

INDEPENDENT TECHNICAL REPORT ON THE OMU PROPERTY, HOKKAIDO, JAPAN



Report Prepared for
Irving Resources Inc.



Report Prepared by



SRK Exploration Services Ltd.

ES7783

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Important Notice

This report was prepared as a National Instrument (NI) 43-101 Technical Report for Irving Resources Inc. (Irving) by SRK Exploration Services Ltd. (SRK ES) and Mitsui Mineral Development Engineering Company Ltd. (MINDECO). The quality of information, conclusions, and estimates contained herein are consistent with the quality of effort involved in SRK ES' services. The information, conclusions, and estimates contained herein are based on: i) information made available at the time of preparation, ii) data supplied by outside sources for which SRK ES places reliance on, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Irving subject to the terms and conditions of its contract with SRK ES and relevant securities legislation. The contract permits Irving to file this report as an Independent Technical Report with the Canadian securities regulatory authorities pursuant to National Instrument 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other uses of this report by any third party is at that party's sole risk. The responsibility for this disclosure remains with Irving. The user of this document should ensure that this is the most recent Independent Technical Report for the property as it is not valid if a new Independent Technical Report has been issued.

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Summary

Introduction

SRK Exploration Services Ltd (SRK ES) was commissioned by Irving Resources Inc. (Irving) to produce an Independent Technical Report (ITR), in accordance with the Rules and Policies of the Canadian National Instrument (NI) 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), on its Omu property in Hokkaido, Japan. The ITR was written in conjunction with Mitsui Mineral Development Engineering Co. Ltd. (MINDECO), Irving's appointed exploration services contractor in Japan.

Property Description and Ownership

The Omu property is located in the northeast of Hokkaido Island, Japan and encompasses a contiguous area of 15,501 ha / 155.01 km². It includes a total of 45 prospecting rights (9 registered/granted and 36 under application review) and 1 mining right (granted).

All of the prospecting and mining rights are in the name of Irving Resources Japan Godo Kaisha (GK), a 100% owned subsidiary of Irving. There are no lease or joint ownership agreements with third parties for the property. Furthermore, Irving has purchased or agreed leases to the surface rights over much of the mining right.

Geology and Mineralisation

The Omu property includes Miocene and Pliocene volcanic and intrusive rocks that include agglomerate, tuff, rhyolite, andesite and basalt with older sedimentary rocks including shales, slate, sandstone and conglomerate. These lithologies are overlain with superficial Pleistocene and Holocene clay, sand and gravel deposits.

There are eight prospects in the Omu property (Omui, Sakinyama, Nanko, Hokuryu, Taihoku, Maruyama, Sinter and Tofutsu River) with a ninth one occurring just outside the property (Omu). Three of these were historical small-scale underground gold-silver mines (Omui, Hokuryu and Omu).

The deposit type is low-sulphidation epithermal gold and silver, consisting of structurally-controlled quartz-dominant veins and breccias containing gold, silver and related sulphides.

Status of Exploration

Gold and silver mineralisation were first identified in the northeast region of Hokkaido in the early 1800s and several mines were developed thereafter. In 1943, during World War 2, the Japanese government ordered almost all of the gold mines to close so that the mining engineers could be allocated to base metal mines in support of the war effort. Following the war, very few of the mines resumed production, resulting in a hiatus in exploration.

Based upon the provided data, historical activities in the Omu property have included prospecting, panning, geological mapping, trenching, drilling and mining.

The historical Omui mine was exploited between 1925 and 1928 and consisted of a 100 m deep vertical shaft from which four main levels and two sub-levels were developed. Mining was focussed on a main vein that was 1 to 1.5 m wide. A 120 m section of the vein averaged 21.5 g/t Au and 600 g/t Ag over an average width of 1.1 m. Narrow adjacent veins assayed from 3 to 7 g/t Au and 7 to 56 g/t Ag. The production from the Omui mine was reportedly 0.34 t Au and 8.5 t Ag, equating to approximately 11,000 oz Au and 270,000 oz Ag.

In the 1980s, rock-chip sampling at and in vicinity to the Omui mine returned > 1 g/t Au and > 15 g/t Ag. The highest assay results were 432.2 g/t Au and 515 g/t Ag. Subsequently, nine holes were drilled and intersected intermittent narrow veins (less than 1 m thick) and of variable grade ranging from < 0.3 to 26.8 g/t Au and 1 to 1,139 g/t Ag. On the basis of the drilling, it was concluded that the main vein does not extend along strike or at depth as a mineralised zone of mineable width and grade and that the workings define the limit of significant gold mineralisation. In the 1990s, trenching in the vicinity of the Omui mine intersected veins of unknown thickness. Incomplete sampling results returned 0.89 to 23.2 g/t Au and 8.6 to 136.2 g/t Ag.

The historical Hokuryu mine operated between 1928 and 1943. The mineralised zones trended NE-SW and E-W and reportedly consisted of parallel quartz veinlets rather than large quartz veins. Gold grades ranged from 7 to 30 g/t Au and production reached 350,000 t @ 8 g/t Au and 33 g/t Ag at the time of its closure. In the 1970s and potentially the 1980s, drilling was completed but the mine was not re-opened.

At the Nanko prospect, located approximately 800 m to the southeast of the Omui mine, a 180 m-long adit was excavated, but subsequently collapsed. Historical rock-chip samples from discard material at the adit portal averaged approximately 5 g/t Au and 50 g/t Ag. In the 1980's, prospecting identified widespread mineralised quartz float and drilling was completed. The drilling intersected some veining ranging from 5 to 180 cm in thickness. The widest veins returned low gold grades, but some with thicknesses of between 20 and 70 cm returned 4.6 to 7.8 g/t Au and 117 to 253 g/t Ag. It was concluded that the assay results were significant, but the widths too narrow to be of interest. However, because of the abundance of well-mineralised float, the area was still prospective. In the 1990's, a single trench was excavated at the Nanko prospect and revealed four quartz veins ranging from 2 to 15 m thick. A total of six rock-chip samples were collected and returned 4.2 to 90.6 g/t Au and 18 to 745 g/t Ag.

At the Taihoku prospect, located approximately 500 m south of the Hokuryu mine, an adit was excavated. Subsequent sampling of discarded banded quartz material from the adit returned 26 g/t Au and 700 g/t Ag. However, due to the absence of larger quartz veins and the localised nature of mineralisation, no further work was completed.

At the Maruyama prospect, located approximately 3 km northwest of the Hokuryu mine, three adits were excavated and identified a 10 to 20 cm wide quartz vein. Rock-chip sampling returned 1.4 to 40 g/t Au and 110 to 640 g/t Ag and the prospect was drilled, but no further details were identified.

It should be noted that because of the incompleteness of the historical exploration data, the sampling and analysis methods are unknown, and the results are unverified.

Irving's exploration activities commenced in 2016 and to date have included stream sediment, soil and rock-chip sampling, geophysical surveying (ground gravity and airborne unmanned aerial vehicle (UAV) magnetics), geological mapping and X-Ray Diffraction (XRD) analysis.

The property-wide stream sediment sampling programme successfully identified several positive anomalies for gold, silver and other related elements, particularly around the Omui, Hokuryu and potentially the Sinter prospects.

The soil sampling programme in the mining right (encompassing the Omui, Sakinyama and Nanko prospects) has defined gold, silver and indicator element anomalies coincident with historically identified mineralisation as well as new targets.

Rock-chip sampling has returned a range of gold and silver grades. Within the Omui mining right (the Omui, Sakinyama and Nanko prospects), a total of 364 predominantly float and waste dump material

samples have been collected and analysed. Grades range from below detection to 691 g/t Au and 0.18 to 9,660 g/t Ag. The highest grades cluster around the Omui and Nanko prospects. However, such selectively sampled rocks may not be representative of widespread mineralisation in the property.

At the Hokuryu prospect, 14 waste dump, road cutting and float material rock-chip samples have been collected. Results returned 0.16 to 58.9 g/t Au and 9 to 708 g/t Ag.

At the Taihoku prospect, only three silicified rhyolite samples have been collected and returned gold grades below 0.05 g/t Au.

At the Maruyama prospect, eight quartz breccia and silicified rhyolite float and road cutting samples have been collected and returned 0.21 to 1.32 g/t Au and 10 to 53 g/t Ag. Silica sinter float has also been identified and samples, returning 1.94 g/t Au and 25 g/t Ag.

At the Sinter prospect, a total of 12 in-situ rock-chip samples have been collected. These returned assay grades from 0.17 to 1.52 g/t Au and 0.5 to 38 g/t Ag. A further 17 samples were collected from float material that assayed between 0.19 and 14.6 g/t Au and 1 to 60 g/t Ag.

At the Tofutsu prospect, a 0.60 to 0.95 m wide quartz vein has been sampled and returned 5.54 g/t Au and 8 g/t Ag.

The ground gravity and airborne magnetic surveying have provided insight on regional structure and possible hydrothermal systems linking the Omui and Sinter prospects, but remain to be fully interpreted and integrated with the other historical and contemporary data.

Mineral Resource and Mineral Reserve Estimates

This are currently no contemporary Mineral Resource or Mineral Reserve estimates for the Omu property, as defined by the CIM Code.

Conclusions and Recommendations

The Omu property represents a good-sized, largely undeveloped property with good accessibility and local resources. Exploration activities are largely unhindered, although access within the property is limited during the winter months (December through to March) and thick bamboo can hinder ground-based exploration activities.

The Omu property contains two historical vein-hosted gold-silver mines that confirm the presence of historically exploitable precious metal mineralisation. The hiatus in exploration and mining suggests that the region is likely to be under-explored and has not been subject to contemporary geological understanding or exploration methods.

The presence of eight prospects within and immediately adjacent to the Omu property, confirms the presence of gold and silver mineralisation and helps substantiate its prospectivity.

Contemporary exploration activities have resulted in some high quality and encouraging results. The geochemical and geophysical data are currently undergoing interpretation and integration to help better understand the geological setting and mineralisation within the property.

The contemporary sample preparation, analyses and security methods and QAQC procedures used to date are sufficient for a project of this stage of development.

The SRK ES data verification methods did not identify any significant data-related irregularities. However, because of the third-party nature and incompleteness of the historical exploration data, not all of the results could be verified. Whilst the verification sampling served to confirm the presence of gold and silver mineralisation in the Omu property, significantly more samples would be required to establish representative precious metal grades.

The identification of quartz sinter at the Sinter prospect is a positive indicator that the uppermost part of the epithermal system has been locally preserved and not entirely eroded. However, it does not guarantee the presence of underlying mineralisation given that sinters can extend several kilometres from the emitting hydrothermal fluid pathways. That stated, gold and silver have been identified in rock-chip samples collected from units beneath the sinter which confirms the localised presence of mineralisation.

Irving are planning to complete a work programme that includes prospecting, trenching, bulk sampling and a 7,800 m diamond (core) drilling at the Omui, Sinter, Nanko and Hokuryu prospects.

At the Omui prospect, Irving are planning to complete trenching, bulk sampling and an initial phase of four drillholes. Drillholes, each up to 135 m in length, will test for shallow high-grade veins as well as evaluate the depth to the Miocene volcanic-Cretaceous sedimentary interface by additional longer holes, a prospective target for mineralisation.

At the Sinter prospect, fan drilling of 23 inclined holes at various azimuths from 10 collar positions is being permitted. Irving plans to drill approximately seven of these holes, each approximately 350 m in length, as a first phase. Drilling will test areas underneath the sinter where there is a pronounced N-S trending gradient in the first horizontal derivative of Bouger gravity that is coincident with a low residual magnetic intensity response. Irving believes these geophysical expressions indicate a major extensional fault underlies this area, a possible feeder for hydrothermal fluids that deposited the sinter.

At the Nanko prospect, two trenches will first be excavated to explore for mineralised veins. If veins are identified and sampling returns favourable results, Irving intend to design a suitable drilling programme.

At Hokuryu, prospecting within the stream sediment sampling anomalies is planned. Drone-based magnetic surveys will also be undertaken.

Scheduling and budgetary aspects of the planned work programme were not made available at the time the ITR was written. However, on 19 October 2018, Irving received approval from the Hokkaido Bureau of the Ministry of Economy, Trade and Industry (METI) for its proposed work programme within the Omui Mining Right which encompasses the Omui and Nanko prospects.

SRK ES recommends that all the available historical and contemporary exploration data are fully interpreted and integrated to improve the understanding of the geological setting and mineralisation and to help targeting prior to any further ground-based activities. Emphasis should be placed upon the identification of favourable structures, such as dilatational zones and the contact zones between sediments and volcanics, particularly where substantiated by the available geochemical data.

Soil sampling has worked well over the Omui, Sakinyama and Nanko prospects, resulting in the identification of various geochemical anomalies that represent targets for further exploration. Because of this, it is recommended that soil sampling be completed over the other prospects in the Omu property prior to more advanced exploration activities such as trenching and drilling.

This recommendation particularly applies to the Sinter prospect, where soil sampling and trenching of any identified anomalies prior to the intended drilling would delineate more localised and substantiated drill targets than the geological mapping, rock-chip sampling and preliminary geophysical interpretation completed to date.

Furthermore, prior to any drilling, it is recommended that Irving engage with whomever they intend to use for their maiden Mineral Resource Estimate (MRE) to ensure that the logging, sampling and related Quality Assurance / Quality Control (QAQC), etc. are completed in accordance with the requirements of the MRE to ensure the data is fit for purpose.

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1 Introduction

1.1 Issuer

Irving Resources Inc. (Irving) is a mineral exploration company listed on the Canadian Securities Exchange (under the symbol IRV). The company began trading on 23 December 2015 and was formed following the merger of Gold Canyon Resources Inc. and First Mining Finance Corp. with the transfer of its earlier-stage non-gold assets to Irving.

In May 2016, Irving incorporated a wholly-owned Japanese subsidiary company called Irving Resources Japan Godo Kaisha (GK) which enabled Irving to acquire and hold exploration and mining rights in Japan.

Irving holds multiple mineral exploration rights in Japan, namely the Omu, Utanobori, Rubeshibe, and Eniwa properties on Hokkaido Island and Sado on Sado Island. Irving Resources also holds Project Venture Agreements with the Japan Oil, Gas and Metals National Corporation (JOGMEC) for exploration programmes in the United Republic of Tanzania, the Republic of Madagascar and the Republic of Malawi. However, the Omu property is the only subject of this Independent Technical Report.

Irving recognises the social and environmental sensitivities with which exploration and mining must adhere to in Japan. Correspondingly, the company has developed the following strategy:

- To identify and develop mineral deposits that contain gold mineralisation with a high silica content that can be used as a smelter flux/solvent in the flash furnace process, thus negating the need to develop an on-site gold processing plant. This concept is used at the Hishikari gold mine in Kyushu, Japan, which feeds its gold ore to the Toyo copper smelter and refinery.
- That mineralisation should also have low sulphur and other deleterious elements that would prevent use as a smelter flux.
- That any deposit should be exploitable by underground methods to reduce the surface footprint of the mine.
- That deposits should be close to port facilities to aid shipping of ore to Japanese smelters/refineries.

In 2016, Irving appointed Mitsui Mineral Development Engineering Co., Ltd. (MINDECO) to undertake field exploration services on the Omu property. MINDECO has been responsible for completing all technical work and reporting on behalf of Irving to date.

Irving understand that working in Japan is founded on building good relationships and trust. To facilitate this understanding, most of the Irving team is Japanese and the company has:

- Built a long-standing relationship with the Japan Oil, Gas and Metals National Corporation (JOGMEC).
- Developed close connections with many Japanese mining houses.
- Established strong relations with the Japanese academic community.
- Earned a good report with Japanese government authorities.
- Developed excellent relationships with the local communities and forestry association.

1.2 Terms of Reference

On 17 July 2018, Akiko Levinson (Irving President, Chief Executive Officer and Director)

commissioned SRK Exploration Services Ltd (SRK ES) to produce an Independent Technical Report (ITR), in accordance with the Rules and Policies of the Canadian National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects, on its Omu property in Hokkaido, Japan. The ITR was written in conjunction with and input from MINDECO. The purpose of the ITR is to produce the first compliant technical report for the Omu property.

1.3 Basis of Technical Report

This ITR contains information derived from multiple sources, including but not limited to:

- A preliminary draft ITR provided by MINDECO.
- Irving and MINDECO documentation and data.
- Verbal communications with the Irving and MINDECO personnel.
- Internet searches of public domain sources.
- Unpublished reports.
- Published academic papers.
- Primary observations in and around the properties.

Where used, the data sources have been cited in the text and are fully referenced in Section 18 (References). Similarly, figures obtained from non-SRK ES data sources are cited. Figures without citations were derived from SRK ES.

Unless indicated otherwise, all of the coordinates stated in this report are in Universal Transverse Mercator (UTM) projection (Zone 54N) and the 1984 World Geodetic System datum (WGS84).

1.4 Qualifications of SRK ES and MINDECO

SRK ES, formed in 2003, is part of the international group holding company SRK Consulting (Global) Limited, which began in 1975 and includes over 1,400 professional personnel in 45 offices in 20 countries on 6 continents providing expertise in a wide range of exploration, mining and engineering disciplines.

SRK personnel include specialists in the fields of exploration, geology, mineral resource estimation and classification, open-pit and underground mining, geotechnical engineering, metallurgical processing, hydrogeology and hydrology, tailings management, infrastructure, environmental management and mining economics.

SRK has a demonstrated track record in undertaking independent assessments of mineral resources and ore reserves, project evaluations and audits, competent person's reports and independent feasibility evaluations on behalf of exploration and mining companies and financial institutions world-wide.

SRK's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its personnel.

SRK ES specialises in exploration for all metal and industrial mineral commodities, elevating projects from the earliest stage of exploration through to resource drilling. We have the team and the technical expertise to deliver tailored field and consultancy services for exploration projects worldwide and are committed to be the partner of choice by adding value to projects, delivering high quality services and maintaining an innovative exploration approach.

Further details can be found at: <http://www.srkexploration.com/en/about-srk-exploration>

The SRK ES personnel involved with this project have extensive experience in the exploration and mining industry and are members in good standing of appropriate professional institutions.

MINDECO, formed in 1981, is a resource and environmental consulting company that provides comprehensive technologies for everything from surveys to development (MINDECO, 2018).

MINDECO's dedicated and knowledgeable staff work closely with clients to provide them with the expertise, techniques and technologies, as well as consistency and safety, that they need in such fields as underground natural resources and utilisation, soil environment research and clean-up, monitoring of abandoned mines, and civil engineering. Specific services include geological surveys, geophysics, geo-engineering and soil studies. Core values of MINDECO are innovation, passion and diligent effort.

Further details can be found at <http://www.mindeco.co.jp/en/>

The preliminary draft ITR provided by MINDECO was produced by Toshio Inoue (MINDECO Department Manager and Senior Geologist) and developed by SRK ES, with contributions from Irving and MINDECO. Various personnel were involved with the development of the ITR, summarised as follows:

Chris Barrett (SRK ES Principal Exploration Geologist) contributed to the Summary, Introduction, History, Deposit Types, Data Verification, Interpretation and Conclusions, Recommendation's and References sections, and undertook a visit to the site. He is also the qualified person, as defined by the CIM Code and by NI 43-101, and the overall signatory of this report.

Dan Marsh (SRK ES Senior Exploration Geologist) contributed to the Property Description and Location, Accessibility, Climate, Local Resources, Infrastructure and Physiography, Exploration, Adjacent Properties, Interpretation and Conclusions and Recommendation's sections.

Steve Bateman (SRK ES Senior Exploration Geologist) contributed to the Summary, Introduction, Reliance on Other Experts, History, Geological Setting and Mineralisation sections.

Tom Stock (SRK ES Exploration Geologist) modified and created many of the figures in the ITR.

Mark Campodonic (SRK Director and Principal Consultant - Resource Geology) reviewed the ITR.

The ITR was produced in the SRK ES offices in Cardiff during the months of August to October 2018.

The qualified person participated in and reviewed all sections of this ITR and accept responsibility for its content.

1.5 Site Visit

In accordance with NI 43-101 guidelines, SRK ES visited the Omu property from 04 to 07 August 2018. The field visit was completed by Chris Barrett (SRK ES Principal Exploration Geologist and qualified person) who was accompanied by Haruo Harada (MINDECO Chief Geologist) and Toshio Inoue (MINDECO Department Manager and Senior Geologist). In-country logistical support was provided by MINDECO and Irving.

The fundamental purpose of the visit was to fulfil the NI 43-101 requirements and enabled observation of the property and its geological characteristics, review of exploration procedures, examination of samples, interview project personnel, and collection of relevant information for the preparation of this ITR. It also enabled the collection of verification samples.

1.6 Acknowledgement

SRK ES acknowledges and thanks the following Irving Resources and MINDECO personnel for their support, assistance and contribution as part of this project:

Akiko Levinson (Irving President, Chief Executive Officer and Director), Lisa Sharp (Irving Chief Financial Officer), Quinton Hennigh (Irving Director), Kevin Box (Irving Director), Toshiyuki Goto (Irving General Manager), Haruo Harada (MINDECO Chief Geologist) and Toshio Inoue (MINDECO Department Manager and Senior Geologist).

Their assistance was greatly appreciated and instrumental to the completion of this ITR.

1.7 Declaration

SRK ES' opinion contained herein, and effective 06 November 2018 is based on information collected by SRK ES throughout the course of SRK ES' investigations. The information in turn reflects various technical and economic conditions at the time of writing this report. Given the nature of the exploration and mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK ES does not consider them to be material.

SRK ES is not an insider, associate or an affiliate of Irving's and neither SRK ES nor any affiliate has acted as advisor to Irving its subsidiaries or its affiliates in connection with this project. The results of the technical review by SRK ES are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

SRK ES has not performed an independent verification of land title and tenure information as summarised in Section 3 of this report. SRK ES did not verify the legality of any underlying agreement(s) that may exist concerning the mineral rights of the Company or other agreement(s) with third parties.

SRK ES was informed by Irving in writing that there are no known litigations affecting the Omu property.

2 Reliance on Other Experts

SRK ES has relied heavily upon a variety of third-party documentation produced by Other Experts for the production of this ITR. These have predominately been sourced from Irving and MINDECO and are provided in the References section.

SRK ES has undertaken only a limited and short site visit to undertake first-hand verification of the underlying geology and most recent surface grab sampling. SRK ES has not observed first-hand any of the data collection. However, has reviewed the relevant reports associated with this work in order to confirm the procedures and practices followed.

3 Property Description and Location

The Omu property is located in the Okhotsk District in the northeast of Hokkaido Island, Japan (Figure 3-1). The property is located 200 km northeast of the regional capital, Sapporo. The small coastal town of Omu sits on the eastern boundary of the property. The approximate coordinates of the centre of the property are 142°51'E longitude and 44°34'N latitude.

