

Section References	PERC REPORTING STANDARD - TABLE 1			Section in the CPR where this is located or why it is considered not relevant to the project (“if not, why not”).
	Exploration Results	Mineral Resources	Mineral Reserves	

Section 1: Project Outline**1.0 Introduction - General**

Section 1: Project Outline	1.0	(i)	The terms of reference or scope of work.	GeoVista has been given the task to compile an updated independent Feasibility Study for the Fäbodtjärn gold deposit. A previous study was published in 2018 and some of the modifying factors have changed considerably since then, the price of gold being the most significant. Also, a powerline is now in place, contracts for construction, toll treatment of ore etc. are negotiated.
		(ii)	The Competent Person’s relationship to the issuer of the report, if any.	The Competent Person is independent of the issuer.
		(iii)	A statement for whom the report was prepared; whether it was intended as a full or partial evaluation or other purpose, work conducted, effective date of report, and remaining work.	The report was prepared on behalf of Botnia Exploration AB (the company).
		(iv)	Sources of information and data contained in the report or used in its preparation, with citations if applicable, and a list of references.	The sources of information are the company and earlier work by GeoVista AB done on behalf of the company.
		(v)	A title page and a table of contents that includes figures and tables.	The main report, GVR24016 Uppdaterad Genomförbarhetsstudie Fäbodtjärn, is published in connection to this Table 1.

	(vi)	<p>An Executive Summary, which briefly summarises important information in the public report, including property description and ownership, geology and mineralisation, the status of exploration, development and operations, Mineral Resource and Mineral Reserve estimates, and the Competent Person's conclusions and recommendations.</p> <p>If Inferred Mineral Resources are used, a summary valuation with and if practical without inclusion of such Inferred Mineral Resources. The Executive Summary should have sufficient detail to allow the reader to understand the essentials of the project.</p>	<p>The property is located in the outskirts of the Vindelgransele village, municipality of Lycksele in the north of Sweden. The mineralisation consists of a quartz vein with dissemination of gold and small amounts of sulphides. The upper part, intended to be mined, contains probable reserves of 117 ktonnes at a grade of 7,7 g/t Au (diluted). The ROM ore will be toll treated at Dragon Mining's Svartliden cyanidation plant, located some 100 km from Fäbodtjärn.</p> <p>In addition to the probable reserves the property contain some 85 ktonnes of inferred mineral resources, grading 5,9 g/t gold. These resources have not been included in the current Feasibility Study.</p> <p>The Competent Person recommend that the project is completed since the economic evaluation is favourable.</p> <p>Location maps are available in Appendix 2a, a list of valid exploration permits, and mining leases is presented in Appendix 2b.</p>
	(vii)	A declaration from the Competent Person, stating whether "the declaration has been made in terms of the guidelines of the PERC Reporting Standard".	This declaration has been made in terms of the guidelines of the PERC Reporting Standard, 2021.
	(viii)	<p>Diagrams, maps, plans, sections and illustrations, which are dated, legible and prepared at an appropriate scale to distinguish important features. Maps including a legend, author or information source, coordinate system and datum, a scale in bar or grid form, and an arrow indicating north.</p> <p>Reference to a location or index map and more detailed maps showing all important features described in the text, including all relevant cadastral and other infrastructure features.</p>	Diagrams and maps can be found in Appendix 3.
	(ix)	The units of measure, currency and relevant exchange rates.	All units of measurement are metric (SI), the currencies Swedish

			Kronor (SEK) and US Dollars (USD) respectively, the exchange rate used 1 USD ⇔ 10,0 SEK
	(x)	The details of the personal inspection on the property by each Competent Person or, if applicable, the reason why a personal inspection has not been completed.	The Competent Person visited the site during the test mining campaign in August of 2017.
	(xi)	If the Competent Person is relying on a report, opinion, or statement of another expert who is not a Competent Person, then a disclosure of the date, title, and author of the report, opinion, or statement, the qualifications of the other expert, the reason for the Competent Person to rely on the other expert, any significant risks and any steps the Competent Person took to verify the information provided.	Not applicable

1.1 Property Description

1.1	(i)	Brief description of the scope of project (i.e. whether in preliminary sampling, advanced exploration, scoping, pre-feasibility, or feasibility phase, Life of Mine plan for an ongoing mining operation or closure).	The scope of this Table-1 is to present an updated feasibility study.
	(ii)	Describe (noting any conditions that may affect possible prospecting/mining activities) topography, elevation, drainage, fauna and flora, the means and ease of access to the property, the proximity of the property to a population centre, and the nature of transport, the climate, known associated climatic risks and the length of the operating season and to the extent relevant to the mineral project, the sufficiency of surface rights for mining operations including the availability and sources of power, water, mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant sites.	<p>The deposit is outcropping at approximately 360m above sea level in the outskirts of the Vindelgransele village, population 50, some 180 km WNW of Skellefteå.</p> <p>The area between the future mine and the nearest permanent housing is covered by pine and spruce forest.</p> <p>Other than forestry the area is used for hunting and berry and mushroom picking.</p> <p>Vindelgransele has a subarctic climate with severe winters, no dry season and cool summer climate. Average annual precipitation is 700mm.</p> <p>The average temperature varies between 18°C in July and -18°C in January.</p>

				<p>Transportation to and from the mine will be done on public roads, mostly paved.</p> <p>The Company has acquired the land necessary for the mining activities as well as for water treatment and waste storage. No tailings will be stored on site, all treatment will be done off-site.</p> <p>The Company holds a valid Mining Concession and an Environmental Permit for the planned activities. In granting the Environmental Permit, the Environmental Court considered all the drainage, flora and fauna, impact on reindeer husbandry etc. that can be affected by the mining activities.</p>
		(iii)	Specify the details of the personal inspection on the property by each CP or, if applicable, the reason why a personal inspection has not been completed.	The Competent Person visited the site during the test mining campaign in August of 2017.

1.2 Location

Section 1: Project Outline	1.2	(i)	Description of location and map (country, province, and closest town/city, coordinate systems and ranges, etc.).		A location map can be found in Appendix 2a.
		(ii)	Country Profile: describe information pertaining to the project host country that is pertinent to the project, including relevant applicable legislation, environmental and social context etc. Assess, at a high level, relevant technical, environmental, social, economic, political and other key risks.		A country profile is presented in the report.
		(iii)	Provide a general topocadastral map	Provide a Topo-cadastral map in sufficient detail to support the assessment of eventual economics. State the known associated climatic risks.	Provide a detailed topo-cadastral map. Confirm that applicable aerial surveys have been checked with ground controls and surveys, particularly in areas of rugged terrain, dense vegetation or high altitude.

1.3 Adjacent Properties

1.3	(i)	Discuss details of relevant adjacent properties. If adjacent or nearby properties have an important bearing on the report, then their location and common mineralized structures should be included on the maps. Reference all information used from other sources.	The company holds some nearby exploration permits with similar style of mineralisation; however, they require more exploration before they can possibly be considered for exploitation. A map of the locations is presented in Appendix 2a.
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1.4 History

1.4	(i)	State historical background to the project and adjacent areas concerned, including known results of previous exploration and mining activities (type, amount, quantity and development work), previous ownership and changes thereto.		No previous mining has taken place in the vicinity of the property. However, the complex sulphide mine Kristineberg (Boliden) is located some 14km to the east.
	(ii)	Present details of previous successes or failures with reasons why the project may now be considered potentially economic.		Not applicable.
	(iii)		Discuss known or existing historical Mineral Resource estimates and performance statistics on actual production for past and current operations.	The latest published estimate of mineral reserves was published in 2018 in the form of a Feasibility Study, GeoVista AB, 2018. No production has been carried out to compare with the estimate.
	(iv)		Discuss known or existing historical Mineral Reserve estimates and performance statistics on actual production for past and current operations.	Not applicable.

1.5 Legal Aspects and Permitting

1.5	(i)	A statement from the Competent Person on the confirmation of the legal tenure, including a description of (the following):		The Company holds a valid mining concession as well as an environmental permit, covering all aspects of mining.
	(ii)	Discuss the nature of the issuer's rights (e.g. prospecting and/or mining) and the right to use the surface of the properties to which these rights relate. Disclose the date of expiry and other relevant details.		All rights necessary for mining are secured by the Company.

	(iii)	Present the principal terms and conditions of all existing agreements, and details of those still to be obtained, (such as, but not limited to, concessions, partnerships, joint ventures, access rights, leases, historical and cultural sites, wilderness or national park and environmental settings, royalties, consents, permission, permits or authorisations).	An agreement for toll treatment of the ore exists between the company and Dragon Mining. No other agreements exist, and none is considered necessary.
	(iv)	Present the security of the tenure held at the time of reporting or that is reasonably expected to be granted in the future along with any known impediments to obtaining the right to operate in the area. State details of applications that have been made. See Clause 8.1 for declaration of a Mineral Reserve.	All rights necessary for mining are secured by the Company. The Mining Concession is valid until 2041-09-06 but can be extended if mining activities are on-going at the time of expiry. The Environmental Permit was granted by the Environmental Court 2020-12-21 and entered into legal force in October 2021. A security for rehabilitation, to the amount of SEK 4 375 000, has been deposited with the County Administrative Board of Västerbotten.
	(v)	Provide a statement of any legal proceedings for example; land claims, that may have an influence on the rights to prospect or mine for minerals, or an appropriate negative statement.	No legal proceedings that could affect the project exists.
	(vi)	Provide a statement relating to governmental/statutory requirements and permits as may be required, have been applied for, approved or can be reasonably be expected to be obtained. Provide a review of risks that permits will not be received as expected and impact of delays to the project.	All rights necessary for mining are secured by the Company.

