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Dongil Cu-Au-Ag-Pb-Zn prospect

Technical Summary

The Dongil Au-Cu-Ag-Zn-Pb prospect is the priority gold-copper-silver deposit of *Korean Metals Exploration Pty Ltd* ("KME"). Dongil lies within the Uiseong mining district of Gyeongsangbuk-do Province, about 4km southeast of Uiseong.

Historical exploration by the *Korean Mining Promotion Corporation* ("KMPC") during the 1970s located significant polymetallic mineralization at Dongil, but there has been no modern exploration conducted on Dongil since 1980. KME has been exploring the district since 2015 and holds the mining rights over a portfolio of projects in the district.

Mineralization consists of quartz veins and chimney breccia pipe, surrounded by fracture stockworks and disseminated sulphides, traced over a 1800m strike length, with vertical depth of >450m. Mineralization is associated with a rhyodacite lava dome emplaced into lacustrine sediments of Cretaceous age. The polymetallic Au-Ag-Cu-Pb-Zn mineralization at Dongil is classified as intermediate-sulphidation epithermal style, depositing at shallow-deep epithermal levels (200-1000m).

KME believes there is excellent potential for a mining and milling operation centred on Dongil, with good potential for additional ore sourced from satellite mining operations in the surrounding area from similar style deposits at Ogsan, Jeonheung, Kyungwha and Keumdongchilbo (refer separate Technical Summaries).

Local Infrastructure

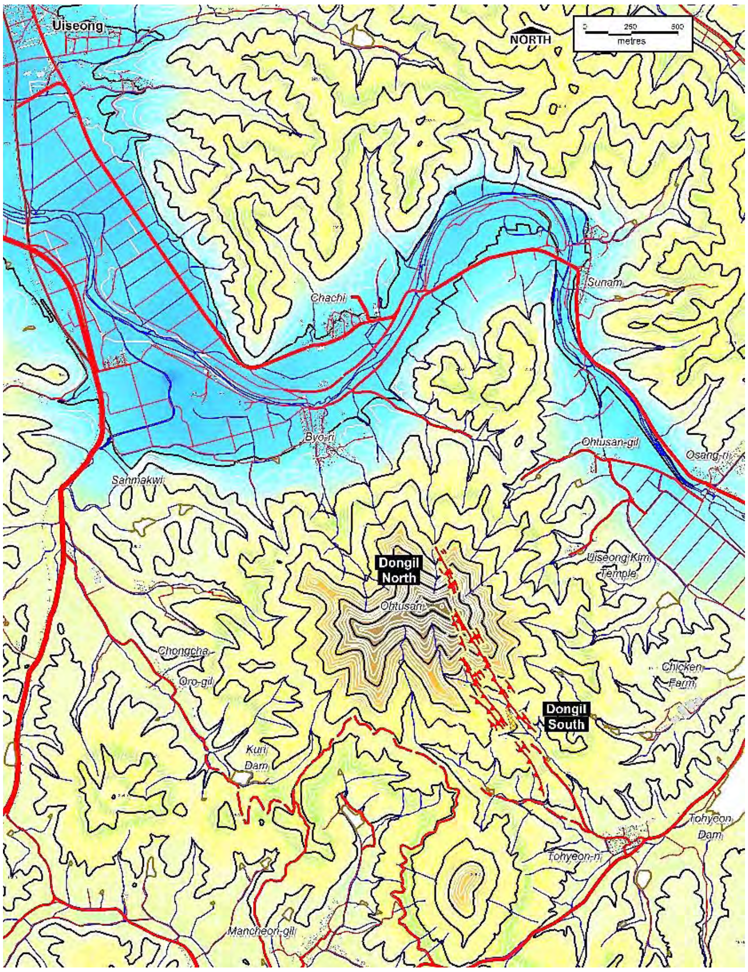
Uiseong town is a 3½ hour drive from Seoul using the *Jung-Ang Expressway*. The prospect area is easily accessible by sealed road from Uiseong. Uiseong (population 56,000) is a rural town, featuring good infrastructure, including engineering and machinery repair facilities and hardware shops to support the agriculture-dominated local economy, as well as good accommodation and a wide variety of restaurants.

Land-use on the low-lying areas is dominated by agriculture, in particular garlic, paddy rice, apple orchards, watermelon, pear and grape fruit-growing. Several small farming villages surround the project area, including Tohyeon-ri, Ohtusan-gil, Mancheon-ri and Byo-ri.

The villages are served by a good network of local powerlines and paved roads. 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 lies to the south of the perennial Namdaecheon-gang River, which flows north-westerly. Hilly terrain is prevalent in the south and east, with elevations rising from 95masl in the river climbing to 475masl at Ohtu-san.

Most of the small creeks draining the prospect area (radial pattern) have small rock-wall dams installed to capture June-August "wet season" rainfall runoff and used mainly as a water supply for local farms.



Digital Topographic Map of the Dongil prospect.

Historical Mining Activities

The Uiseong district formed a central part of the ancient Seorabeol Dynasty (1st Century BC), known as the 'Bronze Age' in Korea. Skilled metal-working using gold, silver, copper and iron is a feature of this dynasty taht was centred at Jumunguk, located 8km SW of Dongil. Based on proximity, the likely source of these metals was Dongil or Ogsan, but no records exist.

Se Woo (2008) indicates Japanese interests acquired the mining rights over Dongil in 1926 and undertook limited mining activities. The mining rights reverted back to the Korean government in 1945 at the end of WW II. Korean private interests acquired Dongil in 1966 and at least 3 adits and levels were excavated in 1968. At the southern Dongil mine (also known as the Tohyun or Kunwi mine), two subparallel adits were driven in a NNW direction following two veins. The Western Adit was driven along the *Central Vein* structure at an elevation of 230masl for a distance of 370m. The East Adit (aka Main Adit) was driven along the *East Vein* structure at an elevation of 225masl for a distance of 550m.

At the northern Dongil mine (also known as the Ohtu mine), an inclined adit (180masl) was driven down dip to follow stratiform volcanoclastic/rhyodacite-hosted disseminated sulphide mineralization for at least 40m. Although support pillars/props were left in the adit, the roof has partially collapsed to a narrow crawl space and is now considered too dangerous to enter.

Production from the Dongil mine during the period 1968-1973 was reported by Se Woo (2008) as about 4,740 tonnes of 5.5-15.0% Cu. Production figures were not reported for silver, lead and zinc, but typical mined ore grades were 68-151g/t Ag, 2.8% Pb and 2.55% Zn. Activities ceased in 1973 and subsequently, the dumps and workings have been rehabilitated by the *Korea Mine Reclamation Corporation* ("MIRECO"). Topsoil cover was placed on the mine dumps and workings and revegetation has been successfully completed.

View looking north of the East Adit portal, driven along the *East Vein* for 550m. Revegetated grass cover has been effectively established. A small gate has been erected by MIRECO to bar entry to the public, but the adit remains accessible for re-entry and sampling underground. The sandstone host exhibits intense vein and fracture stockworks, argillic clay alteration and limonite staining after sulphides.

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 Dongil deposit are anomalous in Cu, Ni, K, Na and eH. The creeks draining the rhyodacite dome intrusion are anomalous in Pb, K, Rb and pH.

Geology

Dongil is located within the Uiseong subbasin of the Cretaceous Gyeongsang Basin. The Dongil deposit is hosted in the middle Cretaceous Jeomgog Formation and the Sagok Formation, overlain by the late Cretaceous Chunsan Formation. The sequence has been intruded by rhyodacite lava dome (prominent circular feature) and likely provided the metals and heat to drive the Au-Ag-Cu-Pb-Zn mineralizing hydrothermal system. A surge pyroclastic rhyodacite tuff breccia (Unmunsa Rhyolite) forms a diatreme complex to the south and is also clearly associated with emplacement of the rhyodacite dome. The sedimentary sequence typically strikes east-northeast, dipping gently to the south-southeast, but then changes strike to surround and dip inwards into the diatreme vent suggesting it is probably a maar.

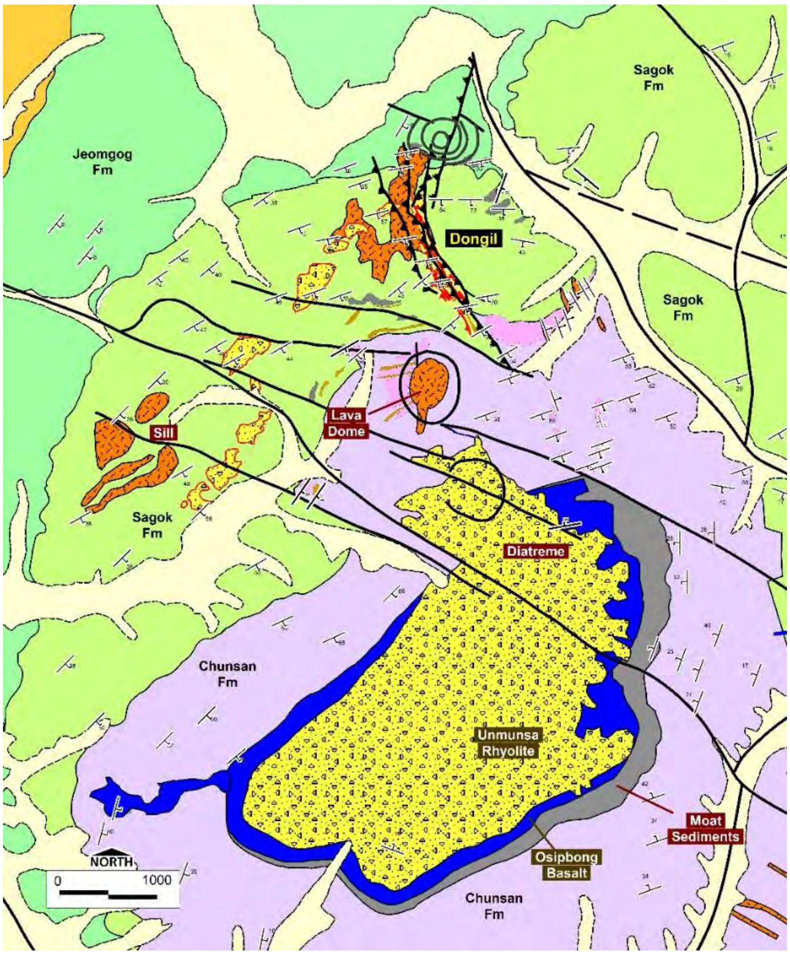
The Jeomgog Formation consists of light to dark green and grey coloured alternating shale and sandstone, with minor black shale and conglomerate.

The Sagok Formation consists mainly of fine-coarse-grained, light to dark grey, pale brown or green coloured volcanolithic sandstone. Colour variations probably reflect the palaeo reducing or oxidizing fluid conditions of the prevailing hydrothermal fluid.

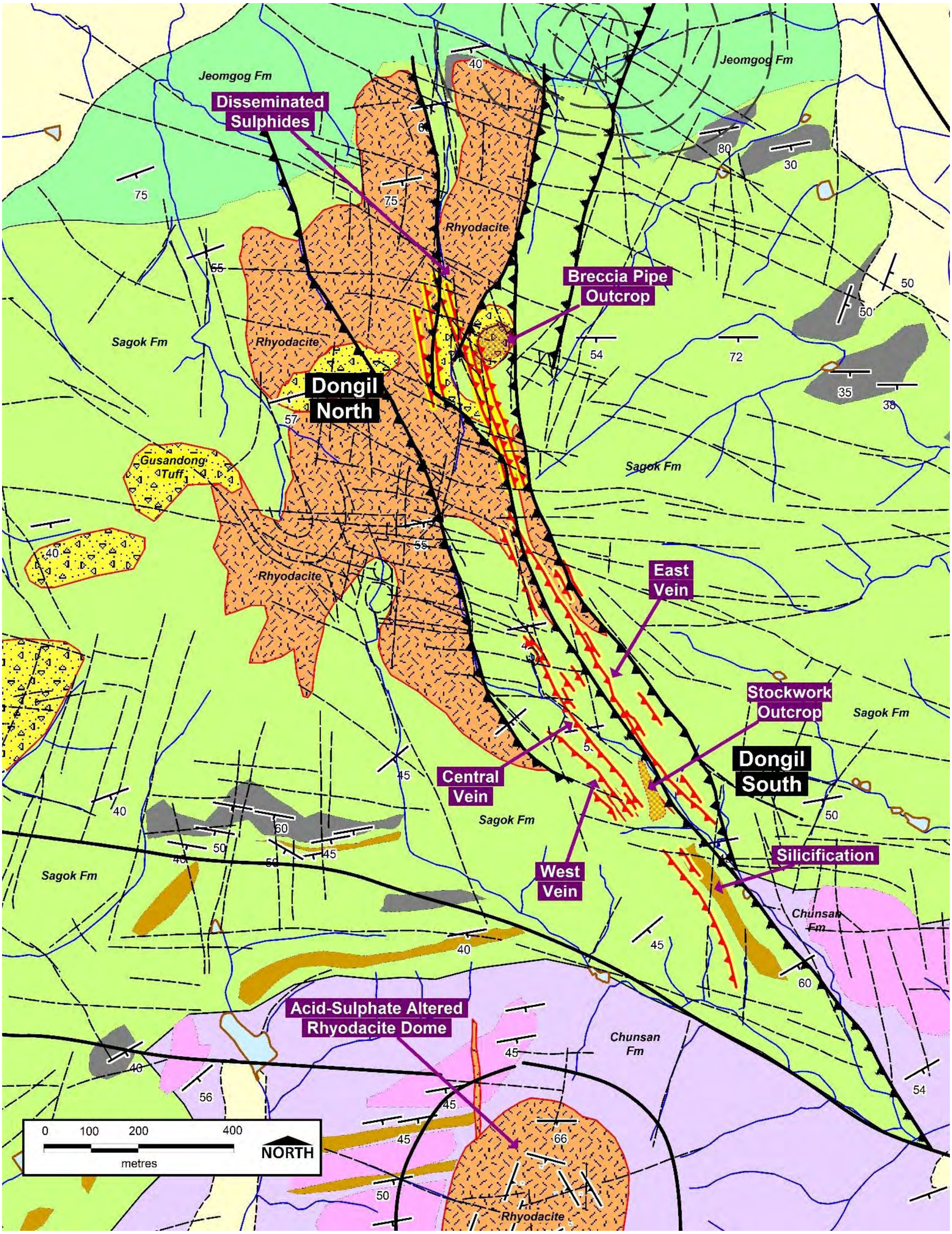
The Gusandong Tuff is interbedded within the Sagok Formation and consists of rhyodacite ignimbrite tuff breccia. the unit thickens towards the inferred “chimney breccia pipe” at Dongil, suggesting it was a source.

The overlying Chunsan Formation is dominated by lacustrine mudstones, stromatolitic limestones, marl, black shale, sandstone and green siltstone. The unit is interpreted as a mudflat, shallow-lake margin depositional environment, under prevailing semi-arid palaeo climatic conditions.

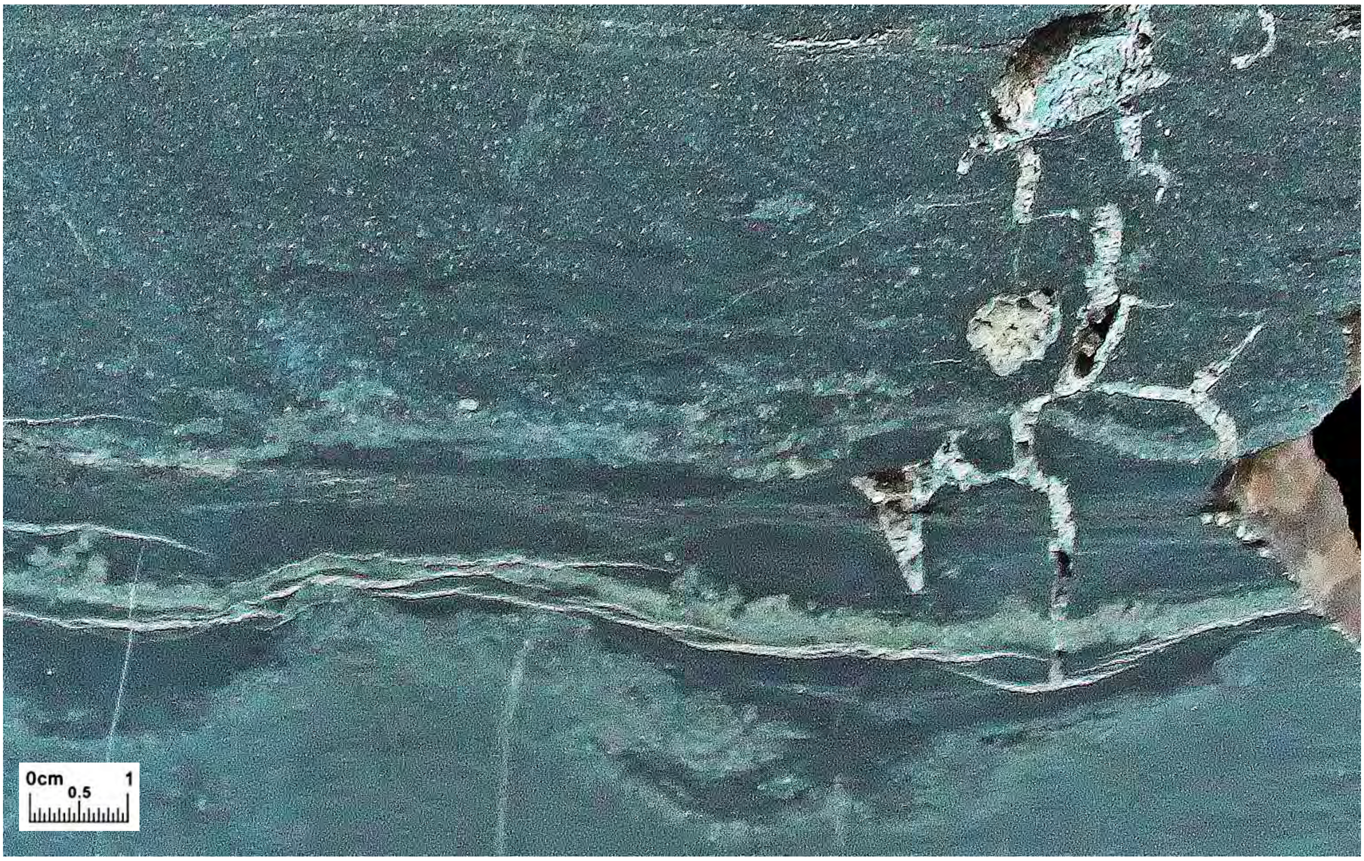
In the Dongil area, the Chunsan Formation has been intensely altered to purple hematite, interpreted to be a paleo thermal oxidation alteration process.