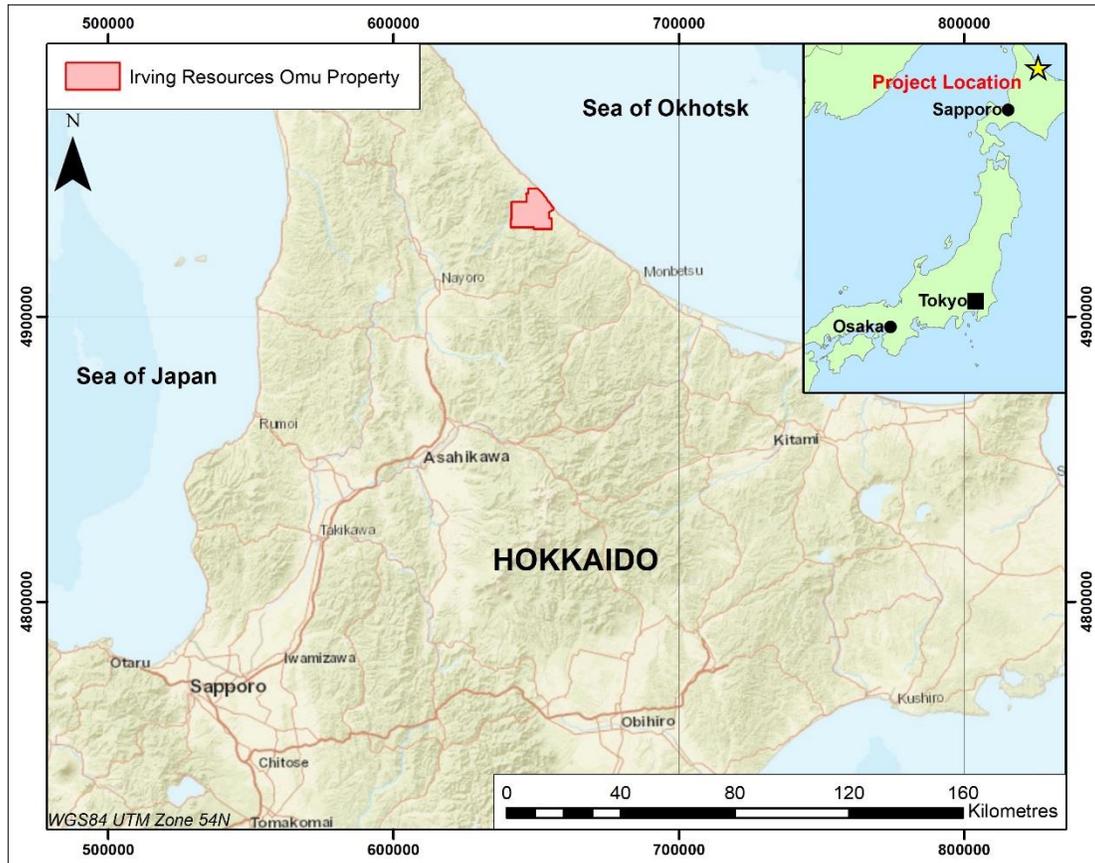


Figure 3-1 - Omu property location map.

3.1 Mineral Tenure

3.1.1 General

In Japan, mining rights are issued and managed by regional bureaus of the Ministry of Economy, Trade and Industry (METI). Minerals legislation is governed by the Mining Act (Act No. 289 of 20 December 1950) and the Mining Amendment Act (21 January 2012). The regional METI bureau overseeing Hokkaido, including the Omu area, is in the city of Sapporo.

The Mining Act differentiates between regulations applicable to “Specified Minerals” and all other minerals. The Specified Minerals include oil and combustible natural gas, minerals found as part of subsea hydrothermal or sedimentary deposits, and asphalt. The below summary applies to the terrestrial exploration for metallic and non-metallic minerals, exclusive of the Specified Minerals.

Aspects of the Mining Act relevant to exploration activities are summarised as follows:

- There are two types of mineral rights described by the Mining Act; a prospecting right and a mining right.

- Mineral rights must be held a Japanese individual or Japanese registered company (can be either national or foreign-owned).
- The applicant must demonstrate that it has the necessary "financial basis", the necessary "technical capability" and the necessary level of "social credibility" to conduct the proposed exploration and mining activities. Further, there is an additional and overriding requirement that allows the government to deny permission for mineral rights to an applicant where it has been determined that granting the rights would hinder the promotion of public interest from the viewpoint of stable supply of minerals.
- Applications for mineral rights are processed by METI on a "first to file" basis.
- The Mining Amendment Act defines the application system for exploration permissions which approves the applicants appropriately scaled exploration programme in addition to their eligibility under the Mining Act.
- There are no minimum work obligations for prospecting rights, although the work programme approved by METI in the licence application must be started within six months of receiving the permission.
- Boundaries of mineral rights are established by straight lines and do not exceed 350 ha, though multiple contiguous rights may be held by a single applicant.
- Prospecting and mining rights may not overlap, with the exception of alluvial rights.
- Mining rights do not confer land rights to the holder. These remain with the landowner who must be consulted for access.
- The duration of prospecting rights is two years from the date of registration. The prospecting right period may be renewed twice, each for a period of a further two years (i.e. maximum of 6 years in total), pursuant to demonstrating exploration has taken place and being necessary for continued development of the project, and that all annual taxes have been paid.
- There are no minimum expenditure obligations or work requirements for maintaining prospecting or mining rights, though work should be completed "in good faith". Annual reports of technical work completed and financial expenditure are necessary to renew permits.
- An applicant who intends to create mining rights is required to submit a description of the ore deposit, which describes the location, strike, dip, thickness and other conditions of the ore deposit of the mineral to be mined in the area of application.
- According to an online overview of Mining in Japan (Konno, et al., 2017), there is no tenure duration for a mining right, which lasts forever after the right is registered in the official mining registry. However, if the holder of a mining right discontinues mining activities for over one year, the mining right may be revoked at METI's discretion.

3.1.2 Irving Resources

As of May 2018, through its wholly owned Japanese subsidiary Irving Resources Japan GK, Irving holds 45 hardrock prospecting rights (9 registered and 36 under application review) for the exploration for gold, silver, copper, lead, zinc, silicates and feldspar and one hardrock gold-silver-silicate mining right. Together these rights make up the Omu property and have a combined area of 15,501 ha (155.01 km²). Irving additionally holds five gold placer prospecting rights totalling

1602 ha (16.02 km²) which overlay the hardrock rights.

These individual rights or permits and their Ministry of Economy, Trade and Industry (METI) assigned identification codes are listed in Table 3-1. The prospecting and mining rights are contiguous, whereas the placer prospecting rights overlay hardrock permits (Figure 3-2).

Table 3-1 - List of Irving Resources' mineral rights.

Type	Permit ID	Area (ha)	Minerals	Status	Expiration Date
Mining	HK Kitami M44	29.805	Au,Ag,Silicate	Registered (Mining Right)	N/A
Prospecting	HK P28_134	34.457	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_136	34.960	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_137	34.551	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_138	34.207	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_139	34.960	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_146	33.159	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_245	34.873	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_246	34.860	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_249	34.310	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Registered	05/06/2020
Prospecting	HK_P28_123	33.226	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_124	34.965	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_125	33.615	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_126	34.727	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_127	34.879	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_128	34.879	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_129	34.965	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_130	34.865	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_131	34.468	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_132	34.894	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_133	30.180	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting (Placer)	HK_P28_140	34.965	Au (Placer)	Pending Approval	
Prospecting (Placer)	HK_P28_141	34.965	Au (Placer)	Pending Approval	
Prospecting (Placer)	HK_P28_142	26.714	Au (Placer)	Pending Approval	
Prospecting (Placer)	HK_P28_143	30.264	Au (Placer)	Pending Approval	
Prospecting (Placer)	HK_P28_144	33.310	Au (Placer)	Pending Approval	
Prospecting	HK_P28_242	34.310	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_243	34.310	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_244	34.310	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_247	34.310	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_248	34.310	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_250	34.320	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_251	32.175	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_252	34.894	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_253	34.894	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_254	34.894	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_255	34.982	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_256	34.800	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_257	12.253	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_258	34.650	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_259	34.320	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_260	34.371	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_261	34.036	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_262	34.320	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P28_263	34.650	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P29_118	34.679	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P29_119	34.973	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P29_85	31.877	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P29_86	31.877	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P29_87	34.925	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	
Prospecting	HK_P29_88	34.925	Au,Ag,Cu,Pb,Zn,Silicate,Feldspar	Pending Approval	

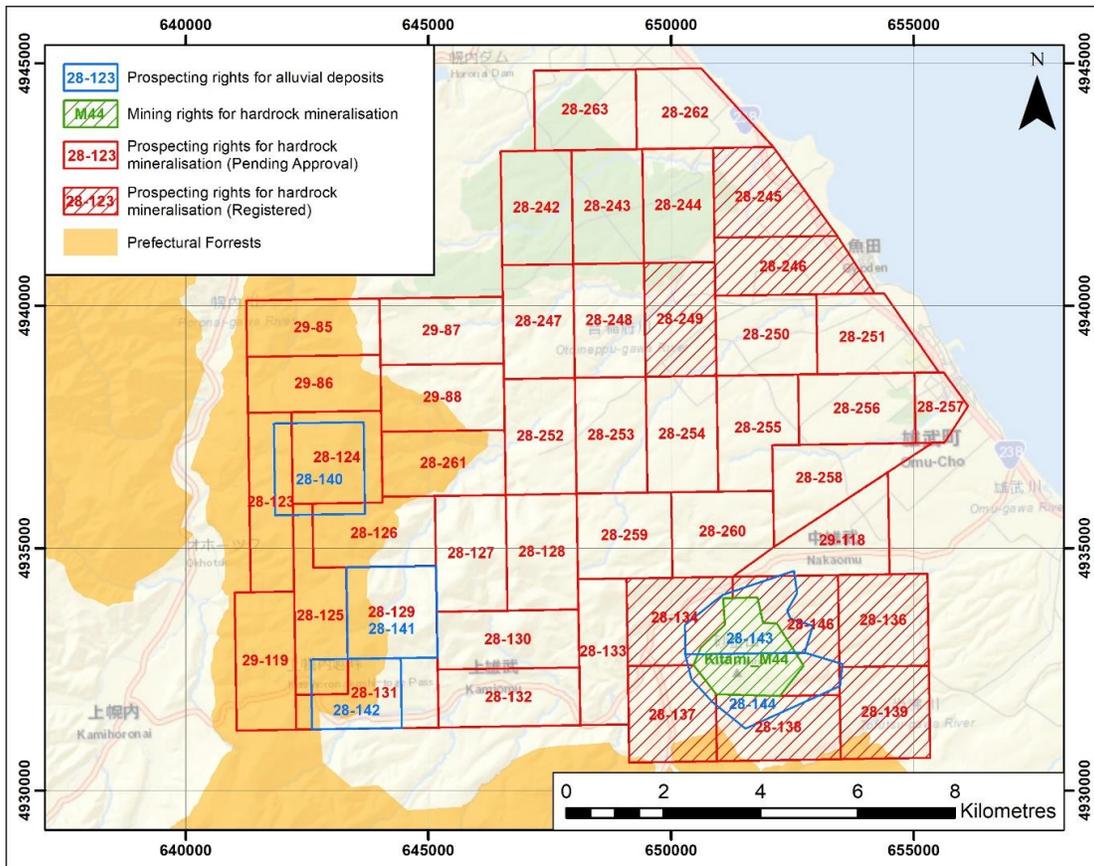


Figure 3-2 - Irving Resources' mineral rights map.

Irving expects the exploration rights that are under application will be approved by the METI within 12 months. During this period Irving is still able to complete exploration activities with the exception of invasive activities such as trenching and drilling.

3.2 Underlying Agreements

Irving Resources Japan GK owns 100% of all mineral rights - there are no lease or joint ownership agreements with third parties for the property.

Irving has purchased surface rights to 80.24 ha of land within and surrounding the Omui mining right (Figure 3-3). In addition, Irving has agreed leases to 119.43 ha of land surface rights in the same area with various owners. Of these, the earliest lease renewal date will fall on 31 December 2021, the latest on 31 March 2023.

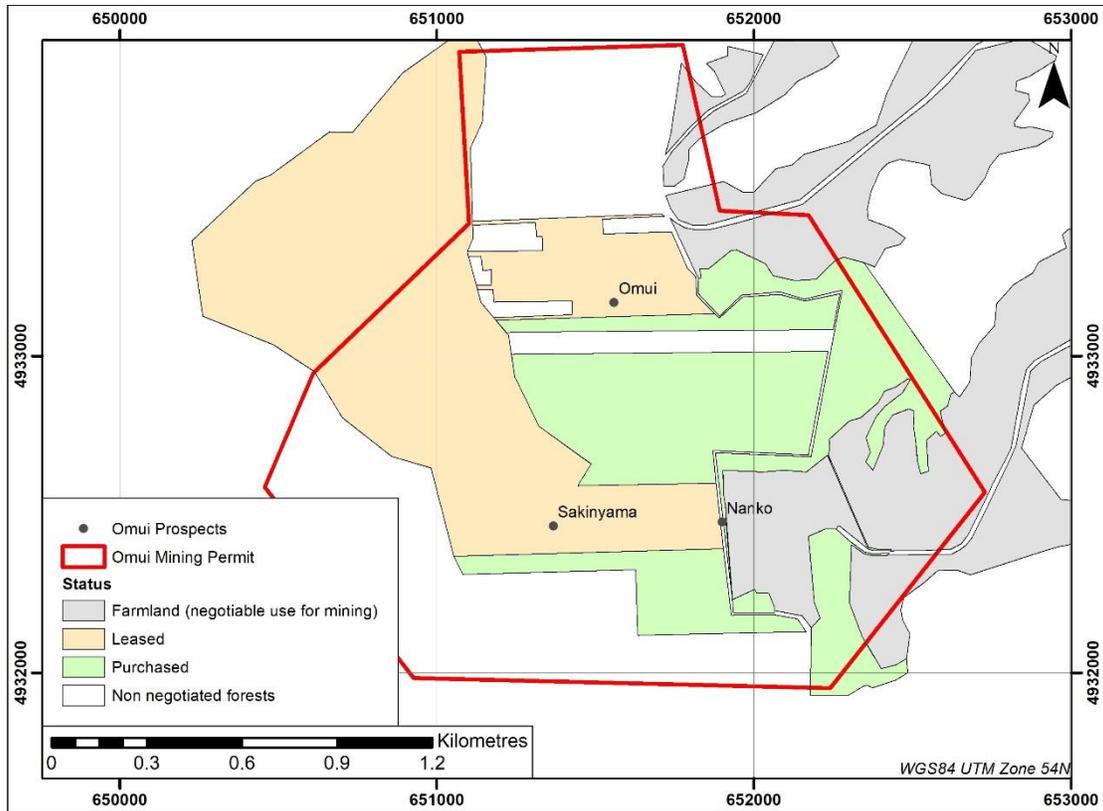


Figure 3-3 - Map of Irving Resources' land surface rights (HK_Kitami_M44).

3.3 Permits and Authorisation

SRK ES is not aware of any other permits or authorisation, beyond mineral rights and land access agreements, that may be required by Irving Resources to conduct its exploration activities.

There are no known royalties, back-in rights, payments, or other agreements and encumbrances to which the property is subject;

There are no known environmental liabilities to which the property is subject.

There are no known additional permits that are required in order for Irving to conduct mineral exploration over the property.

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

4.1 Accessibility

The Omu property occurs immediately west of the coastal town of Omu (population 4,600), extending from the sea to 15 km inland. It takes approximately one hour to drive from Omu on good quality paved roads to the larger town of Monbetsu (population 23,000), 50 km to the southeast. Monbetsu has an airport and daily flights to Tokyo. The city of Nayoro lies 90 km by paved highway to the southwest of Omu.

A network of tertiary paved roads provide access from Omu town to farms across the east of the property, whereas the western areas are accessed by paved highway and numerous narrow gravel forestry roads that require a 4WD vehicle in steeper terrain. It takes 25 minutes to drive from Omu town to the historical Omui mine. Some of the roads within the licenced area are closed to the public, so access requests must be made to the local office of West Forestry Management.

4.2 Climate

The following has been summarised from the last 50 years of data recorded at the Omu weather station by the Japan Meteorological Agency.

Omu has a humid continental climate with warm summers and cold winters. The daily mean temperature reaches a high of 18.5 °C in August but is below 0 °C from December through to April. The mean daily average for February is -7°C.

The average annual rainfall is 916 mm, with the wettest months being during the rainy season in July-September (104 mm and 132 mm monthly averages respectively). Snow frequently falls from October through to May (totalling over 360 mm), blanketing the ground in colder winter months.

Due to the winter snowfall, followed by increased meltwater volumes in streams and rivers in the spring, the summer exploration season is limited to the months of April to October/November.

4.3 Local Resources and Infrastructure

Irving has established an office in Omu town and the town itself has all resources necessary for completion of earlier-stage exploration project activities. There is a municipal hospital, accommodation, a stable electricity supply, fuel and labour available. It is not expected that water supply will be a problem for future exploration drilling programmes. There is cell phone coverage across much of the Omu property except in the most rugged hills.

As the project progresses it may be necessary to bring in specialist equipment or trained personnel, but this is not expected to represent an issue.

4.4 Physiography

The physiography of the Omu property can be broadly split into two parts: an expansive coastal plain in the northeast (rising to 170 m above sea level); and rugged hills in the west and south (reaching an elevation of approximately 470 m above sea level). These hills are deeply incised by a well-developed drainage networks and well-vegetated. The vegetation includes coniferous forest, both natural and planted, and secondary bamboo growth. The latter often impedes access for exploration groundwork. The coastal plain is mostly pastureland with dense vegetation flanking streams and rivers (Figure 4-1 and Figure 4-2). The urban area of Omu town lies outside of the property.



Figure 4-1 - Typical physiography in the Omu property (SRK ES, 2018).



Figure 4-2 - Typical vegetation cover and outcrop in the Omu property (Irving Resources, 2018).

There are four main rivers in the Omu area: the Otoineppu River drains the northern and western parts of the property north-eastwards into the Sea of Okhotsk; the Motoineppu and Omu Rivers drain the central-eastern and southern parts of the property respectively; and the Tofutsu River, cuts across the far south-eastern corner of the property. The far western reaches of the property drain westwards into the Horonai River that flows north, then northeast outside of the Omu property.

5 History

The northeast region of Hokkaido has a long exploration and mining history, with epithermal gold mineralisation discovered and exploited between early 1800 to the mid-1900s.

In 1943, during World War 2, the Japanese government ordered almost all of the gold mines to close so that the mining engineers could be allocated to base metal mines in support of the war effort. Following the war, several gold mines were reopened. However, most of the mines never resumed production. Post war, several studies were carried out on Hokkaido by universities, governmental institutes and private companies, but none to-date have resulted in the resumption of mining.

This following section describes, to the extent known, the exploration history of the prospects occurring within the Omu property. Where possible, this includes the prior ownership and ownership changes; the type, amount, quantity, and general results of exploration and development work undertaken by previous owners or operators; any significant historical mineral resource and mineral reserve estimates; and any production.

The Omu property includes six historical prospects (Omui, Sakinyama, Nanko, Hokuryu, Taihoku and Maruyama) with a seventh one occurring just outside the property (Omu). Three of these were historical mines (Omui, Hokuryu and Omu). The locations of the historical and contemporary prospects are shown in Figure 5-1.

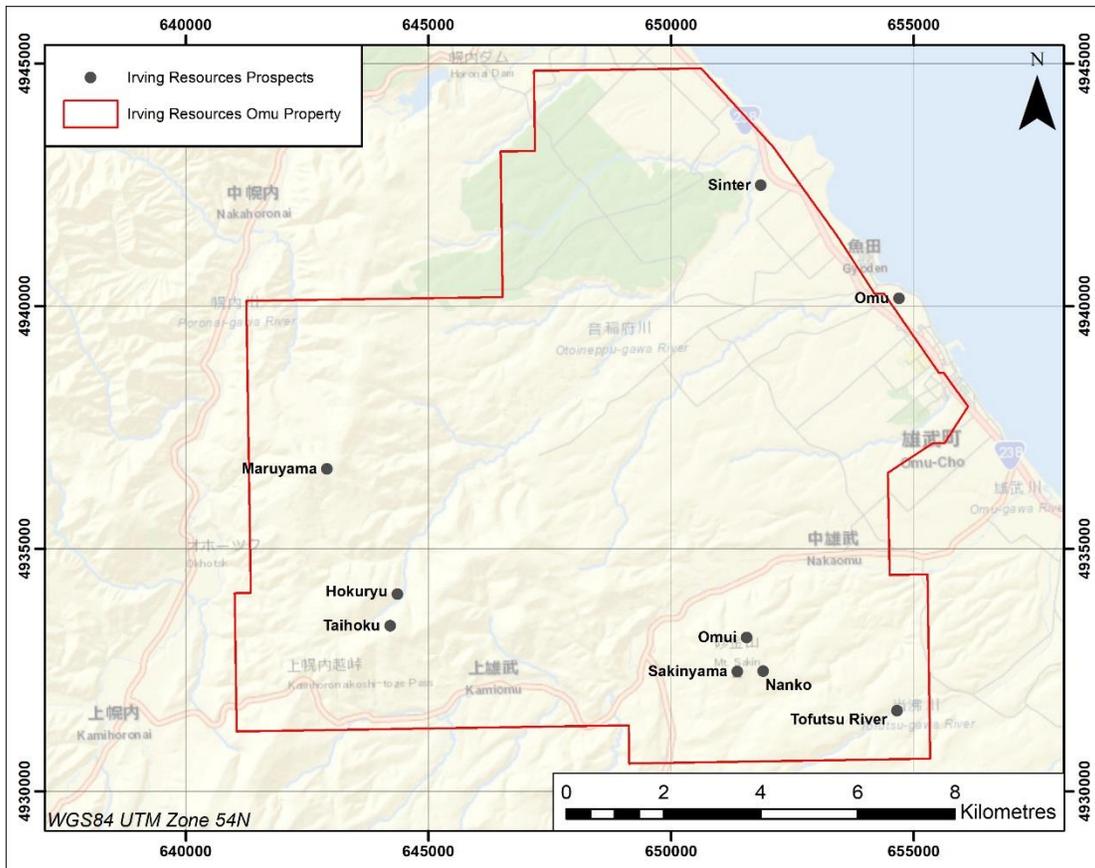


Figure 5-1 - Omu property prospects.

5.1 Omui

The Omui prospect was a historical mine and is located approximately 7 km south-west of Omu town. In the early 1890s, gold was first identified in streams draining off the Omui prospect area. By 1898, placer mining activity was considerable (MMIJ, 1990). Subsequently, prospecting and panning discovered a gold-bearing vein that was named the Honpi (main vein).

In 1921, an adit was excavated to test Honpi. In 1925, Fujita Mining Co. acquired the mining rights of the Omui prospect and developed a small mine on the main vein and identified other veins as part of their underground development. In 1928, mining ceased and by 1930, the mine was owned by the Taiho Mining Company, but no further details of their activities were identified.

The Honpi workings consisted of a 100 m deep vertical shaft from which four main levels and two sub-levels were developed Figure 5-2.

