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Jeonheung-Gamkye Cu-Au-Ag-Pb-Zn mine

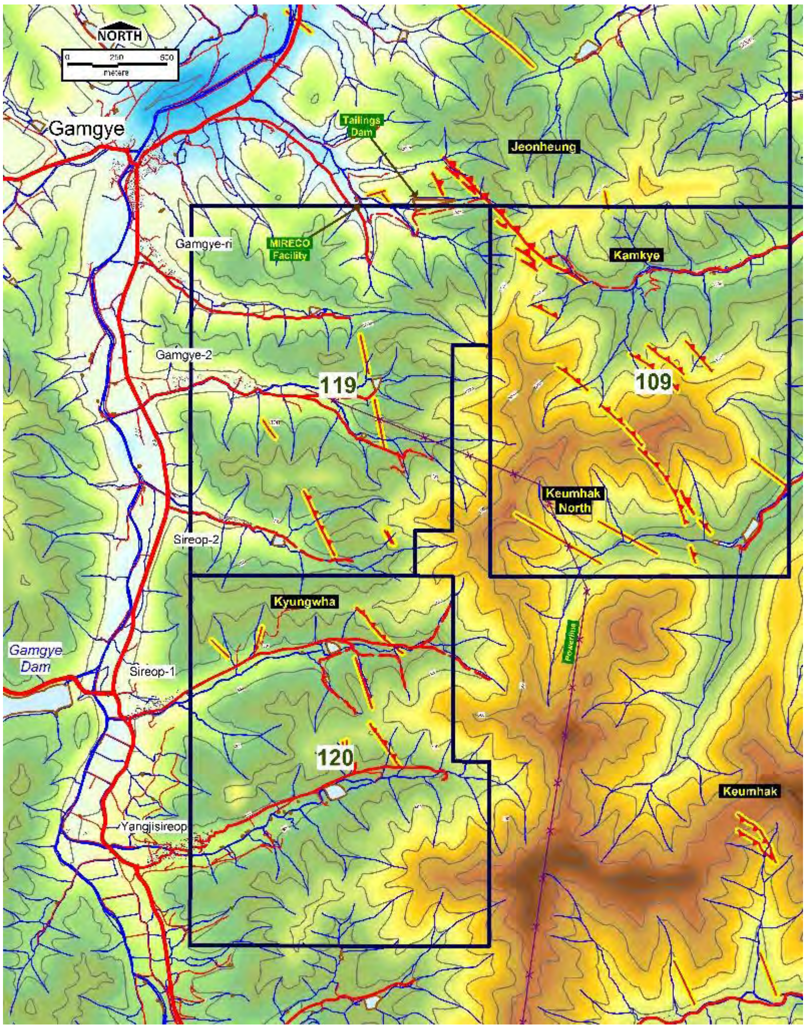
Technical Summary

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



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

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 mine and prospects lie 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.

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.

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 mine, Kumhak 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 down at the old derelict foundations of the Jeonheung mill.

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.

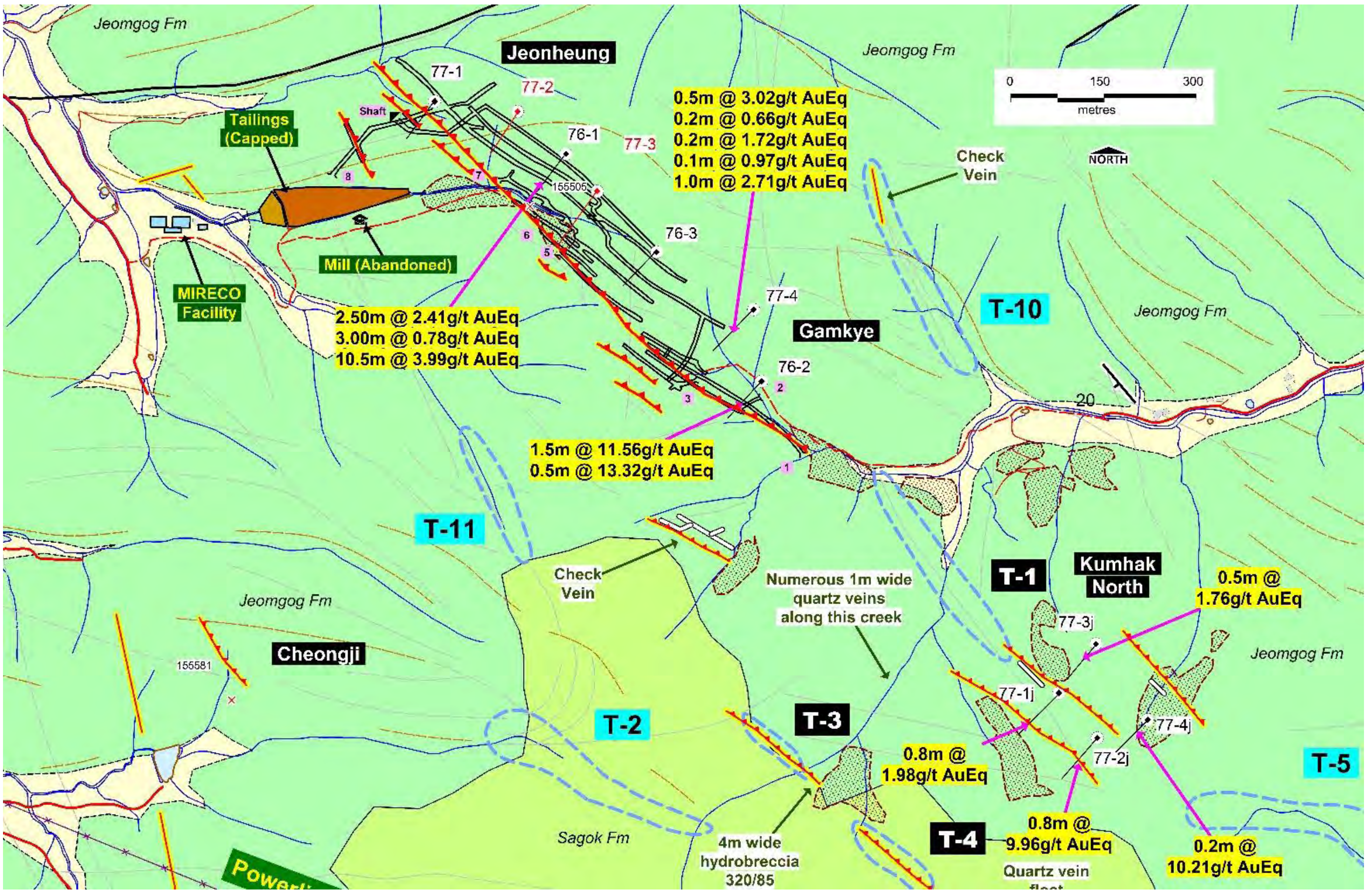
Geology

The geology of the Jeonheung mine, Kumhak 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.

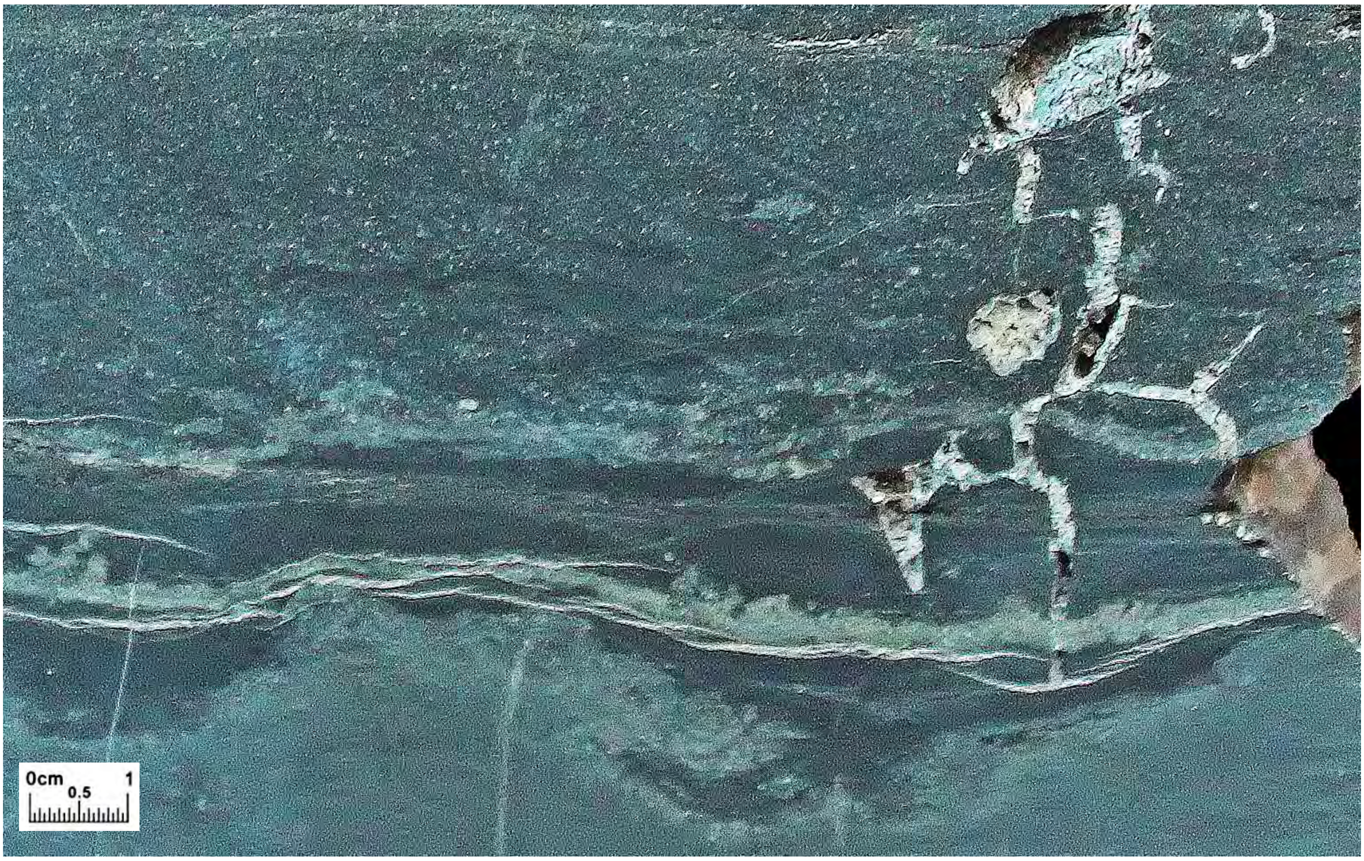
Lithologies in the Jeomgog Formation consist of light to dark green and grey coloured alternating shale and sandstone, with minor black shale and conglomerate beds. The sandstone is feldspathic, fine to coarse grained, well-sorted and commonly display planar laminations. The veins at the Jeonheung-Kamkye mine are hosted in the upper section of the Jeomgog Formation, just below the contact with the overlying Sagok Formation.

