



29 April 2013

QUARTERLY REPORT

FOR PERIOD ENDED 31 March 2013

(ARK: code AHK)

OPERATIONAL HIGHLIGHTS

- Ark signs with Arafura Resources Limited (ASX:ARU) to Mine, Farm in, and Joint Venture the Mt Porter and Frances Creek gold projects in the Northern Territory's highly prospective Pine Creek region.
- Ark relinquishes 100% of its Byrock Tenement EL8002 in the Lachlan Fold Belt, NSW
- Ark relinquishes 100% of its Byrock Tenement EL8003 in the Lachlan Fold Belt, NSW

MT PORTER

- **Resource Extension Targets confirmed by Ark (refer below)**

Ark will now target these zones in its preliminary Drilling with the view to increase the resource and uplift the grade at Mt Porter.

FRANCES CREEK

A GOLD DEPOSIT ARK INTENDS TO MINE

Highlights

- **Close to Arks Mt Porter 34,000oz Au Resource and Pine Creek**
- **First stage drilling completed - 40 RC holes drilled for 1,646m**
- **Excellent Au grades**



- **Med to High grade quartz veins outcropping on top of steep ridge crests which are amenable to simple low cost open pit mining.**
- **The results show similar grades and widths to the surface sampling**
- **Average surface grades of 17.6 g/t over 420 meters (Golden Honcho)**
- **And 18.2 g/t over 180 metres (Golden Slips)**
- **Drilling to date has covered a combined strike length of some 390 metres out of a total strike length of 2,400 metres of mineralised reefs at the prospect.**
- **Multiple intersections will increase total contained ounces and ounces/vertical meter and decrease strip ratio**

The Mt. Porter – Frances Creek projects lies approximately 20km to the North of Pine Creek and 165km South of Darwin in the Northern Territory.

Mt Porter

The gold mineralisation at Mt. Porter was extensively explored by Pine Creek Goldfields Ltd (PCG), a subsidiary of Renison Goldfields Consolidated Ltd (RGC), between 1988 and 1994. Exploration by RGC/PCG at Mt. Porter included a total of 223 drill holes.

The final phase of PCG's exploration at Mt. Porter (46 holes) concentrated on the "10400 Zone" (see cross section below for 10450 N) where earlier drilling had identified a coherent zone of relatively high grade (3-4 g/t Au) gold mineralisation at shallow depths, less than 70 metres from the surface.

PCG completed ore body modeling of Mt. Porter early in 1994. The estimated global resources (JORC 1999) were:

Cut-off 1.5 g/t Au	240,000-250,000 t @ 3.6-3.8 g/t Au
Cut-off 1.7 g/t Au	215,000 t @ 3.9 g/t Au
Cut-off 2.0 g/t Au	176,000 t @ 4.4 g/t Au.

Between 1995 and 1997, an additional 14 drill holes, some as deep as 810 metres (600 metres vertical), were completed by Homestake Gold of Australia Ltd (Homestake) under a



farm-in arrangement with RGC. Homestake explored for major new zones of mineralisation over a kilometre long section of the Mt. Porter mineralised trend, mainly to the north of the 10400 Zone.

In 2003, Arafura Resources Ltd (Arafura) completed a program of 7 inclined core holes totalling 417.5 metres into the 10400 Zone to confirm the continuity of the highest grade gold mineralisation. These holes all intersected medium to high grade quartz veins outcropping on ridge crests which are amenable to simple low cost open pit mining. The results showed similar grades and widths to the surface sampling.

In early 2004, an updated resource estimate was completed for Arafura by Reseval Pty Ltd. Published Identified Resources for the Mt. Porter 10400 Zone deposit, calculated in compliance with the requirements of the JORC Code, now stand at:

	Cut-off 0.5 g/t Au		Cut-off 1.7 g/t
Indicated Resources	694,000 t @ 2.0 g/t Au	Indicated Resources	300,000 t @ 3.1 g/t Au
Inferred Resources	184,000 t @ 1.55 g/t Au	Inferred Resources	55,000 t @ 2.6 g/t Au
TOTAL RESOURCES	878,000 t @ 1.9 g/t Au	TOTAL RESOURCES	355,000 t @ 3.0 g/t Au

In 2005, a review by Arafura of the geological model for the Mount Porter 10400 Zone gold deposit resulted in the identification of two small targets (“NW” and “SE”) which had potential to host minor additional gold resources which could conceivably be extracted at the same time as planned open cut mining of the 10400 Zone resources. Drilling commenced in late-2006 to test these targets but the program was abandoned prematurely after drilling equipment was lost in the fourth hole of the planned 11 hole program. Importantly, the westernmost hole in this program intersected a previously unknown zone of gold mineralisation (“248 Zone”) west of and deeper than the Identified Resources in the 10400 Zone (Goulevitch, 2007).