1.6 Royalties

1.6	(i)	Describe the royalties that are payable in respect of each property.	A royalty of 0,05% of the value of the extracted metal will have to be paid annually to the Swedish state based on the average price on the London Metal Exchange. The company has an obligation to pay a 2% Net Smelter Return to North Atlantic Natural Resources AB
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1.7 Liabilities

	1.7	(i)	Describe any liabilities, including rehabilitation guarantees that are pertinent to the project. Provide a description of the rehabilitation liability, including, but not limited to, legislative requirements, assumptions and limitations.	A security for rehabilitation of the mining area has been deposited with the County Administrative Board of Västerbotten. No other liabilities exists.
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Section 2: Geological Setting, Deposit, Mineralisation

2.1 Geological Setting, Deposit Type and Mineralisation Style				
Section 2: Geological Setting, Deposit, Mineralisation	2.1	(i)	Describe the regional geology.	The Fäbodtjärn gold mineralisation is located in the westernmost part of the Palaeoproterozoic volcanosedimentary belt of the Skellefteå District in Northern Sweden and it also borders the Gold Line District. The stratigraphy of this region is complex and laterally variable. It has been divided into a sequence dominated by subaqueous felsic volcanic rocks, the Skellefteå Group, which is interfingering with a coeval sequence dominated by mixed turbiditic greywackes and coarse clastic sedimentary rocks, the Vargfors Group. The supracrustal rocks have been intruded by numerous felsic, ultrabasic, basic and intermediate sills and dykes. Both supracrustal and intrusive rocks have been affected by major deformation events and subjected to regional metamorphism in greenschist to lower amphibolite facies.
		(ii)	Describe the project geology including mineral deposit type, geological setting and style of mineralisation.	The main mineralisation at Fäbodtjärn is contained in a quartz vein hosted in a sequence of

				<p>turbiditic greywackes and pelitic sedimentary rocks and is situated 20-30 meters above the contact with a granodioritic sill. The vein is commonly in close association with ultramafic to mafic dykes and is massive with a width varying from 0,5 to 4,5 meters. A relatively narrow dyke of lamprophyric affinity and barren of gold, is commonly in immediate hangingwall contact with the quartz vein. Both quartz vein and mafic/ultramafic dykes are orientated parallel to the regional foliation of the hosting meta-sedimentary rocks. Scattered concentrations of arsenopyrite, often with anomalous values of gold, occur randomly in the underlying granodiorite but no economic continuity in neither gold grade nor lateral extent has so far been proved in the diorite. Besides visible gold, the quartz vein contains varying quantities of sulphides (chalcopyrite, sphalerite, galena, pyrrhotite/pyrite and minor arsenopyrite). The gold mineralisation at Fäbodtjärn has the characteristics of a structurally controlled orogenic gold occurrence with a possible genetic link with the underlying intrusive rock.</p>
		(iii)	Discuss the geological model or concepts being applied in the investigation and on the basis of which the exploration program is planned. Describe the inferences made from this model.	<p>The mineralisation at Fäbodtjärn appears in a nearly north-south striking quartz vein with a west-southwestern dip that averages 55 degrees. The strike length of the vein at surface is approximately 150 meters and its downdip extent</p>

				<p>is still unknown (open at depth). Its northern limit seems controlled by a northeast-southwest striking fault-like structure, causing an apparent northern uplift of the stratigraphy. A detailed investigation of the geometry and geological characteristics of this structure and a possible continuation of the quartz vein further to the north will be the focus of a next stage of exploration. The southern limit of the mineralisation is characterised by an abrupt thinning of the quartz vein, as seen both in outcrop and in drill hole intersections. Since its discovery in 2011, the exploration program at Fäbodtjärn was focussed on outlining the extent of the mineralised quartz vein in all directions and to define its economic feasibility.</p>
		(iv)	Discuss data density, distribution and reliability and whether the quality and quantity of information are sufficient to support statements, made or inferred, concerning the project.	<p>The data density in the upper part, down to a depth of approximately 120m, is 35*35m, which is considered sufficient for declaration of Indicated Mineral resources. The data density for the deeper part of the deposit is lower and considered to be sufficient for an Inferred category.</p>
		(v)	Discuss the significant minerals present in the deposit, their frequency, size and other characteristics. These include minor and gangue minerals where these will have an effect on the processing steps. Indicate the variability of each important mineral within the mineral deposit.	<p>Besides varying quantities of quite coarse grained (recrystallised) sulphide minerals (chalcopyrite, pyrite/pyrrhotite, sphalerite and minor galena and arsenopyrite), calcite, chlorite, sericite and actinolitic amphibole occur as accessory minerals in the quartz vein. In most drill intercepts and</p>

				<p>especially in chalcopyrite and/or sphalerite-rich intervals, visible gold is commonly seen as scattered tiny grains. The sulphide minerals occur only mainly as irregular, scattered disseminations within the quartz vein and are not seen in the meta-sediments or mafic/ultramafic dykes. In the excavated vein exposures in the trench, the sulphides constitute a rather minor component in the overall volume of the quartz vein.</p> <p>Hydrothermal alteration is subtle in and close to the quartz veins with a sharp decrease away from the veins, indicating a narrow alteration envelope around the mineralisation. The average contents of base metals (Cu, Zn) in the deposit is considered to be sub-economic. Gold-containing minerals are dominantly electrum. Strongly enhanced values of silver correlate well with the presence of gold in assayed intervals.</p>
		(vi)	Describe the significant mineralised zones encountered on the property, including a summary of the surrounding rock types, relevant geological controls, and the length, width, depth, and continuity of the mineralisation, together with a description of the type, character, and distribution of the mineralisation	<p>Fäbodtjärn quartz/gold vein: hosted by metasediments (greywackes, metapelites) and in immediate hangingwall contact with mafic, lamprophyric dyke. Situated some 20-30 meters above the contact with an intermediate intrusive sill. Classified as an orogenic gold vein with an assumed genetic link with the underlying granodioritic sill. Striking almost north-south with an average western dip of 55 degrees. Highly continuous in character in the drill tested area and in trench</p>

				<p>exposures. Northern extent seems controlled, but possibly not limited by a northeast-southwest striking fault-like structure; its southern limit is defined by an abrupt thinning of the vein. Downdip extension is drillhole-defined until at least 250 meters below surface (equals approximately 320 meters down dip) and the mineralisation is still open further at depth.</p> <p>Scattered disseminations of arsenopyrite with enhanced gold values occur seemingly randomly in the granodioritic sill but evidence of economic continuity in grade or direction is absent.</p>
		(vii)	Confirm that reliable geological models and / or maps and cross sections that support interpretations exist.	Representative digital and analogue geological models, cross sections based on drill hole interpretations and intercept analyses, field observations and geological mapping of trench exposures do exist.

Section 3: Exploration and Drilling, Sampling Techniques and Data

3.1 Exploration				
Section 3: Exploration and Drilling, Sampling Techniques	3.1	(i)	Describe the data acquisition or exploration techniques and the nature, level of detail, and confidence in the geological data used (i.e. geological observations, remote sensing results, stratigraphy, lithology, structure, alteration, mineralisation, hydrology, geophysical, geochemical, petrography, mineralogy, geochronology, bulk density, potential deleterious or contaminating substances, geotechnical and rock characteristics, moisture content, bulk samples etc.). Confirm that data sets include all relevant metadata, such as unique sample number, sample mass, collection date, spatial location etc.	Data acquisition based on core drilling, limited basal till sampling, and rock sampling of trench exposures (channel sampling). All collected samples have an unique sample number and are saved in the projects database together with additional information on collar coordinates and elevation, chemical analyses and other information (like photographs)

				<p>where and when applicable. Detailed scientific research on the mineralogy, petrography and metallurgy of the mineralisation has been carried out and is available. Preparation of geological maps and drill hole correlations is commonly at scale 1:1,000. All drillcore logs are documented with collar coordinates and elevation, drilling dates, hole direction and dip, hole length, dimension of drill core used and name of drill contractor. Depth of overburden and information on casing left in the hole is also registered in the drill log sheets. Mapping of outcropping quartz vein in the trench was carried out at scale 1:200 and over a length of 70m of continuous exposure. A total number of 25 channel samples were collected from sample sites generally 5 to max 10m apart. The bulk density is determined by Archimedes method, weighing the samples in air and immersed in water for a total of 20 samples from drillcore. The bulk density was averaged to 2,67 tonnes/m³.</p>
		(ii)	<p>Identify and comment on the primary data elements (observation and measurements) used for the project and describe the management and verification of these data or the database. This should describe the following relevant processes: acquisition (capture or transfer), validation, integration, control, storage, retrieval and backup processes. It is assumed that data are stored digitally but hand-printed tables with well organized data and information may also constitute a database.</p>	<p>The main constituents that characterize and define the geological and economic relevance of the mineralisation are data collected from drillcore and trench exposures. All core has been geologically described and in most cases photographed (dry and wet). Selected intervals of drill core were sampled and sent off to an accredited laboratory for analysis (gold and multi-element). Returned</p>

				<p>assay results of both sampled core intervals and of regularly inserted geochemical standards, were consecutively inspected and compared with sample descriptions for validation. All data are stored in a digital database. All drill core has been stored in warehouse facility.</p>
		(iii)	Acknowledge and appraise data from other parties and reference all data and information used from other sources.	<p>Historic drill holes in the immediate vicinity of Fäbodtjärn include three diamond drill holes drilled by Boliden in 1992 (Bol 3, 4 and 8), one diamond drill hole (MID98001) completed in 1998 by NANR (North Atlantic Natural Resources) and three reverse-circulation holes (MIDNRC0601 – 03) drilled by Mawson Resources in 2006. Both NANR's and Mawson's test holes were collared 100 meters southeast and 150 meters southwest respectively of the Fäbodtjärn resource area.</p> <p>Out of these seven test holes, only Boliden's diamond drill holes number 3 and 4 hit the gold-bearing quartz vein at Fäbodtjärn and guided Botnia in 2011 to further investigate its potential for an economic resource. The collar positions including drill direction and dip of hole for all seven test holes are known and accessible in Botnias database. Assay results, sample and drill core descriptions are also available.</p> <p>The results from holes Bol 3 and 4 (0,30 meter @ 15,5 g/t Au and 1,35 m @ 17,3 g/t Au respectively) were not included in Botnias</p>

			resource model due to uncertainty in the assaying method chosen by Boliden at the time.
	(iv)	Clearly distinguish between data / information from the property under discussion and that derived from surrounding properties	All geological information and data reported in Table 1 are collected from the property itself unless mentioned otherwise.
	(v)	Describe the survey methods, techniques and expected accuracies of data, including the methods for downhole surveying of drillholes. Specify the grid system used.	<p>Collaring of drill sites in the field was done by means of a handheld Garmin GPS. A geological compass corrected for magnetic declination was used for directional purposes. The coordinate reference system used was RT90 and after completion of the drill program all collar coordinates were surveyed by means of Trimble GNSS/GPS system and subsequently transferred into the Swedish reference system Sweref 99TM. The accuracy of collar positions is considered to be less than 1 meter.</p> <p>Out of a total of 32 drill holes included in the resource model, all but four holes were successfully surveyed, to measure the deviation in azimuth and/or dip down the hole. The surveying system used was Devico.</p>
	(vi)	Discuss whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the estimation procedure(s) and classifications applied.	The competent Person considers that the data spacing and distribution is sufficient to capture the degree of geological and grade continuity.
	(vii)	Present representative models and / or maps and cross sections or other two or three dimensional illustrations of results, showing location of samples, accurate drill-hole collar positions, down-hole surveys, exploration pits, underground workings, relevant geological data, etc.	Maps and sections showing the data distribution are presented in the report.

