



29 April 2016

QUARTERLY REPORT
FOR PERIOD ENDED 31 March 2016
(ARK: code AHK)

OPERATIONAL HIGHLIGHTS FOR THE QUARTER

- **Ark lodged its Mt Porter Gold project Mine Management Plan (MMP) on the 14th March with the Department of Mines and Energy in the Northern Territory.**
- **Ark executed and exchanged a sale and purchase agreement with Newmarket Gold NT Holdings Pty Ltd (Newmarket) for ML29679 in the Northern Territory (Glencoe). Glencoe is a 42,000 oz Gold deposit which only requires a Mine Management Plan approval to get it into production.**
- **Ark has commenced requests for Mine Contractor interest for the Mining component of the Mt Porter project. Ark will award this contract early in May this year.**
- **The Company undertook a mapping and rock chip program, at its Frances Creek, High Grade Gold Prospect in Pine Creek, Northern Territory;**
- **The recent work has provided further extensions to known vein systems and delivered strong drill targets, where Ark will commence drilling in the coming months.**



- **The Company has commenced the first phase of environmental work at its Glencoe Gold Project in Pine Creek, Northern Territory. This is a key component of the Mine Management Plan (MMP), which is required before Mine approval in the Northern Territory.**

Mt Porter Mine Management Plan

The submission of the Mt Porter Mine Management Plan is a significant step forward for Ark Mines. It is the culmination of many months of technical appraisal and Environmental assessment. Ark is very pleased with the result of this work and feels the Mine Management Plan aligns with world's best practice, environmentally and socially.

The Mine Management Plan covers

- Identification and description of mining activities;
- Particulars of the implementation of the management systems to address environmental issues;
- A plan and costing of closure activities;
- Particulars of the organisational structure; and
- Plans of current and proposed mine workings and infrastructure and other information as required.



Figure 1 Environmentalists water sampling at Mt Porter



Ark anticipates the Department of Mines (NT) will approve the Mt Porter Mine Management Plan in this quarter. Ark will commence mining as soon as practicable after the approval. The Company has a binding agreement with Newmarket to process the Ore at its proximal Gold CIL plant at Pine Creek (Union Reef Mill). There is an existing haul road which leads directly to the Mill, only 12km away.

Glencoe Acquisition

The acquisition of Glencoe is an important step in AHK fulfilling its plans to become a medium level gold producer in the Northern Territory. Glencoe joins AHK's established projects at Mt. Porter and Frances Creekx.

Material terms of the Agreement (and associated arrangements) are that:

- Newmarket shall sell and Ark shall purchase Glencoe;
- within seven business days after the parties execute and exchange the Sale Agreement, Ark shall pay to Crocodile the sum of seventy five thousand Australian dollars (AUD\$75,000.00), which payment shall be non-refundable. The payment to be made by Ark shall, for clarity, include any and all bonds and other securities paid by Newmarket and which bonds or securities shall be assigned to Ark with effect from completion of the Sale Agreement;
- Ark shall pay to Newmarket the sum of one hundred thousand Australian dollars (AUD\$100,000) upon the commencement of Glencoe mining;
- in the event that Ark shall mine Glencoe, Ark shall pay to Newmarket a royalty of one percent (1.0%) to be applied against gold sales made from Glencoe ore.

Highlights of the Glencoe Project include:

- ✓ 704,000 tonnes @1.9g/t Au with 253,000 tonnes @2.2 g/t Au oxide and 451,000 tonnes @ 1.7 g/t Au Fresh(see Table A below). This mineral resource estimate complies with recommendations in the Australasian Code for Reporting of Mineral Resources and Ore Reserves (2004) by the Joint Ore Reserves Committee (JORC) (this resource was announced by Ark on 25 February 2016);
- ✓ Metallurgical test work has shown high gravity/cyanidation recoveries of 95.85% (Ammtec 2012). Reagent consumptions were relatively low, with lime and cyanide consumption of 1.01 and 0.77 kg/t, respectively;



- ✓ Bulk sample has been undertaken and reconcilable
- ✓ Pre strip completed
- ✓ the oxide zone is 30m below surface;
- ✓ The deposit is proximal to the other AHK tenements and within trucking distance of Newmarket's Union Reef Gold Mill;
- ✓ A strike length of 800m (from 3,300mE to 4,100mE) with potential for extensions;
- ✓ The deposit is located in three mineralized zones, the largest of which is a round 700m in strike length, 100m down dip and up to 15m in width;
- ✓ Sealed road access;
- ✓ Flat and easily accessible terrain; and
- ✓ No other entities have existing entitlements over this tenement.

Table A: Glencoe Deposit April 2006 Mineral Resource Estimate							
1.0g/t Cut-off, High Grade Cut 20g/t							
Zone	Indicated		Inferred		Total		
	Tonnes	Cut Au	Tonnes	Cut Au	Tonnes	Cut Au	Cut Au
	T	g/t	T	g/t	T	g/t	Ounces
Oxide	208,000	2.1	45,000	2.4	253,000	2.2	17,700
Fresh	174,000	2.0	277,000	1.6	451,000	1.7	25,200
Total	382,000	2.1	322,000	1.7	704,000	1.9	42,900
Previous Estimates							
ERA 1989					730,000	2.3	54,000

Frances Creek Mapping

Whilst the mapping undertaken by Ark to date has been limited, the results have been impressive, in the context of extending the known gold vein exposure.



Ark undertook a two day reconnaissance mapping program focussed on gold mineralisation near to its known gold veins at Frances Creek. The mapping was completed in the area around Golden Honcho, Golden Seniorita and Golden Gulf prospects within the Exploration Lease.

The mapping unveiled numerous new occurrences of quartz veins. Furthermore the study extended known veins and structures and three of the most promising locations were assigned as new prospects: Golden Honcho North, Golden Dias and Golden Sierra.

At Golden Honcho North, quartz veining and stockwork – type mineralisation was recorded in the Golden Honcho structural corridor, for a further 600m to the north of the existing mineralisation. Two relatively thin 0.2- 0.3m veins returned 12.3 and 0.88 ppm Au. This prospect is a high priority for further exploration including rock chip geochemistry and drill testing (refer to Figure 2).

Further to the north across a valley, a series of prominent, up to 1 m thick veins was recorded on a plateau somewhat parallel to Golden Slips, previously named Golden Dias. The veins at Golden Dias, arching from the meridional to northeastern strike were traced for a distance of over 200 m with individual veins being 80-120 m long. One of the northernmost 0.3 m-thick veins returned 0.77 and 0.11 ppm Au. The prospect, demonstrating a significant-scale, gold-bearing vein system, is potentially related to the same Golden Honcho structural corridor and warrants follow-up exploration work.

The Golden Sierra prospect is located on the next ridge to the east of the Golden Sips northern extension. A series of quartz veins was documented; the major 0.4m-thick vein outcropping for a 25m distance along a road returned 0.32ppm Au. The area also warrants follow up work.



Figure 2 Series of concordant and discordant quartz veins in a sandstone sequence, Golden Honcho North, looking east.



Frances Creek Project Highlights:

- Sub-vertical quartz veins and adjacent gold-bearing alteration zones outcrop on top of steep ridge crests that are amenable to simple, low cost, open pit mining.
- The deposits are only 20km from a gold plant, with current capacity to process oxide gold.
- Additional exposed gold veins, within the Frances Creek project area, require drill testing.
- The deposits are close to Ark's Mount Porter 34,000oz gold mineral resource and to Pine Creek Township.
- Oxide down to 60m
- Existing Haul road running from Frances Creek to local Mill (directly past Mt Porter)

Immediate Plans:

- Undertake further shallow RC drilling directed at the above mentioned targets
- Undertake further mapping and rock chip testing further north
- Complete mineral resource estimations for the Golden Honcho and Golden Slips prospects, reportable under the JORC Code (2012).
- Undertake feasibility study and, if positive,
- Apply for mining lease/s, and other necessary permitting, with a view to commencing operations at the Frances Creek gold prospects.

ARK remains focused on its strategy to mine high grade gold and earn revenue as soon as is practicable. The board will continue its current efforts to locate and secure other suitable projects in Australia that support the ARK strategy.

FURTHER INFORMATION: Roger Jackson, Managing Director, Ark Mines Limited: +61400 408 550

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves has been compiled by Roger Jackson BSc , Grad Dip Fin Man, Dip Ed, AICD, who is a Member of The Australasian Institute of Mining and Metallurgy and who has more than five years' experience in the field of activity being reported on. Mr Jackson is a director of the Company. Mr Jackson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jackson consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.