REPORT

NI 43-101 TECHNICAL REPORT

Rupert Resources Ltd. Updated Mineral Resource Estimate for the Ikkari Project - Finland

Project Location

Sodankylä Municipality, Lapland, Finland

Report Effective Date: December 12, 2023

Authors:

1. Brian Thomas; P.Geo.
2. Isabelle Larouche; P.Eng.
3. Gareth Digges La Touche, CGeol, EurGeol

NOTICE TO READERS:

This National Instrument 43-101 Technical Report for Rupert Resources Ltd. (Rupert Resources) was prepared and executed by the Qualified Persons named herein as Authors. This report contains the expressions of professional opinions of the Authors based on (i) information available at the time of preparation, (ii) data supplied by Rupert Resources, and (iii) the assumptions, conditions, and qualifications set forth in this report. The quality of information, conclusions, and estimates contained herein are consistent with the stated levels of accuracy as well as the circumstances and constraints under which the mandate was performed. This Report was prepared in accordance with a contract between WSP and Rupert Resources which contract permits Rupert Resources to file this report as a Technical Report with Canadian securities regulators pursuant to National Instrument 43-101 - Standards of Disclosure for Mineral Projects. Except for the purposes legislated under Canadian securities law, any use of this report by any third party is at that party's sole risk.

Date and Signature Page

This Technical Report on the Ikkari project is submitted to Rupert Resources Ltd. and is effective as of December 12, 2023.

Qualified Person	Responsible for Parts
Brian Thomas; P.Geo. *WSP Canada Inc.* Date Signed: December 11, 2023	*1.1-1.8, 1.10, 1.12.1, 1.13, 2-12, 14, 23-24, 25.1, 26.1, 26.4, 26.5, 27*
Isabelle Larouche; P.Eng. *WSP Canada Inc.* Date Signed: December 11, 2023	*1.9, 1.12.2, 13, 25.2, 26.2*
Gareth Digges La Touche *WSP UK Inc.* Date Signed: December 11, 2023	*1.11, 1.12.3, 20, 25.3, 26.3*

CERTIFICATE OF QUALIFIED PERSON BRIAN THOMAS

I, Brian Thomas, state that:

(a) I am a Principal Geologist at:
WSP Canada Inc.
33 Mackenzie Street, Suite 100 Sudbury,
Ontario, P3C 4Y1

(b) This certificate applies to the technical report titled National Instrument 43-101 Technical Report; Rupert Resources Ltd. Updated Mineral Resource Estimate for the Ikkari Project - Finland; with an effective date of: December 12, 2023 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 ("NI 43-101"). My qualifications as a qualified person are as follows. I am a graduate of Laurentian University with a B.Sc. in Geology from 1994, I am a member in good standing of the Association of Professional Geoscientists of Ontario (#1366). My relevant experience after graduation, for the purpose of the Technical Report, includes over 28 years of experience in mine geology and mineral resource evaluation of mineral projects nationally and internationally in a variety of commodities including 9 years of direct working experience in gold mining operations located in northern Ontario and 12 years of consulting experience with a strong focus on gold related projects.

(d) My most recent personal inspection of the property described in the Technical Report occurred between July 10 to 13, 2023 for a duration of 3 days.

(e) I am responsible for Item(s) 1.1-1.8, 1.10, 1.12.1, 1.13, 2-12, 14, 23-24, 25.1, 26.1, 26.4, 26.5, 27 of the Technical Report.

(f) I am independent of the issuer as described in section 1.5 of NI 43-101.

(g) I have had no prior involvement with the property that is the subject of the Technical Report.

(h) I have read NI 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101; and

(i) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible, contain(s) all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Sudbury, Ontario this 12th of December 2023.

Signed by Brian Thomas

Brian Thomas; P.Geo.

CERTIFICATE OF QUALIFIED PERSON ISABELLE LAROUCHE

I, Isabelle Larouche, state that:

(a) I am a Senior Metallurgist at:
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1300 Guillaume-Couture Boulevard,
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(b) This certificate applies to the technical report titled National Instrument 43-101 Technical Report; Rupert Resources Ltd. Updated Mineral Resource Estimate for the Ikkari Project - Finland; with an effective date of: December 12, 2023 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 ("NI 43-101"). My qualifications as a qualified person are as follows. I am a graduate of Laval University (Québec, Canada), with a Bachelor of Science in Materials and Metallurgical Engineering in 2006, I am a member in good standing of the Order of Engineers of Quebec (#142262) and the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (#L4746). My relevant experience after graduation, for the purpose of the Technical Report, includes sixteen (16) years in mineral processing flowsheet development and plant design and metallurgical test work supervision. I have been involved in numerous gold and tailings filtration projects, located in Canada and abroad.

(d) I have not visited the property described in the Technical Report.

(e) I am responsible for Item(s) 1.9, 1.12.2, 13.0, 25.2 and 26.2 of the Technical Report.

(f) I am independent of the issuer as described in section 1.5 of NI 43-101.

(g) I have had no prior involvement with the property that is the subject of the Technical Report.

(h) I have read NI 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101; and

(i) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible, contain(s) all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Lévis, Québec this 12th of December 2023.

Signed by Isabelle Larouche

Isabelle Larouche, P.Eng.

CERTIFICATE OF QUALIFIED PERSON GARETH DIGGES LA TOUCHE

I, Gareth Digges La Touche, state that:

(a) I am a Hydrogeologist at:
WSP UK Ltd.
WSP House, 70 Chancery Lane,
London, WC2A 1AF, United Kingdom

(b) This certificate applies to the technical report titled National Instrument 43-101 Technical Report; Rupert Resources Ltd. Updated Mineral Resource Estimate for the Ikkari Project - Finland; with an effective date of: December 12, 2023 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 ("NI 43-101"). My qualifications as a qualified person are as follows. I am a graduate of Keele University (United Kingdom), with a Bachelor of Science in Geology & Geography in 1990 and a Master of Science in Computing in Earth Science in 1991. I am a graduate of the University of Birmingham (United Kingdom) with a Master of Science in Hydrogeology in 1995. I am a member in good standing of the Geological Society of London registered as a Chartered Geologist and European Geologist. My relevant experience after graduation, for the purpose of the Technical Report, includes twenty (20) years in environmental impact assessment for mineral extraction developments. I have been involved in numerous gold projects, located in the Nordic Region.

(d) I have not visited the property described in the Technical Report.

(e) I am responsible for Item(s) 1.11, 1.12.3, 25.3 and 26.3 of the Technical Report.

(f) I am independent of the issuer as described in section 1.5 of NI 43-101.

(g) I have had no prior involvement with the property that is the subject of the Technical Report.

(h) I have read NI 43-101 and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101; and

(i) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible, contain(s) all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Edinburgh, United Kingsom this 12th of December 2023.

<u>Signed by Gareth Digges La Touche</u>

Gareth Digges La Touche, BSc, MSc, FRGS, FGS, CGeol, EurGeol.

Table of Contents

TABLES

FIGURES

1.0 SUMMARY

1.1. Introduction

Rupert Resources Ltd. (Rupert Resources) appointed WSP Canada Inc. (WSP) to prepare an updated Mineral Resource Estimate (MRE) and produce a technical report, prepared in accordance with Canadian National Instrument (NI) 43-101, for the Ikkari Project located in northern Finland (the Project). The purpose of this Technical Report is to support the disclosure of an updated Mineral Resource Estimate based on material new drilling completed since the previous Technical Report, titled “NI 43-101 Preliminary Economic Assessment: Ikkari and Pahtavaara - Finland”, with an effective date of March 10, 2023. This MRE will provide the basis for the ongoing pre-feasibility study conducted by WSP.

The Mineral Resources are disclosed in accordance with the Canadian Securities Administrators’ NI 43-101 and this Technical Report follows the requirements of Form 43-101F1.

The document supports disclosures by Rupert Resources Ltd in a news release, dated November 28, 2023, titled “Rupert Resources Reports Updated Mineral Resource Estimate for Ikkari of Over Four Million Ounces Gold in Indicated Category and Provides Details of Winter 2023/2024 Drilling Targets”.

The Qualified Persons (QPs) for this Technical Report are Mr. Brian Thomas, P.Geo., Ms. Isabelle Larouche, P.Eng., and Gareth Digges La Touche, CGeol, EurGeol, all independent QPs, as defined under NI 43-101 and employees of WSP. The Technical Report effective date is December 12, 2023.

A QP personal site inspection of the Project was last conducted by Brian Thomas between July 11-13, 2023, in order to observe site conditions, review geological data collection and Quality Assurance and Quality Control (QA/QC) procedures and results, confirm drill collar locations, and complete verification sampling and logging of drill core.

1.2. Property Description and Location

The Ikkari Gold Deposit is situated within Rupert Resources’ “Rupert Lapland Project” exploration licences, located in the province of Lapland, Northern Finland (Figure 1.1).

Figure 1.1: Location of Rupert Lapland Project, Finland

More locally, the project occurs across an area surrounding the Rajala village in the municipality of Sodankylä. The Ikkari Gold Deposit occurs in the westernmost extents of the Rupert Lapland Project, approximately 30 kilometres (km) northwest of Sodankylä town centre, 10 km north-northwest (NNW) of Jeesiö village and 22 km west-southwest (WSW) of the Pahtavaara Mine, a gold mine currently on care and maintenance within the Rupert Lapland Project tenement package (for coordinates see Table 4.1).

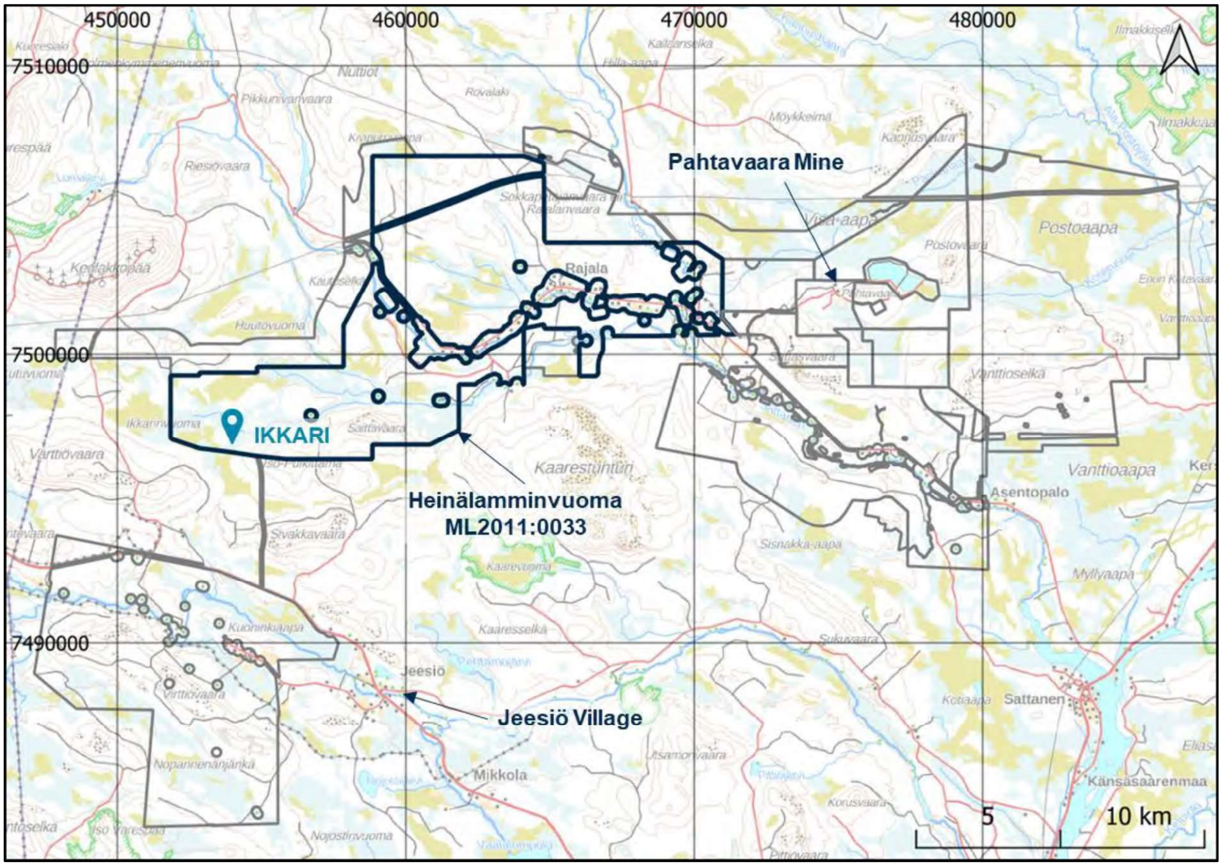
The Ikkari deposit lies on the eastern extreme of the Sirkka Line, a tectonic structure that traverses northern Finland, along which some 25 to 30 gold deposits / occurrences exist. Ikkari is situated at the margins of a low-lying aapa-mire, comprising broad wetlands to the north and west, and is sparsely forested.

The landscape across the Ikkari deposit area is predominantly flat with an elevation of approximately 225 metres (m) above sea level (asl) and rising slightly toward the southeast and the margins of the Iso-Pulkittama hill, which has a maximum elevation of approximately 300 m asl. The overburden cover of glacial till deposits is generally between 10 m to 40 m thick and rock outcrop is very limited across the exploration licence area. In most parts of the deposit area, the ground water table is located close to the ground surface.

1.3. Ownership

The Rupert Lapland Project area, in which the 100% Rupert Resources owned Ikkari deposit occurs, comprises a contiguous package of mining licences, exploration permits, and exploration permit applications totalling an area of 340.6 square kilometres (km^2). Additional permits elsewhere in the Central Lapland Belt, contribute to a total of 490 km^2. The Rupert Lapland Project property is subject to a 1.5 percent (%) royalty on revenue, capped at US (United States) $2.0 million (M).

The Ikkari deposit is contained within the existing valid exploration permit Heinälamminvuoma - ML2011:0033, with an area of 84 km^2 (Figure 1.2). Both Rupert Finland Oy and Rupert Exploration Finland Oy are wholly owned subsidiaries of Rupert Resources Ltd, a company incorporated in British Columbia, whose office is at 82 Richmond Street East, Suite 203, Toronto, Ontario, Canada, M5C 1P1.



Note: The Heinälamminvuoma Licence, where Ikkari is Located, is Shown in Bold.

Figure 1.2: Location of the Ikkari Gold Deposit Within the 340.6 km^2 Contiguous Land Package Known as the Rupert Lapland Project Area

1.4. Geological Setting and Mineralization

1.4.1. Regional Geological Setting

The Rupert Lapland Project area is located within the Central Lapland belt (CLB), part of the Fennoscandian shield, which hosts 1,700 known incidences of mineralization in Finland, Sweden, Norway and Russia including around 80 mines. The CLB has two gold mines of significance. Currently operating is Agnico Eagle's Kittilä mine, 45 km northwest of the Ikkari deposit, which produced 216,947 ounces (oz) of gold in 2022 and has a remaining reserve of 3.68 million ounces (Moz) (Agnico Eagle website, November 2023). The historically producing Pahtavaara mine, 20 km east-northeast of the Ikkari deposit, mined an estimated 441 kilo-ounces (koz) of gold in three periods of ownership between 1996 and 2014 (GTK, Mineral Deposit Report), and hosts a remnant Indicated Resource of 1.9 million tonnes (Mt) at 3.0 grams per tonne (g/t) for 180 koz together with an Inferred Resource of 2.2 Mt grading 3.1 g/t gold (Au) for 220 koz (estimated by Rupert Resources in 2022). The Heinä Central deposit, 1.5 km north-northeast (NNE) of the Ikkari deposit with a resource of 2.7 Mt at 1.8g/t Au for 150 koz (estimated by Rupert Resources in 2022) further demonstrates the prolific gold endowment of the CLB.

Ikkari was discovered in March 2020 and is a grassroots, orogenic gold discovery made under 10-20m of till cover in the Paleoproterozoic CLB, Finland. The Rupert Lapland Project area lies at the eastern extreme of the Sirkka Line (Sirkka shear zone, Eilu et al. 2007), a tectonic structure that traverses northern Finland, along which some 25 to 30 gold deposits exist, either within or related to subsidiary structures along it (Figure 7.1). The shear zone is also associated with intense alteration (albitization, sericitization and carbonatization) as well as anomalous gold along its entire length (Eilu et al, 2007).

The Rupert Lapland Project exploration permits occur at a significant regional geological domain boundary zone, which trends predominantly east-west through the westernmost extent of the Rupert Resources exploration licences (Figure 7.2). An approximately four-kilometre-wide zone of 2.05 giga annum (Ga) Savukoski Group rocks, comprising fine-grained mafic dominated meta-volcanic and metasedimentary rocks, including phyllite, carbonaceous shale and mafic intrusive rocks, as well as komatiites, occurs between younger (2.00 Ga) Kittilä Group rocks to the north and younger still Kumpu Group rocks (1.88 Ga maximum age) to the south. The Kittilä Group is dominantly tholeiitic metabasalts whilst the Kumpu Group is composed of molasse-type fluviatile quartzites, subarkoses and polymictic conglomerates.

This zone of Savukoski Group rocks broadly corresponds with the often discussed ‘Sirkka Line’ structure though the exact nature and location of this is somewhat subjective.

1.4.2. Deposit Geology

Ikkari is located under 10 to 40 m of transported glacial till cover and occupies a complex structural position between thrust imbricated Savukoski Group metavolcanics and metasediments, and synorogenic molasse-type siliciclastic strata of the Kumpu Group. At their most basic level, a 4-fold lithologic subdivision is constructed for the rock types present at Ikkari. (Figure 7.4):

- Dark pyritic shales and siltstones termed the ‘black shale’ (intruded by gabbro) comprise the northern fault block and form the hangingwall to the mineralization.
- A central komatiite-dominant zone with complex intercalations of texturally diverse ‘felsic’ facies.
- A northern, banded ‘felsic’ facies, intensely albite-altered in places, that pinches out in the eastern part of the deposit.
- A southern zone comprising dominantly coarse ‘felsic’ siliciclastics – massive, banded, conglomeratic and typically more quartz-rich than the northern facies but which hosts intercalations of komatiite in decreasing abundance moving southwards.

1.4.3. Mineralization

The Ikkari deposit can be described as an orogenic, hydrothermal gold deposit. Gold, which trends at approximately 065° strike, has a strong sub-vertical control. Gold is hosted by disseminated and vein-related pyrite although free gold in the form of ~1 milimetre (mm) gold grains, is also common. Gold is associated with pyrite and occurs either on the surface of pyrite grains or on fractures within the grain.

Mineralization at Ikkari occurs in several styles, but in all cases, gold distribution is correlated to the abundance of disseminated pyrite and intensity of veining. The style of mineralization is principally controlled by the host lithology with significant controls on mineralization localization including:

- Brittle-fracture regime in intensely albite-altered felsic sediments.
- Lithological contacts, particularly sedimentary intercalations within the wider ultramafic package.
- Fold hinges, including short-wavelength parasitic folding.
- Within and at the margins of hematite-carbonate hydrothermal breccias.

Despite these variations in localization, at the deposit scale, it is considered that all the gold mineralization is related to the same (oxidized) fluid event that was introduced along a complex brittle-ductile permeability meshwork. Sites of gold deposition are structurally controlled but locally dependent on the availability of a geochemical reductant that allows deposition of pyrite and associated gold. Such iron-rich reductants at Ikkari are likely to include magnetite and chlorite, formed during an earlier iron-metasomatic alteration and/or syngenetic pyrite that may have been present in the intercalated siltstones. The spatial association of high-grade gold zones to apparently later, largely post deformation hematite-carbonate breccias is indicative of a later gold-bearing fluid phase also being present.

1.5. Exploration

Ikkari represents a new discovery that was initially identified through systematic base of till (BOT) sampling beginning in early 2019. In the Ikkari area, a single anomalous BOT sample of 0.2 parts per million (ppm) Au was followed up with infill sampling to a 50-m-x-25-m grid, and a small cluster of anomalous samples up to 1 ppm Au was identified. The first drill hole into this geochemical anomaly (hole 120038) was drilled in April 2020 and assayed 54-m grading 1.5 g/t Au from 25 m, under 13 m of glacial till cover material. Follow-up drill hole intercepts demonstrated very broad mineralized zones with a high-grade component over an initial strike length of greater than (>) 500 m.

Exploration continues both within the Heinälamminvuoma exploration permit and on adjacent permits with BOT now supplemented by geophysical techniques ground tested at the Ikkari deposit. Drill testing of both geochemical and geophysical targets continues.

1.6. Drilling

Rupert Resources are the only entity to have drilled in the vicinity of the Ikkari deposit. Yearly drilling by Rupert Resources at the Ikkari Deposit is summarized in Table 1.1. The drilling cut-off for this report was made in June 2022 and 111,896m are considered in the resource.

Table 1.1: Summary of Ikkari Drilling

Prospect	Year	DH Type	Holes	Metres
Ikkari	2020	Diamond	62	20,320
	2021		75	36,049
	2022		85	35 568
	2023 (to June)		46	22 069
Total			**268**	**114,006**

Notes:
* Including later extensions to drill holes and wedges.
** Including holes such as metallurgical holes not assayed, and therefore not included in the resource estimation (Item 14).
Note: Reported as per prospect on coding in database, not all holes are necessarily targeting the same mineralization occurrence. Errors may occur due to rounding.

1.7. Sample Preparation, QAQC and Security

All sample preparation was carried out at independent certified laboratories in Finland, and analyses were carried out at independent certified laboratories in Romania, Ireland, or Finland. No aspect of laboratory sample preparation or analysis was conducted by an employee, officer, director or associate of either Rupert Resources.

Rupert Resources has used a combination of duplicates, checks, blanks and standards to ensure suitable quality control of sampling methods and assay testing. The procedures and QA/QC management are consistent with industry practice and are deemed fit for purpose. Results of recent sampling have not identified any issues which materially affect the accuracy, reliability or representativeness of the results.

It is the resource QP's opinion that the sample preparation, analytical, QA/QC and chain of custody procedures used to produce the sample database are consistent with industry practises and Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mineral Exploration Best Practice Guidelines (November 2018).

1.8. Data Verification

The mineral resource QP completed a 3-day site visit that included verification logging, sampling and verification of hole collar coordinates for selected holes. All drill logs, assays and hole collar data were found to be consistent with the Rupert Resources database and no material differences were identified.

Additional data verification of the Rupert Resources database was conducted under the supervision of the QP consisting of spot check comparisons of collar coordinates, down-hole surveys, assay and density data against the original data sources with no material differences identified.

It is the QP's opinion that the exploration, drilling and analytical procedures used by Rupert Resources to collect geological data are consistent with industry practises and CIM Mineral Exploration Best Practise Guidelines (November 2018) and that the data is suitable to support the MRE as summarized in this Technical Report.

1.9. Mineral Processing

Metallurgical test work was carried out on a series of samples considered to be representative of the Ikkari deposit to evaluate different gold concentration methods and allow evaluation of different processing methods of gold recovery. Comminution tests were also performed to determine the Bond Working index (BWi) and Bond Abrasive index (BAi) (Table 1.2). Based on the proposed flowsheet (Figure 1.3), the overall metallurgical recoveries for gold at Ikkari are presented in Table 1.2.

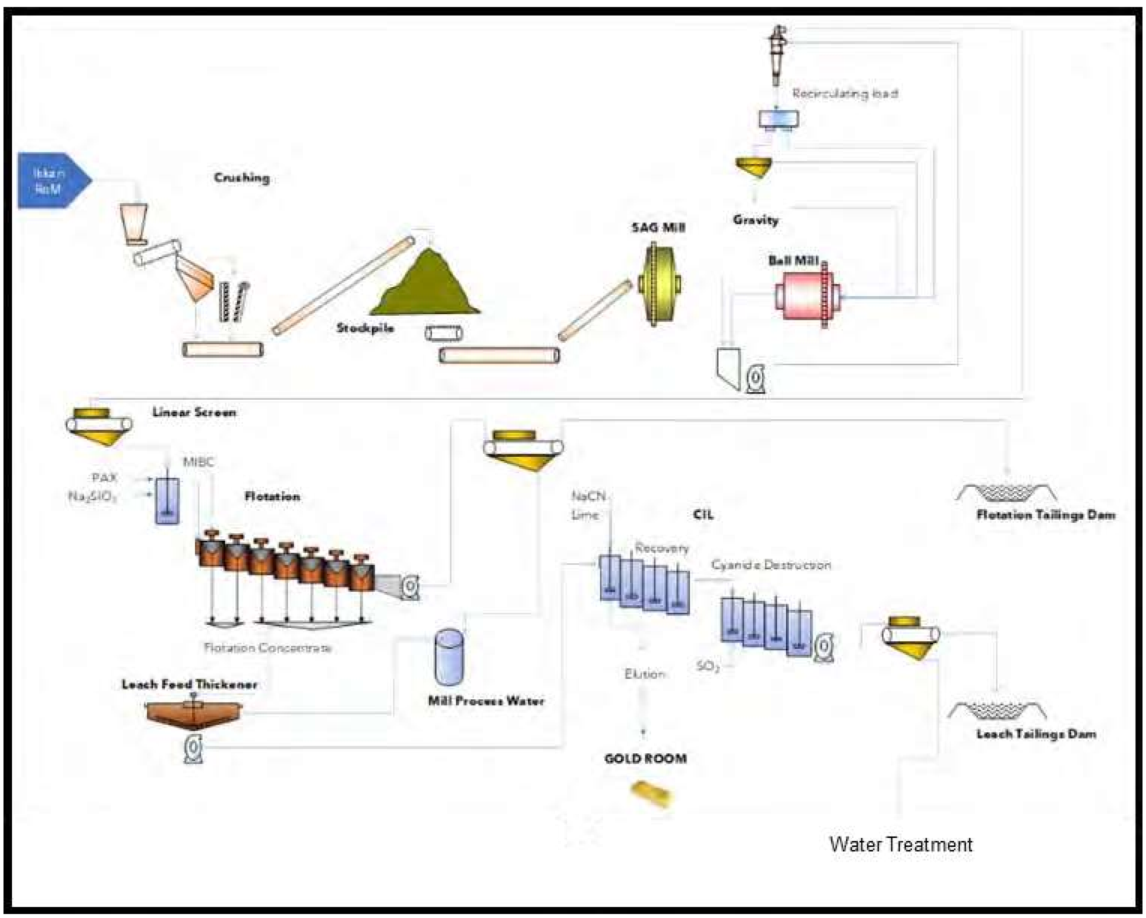


Figure 1.3: Ikkari Proposed Flowsheet (November 2022, PEA)

Table 1.2: Projected Metallurgical Recoveries for Au and Comminution Properties at the Ikkari Deposit

Recovery Method	Grind Size P_{80} (µm)	BWi	BAi	Gold Recovery Percentage (%)
Grindability	-	15.5	0.59	-
Gravity	-	-	-	47
Flotation	175	-	-	97.5
Leach Recovery	60	-	-	97.1
Ikkari total Recovery	-	-	-	94.7

Notes:
Key: µm – micrometer

1.10. Mineral Resource

The MRE for the Ikkari deposit has been prepared in accordance with NI 43-101 and following the requirements of Form 43-101F1. The methodology used to determine the MRE is consistent with the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2019) and was classified following CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

Table 1.3 summarizes the current Indicated and Inferred Mineral Resources for the Ikkari Project.

Mineral Resources are not Mineral Reserves, and do not demonstrate economic viability. There is no certainty that all, or any part, of this Mineral Resource will be converted into Mineral Reserve. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves.

Table 1.3: Ikkari Mineral Resource Estimate (Effective Date October 24, 2023)

Resource Category	Mining Method	Cut-Off Grade Au (g/t)	Tonnes (t)	Grade Au (g/t)	Au Content (Troy Ounces)
Indicated	Open Pit	0.4	37,308,000	2.21	2,649,000
	Underground	0.9	21,122,000	2.12	1,437,000
Total Indicated	-	-	**58,430,000**	**2.18**	**4,087,000**
Inferred	Open Pit	0.4	1,271,000	0.81	33,000
	Underground	0.9	2,305,000	1.39	103,000
Total Inferred	-	-	**3,576,000**	**1.18**	**136,000**

Notes:

1. Tonnage and ounces are rounded to the nearest 1 000.
2. g/t = grams per tonne, ounces are reported as troy ounces.
3. Totals may not add up correctly due to rounding.
4. Cut-off grade defined by Gold Price, $1700/oz, Metallurgical Recovery 95%, Open Pit Mining Costs $2.9/t, Underground Mining Cost $29/t, Processing Cost $11.30/t, G&A, Rehabilitation & Closure $4.8/t, Royalty 0.75%.
5. Open pit resources constrained within a Whittle Optimized open pit shell using the above assumptions with a 26m offset to the property boundary enforced.
6. Underground resources constrained within the estimation domains to meet the RPEEE criteria for underground mining.

Cut off grades for both the open pit and underground portions of the MRE were calculated based on economic assumptions set out in Table 1.4. Cost data and pit slope criteria were derived from the Ikkari Preliminary Economic Assessment (PEA), filed March 17, 2023.

The Open pit MRE was evaluated for Reasonable Prospects of Eventual Economic Extraction (RPEEE) by reporting blocks above a 0.4 g/t Au cut-off from within a Whittle generated Revenue Factor (RF) 0.95 pit shell based on the assumptions and parameters set out in Table 1.4. In addition to these parameters a 26m offset from the license boundary to the edge of the pit shell was enforced.

The Underground MRE was reported outside and below the pit shell at a 0.9 g/t UG break-even cut-off grade representing bulk scale Longhole mining. The UG resource is constrained to within the three mineral domain models. Blocks above cut-off outside of the mineral domains did not demonstrate reasonable mining continuity and therefore were excluded from the MRE.

Table 1.4: Ikkari MRE Economic Cut Off grade and Optimized Shell Parameters.

Parameter	Unit	Price/Cost
Gold Price	US dollar / troy ounce	1,700
Metallurgical Recovery (Gold)	Percentage	95
Open pit mining cost	US Dollar / tonne	2.90
Underground mining cost	US Dollar / tonne	29.00
Processing Cost	US Dollar / tonne	11.30
G&A, Rehabilitation & Closure	US Dollar / tonne	4.80
Royalty (state and landowner combined):	Percentage	0.75

1.11. Environmental Studies

Rupert Resources has been pro-actively engaged in baseline data collection and stakeholder engagement since the outset of exploration in 2018. Rupert Resources submitted its Environmental Impact Assessment (EIA) work programme to the Lapland Centre for Economic Development, Transport and the Environment (ELY Centre) in Q1 2023. This was formally accepted by the ELY Centre in Q2 2023, and Rupert Resources is currently working to deliver this programme of work.

On completion of the EIA Programme work and the Pre-Feasibility Study (PFS), the results will be presented in the project Environmental Impact Assessment document that will form the basis for submission of an environmental permit application.

Rupert Resources has also begun a parallel programme of land use planning with the local and regional authorities and has set up multiple stakeholder co-operation groups that give opinions and feedback throughout the EIA process.

1.12. Conclusions

1.12.1. Mineral Resource Estimate

It is the QP's opinion that the exploration, drilling and analytical procedures used by Rupert Resources to collect geological data are consistent with industry practises and CIM Mineral Exploration Best Practise Guidelines (November 2018) and that the data is suitable for the reporting of Mineral Resource estimates as summarized in this Technical Report.

This MRE has been prepared in accordance with NI 43-101 following the requirements of Form 43-101F1. The methodology used to determine the MRE is consistent with the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2019) and was classified following CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

The QP for this Mineral Resource estimate is Mr. Brian Thomas, P.Geo., an independent QP, as defined under NI43-101 and an employee of WSP Canada Inc. based in Sudbury, Ontario, Canada. The effective date of this Mineral Resource estimate is October 24, 2023.

The QP has taken reasonable steps to make the block model and MRE representative of the project data, but notes that there are risks related to the accuracy of the estimates related to the following:

- The assumptions used by the QP to prepare the data for resource estimation.
- The accuracy of the interpretation of mineralization.
- Estimation parameters used by the QP.
- Assumptions and methodologies used to estimate SG;
- Orientation of drill holes; and
- Cut-off grade and related assumptions of commodity prices, mining costs and metallurgical recovery.

For these reasons, actual results may differ materially from the reported MRE.

1.12.2. Mineral Processing and Metallurgical Testing

It is the QP's opinion that the metallurgical test work completed by Rupert Resources is sufficient to support the MRE. Tests results demonstrate that an overall gold recovery of 94.7% would be achievable using conventional beneficiation steps of gravity, flotation and leaching.

1.12.3. Environmental Studies

It is the QP's opinion that the environmental studies completed by Rupert Resources to date are sufficient to support the MRE. It is noted that there are no designated protected areas in immediate vicinity of the Ikkari deposit, but that it is within a reindeer herding area.

1.13. Recommendations

The PEA (reported March 17, 2023) demonstrated the economic potential of the Ikkari project and this updated MRE builds on the Resource Estimate which underpinned that study. With over 96% of mineral resources now in the Indicated category, Rupert Resources is justified to complete the ongoing PFS study for the Ikkari deposit, continue work to implement the EIA work programme and continue exploration drilling.

On completion of the EIA programme and the PFS, the results will be presented in the project EIA document that will form the basis on which an environmental permit application is submitted.

Table 1.5 summarizes the recommended work programme with associated costs.

Table 1.5: Recommended Work Programme and Associated Costs

Recommended Work	Estimated Cost (US$)
Exploration Drilling	8,000,000
Infill Drilling	5,300,000
Metallurgical studies	750,000
Environmental Studies	4,200,000

Recommended Work	Estimated Cost (US$)
Geotechnical studies	200,000
Engineering design work	2,000,000
Total Cost	**20,450,000**

2.0 INTRODUCTION

2.1 General

Rupert Resources is a gold exploration and development company listed on the TSX Exchange. The Company is focused on making and advancing discoveries of scale and quality with high margin and low environmental impact potential. The Company's principal focus is the Ikkari deposit, a new high quality gold discovery in Northern Finland.

Ikkari is part of the Company's "Rupert Lapland Project", which also includes the Pahtavaara gold mine, mill, Heinä Central deposit, exploration permits and concessions located in the Central Lapland Belt (CLB) of Northern Finland. The Rupert Lapland Project is located within the CLB, part of the Fennoscandian shield, which hosts 1,700 known incidences of mineralization in Finland, Sweden, Norway and Russia including around 80 mines.

The town of Sodankylä provides most of the support services for the Rupert Lapland Project including the use of an accredited assay laboratory as well an additional sample preparation laboratory. The municipality of the same name has a population of 8,137 and its industrial base is dominated by small businesses involved in forestry, agriculture and manufacturing. Mining plays an increasingly important role in the local economy with the Kevista Mine, owned by Boliden, the largest single employer in the municipality.

The town of Rovaniemi in Finland is located some 125 km south-southwest of Sodankylä. Rovaniemi has a population of approximately 60,000 inhabitants and is the administrative centre of Finnish Lapland.

Following the publication of a successful PEA, NI43-101 report filed March 17, 2023, WSP were selected to lead a PFS solely focused on the Ikkari deposit. In support of this study WSP were requested to undertake an independent review of the mineral exploration completed for Ikkari and prepare an updated MRE and Technical Report. The updated MRE and technical report were required due to material changes resulting from significant infill drilling completed since the PEA, in 2022, and 2023.

This Technical Report was prepared by independent QPs following the regulations NI 43-101 and in conformity with the CIM Estimation of Mineral Resources and Reserves best practise guidelines.

This report is prepared for Rupert Resources and summarises the findings of the updated 2023 Ikkari MRE with a report Effective Date of December 12, 2023.

2.2 Site Visits

A personal inspection of the project site was conducted by Mr. Brian Thomas, P.Geo., from July 11 to 13, 2023, a summary of QP site visit details is provided in Table 2.1. All QPs are employees of WSP.

Table 2.1: Personnel on Site Visit

Name	Company	QP	Site Visit Dates
Brian Thomas	WSP	Yes	July 11-13, 2023
Isabelle Larouche	WSP	Yes	Did not go to site
Gareth Digges La Touche	WSP	Yes	Did not go to site

2.3 Qualified Persons

A summary of the QPs responsible for this Technical Report is provided in Table 2.2.

Table 2.2: Summary of QPs

Report Item		Qualified Person
1.0	Summary	All QPs
2.0	Introduction	Brian Thomas
3.0	Reliance on Other Experts	Brian Thomas
4.0	Property Description and Location	Brian Thomas
5.0	Accessibility, Climate, Local Resources, Infrastructure, and Physiography	Brian Thomas
6.0	History	Brian Thomas
7.0	Geological Setting and Mineralization	Brian Thomas
8.0	Deposit Types	Brian Thomas
9.0	Exploration	Brian Thomas
10.0	Drilling	Brian Thomas
11.0	Sample Preparation, Analyses, and Security	Brian Thomas
12.0	Data Verification	Brian Thomas
13.0	Mineral Processing and Metallurgical Testing	Isabelle Larouche
14.0	Mineral Resource Estimates	Brian Thomas
15.0	Mineral Reserve Estimates	Brian Thomas
16.0	Mining Methods	Brian Thomas
17.0	Recovery Methods	Brian Thomas
18.0	Project Infrastructure	Brian Thomas
19.0	Market Studies and Contracts	Brian Thomas
20.0	Environmental Studies, Permitting, and Social or Community Impact	Gareth Digges La Touche
21.0	Capital and Operating Costs	Brian Thomas
22.0	Economic Analysis	Brian Thomas
23.0	Adjacent Properties	Brian Thomas
24.0	Other Relevant Data and Information	Brian Thomas
25.0	Interpretation and Conclusions	All QPs
26.0	Recommendations	All QPs
27.0	References	Brian Thomas

2.4 Sources of Information

The sources of information used for the preparation of this Technical Report were provided by Rupert Resources. This Technical Report is based on the following data and pre-existing reports:

- 2023 PEA
- Rupert Resources database of surface drill holes that included:
  - Au and multi-element assays, specific gravity (SG) measurements, and descriptions of lithology, structure, mineralization, alteration.
- Drill hole collar survey data and down-hole survey data.

- Mineralization models and lithology models.
- Topographic and bedrock surfaces.
- Property boundary.
- QA/QC summary data and graphs.
- Assay certificates.
- Metallurgical test work completed by third parties.
- Environmental studies completed by Rupert Resources and third parties.
- Third party reports.

Further sources of information utilized by the QPs are listed in Item 2.4.

2.5 Units of Measurement and Abbreviations

All units of measure used in this Technical Report are in the metric system, unless stated otherwise. Currencies outlined in the report are in US dollars (US$) unless otherwise stated.

Table 2.3 lists the symbols and abbreviations used in this Technical Report.

Table 2.3: List of Abbreviations

Abbreviation	Definition
%	percent
>	greater than
°C	degrees Centigrade
µm	micron
2D	Two-Dimensional
ADC	Arctic Drilling Company
Ag	Silver
Al	Aluminium
AMD	Acid Mine drainage
As	Arsenic
Au	Gold
Ba	Barium
BAi	Bond Abrasive index
Be	Beryllium
Bi	Bismuth
BOT	Base of Till
BWi	Bond Working index
Ca	Calcium
Cd	cadmium
Ce	Cerium
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CLB	Central Lapland belt
CN_{WAD}	Weak Acid Dissociable Cyanide
Co	Cobalt
Cr	Chromium
Cs	Cesium
Cu	Copper
CV	Coefficient of Variation
Datamine	Datamine Studio RM
DC	Direct Current
DGPS	Differential Global Positioning System
DO	Dissolved Oxygen
E-GRG	Extended Gravity Recoverable Gold
EIA	Environmental Impact Assessment
ELY Centre	Lapland Centre for Economic Development, Transport and the Environment
EM	Electromagnetic
ESIA	Environmental and Social Impact Assessment
Fe	Iron
g	gram
g/t	grams per tonne
g/l	gram per litre
Ga	Giga annum
Ge	Germanium
GPS	Global Positioning System
GTK	Geological Survey of Finland
Ha	hectare
ICP-AE	Inductively Coupled Plasma - Atomic Emission Spectroscopy
ID2	Inverse Distance squared
In	Indium
IP	Induced Polarization
Hf	Hafnium
JV	Joint Venture
K	Potassium
kg	kilogram

Abbreviation	Definition
km	kilometre
km2	square kilometre
koz	kilo-ounce
kW	kiloWatt
La	Lanthanum
Li	Lithium
m	metre
M	Million
m3	cubic metre
masl	metres above sea level
Mg	Magnesium
mm	millimetre
Mn	Manganese
Mo	Molybdenum
Moz	Million ounce
MRE	Mineral Resource Estimate
ms	millisecond
MSCU	Metamorphic Schist Ultramafic Protolith
Mt	Million tonne
MT	Magnetotelluric
Na	Sodium
Nb	Niobium
Ni	Nickel
NI 43-101	National Instrument 43-101
NN	Nearest Neighbour
NNE	North-Northeast
NNW	North-Northwest
NSR	Net Smelter Return
OK	Ordinary Kriging
oz	ounce
P	Phosphorus
PAX	Potassium Amyl Xanthate
Pb	Lead
PEA	Preliminary Economic Assessment
PFS	Pre-Feasibility Study
PGE	Platinum Group Element
Ph.D	Doctor of Philosophy
ppm	parts per million
QA/QC	Quality Assurance and Quality Control
QP	Qualified Person
Rb	Rubidium
Re	Rhenium
RF	Revenue Factor
RPEEE	Reasonable Prospects of Eventual Economic Extraction
RSD	Relative Standard Deviation
Rupert	Rupert Resources Ltd.
s	seconds
S	Sulphur
Sb	Antimony
Sc	Scandium
Se	Selenium
SEM	Scanning Electron Microscopy
SG	Specific Gravity
Si	Silicon
SMU	Selective Mining Unit

Abbreviation	Definition
Sn	Tin
Sr	Strontium
SRK	SRK Consulting (Finland) Oy
SSE	South-Southeast
Ta	Tantalum
Te	Tellurium
Th	Thorium
Ti	Titanium
Tl	Thallium
TSF	Tailings Storage Facility
U	Uranium
UAV	Unmanned Aerial Vehicle
US	United States
US$	US Dollars
V	Vanadium
VLF-R	Very Low Frequency Radar
WSP	WSP Canada Inc.
WSW	West-Southwest
W	Tungsten
Y	Yttrium
Zn	Zinc
Zr	Zirconium

3.0 RELIANCE ON OTHER EXPERTS

3.1 Reliance

This Technical Report has been prepared by WSP for Rupert Resources. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to WSP at the time of report preparation.
- Assumptions, conditions, and qualifications as set forth in this report.
- Data, reports, and other information supplied by Rupert Resources and other third-party sources.

In Items 4.2, Property Ownership, 4.3 Annual Fees and Royalties, and 4.4 Environment, of this Technical Report, the QPs have fully relied upon, and believe there is a reasonable basis for this reliance on, information provided by Rupert Resources regarding mineral tenure, surface rights, ownership details, agreements, taxation, royalties, environmental obligations, permitting requirements and applicable legislation relevant to the Ikkari Project. The QPs have not independently verified the information in these Items and have fully relied upon, and disclaim responsibility for, information provided by Rupert Resources in these Items.

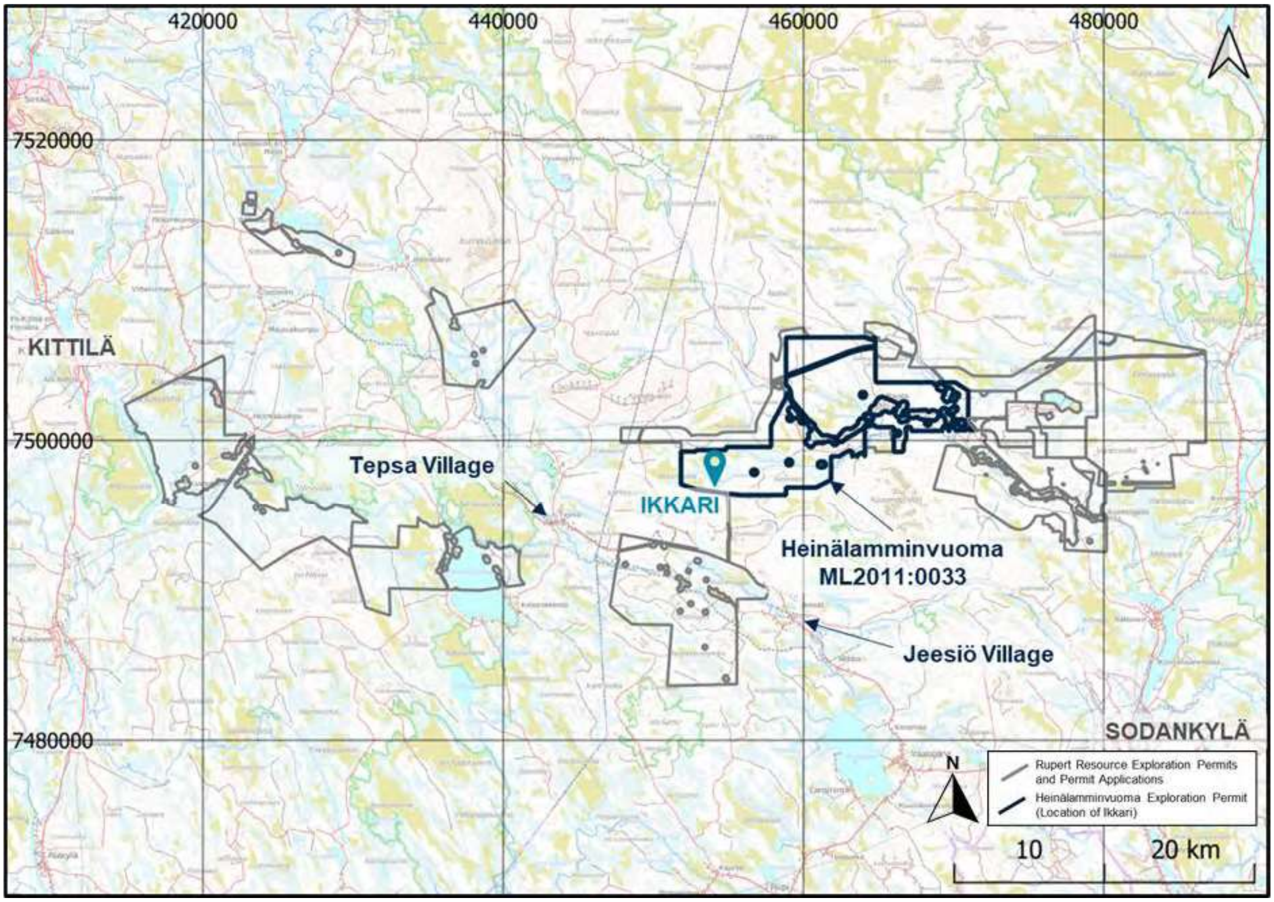
4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location of Ikkari Gold Deposit

The Ikkari Gold Deposit is located within Rupert Resources' "Rupert Lapland Project" exploration licences, which occur in the province of Lapland, Northern Finland, as shown in Figure 4.1.

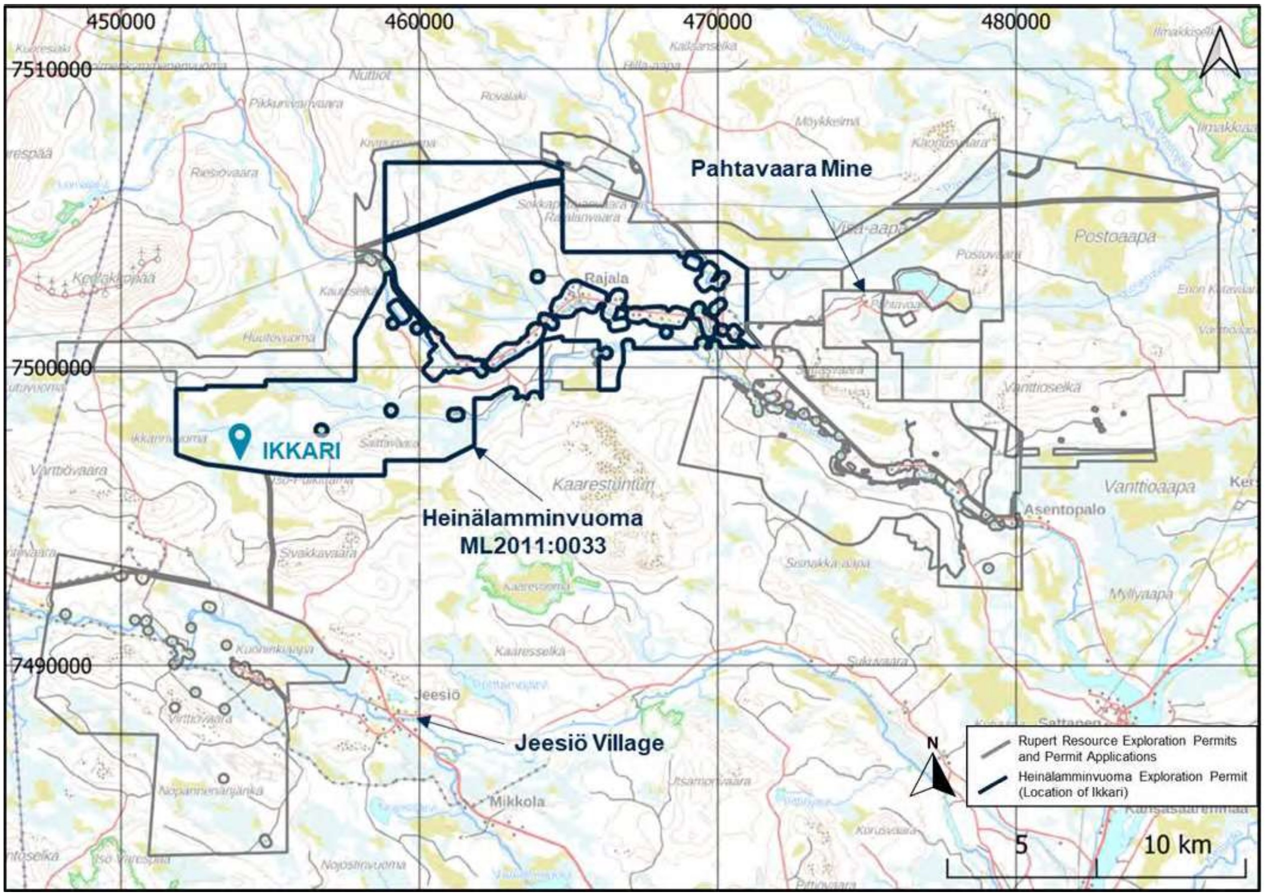
Figure 4.1: Location of Rupert Lapland Project in Northern Finland

More locally, the project occurs across an area surrounding the Rajala village in the municipality of Sodankylä. The Ikkari Gold Deposit occurs in the westernmost extents of the Rupert Lapland Project, approximately 30 km northwest of Sodankylä town centre in northern Finland, 10 km NNW of Jeesiö village and 22 km west-southwest (WSW) of the Pahtavaara Mine, a gold mine currently on care and maintenance within the Rupert Lapland Project tenement package (for coordinates see Table 4.1), as shown in Figure 4.2 and Figure 4.3.



Note: The major regional towns of Sodankylä and Kittila are shown for reference alongside the villages of Jeesiö and Tepsa closest to the Ikkari Project.

Figure 4.2: Location of the Rupert Lapland Project Area and the 490 km^2 Land Package held by Rupert Resources



Note: The location of the historically operating Pahtavaara Gold Mine and the nearest village, Jeesiö, are shown for reference. The Heinälamminvuoma Licence, where Ikkari is located, is shown in bold.

Figure 4.3: Location of the Ikkari Deposit, Located Within the 340.6 km² Contiguous Land Package Known as the Rupert Lapland Project Area

Table 4.1: Deposit Coordinates

Deposit	Reference Grid	Easting	Northing
Ikkari	ETRS-TM35FIN	454,100	7,496,950

The Ikkari deposit lies on the eastern extreme of the Sirkka Line, a tectonic structure that traverses northern Finland, along which some 25 to 30 gold deposits / occurrences exist. Ikkari is situated at the margins of a low-lying aapa-mire, comprising broad wetlands to the north and west, and is sparsely forested.

The landscape across the Ikkari deposit area is predominantly flat with an elevation of approximately 225 masl and rising slightly towards the southeast and the margins of the Iso-Pulkittama hill, which has a maximum elevation of approximately 300 masl. The overburden cover of glacial till deposits is generally between 10 m to 40 m thick and rock outcrop is very limited across the exploration licence area. In most parts of the deposit area, the ground water table is typically located close to the ground surface.

4.2 Property Ownership

The Rupert Lapland Project area, in which the Ikkari deposit occurs is comprised of a contiguous package of mining licences, exploration permits, and exploration permit applications totalling an area of 340.6 km². These licences are 100% owned by Rupert Resources Ltd through its local, Finnish subsidiaries. Additional permits elsewhere in the Central Lapland Belt, contribute to a grand total of 490 km² (see Table 4.2 for component parts, expiry and annual fees). The mineral resource at Ikkari is contained within the existing valid exploration permit Heinälamminvuoma - ML2011:0033, with an area of 84 km². Both Rupert Finland Oy and Rupert Exploration Finland Oy are wholly owned subsidiaries of Rupert Resources Ltd., a company incorporated in British Columbia, whose office is at 82 Richmond Street East, Suite 203, Toronto, Ontario, Canada, M5C 1P1.

The rights conveyed to the landholder are defined in the Mining Act of Finland (621/2011) and summarized as in the following items.

4.2.1 Mining Permit

"The establishment of a mine and undertaking of mining activity are subject to a permit (mining permit)." (Section 16)

A mining permit entitles the holder to exploit:
1) the mining minerals found in the mining area;
2) the organic and inorganic surface materials, excess rock, and tailings generated as a by-product of mining activities (byproduct of mining activity);
3) other materials belonging to the bedrock and soil of the mining area, insofar as the use thereof is necessary for the purposes of mining operations in the mining area.

Moreover, the mining permit entitles its holder to perform exploration within the mining area in accordance with the provisions of Section 11, and the more specific conditions specified in the mining permit." (Section 17)

At the current time, the Mining Licenses held by Rupert Resources, and its subsidiaries refer to the historically operating Pahtavaara Mine not the Ikkari deposit.

4.2.2 Exploration Permit

"Pursuant to an exploration permit, the permit holder has the right, on the permit holder's own land and that owned by another landowner, in the area referred to in the permit (exploration area), to explore the structures and composition of geological formations and to conduct other exploration in order to prepare for mining activity and other exploration in order to locate a deposit and to investigate its quality, extent, and degree of exploitation, as provided for in more detail in the exploration permit.

The holder of the exploration permit may build, or transfer to the exploration area, temporary constructions and equipment necessary for exploration activity, as specified in more detail in the exploration permit. An exploration permit does not authorise exploitation of the deposit." (Section 10)

However, "-- *if a mining permit is applied for with respect to a deposit located within an exploration area, the exploration permit holder shall have priority to the mining permit if the permit holder submits an application for a mining permit in accordance with the provisions laid down in section 34 prior to the expiry or cancellation of the exploration permit." (Section 32)*

The prerequisites for the granting of the mining permit *require the deposit to be "exploitable in terms of size, ore content, and technical characteristics." (Section 47)*

> *The validity of an exploration permit may be extended for a maximum of three years at a time. In total, the permit may remain valid for a maximum of 15 years. (Section 61)*

The Heinälamminvuoma exploration permit, where the Ikkari deposit occurs, is currently in year 7 of a possible 15 year validity period. No additional permits are required to continue with the ongoing engineering studies and exploration work as set out in the recommendations for further work, Section 26. To exploit the Ikkari deposit Rupert Resources will require a mining permit covering the deposit and associated infrastructure.

4.2.3 Reservation

> *"For the purpose of preparing an application for an ore prospecting permit, an applicant may reserve an area for themself by submitting a notification to the mining authority about the matter (reservation notification). A privilege based on a reservation notification becomes valid once the reservation notification has been submitted in compliance with the provisions laid down in Section 44 of the Mining Act (621/2011) and there is no reason, as specified in the Mining Act, for the rejection of the reservation. The validity of the privilege expires when the decision made by the mining authority on the basis of the reservation notification (reservation decision) expires or is cancelled." (Section 32)*

The reservation does not entitle the applicant to perform exploration. Instead, the reservation grants a privilege regarding the submission of an exploration application. (Section 32)

A reservation decision shall remain valid for a maximum of 12 months after issuing of the reservation notification. (Section 76)

At the current time Rupert Resources and its subsidiaries do not hold any valid reservations.

Table 4.2: Land Components of the Rupert Lapland Project

Type	Code	Status	Name	Company	Area (km²)	Granted	Expires	Fee Eur/ha
Mining Licence	KL2018:0011, 3921	Valid	Pahtavaara	Rupert Finland Oy	3.86	14/09/1993	N/A	100
	KL2013:0001-01	Valid	Pahtavaara laajennus	Rupert Finland Oy	0.35	12/09/2013	Review after 10 years	100
Sub total					*4.21*			
Exploration Permit	**ML2011:0033-02**	**Valid**	**Heinälamminvuoma**	**Rupert Exploration Finland Oy**	**83.91**	**11/06/2021**	**10/06/2024**	**30**
	ML2019:0024-01	Valid	Pahta NW	Rupert Exploration Finland Oy	37.82	07/11/2019	17/02/2024	20
	ML2019:0023-01	Valid	Satta SE	Rupert Exploration Finland Oy	43.49	07/11/2019	17/02/2024	20
	ML2020:0006-01	Valid	Area 51	Rupert Exploration Finland Oy	65.56	01/09/2021	08/10/2025	20
	ML2020:0007-01	Valid	Liika	Rupert Exploration Finland Oy	0.79	01/09/2021	08/10/2025	20
	ML2021:0003-01	Valid	Jeesiö	Rupert Exploration Finland Oy	58.28	28/07/2021	03/09/2025	20
	ML2022:0058-01	Valid	Kuusajärvi 1	Rupert Exploration Finland Oy	42.25	02/05/2023	08/06/2027	20
	ML2012:0080-03	Valid	Liikamaa 1-4	Rupert Finland Oy	1.97	31/05/2021	30/05/2024	50
	ML2013:0013-02	Valid	Pahtarimpi 10-11	Rupert Finland Oy	5.46	31/05/2021	30/05/2024	50
	ML2012:0195-02	Valid	Pahtarimpi 2-3	Rupert Finland Oy	1.66	31/05/2021	30/05/2024	50
	ML2013:0014-02	Valid	Paskamaa 1-5	Rupert Finland Oy	4.88	31/05/2021	30/05/2024	50
	ML2011:0034-02	Valid	Paskahaara 1	Rupert Finland Oy	16.77	08/03/2022	14/04/2025	30
Sub total					362.8			
Joint Venture with S2 Resources*	ML2016:0056-01	Valid	Sikavaara E	Sakumpu Exploration Oy	27.45	14/12/2021	20/01/2026	20
	ML2019:0107-01	Valid	Sikavaara W	Sakumpu Exploration Oy	9.49	14/12/2021	20/01/2026	20
Sub total					36.94			
Exploration Permit Extension Application	ML2011:0008-03	Application	Soretiajärvi 3	Rupert Exploration Finland Oy	0.09	N/A	N/A	50
	ML2012:0196-02	Application	Soretiajärvi 4	Rupert Exploration Finland Oy	0.95	N/A	N/A	50
	ML2017:0080-02	Application	Liikavaara	Rupert Exploration Finland Oy	3.71	N/A	N/A	30
	ML2017:0079-02	Application	Rajala	Rupert Exploration Finland Oy	2.94	N/A	N/A	30
	ML2013:0012-02	Application	Paskamaa 2b-3b	Rupert Finland Oy	0.09	N/A	N/A	30
	ML2019:0005-02	Application	Satta	Rupert Finland Oy	4.54	N/A	N/A	40
Sub total					12.3			
Exploration Permit Application	ML2021:0081-01	Application	Rako	Rupert Exploration Finland Oy	0.46	N/A	N/A	20
	ML2021:0113-01	Application	Sattanen West	Rupert Exploration Finland Oy	1.36	N/A	N/A	20

Type	Code	Status	Name	Company	Area (km²)	Granted	Expires	Fee Eur/ha
	ML2022:0025-01	Application	Jeesiö 2	Rupert Exploration Finland Oy	1.63	N/A	N/A	20
	ML2022:0071-01	Application	Kuusajärvi 2	Rupert Exploration Finland Oy	31.98	N/A	N/A	20
	ML2022:0072-01	Application	Kuusajärvi 3	Rupert Exploration Finland Oy	38.19	N/A	N/A	20
Sub total					73.6			
TOTAL					**489.9**			

Notes: Heinälamminvuomä exploration permit, where Ikkari occurs is highlighted in grey and shown in bold.
Key: EUR/ha = Euros per hectare
*Sikavaara E and Sikavaara W licences are held by Sakumpu Exploration Oy, a 100% held subsidiary of ASX listed S2 Resources. Rupert Resources entered into an option agreement in August 2021 under which Rupert Resources can earn up to 70% interest in the licences over a 6-year period. Rupert Resources is the operator of these licences.

4.3 Annual Fees and Royalties

Legislation requires holders of exploration and mining permits to make annual payments to landowners on euros per hectare (EUR/ha) basis (see Table 4.3); holders of reservations are required to make annual payments to the state also on a EUR/ha basis. From 2024, a statutory mining royalty of 0.75% is payable on the value of the exploited mineral / metal. This is comprised of 0.15% payable to the landowner and a 0.6% state royalty.

Table 4.3: Annual Royalty Payments According to Finland Mining Act 2011

Permit Type	EUR/ha
Reservation	1*
Exploration (years 1 - 4)	20
Exploration (years 5 - 7)	30
Exploration (years 8 - 10)	40
Exploration (years 11 - 15)	50
Mining (if not active)	50 (100)

Note:*Reservation annual payment is payable to the state, not the landowner.

The Pahtavaarva Mine is subject to a 1.5% Net Smelter Return (NSR) royalty that is capped at a value of US $2 M.

4.4 Environment

There are no designated protected areas within the exploration permits, exploration permit applications and the Pahtavaara mining licences that comprise the Rupert Lapland Project area. Additionally, there are no designated protected areas within the Ikkari deposit impact zone and as such there is no environmental legislation that adversely impacts the project's reasonable prospects for eventual economic extraction.

Rupert Resources submitted its EIA programme to the ELY Centre in Q1 2023. This was formally accepted by the ELY Centre in Q2 2023. Rupert Resources is currently working towards submission of the EIA report for the Ikkari project by the end of 2024.

Rupert Resources has funded environmental reclamation bonds of EUR 850,000 for the Pahtavaara Gold Mine and a further EUR 55,000 in exploration related bonds covering the Rupert Lapland Project Area.

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

5.1 Property Access

The airport of Rovaniemi has several scheduled domestic flights daily to and from Helsinki as well as international flights during the winter and summer holiday seasons. The distance from Rovaniemi to Sodankylä is 140 km by road and takes under two hours to drive. To reach Ikkari from Sodankylä, turn towards Kittilä onto main road 80. Continue to follow road 80 towards Kittilä, 4.5 km after Jeesiö village turn right to Pulkittama. Continue to follow the gravel Pulkittama road for 7.5 km where forest tracks lead directly to the exploration site. Access to the site is possible throughout the year.

5.2 Physiography

The landscape was sculpted by extensive glaciers in the most recent ice age between 110,000 and 10,000 years ago. Following the last glacial period, melting ice sheets resulted in shallow lakes and extensive boggy lowlands. Broad valleys were scoured out in the direction of glacial transport, flanking low-lying hills underlain by resistant rocks. The landscape is dominated by low rolling hills and flat lowlands comprised of bogs and lakes. Hills are mostly covered by glacial moraine and sands and are forested, primarily with birch, pine, and spruce which are exploited by the state forestry company. Bedrock outcrops on the hills and along riverbanks is limited to some two percent or less of the project area. The Ikkari gold deposit is located at the margins of low-lying bog terrain, cut by a small stream, rising towards a boulder-dominated, gentle slope in the south-southeast (SSE). The area in general is approximately 225 masl. This terrain largely drains to the north and then east into the Saitta River and then into the Sattanen River and further into the catchment basin of the Kitinen River, and eventually the area drains into the Kemi River and the Gulf of Bothnia.

5.3 Climate

According to Köppen climate classification, northern Finland is classified as Dfc (Continental, without a dry season and a cold summer). The region has cold, wet winters, where the mean temperature of the warmest month is no lower than 10 degrees centigrade (°C) and that of the coldest month no higher than -3°C. The rainfall is, on average, moderate in all seasons.

The climate is typical of northern Fennoscandia with temperate summers and cold winters. During the summer months (June to August), temperatures are mostly between 10°C and 20°C, and during the winter months (November to April) between -2°C and -20°C based on 10-year averages from 2005 to 2015 for Sodankylä. Snow covers the terrain on an average of 183 days in the year with a maximum snow thickness varying from 0.6 m to 1.2 m in March. Bogs, lakes and rivers are frozen for four to five months of the year. Exploration work can be conducted during the winter by taking advantage of the frozen bogs for access.

Annual rainfall is around 600 mm with a monthly range between 30 mm (April) to 90 mm (July). The wettest period is June to July and the driest period from February to April. The climate of northern Finland is influenced by its arctic location between the 60th and 70th northern parallels located in the Eurasian continental coastal zone. This region has characteristics of both the maritime and continental climate depending on the direction of airflow. When westerly winds prevail, the weather is warm and clear due to the airflows from the Atlantic Gulf Stream. When airflow is from the east, the Asian continental climate prevails resulting in severe cold in winter and extreme heat in summer.

The mean temperature in northern Finland is several degrees higher than that of other areas in these latitudes such as Siberia and southern Greenland due to the moderating effect of the Atlantic Ocean and the Baltic Sea.

Weather patterns in the project area and in the general region can change quite rapidly, particularly in winter, because northern Finland is located in a zone of prevailing westerly winds where cooling sub-tropical and polar air masses collide. The weather systems known to have the greatest influence on the climate are the low-pressure systems originating near Iceland and the high-pressure systems drifting in from Siberia and the Azores.

The climate is not expected to have any significant impact on the Ikkari operating season, and the operations can be conducted on a year-round basis.

5.4 Local Resources and Regional Infrastructure

The town of Rovaniemi in Finland is located some 150 km south-southwest of Ikkari. Rovaniemi has a population of approximately 60,000 inhabitants and is the administrative centre of Finnish Lapland. The regional technical centre of the Geological Survey of Finland (GTK) and its analytical laboratory are also located here.

The town of Sodankylä provides most of the support services for the Rupert Lapland exploration permits, including accredited sample preparation facilities operated by ALS Minerals and Eurofins Labtium as well as a fire assay facility at the Eurofins (Labtium) laboratory. ALS Minerals and Eurofins Labtium are internationally accredited laboratories and are ISO compliant (ISO 9001:2008, ISO/IEC 17025:2005). The regional industrial base is currently dominated by small businesses involved in forestry, agriculture and manufacturing though mining is the largest single private employer in Sodankylä with the Kevitsa Mine, operated by Boliden, employing an average of 570 people. There are several hotels, shops, and restaurants which accommodate a growing year-round influx of tourists into Lapland. A skilled work force is in place.

Hydroelectric power in the region is relatively inexpensive for commercial use. A main high voltage electrical power line is present five km north of the Ikkari deposit (Figure 5.1). A substation to this power line is located 9 km from the Ikkari deposit, currently serving a commercial wind farm.

Limited surface infrastructure is currently present at Ikkari, an access road has been constructed from the Pulkittama road and a 20-kV powerline to the site laydown area, servicing two temporary facility buildings, was completed in the last twelve months. The logistical hub for exploration across the Rupert Lapland Project area, including the Ikkari deposit, is located at a purpose-built logging and storage facility 10 km to the south of Sodankylä. Management and administration functions are based at an office in the town of Sodankylä.

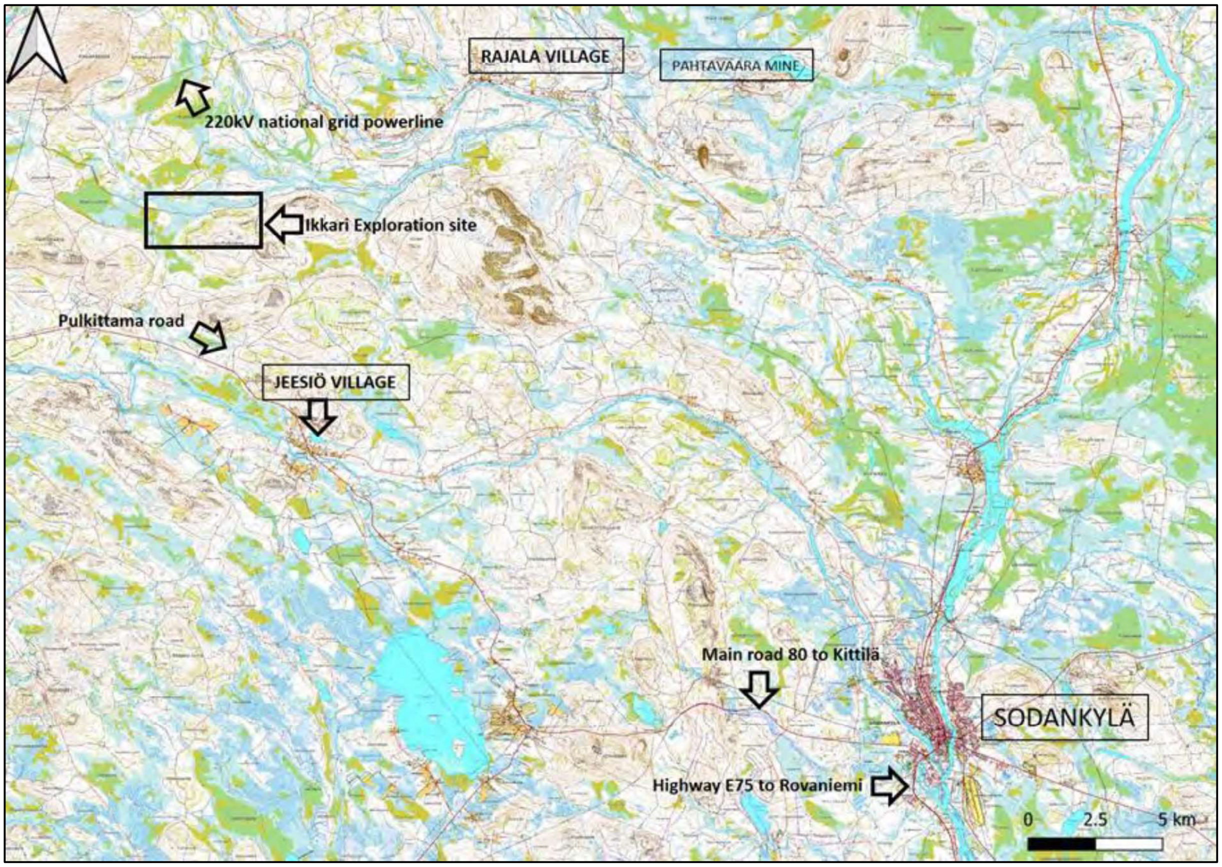


Figure 5.1: Regional Infrastructure

6.0 HISTORY

Ikkari is an under-cover grass roots discovery made in March 2020. Limited previous exploration activities have been undertaken in the area prior to the work conducted by Rupert Resources during 2019 to present.