	(viii)	Report the relationships between mineralisation widths and intercept lengths are particularly important, the geometry of the mineralisation with respect to the drill hole angle. If it is not known and only the down-hole lengths are reported, confirm it with a clear statement to this effect (e.g. 'down-hole length, true width not known').	Most drill holes were directed at high angles to both strike and dip of the mineralised quartz vein. For 19 out of 32 drill hole intercepts, the theoretical relationship between intercept length and true width was calculated with respect to the drill hole angle and the inferred dip of the mineralisation at the intersection point. For these 19 holes a total intercept length of 41,3 meters and an average intercept length of 2,0 meters corresponded to a total true width of 37,6 meters and an average true intercept width of 1,9 meters. The average grade in these 19 intercepts equalled 10 g/t Au, both in intercept length and in corresponding true width.
3.2 Drilling Techniques			
3.2	(i)	Present the type of drilling undertaken (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Banka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Only core drilling undertaken. Overburden generally 5-8 meters. Core diameter: BGM (42 mm) or NQ2 (50,6 mm). Standard tube, 3 meter core barrel. No oriented core.
	(ii)	Describe whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, technical studies, mining studies and metallurgical studies.	All drill core is geologically but not geotechnically logged. No RQD/recovery measurements undertaken except for three holes (20, 21 and 22). Drill core of approximately half of all drill holes that are included in the resource model is photographed (dry & wet). All remaining sampled (half and quarter core) and unsampled drill core was saved and stored in warehouse at the Geological Survey in Malå for future study.

		(iii)	Describe whether logging is qualitative or quantitative in nature; indicate if core photography. (or costean, channel, etc.) was undertaken	<p>All drill intercepts in the mineralised quartz vein were sampled. Samples were also routinely taken from 1-2 meters of the immediate hangingwall and footwall of the quartz vein and from other minor quartz veins and/or otherwise prospective zones. Scattered samples were taken from the underlying granodioritic intrusive, with a focus on zones with noticeable quantities of disseminated arsenopyrite.</p> <p>Channel samples from the outcropping quartz vein in the trench were cut by rock saw at a lateral spacing of 3-10 meters along strike. All sample sites in the trench were photographed, surveyed and mapped at a scale of 1:200.</p>
		(iv)	Present the total length and percentage of the relevant intersections logged.	A total length of 55,5 meters (= 100%) of relevant intersections from 32 drill holes was logged and sampled.
		(v)	Discuss the results of any downhole surveys of the drill holes.	Downhole surveys measuring the deviation in azimuth and dip were accomplished in 86% of all holes completed. With some very few exceptions, these measurements do not show significant irregularities in the deviation of neither the azimuth nor dip down the holes.
		3.3 Sample method, collection, capture and storage		
Section 3: Exploration	3.3	(i)	Describe the nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	See §3.2 III. No handheld XRF instruments or downhole sondes have been used.

		(ii)	Describe the sampling processes, including sub-sampling stages to maximize representivity of samples. This should include whether sample sizes are appropriate to the grain size of the material being sampled. Indicate whether sample compositing has been applied.	Sample intervals were selected on the basis of lithological and/or structural characteristics and with a maximum sample length of 1,5 meters in the quartz vein and 2 meters for samples taken from homogeneous sections in the diorite. Sample compositing has been applied for separate samples taken from a consistent section of the mineralised quartz vein.
		(iii)	Appropriately describe each data set (e.g. geology, grade, density, quality, diamond breakage, geo-metallurgical characteristics etc.), sample type, sample-size selection and collection methods	In the assay data sheets of the project database, each individual sample is listed with its unique sample number, kind of sample, start and end of sampled interval, interval length, and a short description of lithology and/or structural characteristics,
		(iv)	Report the geometry of the mineralisation with respect to the drill-hole angle. State whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the Mineral deposit type. State if the intersection angle is not known and only the downhole lengths are reported.	Measurements of the angles between foliation and/or lithological contacts with the core axis were taken regularly and recorded in the individual drill logs. Correlation of drill holes in cross sections confirmed the regularity and concordance of the mineralised quartz vein in relation to its metasedimentary host rock. Downhole intercept lengths were used in reporting drill results. See also §3.1 VIII
		(v)	Describe retention policy and storage of physical samples (e.g. core, sample reject, etc.)	All sampled and unsampled drill core is stored in warehouses managed by the Geological Survey of Sweden in Malå. Both pulps and rejects were returned from the laboratory to the same warehouse facilities in Malå.

		(vi)	Describe the method of recording and assessing core and chip sample recoveries and results assessed, measures taken to maximise sample recovery and ensure representative nature of the samples and whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<p>Core recovery has been good both in dioritic and metasedimentary rock although few core recovery measurements were systematically undertaken. The exception are holes 20, 21 and 22 where a thorough core recovery survey and RQD measurements were made. Hole 20 had an average core recovery of 98% over 272 meters, hole 21 had an average core recovery of 97% over 261 meters and hole 22 (drilled through a zone of brecciation) had a core recovery of 89% over 146 meters of core.</p> <p>Core loss in the main zone of mineralisation occurred only in hole 44 with a loss of more than 50% of the intercepted interval (2,35 meter length). This was most probably due to a technical issue rather than being caused by the quality of the rock encountered.</p>
		(vii)	If a drill-core sample is taken, state whether it was split or sawn and whether quarter, half or full core was submitted for analysis. If a non-core sample, state whether the sample was riffled, tube sampled, rotary split etc. and whether it was sampled wet or dry. the impact of water table or flow rates on recovery and introduction of sampling biases or contamination from above. Discuss the impact of variable hole diameters, e.g., by the use of a calliper tool.	All drill core samples were cut with a diamond blade core saw in half and one half core was submitted for analysis. The other half was returned to its previous position in the core box and saved/stored. For reasons of metallurgical testing, selected half core of most of the intercepts within the resource area has been sawn into quarter core whereby one quarter was submitted for metallurgical testing and the remaining quarter was again returned to its correct position in the core box and saved.

				The impact of variable hole diameters has not been considered.
		(viii)	If a drill-core sample is taken, sufficient information should be supplied to assess the effects of core loss. Occasionally, only total core recovery is mentioned but at the same time the mineralized parts are designated as poor quality. This type of reporting is against the main principles of Transparency and Materiality. Heavy core losses throughout an ore body intersection can seriously undermine the confidence in a resource estimate. It is important to determine whether a relationship exists between grade and recovery (either positive or negative) to assess the potential for grade bias. In addition, it is important to state the method used to determine the core recovery: Total Core Recovery (TCR), Solid Core Recovery (SCR) and Rock Quality Designation (RQD).	With the exception of one hole (no. 44), no significant core loss has been recorded.
		3.4 Sample Preparation and Analysis		
3.4	(i)	Identify the laboratory(s) and state the accreditation status and Registration Number of the laboratory or provide a statement that the laboratories are not accredited. Record the steps taken by the Competent Person to ensure the results from a non-accredited laboratory are of an acceptable quality.	All rock and core samples from the Fäbodtjärn exploration project were submitted to the ALS Global Geochemistry Laboratory in Malå or Piteå, Sweden for core cutting, core photography, sample preparation and analysis. The ALS Laboratories is a Swedac accredited geochemical laboratory (reg. nr 2030).	
	(ii)	Identify the analytical method. Discuss the nature, quality and appropriateness of the assaying and laboratory processes and procedures used and whether the technique is considered partial or total.	Sample preparation scheme PREP-31 was used on all core samples. After standard drying and fine crushing of the entire sample to produce a crush product with 70% of material less than 2 mm in diameter., a split of 250 g was taken and pulverized to better than 85% passing 75 microns. Samples were then analysed by 50 g fire assay fusion with AAS finish, technique Au-AA26 which has an analysis range of 0,01 – 100 ppm. For reasons of grade comparison, a number of selected samples with visible gold were also analysed with the Au-AA15 leaching technique by accelerated cyanide leach using LeachWell reagent	

				<p>with AAS finish which has an analysis range of 0,01 – 300 ppm. Only Au-AA26 assay results were considered in the Fäbodtjärn resource model. All core samples were also analysed by aqua regia – ICP – AES for 35 elements, analysis method ME-ICP41.</p> <p>No discrepancies in the assay results or reporting routines have been experienced and the quality of analyses was considered high.</p>
		(iii)	Describe the process and method used for sample preparation, sub-sampling and size reduction, and likelihood of inadequate or non-representative samples (i.e. improper size reduction, contamination, screen sizes, granulometry, mass balance, etc.)	See §3.4 II
		3.5 Sampling Governance		
Section 3: Exploration and Drilling, Sampling Techniques and Data	3.5	(i)	Discuss the governance of the sampling campaign and process, to ensure quality and representivity of samples and data, such as sample recovery, high grading, selective losses or contamination, core/hole diameter, internal and external QA/QC, and any other factors that may have resulted in or identified sample bias.	Drill core logging and sampling procedures were always governed by the company's allocated geologist whereby fixed routines in marking and numbering of sample intervals were followed, as to minimize risks for selective losses and contamination and to maximize sample recovery.
		(ii)	Describe the measures taken to ensure sample security and the Chain of Custody.	Logging and sampling were always undertaken at the core logging facilities of the ALS Laboratory in Malå, Sweden. Core boxes with marked sample intervals were handed over to the Laboratory's personnel for sawing and further sample treatment and did not leave the laboratory's facilities until sawing and sample preparation was completed. After core cutting (using a diamond blade saw) the half-core samples were placed into thick polymer bags with a sample

				ticket, weighed, and assigned a sample ID. After sample preparation all samples were sent by the laboratory's personnel to the ALS Geochemistry laboratory in Piteå for analysis.
	(iii)	Describe the validation procedures used to ensure the integrity of the data, e.g. transcription, input or other errors, between its initial collection and its future use for modelling (e.g. geology, grade, density, etc.)		Upon completion of the sample analyses, assay certificates were provided by ALS to Botnia including the laboratory's internal QA/QC procedures and test results. Assay results from each individual sample batch were then checked for any discrepancy between initial sample description and returned assay results. Assays from inserted standards and duplicates were specifically checked as part of the company's own QA/QC procedures.
	(iv)	Describe the audit process and frequency (including dates of these audits) and disclose any material risks identified.		Audit of exploration data has been undertaken by GeoVista AB in Luleå during the process of resource modelling and preparation of a feasibility study in June 2018.

