

FURTHER METALLURGICAL TESTWORK SUCCESS AT APOLLO HILL

- **Agitated cyanide leach tests at P80 sizes of 300, 150 and 90 microns gave values of 92% to 98% extraction.**
- **Gravity Recoverable Gold (GRG) test returned a value of 82% extraction.**
- **Column leach (heap leach simulation) tests at HPGR crush sizes of -4 mm and -8 mm achieved gold extractions of 76.7% and 69.1% respectively.**

Peel Mining Ltd is pleased to advise that recent metallurgical testwork on ore from its 100%-owned Apollo Hill gold project near Leonora WA, has returned further positive results. Peel is encouraged by the results which continue to highlight the positive metallurgical characteristics of the Apollo Hill gold project. The aim of the program was to continue to investigate the potential of extracting gold by evaluating gravity and cyanide leach extractions from Apollo Hill ore at conventional grind sizes, and coarse-crush sizes.

Samples and Sample Preparation

Sample material was derived from diamond drillholes PADD01 and PADD02, completed by Peel Mining in April 2011.

Approximately 330 kg of ½ and ¼ HQ core sample, predominantly representative of fresh ore, was composited and stage crushed to 100% <20mm. This material was then rotary split providing the following sub-samples: 60 kg for stage crushing to -3.35 mm (for head assay and cyanide leach tests); 100 kg for HPGR crushing to -4 mm; 100 kg for HPGR crushing to -8 mm; and 40 kg reserve. The two 100 kg lots were subsequently crushed to -4 mm and -8 mm by HPGR. Sub-samples of the HPGR products were rotary split for head assay, size assay, agglomeration tests and cyanide leach tests including intermittent bottle roll and column tests.

Head Assays

The overall head grade was calculated to be 0.73 g/t Au, and as previously seen, grade variability was observed between the head samples indicating the presence of coarse spotty gold. The ore also contained minor concentrations of silver and low concentrations of cyanide consuming metals, such as copper and zinc.

Bond Ball Mill Work Index (BBMWI) Test

A BBMWI of 16 kWh/t was determined for the ore indicating an ore of average hardness, similar to previous testwork results.

Cyanide Leach Tests

Cyanide leach tests were conducted to determine gold extractions from the ore by (i) pre-leach of gravity gold prior to leaching the combined concentrate leach residue and gravity tails and (ii) direct leaching of the whole ore. The results of these tests are presented in Figure 1 and Table 1 below.