View looking southwest of the advanced argillic altered rhyodacite lava dome, located south of Dongil. The intrusion forms a prominent plug-like circular feature with radial drainage pattern. The related Geumseongsan diatreme complex is visible in the distance at left.

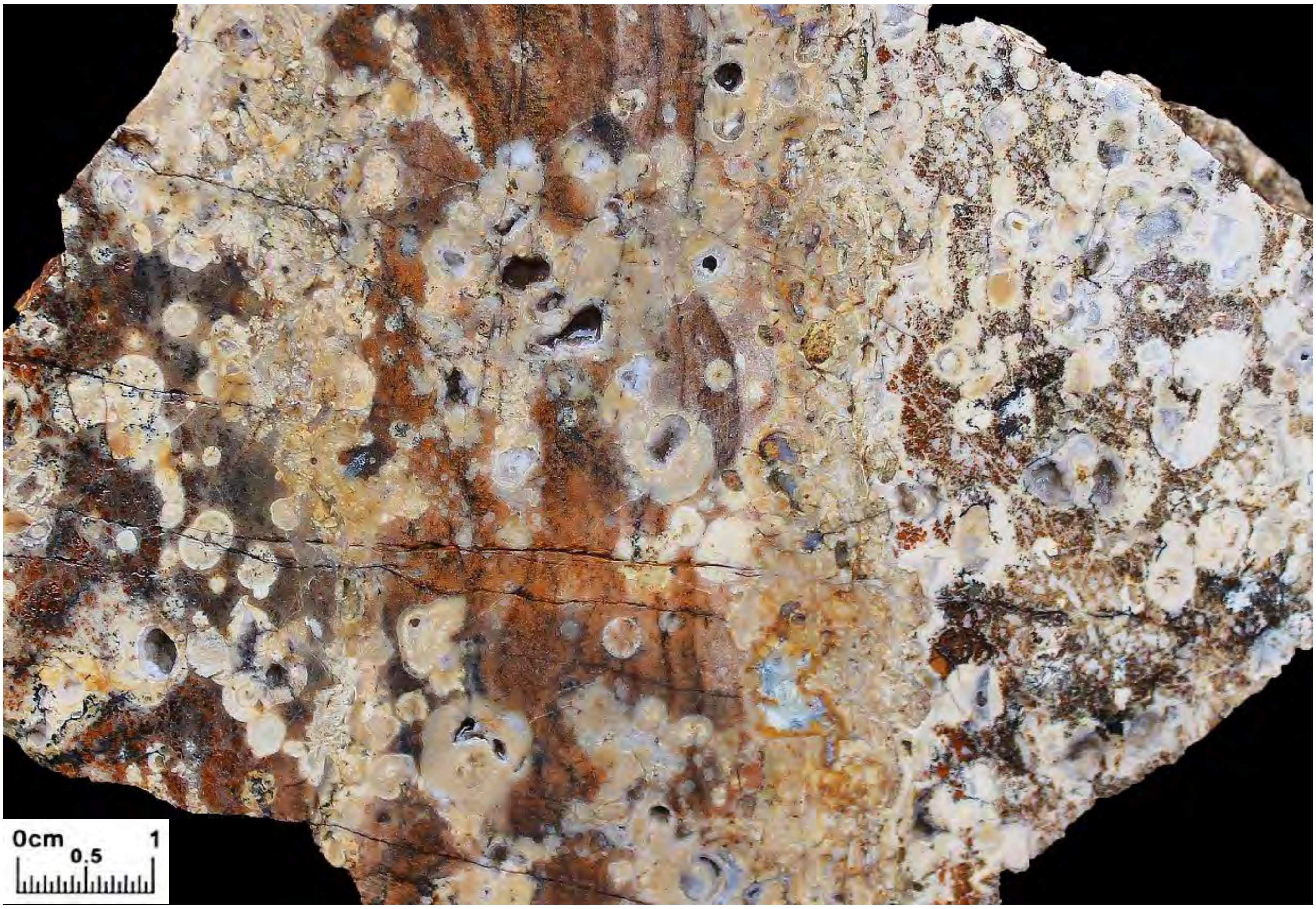


Geological Map, Dongil. The geology of the Dongil prospect comprises an east-west striking, moderately dipping sequence of black shale, siltstone, interbedded tuff (Gusandong Tuff; yellow) and volcaniclastic sandstones of the Sagok Formation, which are overlain by purple siltstone-and mudstones of the Chunsan Formation. The sequence has been intruded by rhyodacite dome-dyke system along an interlinked NNW fault system, with a breccia pipe vent related to Gusandong Tuff. The rhyodacite dome is the likely heat engine and magmatic source of the metal-bearing mineralizing fluids. The breccia pipe probably generated sudden pressure drops in the hydrothermal fluids conducive to metal deposition.



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.

Tuffaceous volcanclastic sandstone of the Sagok Formation, Dongil North adit. Soft sediment compaction features, micro-faulting displacement of thin silty beds, along with disseminated and diffuse sulphide-lined fractures provide some evidence of syn depositional mineralization. Sample No 242718; 0.17% Zn, 0.19% As, 30ppm Sb.



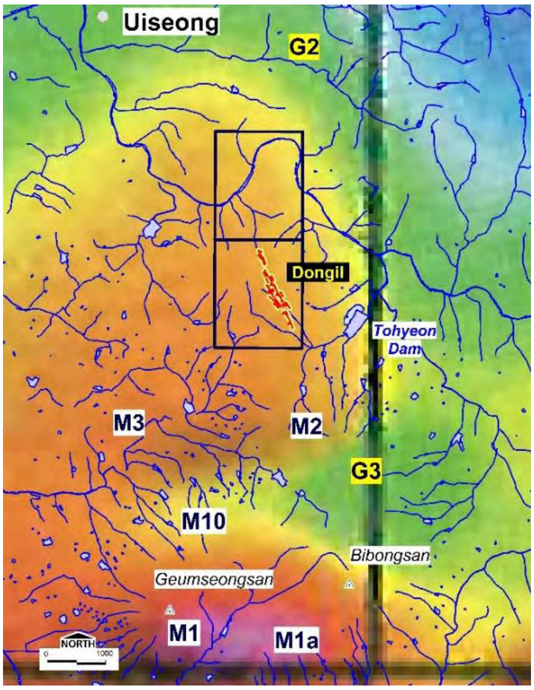
Devitrified rhyodacite from the lava dome. Spherulitic vesicles comprise rhythmic layers of kaolinized feldspar rimmed by chalcedony and a lining of comb quartz. Sample 243492; 0.32% Ba.

Rhyodacite with disseminated and thin discontinuous fracture-filling base metal sulphide veinlets, Dongil North adit. Sample 242716; 27g/t Ag, 905ppm Cu, 1.59% Pb, 1.13% Zn, 0.45% As, 13 ppm Bi, 44ppm Sb & 6.08% Fe as pyrrhotite. This sample clearly illustrates the potential of the rhyodacite dome intrusion to host bulk tonnage disseminated mineralization.

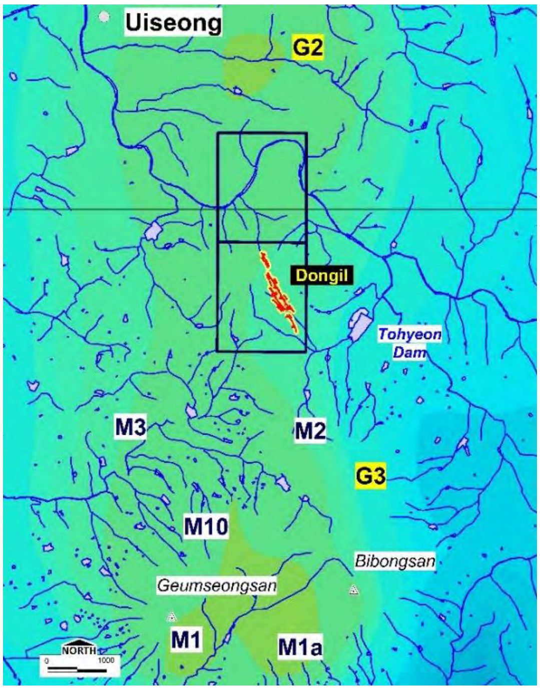
Regional Geophysical Surveys

Regional airborne magnetometer surveys were flown by the *Korean Institute of Geology Mining & Materials* (KIGAM, 2002). Processing and subsequent interpretation of the data has identified the following magnetic features:

- The Jeomgog Formation, Chunsan Formation and rhyodacitic volcanics (Unmunsa Rhyolite) display negative magnetic and gravity responses (**G2**). The Sagok Formation displays a weak elevated magnetic response (**M3**, **M9a**).
- Anomalies **M1** and **M1a** correspond to basalt lava at the base of the Geumseongsan diatreme complex.
- Anomaly **M2** corresponds to the rhyodacite lava dome. Gravity anomaly **G3** is also coincidental with this intrusion.
- Anomaly **M3** is a weak NE-SW trending magnetic high "ridge" corresponding to the Gusandong Tuff.



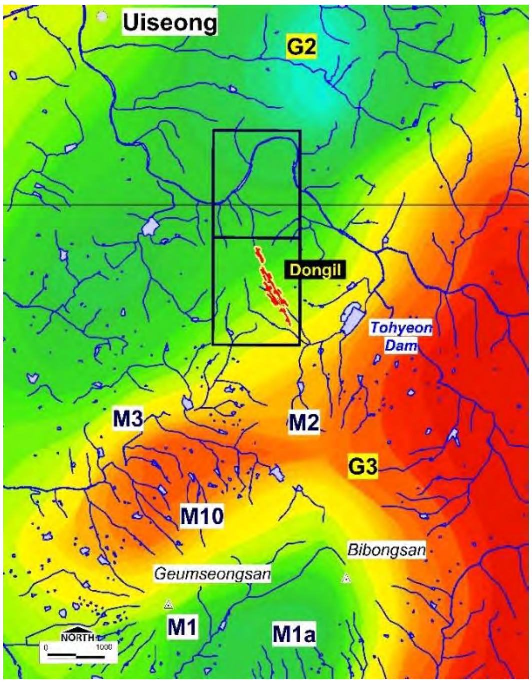
Magnetic Anomaly Map



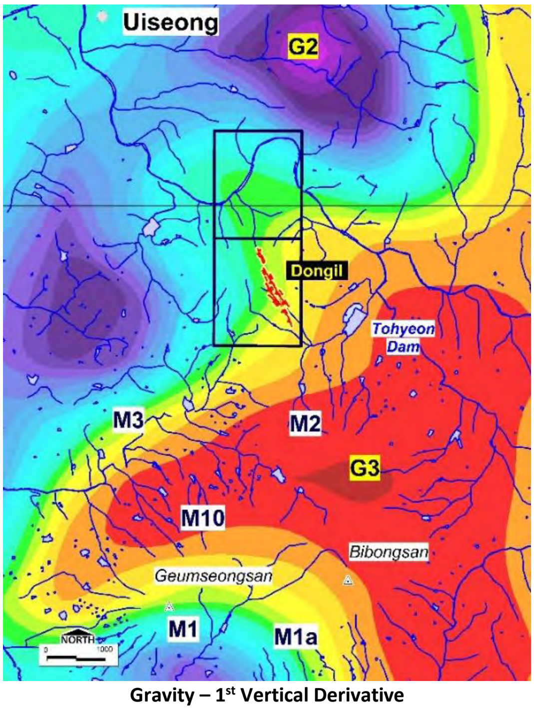
Magnetics - Reduced To Pole

Regional gravity surveys were conducted by *KIGAM* (Kim etal, 2000; Yu et al, 2005; Yang et al, 2008). Interpretation has identified the following gravity features:

- Depth to basement in the Uiseong sub-basin is interpreted to be 4-5km, with a discontinuity at 500-600m depth.
- Anomaly **G2** is a small <6mgal gravity low within the Jeomgog Formation.
- Anomaly **G3** is a prominent gravity high that peaks below the rhyodacite lava dome intrusion (devitrified).
- Anomalies **G3a, G3b** and **G3c** are >12mgal gravity peaks possibly related to **G3**.



Bouguer Gravity Anomaly Map



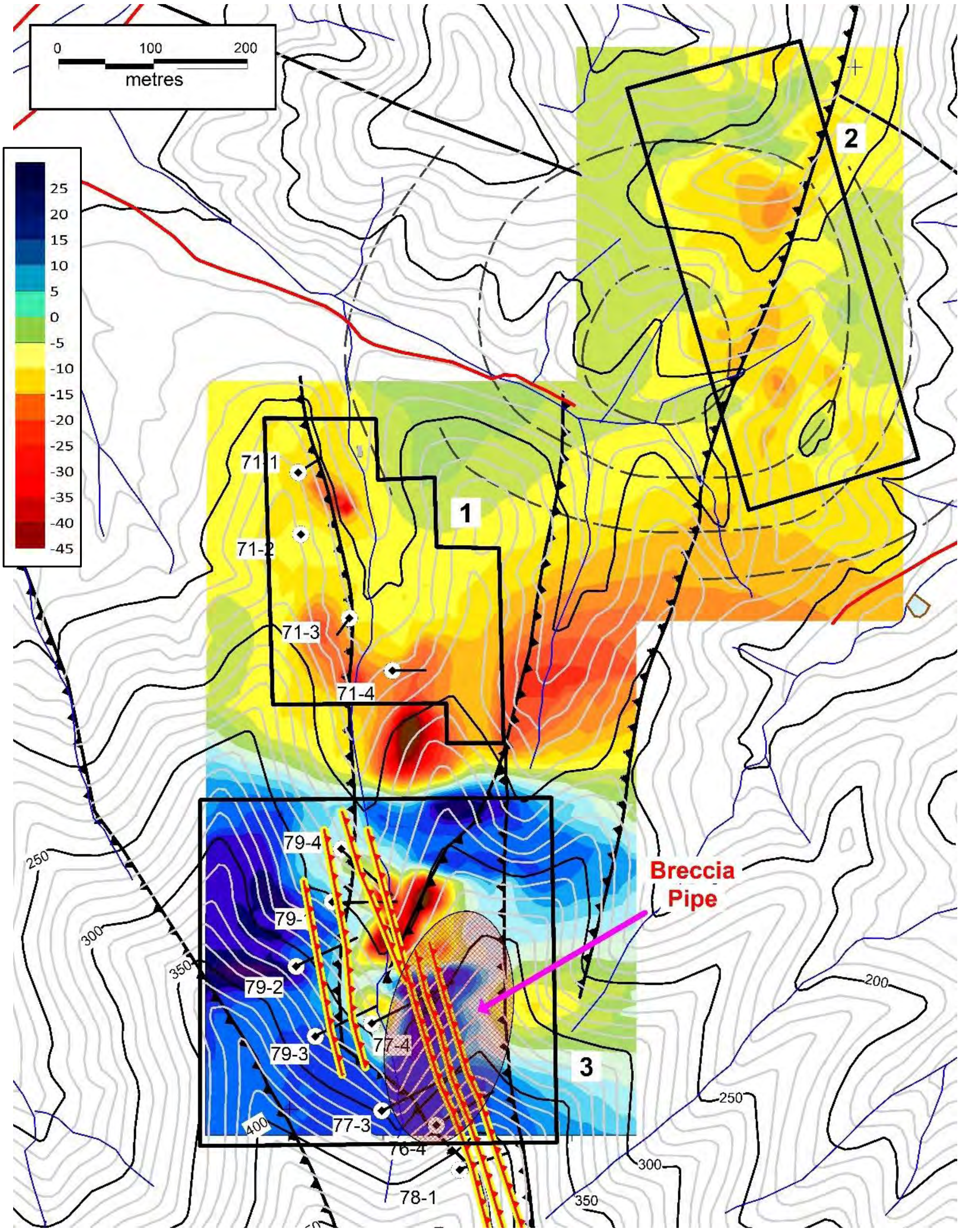
Gravity – 1st Vertical Derivative

Self-Potential Geophysical Survey

In 1970 and 1978, Self-Potential ("SP") ground geophysical surveys (Grids 1,2 & 3, below) were conducted by the *Korean Mining Promotion Corporation* ("KMPC") in the Dongil North area (KMPC, 1970 & 1978). These surveys detected broad -10meV negative chargeability anomalism. associated with rhyodacite and sediments of the Jeomgog Formation. This is interpreted as indicating the presence of disseminated sulphides mineralization within these units. Field checking by KME confirms the presence of disseminated and stockwork fracture filling Ag-Cu-Pb-Zn-Bi-Sb-As mineralized sulphides, hosted within the rhyodacite and volcaniclastic sandstones.