3.6 Quality Control/Quality Assurance

3.6	(i)	Demonstrate that adequate field sampling process verification techniques (QA/QC) have been applied, e.g. the level of duplicates, blanks, reference material standards, process audits, analysis, etc. If indirect methods of measurement were used (e.g. geophysical methods), these should be described, with attention given to the confidence of interpretation. Refer to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. QA/QC procedures used to check databases augmented with 'new' data have not resulted in corruption of previous versions containing stored 'old' data.		A total of 800 core samples were analysed during the drilling campaigns at Fäbodtjärn of 2012 – 2015. Of these, 85 reference material standards and blanks had been inserted, equalling 11% of all samples taken. Furthermore, a total of 9 duplicate sample were analysed. Nine different reference standards covering a wide range of gold and multi-element grades from both Ore Research & Exploration P/L and Geostats PTY LTD in Australia were used for
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			quality control purposes. The returned assay results from all reference standards were checked for any discrepancies and the level of accuracy in assay results was considered as 'good'.
	(ii)	Document the use of any independent check laboratory (umpire check samples). Identify the independent laboratory and details of its accreditation.	No umpire check samples have been analysed.
3.7 Bulk Density			
3.7	(i)	Describe the method of bulk density determination with reference to the frequency of measurements, the size, nature and representativeness of the samples.	Density measurements on core samples from the quartz vein in drill holes 20 and 22 indicated a SG of 2,67 in average.
	(ii)	If target tonnage ranges are reported state the preliminary estimates or basis of assumptions made for bulk density.	Not applicable.
	(iii)	Discuss the representivity of bulk density samples of the material for which a grade range is reported.	Not applicable.
	(iv)	Discuss the adequacy of the methods of bulk density determination for bulk material with special reference to accounting for void spaces (vugs, porosity etc.), moisture and differences between rock and alteration zones within the mineral deposit.	The quartz vein is very homogenous with no holes or cavities. The density determination samples can thus represent the entire vein.
3.8 Bulk-Sampling and/or Trial-mining			
3.8	(i)	Indicate the location of individual samples (including map).	A campaign of test mining was carried out in 2017. Approximately 2100 tonnes were mined and sent to Bolidens Rönnskär smelter for testing. A map is available in the report.
	(ii)	Describe the size of samples, spacing/density of samples recovered and whether sample sizes and distribution are appropriate to the grain size of the material being sampled.	Approximately 50m of the quartz vein was exposed and 18 channel samples were cut with a diamond saw, distributed along the strike of the vein. The average grade of gold was 7,5 g/t.
	(iii)	Describe the method of mining and treatment.	The ground was cleared from topsoil and till to expose the bedrock, saving the excavated

				<p>material in separate heaps for rehabilitation after closure.</p> <p>A narrow pit was created in the metasediments to expose the quartz vein through drilling and blasting.</p> <p>Finally, the quartz vein was drilled and blasted after mapping and sampling.</p> <p>Approximately 2100 tonnes of gold-bearing quartz was mined.</p>
		(iv)	Indicate the degree to which the samples are representative of the various types and styles of mineralisation and the mineral deposit as a whole.	Only one type and style of mineralisation exists in the deposit, the sampled material was a good representation of this.

Section 4: Estimation and Reporting of Exploration Results, Mineral Resources and Mineral Reserves

	4.1 Geological model and interpretation			
Section 4: Estimation and Reporting of Exploration Results, Mineral Resources and Mineral Reserves	4.1	(i)	Describe the geological model, construction technique and assumptions that forms the basis for the Exploration Results or Mineral Resource estimate. Discuss the sufficiency of data density to assure continuity of mineralisation and geology and provide an adequate basis for the estimation and classification procedures applied.	All intercepts of the quartz vein have been modelled into a 3D wireframe. Assay data from within the wireframe has been extracted and used to populate a block model
		(ii)	Describe the nature, detail and reliability of geological information with which lithological, structural, mineralogical, alteration or other geological, geotechnical and geo-metallurgical characteristics were recorded.	<p>Lithological, mineralogical and structural information was recorded in the process of logging the core.</p> <p>The geological information is of sufficient quality for mineral resource estimation.</p>
		(iii)	Describe any obvious geological, mining, metallurgical, environmental, social, infrastructural, legal and economic factors that could have a significant effect on the prospects of any possible exploration target or mineral deposit.	The most important factor that can affect the project is the price of gold.

		(iv)		Discuss all known geological data that could materially influence the estimated quantity and quality of the Mineral Resource.	There are no known data that can materially influence the estimated Mineral Resource.
		(v)		Discuss whether consideration was given to alternative interpretations or models and their possible effect (or potential risk) if any, on the Mineral Resource estimate.	No alternative interpretations were considered.
		(vi)		Discuss geological discounts (e.g. magnitude, per reef, domain, etc.), applied in the model, whether applied to mineralized and / or un-mineralized material (e.g. potholes, faults, dykes, etc.).	No discounts were applied.
		4.2 Estimation and modelling techniques			
	4.2	(i)	Describe in detail the estimation techniques and assumptions used to determine the grade and tonnage ranges for any Exploration Targets, if reported in a Public Report.		Not applicable.
		(ii)		Discuss the nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values (cutting or capping), compositing (including by length and/or density), domaining, sample spacing, estimation unit size (block size), selective mining units, interpolation parameters and maximum distance of extrapolation from data points.	<p>The estimation of tonnage and grade has been done with block modelling. The block model has blocks with 8*2*8 m sized blocks (X*Y*Z), oriented along the strike of the mineralisation (N15°W). To better fit the geometry, ¼ sub - blocking is allowed.</p> <p>Variography showed that the range along strike is approximately 35m, see Appendix 4. It also showed that Kriging can be used as the method for interpolation.</p> <p>The interpolation was done with Kriging with parameters as presented in Appendix 5.</p> <p>The selected block size and the method of interpolation are considered appropriate for the type and size of mineralisation and the data density.</p>
		(iii)		Describe assumptions and justification of correlations made between variables.	No corrections have been carried out, only gold has been estimated.

		(iv)	Provide details of any relevant specialized computer program (software) used, with the version number, together with the estimation parameters used.	All modelling was carried out in Geovia Surpac, v.6.7.1
		(v)	State the processes of checking and validation, the comparison of model information to sample data and use of reconciliation data, and whether the Mineral Resource estimate takes account of such information.	The block model has been validated by visually comparing the block grades and the assays from nearby drill core. No significant deviations were found.
		(vi)	Describe the assumptions made regarding the estimation of any co-products, by-products or deleterious elements.	No estimation of by-products has been made. Due to the presence of Arsenopyrite and Pyrite in the waste rock, all waste produced will be back filled in the mined-out stopes.
		4.3 Reasonable prospects for eventual economic extraction		
Section 4: Estimation and Reporting of Exploration Results, Mineral Resources and Mineral Reserves	4.3	(i)	Disclose and discuss the geological parameters. These would include (but not be limited to) volume / tonnage, grade and value / quality estimates, cut-off grades, strip ratios, upper- and lower- screen sizes.	<p>The gold-bearing quartz vein will be mined in its entirety, no cut-off value has been applied since material can't be left would hinder further progress in mining along the narrow vein.</p> <p>The rock volume needed for underground access has not been investigated in detail, the costs for bolting and grouting have therefore been estimated as a "worst case" scenario.</p>
		(ii)	Disclose and discuss the engineering parameters. These would include mining method, dilution, processing, geotechnical, geohydraulic and metallurgical parameters.	<p>Rill mining (sub level stoping) will be used to mine the quartz vein. In conversion resources to reserves 5% ore losses and 10% waste inclusion have been assumed.</p> <p>Pilot scale testwork at Bureau Veritas Minerals in Perth and tests at the plant in Svartliden, where the ore will be toll- treated, both show >98% recovery using cyanidation, the low contents of</p>

				<p>copper did not affect the recovery of the consumption of cyanide.</p> <p>Cyanide detox and precipitation of arsenic show acceptable results at a pH of 8-8.5, which is in line with that of that of the Svartliden process plant.</p> <p>Test pumping in three hydrogeological drillholes does not show that large inflows of water is expected.</p>
	(iii)		Disclose and discuss the infrastructural including, but not limited to, power, water, site-access.	<p>A road and a powerline have already been built to the property. Water clarification ponds have been built as well.</p> <p>Pads for intermediate storage of waste rock has been constructed</p>
	(iv)		Disclose and discuss the legal, governmental, permitting, statutory parameters.	All necessary permits are in place.
	(v)		Disclose and discuss the environmental and social (or community) parameters.	<p>The company has developed an environmental monitoring program to be able to follow the effects of discharged water and dust.</p> <p>Hearings have been held with stakeholders. Additional meetings will be held as soon as production is initiated.</p>
	(vi)		Disclose and discuss the marketing parameters.	Not applicable
	(vii)		Disclose and discuss the economic assumptions and parameters. These factors will include, but not limited to, commodity prices and potential capital and operating costs	The assumptions that been made for CAPEX and OPEX are tabulated in Appendix 6.
	(viii)		Discuss any material risks	No material risks are left to solve with the exception of a falling gold price.
	(ix)		Discuss the parameters used to support the concept of "eventual"	All modifying factors are well known and the project shows exceptional return on investment.