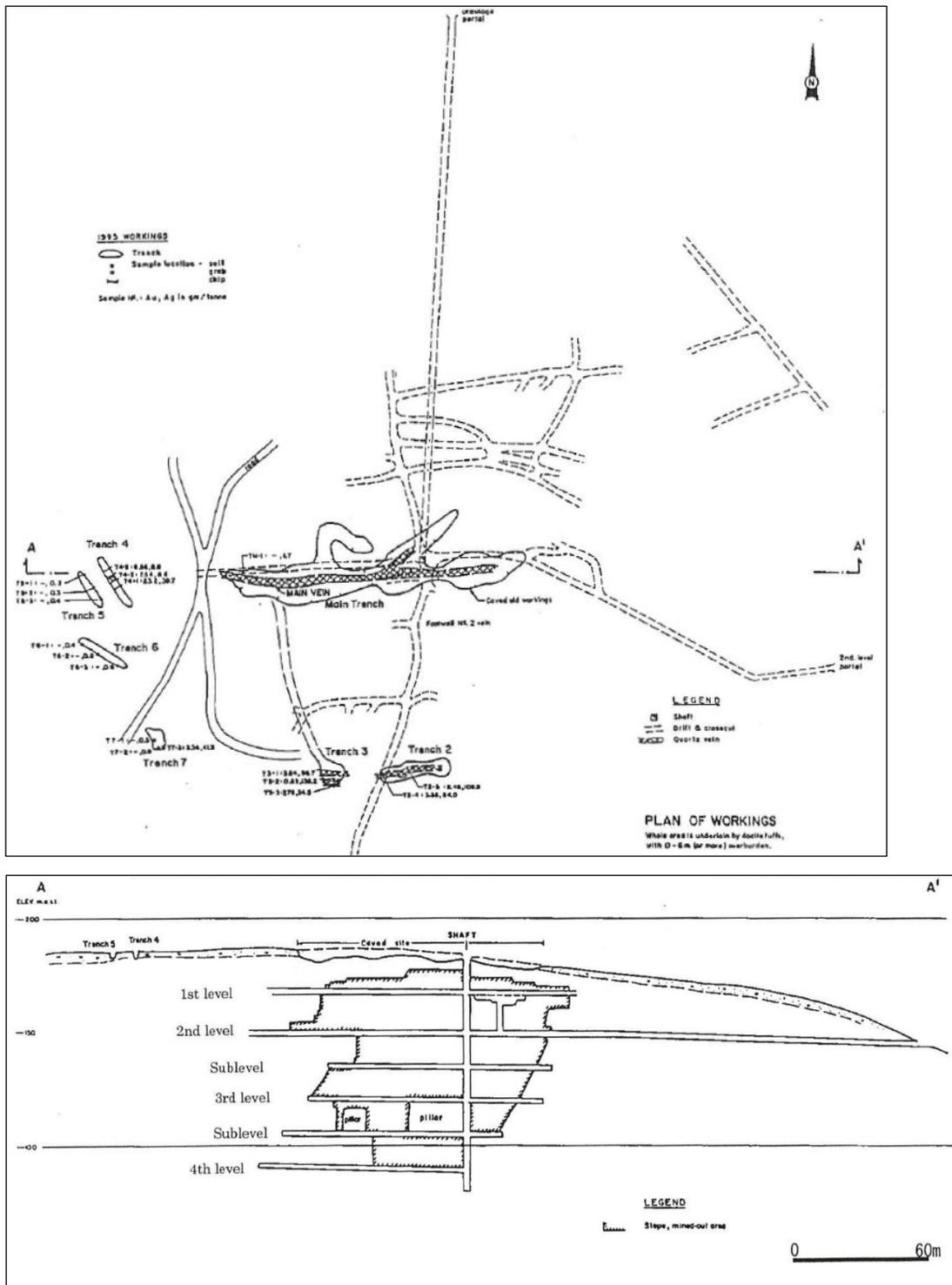


Figure 5-2 - Omui mine underground workings (after Shuto, 1999).

The levels were spaced at approximately 15 m intervals and the second level was connected to surface via a 150 m long adit. A cross-cut from the shaft intersected 8 veins over a width of around 150 m. The Honpi vein was 1 to 1.5 m wide and the other veins were all narrower at between 30 to 60 cm wide. All of the veins were approximately parallel, striking approximately east-west and dipping 80-85° north.

Most of the production came from Honpi, which was mined from near surface to a depth of 90 m. A 120 m section of the vein on the sub-level between levels 2 and 3 averaged 21.5 g/t Au and 600 g/t Ag over an average width of 1.1 m. The other veins assayed from 3 to 7 g/t Au and 7 to 56 g/t Ag. The narrower veins were only exploited 10 to 20 m from the crosscut. Post mining, the workings collapsed resulting in a vein-parallel depression about 160 m in length.

The production from the Omui mine was reportedly 0.34 t Au and 8.5 t Ag, equating to approximately 11,000 oz Au and 270,000 oz Ag (Shuto, 1999).

In 1984-85, Nippon Mining completed geological mapping and delineated quartz and silicified float boulders over broad areas in the northern and eastern parts of the Omui prospect (Shuto, 1999). The available figures suggest that float samples collected from near the old mine workings returned > 1 g/t Au and > 15 g/t Ag. The highest assay results were 432.2 g/t Au and 515 g/t Ag.

Also during 1984-85, Nippon Mining completed diamond (core) drilling. Nine holes were drilled, totalling 2,092 m, but no other parameters were described (Shuto, 1999). Seven of the drillholes tested the Honpi workings. Based upon the available mapping (Figure 5-3), the holes were inclined and consistently drilled towards the southeast.

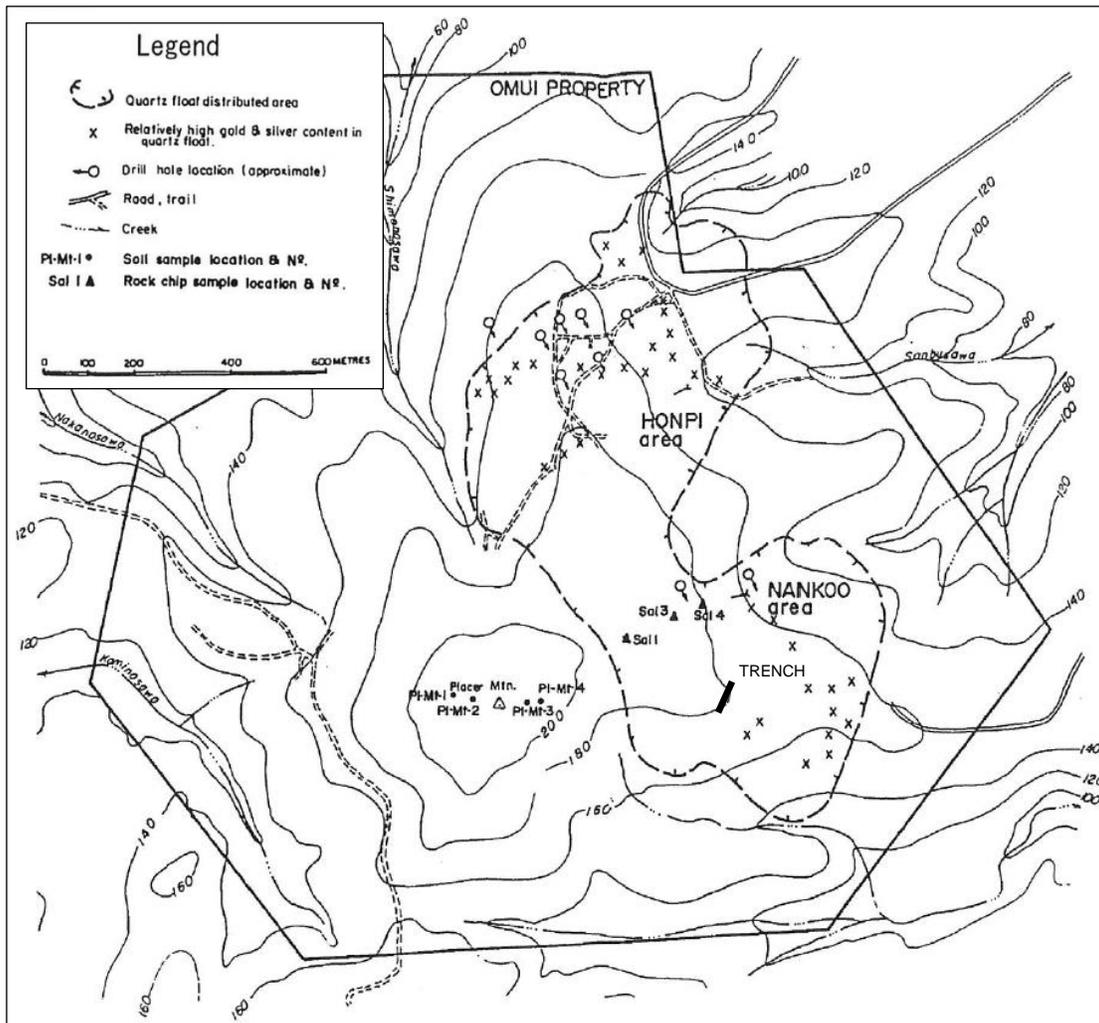


Figure 5-3 - Omui historical drilling (from Shuto, 1999).

Three of the seven Honpi drillholes (OM 1 to OM 3), were spaced along a line approximately 150 m apart, inclined at between 60 and 70° on an azimuth of about 135° and drilled around 10 to 20 m beyond the lowest known underground level.

OM1 intersected six narrow veins in the upper part of the drillhole. The veins were 8 to 19 cm wide and assayed from < 0.3 to 15 g/t Au and 10 to 742 g/t Ag. In the same mineralised section, an 83 cm vein assayed 4.4 g/t Au and 1,139 g/t Ag. These veins occur within the hangingwall of the main mineralised zone and beyond (to the north) of the underground workings. Deeper in the hole, just beneath the workings, eight similar narrow veins were intersected. The only reported maximum grades were 2.4 g/t Au and 30 g/t Ag over 70 cm.

OM2 and OM3 were drilled 150 m either side of OM1. East intersected what are described as numerous very narrow veins with most assaying < 0.3 g/t Au. Six veins, 5 to 40 cm wide, assayed between 4.1 and 15.1 g/t Au. However, it was concluded that whilst some of the grades were good, the veins were too narrow to be of interest (Shuto, 1999).

OMS1 to OMS 4 were short holes used to test for the presence of shallow veins intersected in drillholes OM1 to OM3. The drillholes intersected numerous veins, the majority of which were less than 70 cm wide and assayed between < 0.3 to 2.0 g/t Au and 1 to 50 g/t Ag. Only one vein of significant width and grade was intersected, being 100 cm wide and assaying 26.8 g/t Au and 38 g/t Ag.

On the basis of the drilling results, it was reported that the Honpi zone does not extend to depth as a mineralised zone of mineable width and grade. The results also confirmed that the east and west extensions of the Honpi zone are not present as mineable zones. It was concluded that the workings define the limit of significant gold mineralisation as a narrow E-W trending zone (Shuto, 1999).

In 1995, the property owner (Mr. Nanjo), excavated seven trenches in the vicinity of Honpi zone (Figure 5-2). The results are summarised in Table 5-1. SRK cannot confirm that the widths and grades presented can be relied upon, as SRK has not observed the sampling first-hand, and it is not documented whether the widths represent the vein width or trench width, and whether the samples were collected as a continuous channel or just as grab samples.

Table 5-1 - Omui Honpi trench sample results (from Shuto, 1999).

Trench	SampleID	Width (m)	Au (g/t)	Ag (g/t)	Notes
1	No sample results				Across collapsed workings
2	T2-4	4.2	3.58	54	Hangingwall altered volcanics
	T2-5	4.2	2.46	109.5	Quartz vein
3	T3-1	1.2	3.64	96.7	Quartz vein
	T3-2	Grab	0.89	136.2	Quartz vein
	T3-3	Grab	2.78	34.5	Quartz vein
4	T4-1	1.6	23.2	39.7	Footwall breccia
	T4-2	3.4	7.54	8.6	Vein
	T4-3	6.0	6.86	8.8	Silicified hangingwall
5	No sample results				Failed to reach bedrock
6	No sample results				Failed to reach bedrock
7	T7-3	Grab	3.34	41	Quartz vein

Based on these results, the collective gold values range from 0.89 to 23.2 g/t Au (with an arithmetic mean value of 6.03 g/t Au and a median value of 3.58 g/t Au) and silver values ranging from 8.6 to 136.2 g/t Ag (with an arithmetic mean value of 58.8 g/t Ag and a median value of 41.0 g/t Ag).

5.2 Sakinyama

The Sakinyama prospect is located approximately 800 m SSW of the Omui prospect. In the early 1890s, gold was first identified in streams draining off what was referred to as Placer Mountain, which is now more commonly referred to as Sakinyama (Shuto, 1999). No further details were identified.

5.3 Nanko

The Nanko prospect is located approximately 800 m SSE of the Omui prospect and 500 m east of the Sakinyama prospect. Details regarding when and how it was discovered are lacking, but the prospect includes a 180 m long adit that subsequently collapsed. Chalcedonic quartz samples collected from discard material at the adit portal averaged 4.78-4.90 g/t Au and 50-53 g/t Ag (Shuto, 1999).

In 1984-85, Nippon Mining collected float a small ridge east of the peak of Placer Mountain in proximity to what is described as the Nankoo zone (now referred to as the Nanko prospect). The samples returned up to 175.9 g/t Au and 2,250 g/t Ag. The float material is described as being commonly angular and suggesting that it came from a nearby source.

Also in 1984-85, Nippon Mining drilled two holes (OM4 and OM5) at the Nanko prospect where gold-bearing quartz float had been observed (Figure 5-3). The holes appear to have been inclined and drilled to the south east. Drillhole OM4 intersected six narrow veins with only low (unspecified) gold values, whilst drillhole OM5 intersected 14 veins ranging from 5 to 180 cm in width. Two of the wide veins, measuring 120 and 180 cm, assayed low gold values, but five veins with thicknesses of between 20 and 70 cm assayed 4.6 to 7.8 g/t Au and 117 to 253 g/t Ag. It was concluded that the assay results were significant, but the widths too narrow to be of interest. However, that because of the abundance of well-mineralised float, the area should be considered for additional work (Shuto, 1999).

In 1999, Mr. Nanjo excavated a 150 m long dog leg-shaped trench to a depth of up to 3 m and an unspecified number of pits on the at the Nanko prospect (Figure 5-3). Four quartz veins (A to D) were identified over the length of the trench with thicknesses of 2 to 15 m. The veins are described as being orientated east-west and dipping steeply to the south at 70-80°. A total of six grab samples were collected from the veins and assayed at the Mitsubishi Osarizawa laboratory. The results are shown in Table 5-2. SRK cannot confirm that the widths and grades presented can be relied upon, as SRK has not observed the trench sampling first-hand, and it is not documented whether the widths represent the vein width or trench width. The sample results are from grab samples, and therefore cannot be relied upon to be representative of the grade of the veins across the vein thickness presented.

Table 5-2 - Nanko trench grab sample results (from Shuto, 1999).

Vein	Vein Thickness (m)	SampleID	Au (g/t)	Ag (g/t)
A	15	A-1	4.2	39.2
		A-2	65.8	745.0
		A-3	5.8	18.0
B	5	B-1	20.8	24.7
		B-2	90.6	71.9
C	3	C	27.8	81.7
D	2	Not sampled		

Based on these results, the un-representative grab samples from the four veins collectively returned gold values ranging from 4.2 to 90.6 g/t Au (with an arithmetic mean value of 35.8 g/t Au and a median

value of 24.3 g/t Au) and silver values ranging from 18.0 to 745.0 g/t Ag (with an arithmetic mean value of 163.4 g/t Ag and a median value of 55.6 g/t Ag).

5.4 Hokuryu

The Hokuryu prospect was a historical mine and is located approximately 12 km southwest of Omu town.

In 1918, Hokuryu was discovered by Ryosuke Segawa of Sapporo, who obtained drilling rights, but no further details were identified (MMIJ, 1990).

In 1926, Kuhara Mining Co. (later, Nihon Mining Co.) started a project based on an exploration contract. The following year, the company bought the exploration rights, and in 1928 began full-scale operations. In 1930, mining rights were acquired. In 1933, it mechanised its mining operations, and in 1935 it set up an 80 t/month cyanide smelting plant, which it expanded to 110 t/month in 1939.

In 1943, the mine was closed as part of the nation-wide Japanese government order. After the war, the mining rights were transferred to Teikoku Mining, but in 1950 Nihon Mining bought them back. Between 1965 and 1974, Nihon Mining completed drilling, but the mine was not re-opened.

In 1975, Godo Resources applied for a mining concession, and in 1982 it acquired drilling rights. No further exploration details were evident.

The mineralised zones trended NE-SW and E-W and reportedly consisted of parallel quartz veinlets rather than large quartz veins. The available information describes a *C vein* (trending NE-SW) and a *No. 1 vein* (trending E-W).

The mineralised section of the C vein extended 240 m along strike and more than 210 m down dip with gold grades ranging from 7 to 29 g/t Au. According to the observed underground mine plans, the C vein development included nine levels and anastomosing workings extending over an area approximately 100 m wide and 800 m in length.

The mineralised section of the No. 1 vein extended 320 m along strike and 160 m down dip, with gold grades ranging from 10 to 30 g/t Au. According to the observed underground mine plans, the No. 1 vein development included six levels and sub-parallel workings extending over an area approximately 70 m wide and 200 m in length.

Production at the Hokuryu mine had reached a total of 350,000 t at average grades of 8 g/t Au and 33 g/t Ag at the time of its closure. According to records that were written at the time the mine was closed, there appeared to be a residual amount of ore of 30,000 t at 18 g/t Au and 70 g/t Ag over a very narrow thickness of 23 cm, and about 100,000 t at 5.9 g/t Au and 20 g/t Ag over an unspecified wider thickness. However, because the mineralised zones have been mined from surface and that most of the known high-grade mineralisation has already nearly been depleted, it was suggested that any remaining mineralisation in the delineated mine area would be present in the rock mass supporting the underground excavations.

5.5 Taihoku

The Taihoku prospect, also known as Daihoku, is located approximately 500 m south of the historical Hokuryu mine.

Prior to World War 2, Nippon Mining excavated an adit whilst prospecting for the lower silicification zone identified in the Hokuryu mine. However, the exploration identified an E-W zone of discontinuous quartz veinlets of low-grade that were deemed uneconomic. There is reportedly no production from the prospect (MMIJ, 1990).

Subsequent sampling of discarded banded quartz material from the adit by an unknown party at an unknown time returned 26 g/t Au and 700 g/t Ag. However, due to the absence of larger quartz veins and the localised mineralisation, the economic viability was not substantiated (MMIJ, 1990).

5.6 Maruyama

The Maruyama prospect is located in the west of the Omu property approximately 3 km northwest of the historical Hokuryu mine and information concerning its history is very sparse.

In around 1940, three adits were excavated with one revealing a 10 to 20 cm wide quartz vein, but no other veins were found (MMIJ, 1990).

In 1973, exploration restarted and resulted in the identification of silicified boulders that resembled those observed at the Omui prospect. Sample results returned 1.4 to 40 g/t Au and 110 to 640 g/t Ag and because of the similarity in appearance of the boulders with those at Omui, drilling was completed. Two holes 500 m in length were drilled and reportedly intersected several high-grade veinlets, but no further details were reported.

5.7 Omu

The Omu prospect was a historical mine and is located just outside of the Omu property 2 km north of Omu town station on the coast (MMIJ, 1990).

In the latter half of the 1920s, the Fujita Mining Company mined Omu but the mining operations were not successful.

In 1937, Nippon Mining acquired the mine and continued operations until the 1943 national mining moratorium.

The Omu mine consisted of two levels 20 and 60 m below sea level, and a series of drives and adits that encompassed an area approximately 30 m wide and 120 m in length. The mine contained two main veins Tou-Hi (eastern vein) and Sei-Hi (western vein) and the observed underground mine plan suggests they trended NE-SW. Vein and mineralisation continuity was reportedly poor due to the presence of faulting and the variable direction of the underground workings shown in the mine plan suggests a locally complex structural environment. The reported gold and silver grades for the veins are 4.3 to 6.5 g/t Au and 28 to 33 g/t Ag, but no vein widths were reported.

Production figures for the period 1938 to 1942 are provided in Table 5-3.

Table 5-3 - Omu mine production figures (from MMIJ, 1990).

Year	Tonnage	Au (g/t)	Ag (g/t)
1938	139	3.1	25.0
1939	3,107	3.9	42.0
1940	1,954	4.7	36.0
1941	1,248	6.6	46.0
1942	1,860	5.9	58.0

The total production from the Omu mine was reportedly 0.02 t Au and 0.17 t Ag, equating to approximately 650 oz Au and 5,500 oz Ag (Shuto, 1999). However, these figures differ from those in Table 5-3 (from MMIJ, 1990).

At the time the mine was closed, the proven ore reserve was 3,130 t @ 9.4 g/t Au and 53.1 g/t Ag and the probable ore reserve was 7,847 t @ 4.3 g/t Au and 27.3 g/t Ag (MMIJ, 1990). However, the

mineralised zone widths and the quality and compliance of the proven and probable ore reserve categories compared to current international standards are unknown.

At the time of mining, water ingress reportedly made exploitation difficult. Given the depth of the workings below sea level, it is anticipated that the workings would now be entirely flooded.

6 Geological Setting and Mineralisation

6.1 Regional Geology

Unless cited otherwise, the following descriptions were extracted and summarised from NUMO (2004) and NUMO (2009).

Most of the geology of Japan is a result of subduction-related processes that have occurred since the Mesozoic. The current tectonics of the Japanese islands can be explained by the interaction of four plates: the Pacific and Philippine Sea oceanic plates and the North American (or Okhotsk) and Eurasian (or Amurian) continental plates (Figure 6-1).

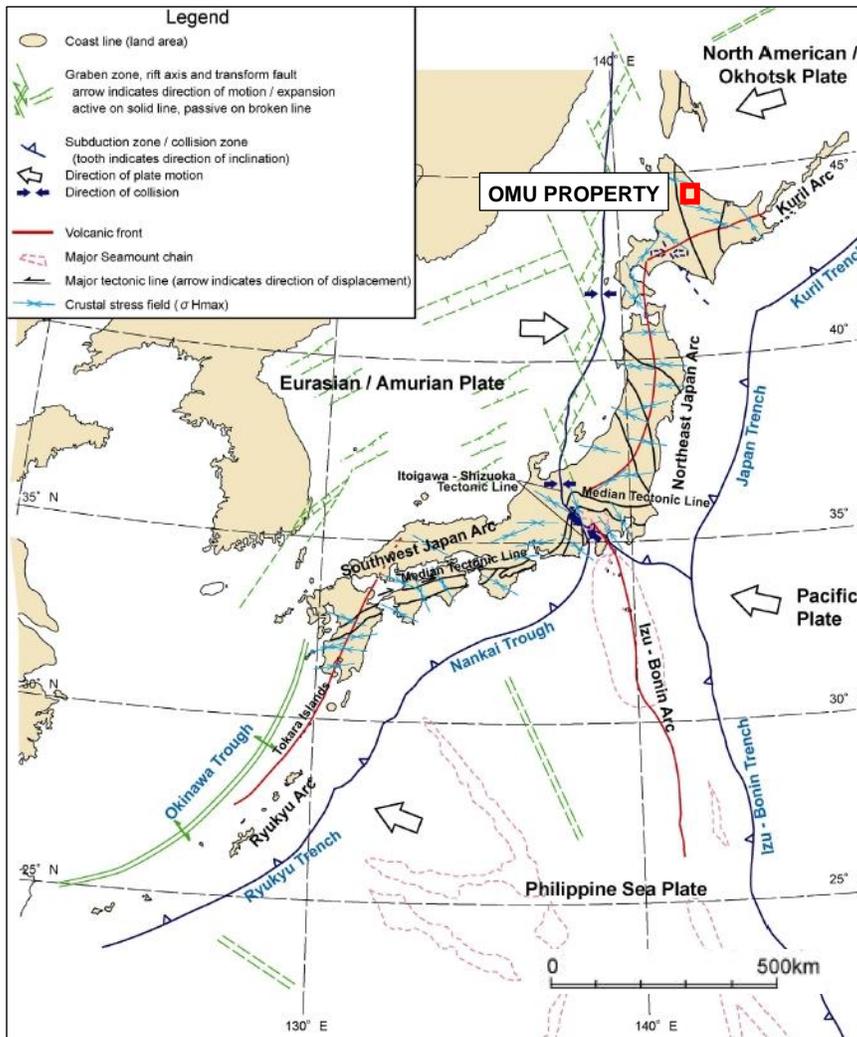


Figure 6-1 - Tectonic map of Japan (from NUMO, 2004).