At the Kumhak North (T1 Anomaly) prospect (at the eastern end of the Jeonheung-Gamkye vein system), thin andesite dykes (hole 77-1j) and andesite tuff? (77-3j) was reported in drill logs. 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.

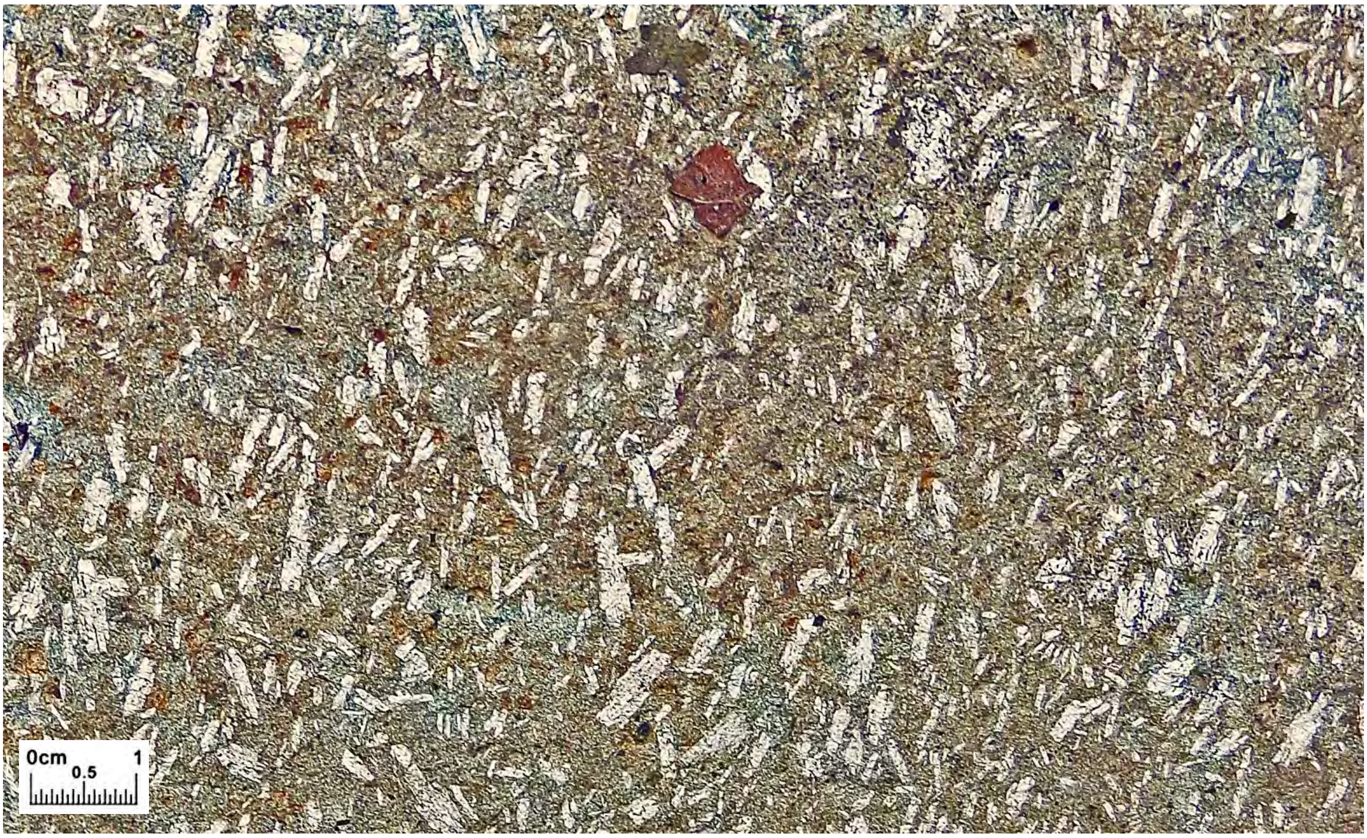
The Sagok Formation outcrops south of Kumhak North. The sequence strikes roughly east-west, dipping gently to the south. Lithologies consist mainly of fine to coarse-grained, light to dark grey, pale brown or green coloured sandstone, with minor black shale and conglomerate beds. The colour variations 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.



Geology of the Jeonheung-Kamkye mine and Kumhak North prospect (Anomaly T-1). 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.



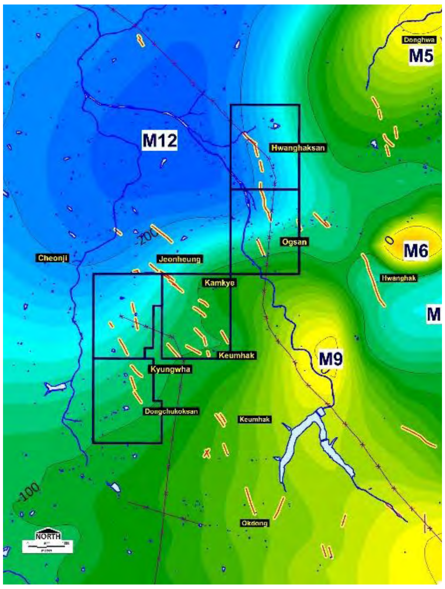
Andesite porphyry/Lamprophyre dyke float observed at Kumhak North (T1 Anomaly). The plagioclase feldspar laths display crude alignment with a poikilitic texture in a finer matrix of mafic olivine/pyroxene and disseminated twinned sulphide (see red cube).

Geophysics

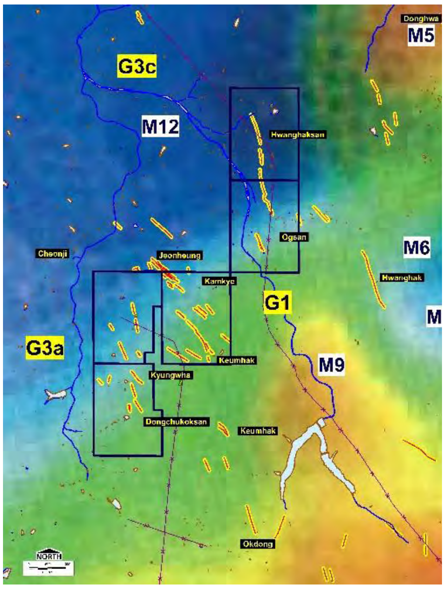
Regional airborne magnetic-radiometer geophysical surveys were flown along east-west lines (1.5km spacing) during 1989-1991 by the *Korean Institute of Geology Mining & Materials* (KIGAM, 2002), at a terrain clearance altitude of 120m.

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.