			4.4 Classification Criteria			
	4.4	(i)		Describe criteria and methods used as the basis for the classification of the Mineral Resources into varying confidence categories.		The upper part of the mineralisation, which is mostly drilled to a 35*35m grid, is classified as indicated. The lower part of the mineralisation, down to a vertical depth of 270m, with lower drilling density, is classified as inferred.
			4.5 Reporting			
Section 4: Estimation and Reporting of Exploration Results, Mineral Resources and Mineral Reserves	4.5	(i)	Discuss the reported low and high-grades and widths together with their spatial location to avoid misleading the reporting of Exploration Results, Mineral Resources or Mineral Reserves.			<p>The gold-bearing quartz vein vary in width between 0,5 and 4,0m. To minimise waste, equipment suitable for 1,5m mining width has been selected.</p> <p>The ramp and adits into the orebody will be constructed 5 by 4m to give room for ventilation in the ceiling. The ramp will be built with an inclination of 1:7.</p>
		(ii)	Discuss whether the reported grades in Exploration Targets are regional averages or if they are selected individual samples taken from the property under discussion.			Not applicable
		(iii)	State assumptions regarding mining methods, infrastructure, metallurgy, environmental and social parameters. State and discuss where no mining related assumptions have been made.			See section 4.3
		(iv)	State the specific quantities and grades / qualities which are being reported in ranges and/or widths, and explain the basis of the reporting			The planned annual production is 50 ktonnes, expected to have an average grade of 7,7 g/t of gold.
		(v)		Present the detail for example open pit, underground, residue stockpile, remnants, tailings, and existing pillars or other sources in the Mineral Resource statement		Not applicable

		(vi)		Present a reconciliation with any previous Mineral Resource estimates. Where appropriate, report and comment on any historic trends (e.g. global bias).	Not applicable	
		(vii)		Present the defined reference point for the tonnages and grades reported as Mineral Resources. State the reference point if the point is where the run of mine material is delivered to the processing plant. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.	The reference point for the ROM material is when delivered to the process plant at the Svartliden mine.	
		(viii)	If the CP is relying on a report, opinion, or statement of another expert who is not a CP, disclose the date, title, and author of the report, opinion, or statement, the qualifications of the other expert and why it is reasonable for the CP to rely on the other expert, any significant risks and any steps the CP took to verify the information provided.			Not applicable.
		(ix)	State the basis of equivalent metal formulae, if applied.			Not applicable.
	Section 5: Technical Studies					
			5.1 Introduction			
Section 5: Technical Studies	5.1	(i)	not applicable to Exploration Results	State the level of study – whether Scoping, Pre-Feasibility, Feasibility or ongoing Life of Mine	State the level of study – whether Pre-feasibility, Feasibility or ongoing Life of Mine. The Standard requires that a study to at least a Pre-Feasibility level has been undertaken to convert Mineral Resource to Mineral Reserve. Such studies will have been carried out and will include a mine plan or production schedule that is technically achievable and economically viable, and that all Modifying Factors have been considered.	The study presented is at Feasibility level.
		(ii)			Provide a summary table of the Modifying Factors used to convert the Mineral Resource to Mineral Reserve for Pre-feasibility, Feasibility or on-going Life-of-Mine studies.	Mineral resources 110 ktonnes, Mining losses 5%, Waste dilution 15%, ROM grade of 8,5 g/t Au, grade in reserves 7,4 g/t Au. Ore resesrve 127 ktonnes.
			5.2 Mining Design			

Section 5: Technical	5.2	(i)	not applicable to Exploration Results	State assumptions regarding mining methods and parameters when estimating Mineral Resources or explain where no mining assumptions have been made.		See section 4.
		(ii)		Discuss Modifying factors taken into account in estimation of Mineral Resources	State and justify all modifying factors and assumptions made regarding mining methods, minimum mining dimensions (or pit shell) and internal and, if applicable, external) mining dilution and mining losses used for the techno-economic study and signed-off, such as mining method, mine design criteria, infrastructure, capacities, production schedule, mining efficiencies, grade control, geotechnical and hydrological considerations, closure plans, and personnel requirements.	See section 4.
		(iii)		State what mineral resource models have been used in the study.		Of the total tonnage planned to be mined, some 91 % stem from Indicated Mineral Resources, the remainder from Inferred Mineral Resources.
		(iv)		Explain the basis of (the adopted) cut-off grade(s) or quality parameters applied. Include metal equivalents if relevant		No cut-off grade has been applied; the quartz vein has to be mined in its entirety.
		(v)			Description and justification of mining method(s) to be used.	The selected method, adopted after the Swedish Lovisa Mine, is particularly suitable for narrow vein mining.
		(vi)			For open-pit mines, include a discussion of pit slopes, slope stability, and strip ratio.	Not applicable.
		(vii)			For underground mines, discuss mining method, geotechnical considerations, mine design characteristics, and ventilation/cooling requirements.	The selected method, described in section 4.3 (ii), will lead to relatively small and stable stopes. It is expected that 95-97% of the deposit can be mined and the

						remaining 3-5% left as pillars for stability. Ventilation will be done by blowing fresh air down the ramp and letting the exhaust out through a ventilation shaft.
5.2	(viii)	not applicable to Exploration Results		Discuss mining rate, equipment selected, grade control methods, geotechnical and hydrogeological considerations, health and safety of the workforce, staffing requirements, dilution, and recovery.		<p>See section 4.5 (iv). All mining of waste and ore will be done by a contractor, using best suited equipment depending on which of the two is being mined.</p> <p>Grade control will be carried out through production planning drillholes from the ramp. Production will be supervised by a site manager and geologist/ geological technician</p> <p>It is calculated that water entering into the mine will have a maximum flow of 15 l/s, which will be pumped out to a series of clarification and settling ponds before being discharged.</p> <p>The company aims to develop a working environment that minimises the risks to health and safety.</p>
	(ix)			State the optimisation methods and any software used in planning, list of constraints (practicality, plant, access, exposed Mineral Reserves, stripped Mineral Reserves, bottlenecks, draw control).		Not applicable.
		5.3 Metallurgical and Test work				
5.3	(i)	not applicable to Exploration Results	Discuss the source of the sample, the representivity of the potential feed and the techniques used to obtain the samples, laboratory and metallurgical testing techniques.			Test have been carried out on bort drillcore from different holes and material from the well over 200

					<p>tonnes resulting from the test mining.</p> <p>Both gravitational methods and conventional cyanidation have been tested, both with good results.</p> <p>The latest set of tests were done at the Process plant at the Svartliden mine, again based on material from the test mining. The result was the recovery of 98% of the gold.</p> <p>Earlier, when the intent was to sell the quartz as slag builder to a copper smelter, some 2100 tonnes were smelted, and all of the gold was liberated to the anode slime in the electrolytical anode slime.</p>
		(ii)		Explain the basis for assumptions or predictions regarding metallurgical amenability and any preliminary mineralogical test work already carried out.	All gold appears as free gold as shown by the good recoveries,
		(iii)		Discuss the possible processing methods and any processing factors that could have a material effect on the reasonable expectations of eventual economic extraction. Discuss the appropriateness of the processing methods to the style of mineralisation.	See section 5.3 (i)
		(iv)			<p>Discuss the nature, amount and representativeness of metallurgical test work undertaken and the recovery factors used. A detailed flow sheet / diagram and a mass balance should exist, especially for multi-product operations from which the saleable materials are priced for different chemical and physical characteristics.</p> <p>The tested material is considered to be well representative for the entire deposit.</p> <p>The flow sheet at the process plant at the Svartliden mine is shown in Appendix 7.</p>

		(v)			State what assumptions or allowances have been made for deleterious elements and the existence of any bulk-sample or pilot-scale test work and the degree to which such samples are representative of the ore body as a whole.	The testwork has not shown the existence of any deleterious elements.
		(vi)			State whether the metallurgical process is well-tested technology or novel in nature. If novel, justify its use in Mineral Reserve estimation.	The selected process is very conventional, crushing and milling followed by cyanidation.
			5.4 Infrastructure			
	5.4	(i)	not applicable to Exploration Results	Comment regarding the current state of infrastructure or the ease with which the infrastructure can be provided or accessed		The current status of the infrastructure at the mine site is that electrical power from the main grid is installed, ROM and waste pads have been constructed, clarifications ponds have been constructed. Construction of the ramp started on April 10 th . Maintenance of equipment will be carried out by the contractor who will also supply barracks for the crew and a maintenance industrial tent.
		(ii)			Report in sufficient detail to demonstrate that the necessary facilities have been allowed for (which may include, but not be limited to, processing plant, tailings dam, leaching facilities, waste dumps, road, rail or port facilities, water and power supply, offices, housing, security, resource sterilisation testing etc.). Provide detailed maps showing locations of facilities.	See section 5.4 (i).

