

Reconnaissance Sampling Returns Copper Results from Skarn up to 7.41 % at Yokai prospect, Mt Suckling

PNG COPPER INC. (“PNG C” or the “Company”) announces that it has received geochemical results from 25 rock samples and 7 panned concentrate samples collected during reconnaissance at Yokai prospect, Mt Suckling, Papua New Guinea. Highlights include 7.41 % Cu from sub-outcrop and 0.72 % Cu in outcrop, both associated with a garnet-bearing skarn occurrence of some 200 m length and 50 m width. Five of the 6 samples collected from the skarn contained >0.10 % Cu.

David Lindley, Interim CEO, said “The occurrence of skarn was predicted and the success of the present programme in locating Cu-bearing skarn indicates that our evolving understanding of the Urua-Omu porphyry system engenders a reasonable geological reliability. This understanding will be refined with continuing diligent exploration work, ultimately leading to the targeting of successful drillholes.”

The Yokai area is located on the southeastern margin of a cluster of copper-in-rock anomalies found in the Urua-Omu area. The area is of interest because extensive Late Oligocene-Middle Miocene massive bioclastic limestone (Ada’u Limestone) crops out along the northern slopes of the east-west trending Yokai Valley. These limestones are older than the Late Miocene-Pliocene intrusive rocks found in the Urua-Omu area, and therefore potential exists for the development of Cu mineralised magnetite skarn. The reactive limestones have the potential to literally act as a blotting paper, soaking up ore-elements from circulating hydrothermal fluids from high-level intrusives.

Historical sampling of quartz vein float from Yokai Creek contained 0.37 % Cu. Visible gold was also present in panned samples in Yokai Creek, near its confluence with Waki Creek. Subsequently, an inversion anomaly was identified in the headwaters of Yokai Creek during inversion modelling of Total Magnetic Intensity data obtained during the 2010 low-level detailed airborne magnetic and radiometric survey of the Ada’u Valley. This modelling was designed to focus on deeper magnetic targets in preference to small and shallow sources, ideal for locating any magnetite skarn mineralisation associated with the Ada’u Limestone. The NNE-SSW trending anomaly, measuring 5 km x 3 km in size, was given a medium priority for followup. Most recently, petrology of 4 carbonate rocks from Omu and south of Urua provided the first indications of skarn mineralisation, when chalcopyrite-cuprite-chalcocite assemblages were observed in 3 limestone samples and chalcopyrite in 1 limestone sample.

There were two components to the recent reconnaissance mapping and sampling at Yokai. The entire length of Yokai Creek was traversed and mapped and mineralised float was sampled. A total of 16 rock float and 7 panned concentrate samples were collected during this work. Four rock samples, all mesothermal quartz veins, contained >0.10 % Cu. These anomalous samples were all collected from a 1.3 km interval of lower Yokai Creek (Figure 1). Anomalous copper contents ranged from 0.13 to 2.04 % Cu. A panned concentrate from a small tributary on the southern banks of lower Yokai Creek contained an anomalous 0.25 g/t Au. Outcrop along Yokai Creek consists of pillow basalt of the Late Oligocene-Middle Miocene Wavera Volcanics. This submarine volcanic unit is coeval with the similarly aged Ada’u Limestone. There are many field examples of

