA AND INFORMATION

Not applicable at the current stage of the Project.

25. INTERPRETATIONS AND CONCLUSIONS

The objective of InnovExplo's mandate was to prepare a NI 43-101 compliant Technical Report to present and support the results of a mineral resource estimate (the "2019 MRE") for the Barsele Project. This Technical Report and the herein meet this objective.

The 2019 MRE is supported by data of sufficient quantity and quality, and by a well-founded interpretation model that demonstrates continuity of mineralization. The 2019 MRE considers a mining scenario that combines three different methods of extraction. The results of the estimation clearly show the Project's potential for extending the mineralized zones at depth and for additional mineral resources.

Specific extraction methods are used only to establish reasonable cut-off grades for various portions of the deposit. No Preliminary Economic Analysis, Pre-Feasibility Study or Feasibility Study has been completed to support economic viability and technical feasibility of exploiting any portion of the mineral resource, by any particular mining method.

Based on the results presented in this Technical Report, InnovExplo recommends that the issuer continue the drilling, field work and thematic studies on the Project in order to:

- Improve the precision and understanding of the geological model;
- Potentially convert Inferred Resources to Indicated Resources;
- Potentially add Inferred Resources;
- Evaluate in greater detail the proposed mining extraction scenarios;
- Proceed to a PEA (conditional on positive results).

The 2019 MRE was based on a compilation of historical and recent diamond drill holes. Wireframed mineralized zones provided by AEM were reviewed and validated by InnovExplo before being used.

The mineral resource is classified as Indicated and Inferred based on data density, search ellipse criteria, drill hole density and interpolation parameters.

InnovExplo concluded the following using the results of the 2019 MRE and a detailed review of all pertinent information:

- Geological and grade continuity have been demonstrated for three mineralized zones (Avan, Central, Skiråsen) and the result of this study is a single MRE for all three zones;
- The resource area measures 2,700 m along strike, up to 450 m wide and up to 900 m in vertical extent, with the bulk of the resource in the first 600 m from surface;
- The 2019 MRE includes Indicated and Inferred resources for a combination of three mining methods: open pit, underground bulk and underground selective;
- Three cut-off grades of 0.50, 1.20 and 1.80 g/t Au were used, respectively corresponding to the open pit, underground bulk and underground selective mining scenarios;
- The total Indicated Resources stand at 324,000 ounces of gold corresponding to 5,6 Mt at 1.81 g/t Au;
- The total Inferred Resources stand at 2,086,000 ounces of gold corresponding to 25,5 Mt at 2.54 g/t Au;

- Compared to the 2018 MRE (Pelletier and Richard, 2018), the 2019 MRE represents an increase of 68% in ounces of gold in the Indicated category and 46% in ounces of gold in the Inferred category;
- It is likely that additional diamond drilling could upgrade some of the Inferred resources to the Indicated category;
- It is likely that additional diamond drilling could also identify more resources down-plunge and in the vicinity of known mineralization;
- At this stage, it is reasonable to believe that somewhere between 6 and 12 Mt at grades between 1.5 and 2.5 g/t Au may be added to the current resources by drilling the extensions of currently defined mineralized zones at depth and laterally. The reader should be cautioned that this exploration target is not a mineral resource estimate and is conceptual in nature. There has been insufficient exploration to define this as a mineral resource, and it is uncertain if further exploration will result in the exploration target being delineated as a mineral resource.
- At the time of this Technial Report, the Norra and Risberget Zones were at the exploration stage.

25.1 Risks and Opportunities

Table 25.1 identifies the significant internal risks, potential impacts and possible risk mitigation measures that could affect the future economic outcome of the Project. The list does not include the external risks that apply to all mining projects (e.g., changes in metal prices, exchange rates, availability of investment capital, change in government regulations, etc.).

Significant opportunities that could improve the economics, timing and permitting of the Project are identified in

Table 25.2. Further information and study are required before these opportunities can be included in the project economics.