Prior to joining the European Union (EU) in 1995, all exploration in Finland was conducted by the Geological Survey (GTK) and/or Outokumpu, then a state-controlled company. The Heinälamminvuoma exploration permit on which the Ikkari Gold Deposit is located, was applied for in 2011 by Lapland Goldminers, the then owners of the operating Pahtavaara Mine however no work was completed in the licence area and the exploration permit remained in the application phase. This was the first instance of a private company applying for an exploration permit over the Ikkari deposit. Lapland Goldminers operated at the Pahtavaara Mine until 2014 when the parent company in Sweden filed for bankruptcy and the operation was placed in care and maintenance. Rupert Resource Ltd purchased the operation from the administrators of Lapland Goldminers in September 2016.

The Heinälamminvuoma exploration permit has been part of the Rupert Lapland Project area since that time, although very little exploration was undertaken initially and exploration field activities were confined to the easternmost parts of the licence, adjacent to the Pahtavaara Mine itself before 2018.

6.1 Previous Mapping and Surface Sampling

Regional mapping has been undertaken by the GTK, but due to the limited outcrop of the region, the majority of this has been interpreted using regional geophysical surveys. Limited bedrock observations have been undertaken by GTK, largely restricted to higher ground outside of the current exploration permit boundaries.

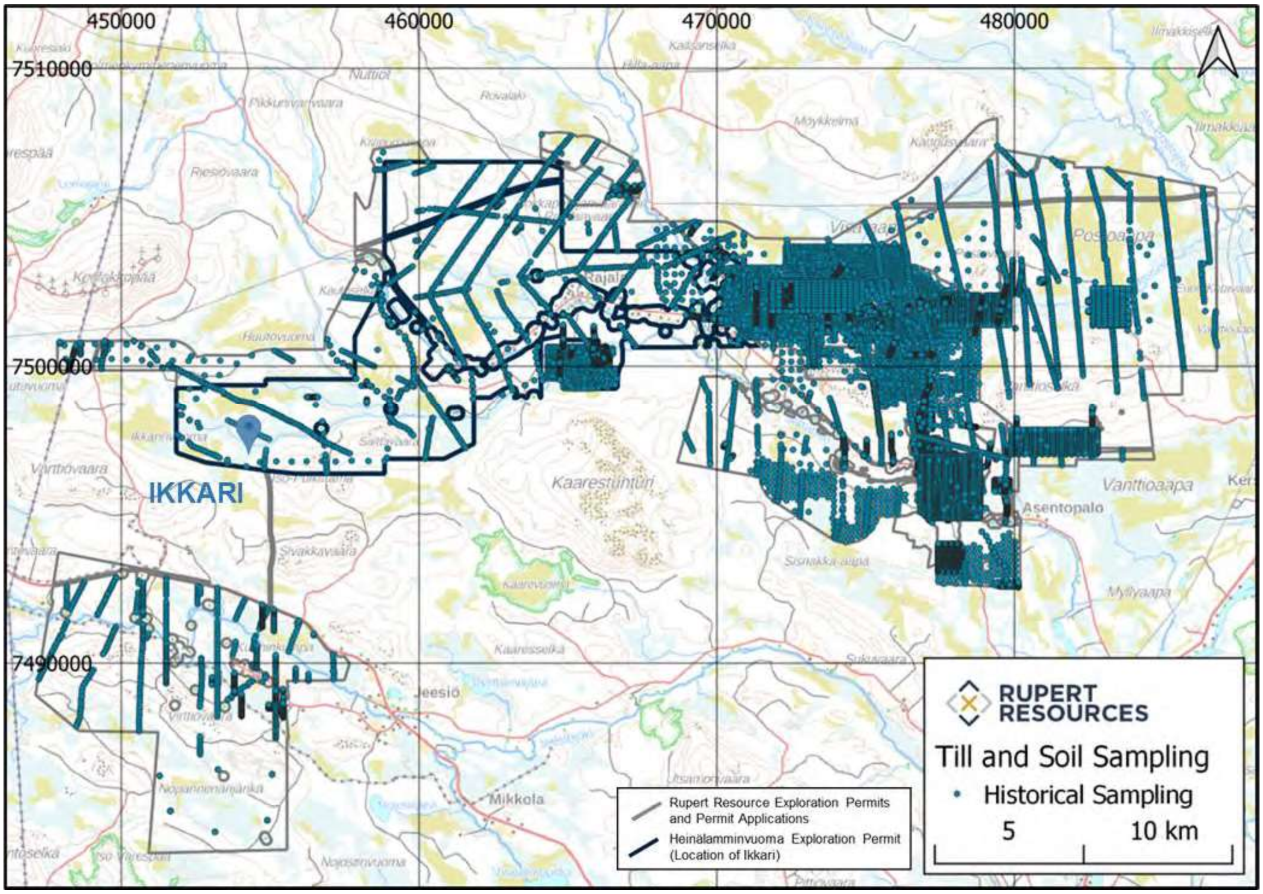
6.2 Previous Geochemical Surveys

Regionally, the Geological Survey of Finland has historically carried out limited outcrop and boulder sampling across the hills to the south and southeast of Ikkari, and Terra Mining (previous owners of the Pahtavaara Mine (1991 to 2000) undertook broad spaced till sampling also across higher ground to the south and east of Ikkari, but no sampling has been undertaken across the Heinälamminvuoma area which hosts the Ikkari deposit.

Previous geochemical sampling within the Heinälamminvuoma exploration licence area comprises only historic (1974 to 1979) till geochemistry in very broad-spaced (>1 km) lines conducted by GTK. These samples were assayed for silver (Ag), lead (Pb), zinc (Zn), copper (Cu), nickel (Ni), cobalt (Co), manganese (Mn), chromium (Cr), vanadium (V), titanium (Ti), potassium (K,) sodium (Na), calcium (Ca), magnesium (Mg), iron (Fe), aluminium (Al) and silicon (Si) and did not include assays for gold. Sample depths appear to have been within the till horizons and did not reach the bedrock contact.

Considering the wider Rupert Lapland Project area, during this sampling campaign copper anomalies were discovered in the Sattasvaara komatiites and subsequent infill sampling, including gold analysis, on a 50-m-x-100 m grid led to the discovery of the Pahtavaara Mine in 1984-1985.

Across the Rupert Lapland Project area historical till sampling comprises 426,737 samples from regional programmes conducted by GTK and previous operators at Pahtavaara (Figure 6.1).



Note: Grid: 5 km

Source: GTK & Internal Rupert Resources Ltd database, 2023

Figure 6.1: Historical Soil and Base of Till Sampling Across the Wider Rupert Lapland Project Area

6.3 Previous Geophysical Surveys

The GTK flew a series of airborne geophysics programmes in the area in the 1970s and 1980s.

Covering the Rupert Lapland Project area, the airborne magnetic, electromagnetic and radiometric surveys were originally flown with a low-level DC-3 system between 1973 and 1979 and then resurveyed in the 1980s using the Twin Otter system. The surveys were flown at a height of 30 m with some blocks flown on N-S lines and others E-W, depending on the geological strike.

The Geological Survey has also conducted more targeted ground magnetic, slingram (electromagnetic [EM]), Induced Polarization (IP) and Very Low Frequency Radar (VLF-R) surveys in the area as well as ground gravity across much of the CLB. Scan Mining analysed the ground geophysics in 2007.

6.4 Drilling by Previous Explorers

Within the Heinälamminvuoma exploration licence area, a total of 2,420 m of historic diamond drilling has been completed within the licence area, from 26 drill holes (Table 6.1). Very limited drilling has been undertaken by any previous explorers and the majority of these holes are confined to the eastern extent of the licence area (Figure 6.2).

Table 6.1: Summary of Historic Drill Data for Heinälamminvuoma Exploration Permit Area

Company	DH Type	Holes	Metres % of Total
Outokumpu (1989 to 1991)	Diamond	5	584
Geological Survey of Finland (Pre- 1989)	Diamond	21	1,836
Total		**26**	**2,420**

No previous drilling has been undertaken at the Ikkari deposit. A review of the drill hole assay database in the region, has indicated that much of the drilling by previous explorers was selectively sampled, with few assays for gold. The only drilling to data on the Heinälamminvuoma exploration perm occurred in the far northeast of the permit.

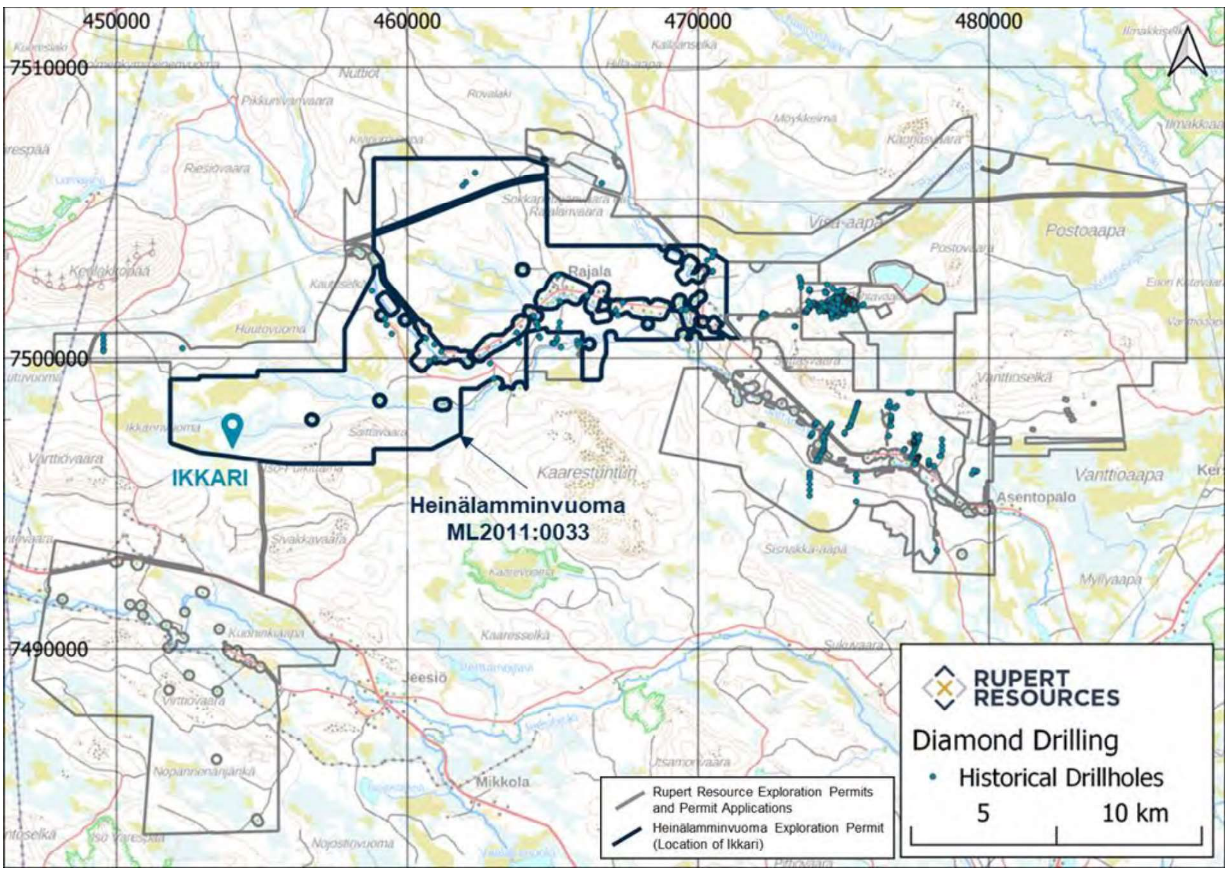


Figure 6.2: Location of Historical Drilling on the Heinälamminvuoma Exploration Licence

6.5 Historical Resource and Reserve Estimates

Ikkari was discovered by Rupert, Resources, therefore there are no historical resource or reserve estimates.

6.6 Production History

The Ikkari deposit, being an exploration stage project has not had any past mining production.

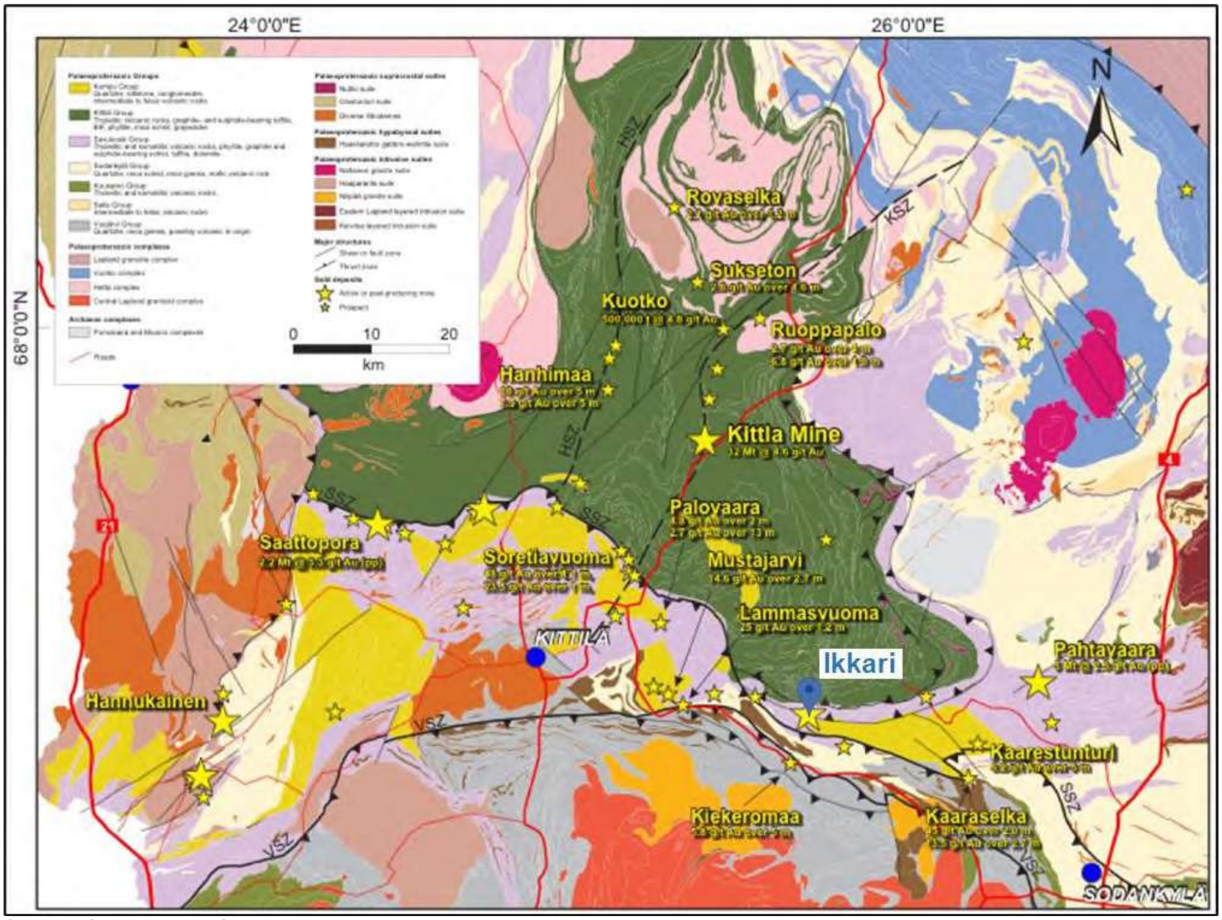
7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geological Setting

The Rupert Lapland Project area is located within the CLB, part of the Fennoscandian shield, which hosts 1,700 known incidences of mineralization in Finland, Sweden, Norway and Russia including approximately 80 mines. The CLB has two gold mines of significance. Currently operating is Agnico Eagle's Kittilä mine, 45 km northwest of the Ikkari deposit, which produced 216,947 oz of gold in 2022 and has a remaining reserve of 3.68 Moz (Agnico Eagle website, November 2023). The historically producing Pahtavaara mine, 20 km east-northeast of the Ikkari deposit, mined an estimated 441 koz of gold in three periods of ownership between 1996 and 2014 (GTK, Mineral Deposit Report), and hosts an Indicated Mineral Resource of 1.9Mt at 3.0g/t for 180 koz together with an Inferred Mineral Resource of 2.2 Mt grading 3.1 g/t Au for 220 koz (estimated by Rupert Resources in 2022). The Heinä Central deposit, 1.5 km north-northeast of the Ikkari deposit with a Mineral Resource of 2.7 Mt at 1.8 g/t Au for 150 koz (estimated by Rupert Resources in 2022) further demonstrates the prolific gold endowment of the CLB.

Copper, along with nickel and Platinum Group Elements (PGEs) are mined from Boliden's Kevitsa mine and reported as part of the resource at Anglo American's Sakatti Project located within 45 km northeast and 35 km east from the Ikkari deposit. These two deposits are examples of magmatic sulphide deposits, hosted by an ultramafic intrusive, and are distinct from the styles of mineralization encountered within the Rupert Lapland Project area to date.

Ikkari was discovered in March 2020 and is a greenfield level, undercover, orogenic gold discovery in the Paleoproterozoic CLB, Finland. The Rupert Lapland Project area lies at the eastern extreme of the Sirkka Line (Sirkka shear zone, Eilu et al. 2007), a tectonic structure that traverses northern Finland, along which some 25 to 30 gold deposits exist, either within or related to subsidiary structures along it (Figure 7.1). The shear zone is also associated with intense alteration (albitization, sericitization and carbonatization) as well as anomalous gold along its entire length (Eilu et al, 2007).

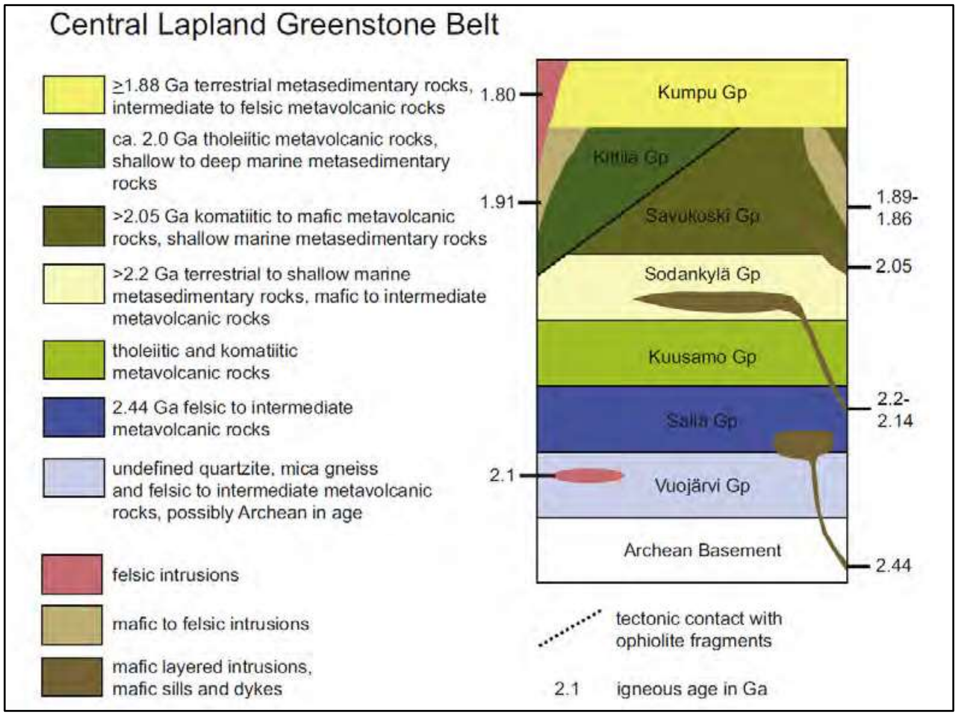


Source: GTK Regional Geology Map

Figure 7.1: Geological Map of Central Lapland Greenstone Belt

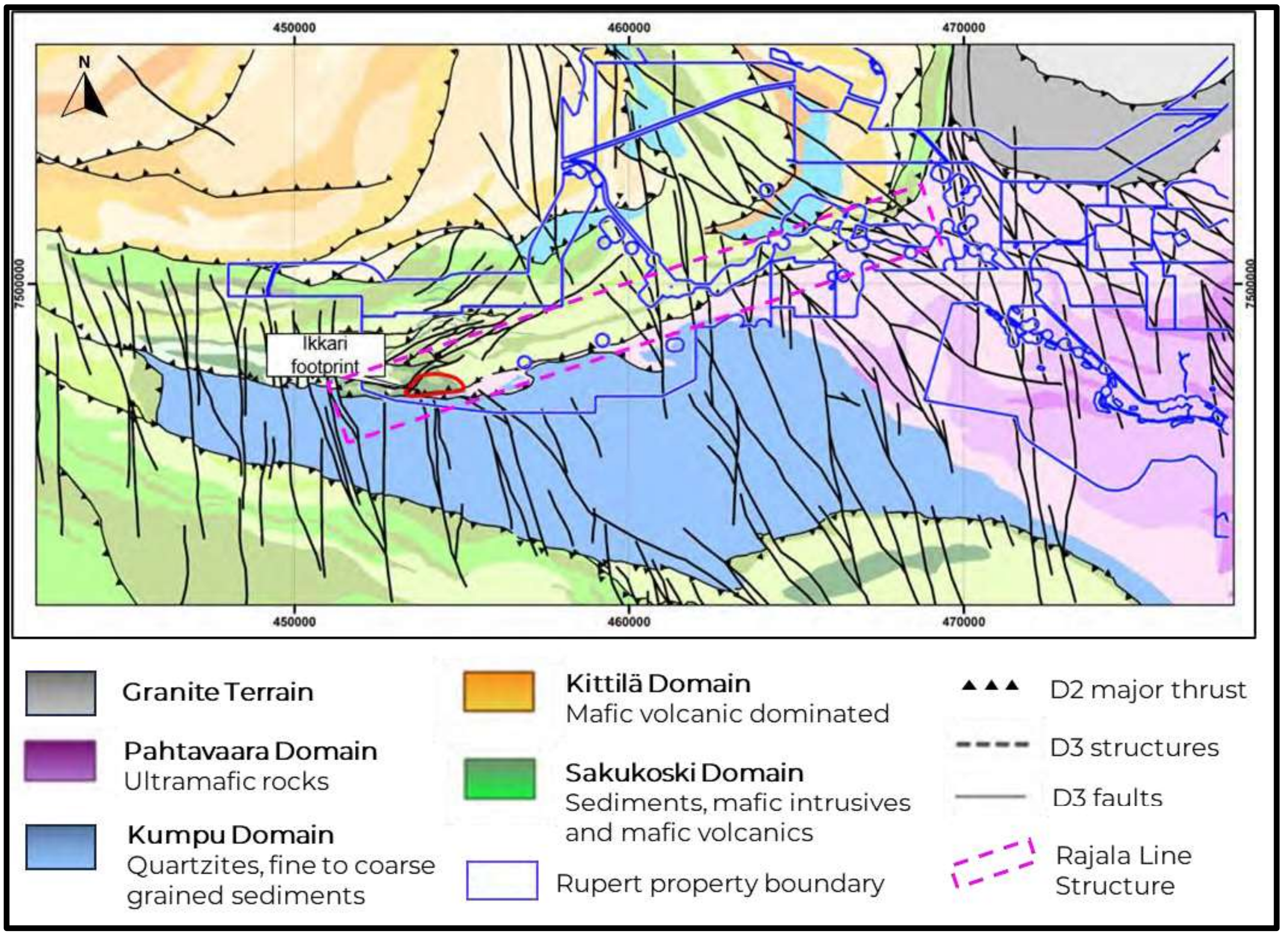
The Rupert Lapland Project exploration permits occur at a significant regional geological domain boundary zone, which trends predominantly east-west through the westernmost extent of the Rupert Lapland Project exploration licences (Figure 7.3). An approximately four-kilometre-wide zone of 2.05 Ga Savukoski Group rocks, comprising fine-grained mafic dominated meta-volcanic and metasedimentary rocks, including phyllite, carbonaceous shale and mafic intrusive rocks, as well as komatiites, occurs between younger (2.00 Ga) Kittilä Group rocks to the north and younger still Kumpu Group rocks (1.88 Ga maximum age) to the south (Figure 7.2). The Kittilä Group is dominantly tholeiitic metabasalts whilst the Kumpu Group is composed of molasse-type fluviatile quartzites, subarkoses and polymictic conglomerates. A stratigraphic column of the region is outlined in Figure 7.2.

This zone of Savukoski Group rocks broadly corresponds with the often discussed 'Sirkka Line' structure though the exact nature and location of this is somewhat subjective.



Source: Niiranen et al, 2015 (Compiled after Hanski et al. (2001) and Bedrock of Finland − DigiKP (October 15, 2013)

Figure 7.2: Stratigraphy and Main Igneous Events of the CLB



Source: Internal Rupert Resources Ltd database and interpretation, 2023, after Selley, 2019

Figure 7.3: Structural Domain Map of the Ikkari-Pahtavaara District, Based on Potential Field Data

Regional drilling and mapping by Rupert Resources, indicate that the Savukoski Group 'corridor' across the Heinälamminvuoma permit area is primarily composed of basalts and fine-grained sedimentary rocks cut by a multitude of dominantly mafic intrusions. Relatively early major recumbent NW-SE orientated folds are interpreted to fold the basalts and sediments together during structural thickening producing the layer-parallel foliation and moderately NW plunge fold axis that are typical north of the Rajala Line.

The locally termed "Rajala Line" (Figure 7.3), a 073° trending distinct magnetic and gravity defined lineation sub parallel to the Sirkka Line west of the Rupert Lapland Project, is a 12 to 15 km ribbon of highly deformed and brecciated sedimentary rocks, nominally belonging to the Savukoski Group. The Ikkari deposit is located at the south-eastern extent of this feature though the precise relationship between this distinct geophysical feature and the genesis of the Ikkari deposit is unclear at the present time.

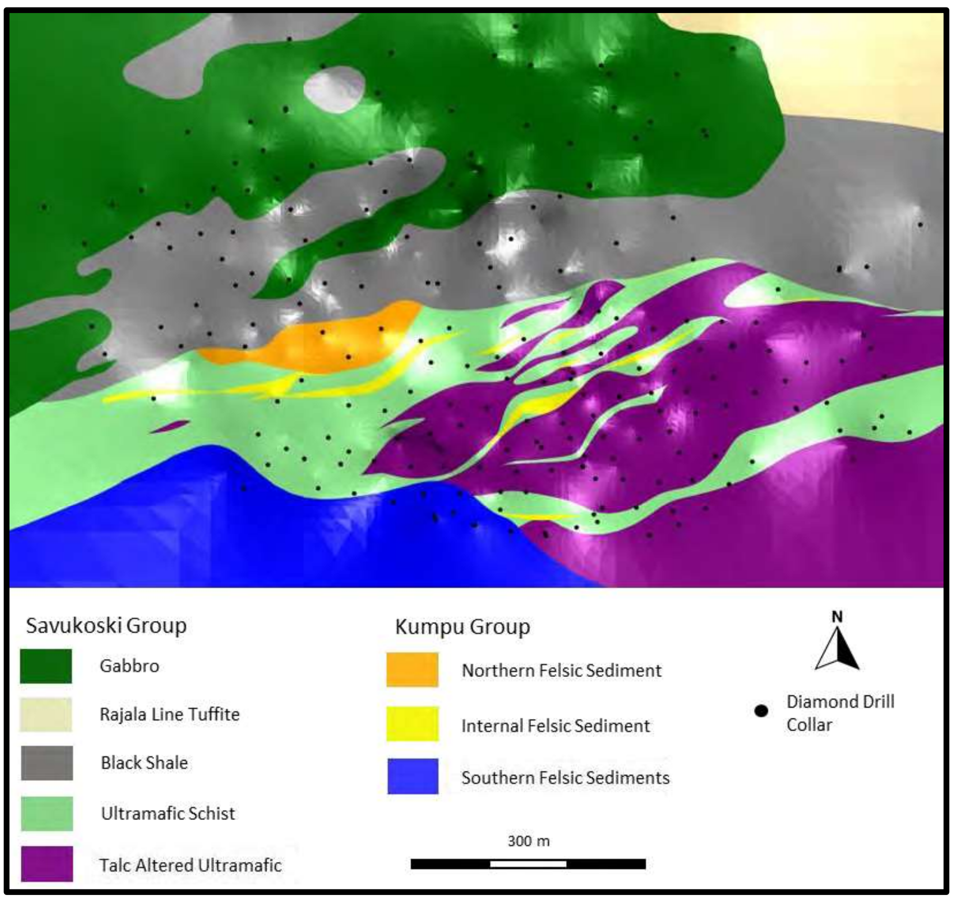
The highest intensity ductile deformation seen to date within the Rupert Lapland Project area occurs along the southern margin of the Rajala Line and is evidenced at both Saitta and Naatuankangas prospects, 4 and 6 km east-northeast of the Ikkari deposit as well as at the Helmi Deposit 1-1.5 km west-southwest of Ikkari (B2Gold-Aurion JV property). This ductile deformation accommodated NNW-SSE compression as the Kittilä and Savukoski Group were thrust towards the south, over the Kumpu Group sedimentary rocks producing tight upright isoclinal folds with shallow plunges.

7.2 Deposit Geology

It should be noted that outcrop across most of the Heinälamminvuoma permit area and especially in the immediate vicinity of the Ikkari deposit, is virtually non-existent. Transported boulders, particularly of Kumpu Group rocks to the south of Ikkari, are not considered reliable indicators of sub-surface geology. Ikkari is a grassroots discovery, located under 10 to 25 m of transported glacial till cover.

Ikkari occupies a complex structural position between thrust imbricated Savukoski Group metavolcanics and metasediments, and synorogenic molasse-type siliciclastic strata of the Kumpu Group. At their most basic level, a 4-fold lithologic subdivision is constructed for the rock types present at Ikkari (Figure 7.4):

- Dark pyritic shales and siltstones termed the 'black shale' (intruded by gabbro) comprise the northern fault block and form the hangingwall to the mineralization.
- A central komatiite-dominant zone with complex intercalations of texturally diverse 'felsic' facies.
- A northern, banded 'felsic' facies, intensely albite-altered in places, that pinches out in the eastern part of the deposit.
- A southern zone comprising dominantly coarse 'felsic' siliciclastics – massive, banded, conglomeratic and typically more quartz-rich than the northern facies but which hosts intercalations of komatiite in decreasing abundance moving southwards.



Source: Internal Rupert Resources Ltd database, 2023

Figure 7.4: Plan Map of Ikkari Taken From 3D Geological Model with Overburden Removed

At this most basic level these rock types are, to a greater or lesser extent, affected by iron and potassic mesothermal alteration broadly synchronous with the main phase of gold mineralization. The alteration products are largely dependent on the protolith and the relative location in respect to the mineralization (Figure 7.5).

Protolith	Dominant Regional Alteration	Distal Mesothermal Alteration	Proximal Mesothermal Alteration
Komatiite	Talc Chlorite Magnetite +/- Biotite Calcite	Chlorite Sericite Siderite Dolomite +/- Magnetite (Logged as MSCU)	Chlorite Siderite - Dolomite Sericite Quartz Pyrite +/- Magnetite
Felsic (Intercalated)	Muscovite Calcite (Rarely Observed)	Albite Dolomite	Albite Quartz Dolomite Pyrite +/- Magnetite, Hematite
Felsic (Northern)	Muscovite Calcite	Albite (Hematitic) Dolomite	Albite Quartz Pyrite Dolomite +/- Magnetite, Hematite
Pyritic Shales and siltstones (Black Shale)	Carbonaceous Pyritic Calcite	Sericite Albite	Albite Quartz Pyrite (Rarely Observed)

Source: Internal Rupert Resources Ltd Interpretation, 2023

Figure 7.5: Basic Relationship Between Protolith and Alteration Products at Ikkari

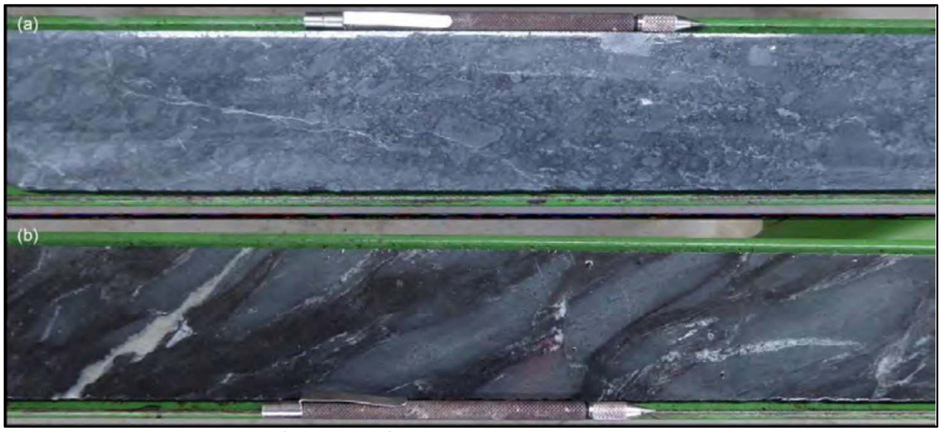
7.2.1 Rock Types

7.2.1.1 Komatiite / Talc-Altered Ultramafic

In more detail, talc altered ultramafic units are dark grey to green-grey schistose extrusive rocks, which can exhibit volcanoclastic textures with lapilli-like deformed clasts where structural intensity is reduced (Figure 7.6). Geochemically, they are komatiitic in composition (> 60% Mg) and are almost completely altered to talc-chlorite composition, but also variably contain serpentine, amphibole and biotite and characteristic narrow, wispy calcite veinlets (Figure 7.7).

These units become more prominent in the southwestern corner of Ikkari, south of an E-W trending fault zone that largely constrains the highly strained domain north of it. Within the highly strained domain this unit still occupies positions distal to the mineralization and can be seen to form the outline of fold geometries. It represents the regional alteration of Komatiites and is common south of the Rajala Line structure stretching up to and beyond the Pahtavaara mine.

The komatiite/ talc altered Ultramafic sequence, forms an over 100 m-thick continuous unit between the Ikkari mineralization and footwall quartzites containing only thin and semi-discontinuous altered portions of ultramafic schist.



Note: Hole 120061 at 72.2 m *Core size HQ (63.5 mm core width).

Source: Chris Bonson 2022 and Internal Rupert Resources Ltd database, 2023

Figure 7.6: Example of Barren Ultramafic Rocks with preserved extrusive textures occurring south of the E-W fault system at Ikkari. a) brecciated komatiite flow (?) and b) preserved pillow textures (?)

Note: Hole 120065 at 138 m *Core size HQ (63.5 mm core width).

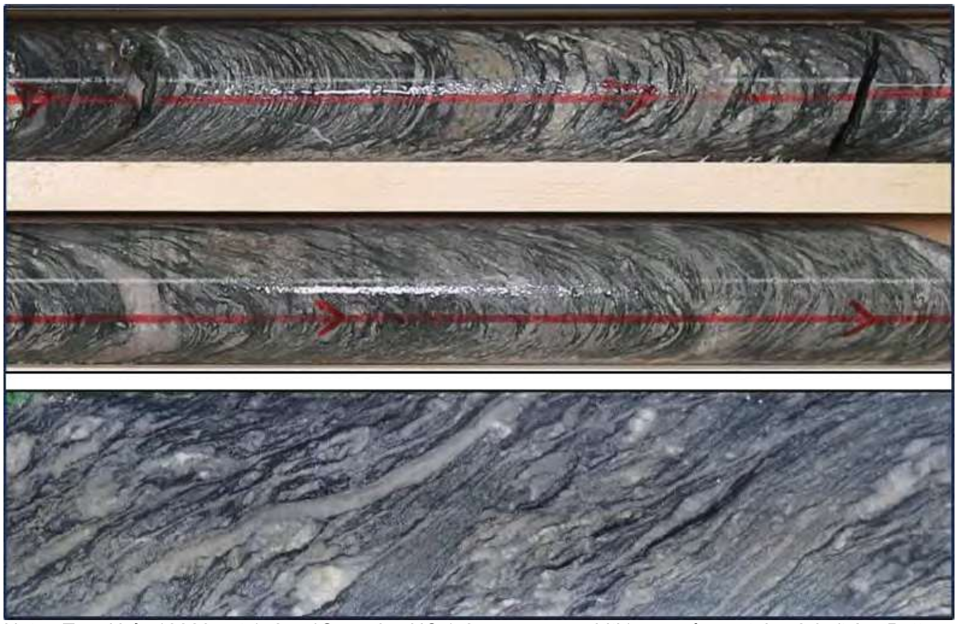
Source: Internal Rupert Resources Ltd database, 2023

Figure 7.7: Example of Highly Strained, Barren Ultramafic Rocks with Characteristic Calcite Veining

7.2.1.2 Ultramafic Schist and Internal Sediments

Where the komatiitic ultramafic units occur in closer proximity to the mineralization, intensely altered ultramafic rocks may appear as a more mafic lithology (magnesium replaced by iron). Mineralogically talc is no longer present and the composition is chlorite-sericite-siderite-magnetite dominated (Figure 7.8). Proximal to the mineralization, silica and dolomite veining together with pyrite mineralization become more common also (Figure 7.9). Intermediate stage shear textures such as boudinage veins (Figure 7.10) are more rarely recorded we vein fragments typically dismembered in the foliation as rootless folds.

This unit, derived from the alteration of Komatiites, is logged as metamporphic schist of ultramafic protolith (MSCU) and is represented on maps and sections as the Ultramafic Schist. Alteration, initially iron metasomatism (chlorite-siderite-magnetite) is strongly correlated with the presence of metasedimentary rocks which are present in the ultramafic package as intercalations.



Note: Top: Hole 122005 at 173 m *Core size NQ (50.7 mm core width), sample contains 0.9g/t Au. Bottom: Hole 122066 at 114.5m *Core size NQ (50.7 mm core width), sample contains 1.9g/t Au.

Matrix here is Chlorite-Sericite-Magnetite and veining dominantly Siderite ± Dolomite ± Silica.

Source: Chris Bonson 2023 and Internal Rupert Resources Ltd database, 2023

Figure 7.8: Example of Altered Mafic-Ultramafic Schistose Rock displaying a Simple Shear Fabric with Siderite Veining Rotated Parallel to the Main Foliation and Rootless Fold Hinges Preserved

Note: Fine-grained disseminated pyrite hosts 5.78 g/t Au in this sample. Hole 120086 at 166 m. *Core size NQ (50.7 mm core width).

Source: Internal Rupert Resources Ltd database, 2023

Figure 7.9: Example of Chaotically Veined, Stockwork-like Siderite ± Chlorite ± Sulphide Veins in Altered Mafic-ultramafic Schistose Rock with Strong Sericite-Silica Overprint

Note: Hole 1120071 at 240 m. *Core size HQ (63.5 mm core width).

Source: Internal Rupert Resources Ltd database, 2023

Figure 7.10: Example of Boudinage Quartz-carbonate Veins in Altered Mafic-ultramafic Rock

The mixed ultramafic-sedimentary package (shown on plan map as ultramafic schist and internal sediment) is characterized by highly variable alteration styles, in places intense veining and foliation that frequently overprint texture, making identification of the original lithology difficult.

Sedimentary rocks present range from conglomerates (Figure 7.11) through felsic sandstones and quartzites to siltstones (Figure 7.12), implying that diverse range of sediments have been intercalated within this unit. Downhole widths of sedimentary intercalations range from tens of meters through to sub-centimetre whilst petrological descriptions suggest that millimetre scale clasts of felsic material can also be present in chlorite-sericite matrix.

Where the intercalated sediments occur as cohesive intersections, there is a clear geochemical distinction from the altered ultramafic schists. At the scale of the geochemical sampling, predominantly 1m samples, a unit with a 'mixed' signature is also present and closely correlated with mineralization. Originally this was attributed to a variable volcanogenic component with these ultramafic schists, nominally more mafic. The current interpretation is that these represent shears active during the intercalation of the sediment within the ultramafic leading to the entrainment of small clasts of sediment with the ultramafic schist leading to the 'mixed' signature.

Where original textures are preserved within the internal sediments, finely laminated dark grey to green-brown silty sediments are common, with occasional coarse grained (up to gravel-sized clasts) units. In places, sedimentary banding is commonly defined (or enhanced) by albite flooding.

The mixed internal sediment and ultramafic schist sequence, hosts ~80% of the mineralization at Ikkari and forms an over 200 m-thick sequence between the Northern Felsic and/or Black Shale and the lower strained, Komatiites which are dominant further to the south.

Note: Hole 120059 at 283m *Core size HQ (63.5 mm core width). Sample assays 0.49g/t

Source: Internal Rupert Resources Ltd database, 2023

Figure 7.11: Example of Intercalated Conglomerate Within the Ultramafic Schist. Rounded Quartz Pebbles are Present Bottom Right along with Distinctive Fiamme-Like Pale Green Clasts

Note: Hole 122005 at 170m *Core size NQ (50.7 mm core width). Sample assays 4.42g/t

Source: Internal Rupert Resources Ltd database, 2023

Figure 7.12: Example of Intercalated Siltstone Within the Ultramafic Schist with Intense Silicification in the First Meter

7.2.1.3 Northern Felsic

Felsic sediments are commonly intensely and pervasively albite-altered, particularly forming a large block of albitized rock in the northwestern extent of the deposit. Albite alteration varies from brown to brick red in colour and original sedimentary textures are obliterated (Figure 7.13). Albite-altered rocks are dominated by brittle fracture, with gold mineralization associated with pyrite (±magnetite) in veinlets. The northern felsic hosts ~20% of the mineralization at Ikkari.

Where not flooded by albite and the primary texture preserved, the unit is commonly a fine-grained sandstone to siltstone with weak sericite alteration enhancing bedding (Figure 7.14). It is interpreted that albite preferentially alters the coarser units with sequence leading to an overrepresentation of fine-grained siltstones in the weakly altered portions.

Note: Hole 120072 at 106 m *Core size HQ (63.5 mm core width). Sample assays 4.1 g/t Au.

Source: Internal Rupert Resources Ltd database, 2023

Figure 7.13: Example of Strongly Albite Altered Felsic Sedimentary Rock with Micro-veinlets Hosting Pyrite-magnetite

Note: Hole 122008 at 289.50m *Core size NQ (50.7 mm core width). Sample assays of 0.09 g/t Au.

Source: Chris Bonson 2023 and Internal Rupert Resources Ltd database, 2023

Figure 7.14: Example of Fine Grained Sandstone to Siltstone with Weak Sericite +/- Carbonate Alteration Representing the Weakly Altered Parts of the Northern Felsic

7.2.1.4 Black Shale

Laminated carbonaceous shale (commonly referred to as the black shale) forms the hangingwall (northern margin) to mineralization in most places (Figure 7.15). It contains significant amounts of syngenetic disseminated pyrite which is often banded, and although graphite content is overall low, graphitic fractures occur in places. The black shale hosts very minor mineralization that is remobilized from the main felsic and ultramafic hosts rocks at Ikkari.

Source: Internal Rupert Resources Ltd database, 2023 *Core size NQ (50.7 mm core width). Sample assays below detection limit for Au

Figure 7.15: Example of Laminated Carbonaceous Shale Displaying Folding with Unmineralized Pyrite

7.2.1.5 Gabbro

In the hangingwall of the deposit, a mafic intrusive of gabbroic composition (Figure 7.16) intrudes the carbonaceous shale, including locally, narrow dykes. This unit does not host any mineralization.

Source: Chris Bonson 2022 and Internal Rupert Resources Ltd database, 2023 *Core size NQ (50.7 mm core width).

Figure 7.16: Example of a Very Weakly Foliated Gabbroic Intrusive in the Hangingwall at Ikkari

7.2.1.6 Southern Felsic Sedimentary Rocks

To the south of the mineralized zone, and the ultramafic dominated package, the contact with the Southern Felsic Sediments (sometimes referred to as the Kumpu Group quartzites) is poorly defined. The Kumpu Quartzites are coarse-grained, relatively unaltered and weakly strained more than a few meters from the contact. In the southwestern portion of the deposit, near surface, the contact between the Kumpu and the Ultramafic package is clearly faulted however at depth the nature of the contact is debateable and drill information limited.

At depth in the west of Ikkari drilling beyond the initially inferred contact, in very limited areas, has indicated that the intercalation of komatiitic strata continues albeit with decreasing abundance of ultramafic material to the south. In the east of Ikkari the contact is more well defined and no further ultramafic material is located beyond the contact to low strain quartzites. Minor mineralization is seen in quartz veinlets at the contact to the quartzites and at one location within the quartzite.

Three separate groups of felsic are modeled based primarily on their spatial location, compositionally and texturally these sediments are commonly indistinguishable. Ages dating of these felsic sediments has shown that all are part of the Kumpu group ~1.88Ga (Harju, 2021) significantly younger than the 2.05Ga Savukoski Group komatiites into which the internal sediments are intercalated. This suggests that these younger rocks must have been complexly structurally interposed within the older komatiite units prior to mineralization.

7.2.1.7 Breccias

Breccias are common throughout the deposit and occur in most lithology types. Structural relationships indicate at least three main phases of brecciation:

- A polymictic breccia, with coarse fragments, frequently fuchsitic or intensely chlorite-altered, displaying elongation of clasts parallel to dominant (S2) foliation (Figure 7.18). This style of brecciation along with similar textures in conglomeratic sandstones (Figure 7.19) are interpreted to be depositional in origin.
- A relatively early cataclastic tourmaline-welded breccia commonly containing clasts of albite-altered sediments (Figure 7.20). In places these are overprinted by the mesothermal alteration regime and are tentatively interpreted to represent D1 structures related to the structural interposition of sedimentary units with the ultramafic.
- A late, carbonate-iron-oxide-rich, hydrothermal breccia that contains rounded quartz grains in a fine-grained matrix and is sometimes vuggy (Figure 7.22). With typically narrow (10 to 30 centimetres [cm] wide) cross-cutting geometries that indicate fluidized injection (Figure 7.21), these breccias frequently host disseminated pyrite, and associated gold grades. Breccias appear to have a dominant sub-vertical control, utilise pre-existing lithological contacts and are associated with high-grade gold mineralization, within and particularly at margins where visible gold is often present.

Note: Hole 120059 at 132 m, containing 1.57 ppm Au. Thicker, coarser-grained siderite veins frequently appear to occupy a marginal position to the mineralized zone. *Core size NQ (50.7 mm core width).

Source: Internal Rupert Resources Ltd database, 2023

Figure 7.17: Example of Chlorite Alteration and Disseminated Pyrite (seen here as rusty staining) Within Disrupted Coarse Carbonate-veined Ultramafic Rock

Note: Hole 121160 at 30.3 m, Sample assays 0.09 ppm Au. *Core size NQ (50.7 mm core width).

Source: Chris Bonson 2022 and Internal Rupert Resources Ltd database, 2023

Figure 7.18: Example of Fiamme-like clasts in Conglomeratic Sandstone Ultramafic Rock

Note: Hole 122039 at 369.30 m, Sample assays 2.12 ppm Au. *Core size NQ (50.7 mm core width).

Source: Internal Rupert Resources Ltd database, 2023

Figure 7.19: Example of Tourmaline Welded Cataclastic Breccia Interpreted to be Related to the Imposition of Felsic Sediments Within the Ultramafic Sequence

Note: Hole 120123 at 344.6 m, Sample assays 3.66 ppm Au. *Core size NQ (50.7 mm core width).

Source: Chris Bonson 2022 and Internal Rupert Resources Ltd database, 2023

Figure 7.20: Example of Wider, Iron-oxide-rich Breccia in Ultramafic Schist. Slight Crosscutting Geometries Indicate Fluidized Injection

Note: Hole 120123 at 394.6 m, Sample assays 0.93 ppm Au. *Core size NQ (50.7 mm core width).

Source: Chris Bonson 2022 and Internal Rupert Resources Ltd database, 2023

Figure 7.21: Example of Narrow, Iron-oxide-rich Breccia in Ultramafic Schist Tapering in Width Towards the Left of the Image

7.2.2 Structure

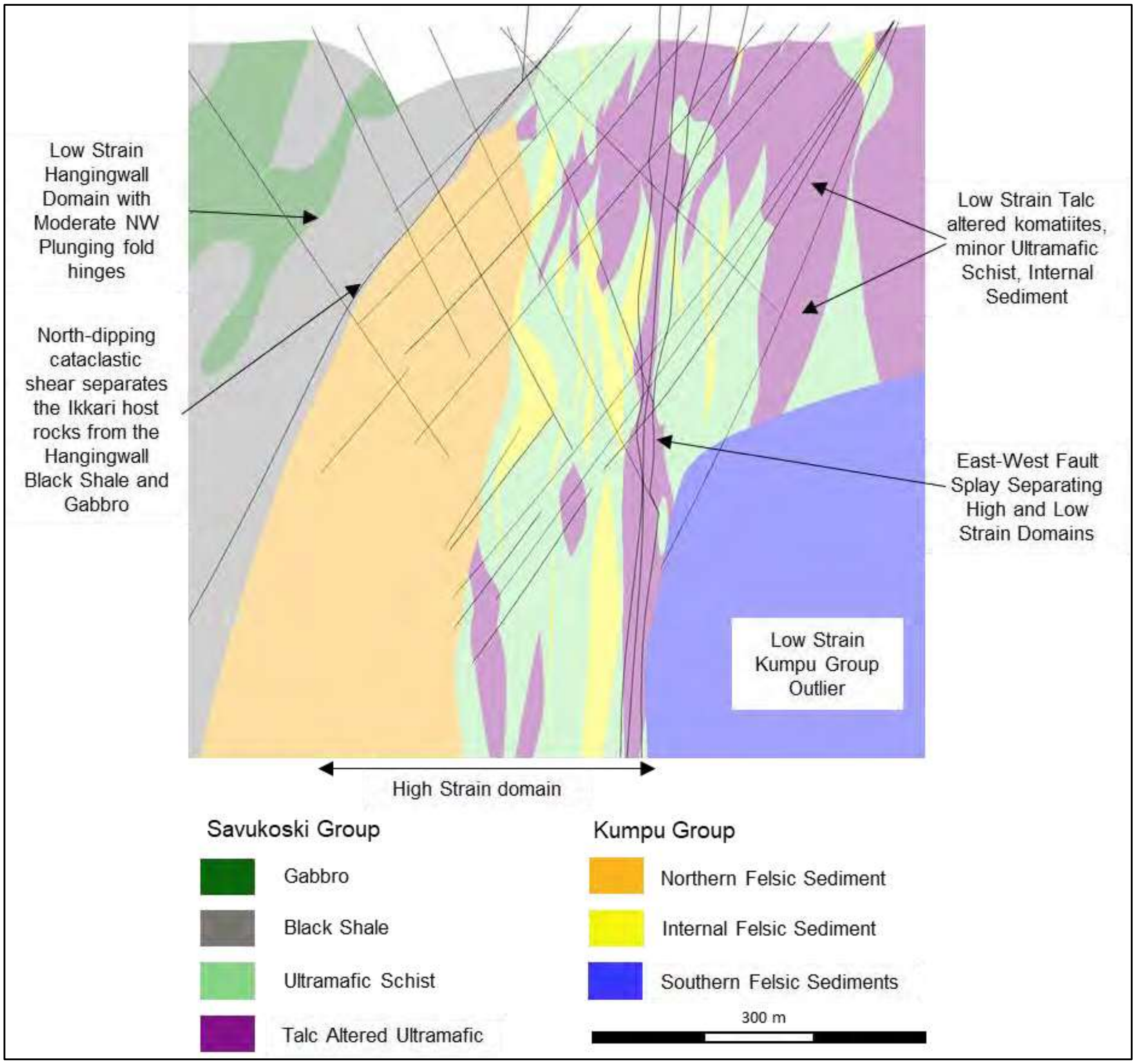
In its simplest terms Ikkari occurs at the structurally modified unconformity between the Savukoski and Kumpu Groups, the Ikkari mineralization is largely confined to an approximate ENE striking, approximately 200 m wide corridor of structurally interleaved Kumpu Group sediments and komatiite dominated Savukoski Group strata.

A moderately N-dipping cataclastic, tourmaline-bearing shear defines the northern margin of the mineralized, interleaved, corridor, obliquely cutting units in the latter, but sub-paralleling the strike of Savukoski black (carbonaceous) shale-dominated strata to the north.

The southern margin of the high-strain, mineralized corridor is defined by a series of vertical faults that merge at depth and relax towards surface as a flower-like structure. This current expression of this fault structure is talc-chlorite rich fault gouge indicating late-stage brittle deformation and it is likely related to the relative uplift of a block of Kumpu Group Sediments to the south of the structure, which plunges to depth in the west.

Whilst the brittle fault splay defines the southern margin of the high-strain mineralized corridor more weakly deformed talc-altered komatiites and occasional, minor sedimentary intercalations are continuous south of this feature. Mineralization in this low strain domain is present but often lower grade and discontinuous. Further south still, less well constrained by drilling, an outlier of quartzitic Kumpu Group sandstones and conglomerates is at least locally in sheared contact with the komatiitic sequence. Strain intensity and alteration decrease rapidly within the Kumpu Group Sandstones (Figure 7.22).

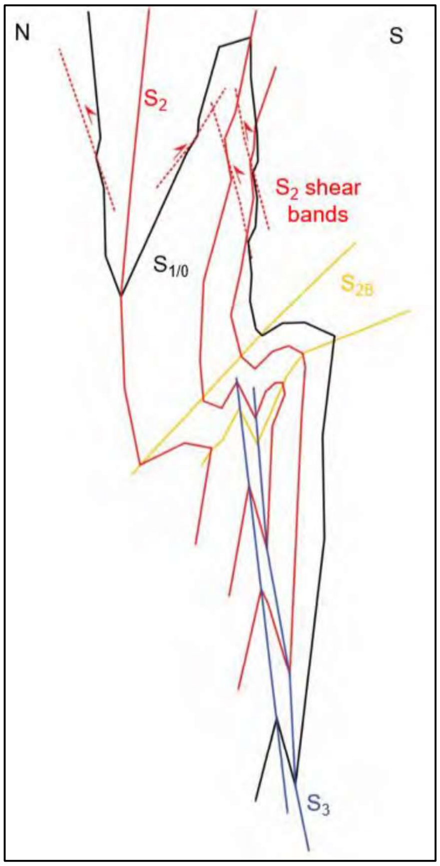
In the west of Ikkari, at depth, Kumpu Group Sandstones become progressively more dominant though interleaved komatiitic rocks persist in decreasing quantities; it is believed that here the true contact to the homogeneous Kumpu outlier has not been drilled.



Source: Internal Rupert Resources Ltd database and interpretation, 2023

Figure 7.22: Example Geological Cross Section through Ikkari Looking Toward 065° Showing the Location of the Brittle Structures which Divide the Structural Domains at Ikkari

Considering the high strain domain at Ikkari, that which hosts the vast majority of the mineralization, structural studies of representative drill hole intersections from Ikkari (Selley, 2021 and Bonson, 2022) indicate three distinct phases of deformation that are texturally and geometrically analogous to the deformation history recorded throughout the region (Figure 7.23). These phases of deformation have led to the development of a complex meshwork of structures and fractures which have acted as fluid flow pathways at various times. These structural meshworks, and relative timing of iron- and gold-bearing fluids have resulted in the deposition of gold mineralization, associated with pyrite at structural and geochemical 'trap' sites.



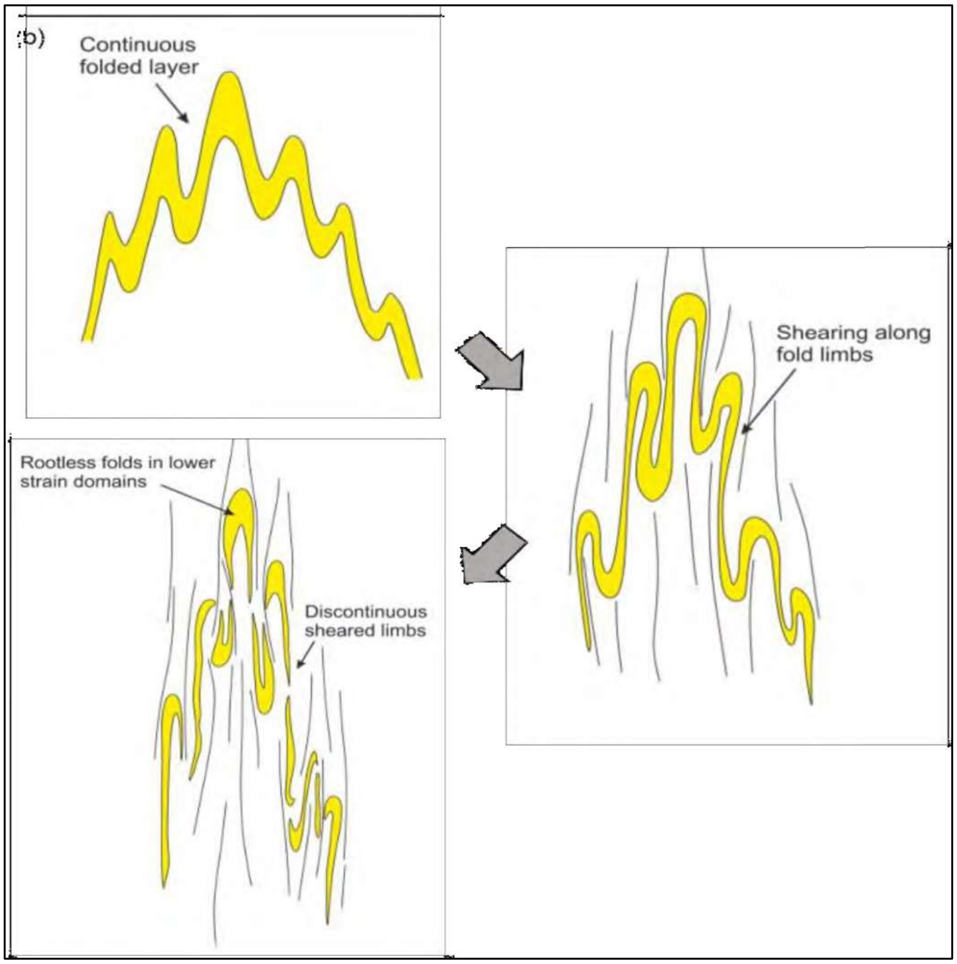
Source: Selley, 2021

Figure 7.23: Schematic Representation of the Three Phases of Structural Deformation at the Ikkari Deposit, Showing Planar Fabric Relationships and Resulting Complex Structural Meshwork

A first phase of deformation (D_1) records early orogenic, large-scale recumbent folding and thrust stacking, with layer-parallel fabrics developed. Although this deformation is poorly preserved it interpreted to be responsible for the complex interleaving of sediments within komatiitic facies, which appears to have been a necessary ‘pre-conditioning’ for gold mineralization throughout the deposit.

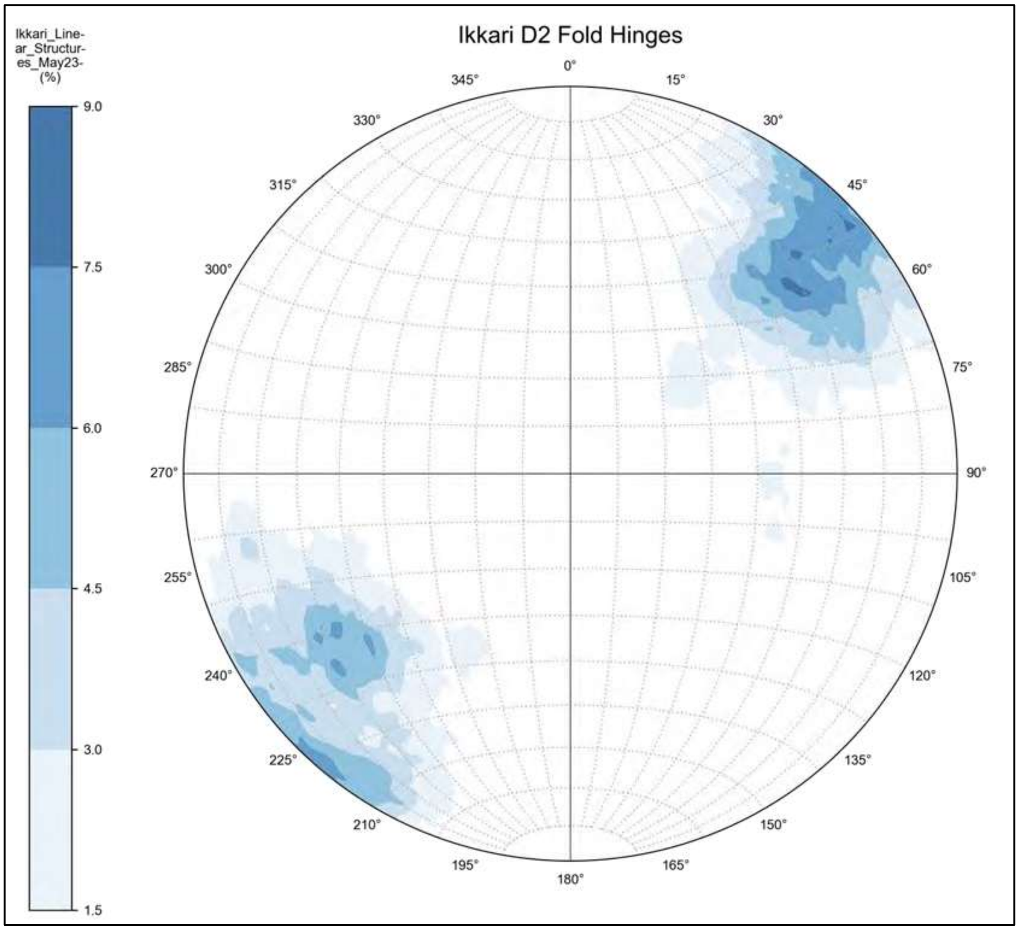
A later deformational event (D2), NW-SE compression of the thrust stack, resulted in the development of tight (meter-scale) upright isoclinal folds with broadly vertical axial planes. This deformation results in the complex geometries of broadly continuous but highly attenuated deformed sediments within the ultramafic rocks (Figure 7.24). The fold plunges recorded in relation to this deformation are shallowly plunging (Figure 7.25) with both NE and SW shallow plunges recorded however, to date, it has not been possible to resolve the different plunge directions in space.

The penetrative S_2 foliation is the dominant fabric identifiable within the mineralized corridor at Ikkari, S_1 fabrics are at most cryptically preserved in fold hinges but more commonly rotated into parallelism with the S_2 foliation on the limbs of S_2 folds making them indistinguishable. The lithological and fold geometry generated during D_2 are the main control to the localization of gold mineralization at Ikkari with contacts and fold hinges preferentially mineralized.



Source: Bonson 2022

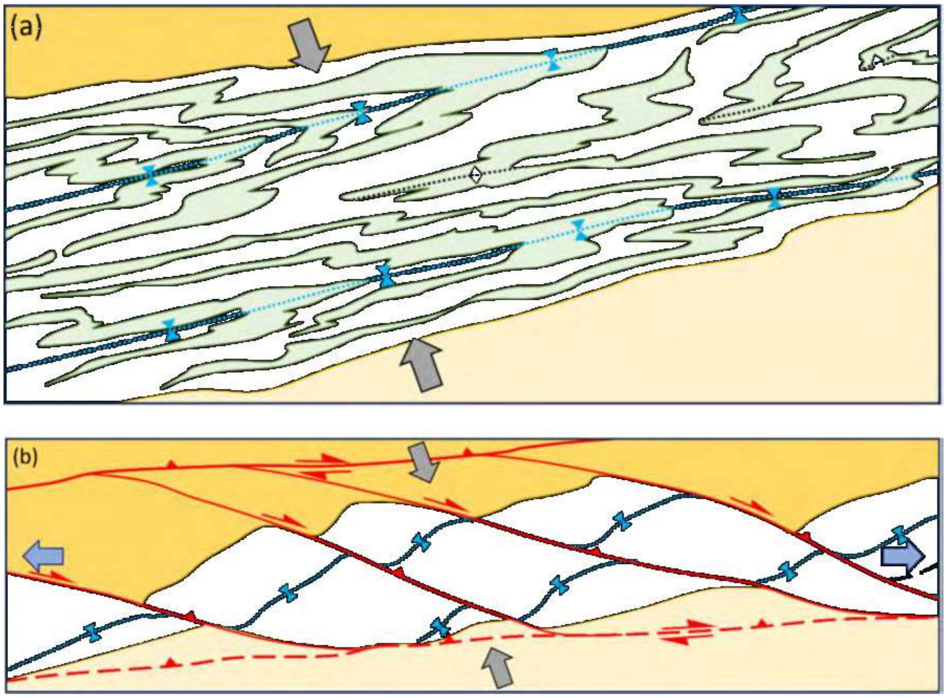
Figure 7.24: Schematic Representation of Main Deformation Event Recorded at Ikkari and the Development of Isolated Limbs and Rootless Fold Hinges Leading to Complex Geometries such as those Encountered at Ikkari



Source: Internal Rupert Resources Ltd database, 2023

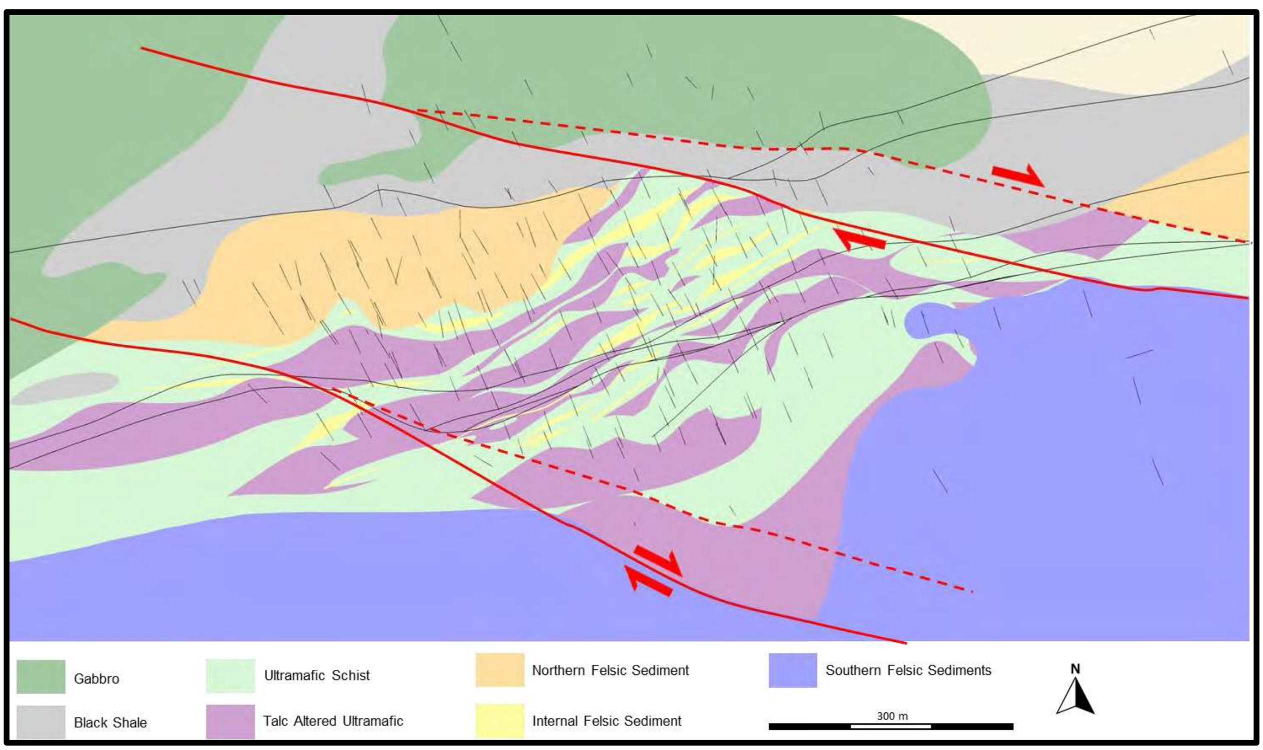
Figure 7.25: Stereonet of D2 Fold Plunge Measurements Demonstrating the Presence of Shallowly Plunging Hinges Toward Both the NE and SW as Measured on Orientated Drill Core.

During progressive deformation, likely due to strain hardening as the tight isoclinal folds have been unable to accommodate further strain a series of WNW-ESE shears are developed with dextral and top to the south sense of movement recorded (Figure 7.26 and Figure 7.27).



