



May 12, 2009

Mr. Chris MacKenzie
Helio Resource Corp. (BAFEX Tanzania)
UK Branch: Belmayne House
99 Clarkehouse Road
Sheffield, S10 2LN
S. Yorkshire, UK

Re: Saza-Makongolosi Project (Kenge Ore) Heap Leach Amenability Test Results (SGS Project CALR-11940-002)

Mr. MacKenzie:

The following report presents the results from the two coarse ore bottle roll cyanidation tests completed on a BAFEX Tanzania, Saza-Makongolosi Project, Kenge target ore sample. The sample tested had been in storage at SGS Minerals Services (Lakefield) since the completion of a scoping level metallurgical test program conducted in 2008 (11940-001). The results from that program were reported in a document issued on August 7, 2008.

Background and Sample Description

Based on the very positive metallurgical response of the Kenge material in the 2008 scoping program, a request was received for the completion of additional testwork intended to assess the ore's amenability to coarse processing (i.e., heap leaching). Due to the limited availability of appropriately sized ore on hand at SGS (Lakefield), the program was limited to preliminary scoping level tests only. Typically, in programs evaluating heap leaching, even at a cursory level, ore as coarse as 1 inch or coarser would be evaluated. In this case, the testwork was completed on the coarsest ore available, specifically -6 mesh (3.35 mm) and -10 mesh (1.7 mm) material.

A single 1,000-g charge of the -6 mesh SMP Composite was prepared from the Bond ball mill test feed remaining from the previous test program. A 1,000-g charge of -10 mesh SMP Composite was retrieved from storage.

Testwork

Both 1-kg ore charges were subjected to heap leach amenability tests (coarse ore bottle roll cyanidation) applying the following test conditions:

Pulp Density	=	40% solids (w/w)
pH	=	10.5 – 11 (maintained with lime)
Cyanide Concentration	=	0.5 g/L NaCN (maintained)
Retention Time	=	14 days, subsampled for Au assay at the intervals indicated in Table 1.

In order to avoid excessive breakage and attrition of the ore, the leach vessels were not rolled continuously but rather intermittently (1 minute every hour) over the duration of the test. This method has been applied to numerous “greenfield” projects and is a very cost effective method of approximating metallurgy (including reagent requirements) and thereby potentially reducing the need to conduct more costly column scale leach tests.

Solution sub-samples were taken and assayed periodically over the test period. Free cyanide concentration and solution pH were monitored and maintained throughout the test. After 14 days, the pulps were filtered and the cakes washed, dried then crushed to pass 10 mesh (if required) and sampled in duplicate for gold analysis.

Considerable assay variation was noted in the initial paired residue gold assays. Both leach residues were therefore resampled and reassayed for gold in duplicate. The repeat assays did little to validate the residue assay. The assays are listed on the attached test sheets. The assay variation is likely a direct reflection of the relatively high proportion of coarse and/or liberated gold in the ore. Note that the average gravity separation gold recovery observed in the previous test program was ~35%.

Results from the two heap leach amenability tests are presented in Table 1.

Table 1. Heap Leach Amenity Test Results

Test No.	Feed Size P ₈₀ , mm	Reag. Consumption kg/t of CN Feed		% Au Extraction Days								* Norm 14 day	Residue Au, g/t	Head (calc), Au, g,t
		NaCN	CaO	1	2	3	4	7	10	14				
HL-1	2.16	0.53	0.96	34	41	45	47	56	62	67.4	62.8	1.54	4.72	
HL-2	1.32	0.57	0.96	50	57	60	61	64	66	66.7	71.4	1.19	3.56	

* The normalised 14 day extractions are calculated by comparing the final residue assay to the average head grade (i.e., 4.14 g/t Au)

The kinetic gold extraction curves are given in Figure 1.

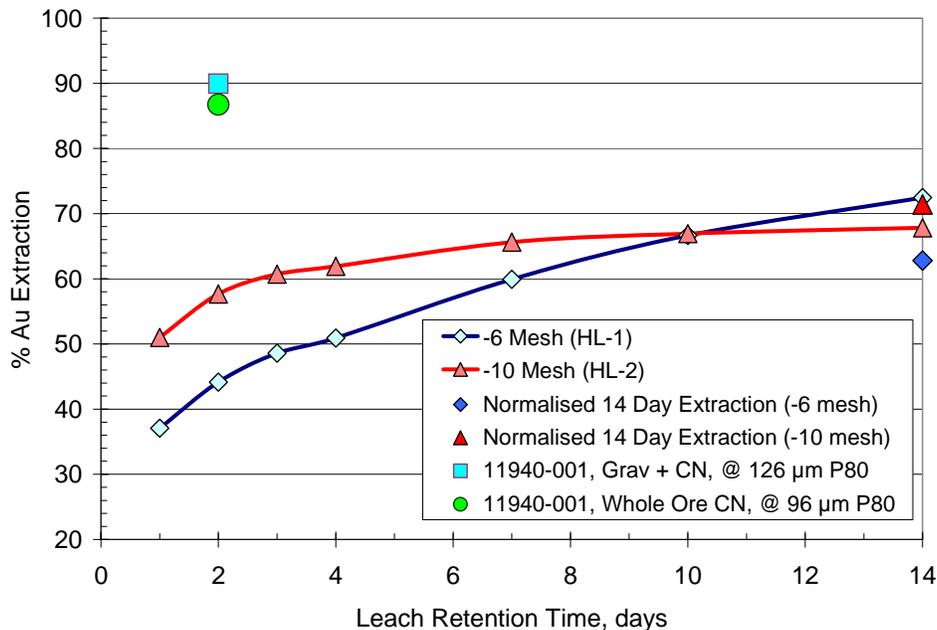


Figure 1. Heap Leach Amenity Gold Extraction Kinetics

The pronounced difference in calculated gold head grades between the two tests makes a direct comparison of gold extractions difficult. Comparing final residue grades however, indicates that as expected, gold recovery was somewhat higher from the finer crushed feed sample (Test HL-2 at -10 mesh). Comparing the final residue grades to the average calculated gold head grade (= 4.14 g/t Au) resulted in the “Normalised 14 Day Gold Extraction” values given in Table 1 and illustrated in Figure 1. Considering the normalised extraction values and the apparent trend toward lower extraction with coarser crushing, it does not appear likely that gold extraction from a heap leach operation, presumably operated

at a much coarser crush size, would exceed ~70%. This should certainly be verified with comparative tests at much coarser crush sizes (-1 inch, - $\frac{3}{4}$ inch, - $\frac{1}{2}$ inch and - $\frac{1}{4}$ inch).

Conclusions and Recommendations

While gold recoveries approaching 70% by heap leaching may be considered as being quite reasonable in many cases, caution should be exercised in evaluating the results from the tests completed in this program. The ore tested in this case was considerably finer than is usual in current industrial practice. The grade of the Kenge ore (3.5 to 4.7 g/t Au) is certainly much higher than is typical in industrial heap leach operations. The excellent response of this ore to conventional fine grind + gravity separation + gravity tailing cyanidation processes or to whole ore cyanidation (refer to “11940-001, Grav + CN @ 126 μm P₈₀” and “11940-001, Whole Ore CN @ 96 μm P₈₀” in Figure 1) may be cause to contemplate processing this ore in a conventional circuit rather than a heap leach operation.

If the heap leach option will be further evaluated, we recommend that future testwork focus on evaluating coarser crush sizes.

All test details are contained in Appendix A.

Best Regards,

A handwritten signature in black ink, appearing to read 'James MacDonald'.

*James MacDonald
Senior Metallurgist
SGS Minerals Services (Lakefield)*