Figure 1 – Gold Extraction vs Time

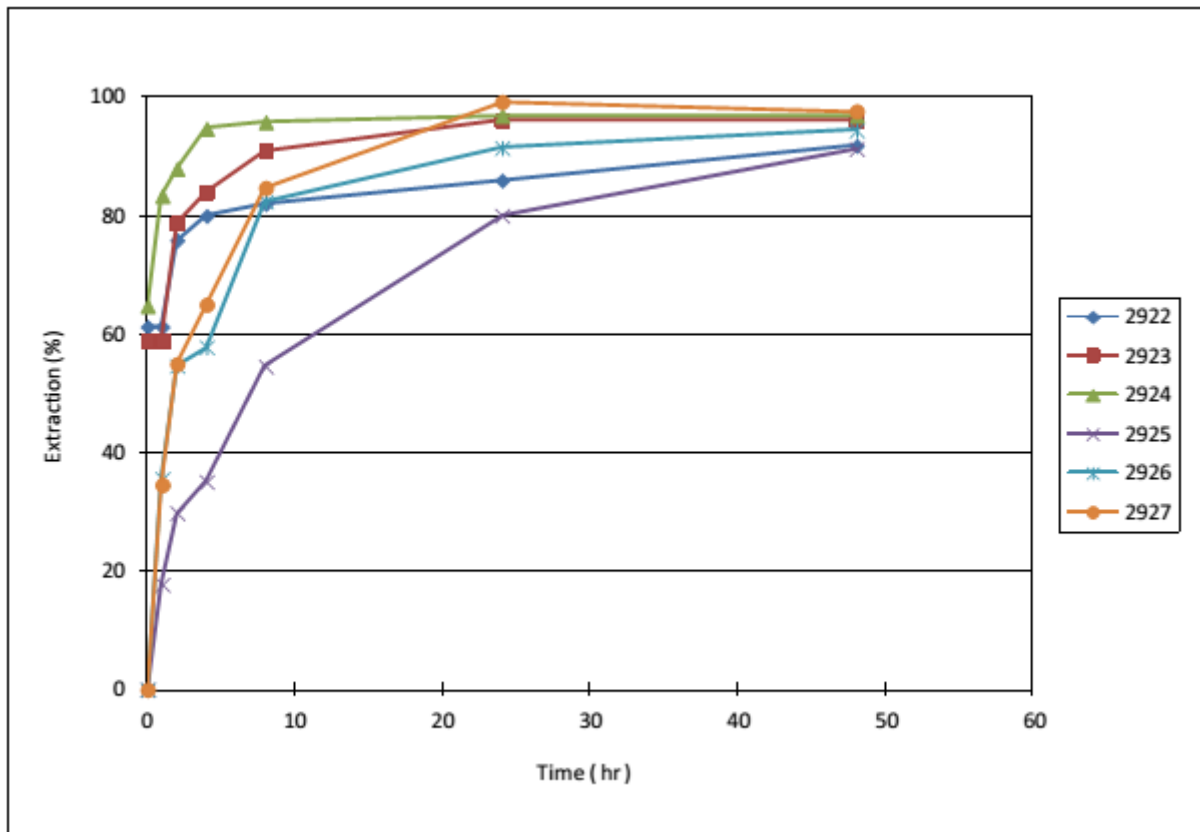


Table 1 - Cyanide Leach Test Data

Test No	Gravity Gold Pre-Leach Step	P ₈₀ Grind Size (µm)	Gold Grade (g/t)				Gold Extraction (%)	NaCN Cons. (kg/t)
			Extracted in Gravity	Final Residue	Extracted in Leach	Calculated Head		
2922	Yes	300	0.35	0.07	0.19	0.57	93.9	0.27
2923	Yes	150	0.39	0.05	0.25	0.67	96.2	0.30
2924	Yes	90	0.33	0.03	0.17	0.52	97.1	0.32
2925	No	300	NA	0.15	0.80	0.88	91.5	0.41
2926	No	150	NA	0.04	0.35	0.37	94.6	0.36
2927	No	90	NA	0.03	0.68	0.69	97.8	0.46

The leach tests indicated that:

- High gold extractions were achieved in all tests ranging from 92% to 97%.
- The gold was well liberated with extractions of 92% and 93% achieved at the coarsest grind size of P80 300 µm. Gold extractions improved slightly with decreasing grind size.
- Pre-leaching the gravity gold improved the leach kinetics compared to the whole ore tests, but only had a modest effect on the ultimate gold extractions.
- About 60% of the gold was extracted by pre-concentration and intensive leaching of the gravity concentrate.
- The calculated heads derived for the tests ranged from 0.37 to 0.88 g/t gold which gave an indication of spotty gold. The greatest variability was seen in tests without gravity gold extraction.

Gravity Recoverable Gold (GRG) Test

A Gravity Recoverable Gold (GRG) test was conducted to determine the recovery of gold to a gravity circuit using the ConSep test methodology. The test demonstrated the ore was amenable to gravity gold recovery with 82.5% of gold recovered to a concentrate containing 1.4% of the mass.

Feed Size Assay on HPGR Product

Mass and gold distributions in the -8 mm and -4mm HPGR products show that the gold is mostly distributed in proportion to the mass with gold grades reasonably consistent across the fractions. The calculated heads for the two crush sizes were in close agreement at 0.79 and 0.80 g/t. The particle size distribution obtained by HPGR crushing is typically finer than achieved by conventional crushing. The P80 size for the -8 mm and -4 mm products were 4.6 mm and 2.4 mm respectively.

Agglomeration and Percolation Tests

Agglomeration and percolation tests were conducted on -4 mm composite which represented the worst-case with respect to bed permeability in a heap leach. The tests determined the appropriate cement (or lime) and moisture additions to provide satisfactory agglomeration conditions for the column leach tests. Satisfactory results were obtained for tests using either lime or cement, however the test with lime was marginal with respect to the measured percolation rate. Cement agglomeration provided good percolation rates.