In 2006, Arafura was granted a mineral lease (ML 23839) over the Mount Porter deposit and in early 2007, in accordance with the requirements of the *NT Environmental Assessment Act 1994*, completed a Public Environmental Report (PER) in respect of mining the existing gold resource and processing off-site (MBS Environmental, 2006, 2007). The PER was formally accepted by the NT Government on 19 March 2007 and Commonwealth Government approval of the proposed open-cut development, under the provisions of the *Environmental Protection and Biodiversity Conservation Act 1999*, was issued in June 2007.

Ark will now target this new found zone in its preliminary Drilling with the view to increase the resource and uplift the grade at Mt Porter.



Frances Creek

Golden Honcho and Golden Slips

At Frances Creek, gold mineralisation has been identified within a number of narrow (<2.5m) ferruginous quartz-breccia veins. These reefs are primarily hosted within massive sandstones of the Mundogie Sandstone, and have a NNE strike. The veins extend into the neighbouring Allamber Springs Granite.

These veins have been explored by several companies since the mid 1980s, with most work focussing on surface geochemistry (soils, rock-chips and stream sediments) with limited drilling follow up. Several high grade veins have been identified from rock-chip sampling including the Golden Honcho and Golden Slips Veins, which have been subsequently drill tested with shallow RC holes by Arafura

The single pass drilling program comprised 40 RC holes for 1,646 metres. The drill results were excellent. The holes that were drilled on the Golden Honcho and Golden Slips reefs ranged in depth from 22 to 67 metres.

These holes all intersected medium to high grade quartz veins outcropping on ridge crests which are amenable to simple low cost open pit mining.

The results show similar grades and widths to the surface sampling which averaged sample grades of 17.6 g/t over 420 metres (Golden Honcho) and 18.2 g/t over 180 metres (Golden Slips). They also show that these veins have substantial depth extensions which will be targeted in the next phase of the drill program.

It is also positive that there are multiple intersections in a number of holes. This has the potential to increase the total contained ounces and the ounces/vertical metre. Some holes intersected a second vein that was not located or sampled at surface and offers the opportunity to increase tonnage and decrease strip ratio in possible open pit.

Drilling to date has covered a combined strike length of some 390 metres out of a total strike length of 2,400 metres of mineralised reefs at the prospect. The Golden Honcho deposit is open along strike to both north and south and at depth.

The intersections in holes were particularly encouraging as they indicate depth continuity. For example, the 3 metre intersection at 9.25 g/t in FCRC051 is directly below the 3 metre intersection of 10.1 g/t in hole FCRC029, and the 5 metres at 19.1 g/t in FCRC053 is directly below the 3 metres at 11 g/t in hole FCRC052".

Ark will commence drilling immediately and expect robust results in all holes. It is anticipated this will be Arks second commercial Mining centre in the NT region.



ARK LACHLAN FOLD BELT TENEMENTS

12 MONTH EXPLORATION PROPOSAL

Ark holds six Exploration Licences (ELs) in New South Wales (NSW). All of which are within the Lachlan Fold Belt. This area is the focus for Exploration in NSW and the epicentre of many major polymetallic and precious metal Mines.

Ark Mines hold 100% of six Licences

Licence Name	Licence Number	Units	Metal Potential
Babinda	7973	47	Cu Pb Zn Ag Au
Bald Hills	6339	22	Au
Gundabooka	6341	24	Au
Coonara	8050	99	Cu Pb Zn Ag Au
Blackfellows	7988	3	U
Nangerybone	6726	50	Au Cu Zn Pb Ag

Ark has been actively exploring these tenements over the past 6 years, and has recently drilled a number of the more favourable targets with considerable success. The targets were developed with Systematic sampling and Geophysics. In recent months the Board has affectively dropped any ground that is not prospective and has now developed a focussed drilling program with ominous targets.

All The LFB prospects are within the shadow of large base metal or precious metal Mines in the Cobar field.



