Korean Metals Exploration Pty Ltd
21 Pandian Crescent, Bellbowrie, QLD. 4070. Australia.
Email: chris@koreanmetals.com
Phone: +61-413 314 750
Website: koreanmetals.com

Kyungwha Cu-Au-Ag-Pb-Zn prospect

Technical Summary

The Kyungwha Cu-Au-Ag-Pb-Zn prospect lies within the Uiseong mining district of Gyeongsangbuk-do Province, about 12km east of Uiseong town and 5km south of Guseong village. Kyungwha (aka Dongchukogsan) is located immediately west and south of the historical Jeonheung-Gamkye Au-Cu-Ag-Pb-Zn mine.

The polymetallic Au-Ag-Cu-Pb-Zn mineralization is classified as intermediate-sulphidation epithermal style, depositing at shallow to deep epithermal levels (200-1000m). Mineralization consists of fissure-veins surrounded by wider stockwork and disseminated sulphide alteration zones. The mineralized structures trend NNW and occur in strike-extensive, sub-parallel sheeted en-echelon arrangements that can extend over vertical depths of >450m. The mineralization was probably derived from the mixing of a magmatically-derived fluid with dilute meteoric waters.

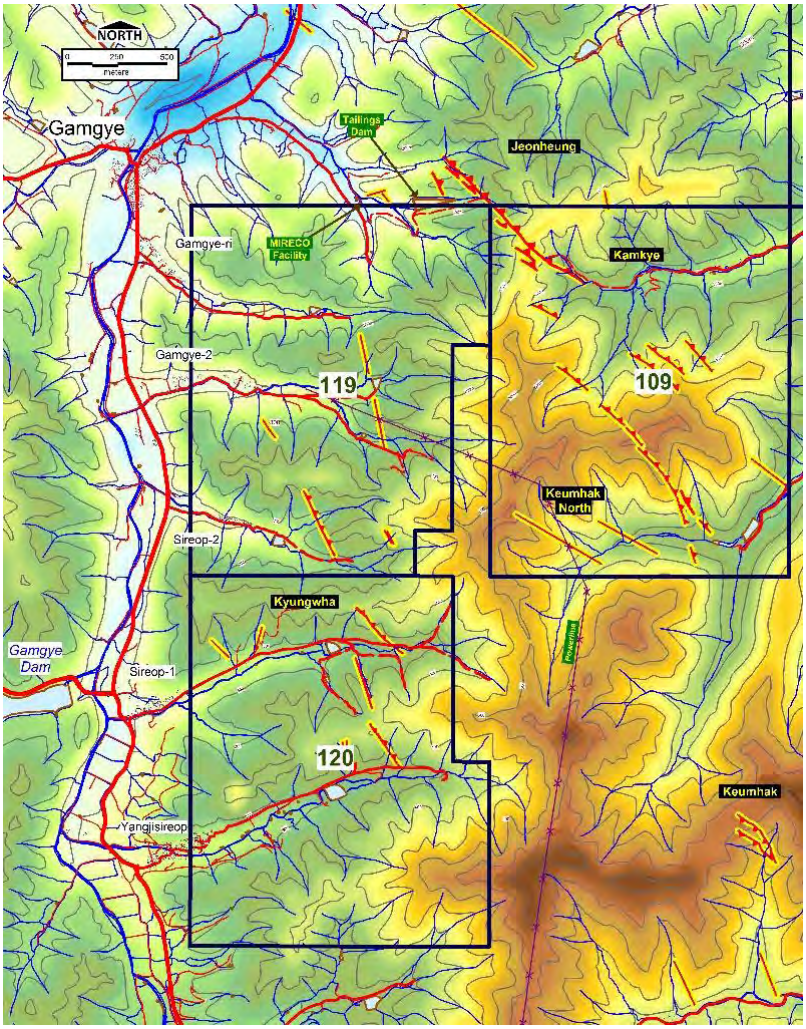
Infrastructure

Uiseong town is a 4-hour drive from Seoul using the *Jung-Ang Expressway*. The prospect area is easily accessible by sealed road from Uiseong (population 56,000). Uiseong features good infrastructure, including engineering workshops, machinery repair and hardware facilities to support the agriculture-dominated local economy, as well as good accommodation and restaurants.

Land-use is dominated by agriculture, in particular apple orchards, but also watermelon, pear and grape fruit-growing. Several small farming villages lie to the west of the project area, straddling the sealed north-south *Provincial Road 79*, including Gamgye, Sireup-ri and Yangjisireup-ri. Concrete-paved roads run alongside most of the creeks and provide good access into the area.

A major National Grid powerline bisects the project area, as well as an extensive network of local powerlines. A cell phone tower is located on the highest peak nearby and provides good Wi-Fi, 5G mobile communications and TV coverage for the area.

The prospect area lies between two major tributaries of the Dalgocheong River, which flow towards the north-west. Hilly terrain is prevalent in the south and east, with elevations rising from 250m in the river reaching up to 600m in the hills to the south.



Digital Topographic Map of the Jeonheung-Kamkye mine and Kyungwha prospect, with access roads and powerlines indicated.

Most small creeks draining the tributaries of the Dalgocheong River have small rock-wall dams installed to capture June-August "wet season" rainfall runoff. These dams are used mainly as a water supply for the local agricultural industry. The more substantial Kumhak Dam (located 3.5km to the east) features steep concrete walls and is used as the main freshwater supply to the local communities at Guseong and Oksan.

Small dam with rockwall on the creek draining the Jukdong North vein system. The dam would provide a useful local water supply for future drilling operations.

Cement power pole with electrical power supply to a property near the Jukdong North vein system.

Exploration by Korean Metals Exploration

The Uiseong mining district was identified by *Korean Metals Exploration Pty Ltd* as a priority area for exploration for gold, silver and copper mineralization. A comprehensive geological and mineral occurrence database established over 26 years indicated historical exploration by the *Korean Mining Promotion Corporation* ("KMPC") in the district during the 1970s had located significant mineralization at the Dongil, Ogsan, Jeonheung, Kyungwha and Keumdongchilbo prospects. There has been no modern exploration conducted on the district since 1980.

Recent exploration fieldwork by KME on the Jeonheung and Kyungwha prospects included inspection of the historical workings and reconnaissance prospecting traverses to check anomalous features identified on high-resolution aerial photography. This work located several new quartz vein-breccia systems at the T1, T3, T4, T6 and T7 Anomalies (see below). Rock chip sampling obtained maximum assays of 0.21g/t Au, 458g/t Ag, 0.88% Cu, 14.60% Pb, 0.44% Zn and 0.14% WO_3 from epithermal style quartz veining. This reconnaissance prospecting confirms there is excellent potential for additional polymetallic intermediate sulphidation style epithermal mineralization to be found in the area, using modern exploration concepts and methods.

Historical Mining & Exploration Activities

The nearby Jeonheung-Kamkye mine operated between 1976-1988. The mine had 8 Adits (380m, 370m, 355m, 337m, 332m, 325m, 297m & 297m Levels). A 200m deep shaft was sunk and used to access the 2 deeper Levels of the mine (240m & 200m Levels). A 100tpd flotation mill was erected at Jeonheung in 1976, employing selective flotation methods (Kim, 1964) to recover lead and zinc concentrates from the extracted ore. Although Jeonheung was the largest mine in the Uiseong mining district, no production figures were reported. The mine closed in 1988.

There was no production from Kyunghwa, but several prospecting adits were excavated on a series of quartz veins by the KMPC (1977), including the *Silupdong, Jukdong South, Jukdong North* and *Okgye East,* and *Cheongi Veins*.

Exploration conducted by the *Korean Mining Promotion Corporation* ("KMPC") during the 1970s included limited diamond drilling and several prospecting adits on the nearby Kyungwha, Kumhak North and Kumhak prospects (Se Woo, 2008).

View looking north towards the collapsed *Jukdong North Level No 2* adit, Kyungwha prospect. The veins are hosted in intensely clay altered fine grained sandstone, siltstone, mudstones and black shale of the Sagok Formation. The photograph was taken in early December 2016 and the normally dense scrub vegetation has died off significantly to reveal the outcrops.

Trench excavation of the 60cm wide vein at the Cheongji Adit, with mined stope just visible.

Mine dump at the Cheongji Adit workings.

Small open cot slot and prospecting Adit found at the T6 Anomaly (Dongchukogsan), during follow-up field checking of anomalous features identified on high-resolution aerial photography.

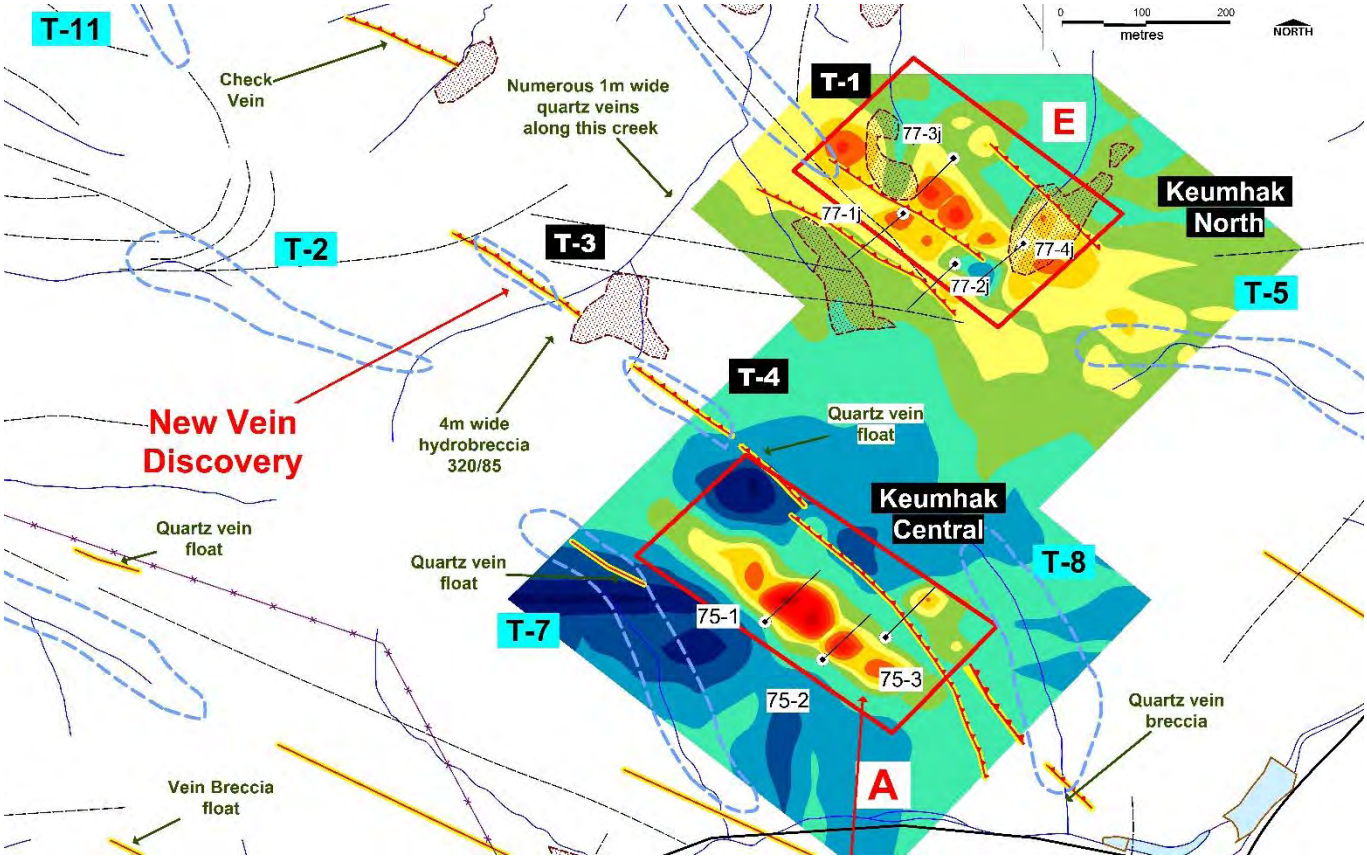
A 1.5m wide zone of sheeted quartz veinlets and open space breccia, hosted in highly fractured, limonite-jarosite stained, sericite altered sediments is exposed the roof of a nearby adit at the T6 Anomaly.

Stream Sediment Geochemistry

The *Korea Institute of Geoscience and Mineral Resources* (KIGAMM, 2001) conducted a country-wide stream sediment geochemical survey in 1971 (Sample density of 1 per 3.5km^2). The active fine sand fraction was sieved to -100# (-150µm) and 70-100g collected from each site. Stream sediment geochemistry indicates the creeks draining the Kyungwha prospect and Jeonheung-Kamkye mine are anomalous in Zn.

