

Corporate Update - December 2019

Corporate Activities Conducted during Second Half of 2019

Korean Metals Exploration Pty Ltd ("KME") has continued to explore and progress its polymetallic projects in South Korea during 2019. The work program conducted by KME in late 2019 is described in the sections below.

Non-exploration activities conducted by KME have involved studies into novel mining and milling methods, including:

- "Sustainable Mining with Drilling" method (SMD). Discussions were held with *Anaconda Mining* and *Memorial University of Newfoundland* staff. An initial Technical Evaluation Report of the operation, equipment and site layout requirements for various diameter and drill rig types was completed, as well as the geotechnical and engineering data for appropriate drill bit/cutter selection.
- Continuous Vat Leach method of *Mineral Process Solutions Limited* of Perth.

These novel mining and milling concepts could potentially be adopted by the Company.

Additional detailed studies were also completed on the following:

- Equipment selection, evaluation of suitable methods and costings for the future exploration program were completed to assist with detailed budgeting purposes. The "Sustainable Mining with Drilling" method will require an increased emphasis on geotechnical engineering data collection, as well as modified exploration and resource definition methods.
- An itemized list and costings of equipment to be purchased for the exploration program was prepared.
- Layout design of the Field Office and Core Processing facility was completed. Work Flow studies and equipment positioning were optimized and a Field Office design prepared using a local building contractor and construction materials available in the Uiseong area.
- Exploration Procedures Manual. Detailed exploration procedures developed by the Competent Person were put into a Company Manual for future training purposes.

In parallel with the above studies, the Company is continuing its efforts to raise capital in a very difficult global capital market for mineral explorers. As part of this effort, the Company will be attending the *Mining Investment Asia 2020* Conference to be held in Singapore during 17-19 March, 2020. A Poster display and other promotional materials are currently being prepared for the Company's booth.

Corporate Summary

Korean Metals Exploration Pty Ltd ("KME" or the "Company") is a polymetallic exploration and development company focused on historic past-producing regions of South Korea. KME has established a portfolio of polymetallic mineral projects in South Korea and holds 28 granted Mining Rights covering an area of 7,496ha over these projects.

KME is planning a two year - US\$10 million exploration and development program. The Program will include bringing the Dongil deposit (Uiseong project) to a mine-ready stage (US\$5.1 million), advancing the Gunbuk deposit (Haman project) to an Indicated Resource stage (US\$1.5 million), with US\$1.8 million for administration/equipment and US\$1.6 million held as contingency.

KME is a privately-owned Australian company formed in 2015, with a 100% owned Korean subsidiary *Shin Han Mine Inc* ("Shin Han") for conducting operations within Korea. KME is led by Directors Mr. Christopher Sennitt and Mr. Kim Wan Joong, both geologists with extensive Korean resource sector experience and have worked together as a team since 1995. Fellow Director Mr. Wal Fick owns *InterDrill Pty Ltd*, an Australian drilling company with previous operating experience in Korea.

KME has a total of 42,000 common shares issued with no warrants or options outstanding. KME has agreed to compensate *Interdrill Pty Ltd* with up to 18,000 shares valued at US\$900,000 or US\$50 per share in return for providing US\$900,000 worth of drilling services using a *Sandvik DE810* Multi-Purpose Reverse Circulation-Diamond Core drill rig to test the Mining rights.

Exploration Activities Conducted during the Second Half of 2019

Uiseong Project

The Cu-Au-Zn-Pb-Ag deposits in the Uiseong sub-basin are classified as intermediate-sulphidation epithermal mineralization style, associated with rhyodacite domes in a caldera-diatreme setting. Analogous deposits are found in the Zacatecas district of Mexico, at Cerro de Pasco of Peru, and Kupol in Russia Far East.

Assay results from the field checking (conducted in June) of Targets T1-T11 were received from the laboratory. Situated approximately 500m south of the Jeonheung mine, the new “discovery” of a 4m wide hydrothermal breccia-vein structure was traced over a strike length of 700m (connecting T3-T4-T8 anomalies). Some of the vein textures are consistent with a hot spring-sinter high-level environment of an epithermal system, as well as bladed carbonate replacement textures indicative of the “boiling” zone. Assay results obtained included 0.21g/t Au, 161g/t Ag, 0.25% Bi, 45ppm Sb, 15ppm Mo, 0.43% Pb, 0.24% Zn. Tungsten assays are consistently high (0.14% WO₃) and could indicate economic by-product potential. In addition, numerous veins of ±1m width are exposed in the creek between T1 and T3. The T3-T4-T8 structure warrants drill-testing in the future.