BABINDA

LOCAL TO THE MAJOR POLY METALLICS

- **Successful Drill results over a Prominent gravity and Magnetic High**

Rationale

Babinda Project has returned promising base metal intercepts at shallow depths from Arks previous drill programs. The Babinda project is 20 kilometres from Nymagee and South of the Cobar Mining field. Babinda has **uncanny similarities** to the Hera and Nymagee Polymetallic Mines developed by YTC Resources.

YTC Resource (per asx announcement 18/3/13)

	Gold (oz)	Silver (Oz)	Copper t	Lead t	Zinc t
HERA	321,832	1,308,200	4,042	62,278	93,870
NYMAGEE		2,32,638	95,935	26,964	52,963
TOTAL	321,832	3,650,958	99,977	94,242	146,833

In late 2011 a 600m RC program was undertaken at Babinda and was designed to test the gravity high that AHK surveyed in June 2011. The Gravity anomaly lies directly in the centre of a large oval-shaped magnetic anomaly.

The shallow RC holes, which has shown “large surface Mineralised Halloes” indicate that there is potential for higher grade results at depth, and importantly, additional targets near the Lord Dudley Mine The drill results confirm that the gravity anomaly correlates with the drill results.

It is therefore important to understand the full extent of the Lord Dudley Gravity anomaly. so a gravity ground crew will be required initially to close out the anomaly. Further to this 5, 120m Rc drill holes will be drilled across the anomaly to determine the geochemical signature as per the Elaines ominous signature. (Refer to the Gravity map) From these results Ark can then proceed to drill a deep diamond hole into the target at both Lord Dudley and Elaine., It is proposed, but not limited to, drilling a 400m diamond hole in each target.