Source: After Bonson, 2023

Figure 7.26: Schematic Representation of The Development of The Isoclinal Folding and Subsequent Compartmentalization Along E-W and WNW-ESE Trending Shears Due to Strain Hardening

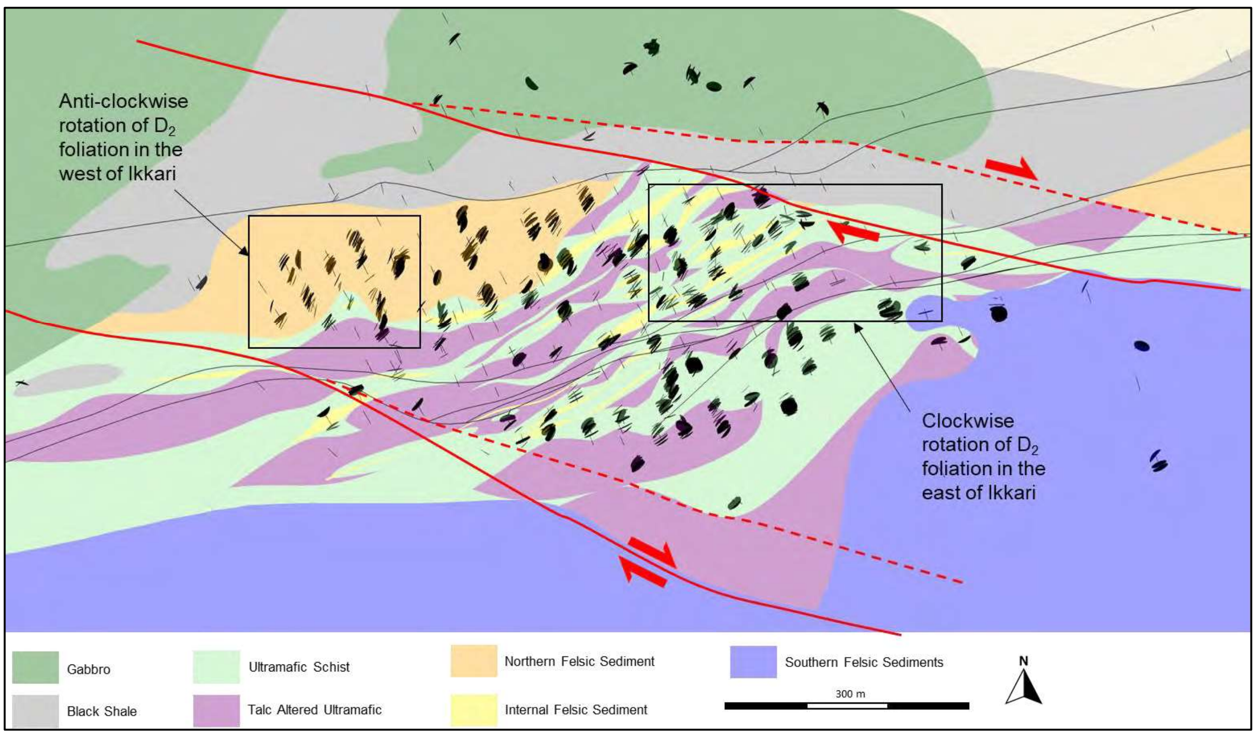


Source: Adapted from Bonson, 2023

Figure 7.27: The Expression of the WNW-ESE shears Developed at Ikkari which Largely Constrain the Mineralization

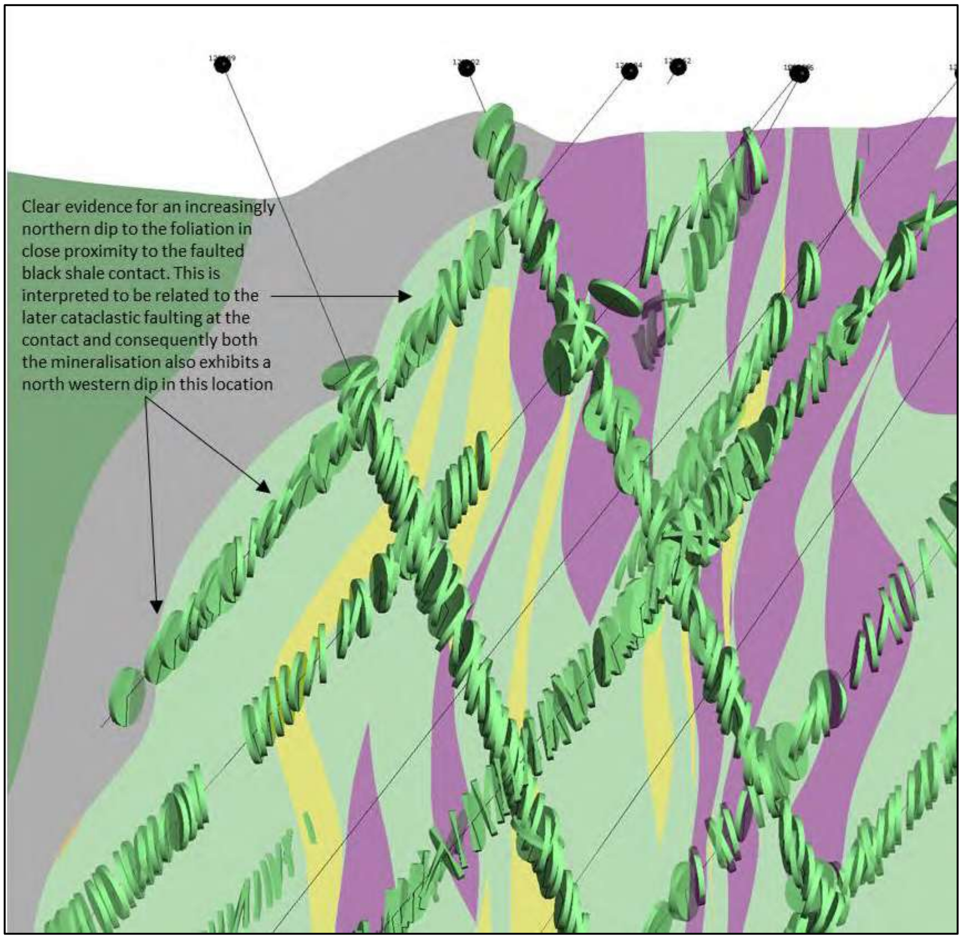
A third deformation phase is recorded within the highly deformed corridor at Ikkari though it is currently unclear if it should be correlated to the WNW-ESE shears noted above (Figure 7.27) as a continuum of D_2 or a distinct structural event related to the reactivation of the structure responsible for thrusting the hangingwall sequence southwards onto the Ikkari host sequence. D_3 folds have an average dip / dip direction of 57°/298 and are thus parallel to the Black Shale contact whilst hinges plunge 15-20° steeper than those formed during D_2 (30° → 227°).

A combination of the WNW-ESE developed late during D_2 and D_3 folding is responsible for the anticlockwise rotation of pre-existing fabrics at the western end of the deposit (which corresponds to a reduction in ore volume), and a more subtle anticlockwise deflection at the eastern end of the Northern Felsic Zone, where the ore volume is greatest (Figure 7.28). They are also responsible for the flexing of the S2 foliation and therefore the mineralization such that a northerly dip is prominent close to the Black Shale contact; this is most pronounced in the NE corner of Ikkari where the eastern most shear also cuts across the deposit (Figure 7.29). Structural disks representing foliation trajectories shown in Figure 7.28 and Figure 7.29 are measured on orientated diamond drill core.



Source: Adapted from Bonson 2023 with Internal Rupert Resources Ltd database and interpretation, 2023

Figure 7.28: Schematic Representation of the Three Phases of Structural Deformation at the Ikkari Deposit, Showing Planar Fabric Relationships and Resulting Complex Structural Meshwork

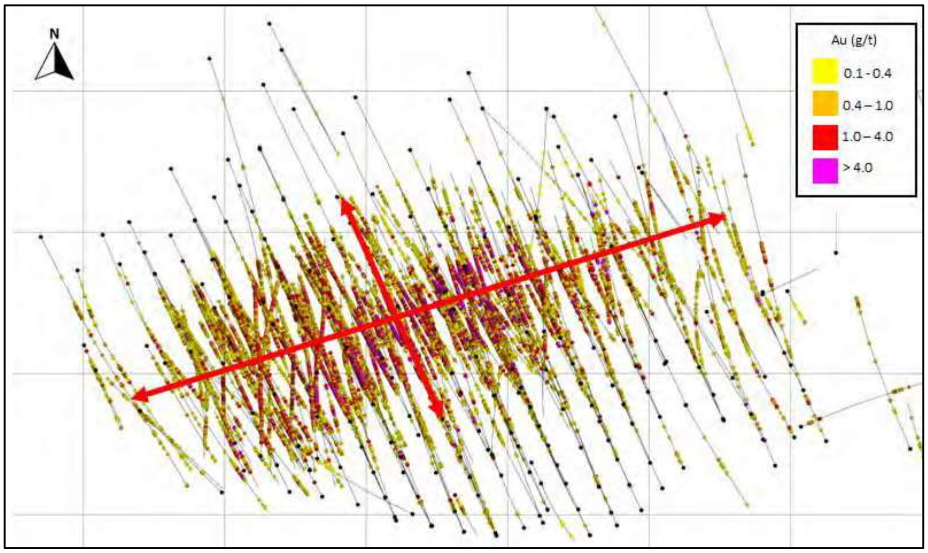


Source: Internal Rupert Resources Ltd database and interpretation, 2023

Figure 7.29: Cross Section from the Central Eastern Portion of the Deposit Showing High Confidence (D2) Foliation as Discs on the Drill Holes Demonstrating the North Dipping Flexure of the D2 Fabric in Close Proximity to the Black Shale

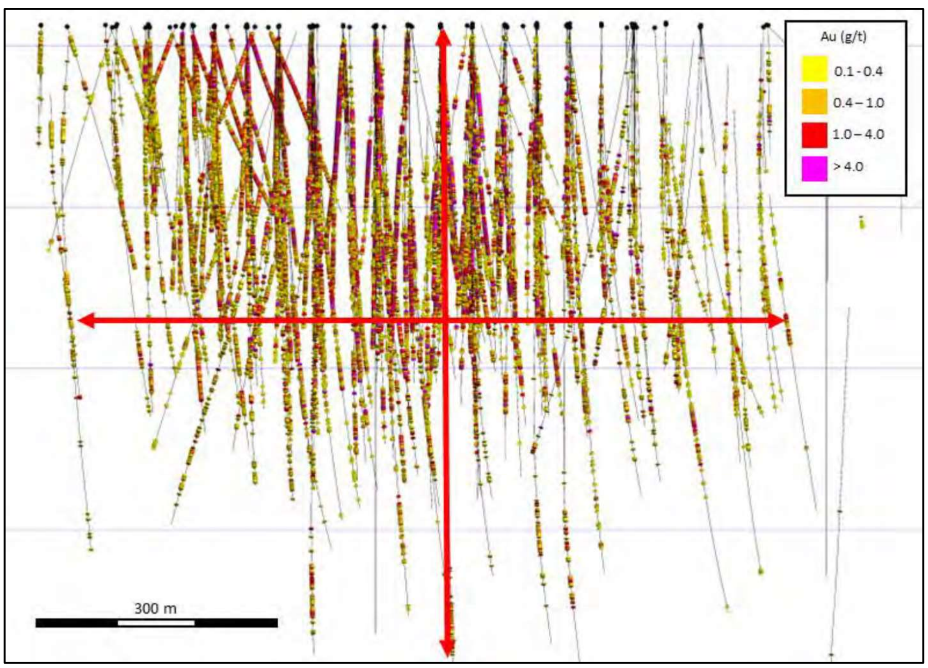
7.2.3 Mineralization

The Ikkari deposit can be described as an orogenic, hydrothermal gold deposit. Modeling of the mineralization, using over 111,000 m of drilling available, shows the deposit to lie within a mineralized envelope of up to 900 m long, 350 m wide and 750 m deep (Figure 7.30 and Figure 7.31) and that the deposit remains demonstrably open at depth and along strike, at depth.



Source: Internal Rupert Resources Ltd database, 2023

Figure 7.30: Currently Defined Limits of Ikkari Mineralization (Plan View), 200-m Grid for Reference



Source: Internal Rupert Resources Ltd database, 2023

Figure 7.31: Currently Defined Limits of Ikkari Mineralization (Looking Northwest toward 335°), 200-m Grid for Reference

Overall, the mineralization trends at approximately 065° strike and has a strong sub-vertical control. However, within the mineralized halo different grade zones have varying morphology and plunges on a local scale and these are explored later.

Mineralization at Ikkari occurs in several styles, but in all cases, gold distribution is correlated to the abundance of disseminated pyrite and intensity of veining, which are in turn considered to be principally controlled by lithological contacts, fold geometry and brittle fracturing. The style of mineralization is principally controlled by the host lithology with significant controls on mineralization localization including:

- Brittle-fracture regime in intensely albite-altered felsic sediments that controls veinlets of gold associated with fine-grained pyrite and magnetite (e.g., Figure 7.13). Given that this style of mineralization is limited to the albite-altered sediments it is most prevalent in the north-western portion of Ikkari where the felsic sediments form a large block. It also occurs in larger felsic intercalations within the komatiite domain.
- Lithological contacts; notably intensely chlorite-sericite-siderite-magnetite-pyrite-(±fuchsite)-altered sediments with felsic sediments, quartzite and conglomerate, and siltstones.
- Complex and concentrated short-wavelength (metre-scale) parasitic folding of narrow felsic and siltstone sedimentary intercalations within intensely chlorite-sericite-magnetite-altered ultramafic rocks that appears to further focus fluid flow and pyrite deposition, particularly at fold hinges. Intense, irregular carbonate-quartz veining is frequently developed in these zones and mineralized higher in grade. (e.g., Figure 7.9).
- Within and at the margins of hematite-carbonate hydrothermal breccias (Figure 7.20 and Figure 7.21), that have a sub-vertical expression and overprint folding and cross-cut lithological contacts. Where these breccias host intense disseminated pyrite, bonanza gold grades are commonly seen.

Ikkari is unusual among orogenic gold deposits in the width of mineralization when compared to the strike (Figure 7.30 and Figure 7.31). In typical orogenic gold systems, the strike of mineralization is an order of magnitude greater than the width, however, at Ikkari the strike length of the mineralization is only two to three times the width and this is be attributed to multiple, stacked mineralized zones perpendicular to the strike. These stacked zones are interpreted to arise from the structural interleaving of diverse lithologies pre-mineralization in D_1, with no evidence to support post mineralization thickening. From the northwest to southeast across Ikkari, at least four subtly different mineralized zones can be described:

1. Within the large felsic block to the northwest of Ikkari, a brittle-fracture regime in intensely albite-altered felsic sediments. This coalesces towards surface and exhibits a moderate northern dip in close proximity to the carbonaceous shale. At depth, and in the east, these brittle fracture zones separate into at least two, narrower, vertical trends. These mineralized zones are separated from each other, and the subsequent mineralization trend to the south, by largely barren sericite and weakly albite-altered felsic sediments (Figure 7.32). In the domaining for resource estimation (Item 14.0) this is termed the “Northern Felsic Domain”
2. At the contact between the northern felsic block and the komatiite domain in the west, and then stepping off this contact to the east to be entirely within the komatiite domain, is the next zone of mineralization. In the west, mineralization occurs on both sides of the felsic-komatiite contact with the intensely albite-altered felsic sediments hosting an intense silica-pyrite brittle fracture to breccia regime, whilst to the south of the contact and along strike to the east, in the komatiite domain, mineralization is most commonly related to first intercalated felsic and phyllitic sediments encountered, the contacts of this and fold hinges within (Figure 7.32 and Figure 7.33). In this, the strongest zone of mineralization the mineralization is commonly pervasive throughout the first intercalated sediment rather than focused on its contacts.
    - To the east, away from the large felsic block, barren talc-chlorite-altered komatiite occurs to the north of this mineralization, separating it from the converging carbonaceous shale. Further east still, this mineralization trend is terminated by the cross-cutting carbonaceous shale. Where the mineralization trend occurs in close proximity to the carbonaceous shale it exhibits a northern dip (Figure 7.33) consistent with the shale but elsewhere the dip is more vertical, and the apparent plunge is approximately 30° to the east. In the domaining for resource estimation (Item 14.0) this is termed the “Contact Domain”
3. Further south still are several parallel mineralization trends within the komatiite domain are characterized by a decreasing gold tenor and lateral extent towards the south/southeast. Mineralization is primarily

associated with contacts to intercalated felsic or phyllitic sediments within the komatiites and enhanced at the fold hinges of these intercalations. Mineralization in this portion of the deposit plunges back to the WSW at approximately 15° which is consistent with the S_2 fold hinges measured throughout the komatiite domain. (Figure 7.32 and Figure 7.33).

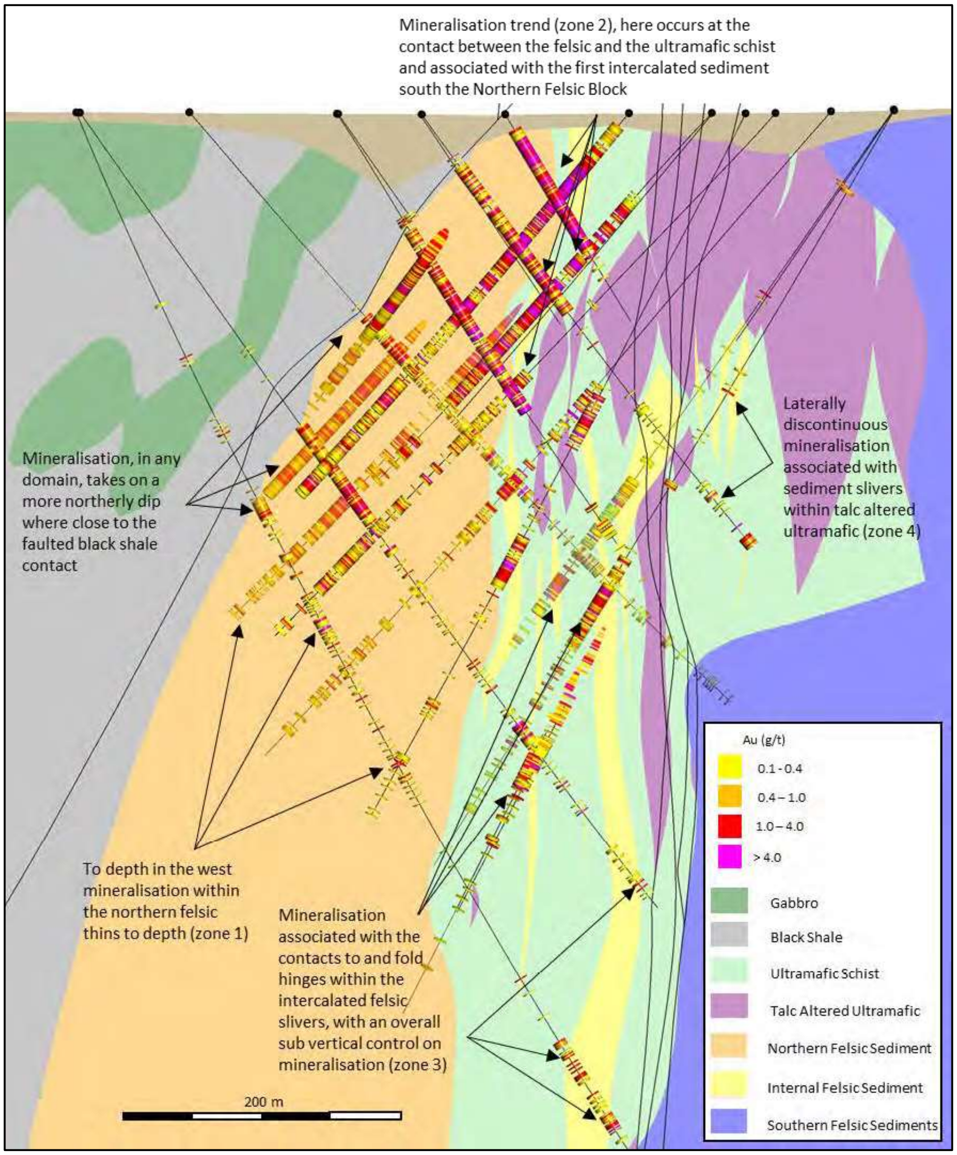
- The opposite plunge of this mineralization in comparison to the trend north of it, creates diverging mineralization trends to depth in the west and converging mineralization trends towards surface in the central-eastern portion of the deposit. To the south of this trend, and where the trends diverge, talc-chlorite-altered barren komatiites separate the mineralization trends. However, where mineralization trends are in closer proximity, no talc-altered komatiite is preserved, and weakly mineralized iron-metasomatized chlorite-sericite-siderite assemblages, the distal alteration product of the komatiite domain, separates the mineralization trends; this is also the case in the poorly mineralized / barren gaps between the mineralization trends of this type. In the domaining for resource estimation (Item 14.0) this is termed the "Internal UM Domain."

4. To the south of the E-W fault array, within the low-strain talc altered komatiites, laterally discontinuous felsic intercalations host mineralization at the contacts to the komatiite in a similar style to those described above. However, here the mineralization is more discontinuous, and the proximal komatiite does not exhibit extensive iron metasomatism as the mineralization trends further north Figure 7.32 and Figure 7.33).

Although vein arrays and stockwork zones are considered to be linked to the main gold phase, there is little consistent relationship between vein density, vein volume, and gold grade. This is attributed to much of the siderite veining, now transposed into the foliation, being relatively early, likely a product of the iron metasomatism 'ground preparation' event along with chlorite and magnetite, that may have been synchronous with the initial structural interleaving of sedimentary and komatiitic units.

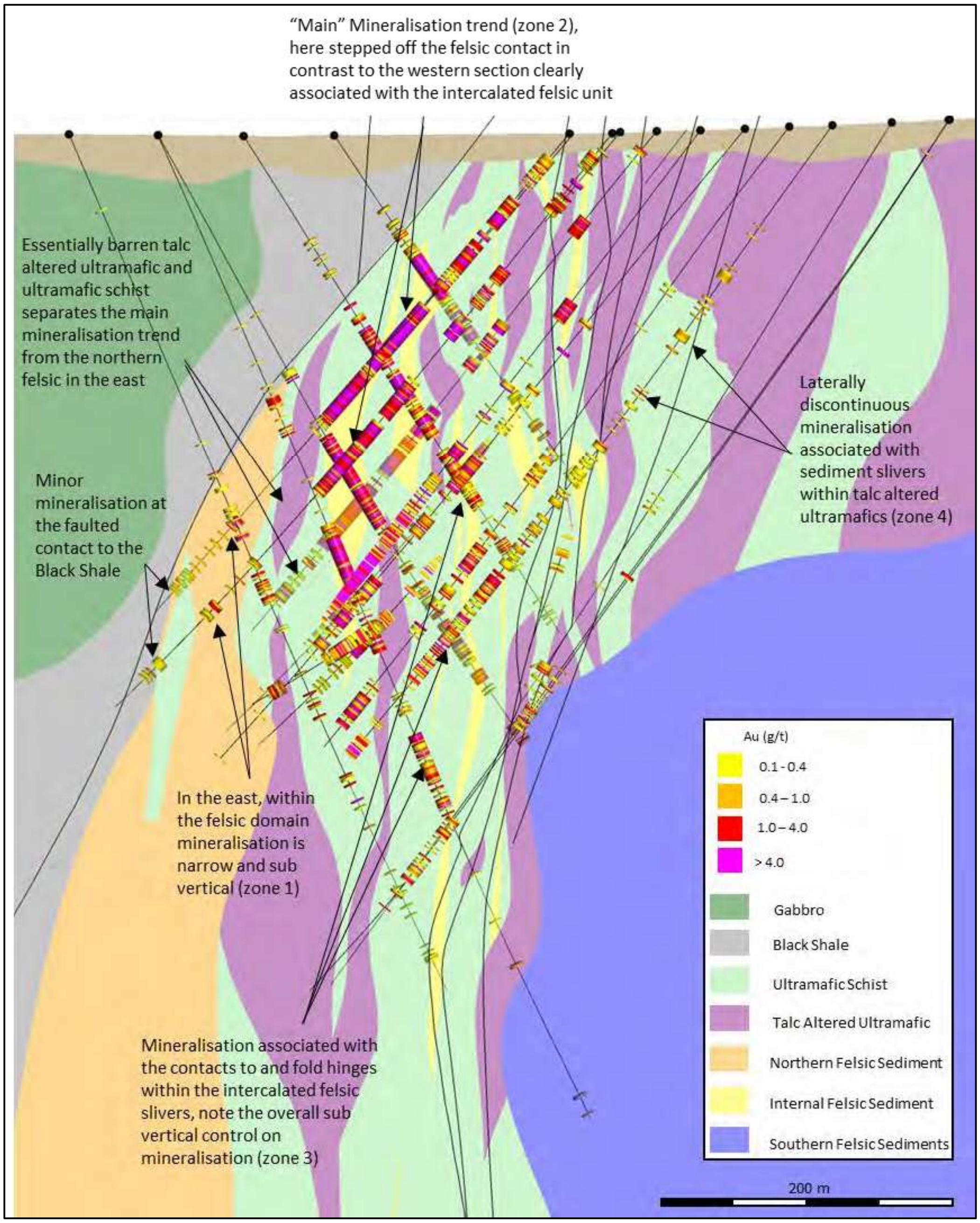
There appears to be a closer relationship between gold content, pyrite and late-stage iron-oxides. Magnetite-bearing veins and breccias typically contain elevated gold grades, with associated disseminated pyrite, and where late haematite is (also) present, particularly in coarse breccias comprising haematite-carbonate (+ pyrite) in the matrix, very high grades (>10 g/t Au) are observed. These iron-rich fluids clearly post-date the main deformation event and inject at zones of weakness, particularly lithological contacts and early breccias. Late-stage hematite dominated hydrothermal breccias with a vertical control occur throughout mineralized zones 1 to 3 as described above but are by far the most extensive in zone 2 that hosts the strongest grades in the deposit.

Despite these variations in localization at the deposit scale, it is considered that all the gold mineralization is related to the same (oxidized) fluid event that was introduced along a complex brittle-ductile permeability meshwork. Sites of gold deposition are structurally controlled but locally dependent on the availability of a geochemical reductant that allows deposition of pyrite and associated gold. Such iron-rich reductants at Ikkari are likely to include magnetite and chlorite, formed during an earlier iron-metasomatic alteration and/or syngenetic pyrite that may have been present in the intercalated siltstones. The presence of a pre-existing reduced fluid cannot be excluded. The spatial association of high-grade gold zones to apparently later, largely post deformation hematite-carbonate breccias is indicative of a later gold-bearing fluid phase also being present.



Source: Internal Rupert Resources Ltd database and interpretation, 2023

Figure 7.32: Cross Section from the Central Western Portion of the Deposit with Different Zones and Styles and Mineralization Highlighted



Source: Internal Rupert Resources Ltd database and interpretation, 2023

Figure 7.33: Cross Section from the Central Eastern Portion of the Deposit with Different Zones and Styles and Mineralization Highlighted

Note: Hole 120102 at 224 m (assay 56.2 ppm Au). *Core size NQ (50.7 mm core width).

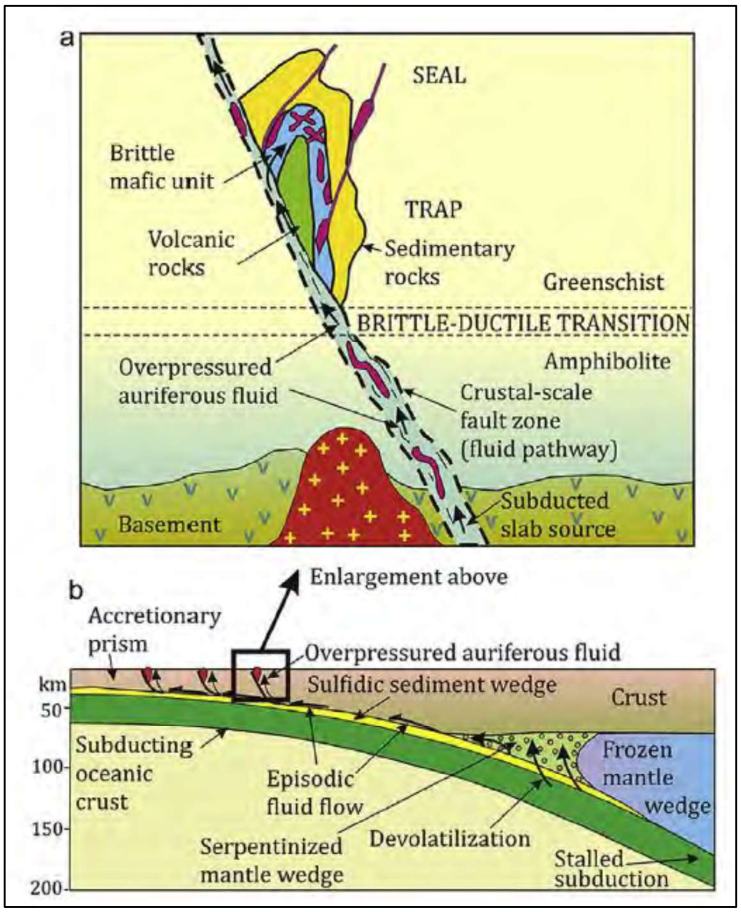
Source: Internal Rupert Resources Ltd database, 2023

Figure 7.34: Visible Gold Within Brecciated Carbonate Veining

8.0 DEPOSIT TYPES

The mineralization at Ikkari is considered to be orogenic-style with gold mineralization associated with low sulphidation alteration. Genetic models for orogenic gold deposits have been discussed in several studies (e.g., Groves et al., 1998 and Groves and Santosh, 2015). The key aspects of these models are:

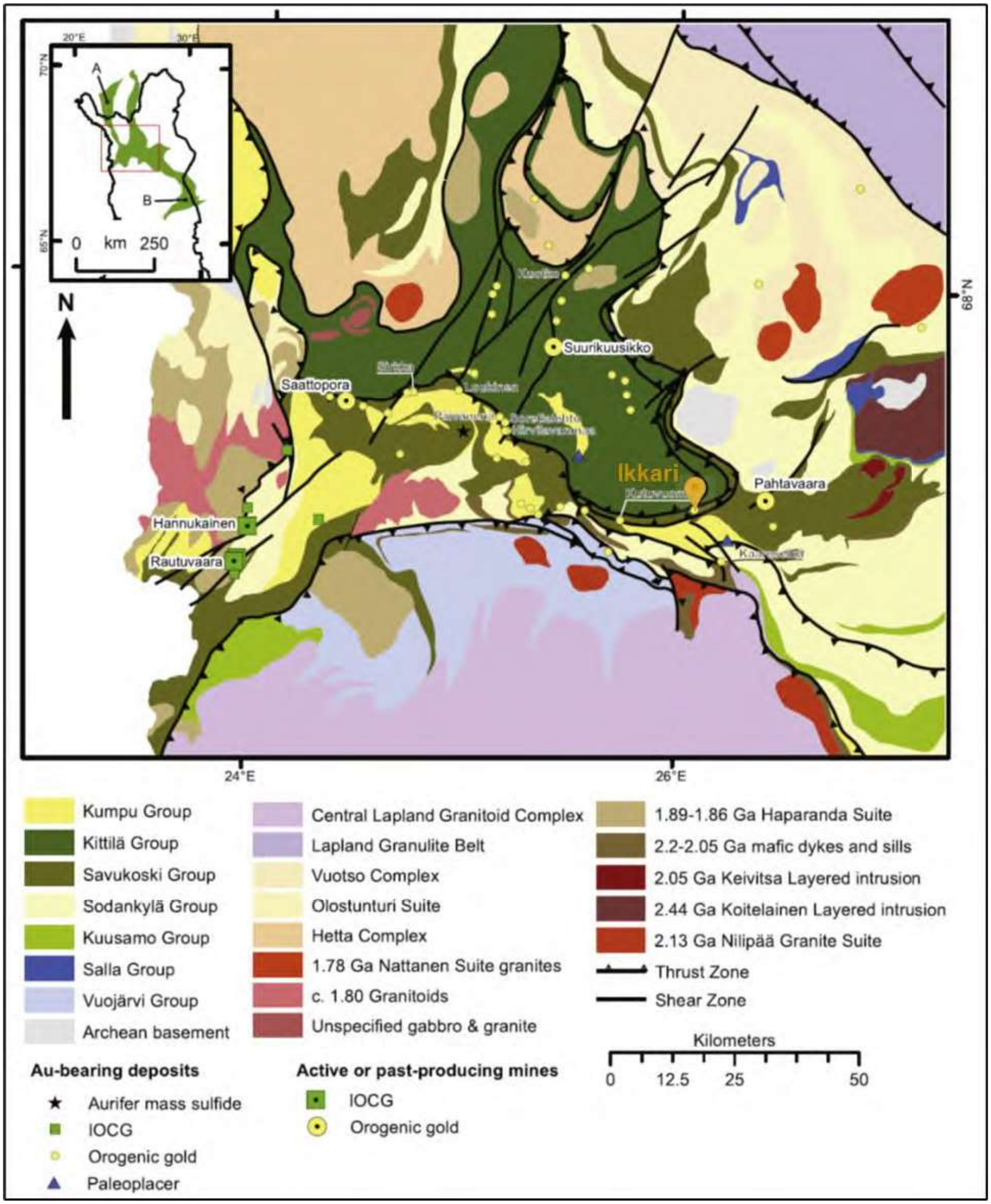
- Metals, complexing agent(s) and fluids transporting the metals are released from the source (or sources) at depth.
- Metal-carrying fluids are focused into shear zones.
- The auriferous fluids migrate along structures into suitable structural and/or chemical traps where the gold and associated metals are deposited via various physicochemical reactions (Niiranen, et al, 2015 pages 733 - 734), Figure 8.1.



Source: Groves and Santosh, 2015

Figure 8.1: Schematic Representation of a Permissive Scenario for All Orogenic Gold Deposits

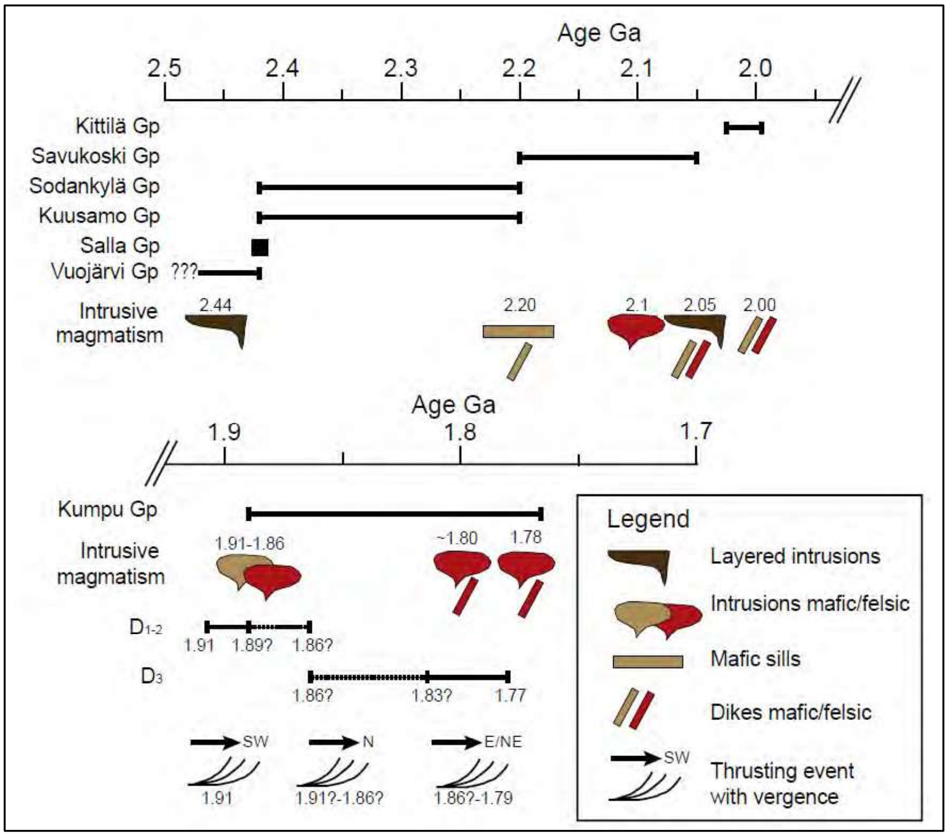
A number of orogenic gold deposits are believed to be hosted in the CLB, including the Pahtavaara and Suurikuusikko deposits (Kittilä Mine) (Figure 8.2). Global examples of other orogenic gold deposits include Kalgoorlie (Australia), Val d'Or (Canada) and Ashanti (Ghana) (Groves et al., 1998). Examples of gold deposits associated with atypical metal associations are given in Groves et al., 2003 with base and semi metals, uranium or even rare-earth elements contributing economically important enrichments in some of the deposits. The introduction of fluids from folded and thrusted intracratonic basins, during orogenesis, is considered a key factor in their formation, as well as possible inheritance of base metals from a proto-ore (and subsequent overprint of gold mineralization) or high salinity fluids released from sedimentary sequences during metamorphism that may introduce base metals into orogenic gold systems (Yardley & Graham, 2002).



Source: Niiranen et al, 2015 (Modified from GTK Bedrock of Finland – DigiKP (October 15, 2013) and FINGOLD (October 15, 2013)

Figure 8.2: Geology and Gold Deposits of the CLB

At a camp and district scale, known deposits cluster in proximity to transcrustal or other major deformation zones that are formed synchronously with the thickening of the crust during accretionary or collisional tectonic events. In most prospective districts, the deposits were formed at mid-crustal levels, as suggested by the dominant greenschist facies metamorphic assemblages of the host rocks (Nirranen et al, 2015). Within the Rupert Lapland Project land package, including known gold occurrences at Pahtavaara, Koppelokangas and Hookana, gold mineralization is located close to a number of structures identified on regional geophysics within rocks of the Savukoski Group, and in the westernmost areas of the Rupert Lapland Project area, hosted at the thrusted margin between the Kumpu and Savukoski Groups. Timing relationships are displayed in Figure 8.3.



Source: Wyche et al, 2015

Figure 8.3: A Schematic Sequence of the Lithostratigraphic Groups, Intrusive Stages and Deformation for the CLGB

However, despite obvious structural controls on mineralization, particularly at Ikkari, where strong WNW-trending foliation is developed related to shearing, there is some indication of a magmatic fluid input where multi-element geochemistry reveals a close association between gold and typically magmatic-related elements such as molybdenum and tungsten. Overprinting alteration events at Ikkari indicate the potential for multifluid sources as a control on gold mineralization. It is possible that a magmatic fluid from a deeper intrusive source may have been somewhat responsible for the localization of gold mineralization, especially high-grade gold, in favourable structural sites.

9.0 EXPLORATION

9.1 Previous Exploration

Previous exploration on the Heinälamminvuoma exploration licence is limited to very wide spaced geochemical sampling by the GTK discussed in Item 6 of this report.

9.2 Geophysical Surveys by Previous Operators

Geophysical surveys are also limited to those performed by the GTK in the 1970's and 80's discussed in Item 6 of this report. It should be noted that the products of these surveys, now used in the freely available GTK regional magnetic maps, provide a prolific source of baseline data which Rupert Resources utilized to develop the original exploration concept.

9.3 Exploration Undertaken by Rupert Resources

Focusing only on the work Rupert Resources has undertaken within the Rupert Lapland exploration licences, including the Heinälamminvuoma licence where the Ikkari discoveries is located, the following exploration programmes have been completed:

Exploration programmes commonly refer to "Area 1", a large target area, approximately 8km by 6km, in the far southwest corner of the Heinälamminvuoma licence which was defined in 2018 as being the most prospective portion of the tenement package and thus the focus for much for the exploration work. The outline of this broad area is shown in Figure 9.1 to Figure 9.3.

9.3.1.1 Geophysics

During May 2018 Rupert Resources conducted a permit-wide aeromagnetic survey using an Unmanned Aerial Vehicle (UAV), which, along with available regional geophysics data, was used as the basis for a regional structural study conducted by structural geology consultant Brett Davis, which highlighted the dominant E-W trending structures across the Heinälamminvuoma permit as being highly prospective for gold exploration (Davis, 2018).

The May 2018 detailed low-altitude magnetic survey represents the most detailed magnetic survey completed to date. This survey extended across the majority of the exploration permit package (Figure 9.1). In addition, a series of ground magnetic programmes were completed during 2020 across selected target areas in Area 1, including Ikkari and Heinä South, a gold occurrence 900 m NW of Ikkari. Ground magnetics were completed with a walking magnetometer + differential Global Positioning System (GPS) with 1 second sampling (GEM GSM-19W).

A ground gravity survey was completed in 2019, across the majority of the Rupert Lapland Project permit area, at a 200-m spaced grid resolution (Figure 9.2), with 3,416 measurements taken.

Since 2016, Rupert Resources has completed 27-line km of IP geophysics on the Rupert Lapland Project area.

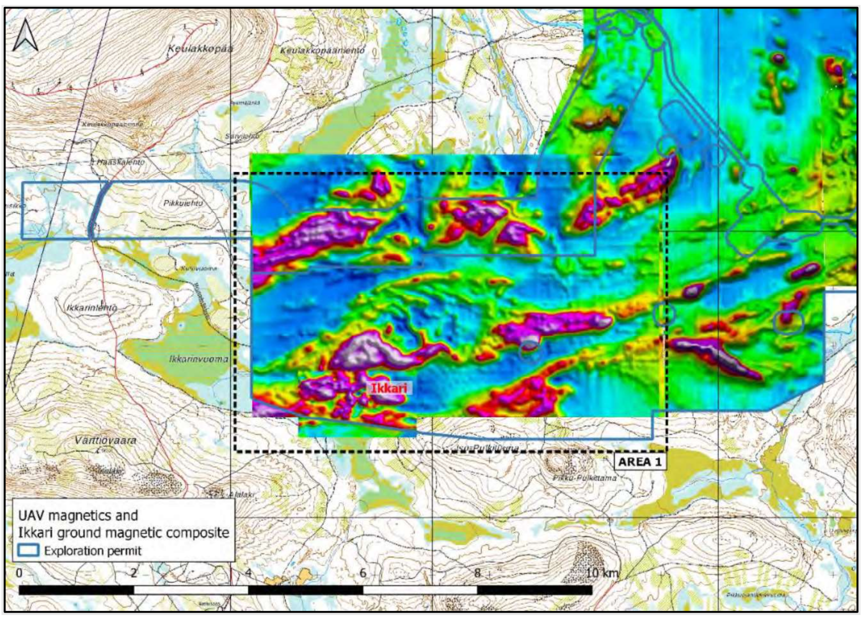
A series of ground IP pole-dipole programmes were completed across specific targets in Area 1 during 2020 (Figure 9.3), using a GDD 32cRx receiver, GDD Tx4 5-kilowatt (kW) transmitter, PbCl2 electrodes and stainless steel. Primary voltage was apparent resistivity and chargeability with 20 arithmetic time channels 80 millisecond (ms) each, 240-ms delay.

At Heinä South, 200-point measurements were taken across 8 lines with electrode spacing at 25 m and 50 m (transient time 2 seconds [s], full waveform measurement).

At Ikkari, an initial 200-point programme was completed with 9 initial profiles completed at 100-m line spacing, followed by an extension of the programme towards the east, with an additional 6 lines completed at 200-m line spacing.

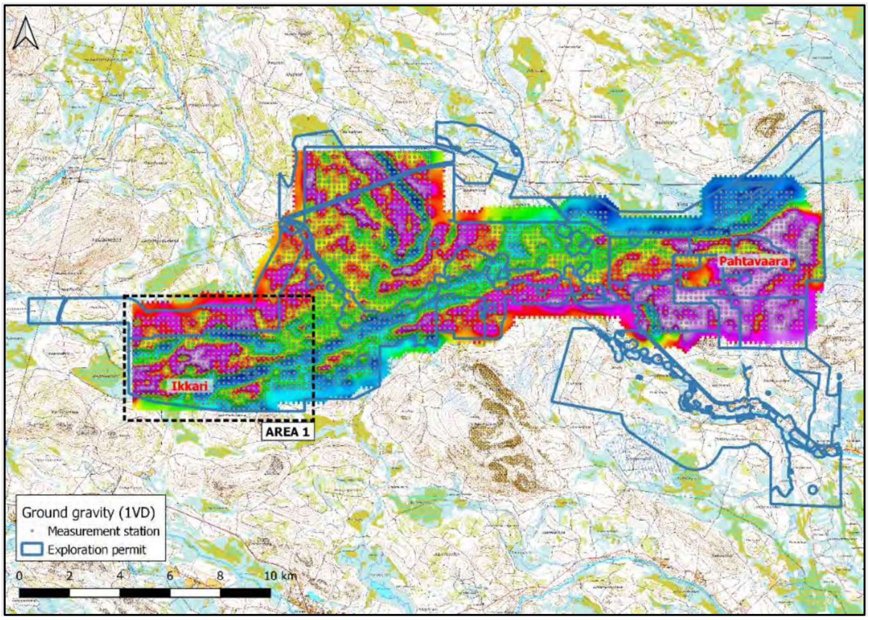
At Saitta, a 100-point programme was completed across 2 lines with electrode spacing at 25 m and 50 m.

During spring 2022 a TITAN DCIP/MT survey was completed by Quantec Geoscience, across the Ikkari deposit and the Helmi deposit, a gold deposit discovered by B2 gold approximately 1km to the west of Ikkari. B2Gold was the principal client for the survey however it was performed as a collaboration with both companies receiving the full report and data. Two-dimensional (2D) inversions of the measured direct current (DC), chargeability (IP), and magnetotelluric (MT) data were provided along the N-S orientated survey lines. A total of 19, 2.2km long lines were surveyed with spacing variable between 200 m and 400 m. Multiple survey lines cross the permit boundary with approximately 60% of the survey line length performed within the Rupert Resources Licence boundary (Figure 9.4).



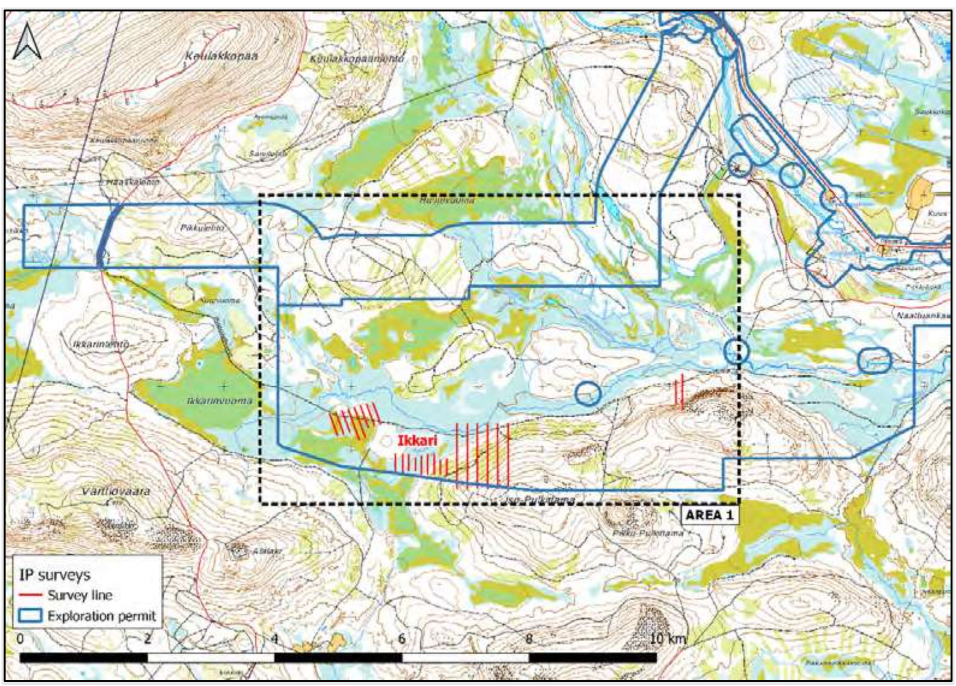
Source: Internal Rupert Resources Ltd database, 2023

Figure 9.1: Composite Magnetic Image of Rupert Lapland Exploration Permits, Showing Results from Drone Magnetic Survey and Ground Magnetics in Area 1



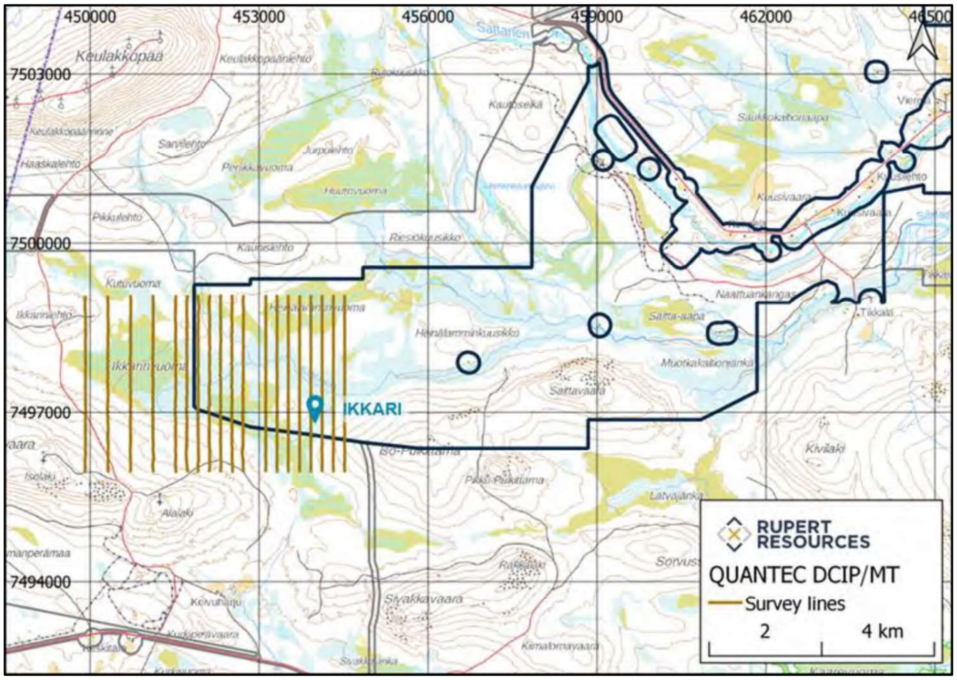
Source: Internal Rupert Resources Ltd database, 2023

Figure 9.2: Ground-gravity Programme with Points for Each Measurement Shown



Source: Internal Rupert Resources Ltd database, 2023

Figure 9.3: Location of Pole-dipole IP Lines at Target Areas Within Area 1



Source: Internal Rupert Resources Ltd database, 2023

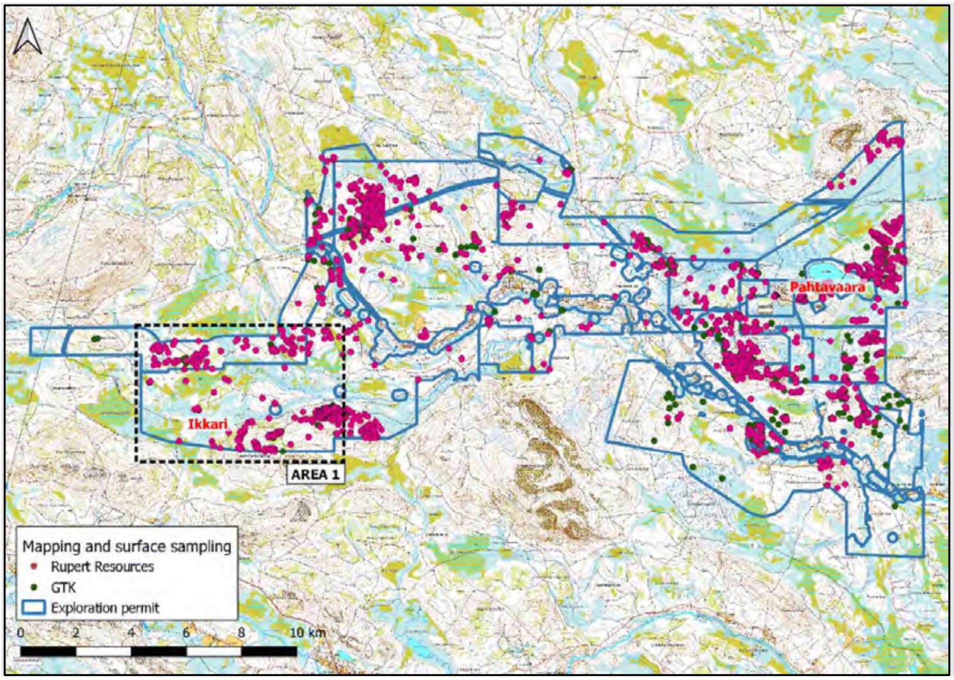
Figure 9.4: Location of MT-IP Lines at Target Areas Within Area 1

9.3.1.2 Geochemistry

Initial work by Rupert Resources on the Rupert Lapland Project area, was focused on the area immediately surrounding the Pahtavaara mine. The bedrock mapping and boulder-hunting database of the Heinälamminvuoma permit area contains 1,365 rock observations including assayed samples collected by Rupert Resources across the project area. However, in the vicinity of the Ikkari deposit significantly fewer rocks and boulders have been sampled by Rupert Resources, largely due to the lack of outcrop, extensive bogs and thick till cover sequences. However, where accessible, surface geochemical sampling has been undertaken in these areas (Figure 9.5).

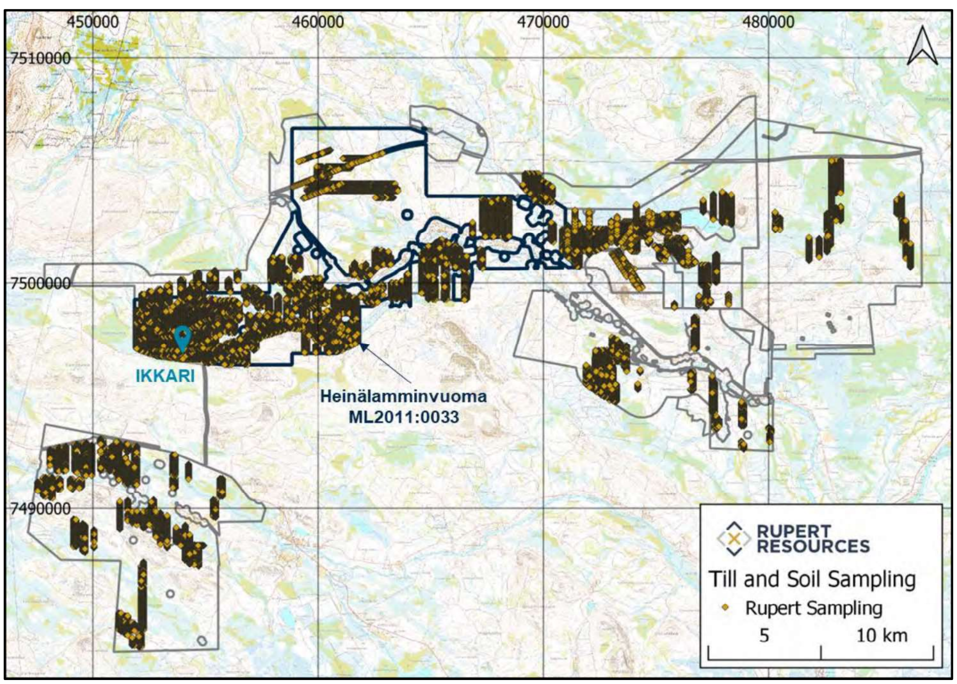
In early 2019, Rupert Resources commenced a base of till sampling programme, using a flow-through sampler with a bandwagon mounted rig, across the extent of the Heinälamminvuoma permit aiming to traverse across the key identified structures and identify zones of gold anomalism in base of till soil samples. Infill base of till sampling was completed in areas that displayed anomalism in the first pass 'tram line' traverses (Figure 9.6 and Figure 9.7)

Follow up systematic drill testing of identified base of till gold anomalies was initiated with gold occurrences identified at several locations within the permit. At Ikkari the Initial 'tram line' BOT traverses yielded a single point anomaly of 0.2 ppm Au and this was followed up with closer spaced infill sampling that identified a cluster of >1 ppm Au anomalies. The first drill hole into geochemical anomaly (hole 120038) assayed 54 m grading 1.5 g/t gold from 25 m, including 4.7 g/t over 1 m from 35 m, 5.2 g/t over 2 m from 65 m and 5.7 g/t over 1 m from 71 m.



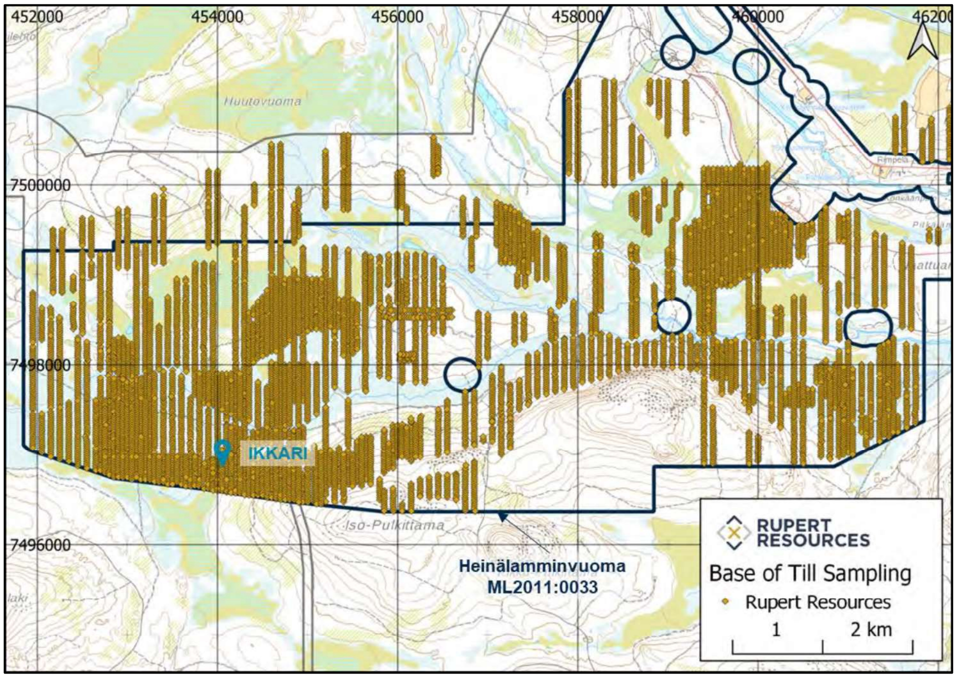
Source: Internal Rupert Resources Ltd database, 2023

Figure 9.5: Boulder and Outcrop Observations Undertaken by Rupert Resources



Source: Internal Rupert Resources Ltd database, 2023

Figure 9.6: Base of Till Locations Completed by Rupert Resources across the Rupert Lapland Project Area



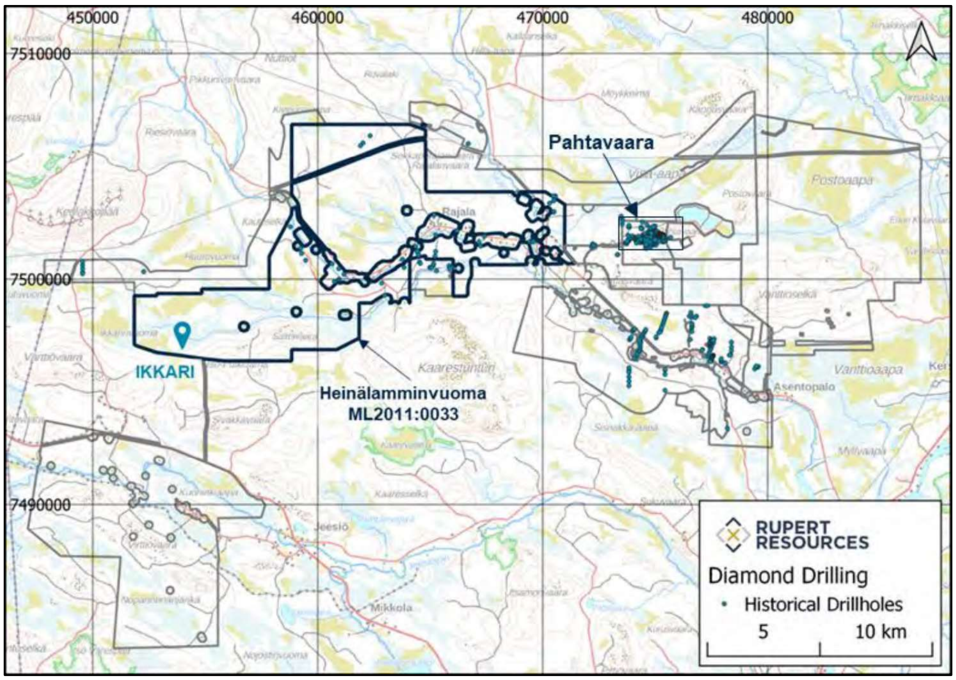
Source: Internal Rupert Resources Ltd database, 2023

Figure 9.7: Base of Till Locations Completed by Rupert Resources in the SW corner of the Heinälamminvuoma Permit – Area 1

10.0 DRILLING

10.1 Drilling by Previous Operators

Considering initially the entire Rupert Lapland exploration licences, the vast majority of historic drilling has been carried out at the Pahtavaara Mine site, and near-mine areas with very little drilling completed elsewhere on the permits (Figure 10.1). No drilling has been undertaken by previous operators at or near the Ikkari deposit. Historical drilling across the Rupert Lapland Project area has been conducted by GTK, Outokumpu, Terra Mining, Scan Mining, Lapland Goldminers and Anglo American.

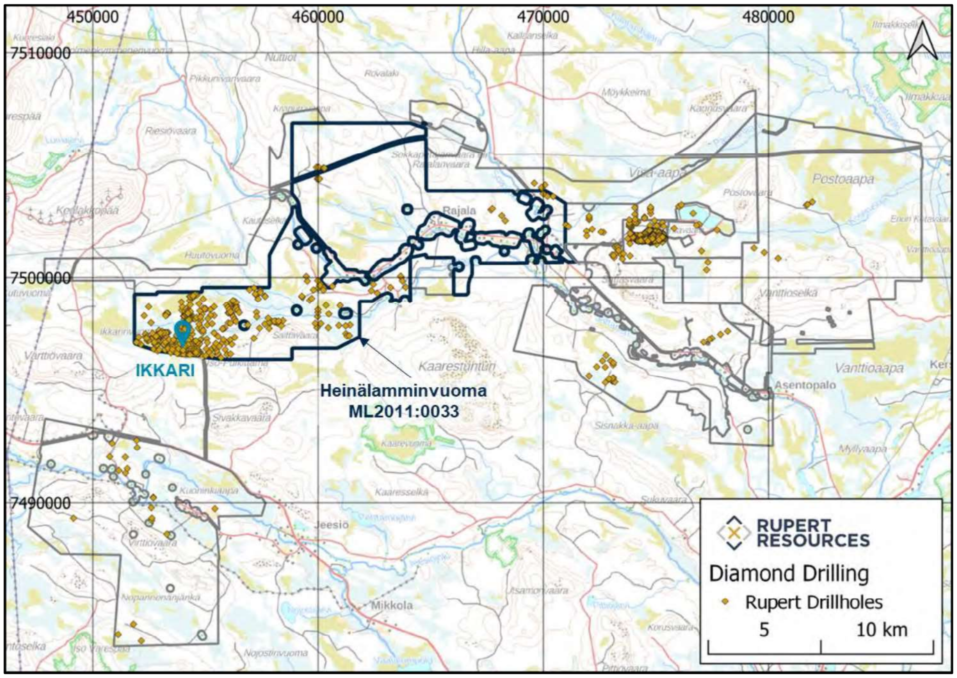


Source: Internal Rupert Resources Ltd database, 2023

Figure 10.1: Diamond Drilling on the Rupert Lapland Licence Area by Previous Operators

10.2 Drilling by Rupert Resources

Following an initial period, where Rupert Resources also focussed on the area immediately adjacent to the Pahtavaara Gold Mine (Figure 10.2), on care and maintenance at the time, focus was switched to greenfield exploration in 2018 with a focus on the SW corner of the Heinälamminvuoma permit area in the target area designated “Area 1” (see. Figure 10.2)

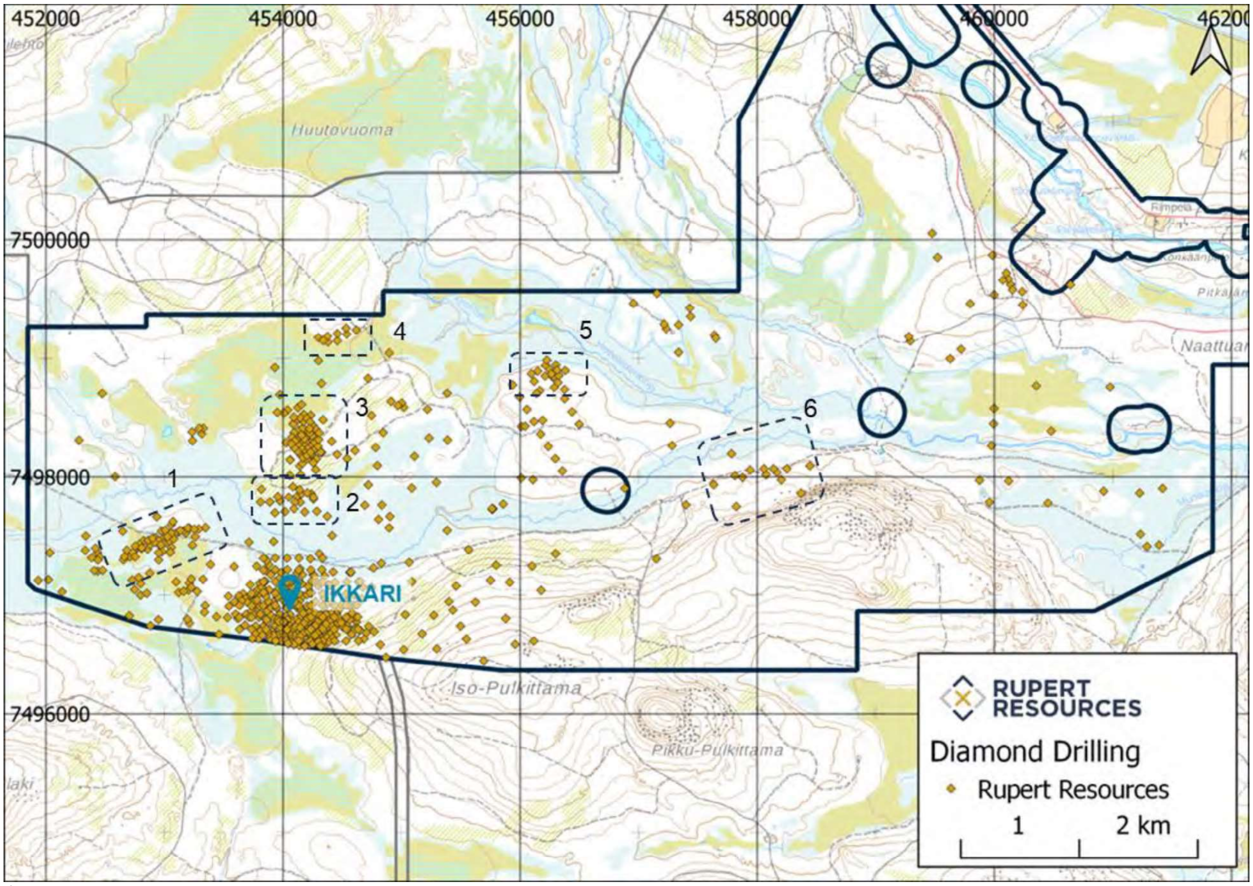


Source: Internal Rupert Resources Ltd database, 2023

Figure 10.2: Diamond Drilling on the Rupert Lapland Licence Area by Rupert Resources

Within the Heinälamminvuoma exploration permit area, Rupert Resources has used diamond drilling to predominantly target base of till gold anomalies. In late 2019, following the generation of base of till targets at Area 1, drilling was undertaken at specific prospect locations at Area 1. These drilling statistics are summarized in Table 1.2 and the locations of drilling to date in Area 1 are shown in Figure 10.3.

At Ikkari, an initial two drill holes in early April 2020 (drill holes 120038 and 120042), tested base of till anomalies along the E-W trend, at the possible margin of a magnetic anomaly. Both holes returned gold mineralization over substantial downhole widths, hosted by sedimentary rocks, and both holes demonstrated strong foliation, shearing, occurrences of visible gold associated with intensive albite-sericite alteration and finely disseminated pyrite throughout.



Source: Internal Rupert Resources Ltd database, 2023
1 = Heinä South, 2 = Ikkari North, 3 = Heinä Central, 4 = Heinä North, 5 = Island North, 6 = Saitta

Figure 10.3: Diamond Drilling on the Heinälamminvuoma Exploration Permit by Rupert Resources

Table 10.1: Drill Hole Summary for Drilling Undertaken by Rupert Resources on the Rupert Lapland Exploration Licences (Outside of the Pahtavaara Mine Area, up to end June 2023)

Prospect	Year	DH Type	Holes	Metres	% of Total
Heinä South	2019	Diamond	2	200	0
	2020		22	3 980	2
	2021		28	4 929	3
	2022		32	6 805	4
	2023 (to June)		2	1 123	1
Heinä North	2019	Diamond	10	1 612	1
	2020		2	245	0
	2023 (to June)		3	565	0
Heinä Central (*inc Ikkari North and sterilization drilling)	2019	Diamond	19	3 593	2
	2020		10	2 416	1
	2021		39	7 540	4
	2022		39	11 745	6
	2023 (to June)		16	4 935	3
Island North	2019	Diamond	1	152	0
	2020		10	1 791	1
	2021		7	1 405	1
	2023 (to June)		11	2 327	1
Saitta (*inc sterilization drilling	2020	Diamond	11	1 960	1
	2021		2	534	0
	2022		17	3 507	2
Ikkari	**2020**	**Diamond**	**62**	**20,320**	**10**
	2021		**75**	**36,049**	**18**
	2022		**85**	**35 568**	**18**
	2023 (to June)		**46**	**22 069**	**11**
Others	2019	Diamond	20	2475	1
	2020		2	430	0
	2021		17	2 722	1
	2022		65	11 606	6
	2023 (to June)		11	2 190	1
Total			**667**	**192 562**	**100%**

Notes:
* Including later extensions to drill holes and wedges.
** Including holes such as metallurgical holes not assayed, and therefore not included in the resource estimation (Item 14.2).
Reported as per prospect on coding in database, not all holes are necessarily targeting the same mineralization occurrence. Errors may occur due to rounding.
See Figure 10.3 for location of these target areas relative to Ikkari.

Hole 120038 intersected 54 m grading 1.5 g/t Au from 25 m, including 4.7 g/t over 1 m from 35 m, 5.2 g/t over 2 m from 65 m and 5.7 g/t over 1 m from 71 m.

Hole 120042 intersected 137.2 m grading 1.8 g/t Au from 10.8 m, including 7.1 g/t Au over 14 m from 23 m and 10.6 g/t over 3 m from 27 m.