Table 25.1 – Risks for the Project

RISK	POTENTIAL IMPACT	POSSIBLE RISK MITIGATION
Geological model	The mineralization setting is not simple and changes in the model could have a material impact	Additional drilling, field work and thematic studies
Metallurgical recoveries	Recovery could be worse than what is currently assumed	Additional metallurgical testwork
Social issues	A delay in the Project's social acceptance would cause a delay in the schedule.	Hold meetings with stakeholders early in the project development phase to address major issues and elaborate mitigation measures
Environment	Issues with permitting due to the presence of a lake	Continue analysis to minimize environmental impact

Table 25.2 – Opportunities for the Project

OPPORTUNITY	EXPLANATION	POTENTIAL BENEFIT
Resource development potential	Potential for additional discoveries at depth and around the deposit by drilling; potential to convert Inferred resources to higher level of confidence	Potential to increase the total resources and the confidence in the resources
Mining extraction scenarios	Possibility of evaluating the underground bulk scenario in greater detail	Potential for more ounces using a lower cut-off grade
Metallurgical recoveries	Recovery could be better than what is currently assumed	Potential to increase resources and improve project viability

26. RECOMMENDATIONS

Based on the results of the 2019 MRE, InnovExplo recommends additional exploration and delineation drilling and further geological interpretation to gain a better understanding of the deposit before the next update of the mineral resource estimate.

More specifically, approximately 20,000 m of infill drilling should be performed to potentially convert part of the Inferred resources to the Indicated category. This additional information would provide a better understanding of the control on mineralization and the distribution of gold in the deposit, including the D3 structures. Also, approximately 10,000 m of drilling should be dedicated to the vertical extensions of currently identified shoots, 10,000 m to the lateral extensions, and 10,000 m to additional targets across the Project.

26.1 Cost Estimate for Recommended Work

InnovExplo has prepared a cost estimate for the recommended two-phase work program to serve as a guideline for the Project. The budget for the proposed program is presented in Table 26.1. Phase 2 is conditional upon the success of Phase 1. Expenditures for Phase 1 are estimated at USD 8,850,000 (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at USD 850,000 (incl. 15% for contingencies). The grand total is USD 9,700,000 (incl. 15% for contingencies).

Table 26.1 – Estimated costs for the recommended work program

PHASE 1	WORK PROGRAM	DESCRIPTION	BUDGET (USD)
1a	Infill drilling	20,000 m	$3,000,000
1b	Exploration – Vertical and lateral extensions	20,000 m	$3,000,000
1c	Exploration – Various targets on the Project	10,000 m	$1,500,000
1d	Updated MRE		$200,000
	Phase 1 contingency (15%)		1,150,000
	Phase 1 Subtotal		$8,850,000
PHASE 2	**WORK PROGRAM**	**DESCRIPTION**	**BUDGET (USD)**
2a	Metallurgical tests		$250,000
2b	Engineering, environment and legal studies		$250,000
2c	PEA		$250,000
	Phase 2 contingency (15%)		$100,000
	Phase 2 Subtotal		$850,000
	TOTAL (Phase 1 and Phase 2)		$9,700,000

27. REFERENCES

Agnico Eagle and Barsele, 2016. Barsele Project Joint Venture Meeting, Meeting No. 3/2016, Storuman, Sweden. Unpublished.

Agnico Eagle, 2017a. Summary report September-2017, Barsele project, AES. Unpublished.

Agnico Eagle, 2017b. Summary report October-2017, Barsele project, AES. Unpublished.

Agnico Eagle, 2017c. Summary report December-2017, Barsele project, AES. Unpublished

Agnico Eagle, 2017d. Agnico Eagle Reports Fourth Quarter and Full Year 2016 Results, Published Agnico Eagle News Releases, PRNewswire, February 15, 2017.

Agnico Eagle, 2018a. Summary report July-2018, Barsele project, AES. Unpublished

Agnico Eagle, 2018b. Summary report August-2018, Barsele project, AES. Unpublished

Agnico Eagle, 2018c. Summary report September-2018, Barsele project, AES. Unpublished

Agnico Eagle, 2018d. Summary report October-2018, Barsele project, AES. Unpublished

Agnico Eagle, 2018e. Summary report November-2018, Barsele project, AES. Unpublished

Agnico Eagle, 2018f. Summary report December-2018, Barsele project, AES. Unpublished

Agnico Eagle, 2018g. Agnico Eagle Reports Fourth Quarter and Full Year 2017 Results, Published Agnico Eagle News Releases, CNW, February 14, 2018.

Agnico Eagle and Barsele, 2017. Barsele Project Joint Venture Meeting, Meeting No. 1/2017, Storuman, Sweden. Unpublished.

Alain, V., Fahlgren, K. and Nigatu, W., 2012. Untitled report for Orex Minerals about prospecting, core relogging and sampling in the summer of 2012.