At Kyungwha, two unmapped adits were found between the Okgye workings and the T6 Anomaly. Sheeted veinlet stockworks are hosted within sericite-hematite-argillic clay altered sediments. Rock chip sampling obtained anomalous values for barium (0.82% BaO), bismuth (0.23% Bi) and silver (49g/t Ag).

Mineral Process Solutions Limited of Perth conducted “sighter” testwork on a “composited ore sample” previously collected from the various workings of the Uiseong project. The head grade assay of the composited sample was 0.48g/t Au, 174g/t Ag, 0.73% Cu, 3.62% Pb and 2.67% Zn. Initial testwork results indicate leaching was unsuccessful, but further work using a finer grind was recommended. Leaching of a flotation concentrate is still potentially feasible.

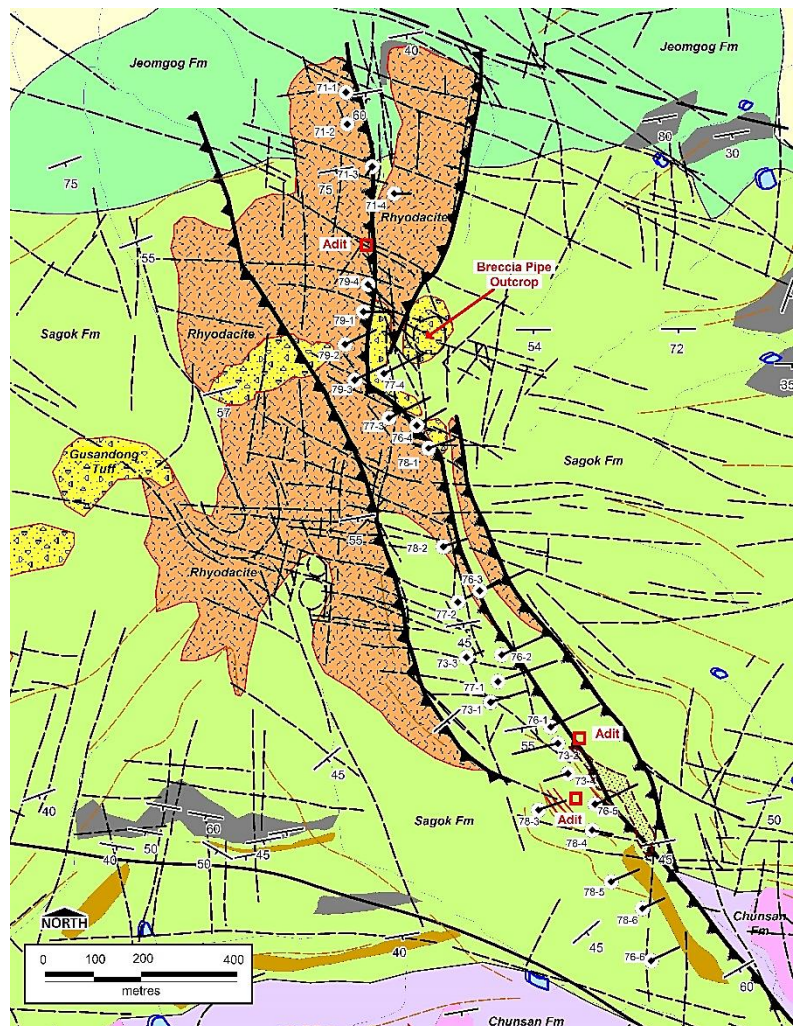
An initial 3D geological resource model was compiled by resource modelling consultant *GeoEconomics* (Dr Reso Kamberaj) for the Dongil Cu-Au-Zn-Pb-Ag deposit, using the historical KMPC data from 28 drill holes (1960-1980s). Several geostatistical methods were applied using both *Leapfrog* and *Micromine* software, including Inverse Distance (ID), Ordinary Kriging (OK), Simple Kriging (SK), Radial basic Function (RBF) and Near Neighbour (NN) methods. This initial modelling used 2 vein structures (Main vein and South Vein) and derived a tonnage of 8,500,000 tonnes (compared to polygonal resource estimate of 9,200,000 tonnes reported by Sennitt, 2017).

Subsequent geological investigations undertaken during the last quarter of 2019 suggest there are at least 3 subparallel, 700m long, steeply-dipping vein structures in the southern sector of Dongil. These veins are referred to as the **East Vein** (average 4.9m width & grade of 3.28g/t AuEq), **Central Vein** (average 2.4m width & grade of 8.16g/t AuEq) and **West Vein** (average 2.3m width & grade of 6.14g/t AuEq). These vein structures indicate an exploration target of 3.7Mt @ 5.20g/t AuEq. These veins are ideal for extraction using the proposed “Sustainable Mining with Drilling” method.