Following these initial results, bold step out drilling was pursued along the interpreted strike, targeting further base of till anomalism and the magnetic anomaly margin. These holes successfully intersected further mineralization and indicated a potential strike length of 450 m.

Hole 120065 intersected 2.1 g/t Au over 31.0 m from 53 m including 23.7 g/t Au over 1 m. The hole targeted near surface mineralization and extended the known mineralized strike eastwards. Hole 120067 intersected 1.3 g/t Au over 172.4 m from surface including 12 m at 2.6 g/t Au with the hole ending in mineralization, extending the known limits 100 m to the north of hole 120042 (1.8 g/t Au over 137.2 m).

These confirmed the presence of a significant mineralized system at Ikkari and further drill testing was prioritized, with some 62 holes for 19,084 m completed during 2020. Wide-spaced drilling traverses were completed between the initial holes in the east and west as well as testing extensions to the trend of base of till anomalies along strike that now extends in excess of 1 km.

With the continued success of the drill programme and the release of the maiden MRE in September 2021 infill drilling on 40-m sections with a 40-m spacing on section commenced immediately, synchronous with further step out drilling to the east, northwest and at depth. An updated resource estimate was published in November 2022 alongside and in support of the PEA of the project, assessed alongside the restart of the Pahtavaara Mine. The November 2022 resource update included 78 holes for 36,398 m in addition to the 36,635 m from 102 holes that were completed at the time of the maiden MRE.

With the successful publication of the PEA and a high-margin operation envisioned, further infill and step-out continued through the 2022-2023 season and with a further 38,742 m from 89 holes completed, including holes targeted primarily for geotechnical, metallurgical and hydrogeological purposes. Principle targets of the 2022-23 drill campaign were to extend mineralization to the west, at depth, a direction in which the deposit remains open, and to convert all resources above -300m RL to the Indicated Category ahead of a PFS initiating in mid-2023.

10.3 Hole Planning and Set-up

Diamond Drilling at Ikkari from 2020 to 2023 was undertaken predominantly by contractors MK Core Drilling, Arctic Drilling Company (ADC), Kati and Comadev. The core diameter used was predominantly NQ2 (50.7 mm core diameter) with WL76 (57.5 mm core diameter) used in some earlier drillholes.

Rupert Resources has an in-house surveyor and field technicians responsible for drill hole setup. Drill holes are planned by the geology team and details passed to the surveyor; this includes the collar coordinate, the coordinates for the planned end of the hole, the azimuth and dip.

The surveyor uses a Differential Global Positioning System (DGPS) to locate the collar location, orients the hole direction from the azimuth determined by the DGPS (according to direction between start and end coordinates).

The collar location is marked by a wooden marker (which has the planned hole number, the coordinates, azimuth and initial dip written on it). The planned azimuth of the hole is also marked with another survey post oriented in the planned drilling direction. An additional ‘marker’ peg is positioned to assist with the drill rig orientation. All orientation ‘pegs’ are annotated to indicate which is the ‘front peg’ (with the – HoleID) and which is the ‘back peg’ (also with the HoleID) ensuring holes are drilled in the correct orientation on the line defined by the pegs.

The drillers use the two orientation guide pegs to set up and orient the drill rig correctly.

10.4 Surveying and Orientations

The actual collar position is measured using DGPS total survey equipment once the drill rig as left the drilling location, in all drill holes, casing through the overburden is not removed. The elevation of the drillholes is measured at top of the casing, the same point that the downhole depth is measured from during drilling; this maybe up to 0.5m above the surface dependent on snow conditions and casing may be cut to ground level during the following summer due to health and safety considerations.

The drilling contractor provides downhole surveys upon completion of the drill hole; intermediate survey may also take place during drilling. Survey tools are dependent on the drilling contractor used. To date Reflexgyro, DeviFlex/DeviGyro, OMNI-IQ, SPRINT-IQ and SPT downhole survey instruments have been used at Ikkari. Considering all tools except for the SPT tool, they are gyro-based tools that measure dip and azimuth every four meters, starting from the bottom of the hole and proceeding upwards to the drill hole collar. The survey data is delivered to the supervising geologist via email as csv- and ds-format using the instrument software. The azimuth field is re-processed at all depths from the collar when the collar survey is available. In the case of the SPT tool, this is a north seeking gyro, and thus azimuth and dip are measured independently in the drillhole and no post processing with the collar azimuth is required.

10.5 Dry Bulk Density Collection

Since initiation of drilling in April 2020, the majority of diamond drill holes have been routinely measured for density. A 10 cm to 15 cm piece of core from every core box, or every 5 m, is weighed first in air, and then in water. These values are recorded in the acQuire database, which calculates the SG using formula SG = ρsubstance / ρH2O, [dry weight/(dry weight-weight in water)].

The logging geologist marks additional measurement points to core boxes in cases of special rock types, for example massive sulphides or breccias.

Given that the rock mass at Ikkari is almost all intact fresh rock containing few voids, and these are avoided during SG determination, the SG is a good match to the bulk density. The density of the lithologies at Ikkari range between 2.5 to 4 gm/cm³ with an average value of 2.86 gm/cm³.

For this resource update the density measurements were estimated into blocks using the extensive database of 11,468 measurements. Density data has interrogated both according to logged lithology (Table 10.2) and the samples position within the geological model (Table 10.3).

Table 10.2: Ikkari Gold Deposit – Density Statistics (G/Cm³) By Logged Lithology. Lithologies With Fewer Than 10 Density Measurements Were Excluded as these are Rare Lithologies Within the Deposit

Logged Lithology	Median	Mean	1st Quartile	3rd Quartile	Number
IFO (Pre-mineralization Dyke)	2.81	2.84	2.78	2.89	10
IGB (Gabbro)	2.86	2.85	2.80	2.94	645
IUO (Intrusive Ultramafic)	2.92	2.91	2.87	2.96	112
MQZ (Quartzite)	2.71	2.73	2.68	2.75	440
MSB (Black Shale)	2.78	2.76	2.73	2.83	748
MSCU (Ultramafic Schist)	2.94	2.94	2.88	3.01	3620
SCO (Conglomerate)	2.71	2.72	2.69	2.74	155
SSI (Siltstone)	2.87	2.88	2.77	2.98	856
SST (Sandstone)	2.75	2.75	2.72	2.78	1792
UKO (Komatiite)	2.88	2.89	2.86	2.91	2480
USP (Serpentinite)	2.90	2.88	2.86	2.94	54
VBA (Basalt)	2.89	2.86	2.80	2.93	61
VPI (Ultramafic pillow lava)	2.88	2.88	2.86	2.89	12
VTUI (Ultramafic tuffitic breccia)	2.69	2.67	2.61	2.74	31
VUO (Ultramafic volcanoclastic)	2.90	2.90	2.87	2.93	396
All	**2.87**	**2.87**	**2.78**	**2.87**	**11468**

Note:
Key: g/cm³ = grams per cubic centimetre
Source: Rupert Resources Database 2023

Table 10.3: Ikkari Gold Deposit – Density Statistics (g/cm³) by Modeled Lithology Group by Rupert Resources

Lithology Series	Median	Mean	1st Quartile	3rd Quartile	Number
Ultramafic (Talc Altered)	2.88	2.89	2.86	2.92	3 238
Northern Felsic Sediments	2.75	2.75	2.72	2.78	1 746
Southern Felsic Sediment	2.75	2.72	2.69	2.75	252
Black shale (MSB)	2.79	2.77	2.74	2.83	765
Ultramafic Schist (MSCU)	2.92	2.93	2.87	3.00	3 691
Gabbro	2.86	2.85	2.79	2.94	661
Internal Felsic	2.85	2.86	2.74	2.98	981

Note:
Key: g/cm³ = grams per cubic centimetre
Source: Rupert Resources Database 2023

As would be anticipated, the felsic lithologies, both logged and modeled, in all locations, have a significantly lower density than the ultramafic lithologies. The increased density of the internal felsic, relative to the other felsic units, reflects the greater pyrite and/or hematite/magnetite content commonly found within this well mineralized lithology; it also has the most variance of any domain. The increased density of the Ultramafic Schist (MSCU) over the talc altered ultramafic is also a likely reflection of the pyrite and magnetite addition in the MSCU as a result of mesothermal alteration. Overburden density is not measured by Rupert Resources as it is not consolidated and therefore not amenable to the Archimedes methodology. It hosts no mineralization and is therefore relevant to pit optimizations and waste stripping only. A density of 1.9 g/cm³ has been assigned to the overburden based on published literature on the overburden in Lapland, Finland.

10.6 Drill Database

Data entry in the company database is achieved through a combination of direct entry of data by Rupert Resources personnel and the direct import of third-party data from the raw files which are subsequently archived in a dedicated and secure location on the file server with set naming conventions.

Logging of drillcore is now performed directly into a SQL based relational database management system designed by acQuire. This 'offline' data is uploaded to acQuire database utilizing a dedicated import object upon completion of each drillhole.

Multiple validations are built into the database to ensure the integrity of data entered, for all manual data entry fields, except for comments fields, validation look-up tables are used to ensure consistency with company validation codes.

Other validations include but are not limited to:

- Ensuring continuity of downhole data (both logging and sampling)
- Preventing overlapping intervals (both logging and sampling)
- Preventing duplication of data
- Ensuring downhole data matches the depth of the drillhole
- Ensuring all the required fields are populated
- Range violations – flagging data that falls outside the expected range
- Data type validations such as text, numeric, date etc… (import specific)
- Validation of format for all import and specifically elements and detection limits for assay data.

The following information is currently stored in the companies acQuire database, the input methodology is given alongside each piece of data:

- Geological logs covering, lithology, alteration, mineralization, textures and structures; logged directly into the database.
- Sampling intervals including insertion and QC standards, blanks and duplicates, logged directly into the database.
- Basic geotechnical logs on all holes (RQD and recovery), logged directly into the database.
- Detailed geotechnical logs, including point load tests, on selected drillholes, logged directly into the database.
- Magnetic susceptibility readings, logged directly into the database.
- SG measurements, logged directly into the database.
- Collar surveys imported into the database from software export.
- Downhole surveys directly imported into the database from software export.
- Assay data, directly imported to the database from laboratory results.

At the completion of each drillhole the Senior Geologist responsible for database management performs a series of checks on data, this includes but is not limited to checking planned collar location entered by the geologist against surveyed collar location, and checking downhole survey against collar survey. Sampling intervals are checked against logged areas of no recovery to ensure these are honoured in the sampling wherever possible.

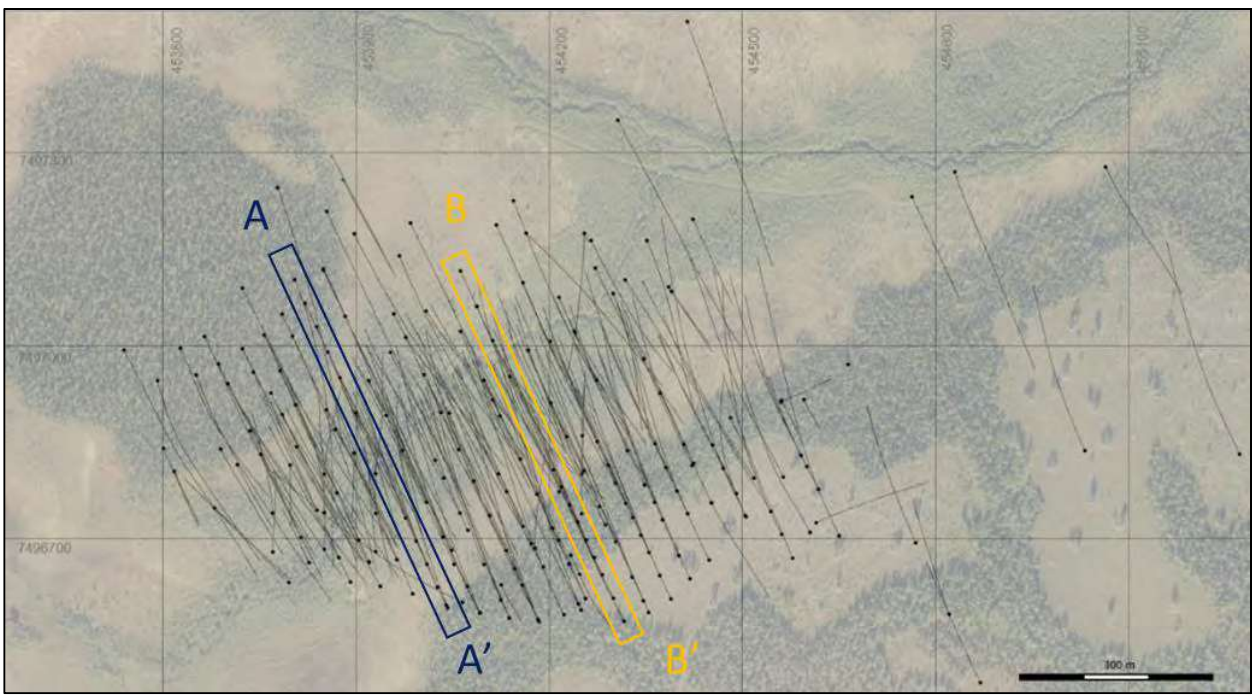
Further quality assurance checks are completed by the Senior Geologist responsible for database management at the completion of each drilling season. These include but are not limited to, ensuring agreement between sample intervals without assay data and logged intervals of no recovery and vice versa, ensuring all intervals where logging data occurs has assay data assigned, ensuring all drillholes have collar and downhole survey data. Further to this raw laboratory assays, for several batches, are compared to the database to ensure the continued successful import of assay data.

Upon import and acceptance of assay results the drill hole is then "locked" in the database such that only users with assigned credentials may edit the information related to these drill holes. Each employee has their own login credentials for the database and as such access to unlock drill holes is limited to the Senior Geologist responsible database management, the Exploration Manager, and the Resource Geologist. This ensures the long-term integrity of the database.

The Ikkari database used in this resource evaluation contains 255 diamond drill holes (111,896 m) (Figure 10.1). The difference from the table above (Table 1.2) owes to the exclusion of holes drilled for Metallurgical purposes without assays, the double counting of meters from wedges off drillholes due to the way they are stored in the database and the exclusion of holes flagged as 'Ikkari' in the database but at a significant distance from the resource.

The drilling database used in this resource calculation contains 103,839 gold assays and 84,133 multi-element assays. The database also contains 24,456 downhole survey stations and 11,427 SG measurements. Figure 10.4 shows a plan map of collar locations.

Core recoveries are in general excellent with an average of 98% recovery achieved from bedrock during diamond drilling; this excludes the barren overburden where recovery is not attempted. This average is also negatively affected by poorer recoveries close to surface in the black shale, another predominantly barren unit. Considering only the estimation domains the recovery is >99%. Core recovery achieved is sufficient for resource estimation.

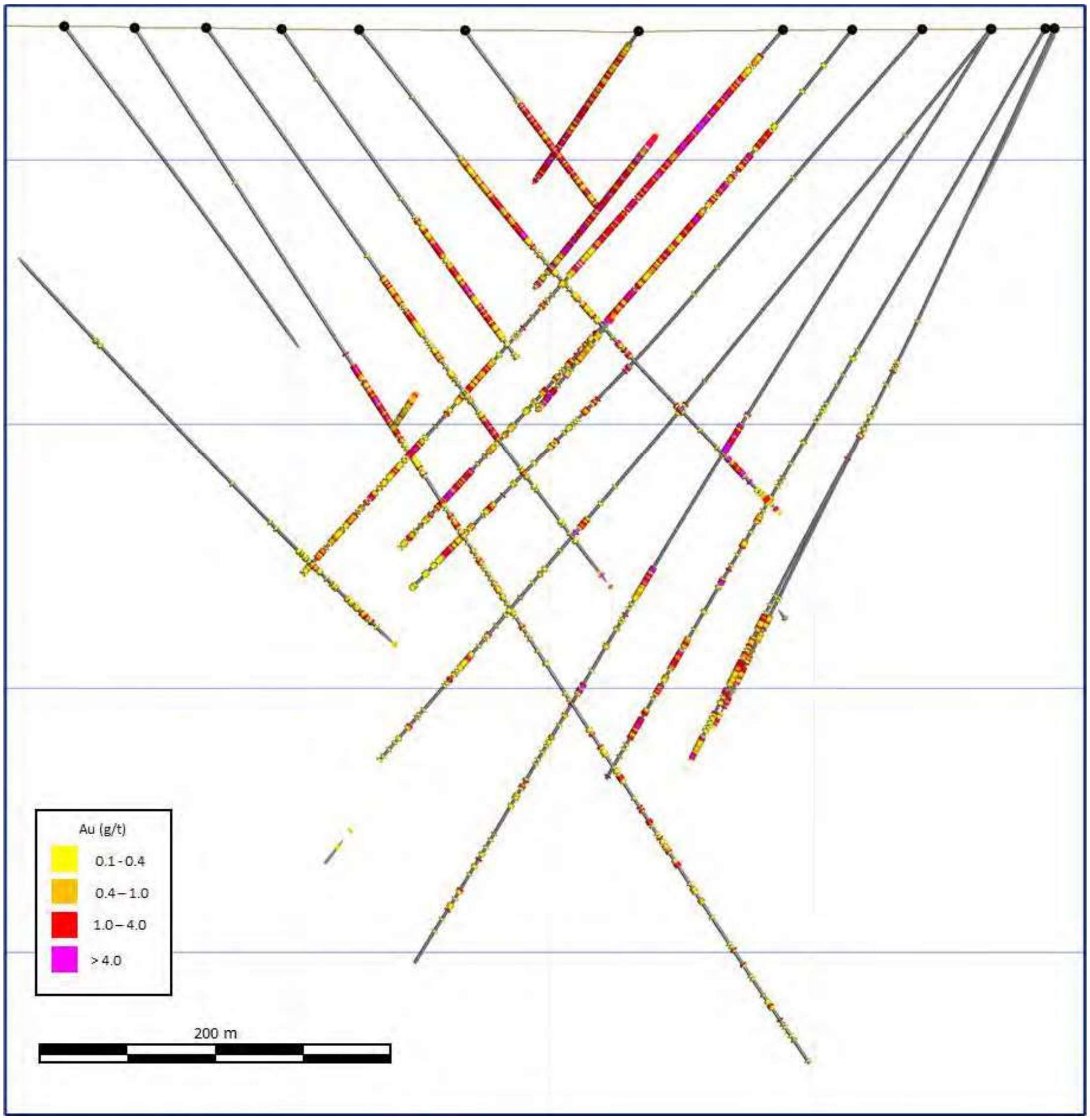


Note: Grid and scale bar 300 m.

Source: Internal Rupert Resources Ltd database, 2023

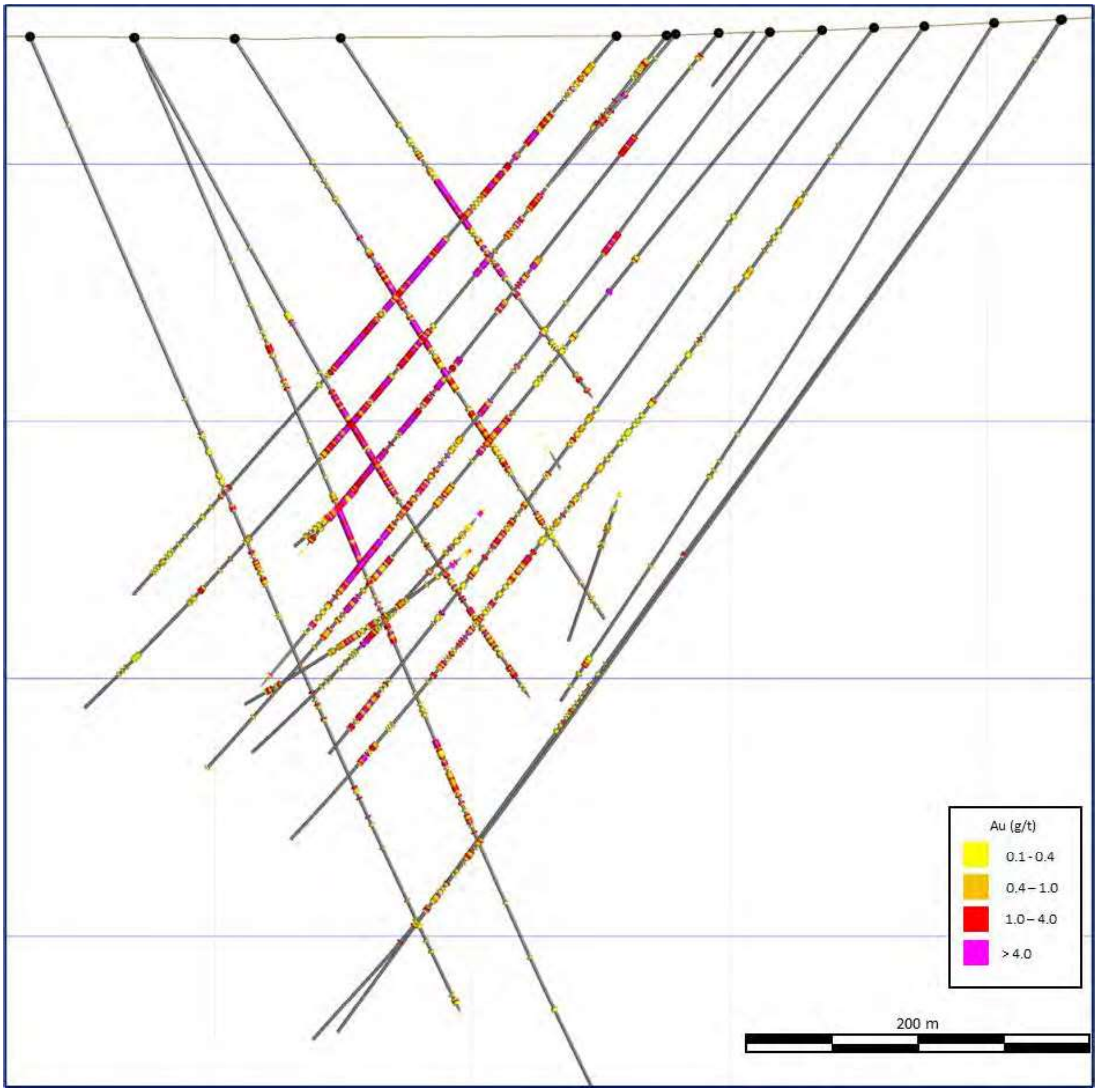
Figure 10.4: Plan Map of Collar Locations and Drill Trace on Semi-transparent Aerial Photograph Draped on Topography

The location of representative cross sections A→A' and B→B' are noted in Figure 10.4 and these are presented in Figure 10.5 and Figure 10.6.



Note: Collars, Drill Traces and Au Assays Greater Than 0.1g/t Au are shown. Grid Lines 150-m spacing.

Figure 10.5: Cross Section A - A’ (Location in Figure 10.4) in the Western portion of the Ikkari Deposit



Note: Grid Lines 150-m spacing.

Figure 10.6: Cross Section B - B' (Location in Figure 10.4) in the Eastern portion of the Ikkari Deposit. Collars, Drill Traces and Au Assays Greater Than 0.1g/t Au are shown

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Chain of Custody, Sample Preparation, and Analyses

Chain of custody from drill rig to Rupert Resources facilities is dependent on the number of drill rigs operating at any given time. When two rigs or fewer are operating at Ikkari, the contractor brings the core at the end of their shift to Rupert Resources' facilities, now located 10 km south of Sodankylä. During peak drilling season when more drill rigs are operating, at the end of the shift drill core is transported by the contractor to a prearranged laydown yard, from where it is met by a single, local transport contractor for transportation to Rupert Resources facility. Whichever methodology is in use at the given time, drill core is constantly under supervision of either the drill contractor or the transport contactor until delivery to the Rupert Resources facility and final delivery into the 'core shed'.

The Rupert Resources facility is secured at all times by continuous fencing and a gate that can only be opened through pre-registered mobile phones together with locks on all doors to the internal storage areas including the cold storage area for drill core from previous drilling seasons.

Once inside the core shed, the sample handling team then checks that core samples are in right order, move the core inside the trays against its left border and assembles any broken segments if possible.

After organizing the core boxes and core samples, each piece of the core is taken out from the core box and arranged in the rail of the logging table to draw continuous bottom line on the core, and downhole direction pointed with arrows along the line. A solid line is used to represent core orientated from two or more independent orientation marks, core orientated from only a single orientation measurement is marked with a dashed line. These high and low confidence criteria are reflected in the orientated structural logging. Reflex ACT III orientation tool is used by all drilling contractors to achieve oriented core. Following orientation, the core is measured, and metre intervals are marked on core boxes and on core with black marker pen.

Core logging is performed directly into the acQuire database. Log sheets to be filled include lithology, structural data, magnetic susceptibility, core recovery and rock quality index (RQD) sheets as well as the sample data sheet which includes company quality check samples.

The geotechnical logging includes the magnetic susceptibility and core recovery data. Once the metres are measured and marked correctly onto the core, the magnetic susceptibility of the core is measured. This is done metre by metre, scanning between each metre mark by using a Terraplus KT-10 handheld magnetic susceptibility and conductivity meter. KT-10 has a scanner mode, which automatically calculates the average susceptibility for each scanned interval.

RQD values are measured at each metre interval and written on the left side of each metre line in the core box with pencil. acQuire calculates RQD percentage automatically from given interval length and RQD centimetres.

The acQuire sampling table automatically creates one-metre-long sampling intervals. It also reminds the operator to enter a Quality Control (QC) sample, company blank or commercial standard every tenth sample. Logging geologist inserts one core duplicate per 20 samples and marks it also to the core box. Unique sample numbers are assigned to all samples including the QC samples based on sample books. QC samples also include pulp duplicates. The preparation laboratory has been instructed to insert one pulp duplicate in every 20 samples. Pulp duplicates have the same sample ID number the original sample, with suffix PD.

Sampling intervals are marked on the core box (below a certain interval) with a red marker. Places where the sampling intervals begin and end are marked with red arrows (on the core box and on the core) and the sampling number is written with the first six numbers at the top right edge of the core box and the last three numbers under each sample interval on the core box below the core at the beginning of the interval. The QC samples are marked on the core boxes. All sampling documents for a batch of samples, along with sachets containing standards and blanks and corresponding sample tickets are placed in a sealed bag for dispatch along with the batch of samples.

After all the logging and sampling has been undertaken, all the core boxes are photographed. Two photographs are taken: The first of dry core and second of wet core. Core photographs are automatically uploaded to the Imago cloud which is available immediately via an online portal or through links in the modeling software.

Drill core is cut at the Rupert Resources core logging and sampling facility by a Rupert Resources technician. Cutting is done next to the orientation line, and the half with the line remains in the core box. A minority of core has been shipped to ALS for core cutting during the busiest drill periods, where this has occurred the same procedures have been implemented. After the core has been sawn, the samples (half core samples, blanks, core duplicates and standards) are packed in plastic bags tagged with sample tag from the sample book and are packed onto EUR-pallets to be shipped to the laboratory. During packing each sample is weighed and the information is added to the database.

Once a batch has been packed wooden lids are screwed onto the pallet sides and further metal or plastic straps wrapped around the pallet and tightened using a rachet mechanism. Upon arrival of the samples at the laboratory visual checks are performed on the pallet to ensure integrity of the samples.

Geologists are responsible for creating new sample batches and sending the sample submittal form and assay order form to the laboratory. Sample shipment is requested and followed up by the Rupert Resources technician, who handles the contacts with the courier company.

The main laboratory used by Rupert Resources is ALS Minerals at Sodankylä, Finland (prep lab) with gold assays performed at ALS Geochemistry in Rosia Montana, Romania, an ISO 17025 accredited laboratory. Approximately 18% of samples (Table 11.1) have been prepped at ALS Outokumpu, another preparation laboratory in Finland with analysis again performed at ALS Geochemistry, Rosia Montana, Romania. The assay method in use is Au-AA26, Au by fire assay 50 g sample weight and AAS finish (0.01 to 100 ppm). Preparation methods include CRU-31 fine crushing minimum 70% to <2 mm, and PUL-24e, pulverizing the entire sample (max 3 kg) minimum 85% to 75 microns (µm). Samples greater than 3 kg are split prior to pulverizing with method SPL-22.

After pulverizing, a 250 g extra split is packed separately and returned to Rupert Resources for use in umpire lab checks. The remaining pulp material is also returned to Rupert Resources for long term storage. The over limit samples (>100 ppm Au) are automatically re-assayed via fire assay with gravimetric finish, code Au-GRA22. Multi-elements (Ag, Al, Arsenic (As), Barium (Ba), Beryllium (Be), Bismuth (Bi), Ca, cadmium (Cd), cerium (Ce), Co, Cr, caesium (Cs), Cu, Fe, gallium (Ga), germanium (Ge), hafnium (Hf), indium (In), K, Lanthanum (La), Lithium (Li), Mg, Mn, molybdenum (Mo), Na, niobium (Nb), Ni, Phosphorus (P), Pb, rubidium (Rb), rhenium (Re), sulphur (S), antimony (Sb), scandium (Sc), selenium (Se), tin (Sn), strontium (Sr), tantalum (Ta), tellurium (Te), thorium (Th), Ti, thallium (Tl), uranium (U), V, tungsten (W), yttrium (Y), Zn, zirconium (Zr) have been routinely assayed using method ME-MS61, four acid digestion with Inductively Coupled Plasma Mass Spectrometry (ICP-MS) finish (Ultra Trace Level Method – 48 elements by HFHNO3-$HClO_4$ acid digestion, Hydrochloric Acid (HCl) leach, and a combination of ICP-MS and Inductively Coupled Plasma – Atomic Emission Spectroscopy [ICP-AE]). Multi-elements are assayed by ALS Geochemistry in Loughrea Ireland. All ALS laboratories are internationally accredited in accordance with ISO 17025.

Samples from some drill holes, amounting to ~7% of all samples, were assayed for gold in Eurofins Labtium Sodankylä (Table 11.1) utilizing their equivalent Au-705P method, gold assay 50 grammes (g) by fire assay with ICP-OES finish. Eurofins Labtium is ISO/IEC 17025 accredited by FINAS, the Finnish accreditation service. Labtium preparation method was agreed to match Rupert Resources' normal procedure at ALS. Jaw crushing of the samples to >60% less than (<)2 mm (method 31) with compressed air cleaning of jaws between samples, pulverizing the whole sample (max 3.5 kg) in one milling (method 50, LM5). After pulverizing the whole pulp is sampled to subsamples for following Fire Assay analysis. The pulp rejects are packed in plastic bags and one sub sample is forwarded to ALS Geochemistry in Loughrea Ireland for Multi Element analysis. The pulverizing puck and the bowl are cleaned by pulverizing barren quartzite.

In 2021 three holes, nine batches were also sent to CRS for preparation. Gold for these batches was assayed by their operational partner the ISO 17025 accredited MSA laboratories in Langley Canada. The preparation method was identical with ALS and Labtium procedures (PRP-999 and PWA-500), assay method was FAS-121, Au (0.005-10 ppm) by trace fire assay (50 g nominal sample weight), aqua regia digest and analysis by AAS. Overlimit assay for assays 10 to 1000 ppm was FAS-425, gravimetric fire assay.

All core is under custody from the drill site to the core processing facility. The Company's QA/QC programme includes the regular insertion of blanks and standards into the sample shipments, as well as duplicate sampling. Standards, blanks and duplicates are inserted at appropriate intervals. Approximately five percent (5%) of the pulps are sent for check assaying at a second lab (umpire split 250 g). Core recovery in the mineralized zones has averaged >99%.

Table 11.1: Ikkari Assay Samples by Laboratory

Preparatory Laboratory	Number of Samples	Assaying Laboratory	Number of Samples
ALS – Sodankylä	74,570	ALS – Romania	93,080
ALS – Outokumpu	18,510		
Eurofins / Labtium	7,747	Eurofins / Labtium	7,747
CRS	3,011	MSA	3,011

Source: Internal Rupert Resources Ltd database, 2023

11.2 Assay Quality Control

For drilling carried out since the beginning of exploration until present the following sets of data have been reviewed and statistically assessed:

- CRM submitted by Rupert Resources to the independent assay laboratories.
- CRM inserted internally by the assay laboratories.
- Sample pairs, including drill core duplicates, pulp duplicates and pulp replicates (lab duplicates) and external duplicates (umpire duplicates).
- Barren samples ("blanks") submitted by both Rupert Resources and the assay laboratory.

Standard failures are defined internally as those greater than three times the standard deviation from the certified value. Where this occurs, a re-assay is requested for both the failing standard and the 10 samples either side of the failure; given the insertion rate this covers all samples to the next quality control sample in each direction. Warnings are generated where a standard assays outside of two times the standard deviation from the certified value. Persistent failures, in one direction, between 2-3 times the standard deviation are also re-assayed.

Blanks are monitored for contamination issues with re-assays typically requested for a value over ten (10) times the detection limit is returned. Lower-level contamination issues are routinely discussed with the respective laboratories during regular monthly meetings.

Duplicate data is monitored on a quarterly basis. With the expected differences between duplicate pairs now well established at Ikkari, duplicates are monitored for decreased precision that could result from sample preparation or analytical issues.

11.2.1 QC Data

QA/QC data from sampling and analyses have been compiled in acQuire 4 relational database. The relevant information has been downloaded for statistical review and analysis. Presented in this report are only the Standards and blanks submitted by Rupert Resources as well as all data pairs, internal QC standards by the laboratories are not presented here.

Blanks:

- Submitted by Rupert Resources to each of the three laboratories (ALS, Eurofins, CRS)

CRM (Standards):

- Submitted by Rupert Resources to each of the three laboratories (ALS, Eurofins, CRS)

Data Pairs:

- Core duplicates (quarter core pairs).
- Pulp duplicate (duplicate samples taken after pulverized to >85% <75 µm).
- Lab duplicates (duplicates samples taken from within one pulp sachet).
- Umpire checks (Pulp split sent to second laboratory).

11.2.1.1 Blanks

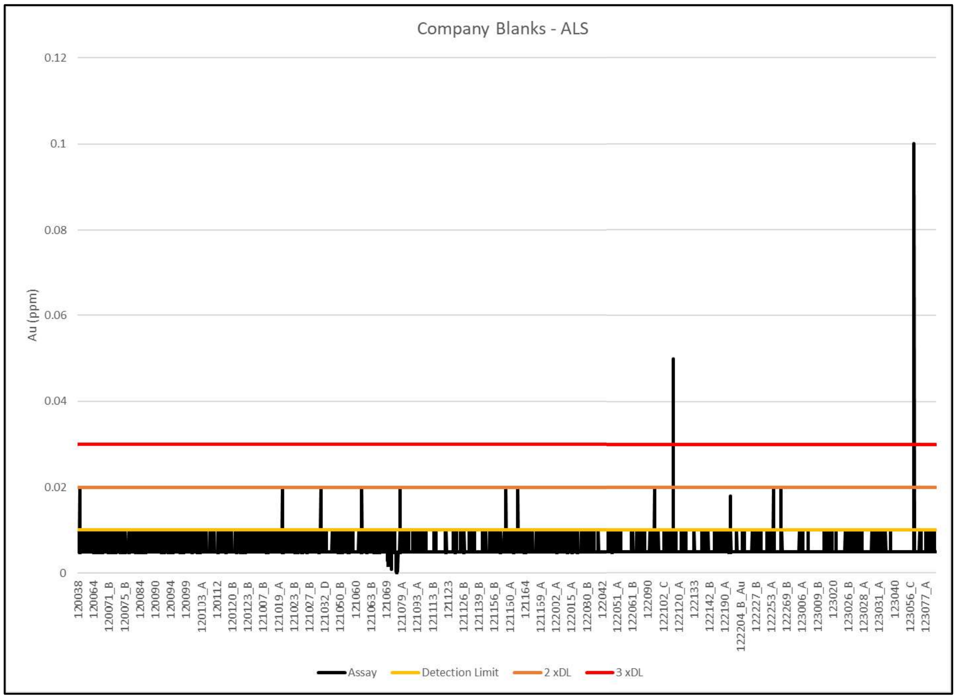
Analyses on blanks have been carried out on blank samples submitted by Rupert Resources and on inserted blanks inserted by laboratories, as part of the laboratory QA/QC procedures. The blank material Rupert Resources has been using and continues to use is quartz gravel provided by Sibelco Nordic/Nilsiä kvartsi. Rupert Resources' QA/QC routine with the fire assay method stipulates submitting blanks at the rate of 1 in 20 samples which is the equivalent rate of 1 in 18 primary samples taking both core duplicates and CRMs into account.

Table 11.2 and Figure 11.1 summarise the results of assaying blank samples. For the great majority of analyses, the blanks returned less than detection limit results. A total of 4 blanks have returned assays over three times the detection limit and no systematic contamination from high-grade samples has been noted.

Table 11.2: Ikkari Gold Deposit Blanks

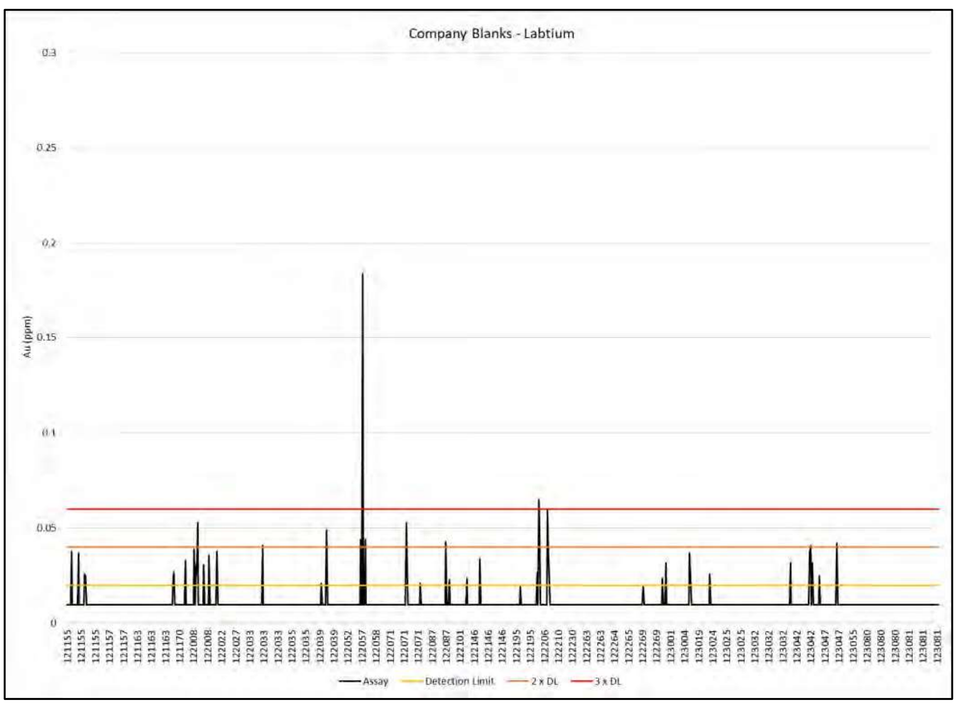
Standard	Assay Method	Laboratory	Number	Expected Value	Mean	% Bias	% in Tolerance
BLK-CO01	Au-AA26-ppm	ALS	5403	0.010	0.0058	-42.0	99.96
BLK-CO01	Au-705P-ppm	Labtium	995	0.020	0.0113	-43.4	99.80
BLK-CO01	Au-FAS121-ppm	CRS/MSA	92	0.005	0.0029	-42.5	100

Notes: % bias = (mean assay - certified value) / certified value *100.
Tolerance here defined as three times detection limit.
Source: Internal Rupert Resources Ltd database, 2023



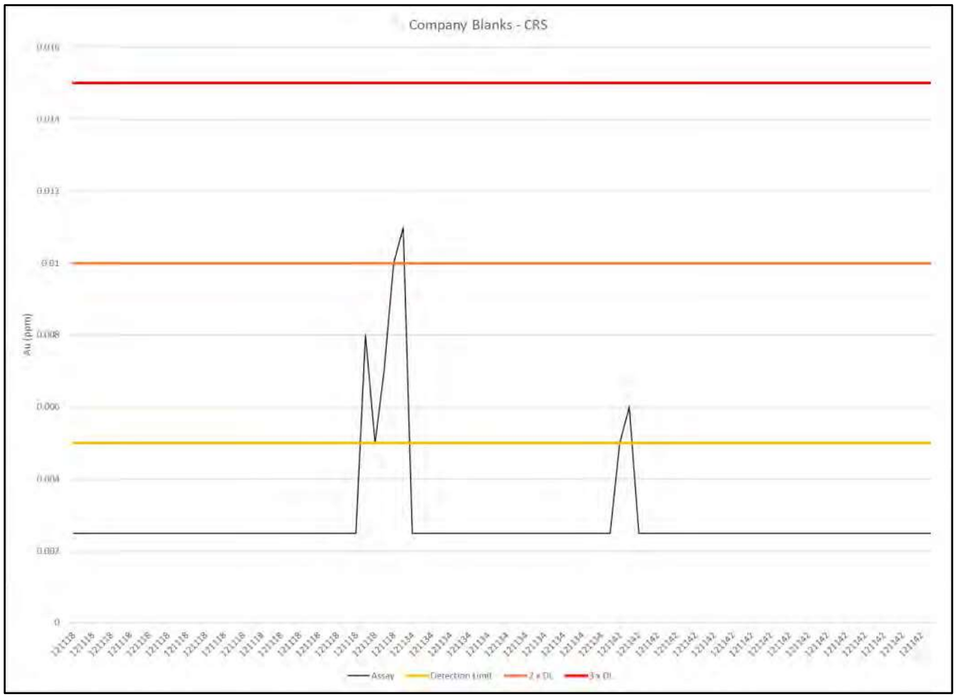
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.1: Rupert Resources Blank (BLK-CO01) Performance, ALS



Source: Internal Rupert Resources Ltd database, 2023

Figure 11.2: Rupert Resources Blank (BLK-CO01) Performance, Labtium



Source: Internal Rupert Resources Ltd database, 2023

Figure 11.3: Rupert Resources Blank (BLK-CO01) Performance, CRS

11.2.1.2 CRM Submitted by Rupert Resources

Rupert Resources routinely submitted accredited CRM at the rate of 1 CRM per 20 samples which is equivalent of 1 in 18 primary samples (5.5%). Rupert Resources has primarily been using gold certified reference materials produced by Geostats Pty Ltd. These CRM's have been selected to represent a range of gold grades covering the vast majority of the grade range experienced at Ikkari. Rupert Resources has also used a minor quantity CRMs prepared by CDN Resource Laboratories Ltd (CDN-GS-3H, CDN-GS-3K, CDN-GS-P7B and CDN-GS-P7H).

Table 11.3: Ikkari Gold Deposit Standards Submitted to ALS by Rupert Resources

Standard	Assay method	Number	Expected Value	Mean	% Bias	% RSD	% in Tolerance
G312-4	Au-AA26	1	5.3	5.2	-1.89	NA	100
G314-2	Au-AA26	55	0.99	0.98	-1.01	2.53	100
G315-7	Au-AA26	49	0.30	0.29	-2.24	2.58	100
G320-10	Au-AA26	448	0.65	0.64	-1.15	3.51	100
G398-4	Au-AA26	15	0.66	0.65	-2.12	3.07	100
G912-3	Au-AA26	1436	2.09	2.08	-0.51	2.94	100
G915-2	Au-AA26	1486	4.98	5.01	0.62	2.24	100
G915-4	Au-AA26	680	9.16	9.03	-1.43	1.76	100
G915-6	Au-AA26	939	0.67	0.65	-2.61	3.87	100
G917-4	Au-AA26	6	5.10	5.10	0.00	1.49	100
G917-7	Au-AA26	15	4.96	5.01	0.98	2.30	100
GBMS304-3	Au-AA26	32	2.68	2.71	1.19	2.73	100
GBMS304-4	Au-AA26	56	5.67	5.63	-0.65	2.75	100
CDN-GS-3H	Au-AA26	14	3.04	3.02	-0.72	3.74	100
CDN-GS-3K	Au-AA26	11	3.19	3.15	-1.37	2.72	100
CDN-GS-P7B	Au-AA26	1	0.71	0.69	-2.82	NA	100
CDN-GS-P7H	Au-AA26	25	0.80	0.80	0.28	2.27	100

Notes: % bias = (mean assay - certified value) / certified value *100
% RSD = Standard deviation of assays / certified value *100
Tolerance here defined as three times standard deviation.
Source: Internal Rupert Resources Ltd database, 2023

Table 11.4: Ikkari Gold Deposit Standards Submitted to Labtium by Rupert Resources

Standard	Assay method	Number	Expected Value	Mean	% Bias	% RSD	% in Tolerance
G320-10	Au-705P	141	0.65	0.66	1.53	2.77	100
G912-3	Au-705P	265	2.09	2.13	1.80	2.15	100
G915-2	Au-705P	217	4.98	5.09	2.30	2.34	100
G915-4	Au-705P	202	9.16	9.26	1.06	2.04	100
G915-6	Au-705P	91	0.67	0.67	0.12	4.91	100
G919-7	Au-705P	23	4.96	5.02	0.71	1.48	100
GBMS304-3	Au-705P	4	2.68	2.72	1.53	3.26	100
GBMS304-4	Au-705P	16	5.67	5.64	-0.45	2.33	100

Notes: % bias = (mean assay - certified value) / certified value *100
% RSD = Standard deviation of assays / certified value *100
Tolerance here defined as three times standard deviation.
Source: Internal Rupert Resources Ltd database, 2023

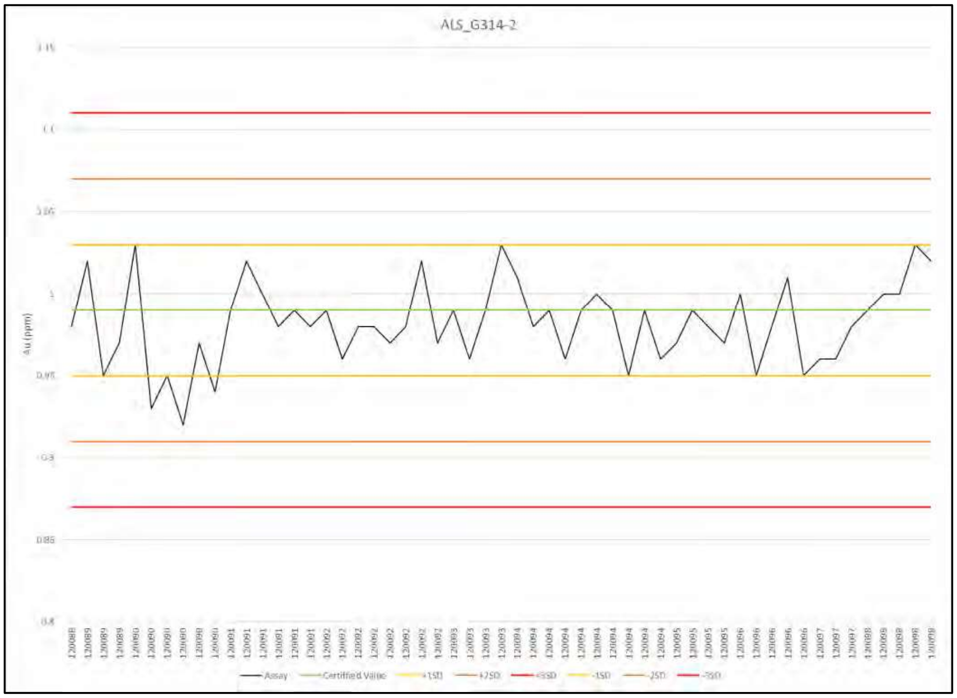
Table 11.5: Ikkari Gold Deposit Standards Submitted to CRS/MSA by Rupert Resources

Standard	Assay method	Number	Expected Value	Mean	% Bias	% RSD	% in Tolerance
G912-3	Au-FAS121	22	2.09	2.04	-2.55	3.75	100
G915-2	Au-FAS121	24	4.98	4.97	-0.18	2.64	100
G915-4	Au-FAS121	24	9.16	8.83	-3.56	2.61	100
G915-6	Au-FAS121	21	0.67	0.63	-6.08	3.45	100

Notes: % bias = (mean assay - certified value) / certified value *100
% RSD = Standard deviation of assays / certified value *100
Tolerance here defined as three times standard deviation.
Source: Internal Rupert Resources Ltd database, 2023

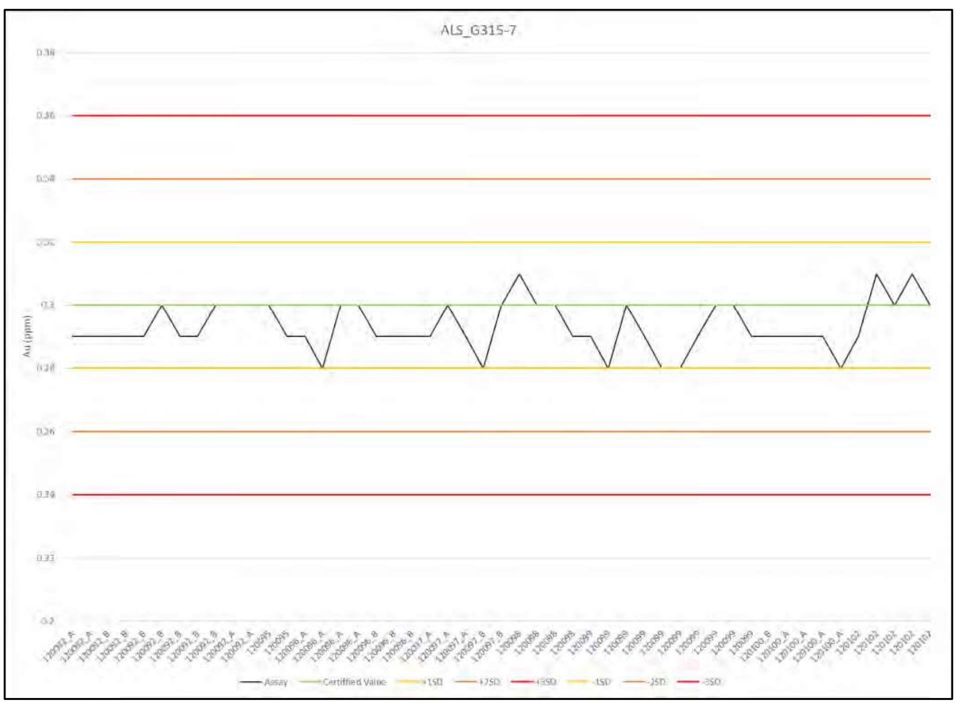
Control graphs for the most commonly utilized standards at ALS (8), Labtium (6) and CRS (4) are presented below:

- ALS: Figure 11.4 through Figure 11.11
- Labtium: Figure 11.12 though Figure 11.17
- CRS: Figure 11.18 though Figure 11.21



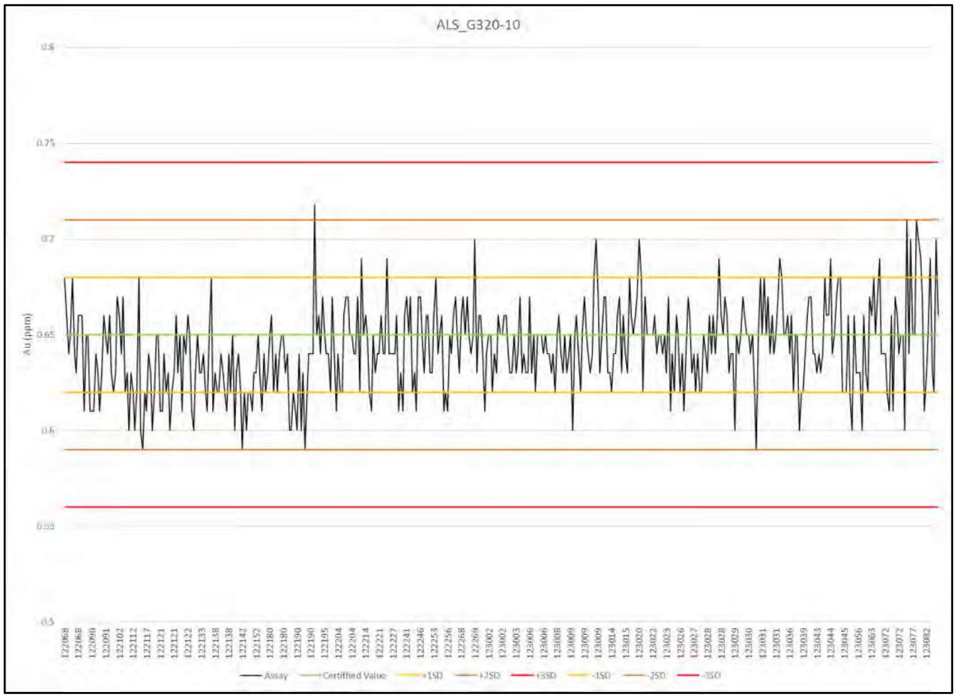
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.4: Rupert Resources CRM's Performance in ALS, G314-3



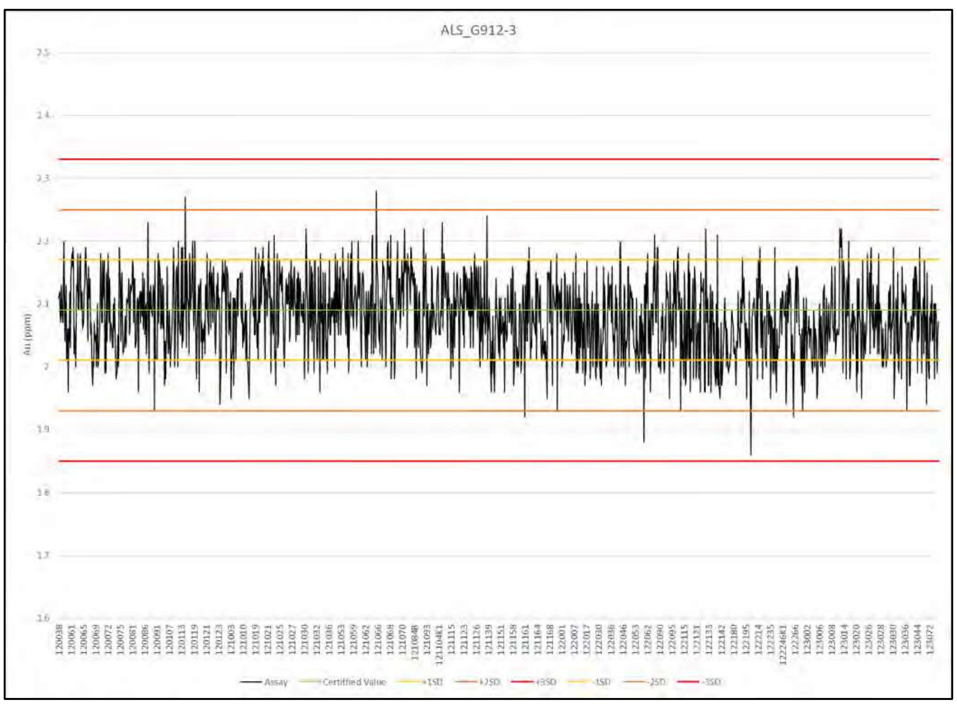
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.5: Rupert Resources CRM's Performance in ALS, G315-7



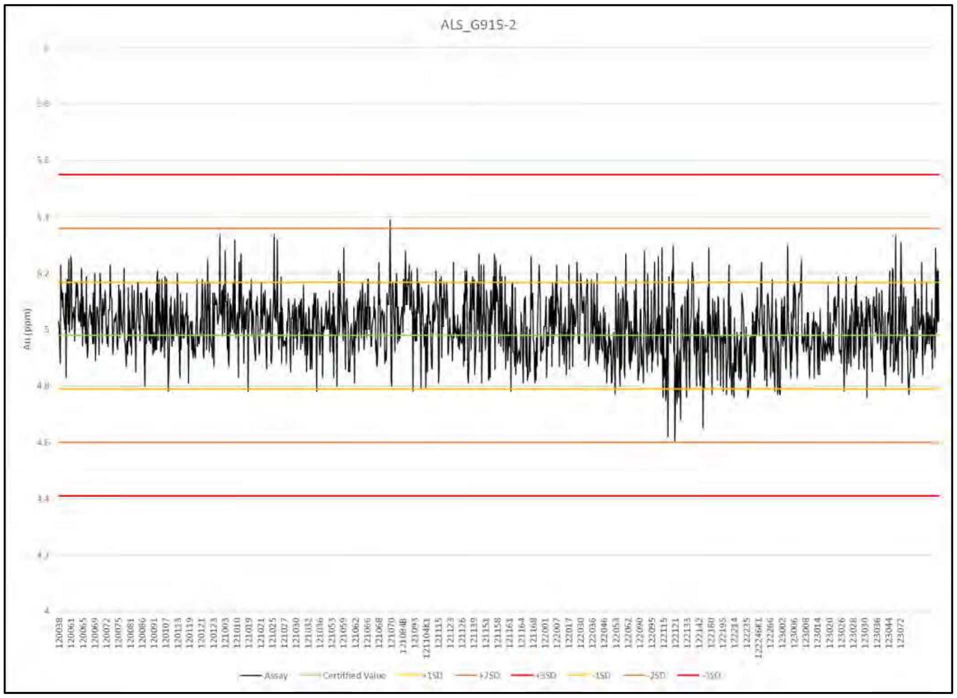
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.6: Rupert Resources CRM's Performance in ALS, G320-10



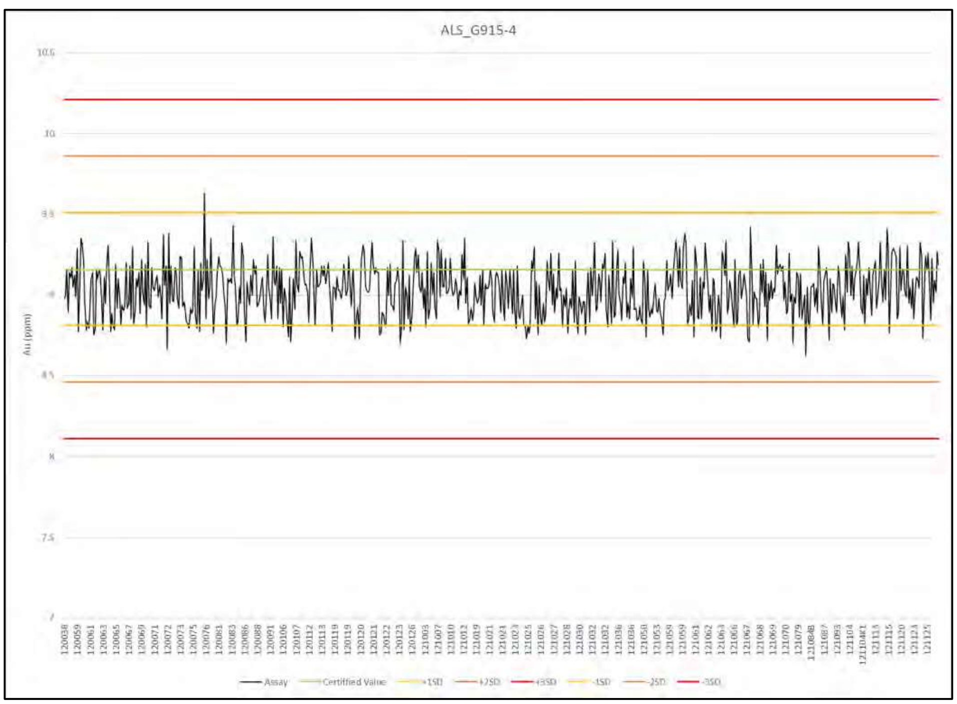
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.7: Rupert Resources CRM's Performance in ALS, G912-3



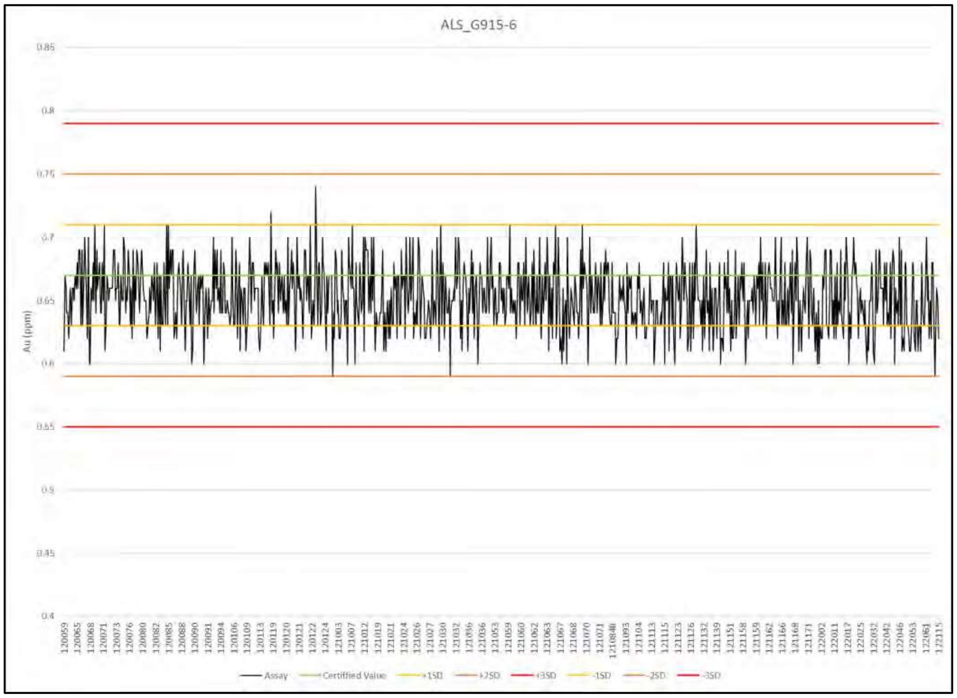
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.8: Rupert Resources CRM's Performance in ALS, G915-2



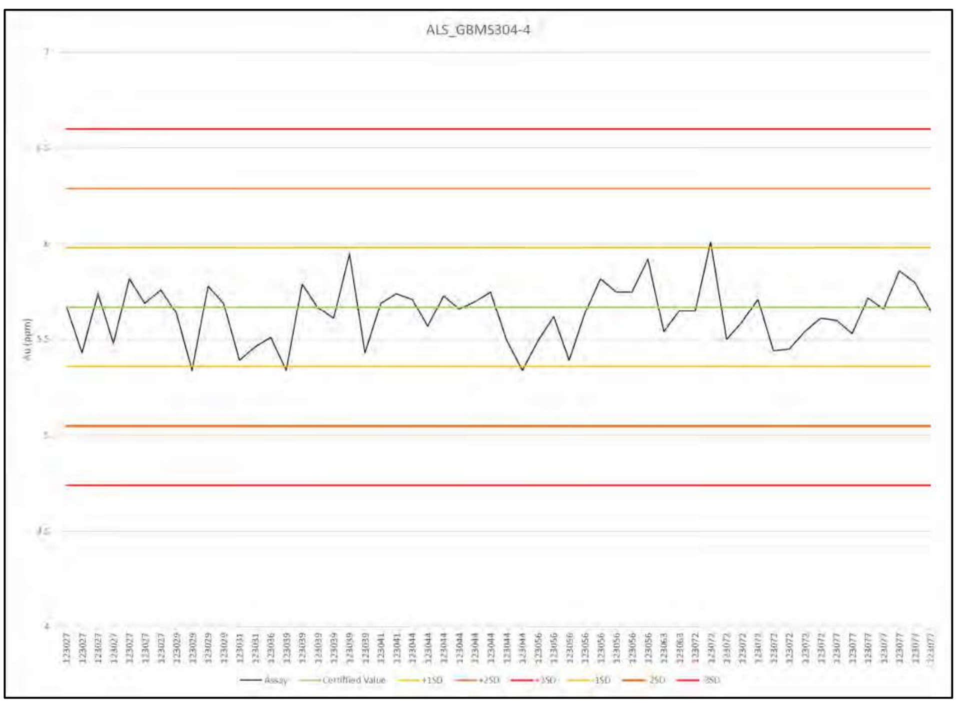
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.9: Rupert Resources CRM's Performance in ALS, G915-4



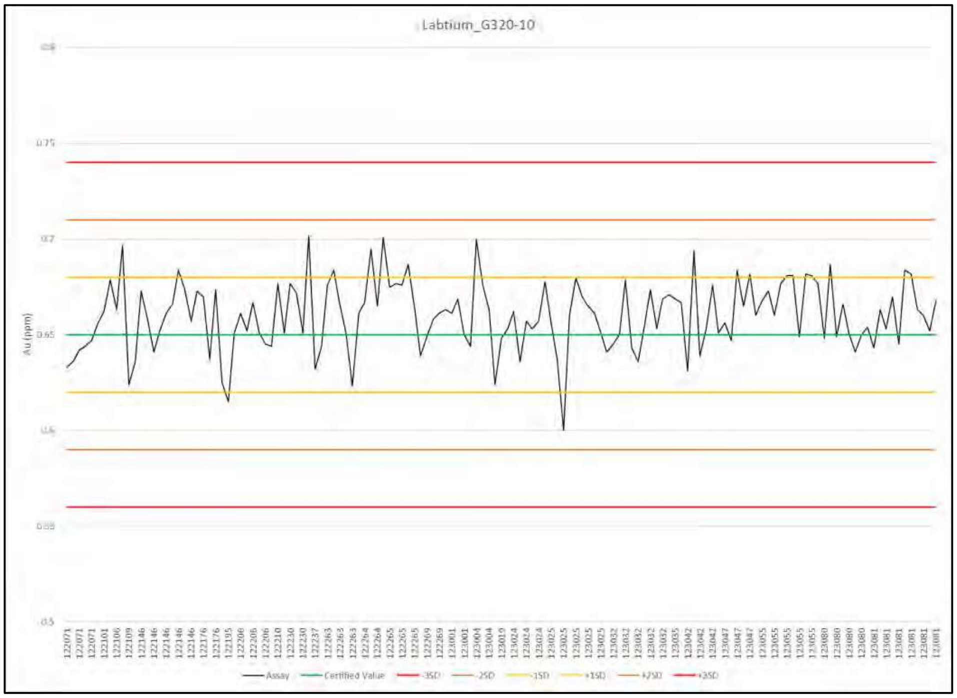
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.10: Rupert Resources CRM's Performance in ALS, G915-6



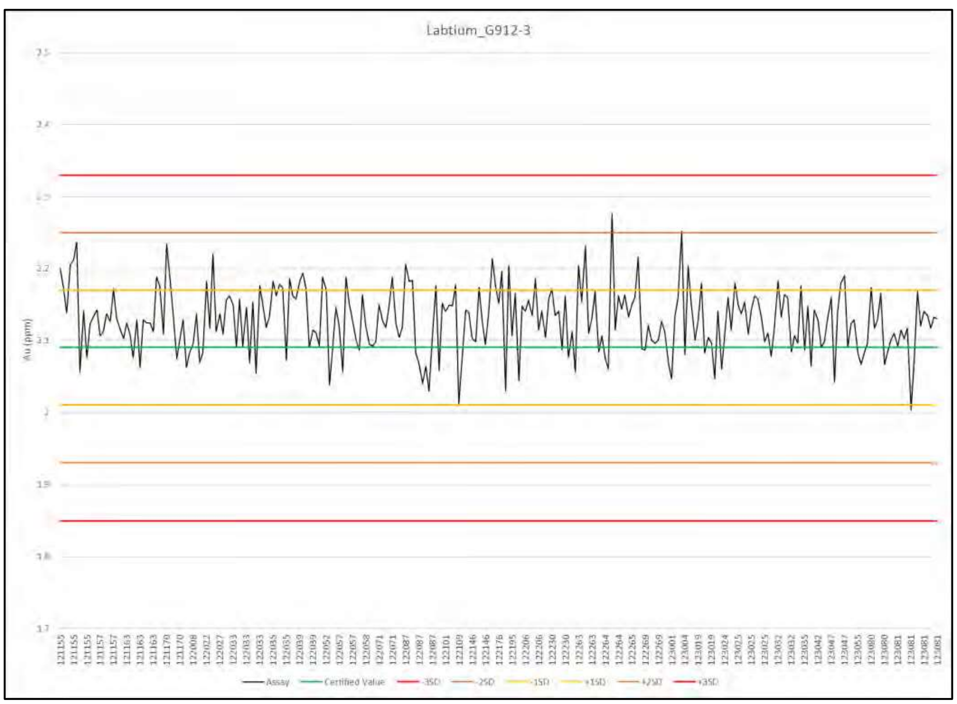
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.11: Rupert Resources CRM's Performance in ALS, GBMS304-4



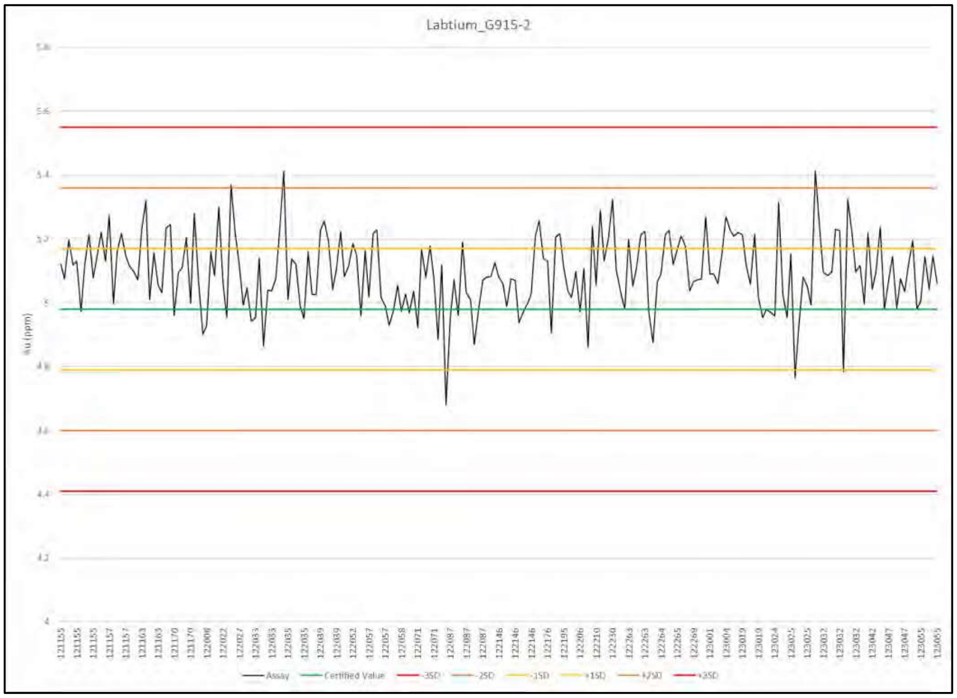
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.12: Rupert Resources CRM's Performance in Labtium/Eurofins, G320-10