Allen, R.L., Weihed, P. and Svenson, S.-Å., 1996. Setting of Zn-Cu-Au-Ag massive sulphide deposits in the evolution and facies architecture of a 1.9 Ga marine volcanic arc, Skellefte district, Sweden. Economic Geology 91, 1022-1053.

Allen, R., 2007. Review of Geology and Exploration Potential at the Barsele Project, Sweden. Unpublished Report to Northland Exploration Sweden, March 19, 2007.

BABEL Working Group, 1990. Evidence for early Proterozoic plate tectonics from seismic reflection profiles in the Baltic shield. Nature 348, 34-38.

Bark, G., 2008. On the origin of the Fäboliden orogenic gold deposit, northern Sweden. PhD Thesis, Luleå University of Technology, 142 pages.

Barry, J.P., Sandefur, R.L., Armbrust, G.A., 2006. Technical Report Barsele Project Northern Sweden. Technical report prepared for Northland Ressources Inc., April 12, 2006.

Barsele, 2018. Barsele Expansion drill hole SKI18007 at the Skirasen Zone Intersects Five Mineralized Intervals, including 15.0 metres grading 3.74 g/t gold, Published Barsele Minerals Corp. News Release, November 14, 2018.

Bauer, T.E., Skyttä, P., Allen, R.L. and Weihed, P., 2011. Syn-extensional faulting controlling structural inversion – Insights from the Paleoproterozoic Vargfors syncline, Skellefte mining district, Sweden. Precambrian Research 191, 166-183.

Bauer, T.E., Skyttä, P., Allen, R.L. and Weihed, P., 2013. Fault-controlled sedimentation in a progressively opening extensional basin: the Paleoproterozoic Vargfors basin, Skellefte mining district, Sweden. International Journal of Earth Sciences 102, 385–400.

Bauer, T.E., Skyttä, P., Hermansson, T., Allen, R.L., Weihed, P., 2014. Comparison of provenance, ore body shape and regional deformation patterns of VMS deposits for mapping the prospectivity in the Skellefte district, Sweden. Mineralium Deposita 19: 555-573.

Bauer, T., 2015. Barsele-Structural geological mapping, GVR15017, Unpublished report for Agnico Eagle Sweden AB report. 52 pages.

Bauer, T.E. and Imaña, M., 2017. Barsele project: structural framework modelling coupled with lithogeochemistry and alteration. Unpublished report for Agnico Eagle AB. 51 pages.

Bejgarn, T., Söderlund, U., Weihed, P., Årebäck, H. and Ernst, R., 2012. Paleoproterozoic porphyry Cu–Au, intrusion-hosted Au and ultramafic Cu–Ni deposits in the Fennoscandian Shield: Temporal constraints using U–Pb geochronology. Lithos, doi:10.1016/j.lithos.2012.06.015.

Billström, K. and Weihed, P., 1996. Age and provenance of host rocks and ores in the Paleoproterozoic Skellefte District, northern Sweden. Economic Geology 91, 1054-1072.

Corkery, J., 2007. Drilling Report for the Central High-Grade Polymetallic Zone. Internal Northland Report authored by John Corkery, Project Manager, Barsele Gold Project.

Dragon Mining, 2018. Svartliden Gold Mine. Online. http://www.dragonmining.com/svartliden-gold-mine

Dubé, B., and Gosselin, P., 2007. Greenstone-hosted quartz–carbonate vein deposits. In: Goodfellow, W. D. (ed). Mineral deposits of Canada: a synthesis of major deposit-types, district metallogeny, the evolution of geological provinces, and exploration methods. Geological Association of Canada, Mineral Deposits Division, Special Publication 5, pp. 49–73.

Eilu, P., 2012. Mineral deposits and metallogeny of Fennoscandia (Vol. 53, pp. 6-12). P. Eilu (Ed.). Geological survey of Finland. 403 pages

Eklund, D. 2007. Mineralogy of the hypozonal Svartliden gold deposit, northern Sweden, with emphasis on the composition and paragenetic relations of electrum. Undergraduate thesis MN3, Department of Earth Sciences, Uppsala University. Vol. 139. 34 pages.

Eliasson, T., Greiling, R.O., Sträng, T. and Triumf, C.-A., 2001. Bedrock map 23H Stensele, scale 1:50 000. Sveriges geologiska undersökning Ai 126–129.