Self Potential Geophysical Survey

During 1973, Self Potential ("SP") ground geophysical surveys were conducted over 7 small grids (labelled 73, 74, A-E) in the Kumhak area (KMPC, 1976). Negative chargeability anomalies of less than -15Mev correspond well to vein mineralization and demonstrates the effectiveness of the SP geophysical method to map mineralized structures. Anomalies located on grids A (Kumhak Central, T-7 Anomaly), B & E (Kumhak North, T-1 Anomaly) were subsequently drill tested.



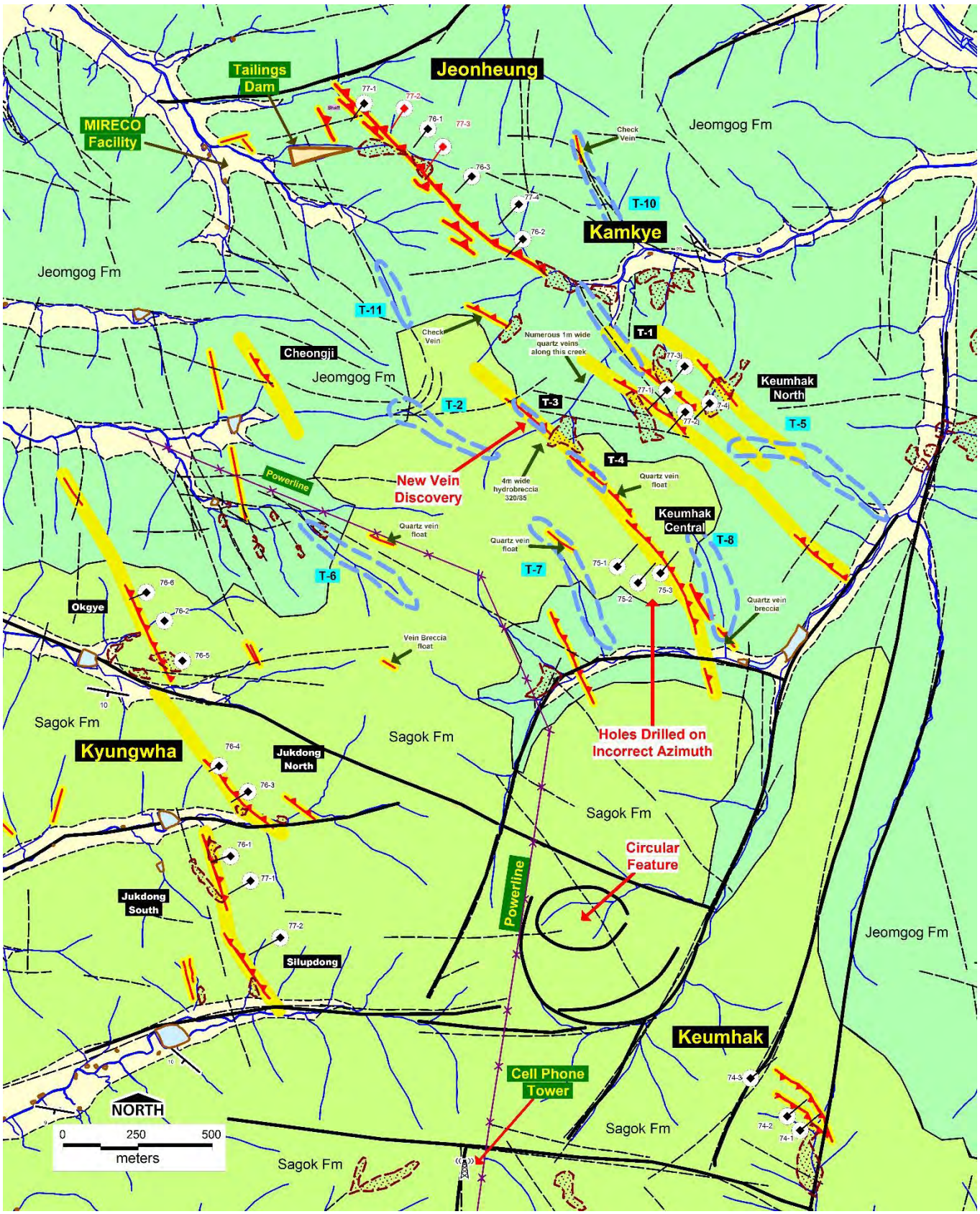
Geology

The geology of the Jeonheung mine and Kyungwha prospect area consists of the middle Cretaceous Hayang Group, comprising the Jeomgog Formation and overlying Sagok Formation. The sequence broadly strikes east-west, dipping gently to the south.

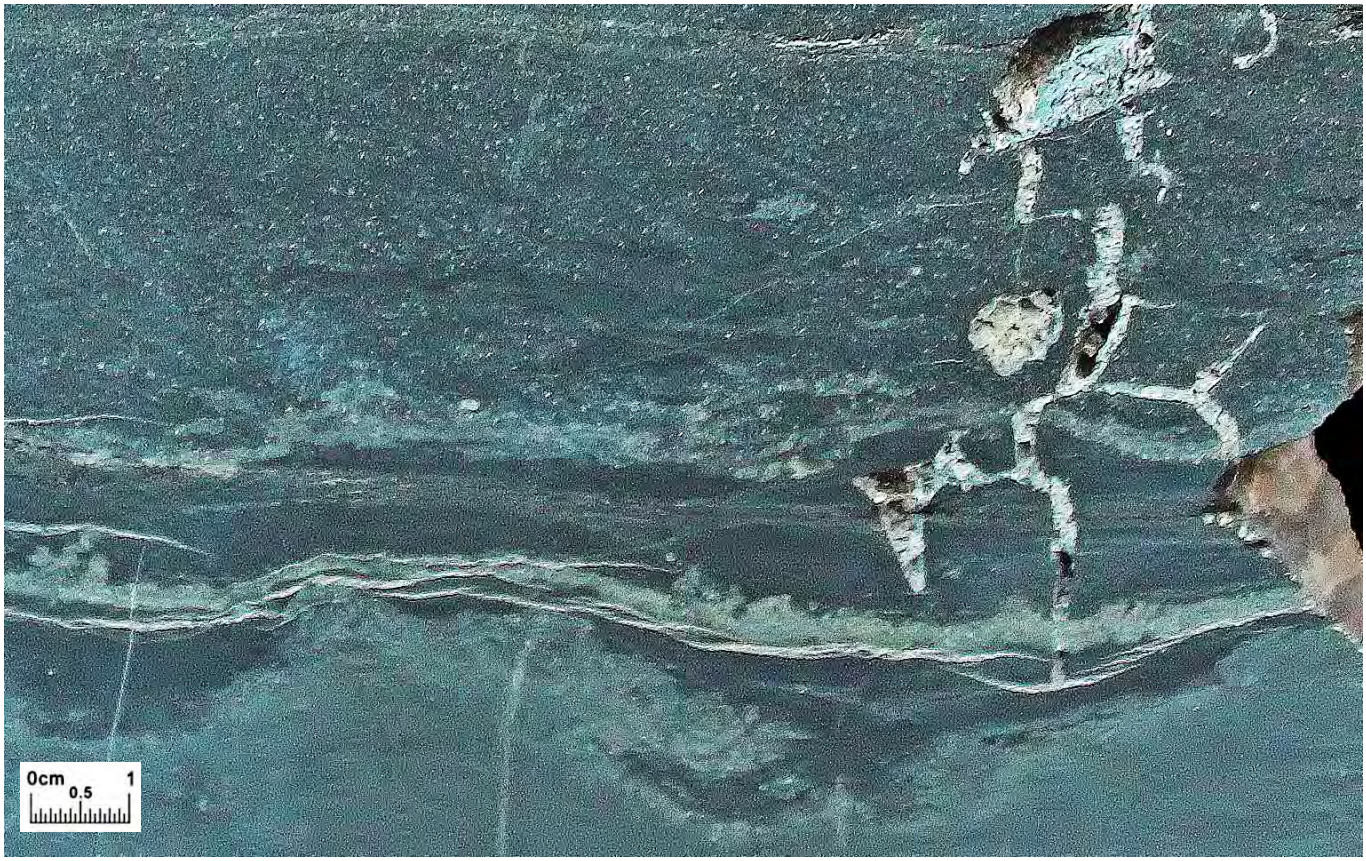
Lithologies in the Jeomgog Formation consist of light to dark green and grey coloured alternating shale and sandstone, with minor black shale and conglomerate beds. The sandstone is feldspathic, fine to coarse grained, well-sorted and commonly display planar laminations.

Andesite/lamprophyre dykes were observed in reconnaissance prospecting traversing (see photo below) and display a crude alignment of plagioclase and poikilitic igneous texture, consistent with intrusive dyke.

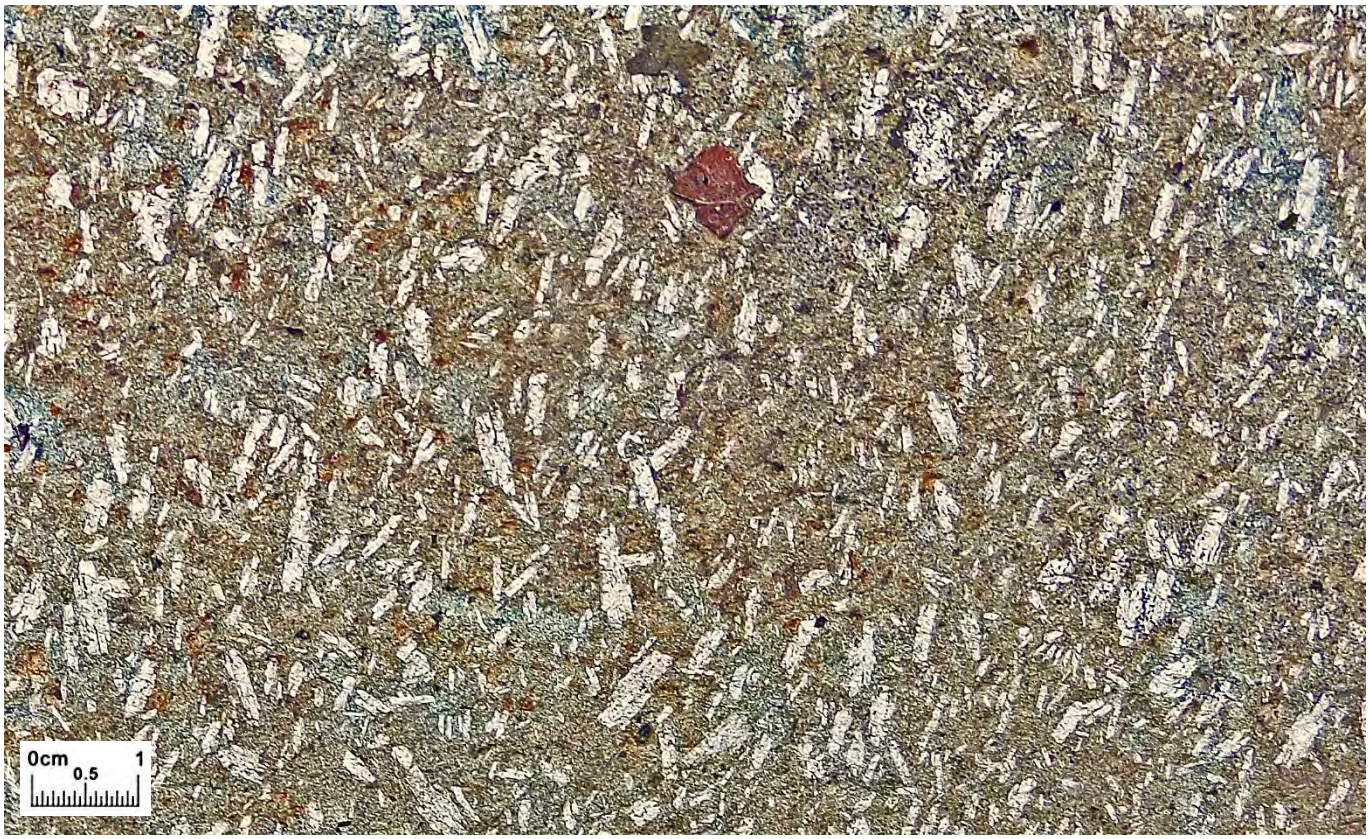
The Sagok Formation outcrops south of Kumhak North. The sequence strikes roughly east-west, dipping gently to the south. Lithologies consist mainly of fine to coarse-grained, light to dark grey, pale brown or green coloured sandstone, with minor black shale and conglomerate beds. The colour variations observed within the sandstone beds probably reflect differing palaeo reducing–oxidizing fluid interface conditions and most likely be related to the prevailing hydrothermal fluid mineralizing conditions. The Kyungwha vein system is hosted within the basal section of the Sagok Formation, just above the contact with the underlying Jeomgog Formation.