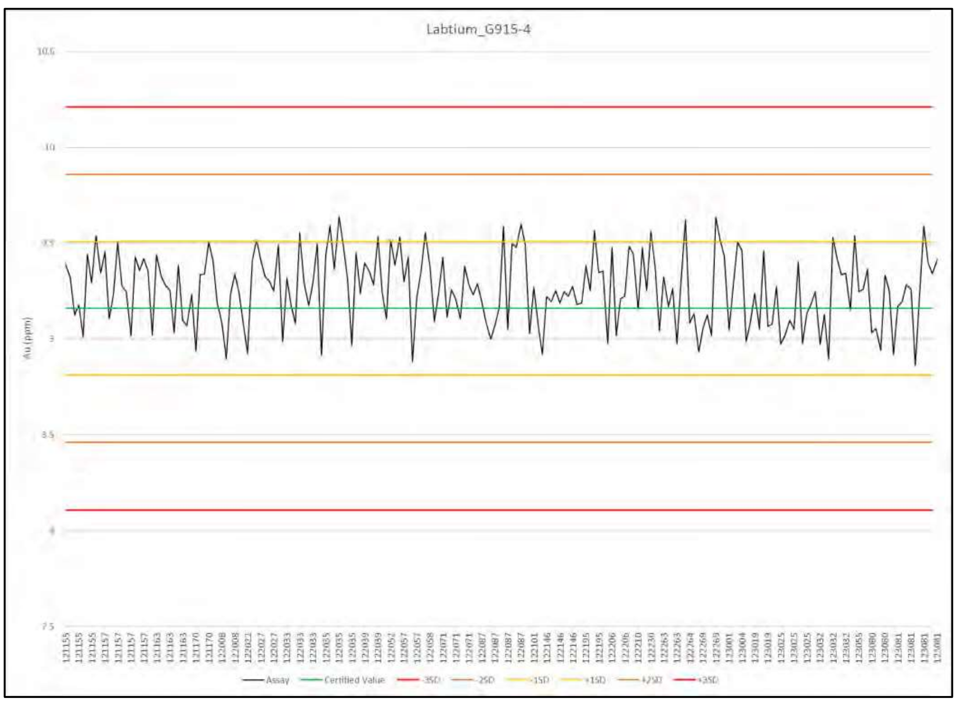
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.13: Rupert Resources CRM's Performance in Labtium/Eurofins, G912-3



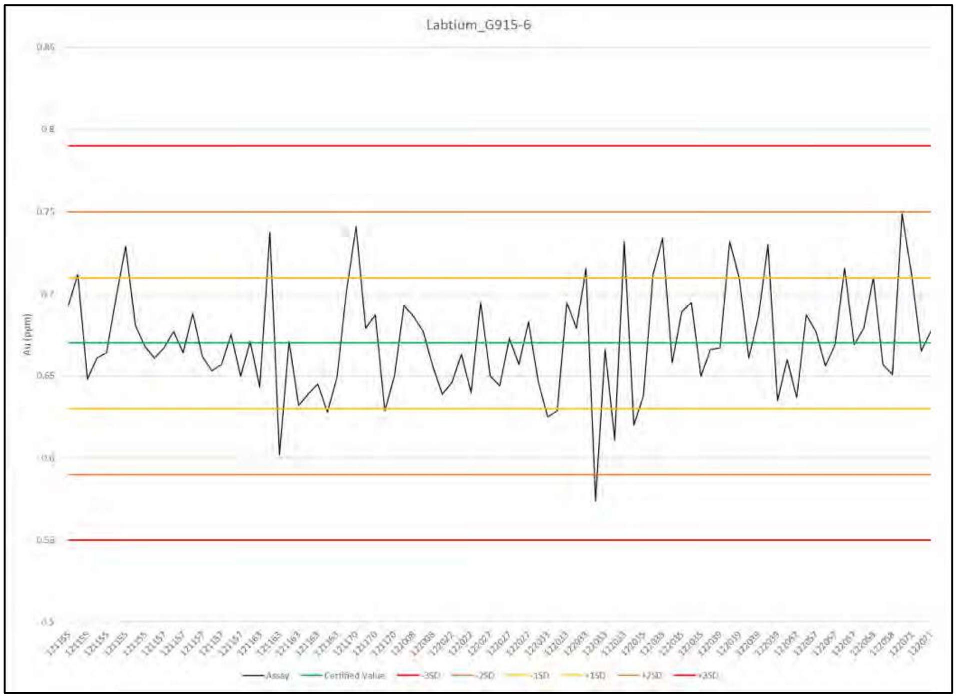
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.14: Rupert Resources CRM's Performance in Labtium/Eurofins, G915-2



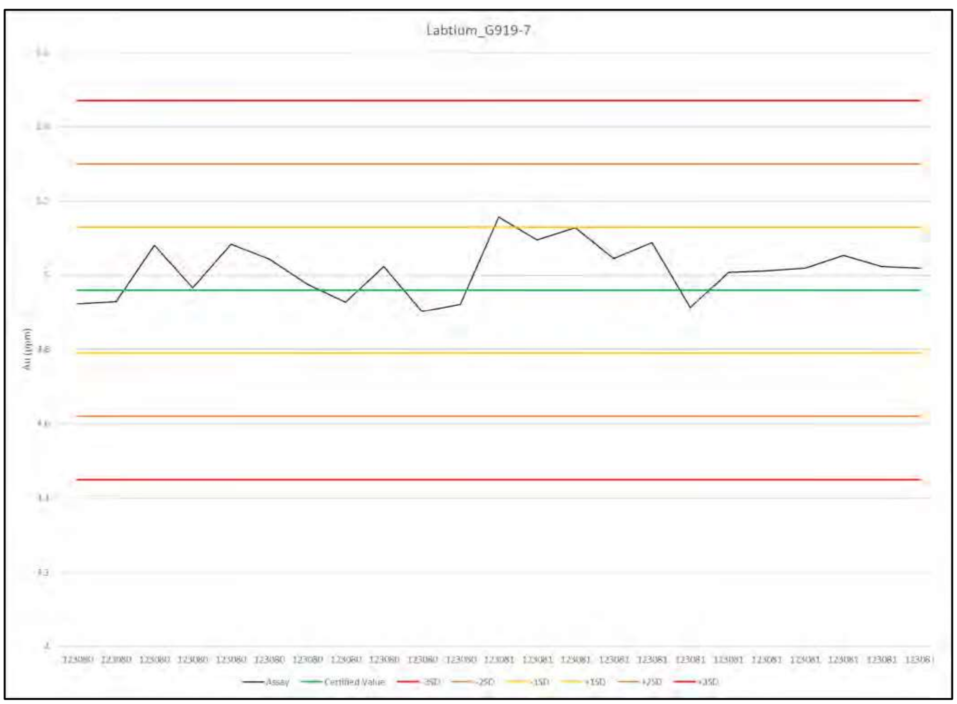
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.15: Rupert Resources CRM's Performance in Labtium/Eurofins, G915-4



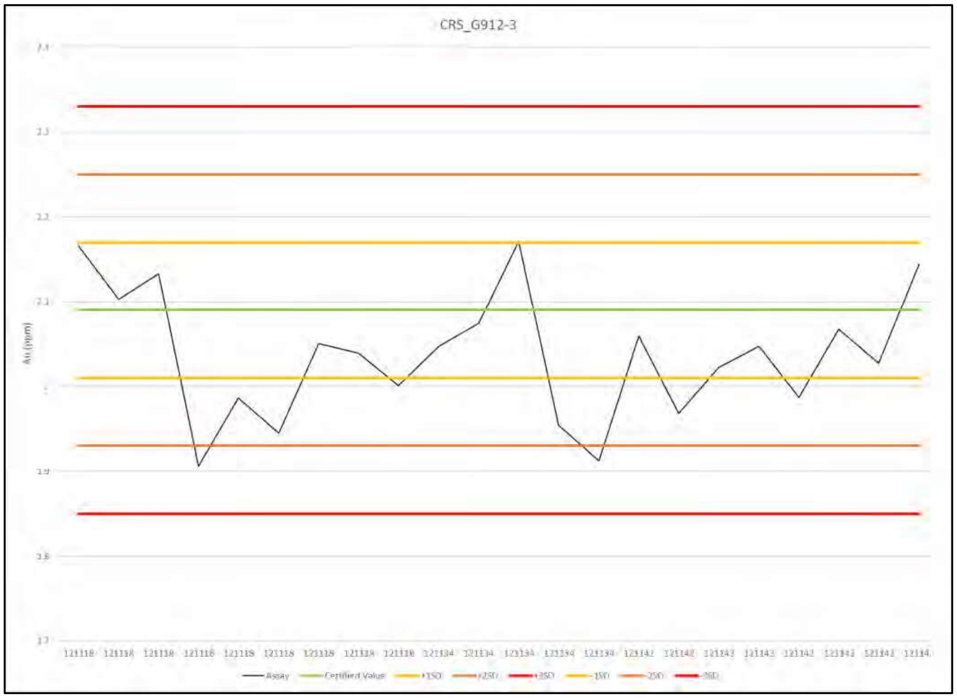
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.16: Rupert Resources CRM's Performance in Labtium/Eurofins, G915-6



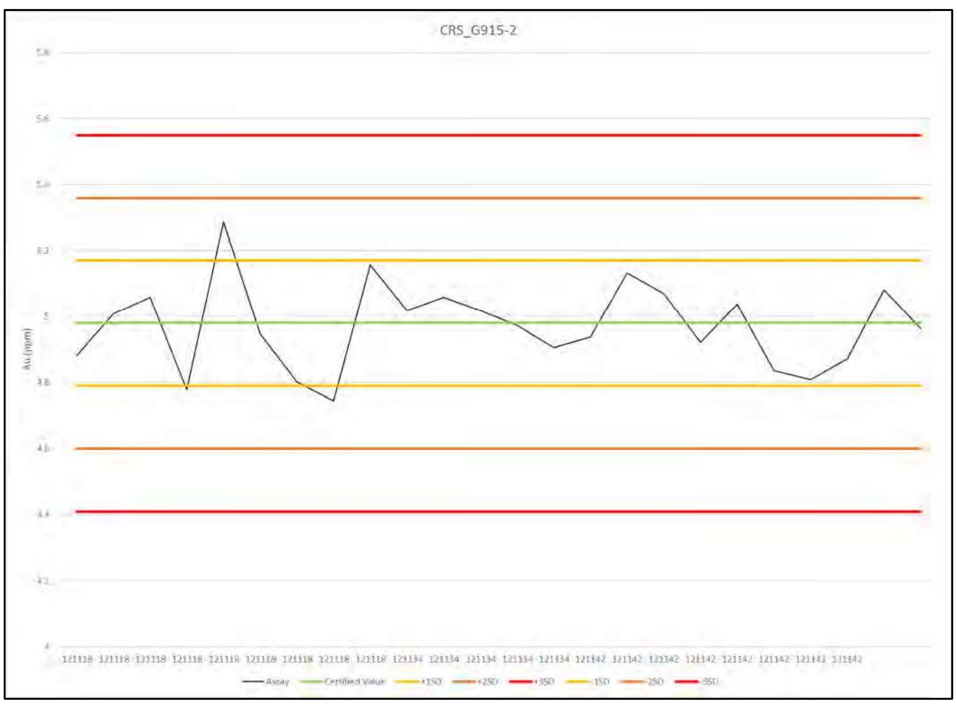
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.17: Rupert Resources CRM's Performance in Labtium/Eurofins, G919-7



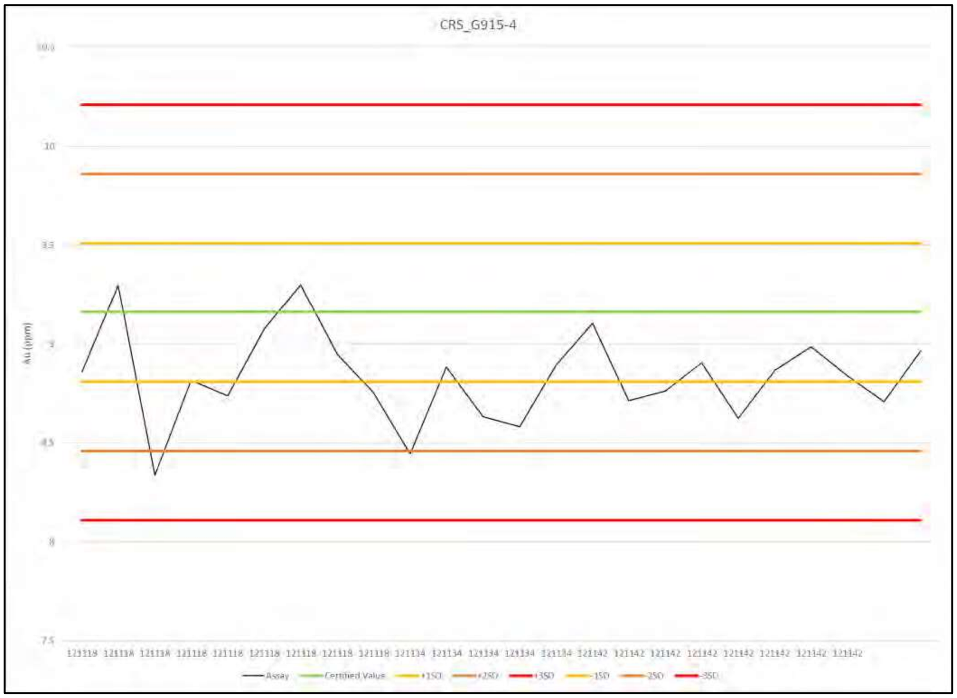
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.18: Rupert Resources CRM's Performance in CRS/MSA, G912-3



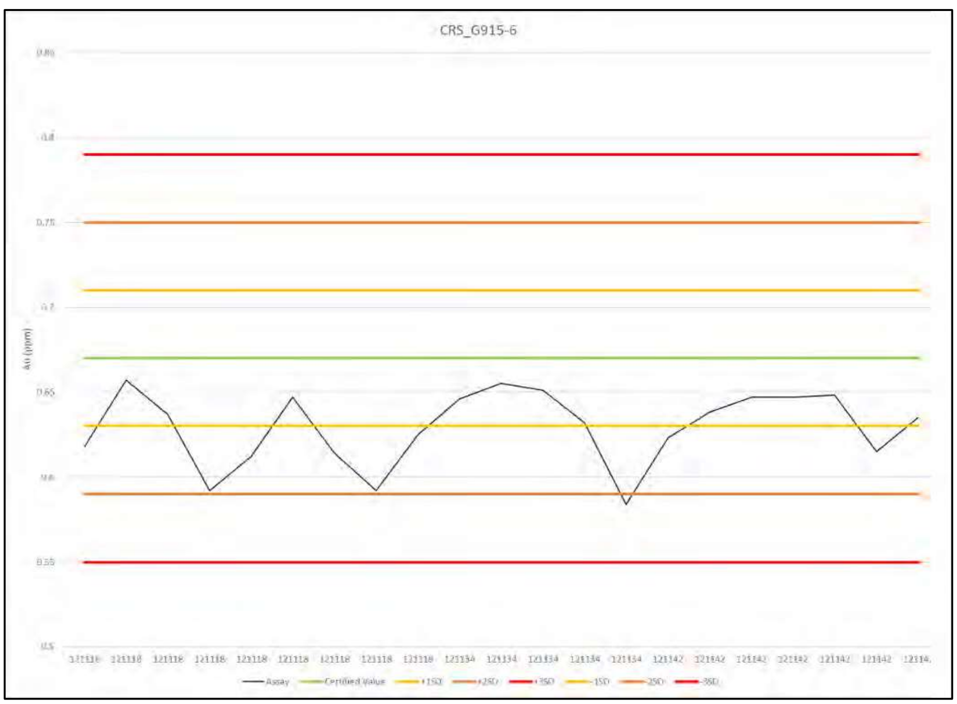
Source: Internal Rupert Resources Ltd database, 2023

Figure 11.19: Rupert Resources CRM's Performance in CRS/MSA, G915-2



Source: Internal Rupert Resources Ltd database, 2023

Figure 11.20: Rupert Resources CRM's Performance in CRS/MSA, G915-4



Source: Internal Rupert Resources Ltd database, 2023

Figure 11.21: Rupert Resources CRM's Performance in CRS/MSA, G915-6

11.2.1.3 Comparison of Common CRM

All CRM's Rupert Resources have been using since July 2018 perform very well with used fire assay methods in all laboratories, the main laboratory ALS minerals as well as in MSA labs and Eurofins Labtium. Rupert Resources' policy of re-assaying CRMs (and the surrounding primary samples) when assays occur outside of three standard deviations results in a very narrow spread of results for all CRMs.

For all CRMs, ALS demonstrates a very slight negative bias when compared with the certified values whereas Eurofins Labtium demonstrates a very slight positive bias relative to the certified value; CRS, with its limited dataset demonstrates a larger negative bias.

Considering the variability, the same standards (G915-6) demonstrate the highest variability at both ALS and Eurofins Labtium indicative of slightly less homogenized reference material. G915-4 and G919-7 produce the lowest Relative Standard Deviation (RSD) at both ALS and Eurofins Labtium indicative of very homogenous reference material. This together with the similarities between the laboratories in RSD suggest both laboratories have similar levels of precision, something that is further addressed when discussing the data pairs.

11.2.1.4 Data Pairs

Rupert Resources' QA/QC routine with the fire assay method includes submitting core duplicates, pulp duplicates, and umpire checks, each 5% of the samples.

Available data pairs have been reviewed, subdivided by the assay laboratory. The different types of data pairs comprise the following:

- Field duplicates (quarter core pairs).
- Lab duplicates (two samples taken after pulverizing sample material >85% <75 µm).
- Pulp duplicates (duplicates samples taken from within one pulp sachet).
  - *Pulp duplicates not performed at CRS Laboratory

Umpire checks (Pulp split sent to second laboratory) are detailed in section 11.1.1.5

Table 11.6: Ikkari Gold Deposit Data Pairs

Duplicate Type	Laboratory	Total Number of Pairs	Au Original Mean (g/t)	Au Check Mean (g/t)	Corr. Coeff.
Field duplicate	ALS_All	5308	0.35	0.33	0.73
Pulp duplicate	ALS_SO	5149	0.48	0.48	0.99
Pulp duplicate	ALS_OT	103	0.17	0.19	0.99
Lab duplicate	ALS_All	5039	1.12	1.14	0.99
Field duplicate	Labtium	979	0.40	0.44	0.70
Pulp duplicate	Labtium	973	0.34	0.34	0.99
Lab duplicate	Labtium	438	1.27	1.26	0.99
Field duplicate	CRS/MSA	94	0.06	0.09	0.61
Lab duplicate	CRS/MSA	47	0.61	0.65	0.99

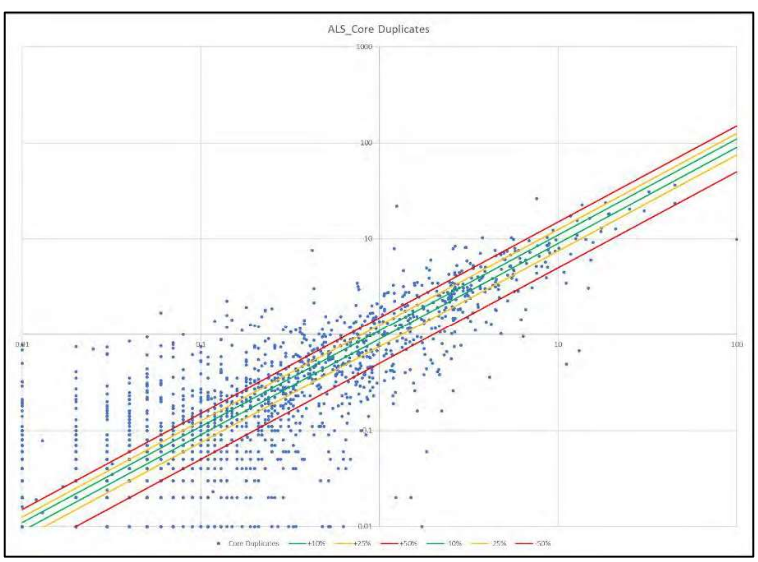
ALS Sodankylä and ALS Outokumpu are preparation laboratories only with assaying from both completed at ALS Romania. Laboratory duplicates and core duplicates have therefore been grouped for both preparation laboratories.

The paired assay data has been assessed using the following techniques and plots:

- MPRD by Mean Grade.
- Correlation Plot.
- Quantile-Quantile Plot.

The contents of the following figures are set out below:

- Figure 11.22: Sample Pair Statistical Analysis: Samples Submitted to ALS: Field Duplicates
- Figure11.23: Sample Pair Statistical Analysis: Samples Submitted to ALS Sodankylä: Pulp Duplicates
- Figure11.24: Sample Pair Statistical Analysis: Samples Submitted to ALS Outokumpu: Pulp Duplicates
- Figure11.25: Sample Pair Statistical Analysis: Samples Submitted to ALS: Laboratory Duplicates
- Figure11.26: Sample Pair Statistical Analysis: Samples Submitted to Labtium: Field Duplicates
- Figure11.27: Sample Pair Statistical Analysis: Samples Submitted to Labtium: Pulp Duplicates
- Figure11.28: Sample Pair Statistical Analysis: Samples Submitted to Labtium: Laboratory Duplicates
- Figure11.29: Sample Pair Statistical Analysis: Samples Submitted to MSA/CRS: Field Duplicates
- Figure11.30: Sample Pair Statistical Analysis: Samples Submitted to CRS/MSA: Laboratory Duplicates
  - *No Pulp Duplicates were performed on samples submitted to CRS/MSA
  - *ALS Sodankyla and ALS Outokumpu



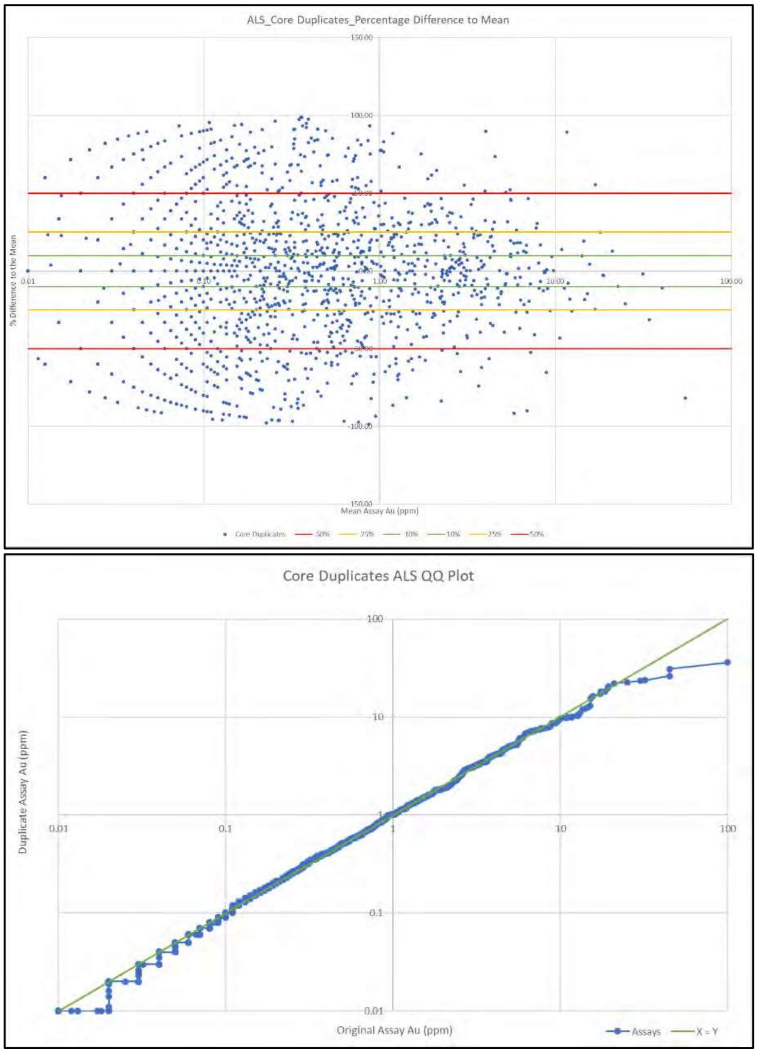


Figure 11.22: Sample Pair Statistical Analysis: Samples Submitted to ALS: Field Duplicates

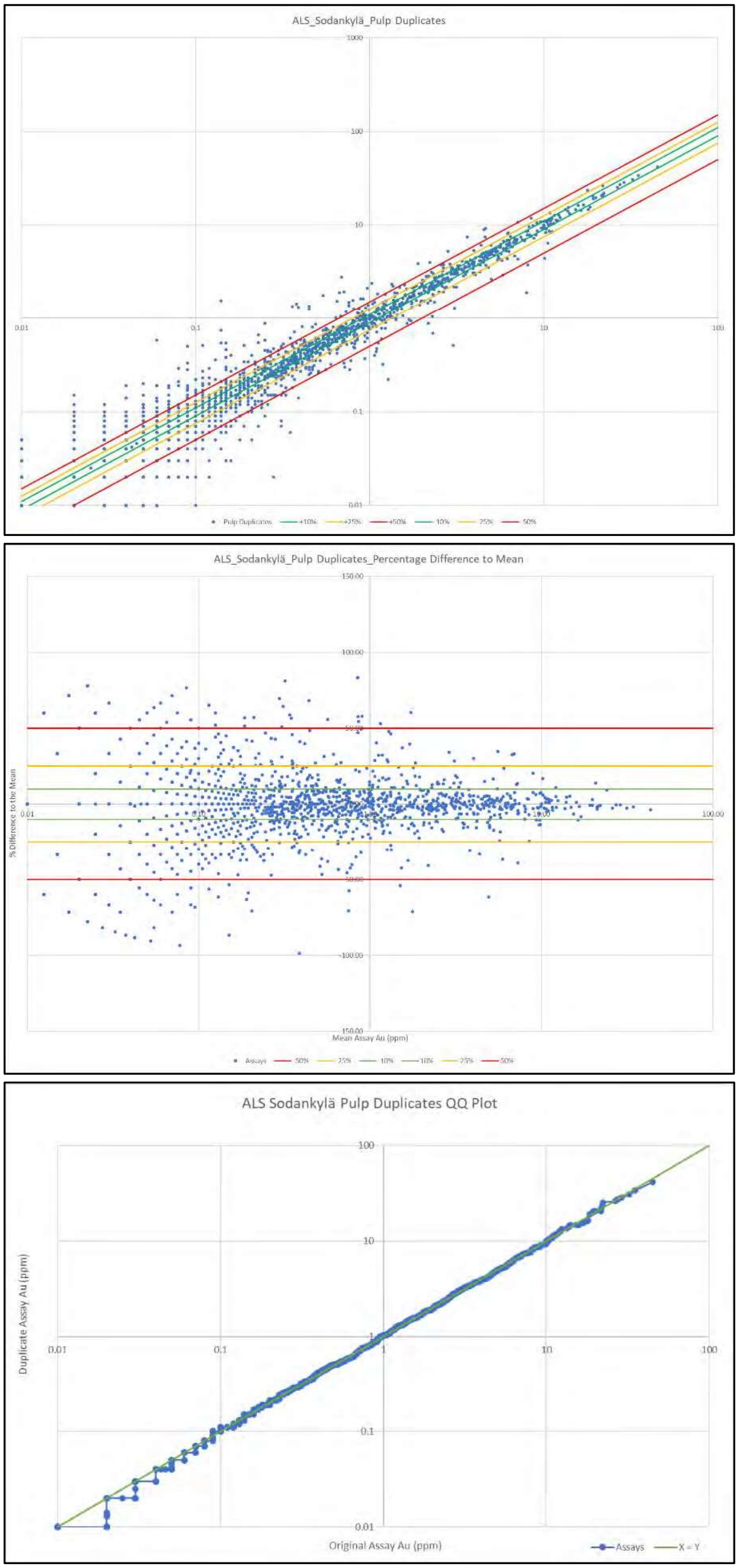


Figure11.23: Sample Pair Statistical Analysis: Samples Submitted to ALS Sodankylä: Pulp Duplicates

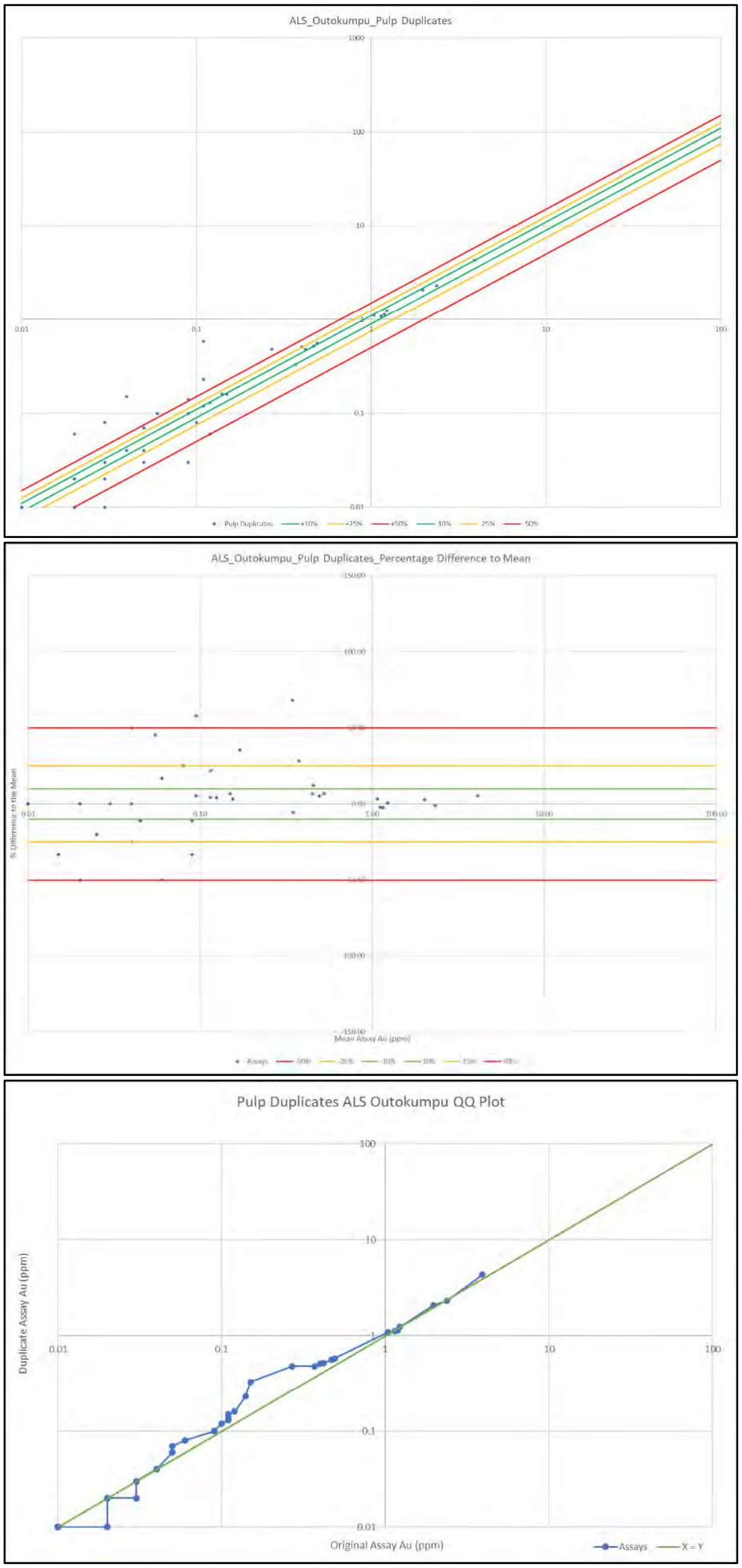


Figure11.24: Sample Pair Statistical Analysis: Samples Submitted to ALS Outokumpu: Pulp Duplicates

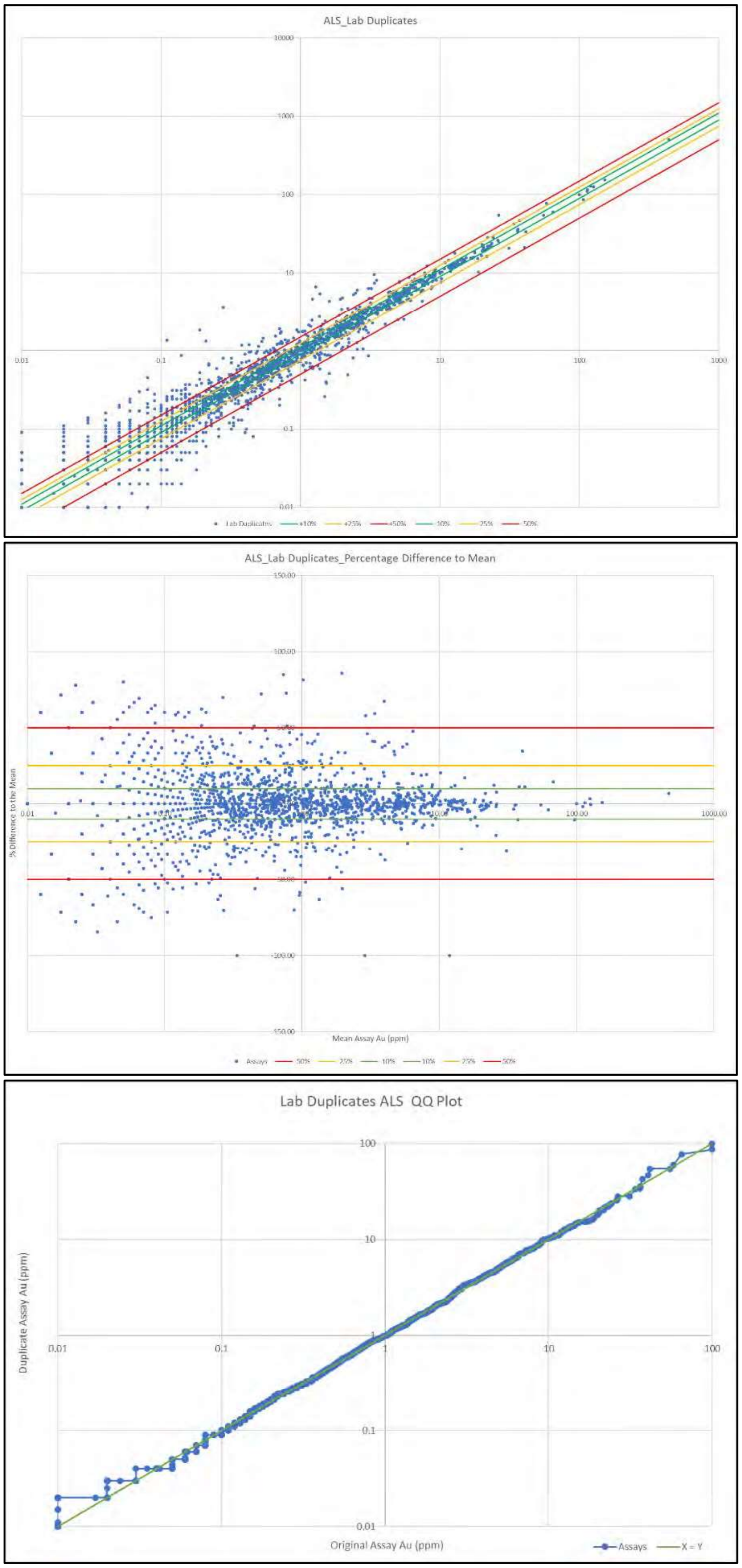


Figure11.25: Sample Pair Statistical Analysis: Samples Submitted to ALS: Laboratory Duplicates

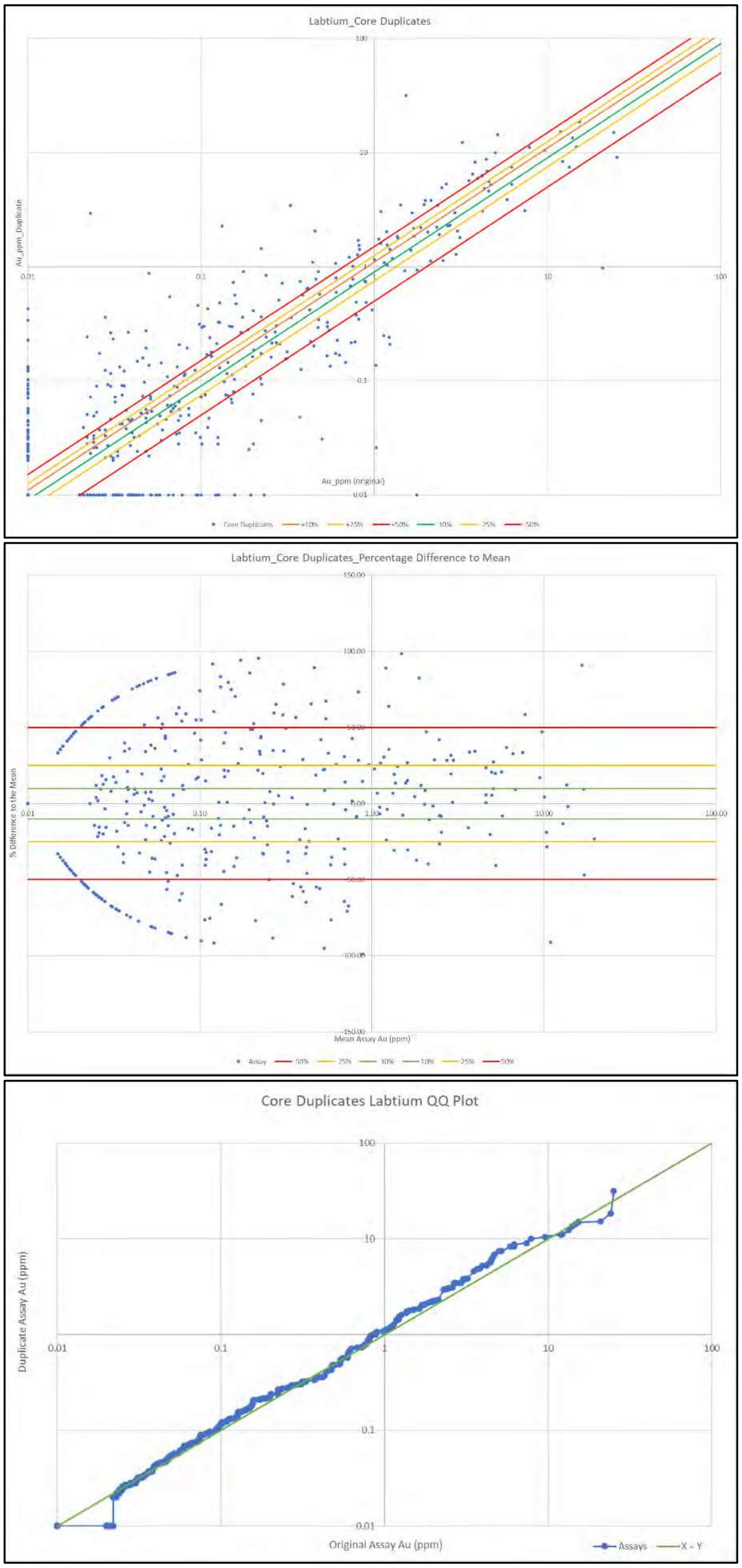


Figure11.26: Sample Pair Statistical Analysis: Samples Submitted to Labtium: Field Duplicates

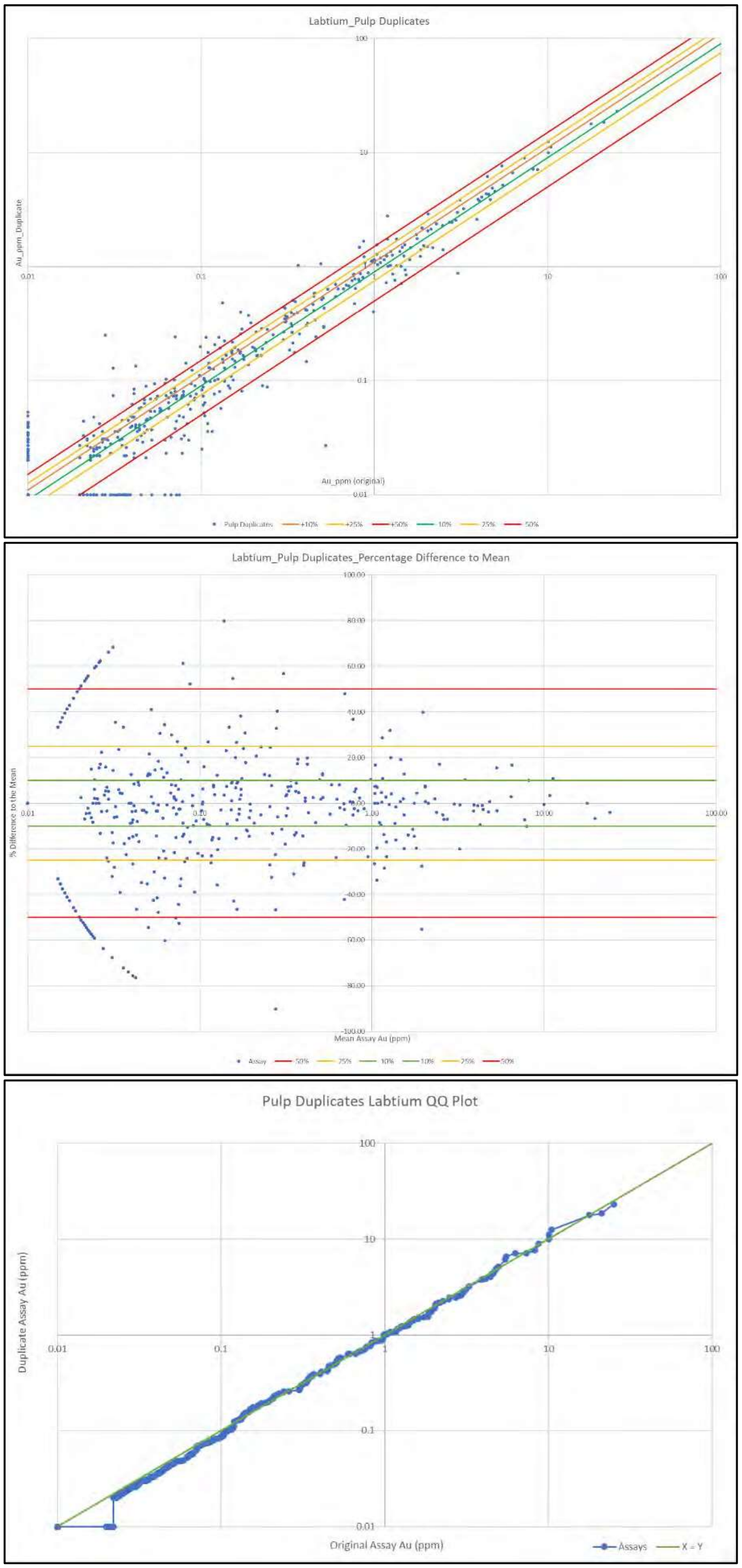


Figure11.27: Sample Pair Statistical Analysis: Samples Submitted to Labtium: Pulp Duplicates

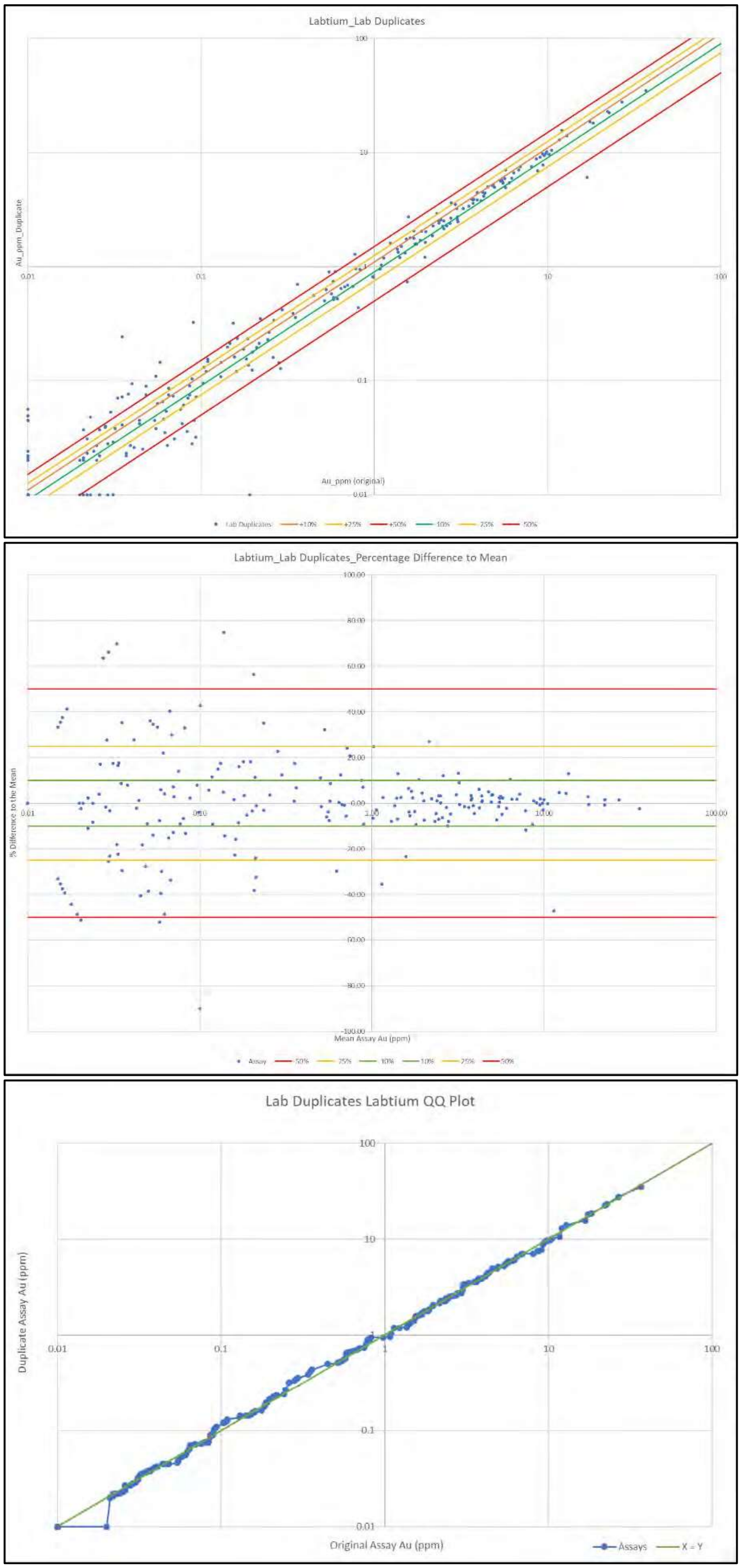


Figure11.28: Sample Pair Statistical Analysis: Samples Submitted to Labtium: Laboratory Duplicates

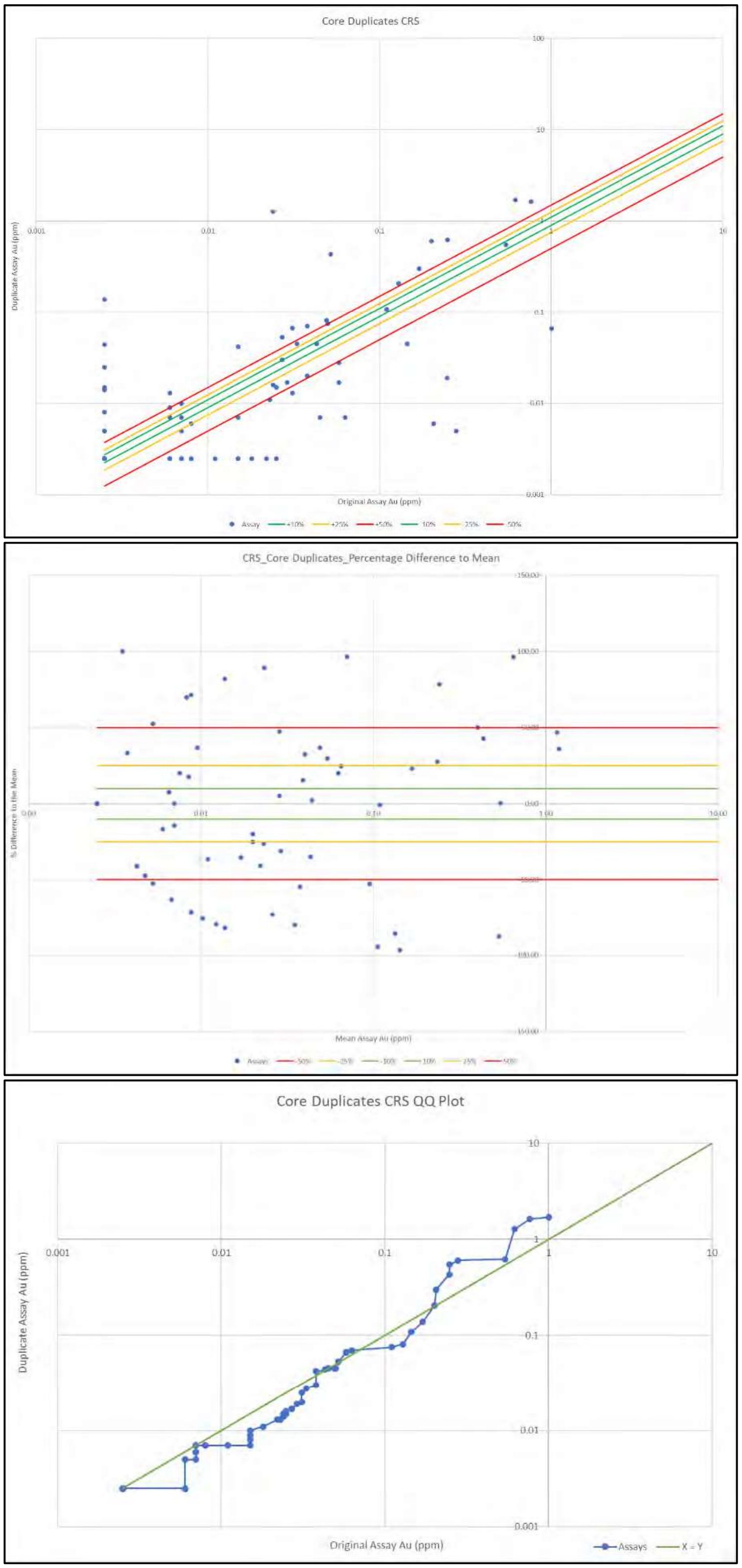


Figure11.29: Sample Pair Statistical Analysis: Samples Submitted to MSA/CRS: Field Duplicates

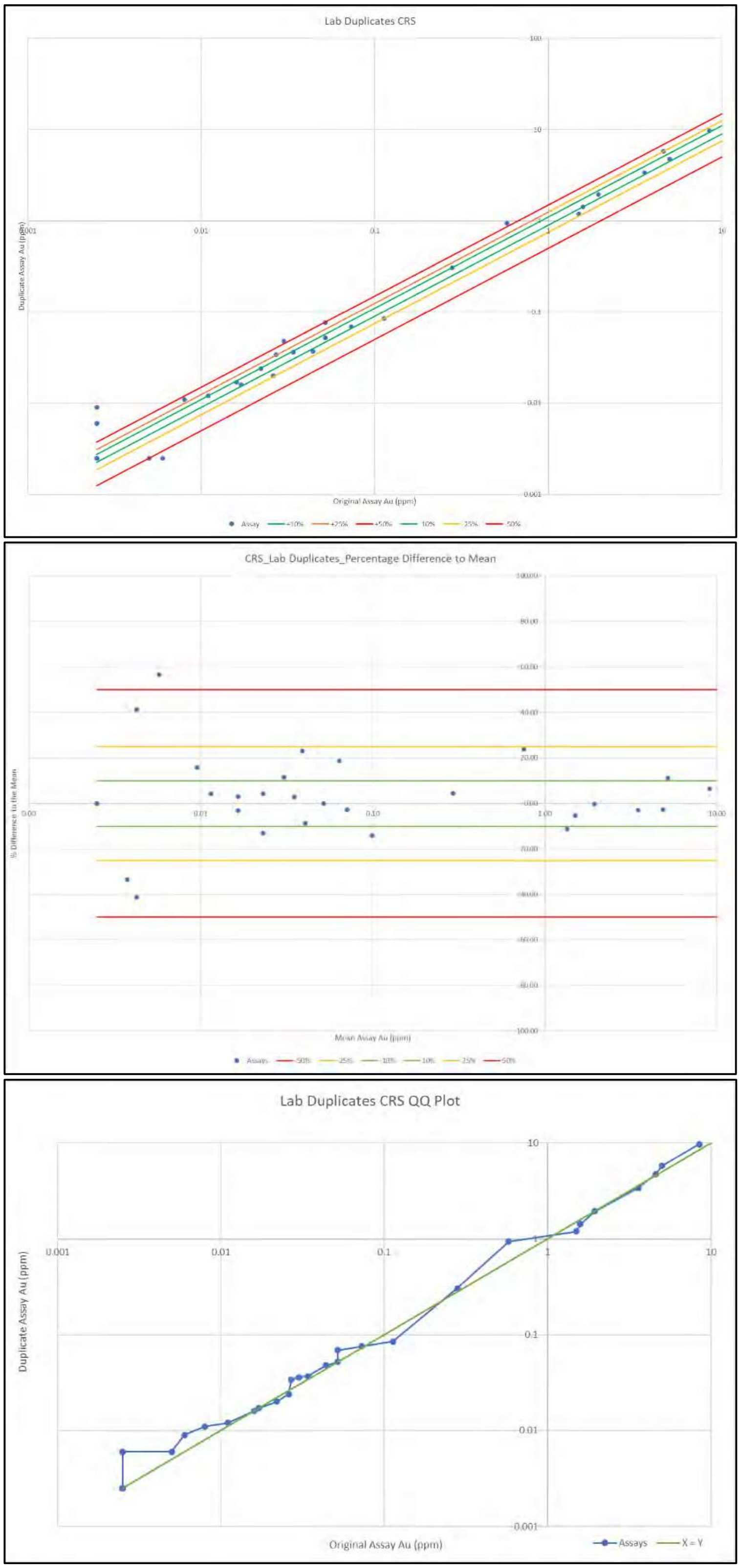


Figure11.30: Sample Pair Statistical Analysis: Samples Submitted to CRS/MSA: Laboratory Duplicates

11.2.1.5 Umpire Checks

ALS Minerals laboratory has been instructed to make a 250 g extra split at pulverizing stage, to be sent to second laboratory for umpire check. Five percent of all samples have been sent to a different external Laboratory for check (umpire) assay with weighting applied such that samples greater than 0.1 ppm Au, of economic interest, are oversampled.

The majority of ALS umpire checks are sent to Eurofins Labtium with a minority sent to CRS; all Labtium umpire checks are sent to ALS.

Umpire checks statistics are displayed in Table 11. with samples originally assayed at ALS shown in Figure 11.31 and those originally assayed at Labtium shown in Figure 11.32.

Table 11.7: Ikkari Gold Deposit Umpire Checks Data Pairs

Original laboratory	Umpire Laboratory	Total Number of Pairs	Au Original Mean (g/t)	Au Check Mean (g/t)	Corr. Coeff.
ALS	Labtium	3,359	3.36	3.36	0.92
ALS	MSA	421	3.99	3.94	0.99
Labtium	ALS	1120	1.29	1.26	0.91

The paired assay data has been assessed using the following techniques and plots:

- MPRD by Mean Grade.
- Correlation Plot.
- Quantile-Quantile Plot.

The contents of the following figures are set out below:

- Figure 11.31: Sample Pair Statistical Analysis: Samples Submitted to ALS Originally: External/Umpire Duplicates to CRS and Eurofins Labtium
- Figure 11.32: Sample Pair Statistical Analysis: Samples Submitted to Eurofins Labtium Originally: External/Umpire Duplicates to ALS
- Figure 11.33:

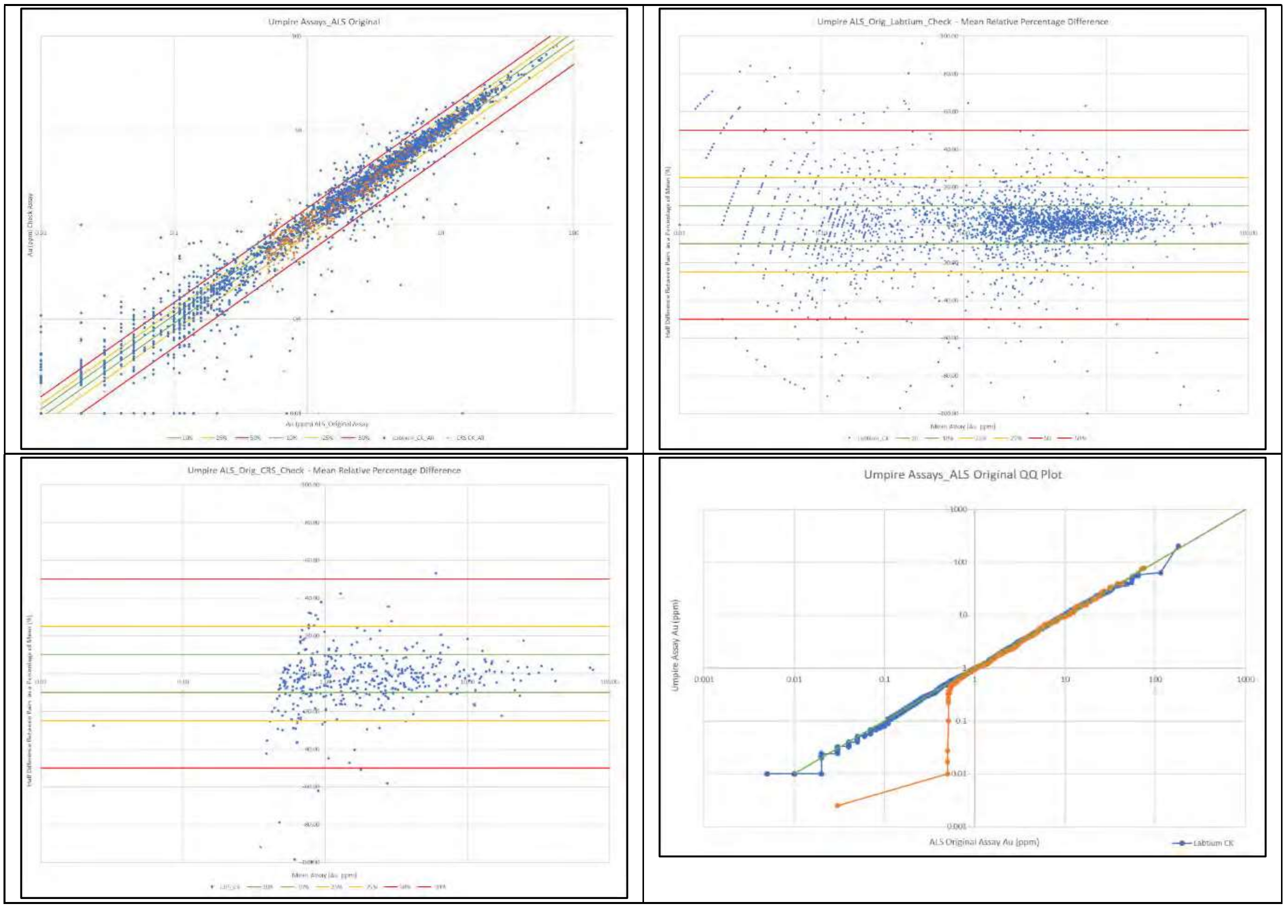


Figure 11.31: Sample Pair Statistical Analysis: Samples Submitted to ALS Originally: External/Umpire Duplicates to CRS and Eurofins Labtium

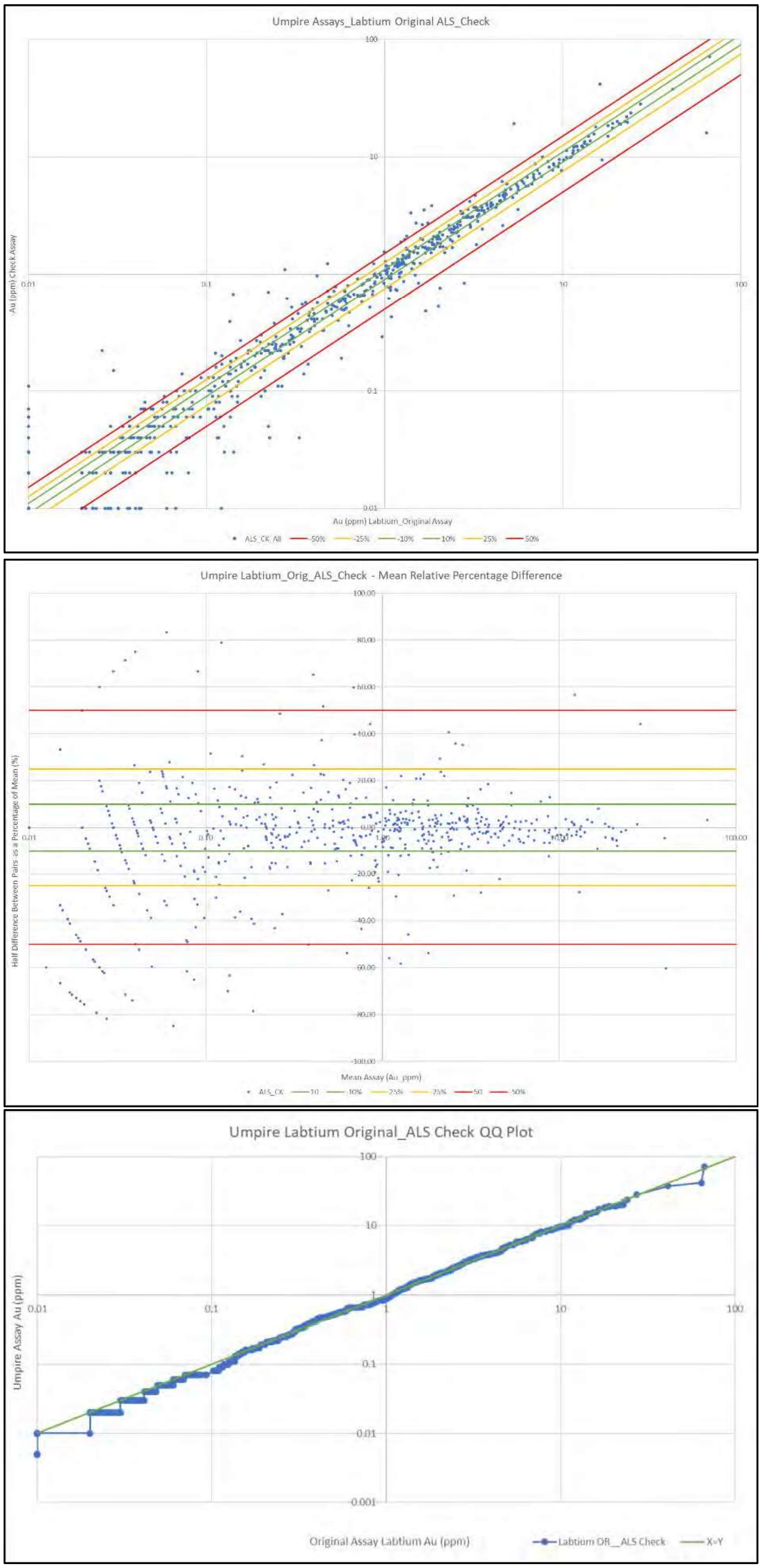


Figure 11.32: Sample Pair Statistical Analysis: Samples Submitted to Eurofins Labtium Originally: External/Umpire Duplicates to ALS

Since umpire check assays are performed on a separate pulp spilt than the original analysis, they are equivalent to the pulp duplicates analysed as part of the normal QC process. Comparison of the absolute mean percentage difference for both the umpire check assays and pulp duplicates shows that differences between duplicates pairs for both are minor with umpire assays showing slightly reduced differences versus the pulp duplicates (Figure 11.33).

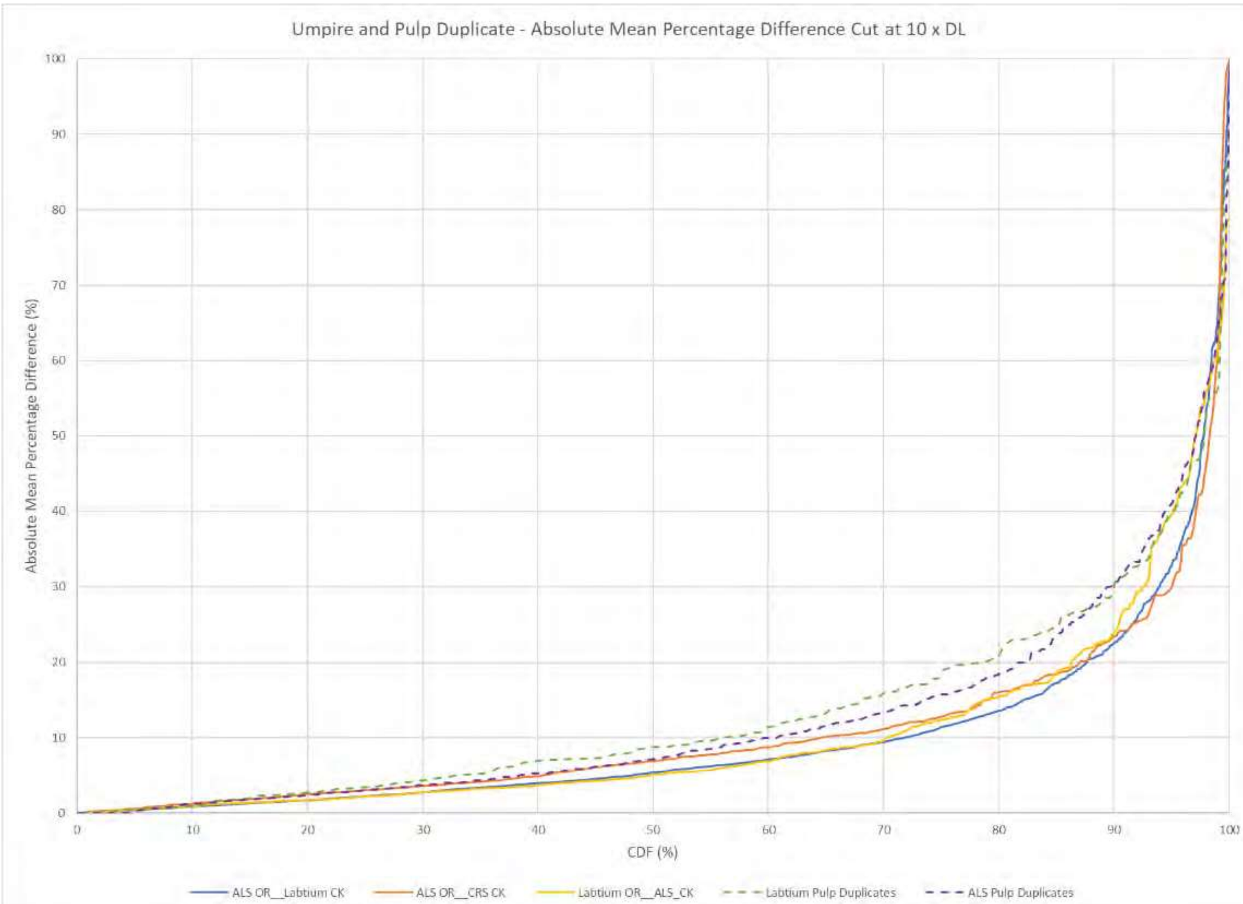


Figure 11.33: Comparison of Absolute Mean Percentage Difference Between the Umpire/External Check Assays and the Pulp Duplicates – the Equivalent Stage Internal Assay check

11.3 Conclusions

All sample preparation was carried out at independent laboratories in Finland, and analyses were carried out at independent laboratories in Romania, Ireland, or Finland. No aspect of laboratory sample preparation or analysis was conducted by an employee, officer, director or associate of either Rupert Resources.

Rupert Resources has used a combination of duplicates, checks, blanks and standards to ensure suitable quality control of sampling methods and assay testing. The procedures and QA/QC management are consistent with industry practice and are deemed fit for purpose. Results of recent sampling have not identified any issues which materially affect the accuracy, reliability or representativeness of the results.

It is the resource QP's opinion that the sample preparation, analytical, QAQC and chain of custody procedures used to produce the sample database are consistent with industry practises and CIM Mineral Exploration Best Practice Guidelines (November 2018).

12.0 DATA VERIFICATION

This Item summarizes the data verification conducted by the QP which consisted of a personal site inspection, verification logging and sampling, verification of drill hole collar locations, independent checks on the assay data and database validation including spot checks of the assay data compared to laboratory certificates and checks on collar locations, downhole surveys and interval data, among others.

12.1 Site Inspection

The personal site inspection was completed by Brian Thomas, P.Geo., an independent QP, as defined under NI43-101 and an employee of WSP, from July 11 - 13, 2023. The site visit included the following personnel:

- Brian Thomas, P.Geo.; Principal Resource Geologist, WSP Canada Inc.
- Craig Hartshorne; Resource and Evaluation Geologist, Rupert Resources Ltd.
- Rudolph Jekabsons; Senior Exploration Geologist, Rupert Resources Ltd.

The site inspection covered only the Ikkari deposit and excluded the other Rupert Resources deposits in the region (Pahtavaara, Heinä Central) that comprise the Rupert Lapland project.

The site inspection included the following items:

- Review of geology, mineralization and structural controls on mineralization
- Review of current interpreted geological models
- Review of drilling, logging, sampling, analytical and QA/QC procedures
- Review of site security and chain of custody of samples from the drill to the lab
- Independent verification logging and sampling of selected drill holes
- Inspection of the project site and verification of drill hole collar locations
- Inspection of storage facilities for drill core and pulp samples

Rupert Resources provided access to all data requested and there were no restrictions or limitations imposed on the QP.

12.2 Ikkari Project Site

The QP went to the project site to observe current conditions and verify the location of randomly selected drill hole collars. As the project is still in the exploration phase, there is little development at the site which mainly consists of storage containers and a large lay down area for drill equipment as shown in Figure 12.1 and Figure 12.2. Waypoints were taken at 7 drill hole collar locations with a handheld GPS and imported into Google Earth to confirm their locations (Figure 12.2).

Figure 12.1: Ikkari Project Site

Figure 12.2: Verified Collar Locations (Image from Google Earth)

Collar locations were flagged with pickets, and casings were capped with the hole number stamped onto the caps as seen in Figure 12.3.

Figure 12.3: Example Drill Hole Collar

Collar coordinates measured at the site were compared to the Rupert Resources database and found to be consistent within the 3 – 6 m accuracy of the handheld GPS used as summarized in Table 12.1.

Table 12.1: Collar Verification Summary

	Rupert Resources Survey Coordinates			WSP Verification Coordinates		
Hole ID	**Easting**	**Northing**	**Elevation**	**Easting**	**Northing**	**Elevation**
120061	454287	7496721	228	454289	7496721	232
121032	454182	7496575	229	454185	7496571	224
121125	454244	7496726	227	454247	7496722	227
121168	454278	7496750	227	454281	7496751	225
122195	454223	7496582	230	454225	7496579	229
122214	454231	7496660	228	454233	7496658	228
122246	454300	7496607	232	454306	7496605	229

Notes: Rupert Resources survey coordinates rounded to the nearest metre
WSP handheld GPS accurate to approximately 3 - 6 m

12.3 Verification Logging and Sampling

Intervals from four holes were selected for verification logging and sampling during the site visit including holes 122001 (364 m – 369 m), 121068 (369 m – 376 m), 121158 (293 m – 298 m) and 123042 (171 m – 180 m) which represented different mineralized lithologies and holes drilled from opposing orientations. A total of 26 quarter sawn core samples were taken along with the submission of control samples consisting of 3 standards and 2 pulp duplicates and 1 blank. Samples were placed in plastic bags and closed with sample tags attached and submitted to Eurofins laboratory located in Sodankylä for fire assay analysis consistent with the methodology used by Rupert Resources.

Details of the verification assay results are summarized in Table 12.2.

Table 12.2: Assay Verification Summary

Hole ID	From	To	Original Sample ID	New Sample ID	Sample Type	Original Rupert Resources Au (g/t)	WSP Verification Au (g/t)
Blank				990429701	Blank	0.00	0.02
122001	364	365.4	990250420	990429702	DH 1/2	7.97	1.17
122001	365.7	367	990250423	990429703	DH 1/2	6.64	7.37
122001	367	368	990250424	990429704	DH 1/2	7.61	9.92
122001	368	369	990250425	990429705	DH 1/2	8.69	2.39
121068	369	370	990188767	990429706	DH 1/4	16.80	10.54
Standard				990429707	STD G915-2	4.98	5.20
121068	370	371	990188768	990429708	DH 1/4	3.93	8.32
121068	371	372	990188769	990429709	DH 1/4	1.11	2.43
121068	372	373	990188770	990429710	DH 1/4	1.05	0.62
121068	373	374	990188772	990429711	DH 1/4	0.17	0.48
121068	374	375	990188773	990429712	DH 1/4	74.80	8.19
Standard				990429713	STD G915-4	9.16	9.33
121068	375	376	990188774	990429714	DH 1/4	22.10	10.72
121158	293	294	990294444	990429715	DH 1/4	2.23	3.19
121158	294	295	990294445	990429716	DH 1/4	5.23	3.16
121158	295	296	990294446	990429717	DH 1/4	4.70	5.90
121158	296	297	990294447	990429718	DH 1/4	22.40	25.12
121158	297	298	990294448	990429719	DH 1/4	10.45	6.35
123042	171	171.5	990339119	990429720	DH 1/4	6.88	7.52
Standard				990429721	STD G912-3	2.09	2.23
123042	171.5	172	990399120	990429722	DH 1/4	12.04	20.06
123042	172	173	990399122	990429723	DH 1/4	11.53	14.26
123042	173	174	990399123	990429724	DH 1/4	1.18	2.44
123042	174	175	990399124	990429725	DH 1/4	4.72	3.68
123042	175	176	990399125	990429726	DH 1/4	4.55	4.24
123042	176	177	990399126	990429727	DH 1/4	0.90	0.36
123042	177	178	990399127	990429728	DH 1/4	9.58	11.99
123042	178	179	990399128	990429729	DH 1/4	4.59	3.87
123042	179	180	990399129	990429730	DH 1/4	7.60	8.30

There was one very high-grade Rupert Resources sample that wasn't reproduced (74.80 g/t vs 8.19) but aside from that outlier, the verification assay results were generally consistent with Rupert Resources original assays and no bias was observed. Variability of assay results from field duplicates is common in gold deposits due to the nature of the gold distribution and differences in sample volumes between the original half core samples and quarter core verification samples. A scatterplot was generated to graphically compare the verification results to the original assays, as shown in Figure 12.4.

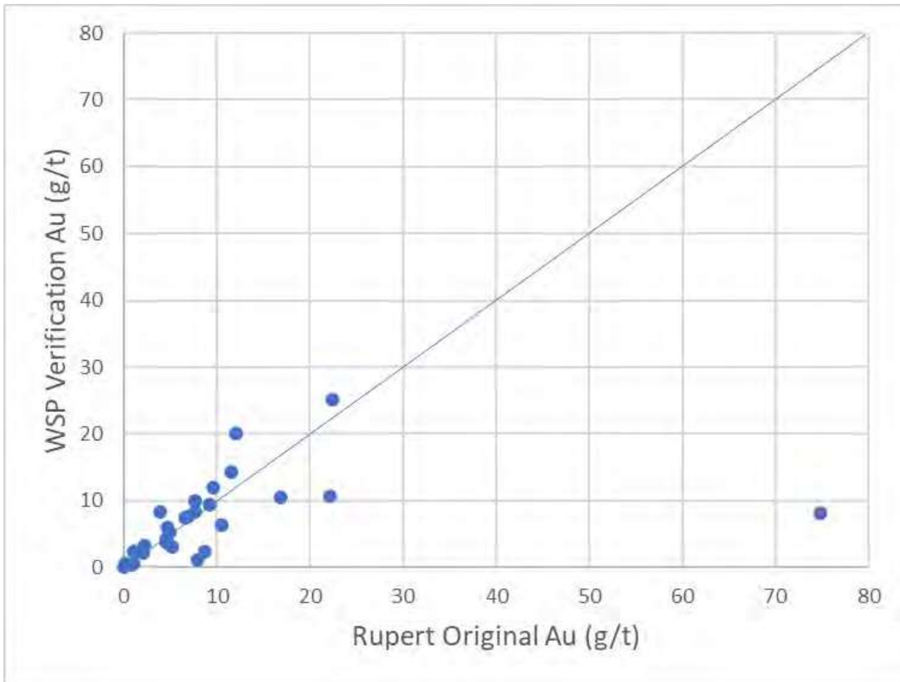


Figure 12.4: Scatterplot Comparison of Rupert Resources vs WSP Verification Assays

12.4 Database Verification

The drillhole database was verified based on the following spot checks and analysis of data:

- Analysis of collar coordinates incl. spot check comparisons against original survey pickups
- Analysis of downhole surveys incl. spot check comparisons against original downhole measurements
- Analysis of assay results incl. spot check comparisons of Au assays against laboratory certificates and out-of-range values
- Analysis of density values
- Analysis of interval data for overlaps and gaps

No material issues were identified during the database verification process.

12.4.1 Collars

12.4.1.1 Spot Checks

The QP performed spot checks on a randomly generated population of 5% of total collar coordinates within the final database against the original survey pickups. Collars selected for verification are presented in Table 12.3. No drill holes selected by the QP were found to have any significant discrepancy between the raw data logs and finalized database.

Table 12.3: Collar survey spot checks for Ikkari

Hole ID	Original Log			Database		
	X	Y	Z	X	Y	Z
120059	7496772.74	454215.24	225.33	7496772.74	454215.24	225.33
120067	7496800.12	453850.48	224.18	7496800.12	453850.48	224.18
120084	7496858.26	454227.00	224.41	7496858.26	454227.00	224.41
121025	7496793.98	454035.99	224.47	7496793.98	454035.99	224.47
121069	7496754.91	454318.65	227.58	7496754.91	454318.65	227.58
121139	7496673.75	454401.21	232.07	7496673.75	454401.21	232.07
121158	7496780.23	454218.83	224.56	7496780.23	454218.83	224.56
121159	7496706.69	454560.87	235.64	7496706.69	454560.87	235.64
121160	7496806.72	454206.49	224.30	7496806.72	454206.49	224.30
121163	7496705.29	454342.19	229.51	7496705.29	454342.19	229.51
122109	7496670.77	453873.15	223.26	7496670.77	453873.15	223.26
123002	7496945.97	453591.52	227.02	7496945.97	453591.52	227.02
123022	7497232.03	454762.80	222.14	7497231.34	454763.16	222.33

12.4.1.2 Collar vs Topography

A comparison of drillhole collar locations against topographic surveys was performed by the QP within the model area. A single topography surface was provided by Rupert Resources for the entire model area as the file "Topography.dxf".

Figure 12.5 shows the collar vs topography comparison for the Ikkari model area. The Project area has a mean collar to topography distance of 0.26 m with a maximum of 0.99 m. This is attributed to drilling during the winter season where snow cover combined with the tracks of the drill rig require the overburden casing to be above the ground surface, typically around 30cm. Given that the downhole measurements are relative to the overburden casing Rupert Resources policy is to survey at the level of the casing and thus prioritise the integrity of downhole depths relative to the collar as opposed to the collar being aligned with the topographical elevation. A handful off drillholes have been drilled with extended casing to allow for the installation of hydrological monitoring equipment.

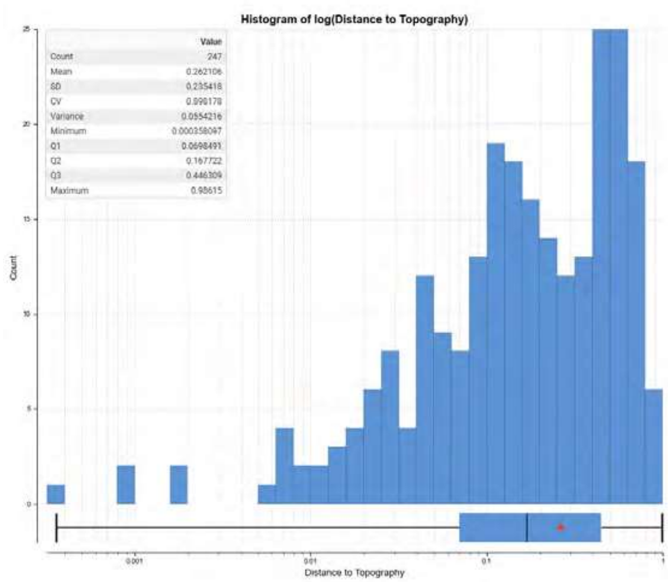


Figure 12.5: Collar Locations vs Topography for Ikkari

The QP notes that although some slight variation exists between collar locations and the provided topographic surface, these can be considered minor and will not pose a material risk to the MRE update.

12.4.2 Downhole Surveys

12.4.2.1 Spot Checks

The QP performed spot checks on a randomly generated population of 5% of total downhole survey measurements within the final database against the original survey pickups. Collars selected for verification are presented in Table 12.4. No drill holes selected by the QP were found to have any significant discrepancy between the raw data logs and finalized database.

Table 12.4: Collars Selected for Downhole Survey Verification at Ikkari

Hole ID				
120063	121033	122109	123023	123082
120070	121126	122020	123025	
120109	122022	123001	123080	

12.4.2.2 Number of Surveys

Across the Ikkari deposit, the average number of surveys per drillhole is ~96 (Figure 12.6), with only a single drillhole (122122K1) identified with no recorded survey measurements attached.

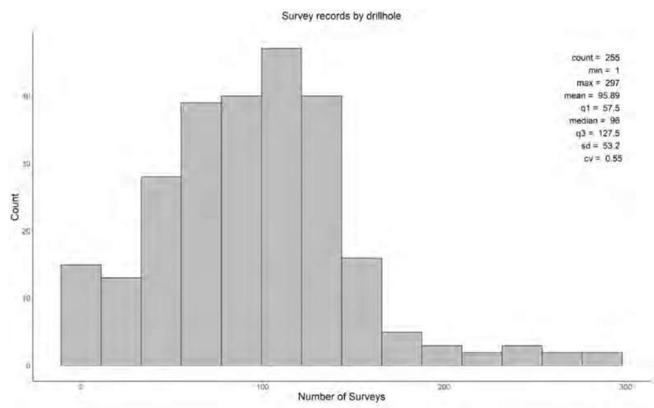


Figure 12.6: Survey Measurements by Drill Hole for Ikkari

The QP noted that across the Ikkari deposit there are 15 instances of drill holes with only a single survey measurement recorded, these are outlined in Table 12.5. Drillholes greater than 100m, with only a single survey measurement, can be a risk to overall modeling accuracy. The QP investigated all identified drill holes with Rupert Resources and outlined the findings below.

Table 12.5: Drill holes identified as Having a Single Survey

Hole ID	Surveys	EOH Depth (m)	QP Comment	Rupert Resources Comment
120060	1	40.9	Short drillhole, outside MRE and void of significant mineralization.	Hole Collapsed – No Survey 120061 is a repeat of this hole
120062	1	45.6	Short drillhole, outside MRE and void of significant mineralization.	Hole Collapsed – No Survey 120063 is a repeat of this hole
120074	1	99.45	Mineralization at EOH currently guides PEA grade shell.	Hole Collapsed – No Survey 120074B is a repeat of this hole
120076_1	1	35.55	Short drillhole, outside MRE and void of significant mineralization.	Hole Collapsed – No Survey 120076 is a repeat of this hole
120085	1	80.6	Drillhole outside current MRE and void of mineralization.	NA
120093	1	188.6	Drillhole outside current MRE and void of mineralization.	Hole collapsed – decision taken not to survey due to no mineralization and risk of losing rods in hole
120095	1	200.8	Drillhole outside current MRE and void of mineralization.	Hole collapsed – decision taken not to survey due to no mineralization and risk of losing rods in hole

Hole ID	Surveys	EOH Depth (m)	QP Comment	Rupert Resources Comment
120104	1	111.7	Drillhole outside current MRE and void of mineralization.	Hole collapsed – decision taken not to survey due to no mineralization and risk of losing rods in hole
120106	1	226.6	Drillhole outside current MRE and void of mineralization.	Hole collapsed – decision taken not to survey due to no mineralization and risk of losing rods in hole
120118	1	35.6	Short drillhole, outside current MRE, and void of significant mineralization.	Hole Collapsed – No Survey 120120 is a repeat of this hole
121071	1	322.2	Mineralization at EOH guides current MRE grade shell. Investigation surrounding suitability for estimation required.	Casing sheared off so unable to re-renter the hole
122012	1	92.8	Mineralization at EOH guides current MRE grade shell. Investigation surrounding suitability for estimation required.	Hole Collapsed – No Survey 122015 is a repeat of this hole
122065	1	59.0	Short drillhole, outside MRE and void of significant mineralization.	Hole Collapsed – No Survey
122217	1	122.1	Drillhole outside current MRE and void of mineralization.	Hole collapsed – decision taken not to survey due to no mineralization and risk of losing rods in hole
123022	1	498.0	Drillhole outside current MRE and void of mineralization.	Awaiting collar survey to calibrate gyro survey – very wet ground

The QP notes that while several drillholes across Ikkari only have a single survey measurement attributed to them, investigation and clarification from Rupert Resources geologists, reveals the majority of those identified will not have a significant contribution to the MRE update. All identfied drill holes were deemed suitable for inclusion into the final database used for the mineral Resource estimation.

12.4.2.3 Angular Change

An analysis of angular difference between adjacent downhole survey readings “The dogleg angle”, normalized by the distance between them downhole was completed by the QP. As Figure 12.7 displays, average angular change between successive surveys was 0.15°, with the majority of readings falling below a 1° difference.

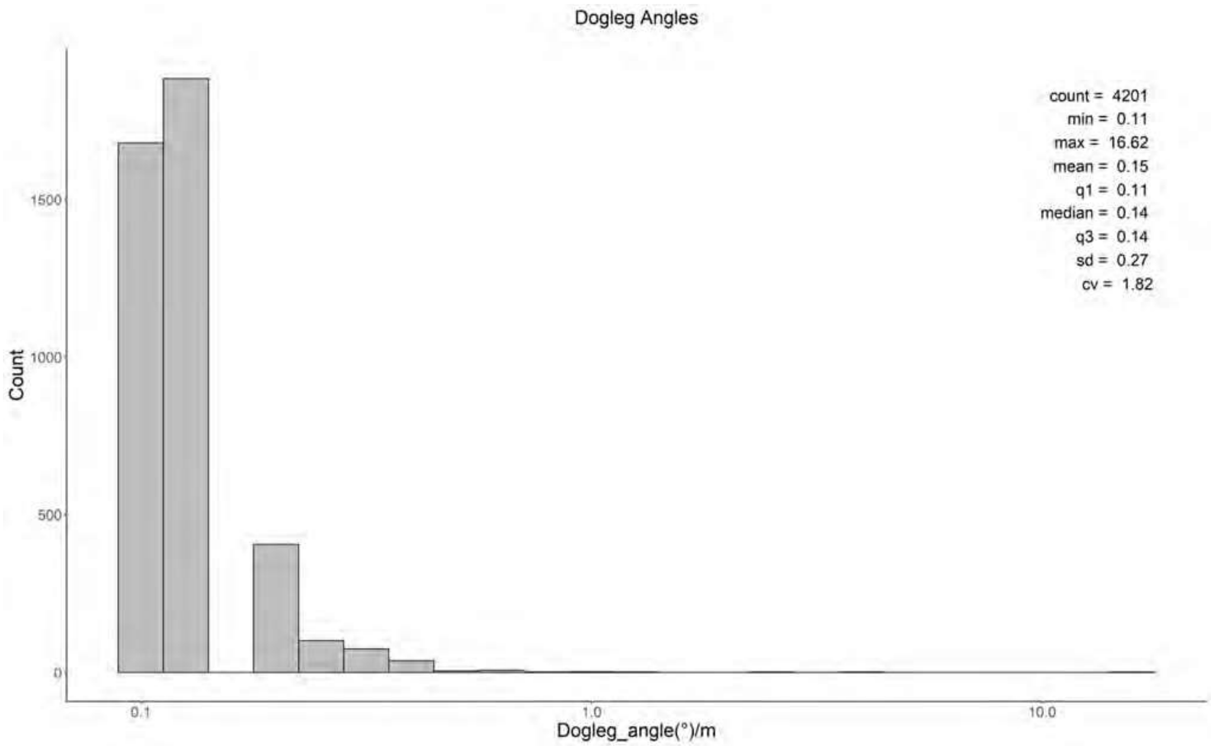


Figure 12.7: Angular Change Between Successive Surveys at Ikkari

Review of the angular change between successive surveys reveals robust downhole surveying practices at Ikkari, and presented no cause for concern for the MRE update.

12.4.2.4 Survey Intervals

The average survey interval distance for all drillholes is ~4m within the Ikkari deposit area (Figure 12.8). It was noted that for those drillholes with greater than two surveys, only hole 121123 presents a concern with 190m between successive surveys. With such a large distance, there is a much higher risk of incorrect drillhole de-surveying; resulting in possible modeling errors.

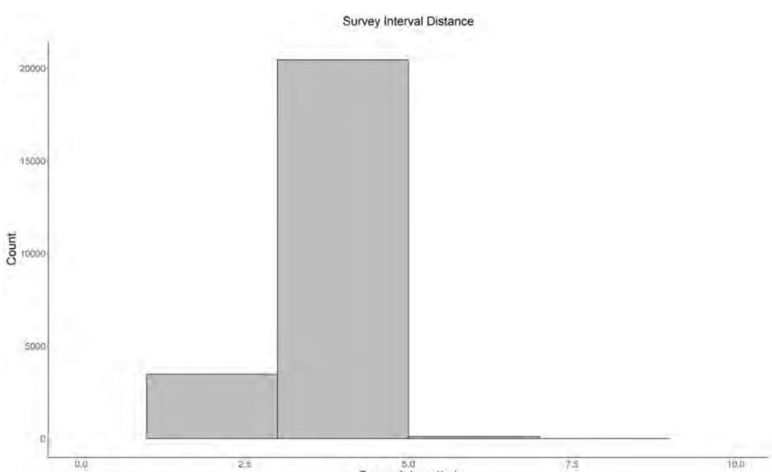


Figure 12.8: Distance between Successive Surveys at Ikkari

Prior to the commencement of the Ikkari MRE, drill hole 121123 was reviewed by the QP and found it to be suitable for inclusion within the mineral Resource update.

12.4.2.5 Last Survey to EOH Extrapolation

The average last survey to EOH extrapolation distance is ~26 m within the Ikkari deposit (Figure 12.9), which is considered suitable. A large distance between surveys can result in incorrect de-surveying for the drillhole tail and affect geological model boundaries. Investigations revealed 17 drillholes across the Ikkari deposit that have EOH extrapolation distances greater than 100 m (Table 12.6).

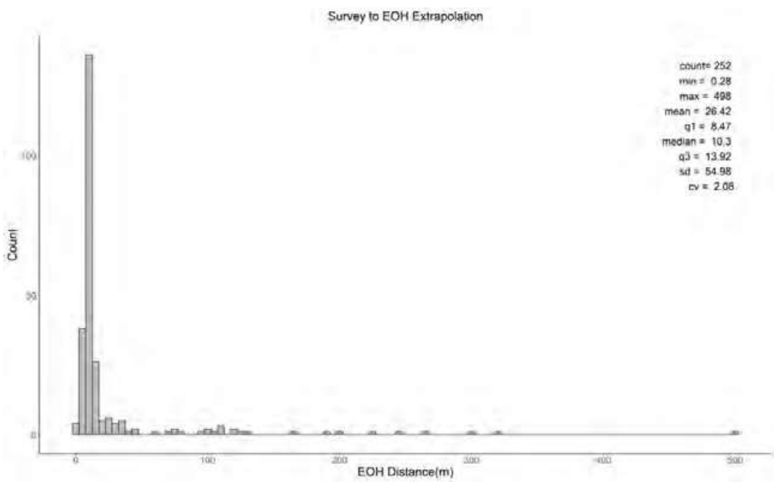


Figure 12.9: Distance from last Survey to EOH at Ikkari

Table 12.6: Drill holes at Ikkari with last survey to EOH distance >100m

Hole ID	Survey to EOH	Year Drilled	QP Comment	Rupert Resources Comment
123022	498	2023	Drillhole outside MRE area, will not concern Resource estimation.	Awaiting collar survey to calibrate gyro survey – very wet ground
121071	322.2	2021	Drillhole on edge of MRE area, can be excluded from Resource estimation if survey data not available.	Casing sheared off so unable to re-renter the hole
122002	299.8	2022	Drillhole on edge of MRE area, can be excluded from Resource estimation if survey data not available.	Rod string broke – unable to get back into to survey EOH
121036	244.9	2021	EOH mineralization guides existing grade-shell at depth. Investigation required.	Drilling company have this survey, yet to be delivered
120106	226.6	2020	Barren drillhole, will not be included in Resource estimation.	Hole Collapsed – No Survey
120095	200.8	2020	Barren drillhole, will not be included in Resource estimation.	Hole Collapsed – No Survey
120093	188.6	2020	Barren drillhole, will not be included in Resource estimation.	Hole Collapsed – No Survey
121093	164.5	2021	Significant mineralization held within bottom portion of drillhole. Investigation around suitability for Resource estimation required if survey data not available.	Rod string broke – unable to get back into to survey EOH
121027	161	2021	Significant mineralization held within bottom portion of drillhole. Investigation around suitability for Resource estimation required if survey data not available.	Survey data added to EOH
122176	130.8	2022	Drillhole on edge of MRE area, can be excluded from Resource estimation if survey data not available.	Hole Collapsed – No Survey beyond 88m 122180 is a repeat of this hole
122138	123.7	2022	EOH barren and not contributing to current MRE. No investigation required.	Barren beyond last survey point
122217	122.1	2022	Barren drillhole, will not be included in Resource estimation.	Barren beyond last survey point
121156	119.8	2021	Minor mineralization EOH guiding current grade shell.	Not possible to survey beyond 264m as rods getting stuck
121023	113.3	2021	Mineralization at depth outside current PEA grade shell. Investigation required with new estimation domains to determine suitability.	Survey data added to EOH
122122	111.9	2022	Drillhole on edge of MRE area, can be excluded from Resource	NA

Hole ID	Survey to EOH	Year Drilled	QP Comment	Rupert Resources Comment
			estimation if survey data not available.	
120104	111.7	2020	Barren drillhole, will not be included in Resource estimation.	NA
122146	105.2	2022	Mineralization at depth outside current PEA grade shell. Investigation required with new domains to determine suitability.	NA

The QP noted that while several drillholes across Ikkari have significant distances between the last survey and EOH, investigation reveals the majority of those will not have a significant contribution to the MRE update. Several drillholes (121036, 121093, 121023 & 122146) were investigated as to their suitability to guide the Mineral Resource update and were found to be acceptable for inclusion.

12.4.3 Assay

12.4.3.1 Spot Checks

The QP performed spot checks on a randomly generated population of 5% of total drill holes within the final database against the original assay results (Au only). Holes selected for verification are presented in Table 12.7. No drill holes selected by the QP were found to have any significant discrepancy between the raw assay results received and the finalized database.

Table 12.7: Collars Selected for Au Assay Verification at Ikkari.

Hole ID				
120066	121053	122025	122102	123044
120099	121087	122036	122204	
120121	122015	122062	123030	

12.4.3.2 Erroneous Values

The assay dataset contained no negative or “<” values, which are commonly used to identify samples below the detection limit. This suggests that an appropriate value may have already been applied to these in the database, e.g., ½ of the detection limit.

Two drillholes were missing assay records as displayed in Table 12.8. Both drill holes were removed for the database prior to the commencement of the mineral Resource estimation.

Table 12.8: Drill Holes with no Assay Values at Ikkari

Hole ID
121084
122065

12.4.4 Density

A total of 10,962 density samples were available within the database. Average density across the Ikkari project is 2.86 g/m3 (Figure 12.10) and shows a low variability across major lithologies (Figure 12.11). Density values across the Ikkari deposit range from 1.79 g/m^3 to ~6.82 g/m^3.

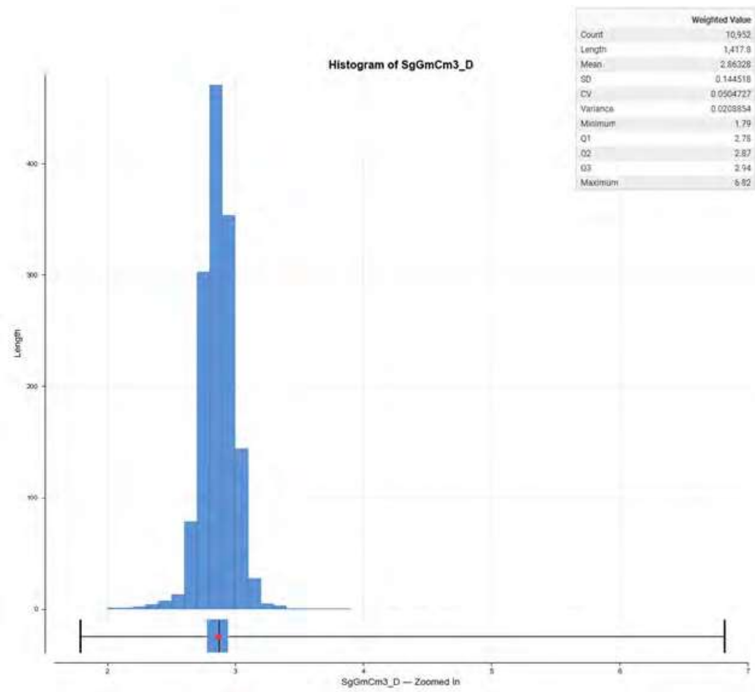


Figure 12.10: Log Histogram of Density Values Captured at Ikkari

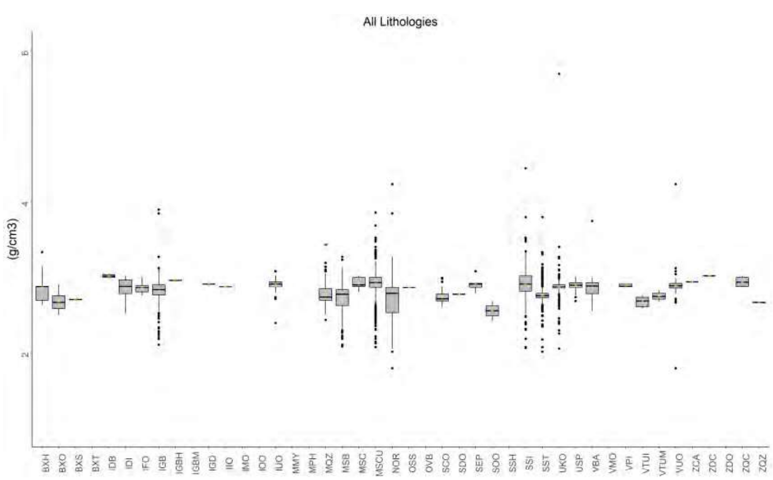


Figure 12.11: Boxplots of Density Values for Each Logged Lithology at Ikkari

The QP notes the density programme across Ikkari captures all major lithologies, across a range of depths and spatial location and appears suitable for use in mineral resource estimation. Density values show little variation across the deposit and across varying lithologies.

12.4.5 Core Recovery

Core loss at Ikkari is captured through the “geology” logging sheet. Field geologists use the code “NOR” for a given interval to identify areas in which core has been lost. Investigation of the dataset shows there are 2,441 instances of core loss logged within the geology database, with an average length of 0.76m (Table 12.9). The average end-depth of core loss measurements is approximately ~100 mL across Ikkari.

Table 12.9: Summary Statistics for Core Loss at Ikkari

LI1	Count	Length	Mean	SD	CV	Var	Min	L.Q	Med	U.Q	Max
NOR	2,441	1,863.7	0.76	1.87	2.45	3.79	0.1	0.25	0.4	0.9	65.5

Investigating further, those samples in the database where gold values were attributed to intervals in which “NOR” was recorded as the primary lithology, while also containing Au values higher than the 0.3 ppm grade shell cut-off used in the previous MRE were identified. This refinement reveals 7 samples (Table 12.10) across the Ikkari deposit that required further investigation.

Table 12.10: Overview of intervals with “NOR” as the primary lithology and Au grades >0.3 ppm

Hole ID	From	To	Length (m)	Au_ppm	LI1	Rupert Resources Comment
120071	55.3	55.5	0.2	0.48	NOR	Incorrectly sampled as per protocol - Sample does include 0.2m core loss.
120080	68.2	69	0.8	8.14	NOR	Corrected in final data. NOR logging is in wrong position; 67.85 - 68.20m is NOR (as has no assay attached) 68.20 - 69.00m was recovered and is a normal sample 69.00 - 70.00m was recovered and is a normal sample.
120080	69	69.2	0.2	4.31	NOR	
120081	12.7	12.8	0.1	0.44	NOR	10cm of NOR was included in a sample as excluding it to create two samples either side would not have given the lab sufficient material for fire assay (12.60 - 12.70m).
121087	450.6	450.85	0.25	0.32	NOR	Incorrectly sampled as per protocol – 25cm of core loss was included in this sample.
121158	26.6	26.8	0.2	0.38	NOR	20cm of NOR was included in a sample as excluding it to create 2 samples either side would not have given the lab sufficient material for fire assay (26.80 - 26.90m).
122011	90.2	90.3	0.1	0.4	NOR	NOR should start at 90.30m not 90.20m. Corrected.
122041	99.1	99.4	0.3	1.94	NOR	30cm of NOR was included in a sample as excluding it to create 2 samples either side would not have given the lab sufficient material for fire assay (99.00 - 99.10m)

While several drill holes across Ikkari contain Au grades within intervals marked as “NOR”, investigation into those samples revealed the majority of identified samples will not have a significant impact upon the mineral Resource estimation at Ikkari. Samples identified by the QP were either corrected by Rupert Resources or found to not materially impact upon the mineral Resource estimation.

12.5 Chain of Custody

The chain of custody procedures for drill core and samples was reviewed with no material concerns identified, with the risk for potential sample manipulation considered to be low. The core is stored and processed in a secure, modern facility with restricted gate access as shown in Figure 12.12. Although Rupert Resources does not use security tags for their sample shipments, they are shipped in secure wooden bins with plywood lids screwed in place and samples are shipped, generally short distances by a third-party contractor.

Figure 12.12: Rupert Resources Core Logging and Storage Facility, Sodankylä, Finland

12.6 Conclusions and Recommendations

After completion of the site visit and data verification, the QP concludes that the exploration, drilling and analytical procedures used by Rupert Resources to collect geological data are consistent with industry practises and CIM Mineral Exploration Best Practise Guidelines (November 2018) and that the data is suitable to support the reporting of the MRE as summarized in this Technical Report.

The QP has the following recommendations for Rupert Resources:

- Switch to using a bar coded sample tag that can be read when received at the laboratory to reduce any potential risk of transcription errors.
- Conduct third party density measurements that are consistent with the sample intervals in the next infill drill programme.
- Evaluate the potential implementation of security tags with sample shipments.
- Produce formal written procedures for database management.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

This Item presents metallurgical test results from laboratory work conducted on samples from the Ikkari deposit and available in the following previously published reports:

- Research report from samples AEM 001-AEM020 Ikkari Au prospect, Kari Kojonen, Ph.D. spring 2021.
- 21-1882 Ikkari Deposit Gold Recovery Testing - Rupert Resources, Grinding Solutions, May 2021.
- 22-1967 Rupert Resources Phase II - Ikkari Gold Recovery Optimization Testing1, Grinding Solutions, February 2022.
- 22-2061 Rupert Resources - Pre-aerated Cyanide Leach Testing, Grinding Solutions, May 2022.

The QP reviewed the above metallurgical test work reports to prepare this technical report. Earlier work completed by ALS is not described in this section but has also been consulted. The QP was not responsible for the samples selection and did not oversee the test programmes. Based on a review of the metallurgical samples assays compared to the resource data, the QP has deemed that the samples tested are representative of the Ikkari deposit.

13.2 Mineralogical Test Work

In the spring of 2021, Kari Kojonen Ph.D. issued a mineralogical examination report for the work conducted on two samples from the Ikkari deposit. Six polished sections and 18 polished thin sections were prepared from six drill cores for microscopical, SEM/EDS and electron microprobe point analysis and element distribution maps. The mineralogical study was completed using a polarizing microscope in reflected and transmitted light.

The major minerals in the samples were observed to be pyrite, magnetite, ilmenite, rutile with minor amounts of chalcopyrite, sphalerite, galena, and native Au alloy as 5-100 µm inclusions in pyrite and the gangue minerals. Native gold is present in the samples for the most part in connection with pyrite, on its surface or in inclusions and on fracture surfaces. In addition, native gold is in the grain boundaries of gangue minerals. The average of the gold analysis in the samples is 10.8 g/t. The occurrence of pyrite and native gold refers to epigenetic gold in shear zones.

Other ore minerals in the samples include magnetite, ilmenite, rutile and titanomagnetite. Accessory minerals include monazite, xenotime, zircon, brannerite, and apatite. The main minerals in the ore samples are sericite, carbonate, quartz, biotite and chlorite.

Based on elemental distribution images, pyrite shows compositional zoning growth and is also heterogeneous in terms of Ni and Co concentrations. The average concentrations of pyrite are Co 1.07% and Ni 0.27% (EDS); Co 0.90 and Ni 0.20% (EPMA) and magnetite Co 0.44% and Ni 0.33% (EDS).

13.3 Ikkari Metallurgical Test Work

The Ikkari PEA metallurgical test work was carried out in two phases by Grinding Solutions.

The report from the first phase of testing was issued on May 19th, 2021. This programme included tests related to head analysis, comminution (SMC, Bond abrasion, Bond rod and Bond Ball mill Indexes), gravity recovery, cyanidation, flotation, thickening, waste rock analysis, acid base accounting, net acid generation potential and waste compliance.

The second phase focused on optimizing the gold recovery. The report was issued on February 9th, 2022. The focus was on reaffirming the processing methodology on newly submitted sample and optimize parameters such as primary grind size, flotation reagents scheme and cyanidation conditions. Cyanide detoxification tests were also performed.

Based on information provided by Rupert Resources, all the samples tested for the Phase 1 test work programme at Grinding Solutions were taken from within the boundaries of the projected open pit area. For the Phase 2 programme, the majority of the samples also originated from the projected open pit area, with the others taken at depth under the open pit.

13.3.1 Head grade

Direct assays of the sample used for the first phase of tests indicated that the gold content ranged from 4.76 g/t Au to 9.54 g/t Au. During testing of the sample, the back calculated Au head grade ranged between 3.6 g/t Au and 4.2 g/t Au. It is considered that the result showing 9.54 g/t Au was an outlier. The silver content of the sample was shown to be 0.4 g/t. The sulphide speciation showed that the sample contained 1.88% of sulphide sulphur. The carbon speciation indicated that only 0.03% of the carbon was organic.

The sample used for the second phase of tests contained 3.14 g/t Au and 0.5 g/t Ag. Sulphide content was shown to be 1.3% and organic carbon content was low at 0.04%. Cd, Hg, U, and Th levels are all shown to be below levels of detection. It was noted during the testing programme that the weighted average of the back calculated gold grade was lower (1.81 g/t Au) than indicated in the head assay. This value was taken as the correct gold head grade.

13.3.2 Comminution

13.3.2.1 SMC Test Work

The results of the SMC test work are shown in Table 13.1 and Table 13.2. The results are compared to the SMC hardness classification (Table 13.3), showing that the material is harder than medium and abrasive.

Table 13.1: SMC Test Results

Sample	Dwi (KWh/m^3)	Dwi %	Mi Parameters (kWh/t)			SG
			Mia	Mih	Mic	
Rupert Resources	7.30	58.00	19.40	14.60	7.5	2.90

Table 13.2: Parameters Derived from the SMC Results

Sample	A	b	A*b	T_a	SCSE (kWh/t)
Rupert Resources	60.8	0.65	39.5	0.35	10.38

Table 13.3: Hardness Classification for the SMC Results

DWT Relative Values		Very Hard -----------------------------------Medium------------------------------------Very Soft						
A*b	Impact	<30	30-38	38-43	43-56	56-67	67-127	>127
t_a	Abrasion	<0.24	0.24-0.35	0.35-0.41	0.41-0.54	0.54-0.65	0.65-1.38	>1.38

13.3.2.2 Abrasion Test Work

The Bond abrasion index of the submitted sample was shown to be 0.59, which categorises the material as abrasive.

13.3.2.3 Bond Rod Mill Grindability

A sample was submitted for Bond rod mill work index testing at a closing size of 1180 µm. The material had a RWI of 11.8 kWh/t, which is considered marginally soft.

13.3.2.4 Bond Ball Mill Grindability

A sample was submitted for Bond ball mill work index testing at a closing size of 150 µm. The material showed a BWI of 15.5 kWh/t, which is considered of average hardness.

13.3.3 Gravity Recovery

13.3.3.1 Gravity Release Analysis

A 1 kg sample pre-ground to -1 mm was sized into 6 size fractions for separate gravity release tests.

The gravity release tests show that gravity concentration is viable for grinds below 600 µm, with the best results attained at size fractions below 300 µm. Below 300 µm, a mass pull of approximately 13% would provide a gold recovery of about 74% to a gold grade of around 32 g/t.

Figure 13.1 shows a steep cumulative gold recovery for particles below 600 µm indicating that gravity recovery is a viable concentration and recovery method.

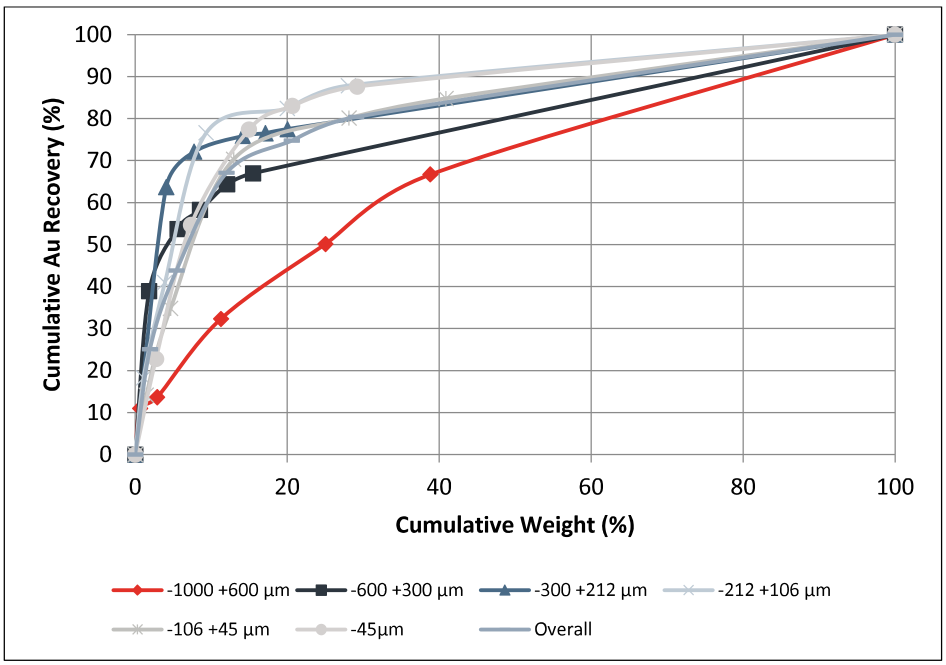


Figure 13.1: Mass Pull vs Au Recovery Curves for Gravity Release Analysis

13.3.3.2 Gravity Recoverable Gold and E-GRG Test

Gravity recoverable gold testing showed that 65.2% of the gold was recovered by the concentrators. Mozley panning demonstrated that the gold content could be cleaned further. However, no free gold was observed on the table.

Extended gravity recoverable gold (E-GRG)testing was carried out in the second phase of testing. E-GRG tests demonstrated a GRG recovery of 47.0% at a mass pull of 1.15% over three recovery stages (509 µm, 270 µm and 185 µm). The head grade was back calculated and found to be 1.7 g/t Au.

The E-GRG tests showed that gold recovery generally occurs for particles smaller than 300 µm. The P80 of the recovered gold was 167 µm, the P50 was 84 µm and the P20 was 36 µm. Compared with the database, this GRG gold grain size distribution is considered to be moderately coarse.

13.3.4 Flotation

13.3.4.1 Grind Size

During Phase 1, a series of flotation tests were performed to determine the optimal primary grind size. The tests were carried out using a 1 kg feed charge in a 2.5 l flotation cell and at 33% solids. The flotation time was 15 minutes, and the potassium amyl xanthate (PAX) dosage was 80 g/t. Grind sizes of 250, 190, 125, 90, 75 and 53 µm were tested.

Results are shown in Figure 13.2. Tests performed at grind sizes up to 125 µm yielded very similar recovery profiles with gold recovery decreasing at grind sizes of 190 µm and above. The gold recovery was largely complete after 8 to 10 minutes of flotation. A grind size of 125 µm achieved a gold recovery of 95.5% after 15 minutes of flotation with a mass pull of 7.4%. The gold grade of this concentrate was 45 g/t Au. This grind size was selected for subsequent testing.

Figure 13.3 shows that the silver recoveries were significantly lower and a trend in the results was less apparent.

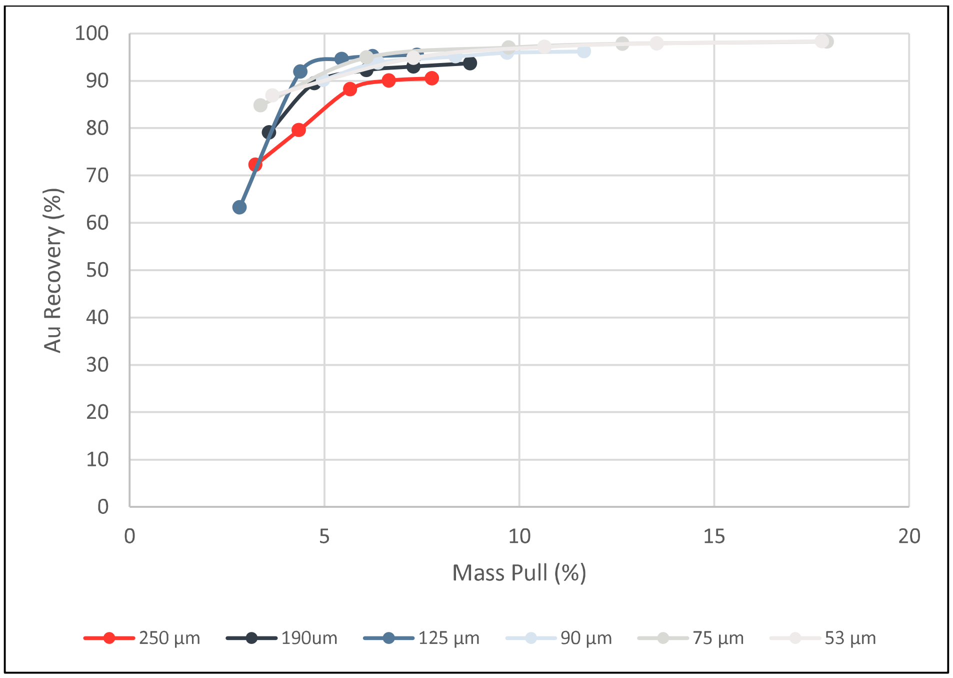


Figure 13.2: Kinetic Au Recovery Plot for Mesh of Grind Flotation Tests

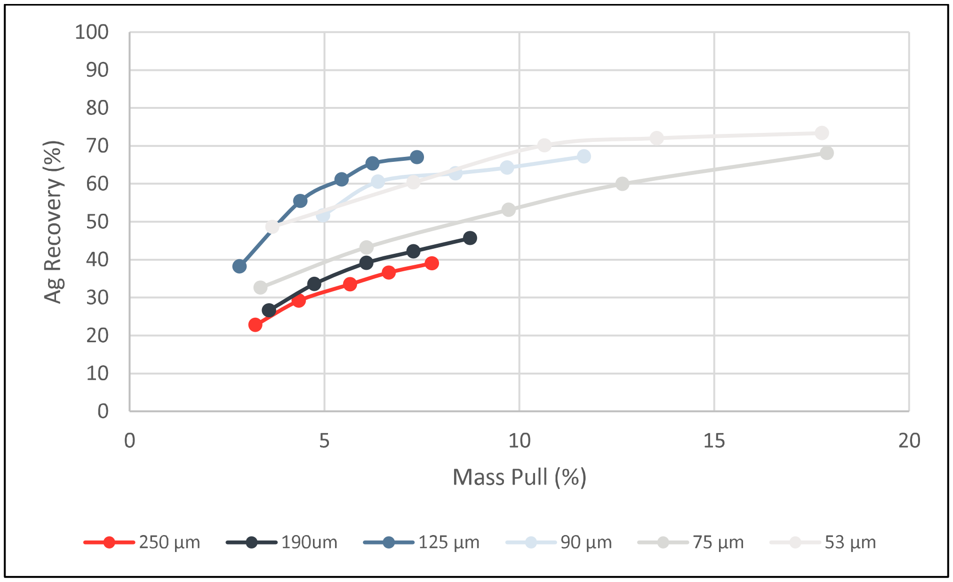


Figure 13.3: Kinetic Ag Recovery Plot for Mesh of Grind Flotation Tests

In Phase 2, a series of flotation tests were completed at a range of grind sizes to investigate increasing the P80 selected during Phase 1 (125 µm). The tests conditions were the same as in Phase 1 (1 kg charges, 33% solids, 80 g/t PAX). The results are shown in Figure 13.4.

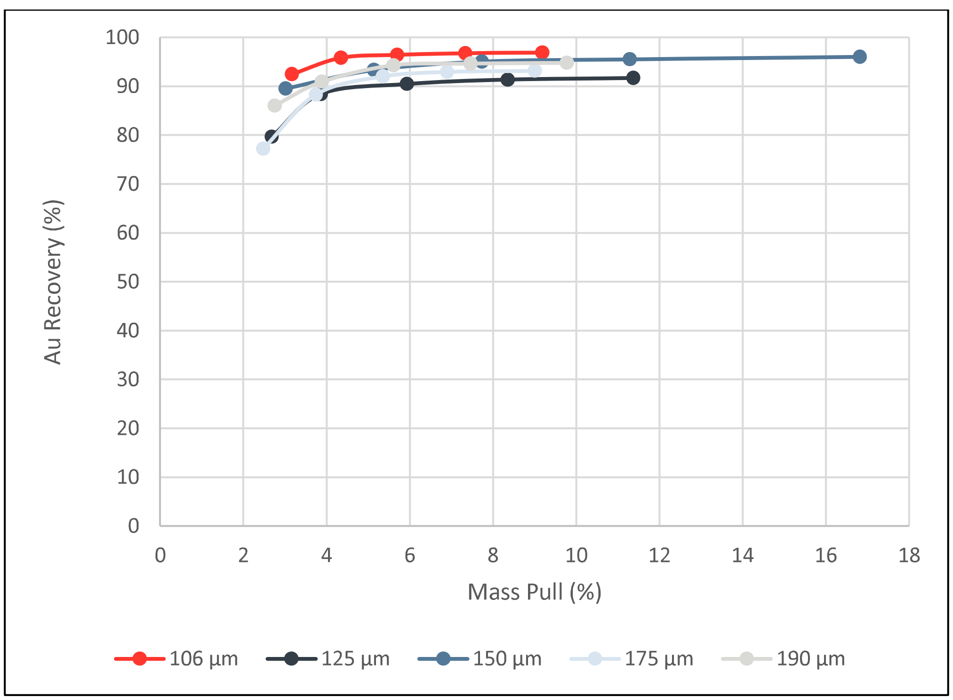


Figure 13.4: Kinetic Au Recovery to Rougher Flotation Concentrate – Mesh of Grind Flotation Tests Between 106 µm to 190 µm

The highest recovery was achieved at a P80 of 106 µm but no trend was observed between the grind size and the recovery. The results show that, for these samples, gold recovery was insensitive to grind size over the range tested.

13.3.4.2 Reagent

In Phase 1, reagent optimization test work was carried out for different reagent addition rates and using an alternative flotation collector at a grind of 125 µm. The results of the tests are shown in Figure 13.5.

Gold recovery was little impacted by reducing the PAX dosage from 80 g/t to 32 g/t with gold recoveries ranging between 94.1% and 96.2% for these tests.

The test conducted using Aero 7249 showed a much lower gold and sulphur recovery. A PAX dosage of 32 g/t was carried forward for further testing.

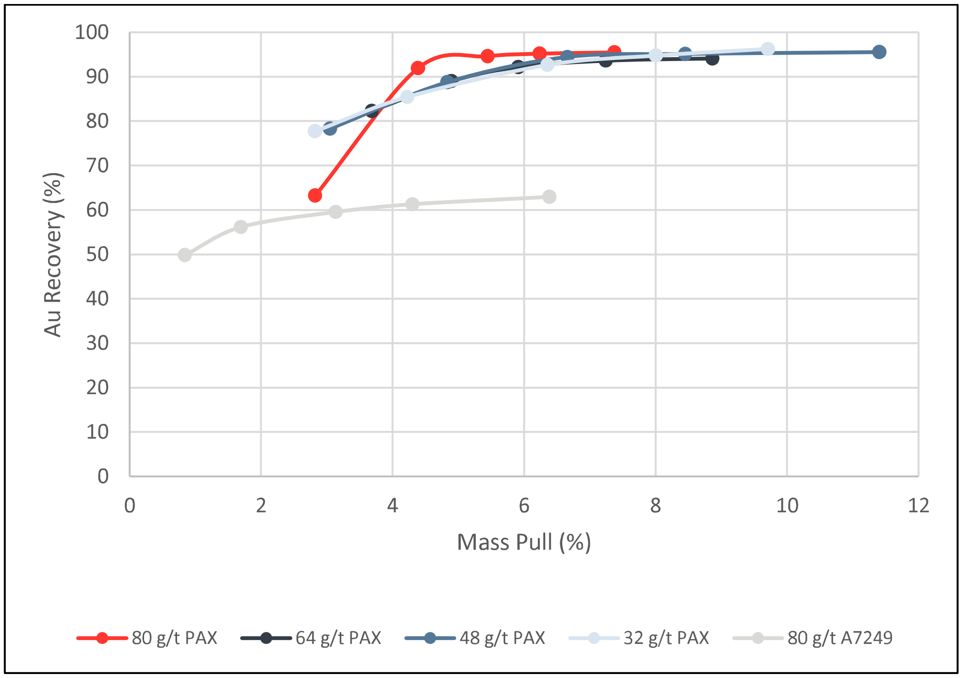


Figure 13.5: Kinetic Recovery Plots for Reagent Scoping Flotation Tests

In Phase 2, further reagent optimization was done using a wider variety of reagents and addition rates. In Table 13.4, tests FT6 to FT13 were completed on GRG tailings to gauge the effect of the lower head grade on flotation concentrate grade. These GRG tailings had a P80 of 185 µm.

Table 13.4: Summary of Test Conditions and Results of Rougher Reagent Flotation Tests

Test	Charge Mass kg	% Solids	Grind Size µm	Na2SiO3 g/t	A5688 g/t	Aero 8045 g/t	Aero MX983 g/t	PAX Dosage g/t	MIBC g/t	Mass Pull %	Au Recovery %	Au Grade g/t
FT6	1	33	185*		30	-	-	50	10	17.18	94.17	3.89
FT7	1	33	185*		-	30	-	50	10	11.64	70.12	5.52
FT8	1	33	185*		-	-	30	50	10	23.32	90.25	2.65
FT9	1	33	185*	500	-	-	-	80	10	10.61	96.44	9.13
FT10	1	33	185*		-	-	-	50	10	12.32	90.38	5.35
FT11	1	33	185*		-	-	-	32	10	18.27	94.48	5.36
FT12	1	33	185*		-	-	-	20	10	12.68	91.73	7.64
FT13	1	33	185*		-	-	-	15	10	20.00	88.82	6.99
FT14	1	33	150	500	150	-	-	-	10	20.00	88.82	6.99

* GRG Tailings

The results show that the highest gold recovery was achieved during test FT9 where 80 g/t of PAX was used. Tests FT6 and FT11 also performed well with gold recoveries over 94% to the rougher concentrate.

13.3.4.3 Cleaner Flotation Tests

During the first phase, two stages of cleaner tests were performed on two grind sizes, 125 µm and 190 µm, to produce a gold grade recovery curve. The results of the tests are shown in Table 13.6. Recoveries were higher when testing the 125 µm sample.

The results show that for the test performed using a 125 µm primary grind size the rougher recovery reached 93.2% Au. After a single stage of cleaning, the recovery dropped to 88.3% and to 85.4% after two stages of cleaning. The 7.43% mass recovery in the rougher stage was reduced to 3.25% in the second cleaner concentrate.

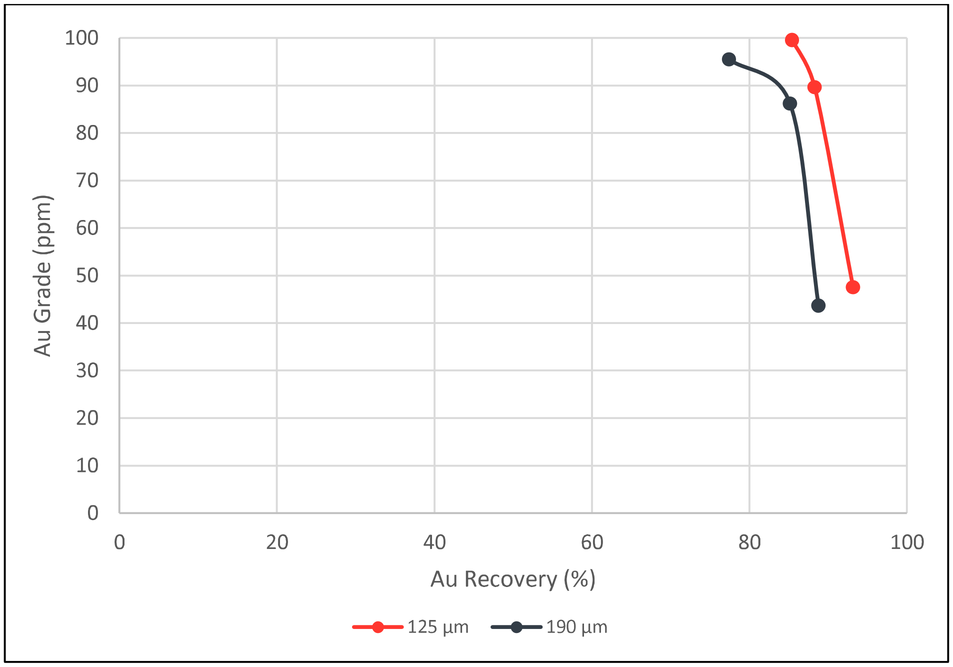


Figure 13.6: Au Grade Recovery Curves for Cleaner Tests Performed at 125 µm and 190 µm Primary Grind Sizes

In Phase 2, cleaner flotation tests were performed on 150 µm samples using various reagents. Results obtained when using PAX at 32 g/t showed that high stage gold recoveries could be achieved. The gold recovery in the rougher stage reached 96.4% and the first cleaner concentrate gold recovery reached 94.7%. Introducing a second stage of cleaning saw the gold recovery drop to 83.3%.

13.3.4.4 Bulk Flotation

In Phase 1, a bulk rougher flotation test was performed on 30 kg of feed material to produce material for cyanidation tests. The test was done at the selected primary grind size of 125 µm, over 15 minutes of flotation and using 80 g/t of PAX.

A gold recovery of 95,5% was achieved to the rougher concentrate with a mass pull of 5.97% yielding a gold grade to the concentrate of 60.0 g/t Au.

During the second phase, another rougher bulk flotation test was performed on 150 kg of material to generate more flotation concentrate sample for leach testing. The test was done at a grind size of 175 µm and using 32 g/t of PAX and 500 g/t of Na_2SiO_3.

A gold recovery of 97.5% was achieved to the rougher concentrate with a mass pull of 6.55% yielding a gold grade to the concentrate of 27.4 g/t Au.

The bulk rougher flotation test was then repeated on a 40 kg charge to generate more flotation concentrate sample for leach testing. This test was done using the same conditions as the previous test. The results indicated that 96.3% of the gold was recovered to the float concentrate with a mass pull of 7.21% and producing a concentrate with a gold grade of 16.7 g/t.

13.3.4.5 Locked Cycle Flotation

In the second phase, a locked cycle flotation test was performed on the GRG tailings at a P80 of 185 µm. The locked cycle test consisted of a rougher stage followed by two stages of cleaning. The rougher flotation stage was carried out using 32 g/t of PAX and 500 g/t of Na_2SiO_3. PAX was also added in the first cleaner stage, at a dosage of 12 g/t.

The results of the locked cycle test show that a gold recovery from the GRG tailings to a second cleaner concentrate of 88.2% was achieved with a concentrate grade of 32.0 g/t Au.

13.3.5 Leaching

13.3.5.1 Whole Ore Leaching

In the first phase of testing, a series of whole ore cyanidation tests were performed at different grind sizes to assess the amenability of the ore to direct cyanidation. The tests were carried out at a cyanide concentration of 1 g/l.

The gold and silver extraction kinetics results are shown in Figure 13.7 and Figure 13.8.

The results show that gold extraction was high for all grind sizes (between 94.8% and 98.8%) and gold leaching was complete after 24 hours. Tests performed on samples 53 µm and finer have higher gold recoveries with 98.8% at 38 µm and 98.5% at 53 µm.

Silver recoveries were lower, ranging between 48.5% and 81.7%.

The cyanide consumption ranged between 0.3 and 0.5 kg/t of feed showing a slight increase with the finer grind sizes. Lime consumption varied between 0.3 to 0.6 kg/t of feed again showing an increase in finer grind sizes.

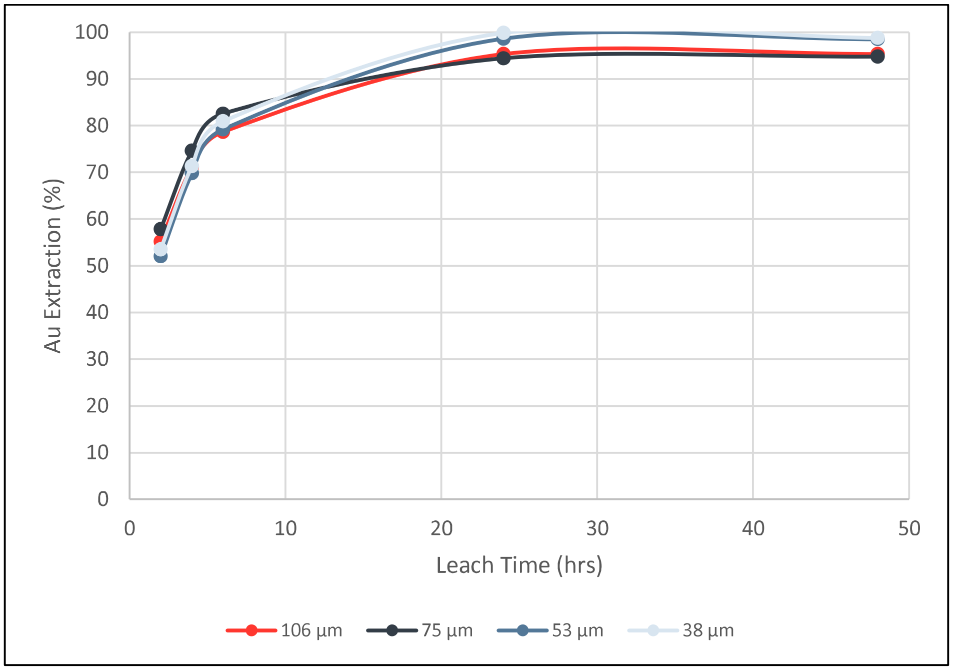


Figure 13.7: Kinetic Extraction Plots for Au for the Mesh of Grind Cyanidation Tests

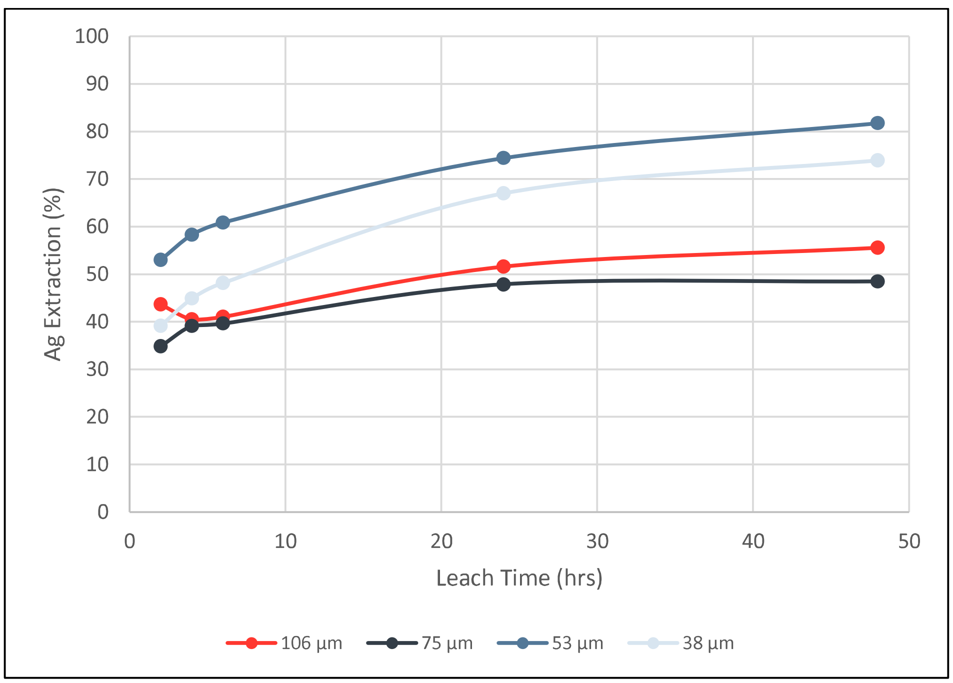


Figure 13.8: Kinetic Extraction Plots for Ag for the Mesh of Grind Cyanidation Tests

13.3.5.2 *Flotation Concentrate Leaching*

13.3.5.2.1 Effect of Grind on Gold Extraction

In Phase 1, the bulk flotation concentrate was reground to three product sizes (45, 30 and 15 µm) and submitted to cyanidation tests for 48 hours at a cyanide concentration of 5 g/l. Excellent gold extractions were seen for all sizes tested (from 98.8% at 45 µm to 99.7% at 15 µm.

The results are presented in Figure 13.9.

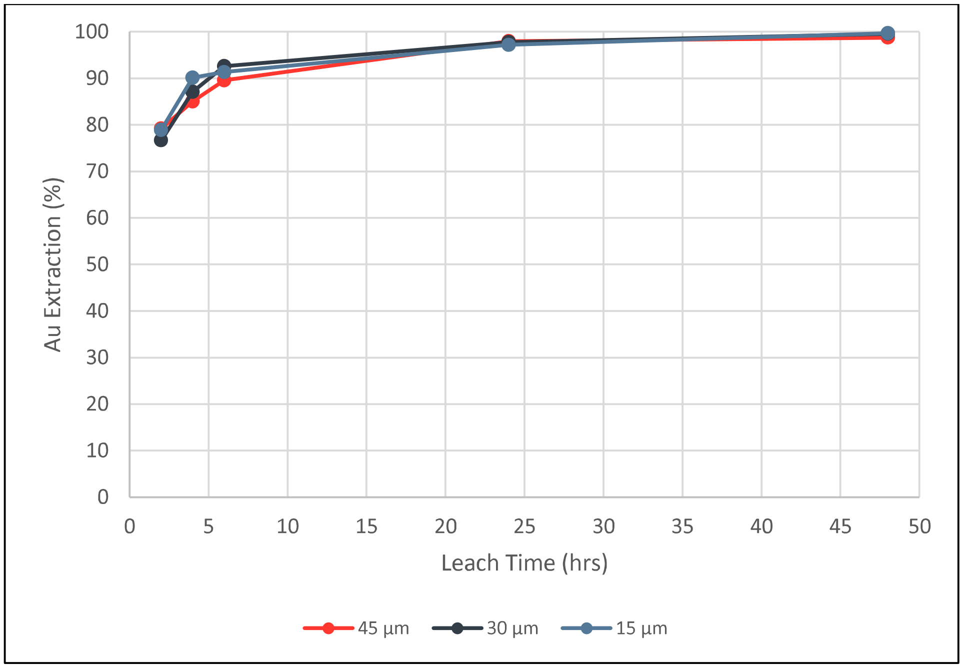


Figure 13.9: Au Kinetic Extraction Plots for Intensive Cyanidation Tests Performed on Reground Bulk Flotation Rougher Concentrate

Cyanide consumption ranged between 17.0 kg/t and 26.0 kg/t with a trend for increasing consumption at the finer grind size tested which is explained through the increased surface area of the sulphide content. Lime consumption ranged between 6.0 kg/t and 40.4 kg/t with increasing consumption seen at the finer regrind sizes.

During the second phase of testing, the bulk rougher concentrate was reground to 75, 60, 47 and 38 µm and submitted to 48 hours of leach at a 2 g/l concentration of NaCN. Gold extractions were above 95.5% for all tests, with the highest recovery observed for the 60 µm sample. No trend relating final extraction or kinetic extraction rate to grind size was demonstrated.

The results are presented in Figure 13.10.

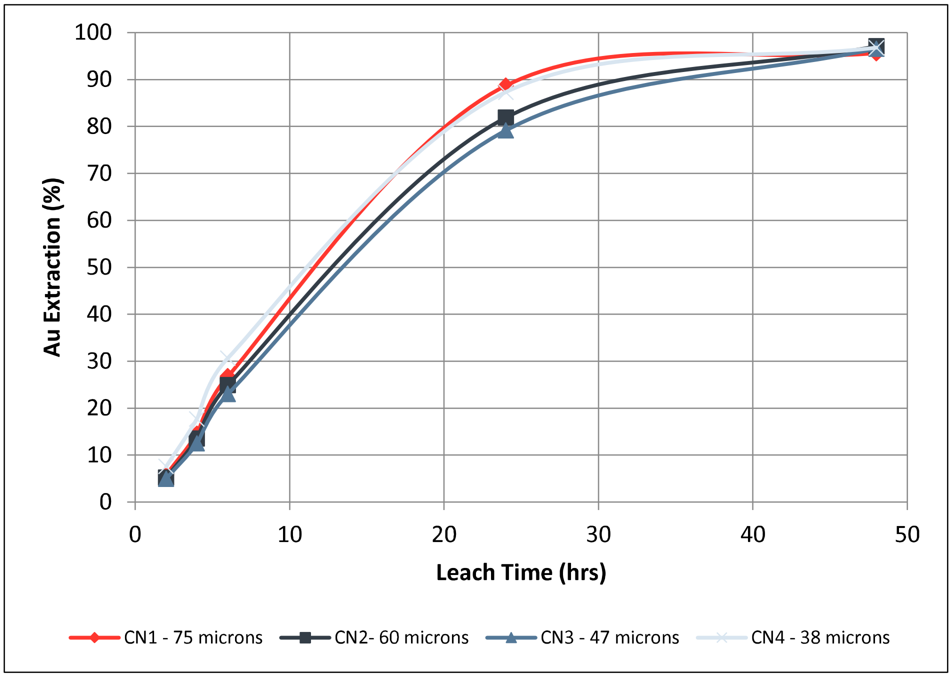


Figure 13.10: Kinetic Extraction Plots for Au During Mesh of Flotation Concentrate Grind Cyanidation Tests

13.3.5.2.2 Effect of Cyanide Concentration on Gold Extraction

In Phase 2 of the test work, a series of cyanide leach tests were completed on 60 µm samples at different NaCN dosages (5, 1 and 0.75 g/l). These results were compared against a test completed previously using the same conditions but at 2.0 g/l NaCN.