		(iii)			Statement showing that all necessary logistics have been considered.	The Competent Person considers that all necessary infrastructure has been considered.
			5.5 Environmental, Social Performance, and Governance			
Section 5: Technical Studies	5.5	(i)		<p>General:</p> <ul style="list-style-type: none"> - Confirm that the company or reporting entity has addressed the host country environmental legal compliance requirements and any mandatory and/or voluntary standards or guidelines to which it subscribes - Identify the necessary permits that will be required and their status and where not yet obtained, confirm that there is a reasonable basis to believe that all permits required for the project will be obtained - Identify and discuss any sensitive areas that may affect the project as well as any other environmental factors including Interested and Affected Parties (I&AP) and/or studies that could have a material effect on the likelihood of eventual economic extraction. Discuss possible means of mitigation. - Identify any legislated social management programmes that may be required and discuss the content and status of these. - Outline and quantify the material socio-economic and cultural impacts that need to be mitigated, and their mitigation measures and where appropriate the associated costs. 		<p>The company has followed all applicable laws and ordinances of Sweden. The company has also decided to follow the Equatorial Principles to determine, assess and manage environmental and social risk.</p> <p>The permits needed to operate are mining concession, environmental permit, land designation, and a planning permit, all four are already held by the company.</p> <p>The mining area lies in the winter pastureland for reindeer. The concerned area has therefore been fenced in.</p> <p>No social management program exists,</p> <p>No socio-economic mitigation is expected to be needed.</p>
		(ii)		<p>Context: The project context is determined and described, including the following aspects:</p> <ul style="list-style-type: none"> • The locality's physical geography, centres of population, economic and cultural characteristics; • Existing land and natural resource use for economic, cultural, recreational and conservation purposes (inclusive of environmental and cultural sites of interest); • Existing or historical industrial development and associated infrastructure including mining and quarrying in the region; and • Local governance structures and administrative bodies, their roles and responsibilities in relation to permitting and regulations. • Site access routes and any potential impact on environment or local communities • Provision of energy for activities (e.g. off-grid renewable energy, or sourced direct from local non-renewable power grid with plans for decarbonisation for future project if possible) 		See main report text.

		(iii)	<ul style="list-style-type: none"> • High level assessment of level of water stress (e.g. potential for drought, flood and impact on water quality) • High level assessment of biodiversity (e.g. endangered species known in area) 	<ul style="list-style-type: none"> • Associated Environmental and seasonal constraint/ control/consent measures/modifying factors described • Identification of potential climate associated risks and impacts • Social economic and cultural constraint /control/consent measures/ modifying factors described • Any sensitive areas that may affect the project as well as any other environmental factors including I&AP and/or studies that could have a material effect on the likelihood of eventual economic extraction. • Management of project waste and anticipated requirements for large scale infrastructure for mine waste for future, including but not limited to waste dumps and tailings dams. 	<p>Tests have shown that contact water will have to be clarified before discharge. Mine water will also be treated in the same clarification pond. If necessary, chemical treatment of effluents will be done before discharge.</p> <p>No risks are anticipated.</p> <p>See also sections 4.2 (vi) and 4.3 (iii).</p>
	5.5	(iv)	<p>Permits and permission: Identification of the necessary permits that will be required and their status, and where not yet obtained, and confirmation that there is a reasonable basis to believe that all permits required for the project will be obtained in a timely manner. Also include any records of penalties / fines or revoked permits complete with rationale.</p>		<p>All necessary permits are held by the company.</p>
Section 5: Technical Studies		(v)	<p>Liabilities: Describe any known rehabilitation activities, liability and / or compliance costs</p>	<ul style="list-style-type: none"> • Describe the best cost estimate for closure inclusive of environmental, social material remaining liability and compliance costs. • Provide a description of mechanisms in place to address unplanned closure • If appropriate, describe bonding obligations in place to ensure that these liabilities can be funded on a qualitative and quantitative basis. 	<p>The costs for closure and rehabilitation have been estimated to SEK 4 375 000. This amount has been paid to an escrow account at the County Administrative Board.</p>
		(vi)	<p>Description of stakeholder group characteristics Records of Community and Stakeholder relationships: Records kept of all engagements with all stakeholders from the outset of the project; A grievance and/or complaints procedure established, stakeholders' issues, concerns recorded and tracked until resolved.</p>		<p>The company have held hearings with the general public as well as with the environmental protection authorities and reindeer herding associations. All such meetings have minutes taken.</p>
		(vii)		<p>A data management system implemented to record and track engagements; Provisions made for vulnerable and or underrepresented stakeholder groups Presence, or not of Indigenous People, if FPIC triggered, how is this managed</p>	<p>No such system is implemented.</p>
		(viii)	<p>Health and safety protocols and procedures required for exploration target definition inclusive of evidence of adherence to them and ongoing health and safety record.</p>	<p>Health and safety procedures and protocols, including community safety and security, across the exploration programme inclusive of evidence of adherence to them and ongoing health and safety record</p>	<p>See section 12.4 of main report.</p>
		(ix)	<p>Opportunities for contributing to the local economy identified and utilized where appropriate.</p>	<p>Legislated and or voluntary social development programmes that may be required and content and status of these.</p>	<p>No such development programme is planned for. However, the company will provide welcome work opportunities in the local community.</p>

		(x)		Material socio-economic and cultural impacts that need to be managed, and where appropriate the associated costs.	N.A.
		(xi)	Description of corporate governance board structure: gender, nationality, tenure, roles, responsibilities and process for selection of Board members, and Board remuneration processes and procedures		Selection of board members is prepared by the board election committee and suggested to the annual general meeting for election for the period of one year. The general meeting also decides issues with board remuneration. The board election committee includes representatives from largest shareholders and is tasked with suggesting a diverse group of people with experience suitable for the needs of the company. Board work is performed according to the rules and procedures of the board of directors.
		(xii)	<ul style="list-style-type: none"> • Commitment to GIIP: transparency, diversity, commitment to ESG described • Corporate commitment to social performance described/ provided • Corporate commitment to environmental stewardship described / provided 	<ul style="list-style-type: none"> • Description of how corporate compliance is assured and verified • Demonstrable commitment to GIIP: transparency, diversity, commitment to ESG described • Demonstrable commitment to social performance described • Demonstrable commitment to environmental stewardship described 	See section 12.5 of main report.
		(xiii)	Integrated Risk Management: Description of identified potential modifying factors and management actions taken to manage them where appropriate	<ul style="list-style-type: none"> • Description of proposed mitigation plans for identified modifying factors and management actions taken to manage them where appropriate. • Description of any additional risks that may impact on the long term future of the project, even if not deemed to be material at the current time. • Description of how the risk assessment process outlined here is integrated with the overall risk management framework for the company as a whole. 	No mitigation plans exists, however, the major risk is a lower gold price, the current margin for break even is high, and the risk is considered to be small.
			5.6 Market Studies and Economic Criteria		
Section 5: Technical Studies	5.6	(i)	not applicable to Exploration Results	Discuss any technical and economic factors likely to influence the prospect of economic extraction.	Describe the valuable and potentially valuable product(s) including suitability of products, co-products and by products to market.
					<p>The value metal from this mine is gold only.</p> <p>There is also a small amount of silver in the mine as well as a possibility to sell a portion of the waste rock as aggregate. No economic consideration has been</p>

					given to the silver or the waste rock.
		(ii)		Describe product to be sold, customer specifications, testing, and acceptance requirements. Discuss whether there exists a ready market for the product and whether contracts for the sale of the product are in place or expected to be readily obtained. Present price and volume forecasts and the basis for the forecast.	Gold-bearing quartz will be toll-treated at the Svartliden mine. Doree bars will be the product sold to refineries. There exists a ready market for this product. Between 173 and 444 kg of gold (5560-14290 ounces) will be produced per annum during three years. The price of gold has been set to USD 2 000/oz.
		(iii)		State and describe all economic criteria that have been used for the study such as capital and operating costs, exchange rates, revenue / price curves, royalties, cut-off grades, reserve pay limits.	See section 15 of the main report.
		(iv)		Summary description, source and confidence of method used to estimate the commodity price/value profiles used for cut-off grade calculation, economic analysis and project valuation, including applicable taxes, inflation indices, discount rate and exchange rates.	All costs are based on firm quotes, in most cases already realised. See also section 17 of main report.
		(v)		Present the details of the point of reference for the tonnages and grades reported as Mineral Reserves (e.g. material delivered to the processing facility or saleable product(s)). It is important that, in any situation where the reference point is different, a clarifying statement is included to ensure that the reader	The point of reference for tonnages and grades are at the delivery to the toll treatment plant.

					is fully informed as to what is being reported.	
		(vi)			Justify assumptions made concerning production cost including transportation, treatment, penalties, exchange rates, marketing and other costs. Provide details of allowances that are made for the content of deleterious elements and the cost of penalties.	See section 5.6 (iv). No deleterious elements are known to exist.
		(vii)			Provide details of allowances made for royalties payable, both to Government and private.	The Minerals Act (1991:45) stipulates that 0.2% of the calculated value of the mineral extracted each year of operation. Three-quarters of the compensation shall accrue to property owners within the concession area and one-quarter to the State. Since the company owns the land where the concession is located, only the share to the State has to be paid. The company has an obligation to pay a 2% Net Smelter Return to North Atlantic Natural Resources AB
		(viii)			State ownership, type, extent and condition of plant and equipment that is significant to the existing operation(s).	The process plant where toll treatment will be done is owned by Dragon Mining (Sweden) AB. The land where the mine is located is owned by the company. The equipment used for mining is owned by Bergteamet AB.

		(ix)			Provide details of all environmental, social and labour costs considered	See sections 15 and 16 of main report.
			5.7 Risk Analysis			
Section 5: Technical Studies	5.7	(i)	A high-level assessment should be made of key areas of uncertainty which may affect exploration outcomes. An assessment should be provided on the chances of exploration success, together with consideration of any potential threats, such as ESG aspects, which could hinder eventual development of a mining or extraction project in the exploration area.”	Report an assessment of technical, environmental, social, economic, political and other key risks to the project. Describe actions that will be taken to mitigate and/or manage the identified risks.		See section 17 of main report.
			5.8 Economic Analysis			
	5.8	(i)	not applicable to Exploration Results	Describe the basis on which reasonable prospects for eventual economic extraction has been determined, including any material assumptions made in determining the ‘reasonable prospects for eventual economic extraction’.	State and justify the inclusion of any Inferred Resources in the Pre-feasibility and Feasibility Studies economic analysis. Report the sensitivity to the inclusion of any Inferred Resources.	See section 16 of main report.
		(ii)		At the relevant level (Scoping Study, Pre-feasibility, Feasibility or on-going Life-of Mine), provide an economic analysis for the project that includes:		See section 16 of main report.
		(iii)		Cash Flow forecast on an annual basis using Mineral Reserves or an annual production schedule for the life of the project		See section 16 of main report.
		(iv)		A discussion of net present value (NPV), internal rate of return (IRR) and payback period of capital		See section 1.6 of main report.
		(v)		Sensitivity or other analysis using variants in commodity price, grade, capital and operating costs, or other significant parameters, as appropriate and discuss the impact of the results.		See section 16 of main report.
Section 6: Estimation and Reporting of Mineral Reserves						
			6.1 Estimation and Modelling Techniques			
Section 6:	6.1	(i)	not applicable to Exploration Results	Describe the Mineral Resource estimate used as a basis for the conversion to a Mineral Reserve.		See section 4.2 (ii) and onwards in this document.