Regional Geology of the Jeonheung-Kamkye mine, Kyungwha and Kumhak prospect area. The main vein systems are highlighted in yellow. Exploration Targets identified using aerial photography are highlighted in blue. Historical mine dumps, inferred from aerial photograph interpretation, are indicated by the brown dashed lines.



Fine-grained feldspathic grey sandstone, black shale and grey siltstone of the Jeomgog Formation. Sedimentary features include soft-sediment deformation, laminated bedding and thin, wispy cloudy gypsum? textures interpreted as algal mat, lacustrine stromatolites or evaporite beds. There is disseminated fine sulphides and likely significant organic component. Open cavity network fractures, lined/infilled with quartz-carbonate veins, are evident and are consistent with contemporaneous hydrothermal mineralising fluids active shortly after sedimentation. Sample 155531; 147ppm V.



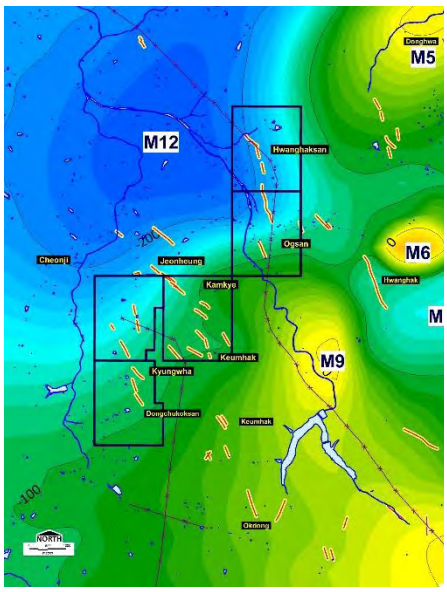
Andesite porphyry/Lamprophyre dyke float observed at Kumhak North (T1 Anomaly). The plagioclase feldspar laths display crude alignment with a poikilitic texture in a finer matrix of mafic olivine/pyroxene and disseminated twinned sulphide (see red cube).

Geophysics

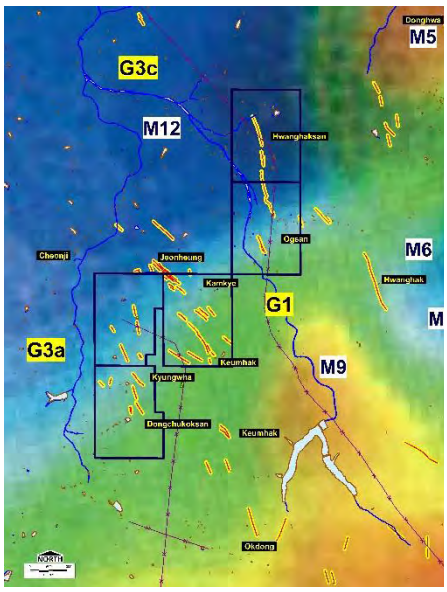
Regional airborne magnetic-radiometer geophysical surveys were flown along east-west lines (1.5km spacing) during 1989-1991 by the *Korean Institute of Geology Mining & Materials* (KIGAM, 2002), at a terrain clearance altitude of 120m.

The Ogsan project sits within a broad magnetic low anomaly **M12**, corresponding with the reduced sediments of the Jeomgog Formation. The anomaly displays magnetic characteristics typical of sediments in a graben setting, with both NE striking and NNW striking fault boundaries evident. Northeast of Ogsan, a sharp boundary (major NNW striking fault contact ?) separates the magnetic low from a broad magnetic high anomaly **M5**, which coincides with "basement" granodiorite of the Jurassic Daebo Igneous Series. South of Ogsan, the NE-striking contact of a broad magnetic high anomaly **M9** is situated within sediments of the Sagok Formation (also coincidental with the **G1** gravity anomaly). The cause of this anomaly is unclear, but is most likely a shallow blind intrusion or uplifted basement high.

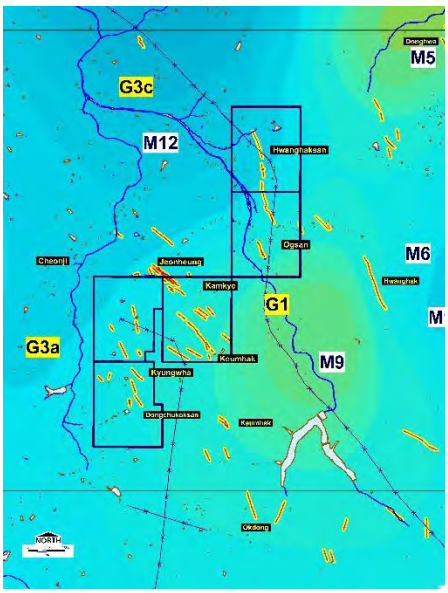
Anomaly **M6** is a circular "bullseye" magnetic high coinciding with the monzogranite intrusion at Hwanghaksan mountain and also coincidental with the intersection of the inferred NE and NNW striking faults.



Magnetic Anomaly Map



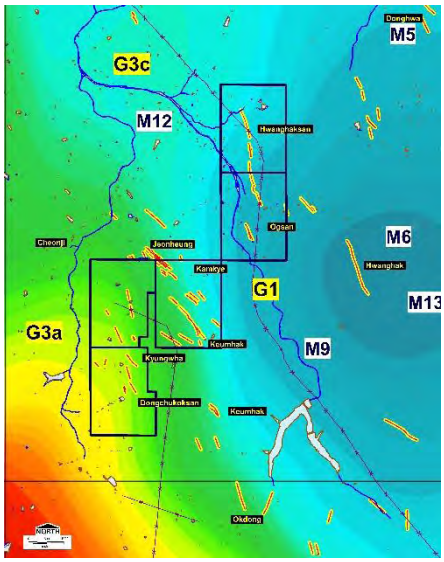
Magnetics- Total Field Map



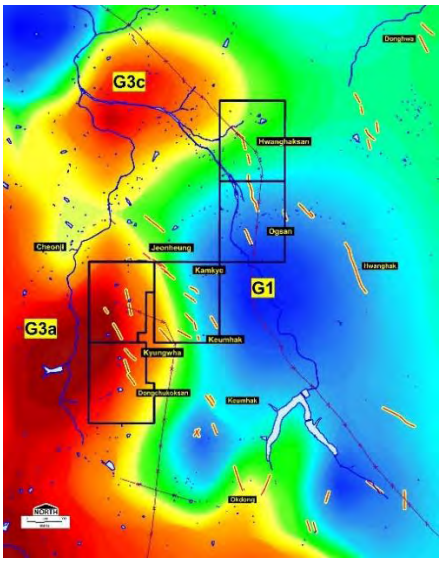
Magnetics - Reduced To Pole

Regional gravity surveys were also conducted in the Uiseong sub-basin by *KIGAM* (Kim etal, 2000; Yu et al, 2005; Yang et al, 2008).

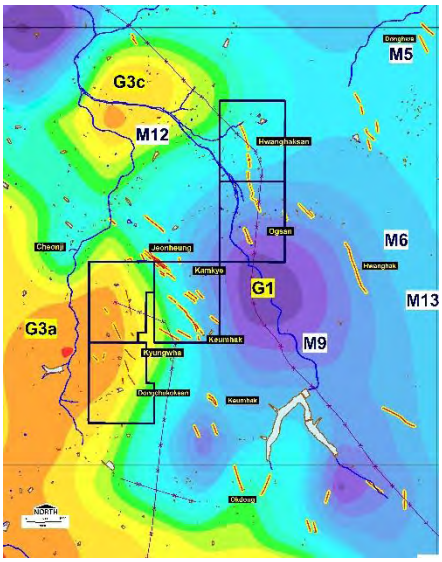
A series of >12mgal gravity highs (**G3a**, **G3c**) occur within the sediments of the Jeomgog Formation, but there is no obvious geological explanation for this anomalism. Anomaly **G1** is a <6mgal gravity low anomaly located south of Ogsan/east of Kyungwha and nearly coincidental with the **M9** magnetic high anomaly.



Bouguer Gravity Anomaly Map



Gravity – 1st Vertical Derivative



Gravity – 2nd Vertical Derivative

Mineralization

The Kyungwha vein structures can be traced over a strike length of 1,200m, varying in width from 0.7m up to 9.0m. At least four separate sets of NW striking quartz veins were mapped by the KMPC (1977), including (north to south) the *Cheongji, Okgye, Jukdong North, Jukdong South* and *Silupdong Veins*, all of which dip steeply to the northeast. Individual veins can be traced in outcrop over strike lengths of 200m. The veins appear to be a single system that has been dextrally displaced by a series of east-west faults, based on interpretation of fracture sets noted from aerial photograph/satellite imagery. Alternatively, it is possible several sheeted veins are present as an en-echelon vein array pattern. Further detailed geological mapping is required to determine this.

Interpretation of the drill intersections and available drill logs (See Drill Sections below) indicate the Kyungwha vein system comprises at least 2 subparallel high-grade veins contained within a 5-30m thick zone of lower-grade stockworks, brecciation and disseminated sulphides. Vein mineralization outcrops at elevations ranging from 370masl down to 200masl, indicating a minimum vertical extent of 170m. Typical grades were reported to be 0.5-1.0g/t Au, 58-824g/t Ag, 0.27-9.51% Cu, 1.42-27.93% Pb and 0.2-7.38% Zn (Se Woo, 2008). Mineralization remains open in all directions.

The quartz veins are clearly of epithermal origin, with rhythmic colloform banding, bladed carbonate pseudomorph replacement and pseudo-acicular adularia replacement textures observed, with a paragenetic sequence comprising:

- **Stage I Early Vein** coarse euhedral saccharoidal quartz and zonal prismatic quartz.
- **Stage II Base Metal** with sulphides of early pyrite, arsenopyrite, pyrrhotite and specular hematite, followed by chalcopyrite, bornite, Fe-rich black sphalerite, electrum, argentite, tetrahedrite, galena, hematite and marcasite.
- **Stage IIIa Sulphosalts** occur as anhedral grains with galena intergrown with Fe-poor honey-brown sphalerite (Lee et al, 1998), interstitial to quartz vughs and filling fractures in quartz. The sulphosalts comprise pearcite (Cu-Ag), lillianite (Pb-Bi), boulangerite (Pb-Sb), polybasite (Ag-Sb) and galenobismuthinite (Pb-Bi).
- **Stage IIIb Brecciation Event**, with vughy cavities lined with white comb quartz, with minor sulphides.
- **Stage IV Late Vein** white calcite and anhedral green or purple fluorite deposition.
- **Stage V Supergene** covellite and chalcocite are present, with malachite observed in the oxidized weathering zone and at surface.

Detailed fluid inclusion studies at the Jeonheung-Kamkye mine indicate a complex history of boiling of hydrothermal ore fluids that over-pressured, resulting in brecciation and fracturing at a palaeodepth of 412m. Mineralization deposited at temperatures between 220-380^{o}C from fluids with salinities of 0.7-8.4 wt.% NaCl. The hydrothermal fluids subsequently mixed, cooled, and diluted with meteoric waters (Lee & Kim, 1995; Choi et al, 1992). Copper was transported as copper-chloride complexes.

The sandstones are calcareous in places and could potentially act as a favourable reactive and porous host lithology for replacement-style sediment-hosted mineralization.