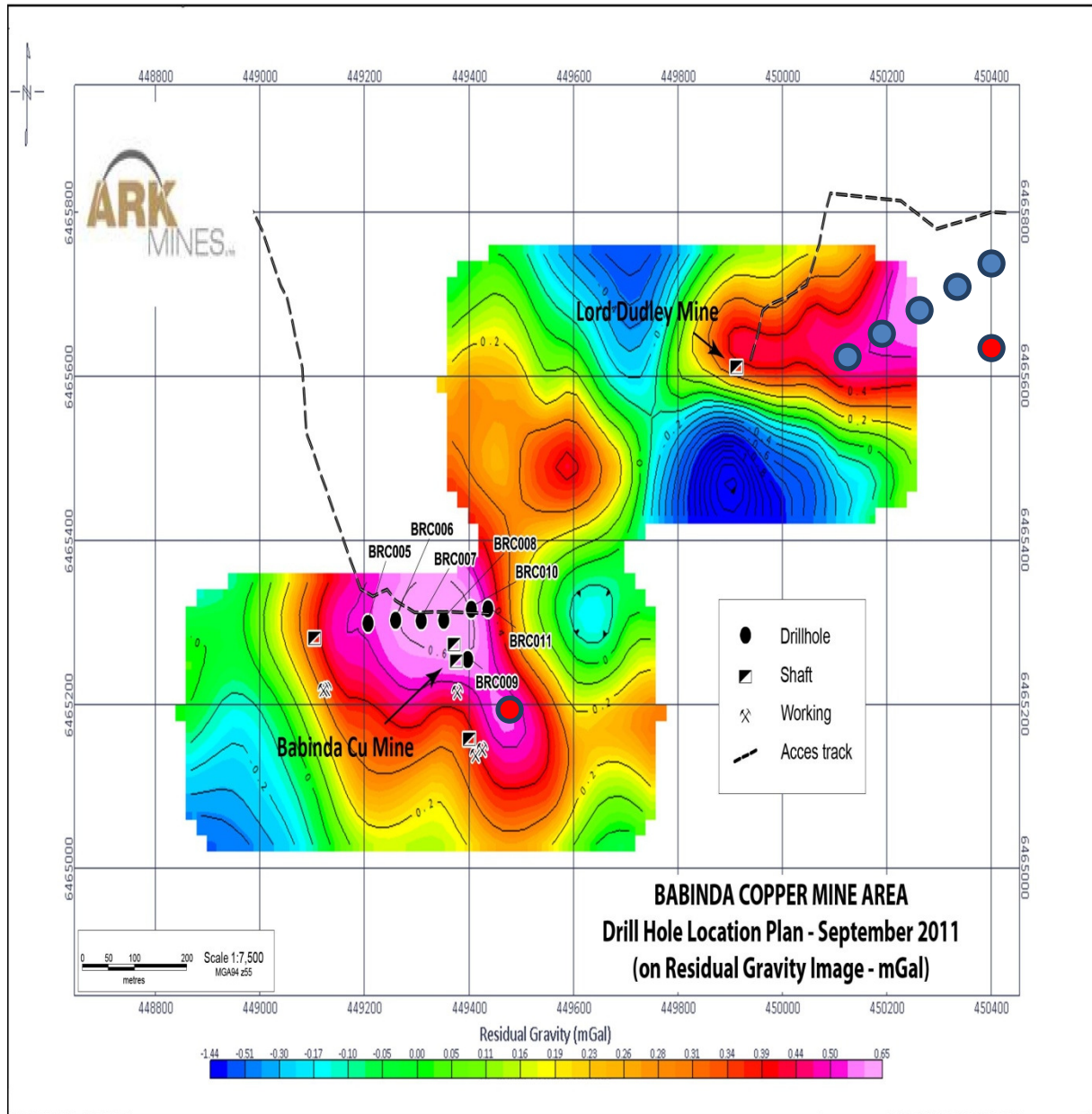


Figure 1 Babinda Gravity map, and proposed drill holes

- Proposed 120m RC Holes
- Proposed 300m Diamond Holes

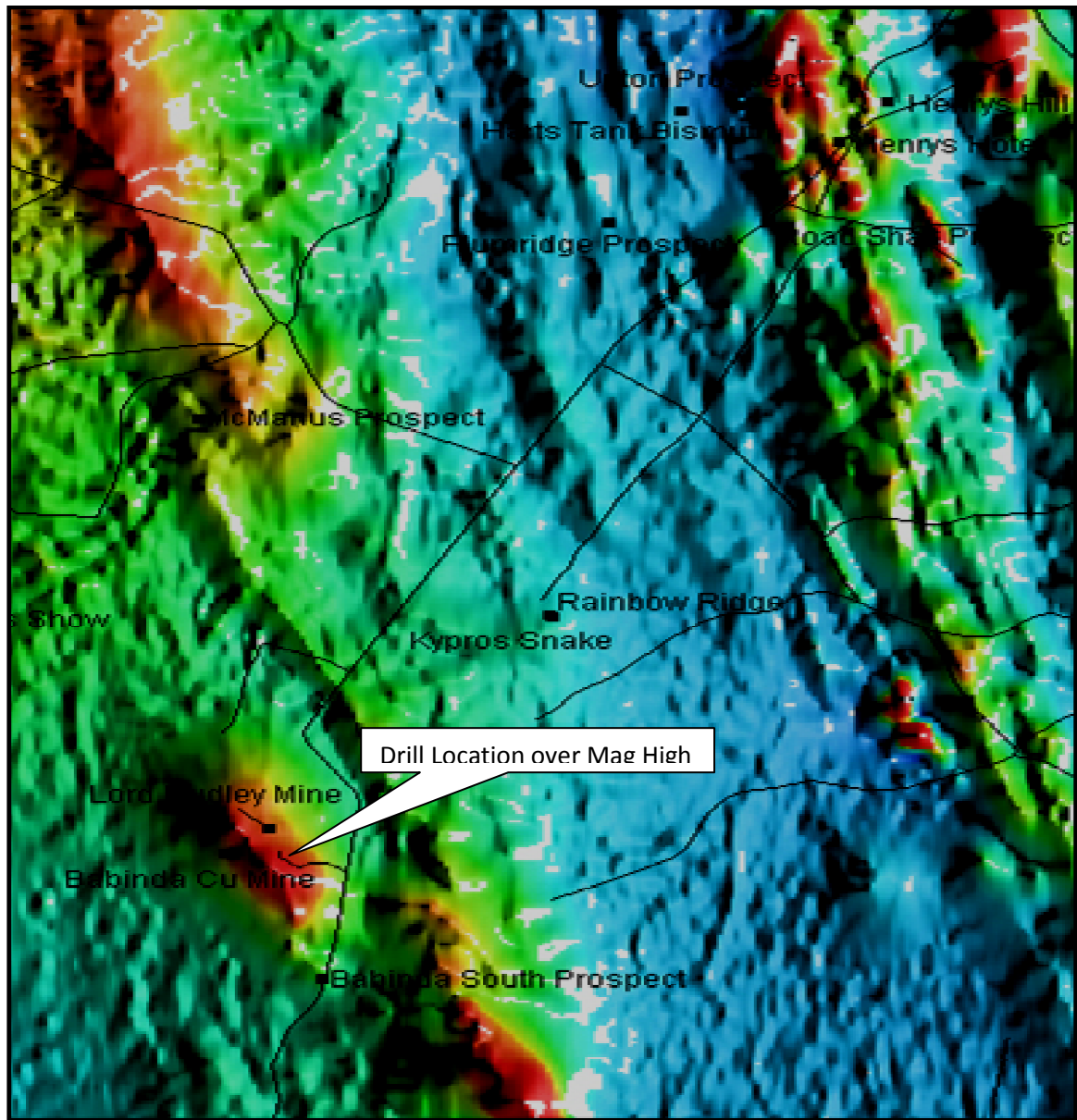


Figure 2 Babinda Magnetic Anomaly

GUNDABOOKA HIGHLIGHTS SO FAR INCLUDE:

- **Gundabooka Gold Deposit located within a Western splay, off the Rookery Fault Zone (hosts the Cobar mineral field)**
- **GRC0012m @ 2.49g/t Au from 48m to 50m with 1m @ 4.82g/t Au**
- **GRC002 6m @ 3.5g/t Au from 37m to 43m with 1m @ 19.8g/t Au**
- **122.02g/t Au samples taken from rock samples in old workings**

About Gundabooka

Gold was first discovered in the Gundabooka area in 1898, resulting in the development of a number of gold prospects mainly in the form of vertical shafts (up to 40m deep) and shallow pits (up to 2m deep). Gundabooka was worked up until 1930 with a recorded production of approximately 30kg Au.

- Gundabooka consists of two vertical shafts, a decline shaft, a 170m long drive (37m below surface) and a 30m long winze which stopped at a vertical depth of 58m.
- Samples have been collected along the drive and the results are:
 - Highly gossanous quartz vein (15-30cm thick) hosted within siltstone.
 - Wallrock alteration consists of 1-2m zones of 3-5cm thick quartz veins spaced at 30cm and sub-parallel to the main quartz vein. Multiple limonitic fractures are seen perpendicular to the quartz veins.
 - Assays of 0.12g/t Au to 26.0g/t Au.
 - Surface mullock samples at main workings with best results of 122.02g/t Au within brecciated quartz vein material with yellow and red oxide material (containing pyromorphite and cerussite).
 - There are two shafts, 15m deep, northeast of Gundabooka with a mullock sample of 25.6g/t Au; 6.5% Pb within broken up quartz vein material with cerussite and sheared sst material (wallrock).
 - Petrological samples observed visible Au.



Gundabooka Exploration Rationale