More intense negative chargeability anomalies (-30meV) were detected in Grids 1 and 3, which closely coincide with the inferred chimney breccia pipe (-100meV) over a 100m x 100m area. This area was subsequently partially drill-tested by 4 holes in 1979 with good results recorded in the stratiform **N4** and **N5** veins (holes 79-1, 79-2, 79-3 & 79-4). However, from the plan below, it is apparent the drill holes did not extend to the east enough to test the main "bullseye" chargeability/conductor anomaly. In addition, it is also evident that the main vein structures (**N1**, **N2** & **N3**) extend north towards this anomaly, possibly emanating from this feature. This is a high-priority drill target.

The "bullseye" and more broader SP chargeability anomaly between Grids 1 and 2 also remains untested. This is also high-priority drill target.



Mineralization

The Dongil prospect can be divided into two areas; **Dongil North** and **Dongil South**, separated by a 200m wide gap, formed by the steep topography of Ohtu-San (peak at 475masl). The vein structures appear to be related to rhyodacite dykes emanating from a dome-vent feeder pipe and an inter-linked NNW striking fault system.

Mineralization at **Dongil North** comprises 3 vein structures, identified as **N1**, **N2** and **N3**, which dip steeply at 80^{o} to the east, perhaps coalescing at depth. Drill logs suggest a "chimney" breccia pipe is developed, elliptical in shape, with dimensions of 150-300m long (NNE orientated) x 25-60m wide and extending from 380masl down to below 50masl, indicating a vertical depth extent of >330m. Thick intervals (>200m) of stockwork fracture and disseminated galena, sphalerite, arsenopyrite mineralization were intersected in drilling, hosted within rhyodacite and sediments (identified as **N4** and **N5**).

Dongil South consists of at least 3 subparallel, NNW striking, steeply west-dipping veins and stockworks of 1-7m thickness, identified as the as the ***East Vein*** (aka Main Vein), ***Central Vein*** and ***West Vein*** (aka South Vein). The veins can be traced over strike lengths of 700m (*West Vein*), 600m (*Central Vein*) and 1100m (*East Vein*) and remain open along strike to the south and north. Drilling indicates the veins extend from 400masl down below -50masl (open), indicating a vertical depth extent of >450m. The *East Vein* may be a higher-temperature zone, as suggested by skarn, hornfels and silicification in proximity to the adjacent eastern fault structure.

Rock chip sampling by KME (n=64 samples) at Dongil confirm the overall tenor of the reported historical KMPC drill results, recording maximum assays of 3.66g/t Au, 168g/t Ag, 3.57% Cu, 2.42% Pb and 16.60% Zn, 11g/t Te, 102ppm In, 22ppm Ga, 897ppm Bi, 0.24% Sb, >635ppm SnO_2, 195ppm Co and 402ppm WO_3.

The quartz vein and sulphide mineralization at Dongil exhibits the following paragenetic sequence (Lee et al, 1993):

- **Stage I Early Vein.** Coarse grained euhedral saccharoidal quartz and zonal prismatic quartz.
- **Stage II Base Metal.** Early pyrite, arsenopyrite, magnetite, specular hematite, pyrrhotite, followed by black Fe-rich sphalerite, chalcopyrite, stannite (CuFeZnSn), galena, electrum, argentite and galena.
- **Stage IIIa Sulphosalts.** Galena intergrown with Fe-poor honey-brown sphalerite, then sulphosalts deposited interstitial to vughs in quartz and replacing earlier sulphides. The sulphosalts comprise bournonite (Pb-Cu-Sb), boulangerite (Pb-Sb), stibnite, galenobismuthinite (Pb-Bi) and native bismuth.
- **Stage IIIb Brecciation Event.** Vughy cavities lined with white comb quartz and marcasite.
- **Stage IV Late Vein.** White calcite and occasional anhedral green or purple fluorite deposition.
- **Stage V Supergene.** Occasional covellite and chalcocite, with malachite and chrysocolla observed in the oxidized weathering zone and at surface.

Mineralization from Stage II (Base Metal) deposited from relatively hot fluids at temperatures of 365-425^{o}C (based on arsenopyrite geothermometer), 374-418^{o}C (based on sphalerite and galena isotopes), 246^{o}C (based on stannite) and 185-388^{o}C with salinities of 3.5-6.9 wt.% NaCl (based on fluid inclusions). Isotope studies obtained 4.9-7.6 δ^{34} sulfur, -3.8 δ^{13} carbon and 14.2 δ^{18} oxygen and indicate a magmatic origin for the ore fluids (probably the rhyodacite dome).

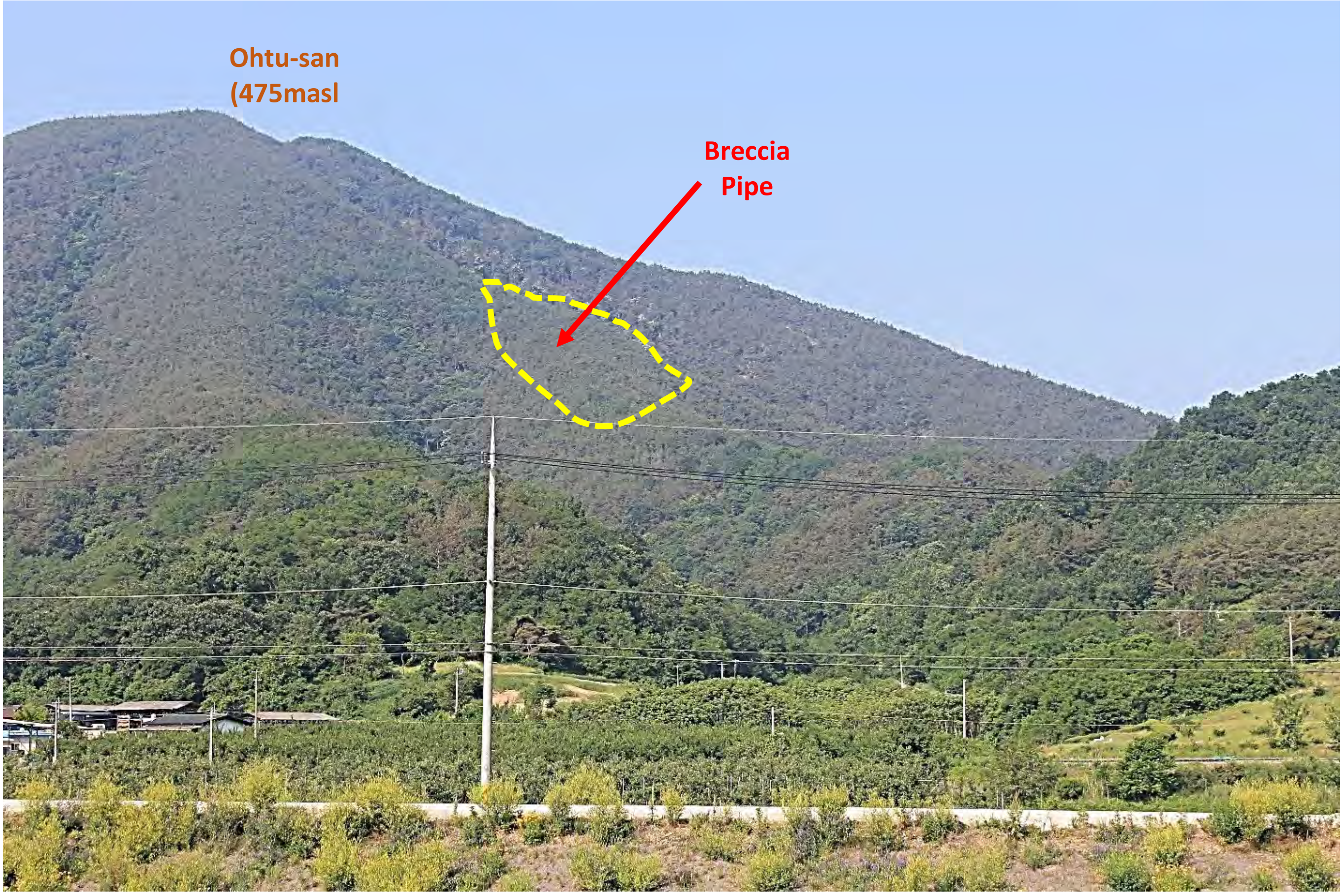
Towards the end of Stage II and early Stage IIIa, boiling of the hydrothermal fluid took place, resulting in gold deposition, followed by an over-pressuring event, resulting in brecciation and fracturing (Stage IIIb), probably related to the chimney breccia pipe and movements along the interlinked faults. In Stage IV Late Vein, the hydrothermal fluids subsequently mixed, cooled, and diluted with meteoric waters.

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

Alteration

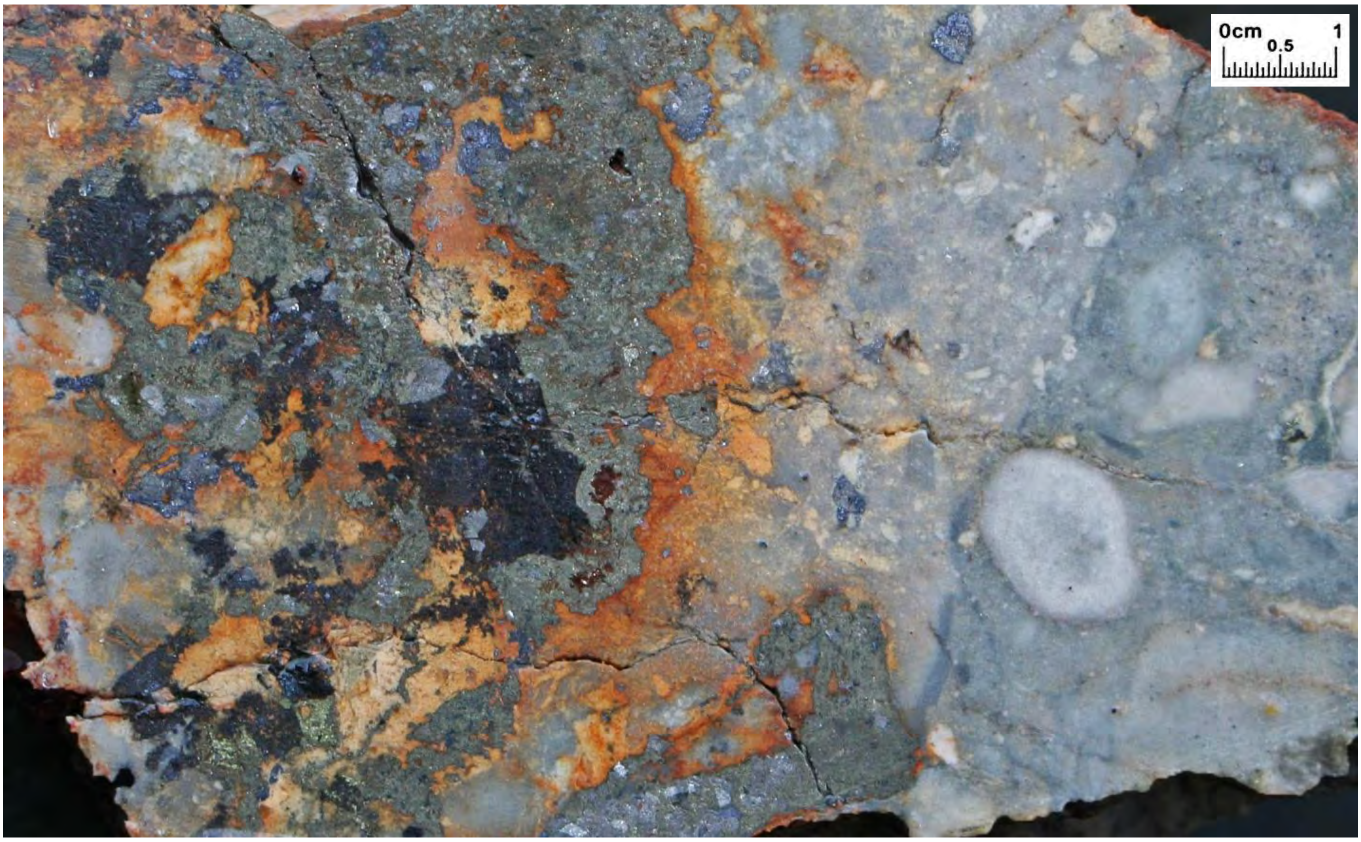
In proximity to mineralization, minor magnetite and hypogene silvery-grey specular hematite, along with feldspar (adularia?) alteration and is consistent with calc-potassic alteration or an inner propylitic assemblage in a porphyry setting. Mineralization is commonly surrounded by pale green sericite, chlorite, and lesser epidote alteration, usually accompanied by disseminated fine grained euhedral to subhedral pyrite. Illite clay, pyrite with lesser kaolinite and quartz (silicification) is present in the intense mineralized zones. The observed alteration is consistent with an intermediate argillic alteration assemblage in an epithermal environment.

The overlying Chunsan Formation exhibit widespread purple-red brown hematite alteration and is suggestive of thermal oxidation (volcanism-related) in a near-surface lacustrine environment.

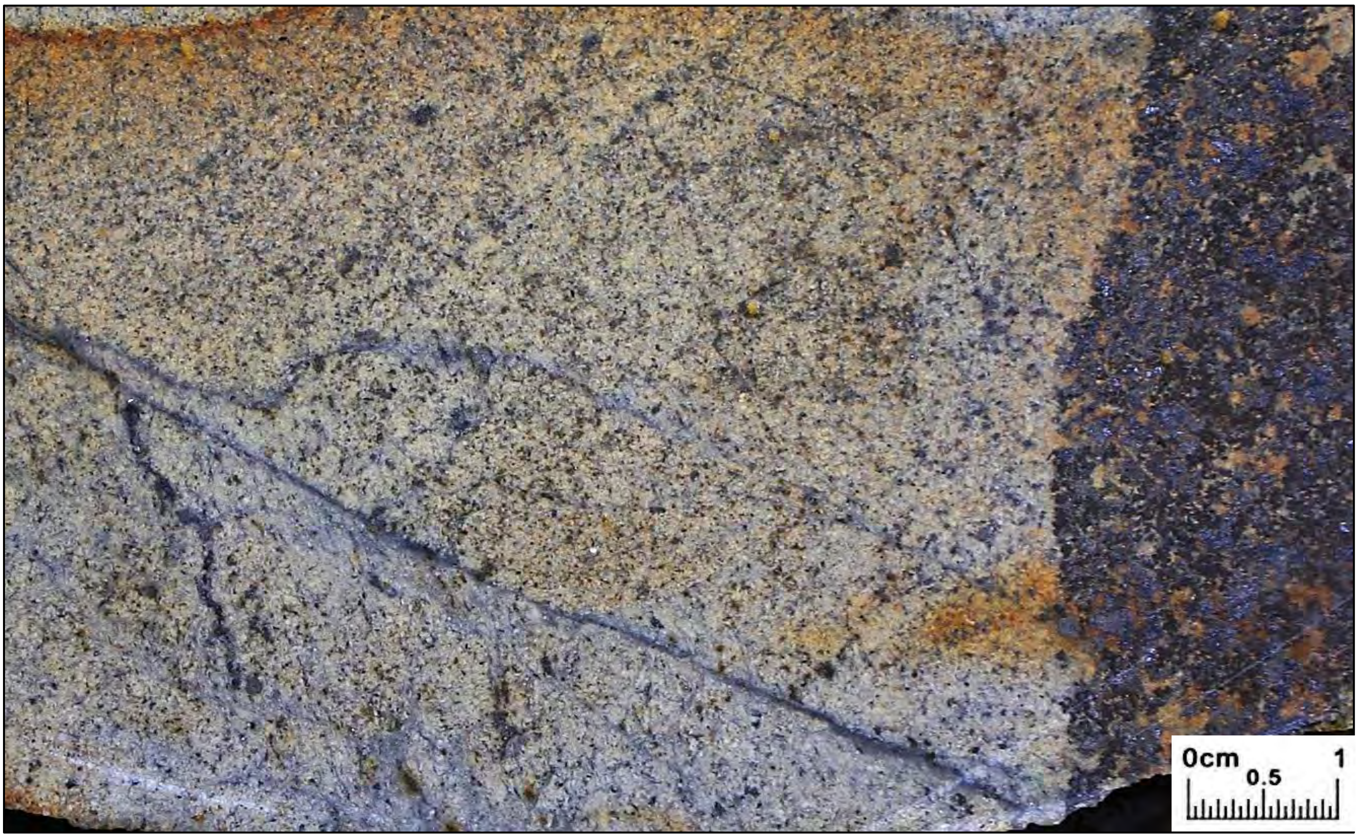


The “chimney breccia pipe” target (yellow outline) at Dongil North (view looking SW from the bank of the Namdaecheon-Gang River). An apple fruit orchard, farmhouse, concrete paved road and powerlines are evident in the foreground.