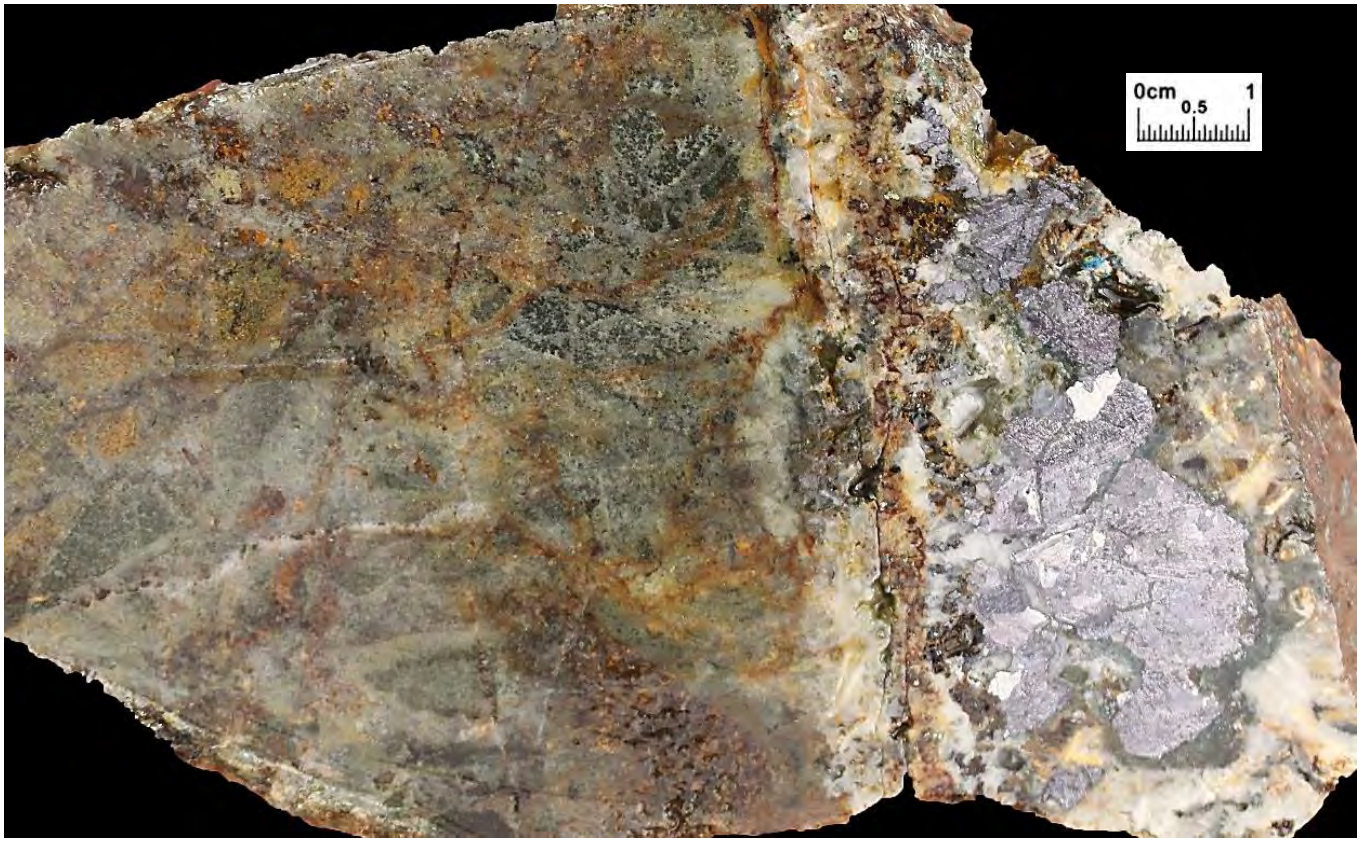
Some of the quartz veins and stockworks appear to be localized at lithological contacts, suggesting rock competency contrasts may have played a role in focusing veining and mineralization. Rock types such as siltstones and shales, as well as previously silicified rocks, are favourable for the development of quartz vein stockworks and breccias because of their brittle and competent nature. Their low porosity and impermeability tend to act as a lithological trap for hydrothermal fluids. Ruptures occur during the interaction with dilational fault jogs coeval with seismic activity in the epithermal environment (Sibson, 1989). Within this frictional regime, fault brecciation processes can localize chimney pipes by the sudden creation of cavities and intense fluid-pressure differentials. Violent localized boiling may be triggered and result in gold deposition related to sudden pressure drops and fluid mixing.

Alteration

Alteration observed in the siltstones and sandstones of the Sagok Formation (Kyungwha prospect area) consists of early pale green sericite and illite clay alteration, accompanied by purple-red brown hematite.

in proximity to mineralized veins and breccias, hypogene silvery-grey specular hematite is commonly observed. These zones are commonly surrounded by pale green sericite, chlorite and lesser epidote alteration, usually accompanied by disseminated fine grained euhedral to subhedral pyrite, along with some kaolinite and quartz (silicification). The observed alteration is consistent with an intermediate argillic alteration assemblage in an epithermal environment.

Limonite and siderite? staining of rapidly-oxidising reactive sulphides (ie pyrrhotite and arsenopyrite) is common in the mineralised zones.



Banded galena-quartz vein, Jukdong North adit dump. Coarse galena (right), minor black sphalerite and chalcopyrite next to grey chalcedony rimmed by white comb quartz with cavities hosted in contact with limonite stained grey silica-sericite altered sandstone (left). Sample 155509: 0.07g/t Au, 408g/t Ag, 0.88% Cu, 14.60% Pb, 0.44% Zn, 6g/t Te, & 122ppm Sb.

Weakly banded vein of chalcedony, microfault, prismatic zonal quartz with sulphide infill and jigsaw textured quartz core, Jukdong North adit dump. Sample 155583:193g/t Ag, 0.81% Cu, 7.45% Pb, 565ppm Zn, 327ppm Bi, 64ppm Sb, 13ppm Mo.

Quartz vein breccia, Jukdong North adit dump. Late comb quartz with cloudy white feldspar (adularia?) overprints and brecciates an early phase of grey cryptocrystalline quartz containing pyrite, pyrrhotite, chalcopyrite, galena and sphalerite and clasts of spalled andesite. Sample 155510: 0.21g/t Au, 458g/t Ag, 0.44% Cu, 2.11% Pb, 884ppm Zn.

Epithermal banded carbonate-quartz vein, Jukdong North adit dump. White carbonate (at left; bladed calcite) is in contact with rhythmic colloform banded chalcedony, then grey cryptocrystalline quartz with minor pyrite, pyrrhotite, chalcopyrite, galena and sphalerite, overprinted by late white comb quartz with cloudy white feldspar (adularia?). Minor black sphalerite is within the calcite.

1.5m wide sheeted quartz veinlet stockwork open-space "jig-saw" breccia, hosted in limonite-jarosite stained, green sericite altered siltstones of the Sagok Formation, Dongchukogsan Adit (T6 Anomaly). Chrysocolla and zinc gossan are evident on exposed surfaces.

Rhythmic banded chalcedony vein cutting early stage brown oxidised chalcedony cemented polymictic breccia, T6 Anomaly. Sample 155586: 0.43% Pb, 0.24% Zn, 45ppm Ab, 341ppm Cu, 0.37% Ba.

Quartz vein comprising early chalcedony overprinted by late white moss and comb quartz lined vughs, T7 Anomaly. Sample 155591: 161g/t Ag, 0.11% WO_3, 0.26% Bi, 24ppm Sb, 10ppm Mo.

Multi-phase, well-banded epithermal quartz vein, Kumhak Central prospect (T8 Anomaly). Various diagnostic epithermal textures are present in the vein, including from bottom; open space cavity lined with comb quartz, colloform banded chalcedony, galena, brown oxidised ginguro band after sulphide, radial pseudo-acicular dendritic aggregates of silica (commonly associated with weathered kaolinite and illite clay after adularia), rhythmic colloform banding with brown ginguro bands, lattice-bladed pseudomorphs after carbonate (top). Sample 155584; 0.09g/t Au, 52g/t Ag, 531ppm Bi, 34ppm Sb, 966ppm Cu, 0.32% Pb, 985ppm Zn.

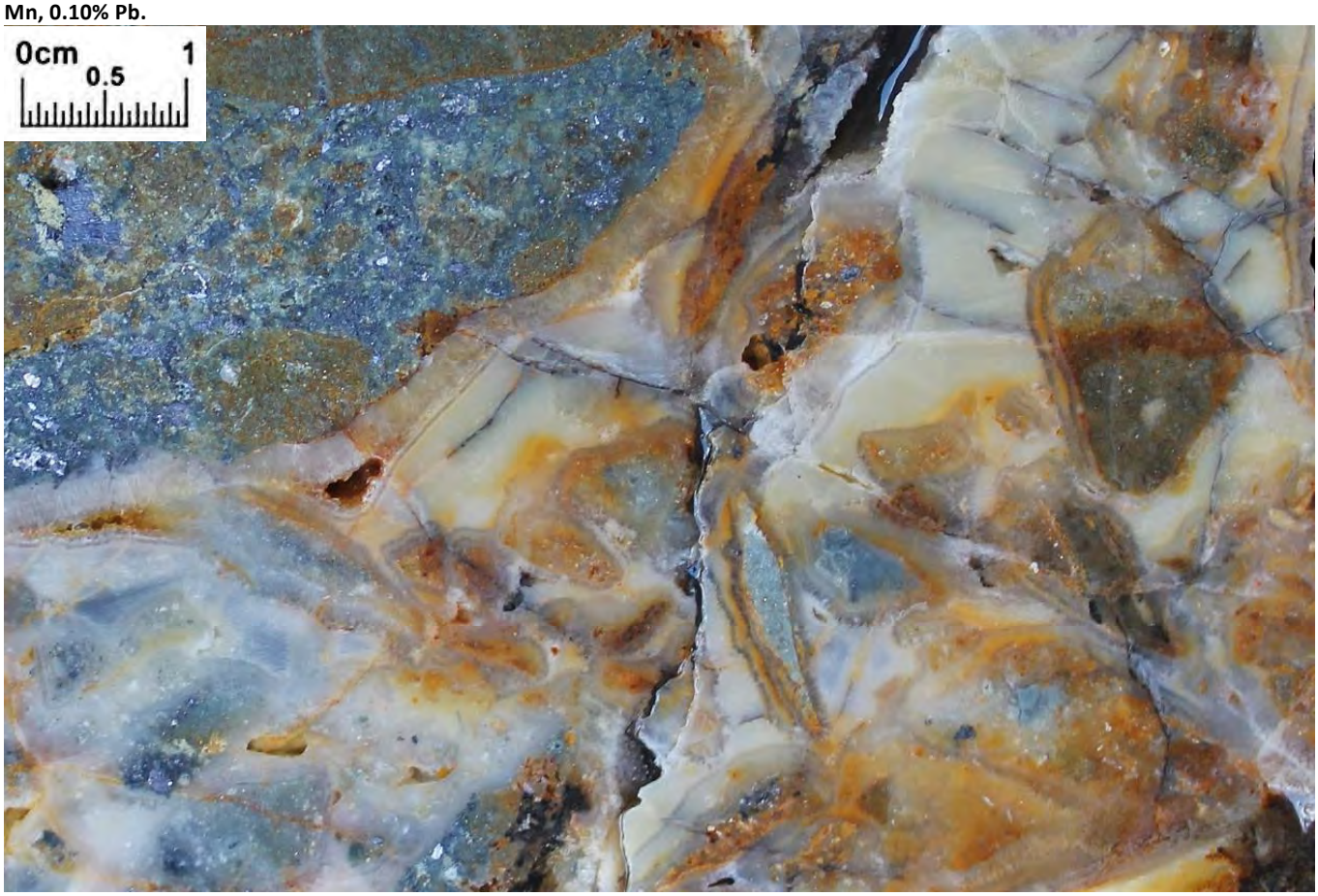
T3 Anomaly looking NW along strike from the T4 Anomaly. The strike and dip of the quartz vein breccia is indicated by the red arrows. The dense vine-creeper and thorny vegetation is vigorous secondary regrowth that grows quickly in spring and summer humid and high rainfall conditions and then browns off during autumn and dies out over the winter months.

Looking NW along strike at the 4.5m wide quartz vein breccia outcropping at T3 Anomaly.

Ghost bladed carbonate pseudomorph textures (top right) in limonite stained, white cryptocrystalline quartz vein, with minor vughs, T3 Anomaly. Sample 155589: 0.21g/t Au, 145g/t Ag, 807ppm Bi, 16ppm Sb, 318ppm W, 194ppm Cu, 16ppm Mo, 0.14% Pb, 0.22% Zn.

Horizontal bedding planes in green reduced and purple oxidised "red bed" sandstones of the Jeomgok Formation infiltrated by open space breccia filling "dog tooth" prismatic white quartz crystals, Kumhak North prospect (T1 Anomaly).

Hydro-fractured, brecciated, hematite altered wallrock (muddy tuff breccia?, with banded epithermal quartz vein. The wallrocks display brecciation with minimal rotation (expansion cavities infilled with hematite) but a more rotated breccia forms the ve in contact. The vein has an orange-brown siderite? band (probable reactive sulphides, pyrrhotite?) and a central core of white comb and moss textured quartz lined vughs, T8 Anomaly, Kumhak Central prospect. Sample 155595; 0.14% WO_3, 5g/t Ag, 30ppm Bi, 231ppm Cu, 0.10% Mn, 0.10% Pb.



Limonite stained, rhythmically banded layers of chalcedony (clear, brown, grey) with late layer of white comb quartz lined vughs and breccia of sulphides, with limonite staining, Cheongji adit dump. Sample 155581: 17g/t Ag, 4.68% Pb, 1.67% Zn, 138ppm Cu, 41ppm Sb.