The results presented in Figure 13.11 show that gold extraction ranged between 95.5% and 47.4% with a clear trend of increasing final gold extraction and kinetic extraction with increasing NaCN concentration.

Cyanide consumptions for the tests ranged between 2.4 kg/t and 3.9 kg/t NaCN. Lime consumption ranged between 0.7 kg/t to 1.0 kg/t $Ca(OH)_2$ with a trend showing increasing consumption rates with increasing cyanide dosage.

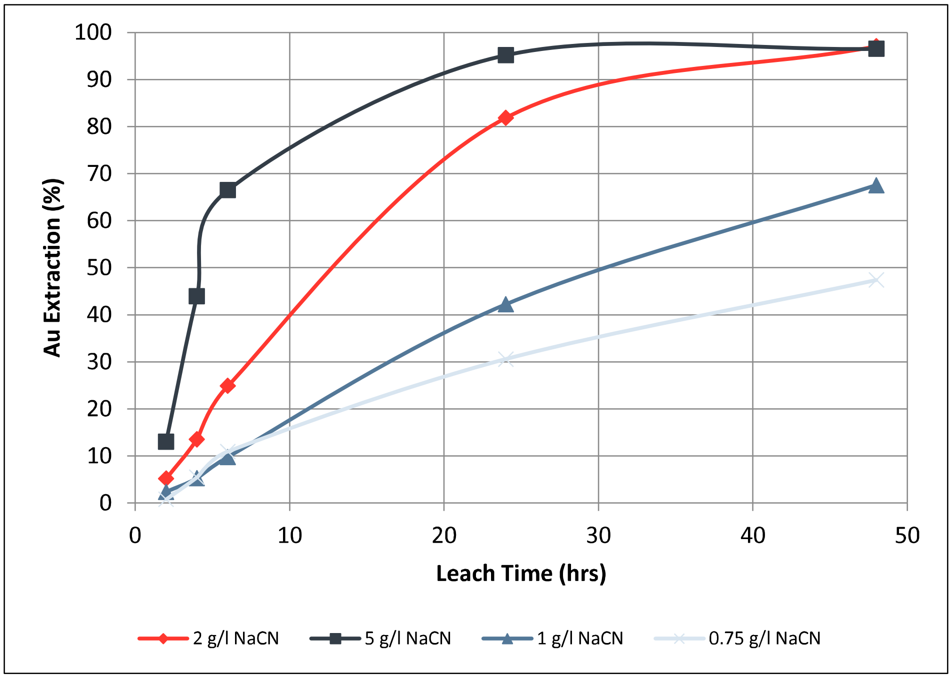


Figure 13.11: Kinetic Extraction Plots for Au during Cyanide Dosage Cyanidation Tests

13.3.5.2.3 Effect of Lead Nitrate Addition on Leach Kinetics

During Phase 2, a series of tests were completed on the 60 µm sample to investigate the effect of lead nitrate addition on leach rate and reagents consumption. Three dosages were tested (100, 200 and 400 g/t) and were compared against a previous test completed on a 60 µm sample using the same conditions but without lead nitrate.

The results, shown in Figure 13.12, demonstrate that after about 30 hours of leaching, the gold extraction was lower when lead nitrate was added. Gold extraction to solution ranged between 90.4% and 91.8% with the addition of lead nitrate compared to 97.1% without. However, the initial kinetics of gold extraction were faster with the addition of lead nitrate.

Cyanide consumptions ranged between 3.2 kg/t and 3.5 kg/t NaCN. No clear trend between lead nitrate addition rates and cyanide consumptions were observed. Lime consumptions ranged between 0.4 kg/t and 0.8 kg/t $Ca(OH)_2$ with a trend of decreasing lime consumption with increasing lead nitrate addition.

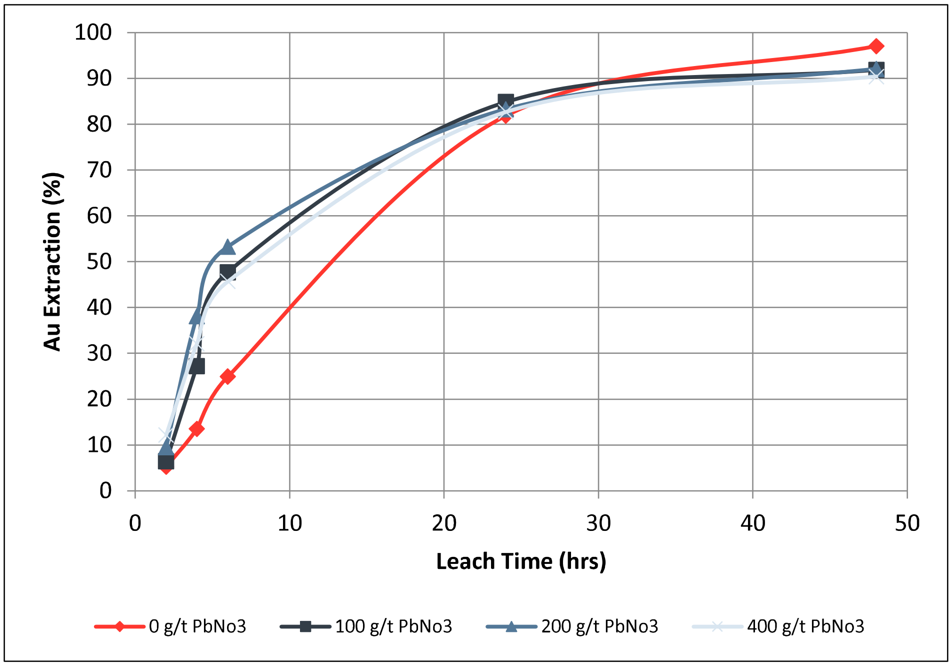


Figure 13.12: Kinetic Extraction Plots for Au during Lead Nitrate Cyanidation Tests

13.3.5.2.4 Effect of Pre-Aeration

In the second phase of testing, oxygen addition in a preconditioning step and during leaching were tested to measure the effect on the gold extraction kinetics and reagent consumptions. The conditions of the test work are shown in Table 13.5.

Table 13.5: Conditions Used During Pre-Aerated Cyanide Leach Tests

Test	Pre-aeration	Pre-aeration DO2 mg/l	NaCN g/l	$PbNO_3$	Leach DO2 mg/l
1	Y	40+	3.77	200 g/t	20
2	Y	40+	1.89	200 g/t	20
3	Y	40+	1.42	200 g/t	20
4	Y	40+	1.42	0 g/t	20
22-1967 CN9	N	-	2.00	200 g/t	Natural

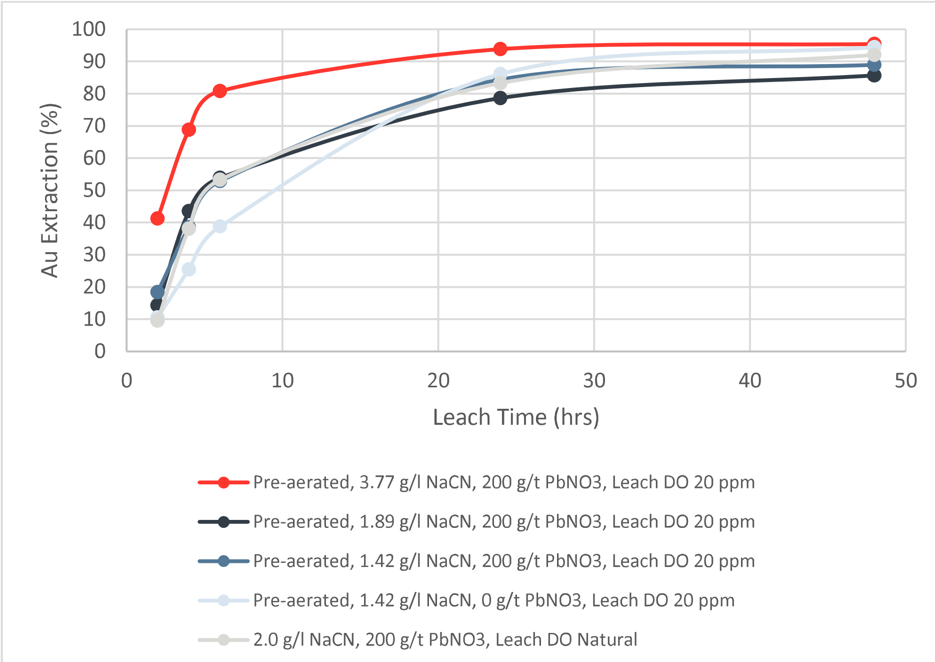


Figure 13.13: Kinetic Au Extraction Plots for Pre-Aerated Cyanide Leach Tests

The results, shown in Figure 13.13, demonstrate that the gold extraction to solution for the tests conducted with pre-aeration and aeration during leach ranged between 85.6% to 95.4%. Cyanide consumption during the test work ranged between 2.8 kg/t and 4.0 kg/t NaCN showing increasing consumption with increasing cyanide dosage rate.

There was no improvement in the extraction or the kinetics with a pre-aeration step or higher Dissolved Oxygen (DO) levels.

13.3.5.3 Leaching of Flotation Tailings

The flotation tailings generated from the locked cycle test and bulk flotation tests during Phase 2 were subjected to cyanide leach testing. The primary objective of this test was to obtain a back calculated gold grade and to provide kinetics leach data on flotation tailings.

The tests were carried out on 1 kg samples at 40% solids over a 48 hours leach period and at a cyanide concentration of 1 gram per litre (g/l).

The results are summarized in Table 13.6 and show that the gold extraction was 46.9% for the locked cycle test tailings and 56.3% for the bulk flotation tailings.

Table 13.6: Summary of Flotation Tailings Cyanide Leach Results

Leach Feed Sample	Au Extraction to Solution %	Au in Residue g/t	Back Calculated Head g/t Au	Cyanide Consumption kg/t NaCN
LCT Tailings	46.91	0.07	0.14	0.12
Bulk Flotation Tailings	56.31	0.06	0.14	0.12

The back calculated gold grades for the tests both came back at 0.14 g/t Au, which is significantly higher than the previously reported direct assays of 0.07 and 0.06 for the locked cycle test and bulk flotation tailings respectively.

The cyanide consumptions for both tests were 0.1 kg/t NaCN.

13.3.6 Cyanide Destruction

The slurry from the bulk leach test was submitted for INCO SO_2 / air cyanide destruction testing.

Table 13.7 shows the analysis of the feed to the test with Table 13.8 showing the conditions used for the continuous cyanide destruction test. Sodium metabisulphite was used as the source of SO_2.

Table 13.7:Feed Analysis of the Feed to INCO Cyanide Destruction

Feed Solution Analysis	Mg/l
Copper	551.00
Zinc	0.59
Iron	6.41
Nickel	1.70
Cyanide total	1,130.00
Cyanide wad	770.00

Table 13.8: Operating Conditions for INCO Test

Parameter	Value
Feed Solids	30%
SO_2 g/g CN wad	6.5
$CuSO_4$	NA
pH Target	9.5
Retention Time mins	180

The results of the continuous test, presented in Figure 13.14, show that the weak acid dissociable cyanide (CN_{WAD}) concentration level was maintained below 1ppm (measured using the picric acid method) over the duration of the test. An ICP scan of the final sample had a higher CN_{WAD} concentration of 2.8 ppm, which is still well below allowable European discharge levels to tailings storage facilities (TSF) of 10 mg/l.

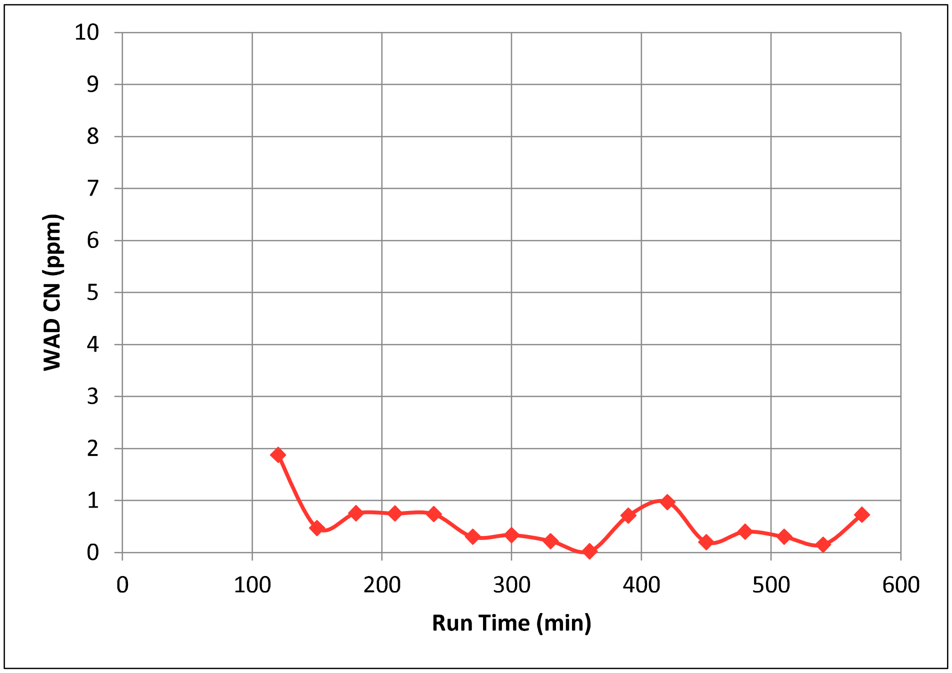


Figure 13.14: Plot of WAD Cyanide Levels in Cyanide Destruction Reactor Discharge

13.3.7 Settling Tests and Flocculant Screening

During Phase 1 of testing, flocculant screening was carried out on the tailings from the bulk flotation test. The flocculants tested were from the Nasfloc series (2286, 2132, 2326 and 2354). A test without flocculant addition was also perfomed.

The results showed that Nasfloc 2354 was the most effective at providing fast settling and a clear overflow.

Initial solid liquid separation testing has shown that the bulk flotation tailings responded well to flocculation and settling. The results from the test work are shown in Table 13.9.

Table 13.9: Summary Results of Settling Tests Performed on Bulk Flotation Tails

Settling Test	Feed Solids %	Flocculent	Dosage g/t	Settling Rate m3/m	Thickener Unit Area Underflow M2/MTPD	Solids % at Compression Point	Final Underflow Solids Density %
1	10	N2354	14.25	4818.53	0.639	63.0	71.6
2	10	N2354	21.37	4744.92	0.332	61.2	65.8
3	10	N2354	28.26	4523.9	0.245	53.4	60.9
4	10	N2354	35.62	5096.4	0.123	63.0	67.5
5	12.5	N2353	34.74	4553.28	0.187	60.8	65.7
6	15	N2354	34.85	4553.28	0.136	62.3	67.3
7	17.5	N2354	40.00	3689.63	0.228	52.8	61.5
8	20	N2354	39.33	4142.02	0.166	58.5	63.7

Initial settling rates in the order of 4500 m^3/m^2.day were observed with high underflow solids densities (between 60% and 70%). Thickener unit area underflows of 0.166 m^2/MTPD were achieved with feed-well solids contents of 20%.

13.3.8 Environmental Tests

As part of the first phase of testing, various environmental tests were conducted as described in the following sections.

13.3.8.1 Waste Rock Chemical Analysis

Tailings from the various process steps (gravity flotation tailings, leach and cyanide destruction) were analysed for U, Th, Cd, and Hg concentrations.

All the samples were below the detection limit of 0.0001% for the elements assayed.

13.3.8.2 Acid Base Accounting and Net Acid Generation Tests

Samples of waste rock and tailings from the bulk flotation test were submitted for acid base accounting tests.

Five waste rock samples were tested. Four of the five were classified as acid neutralizing and one sample was classified as potentially acid generating.

A flotation tailings sample was found to be acid neutralizing.

The results from the net acid generation tests on the five waste rock samples and the flotation tailings sample showed a final pH between 8.2 and 12.0. Therefore, all the samples tested are found to be acid neutralizing.

13.3.8.3 Waste Compliance Test

Five waste rock samples and a sample of the flotation tailings were sent for waste compliance leach testing.

Each of the samples was shown to be acceptable for inert waste landfill.

13.3.9 Gold Recovery

Based on a proposed flowsheet involving gravity concentration followed by flotation and cyanide leaching of the flotation concentrate, the overall projected metallurgical recoveries for gold at Ikkari are presented in Table 13.10.

Table 13.10: Projected Metallurgical Recoveries for at the Ikkari Deposit

Processing Step	Au Recovery (%)
Gravity*	47.0
Flotation	97.5
Leaching	97.1
Overall	**94.7**

Note: *No net loss, tailings sent to downstream recovery process.

14.0 MINERAL RESOURCE ESTIMATES

The MRE and other information in this Item are forward-looking information. The factors that could cause actual results to differ materially from the forward-looking information may include any significant differences from one or more of the following material factors or assumptions that were applied in drawing the conclusions or making the estimates, forecasts or projections set forth in this Item, including: **the natural geological variability of the deposit, accuracy of assay database, the assumptions used by the QP to prepare the data for resource estimation, the interpretation of the controlling structural environment and mineral domain models, the selection of grade interpolation method, sample search and estimation parameters used for grade interpolation, treatment of high-grade outlier sample data, continuity of mineralization and factors used to determine reasonable prospects for economic extraction.**

14.1 Introduction

This Report represents an update of the MRE to the 2023 Technical Report, titled “Rupert Resources Ltd. Preliminary Economic Assessment: Ikkari and Pahtavaara - Finland” with an Effective Date of March 10, 2023.

The updated Ikkari MRE was publicly disclosed on November 28, 2023, in the news release titled “Rupert Resources Reports Updated MRE for Ikkari of Over Four Million Ounces Gold in Indicated Category and Provides Details of Winter 2023/2024 Drilling Targets”; and is supported by this NI 43-101 Technical Report.

This MRE has been prepared in accordance with NI 43-101 following the requirements of Form 43-101F1. The methodology used to determine the MRE is consistent with the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2019) and was classified following CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014).

The QP for this MRE is Mr. Brian Thomas, P.Geo., an independent QP, as defined under NI 43-101 and an employee of WSP Canada Inc. based in Sudbury, Ontario, Canada. The effective date of this MRE is October 24, 2023.

The MRE outlined in the following sections, was based on geological models and drill hole data provided by Rupert Resources and was estimated using a 3D block modeling approach, based on Ordinary Kriging (OK), in Datamine Studio RM (Datamine) software.

14.2 Drill Hole Data

The MRE is based upon data provided from recent surface diamond drilling, completed by Rupert Resources between 2020 and 2023. The final drill hole database consisted of 255 drill holes, totaling approximately 111,896 m of core, 103,839 gold assays and 11,436 SG measurements and was made available for modeling on August 28, 2023.

Table 14.1: Overview of Ikkari Drilling Database

Year	Nº Drill Holes	Length (m)
2020	62	20,320
2021	75	36,049
2022	78	34,085
2023	40	21,442
Total	**255**	**111,896**

For the purposes of modeling, Rupert Resources provided only drill holes located within the Ikkari project area so no sub-domaining of the data was required prior to MRE.

The database was analyzed for interval errors and out of range values and was reviewed in 3D space to validate the hole locations and de-surveyed hole traces with no significant issues identified. Further to this, the database was validated for potential errors with the collar locations, downhole surveys, assay and density entries, core recovery and logged structural data. The QP concluded that the drill hole database was robust in its construction and suitable for use in MRE as described in Item 12.0.

The Rupert Resources drill hole data is supported by a QA/QC process as described previously in Item 11.0. The QP has also completed independent sample verification and check logging as summarized in Item 12.0 and has not identified any material flaws in the drill hole data or data collection procedures. Rupert Resources' data collection procedures were found to be consistent with industry practice. All drilling is recent and has been completed by Rupert Resources and there is no historical (legacy) data.

14.3 Geological Domaining

Rupert Resources modeled the deposit lithology, bedrock and topographic surfaces as well as three mineralized domains consisting of the Northern Felsic, Contact, and Internal Siderite domains, as outlined in Figure 14.2 and Figure 14.3. The domain models were based on a combination of lithology and mineralization generally above an approximate 0.3 g/t cut-off. The domain models were constructed by Rupert Resources using Leapfrog Geo software and reviewed by the QP relative to the drill hole data.

Mineralization domains were constrained by the bedrock-overburden contact and to the north by the contact with the black shale lithology unit, consistent with the grade distribution at this contact (Figure 14.1). Continuity of grade at the Northern Felsic - Ultramafic contact was also investigated (Figure 14.1). With no significant change in the grade distribution at the contact this was not treated as a boundary for the purpose of mineral domaining.

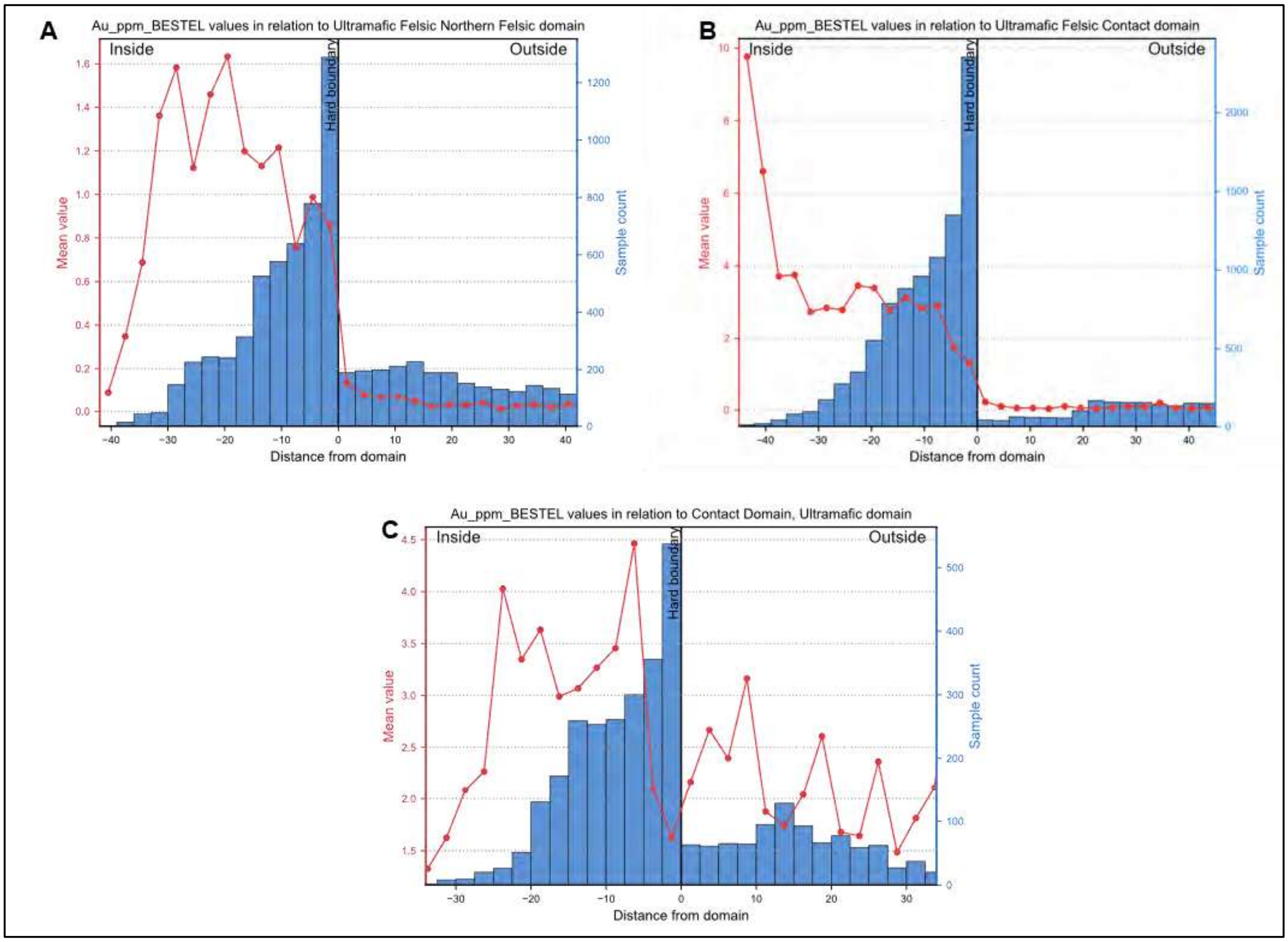


Figure 14.1: A) Contact Plot Northern Felsic Domain (inside) vs Black Shale (outside), B) Contact Plot Contact Domain (inside) vs Black Shale (outside), C) Contact Plot Ultramafic Host (inside) vs Felsic Host (outside) within the Contact Domain.

Small discontinuous lenses were removed and the models were verified for common issues such as duplicate vertices, duplicate faces, open edges and crossovers. Model volumes were queried and summarized in Table 14.1.

The QP notes that there is mineralization remaining outside of the modeled domains that could not be interpreted into continuous mineral domain volumes with any high degree of confidence. This mineralization was estimated within the surrounding background material. The background material was broken into two separate areas including the North, representative of the hangingwall black shale and gabbro units north of the Northern Felsic domain, and the South, representative of the footwall rocks that host the main mineralization. No bounding structures were identified that either offset or cut off mineralization.

It's the QP's opinion that the mineral domain models are representative of the current drill hole data observed for the Ikkari deposit and are suitable for use in the determination of this MRE.

The QP notes that there are risks associated with any geological interpretation and that it is subject to change with new data and geological understanding over time.

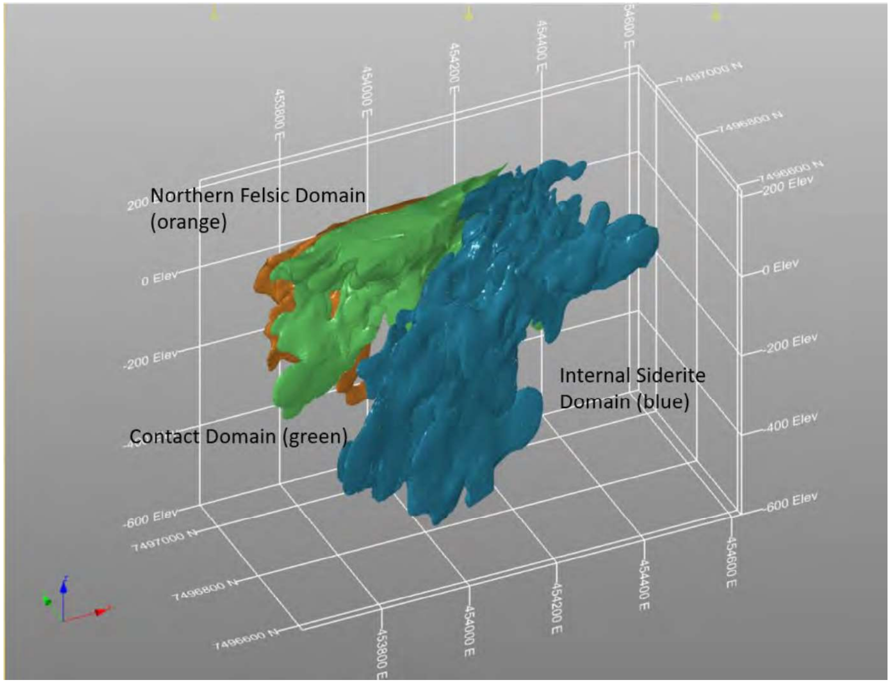


Figure 14.2: Ikkari Mineral Domains (Oblique View Facing Northeast)

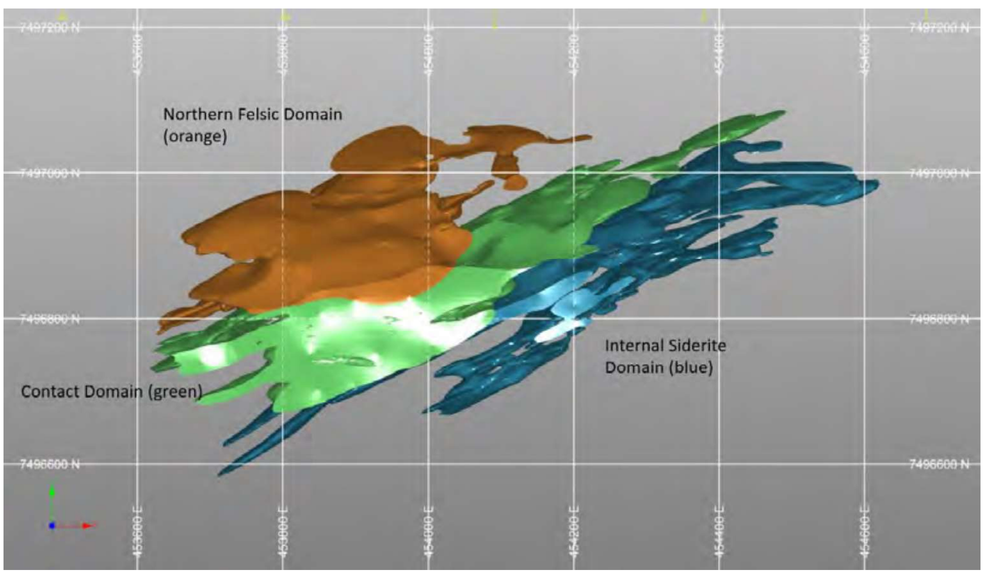


Figure 14.3: Ikkari Mineral Domains (plan view)

Table 14.2: Mineral Domain Volumes

Mineral Domain	Volume (m3)
Northern Felsic	7,339,035
Contact	9,977,062
Internal Siderite	14,617,334

14.4 Exploratory Data Analysis

Exploratory data analysis was conducted on the Ikkari gold and density data within each mineral domain in order to understand the grade distribution, validate the data for out-of-range values, assess sample lengths and identify high-grade outlier values in order to inform decisions relative to the estimation methodology such as interpolation method, sample composite length and outlier control strategies.

14.4.1 Descriptive Statistics

Table 14.3 summarizes the descriptive statistics by domain for raw sample grades, capped sample grades and capped composite grades. Comparison of the mean capped sample grades to the composite grades confirmed there were no changes to the mean grades during compositing. All grade domain populations were found to be positively skewed with some high-grade outlier values.

Table 14.3: Comparison of Au Sample Statistics

Domain	Sample Type	# of Samples	Min (g/t)	Max (g/t)	Mean (g/t)	Variance	Std. Deviation	C.V.
Contact	Raw	8,590	0.00	465.30	2.54	44.08	6.64	2.62
	Capped	8,590	0.00	30.00	2.41	18.72	4.33	1.79
	Composite	3,435	0.01	29.12	2.40	11.26	3.35	1.40
Internal Siderite	Raw	9,668	0.00	165.00	1.76	24.51	4.95	2.82
	Capped	9,668	0.00	50.00	1.72	17.27	4.16	2.42
	Composite	3,809	0.01	35.11	1.72	8.52	2.92	1.70
Northern Felsic	Raw	4,980	0.01	55.04	1.09	4.78	2.19	2.01
	Capped	4,980	0.01	30.00	1.09	4.37	2.09	1.93
	Composite	1,989	0.01	15.32	1.09	2.04	1.43	1.32
Background North	Raw	15,384	0.00	65.86	0.04	0.41	0.64	15.27
	Capped	15,384	0.00	5.50	0.03	0.04	0.20	5.76
	Composite	6,272	0.00	4.36	0.03	0.02	0.14	4.11
Background South	Raw	65,279	0.00	438.00	0.06	3.52	1.88	29.45
	Capped	65,279	0.00	15.00	0.05	0.12	0.34	6.43
	Composite	26,167	0.00	12.00	0.05	0.06	0.24	4.47

14.4.2 Compositing

A composite length of 2.5 m was chosen based on the block model Selective Mining Unit (SMU) dimensions of 10 x 5 x 5 m. All raw sample intervals were composited to a mean length of 2.5 m. As the composite length was variable, the composite lengths ranged between a minimum of 1 m to a maximum of 3 m. The global mean Au grades and total sample lengths were compared to ensure that no significant number of samples were lost during the compositing process.

14.4.3 Outlier Analysis

The raw samples within each mineral domain were assessed for high-grade outlier values based on XY scatterplots, cumulative probability plots, box plots, review of the raw ranked Au grades and descriptive statistics including Coefficient of Variation (CV). The CV values were observed to be relatively low in the 3 mineral domains and higher in the background domains due to their unconstrained nature. Lower CV values are considered an indicator that outlier grades will have less potential to bias block estimates. Based on these assessments top-cut values were used to cap (limit outlier grades to the top-cut value) the Au grades of the raw samples as summarized in Table 14.4.

Table 14.4: Summary of Outlier Controls

Domain	Top-Cut (g/t)	Number of Samples
Northern Felsic	30	1
Contact	30	16
Internal Siderite	50	11
Background North	5.5	10
Background South	15	11

Due to the unconstrained nature of the background domains, an additional distance restriction constraint of 10 m along strike, 10 m down dip and 5 m across strike was applied to all samples greater than 3 g/t in order to prevent excessive grade spreading in the block model estimates.

14.4.4 Specific Gravity

Specific Gravity (SG) measurements were taken by Rupert Resources from 10 – 15 cm core samples using the weight in air versus the weight in water method (Archimedes) based on the following formula:

$$SG = \frac{Sample\ Weight\ in\ Air}{Sample\ Weight\ in\ Air - Sample\ Weight\ in\ Water}$$

A full description of the SG measurement process is outlined in Item 11.0. SG measurements were assessed for out-of-range values with measurements less than 2.5 being discarded and measurements greater than 3.5 being capped at 3.5. Table 14.5 summarizes the SG data used in the block model estimate by domain.

Table 14.5: Summary of SG Data by Domain

Domain	Sample Type	# of Samples	Min (g/cm3)	Max (g/cm3)	Mean (g/cm3)	Variance	Std. Deviation	C.V.
Contact	Raw	925	2.06	6.82	2.88	0.05	0.21	0.07
	Capped	925	2.50	3.50	2.87	0.03	0.16	0.06
Internal Siderite	Raw	1,164	2.18	4.44	2.95	0.02	0.15	0.05
	Capped	1,164	2.50	3.50	2.95	0.02	0.14	0.05
Northern Felsic	Raw	422	2.55	3.83	2.76	0.01	0.09	0.03
	Capped	422	2.55	3.50	2.76	0.01	0.07	0.03
Background North	Raw	1,476	2.01	3.89	2.80	0.03	0.16	0.06
	Capped	1,476	2.50	3.50	2.81	0.02	0.14	0.05
Background South	Raw	7,419	1.79	5.69	2.87	0.01	0.12	0.04
	Capped	7,419	2.50	3.50	2.87	0.01	0.11	0.04

14.5 Block Model and Mineral Resource Estimation

14.5.1 Assessment of Spatial Grade Continuity

Spatial continuity of Au grade was assessed using a combination of variogram maps and directional variograms. This analysis provided input on the orientations and interpreted distance of grade continuity in each of the mineral domains. The variogram analysis was found to be consistent with geological orientations observed in the deposit and those modeled by Rupert Resources in the mineral domain models. This analysis was used as the basis for the search ellipse distances defined in the sample selection strategy as summarized in Item 14.5.4 and used for the purpose of assigning Kriging weights to the composite samples for grade estimation using OK. Table 14.6

summarizes the variogram model parameters for the two-structured spherical models. Variogram ellipses were generated for validation purposes and compared in 3D against the composite data to confirm reasonable alignment with observed grade trends.

Table 14.6: Variogram Model Parameters

Domain	VANGLE1	VANGLE2	VANGLE3	VAXIS1	VAXIS2	VAXIS3	NUGGET	ST1	ST1PAR1	ST1PAR2	ST1PAR3	ST1PAR4	ST2	ST2PAR1	ST2PAR2	ST2PAR3	ST2PAR4	TOTAL SILL
Contact	-25.00	10.00	77.70	3.00	2.00	1.00	0.298	1.00	14.20	7.10	9.20	0.34	1.00	80.1	60.30	29.90	0.10	0.74
Internal Siderite	-27.34	14.77	79.66	3.00	2.00	1.00	0.297	1.00	32.60	6.20	23.30	0.49	1.00	80	59.80	39.80	0.08	0.87
Northern Felsic	-25.00	10.00	77.70	3.00	2.00	1.00	0.298	1.00	14.20	7.10	9.20	0.34	1.00	80.1	60.30	29.90	0.10	0.74
Background North	-10.00	0.00	55.00	3.00	2.00	1.00	0.145	1.00	13.40	3.10	24.60	0.20	1.00	100	59.90	39.60	0.10	0.45
Background South	-25.00	15.00	73.60	3.00	2.00	1.00	0.253	1.00	9.20	16.90	15.60	0.17	1.00	100.2	79.90	40.10	0.13	0.55

14.5.2 Block Model Definition

The Ikkari block model specifications are summarized in Table 14.7. Block shape and sizes are typically a function of the geometry of the deposit, density of sample data, and expected SMU. On this basis, a -25 degree rotation was applied to orient the X-axis along the strike direction of mineralization and a parent block size of 10 m (X-axis along strike) by 5 m (Y-axis across strike) by 5 m (Z-axis down-dip) was chosen to represent the selective mining unit considered for the base case open pit and underground longhole mining scenarios.

Table 14.7: Block Model Definition

Direction	Minimum	Maximum	Block Size (m)	No. Blocks
Easting	453,700	455,040	10	134
Northing	7,496,200	7,497,100	5	180
Elevation	- 620	280	5	180

The final model was later expanded and moved to a new prototype for mine planning purposes with the expanded model specifications outlined on Table 14.8. The new origin positions were calculated to align with blocks in the original model prototype.

Table 14.8: Expanded Block Model Definition

Direction	Minimum	Maximum	Block Size (m)	No. Blocks
Easting	453,603.26209	455,343.26209	10	174
Northing	7,495,934.21470	7,497,234.21470	5	260
Elevation	- 620.0	280.0	5	180

The mineral domain envelopes were filled with regularized blocks (no block splitting used) and block volumes were then compared to the mineral domain wireframe volumes to confirm there were no significant volume discrepancies. Block volumes for all zones were found to be within reasonable tolerance limits of the mineral domain volumes.

14.5.3 Interpolation Methods

OK was the final Au and SG interpolation method chosen as the basis of the Ikkari MRE. This method assigns estimation weights to the samples within the search volume relative to the distance and direction of the sample data from the centre of each block. Samples located closest to the block centroid in directions of preferred grade continuity receive higher estimation weights as defined by the modeled variogram parameters.

Inverse Distance squared (ID^2) and Nearest Neighbour (NN) interpolation methods were also used for global comparison and validation purposes but were not used for final resource reporting.

14.5.4 Sample Selection Strategy

A 3 pass, elliptical search strategy was used to interpolate block grades with the first pass search distances based on half the variogram range and representing the areas having the highest drill hole density. The second pass was based on the full variogram range, and the third pass was twice the variogram range. Sample selection criteria for Au were calibrated based on a change of support smoothing ratio evaluation for each mineral domain and therefore have minor differences as summarized in Table 14.9.

Table 14.9: Sample Selection Criteria Used for Au Grade Estimation

Domain	Pass	Along Strike (m)	Down Dip (m)	Across Strike (m)	Min No of Samples	Max No. of Samples	Max No. Samples per Hole	Min No. of Holes
Contact	Pass 1	40	30	10	8	18	3	3
	Pass 2	80	60	20	8	18	3	3
	Pass 3	160	120	40	3	8	3	1
Internal Siderite	Pass 1	40	30	10	5	8	3	2
	Pass 2	80	60	20	5	8	3	2
	Pass 3	160	120	40	3	8	3	1
Northern Felsic	Pass 1	40	30	10	6	12	3	2
	Pass 2	80	60	20	6	12	3	2
	Pass 3	160	120	40	3	8	3	1
Background North and South	Pass 1	100	80	7.50	5	8	3	2
	Pass 2	150	120	11.25	5	8	3	2
	Pass 3	200	160	15	3	8	3	1

Smoothing ratios are based on the ratio between the theoretical expected model variance, and the actual OK model variance. The theoretical variance is calculated based on the declustered sample variance, the variogram model, block size, and F-Function.

A smoothing ratio of 1 represents the ideal scenario where the expected variance equals the model variance, and ratios between 0.8 to 1.2 are considered to be within acceptable tolerances that would not require any corrective actions. Ratios less than 0.8 are considered "under-smoothed" (lower tonnes and higher grade) and over 1.2 are considered "over smoothed" (higher tonnes and lower grade). Smoothing ratios generally greater than 2 need to be reviewed for any potential issues such as biased drill hole support and could require corrective actions as the proportion of tonnes and grade above the selective mining cut-off may not be representative of what can be achieved during mining. Corrective actions would include options such as adjusting various estimation parameters or conducting a variance correction on the model. Table 14.10 summarizes the smoothing ratios assessed for each domain relative to the selected search strategy.

Table 14.10: Summary of Smoothing Ratios by Domain

Domain	OK Smoothing Ratio
Contact	0.88
Internal Siderite	0.97
Northern Felsic	1.00
Background North	0.87
Background South	1.15

Dynamic Anisotropy was used to account for minor variations in deposit orientation. Dynamic Anisotropy is a Datamine process used to adjust search orientations based on the shape of a controlling surface, which in this case was a centre line surface through the middle of each mineral domain. Search orientations, defined by dip and dip direction, were estimated into the blocks based on the trends implicit to the mineral domain envelopes which were used to control the search ellipse orientation for each block during estimation.

14.5.5 Model Validation

The block model validation process included visual comparisons between block estimates and composite grades in plan, section, and long section along with a global comparison of mean grades and swath plots. Block estimates were visually compared to the drill hole composite data to check agreement.

Figure 14.4 and Figure 14.5 provide comparisons of the composite samples and block model Au estimates in plan and cross-section views. No material grade bias issues were identified, and the block grades compared well to the composite data.

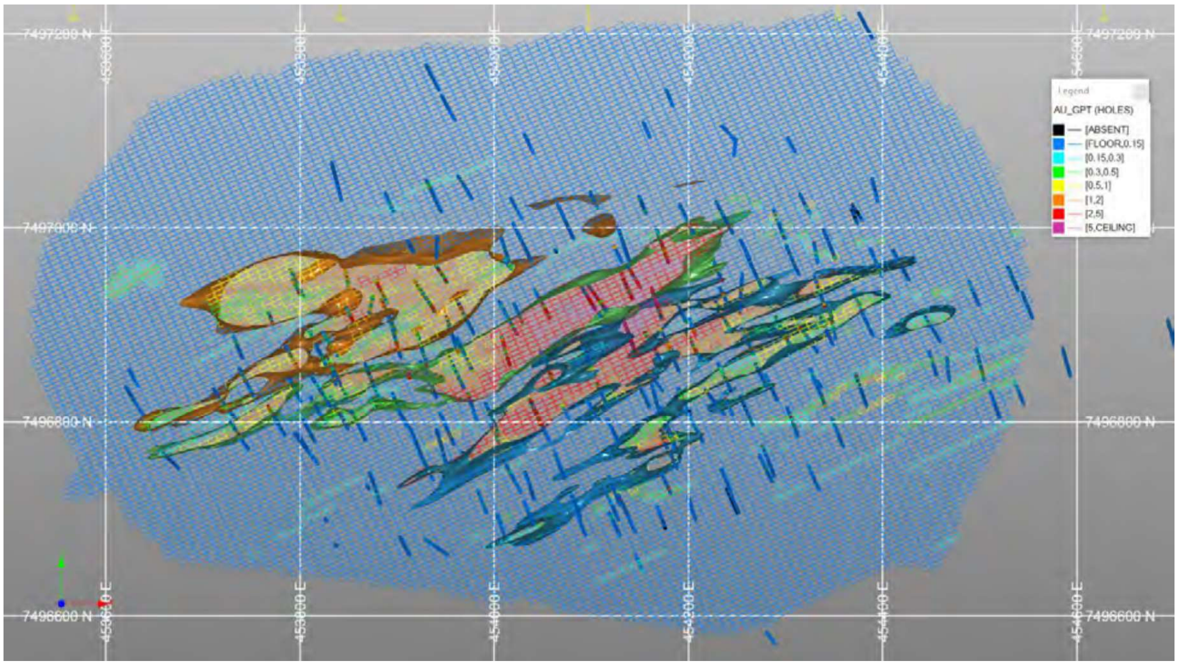


Figure 14.4: Plan View Comparison of Block Grades vs Composite Grades (0 Elevation)

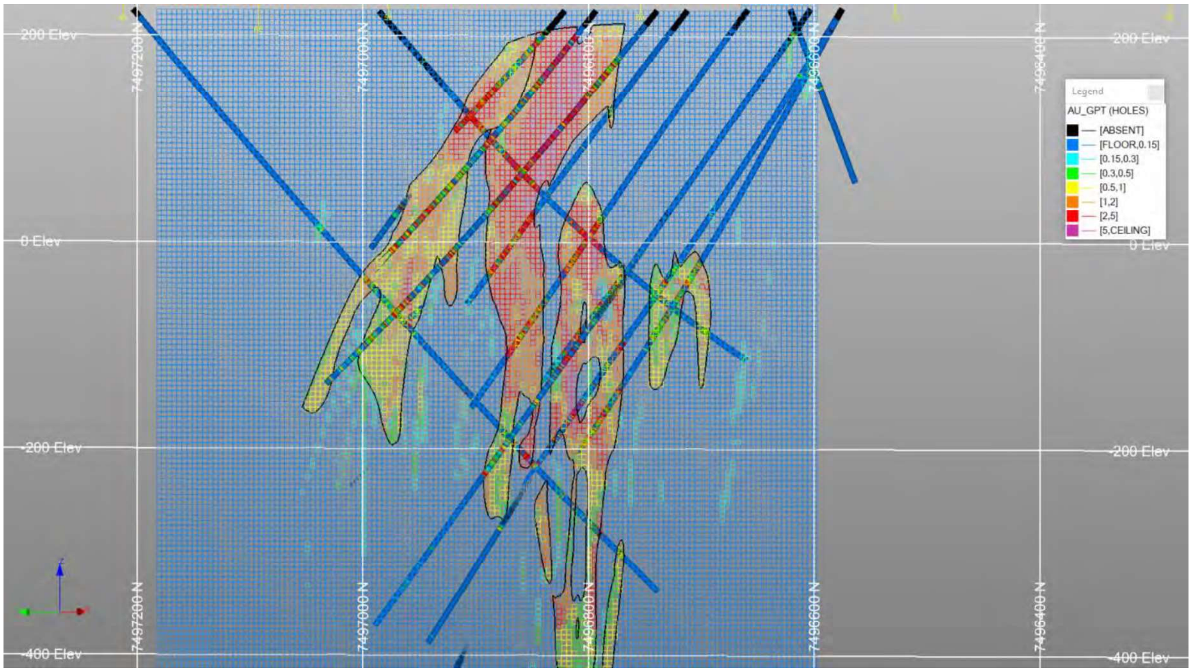


Figure 14.5: Example Cross-Section Comparison of Block Grades vs Composite Grades (Facing North-East)

Global statistical comparisons between the composite samples, NN estimates, ID^2 estimates and the final OK estimates were compared to assess for global bias, where the NN model estimates represent de-clustered composite data based on a 5 m composite length. A longer composite length was used for the NN model to be more representative of the block size so that more samples would be used and fewer samples excluded from the global estimate since NN is based on only the nearest sample. Clustering of the drill hole data can result in differences between the global means of the composites and NN estimates. Comparison of the global NN grades were found to compare favorably with the global OK estimates indicating that no material global bias was observed in the model. The results of the global bias assessment are summarized in Table 14.11.

Table 14.11: Statistical Comparison of Global Mean Au Grades

Domain	Composite Mean (g/t)	Global NN Mean (g/t)	Global ID^2 Mean (g/t)	Global OK Mean (g/t)	NN-ID Relative Difference (%)	NN-OK Relative Difference (%)
Contact	2.40	2.33	2.32	2.29	-0.31	-1.66
Internal Siderite	1.72	1.45	1.43	1.42	-1.98	-2.46
Northern Felsic	1.08	1.03	1.03	1.04	-0.03	0.75
Background North	0.03	0.03	0.03	0.03	-0.72	-0.58
Background South	0.05	0.05	0.05	0.05	-0.53	-0.04

Notes: The comparison is for all blocks (global) in the model irrespective of classification.
Relative difference calculated between OK mean and NN mean Au grades.

Swath plots of Au grades were generated from 40 m swaths for the 3 main mineral domains throughout the final model to evaluate for local grade bias issues. Figure 14.6, Figure 14.7 and Figure 14.8 highlight the grade comparisons for each interpolation method in each axis direction. The swath plots compare the OK, and ID^2 model grades to the NN model grades (de-clustered composite grades) in order to identify potential local grade bias in the model. Review of all the swath plots did not identify any significant bias in the model that is material to the MRE as there was general agreement between the de-clustered composites (NN model) and the final model grades with minor variances noted around the margins of the deposit.

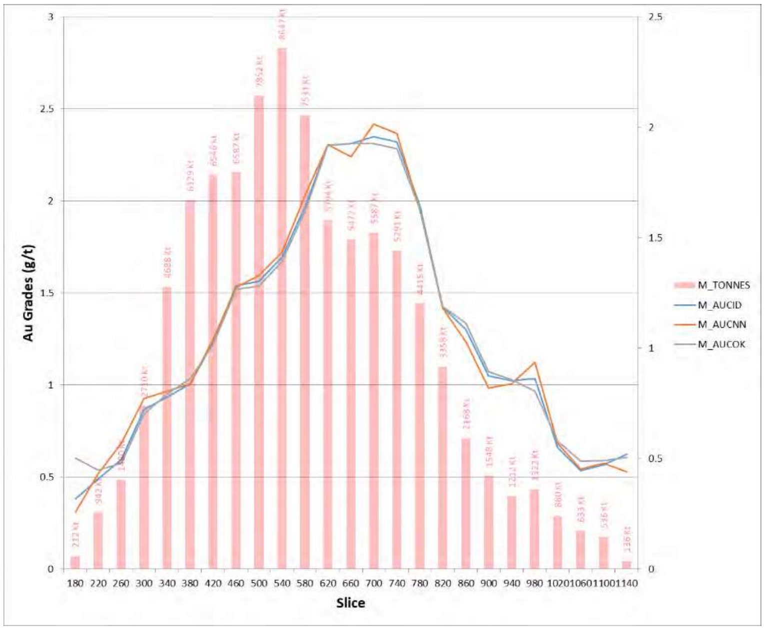


Figure 14.6: Swath Plot of the Ikkari Block Model (X-Axis)

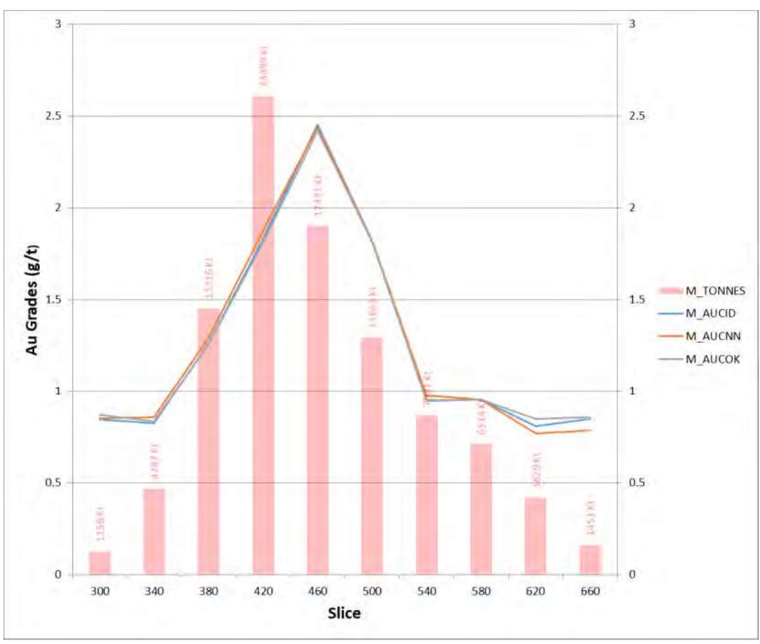


Figure 14.7: Swath Plot of the Ikkari Block Model (Y-Axis)

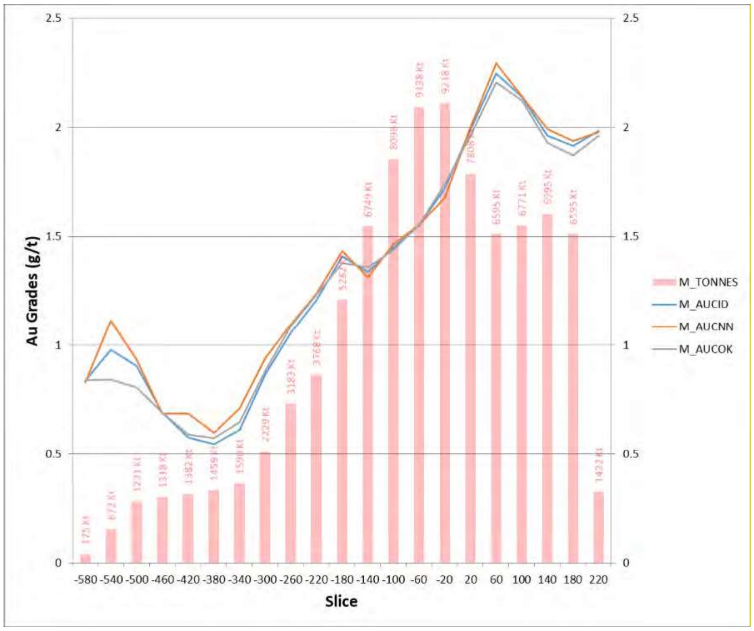


Figure 14.8: Swath Plot of the Ikkari Block Model (Z-Axis)

14.5.6 Resource Classification

The MRE was classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014). Resource classifications were assigned to broad regions of the block model based on QP confidence and judgement related to drill hole spacing, geological understanding, continuity of mineralization in conjunction with data quality and block model representativeness. Indicated Mineral Resources were defined at an approximate 40 m drill spacing or less and estimated within the first or second pass and confined to the mineral domain models (i.e., background domains excluded).

Inferred Mineral Resources were defined between 40 m and 80-m drill spacing. Final Inferred Mineral Resources for the UG MRE were confined to within the mineral domain model volumes as the mineralized material outside of the domain models, in the background domains, did not demonstrate adequate continuity to support RPEEE.

Measured Mineral Resources were not defined due to insufficient drill spacing relative to the deposit type.

Figure 14.9 and Figure 14.10 outline the locations of Indicated and Inferred Mineral resources in the Ikkari Deposit.

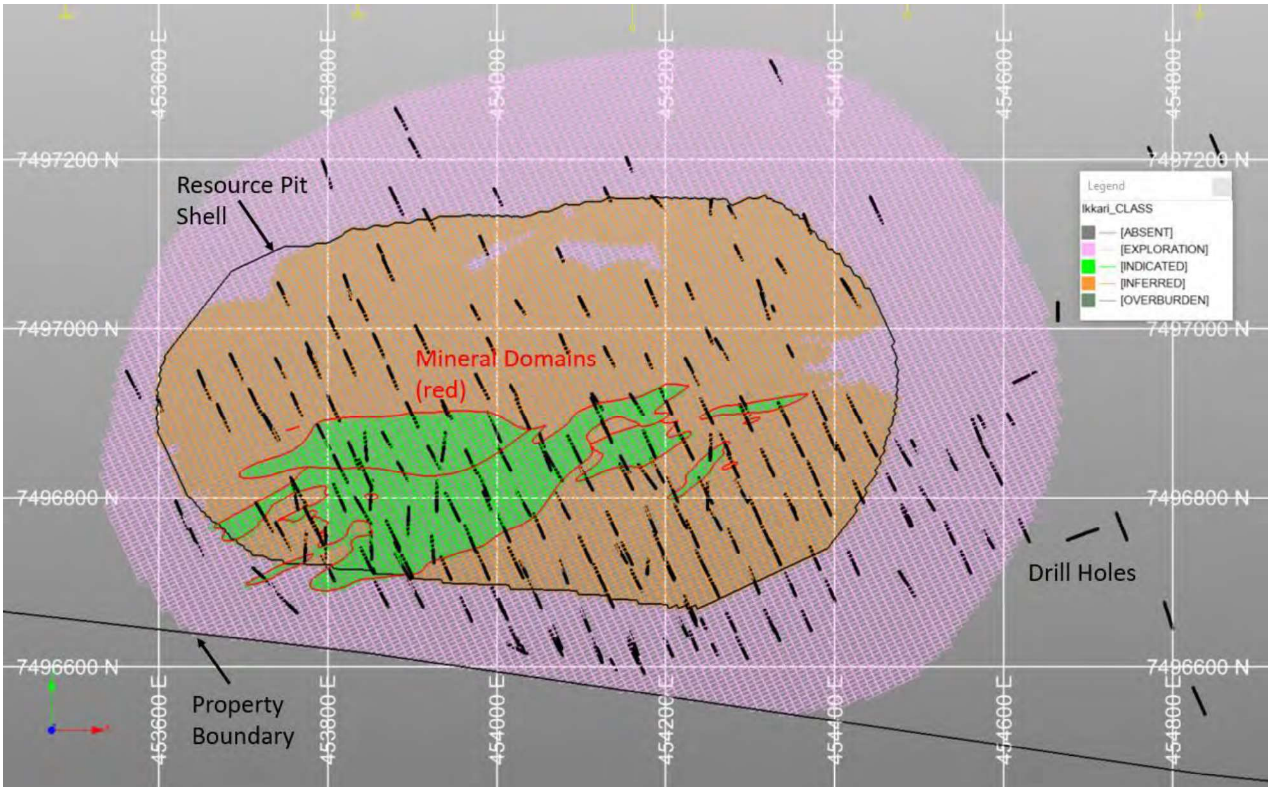


Figure 14.9: Ikkari Mineral Resource Classification in the Open Pit Area (Plan View, 150 m Elev.)

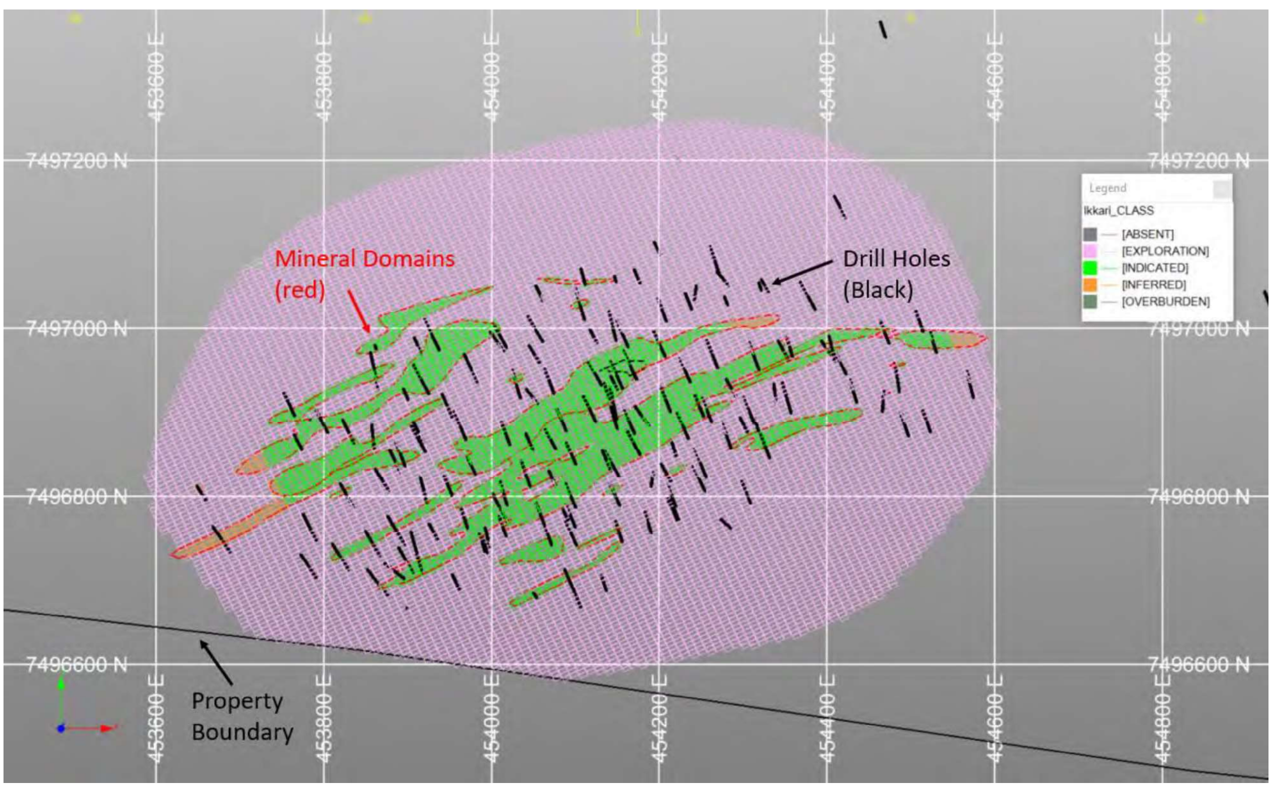


Figure 14.10: Ikkari Mineral Resource Classification in the Underground Area (Plan View, -100 m Elev.)

14.5.7 Reasonable Prospects for Eventual Economic Extraction (RPEEE)

14.5.7.1 Open Pit

Mineral Resources were reported above a 0.4 g/t break-even cut-off grade and constrained within a Whittle resource pit shell based on a revenue factor of 0.95. A 26 m buffer between the south edge of the resource pit shell and the license boundary was imposed. Pit slope angles were determined for five different pit sectors based on SRK's Geotechnical report on Ikkari dated June 2023. The pit shell and cut-off grade determination were supported by the following economic assumptions (costs stated in $US dollars):

- Gold Price: $1,700 / oz
- Metallurgical Gold Recovery: 95%
- Mining dilution 5 %
- Mining recovery 95 %
- Open pit ore mining cost: $2.9/t
- Open pit waste mining cost $2.2/t
- Additional haulage cost of $0.05/t/10-meter bench height
- Processing Cost: $11.30/t
- G&A, Rehabilitation & Closure: $4.8/t
- Royalty (state and landowner combined): 0.75%
- Gold payable 99.92 %
- Treatment charge $2.5/oz
- Pit slope angles from 3rd party geotechnical report prepared for Rupert Resources dated June 2023:
  - North pit sector 50.8°
  - East pit sector 44.8°
  - South-Southeast pit sector 43.2°
  - Southwest pit sector 44.9°
  - West pit sector 49.0°

Figure 14.11 and Figure 14.12 outline mineral resource blocks greater than 0.4 g/t within the pit shell (blue). The QP notes that mining dilution and recovery factors were used for the purpose of generating the resource pit shell only and were not applied to the MRE.

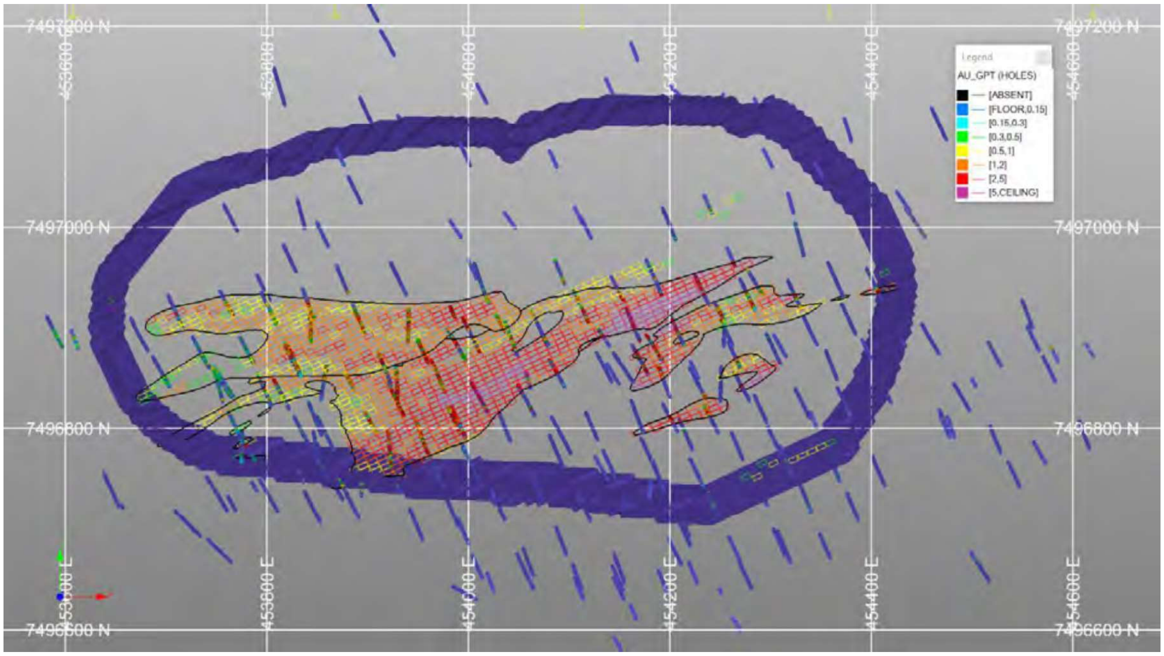


Figure 14.11: Plan View of the Resource Pit Shell (100-m Elevation)

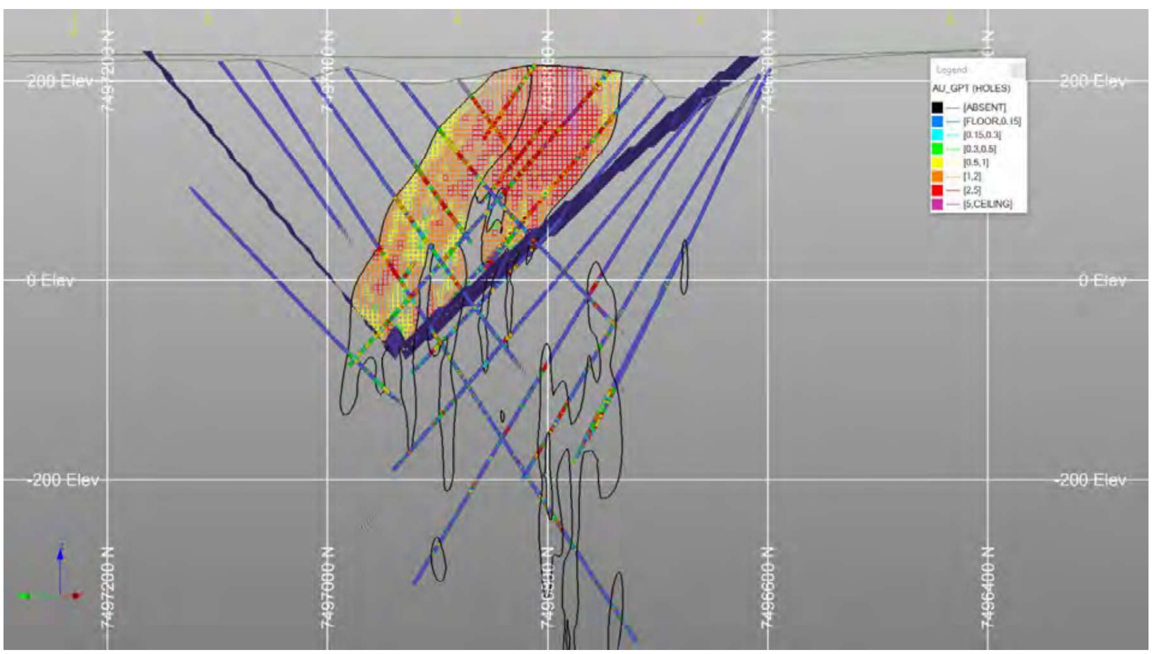


Figure 14.12: Example Cross-Section View of Resource Blocks within the Pit Shell (Facing North-East)

14.5.7.2 Underground

The UG MRE was reported outside and below the pit shell at a 0.9 g/t UG break-even cut-off grade representing bulk scale Longhole Open Stope mining. Resource blocks were evaluated for reasonable mining continuity and a decision was made to constrain the UG resource to within the 3 mineral domain models. Blocks above cut-off outside of the mineral domains did not demonstrate reasonable mining continuity and therefore were excluded from the MRE.

The calculation of the UG mining cut-off is supported by the following economic assumptions (costs stated in $US dollars).

- Gold Price: $1,700 / oz
- Metallurgical Gold Recovery: 95%
- Underground mining cost: $29/t
- Processing Cost: $11.30/t
- G&A, Rehabilitation & Closure: $4.8/t
- Royalty (state and landowner combined): 0.75%

Further UG constraining envelopes were evaluated but they did not account for some changes in orientation and no material difference was observed from reporting inside the mineral domains, therefore underground constraining grade envelopes were not used for reporting the MRE. Blocks above the cut-off grade, constrained within the mineral domain models, have been reviewed for continuity. In the opinion of the QP, they are of sufficient spatial continuity that these blocks meet the RPEEE test for underground mining. Figure 14.13 provides an example cross-section view of UG resource blocks.

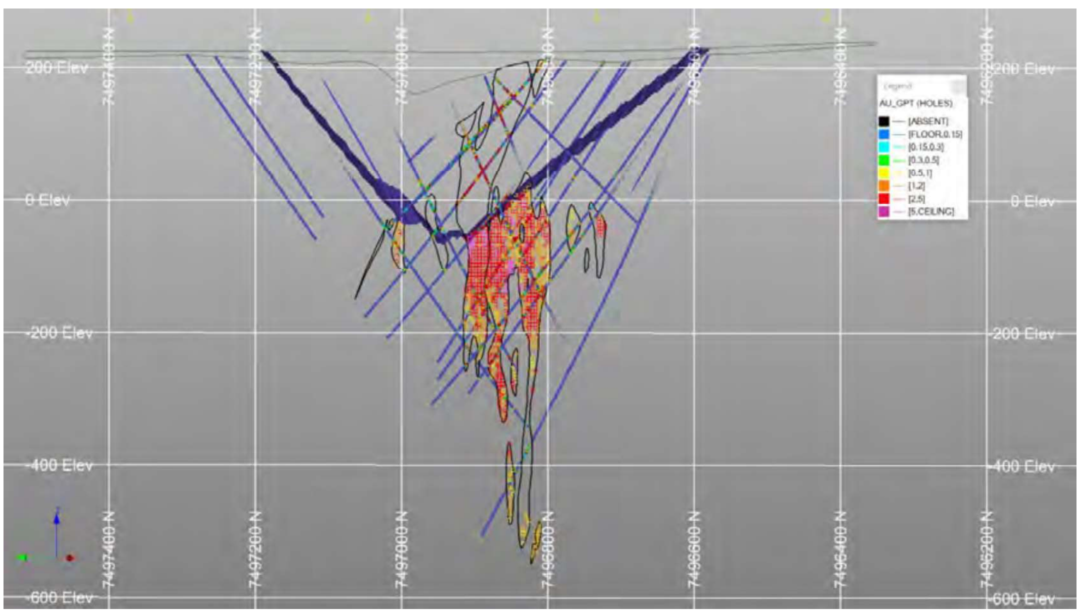


Figure 14.13: Example Cross-Section of Resource Blocks Constrained to within the Mineral Domains

14.5.7.3 Combined OP and UG Mineral Resource Blocks

Figure 14.14 illustrates the OP and UG resource blocks combined above their respective cut-off grades as described in the previous sections (resource pit shell shown in blue).