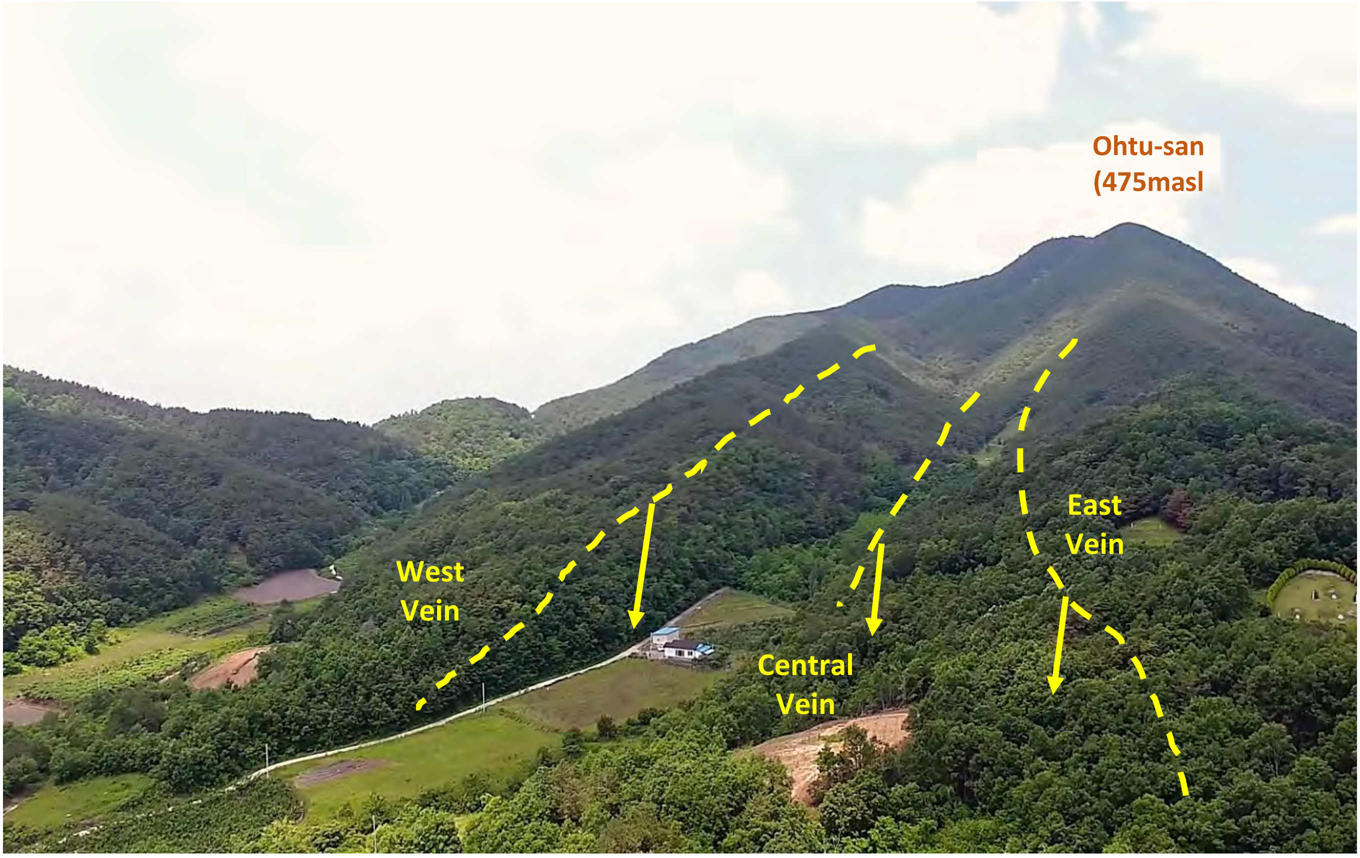

The partially collapsed adit at Dongil North. Although of poor quality, the photograph shows intensely limonite stained (after sulphides) and clay altered rhyodacite and sandstones.



"Chimney breccia pipe" mineralization, Dongil North. Milled clasts of early cloudy-grey opaline silica are cemented in a siliceous breccia margin to coarse-grained base metal sulphides, angular clasts, fine sulphides and rock flour. The orange coloration is an oxidation and feldspar (adularia?) alteration rim affecting some clasts. Sample No 242716; 27g/t Ag, 905ppm Cu, 1.59% Pb, 1.13% Zn, 0.45% As, 13 ppm Bi, 44ppm Sb & 6.08% Fe.

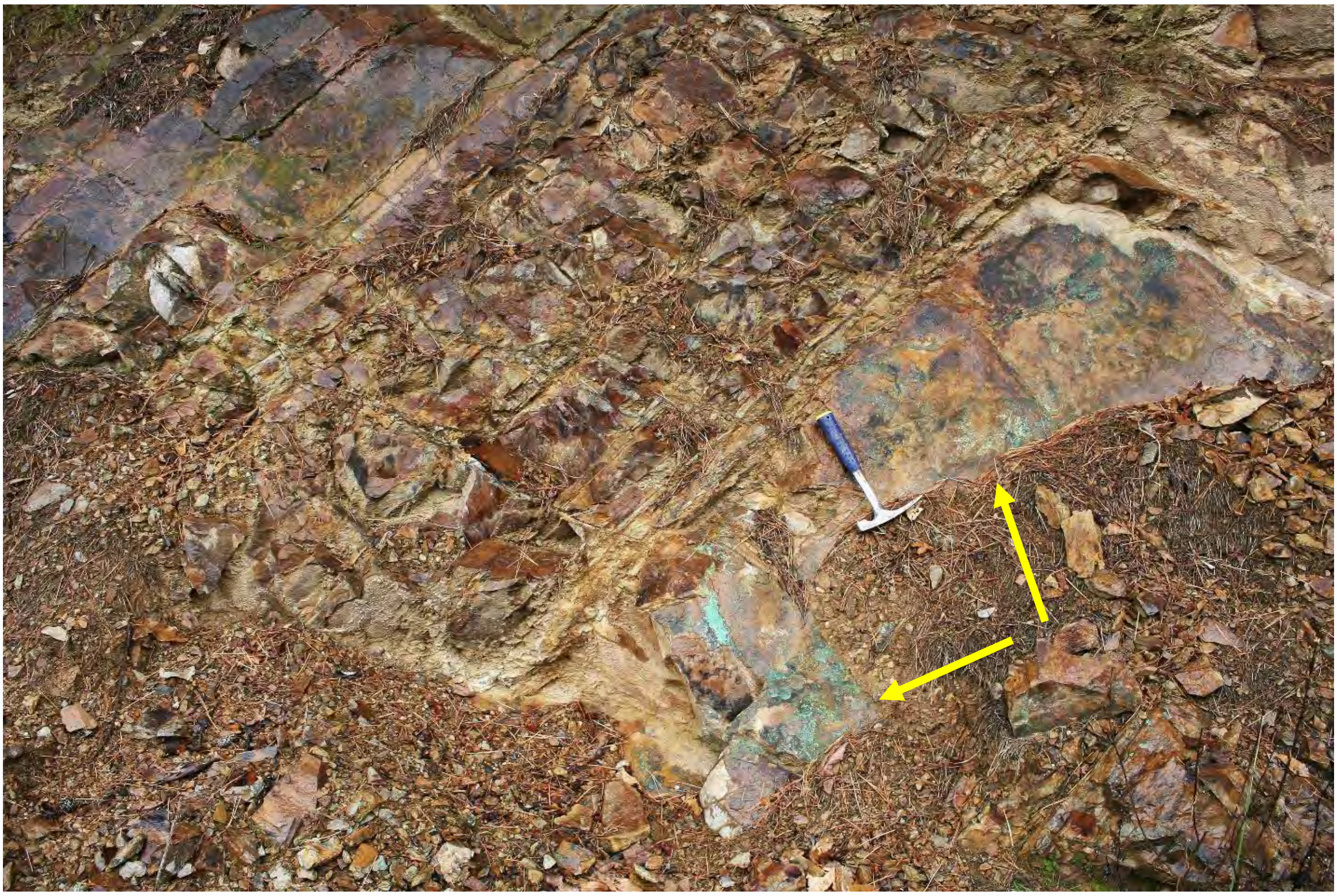


Disseminated and discontinuous fracture-filling sulphides in volcaniclastic sandstone (Sagok Formation), Dongil North Adit. Sample No 242720; 45g/t Ag, 2.20% Pb, 3.16% Zn, 2.45% As, 57ppm Bi, 177ppm Cd, 119ppm Sb, & 5.83% Fe as pyrrhotite.



Overhead view looking northwest of Dongil South, with the peak of Ohyu-san (475masl) at right. The approximate strike and dip trace of the West, Central and East Veins is shown.

Dongil South. Outcrop of the copper mineralization (inset) of the *Central Vein* at left and the East Adit portal driven along the *East Vein* (arrow). Note the revegetated grass over the cleared, clay altered subcrop to stop erosion and concrete drain installed by MIRECO.



Outcrop of copper-mineralized moderately-dipping, intensely altered and mineralized volcaniclastic sandstone and siltstone (Sagok Formation), surface expression of Central Vein, Dongil South. Limonite-hematite oxidised iron staining is replacing disseminated and fracture-filling sulphides. Malachite staining on weathered fracture surfaces is prominent in the lower bed (yellow arrows).

Malachite-azurite-chrysocolla-limonite-hematite stained stockwork fractures and disseminations hosted in intensely argillic clay altered volcaniclastic-sandstone of the Sagok Formation, Dongil South.

Mineralized hydrothermal breccia, West Vein at Dongil South. The entrained clasts of bedded massive sulphide (pyrrhotite-pyrite-chalcoprite), sediments and quartz-carbonate veins are cemented in a finer matrix of rock flour, sulphides (pyrite, chalcopyrite) and comb quartz, clearly indicating multiple episodic phases of mineralization. Sample 155502: 0.28g/t Au, 86g/t Ag, 0.94% Cu, 0.83% Zn, 0.35% Pb, 0.23% Sb, >500ppm Sn, 195ppm Co, 0.64% As.

Expansion breccia and veinlet stockwork in volcano-lithic sandstone (Sagok Formation) from East Vein, Dongil South. The sandstone contains abundant disseminated early stage ruby brown grains of garnet with white diopside and is indicative of a high-temperature prograde skarn assemblage. The core of the breccia veins consist of pyrrhotite and chalcopyite, with margin rims of the veins composed of galena and lesser black sphalerite (iron-rich species marmatite). Some of the chalcopyrite is being replaced by covellite-bornite.

The orange coloration is a an oxidation and feldspar (adularia?) alteration halo developed around the vein breccia. The observed mineralogy and alteration effects are consistent with reducing-oxidation interface conditions in a complex fluid mixing environment. Sample 155501: 0.35g/t Au, 168g/t Ag, 3.57% Cu, 0.35% Pb, 0.19% Zn, >1.00% As, 110ppm Co, 630ppm Sb, 319ppm W, >500ppm Sn, 11.4 ppm Te, 59ppm In.

Conceptual Model - Intermediate-Sulphidation Epithermal Mineralization

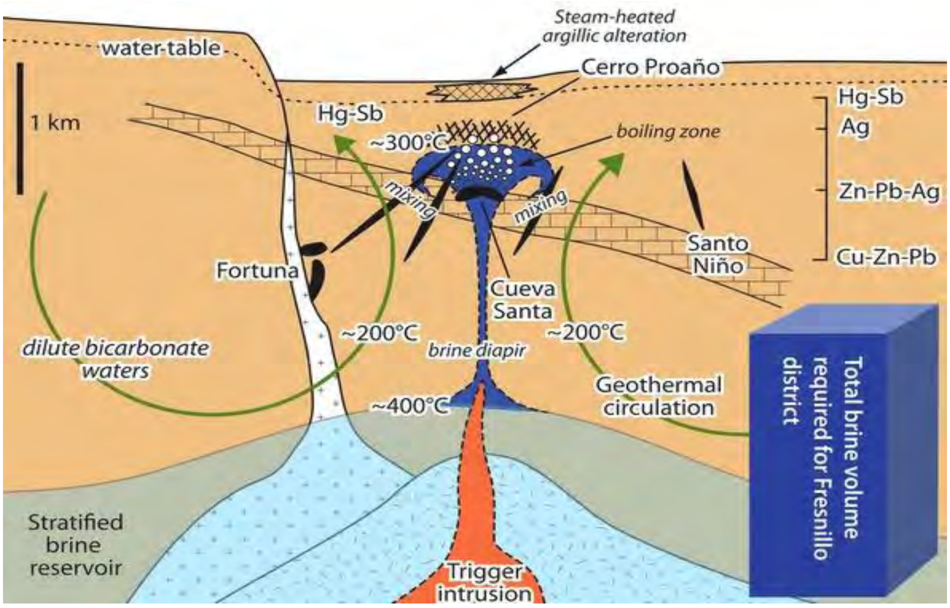
Intermediate-sulphidation ("IS") epithermal style polymetallic Ag-Au deposits in Mexico occur as fissure vein-Ag-rich deposits in the Fresnillo, Zacatecas, Guanajuato and Palmarejo mining districts. Although more than 48,000 tonnes of silver have been mined since 1553, resources have increased substantially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

The KMPC drilled a total of 28 diamond drill holes at Dongil (in several campaigns) between 1971 and 1979, for a total of 4,970m core (narrow diameter AX core). The drillhole pattern spacing was approximately 100m apart and most of the holes drilled at an angle of 60°, perpendicular to the main vein-breccia structural trend. Core recoveries were good (>91%). The drill logs are rudimentary by current standards. Downhole surveys and core orientation of drill holes were not undertaken (technology was not available at that time).

The drilling intersected wide zones of Au-Ag-Cu-Pb-Zn mineralization, with the more significant intersections tabulated below (Se Woo, 2008). Some of the initial early drillholes 71-3, 73-2 and 73-4 were drilled on an opposite azimuth and failed to intersect mineralization. Only obvious high-grade sulphide veins were sampled and analysed by the KMPC. There was no sampling undertaken outside of these high-grade mineralized sulphide veins. Pb and Zn were mainly analysed, with Cu, Au and Ag analysed to a lesser extent. Au was not analysed in samples collected from the 1971 drilling campaign. Samples were analysed at the KMPC "in house" laboratory in Seoul between 1971 and 1979. The KMPC laboratory was not an internationally certified commercial analytical laboratory. No QA/QC protocols were reported by the KMPC.

Core logs describe wide envelopes (>200m thick) of disseminated and veinlet sulphides (visible sphalerite, galena and arsenopyrite) surrounding the vein structures, being particularly observed within the rhyodacite and to a lesser extent the volcaniclastic sandstone lithologies. These disseminated sulphide zones were never sampled by the KMPC. No drill core remains for inspection or check sampling.

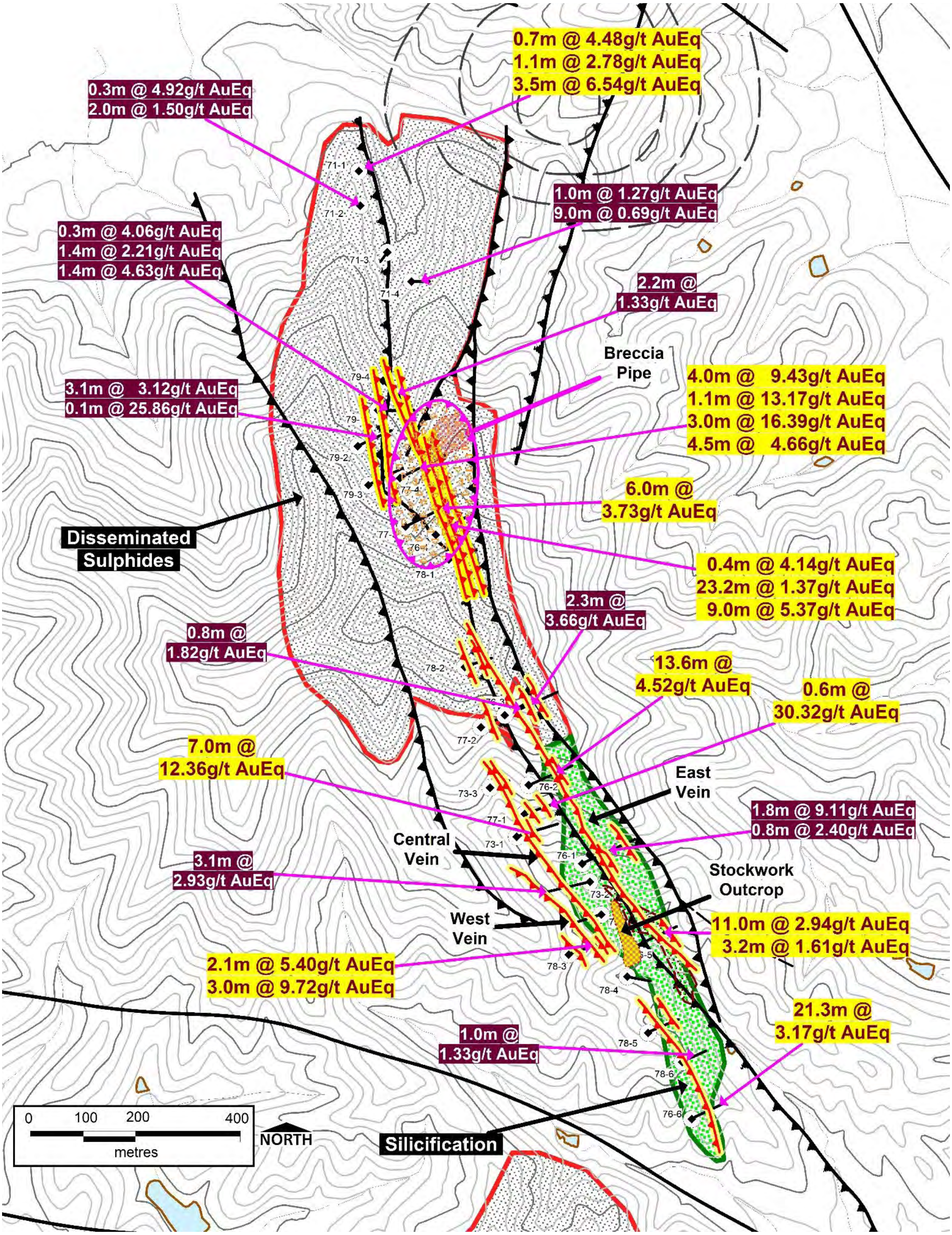
Notwithstanding the sampling issues, most holes intersected significant Au-Ag-Cu-Pb-Zn mineralization, as indicated in the Table, Map and Sections below. Mineralization remains open in all directions.