Conceptual Model - Intermediate-Sulphidation Epithermal Mineralization

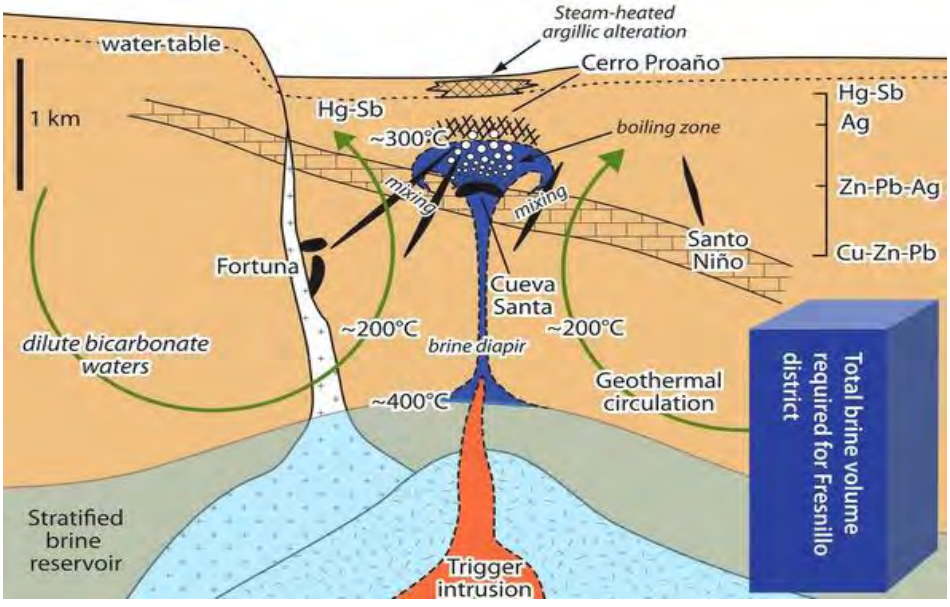
Intermediate-sulphidation ("IS") epithermal style polymetallic Ag-Au deposits in Mexico occur as fissure vein-Ag-rich deposits in the Fresnillo, Zacatecas, Guanajuato and Palmarejo mining districts. Although more than 48,000 tonnes of silver have been mined since 1553, resources have increased substantially since 1985 as modern epithermal exploration has led to the discovery of 'blind' deposits at depth.

Mineralization consists of silver sulphides and sulphosalts. gold as electrum and Cu-Pb-Zn accompanied by As, Sb and Hg. A vertical geochemical zonation pattern is recognized. Ag occurs at shallow levels grading downwards to Zn-Pb-Ag, then Cu with Zn-Pb at depth. Au, Ag and Ag-Bi sulphosalts are typically associated with the "boiling zone". Ba, As, Sb, Hg occur above this boiling zone at shallower levels closer to the palaeo-surface.

Alteration consists of argillic assemblages in the shallow, upper parts of the system, above the "boiling" ore zone, characterized by low-temperature silica phases, including cristobalite, opalline amorphous silica, fine silica-sulphide "silica gris", chalcedony and Hg-Se-S-Cl complexes. A sub-horizontal zone of hypogene hematite occurs above and extends down into the "boiling" zone and is indicative of the fluid mixing zone with oxygenated meteoric waters. Deeper in the system, vein quartz contains chlorite, calcite, rhodonite and adularia, surrounded by sericite (phyllic) and chlorite (propylitic) alteration assemblages. High-temperature zones may be indicated by skarn-type minerals (prograde silicates diopside, hedenbergite & garnet) and retrograde silicates (epidote, clinochlore).

Mineralization and alteration are consistent with magmatic-derived, chlorine fluids that injected into a circulating meteoric water geothermal system. Fluid flow is horizontal (Clarke & Titley, 1988) and boiling off of dissolved gases (mainly CO_2) increases the Ag/Au ratio. Higher grades of Ag are typically associated with higher salinities, suggesting proximity to the intrusive source may play an important role. The polymetallic Ag-Au mineralization of Mexico is regarded as equivalent to the carbonate-base metal Au deposits of the Southwest Pacific (Corbett, 2010). The characteristic features of low-temperature, intermediate-sulphidation epithermal deposits include:

- Surface expression is a subtle barren argillic cap that sits above 'blind' mineralization.
- The veins barely reach the surface, forming a wispy seditious zone below the barren cap.
- Mineralization is hosted in veins, stockworks and breccias. The veins can balloon out in size up to 10m in width.
- Mineralization displays coarse mineral banding, contrasting with the rhythmic fine banding of low-sulphidation veins.
- Dark brown Fe-rich sphalerite occurs in the early base metals stage and is indicative of high-temperature and salinity.
- Significant Cu-Pb-Zn occurs at depth from distal magmatically-derived fluids.
- Deposition is controlled by fluid mixing (Leach & Corbett, 2008), dilution and rapid cooling with oxidized meteoric waters, as the base metals are transported as chloride complexes.
- Gold and silver deposition is controlled by rapid cooling (Leach & Corbett, 2008) of a shallow "boiling" zone, typically located about 400m below the palaeo surface.
- Honey-yellow Fe-poor sphalerite is deposited late stage and is an indicator of lower temperatures, commonly associated with Ag-bearing sulphosalts, freibergite and electrum.
- The vertical extent of mineralization can be over 450m.
- Alunite-like high-sulphidation minerals may occasionally be present. Exploration focus directed to locating acid-sulphate caps (evidenced by kaolinite-alunite alteration), as high-grade Au-Ag can deposit at depth.



Mexican Style Au-Ag-Cu-Pb-Zn Epithermal Mineralization Model (after Williams et al, 2013).

Drilling (Historical)

During 1976-1977, a total of 8 diamond drill holes were completed at the Kyungwha prospect area for a total of 1,150m of core. Unfortunately, drill logs are only available for 2 holes. Sampling of the drill core was limited to selective sampling of visible high-grade sulphide mineralization and assaying is inconsistent, with gold not analysed for in the 6 holes drilled in 1976.

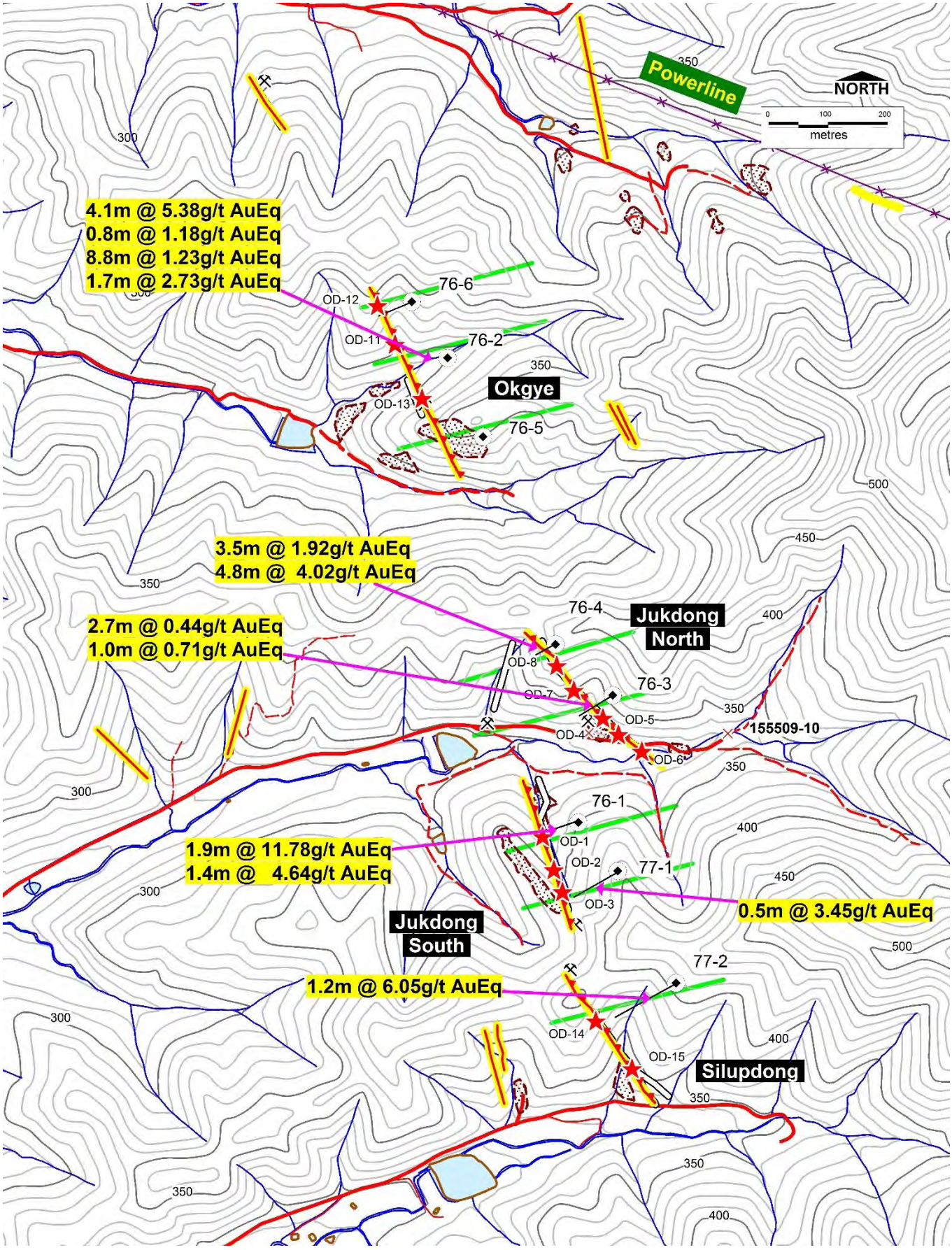
It is worth noting that only obvious high-grade mineralization was sampled-assayed. Several sulphide veins and quartz veins recorded in the drill logs were not sampled/assayed (indicated as N/A.) In addition, Cu was not routinely assayed, although rock chip sampling by KME indicates that it is usually present. Gold was not assayed in the early holes, but when Ag and Cu are present in significant amounts, significant Au can be expected.

Notwithstanding these sampling issues, most holes intersected significant Au-Ag-Cu-Pb-Zn mineralization, as indicated in the Map and Sections below. Mineralization remains open in all directions.

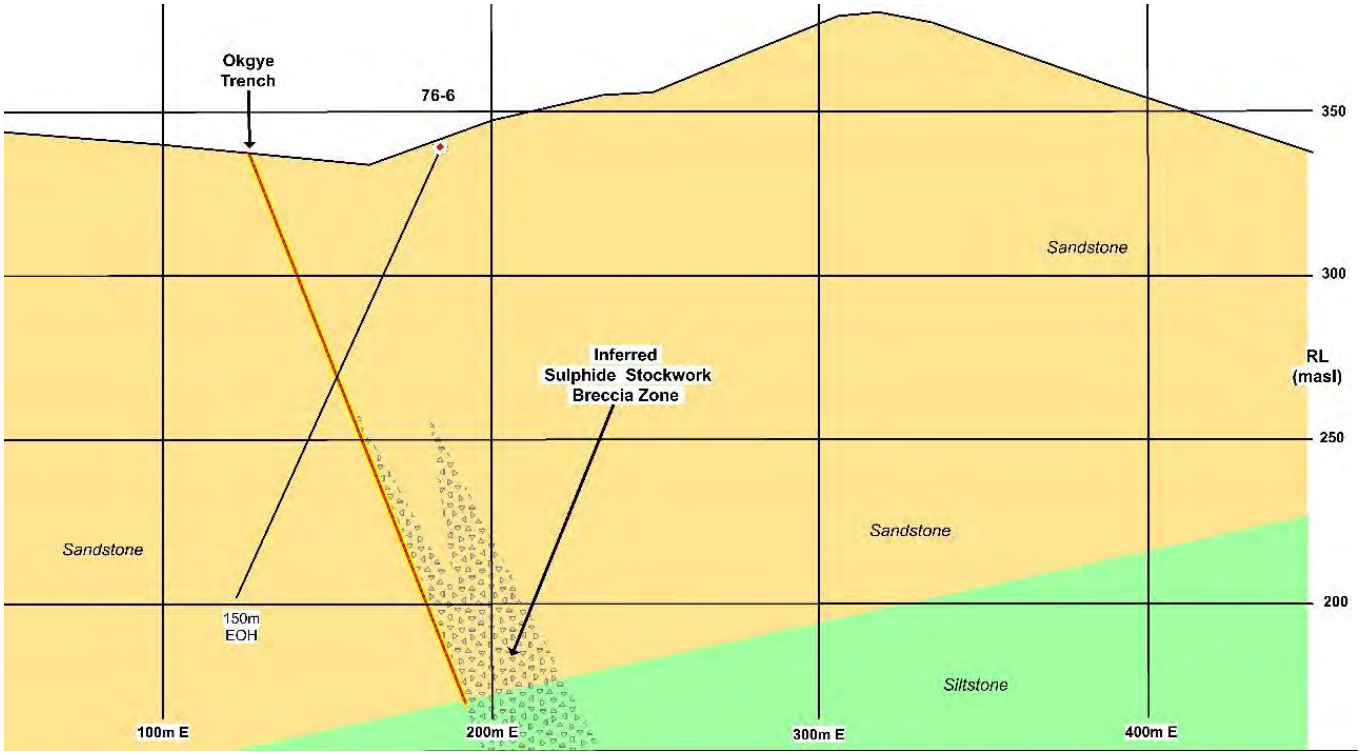
A brief inspection of the Kyungwha mine was made in November 2016 which indicated at least 2 BQ size diamond core holes had been recently completed by KORES in the *Jukdong North Level No 2* prospect during 2014 (total number of holes drilled is not known). The bulk of the drill core remains in plastic trays on site, unprotected from the elements, with only obvious mineralised intervals sampled and completely removed for assay. It is highly recommended this information be acquired from the KORES library, the core be removed from site, photographed, relogged to identify mineralisation and then stored in a more permanent facility as soon as possible.