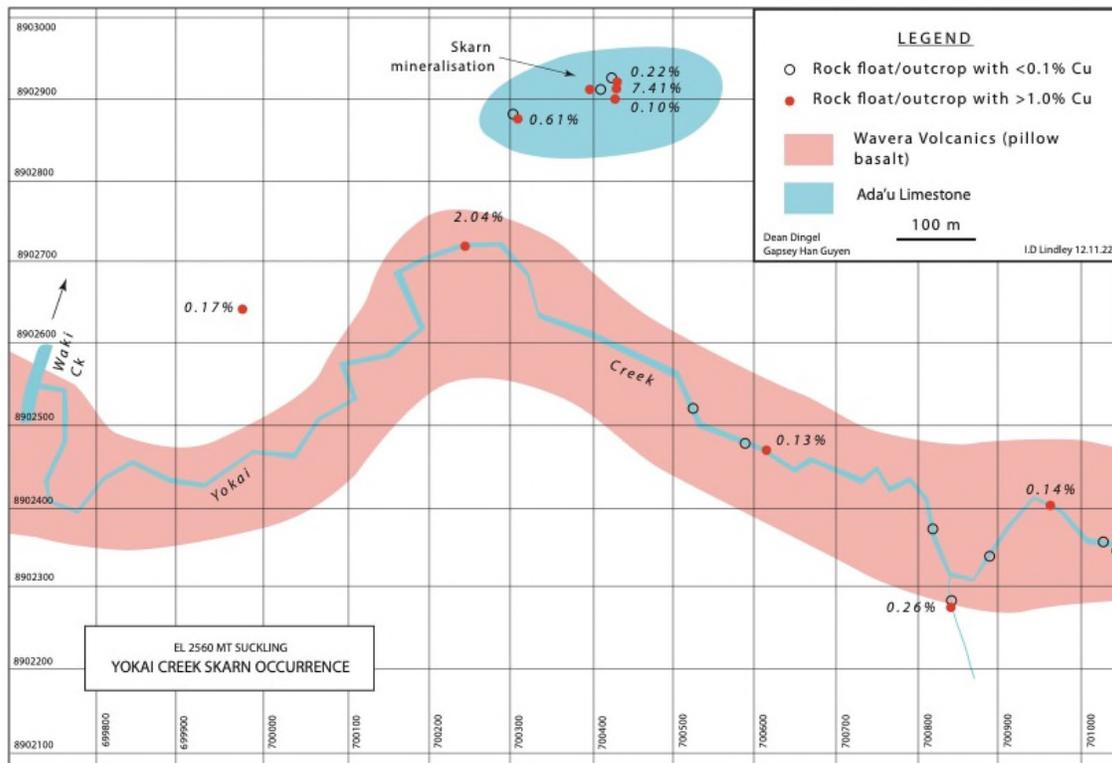


Figure 1: Reconnaissance sampling of lower Yokai creek, southeast Urua-Omu project area.

the two units intermingling, with catastrophic consequences, viz. the formation of submarine limestone-basalt breccias.

The second component of work involved traversing slopes on the northern fall of Yokai Valley, to explore for skarn associated with the nearby Ada'u Limestone. An outcropping skarn was discovered in an east-west striking zone of ~200 m length and ~50 m width, located on steep slopes 250 m north of Yokai Creek. A total of 9 rock samples were collected from this zone. Garnet is present and the zone appears to be structurally controlled. Six samples were skarn; 5 were from outcrop and 1 sample sub-outcrop or scree adjacent to outcropping skarn (see attached figure). Five of the 6 skarn samples contained anomalous Cu values ranging from 0.10 to 7.41 % Cu. These rocks were described as consisting of a mineral assemblage of quartz-chlorite-epidote-garnet-pyroxene±sulphide. The remaining samples were described as rocks with quartz-sericite±sulphide or limonite-haematite-jarosite-quartz±sulphide, in one case with a gossanous appearance. Of these samples, 2 were outcrop and 1 float. The gossanous rock contained 0.22 % Cu.

Rock and panned concentrate samples from the Yokai reconnaissance were dispatched to Australian Laboratory Services, Brisbane, Australia, for analysis on 5 September 2022. Gold analyses of panned concentrates were completed by aqua regia extraction on a 50 gm sample with Inductively Coupled Plasma Mass Spectrometry finish. Analyses of rock samples for base and other elements (33 elements total) were completed by four acid digestion of a 0.25 gm sample with Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry finish.

The Urua-Omu porphyry copper system

Summary. The Urua-Omu prospect remains highly prospective for porphyry copper discovery. High-grade copper values, typically in excess of 0.10 % Cu and often greater than 1 % Cu, are present in both float and outcrop, as well as in drill intersections obtained during the 2012 drilling of monzonite stocks. These copper-bearing rocks define a 36 km² area straddling the east-west trending Keveri Fault and its flanking subsidiary structures (Figure 2). Despite the late 2018 to September 2021 exploration programme completed by the Company, which was essentially restricted to the Omu prospect, this large area of interest remains at an early, albeit de-risked, stage with well-defined grid soil and rock geochemical footprints, airborne and ground geophysical signatures and lithological and hydrothermal alteration assemblages similar to many other southwest Pacific porphyry projects when at a similar stage of exploration.