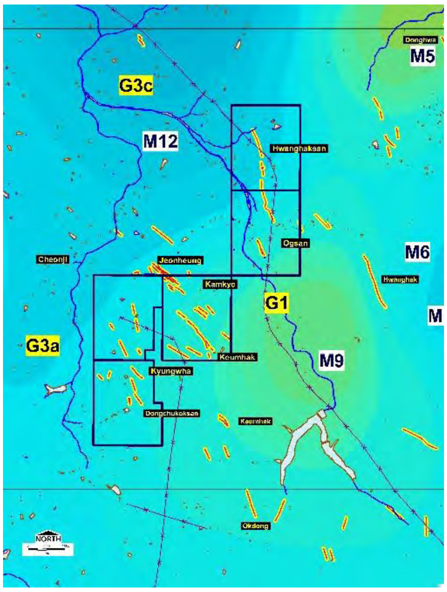
Anomaly **M6** is a circular "bullseye" magnetic high coinciding with the monzogranite intrusion at Hwanghaksan mountain and also coincidental with the intersection of the inferred NE and NNW striking faults.



Magnetic Anomaly Map



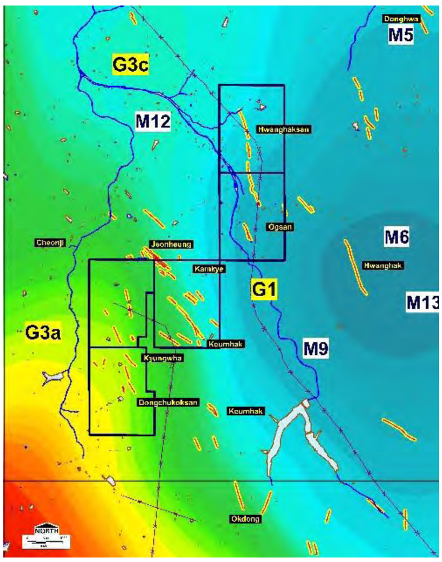
Magnetics- Total Field Map



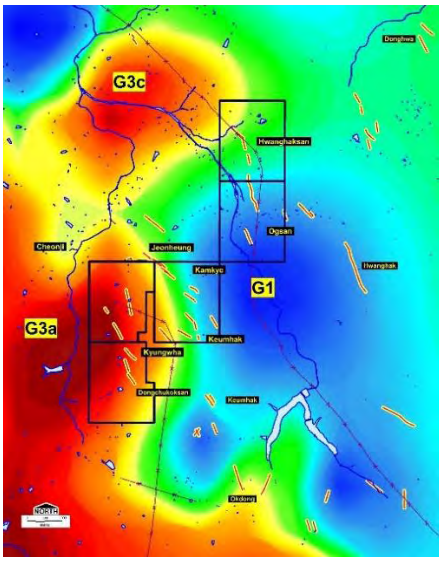
Magnetics - Reduced To Pole

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

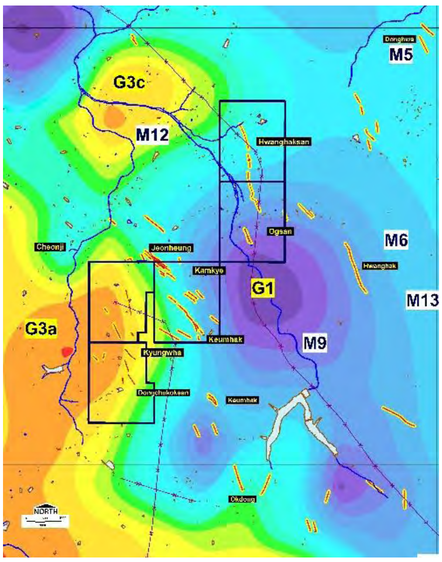
A series of >12mgal gravity highs (**G3a**, **G3c**) occur within the sediments of the Jeomgog Formation, but there is no obvious geological explanation for this anomalism. Anomaly **G1** is a <6mgal gravity low anomaly located south of Ogsan/east of Kyungwha and nearly coincidental with the **M9** magnetic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



Bouguer Gravity Anomaly Map



Gravity – 1st Vertical Derivative



Gravity – 2nd Vertical Derivative

Mineralization

Mineralization at Jeonheung-Kamkye mine consisted of a main 0.4-1.9m wide quartz vein, striking NW over a strike length of about 900m, dipping steeply at 70-80^o to the NE. The vein structures extend south-easterly towards the Kumhak North vein system, which has a further 400m strike length (Choi & So, 1992). Vein mineralization is mapped on the surface, in adits and drill holes from elevations of 450masl down to below 200masl, indicating a vertical extent of >250m.

The quartz veining is multi-phase and banded, 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 Jeonheung (Choi et al, 1992) and Kamkye (Lee & Kim, 1992) indicate a complex history of “boiling” of hydrothermal ore fluids, which deposited mineralization at temperatures of 240-380^{o}C from fluids with salinities of 0.7-8.4 wt.% NaCl. An over-pressuring, brecciation-fracturing event occurred, followed by cooling and dilution of hydrothermal ore fluids with oxidising meteoric waters. 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 also tend to act as a lithological trap for hydrothermal fluids. Ruptures occur during the interaction with strike-slip dilational and anti-dilational fault jogs during seismic activity in the epithermal environment (Sibson, 1989). Within this frictional regime, fault brecciation processes can localise chimney pipes by the sudden creation of cavities and intense fluid-pressure differentials during ruptures propogated along dilational jogs. Violent localized boiling may be triggered and result in gold deposition related to sudden pressure drops and fluid mixing.

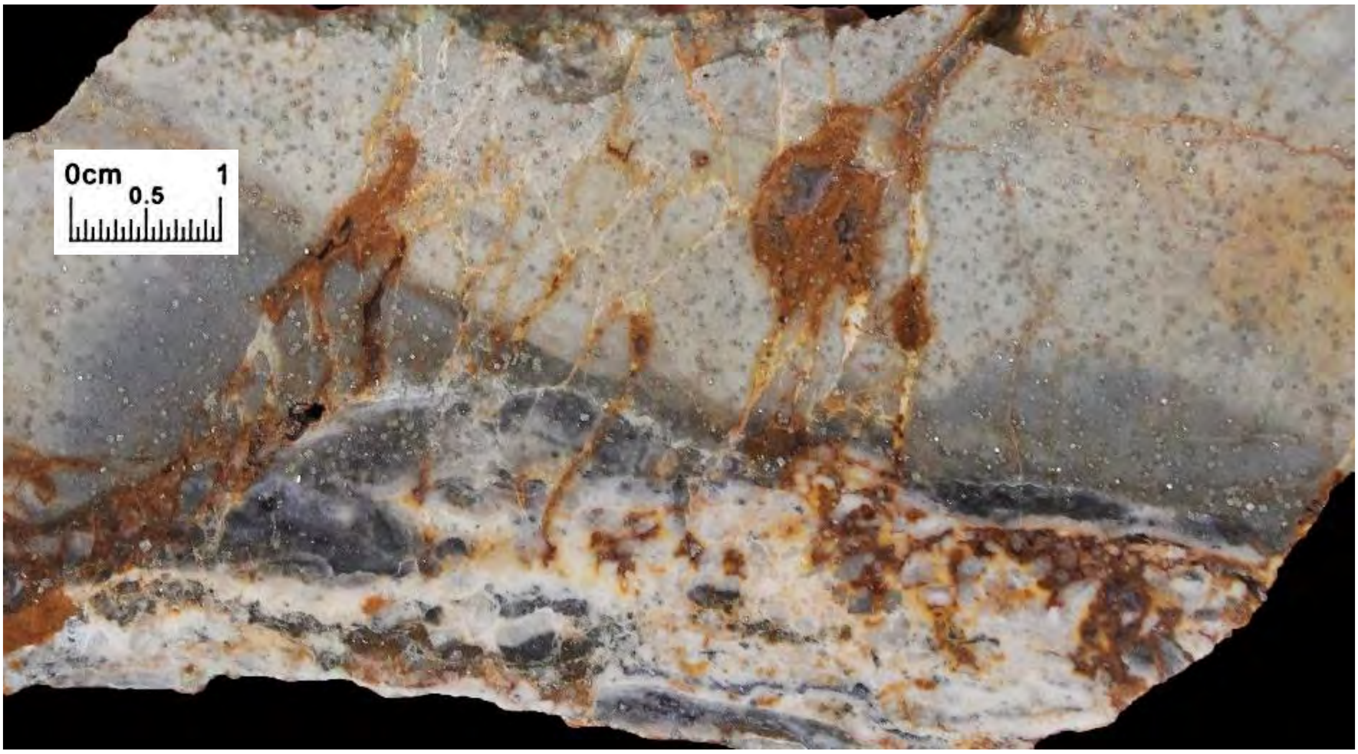
Alteration

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).

