Argent Minerals Limited

ABN 89 124 780 276

ASX ANNOUNCEMENT

28 April 2009

EXCELLENT HEAP LEACH TEST RESULTS FOR KEMPFIELD PROJECT

Testwork on BJ Zone shows excellent heap leach suitability.

Highly respected international heap leaching experts, Kappes, Cassiday and Associates Australia (KCAA), planned and supervised heap leach test work on Kempfield's BJ Zone material which was conducted at Metcon's Brookvale laboratory over the last four months.

Kappes Cassiday concluded that "Overall, the Kempfield BJ Zone material appears to be an excellent candidate for low cost heap leach processing based on the easy to moderate crushing characteristics, good silver recoveries, excellent agglomeration characteristics and low to moderate reagent consumptions."

Average silver recoveries applicable to a 3.5mm crush were Oxide and Mixed material 73%, and Primary material 55%."

Executive Chairman of Argent Minerals, Kerry McHugh summarised the impact of the results as "a very positive step along the road towards production of silver from the Kempfield resource." he went onto say "The next step is to provide a revised estimate of the Kempfield resource and we expect to be in a position to do so in the next week."

This metallurgical test work had been foreshadowed in Argent's January 2008 Prospectus. The tests were confined to BJ Zone material which accounts for approximately 70% of the potentially heap leachable material at Kempfield.

Tests will need to be done on McCarron Zone and Quarries Zone material at a later date.

Methodology

The testing program was based on representative intervals of PQ drill core from 5 vertical holes drilled specifically for obtaining metallurgical samples. The drill targets were selected by Argent geologists and reviewed by KCAA. The intervals selected for testing were based on silver grade, degree of oxidation / weathering, rock type, depth and spatial factors and included some low grade or barren intervals to effectively represent "mineable blocks."

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ASX Code: ARD

Market Capitalisation
A$8,400,000
(Last sale $0.20 per share)

Cash at Bank at 31 March 2009
A$2,800,000

Issued Capital (ASX:ARD)
41,940,251 shares

Options on Issue (ASX:ARDO)
41,939,751
Exercisable at $0.20c, 30 June 2011

Background

- Argent listed on the ASX in April 2008 raising $4,000,000

Projects

Argent may earn a 70% interest from Golden Cross Resources Ltd in each of the following projects.

Kempfield

- Core focus of investigating and extending the known polymetalic resource at Kempfield which includes Silver, Lead, Zinc and Barite. Kempfield is located 60kms southeast of Orange in NSW.
- IPO Measured, Indicated and Inferred Resource containing 11.3m ounces of silver, see further the Competent Persons Statement
- Since IPO, completed 3,000m of drilling, expected to lead to a significant increase in resources at Kempfield.
- Metallurgical test work nearing completion to lay the groundwork for potentially viable silver project.

Sunny Corner

- Contains the historic Sunny Corner Silver, Lead and Copper mine, located between Lithgow and Bathurst in NSW.
- Initial inferred resource of 1.5 mt @ 6.2% combined base metals, 24 g/t Ag and 0.3g/t Au. Shallow flat lying deposit which is likely to be amenable to open pit mining.
- Flotation test work is to commence shortly.

West Wyalong

- Located in NSW has a long history of gold exploration and production.
- The focus in West Wyalong is a large coincident gravity and magnetic high within a region known to host copper/gold porphry deposits.

Directors

Kerry McHugh
EXECUTIVE CHAIRMAN

Marcus Michael
EXECUTIVE DIRECTOR

Jamie Ogilvie
NON EXECUTIVE DIRECTOR

David Timms
TECHNICAL ADVISER TO THE BOARD

In all, some 140 individual core intervals were employed representing 156 metres of vertical core. Depths ranged from 3 metres to 51 metres while silver grades ranged from 36 to 195g/t Ag. Oxidation / weathering was designated as “weathered”, “partially weathered” and “fresh”. Rock types included schist and volcanic breccia, with the majority of the intervals logged as volcanic breccia.

Heap leach testing included intermittent bottle roll tests on coarse-crushed portions, column leach tests, sizings with fraction assays, agglomeration optimisation, and physical tests, impact work index measurements, abrasion index measurements, and unconfined compressive strength. Testing was conducted at 16mm, 6.7mm and 3.35mm topsizes with size distributions checked against expectations for field processing.