Another 3 holes were drilled to the northeast at Kumhak Central prospect (T8 Anomaly), mainly designed to test a SP geophysical anomaly associated with quartz veining. Based on the observed outcrop trends, these holes were drilled parallel to the dip of mineralization and consequently failed to intersect the vein mineralization.

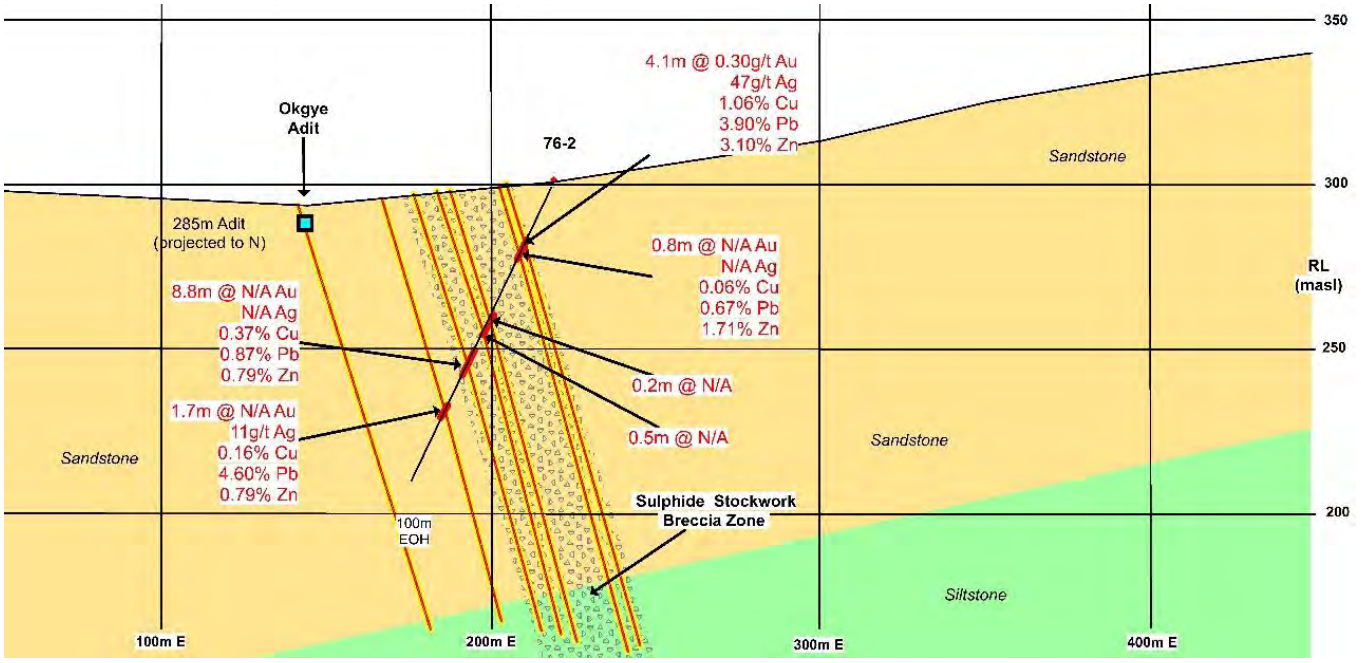
Core trays (BQ size) left abandoned on site near the *Jukdong North Level No 2* adit. KORES drilled at least 2 holes at Kyungwha in 2014.



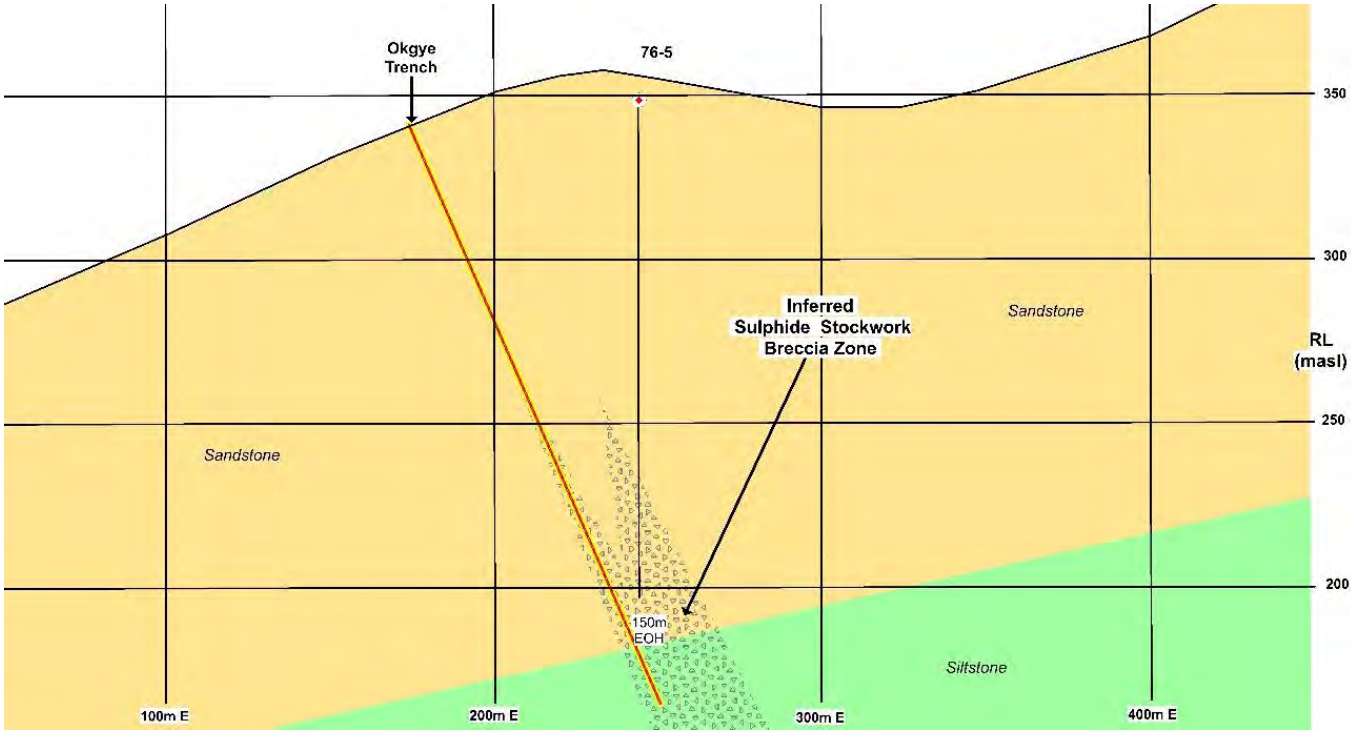
Digital Topographic Map of Kyungwha prospect, showing Drill Sections (green lines). The historical drill holes and location of surface and underground adit (red star) rock chip samples are indicated. Significant drillhole intersections are highlighted in yellow.



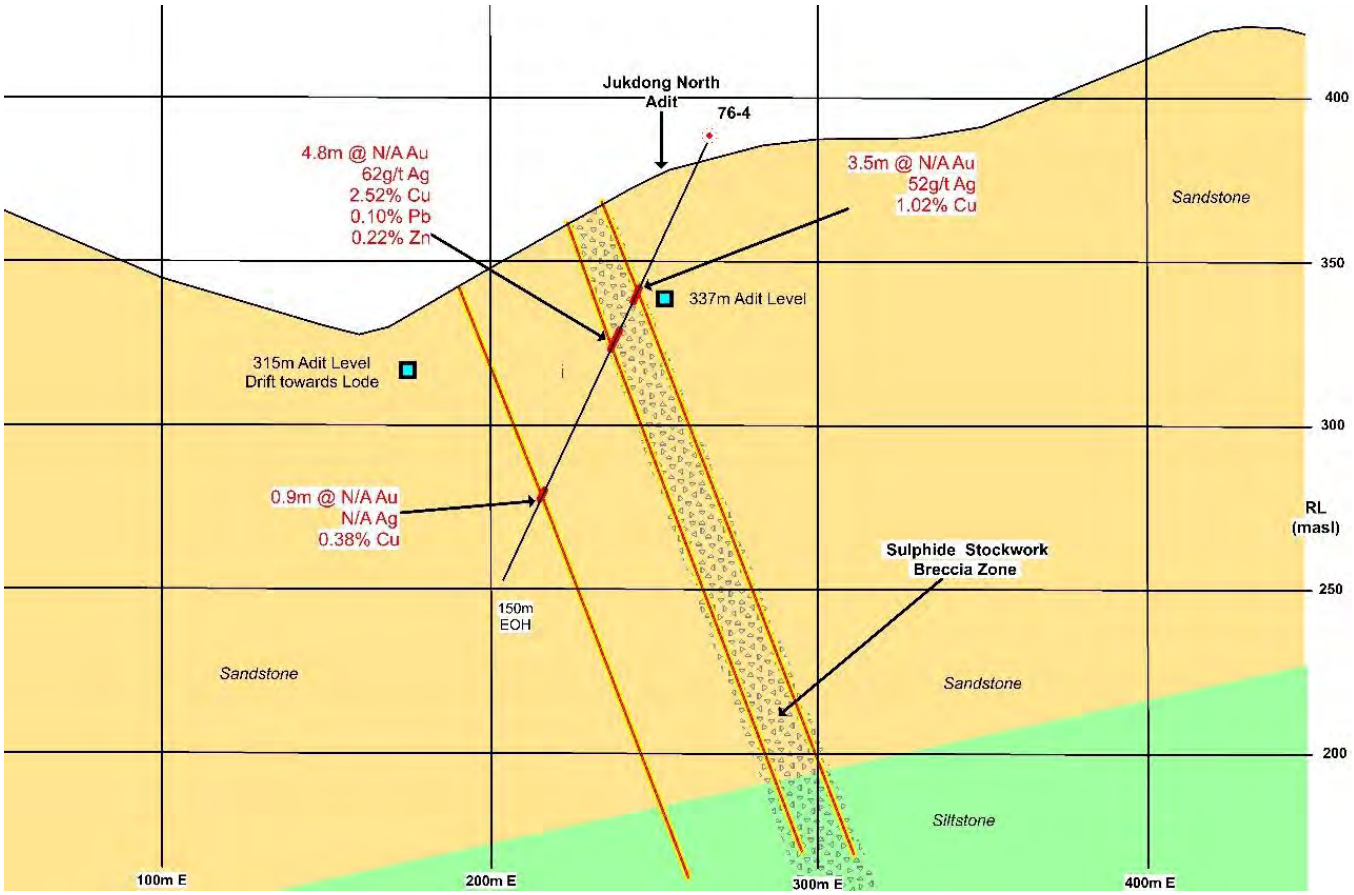
Kyungwha Drill Section 1700 North, Okgye Vein. Looking NNW (Azimuth 255°).



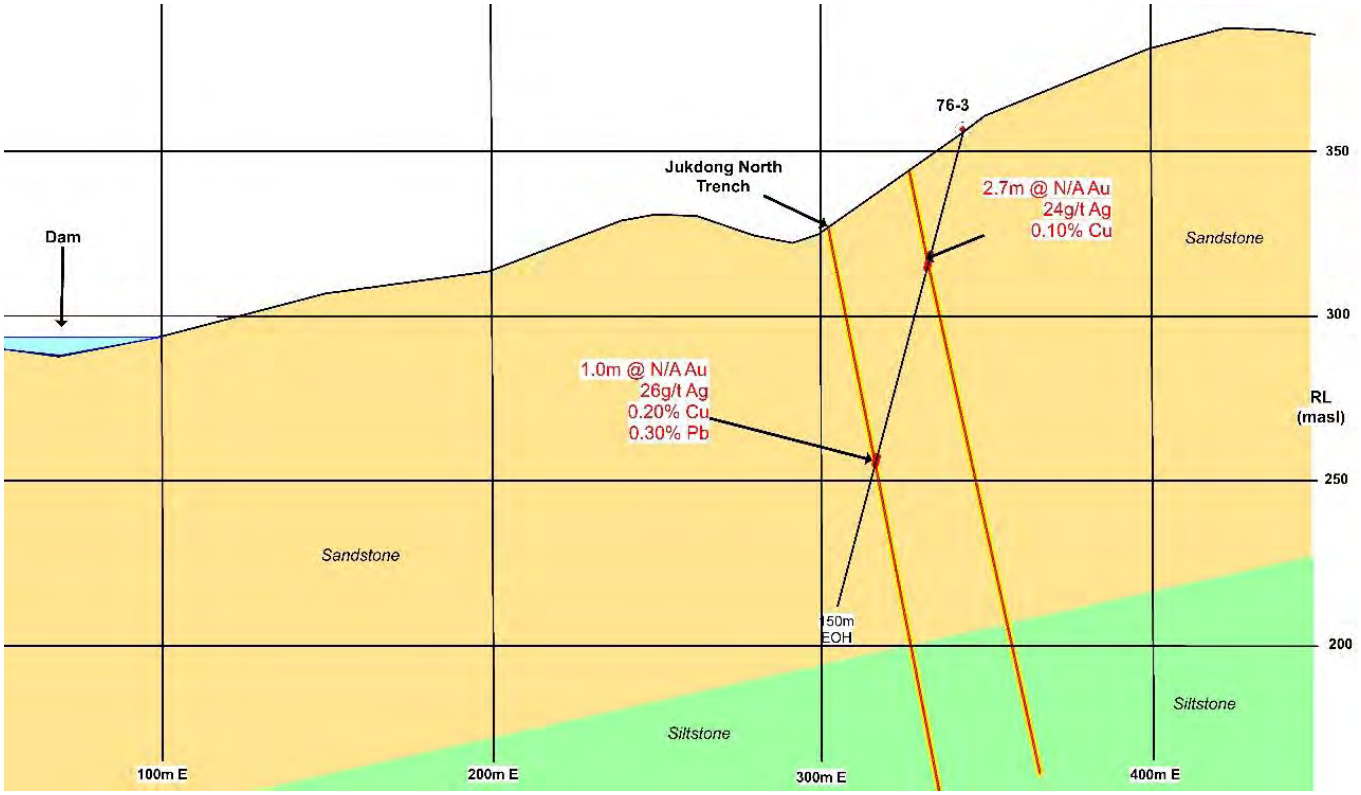
Kyungwha Drill Section 1600 North, Okgye Vein. Looking NNW (Azimuth 255°).



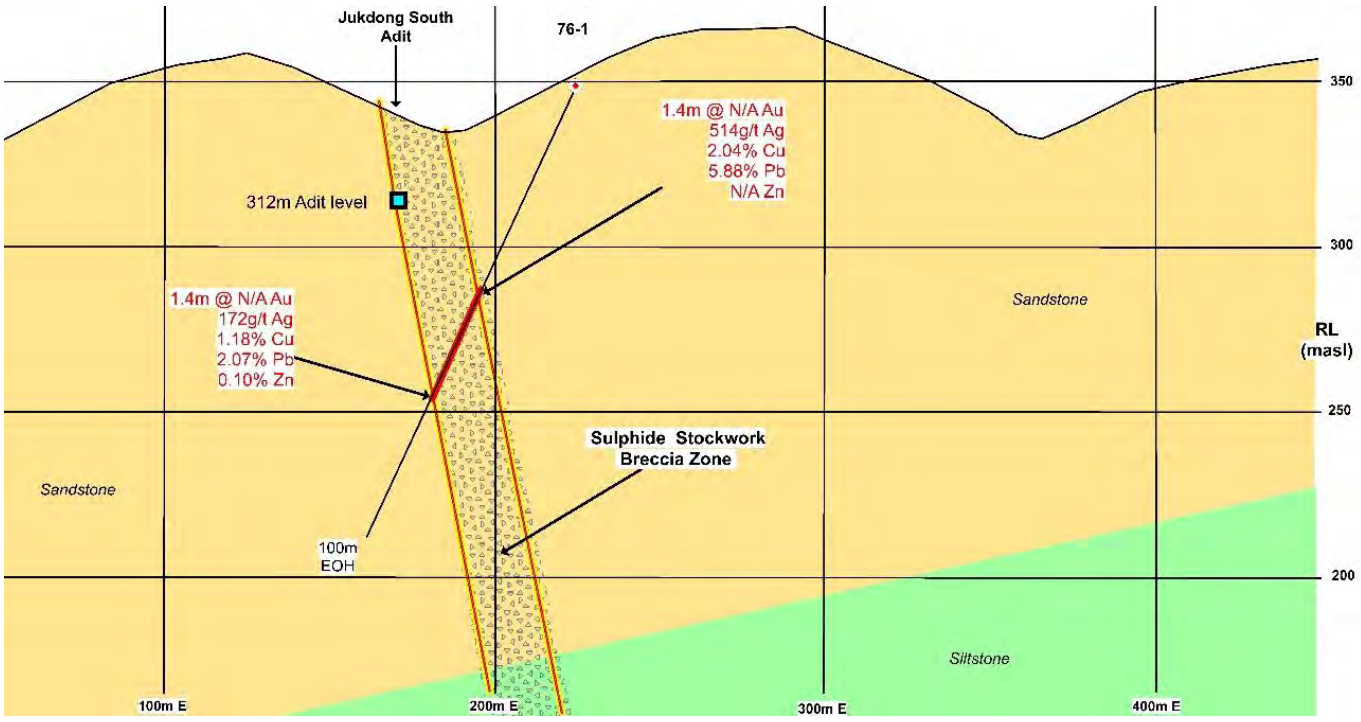
Kyungwha Drill Section 1450 North, Okgye Vein. Looking NNW (Azimuth 255°).



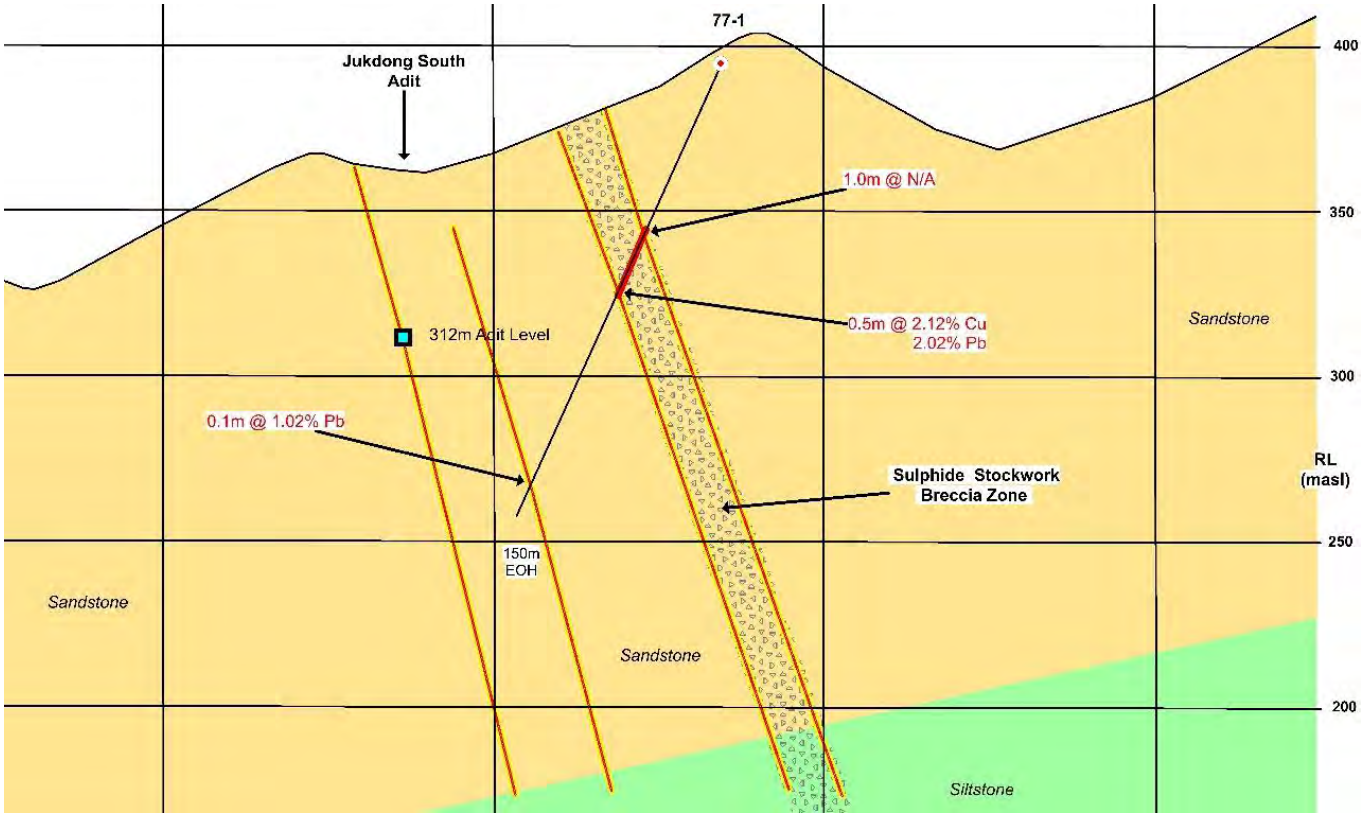
Kyungwha Drill Section 1050 North, Jukdong North Vein. Looking NNW (Azimuth 255°).



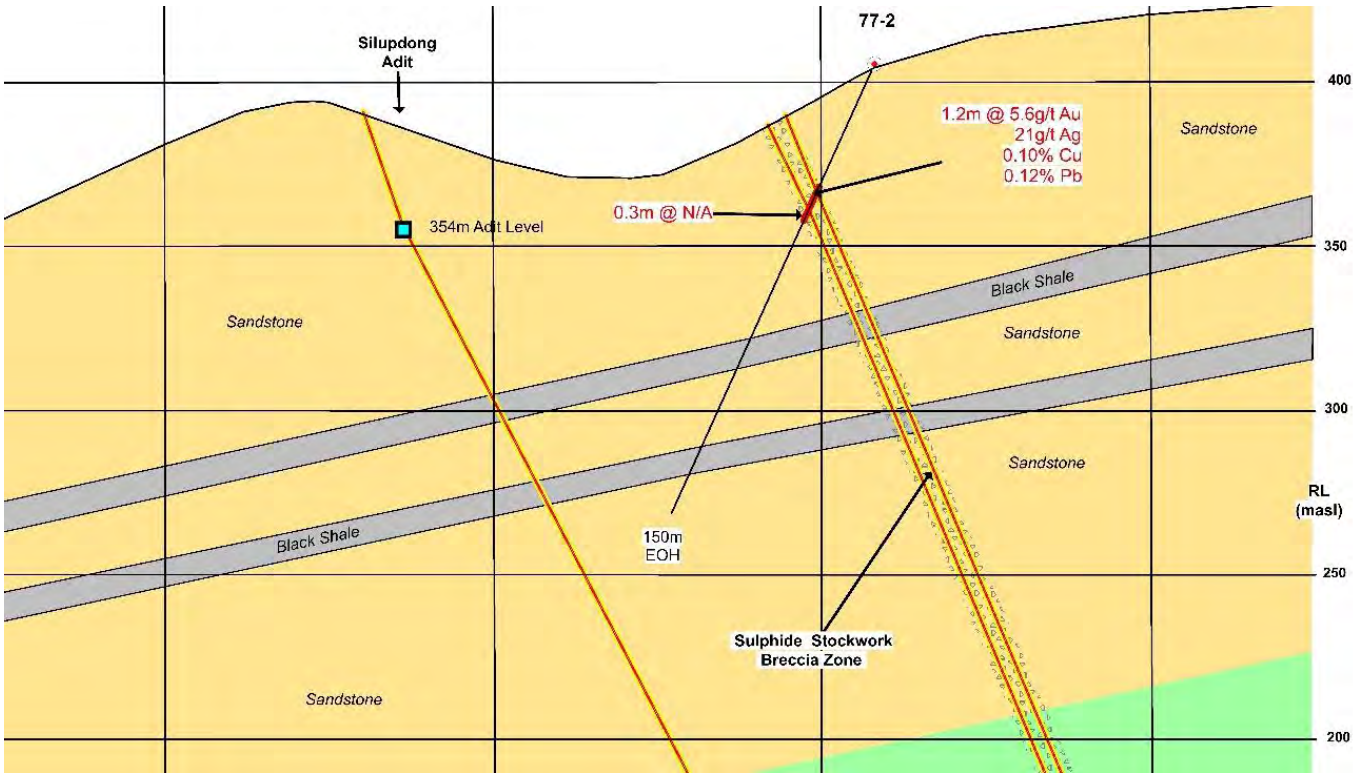
Kyungwha Drill Section 950 North, Jukdong North Vein. Looking NNW (Azimuth 255°).



Kyungwha Drill Section 700 North, Jukdong North Vein. Looking NNW (Azimuth 255°).



Kyungwha Drill Section 600 North, Jukdong South Vein. Looking NNW (Azimuth 255°).



Kyungwha Drill Section 400 North, Silupdong Vein. Looking NNW (Azimuth 255°).

Resource Estimates

Senlac Geological Services Pty Ltd compiled a drilling database from the historical drilling data, with significant drill intersections presented in the Table below. The surface projections of the drill intersections are illustrated in Figure 41a. From the surface projection of the mineralized structures, it is apparent that the Kyungwha vein structures can be traced over a strike length of 1,200m, varying in width from 0.7m up to 9.0m. Using the historical KMPC drill results, *Senlac Geological Services Pty Ltd* prepared a preliminary resource estimate, using several assumptions, including:

- ❖ True vein width could not be estimated because of the absence of orientated core.
- ❖ Individual vein panels were assumed to extend to the mid-point between drill holes, 100m along strike and 200m down-dip.
- ❖ No minimum widths, or mining parameters, or cutting of grades was applied.
- ❖ The Mineral Resource Tonnages and grades were estimated on a dry in-situ basis. The model is undiluted, so appropriate dilution needs to be incorporated in any evaluation of the deposit.

Senlac Geological Services Pty Ltd estimates an Exploration Target for the Kyungwha mine of **4,802,215 tonnes @ 0.25g/t Au, 42g/t Ag, 0.66% Cu, 1.69% Pb & 0.98% Zn**. This resource has contained metals of 39,316 ounces gold, 6,478,763 ounces of silver, 31,689 tonnes of copper, 80,995 tonnes of lead and 47,171 tonnes of zinc. The resource is unmined and at surface and potentially exploitable as an open pit.

Cautionary Statement: It should be noted this resource estimate is based on widely-spaced historical drilling and does not comply with current NI-43-101 or 2012 JORC reporting requirements.

The contained metals have an insitu value of about US$699,635,921 (approximately US$146/t), using metal prices as of August 2017. The relative value distribution of the metals is 29.19% copper, 27.00% lead, 20.94% zinc, 15.69% silver and 7.22% gold. The contained metals are approximately equivalent to 544,888 contained ounces of gold using August 2017 metal prices (see Table Notes below). Corresponding metal equivalent grades are 3.53g/t AuEq, 268g/t AgEq, 2.26% CuEq, 6.24% PbEq and 4.69% ZnEq.

Significant Mineralized Drill Intersections & Resource Estimate, Kyungwha Prospect.

Hole ID	Width (m)	Grade AuEq (g/t)	Grade Au (g/t)	Grade Ag (g/t)	Grade Cu (%)	Grade Pb (%)	Grade Zn (%)	Length (m)	Depth (m)	Volume (m^3)	SG (g/cc)	Tonnes (t)
76-1	1.90	13.28		514	2.04	5.88		169	200	64,220	2.75	176,505
	1.40	5.35		172	1.18	2.07	0.10	169	200	47,320	2.75	130,130
76-2	4.10	7.11	0.30	47	1.06	3.90	3.10	376	200	308,320	2.75	847,880
	0.80	1.76			0.06	0.67	1.71	376	200	60,160	2.75	165,440
	0.20	0.44		5	0.10	0.16	0.17	376	200	15,040	2.75	41,360
	0.50	0.22			0.08		0.13	376	200	37,600	2.75	103,400
	8.80	1.69		2	0.37	0.87	0.79	376	200	661,760	2.75	1.819,840
	1.70	3.61		11	0.16	4.64	0.79	376	200	127,840	2.75	351,560
76-3	2.70	0.47		24	0.10			226	200	122,040	2.75	335,610
	1.00	0.82		26	0.20	0.30		226	200	45,200	2.75	124,300
76-4	3.50	2.28			1.02			98	200	68,600	2.75	188,650
	4.80	4.97			2.52	0.10	0.22	98	200	94,080	2.75	258,720
	0.90	0.59			0.38			98	200	17,640	2.75	48,510
77-1	0.50	4.45			2.12	2.02		113	200	11,900	2.75	31,075
	0.10	0.58				1.02		113	200	2,260	2.75	6,215
77-2	1.20	6.10	5.60	21	0.10	0.12		262	200	62,880	2.75	172,920
TOTALS		3.53	0.25	42	0.66	1.69	0.98		200	1,746,260	2.75	4,802,215

NOTES:

- ❖ AuEq was calculated using metal prices as at August 2017:
  Au = US$1284/oz, Ag = US$16.94/oz, Cu = US$2.93/lb, Pb = US1.06/lb & Zn = US$1.41/lb.
- ❖ Intersections of >4.0m, >250,000 tonnes and a grade of >4g/t AuEq are highlighted in dark red font.
- ❖ Some intersections contain intervals which were not assayed. For the purposes of aggregation into composited intersections, these intervals have been assigned zero value, although it is likely they carry some low grades.

Development Potential

The Kyungwha vein system can be traced over a strike length of 1,200m and includes mineralization identified at the *Cheongji, Okgye, Jukdong North, Jukdong South* and *Silupdong Veins*. The vein system consists of at least 2 high-grade veins contained within a 5-30m thick zone of lower-grade stockworks, brecciation and disseminated sulphides. The Kyunghwa Vein system remains open in all directions. Significant drill intersections were recorded in historical drilling (conducted during the 1970s), from which it is possible to estimate a potential Exploration Target of 4,802,215 tonnes @ 0.25g/t Au, 42g/t Ag, 0.66% Cu, 1.69% Pb & 0.98% Zn (Sennitt, 2017).

There has been no further exploration conducted in the area since 1980.

Interpretation of high-resolution aerial photograph imagery identified 8 anomalous linear features (Targets T1, T2, T3, T4, T5, T6, T7 & T8) with the same NW strike as the Kyungwha Vein system. Field checking confirms most of these Targets have epithermal quartz vein-breccias present in outcrop or float. The Kyungwha vein system and surrounding area warrants further exploration, including geological mapping, soil geochemical survey, geophysical survey and confirmatory check drill testing, using experienced personnel familiar with modern methods and concepts.

An initial 5 holes (300m spacing) for 750 metres is recommended to confirm the historical drill results and estimate a JORC inferred mineral resource.

The Kyungwha veins are clearly of epithermal origin, with rhythmic colloform banding, bladed carbonate pseudomorph replacement and pseudo-acicular adularia replacement textures observed, indicating “boiling” occurred. The presence of base metals and the geological environment indicate the mineralization can be classified as intermediate sulphidation epithermal style. Exploration by KME shows Bi, W, Mo and Te critical metals are associated with the Au-Ag-Cu-Pb-Zn mineralization and may be potential by-products.

The steeply-dipping vein mineralization of the Kyungwha Vein system is amenable to mining using the *Sustainable Mining by Drilling* method using Pile Top Reverse Circulation Drills.

The Exploration Target resource identified at Kyungwha is potentially exploitable as a satellite mine, trucking “flash flotation” sulphide and gravity concentrates to a central mill facility (Dongil?) for sequential flotation and/or vat leach processing.

References

Chi, S.J., Doh, S.J., Choi, S.G., & Lee, J.H., 1989. Geochemistry of Cu-Pb-Zn-Ag deposits from the Euiseong mineralized area, *Journal of Korean Institute of Mining Geology*, 22, 253-266.

_____, & Koh, Y.K., 1991. Gold-silver mineralization of the Euiseong area, *Journal of Korean Institute of Mining Geology*, 24, 2,151-165.

Choi, H.I., 2007. Geochemical evolution of hydrothermal fluids related to polymetallic mineralization in the Gyeongnam mineralized district, Korea, *N. Jb. Miner. Abh*., 183, 2, 149-163.

Choi, S.G. Lee, J.H. Yun, S.T., & So, C.S., 1992. Mineralogy and geochemistry of the Jeonheung and Oksan Pb-Zn-Cu deposits, Euiseong area, *Journal of Korean Institute of Mining Geology*, 25, 417-433.

_____ & Jin, M.S. (eds.), 2002, The genetic implications of Mesozoic gold-silver mineralization, Korea, in Mesozoic Sedimentation, *Igneous Activity and Mineralization in South Korea*, 1, 216-226.

Choi, S.H. & So, C.S., 1992. Mineralogy and geochemistry of the Keumhak Cu vein deposit, Korea, *Journal of the Japanese Association of Mineralogists*, 87, 69-85.

Choi, P.Y., Lee, S.R., Ko, I.S., & An, G.O., 2004. Movement History of the Gaeum Fault System, *Geology of Korea, Special Publication* 2, 211-228.

Hwang, J.H. Kim, D.H. Cho, D.R., & Song, K.Y., 1996. Geologic Map of Andong Sheet, 1:250,000, *Korea Institute of Geology, Mining and Materia*l.

Hwang, S.K. & Yang, J.I., 1977. Feasibility study of oxidized lead-zinc-copper ore by heating flotation from Jun Hung mine, *in* Report on Geoscience and Resources, Volume 2, *Korean Mining Promotion Corporation*, 275-282.

Jin, M.S., Lee, S.M., Lee, J.S., & Kim, S.J., 1982. Lithochemistry of the Cretaceous granitoids with relation to the metallic ore deposits in southern Korea, *Journal of Geological Society of Korea*, 18, 119-131.

Jin, M.S., Lee, Y.S., & Ishihara, S., 2001. Granitoids and Their Magnetic Susceptibility in South Korea, *Resource Geology*, 51, 3, 189-203.

Jin, M.S., Lee, S.R., Choi, H.I., Park, K.H., Koh, S.M., Cho, D.L., & Jin (et al.) (eds.), 2002. The study of Mesozoic igneous activity in the southern part of the Korean Peninsula-History, problem and perspectives. Mesozoic Sedimentation, Igneous Activity and Mineralization in South Korea, *Mesozoic Sedimentation, Igneous Activity and Mineralization in South Korea*, 2, 89-110.

Jo, J.G. & Shin, D.B., 2015. Sulfur isotope variations of metallic ore deposits in the Gyeongsang Basin, South Korea, *Resource Geology*, 65, 3, 296-310.

KIGAM, 2001. Geochemical Atlas of Korea (1:700,000), Series 1-7, *Korea Institute of Geoscience and Mineral Resources*.

KIGAM, 2001. Study on the data-base and assessment of domestic mineral resources, Area of 1:250,000 Pusan and Andong Geological Sheets, *Korea Institute of Geoscience and Mineral Resources*, *Rept No* 2000-R-TI02-P-03, 90pp.

KIGAM, 2002. Andong Magnetic Anomaly Map 1:250,000 scale Map Sheet NJ52-14, *Korea Institute of Geoscience and Mineral Resources*.

KIGAM, 2009. Magnetic Anomaly Maps of Korea, 1:100,000 scale, *Korea Institute of Geoscience and Mineral Resources*.

KMPC, 1975. Kumhak Mine Drilling Report, *Korean Mining Promotion Corporation*, Annual Rept.,194-197.

KMPC, 1976. Jeonheung Mine Drilling Report, *Korean Mining Promotion Corporation*, Annual Rept., 190-193.

KMPC, 1976. Geophysical Survey – Kumhak-Kyungwha mine area, *Korean Mining Promotion Corporation*, Annual Rept., 440-445.

KMPC, 1977. Exploration Activities Report, Cheonji Mining Claims 119 and 120, *Korean Mining Promotion Corporation*, Annual Rept., 136-137.

KMPC, 1979. Exploration Activities Report, Jeonheung mine, Mining Claim 109, *Korean Mining Promotion Corporation*, Annual Rept., 152-154.

KMPC, 1980. SP Geophysical Survey Report - Cheonji 116 Mining Claim, *Korean Mining Promotion Corporation*, Annual Rept., 466-468.

KMPC, 1981. Exploration Activities Report, Jeonheung mine, Mining Claim 109, *Korean Mining Promotion Corporation*, Annual Rept., 178-179.

KMPC, 1987. Exploration activities report, Cheonji 88 Mining Claim, *Korean Mining Promotion Corporation*, Annual Rept., 849-850.

Koh, S.M., Ryoo, C.R., Song, M.S., Jin (et al.) (eds.), 2002. Mineralization characteristics and Gyeongsang basin, south Korea, *Mesozoic Sedimentation, Igneous Activity and Mineralization in South Korea*, 1, 89-110.

Koh, S.M., Ryoo, C.R., & Song, M.S., 2003. Mineralization characteristics and structural controls of hydrothermal deposits in the Gyeongsang Basin, South Korea, *Resource Geology*, 53, 3, 175-192.

Lee, H.K., Kim, S.J., 1995. Ore minerals and fluid inclusions study of the Kamkye Cu-Pb-Zn-Au-Ag deposits, Republic of Korea, *Economic and Environmental Geology*, 28, 9-17.

Sennitt, C.M., 2017. Uiseong Au-Ag-Cu-Pb-Zn Project, South Korea, *Unpubl. Co. Rept., Senlac Geological Services Pty Ltd*.

Se-Woo Mining, 2008. Oksan-Geumhak Pb-Zn Mine, *Unpubl. Co. Rept., Se-Woo Mining Co Ltd.*