The active Keveri Fault and the importance of understanding the fault-dissected nature of the project area. The Keveri Fault system has been active for at least the past 5 million years and during this time, has accommodated approximately 8,000 m of uplift. Key to understanding the geology and mineralisation of Urua-Omu is the recognition of significant *vertical* movement of tectonic blocks within the Keveri structure (Figure 2). That this has occurred is not unique; it is common-place throughout other dynamic circum-Pacific mobile zones. Three fault-bounded domains are readily obvious, based on the nature of alteration, quartz vein/mineralisation types and lithological mapping (Figure 2). Each block, relative to adjacent blocks, displays a contrasting erosional level. In-turn, the exploration potential of each block varies, but holistically the entire Urua-Omu system is tied together as an entity with probably one (or more) heat and hydrothermal fluid source(s). Only detailed specialist mapping of the Urua-Omu rock sequence in concert with careful petrological and fluid inclusion study will lead to an understanding of the system as a whole.

Omu block. The fault block containing Omu (the Omu block) sits at a moderately deep erosional level, as indicated by the widespread occurrence of mesothermal carbonate-base metal veins (Figure 2). The Company's several years of exploration at Omu to the end of September 2021 was hampered not only by a reluctance to accept that varying erosional levels existed across Urua-Omu, but the failure to recognise and understand the significance of mesothermal carbonate-base metal veining. These vein systems contain appreciable carbonate and base-metal and form at mid-crustal levels between porphyry and epithermal environments. They are typically distal from a causative porphyry. The presence of carbonate-base metal veining was confirmed by petrological examination of 45 rock and vein samples, mainly from Omu. Furthermore, the petrologist concluded that it was *unlikely* that the quartz diorite and tonalite porphyry rocks at Omu (the target of the Company's exploration) were causative to early magmatic hydrothermal fluid flow and late convective meteoric hydrothermal fluid circulation. The intrusive rocks at Omu are probably Late Miocene-Early Pliocene in age (15-2.5 million years). They are genetically related to the nearby similarly aged (and radiometrically dated) Suckling Granite and Mai'iu Monzonite.

Urua block. The Urua block is bounded by the Nonia Fault and the Keveri Fault and has undergone moderate dissection (Figure 2). This is indicated by the presence of a sub-volcanic structure referred to as the Urua volcano. Relative age relationships suggest the volcanic feature is Late Miocene-Early Pliocene (15 to 2.6 million years). A diatreme breccia mapped over a 1.7 km x 1.0 km area contains wood and charcoal fragments. These wood-bearing breccias represent the vent of the volcano. Airfall deposits (accretionary lapilli tuff), which can only be derived from the