Dongil Au-Ag-Cu-Pb-Zn Project - Significant Drill Intersections Reported in Historical Drilling.

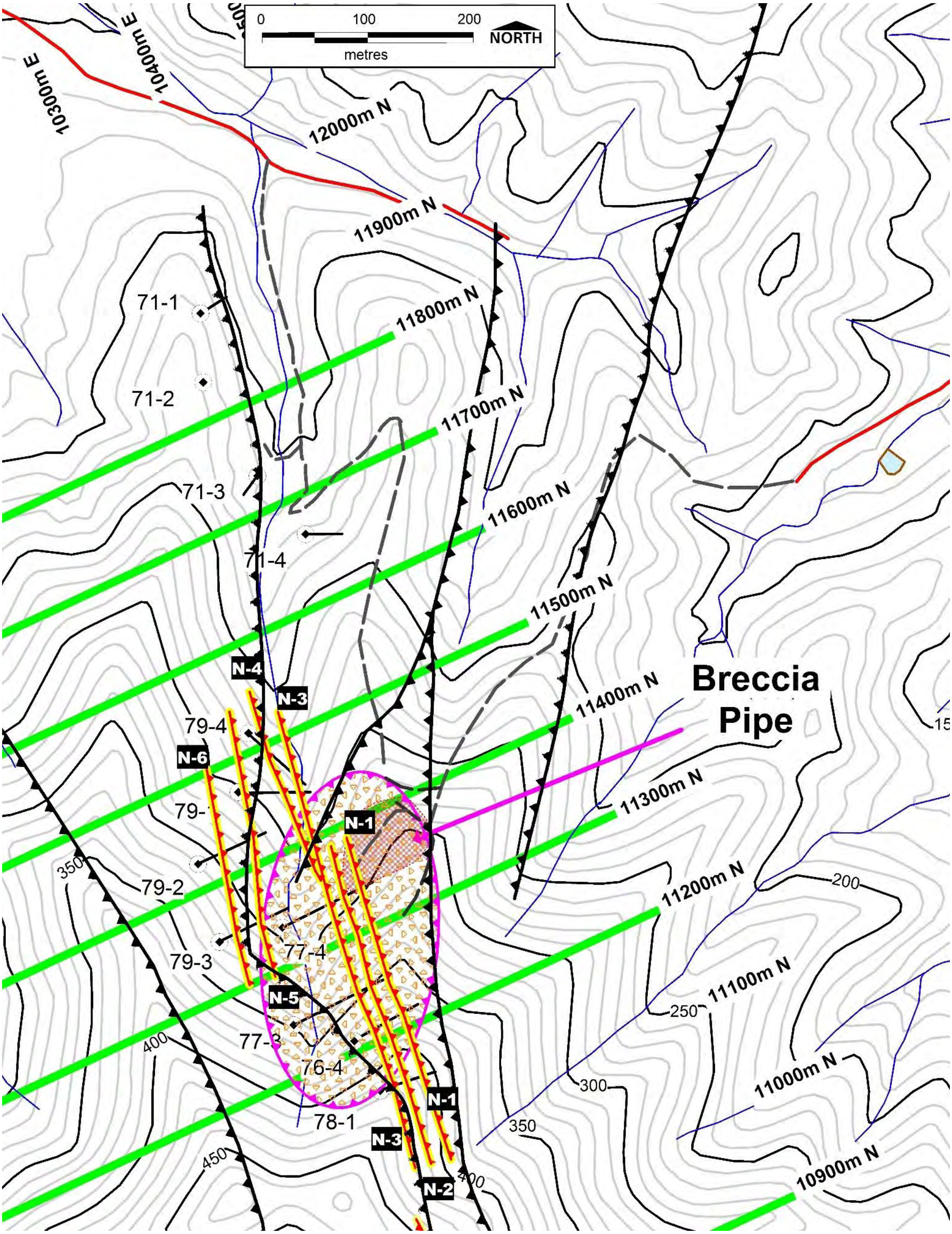
Hole ID	Location	Depth From	Depth To	Intercept (m)	Grade AuEq	Grade Au (g/t)	Grade Ag (g/t)	Grade Cu (%)	Grade Pb (%)	Grade Zn (%)
73-1	**South**	45.5	52.5	**7.0**	**12.36**	**2.25**	**201**	**4.00**	0.63	**1.15**
76-6	**South**	115.0	136.3	**21.3**	**3.73**	**0.93**	**55**	0.11	**2.42**	0.71
76-2	**South**	156.6	170.2	**13.6**	**4.52**	N/A	N/A	**2.37**	0.14	0.99
76-4	**North**	99.0	108.0	**9.0**	**5.73**	**1.42**	**54**	0.09	**2.49**	**2.73**
77-4	**North**	156.5	159.5	**3.0**	**16.9**	**14.20**	**32**	**1.46**	N/A	N/A
77-4	**North**	87.0	91.0	**4.0**	**9.66**	**8.50**	12	**0.64**	N/A	N/A
71-1	**North**	55.5	59.0	**3.5**	**10.03**	N/A	25	N/A	0.54	**12.50**
76-5	**South**	144.5	155.5	**11.0**	**2.94**	N/A	**38**	**1.52**	0.12	N/A
76-4	**North**	64.5	87.7	**23.2**	**1.37**	N/A	21	N/A	**1.65**	0.22
78-3	**South**	295.4	298.4	**3.0**	**9.72**	0.30	**310**	N/A	**1.99**	**5.59**
77-3	**North**	215.7	221.7	**6.0**	**3.73**	0.01	**45**	**1.63**	N/A	N/A
77-4	**North**	187.5	192.0	**4.5**	**4.84**	**3.86**	8	**0.54**	0.05	0.01
76-1	**South**	98.5	100.3	**1.8**	**9.11**	N/A	**225**	**2.12**	**1.02**	**3.01**
77-4	**North**	103.0	104.1	**1.1**	**14.05**	**9.80**	24	**2.45**	0.10	0.08
78-3	**South**	274.9	277.0	**2.1**	**5.4**	0.09	**276**	N/A	**1.92**	0.78
76-3	**South**	55.6	57.9	**2.3**	**4.52**	N/A	**60**	**1.68**	**1.66**	0.22
79-2	**North**	63.8	67.2	**3.1**	**3.12**	0.33	**30**	**1.42**	0.07	0.18

NOTES:

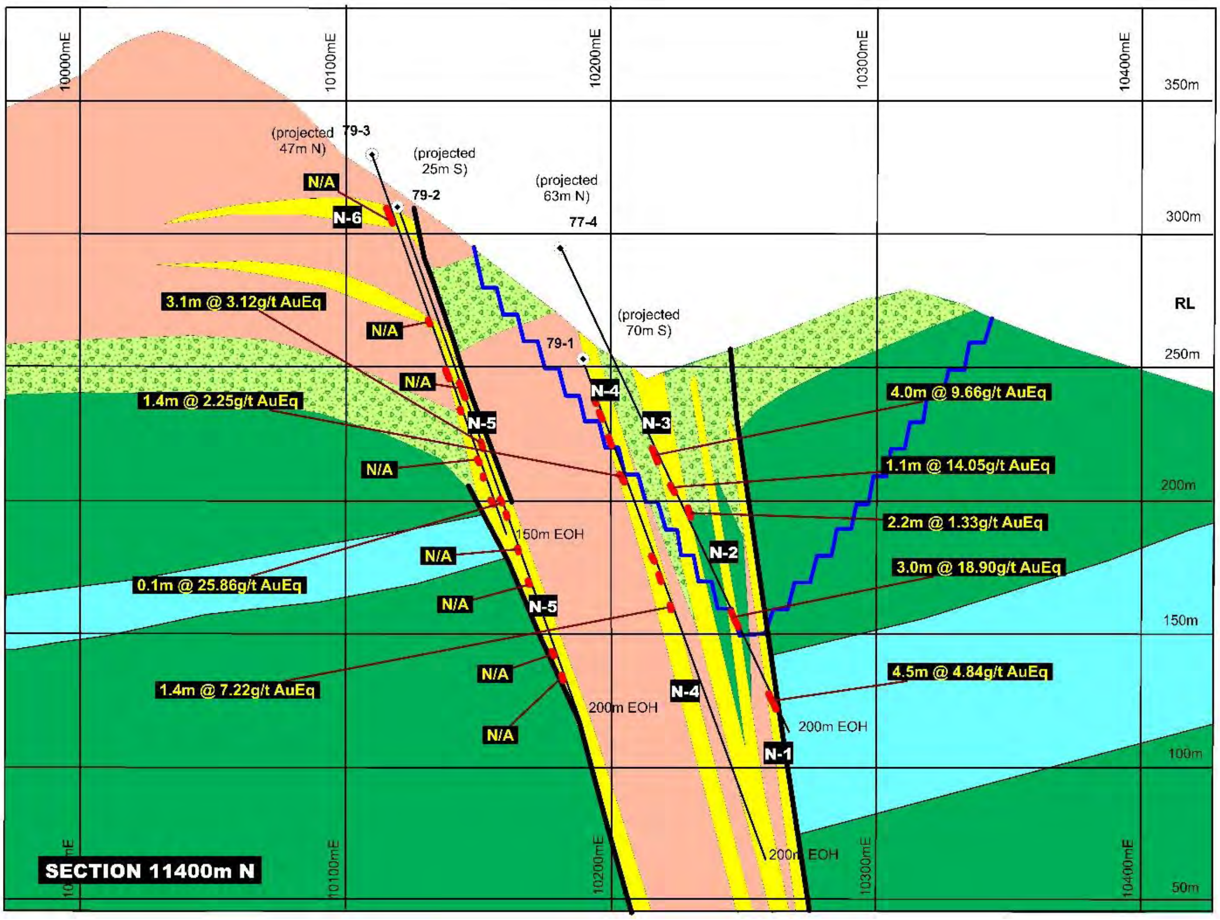
- AuEq was calculated using August 2017 metal prices:
  Au = US$1284/oz, Ag = US$16.94/oz, Cu = US$2.93/lb, Pb = U$1.06lb, Zn = US$1.41/lb
- Intersections are ranked in descending order by grade (AuEq) x thickness
- Some intersections contain internal intervals which were not assayed. For the purposes of aggregation into composited intersections, these internal intervals have been assigned zero value.
- N/A = Not Analysed



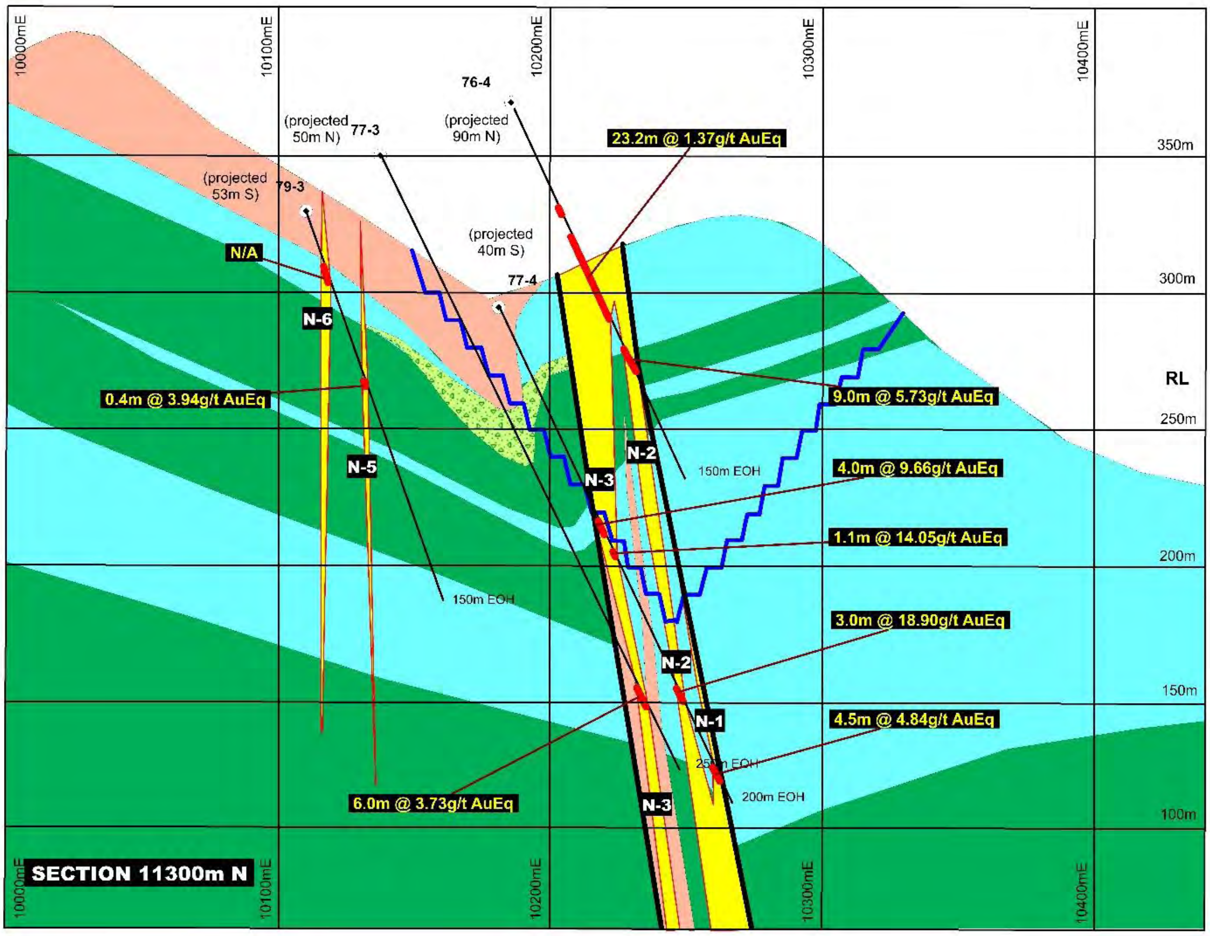
Digital Topographic Map of Dongil Prospect, showing historical drillholes and Mineralized Intersections (AuEq). Sub-surface alteration is also shown, including disseminated sulphides in the rhyodacite and sandstone, as well as fault-vein-related, typically high-temperature skarn/hornfels/silicification in the southern part of the fault system. Mineralization has not been closed off and remains open in all directions.



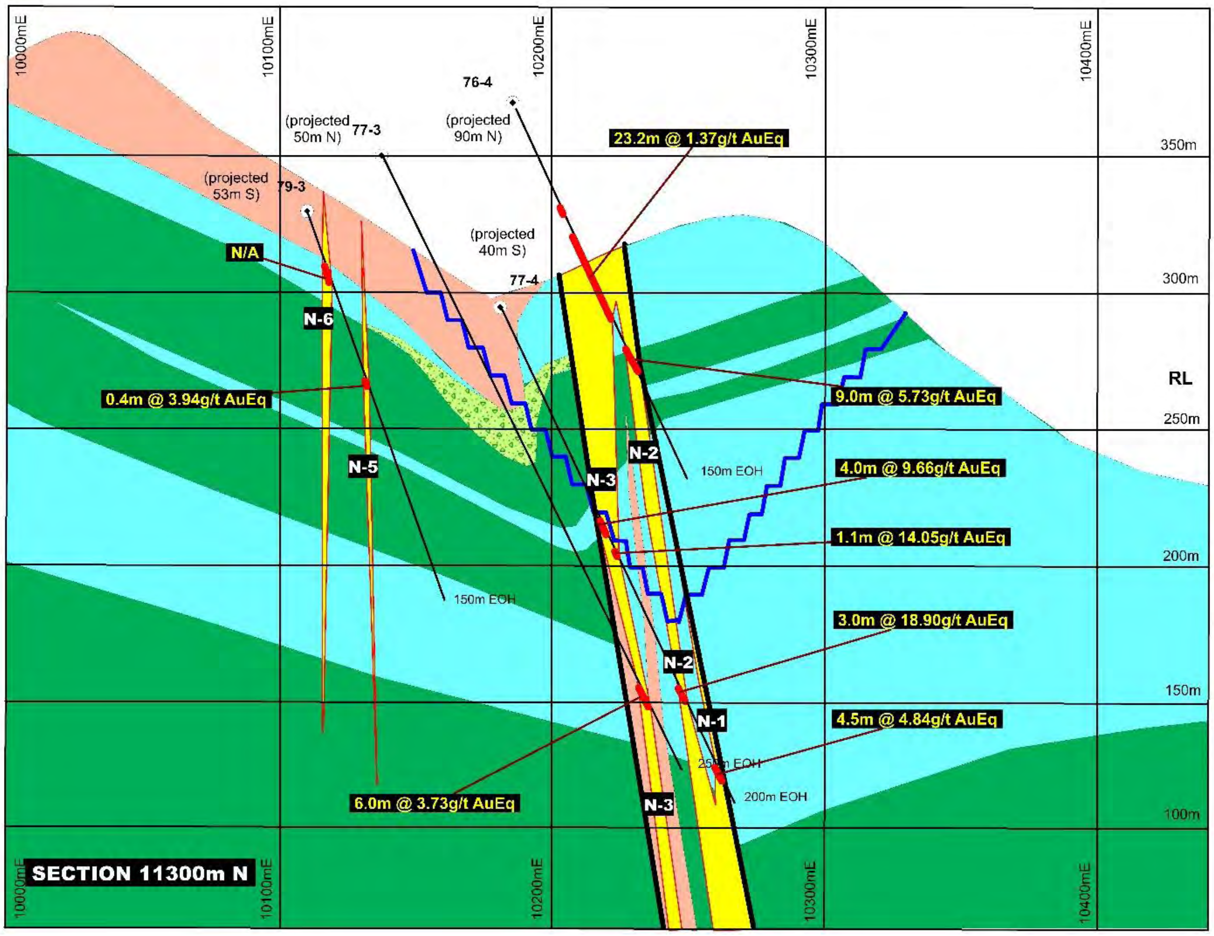
Drill Plan of Dongil North, showing Drill Sections and Vein Structures. The main Vein structures at Dongil North are identified as **N1**, **N2**, and **N3**, which strike NNW and dip steeply at 80º to the east, perhaps coalescing at depth. The Resource Exploration Target size is estimated to be 2.1Mt @ 4.78-9.44g/t AuEq (refer Tabulated Estimates below)). A breccia pipe is present, elliptical in shape, with dimensions of 150-300m long (NNW orientated) x 25-60m wide and extending below >330m in vertical depth. Mineralization outside the breccia pipe margin is a more complex and poorly understood configuration, possibly gently dipping disseminated sulphides (identified as **N5** & **N6**) within the rhyodacite dome and requires orientated drill core to determine.



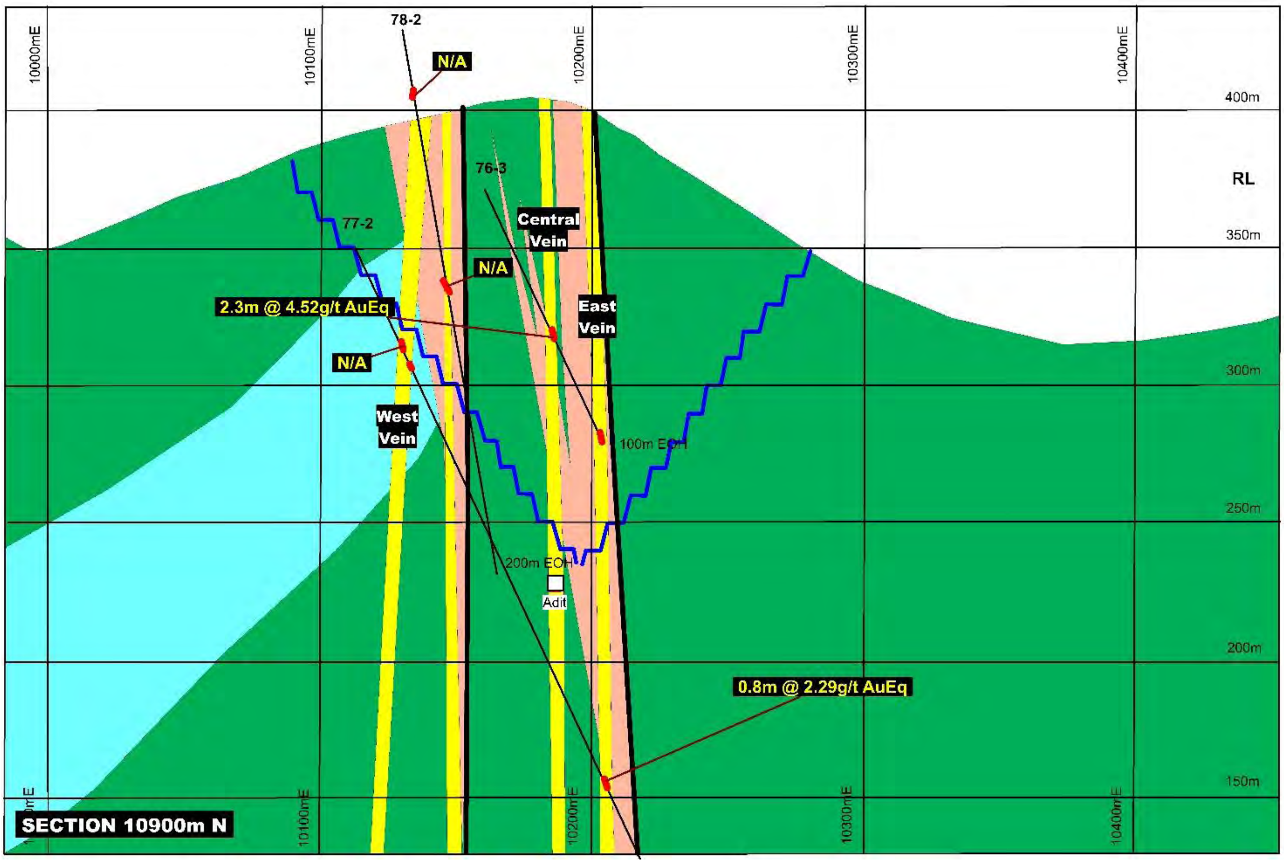
Dongil North, Drill Section 11400mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A). A conceptual open pit outline is shown using 10m bench heights at 60°.



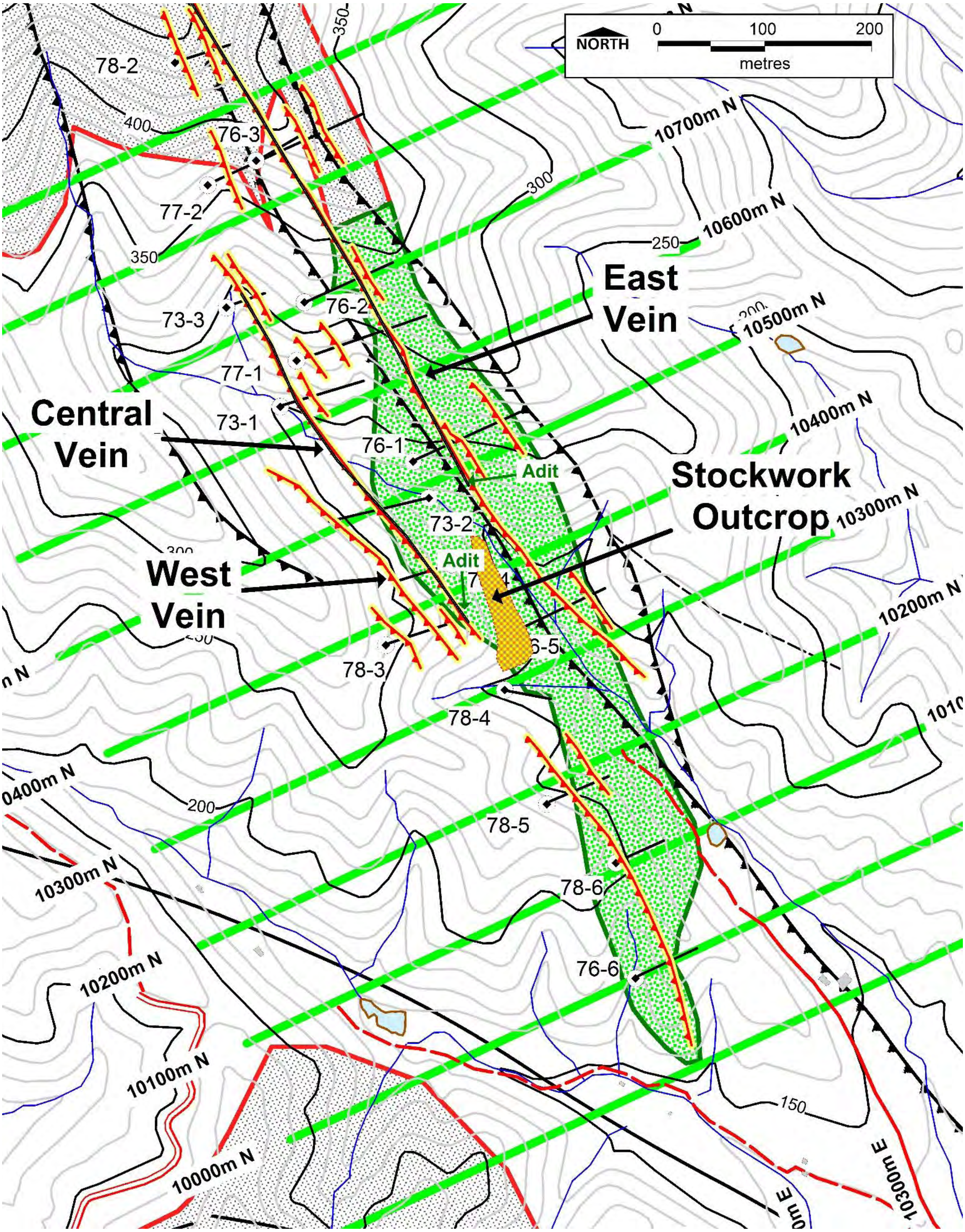
Dongil North, Drill Section 11300mN. A conceptual open pit outline is shown using 10m bench heights at 60°.



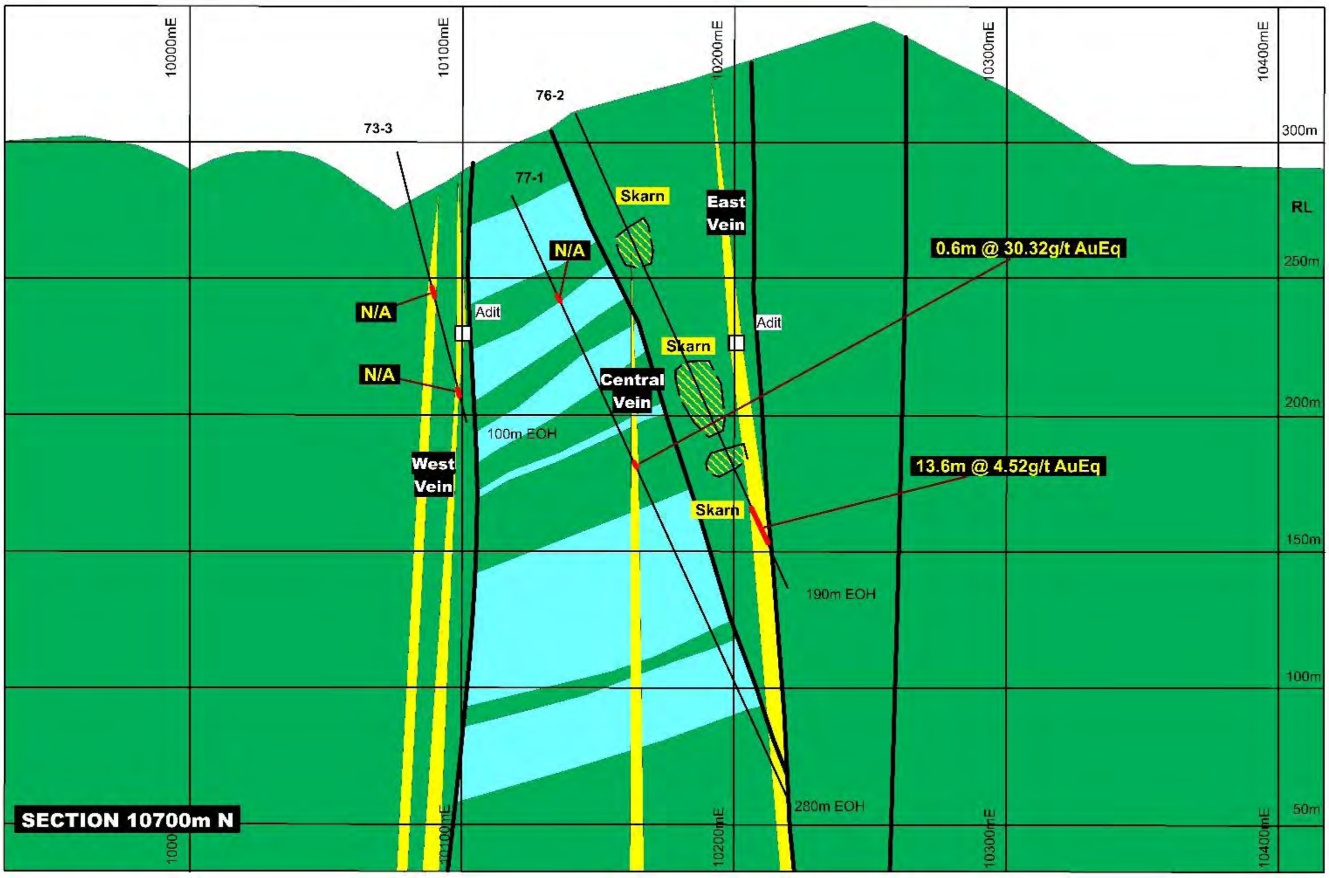
Dongil North, Drill Section 11200mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A). A conceptual open pit outline is shown using 10m bench heights at 60º.



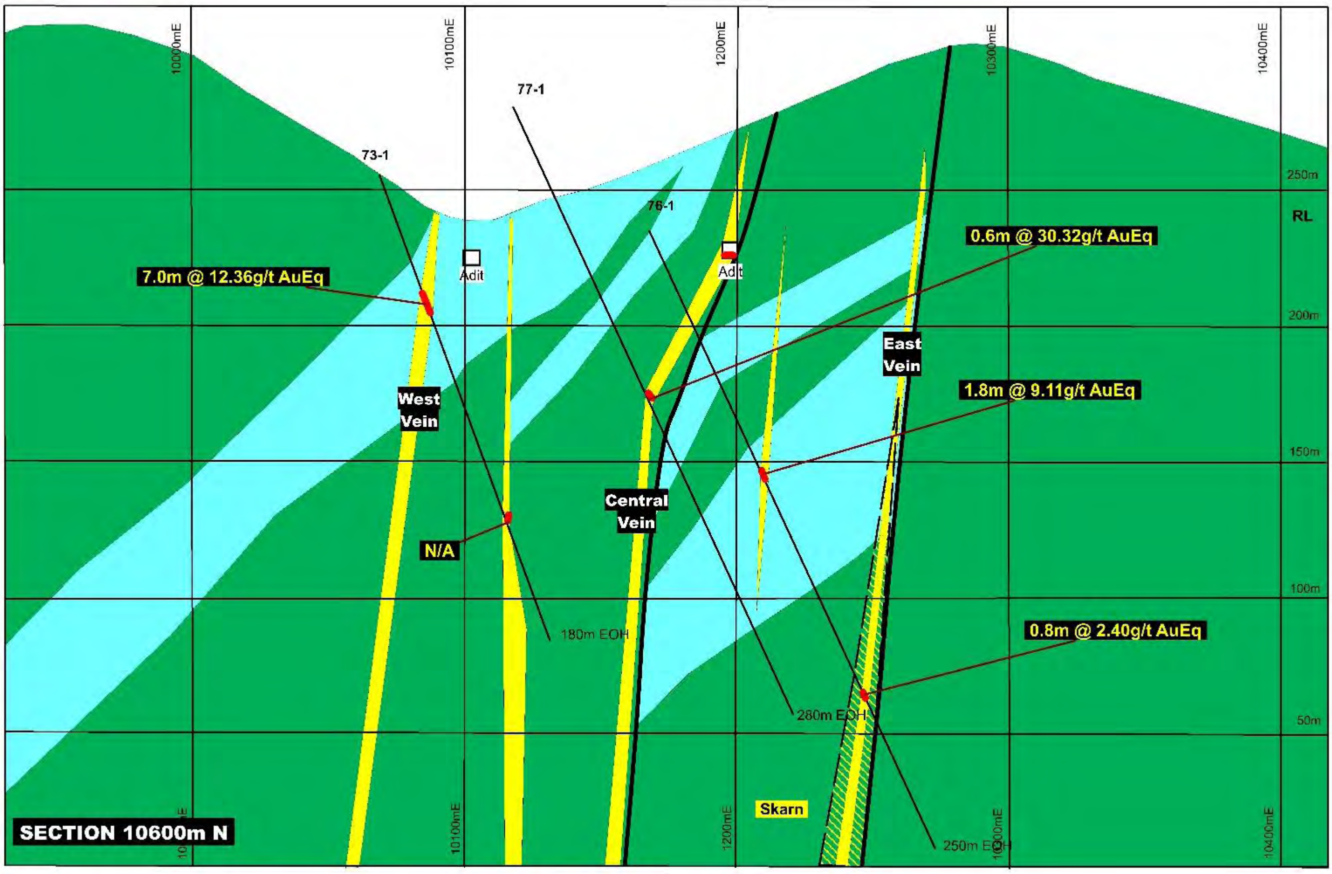
Dongil North, Drill Section 10900mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A). A conceptual open pit outline is shown using 10m bench heights at 60º.



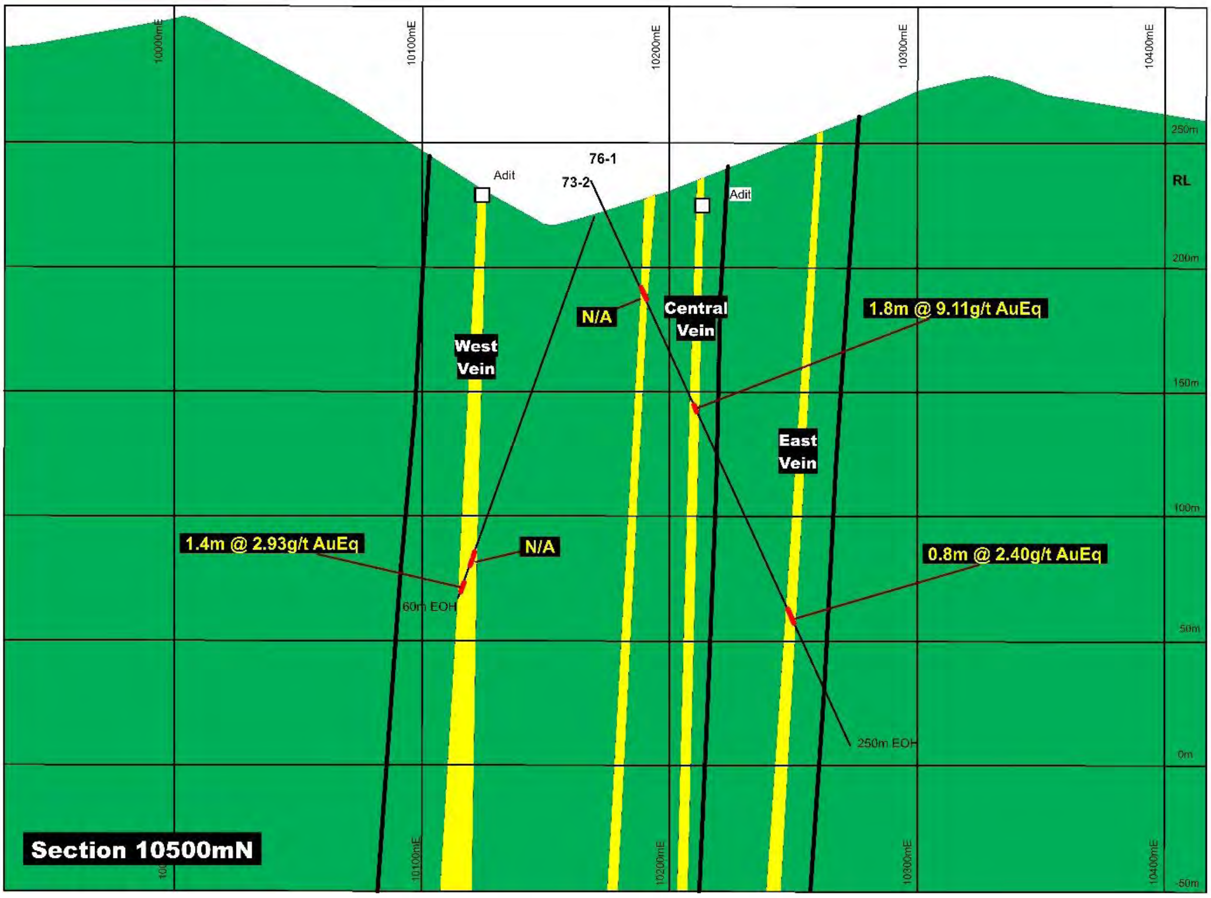
Drill Plan - Dongil South, showing drill sections and vein structures. Dongil South consists of 3-5 subparallel, NNW striking, steeply west-dipping veins and stockworks of 1-11m thickness. The larger veins are identified as ***East Vein*** (Main Vein), ***Central Vein*** and ***West Vein*** (South Vein). The veins have a strike length of 700m (*West Vein*), 600m (*Central Vein*) and 1100m (*East Vein*), extending vertically down >450m depth. Correcting for true vein thickness, the combined Resource Target size of the 3 veins is estimated to be 4.3Mt @ 2.91-9.37g/t AuEq (refer tabulated estimates below).



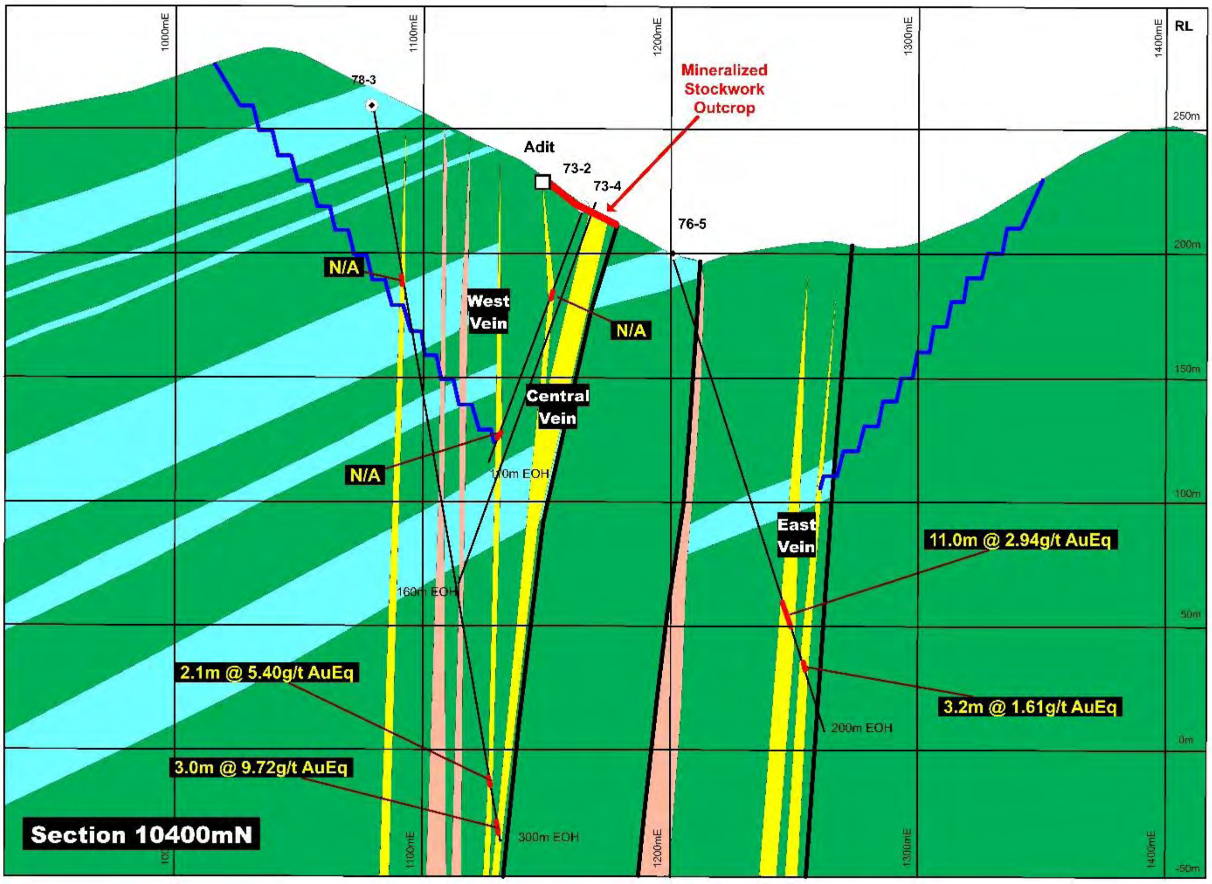
Dongil South, Drill Section 10700mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A).



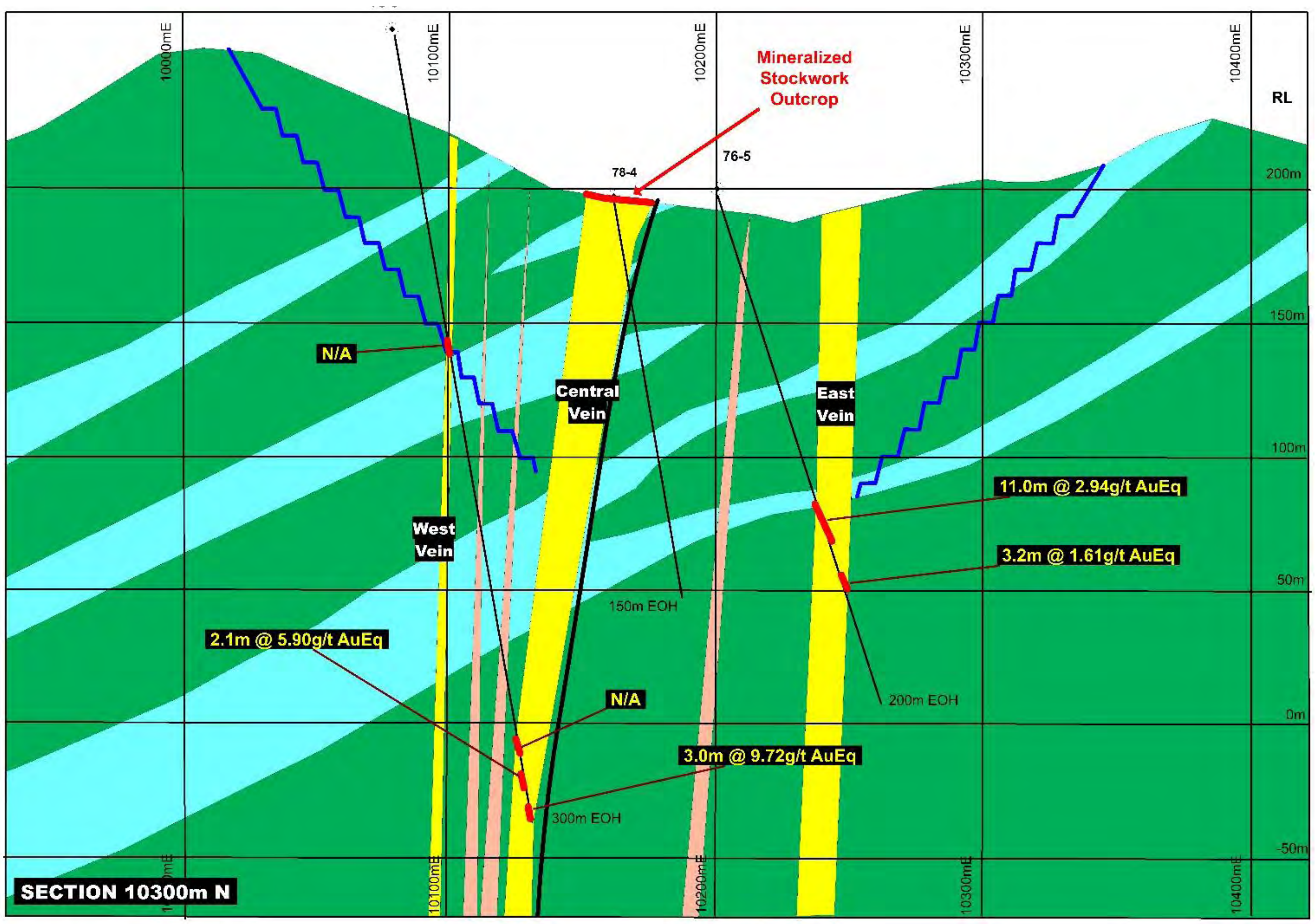
Dongil South, Drill Section 10600mN.



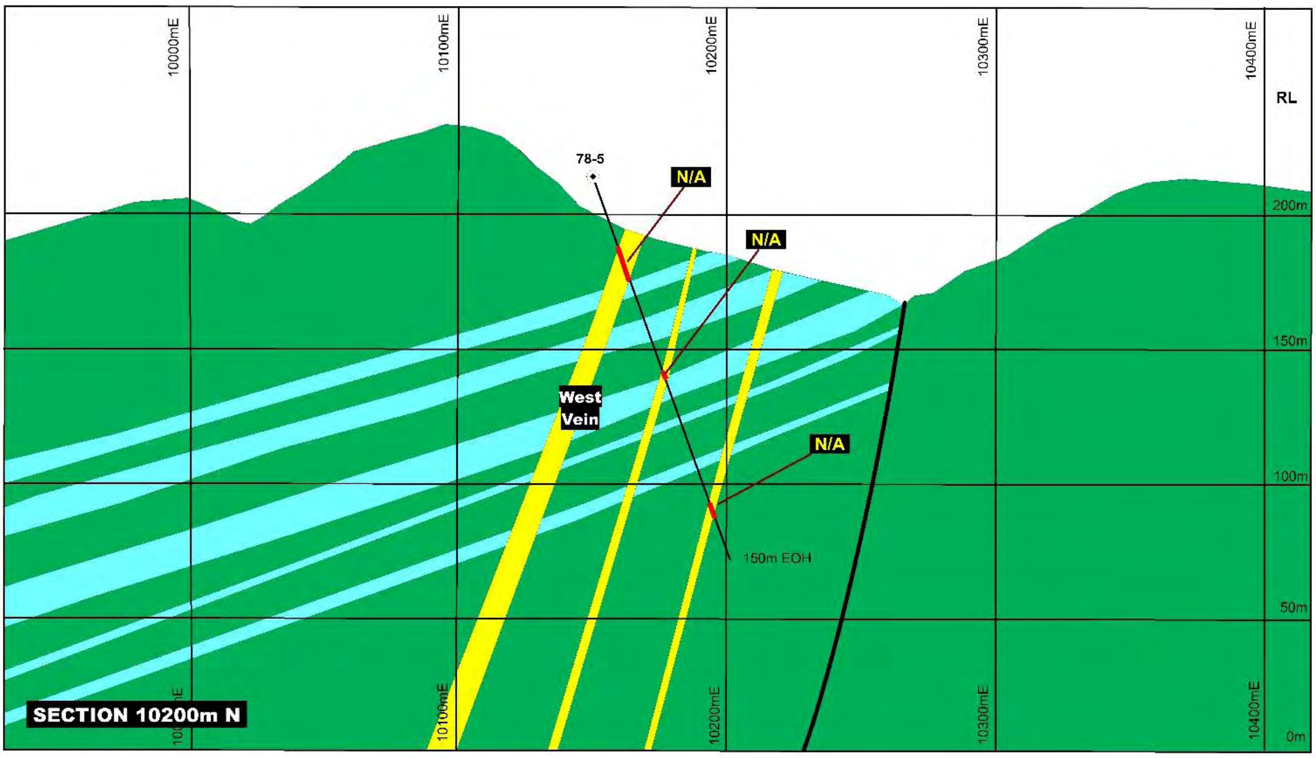
Dongil South, Drill Section 10500mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A).



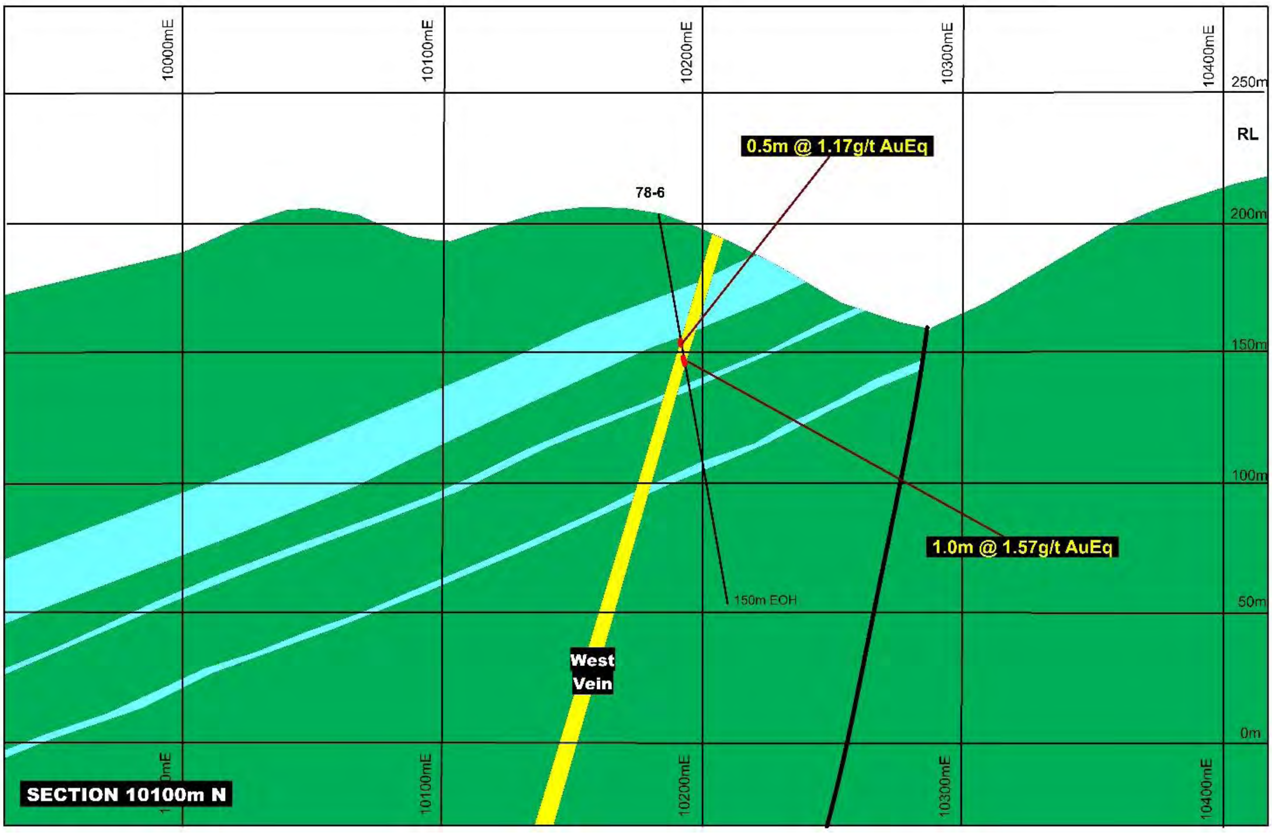
Dongil South, Drill Section 10400mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A). A conceptual open pit outline is shown using 10m bench heights at 60°.



