

Monday 3 March 2014

## KEMPFIELD DRILLING UPDATE

### HIGHLIGHTS:

- **Two full length diamond holes completed**
  - **Causeway Zone AKDD177 to 408 metres**
  - **West McCarron AKDD159 extension from 100.8 to 173.7 metres**
- **Assay results pending**

Argent Minerals Limited (ASX: **ARD**, **Argent**, **Argent Minerals** or the **Company**) is pleased to report that it has completed two diamond holes at Kempfield for a total of 480.9 metres. In summary, the hole drilled at Causeway, AKDD177, was drilled to 408 metres, and hole AKDD159 at West McCarron was extended from its original length of 100.8 metres to 173.7 metres. The Company is waiting for assay results, which the laboratory has advised Argent to expect shortly.

Managing Director David Busch said, "We are very pleased with this initial phase of the drilling program which has progressed according to plan and we look forward to receiving the assay results."

Meanwhile, a summary of the visual observations is provided as follows.

### CAUSEWAY HOLE AKDD177

The Causeway drill hole AKDD177 was drilled to test a coincident IP chargeability and gravity high which could indicate the presence of the disseminated sulphide "halo" of an adjacent massive sulphide feeder zone. Additional exploration "vectors" pointing to massive sulphide potential at Causeway include adjacent Que River footwall-like outcropping felsic volcanic rock identified by Professor Large, a trend of base metal mineralisation grades increasing from east to west, and observations of brown sphalerite in nearby historical core samples; brown sphalerite is indicative of high temperature deposition associated with potential proximity to a VMS feeder zone.

AKDD177 was drilled through a sequence of westerly steeply dipping, strongly foliated felsic volcanic breccia and volcanoclastics containing disseminated sulphides and locally transected with quartz/carbonate veins. The hole intersected two intervals of semi-massive sulphides mainly pyrite in volcanic breccia matrix – from 145 to 156 metres and from 321 to 334 metres.

A summary of key visual observations in relation to the AKDD177 drill core is provided in Table 1.

Table 1 - Causeway Hole AKDD177 Visual Observations

| Interval<br>( From – To, metres) | Visual Observations   |
|----------------------------------|---|
| 0 - 34                           | Sericitised and strongly foliated felsic volcanics (sericite/phlopophite schist).   |
| 34 - 80                          | Disseminated sulphides and quartz/carbonate/barite veins. Stratigraphy is steeply dipping (80-85 degrees) to the west.  |
| 80 - 128                         | Disseminated sulphides with clusters of semi-massive sulphides. Intense chlorite/sericite alteration with carbonate spotting and quartz carbonate veins in strongly foliated felsic volcanic rock. Stratigraphy including quartz carbonate veins and mineralised pyrite bends dips steeply (80-85 degrees) to the west. |
| 128 - 145                        | Disseminated sulphides. Chlorite/sericite altered foliated felsic volcanics containing pyrites mostly in breccia matrix and at the quartz/carbonate vein margins.   |
| 145 - 156                        | Semi-massive sulphide occurrences. Intense sericite/chlorite altered felsic volcanics. Sulphide mineralisation in bends and agglomerated around clasts and quartz-carbonate veins.  |
| 156 – 205                        | Disseminated sulphides. Chlorite/sericite alteration in felsic volcanic breccia with rhyolite dykes.  |
| 205 – 245                        | Disseminated sulphides. Chlorite/sericite altered volcanic/volcaniclastics with rhyolite dykes.   |
| 245 – 321                        | Felsic volcanic breccia; strongly foliated locally with quartz veins and minor sulphides.   |
| 321 – 334                        | Felsic volcanic breccia with semi-massive disseminated sulphide matrix; intense chlorite and sericite alteration.   |
| 334 - 408                        | Felsic volcanic breccia; strongly foliated felsic volcanic breccia  |

## WEST MCCARRON HOLE AKDD159 EXTENSION

The diamond drillhole AKDD159 was drilled as an extension to the existing historical geotechnical hole which, as the Company reported on 18 November 2013, had intercepted rich lead/zinc and silver sulphide mineralisation from 85 to 100.8 metres. AKDD159 was originally terminated in base metals mineralisation at 100.8 metres.