A “chimney” breccia pipe is evident in the northern sector of Dongil, located at the structural intersection of moderately-dipping Gusandong Tuff and apparently associated with the emplacement of a sub-vertical rhyodacite dome intrusion. The pipe appears to be ovoid in shape with dimensions of 150m long (NNW axis) and 30m wide, plunging steeply (80°) to the east and south. High-grade mineralization is best developed on the margins of the pipe and also the margins of the rhyodacite. An exploration target of 5-10Mt at a grade of 3-9g/t AuEq is indicated here.

Disseminated and veinlet mineralization is developed within the rhyodacite dome further to the north and appears to be conformable with extrusive flow banding. A low-grade, bulk-tonnage exploration target may be present in this area.

It seems likely the chimney breccia pipe is a vent source for the Gusandong Tuff, which underlies and possibly partially coeval with the rhyodacite intrusion. The Gusandong Tuff is interbedded within the Sagok Formation sequence of interbedded siltstones and volcanoclastic sandstones. The unit strikes ENE, dipping at about 35° to the SE and appears to be about 30m thick in the Dongil area. The Gusandong Tuff is typically about 4m



thick and has been used as a “marker horizon” within the Gyeongsang Basin. The significant thickness of the unit at Dongil adds further support to the concept of a vent source in this area.

A 12-hole, 2,800m check-validation drill program is planned for the second quarter 2020 for the Dongil deposit. This drilling program is designed to test the southern 3 vein structures and the main chimney breccia pipe drill target in the north. The HQ drill core will be orientated in order to accurately determine the structural configuration of the mineralization.

Preparation work for the drill program includes landowner access agreements for drilling, water source, drill pad and access road construction, drill permits from local government, and establishment of an exploration field depot on site. Funding of US\$900,000 for this drill program is being provided by *Interdrill Pty Ltd* to complete its share issuance.

KME aims to establish a JORC Mineral Resource Estimate on Dongil using the results from this drill program and incorporating into and enhancing the 3D geological resource model developed by Dr Kamberaj.

Haman Project

Mineral Process Solutions Limited of Perth conducted “sighter” testwork on “ore” samples previously collected from the various Haman workings. The head grade assay of the composited sample was 1.82g/t Au, 25g/t Ag and 0.62% Cu. Initial test results indicated the Haman ores can be successfully leached. A recovery rate of 63% was obtained after 48 hours of leaching. The leach rate trend was continuing upwards and indicates an 80% recovery is likely after 60 hours of leaching. Further testwork was recommended using a finer grind.

An internal desktop preliminary conceptual financial scoping study was completed on the Gunbuk Cu-Au-Ag deposit. The study demonstrates there is significant potential for a high-grade underground mining operation at Gunbuk, using the Continuous Vat Leaching (“CVL”) technology of *Innovat Mineral Process Solutions Limited* to recover gold-silver dore and copper concentrates.

Interpretation of high-resolution aerial photograph and satellite imagery has located additional unmapped mine dumps, colour and vegetation anomalies for field checking. Fracture analysis has also assisted with the structural model interpretation.

Field work was conducted during September with the objective of field checking some of the features identified from the interpretation of aerial photography. An area of disseminated sulphides (960m long x 320m wide area) was mapped extending south-easterly from the **Okbang workings** to the **C Vein** and also eastwards to the **E Vein**. Within this area, a sequence of siltstones has been intruded by monzonite and porphyry dykes, and probably capped by andesite lava. Mineralized quartz-magnetite-hematite-sulphide vein-breccias are developed along the dyke contacts, along with extensive magnetite-hematite and tourmaline-actinolite skarn. Significant rock chip sample results included:

- **Okbang workings.** Dacite porphyry dyke contact with siltstone. Quartz-hematite vein-breccia assayed 3.77g/t Au, 0.16% Cu & >1.00% As. The dacite dyke contains disseminated sulphide (arsenopyrite with traces of gold and copper).
- **Ilkwang Adit, Jaeilgunbuk mine.** Epidote-chlorite altered siltstone containing abundant porous dissolution cavities/vughs and hematite infill of breccia and fractures assayed 0.56g/t Au & 0.55% Cu.
- **Dundok area.** Magnetite-hematite-sulphide breccia-skarn assayed 0.19g/t Au & 0.37% Cu.
- **C Vein area.** Monzonite porphyry dyke contact with siltstone, with tourmaline-actinolite skarn development. Jarosite-goethite stained magnetite-sulphide skarn assayed 0.17g/t Au.
- **E Vein area.** Monzonite porphyry dyke contact with siltstone. Quartz magnetite-hematite vein breccia assayed trace gold & 0.11% Cu.

Goseong Project

No field work was undertaken on the Goseong project during the last quarter of 2019.