The eastern part of the Eurasian plate is broken with a large fragment, the Amur sub-plate, currently moving as a distinct kinematic entity. The North American plate continues across the Bering Sea into eastern Asia and down past the Kamchatka-Kuril trench segments to Japan. An elongate southern section of the North American plate extends southwards to Japan. This section has broken off and is also currently moving as a distinct kinematic entity, known as the Okhotsk sub-plate. The current tectonics of northeast Japan (northern Honshu and Hokkaido) are a manifestation of the interactions between the Amur and Okhotsk sub-plates with the Pacific plate.

Subduction along the Japan Trench at a speed of about 9 cm/year is concurrent with convergence near the eastern edge of the Sea of Japan at a speed of about 1 to 1.5 cm/year. Four arc segments merge to form the Japanese islands.

The northern half of Honshu island is a subduction segment commonly referred to as northern or northeast Japan. Hokkaido is the southern end of the Kuril trench and arc. East-central Honshu (Izu peninsula) is the northern end of the Izu-Bonin-Mariana trench and arc. These three arc-trench segments are all the product of the Pacific plates westward subduction beneath them and along which Quaternary volcanoes lie parallel forming a "volcanic front".

In the north, subduction of the Pacific Plate is oblique to the Kuril Trench, causing a strike-slip movement along the Kuril Arc, which results in a local collision zone within the Okhotsk Plate in central Hokkaido.

The basement rocks of the southwestern Kuril arc consist of a Mesozoic accretionary complex with a cover of Cretaceous and Paleogene sedimentary rocks (Garwin, et al., 2005). Eocene to middle Miocene ilmenite-series granitoids intrude the basement rocks. The volcanism of the southwestern Kuril arc has changed from middle Miocene andesitic activity to middle to late Miocene bimodal basalt and rhyolite, including a period from 12 to 8 Ma with basalt-only volcanism. The andesitic and bimodal volcanic activity migrated trenchward during the middle Miocene. The middle to late Miocene bimodal and basalt-only volcanism occurred mainly in a north-south trending graben perpendicular to the arc trend. The basalts of the Miocene bimodal assemblage changed from island-arc type at 13 to 11 Ma to backarc basin basalt at 9 to 7 Ma and again changed into island-arc type at 5 to 4 Ma. Since the Pliocene, bimodal volcanism in the backarc has disappeared and andesitic volcanic activity at the volcanic front has become dominant. This Plio-Pleistocene activity was associated with formation of calderas several to ten kilometres in diameter, which erupted large amounts of felsic ignimbrite. East-northeasterly trending right-lateral strike-slip faults were active during the late middle Miocene nearby the volcanic front of the southwestern Kuril arc due to oblique subduction of the Pacific plate. This fault movement led to the westward migration and collision of the Kuril forearc sliver with the north-eastern Japan arc at southern Hokkaido, forming the present concave joint between the Kuril and north-eastern Japan arcs.

6.2 Local Geology

Unless cited otherwise, the following descriptions were extracted and summarised from Garwin, et al. (2005) and Watanabe (1995).

The crustal evolution of Hokkaido Island has been dominated by a series of accretion and collision processes occurring from the late Jurassic to the present. The central part of Hokkaido Island is composed of numerous N-S-trending Belts (Figure 6-2).

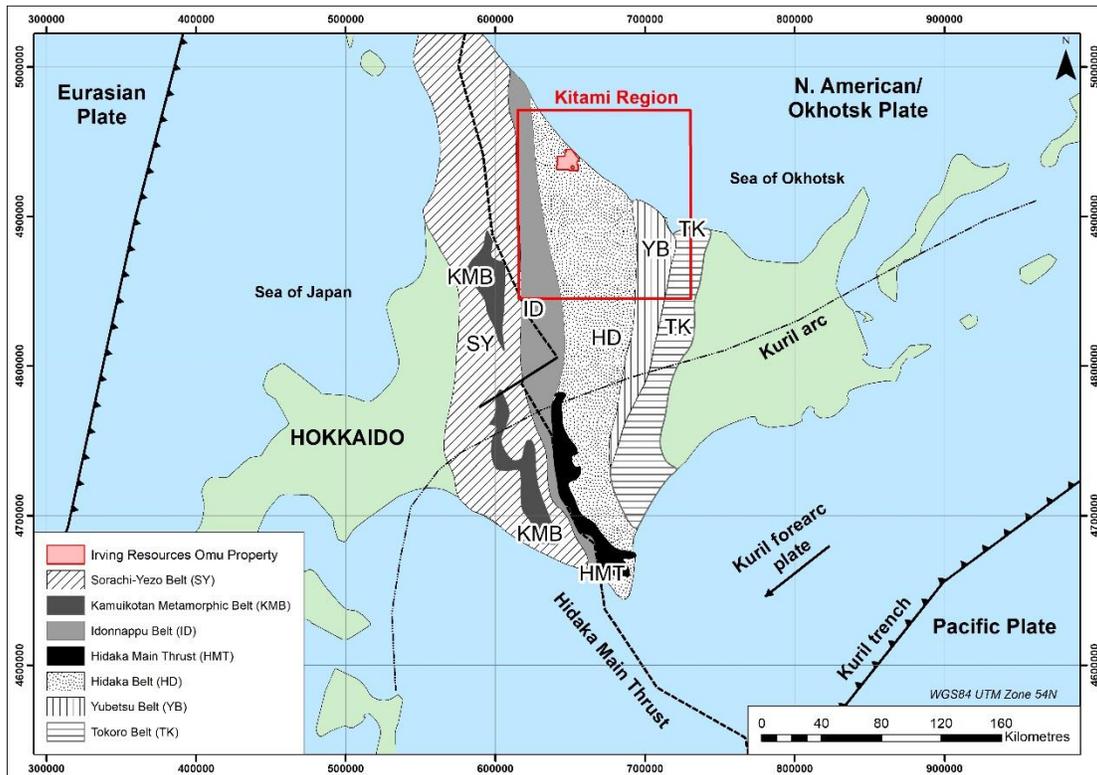


Figure 6-2 - Hokkaido Island tectonic map (after Iwasaki, et al., 1998).

From west to east, the Sorachi-Yezo Belt (SY) is characterised by ophiolite sequences (Jurassic oceanic crust), Cretaceous forearc basin sedimentary rocks and high pressure metamorphosed rocks. The Kamuikotan Metamorphic Belt (KMB) occurs within the Sorachi-Yezo Belt and was formed in relation to late Jurassic to early Cretaceous subduction processes.

The Idonnappu Belt (ID) is composed of chert and limestone units that young eastward from early to later Cretaceous. This belt is considered to be an accretionary complex in which oceanic crust is underthrust toward the west or the northwest and it is in faulting contact with the adjacent Sorachi-Yezo and Hidaka Belts.

The Hidaka Belt (HD) is also an accretionary complex of flysch-type sediments and melange formed by the westward subduction of the oceanic plate during the early Cretaceous to early Paleogene. The terrigenous clastic sediments in this belt become younger to the east. Along the Hidaka Mountains in the western part of this belt, high-temperature Palaeogene to Miocene metamorphic rocks are exposed.

The Yubetsu (YB) and Tokoro (TK) Belts were developed during the late Cretaceous to Paleocene plate subduction beneath the Kuril Trench. The Yubetsu Belt includes pelagic limestone and chert which originally formed as Jurassic seamounts that are unconformably overlain by conglomerates and turbidites. The Tokoro Belt (TK) is mainly composed of clastic sedimentary rocks.

Eastern Hokkaido represents the southwestern margin of the Kuril arc and includes Cretaceous volcanic and sedimentary rocks.

The Kitami Region (Figure 6-2), encompassing parts of the Idonnappu, Hidaka and Yubetsu Belts, includes several similarly orientated zones (Figure 6-3).

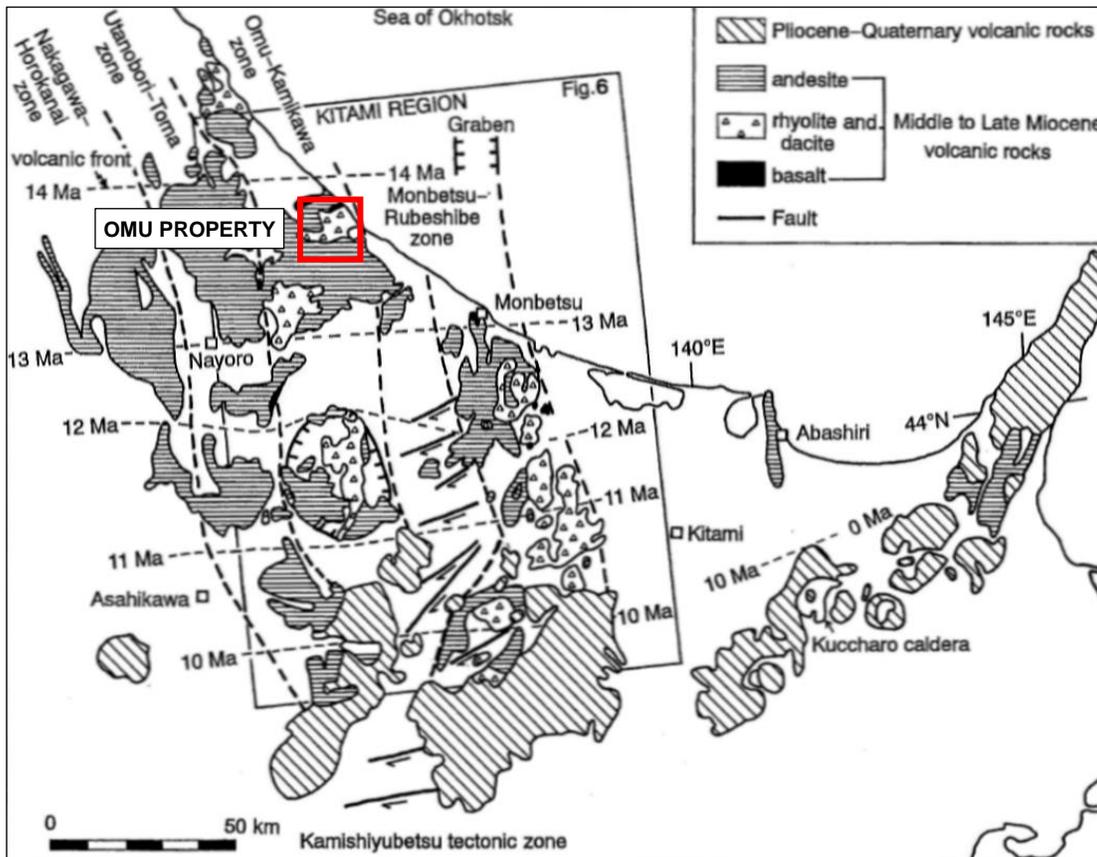


Figure 6-3 - Kitami region geological zones (from Watanabe, 1995).

The Nakagawa-Horokanai zone predominantly consists of hornblende-pyroxene andesite. The volcanic rocks are intercalated with an underlying submarine sedimentary sequence and an overlying subaerial sequence. Within the southern end of the zone, high magnesian andesite lavas occur.

The Utanobori-Toma zone consists of a series of sub-aerial volcanoes composed of pyroxene andesite and overlies submarine andesitic volcanoclastic rocks.

The Omu-Kamikawa zone consists of rhyolitic and dacitic lavas which are intercalated with pyroxene andesitic lavas. These overlie tuff, tuff and volcanic breccias as well as sandstones and mudstones of the Middle Miocene formations. The Omu-Kamikawa rhyolites contain minor amounts of basaltic lavas and intrusions.

In the Monbetsu-Rubeshibe zone, felsic volcanic rocks predominate with a subordinate amount of basaltic rocks, following initial submarine pyroxene andesitic activity. Rhyolitic and basaltic rocks intercalate with lacustrine sedimentary rocks which unconformably overlie andesitic volcanics. These rhyolites are principally distributed within a 10 km wide N-S trending graben extending on the eastern side of the zone.

Compiled age data for the volcanic rocks in the zones have shown that the initial andesitic volcanism migrated approximately 100 km southwards from ca. 14 Ma towards the present Kuril arc volcanic front

until c.10 Ma. Subsequent felsic volcanism has also been shown to become younger towards the south. In the Nakagawa-Horokanai zone volcanism finished ca. 11 Ma and ca. 9 Ma in the Utanobori-Toma and Omu-Kamikawa zones. Further east in the Monbetsu-Rubeshibe zone, volcanism continued until ca. 6 Ma. Within northeast Hokkaido, andesitic rocks are more predominant in the west whereas felsic rocks are more predominant in the east.

6.3 Property Geology

According to the 1:50,000 geological map published by the Geological Survey of Hokkaido, the Omu property encompasses Neogene and Quaternary System lithological units (Figure 6-4).

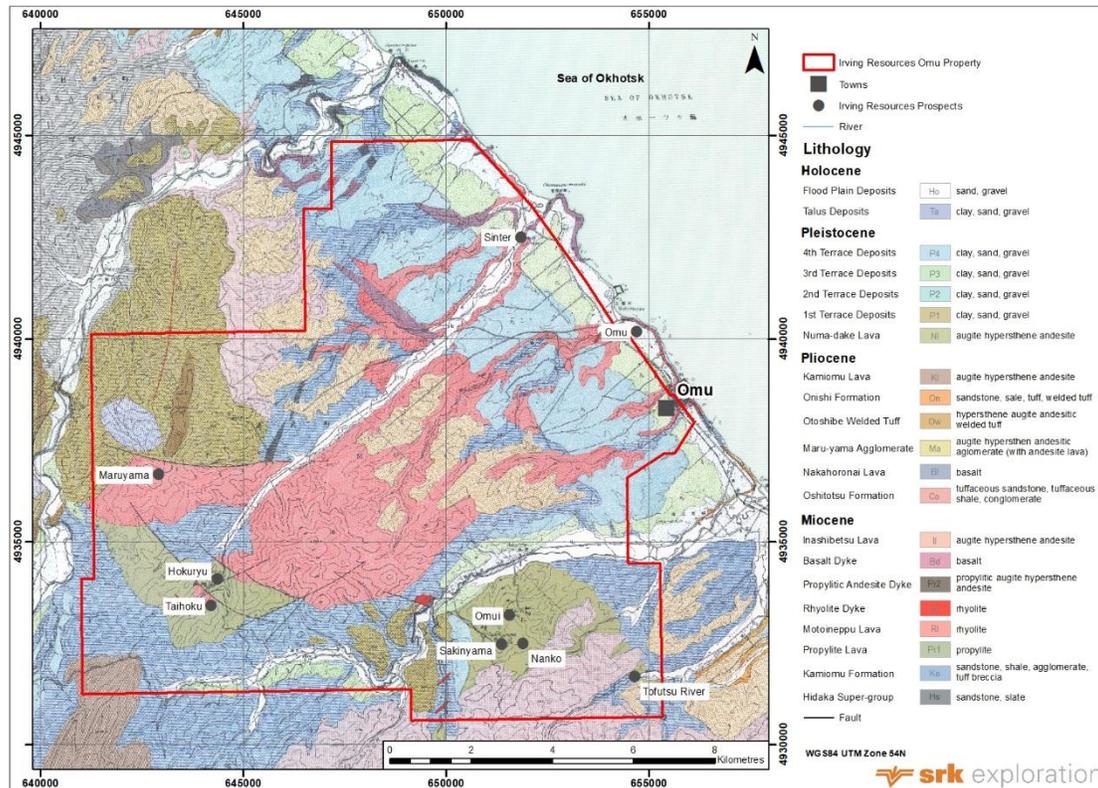


Figure 6-4 - Omu property geological setting (after Suzuki, et al., 1966).

The Neogene includes various volcanic rocks, which are of Miocene or Pliocene Epochs.

The Kamiomu Formation includes the only Miocene sediments in area and are composed of tuff, tuff breccia, agglomerate, tuffaceous sandstone, shale, sandstone and conglomerate. It has a N–S strike and a dip of 10 to 20° E. Beds of green tuff are developed in the lowermost part and their presence is interpreted as belonging to the so-called Kitami green-tuff.

Volcanic rocks of the Miocene are intruded into the Kamiomu Formation as well as extensively overlying the same formation. All of these rocks are affected by hydrothermal alteration, though the types of alteration are variable. In order of geological succession within the Miocene, the Kamiomu Formation is succeeded by the Propylite Lava followed by the Motoineppu Lava. These were then followed by successive intrusions of rhyolite and propylitic andesite dykes followed by basalt dykes before finally the Inashibetsu Lava (andesite).

The Propylite Lava is dark green, its original composition being augite-hypersthene andesite. The lava

is fairly coarse in size and has undergone significant alteration. The Motoineppu Lava rhyolitic and is considerably variable in rock facies. Alteration is conspicuous also in this lava. Both the Propylite Lava and the Motoineppu Lava occur as country rocks hosting gold-silver mineralisation. These rocks have undergone silicification, chloritisation, carbonitisation and argillic alteration.

The rhyolite dykes do not occur frequently within the property and are relatively small, ranging between 1 to 5 m in width. These intrude into the Kamiomu Formation in the central south part of the property, the Propylite Lava in the west and the Motoineppu Lava on the east. A northeast trending propylitic andesite dyke intrudes into the Kamiomu Formation in the northwest of the property. The dyke has undergone chloritisation and/or carbonitisation. The generally northwest trending, sometimes parallel, basalt dykes intrude into the Kamiomu Formation in the northeast of the project area. These rocks are dark green in colour and flow structures are observed. The Inashibetsu Lava, in which foliations are well developed, is composed of basic augite-hypersthene andesite. The Inashibetsu Lava is covered unconformably by the Pliocene Maru-yama agglomerates in the northwest and central south part of the project area.

The Pliocene formations are barren of fossils and are isolated in distribution from each other. Accordingly, the stratigraphic relations between these formations, and their relations with the volcanic rocks of this age, have not been determined. Currently the succession of these Pliocene lithologies has been presumed as the Oshitotsu Formation at the base, followed by the Nakahoronai Lava, Maru-yama Agglomerate, Otoshibe welded tuff, Onishi Formation and the Kamiomu Lava.

The Oshitotsu Formation is exposed in a small area southwest (outside) of the property and lies unconformably on the Kamiomu Formation. The Oshitotsu Formation is divided into the lower welded tuff beds and the upper Kamihoronaigoshi Formation. Only the latter is developed in this area. It is composed of alternating tuffaceous sandstone, tuffaceous shale and conglomerates. Nakahoronai basaltic lava sits directly on the basement rocks of the Hidaka Supergroup to the northwest of the project area. It consists of basalt with dense, platy joints and superficially resembles slate.

The Maru-yama Agglomerate lies unconformably on the Hidaka Supergroup or Inashibetsu Lava in the west and south of the property. The agglomerate includes numerous, angular andesite pebbles as well as three layers of andesite lava. The Otoshibe welded tuff is poorly exposed to the north of the project area and consists of andesitic welded tuff containing angular pebbles of slate. The Onishi Formation appears to the southeast of the project area. It is divided into an upper and lower part with only the lower being represented. It is composed mainly of hypersthene andesitic tuff, in which there is minimal stratification. The rocks are weakly welded. The Kamiomu Lava is composed of augite-hypersthene andesite and sits unconformably the Kamiomu Formation.

The Quaternary formations in the property are classified into two groups belonging either to Pleistocene or Holocene. The Pleistocene formations consist of the Numa-dake Lava and four identified terrace deposits (1st - 4th) that get progressively younger. The Numa-dake Lava consists of augite-hypersthene andesite and occurs to the northwest of the project area. The terrace deposits, consisting of clay, sand and gravel, are extensively developed. The deposits of the first and second terraces are partially altered into red soil. Holocene formations are represented by the flood-plain deposits forming the present river beds and by talus deposits.

6.4 Mineralisation

Given its tectonic setting, Japan is host to many epithermal precious metal deposits and this Deposit Type is described in Section 7.

At a more localised-scale, the Kitami region includes more than 40 closed gold mines and prospects

and a smaller number of mercury and base metal (Cu-Pb-Zn) deposits (Figure 6-5).

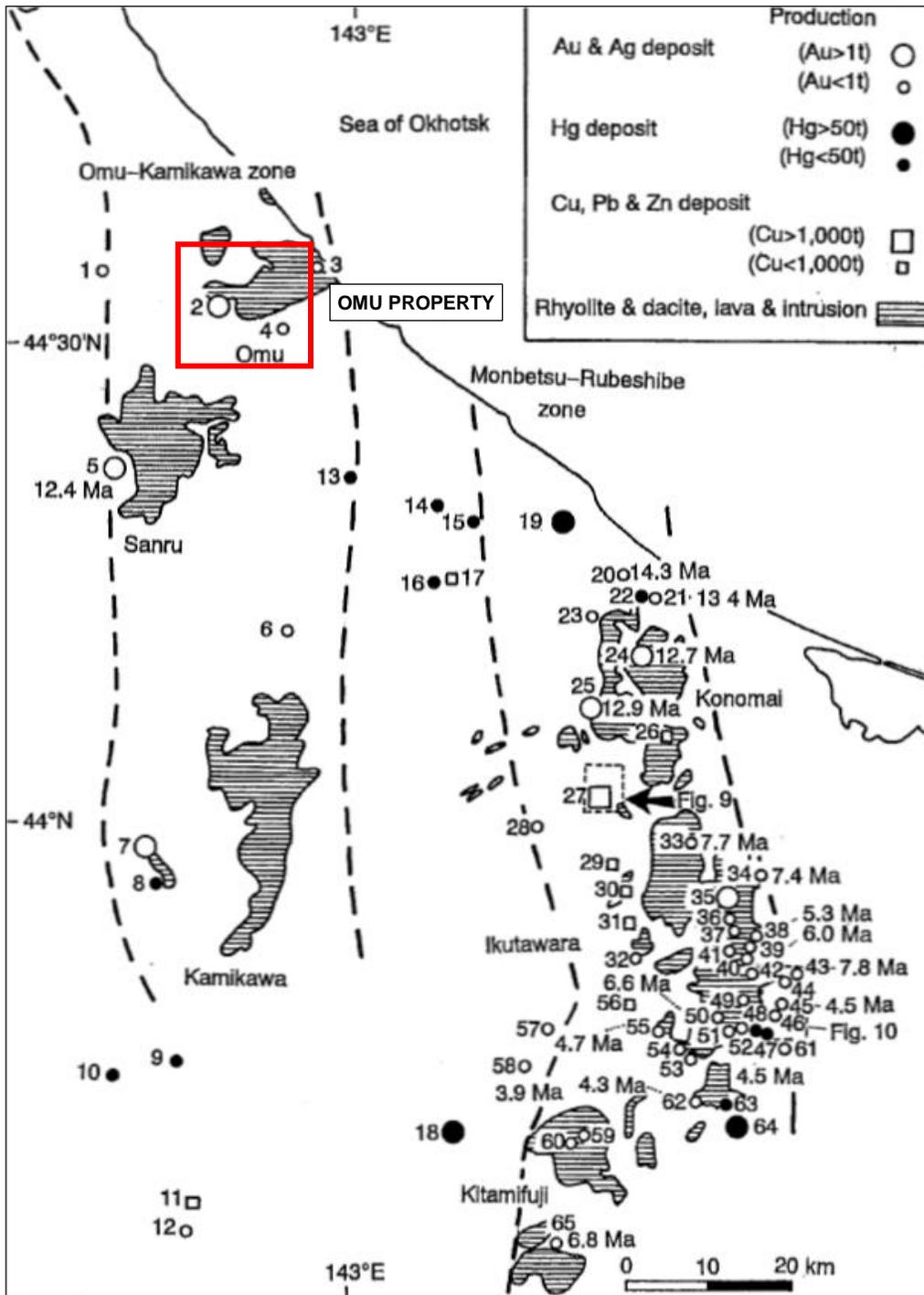


Figure 6-5 - Kitami region mineralisation (from Watanabe, 1995).