Testing on the master composites included intermittent bottle roll test at 16mm, intermittent bottle roll tests and column tests at 6.7mm and column tests at 3.35mm.

Relatively standard column leach test procedures were employed, but with increased cyanide levels (to 3,000 ppm) and enhanced aeration / oxidation for the tests on fresh material. Test duration was initially set at 60 days but was extended to over 100 days based on continuing silver recovery.

Results

Overall, indicated silver recoveries ranged from a low of 44% for primary rock in a 16mm intermittent bottle roll test to a high of 84% from a partly weathered sample in a 3.35mm intermittent bottle roll test. At a 4mm crush size, field recoveries are expected to range from 55 to 60% from primary material to as high as 82% for the more weathered / oxidised material.

Average silver recoveries applicable to a 3.5mm crush were Oxide /Mixed material 73% and Primary material 55%.

Physical test results indicate relatively easy crushing characteristics, with all but the deepest fresh rock being suitable for hammer mill / impact crushing. Accordingly a simple crushing circuit would be suitable for BJ Zone material, even at the fine crush sizes indicated.

Reagent consumptions were reasonable with NaCN consumptions ranging from 0.6kg/t in the intermittent bottle roll tests to 3.3kg/t in long-term column tests.

Lime consumptions in the intermittent bottle roll tests ranged from 0.2 to 0.8kg/t while cement dosage averaged 6kg/t. All ores agglomerated exceptionally well, with no slumping or permeability problems encountered in any of the tests.

Agglomeration requirements are expected to be moderate at a 5 to 7kg/t cement dosage. Cyanide consumption is also considered reasonable for silver ores with the expected field consumption in the range of 0.6 to 1.0 kg/t.

Argent Minerals Limited may earn a 70% interest in the Kempfield Tenements from Golden Cross Resources Limited by spending $2.745 million by June 2013.

For more information:

www.argentminerals.com.au

Kerry McHugh
Executive Chairman
Argent Minerals Limited
Ph: 0404 465 154

Competent Person Statements

Kempfield
Resource estimate undertaken by Hellman & Schofield Pty Ltd May 2000 and September 2001.

Resource estimate 60 g/t Ag cut-off	Million tonnes	Ag (g/t)	Million /oz Ag	Barite %	PB %	Zn %
Measured	0.82	109.3	2.9	29.6	0.34	0.41
Indicated	1.93	90.7	5.6	26.0	0.42	0.70
Inferred	0.97	90.5	2.8	24.2	0.65	0.94
Total	**3.72**	**94.7**	**11.3**	26.3	0.46	0.70

The information in this report that relates to mineral resources on the Kempfield Tenements is based on information compiled by Mr van der Heyden who is a Member of the Australian Institute of Mining and Metallurgy and a full time employee of Hellman & Schofield Pty Ltd. The data used to derive the mineral resource estimate was supplied by Argent Minerals Limited and compiled by Mr Chris Torrey who is a Member of the Australian Institute of Geoscientists and a full time employee of CTEX Pty Ltd an independent geological consultancy. Mr van der Heyden and Mr Torrey have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as "Competent Persons" as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr van der Heyden and Mr Torrey consent to the inclusion in this Report of the information compiled by them in the form and context in which they appear.

Sunny Corner
The information in this report that relates to mineral resources on the Sunny Corner Tenements is based on information compiled by Mr Simon Tear, who is a Member of the Australian Institute of Mining and Metallurgy and a full time employee of Hellman & Schofield Pty Ltd. The data used to derive the mineral resource estimates was supplied by Argent Minerals and compiled by Dr Vladimir David who is a Member of the Australian Institute of Geoscientists and Registered Professional Geoscientist in Mining, Mineral Exploration and Regional Geology.

Simon Tear and Vladimir David have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as "Competent Persons" as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Tear and Dr David consent to the inclusion in this Report of the information compiled by them in the form and context in which they appear.

Exploration
The information in this Report that relates to Exploration is based on information compiled by David Timms, who is a member of the Australian Institute of Geoscientists, is a Technical Consultant to Argent, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Timms consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.