The current AKDD159 extension intersected strongly chlorite altered and mineralised felsic volcanic breccia from 100.8 metres before it entered into weakly altered rhyolite at 152.3 metres. Drilling to the west down dip along stratigraphy was challenging, as expected, and the hole had to be terminated at 173.7 metres due to an intercepted geological fault preventing recirculation of the necessary water for lubrication and cooling of the diamond drill bit.

A summary of key visual observations in relation to the AKDD177 drill core is provided in Table 2.

Table 2 – West McCarron AKDD159 Visual Observations

| Interval<br>( From – To, metres) | Visual Observations  |
|----------------------------------|--|
| 100.8 - 121                      | Strongly chlorite altered volcanic breccia containing sphalerite and galena veins.   |
| 121 - 151                        | Intense chlorite/sericite altered felsic volcanic breccia with stock work of quartz veins and sphalerite; zone of strong faulting. |
| 151 – 152.3                      | Strong fault filled with clay; quartz veins and later euhedral pyrite.   |
| 152.3 – 173.7                    | Weakly altered rhyolite, with localised traces of sphalerite.  |

### AKDD159 Drill Core Photographs

The following preliminary core photographs are provided for AKDD159 drill core:



Figure 1 - AKDD159 drill core at 100.8 metres showing sphalerite and galena veins in strongly chlorite altered volcanic breccia

Scale note: Core size is NQ (4.76 cm diameter).





Figure 2 – AKDD159 drill core at 126 metres showing brown and yellow sphalerite in chlorite-quartz altered volcanic breccia



Figure 3 - AKDD159 drill core at 127 metres showing brown and yellow sphalerite in chlorite-quartz altered volcanics



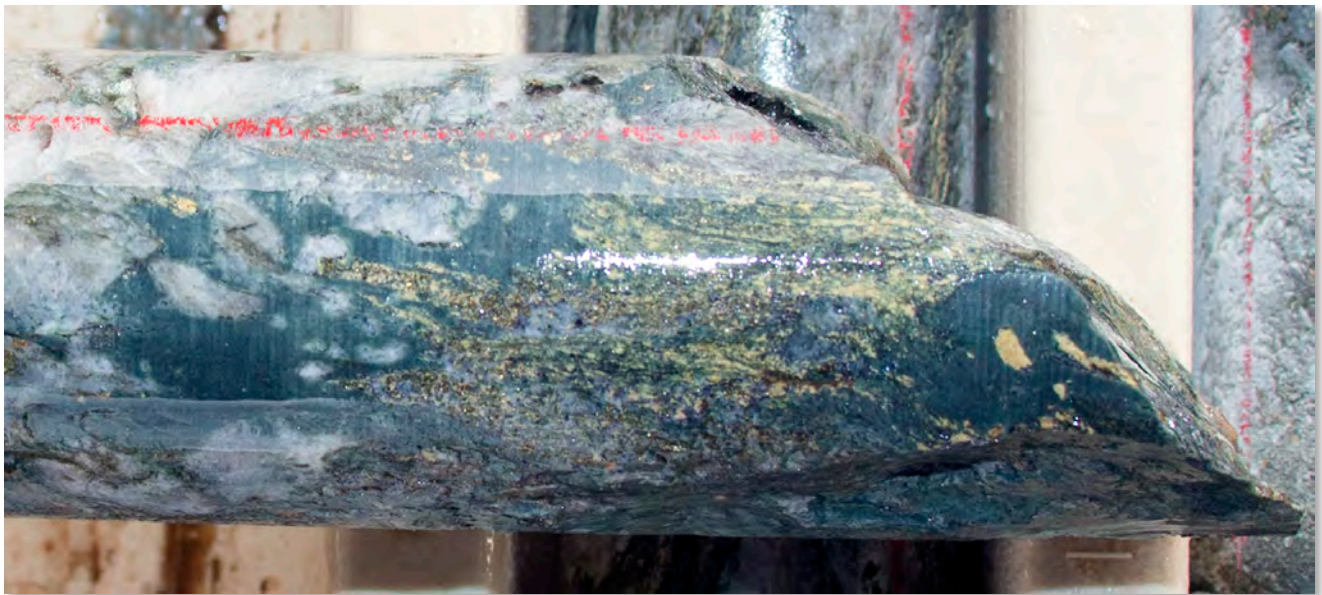


Figure 4 – Close up of AKDD150 drill core at 127 metres shown in Figure 3

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