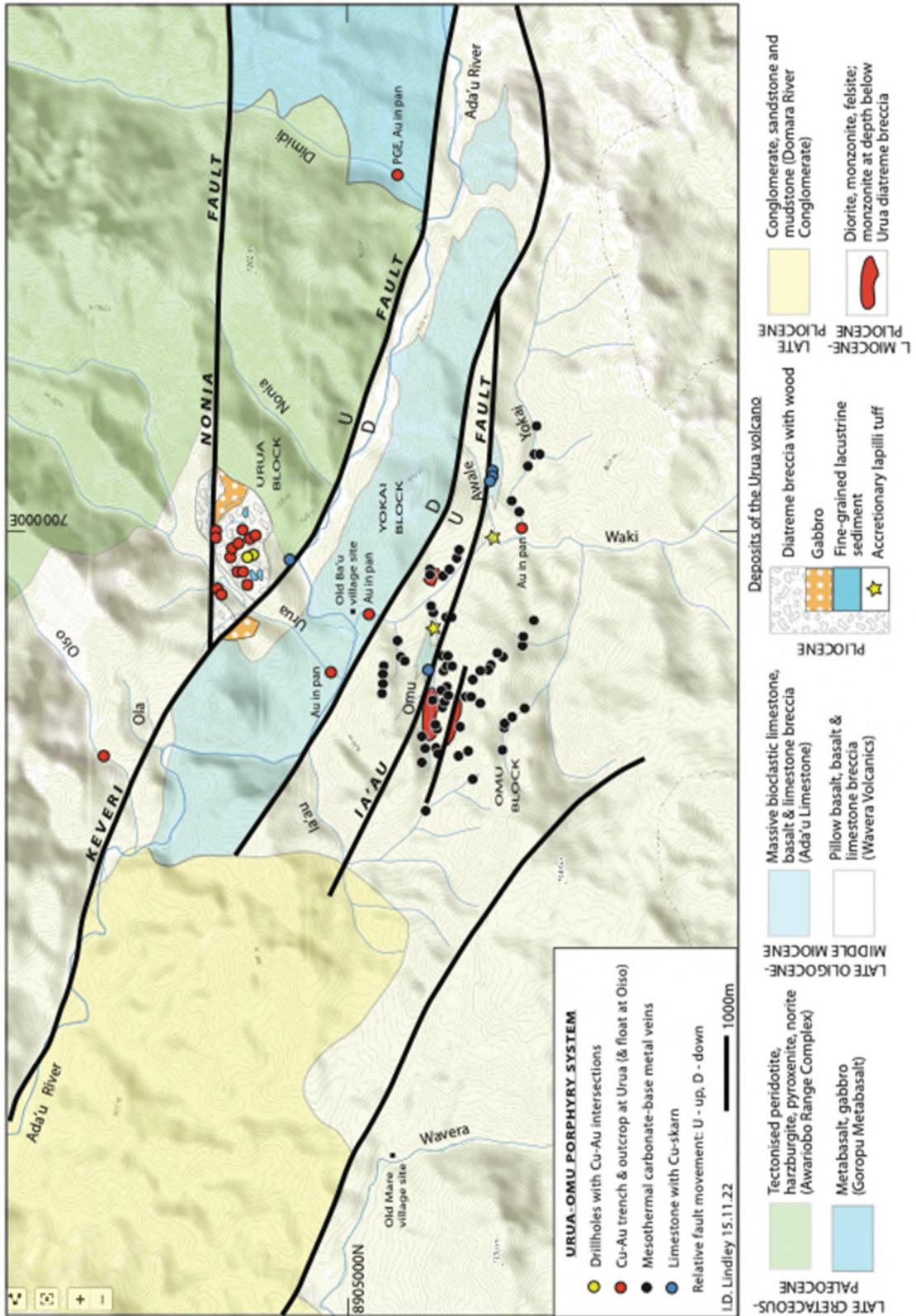


Figure 2: Geological map of the Urua-Omu project area, showing three distinct tectonic blocks, each with a differing erosional level, viz. Urua block, Yokai block and Omu block.

Urna geochemistry and geophysics

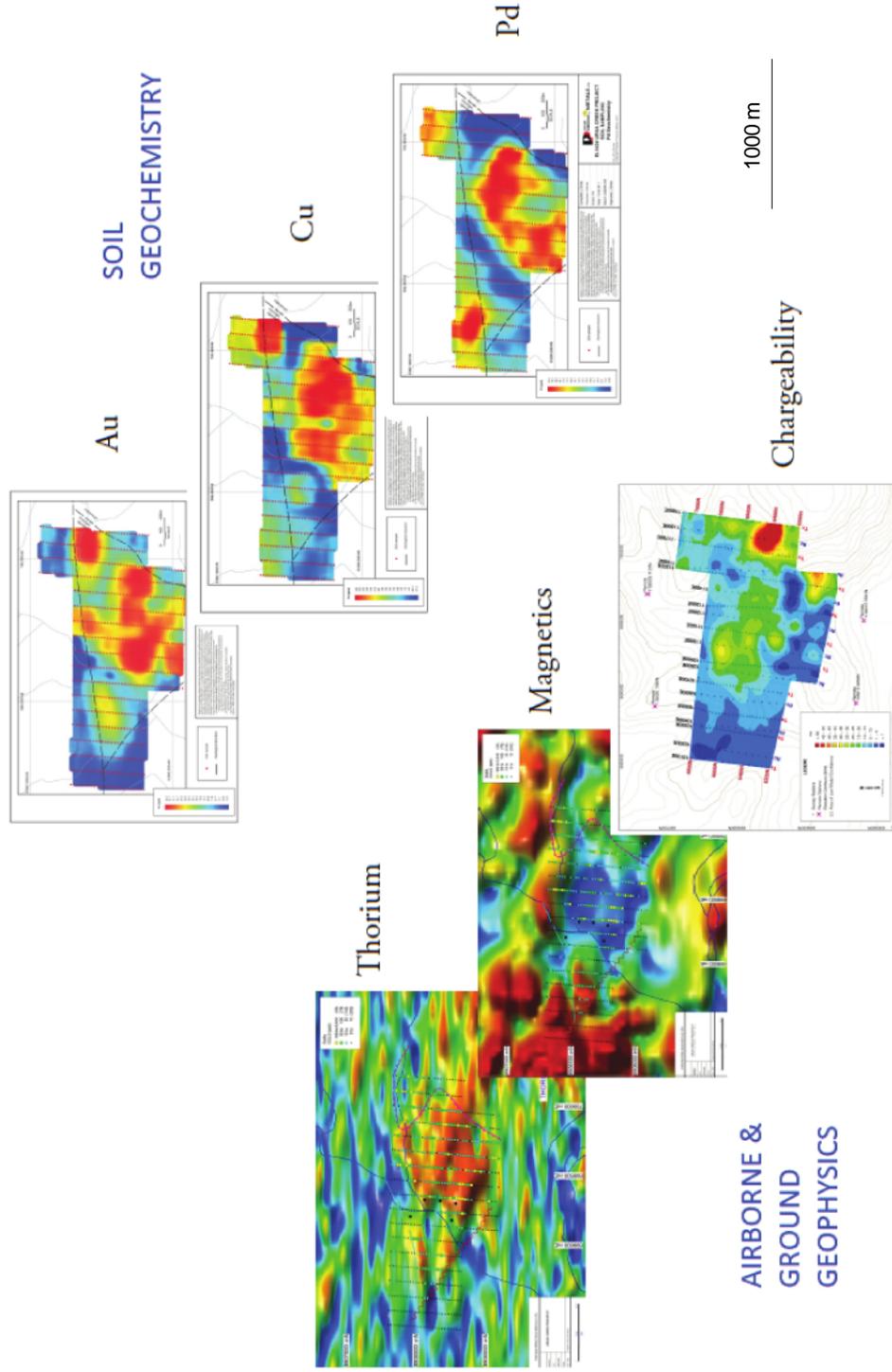


Figure 3: *Urna prospect showing coincident Au-Cu-Pd soil geochemistry, airborne geophysical signatures (thorium and magnetics) and chargeability.*

Pliocene eruptions from Urua, are present in lower Omu Creek and in the vicinity of the Awale Creek/Waki Creek junction (Figure 2), indicating there is no significant strike-slip (or *horizontal*) displacement between tectonic blocks.

The diatreme breccias are associated with coincident and anomalous Au-Cu-Pd soil values, anomalous Cu-Au values in rock (to 37 g/t Au) and trench, radiometric thorium and magnetic signatures, and a very strong induced polarisation chargeability anomaly (Figure 3). The wood-bearing breccia is 70 m thick and is draped over the top of a drill-intersected altered and multiphase monzonite stock. Only two drillholes have been completed to evaluate this prospective target. Both holes contained numerous intercepts of Cu-Au mineralisation, with a best result of 6.65 m @ 0.77 % Cu, 1.84 g/t Au from 208.85 m depth.

Yokai block. The Yokai block sits between the Omu block and Urua block (Figure 2). It is the least dissected of the three blocks, as a cap of Late Oligocene-Middle Miocene Ada'u Limestone is preserved along the length of the block. The block is downthrown relative to the adjacent blocks, thereby preserving the Ada'u Limestone intact, despite the active tectonism of the region. It has long been thought that porphyry-related skarn development is likely to occur within the limestone formation given it is older than the intrusive rocks at Omu and Urua. Recent petrological studies of four carbonate rocks from Omu and south of Urua provided confirmation of this, when chalcopyrite-cuprite-chalcocite assemblages were observed in 3 limestone samples and chalcopyrite in another. Subsequently, reconnaissance sampling on the northern slopes of Yokai Creek, the subject of this release, under cliffs of limestone, has located exposures and sub-outcrop of skarn mineralisation containing up to 7.41 % Cu.

The technical information in this document has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 and reviewed on behalf of the company by Ian David Lindley, Interim Chief Executive Officer of PNG Copper Corp, a Qualified Person. Dr. Lindley has First Class Honours and Ph.D. degrees in Geology, 44 years mining industry experience, and is a Fellow of the Australian Institute of Geoscientists.