Gundabooka has previously shown, through Arks previous drilling programs, that it has some high grade gold intersections. Drilling, however, has been limited with only three shallow RC holes drilled thus far. The tectonic environment provides for larger systems to have derived the high gold mineralisation. Due to the lack of exposed rock and significant cover over most of the immediate area, drilling is proposed as the best, and most cost effective, means of exposing the gold potential. With success Ark will work out from the Great Gundabooka shaft area with further drilling.

12 Month Budget

Licence Name	Licence Number	Units	Proposed Exploration	Cost to Ark	
Babinda	7973	47	Ground Gravity Program 5 X 120m RC holes 2 X 400m Diamond Holes	\$236,000	
Bald Hills	6339	22	Drill Program TBD	Nil	Farm in with Drilling company
Gundabooka	6341	24	6 X 50m RC Holes and 2 250m RC holes	\$146,000	
Coonara	8050	99	Soil Sampling	\$50,000	
Blackfellows	7988	3	On approval Ground Geophysics	Nil	JV with Uranium explorer
Nangerybone	6726	50	3 X 30m RC holes	\$50,000	

Total Expenditure for the next 12 months \$480,000



The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves has been compiled by Robert McLennan BSc (Hons), MSc, MAIG, who is a Fellow of The Australasian Institute of Mining and Metallurgy and who has more than ten years experience in the field of activity being reported on. Mr McLennan is a director of the Company. Mr McLennan 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 2004 Edition of 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr McLennan consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Note:

Runge Limited who purchased the assets of Resource Evaluations Pty Ltd have reviewed the documentation relating to the Mount Porter resource and have confirmed that this resource estimation conforms to the reporting guidelines of the JORC Code (2004)