Intermittent Bottle Roll Leach Tests on HPGR Product

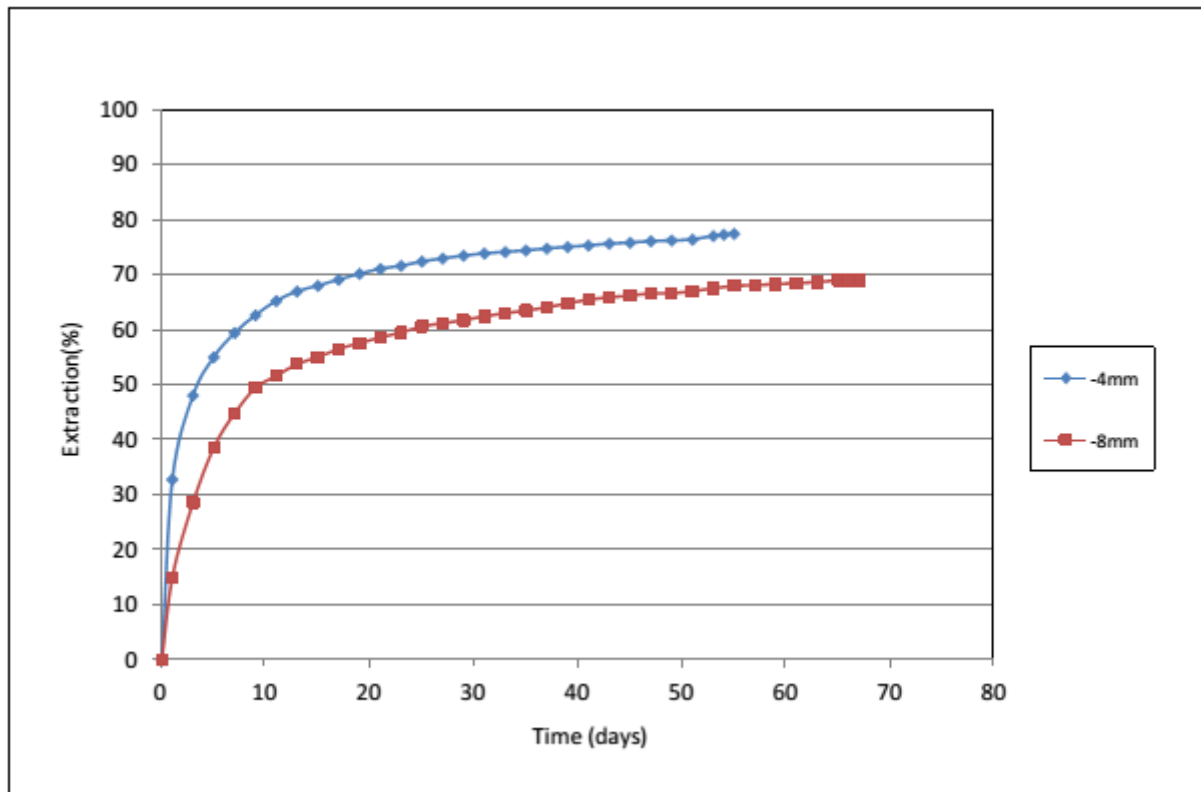
Intermittent bottle roll tests were conducted on samples HPGR crushed to -4 mm and -8 mm. The leach profiles indicated that the -4 mm composite contained a coarse gold component that was slow leaching. The gold extractions obtained at the -4 mm and -8 mm crush size were 59% and 67%, respectively. The tests suggested that gold extractions in a column test should be in excess of 60%, with a residue grade of ~0.2 g/t gold, or lower. Cyanide consumptions were low to moderate at 0.1 kg/t to 0.6 kg/t.

Column Leach Tests on HPGR Product

Column leach tests were performed on sample HPGR crushed to -4 mm and -8 mm. The key findings were:

- Gold extractions of 77.6% and 69.1% were obtained at crush sizes of 4 and 8 mm, respectively.
- The respective gold extraction achieved within the first two weeks of leaching was ~67% and ~54%.
- Size-by-size assays on the column residues showed that the majority of the residual gold was contained in solids coarser than 2 mm.
- The column charges remained permeable throughout the leach tests with no evidence of ponding or poor permeability. The maximum percolation rates measured on each test at the end of the leach were high at >20,000 L/m²/h.
- Cyanide consumptions were moderate at 0.7 to 0.8 kg/t. The analysis of the first PLS and final barren liquor showed relatively low concentrations of cyanide consuming metals such as copper, iron and zinc.

Figure 2 – Column Leach Extraction vs Time



For further information, please contact Rob Tyson on +61 420 234 020.

Competent Persons Statements

The information in this report that relates to Exploration Results is based on information compiled by Rob Tyson who is a fulltime employee of the company. Mr Tyson is a member of the Australasian Institute of Mining and Metallurgy. Mr Tyson has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Tyson consents to the inclusion in this report of the matters based on information in the form and context in which it appears. Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures.