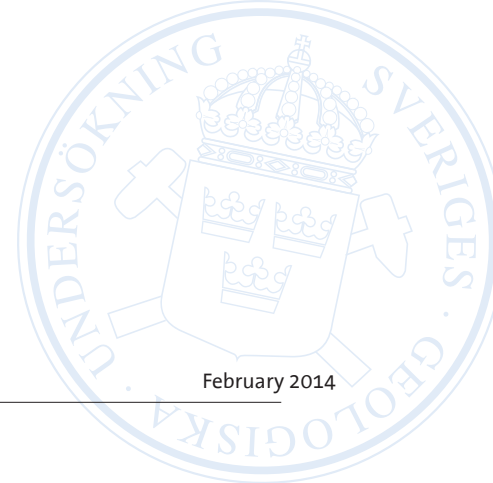


What's up in Sweden

EXPLORATION NEWSLETTER

February 2014



EXPLORATION NEWS

Avalon Minerals Ltd announced on December 17 that The Company has commenced various studies to progress the Viscaria Copper-Iron Project. The results from the site-wide hydrological survey currently underway will be utilised in the Viscaria Project Environmental Impact Assessment. Avalon also plans to conduct a program of drilling and metallurgical testwork in the first half of 2014.

Beowulf Mining Plc announced an operational update on January 22 in respect of the Kallak iron ore project. Approximately 4,124 m of drilling was completed on Kallak South in 2013, covering 16 holes. Significant results include one inclined drill hole with an intercept of 17.40 m at 31.35% average iron content. The new work plan notified and disseminated for Kallak South, for up to a total of 18,000 m of drilling through to 31 December 2015, is now valid. Promising assay results were received for the first four holes from the 1,546 m phase of drilling on Kallak North completed in August 2013. Significant results include one inclined hole with a long intercept of 90.20 m at 41.37 % iron. A 7.36 m section in the same hole returned a result of 46.86 % average iron content. A further 615 m of drilling was completed on Kallak North in late 2013 and early 2014 prior to the local Sami community requesting a temporary suspension of works in accordance with their entitlement under the work plan. The existing work plan remains valid until 31 October 2015 for up to a total of 11,000 m of drilling. **Beowulf** announced on January 27 an operational update in respect of the group's Ballek copper-gold joint venture project. Approximately 300 m has been drilled to date on the ongoing Ballek campaign on the first drillhole. A drill programme of up to 3,000 m over eight holes commenced as planned on 17 December 2013.

On November 18, **Drake Resources Ltd** announced that **Drake** engaged **Mineralium Pty Ltd** to conduct a regional target review of the Company's Bergslagen asset portfolio which contains Drake's greenfield Granmuren nickel/copper sulphide discovery.

On January 31, **Hannans Reward Ltd** announced a maiden JORC Inferred Mineral Resource estimate of 2.3Mt at 1.74 % Cu, 0.6 g/t Au for its Pahtohavare Project. The estimate is a compilation of historic data only at this stage and is expected to grow with additional drilling being undertaken by **Hannans**.

Talga Resources Ltd announced on January 17 that a research project is being undertaken with **Adelaide Research and Innovation Pty Ltd (ARI)**, the commercial

development arm of the University of Adelaide. Specifically, **ARI** has contracted with **Talga** to test ore from the Company's Nunasvaara project and assess the ability of this super grade graphite deposit to produce the much publicized high technology material, graphene. Samples from Nunasvaara are already with the University and test results are expected in a few weeks' time.

Aura Energy Ltd announced on December 4 additional financial modeling of its Häggån Project. **Aura** completed a Scoping Study for the Project in May 2012 at 30 Mtpa, but here has considered three smaller size options: 3.5 Mtpa, 5.0 Mtpa and 7.5 Mtpa, in order to provide a number of additional development options with a substantially lower front end capital cost requirement.

Continental Precious Minerals Inc announced on February 6 positive results from an updated Mineral Resource Estimate and Preliminary Economic Assessment ("PEA") on its Viken Project. The PEA was completed by **P&E Mining Consultants Inc (P&E)**, with **Lawrence Consulting Ltd** and **DENM Engineering Ltd** having completed the metallurgical components of the study. The Viken mineral resource is a poly-metallic shale resource contained within the Viken Shale. **P&E** issued a PEA in 2010 that concluded the Viken Project had economic potential as an open pit mine and processing facility producing Uranium Oxide, Vanadium and Molybdenum. The bio-heap leach case presented in the updated PEA is very different from the roasting methodology in the 2010 PEA. A significant change is that the leaching is acidic rather than alkaline. Another key difference is that with the new plan, the mine product is coarsely crushed for stacking on a heap leach pad rather than being finely ground for tank leaching. **P&E** concludes that the Viken Project has economic potential as an open pit mine and bioheap leach process facility, to recover Uranium Oxide, Nickel, Copper and Zinc. The study contemplates a 60,000 t per day process feed rate and a 34 year mine life.

MINING NEWS

Elgin Mining Inc announced on January 8 record production results for the fourth quarter and year ended December 31. Gold production at Björkdalsgruvan was 13,817 ounces for the fourth quarter and 46,945 ounces for the 2013 year, both records since the commencement of underground production in 2007.

Lovisagruvan AB announced in January 7 that the ore deliveries for 2013 were 39815 t (39003). The ore stockpile of 800 t was depleted.

Lundin Mining Ltd announced on January 23 production results for 2013. Zinkgruvan's Zinc and lead production were slightly below guidance levels largely as a result of lower than planned throughput levels caused by paste backfill and local ground control issues particularly early in the year. Despite steady production at rates of over 18 kt of zinc production per quarter in the last three quarters of 2013, the mine was not able to catch up by the end of the year on the shortfall resulting from poor first quarter production.

In a year-end report for January-December 2013, **Boliden** announced that the milled tonnage volume at Aitik during the fourth quarter totaled 10 Mt and just over 37 Mt for the year as a whole. The higher milled tonnage volume during the quarter resulted in an increase in copper production in comparison with both the previous quarter and the fourth quarter of 2012. The quarter's copper grade was higher than for the year as a whole, while the gold grade deteriorated in comparison with the previous quarter. The copper grade was 0.22% for the quarter and 0.21% for the year as a whole. The Boliden Area's production of zinc, gold and silver increased in comparison with both the previous quarter and the previous year, while copper production fell. The changes were primarily due to changes in the ore mix. Copper ore from Maurliden Östra was replaced by gold ore from Kankberg and zinc ore from Kristineberg. The change in the ore mix means that the Boliden Area is more exposed to precious metal prices and this has had a negative effect on the operating profit over the past year. The milled tonnage volume increased in comparison with the third quarter when a section of the mill was used to process smelter slag, which was not the case during the fourth quarter. Changes in market conditions resulted in the long-term price for tellurium being lowered to approximately USD 150/kg. Production at Garpenberg took place in areas with lower grades than in the previous quarter, resulting in a fall in the production of silver and zinc metal. Production increased year on year, due to low grades and low grindability in the previous year.

In a year-end report for 2013, **LKAB's** president and CEO Lars-Eric Aaro commented that demand for **LKAB's** products remained high during the quarter. The high volume of deliveries in the last quarter of 2012 is due to a large proportion of sales from inventories 1.2 (1.2) Mt. Deliveries of iron ore products totaled 6.6 (7.6) Mt, a decrease of 13%. Deliveries of iron ore for the full year totaled 25.5 (26.3) Mt. At present, LKAB is waiting for permission to start up new iron ore mines in Mertainen and Leveäniemi. The Mertainen permit is presently being assessed by the Land and Environment Superior Court, which has not yet announced a final timetable. The planned production in-

crease in the Mertainen surface mine is now delayed so that the full effect of **LKAB's** growth program has shifted. The permit for the existing processing operation in Svappavaara and iron ore production in Gruvberget went into force 2 January 2014. The Gruvberget permit is for mining and processing of two Mt of ore per year. The permit also allows for the ore processing facilities in Svappavaara to produce 4.5 Mt of pellets or other products annually.

NEWS FROM MINERAL RESOURCES INFORMATION OFFICE

The **Geological Survey of Sweden (SGU)** has signed a contract with **SPECIM** to scan drill cores at the National Drillcore Archive at Malå. 200 000 m of drillcore will be scanned during the 2-year project using optical and hyperspectral imaging. The aim is to create a virtual drillcore archive. The scanning starts during 2014 and will capture VNIR, SWIR and LWIR wavelength spectral images as well as High Resolution RGB images of the cores.

SGU has received additional funding (2012-2015) from the Ministry of Enterprise to start the Barents project. The aim is to produce modern geophysical and geological information from Northern Sweden that include:

- Airborne full tensor gravity and transient electromagnetic (TEM)
- A 74 km long seismic reflection profile from the Kiruna area
- Bedrock mapping in key areas representing specific parts of the supracrustal rocks in northern Norrbotten
- Regional mapping in southern Norrbotten
- Till geochemistry sampling and analyses

Don't hesitate to contact us if you have any questions. You are of course welcome to visit us and have a closer look at the information that we can offer.

Hope to see you soon

SGU

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The content of this newsletter is entirely based upon public information gathered from newspapers, press releases, and web sites on Internet.

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