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COMPANY: Rockwater Pty Ltd
ATTENTION: Phil Warton
FROM: Graeme Campbell
SUBJECT: Ravensthorpe Gold Project: Projection of Indicative Pit-
Water Quality for Kaolin, Harbour View, and Flag Pits
NO. PAGES (including this page): 2 DATE: 15th August 2018

Phil,

The indicative projections of pit-water quality below are based on the assessment of mine-waste geochemistry as documented in the GCA (2018) report, viz.

- Graeme Campbell and Associates Pty Ltd, 2018, Ravensthorpe Gold Project: Review of Assays from Geological Database in Conjunction with Historic GCA-Reports - Geochemical Character of Mining / Processing Steams and Implications for Mine-Waste, LG-Ore and Tailings Management (Harbour View, Flag, Kaolin Deposits)

These projections are also based on the indicative salinity ranges of the natural groundwaters as listed in your email earlier today.

The baseline salinity (as Total-Dissolved-Solids [TDS]) for the natural groundwaters broadly corresponds to that of seawater (viz. TDS within 20-40 g/L range).

1.0 HARBOUR VIEW PIT

This pit-water should be circum-neutral (pH 6-8), due to the typical sporadic occurrence of only 'trace-sulphides' in the lower sections of the Pit, and rapid water-table recovery initially (i.e. bottom 10-20 m of pit submerged within a few years).

Concentrations of dissolved minor-elements (e.g. As, Zn, etc.) should be low, and well within the sub-mg/L range, due to low contents of these elements in the pit-wall rocks.

Although Cu contents may locally range up to some thousands-of-mg/kg, solubility should be tightly constrained within the sub-mg/L range for the anticipated circum-neutral-pH regime.

2.0 FLAG PIT

This pit-water is projected to be moderately acidic, due to the common occurrence of 'trace-sulphides', and pit-wall rocks expected to be devoid of carbonates (e.g. calcites). At this pH the concentrations of Cu, Fe and Al are expected to be within the multi-mg/L range.

Although difficult to predict accurately here, it is possible that the primary-silicates in the dacite wall-rocks may be effective in buffering pH near 4 with reduced Fe and Al concentrations, though not necessarily reduced Cu concentrations.

3.0 KAOLIN PIT

This pit-water should be circum-neutral (pH 6-8), due to the local occurrence of calcites in the deep pit-wall rocks with consequent buffering properties.

Concentrations of dissolved minor-elements (e.g. As, Zn, etc.) should be low, and well within the sub-mg/L range, due to low contents of these elements in the pit-wall rocks.

Although 'trace-sulphide' occurrences in the wall-rocks for the Kaolin Pit may be more frequent than for the Harbour View Pit, the chemistry of the two pit-waters should be broadly similar, due to calcite occurrences in the wall rocks of the Kaolin Pit.

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I trust the above is useful to your current needs.

Regards,

Dr GD Campbell
Director