		(ii)		Report the Mineral Reserve Statement with sufficient detail indicating if the mining is open pit or underground plus the source and type of mineralisation, domain or ore body, surface dumps, stockpiles and all other sources.		See section 4.
		(iii)			If Inferred resources are used in assessing Mineral reserves, then report and discuss a comparison between the two possibilities, the one with inclusion of Inferred Mineral Resources and the one without inclusion, in such a way so as not to mislead the investors. Identify the quantity of the Inferred Mineral Resources included and the sensitivity of the inclusion to the study.	Due to technical reasons, the company plans to mine some 10000 tonnes of inferred resources, with an estimated contents of approximately 1000 ounces of gold. The economical results are reported both including and excluding this tonnage
		(iv)			A Mineral Reserve Statement in sufficient detail indicating if the mining is open pit or underground plus the source and type of mineralisation, domain or ore body, surface dumps, stockpiles and all other sources.	Mining will only be made underground. See also main report.
		(v)			Provide a reconciliation reporting historic reliability of the performance parameters, assumptions and modifying factors including a comparison with the previous Reserve quantity and qualities, if available. Where appropriate, report and comment on any historic trends (e.g. global bias)	N.A:
			6.2 Classification Criteria			
	6.2	(i)			Describe and justify criteria and methods used as the basis for the classification of the Mineral Reserves into varying confidence categories, based on the Mineral Resource category, and including consideration of the confidence in all the modifying factors.	The entire Mineral reserves are classified as Probable reserves since the Mineral resources they build on are classified as Indicated resources. The exception to the above is the Inferred tonnage necessary to mine due to technical reasons.

Section 6: Estimation and Reporting of Mineral Reserves			6.3 Reporting			
	6.3	(i)			Discuss the proportion of Probable Mineral Reserves, which have been derived from Measured Mineral Resources (if any), including the reason(s) therefore.	All of the Indicated Resources have been transferred to Probable Reserves. See also section 7 of main report.
		(ii)			Present details of for example open pit, underground, residue stockpile, remnants, tailings, and existing pillars or other sources in respect of the Mineral Reserve statement	A detailed mine plan is described in section 8 of main report.
		(iii)			Present the details of the defined reference point for the Mineral Reserves. State where the reference point is the point where the run of mine material is delivered to the processing plant. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. State clearly whether the tonnages and grades reported for Mineral Reserves are in respect of material delivered to the plant or after recovery.	The reference point is when delivered to the ROM pad at the Svartliden concentrator.
		(iv)			Present a reconciliation with the previous Mineral Reserve estimates. Where appropriate, report and comment on any historic trends (e.g. global bias).	N.A:
		(v)			Confirm that only Measured and Indicated Mineral Resources can be considered for inclusion in the Mineral Reserve.	Only Indicated resources are included in the Mineral Reserves, however, economic evaluations are presented for both Indicated Resources only and for Indicated

						Resources plus a small part of Inferred Resources.
		(vi)		State whether the Measured Mineral Resources and Indicated Mineral Resources are inclusive of or additional to the Mineral Reserves.		The Mineral Reserves are inclusive of the Mineral Resources.
			6.4 Specific for Metal Equivalents or Combined Grades Reporting			
	6.4	(i)	Confirm that all reports comply with section 9 (paragraphs 9.1 to 9.5) of the PERC Reporting Standard.			Yes, they do.
		(ii)		Discuss and describe the basis for the grade estimation for each metal relating to the metal equivalence or combined grade		N.A:
		(iii)		Disclose all economic criteria that have been used for the calculation such as exchange rates, revenue / price curves, royalties, cut-off grades, pay limits.		See section 16 of main report.
		(iv)		Discuss the basis for assumptions or predictions regarding metallurgical factors such as recovery used in the metal equivalents or combined grades calculation.		Recoveries based on test work.
		(v)		Show the calculation formula used.		N.A:
	Section 7: Audits and Reviews					
			7.1 Audits and Reviews			
Section 7: Audits and Reviews	7.1	(i)	State type of review/audit (e.g. independent, external), area (e.g. laboratory, drilling, data, environmental compliance etc.), date and name of the reviewer(s) together with their recognized professional qualifications. State the level of review/audit (desk-top, on-site comparison with standard procedures, or endorsement where auditor/reviewer has checked the work to the extent they stand behind it as if it were their own work).			N.A:
		(ii)	Disclose the conclusions of relevant audits or reviews. Note where significant deficiencies and remedial actions are required.			N.A:
	Section 8: Other Relevant Information					
			8.1 Other Relevant Information			

Section 8: Other Relevant Information	8.1	(i)	Discuss all other relevant and material information not discussed elsewhere.	N.A:
Section 9: Qualification of Competent Person(s) and other key technical staff. Date and Signature Page				
Section 9: Competent Person Signoff			9.1 Competent Person Details	
	9.1	(i)	State the full name, registration number and name of the professional body or RPO, for all the Competent Person(s). State the relevant experience of the Competent Person(s) and other key technical staff who prepared and are responsible for the Public Report.	M.Sc. Thomas Lindholm of GeoVista AB, Luleå, Sweden, member of Fennoscandian Association of Metals and Mining Professionals, Fellow AusIMM.
		(ii)	State the Competent Person's relationship to the issuer of the report.	The Competent Person is independent of the issuer.
		(iii)	Provide the Certificate of the Competent Person (Appendix 0), including the date of sign-off and the effective date, in the Public Report.	See appendix 0

Certificate of Competent Person

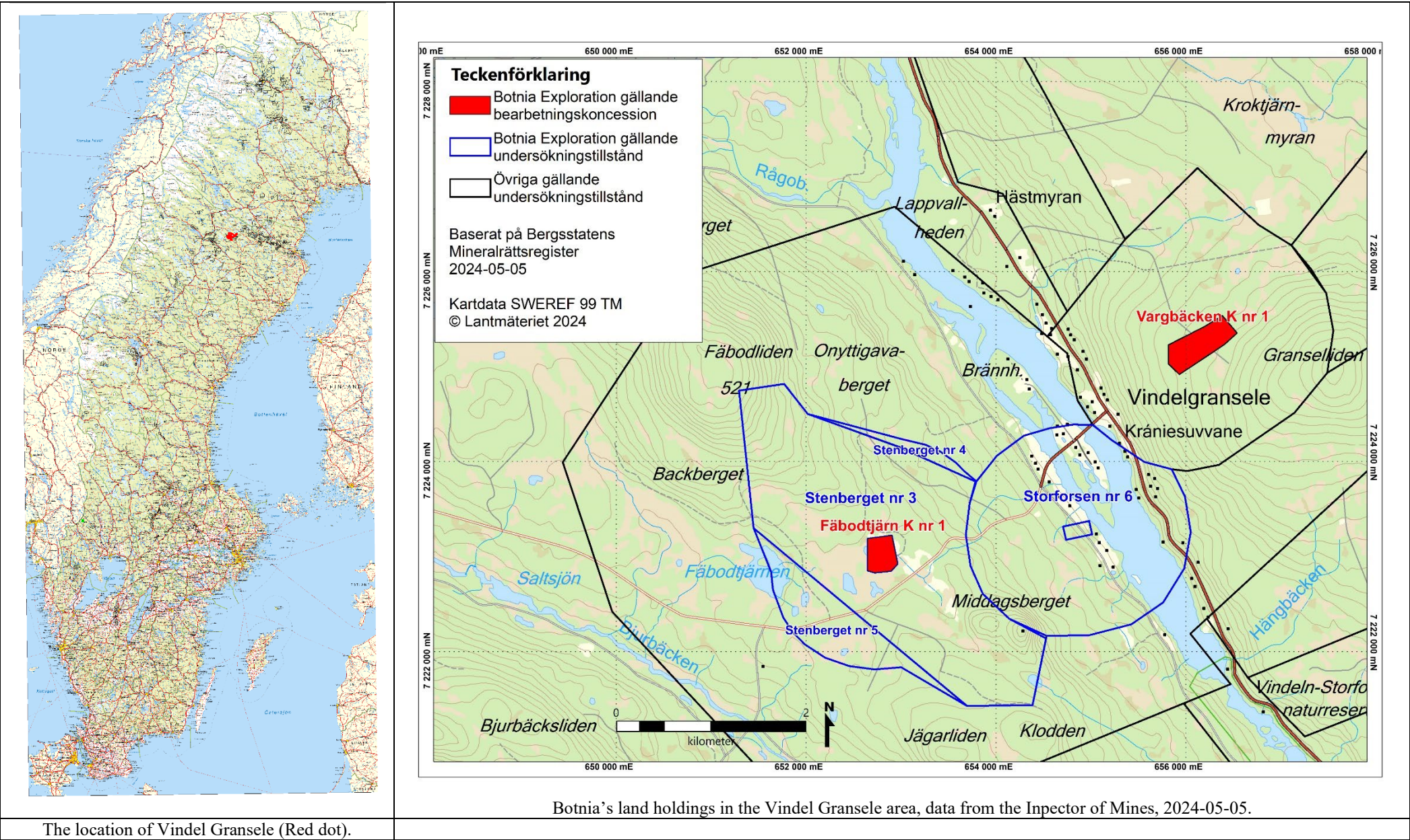
As the Competent Person responsible for the information on which the Public Report entitled “GVR24016 Uppdaterad Genomförbarhetsstudie Fäbodtjärn “is based, I hereby state:

1. My name is Thomas Lindholm.
2. I am a senior associate of GeoVista AB, Luleå, Sweden.
3. I am a Mining Engineer, member of the Fennoscandian Association of Metas and Mining Professionals, FAMMP as well as a Fellow of AusIMM.
4. I graduated with a M.Sc. in mining engineering from the University of Luleå I 1982 and have since worked in exploration and mine development projects in Sweden and abroad.
5. I have participated in, or led a number of feasibility studies for various types of gold, base metal and iron deposits.
6. I meet the requirements of a ‘Competent Person’ as defined explicitly in the PERC Reporting Standard.
7. I have prepared the Mineral Resource Estimate and compiled the Feasibility Study report.
8. The CP visited the site in August 2017, in connection to the test mining campaign.
9. The CP is responsible for the entire report.
10. I am not aware of any material fact or material change concerning the subject matter of the Public Report that is not reflected in the Public Report, the omission of which would make the Public Report misleading.
11. I declare that this Public Report appropriately reflects the Competent Person’s view.
12. I am independent of Botnia Exploration AB.
13. I confirm that I have read all the relevant sections of the PERC Reporting Standard 2021. The Public Report has been prepared under the requirements of the PERC Reporting Standard.
14. I do not have, nor do I expect to receive, a direct or indirect interest in the Fäbodtjärn mine of Botnia Exploration AB.
15. I have no conflicts of interest in respect of the reporting entity/issuer Botnia Explration AB or the Fäbodtjärn Mine.
16. At the effective date of the Public Report, to the best of my knowledge, information and belief, the Public Report contains all scientific and technical information required to be disclosed in order to make the Public Report not misleading.