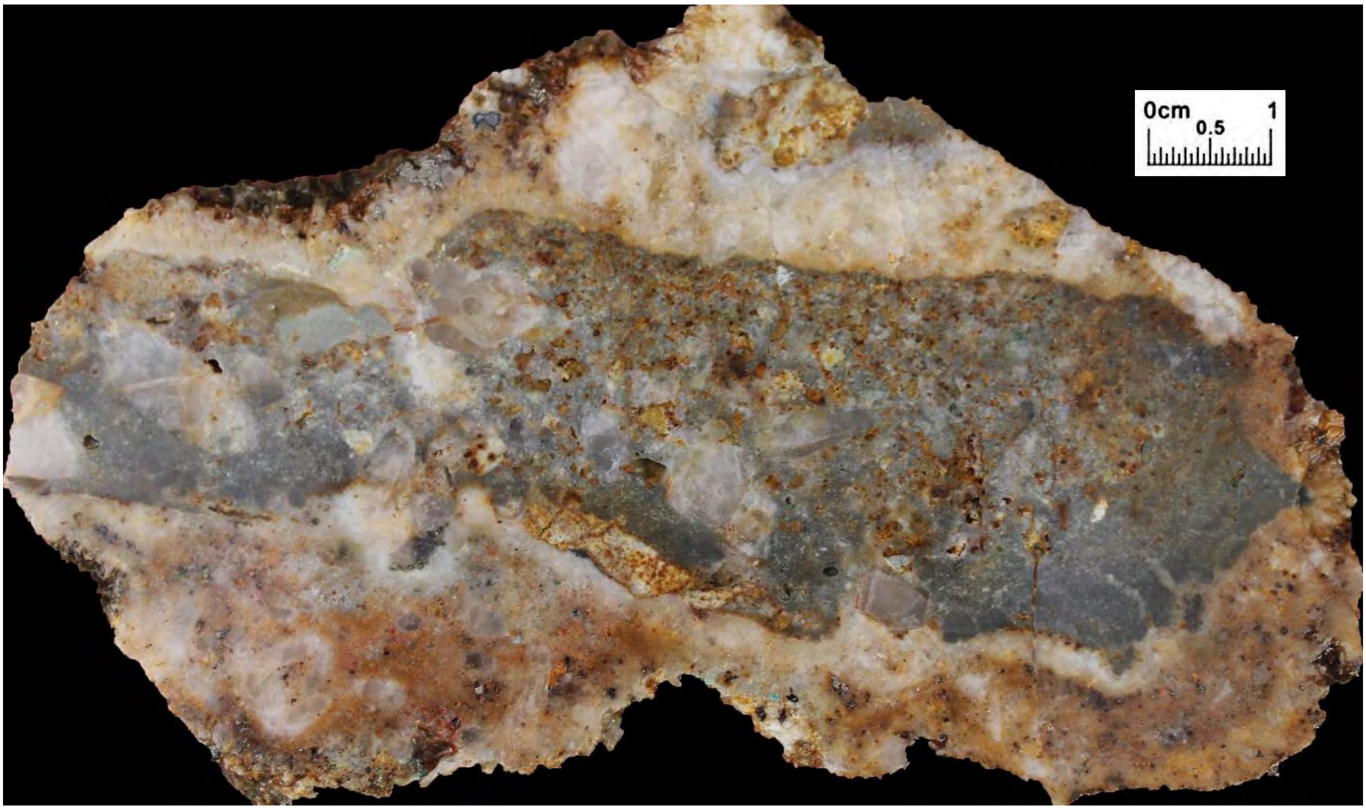
The observed alteration is consistent with an intermediate argillic alteration assemblage in an epithermal environment.

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



Banded quartz vein breccia (2cm wide), hosted within fine-grained grey sandstone, Jeonheung mine dump. Pyrite and pyrrhotite (probable reactive brown oxidation siderite? staining) occur within in the breccia, with bands of galena on the vein margins. Fine pyrite cubes are disseminated within the sandstone. Sample 155505: 0.05g/t Au, 8g/t Ag, 0.13% Cu, 0.57% Pb, 9.27% Zn, 228ppm As, 340ppm As, 43ppm Sb, 68ppm Mo.

Disseminated sulphides hosted within fine-grained volcanolithic sandstone (purple hematite matrix) of the Jeomgok Formation, Jeonheung mine dump. The sulphides consist of pyrrhotite, pyrite and chalcopyrite, with minor galena and sphalerite. Sample 155504: 0.04g/t Au, 71g/t Ag, 0.87% Cu, 0.20% Zn, 408ppm Mo.



Banded hydrothermal quartz vein breccia, Jeonheung mine dump. Zonal quartz grains with some open cavities (partially infilled with kaolinite clay) occur with white comb quartz bands with a core of grey fine-grained, cryptocrystalline quartz. Fine-grained sulphides of pyrite, chalcopyrite, galena and black sphalerite occur in small cavities dispersed through all the vein phases. Sample 155503: 0.07g/t Au, 17g/t Ag, 0.17% Cu, 0.49% Pb, 661ppm Zn, 176ppm Mo.

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

Conceptual Model - Intermediate-Sulphidation Epithermal Mineralization

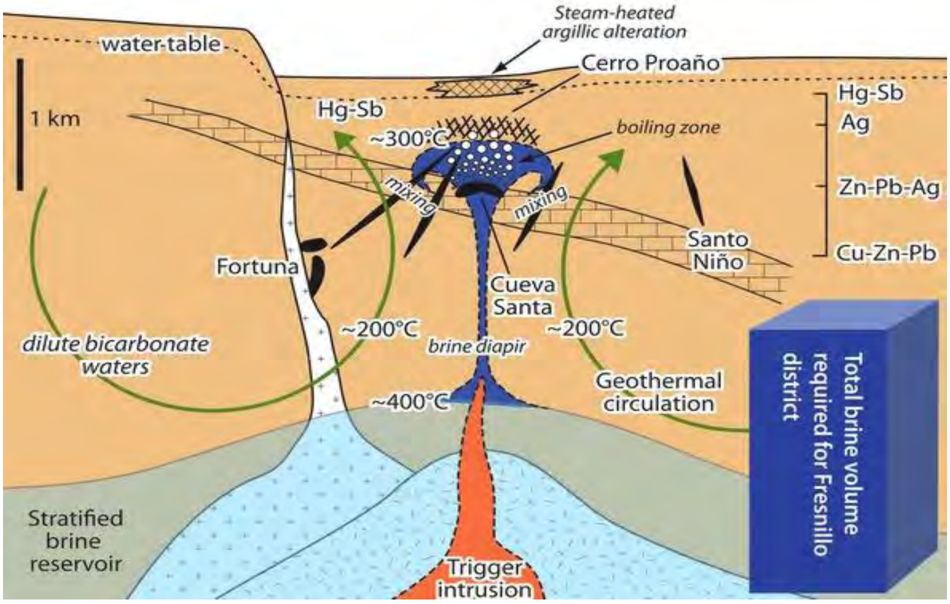
Intermediate-sulphidation ("IS") epithermal style polymetallic Ag-Au deposits in Mexico occur as fissure vein-Ag-rich deposits in the Fresnillo, Zacatecas, Guanajuato and Palmarejo mining districts. Although more than 48,000 tonnes of silver have been mined since 1553, resources have increased substantially 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:

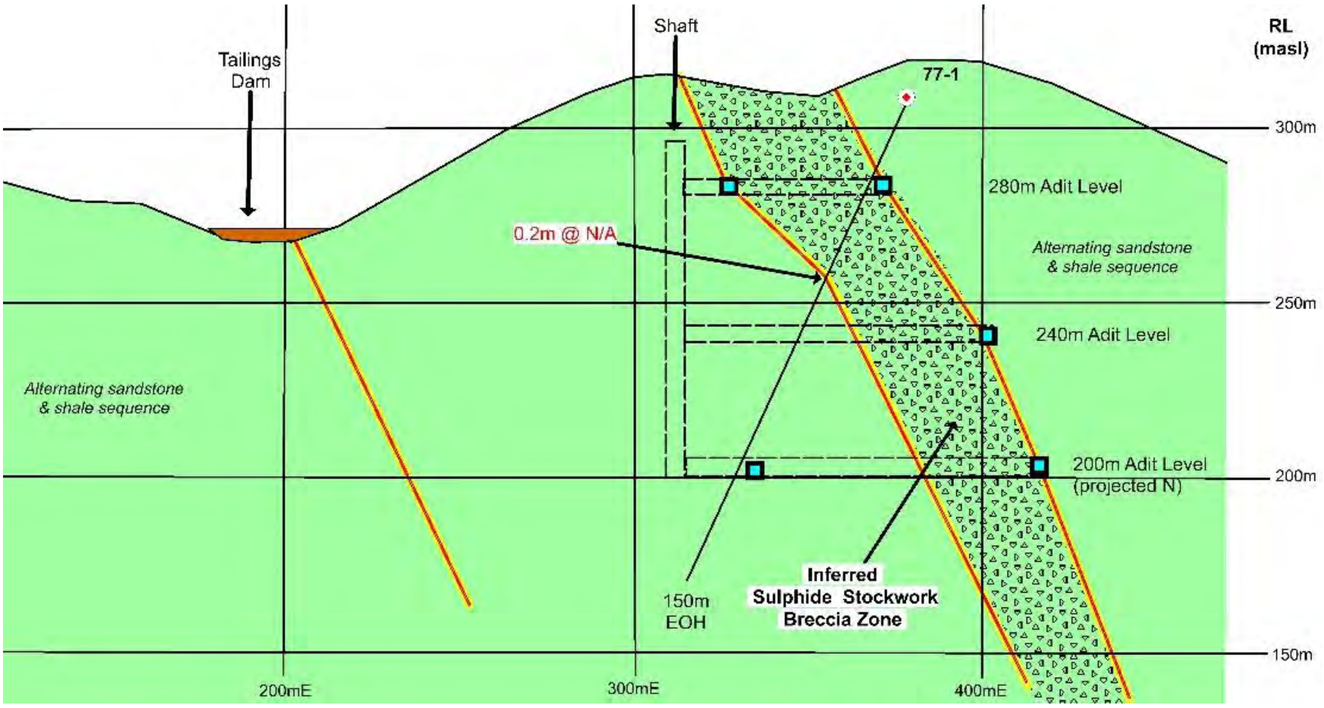
- Surface expression is a subtle barren argillic cap that sits above 'blind' mineralization.
- The veins barely reach the surface, forming a wispy seditious zone below the barren cap.
- Mineralization is hosted in veins, stockworks and breccias. The veins can balloon out in size up to 10m in width.
- 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.



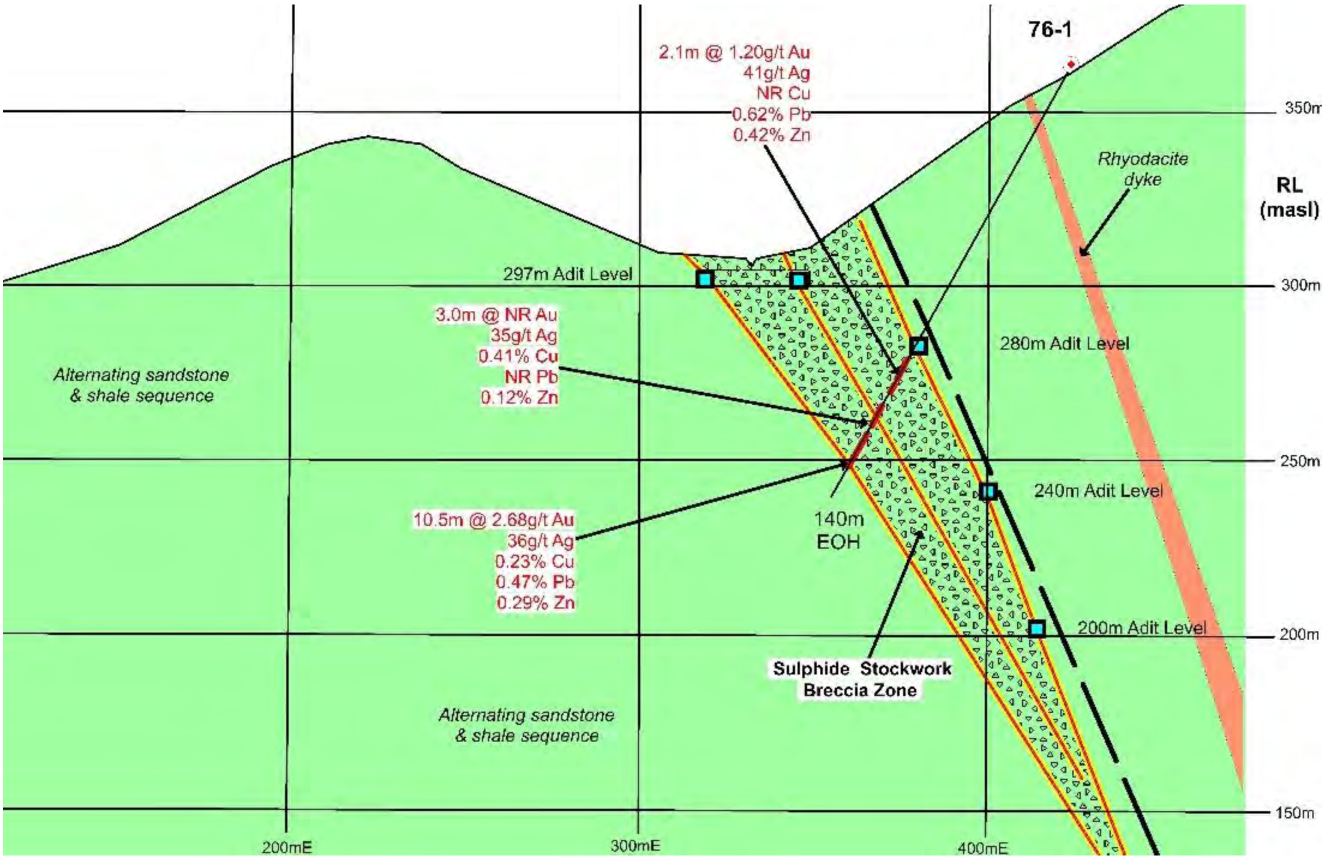
Mexican Style Au-Ag-Cu-Pb-Zn Epithermal Mineralization Model (after Williams et al, 2013).

Drilling (Historical)

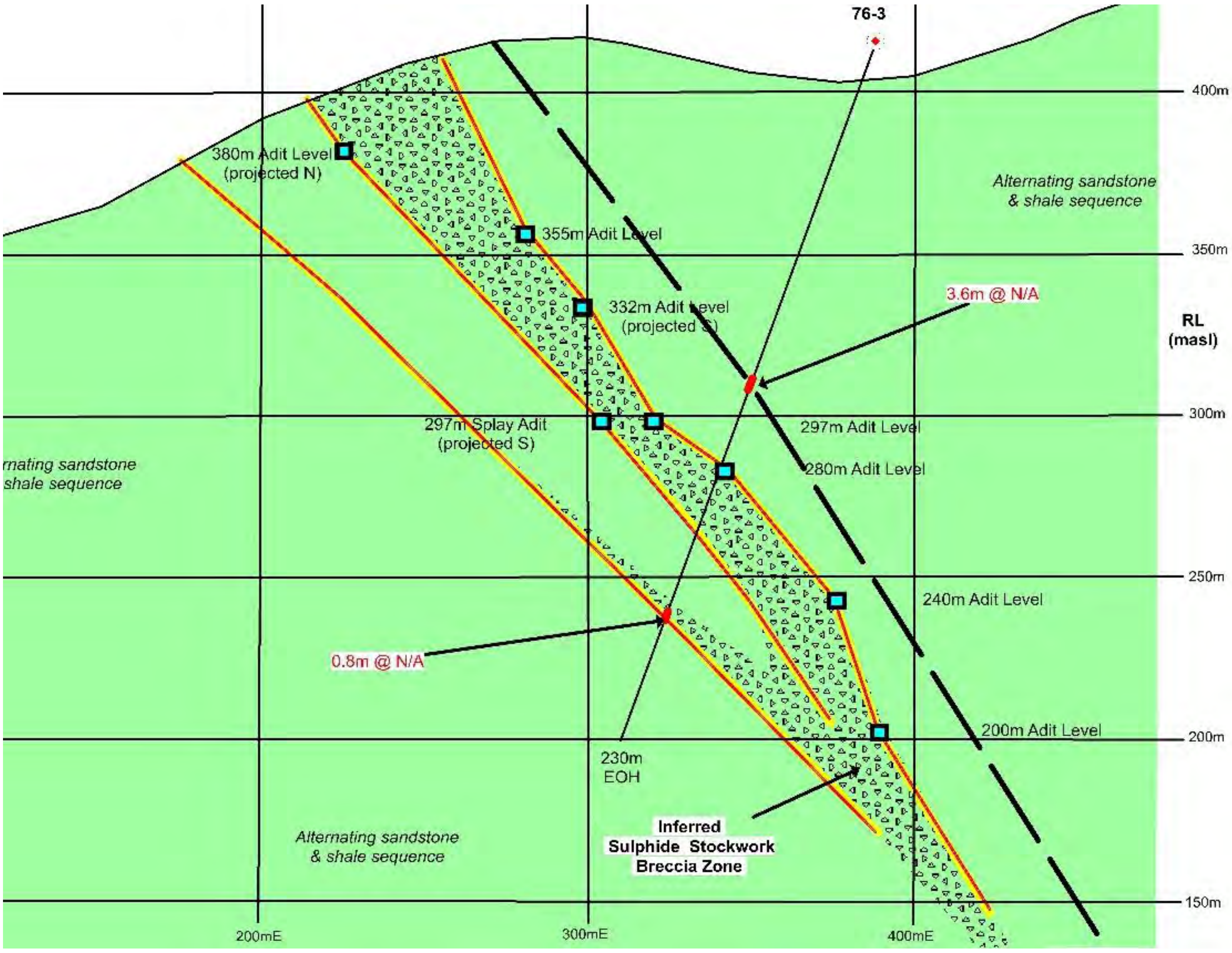
During 1976, 3 diamond drill holes were completed on the Jeonheung-Kamkye mine area for a total of 500m of AX diameter core (KMPC 1976). Another 2 holes were drilled in 1977 for a total of 450m of core (KMPC, 1977). Significant Au-Ag-Cu-Pb-Zn mineralization was intersected in several holes, as indicated in the Plan and Drill Sections below. At the Kumhak North prospect, located along strike to the SE from Gamkye, another 4 holes were drilled to test 2 subparallel vein structures (refer Drill Sections below). 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. In addition, Cu was not routinely assayed, although rock chip sampling by KME indicates that it is present. Mineralization is open in all directions.



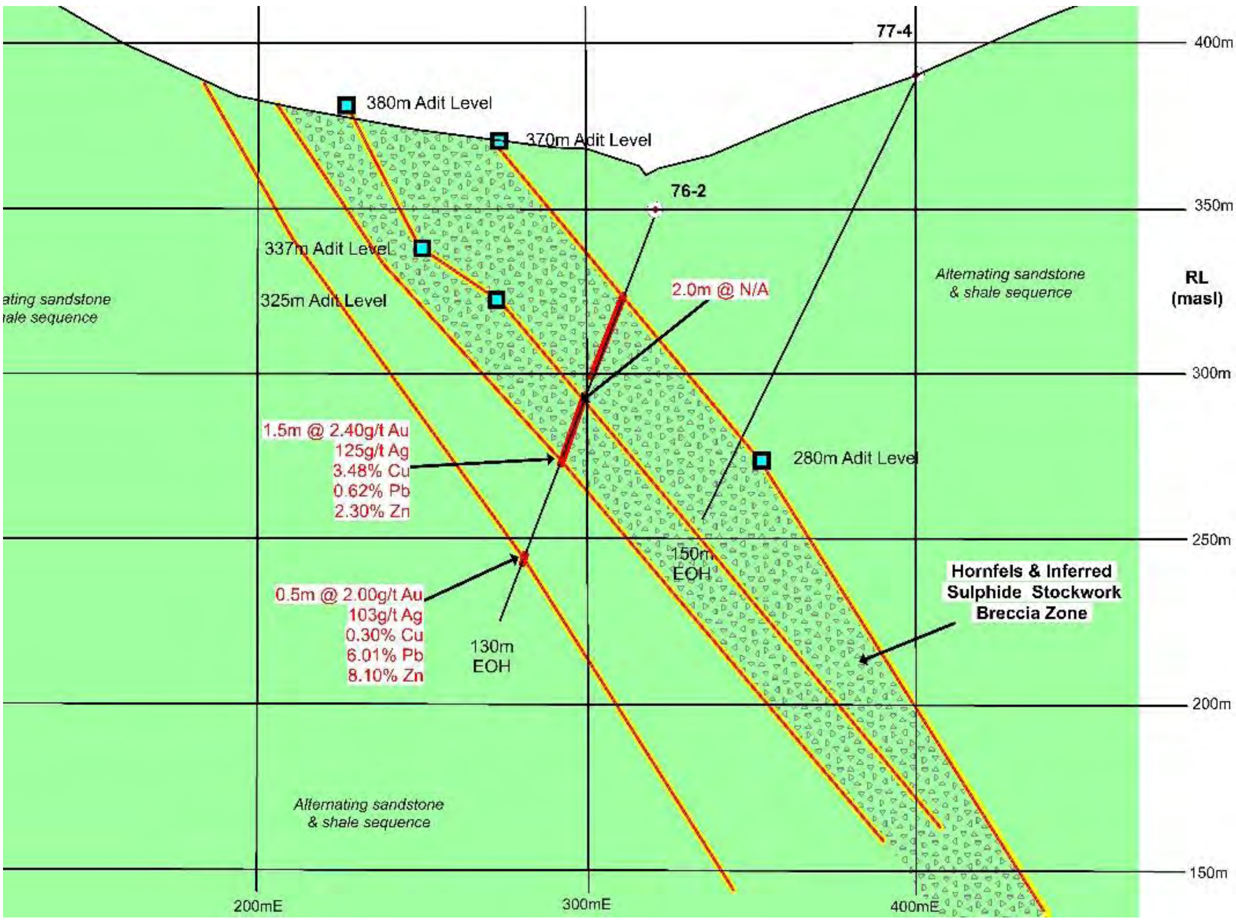
Jeonheung Drill Section 1600 North Looking NW. (Azimuth 245º).



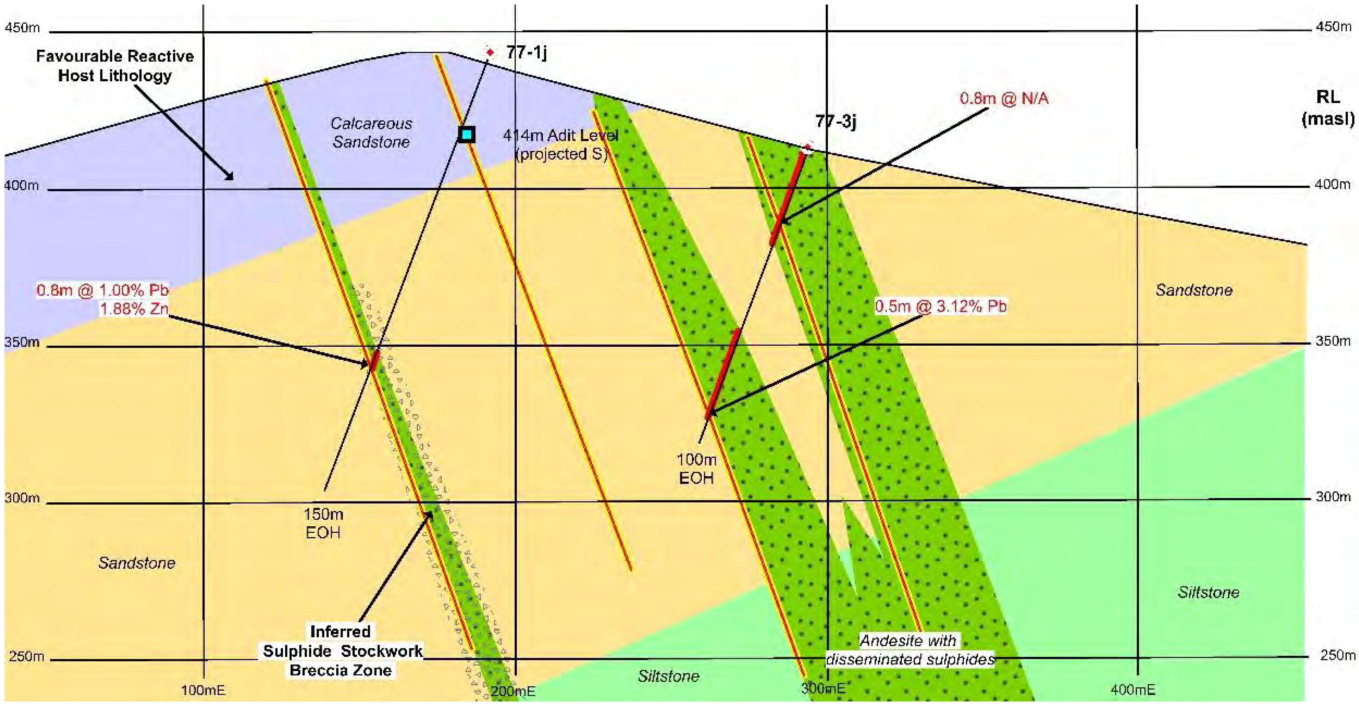
Jeonheung Drill Section 1400 North Looking NW. (Azimuth 245º).



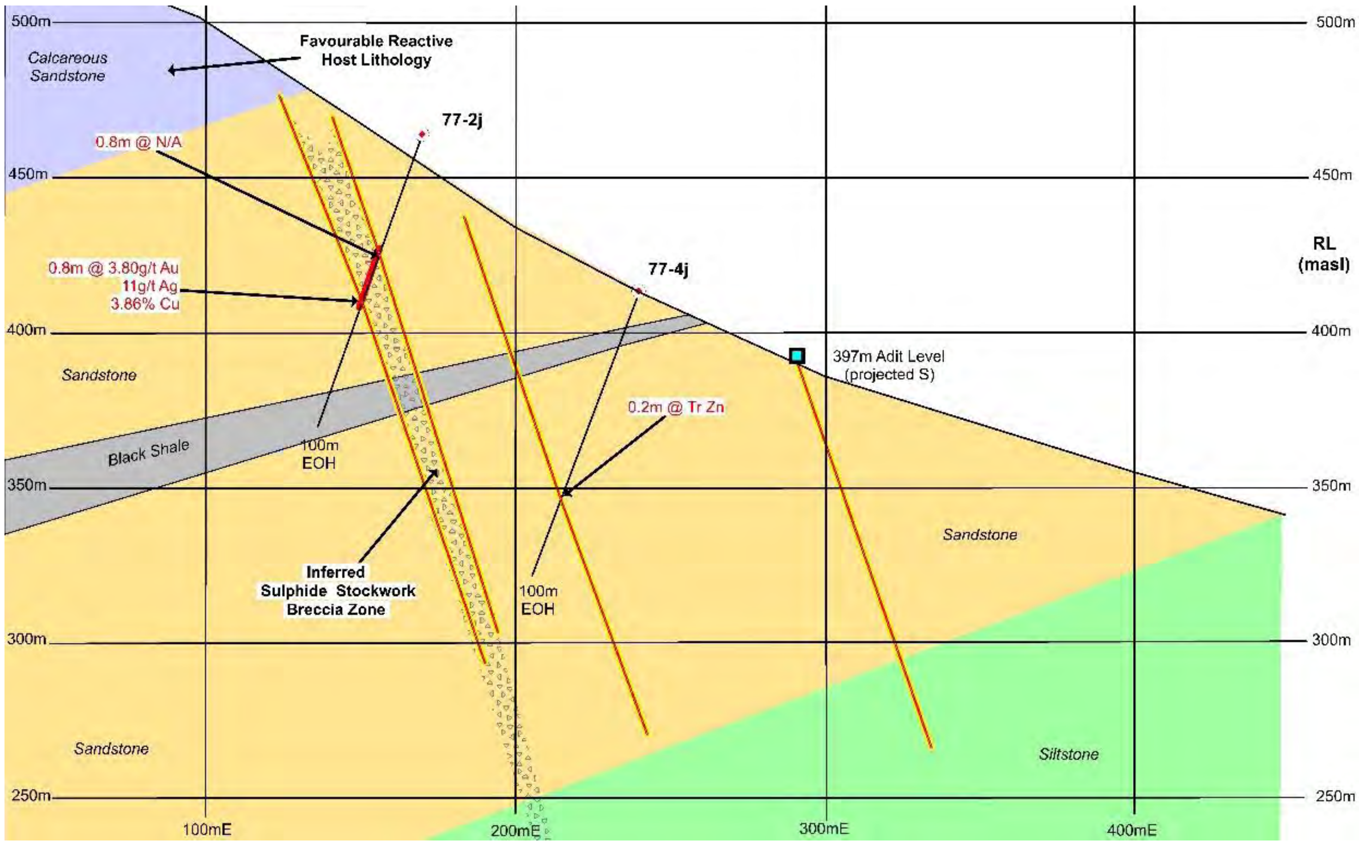
Jeonheung Drill Section 1200 North Looking NW. (Azimuth 245°).



Jeonheung Drill Section 1000 North Looking NW. (Azimuth 245°).



Kumhak North Drill Section 250 North Looking NW. (Azimuth 245°).



Kumhak North Drill Section 100 North Looking NW. (Azimuth 245°).

Resource Estimates

The *Korean Mining Promotion Corporation* (KMPC, 1978) estimated a mine resource[1] at the Jeonheung mine of 100,458 tonnes @ 165g/t Ag, 2.10% Cu, 2.44% Pb, and 4.40% Zn, using sampling of the underground adits (Se-Woo Mining, 2008). In addition to this resource, KIGAM reported there was "mine reserves" of about 1,000,000 tonnes of mixed oxidized-sulphide ore at Jeonheung, but didn't specify grades (Hwang & Yang, 1977). **Cautionary Statement: These mineral resources are "historical" and do not comply with current JORC or NI-43-101 reporting standards**.

Senlac Geological Services Pty Ltd (2017) compiled a drilling database from the historical drilling data. The Jeonheung-Kamkye vein structures can be traced over a strike length of 900m, varying in width from 0.1m up to 10.5m. 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 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 estimate is undiluted, so appropriate dilution needs to be incorporated in any evaluation of the deposit.

Senlac Geological Services Pty Ltd (2017) estimates an Exploration Target for the Jeonheung-Kamkye mine of **2,470,655 tonnes @ 1.90g/t Au, 39g/t Ag, 0.46% Cu, 0.67% Pb & 0.73% Zn**. This resource has contained metals of 150,908 ounces gold, 3,099,544 ounces of silver, 11,371 tonnes of copper, 16,466 tonnes of lead and 18,110 tonnes of zinc. The resource is near-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$414,125,008 (approximately US$168/t), using metal prices as of August 2017. The relative value distribution of the metals is 56.32% gold, 12.52% silver, 11.73% copper, 10.16% zinc and 9.28% lead. The contained metals are equivalent to 322,527 contained ounces, using August 2017 metal prices (refer Table Notes below). Corresponding metal equivalent grades are 4.06g/t AuEq, 308g/t AgEq, 2.60% CuEq, 7.18% PbEq and 5.40% ZnEq.

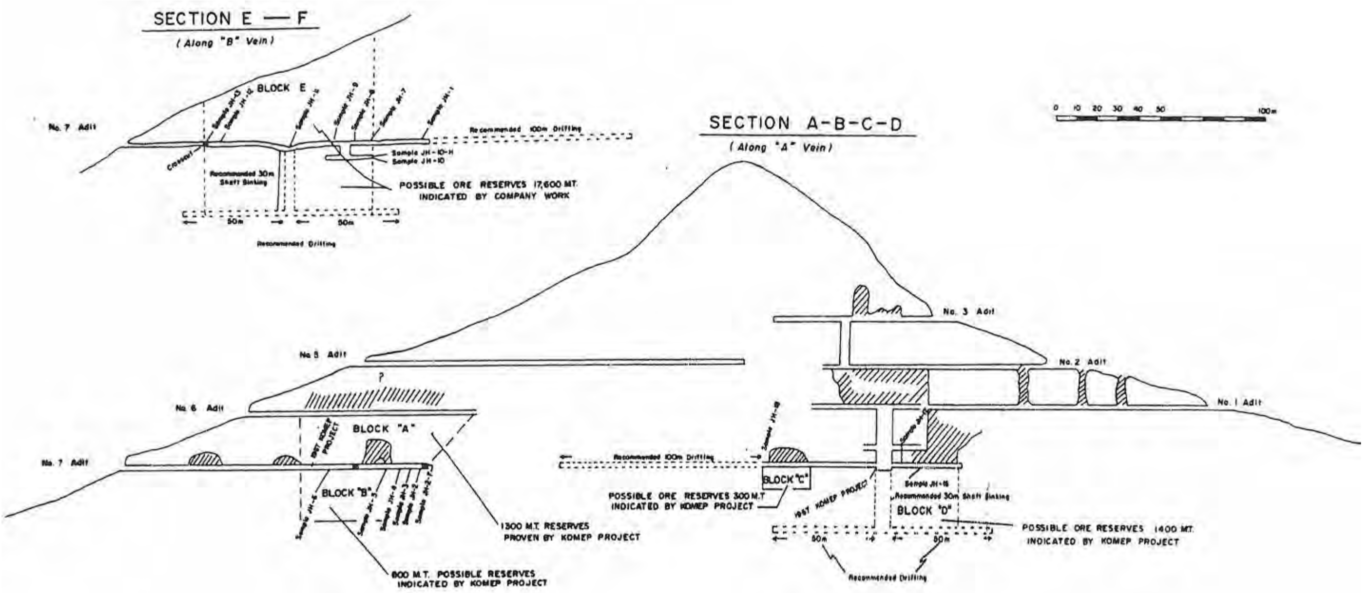
Significant Mineralized Drill Intersections & Resource Estimate, Jeonheung-Kamkye Mine.

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 (m³)	SG (g/cc)	Tonnes (t)
76-1	2.5	2.41	1.20	41		0.62	0.42	219	200	109,500	2.75	301,125
	3.0	0.78		35		0.41	0.12	219	200	131,400	2.75	361,350
	10.5	3.99	2.68	36	0.23	0.47	0.29	219	200	459,900	2.75	1,264,725
76-2	1.5	11.56	2.40	125	3.48	0.62	2.30	195	200	58,500	2.75	160,875
	0.5	13.32	2.00	103	0.30	6.01	8.10	195	200	19,500	2.75	53,625
76-3	0.8								200		2.75	
76-4	0.5	3.02				1.44	2.93	124	200	12,400	2.75	34,100
	0.2	0.66				0.21	0.72	124	200	4,960	2.75	13,640
	0.2	1.72				0.62	1.82	124	200	4,960	2.75	13,640
	0.1	0.97				0.15	1.17	124	200	2,480	2.75	6,820
	1.0	2.71				0.72	3.06	124	200	24,800	2.75	68,200
77-1	0.8	1.98				1.00	1.88	147	200	23,520	2.75	64,680
77-2	0.8	9.96	3.80	11	3.86			159	200	25,440	2.75	69,960
77-3	0.5	1.76				3.12		147	200	14,700	2.75	40,425
77-4	0.2	10.21	10.20				0.01	159	200	6,360	2.75	17,490
TOTALS		4.06	1.90	39	0.46	0.67	0.73		200	898,420	2.75	2,470,655

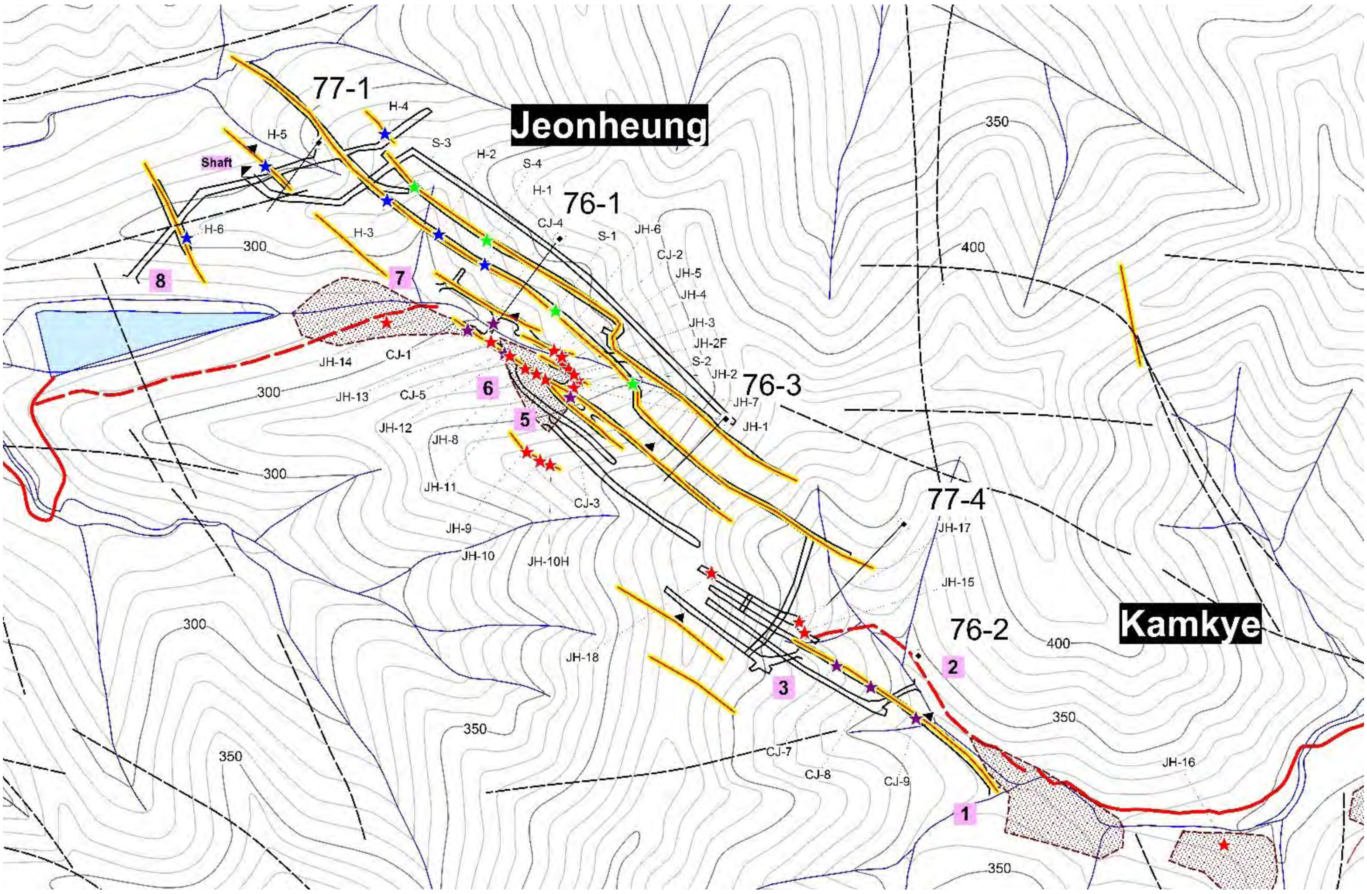
NOTES:

- 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.
- N/A = Not Assayed
- 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 may carry some low grades.

[1] **Cautionary Statement: These resources were classified based upon the *Korean Mining Promotion Corporation* and *Korean Institute of Energy Resources* resource estimation classification scheme and reporting nomenclature. The resource estimates are historical and do not comply with current NI-43-101 or 2012 JORC Code reporting requirements.**



Long Section of the Jeonheung-Kamkye Mine Workings, with sampling and estimated resources prior to commencement of mining operations (after KMPC, 1978). The hatched area is the mined stopes.



Surface Projection of the Jeonheung-Kamkye Mine Workings, with underground sample locations and drill holes.

Capped Tailings Storage Facility at Jeonheung, with a water monitoring device on the drain collecting runoff at the MIRECO metals recovery and mine water treatment plant. The mine tailings probably contain a low-grade resource that could be exploited in any future development at the project.

Metallurgical Testwork

The *Korean Research Institute of Geoscience and Mineral Resources* ("KIGAM") (Hwang & Yang, 1977) developed the flow sheet circuit for the 100tpd selective flotation mill at Jeonheung. The Jeonheung ore sample tested assayed 2.75% Pb, 6.31% Zn, 1.21% Cu, 0.3g/t Au, 110g/t Ag, 10.3% Fe, with trace As and 8.18% S. Petrological examination indicated the ore consisted of chalcopyrite, galena, sphalerite, pyrite and argentite, with azurite and malachite as the secondary minerals. Gangue minerals consisted of quartz, chlorite and clay. The grain size of mineralization ranged from 70-200µm, averaging 100µm.

Crushing tests used a jaw crusher (<¾") followed by a rolls crusher (<¼"), then optimum grinding to -65# (-212µm) using a rod mill. Heavy minerals were concentrated using a *Wifley Table*. Conventional flotation used a Denver Sub-A Flotation Cell. The pH conditioning was varied from pH 5-11 using chemicals H_2SO_4, Na_2CO_3 and variable dosages of NaCN. These tests indicated higher concentrate grades were achieved under alkaline conditions, but best recoveries were achieved under neutral pH conditions. The use of NaCN was found to be ineffective.

KIGAM (Hwang & Yang, 1977) identified a resource of about 1 million tonnes of oxidized ore (grades not stated) present at Jeonheung, which could not be recovered using the selective flotation method used in the 100tpd mill operated at the mine. Heated flotation was trialled on the oxidized and partially oxidised Pb-Zn-Cu ores and this method was able to recover a lead concentrate (58.3% Pb), a zinc concentrate (54.2% Zn) and a copper concentrate (19.40% Cu), with overall recoveries of 89.1% Zn, 73.0% Pb and 63.7% Cu. Test conditions were neutral pH 7, temperatures of 80-85°C, $NaSO_4$ dose of 50-200g/t, Na_2CO_3 dose of 0-1000g/t, NaCN dose of 0-1000g/t and Aero 404 flotation agent dose of 10g/t.

It is likely modern sequential flotation and/or leaching methods would achieve better concentrate grades and recoveries.

Rehabilitation Activities

The dumps and workings at Jeonheung-Gamkye mine were subsequently rehabilitated by the *Korea Mine Reclamation Corporation* ("MIRECO"). Topsoil cover and revegetation of the mine dumps, workings and tailings was completed and an active water treatment facility installed on the creek draining the Jeonheung workings.

Dried filter cake is collected via a series of evaporation ponds at the treatment plant and regularly removed for offsite metal recovery and proper disposal. The MIRECO facilities could be potentially useful for any future mining operation at Jeonheung.

View looking west of concrete drain and revegetated hill.

The MIRECO-operated water treatment, evaporation ponds and solids air-dying station at Jeonheung.

Development Potential

Mineralization at Jeonheung-Kamkye consisted of at least 3 NW striking veins over a 900m strike length. These veins probably connect with the Kumhak North vein system to the SE, which has a further 400m strike length. Significant drill intersections were recorded in historical drilling (conducted during the 1970s), from which it is possible to estimate a potential Exploration Target for the Jeonheung-Kamkye mine of 2.47 million tonnes @ 1.90g/t Au, 39g/t Ag, 0.46% Cu, 0.67% Pb & 0.73% Zn (Sennitt, 2017). Drilling intercepted a 45m thick interval with 2-6 vein breccias and disseminated sulphides that were not assayed.

The Jeonheung veins are clearly of epithermal origin and 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 vein system and surrounding area warrants further exploration, including geological mapping, soil geochemical survey, geophysical survey and infill drill testing using experienced personnel familiar with modern methods and concepts. An initial 6 holes (300m spacing) for 900 metres is recommended to confirm the historical drill results and estimate a JORC inferred mineral resource at Jeonheung.

The Exploration Target resource identified at Jeonheung is potentially exploitable as a satellite mine, trucking "flash flotation" sulphide and gravity concentrates to a central mill facility for sequential flotation and/or vat leach processing. The steeply-dipping vein mineralization is amenable to mining using the *Sustainable Mining by Drilling* method using Pile Top Reverse Circulation Drills.

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.*