Franklin, J.M., Hannigton, M.D., Jonasson, I.R., and Barrie C. T., 1998. Arc-related volcanogenic massive sulphide deposits. In: Proceedings of Short Course on Metallogeny of Volcanic Arcs, January 24-25, Vancouver. British Columbia Geological Survey Open-Files 1998-8, p. N1-N32.

Galley, A.G., Hannington, M.D., and Jonasson, I.R., 2007. Volcanogenic massive sulphide deposits. In: Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods. Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 141-161.

Giroux, G. H. and Thornsberry, V., 2011. Revised NI 43-101 Technical Report Orex Minerals Inc. Barsele Gold Project Storuman, Sweden, Technical Report prepared for Orex Minerals, March 18, 2011.

Giroux, G. H., Butler, S., Collins, M., 2012. NI 43-101 Technical Report November 2012 Orex Minerals Inc. Barsele Gold Project Storuman, Sweden. Report published on SEDAR website (Orex Minerals Inc.) on December 3, 2012. 164 pages.

Giroux, G. H., Butler, S., Collins, M., 2015. NI 43-101 Technical Report June 2015 Barsele Minerals Corp Orex Inc. Barsele Gold Project Storuman, Sweden. Report published on SEDAR website (Orex Minerals Inc.) on September 1, 2015. 172 pages.

Goldfarb R.J. Groves D.I., and Gardoll, S. 2001. Orogenic gold and geologic time: a global synthesis. Ore Geology Reviews 18: 1-75.

Goldfarb R.J., Baker, T., Dubé, B., Groves, D.I., and Hart, C.J.R., 2005. Distribution, character, and genesis of gold deposits in metamorphic terranes. Economic Geology 100th Anniversary Volume: 407-450.

Gonzales Roldan, M.J., 2010. Mineralogia, petrologia y geoquimica de intrusions sin-volcanicas en el distrito minero de Skellefte, norte de Suecia. Doctoral thesis, Universidad de Huelva, Spain, 273 pages.

Google Earth «Barsele» 65°02'44'' N and 17°27'18'' E. Google Earth. December 31, 2009. December 8, 2017.

Groves, D. I., Goldfard, R. J., Robert, F., Hart, C. J. R., 2003. Gold deposits in metamorphic belts: overview of current understanding, outstanding, problems, future research, and exploration significance. Economic Geology, v. 98, pp. 1–29.

Höglund, K., 2018a, Core Sampling, sample preparation, analytical methods & QAQC procedures at Barsele Au-VMS project, Sweden. July 2018 review, 15p.

Höglund, K., 2018b, Barsele Au-VMS Project, Sweden Review of end year 2017 and Q1-2018 Drilling Quality Control, Period 14 Nov, 2017 – to 31 Mar. 2018. 28p.

Hultman, E., Ström, R., Segerström, M., June 20, 2017. Sweden proposes major corporate income tax changes, Ernst and Young, http://www.ey.com/gl/en/services/tax/international-tax/alert--sweden-proposes-major-corporate-income-tax-changes

Imaña, M., 2016. Barsele Project: Structural compilation, lithogeochemistry and alteration, Nov.2015-Mar.2016. Unpublished report for Agnico Eagle AB, Storuman, Sweden, 38 pages.

Imaña, M., 2017. Figure in the Summary report of October-2017 Barsele Project, AES. Unpublished report by Agnico Eagle Sweden, 23 pages.

Isaksson, H., Keisu, M., Lindholm, T., 2016. Barsele Geophysical data compilation, geointerpretation and targeting for Agnico Eagle Sweden AB. GeoVista AB, GVR16002. Unpublished report. 126 pages.

Kathol, B. and Weihed, P., 2005. Description of regional geological and geophysical maps of the Skellefte district and surrounding areas. Geological Survey of Sweden SGU, Ba 57.

Keyser, H.J., 2004. Geological Report on the Barsele Property. Unpublished Report for North American Gold inc. March 19, 2004; revised April 24, 2004.

Lundqvist, T., Vaasjoki, M. and Skiöld, T., 1996. Preliminary note on the occurrence of Archaean rocks in the Vallen-Alhamn area, northern Sweden. Sveriges geologiska undersökning C 828, 32-33.

Lundström, I. and Albino, B., 1997. The Björkdal area. Geological Survey of Finland, Guide 41, 72–75.

Mellqvist, C., Öhlander, B., Skiöld, T. and Wikström, A., 1999. The Archaean-Proterozoic Palaeoboundary in the Luleå area, northern Sweden: Field and isotope geochemical evidence for a sharp terrane boundary. Precambrian Research 96, 225-243.