Dated at Luleå, Sweden and 2024-09-02.



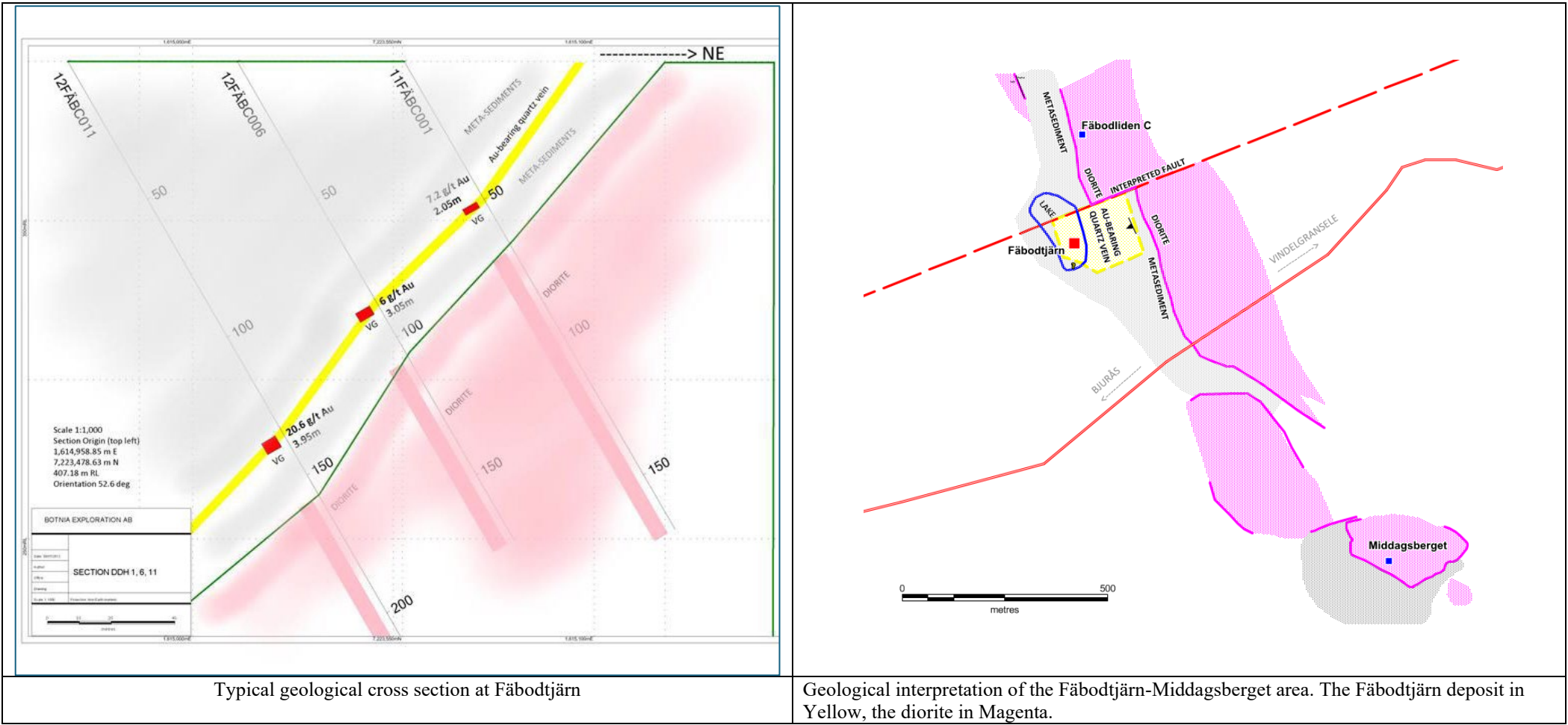
Thomas Lindholm, member of FAMMP, Fellow AusIMM



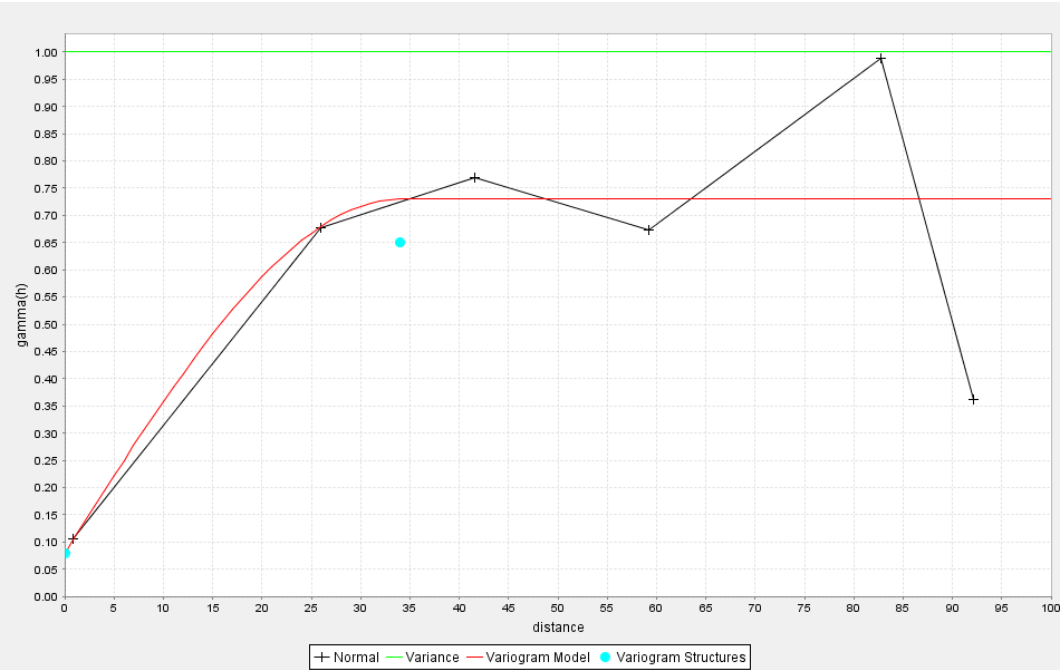
Appendix 2b: Exploration permits and Mining leases

NAME	LICENCEID	AREA_HA	VALIDFROM	VALIDTO	MINERAL	COUNTY	MUNICIPAL	PERMITTYPE	STATUS
Stenberget nr 3	2007:321	521.7675	2007-11-21	2024-11-21	Gold	Västerbotten	Lycksele	Expl. Permit	Approved
Stenberget nr 4	2020:9	13.1036	2020-02-20	2025-02-20	Gold	Västerbotten	Lycksele	Expl. Permit	Approved
Stenberget nr 5	2020:10	88.2021	2020-02-20	2025-02-20	Gold	Västerbotten	Lycksele	Expl. Permit	Approved
Storforsen nr 6	2015:58	403.6659	2015-04-01	2027-04-01	Gold	Västerbotten	Lycksele	Expl. Permit	Approved
NAME	LICENCEID	AREA_HA	VALIDFROM	VALIDTO	MINERAL	COUNTY	MUNICIPAL	PERMITTYPE	STATUS
Vargbäcken K nr 1	-	20.5238	2003-10-13	2028-10-13	Gold	Västerbotten	Lycksele	Mining lease	Approved - legal force
Fäbodtjärn K nr 1	-	10.2273	2016-09-06	2041-09-06	Gold, silver	Västerbotten	Lycksele	Mining lease	Approved - legal force

Appendix 3: Geological section and plan view.



Appendix 4: Variogram for gold along the strike of the deposit.



Appendix 5: Kriging parameters.

Interpolation pass	Max. search radius	Major/minor	Min. number composites	Max. number composites	Max number per drillhole
1	25	2	3	15	2
2	50	2	3	15	2
3	75	2	3	15	2
4	100	2	3	15	2

Appendix 6: Assumptions of CAPEX and OPEX

Type of cost	Costs
MINING	
Establishment - mine entrepreneur	2,5 MSEK
Access ramp down to production level	5,2 MSEK
Development, mining of waste for access	49,2 MSEK
Transport of waste to intermediate stockpiles	10,3 MSEK
Electricity, water and ventilation	2,1 MSEK
CAPEX	
Ventilation	4,2 MSEK
Electrical installation	4,7 MSEK
Heating mine	2,8 MSEK
Sedimentation and water cleaning system	15,4 MSEK
Establishment - industrial area	9,5 MSEK
Personnel quarters and office	2,9 MSEK
OTHER CAPEX	
Drilling of production planning holes	2,0 MSEK
Continued investigation of quartz vein at depth	4,3 MSEK
PRODUCTION COST	Cost per ton
Production of ore, transport of ore and backfilling with waste	661 SEK
Grouting and bolting	60 SEK
Transport	144 SEK
Electricity, diesel and oil for heating	208 SEK
Analyses	14 SEK
Toll treatment	500 SEK

Appendix 7: Recommended flowsheet for beneficiation of the ore from Fäbodtjärn.