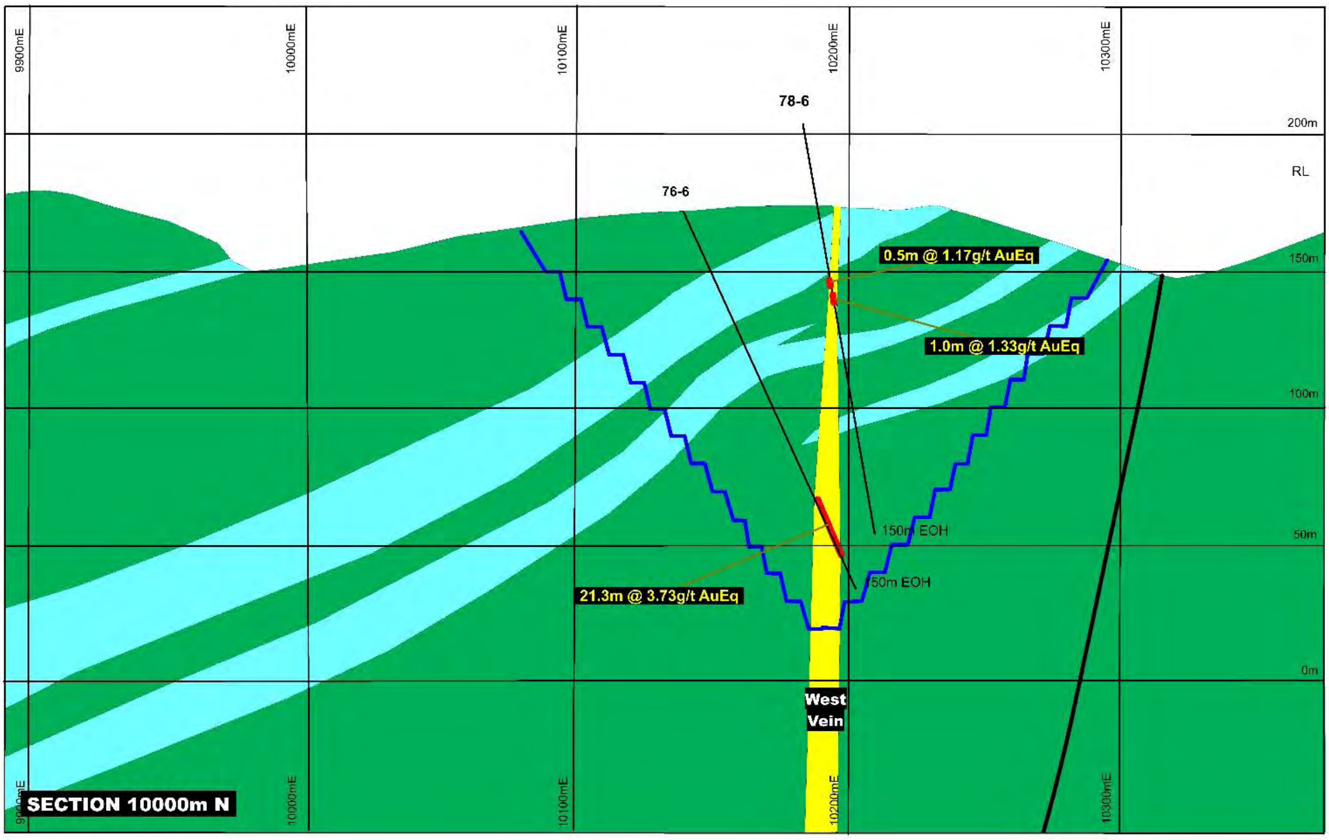
Dongil South, Drill Section 10300mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A). A conceptual open pit outline is shown using 10m bench heights at 60°.



Dongil South, Drill Section 10200mN. Note numerous quartz-sulphide veins recorded but not assayed (N/A). A lack of drilling is evident on this section and further drilling is required to the east.



Dongil South, Drill Section 10100mN. Lack of drilling is evident on this section and further drilling is required to the east.



Dongil South, Drill Section 10000mN. Lack of drilling is evident and required to the east. There is an unexpected very wide vein at the southern end of Dongil which needs follow up drill testing. A conceptual open pit outline is shown using 10m bench heights at 60°.

Resource Estimates

The *Korean Mining Promotion Corporation* previously estimated a mineral resource at the Dongil mine of 152,800 tonnes @ 3.67% Cu at the Dongil mine (Se-Woo Mining, 2008). This mineral resource estimate was classified based upon the *Korean Mining Promotion Corporation* and *Korean Institute of Energy Resources* resource estimation classification scheme and reporting nomenclature. This resource estimate is historical and does not comply with current JORC or NI-43-101 standards.

Senlac Geological Services Pty Ltd compiled a drilling database from the historical drilling data of 28 drill holes, with significant drill intersections, collar locations and surface projections presented in the previous section. Using the historical KMPC drill results, *Senlac Geological Services Pty Ltd* prepared a preliminary resource estimate, using the Sectional Polygonal method and 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 50m down-dip.
- No minimum widths, or mining parameters, or cutting of grades was applied.
- Specific gravity of 2.75g/cc was used for ore. No density measurements have yet been performed. Because of metal content a higher density is likely, but a conservative typical rock density was adopted for this estimate.
- 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.

The following should be noted:

- Some AuEq intersections contain intervals and elements which were not assayed. For the purposes of aggregation into composited intersections, these intervals were assigned zero value, although it is likely they carry low grades.
- Only high-grade mineralization was assayed. Wide intervals of disseminated veinlet mineralization were not assayed.
- Mineralized intercepts north of Section 11400mN are not been included in this Table.
- Mineralized intercepts south of Section 10300mN have not been included in this Table.
- Mineralization is “open” in all directions.

Senlac Geological Services Pty Ltd estimates an Exploration Target for Dongil of **6,262,850 tonnes @ 1.85g/t Au, 76g/t Ag, 1.13% Cu, 0.86% Pb & 0.95% Zn**.

Cautionary Statement: It should be noted this Resource Estimate is based on historical drilling and does not comply with current NI-43-101 or 2012 JORC reporting requirements and is therefore Classified as an Exploration Target.

This resource has contained metals of 372,811 ounces gold, 15,333,805 ounces of silver, 70,952 tonnes of copper, 53,914 tonnes of lead and 59,383 tonnes of zinc. The contained metals have an insitu value of about US$1,508,104,137 (approximately US$241/t), using metal prices as of **August 2017**. The relative value distribution of the metals is 32% gold, 30% copper, 17% silver, 12% zinc and 9% lead.

The contained metals are approximately equivalent to 1,174,536 contained ounces of gold, using **August 2017** metal prices (Refer Table Notes below). Corresponding metal equivalent grades are 5.83g/t AuEq and 3.74% CuEq.

Resource Estimates, Dongil Project (Sectional Polygonal Method)

Dongil South – Central Vein

Section	Hole ID	True Width	Length	Depth	Density (g/cc)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
10900 N	76-3	1.0	100	250	2.75	68,750	4.52	NA	60	1.68	1.66	0.22
10800 N	76-3	1.0	100	250	2.75	68,750	4.52	NA	60	1.68	1.66	0.22
10700 N	77-1	1.0	100	250	2.75	68,750	30.32	3.20	305	4.12	14.22	11.48
10600 N	76-1	1.0	100	250	2.75	68,750	9.11	NA	225	2.12	1.02	3.01
10500 N	76-1	1.0	100	250	2.75	68.750	9.11	NA	225	2.12	1.02	3.01
10400 N	78-3	6.0	100	250	2.75	412,500	9.72	0.30	310	NA	1.99	5.59
10300 N	78-3	1.5	100	250	2.75	103,125	5.40	0.09	276	NA	1.92	0.78
10300 N	78-3	1.5	100	250	2.75	103,125	9.72	0.30	310	NA	1.99	5.59
TOTALS	**Central**		**800**	**250**	**2.75**	**962,500**	**9.37**	**0.40**	**258**	**0.84**	**2.67**	**3.62**

Dongil South – East Vein

Section	Hole ID	True Width	Length	Depth	Density (g/cc)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
10900 N	77-2	1.0	100	250	2.75	68,750	2.29	NA	18	0.42	2.48	NA
10800 N	77-2	3.0	100	250	2.75	206,250	2.29	NA	18	0.42	2.48	NA
10700 N	76-2	5.0	100	250	2.75	343,750	4.52	NA	NA	2.37	0.14	0.99
10600 N	76-1	1.0	100	250	2.75	68,750	2.40	NA	51	1.02	0.25	NA
10500 N	76-1	1.0	100	250	2.75	68,750	2.40	NA	51	1.02	0.25	NA
10400 N	76-5	8.0	100	250	2.75	550,000	2.94	NA	38	1.52	0.12	NA
10400 N	76-5	2.0	100	250	2.75	137,500	1.61	NA	45	0.48	0.10	0.28
10300 N	76-5	8.0	100	250	2.75	550,000	2.94	NA	38	1.52	0.12	NA
10300 N	76-5	2.0	100	250	2.75	137,500	1.61	NA	46	0.48	0.10	0.28
TOTALS	**East**		**900**	**250**	**2.75**	**2,131,250**	**2.91**		**31**	**1.35**	**0.43**	**0.20**

Dongil South – West Vein

Section	Hole ID	True Width	Length	Depth	Density (g/cc)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
10900 N	77-2	2.0	100	250	2.75	137,500	NA	NA	NA	NA	NA	NA
10800 N	77-2	2.0	100	250	2.75	137,500	NA	NA	NA	NA	NA	NA
10700 N	73-3	2.0	100	250	2.75	137,500	NA	NA	NA	NA	NA	NA
10600 N	73-1	5.0	100	250	2.75	343,750	12.36	2.25	201	4.00	0.63	1.15
10500 N	73-2	3.0	100	250	2.75	206,250	2.93	NA	51	0.40	0.43	1.85
10400 N	78-3	1.0	100	250	2.75	68,750	5.40	0.09	276	NA	1.92	0.78
10300 N	78-3	1.0	100	250	2.75	68,750	NA	NA	NA	NA	NA	NA
TOTALS	**West**		**700**	**250**	**2.75**	**1,100,000**	**4.76**	**0.71**	**90**	**1.33**	**0.40**	**0.76**

Dongil North – N-1 Vein

Section	Hole ID	True Width	Length	Depth	Density (g/cc)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
11400 N	77-4	2.0	100	200	2.75	110,000	4.84	3.86	8	0.54	0.05	0.01
11300 N	77-4	2.0	100	200	2.75	110,000	4.84	3.86	8	0.54	0.05	0.01
11200 N	76-4	5.0	100	150	2.75	206,250	5.73	1.42	54	0.09	2.49	2.73
11200 N	77-3	5.0	100	150	2.75	206,250	3.73	0.01	45	1.63	0.86	0.12
TOTALS	**N1**		**400**		**2.75**	**632,500**	**4.78**	**1.81**	**35**	**0.75**	**1.11**	**0.93**

Dongil North – N-2 Vein

Section	Hole ID	True Width	Length	Depth	Density (g/cc)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
11400 N	77-4	1.5	100	200	2.75	82,500	18.90	14.2	32	1.40	NA	NA
11300 N	77-4	8.6	100	200	2.75	473,000	18.90	14.2	32	1.40	NA	NA
11200 N	77-3	8.0	100	150	2.75	330,000	3.73	0.01	45	1.63	0.86	0.12
11200 N	76-4	10.0	100	100	2.75	275,000	1.37	NA	21	NA	1.65	0.22
TOTALS	**N2**		**400**		**2.75**	**1,160,500**	**9.44**	**6.80**	**33**	**1.13**	**0.64**	**0.09**

Dongil North – N-3 Vein

Section	Hole ID	True Width	Length	Depth	Density (g/cc)	Tonnes	AuEq (g/t)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
11500 N	79-1	1.0	100	200	2.75	55,000	7.22	NA	NA	0.09	0.16	9.29
11400 N	77-4	2.4	100	40	2.75	26,400	9.66	8.50	12	0.64	NA	NA
11400 N	77-4	0.7	100	20	2.75	3,850	14.05	9,80	24	2.45	0.10	0.08
11400N	77-4	1.3	100	160	2,75	57,200	1.33	NA	NA	NA	NA	NA
11300 N	77-4	2.5	100	140	2.75	96,250	9.66	8.50	12	0.64	NA	NA
11300 N	77-4	0.8	100	140	2.75	30,800	14.05	9.80	24	2.45	0.10	0.08
11200 N	76-4	0.3	100	80	2.75	6,600	4.14	2.00	102	NA	1.24	0.12
TOTALS	**N3**		**700**		**2.75**	**276,100**	**5.05**	**5.05**	**11**	**0.61**	**0.07**	**1.86**

TOTALS COMBINED			**2.75**	**6,262,850**	**5.83**	**1.85**	**76**	**1.13**	**0.86**	**0.95**

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.
- NA = Not Assayed. Significant grades can be expected in some intervals, but zero value is assigned in this estimate.

Development Potential

Mineralization at **Dongil North** comprises 3 vein structures, identified as **N1**, **N2** and **N3**, which dip steeply at 80^o to the east, perhaps coalescing at depth. An Exploration Target resource of 2Mt @ 4.78-9.44g/t AuEq has been estimated using the historical KMPC data. The mineralization at Dongil North is exposed at/near surface and could be potentially be mined using conventional open cut mining methods. A conceptual, "non-optimised", open pit design (with 10m benches at 60^o) is shown on the Drill Sections above, with Tonnage Factors tabulated below. This open pit has a favourable <4:1 Waste to Ore "strip ratio".

Dongil North – Conceptual Open Pit Tonnage Factors

Section	Area	Length	Density	Tonnes Waste	N1 Vein	N2 Vein	N3 Vein	Tonnes Ore	Strip Ratio
11400 N	10683	100	2.75	2,602,875	110,000	82,500	142,450	334,950	7.8
11300 N	12952	100	2.75	2,851,750	110,000	473,000	127,050	710,050	4.0
11200 N	11722	100	2.75	2,199,450	412,500	605,000	6,600	1,024,100	2.1
				7,654,075	632,500	1,160,500	276,100	2,069,100	3.7

In addition, drill logs suggest a "chimney" breccia pipe is developed associated with the **N1**, **N2** and **N3** veining that is surrounded by thick intervals (>200m) of stockwork fracture and visible disseminated galena, sphalerite, arsenopyrite mineralization, hosted within rhyodacite and sediments, that was never assayed. There is significant potential for economic grades to be encountered in this area with further drill testing and systematic assaying of these intervals.

Dongil South consists of at least 3 subparallel, NNW striking, steeply west-dipping veins and stockworks of 1-7m thickness (*Central, East & West Veins*). These veins can be traced over a strike length of 700-900m, remain open along strike, and extend down over >450m vertical depth. The vein structures appear to be related to rhyodacite dykes and an interlinked NNW striking fault system. Orientation data is required to verify the true orientation of these vein structures. Assuming the veins are sub-vertical dipping structures, 200m deep and correcting for true vein thickness, the combined Exploration Target size of the 3 veins was estimated to be 4.3Mt @ 2.91-9.37g/t AuEq. The steeply-dipping vein mineralization is amenable to mining using the *Sustainable Mining by Drilling* ("SMD") method using Pile Top Reverse Circulation Drills.

The Exploration Target resources identified at Dongil North and South are considered substantial enough to be developed as a modest "stand alone" mining and milling operation. A 1,000tpd Continuous Vat Leach ("CVL") mill or a sequential flotation mill at Dongil is envisaged to recover gold and silver dore, as well as copper-gold, zinc and lead-silver sulphide concentrates. These concentrates could be sold to domestic base metal refineries located nearby at Onsan (operated by *Korea Zinc* and *LS Nikko*) or even shipped to Japan for refining. KME sampling demonstrates Bi, W, Mo and Te critical metals are associated with the Au-Ag-Cu-Pb-Zn mineralization and are potential by-products that would be attractive for off-takers of concentrates.

Exploration by KME has found several new epithermal quartz vein-breccias present in outcrop or float in the area and indicates the district warrants further exploration, including geological mapping, soil geochemical survey, geophysical survey and confirmatory check drill testing, using experienced exploration geologists familiar with modern methods and concepts.

KME believes there is excellent potential for additional ore to be sourced from satellite mining operations in the surrounding area, particularly from similar mineralization style deposits at Ogsan, Jeonheung, Kyungwha and Keumdongchilbo. These deposits could be potentially exploited using mobile Pile Top RC Drills to recover gravity and sulphide "flash flotation" concentrates, which are then trucked to a central mill facility (Dongil?) for sequential flotation and/or vat leach processing.

An initial 12-hole (100m spacing) diamond drilling program at Dongil (total 3,000 metres), collecting orientated NQ core, with full QA/QC protocols is recommended to confirm the historical drill results and estimate a JORC compliant Inferred Mineral Resource.

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