The epithermal mineralisation within the region is related to Middle to Late Miocene subduction-related volcanism which occurred on the back-arc side of the Kuril Arc.

All the epithermal gold deposits within the Kitami region are low sulphidation in type and a close relationship has been confirmed between the Miocene hydrothermal mineralisation and rhyolite

volcanism, both in time and space. Most gold and base metal deposits are located close to or hosted by rhyolitic lavas and intrusions.

Accumulated age data indicate that gold mineralisation started circa 14 Ma in the northern extents of the region and shifted southwards as volcanic activity moved south (Watanabe, 1995).

The historical mines within the Omui property, namely Hokuryu and Omui, are considered as typical of the Kitami region epithermal deposits.

6.4.1 Omui

The host rock at the historical Omui mine is a rhyolitic tuff breccia, containing chalcedonic gold-and-silver-bearing quartz veins that have a roughly E-W orientation. A main vein (Honpi) and three sub-parallel hangingwall veins were exploited prior to the mine's closure in 1928 (see Section 5.1). The workings are no longer accessible, so descriptions presented here are sourced from MMIJ (1990) and sample photographs come from Irving's contemporary exploration activities.

There were three main types of mineralisation identified and exploited; chalcedonic quartz, breccias of a highly altered silicate rock (tuff), and crystalline quartz. The chalcedonic quartz mineralisation contains minute gold grains intermixed with iron sulphide (pyrite) with colloidal ash and dark-coloured laminations (Figure 6-6). An example of the breccia-type mineralisation is provided in Figure 6-7.

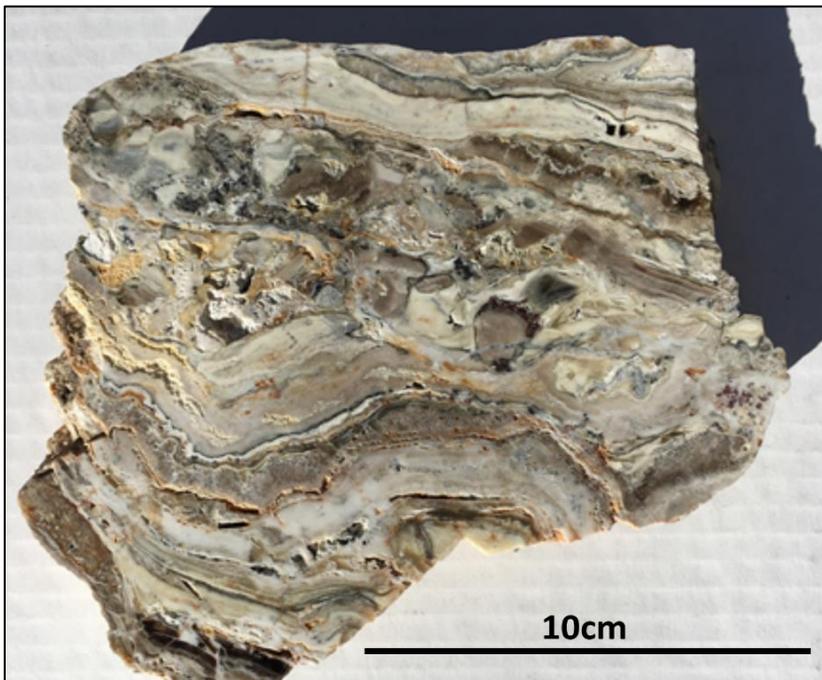


Figure 6-6 - Omui (Honpi) grab sample 16OM-42 (Irving Resources, 2018).

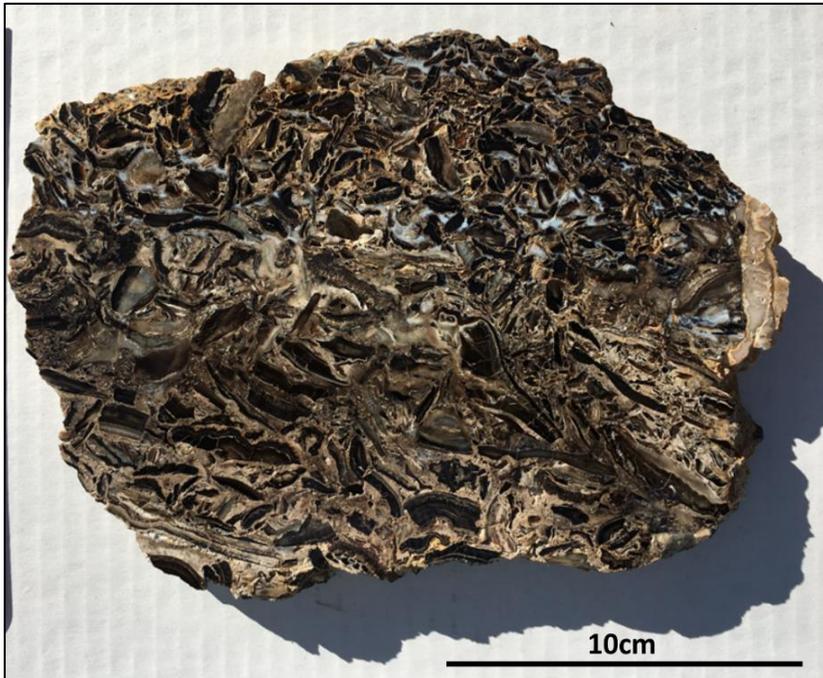


Figure 6-7 - Omui (Honpi) grab sample 16OM-12 (Irving Resources, 2018).

The walls of the mineralised veins have been significantly silicified, extending some 5 to 10 m into the wallrock, and the hangingwall often contains “lattice” networks of veining. The footwall has a more brecciated texture and is often cemented by silica.

6.4.2 Hokuryu

The host rocks at the historical Hokuryu mine include rhyolite and tuff belonging to the Miocene Sakingawa and Kawabata Formations. The Sakingawa Formation generally has a strike of N60°E and a dip of 10 to 20° SE. The rhyolites reportedly appeared within the mine and relate to fissures in which mineralisation has occurred. However, they also represent extruded lavas at surface.

Mineralisation comprises E-W and NE-SW orientated gold-bearing vein sets. Rather than single quartz veins, the mineralised zones comprise many narrow veinlets. There is very little outcrop at Hokuryu and modern exploration has to date been limited. Therefore, the following description of mineralisation relies on the description of the deposit by MMIJ (1990).

Two types of mineralisation were recorded and exploited in the past: so-called *Kitami-type* symmetric banded silicate mineralisation and micro-quartz veinlets. Both types contain native gold, argentite, pyrrargyrite, tetrahedrite and pyrite, occasionally with minor oxidised manganese.

Amongst discarded material approximately 800 m west of the old Hokuryu adit entrance, chalcedonic banded mineralisation was identified. This included abundant “ginguro”, thin laminations of banded silver sulfosalts, electrum and some chalcopryite, galena and sphalerite (Figure 6-8).



Figure 6-8 - Hokuryu grab sample 16OM-087 (Irving Resources, 2018).

6.4.3 Maruyama

Three adits were excavated into a hillside and identified a 10 to 20 cm wide quartz vein, but no other veins were found (MMIJ, 1990). However, a zone of silicified rocks measuring approximately 500 m N-S and 1000 E-W a large number of quartz boulders (up to 4 m³) were observed on the flanks of the hill. Some of these reportedly looked like the boulders observed in proximity to the Omui prospect and were mineralised. A subsequent two-hole drilling programme intersected several high-grade veinlets.

Despite the quartz veining intercepted in adits and drillholes (summarised in Section 5.7), no descriptions of the mineralisation or host rocks at Maruyama have been found.

6.4.4 Omu

The historical Omu mine consisted of two main veins Tou-Hi (eastern vein) and Sei-Hi (western vein), hosted in rhyolites (MMIJ, 1990). One vein had a strike of 040°, dipped at 70° to the SE, had a strike length of 150 m, down-dip extent of 80 m and an average thickness of 0.88 m. The other vein had a strike of 060°, dipped at 80° to the NW, had a strike length of 60 m, down-dip extent of 80 m and thickness of 0.60 m. The vein quartz is predominantly described as dense and white, although some yellowish-brown quartz and banded “ginguro” textures were present.

No modern exploration has taken place at this location to confirm or elaborate on the mineralisation present.

6.4.5 Sinter

In 2016, Irving discovered a NE-trending cliff approximately 8 m high that included quartz sinter and gold and sulphide-bearing silicified rhyolite and brecciated tuffs (Figure 6-9).



Figure 6-9 - Sinter prospect grab sample 18OMS-R011 (Irving Resources, 2018).

Subsequent geological mapping of the prospect resulted in the production of a cross-section suggesting that the sinter represents the preserved uppermost part of a mineralised epithermal system (Figure 6-10). However, the presence of sinter does not guarantee the presence of underlying mineralisation given that sinters can extend several kilometres from the emitting hydrothermal fluid pathways that may or may not be mineralised.

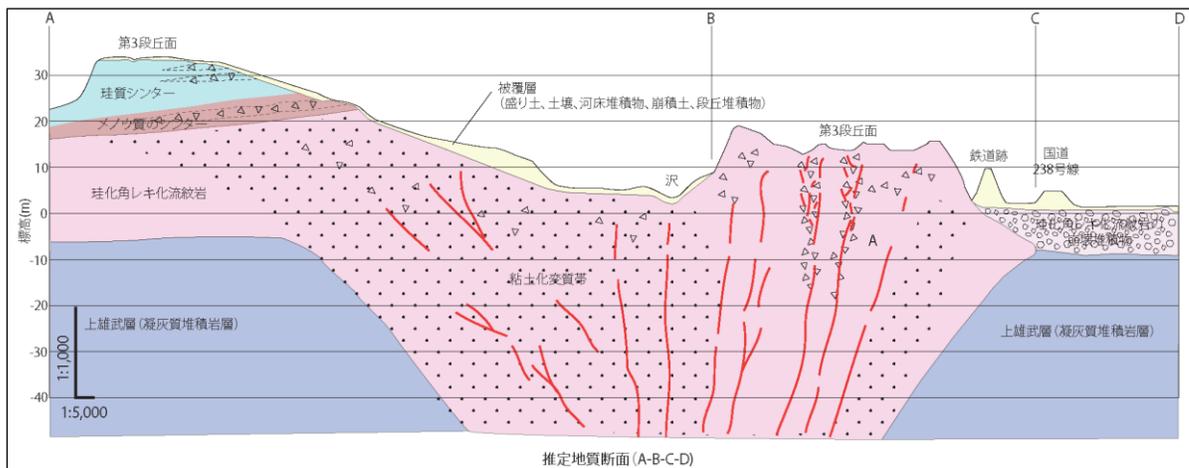


Figure 6-10 - Sinter prospect geological cross section (from MINDECO, 2018).

7 Deposit Types

This section provides a summary of the mineral deposit type being explored for and represents the geological model being used to help understand the mineralisation in the Omu property and the choice of exploration activities. The section has been derived from a variety of sources, including but not limited to; Corbett & Leach (1997), Ewers (1989), Feebrey, et al. (1998), Hedenquist, et al. (2000), Hodgesson (1990), Okada (1995), Panteleyev (1996), Taylor (2007), White & Hedenquist (1995), and the experience of the report Author's.

It is considered important to state that geological models typically describe general conceptual and/or empirical characteristics and processes of a deposit type. Given the inherent variability of individual mineral deposits, even of the same type, it is important that models are not applied too rigidly, and that project-specific observations and results ultimately guide exploration activities and the development of a project.

The deposit type of relevance to the Omu property can be broadly described as epithermal, which literally means shallow (*epi*) heat (*thermal*) and succinctly describes the fundamental genetic aspects of their formation. Epithermal systems develop within 1 to 2 km of surface and mineralisation is precipitated within the temperature range of 150 to 300 degrees centigrade (°C). Gold is the principal economic metal of interest, although epithermal systems also contain significant amounts of silver and can also contain recoverable amounts of lead, zinc and copper.

Epithermal mineral deposits develop within volcanic-plutonic arcs (island and continental arcs) associated with subduction zones in convergent tectonic settings. They are mainly hosted by or related to calc-alkalic or alkalic volcanic rocks. Their formation is not temporally restricted. However, because epithermal systems develop near to the surface, they are often eroded and therefore poorly preserved in geological history. The best-preserved systems are late Mesozoic and Cenozoic in age (< 120 Ma) and are associated with recent subductions zones, such as the Pacific Ring of Fire. Older Paleozoic examples have also been preserved within the interiors of North America, Asia and elsewhere.

Epithermal systems can be subdivided into two principal sub-types based on the chemistry of the hydrothermal fluids from which mineralisation is precipitated, namely low-sulphidation and high-sulphidation. Low-sulphidation mineralisation (also known as adularia-sericite type) is precipitated from near neutral pH and reduced fluids. In contrast, high-sulphidation mineralisation (also known as acid-sulphate type) is derived from acidic and oxidising fluids. It is generally accepted that the different sub-types develop in response to the proximity of the epithermal system to the intrusive source, with low-sulphidation systems developing more distally than the high-sulphidation equivalents.

The Omu property contains low-sulphidation mineralisation and the following description focusses on the general characteristics of this sub-type. A diagram of a low-sulphidation system is provided in Figure 7-1. However, further to the comment regarding the limitations of geological models, the diagram includes features that may be present or absent and of variable scale.

Low-sulphidation mineralisation of economic importance is predominantly associated with faults and their related structures. Mineralisation typically occurs within massive, banded and colloform veins (often with sharp contacts), breccias/stockworks and druse-lined cavities. Faulting, dilation, hydraulic fracturing and brecciation are characteristically recurrent, resulting in multiple phases of metallic and gangue mineral deposition and banded/colloform textures.

Vuggy textures are less common in low-sulphidation systems as these typically form due to leaching by acidic hydrothermal fluids. Similarly, disseminated and replacement mineralisation is uncommon or minor in low-sulphidation systems.

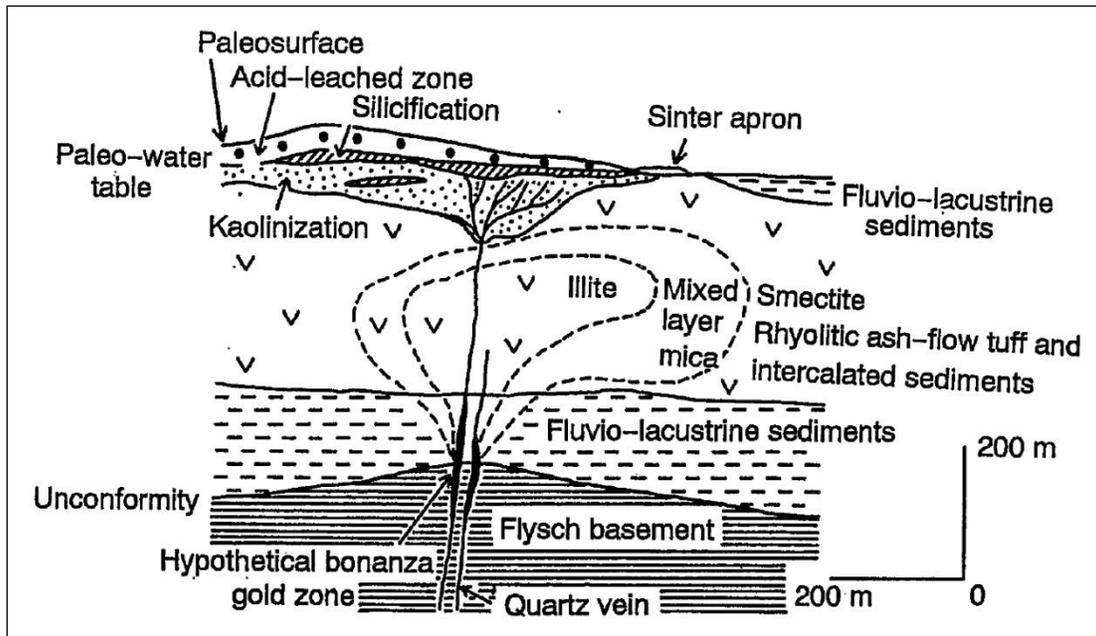


Figure 7-1 - Low-sulphidation epithermal system (from Watanabe, 1995, after Sillitoe, 1993).

Gold and silver are the prevalent elements of economic importance, although some low-sulphidation systems can contain lead, zinc and copper.

Epithermal systems include ubiquitous and abundant pyrite. Common metallic minerals in low-sulphidation systems includes sphalerite and galena (variable abundance), arsenopyrite (minor abundance), chalcopyrite, tennantite-tetrahedrite and telurides-selenides (very minor abundance). Uncommonly they contain electrum (variable abundance), cinnabar (minor abundance), covellite and stibnite (very minor abundance). Rarely they contain enargite-luzonite, orpiment and realgar (very minor abundance). Minerals that characterise low-sulphidation systems compared with high-sulphidation include sphalerite and arsenopyrite.

Epithermal systems include ubiquitous and abundant quartz. In low-sulphidation systems, distinctive quartz sinter zones can develop at the paleosurface. The sinter zones can be spatially extensive, banded and contain organic material. Where sinter zones are preserved, they provide an indication of how vertically preserved an epithermal system is.

Low-sulphidation systems commonly contain chalcedony, calcite and adularia (all of variable abundance), illite (abundant) and barite (very minor). Characteristically rare or absent minerals include kaolinite, pyrophyllite-diaspore and alunite, unless introduced as part of a secondary hydrothermal event.

The presence of adularia and calcite are indicative of near-neutral pH conditions and common in low-sulphidation systems. Bladed calcite, often replaced by quartz but retaining its original crystal form, can also be present.

Hydrothermal alteration of the host rocks is common in epithermal systems. Many alteration minerals are stable over specific temperature and/or pH ranges and their presence can be used to help constrain the thermal, chemical and preservation characteristics of a system.

Temperatures increase with depth towards the intrusive source and hydrothermal fluid pathways, with mineralisation deposited between around 150 to 300 °C. Therefore, the presence of higher temperature minerals such as biotite or amphibole would not be expected to be present given and may signify the basal section of an eroded epithermal system or an overprinting event. In low-sulphidation systems, clay alteration minerals can be used as indicators of paleotemperature. With increasing temperature, smectite (stable at < 160 °C) transitions to smectite-illite and then illite (generally stable at > 220 °C).

In low-sulphidation systems, hydrothermal fluids predominantly consist of meteoric water and are near-neutral pH and reduced. This results in minerals that often include calcite, adularia, chlorite, smectite, illite and the zeolites mordenite, laumontite and wairakite. Minerals such as kaolinite, dickite, pyrophyllite, diaspore and alunite suggest acidic conditions and would not be expected to occur in low-sulphidation systems unless there has been increased acidity due to magmatic hydrochloric acid (HCl) and sulphur dioxide (SO₂), steam-heated acid-sulphate waters formed near surface, and/or weathering of sulphide minerals.

Low-sulphidation epithermal systems are associated with a variety of characteristics that can be used for exploration purposes.

The location of epithermal mineralisation is fundamentally structurally controlled. Extensional and transtensional faulting (potentially caused by rifting or basement doming) that provide hydrothermal fluid pathways and space into which mineralisation can be deposited are particularly favourable. Specific fault-related structures that are favourable for hosting mineralisation include intersections, splays, flexures, steps/jogs, breccias/stockworks, etc., some of which are shown diagrammatically in Figure 7-2.

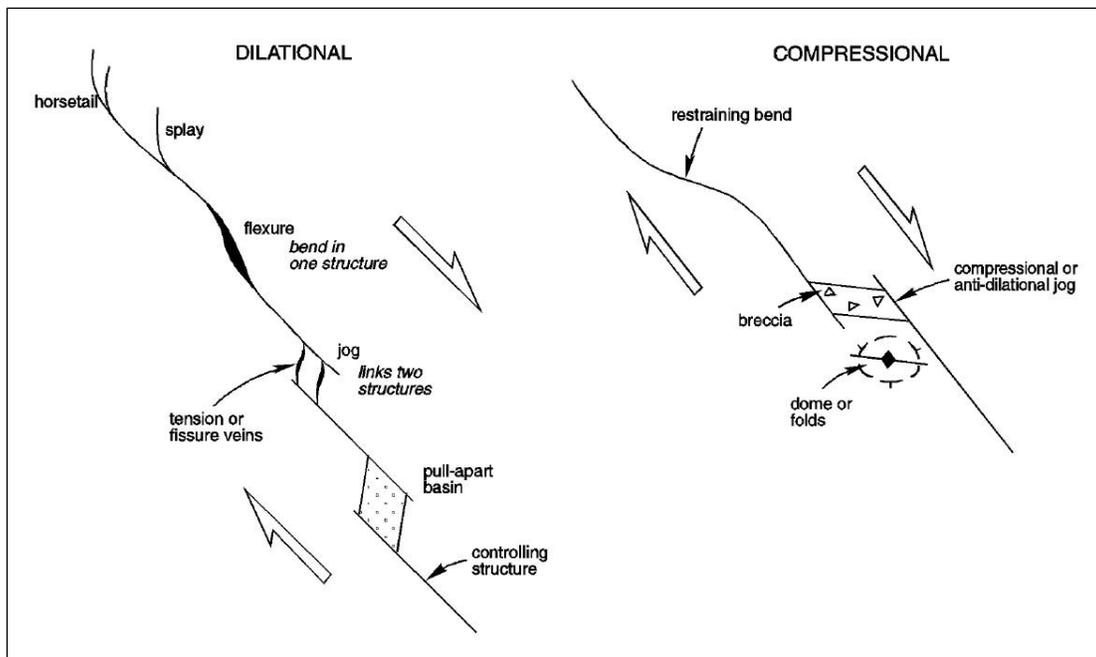


Figure 7-2 - Structures favourable for epithermal mineralisation (from Corbett & Leach, 1997).

The rheological characteristics and contrasts of lithological units and their permeability also influence their favourability for hosting epithermal mineralisation.

Field-observable characteristics include the presence of sulphide-bearing quartz, especially with banded, colloform and brecciated/stockwork textures. The presence of topographically elevated areas may represent silicified zones that are more resistant to erosion.

Geochemically, mineralised low-sulphidation systems are generally associated with elevated Ag, As, Au, Ba, F, Hg, K, Mn, Pb, Sb, Se and Zn.

Various geophysical exploration methods can be used to explore for low-sulphidation epithermal systems. Airborne and ground magnetic and gravimetric surveying can help identify favourable structures, such as faults, that may control the localised of mineralised zones. For example, at Hishikari in Japan elevated gravity responses were interpreted to represent localised doming of the basement that might be associated with faulting and mineralisation in the overlying lithological units. Where regolith cover is thin, radiometric surveys can be used to identify elevated potassium (K) responses that may be associated with adularia. More localised geophysical surveying including induced polarisation (IP) / resistivity and electromagnetics have also been used, to help identify pyritisation, silicification and clay alteration respectively.

Examples of economic low-sulphidation deposits include Hishikari in Japan, McLaughlin in the USA and Golden Cross in New Zealand. Economic low-sulphidation deposits are typically high grade (up to tens of grammes per tonne gold) and variable but lower tonnage compared with other types of gold deposit.

8 Exploration

This section chronologically describes the exploration activities completed by Irving and MINDECO.

Exploration activities commenced in 2016 and have included stream sediment, soil and rock-chip sampling, geophysical surveying (gravity and airborne unmanned aerial vehicle (UAV) magnetics), geological mapping and X-Ray Diffraction (XRD) analysis.

8.1 Stream Sediment Sampling

In 2017, MINDECO completed a stream sediment sampling programme across the entire Omu property to identify gold and related pathfinder element anomalies

The sampling involved dividing the Omu property into drainage catchments and collecting approximately one sample every 2 km². Samples were collected from active flowing streams with sample site selection being dictated by accumulations of fine (mud/clay) sediment. Each sample consisted of a combination of multiple sub-samples collected along approximately 50 m sections of the streams. Samples were collected sequentially in an upstream direction to prevent disturbed material causing any contamination. Sub-sample material was collected into a single plastic bucket using a plastic scoop until approximately 100-200 g of material was obtained. The bucket was then left for 3 minutes for the heavy particles to settle out. The water was then decanted into another bucket with netting over it to remove any light organic matter. Flocculant was added to the sample before being transferred to a 30 x 40 cm canvas bag. The samples were then transported by company vehicle to a hooped polythene-covered greenhouse where they were dried naturally. Once dry, they were transferred to small polythene bags and sent to ALS Minerals in Vancouver, Canada for analysis.

The results of the stream sediment programme clearly show gold (Figure 8-1), silver (Figure 8-2), arsenic, mercury and antimony anomalies corresponding to the historic Omui and Hokuryu mines. The elevated precious metal values extend downstream as weakening residual anomalies, but also in to drainage catchments separated from those containing mines. This suggests sources of metals in

additional as yet unexploited locations to the northwest and south of the Hokuryu prospect and west and southeast of the Omui prospect.

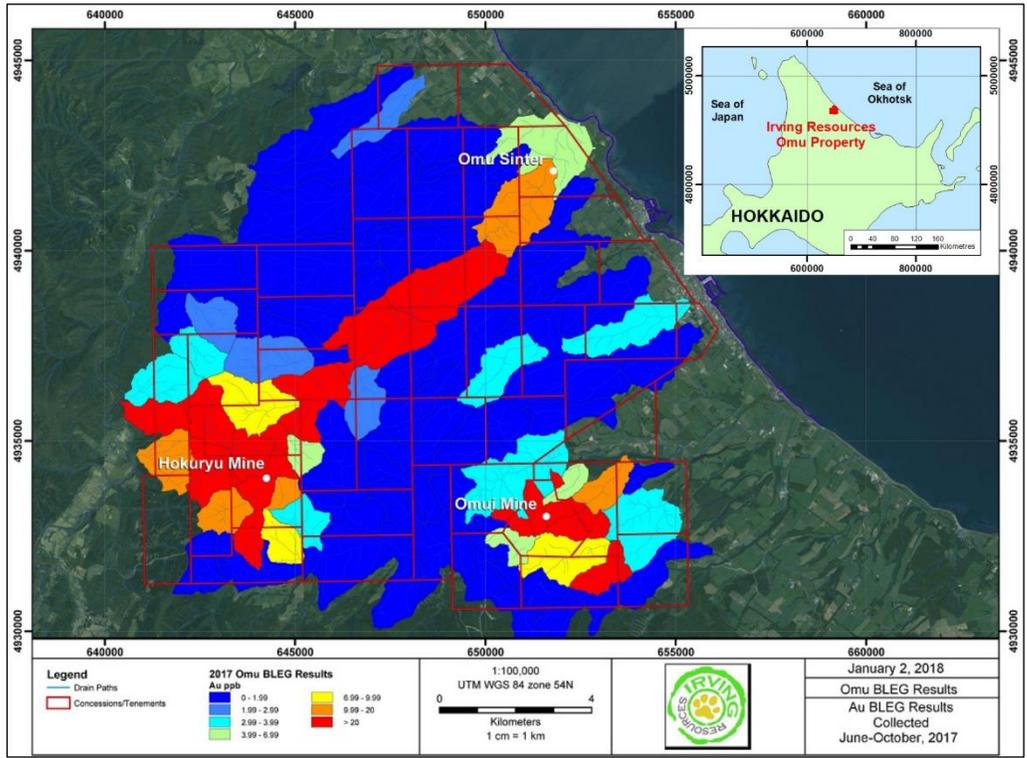


Figure 8-1 - Omu property gold stream sediment sampling results (Irving Resources, 2017).

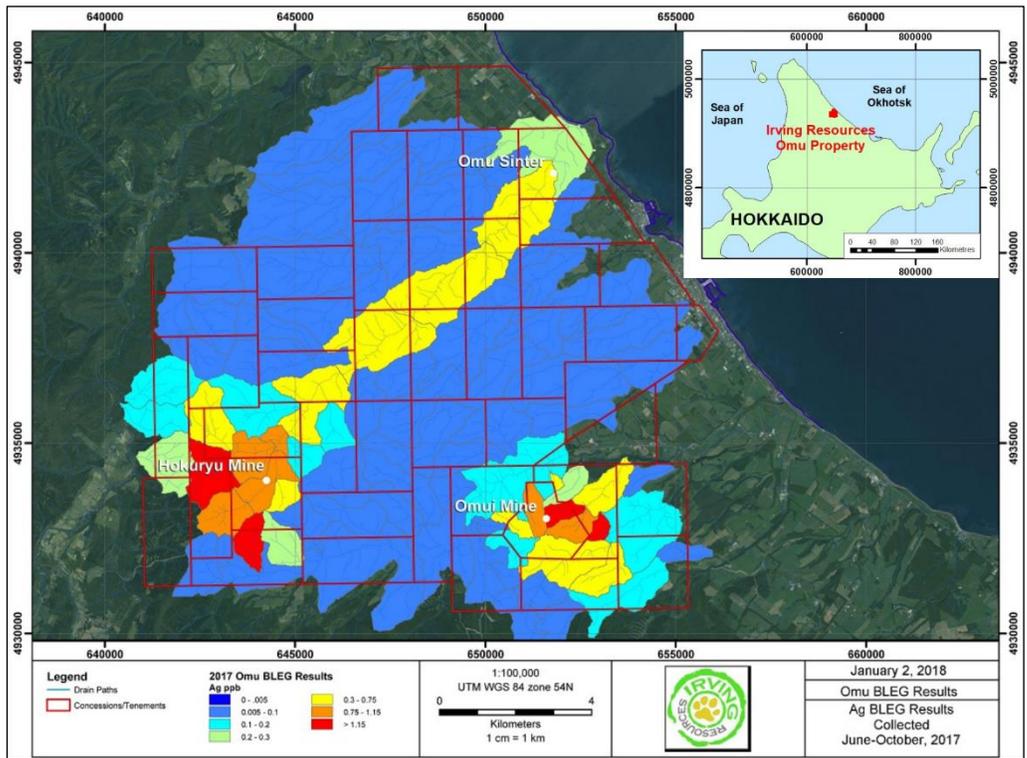


Figure 8-2 - Omu property silver stream sediment sampling results (Irving Resources, 2017).

8.2 Soil and Rock Chip Sampling

In 2017, MINDECO completed a soil sampling programme over the Omui mining permit to define geochemical anomalies that may be followed up with trenching and drilling. The survey was completed along UTM aligned north-south orientated lines typically spaced 50 m apart, but 100 m apart in the peripheral areas. Samples were collected at 50 m intervals along each line, with the sample locations staggered by 25 m between each line.

The soil sample collection procedure involved locating the pre-defined sample locations using a Garmin GPSMap 62sc handheld GPS. Once located, a manual post-hole tool was used to dig vertically down to a maximum of 1 m. An approximately 40 cm interval of material was collected from the B-horizon. The soil was typically moist and amounted to about 2 kg of sample material that was put into a 20 x 30 cm Ziploc bag. The sample bags were annotated with the SampleID, Depth and Date of sample collection using a marker pen. Descriptions of the sampled medium were recorded, though not of the landform or regolith type at each location.

The samples were then transported by company vehicle to a hooped polythene-covered greenhouse where they were dried naturally. They were then sent to ALS Minerals in Vancouver, Canada for analysis.

Over the last three years of exploration, whenever MINDECO identified silicified rocks or significant quartz veining in outcrop, waste dump or float material during stream sediment and soil sampling programmes, grab or rock-chip samples were collected. Sample locations were again recorded by handheld GPS and analysed for gold by fire assay and gravimetric finish at the ALS Minerals laboratory in Vancouver, Canada.

8.2.1 Omui Mining Permit

The results of the soil sampling show numerous gold anomalies across the Omui mining permit (Figure 8-2). There is a SW-NE trending anomaly over the historical Omui workings exceeding 0.5 ppm Au. There are several spatially smaller sized anomalies in the region of the Nanko prospect. However, the most obvious anomalous zone corresponds with the Sakinyama prospect. Here the results define an area of approximately 500 x 500 m with > 0.15 ppm Au and a higher-grade tail extending to the northwest. This area has no outcrop and, though linear depressions on the ground, now hidden by dense bamboo growth, are thought to show historic trenching by prospectors.

Despite the general correlation of silver with gold in rock samples, the silver in soil anomalies (Figure 8-3) are not as coherent or strong as the gold anomalies. There is again a general elevated silver concentration in soils north of the historical Omui workings and a broad anomaly over the Sakinyama prospect, as well as smaller sized anomalies east of both Omui and the Nanko prospects.

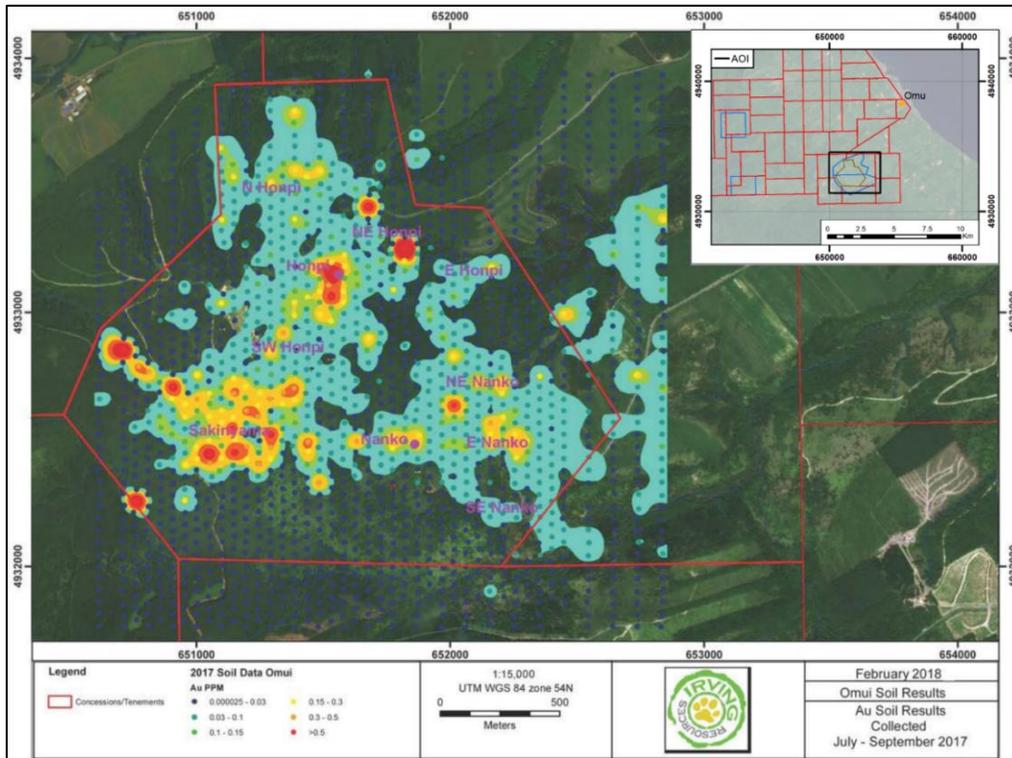


Figure 8-2 - Omui mining permit gold in soil anomalies (Irving Resources, 2017).

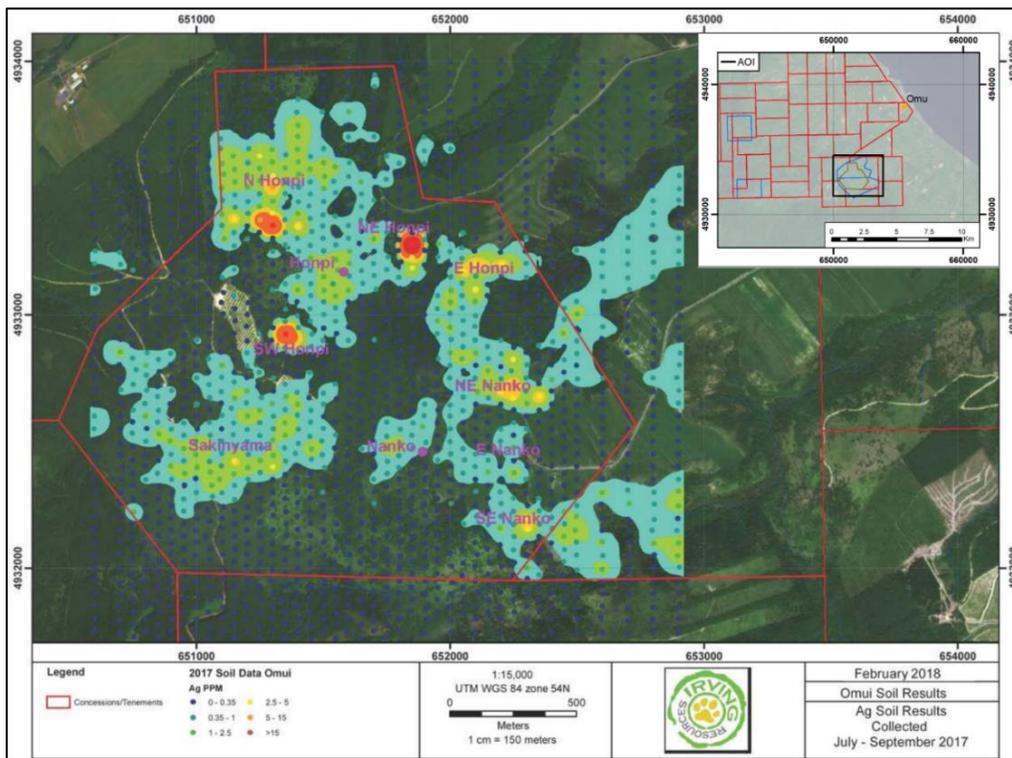


Figure 8-3 - Omui mining permit silver in soil anomalies (Irving Resources, 2017).

Arsenic anomalies of > 500 ppm As are well defined north of the historical Omui workings and to the east and west of the Nanko prospect (Figure 8-4). Anomalies are also unbounded and open to the

east where the soil sampling programme stopped.

Antimony anomalies (Figure 8-5) show a broadly similar pattern to the silver anomalies with coherent anomalies to the north of the historical Omui workings and between Omui and Nanko.

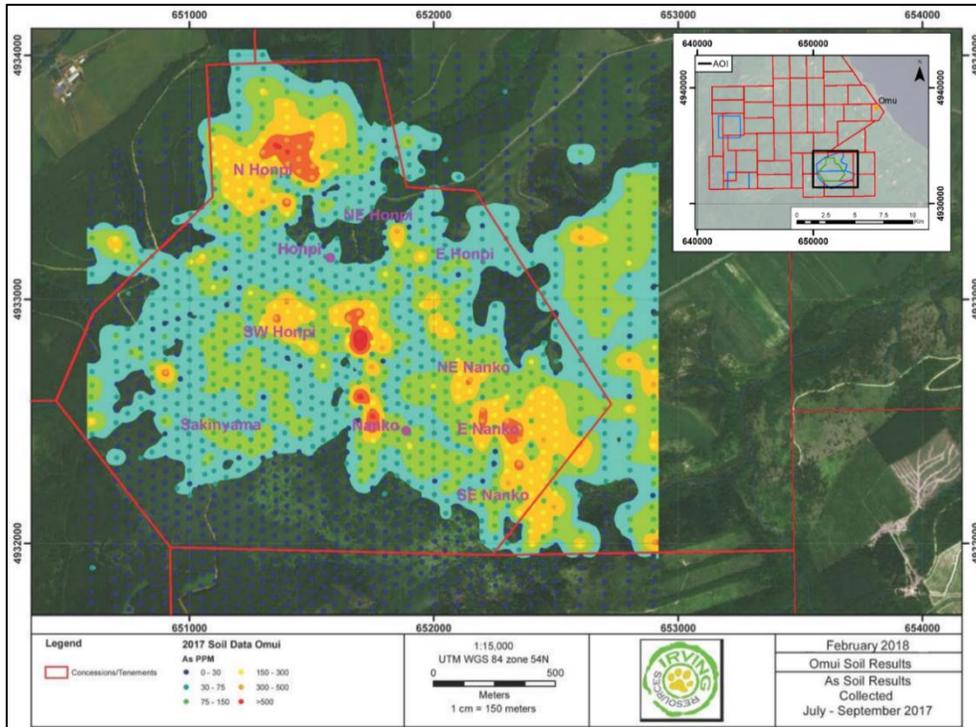


Figure 8-4 - Omui mining permit arsenic in soil anomalies (Irving Resources, 2017).

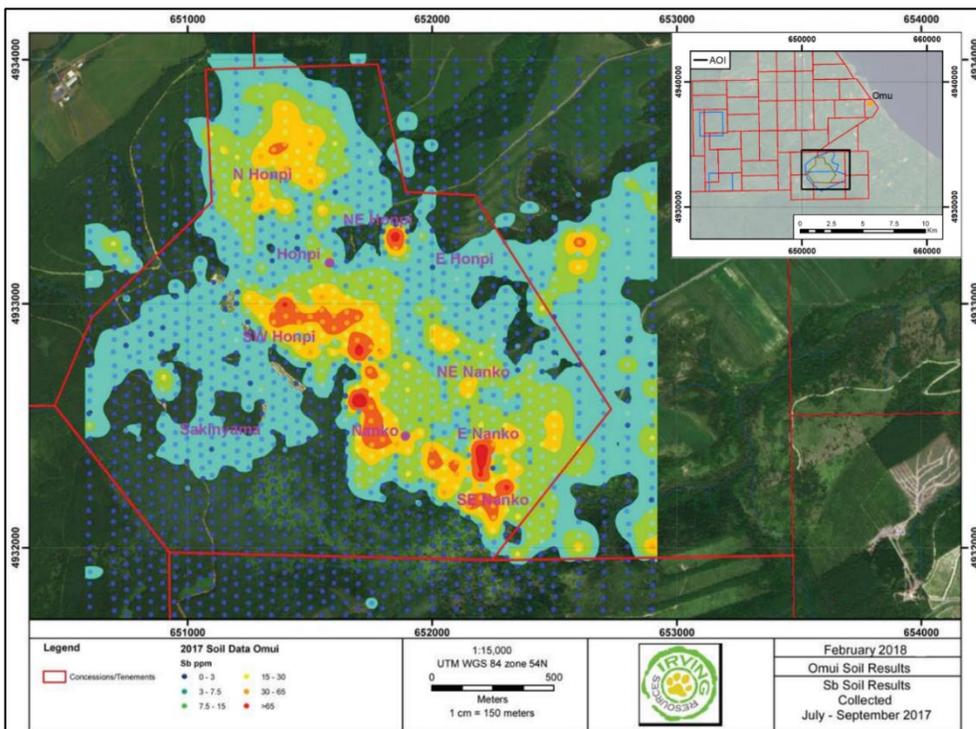


Figure 8-5 - Omui mining permit antimony in soil anomalies (Irving Resources, 2017).

Irving and MINDECO has collected a total of 364 rock samples from across the Omui Mine Right, dominantly float boulders found whilst excavating soil sampling pits, and waste dump material from historic excavations. Gold grades range between below detection limits up to 691 g/t Au, and silver grades of 0.18 to 9,660 g/t Ag. The highest grades cluster around the Omui and Nanko prospects. Such selectively sampled rocks may be indicative of the high grades of mineralisation in the property but may not be representative of widespread mineralisation.

8.2.2 Sinter

According to the provided sample database, a total of 12 in-situ rock-chip samples have been collected from the Sinter prospect. These returned assay grades from 0.17 to 1.52 g/t Au and 0.5 to 38 g/t Ag. A further 17 samples were collected from float material that assayed between 0.19 and 14.6 g/t Au and 1 to 60 g/t Ag.

In 2018, three rock samples from the Sinter prospect were sent for XRD analysis which showed abundant quartz and adularia in all samples.

8.2.3 Hokuryu

MINDECO has selectively sampled old mine dumps, road cuttings and float material in the area surrounding the historical Hokuryu mine entrance and up to approximately 1.3 km to the west. A total of 14 samples assayed 0.16 to 58.9 g/t Au and 9 to 708 g/t Ag. Although these are only indicative of the possible mineralisation grades, this limited sampling suggest that this area is prospective and worthy of detailed exploration. No further modern exploration has been conducted at this prospect.

8.2.4 Maruyama

MINDECO has collected eight surface grab samples from float material in road cuttings on the southern side of the hill containing the old Maruyama adits. These were dominantly quartz breccias, but also included silicified rhyolite. Grades ranged from 0.21 to 1.32 g/t Au and 10 to 53 g/t Ag.

Silica sinter has been identified in float material on the ridge 700 m north of the old workings containing 1.94 g/t Au and 25 g/t Ag.

No further detailed exploration has yet been conducted at this prospect by Irving Resources.

8.2.5 Taihoku Prospect

The Taihoku occurrence is reported by MMIJ (1990) as being approximately 600 m south of the Hokuryu mineralisation on the other side of a valley. Due to steep terrain and dense vegetation, MINDECO has so far made only cursory visits to this historically identified prospect, collecting only three samples of silicified rhyolite with gold grades below 0.05 g/t Au.

8.2.6 Tofutsu Prospect

The Tofutsu prospect comprises an in-situ quartz vein identified during the stream sampling programme. The vein is 0.60 to 0.95 m wide, strikes NE and dips at 85° to the NW. To date, Irving has not investigated this prospect in detail, but a single geological hammer-picked channel sample 60 cm in length (17OM-RTK037) of quartz vein in silicified sandstone returned 5.54 g/t Au and 8 g/t Ag.