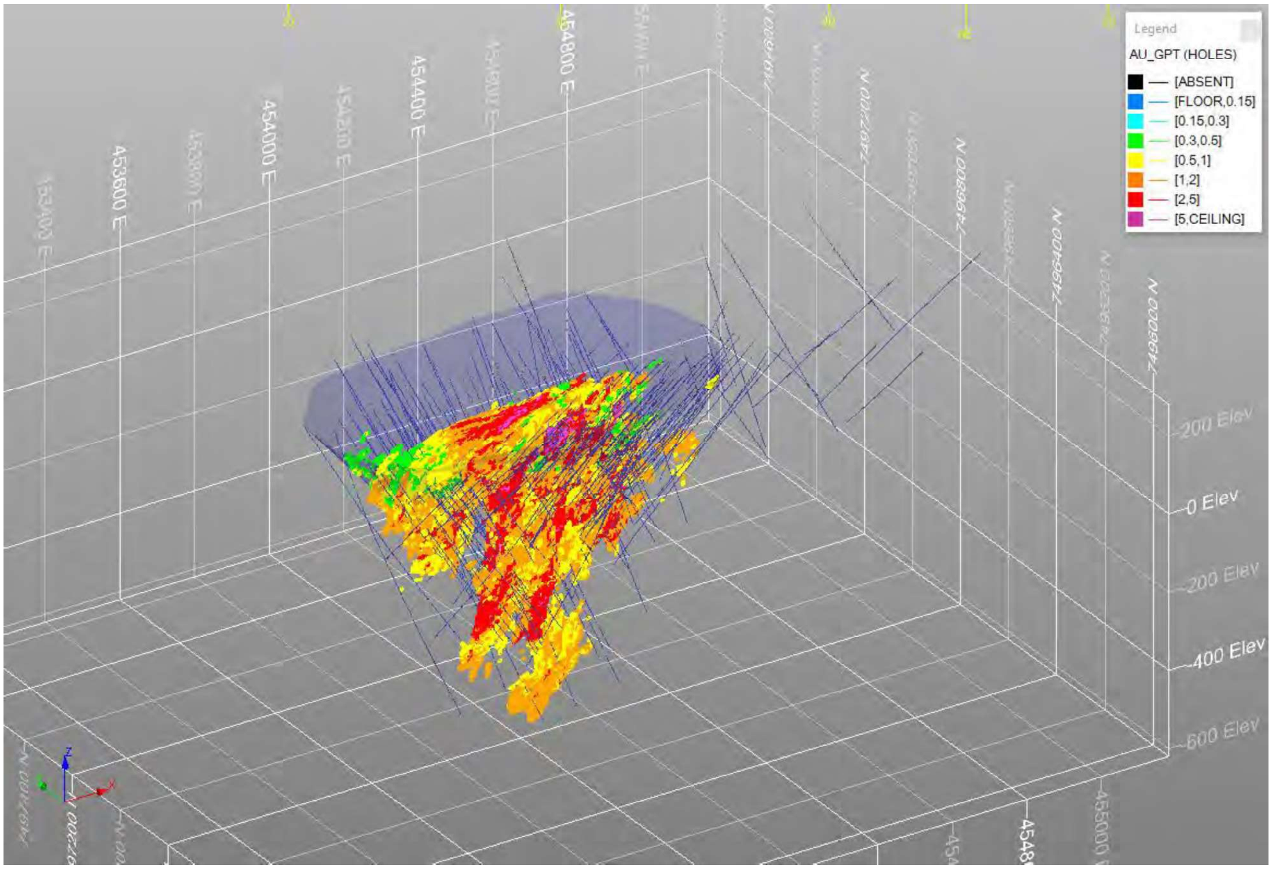


Figure 14.14: Oblique View Facing NE of Combined OP and UG Mineral Resource Blocks (resource pit shell in blue)

14.5.8 Mineral Resource Statement

Mineral Resources are not Mineral Reserves, and do not demonstrate economic viability. There is no certainty that all, or any part, of this Mineral Resource will be converted into Mineral Reserve. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves.

Table 14.12 summarizes the Indicated and Inferred Mineral Resources for the Ikkari Project, and Table 14.6, and Table 14.7 demonstrate the tonnage and grade sensitivity relative to other potential OP and UG mining cut-offs (base case scenarios highlighted in bold).

The OP MRE was evaluated for RPEEE by reporting blocks above a 0.4 g/t Au cut-off from within a Whittle generated pit shell based on the assumptions and parameters described in Item 14.5.7.

The UG MRE was constrained to the three mineral domains as they demonstrated reasonable continuity for the base case scenario of bulk tonnage longhole mining. Blocks above the cut-off grade in the Background domains were excluded from the reported underground resource estimate as they did not demonstrate adequate continuity for mining. Test case mining envelopes were generated to confirm that there was no material difference between constraining the resource to the mineral domain models.

Table 14.12: Ikkari Mineral Resource Estimate (Effective Date October 24, 2023)

Resource Category	Mining Method	Cut-Off Grade Au (g/t)	Tonnes (t)	Grade Au (g/t)	Au Content (Troy Ounces)
Indicated	Open Pit	0.4	37,308,000	2.21	2,649,000
	Underground	0.9	21,122,000	2.12	1,437,000
Total Indicated	-	-	**58,430,000**	**2.18**	**4,087,000**
Inferred	Open Pit	0.4	1,271,000	0.81	33,000
	Underground	0.9	2,305,000	1.39	103,000
Total Inferred	-	-	**3,576,000**	**1.18**	**136,000**

Notes:
1) Tonnage and ounces are rounded to the nearest 1 000.
2) g/t = grams per tonne, ounces are reported as troy ounces.
3) Totals may not add up correctly due to rounding.
4) Cut-off grade defined by Gold Price, $1700/oz, Metallurgical Recovery 95%, Open Pit Mining Costs $2.9/t, Underground Mining Cost $29/t, Processing Cost $11.30/t, G&A, Rehabilitation & Closure $4.8/t, Royalty 0.75%.
5) Open pit resources constrained within a Whittle Optimized open pit shell using the above assumptions with a 26m offset to the property boundary enforced.
6) Underground resources constrained within the estimation domains to meet the RPEEE criteria for underground mining.

Table 14.13 and Table 14.14 demonstrate OP and UG Mineral Resource sensitivities. Estimates reported below the base case mining scenario cut-offs for open pit and underground mining are shown for informational purposes and do not demonstrate RPEEE.

Table 14.13: Ikkari Open Pit Cut-off Sensitivity Comparison

Resource Category	Au Cut-Off (g/t)	Tonnes (t)	Grade Au (g/t)	Au Content (Troy Ozs)
INDICATED	0.30	38,385,000	2.16	2,662,000
INDICATED	0.35	37,866,000	2.18	2,656,000
INDICATED	**0.40**	**37,308,000**	**2.21**	**2,649,000**
INDICATED	0.45	36,618,000	2.24	2,640,000
INDICATED	0.50	35,944,000	2.28	2,630,000
INFERRED	0.30	1,883,000	0.66	40,000
INFERRED	0.35	1,510,000	0.74	36,000
INFERRED	**0.40**	**1,271,000**	**0.81**	**33,000**
INFERRED	0.45	1,059,000	0.88	30,000
INFERRED	0.50	913,000	0.95	28,000

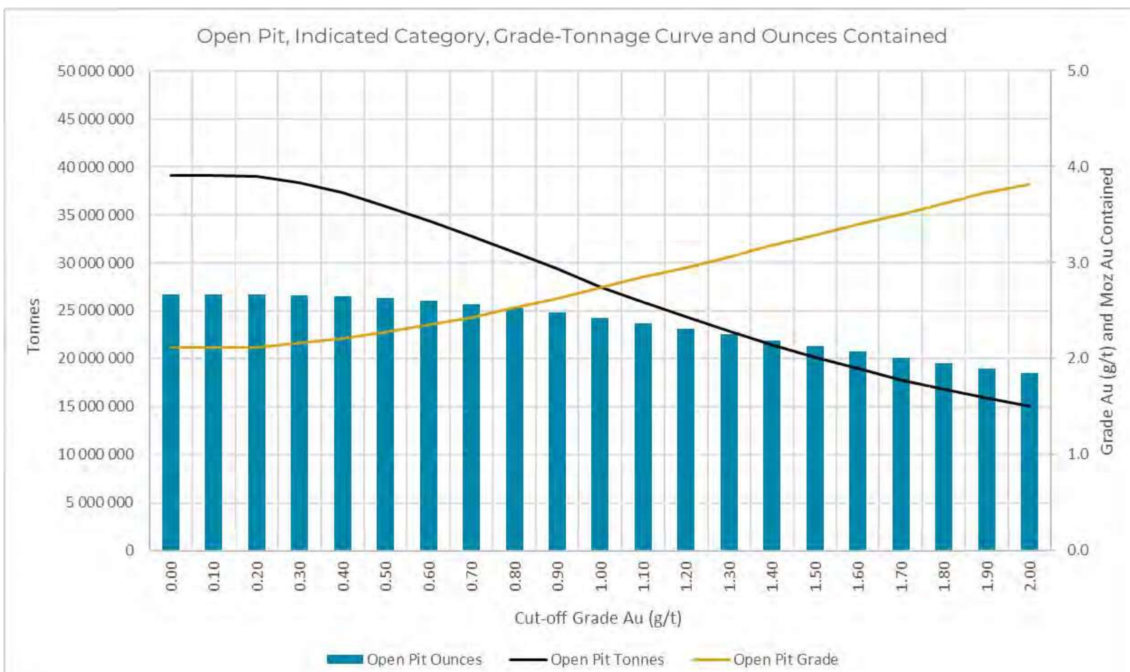
Notes:
1) Base case scenario highlighted in bold.
2) Au cut-offs listed below the base case scenario do not demonstrate RPEEE and are shown for informational purposes only.
3) Tonnage and Au content estimates are rounded to the nearest 1,000.
4) g/t – grams per tonne.
5) Ounces are reported as troy ounces.
6) Totals may not add up correctly due to rounding.

Table 14.14: Ikkari Underground Cut-off Sensitivity Comparison

Resource Category	Au Cut-Off (g/t)	Tonnes (t)	Grade Au (g/t)	Au Content (Troy Ozs)
INDICATED	0.8	23,174,000	2.00	1,493,000
INDICATED	**0.9**	**21,122,000**	**2.12**	**1,437,000**
INDICATED	1	19,212,000	2.23	1,379,000
INDICATED	1.1	17,556,000	2.34	1,323,000
INDICATED	1.2	16,158,000	2.45	1,272,000
INFERRED	0.8	3,118,000	1.25	125,000
INFERRED	**0.9**	**2,305,000**	**1.39**	**103,000**
INFERRED	1	1,747,000	1.53	86,000
INFERRED	1.1	1,273,000	1.71	70,000
INFERRED	1.2	1,015,000	1.85	60,000

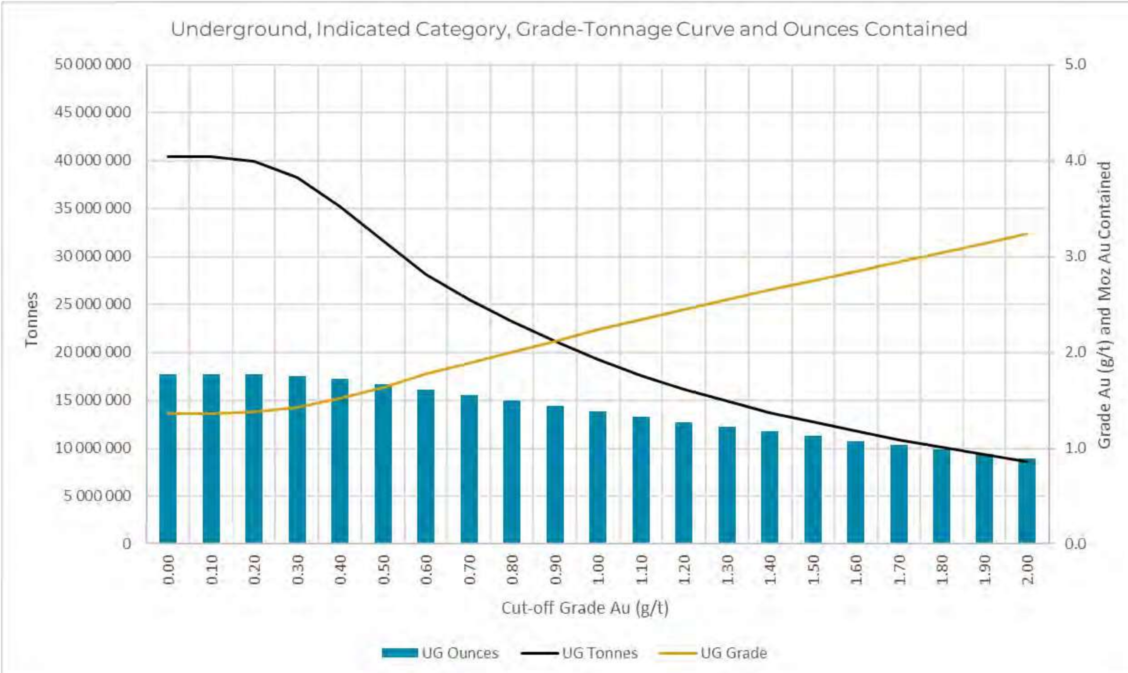
Notes:
1) Base case scenario highlighted in bold.
2) Au cut-offs listed below the base case scenario do not demonstrate RPEEE and are shown for informational purposes only.
3) Tonnage and Au content estimates are rounded to the nearest 1,000.
4) g/t – grams per tonne.
5) Ounces are reported as troy ounces.
6) Totals may not add up correctly due to rounding.

Grade-tonnage curves were also generated for the Indicated category to evaluate sensitivities for OP and UG estimates as shown in Figure 14.15 and Figure 14.16.



Note: Estimates are shown here at a range of cut-off grades, Au cut-off grades below the base case presented in Table 14.12 do not demonstrate RPEEE, please see Table 14.12 for base case cut-off grade.

Figure 14.15: Grade-Tonnage Curve for OP Indicated Category



Note: Estimates are shown here at a range of cut-off grades, Au cut-off grades below the base case presented in Table 14.12 do not demonstrate RPEEE, please see Table 14.12 for base case cut-off grade.

Figure 14.16: Grade-Tonnage Curve for UG Indicated Category

A comparison was completed to evaluate changes between the 2022 and 2023 MRE, as summarized in Table 14.15.

Table 14.15: Summary of Changes to the Ikkari Mineral Resource Estimate from 2022 to 2023

	2022 Resource Estimates			2023 Resource Estimates			Changes to the Resource Estimate		
Category	Tonnes (000)	Au Grade (g/t)	Au Content (000s Troy Ozs)	Tonnes (000)	Au Grade (g/t)	Au Content (000s Troy Ozs)	Tonnes (000)	Au Grade (g/t)	Au Content (000s Troy Ozs)
Indicated OP	30,000	2.5	2,400	37,308	2.21	2,649	7,308	-0.29	249
Indicated UG	16,500	2.4	1,280	21,122	2.12	1,437	4,622	-0.28	157
Inferred OP	3,100	1.5	48	1,271	0.81	33	- 1,829	-0.69	- 15
Inferred UG	8,700	2.0	550	2,305	1.39	103	- 6,395	-0.61	- 447

Note: Negative changes in red font.

There were significant changes between 2022 and 2023 that resulted in material differences to the stated MRE, as summarized in the following list:

1) Rupert Resources conducted infill drilling to an average drill spacing of approximately 40 m which resulted in the conversion of lower grade Inferred Mineral Resources to the Indicated Mineral Resource category.
2) The resource cut-off grades for the OP and UG resources were each reduced by 0.1 g/t to 0.4 g/t and 0.9 g/t respectively resulting in an increase in tonnage and a decrease in grade.
3) The resource estimation methodology was changed significantly but did not result in material changes to the gold content.
4) The resource is now constrained with an optimized resource pit shell whereas the 2022 resource was constrained within a designed open pit.

14.5.9 Risks and Opportunities

The QP has summarized the following risks and opportunities related to this MRE:

- Mineral domain and lithological models were interpreted from drill hole data and may not accurately represent the geology or account for the full scale of geological variability due to the complex structurally deformed nature of the deposit. Geological models generally change and evolve and improve over time as new information becomes available.
- Orientations of some of the drill holes may not represent a true cross-section and are possibly oriented sub-parallel to the down dip direction locally which may result in some local grade bias in the block model.
- The sample database contains high-grade outlier values which can have a material impact on the MRE. The QP has taken steps to reduce the impact of this data but there remains some uncertainty regarding the impact on the overall quantity of metal in the deposit.
- Many different grade estimation methodologies can be used to support a MRE and variations in the approach and estimation parameters used can have a material impact on the resource estimate. Different approaches may affect the degree of grade smoothing which can have a material impact when reporting mineral resources above a grade cut-off. The QP has made efforts to achieve the expected level of smoothing to match the change of support from 2.5m composites to the SMU block size, but the process is not an exact science and is dependent on the quality of the variogram and mineral domain models.
- The density measurements are not as closely spaced as the grade data and may present a relatively minor risk to the accuracy of the tonnage and metal content of the MRE.
- Changes in metal prices and mining costs can vary significantly over short periods of time which has the potential to materially impact the MRE.
- The metallurgical recovery assumed for the MRE is based on test work completed to date and may not reflect actual recoveries achieved during future mining.
- The exclusion of mineralization in the background domains from the UG MRE presents an opportunity to increase UG resources through continued exploration and infill drilling.
- Further infill drilling will provide an opportunity to increase resource confidence and may support the conversion of Indicated resources to the Measured category.

The QP is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or any other potential factors that could materially impact the Ikkari MRE provided in this Technical Report.

15.0 MINERAL RESERVE ESTIMATES

There are no Mineral Reserve estimates for the Project.

16.0 MINING METHODS

Not applicable to this Technical Report.

17.0 RECOVERY METHODS

Not applicable to this Technical Report.

18.0 PROJECT INFRASTRUCTURE

Not applicable to this Technical Report.

19.0 MARKET STUDIES AND CONTRACTS

Not applicable to this Technical Report.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Studies Done and Relevant Environmental Issues

There are no designated protected areas in immediate vicinity of the Ikkari deposit. Kaaresvuoma nature conservation area (ESA302828, SSO120578) is the closest nature conservation area to Ikkari and is situated 8 km east of the Ikkari deposit. Tollovuoma-Silmäsvuoma-Nunarvuoma (SAC/SPA, FI1300608, 9 673 hectares [ha]) is both a Natura 2000 area and a nature conservation area, located more than 10 km west of the Ikkari deposit. Joukaisvaara nature conservation area (ESA302827) is located 15 km southeast of the deposit. The Ikkari project area contains production forests, mires, swamps and springs, small streams, and headwaters of small rivers. The following nature and environmental studies have been conducted:

Nature Surveys, Land

- Desktop review of nature values and habitats of exploration area (Eurofins, February 20, 2018).
- Moor frog –study of Ikkari & Heinälamminvuoma 2019 (Eurofins, October 9, 2019).
- Breeding bird line transect censuses in Heinälamminvuoma (Ikkari), 2019 (Eurofins, September 18, 2019).
- Nature survey of exploration areas, 2019 (Ramboll, January 30, 2020).
- Ikkari area nature survey 2021; birds, moor frogs, bats, directive inspects, otter (Envineer, January 14, 2022).
- Preliminary review of route alternatives for Ikkari discharge water (Envineer, May 10, 2022).
- Ikkari area nature survey 2022; mammalian snow tracks, birds, moor frogs, bats, directive insects, otter (Envineer).
- Ikkari area flora & fauna survey 2022 (Envineer).
- Ikkari area endangered moss species survey 2022 (Envineer).
- *To be reported:* 2023 nature surveys along planned discharge pipeline routes including nature values, endangered species and springs (Envineer).
- *To be reported:* 2023 nature surveys, mosses, springs, insects, birds in the Ikkari area (Envineer).

Nature Surveys, Water

- Desktop study of freshwater pearl mussels (Eurofins, March 28, 2021).
- Status of Ikkari water systems (Envineer, November 12, 2021).
- Ikkari area freshwater pearl mussel survey 2022 (Eurofins).
- Aquatic biological surveys in Ikkari and Pahtavaara; fish, benthos, diatoms, aquatic and coastal habitats and aquatic vegetation 2022 (Envineer).
- *To be reported:* 2023 aquatic biological surveys in Ikkari: benthos, diatoms, aquatic and coastal habitats and aquatic vegetation (Envineer).

Overburden Surveys

- Ikkari peat layer and peat quality studies 2022 (Geolite & Afry).
- Ikkari overburden investigation 2023 (AFRY Finland Oy)

- *To be reported*: 2023 Ikkari geophysics (ERT) in Ikkari (Geovisor Oy)

Hydrogeological Surveys

- Phase 1 Review of data to support the hydrogeological study of the Ikkari gold and satellite deposits, Northern Finland (SRK Consulting, December 2021).
- Phase 2 Hydrogeological field study report for the Ikkari Au and satellite deposits, Northern Finland (SRK Consulting, 13 June 2022).
- Phase 3 Hydrogeological field study report for the Ikkari Au and satellite deposits, northern Finland (SRK Consulting, May 2023).
- Phase 5 Hydrogeological study of the Ikkari gold and satellite deposits, Northern Finland (SRK Consulting October 2023).

Social, Cultural and Other Surveys

- Climate change model for Ikkari gold mine (Envineer, May 31, 2022).
- Archaeological survey for Ikkari and Pahtavaara area 2022 (Mikroliitti).
- *To be reported:* Archaeological survey for the Ikkari discharge pipeline alternatives 2023 (Mikroliitti)
- *To be reported:* As part of the ongoing EIA work, Ramboll Oy has initiated social studies, questionnaires and interviews with locals.
- *To be reported:* A noise and vibration baseline study as part of the ongoing EIA work (Envineer).
- *To be reported:* A reindeer herding baseline study as part of the ongoing EIA work (Alfred Colpaert)

20.2 Waste Management

From an Acid Mine Drainage (AMD) perspective, the widespread presence of sulphide mineralization and elevated metals indicates waste rock AMD is a tangible risk at the site. Nonetheless much of the testwork to date highlights the long term pH-buffering of the abundant carbonate in the majority of the host and waste rock at Ikkari. The MSB black shale lithology appears to carry predictable elevated sulphide which is seen as an indicator of AMD risk that can potentially be managed through logical classification schemes. Sulphides related to later economic mineralization are more widely distributed and therefore will require inclusion in more detailed waste planning which will consider the overall net acid generating potential and metal leaching characteristics. In general, metal concentrations of a number of species (e.g., Ni, Co) are elevated with respect to crustal abundance indices and published assessment criteria however the relevance of absolute metal concentrations to metal leaching risks is a major uncertainty at this point (Mine Environment Management Ltd, 2.11.2022).

The Ikkari waste characterization programme started in July 2022 with Mine Environment Management Ltd (MEM) and will be ongoing into 2024. Ongoing programmes are based on a staged approach, where available information is reviewed to develop an understanding of the deposit before targeted selection of samples for detailed geochemical testing is carried out, and the results of this testing are used to develop a waste characterization framework for the Ikkari deposit. The phases of the current programme can be summarised as:

- Phase 1 consolidated the existing Rupert Resources information (chemistry, geology and spatial distribution of rock within the deposit and previous studies) and identify potential gaps that would need to be addressed as part of the current testing. Phase 1 was completed in Autumn 2022 and the details and outcomes reported in “Ikkari Geochemistry data review, waste characterization and gap analysis. Report number 025-001-01-0922.” (Mine Environment Management Ltd. 2022).

- Phase 2 involved identifying samples and testing methodology, aiming to address the identified gaps in understanding of geochemical behaviour drives for the waste materials that would be generated at the site. Justifications for the selected samples and testing approaches are detailed in the memorandum “Sample selection for Ikkari waste rock and tailings. Project number 025/001” (Mine Environment Management Ltd. 2023).
- Phase 3 encompasses the static testing of materials. Tailings and waste rock testing is ongoing, overburden testing is about to start (11/2023). A draft report includes the data from waste rock and tailings testing and provides interpretation of the geochemical properties of the materials tested to date including implications for their optimal management using industry best practice and environmentally acceptable and, where possible, sustainable methods. The report also includes a summary of the samples selected for kinetic testing in Phase 4 and justification for their selection. Phase 3 is reported in the draft report “Detailed Geochemistry and Waste Characterization Report, Report No: 025-01-01-1023” October 2023 (Mine Environment Management Ltd.).
- Phase 4 of the work will extend the understanding developed in Phase 3 through kinetic testing of selected materials under conditions that are more representative of the anticipated site conditions (for example in terms of liquid to solid ratio) and therefore provide empirical data required to predict seepage quality that would be expected form the different materials or combinations of materials (for example as part of co-disposal). This phase has not been initiated yet.

The review of Carbon Capture and Storage potential indicates Ikkari in particular has potential due to the presence of large volumes of ultramafic rocks. Further studies will be undertaken to determine whether a carbon dioxide (CO^2) capture project can potentially add value to the project by offsetting waste management costs.

20.3 Post-Closure Management

Closure planning of Ikkari mine started in the EIA phase and becomes more specific as the investigations progress.

20.4 Site Monitoring

Environmental baseline data collection at Ikkari began 2017 with water sampling of main streams and rivers. The sampling programme has been broadened and comprises currently 36 surface water locations both upstream and downstream of the Ikkari area. A wide range of water analyses (total of 63 parameters) are carried out 6 times per year on all surface water samples. Groundwater monitoring includes sampling of 11 shallow wells and five springs six times a year (total of 65 parameters). In addition, deep groundwater sampling has been done in two winter campaigns as part of the hydrogeological study. Three piezometric clusters were installed at or close to the deposit in spring 2023 with three standpipes each, one in peat, one in till and one in bedrock. A total of 22 leveloggers measure groundwater head, of which 8 in deep drill holes and the rest in shallow (<50 meter) holes.

Continuous environmental monitoring stations have been installed in the area:

- Eight to measure flow, cloudiness and electrical conductivity in water courses above and below the Ikkari project area and adjacent streams. Two additional stations to be installed in November 2023.
- Seven to measure pore water pressure in drill holes in and around the Ikkari deposit.
- A weather station measuring temperature, wind direction and speed, air moisture, air pressure, rainfall and radiation next to the deposit on hill Iso-Pulkittama.

Snow depth is measured manually on a daily basis in the winter.

Samples are collected and are sent for analysis by Eurofins Ltd. The results of the analyses are delivered regularly to the supervising authority (the Centre for Economic Development, Transport and Environment of Lapland).

20.5 Permit Requirements, Status of Permit Applications and Bond Requirements

20.6 Applicable Codes

20.6.1 Mining Code

Mining and exploration projects in Finland are subject to the Finland Mining Act (621/2011). The Act underwent some changes in 2023, the changes are incorporated in this text. The General Provisions of this act are described as follows:

The objective of this Act is to promote mining and organise the use of areas required for it, and exploration, in a socially, economically, and ecologically sustainable manner. In order to fulfil the purpose of the Act, the securing of public and private interests is required, with particular attention to:

1) the preconditions for engaging in mining activity;
2) the legal status of landowners and private parties sustaining damage; and
3) the impacts of activities on the environment and land use, and the economic and sustainable use of natural resources.

A further objective of the Act is to provide the municipalities and individuals with opportunity to influence decision-making. Furthermore, an objective of the Act is to promote the safety of mines and to prevent, decrease and avert any inconvenience and damage incurred in the activities referred to in this Act, and to ensure liability for damages for the party causing the inconvenience or damage.

20.6.2 Environmental Code

The Mining Act (621/2011) also refers to other legislation for "decisions on permit issues or other matters hereunder and other activities in accordance with this Act shall comply with the provisions of the Nature Conservation Act (9/2023), the Environmental Protection Act (527/2014), the Act on the Protection of Wilderness Reserves (62/1991), the Land Use Act (132/1999), the Building Act (751/2023), the Water Act (587/2011), the Reindeer Husbandry Act (848/1990), the Radiation Act (859/2018), the Nuclear Energy Act (990/1987), the Antiquities Act (295/1963), the Off-Road Traffic Act (1710/1995), the Dam Safety Act (494/2009), the Administrative Act (434/2003), the Act on Electronic Transactions in Official Activities (13/2003), the Act on Sámi Assemblies, the Sámi Language Act (1086/2003), the Language Act (423/2003) the Act on Monitoring Foreign Business Acquisitions (172/2012), the Act on the Requirement of Permits for Certain Real Estate Acquisitions (470/2019), the law on the State's Right of First Refusal in Certain Areas (469/2019) and in the law on the Redemption of Immovable Property and Special Rights to Ensure National Security (468/2019), as well as elsewhere in the law.

20.6.3 Regulations

Regulations are specified for exploration (Section 51) and mining (Section 52) permits in the Mining Act (621/2011).

20.6.3.1 Section 51 - Regulations to be included in an exploration permit

The exploration permit shall specify provisions for the location and borders of the exploration area. The exploration permit shall include the necessary provisions for securing public and private interests concerning the following:

1) the times and methods of exploration surveys and the equipment and constructions related to exploration;
2) measures to diminish harm caused to reindeer herding in the area specially intended for reindeer herding, and to other traditional livelihood for the Sámi in the Sámi residential area;

3) ensure that activity under the permit will not endanger the Sámi people's rights to maintain and develop their language, culture and traditional livelihoods in the Sámi residential area, or the rights of the Skolts in accordance with the Skolt Act in the Skolt area;
4) obligation to report about exploration activities and results;
5) post investigation measures and the final deadline for submission of notification concerning these measures;
6) the waste management plan for extractive waste and compliance therewith;
7) the obligation to report on the exploration work to the appropriate authority overseeing public interests within its line of duty;
8) the schedule for decreasing the size of the exploration area;
9) collateral in accordance with Chapter 10;

   9a) measures to ensure that ore prospecting and other use of the exploration area does not cause harm to human health or danger to public safety, significant harm to other business activities, significant changes in natural conditions, significant damage to rare or valuable natural occurrences, significant landscape damage or other significant harmful environmental impact;

10) other terms concerning exploration and use of the exploration area in order to ensure that the activity does not result in any consequence prohibited by this Act; AND
11) other specifications that are necessary in view of public and private interests and pertaining to the implementation of the conditions of the permit.

Good practices for reducing the environmental impacts caused by ore exploration must be taken into account when issuing permit regulations, regarding the timing and methods of exploration surveys, as well as equipment and structures related to ore prospecting.

More detailed regulations on the regulations issued in the exploration permit can be issued by a decree of the Government.

20.6.3.2 Section 52 - Regulations to be included in a mining permit

A mining permit shall give provisions for the location and borders of the mining area to be formed and the auxiliary area to the mine, taking the provisions laid down in sections 19 and 47, and the content of the rights of use and other special rights pertaining to the auxiliary area to the mine, into consideration. However, the permit authority may implement such changes in the location and borders of the mining area or auxiliary area to a mine presented in the application as are necessary in consideration of the provisions laid down in this Act. The mining permit shall specify a term within which the mining permit holder shall engage in mining activity or other such preparatory activity that indicates that the permit holder is seriously aiming to initiate actual mining operations. The time limit may be, at maximum, 10 years after the permit becomes legally valid. The mining permit shall include the necessary provisions for securing public and private interests concerning the following:

1) Avoidance or limiting of detrimental impacts of mining activity and addressing of elements necessary to ensure people's health and public safety;
2) Measures for ensuring that mining activities do not entail obvious wasting of mining minerals or endanger or hamper potential future use of the mine and excavation work there;
3) The obligation to report on the extent of exploitation of the deposit and results;
4) Measures to diminish harm caused to reindeer herding in the area specially intended for reindeer herding, and to other Sámi traditional livelihoods in the Sámi residential area;
5) Ensuring that activity under the permit will not endanger the Sámi's rights to maintain and develop their language, culture and traditional livelihoods within the Sámi residential area, or the rights of the Skolts in accordance with the Skolt Act in the Skolt area;
6) Collateral, in accordance with Chapter 10, associated with mine-closure alongside other obligations related to termination of mining activities and those after termination;
7) The deadline to be set for submission of any further specifications related to verifying the permit regulations;
8) Material on other aspects of activity under the mining permit in order to ensure that the activity does not result in any consequence prohibited by this Act;

   8 a) on the preservation and renewal of trees and other vegetation and on new plantings during mining operations;

12) 8 b) on the placement of operations in the mining area, taking into account the effects on biodiversity and other environmental effects;

   8 c) measures to prevent the occurrence of significant harmful environmental effects;

   8 d) measures to prevent a significant deterioration of the settlement or economic conditions of the locality;

   8 e) on phased closure of the mine;

9) Other specifications that are necessary in view of public and private interests and pertaining to the implementation of the conditions of the permit.

More detailed regulations on the regulations issued in the mining permit can be issued by a government decree.

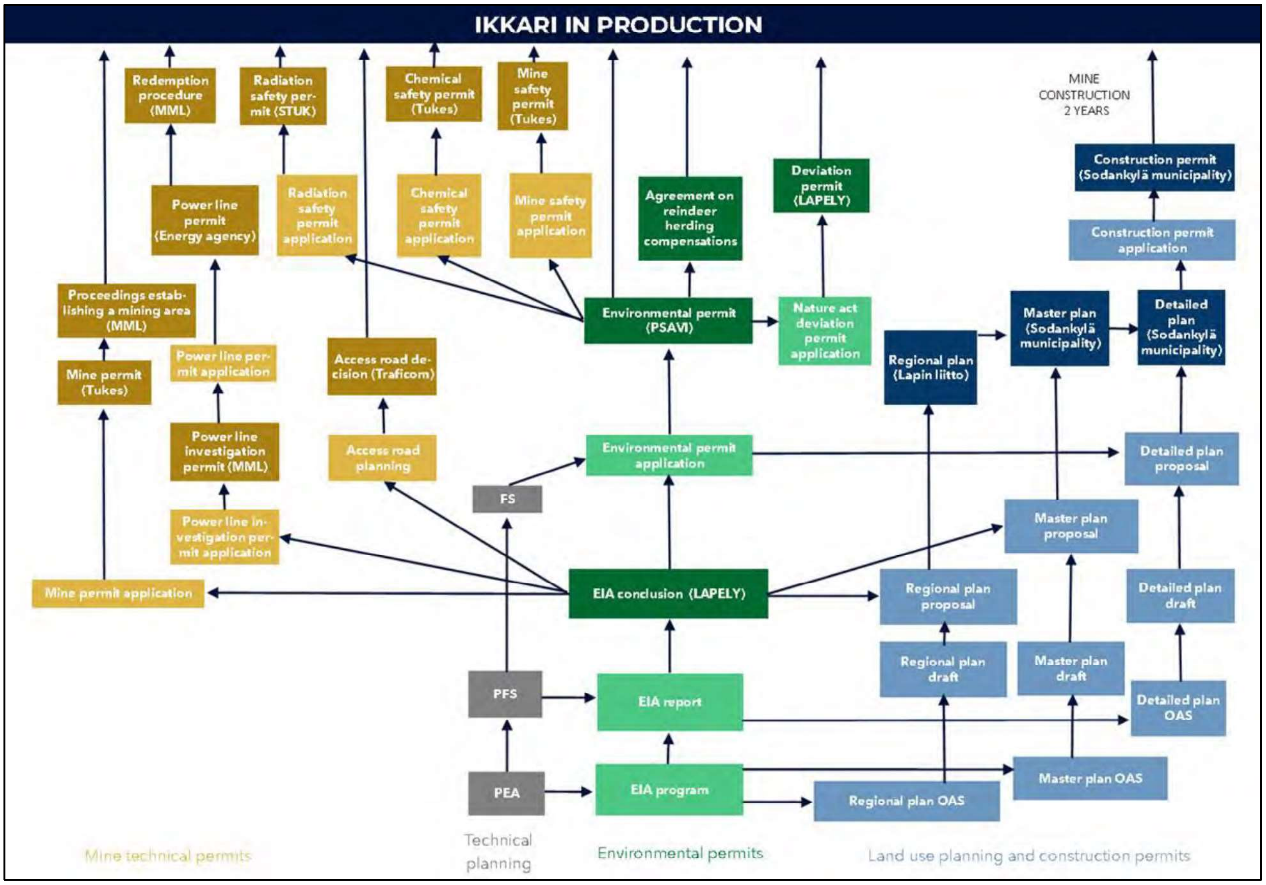


Figure 20.1: Permitting Pathway in Finland – Company Sourced

20.6.4 Environmental Protection Policies and Strategies

Rupert Resources has a corporate social responsibility policy, environmental policy, community policy and health and safety policy that have been designed provide a risk management framework for the Project. These documents are available on the Company website. There are no Natura areas or national protected areas on Rupert Resources' current exploration land package.

20.6.5 Rural and Land Development Policies and Strategies

The mining area is part of the Northern Lapland provincial plan, which was ratified by the Government on December 27, 2007. The Ikkari project requires three stages of land use planning. The processes have been initiated in 2022 and work will continue for at least three years.

20.6.6 International Agreements, Protocols and Conventions

Rupert Resources' activities are currently confined to Finland where local legislation is considered to meet or exceed international best practice.

20.7 Social and Community Related Requirements

Reindeer herding is a traditional livelihood in the Northern half of Finland. The reindeer herding area consists of 54 cooperatives. The 20 northernmost cooperatives form an area specifically intended for reindeer herding, where other land use may not be used in a manner that may significantly hinder reindeer herding. The 13 northernmost cooperatives are also the Sámi residential area. Ikkari is located within the area specially intended for reindeer herding but not within the Sámi residential area. The Rupert Resources exploration permits fall mostly within the Sattasniemi Reindeer Herding Cooperative. Rupert Resources has regular interaction with Sattasniemi reindeer herders and annual meetings to discuss matters concerning the interaction between exploration and reindeer herding and to coordinate each other's activities in the area. As part of the ongoing EIA work, Rupert Resources has initiated dialogues with three other reindeer herding cooperatives adjacent to the Sattasniemi cooperative to the West, South and Southwest, where impacts from the project may occur in the future.

The nearest reindeer farm, and closest inhabited house, is located some 3.5 km to the southwest of the Ikkari deposit. Since reindeers are grazing freely, animals are pasturing across the whole exploration area. The project area is mainly used in wintertime, and a transportation route splits the project area from South to North.

Rupert Resources has organized regular village meetings since 2017 for all the closest villages. Five different village meetings were held in fall 2021 and more than 100 inhabitants attended the meetings. Meetings included a general presentation of Rupert Resources activities in the region and an engaged question and answer session, including open conversations with company members. During spring 2022, Rupert Resources arranged a local stakeholder feedback survey for exploration areas nearest landowners and inhabitants. This was renewed in autumn 2023, and will be repeated on annual basis. Also, the company has taken part in the *"Experienced impacts of Mining in Sodankylä"* follow-up study since 2018. A Study has been arranged every other year for all Sodankylä inhabitants. As part of the EIA process, Rupert Resources has established several ways to initiate dialogues with stakeholders:

- A stakeholder steering committee for the Ikkari EIA process, where authorities and local stakeholders can give their feedback and comments to the ongoing EIA process.
- Small group discussions have been held twice in 2023 and plans are to continue in 2024 as long as EIA work is ongoing. The small groups are thematized: reindeer herding, inhabitants, municipality and livelihoods, recreational use and nature protection, land and water area owners.
- Interviews with key persons, implemented by Ramboll Finland Oy.
- Open coffee events once a month in the Sodankylä town centre, where anyone can come and discuss Rupert Resources activities in the area.

20.8 Mine Closure

Closure planning of Ikkari mine is initiated in the EIA phase and becomes more specific as the investigations progress.

21.0 CAPITAL AND OPERATING COSTS

Not applicable to this Technical Report.

22.0 ECONOMIC ANALYSIS

Not applicable to this Technical Report.

23.0 ADJACENT PROPERTIES

The information in this section that relates to adjacent properties is derived from public domain information and the QP has not verified this information.

23.1 Rupert Resources – Other Deposits

Ikkari is located on the Rupert Lapland Project area surrounding the Pahtavaara Mine, which in 1996 was the first mine to be developed in the CLB belt. Both the Pahtavaara Mine, 20 km WNW from Ikkari and Heinä Central deposit, 1.5km NNE of Ikkari (Figure 23.1) have a MRE which were published in 2022 and included in the Technical Report, titled “NI 43-101 Preliminary Economic Assessment: Ikkari and Pahtavaara - Finland”, with an effective date of March 10, 2023, and available on Sedar. The MREs for both Heinä Central and Pahtavaara are set out in Table 23.1 along with the consolidated MRE for the Rupert Lapland Project area.

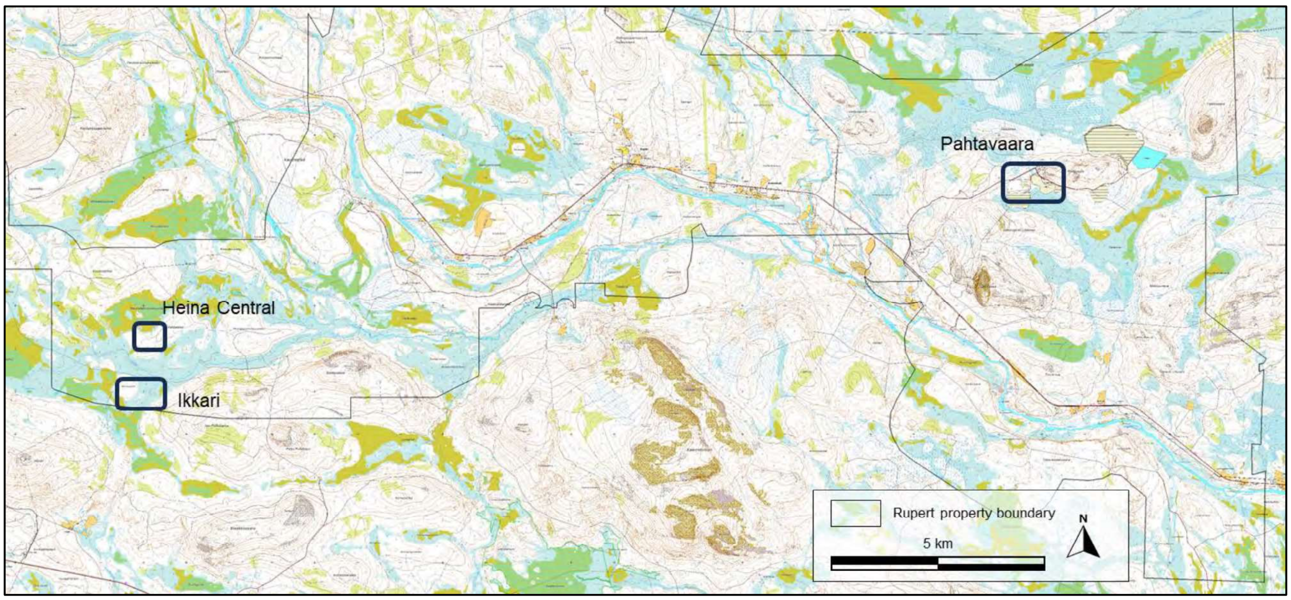


Figure 23.1: Location of Pahtavaara and Heinä Central Deposits in Relation to Ikkari

Table 23.1: MREs for Heinä Central and Pahtavaara and Consolidated MRE for the Rupert Lapland Project Area

Classification	Target Area	Mining Method	Cut-off	Tonnage (t)	Grade	Gold	
			Au (g/t)		Au (g/t)	Kg	Ounces
Indicated	Ikkari	Open Pit	0.4	37,308 000	2.21	82,400	2,649 000
		Underground	0.9	21,122 000	2.12	44,700	1,437 000
		Total		58,430 000	2.18	127,100	4,087 000
	Pahtavaara	Open Pit	0.5	900,000	2.20	1,900	60,000
		Underground	1.5	1,000,000	3.70	3,700	120,000
		Total		1,900,000	3.00	5,600	180,000
	Total			**60,331,000**	**2.20**	**132,700**	**4,267,000**
	Ikkari	Open Pit	0.4	1,271 000	0.81	1,000	33,000
		Underground	0.9	2,305 000	1.39	3,200	103,000
		Total		3,576 000	1.18	4,200	136,000
	Pahtavaara	Open Pit	0.5	3,700,000	1.60	5,900	190,000
Inferred		Underground	1.5	2,200,000	3.10	6,800	220,000
		Total		5,900,000	2.10	13,000	410,000
	Heinä Central	Open Pit	0.5	2,200,000	1.70	3,800	120,000
		Underground	1.2	400,000	2.10	900	30,000
		Total		2,700,000	1.80	4,700	150,000
	Total			**12,176,000**	**1.78**	**21,600**	**696,000**

Note: The Pahtavaara and Heinä Central Mineral Resource Estimates were prepared by Brian Wolfe, Principal Consultant, International Resource Solutions Pty Ltd., an independent QP under NI 43-101. The Mineral Resource Estimates for the Pahtavaara and Heinä Central deposits, have been prepared in accordance with NI 43-101 and following the requirements of Form 43-101F1. The methodology used to determine the Mineral Resource Estimate is consistent with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines (November 2019) and was classified following CIM Definition Standards for Mineral Resources & Mineral Reserves (May 2014). Readers are cautioned that Mineral Resources are not Mineral Reserves, and do not demonstrate economic viability. There is no certainty that all, or any part, of this Mineral Resource will be converted into Mineral Reserve. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Ounces are reported as troy ounces, and grade as grams per tonne (g/t). Tonnes, grade, ounces and kilograms are rounded to 2 significant figures, numbers may be affected by rounding.

The effective date of the Pahatavaara and Heinä Central Mineral Resource Estimates was November 28, 2022. The Mineral Resource Estimate for Pahtavaara a was calculated using the Multiple Indicator Kriging (MIK). Cut-off grade defined by Gold Price, $1650/oz, Metallurgical Recovery 89%, Open Pit Mining Costs $2.6/t, Underground Mining Cost $49.6/t, Processing Cost $10.20/t, Other $1.0/t, G&A incl Royalties & Refining $4.1/t. Open pit resources constrained within a designed Open Pit shell using the above assumptions. UG resources reported as those outside of the designed Open Pit. The Mineral Resource Estimate for Heinä Central a was calculated using the Ordinary Kriging (OK). Cut-off grade defined by Gold Price, $1650/oz, Metallurgical Recovery 78%, Open Pit Mining Costs $2.5/t, Underground Mining Cost $30/t, Processing Cost $10/t, Other $3.2/t, G&A incl Royalties & Refining $1.7/t. No copper credit included. Open pit resource constrained within Whittle optimized shell and as an UG resource outside.

23.2 Third Party Projects - Introduction

Several significant mineral discoveries have been made in the CLB, namely Suurikuusikko, better known internationally as the Kittila gold mine and Sakatti an orthomagmatic, polymetallic base metals deposit. Kevitsa, also a polymetallic orthomagmatic deposit discovered in 1987 entered production in 2012. Since 2015, several major mining groups have made strategic investments in the region and promising early-stage discoveries have been made at Aamurusko, Kutuvuoma and Helmi (gold) (Figure 23.2).

Table 23.2 summarizes the Mineral Reserve and MREs of these deposits based on publicly available information. These estimates are not necessarily representative of the mineralization for the Ikkari project and the QP has not verified this information.

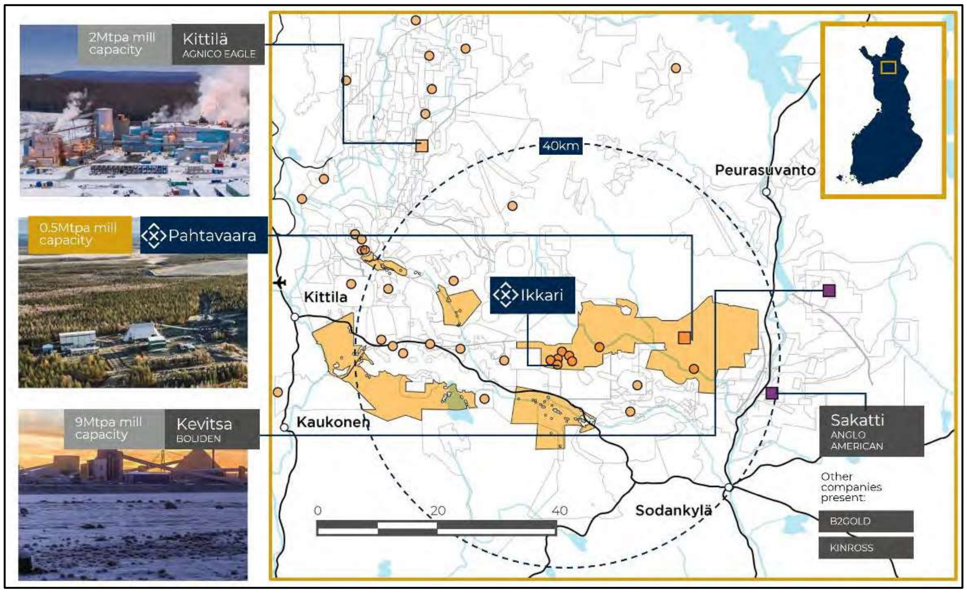


Figure 23.2: Recent Activity in Central Lapland

Table 23.2: Mineral Reserves and Resources of Adjacent Properties in CLB (November 2023)

Deposit	Type	Mt	Au (g/t)	Cu (%)	Ni (%)	Co (%)	Pt (%)	Pd (%)
Reserves								
Kevitsa (Boliden)	Proven	73	0.10	0.33	0.22	0.01	0.21	0.13
	Probable	28	0.10	0.38	0.26	0.01	0.18	0.12
Kittilä (Agnico Eagle)	Proven	1.22	4.36	-	-	-	-	-
	Probable	26.0	4.20	-	-	-	-	-
Resources								
Kevitsa (Boliden) *	Measured	53	0.08	0.33	0.21	0.01	0.17	0.11
	Indicated	89	0.07	0.36	0.23	0.01	0.11	0.07
	Inferred	0.4	0.02	0.16	0.09	0.01	0.03	0.02
Kittilä (Agnico Eagle) *	Measured	5.09	2.76	-	-	-	-	-
	Indicated	16.2	2.74	-	-	-	-	-
	Inferred	6.2	4.50	-	-	-	-	-
Sakatti (Anglo American) *	Indicated	3.5	0.33	3.45	2.47	0.11	0.98	1.18
	Inferred	41	0.33	1.77	0.83	0.04	0.61	0.43

Note: * Mineral Resources are reported exclusive of Mineral Reserves (see references, Boliden 2022; Anglo American plc, 2022; Agnico Eagle 2022).

23.3 Suurikuusikko/Kittilä Mine (Agnico Eagle)

The Kittilä mine is located in the Lapland region of northern Finland, approximately 900 km north of Helsinki and 150 km north of the Arctic Circle. The Kittilä mine is the largest gold mine in Europe and annually extracts about 2.0 million tonnes of ore, yielding about 7000kg of gold annually. With a mine life estimated through 2035, its proven and probable mineral reserves contain 3.68 Moz gold (27.2 Mt at 4.20 g/t Au) as of December 31, 2022. Ore has been mined from underground since 2010 and the mine produced 216,947 oz of gold in 2022.

The Kittilä property covers 215 km^2, stretching 25 km along the Suurikuusikko Trend, a major gold-bearing shear zone. The mine area includes a group of six gold deposits along a 4.5 km segment of the trend. The largest of the deposits are the Suuri, Roura and Rimpi zones that contain most of the current reserves and resources at Kittilä. The other deposits are the undeveloped Sisar Zone, which is sub-parallel to the Main Zone, as well the Etela and Ketola zones. As part of a major expansion project at Kittilä, the commissioning of the expanded mill with its 25% increase in capacity was completed ahead of schedule in 2020 and the ramp-up towards the design capacity of 2.0 Mt per annum complete in 2021. The sinking of a 1,044-metre-deep shaft as part of the expansion project experienced delays due to COVID-19 travel restrictions, and commissioning is ongoing. The expansion project is expected to increase the efficiency of the mine and decrease or maintain current operating costs while providing access to the deeper mining horizons. This increased mining rate will be supported by the development of the Sisar Zone and deeper portions of the Main Zone. (Source; Agnico Eagle website).

23.4 Kevitsa Mine (Boliden)

Boliden Kevitsa in Sodankylä is one of the biggest open pit mines in Finland. The main products are nickel and copper concentrate and in addition to this, significant amounts of platinum, palladium, gold and cobalt. The Kevitsa open pit mine in northern Finland was acquired by Boliden in June 2016. The operation, which comprises a mine and a concentrator, went into operation in 2012. In 2021, around 9,469 kt of ore were processed into metal concentrates. (Source; Boliden website).

In 2022 10.287Mt of ore were processed with Nickel and Copper concentrates produced by floatation onsite. Concentrate is trucked to the Gulf of Bothnia ~300km south of the mine from where it is shipped to Boliden's Harjavalta smelter in southwestern Finland.

23.5 Sakatti Project (Anglo American)

The Sakatti Project is a Copper – Nickel – Platinum Group Elements (PGE) deposit that was discovered by Anglo American in 2009 and is one of the richest multi-metal deposits in Europe. The deposit is located 15 km north of Sodankylä, and the area is partly located in Viiankiaapa, a protected mire and a Natura 2000 designated area. Anglo American recommenced drilling of the project in the winter of 2016 and announced a maiden resource for the project in 2017. Anglo American commenced a PFS for the project in early 2017, which was completed in 2019. A total of 166 km of drilling had been completed at the project at the end of 2020. An exploration permit and a permit from the Environmental Ministry for the exploration work at Sakatti was awarded during July 2020 enabling a three-year drilling programme, which commenced in November 2020. Environmental and Social Impact Assessment (ESIA) was completed in December 2020 and environmental permitting commenced in January 2021. (Source; Anglo American Ore Reserves and Mineral Resources Report 2022).

23.6 Aamurusko Project (Aurion Resources)

In February 2017 Aurion Resources reported the discovery of new, bonanza grade gold mineralisation on its 100% owned Risti Project in Northern Finland. The property is also known as the Aamurusko Project. The initial discovery was a 1150 m long by 700 m wide area of gold mineralisation with an apparent NE-SW trend that was discovered in late 2016. Here, 133 rock grab samples collected from predominantly large and angular sub-cropping quartz-tourmaline blocks assayed from nil to 1563.5 g/t Au, including 36 samples which assayed greater than 31 g/t Au (1 ounce per tonne). The average grade of all 133 samples was 74.3 g/t Au. Many of these samples contained abundant coarse visible gold. Aurion commenced drilling of Aamurusko in late 2017 and has subsequently identified additional mineralized zones along trend.

Aamurusko Main consists of gold-bearing quartz veins occurring near the sheared contact between sedimentary rocks and a gabbro intrusion, located on the south side of a steep, prominent ridge glacially up-ice from high-grade boulders. Drilling Highlights from Aamurusko Main include:

- 789.06 g/t Au over 2.90 m (including 3510.00 g/t Au over 0.65 m) from 116.10 m (Drill hole AM18042).
- 42.28 g/t Au over 4.00 m from 40.00 m (Drill hole AM19082).

Aamurusko Northwest is approximately 600 m northwest of Aamurusko Main target. This target consists of a 10 to 30 m wide zone of gold-bearing quartz veins within altered and mineralized clastic sedimentary rocks. Drilling has delineated Aamurusko NW to 150 m vertical depth and the target is open to extension. Drilling Highlights from Aamurusko NW include:

- 13.31 g/t Au over 19.54 m (including 22.58 g/t Au over 8.18 m) from 77.64 m (Drill hole AM19095).
- 3.51 g/t Au over 31.12 m from 55.88 m (Drill hole AM19094).

In late 2020, Aurion announced the discovery of multiple new, gold-bearing zones at Launi East Project (8 km southeast of their Risti project), which they report is within a 5.5 km long corridor parallel to the Sirkka Shear Zone. Many high-grade boulder samples have been collected, and initial drill results indicate narrow vein-hosted mineralisation along a trend up to 1 km long. The best drill results include 63.90 g/t Au over 0.37 m, 5.50 g/t Au over 0.40 m and 3.05 g/t Au over 5.30 m.

23.7 Outapää Project (Aurion Resources and Kinross)

In February 2018, Aurion Resources reported that it had signed a non-binding letter of intent Kinross Gold Corporation giving Kinross the right to earn up to 70% of the Outa Project which comprises approximately 15,000 ha to the west of Pahtavaara.

23.8 Kutuvuoma-Helmi Project (B2 / Aurion Resources)

Kutuvuoma-Helmi adjoins Rupert Resources' Lapland Project area on its westmost boundary, and a small gold occurrence operated as a satellite pit for the Pahtavaara mill in the late 1990s.

In August 2015, Aurion entered a Joint Venture (JV) agreement whereby B2Gold could earn 75% of the Kutuvuoma Project by spending CA $15 million and completing a feasibility study for the Project. In August 2019, B2Gold exercised its option to acquire a 51% interest in the Finland JV covering approximately 29,000 ha, which include the Kutuvuoma, Ahvenjärvi and Sinermä projects. Since inception of the agreement, dated January 13, 2016, B2Gold completed over CA $5 million in exploration expenditures, paid Aurion CA $50,000 in cash and issued 550,000 B2Gold shares over a four-year period to complete the requirements of the first option. B2Gold is currently earning an additional 19% interest by spending a further CA $10 million over two years, and, if exercised, an additional 5% interest by completing a feasibility study, for a total of 75%.

In December 2016 Aurion reported the results of the maiden drill programme and further drilling by B2Gold has been focused on identifying extensions to the Kutuvuoma resource and attempting to trace the mineralized trend along strike. They interpret over 5 km long high-grade gold mineralized target with limited shallow drilling with initial drill results returning up to 11.4 g/t Au over 13.3 m.

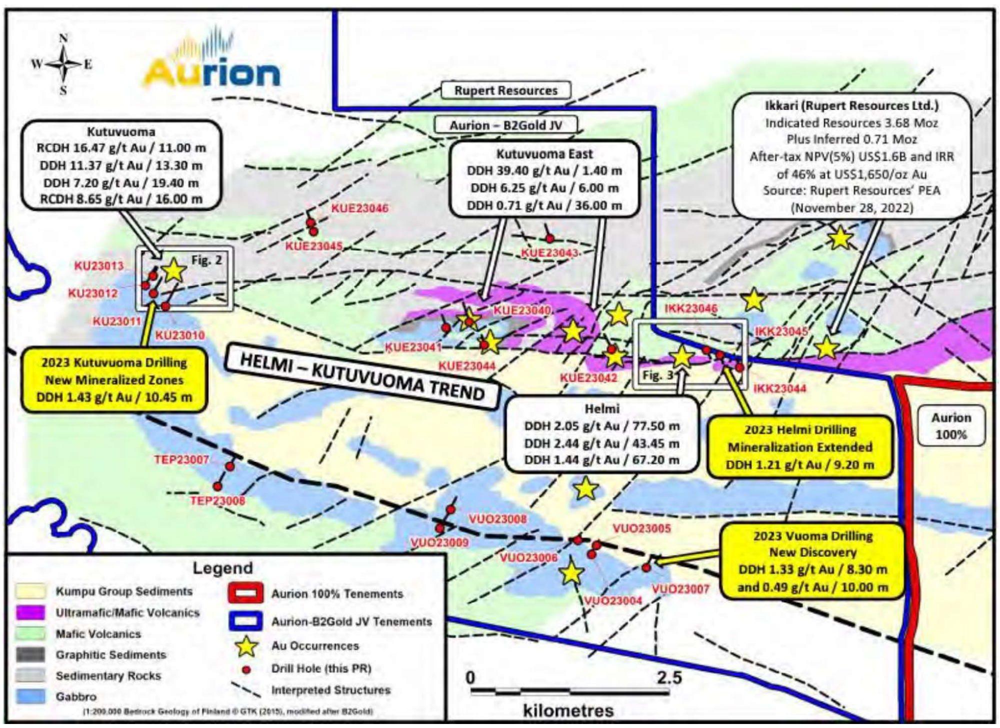
Most recently, drilling in late 2020 by B2Gold has followed up on base of till anomalies associated with interpreted western strike extensions of the mineralized zones in Area 1 (Rupert Resources). B2Gold's Helmi deposit is located along strike and in between Rupert Resources' Ikkari discovery (1.3 km to east) and the Kutuvuoma prospect (3.5 to 5 km to the west), within the metavolcanic and metasedimentary rocks of the Savukoski group near the contact with the sedimentary rocks of the Kumpu group.

An initial, widely spaced, five-hole (1,259.1 m) diamond drilling programme tested selected geochemical (gold in base of till) and geophysical targets over an area extending 1,300 m in strike length. All drill holes intersected zones with elevated gold (>0.1 g/t Au) with mineralized zones encountered in multiple lithologies including ultramafic and mafic volcanic rocks, siltstones, graphitic sediments and in contacts between volcanic rocks and felsic/porphyritic dykes. Gold mineralisation was intersected in all holes (from anomalous to 28.90 g/t Au) in the maiden drill programme.

Most recently, infill and extension drilling by B2Gold at Helmi has yielded significant new intercepts that indicate potential for an economic deposit, including:

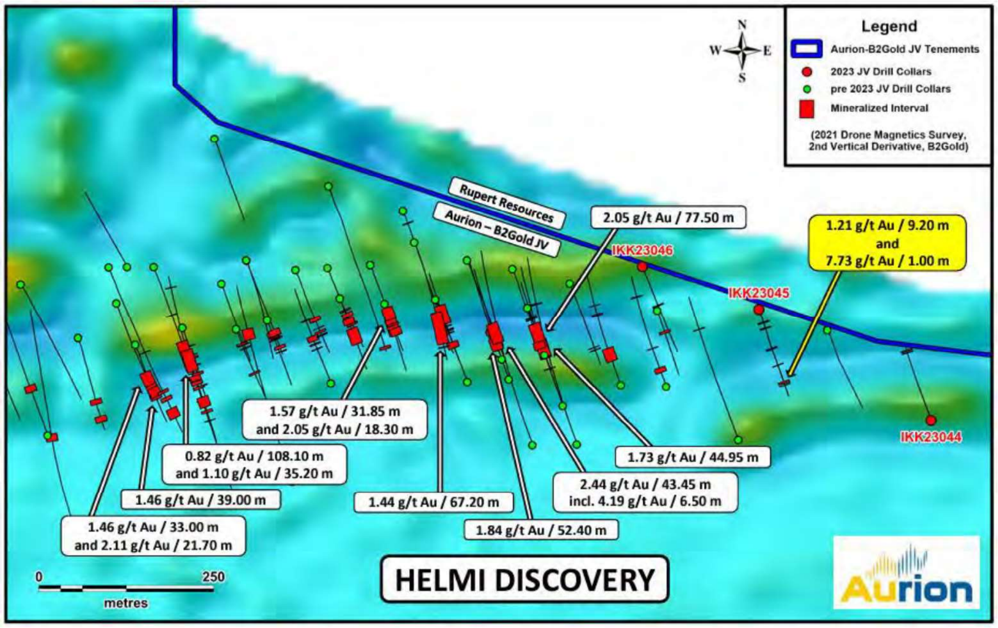
- 2.05 g/t Au over 77.50 m, including 4.18 g/t Au over 24.55 m (hole IKK22018).
- 1.42 g/t Au over 15.90 m, including 2.13 g/t Au over 6.35 m (hole IKK22019).

To date publicly available information indicates that B2Gold have drilled at least 44 holes into the Helmi prospect and a further 40 holes to Kutuvuoma with the most recent map accompanying the last press release showing the location relative to the Ikkari deposit (Figure 23.3) and a plan view of significant intercepts to date nominally along strike from Ikkari (Figure 23.4).



Source: Aurion press release: Aurion-B2Gold JV Discovers New Zone of Gold Mineralization South of Helmi, August 21, 2023

Figure 23.3: Plan Map of B2Gold / Aurion Prospects Nominally Along Strike from Ikkari



Source: Aurion press release: Aurion-B2Gold JV Discovers New Zone of Gold Mineralization South of Helmi, August 21, 2023

Figure 23.4: Plan Map of Significant Intercepts at the Helmi Deposit Operated by B2Gold Nominally Along Strike from Ikkari

24.0 OTHER RELEVANT DATA AND INFORMATION

The QPs are not aware of any other data or information that is material to the Project.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 Mineral Resource Estimate

It is the QP's opinion that the exploration, drilling and analytical procedures used by Rupert Resources to collect geological data are consistent with industry practises and CIM Mineral Exploration Best Practise Guidelines (November 2018) and that the data is suitable for the reporting of the MRE as summarized in this Technical Report.

The MRE for the Ikkari Project has been estimated in conformity with November 2019 CIM "Estimation of Mineral Resource and Mineral Reserves Best Practice" guidelines.

The QP has taken reasonable steps to make the block model and MRE representative of the project data, but notes that there are risks related to the accuracy of the estimates related to the following:

- The assumptions used by the QP to prepare the data for resource estimation;
- The accuracy of the geological interpretations of lithology, structural controls and mineralization;
- Estimation parameters used by the QP;
- Assumptions and methodologies used to estimate SG;
- Orientation of drill holes; and
- Cut-off grade and related assumptions of commodity prices, mining costs and metallurgical recovery.

For these reasons, actual results may differ materially from the reported MRE.

25.2 Mineral Processing and Metallurgical Testing

It is the QP's opinion that the metallurgical test work completed by Rupert Resources is sufficient to support the MRE. Tests results demonstrate that an overall gold recovery of 94.7% would be achievable using conventional beneficiation steps of gravity, flotation and leaching.

25.3 Environmental Studies, Permitting and Social or Community Impact

It is the QP's opinion that the environmental studies completed by Rupert Resources to date are sufficient to support the MRE. It is noted that there are no designated protected areas in immediate vicinity of the Ikkari deposit, but that it is within a reindeer herding area.

26.0 RECOMMENDATIONS

26.1 Mineral Resource Estimate

The QP has the following recommendations:

- Conduct further exploration and drilling in close proximity to the deposit to fully assess the potential of mineralisation for satellite deposits.
- Perform test grids to determine the drill density required for the conversion of resources to the Measured Category and likely grade control pattens required during mining.
- Conduct further exploration and drilling to expand the footprint of the deposit.
- Conduct infill drilling to potentially increase confidence in the existing OP and UG resources.
- Switch to using a bar coded sample tag that can be read when received at the laboratory to reduce any potential risk of transcription errors.
- Conduct third party density measurements that are consistent with the sample intervals in the next infill drill programme.
- Evaluate the potential implementation of security tags with sample shipments.
- Produce formal written procedures for database management.
- Assess the sensitivity of outlier data through various top-cuts and restriction techniques.

26.2 Mineral Processing and Metallurgical Testing

Further comprehensive test work programmes should be undertaken prior to the PFS and DFS phases of the Ikkari project. The programme should include further investigative work such as:

- Variability samples from identified lithological and mineralogical domains as well as bulk composites representative of both the open pit and underground resources.
- Mineralogical analysis of the variability samples
- Extensive comminution testing:
  - Crushing work index
  - Abrasion index
  - SMC tests
  - Bond ball mill work index
- E-GRG testing
- Flotation testing
  - Batch optimization tests (reagents and conditions, including grind size optimization)
  - Flowsheet optimization (number of flotation steps)
  - Locked-cycle tests

- Flotation concentrate regrind tests
- Cyanidation testing on whole ore, gravity tailings and flotation tailings, on various grind sizes and conditions
- Cyanide destruction testwork
- Concentrate and tailings thickening, filtration and rheology testing
- Acid base accounting tests

The PFS test programme is anticipated to cost between $600 000 and $800 000 USD.

It is also recommended to complete trade-off studies in order to evaluate various flowsheets options prior to the PFS.

26.3 Environmental Studies, Permitting and Social or Community Impact

The QP recommends that the programme of baseline monitoring continues and that the ongoing programme of investigation relating to the environmental, social and community impact is continued. Of particular note are studies relating to diversion of surface water courses and mitigation of the impact on surface water, further understanding of the impact of mine dewatering and the impact of the project on local communities and livelihoods.

26.4 Engineering Studies

Further, more detailed engineering studies such as a PFS, are justified following the positive results for the PEA and the updated MRE stated in this report. Engineering studies should include but not be limited to:

- Mine design and methodology
  - Optimise the pit slope angles particularly on the southern wall to which the resource is sensitive given the boundary constraints.
  - Trade-off studies to determine the favoured underground mining method.
- Mineral processing, filtering and paste plant design
- Mining waste management
- General infrastructure
- Water management
- Mine closure
- Financial and economic analysis

26.5 Summary of Recommended Work Programmes

The PEA (reported March 17, 2023) demonstrated the economic potential of the Ikkari project, and this updated MRE builds on the Resource Estimate which underpinned that study. With over 96% resources now in the Indicated category, Rupert Resources is justified to complete the ongoing PFS study for the Ikkari deposit, continue work to implement the EIA work programme and continue exploration drilling.

On completion of the EIA programme and the PFS, the results will be presented in the project EIA document that will form the basis on which an environmental permit application is submitted.

Table 26.1 summarizes the recommended work programme with associated costs.

Table 26.1: Recommended Work Programme and Associated Costs

Recommended Work	Estimated Cost (US$)
Exploration Drilling	8,000,000
Infill Drilling	5,300,000
Metallurgical studies	750,000
Environmental Studies	4,200,000
Geotechnical studies	200,000
Engineering design work	2,000,000
Total Cost	**20,450,000**

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