Montelius, C., 2005. The Genetic Relationship between Rhyolitic Volcanism and Zn-Cu-Au Deposits in the Maurliden Volcanic Centre, Skellefte district, Sweden: Volcanic facies, Lithogeochemistry and Geochronology. Dissertation or Thesis, Luleå University of Technology.

Norén P. and Boiln, N., 1992. Barsele Norra- Indicative beneficiation tests- Terra Mining unpublished memo dated Sept 16, 1992.

Pearson, W., 1998. Summary Report, Barsele Property. Private report for William Resources. January 28, 1998.

Pelletier, C., Richard, P.L., 2018. NI 43-101 Technical Report and Mineral Resource Estimate on the Barsele Property. Report published on SEDAR website (Barsele Minerals Corp.) on April 12, 2018. 139 pages.

Rafini, S., 2015, Assurance et contrôle de la qualité (QA/QC) en exploration minérale : Synthèse et évaluation des usages. Projet 2013-05. 52p.

Reynolds, I.M., 1996. Mineralogy and Preliminary Metallurgical Testwork on a Gold Bearing Ore Sample from the Barsele Deposit, Sweden. Private Report for Terra Mining AB by Anamet Sevices, May 1, 1996.

Robert, F., 1996. Filons de quartz-carbonates aurifères ; dans Géolgie des types de gîtes minéraux du Canada, rev by O.R. Eckstrand, W.D. Sinclair and R.I. Thorpe, CGC no°8, 387-405.

Schlöglova, K., Gordon, C., Hanes, R., Ask, H., and Broman, C., 2013. Svartliden gold mine: shear zone and BIF-hosted orogenic gold deposit, Gold Line, northern Sweden. Conf. Proceed. 12th Biennial SGA Meeting, Sweden:1193-1196.

Skyttä, P., Hermansson, T., Andersson, J. and Weihed, P., 2011. New zircon data supporting models of short-lived igneous activity at 1.89 Ga in the western Skellefte District, central Fennoscandian Shield. Solid Earth 2, 205-217.

Skyttä, P., Bauer, T.E., Tavakoli, S., Hermansson, T., Andersson, J. and Weihed, P., 2012. Pre-1.87 Ga development of crustal domains overprinted by 1.87 Ga transpression in the Paleoproterozoic Skellefte district, Sweden. Precambrian Research 206–207:109-136.

Sundblad, K., 2003. Metallogeny of Gold in the Precambrian of Northern Europe. Economic Geology, vol. 98, p. 1271-1290.

Swedish Meteorological and Hydrological Institute (SMHI), December 8, 2017, Gunnarn SMHI's station, https://www.smhi.se/en/weather/sweden-weather/observations#ws=wpt-a,proxy=wpt-a,tab=vader,param=t,stationid=147560,type=weather

Sveriges geollogiska undersökning (SGU), 2006. Guide to mineral legislation and regulations in Sweden. 10 pages.

Sveriges geollogiska undersökning (SGU), December 11, 2017. Depth to bedrock 1:100 000. Online Map Generator, http://apps.sgu.se/kartgenerator/maporder_en.html

Weatherbase, 2017. Forsvick, 8 December 2017, Sweden weather 35 yr record, http://www.weatherbase.com/weather/weatherall.php3?s=21281&cityname=Forsvick%2C+Vaesterbotten%2C+Sweden&units=

Weihed, P., Bergman Weihed, J., Sorjonen-Ward, P., Matsson, B., 2002. Post-deformation, sulphide-quartz vein hosted gold ore in the footwall alteration zone of the Paleoproterozoic Långdal VMS deposit, Skellefte district, northern Sweden. GFF 124:201-210.

Wikström, A., Mellqvist, C. & Barbarian, C., 1996. An Archaean Megaxenolith and a Proterozoic fragment within the Bälinge Magmatic Breccia, Luleå, northern Sweden. Sveriges Geologiska Undersökning C 828 48-56.

Wilson, M.R., Sehlstedt, S., Claesson, L., Smellie, J.A.T., Aftalion, M., Joseph Hamilton, P. and Fallick, A.E., 1987. Jörn: An early Proterozoic intrusive complex in a volcanic-arc environment, north Sweden. Precambrian Research 36, 201-225.

Witschard, F., 1984. The geological and tectonic evolution of the Precambrian of northern Sweden a case for basement reactivation? Precambrian Research 23, 273-315.