8.3 Geophysical Surveys

MINDECO has completed gravity, magnetic and LiDAR surveys to help better understand the geological setting of the Omu property.

8.3.1 Gravity Survey

The 2017, gravity surveying was completed as two phases of work. In both cases a Lacoste & Romberg Type G (G-283 and G-366) gravimeter and a Scintrex CG-6 Gravimeter were used. Location data and elevations of the measurement stations were acquired using kinematic or static mode (depending on satellite reception) using a Leica GPS1200+ GNSS Surveying System. Standard correction and data reduction processing steps were taken.

The initial regional survey involved the collection of 56 gravity measurements both within and surrounding the Omu property, that were then compiled with existing regional gravity measurements published in the Geological Survey of Japan (GSJ) and National Institute of Advanced Industrial Science and Technology (AIST) Gravity Database (GALILEO). First order horizontal derivative of the regional gravity Bouguer anomaly results are shown in Figure 3-1.

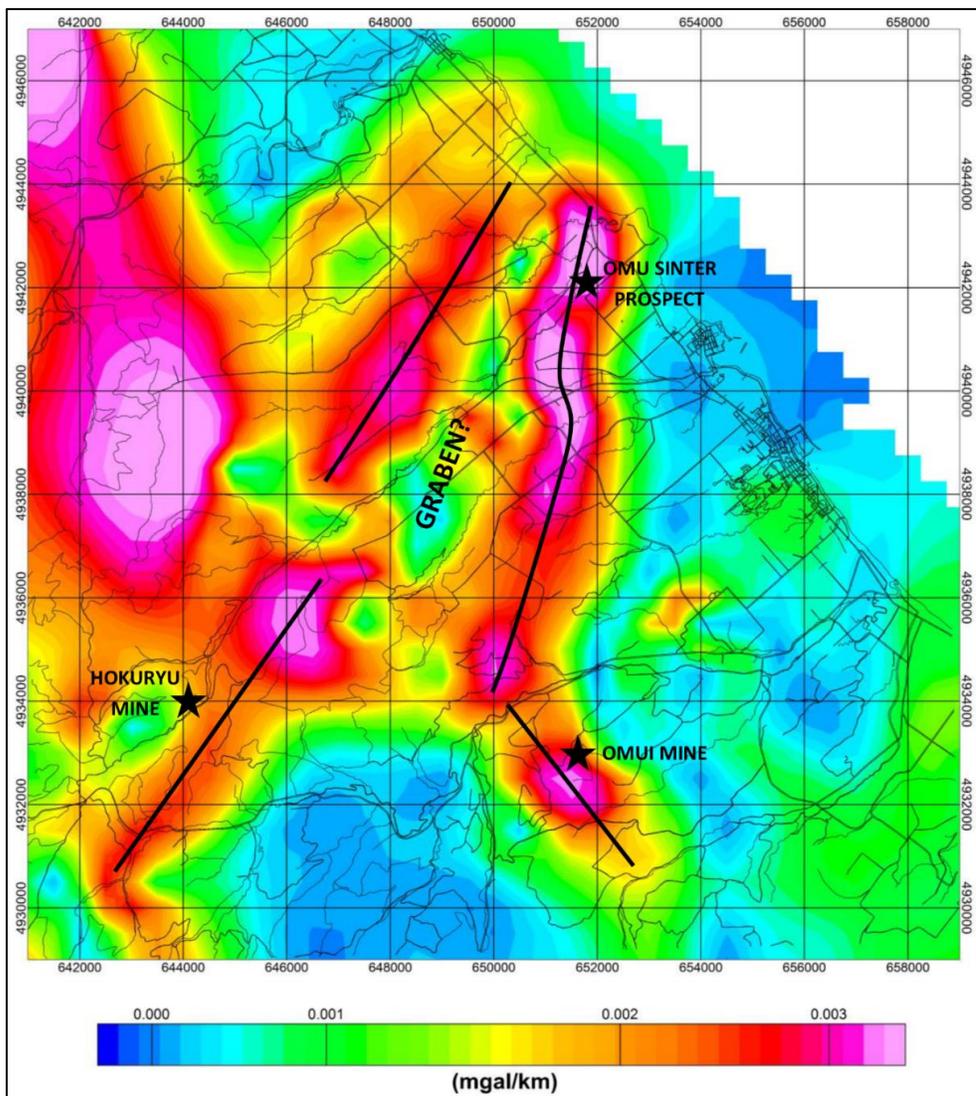


Figure 8-6 - First order horizontal derivative of the regional gravity Bouguer Anomaly with interpreted graben structure (from MINDECO, 2017).

MINDECO interpreted the gravity results to represent a graben structure orientated in a NE-SW direction. The first-order horizontal derivative of the Bouguer Anomaly best highlights the sub-parallel

highs that represent the edges of the graben (Figure 8-6). The historical Omui and Hokuryu mines, as well as Sinter prospect, all appear to lie on the flanks of the interpreted graben.

The second part of the gravity survey was a higher density of measurements incorporating 753 stations across the Omui prospect at approximately 100 x 50 m station spacing. The complex density distribution in this smaller area reflects the more complex structural regime than on a regional scale. Two-dimensional forward modelling of the data has so far been inconclusive in determining the orientation of faults and offsets.

8.3.2 Magnetic Survey

In 2017, MINDECO commenced magnetic surveys in the Omu property to develop a better understanding of structure in the Omui and Sinter prospects. A DJI Matrice 600 Pro Unmanned Aerial Vehicle (UAV or “drone”) coupled with a GEM Systems GSMP-35U potassium magnetometer was used to complete the survey. This approach was used because it was far quicker than a conventional ground-based survey that would have faced considerable access difficulties given the terrain and vegetation in the area. Flight lines were at a nominal 50 m separation, increasing to 100 m over parts of the Sinter prospect.

The UAV-magnetometer system was developed by MINDECO specifically for this project in a short space of time. Consequently, the system lacked autonomous flight control or draped flying at a constant height above the terrain. The two survey blocks completed in 2017 were therefore flown at a constant altitude of 220 m in the Omui prospect area and 73 m in the Sinter prospect area. This is somewhat higher than would normally be expected from a manned airborne survey and will certainly lack the near-surface resolution of ground-based surveying methods that position the sensor closer to the magnetic source. However, a correction was applied by MINDECO to calculate terrain-parallel magnetic intensity, and the data collected was deemed sufficient for preliminary interpretation purposes.

The survey was flown at 3-4 m per second at a 10 hertz (Hz) sampling rate, resulting in measurements at approximately 0.3 to 0.4 m along each line. Standard diurnal corrections from a local base station and data filtering and processing flows were followed.

In 2018, MINDECO flew a second survey using the same UAV-magnetometer system to infill an approximately 2 x 10 km area between the Omui and Sinter prospects. This survey was able to fly draped lines following the topography at a constant 40 m above ground level. Flight lines were at a nominal 100 m spacing, orientated dominantly E-W. A similar standard processing flow to the original survey was used and the data merged with the 2017 survey to produce the residual magnetic intensity map shown in Figure 8-7.

The magnetic data have not yet been interpreted by Irving/MINDECO.

8.3.3 LiDAR Topographic Survey

In 2018, MINDECO flew a high spatial resolution Light Detection and Ranging (LiDAR) topographic model as part of their exploration efforts. The same DJI Matrice 600 UAV used for the magnetic survey was instead coupled with a Phoenix LiDAR Systems Alpha AL3-16 sensor. The flight line spacing was 60 m, with a 40 m above ground level (agl) flight altitude and flight speed of 5m/s. The scanning rate of 300,000 points per second gives a measurement accuracy of ± 3 cm.

At the time of writing this report, Irving was awaiting delivery of the final processed LiDAR dataset and survey report.

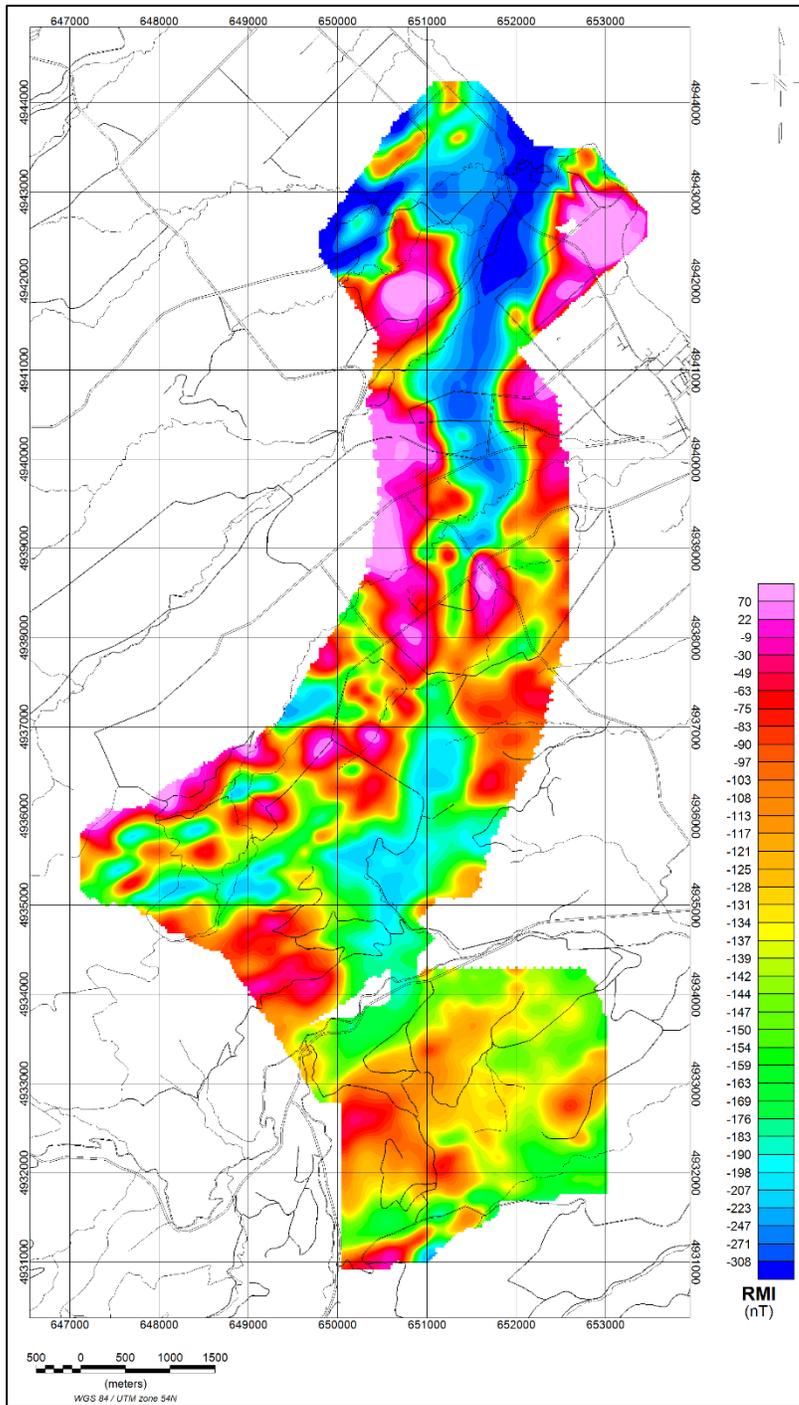


Figure 8-7 - Omu prospect residual magnetic intensity results (MINDECO, 2018).

9 Drilling

There has been no drilling undertaken by Irving on the Omu property.

10 Sample Preparation, Analyses and Security

This section focusses on the contemporary sample preparation, analyses and security. It does not consider the historical exploration data because of its incompleteness, particularly the unknown sample collection, preparation and analysis methods.

MINDECO implemented various procedures to ensure the samples collected have been prepared and analysed in an appropriate manner, have not been subject to tampering, and that analysis methods are accurate and repeatable. This section describes these procedures for each sampling programme. MINDECO utilised blanks, Certified Reference Materials (CRMs) and field duplicates as part of their geochemical Quality Assurance / Quality Control (QAQC) programme.

The same blank material was used for all sampling programmes over the last three years. This consists of powdered silicon dioxide (quartz) with A guaranteed blank grade were purchased from FUJIFILM Wako Pure Chemical Corporation (formerly Wako Pure Chemical Industries, Ltd.).

The three CRMs used as part of QAQC procedures are shown in Table 10-1. The CRMs were purchased from ORE Research & Exploration Pty Ltd. CRMs were purchased in 500 or 1000 g plastic jars of pulverised material pre-prepared by the manufacturer. Fifty grammes of the selected CRM was placed in a sample bag for insertion into the sample sequence. Details of the insertion rate and CRMs used are given below for each sampling programme.

Table 10-1 - Certified Reference Materials used in the 2016-2018 exploration programmes.

CRM	Element	Certified Grade	2 Standard Deviations
OREAS 229	Gold	12.11 ppm	±0.412 ppm
OREAS 601	Gold	0.78 ppm	±0.062 ppm
OREAS 906	Gold	49 ppb	±2 ppb

10.1 Stream Sediment Sampling

10.1.1 Sample Preparation, Security and Analysis

After drying in the polyethene greenhouse, the whole stream sediment sample was packaged in polyethylene bags, sealed and couriered by Express Mail Service (EMS) - Japan Post, to the ALS Minerals laboratory in Vancouver, Canada.

The ALS Minerals laboratory is an independent facility accredited to ISO 9001:2015 for quality management systems and ISO/IEC 17025:2017 for specific analytical procedures, including those used to analyse the submitted samples.

Stream sediment samples were initially pulverised and screened to 180 µm. At the start of the programme, samples were analysed by gold and 51-element assay method AuME-TL43 (aqua regia extraction with Inductively Coupled Plasma Mass Spectrometry ICP-MS finish). However, insufficient charge weights for numerous samples led to trialling of alternative analysis methods. Method Au-CN44 (a cyanide extraction (50 g) and ICP-MS analysis for 0.02 ppb to 1 ppm Au) and ME-MS41 (an aqua regia digestion (0.5 g) with ICP-MS finish with detection limits of 0.02 ppb to 25 ppm Au) were used.

During the stream sediment sampling programme field duplicates were inserted into the sample batch at a rate of 1:20, CRMs at 1:25 and field duplicates at 1:20.

10.1.2 QAQC Results

All four blank samples returned at or below the detection limits for the three assay methods used.

The CRM assay results (five samples by two methods) all returned 39 to 46 ppb Au. The certified grade for OREAS 906 is 49 (± 2) ppb Au. Analysis therefore of this low-grade CRM has underreported the gold content in both cyanide extraction and aqua regia digestion ICP-MS techniques.

The majority of the duplicates were inconclusive for the stream sediment samples because many of the results were close to or less than the lower detection limits.

10.2 Soil Sampling

10.2.1 Sample Preparation, Security and Analysis

After all soil samples had been dried in the polythene greenhouse, each sample was passed through a coarse sieve to remove oversized material. The material was then split using a riffle splitter to reduce the sample into two 200- to 300 g samples, one to be sent for analysis and the other to be stored as for reference. The riffle splitter was cleaned using a brush and then pressurised air between samples. All samples were placed into polythene sample bags that were folded and tied before being dispatched to the ALS Minerals laboratory in Vancouver, Canada by courier EMS - Japan Post.

All soil samples were pulverised, homogenised and screened to 180 μm , prior to aqua regia digestion of a 50 g charge and analysis by ICP-MS for 53 elements plus gold (AuME-ST44). This "super trace" method provides levels of detection for gold of 0.1 ppb to 1 ppm Au and is commonly used for soil analysis. In cases where the gold content of a sample was above the upper detection limit of 1 ppm, samples were reanalysed by method AROR44.

10.2.2 QAQC Results

QAQC materials were inserted at a rate of 1:50 for blanks, 1:50 for CRMs (OREAS 601 and OREAS 906), and 1:50 for field duplicates.

The blank materials analysed during the soil sampling programme returned an average gold grade of 0.24 ppb. Two samples (17OM-S1100925 and OM17-S1251900) returned 1.2 ppb and 2.7 ppb Au respectively, are higher than the other blank samples which may indicate possible contamination. Otherwise, there appears to be no problems with sample contamination through the preparation at the laboratory.

Results for the CRM OREAS 601 are acceptably within three standard deviations of the certified gold grade. Results for the 18 low-grade OREAS 906 samples were more variable, between 41ppm and 58ppm, compared to the certified value of 49 ± 4 ppm (2SD).

The majority of the duplicates were inconclusive for the soil samples because many of the results were close to or less than the lower detection limits.

10.3 Rock Sampling

10.3.1 Sample Preparation, Security and Analysis

Rock samples were dispatched directly to ALS Minerals in Vancouver without further preparation by MINDECO. At the laboratory, samples were crushed to >70 % passing a 2 mm sieve, then riffle split and pulverised to >85 % passing a 75 μm sieve. Gold grades were determined by fire assay and gravimetric finish (Au-GRA22), whereas multielement analysis was by four acid digestion and ISP-MS (ME-MS61L). Levels of detection for gold assay were 0.05 to 10,000 ppm.

Blanks were inserted at a rate of 1:50 and CRMs inserted at a rate of 1:50. No duplicates were taken

of surface grab samples.

10.3.2 QAQC Results

Of the seven blank samples assayed, all returned at or below detection for gold (< 0.05 ppm), indicating no contamination during sample preparation.

CRM OREAS 229 reported gold grades of 12 to 12.25 ppm Au, all within 2SD of the certified grade. However, OREAS 906 has a certified grade of 49 ppb Au, which is below the 50 ppb Au detection limit for method Au-GRA22. Five OREAS 906 samples were analysed with the rock samples, three of which reported below detection, one at 120 ppm Au and one at 60 ppm Au. These last two indicate possible difficulties with analysis at very low gold levels or sample numbering errors.

11 Data Verification

This section describes the activities completed by SRK ES to verify the data included in this Independent Technical Report. This includes data verification procedures applied by the qualified person; any limitations on or failure to conduct such verification, and the reasons for any such limitations or failure; and the qualified person's opinion on the adequacy of the data for the purposes used in the technical report.

Data verification included cross-checking presented technical information with information from different independent sources, the acquisition of original data, where possible (for example, laboratory-issued geochemical results), interviewing different project personnel, a field visit to the Omu property to complete first-hand observations, and the collection of verification rock-chip samples.

The Omu property was visited by Chris Barrett (SRK ES Principal Exploration Geologist and qualified person) from 04 to 07 August 2018. The visit was preceded by travel from the SRK ES office in Cardiff, UK to Monbetsu on Hokkaido Island via flights from London Heathrow, UK and Tokyo, Japan. The field visit was accompanied by Haruo Harada (MINDECO Chief Geologist) and Toshio Inoue (MINDECO Department Manager and Senior Geologist).

The fundamental purpose of the visit was to fulfil the NI 43-101 requirements and enabled observation of the property and its geological characteristics, review of exploration procedures, examination of rock specimens, interview project personnel, and collection of relevant information for the preparation of this ITR.

The Omui, Nanko and Sinter prospects were observed during the field visit.

The observed historical Omui mine was characterised by the collapsed Honpi workings and exposed in-situ veining-brecciation (Figure 11-1).



Figure 11-1 - Omui prospect exposed veining-brecciation.

The observed in-situ veining-brecciation is located adjacent to and immediately north of the collapsed working and exposed beneath 2 to 2.5 m of regolith. The general orientation of the veining-brecciation appears to mimic the Honpi vein and trends approximately east-west.

Two verification samples were collected from the veining-brecciation in proximity to mineralised Irving sample 17OM-QH011. SRKES7783-001 consisted of a silicified breccia comprising dark grey, elongate angular fragments in a white to grey quartz and clay matrix with some localised vuggy textures. A representative rock-chip forming part of the sample is provided in Figure 11-2.



Figure 11-2 - Omui rock-chip from SRK ES sample SRKES7783-001.

Sample SRKES7783-002 consisted of un-brecciated white to grey quartz with lesser amounts of chalcedony and minor clay with localised boxwork textures.

The Nanko prospect is obscured by dense vegetation that is dominated by bamboo. Despite this, the remnant surface disturbance created by the 1999 trench and some of the 2017 soil sampling locations were observed. Occasional quartz float material was also seen as part of the traverse. A total of 3 verification samples were collected in proximity to mineralised MINDECO rock-chip samples 17OM-RY041, 17OM-RA052 and 17OM-RY039.

Sample SRKES7783-003 consisted of a grey to yellowish-brown to red amorphous silica-dominant micro-breccia with a vuggy texture. The sample was ferruginous and included limonite, goethite and hematite.

Sample SRKES7783-004 consisted of multiple small (< 80 mm) angular to sub-angular pieces of weathered quartz dominant float. The weathering made it difficult to identify minerals and textures, but some brecciated fragments and vugs were visible.

Sample SRKES7783-005 consisted of several angular pieces of weathered and ferruginous float of uncertain rock type. In places, some of the pieces had a vuggy texture and contained

disseminated pyrite within dark grey crystalline quartz. One of the pieces contained a narrow white quartz vein (< 1 cm) with abrupt margins but devoid of metallic mineralisation.

The observed Sinter prospect consists of a well-forested topographical escarpment characterised by outcrops and large boulders of quartz sinter (Figure 11-3).



Figure 11-3 - Sinter prospect quartz sinter.

The sinter comprises blocky but layered predominately monomineralic milky-white quartz with minor ferruginous minerals including limonite and hematite. The unit did not react with dilute hydrochloric acid, suggesting an absence of carbonate minerals. The layering is horizontal to sub-horizontal, but also steeper in places and attributed to cambering or slight rotation of the boulders on the edge of the escarpment. In places, the sinter included vuggy and infrequent brecciated textures. No metallic mineralisation was observed.

An irregular traverse was completed along the edge of the escarpment and observed abundant sinter float and an old east-west trench that was largely infilled and overgrown.

In the vicinity of the Sinter prospect, the local farmer(s) had stockpiled mounds of scallop shells and scattered broken shells over the surface. It is presumed these were being used to help reduce the acidity (lower the pH) of the soils as caused by the prevalence of quartz in the underlying rock.

Further to the north of the escarpment, the ground surface elevation lessens towards the sea and comprises an extensive outcrop of silicified rhyolite up to approximately 6 m in height. The base of the outcrop was followed and identified an old horizontal excavation. The excavation was largely backfilled and the volume of material in front of it suggested it was probably not extensive. In places, the rhyolite was observed to be silicified, ferruginous and vuggy.

A verification sample (SRK ES7783-006) was collected in proximity to mineralised Irving sample 17OM-QH002. It consisted of angular, weathered, brecciated, silicified and ferruginous rhyolite float material (Figure 11-4).



Figure 11-4 - Sinter prospect rock-chip from SRK ES sample SRKES7783-006.

A total of six verification samples were collected and analysed at the ALS Minerals Laboratory in Loughrea, Ireland. The results are shown in Table 11-1.

Table 11-1 - SRK ES verification sample results.

Prospect	MINDECO ID	SRK ES ID	Type	SubType	Au (ppm)		Ag (ppm)	
					MINDECO	SRK ES	MINDECO	SRK ES
Omui	17OM-QH011	SRKES7783-001	Rock chip	Outcrop	203.00	466.00	5,310	4,430
Omui	-	SRKES7783-002	Rock chip	Outcrop	-	38.50	-	219
Nanko	17OM-RY041	SRKES7783-003	Rock chip	Float	691.00	2.33	515	14
Nanko	17OM-RA052	SRKES7783-004	Rock chip	Float	42.50	0.55	539	<5
Nanko	17OM-RY039	SRKES7783-005	Rock chip	Float	16.55	0.46	40	9
Sinter	17OM-QH002	SRKES7783-006	Rock chip	Float	14.60	6.22	52	25

The results indicate that the verification samples were mineralised. However, most of the SRK ES results were not as high-grade as the samples collected by Irving and MINDECO. This could be attributed to the typically erratic and nuggety style of gold and silver mineralisation and the predominant type of samples (float) making it more difficult to replicate the original results. However, ultimately significantly more samples would be required to verify the Irving/MINDECO grab sample results and establish representative precious metal grades for the property.

Regarding data limitations - some of the provided source data were written in Japanese and SRK ES was reliant upon translations (into English) from Irving and unknown third-parties. However, the translated material appeared to be coherent and good quality and its content was corroborated with other sources, where possible.

Regarding data adequacy - it is the opinion of SRK ES and the qualified person that the data used in this ITR are adequate to describe the technical aspects of the Omui property.

12 Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical test work has been undertaken for the Omu property.

13 Mineral Resource Estimates

There are no mineral resource estimates for the Omu property.

In accordance with the NI 43-101 reporting guidelines, the Mineral Reserve Estimates, Mining Methods, Recovery Methods, Project Infrastructure, Market Studies and Contracts, Environmental Studies, Permitting, and Social or Community Impact, Capital and Operating Costs and Economic Analysis items have been excluded because the Omu property is not considered an Advanced Project.

14 Adjacent Properties

This section summarises information relating to adjacent properties. However, it should be noted that the qualified person has not verified the summarised information and that the information is not necessarily indicative of the mineralisation in the Omu property.

The nearest adjacent property occurs approximately 7 km to the southwest of the Omu property. It is called Sanru and is being explored by TSX-V-listed company Japan Gold Corp. (TSX-V:JG). It is a contiguous property that encompasses 35 blocks that amount to 112.69 km² (Japan Gold, 2018a). The southwest corner of the property occurs adjacent to the historic Sanru mine (Figure 6-5) which was reportedly the second largest gold producer in North Hokkaido, producing 215,410 oz of gold at an average grade of 7.4 g/t Au, and over 1.4 Moz of silver before the government moratorium on mining forced closure in 1943 (Japan Gold, 2018b).

The Sanru vein outcrop is located about 500 m west of the Japan Gold tenement boundary and was discovered in 1917 by local prospectors. Gold mineralisation occurs at an east-west flexure along an ENE-trending dextral fault, hosted in Miocene Sanru sedimentary sequence. The main vein dips 50° towards the southeast with rhyolite breccia in the footwall and black shale in the hangingwall. Bonanza grade ore-shoots reportedly occurred at bends in the vein, with six such zones mined having dimensions of up to 200 m length and 30 m width. The style of mineralisation has been classified as rift-related, low-sulphidation epithermal, with gold and silver mineralisation associated with quartz chalcedony-adularia-sericite (\pm calcite) in silicified and veined or brecciated structures. Dark sulphidic bands (ginguro) are common.

Japan Gold's Sanru property includes five known mine workings that are along strike from the historical Sanru mine and inferred by the company to be fault-controlled with potential to host similar mineralisation as exploited in the Sanru Mine.

As of 2018, Japan Gold had completed a compilation of published exploration and historical mining data but not conducted any fieldwork.

15 Other Relevant Data and Information

There is no additional data or information considered necessary to make the report more understandable.

16 Interpretation and Conclusions

This section summarises the relevant results and interpretations of the information and analysis in the technical report. If necessary, it includes a discussion of any significant risks or uncertainties that could affect the reliability or confidence in the exploration information, and any reasonably foreseeable impacts to the project's potential economic or continued viability.

Property Description and Location

The Omu property is located in the northeast of Hokkaido Island, Japan and encompasses a contiguous area of 15,501 ha / 155.01 km². It includes a total of 45 prospecting rights (9 registered and 36 under application review) and 1 mining right.

This represents a good-sized property although to date, not all the exploration rights have been granted. This does represent a risk to the project. However, Irving and MINDECO reportedly have a good relationship with the local authorities and organisations (for example, the Hokkaido Bureau of the Ministry of Economy, Trade and Industry and the Forestry Association) and the rights encompassing the Omui, Sakinyama, Nanko and Sinter prospects have already been granted. On this basis, the likelihood of the others not being granted is perceived to be low. Positively, Irving has also secured the land surface rights (purchased or leased) over much of the mining right.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Omu property occurs adjacent to the coastal town of Omu and 50 km / 1-hour northwest of the larger town of Monbetsu, which has an airport and daily flights to Tokyo. The property itself includes a network of paved roads and gravel tracks. Climatically, the property has a continental climate with warm summers and cold winters. Local resources in the town of Omu include a company office, hospital, accommodation, food, fuel and labour. There is cell phone coverage across much of the Omu property, except in the most rugged hills. Most of the property is uninhabited and it consists of coastal plain and rugged hills. The coastal plain is mostly pastureland and the hills include natural and planted forest, and thick bamboo.

Accessibility to and from the Omu property is very good, although access within the property is limited during the winter months (December through to March). The local resources and infrastructure are also very good, and the uninhabited nature of the property is also advantageous from a potential development perspective. The physiography can be challenging in some parts of the property and the bamboo can hinder ground-based exploration activities.

History

The northeast region of Hokkaido has a long exploration and small-scale underground mining history, with gold and silver mineralisation discovered and exploited since the early 1800s. However, almost all of the mines were closed by the Japanese government in 1943 in support of the war effort.

The Omu property contains two historically exploited gold-silver deposits. Despite their limited production, it confirms the presence of historically exploitable precious metal mineralisation. The hiatus in exploration and mining suggests that the region is likely to be under-explored and has not been subject to contemporary exploration understanding or methods.

Geological Setting and Mineralisation

The Japanese islands formed in response subduction-related processes and the convergence of several oceanic and continental plates. Hokkaido Island consists of multiple broadly N-S accretionary belts that include a variety of sedimentary and igneous rock types. The Omu property predominantly

contains volcanic rocks and lesser amounts of sediments.

Because of its tectonic setting, Japan is associated with hundreds of widely distributed gold and silver deposits, prospects and occurrences. The Omu property includes six historical prospects (Omui, Sakinyama, Nanko, Hokuryu, Taihoku and Maruyama) with a seventh one occurring just outside the property (Omu). Three of these were small historical gold and silver mines (Omui, Hokuryu and Omu). It also includes the recently discovered Sinter and Tofutsu River prospects.

The presence of nine prospects within and immediately adjacent to the Omu property, confirms the presence of gold and silver mineralisation and helps substantiate its prospectivity.

Deposit Types

The deposit type of relevance to the Omu property is low-sulphidation epithermal gold and silver. The characteristics of this type are comparatively well-studied and understood, making it somewhat easier to explore for.

Exploration

Recent exploration activities commenced in 2016 and have included stream sediment, soil and rock-chip sampling, geophysical surveying (ground gravity and airborne unmanned aerial vehicle (UAV) magnetics), geological mapping and X-Ray Diffraction (XRD) analysis.

The property-wide stream sediment sampling programme was being referred to as a Bulk Leach Extractable Gold (BLEG) programme. However, because of the small size of the collected and analysed volume of material, SRK ES does not support this terminology and consider the programme to be more accurately described as a stream sediments sampling. Irrespective, the programme successfully identified several positive anomalies for gold, silver and other related elements, particularly around the Omui, Hokuryu and potentially the Sinter prospects.

The soil sampling programme in the mining right (encompassing the Omui, Sakinyama and Nanko prospects) has defined gold, silver and indicator element anomalies coincident with historically identified mineralisation as well as new targets.

Rock-chip sampling have returned a wide range of gold and silver grades, including some extremely high grades, typical of epithermal precious metal deposits.

The very limited outcrop across the property has meant that the majority of rock samples collected are from float material that is not in-situ. This means that although gold and silver grades for these samples provide an insight to the mineralisation that is present in the area, the exact source of such samples is still unknown.

The geophysical surveying (magnetics and gravity) has provided insight on regional structure and possible hydrothermal systems linking the Omui and Sinter prospects. The geochemical and geophysical data are currently undergoing interpretation and integration to help better understand the geological setting and mineralisation within the property.

Sample Preparation, Analyses, and Security

The contemporary exploration sample preparation, analyses and security methods and QAQC procedures used to date are sufficient for a project of this stage of development. However, some improvements could be made and are included in the Recommendations section.

Data Verification

The SRK ES data verification included cross-checking presented technical information with information from different independent sources, the acquisition of original data, where possible (for example,

laboratory-issued geochemical results), interviewing different project personnel, a field visit to the Omu property to complete first-hand observations, and the collection of very limited verification rock-chip samples. No significant data-related irregularities were identified. However, because of the third-party nature and incompleteness of the historical exploration data, not all of the results could be verified.

The verification sampling confirmed the presence of gold and silver mineralisation within the property, although most of the SRK ES results were not as high-grade as the samples collected by Irving and MINDECO. This could be attributed to the typically erratic and nuggety style of gold and silver mineralisation and the predominant type of samples (float) making it more difficult to replicate the original results. However, ultimately significantly more samples would be required to verify the Irving/MINDECO results and establish representative precious metal grades for the property.

Adjacent Properties

The TSX-V-listed company Japan Gold hold the exploration rights to the Sanru property that is located approximately 7 km to the southwest of the Omu property. According to Japan Gold, their property contains five historical mine workings that occur along the same zone as the nearby Sanru mine that was reportedly the second largest gold producer in North Hokkaido. Whilst Japan Gold do not yet appear to have completed any field activities in the Sanru property, it none-the-less serves to confirm that other companies consider the region to be prospective and their presented exploration results are encouraging.

SRK ES is aware that there are historical data pertaining to the Omu property that are not currently available to the project for ownership and confidentiality reasons. These mainly related to the exploration activities completed by Nippon Mining at the historical Omui and Hokuryu mines. These data have not been released to Irving and therefore the description of historic activities and results at the Omui and Hokuryu mines are incomplete and unverified. This information is extremely important for understanding the potential grade and mineralised vein thicknesses for these prospects.

The identification of quartz sinter at the Sinter prospect in the Omu property is a positive indicator that the uppermost part of the epithermal system has been locally preserved. However, it does not guarantee the presence of underlying mineralisation given that sinters can extend several kilometres from the emitting hydrothermal fluid pathways (i.e. extend a significant distance from the fluid emitting structure(s) that may or may not be mineralised). That stated, gold and silver have been identified in rock-chip samples collected from units beneath the sinter which confirms the localised presence of mineralisation.

In conclusion, and based on the available information, the Omu property is prospective for discrete vein-hosted orebodies, potentially with grades that may be sufficient for localised underground gold and silver mining. However, at the current time there is too little information recorded on vein thicknesses and precious metal grades. Despite this, the thicknesses of the veins revealed in the Nanko trench and those at the historical Sanru mine to the southwest of the Omu property (if accurate) suggest that larger mineralised veins exist.

17 Recommendations

This section would typically recommend work programmes. However, prior to SRK ES' involvement in the project, Irving and MINDECO had already designed the work programme. Because of this, this section describes the planned Irving-MINDECO work programme with comments from SRK ES, where appropriate.

Irving have submitted a series of work programmes to the Hokkaido Bureau of the Ministry of Economy, Trade and Industry (METI). These includes prospecting, trenching, bulk sampling and drilling (7,800 m) activities at the following prospects:

Omui prospect

Irving are planning to complete trenching, bulk sampling and diamond (core) drilling at the Omui prospect (Figure 17-1). The work programme is to include a north-south orientated trench that intersects the seven to eight known veins and four drillholes drilled steeply towards the south. The drillholes, each up to 135 m in length, will test for shallow high-grade veins as well as evaluate the depth to the Miocene volcanic-Cretaceous sedimentary interface by additional longer holes, a prospective target for mineralisation.

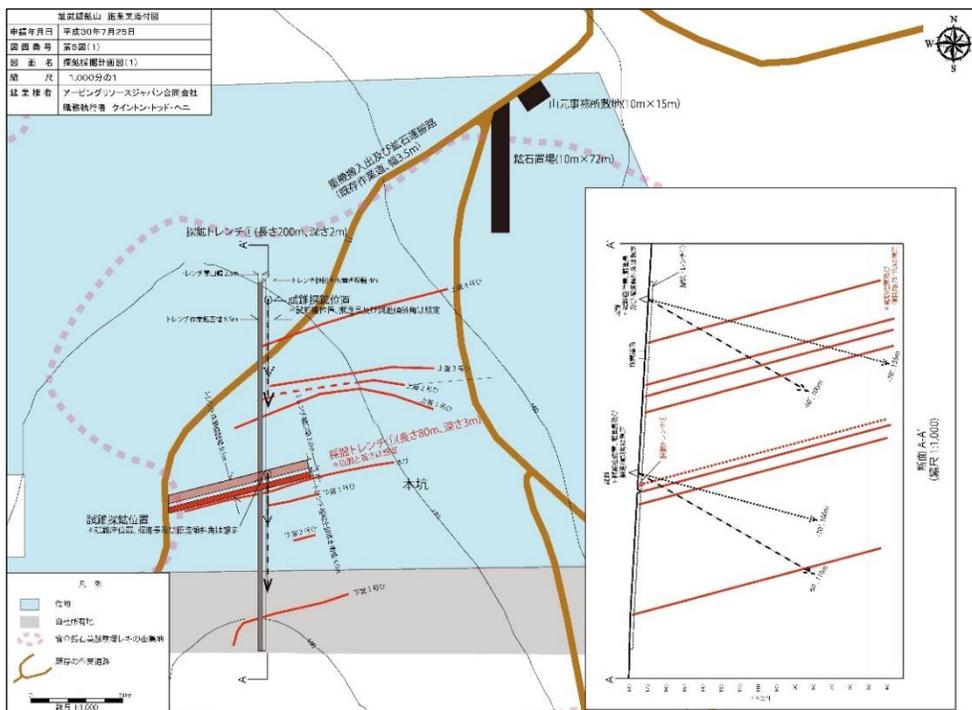


Figure 17-1 - Omui prospect planned work programme (from MINDECO, 2018).

Sinter prospect

Irving are planning to complete fan drilling of 23 inclined holes at various azimuths from 10 collar positions (Figure 17-2). The first phase is to around drill seven holes, each approximately 350 m in length. Drilling will test areas underneath the sinter where there is a pronounced N-S trending gradient in the first horizontal derivative of Bouger gravity that is coincident with a low residual magnetic intensity response. Irving believes these geophysical expressions indicate a major extensional fault underlies this area, a possible feeder for hydrothermal fluids that deposited the sinter.



Figure 17-2 - Sinter prospect planned work programme (from MINDECO, 2018).

Nanko prospect

Irving are planning to complete trenching and potentially diamond (core) drilling at the Nanko project, as shown in Figure 17-3.

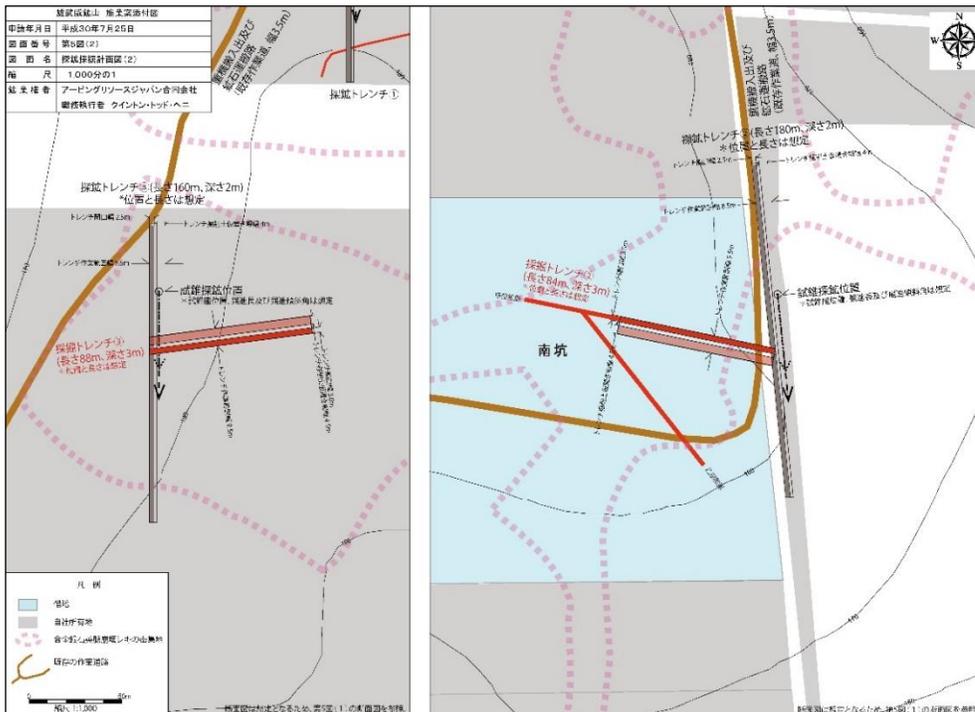


Figure 17-3 - Nanko prospect planned work programme (from MINDECO, 2018).

Two trenches will first be excavated to explore for mineralised veins. If veins are identified and sampling returns favourable results, a suitable drilling programme will be designed.

Hokuryu prospect

Irving are planning to complete prospecting within the stream sediment sampling anomalies delineated in the Hokuryu prospect and a drone-based magnetics survey is also planned.

The activities are planned to commence in the fourth quarter of 2018, but at the time of writing, the duration and budget of the work programme are unknown. However, on 19 October 2018, Irving received approval from the Hokkaido Bureau of the Ministry of Economy, Trade and Industry (METI) for its proposed work programme within the Omui Mining Right which encompasses the Omui and Nanko prospects.

Data interpretation and integration

The Omu project is associated with high quality historical and contemporary geochemical (stream sediment, soil and rock-chip results), geophysical (gravity and magnetics) and geographical (LiDAR) data. However, these have yet been fully interpreted and integrated to improve the understanding of the geological setting and mineralisation and to help targeting. Emphasis should be placed upon the identification of favourable structures, such as dilatational zones and the contact zones between sediments and volcanics, particularly where substantiated by the available geochemical data.

SRK ES recommends that the data interpretation and integration is completed as a priority and should occur prior to more advanced exploration activities such as trenching and drilling.

Historical data

It is recommended that Irving try and arrange the release of the Nippon Mining data. They can then be technically reviewed to improve the understanding of the Omui and Hokuryu prospects, and their content potentially be disclosed in the public domain to existing and potential investors.

Soil sampling

Soil sampling has worked well over the Omui, Sakinyama and Nanko prospects, resulting in the identification of various geochemical anomalies that represent targets for further exploration. Because of this, it is recommended that soil sampling be completed over the other prospects in the Omu property prior to more advanced exploration activities such as trenching and drilling.

This recommendation particularly applies to the Sinter prospect, where soil sampling and trenching of any identified anomalies prior to the intended drilling would delineate more localised and substantiated drill targets than the geological mapping, rock-chip sampling and preliminary geophysical interpretation completed to date.

The previously used line and sample spacing (lines spaced 50 to 100 m apart with samples collected at 50 m intervals and sample locations staggered by 25 m between each line) appears to have worked well. The orientation of the lines would need to be dictated by local geological settings.

Sample Preparation, Analyses, and Security

Issues at the start of stream sediment sampling programme due to sample size were overcome using alternative assay methods. However, any future stream sediment sampling should involve the collection of larger samples and a consistent analysis method.

It is recommended that coarse blank material is used to check sample preparation cleanliness as any contamination at the crushing/pulverising stage would not be identified by the currently used powdered blank samples.

To date, no umpire laboratory has been used to verify the primary laboratory results. This should be considered for future trenching and drilling-related sampling programmes.

It is recommended that several improvements be made to the sampling procedures and database:

- Standardisation of the sample identifiers (SampleID)
- Weighing of all samples before dispatch
- Create a centralised and complete sample results database
- Include the units of measurement with elemental results (for example, Au_ppm)
- Include separate fields/columns for Au by different methods to allow comparison of methods.

Drilling

Prior to drilling, it is recommended that Irving engage with whomever they intend to use for their maiden Mineral Resource Estimate (MRE) to ensure that the logging, sampling and related Quality Assurance / Quality Control (QAQC), etc. are completed in accordance with the requirements of the MRE.

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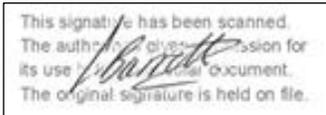
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19 Date and Signature Page

This report titled "Independent Technical Report on the Omu Property, Hokkaido, Japan" and dated 06 November 2018 was prepared and reviewed by the following persons:

Prepared by:



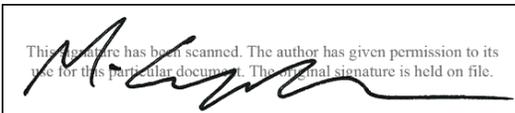
Chris Barrett *BSc (Hons), MSc, FGS, CGeol*

Principal Exploration Geologist



SRK Exploration Services Limited

Reviewed by:



Mark Campodonic *BSc, MSc, FGS, MAusIMM (CP)*

Director & Principal Consultant (Resource Geology)

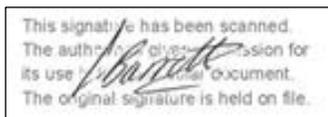


SRK Consulting (UK) Limited

20 Certificate of Qualified Person

To accompany this report titled “Independent Technical Report on the Omu Property, Hokkaido, Japan” dated and effective 06 November 2018 I, Mr Christopher Mark Barrett, do hereby certify that:

- 1) I am a Principal Exploration Geologist with SRK Exploration Services Ltd. (SRK ES) with an office at 12 St. Andrew’s Crescent, Cardiff, CF10 3DD, United Kingdom.
- 2) I am a graduate of the University of Wales - Cardiff, UK (in 1998) and obtained a Bachelor of Science (BSc) with Honours (Hons) degree in Exploration Geology (First Class). I am also a graduate of the University of Greenwich - London, UK (in 2004) and obtained a Master’s (MSc) degree in Geographical Information Systems (GIS) and Remote Sensing (Distinction). I have practiced my profession continuously since 1998.
- 3) I am a Fellow and Chartered Geologist (CGeol) with the Geological Society of London (Fellowship number 1003738).
- 4) I have personally visited and observed the Omu property between 04 to 07 August 2018.
- 5) I have read the definition of “qualified person” set out in National Instrument (NI) 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfil the requirements to be a “qualified person” for the purposes of this Independent Technical Report (ITR).
- 6) I have participated in and reviewed all sections of this ITR and accept responsibility for its content.
- 7) I, as a qualified person, I am independent of the issuer as defined in Section 1.5 of NI 43-101.
- 8) I have had no prior involvement with the subject property.
- 9) I have read NI 43-101 and confirm that this ITR has been prepared in compliance therewith.
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Omu property or securities of Irving Resources Inc.
- 12) That, as of the date of this ITR, to the best of my knowledge, information and belief, this ITR contains all scientific and technical information that is required to be disclosed to make the ITR not misleading.
- 13) I consent to the filing of this ITR with any stock exchange and other regulatory authority and any publication for regulatory purposes, including electronic publication in the public company files on their websites accessible to the public.



Chris Barrett BSc (Hons), MSc, FGS, CGeol

Principal Exploration Geologist

