



What's up in Sweden

EXPLORATION NEWSLETTER

September 2019

EXPLORATION NEWS

Talga Resources Ltd announced on July 3 the balance of the diamond drillhole assay results from the completed drilling campaign at its Vittangi Graphite Project. A total of 28 exploration diamond drillholes for 3046.5m were completed at the Niska prospect, targeting a series of electro-magnetic and outcropping targets located 1-2 km northeast along strike of the Nunasvaara Mineral Resource. Downhole intercepts were returned including 72.0m @ 29.9% graphite ("Cg") from 105.5 m in one hole (incl. 32.0m @ 41.9% Cg), 73.0 m @ 29.7% Cg from 112.1 m in a second hole (incl. 18.0 m @ 41.4% Cg) and 106.4 m @ 25.5% Cg from 24.8 m in a third hole.

Pursuit Minerals Limited announced on May 8 results from a Scoping study conducted to assess the economics of the Airijoki vanadium project. The scoping study was based on the Inferred Mineral Resource announced for the Airijoki project in March 2019. The Resource totaled 44.3 Mt, at in-situ grade of 0.4% V₂O₅, containing 5.9 Mt of magnetite @ 1.7% V₂O₅, for 100,800 t of V₂O₅ based on 13.3% mass recovery of magnetite concentrate and a cut-off of 0.7% V.

Copperstone Resources AB announced on June 20 that it has signed **Kati Oy** as drill contractor in Viscaria. The initial contract comprises 8,000 m, with the intention of increasing to 22,000 m over 24 months. The first part of the campaign will focus on zone A, aiming at increasing the resource loads near the old mine site, provide an increased geological understanding, provide cores for geotechnical assessment work and metallurgical testworks. The second part of the campaign will focus on zone D, expanding the resources and providing cores for metallurgical testworks, including magnetite that could be a valuable contribution at current market price, not included in the Scoping Study.

Barsele Minerals Corp reported on February 21 that an independently verified Mineral Resource Estimate has been completed for the Barsele Gold Project. The study concludes that diamond drilling to date along the Avan--Central--Skiråsen gold zones at a 0.50 g/t gold cut-off for a pit constrained extraction mining method and a 1.50 g/t gold cut-off for a bulk underground extraction mining method and a 1.80 g/t cut-off for a selective underground extraction mining method, has in combination, outlined an Inferred Resource of 25,495,000 t grading 2.54 g/t gold and an Indicated Resource of 5,578,000 t grading 1.81 g/t gold. The exploration program at Barsele is being operated by joint venture partner **Agnico Eagle Mines Limited**.

Dragon Mining Limited announced on May 24 that the test mining campaign at the Fäboliden Gold Project has commenced. It is anticipated that the first parcel of ore from the Fäboliden open-pit will be mined, transported to, and stockpiled at the Company's Svartliden Plant.

Gungnir Resources Inc announced on August 6 that to date this summer, the Company has completed five drill holes and a sixth hole is in progress. Five holes have been completed in the Rodingtrask volcanogenic massive sulphide (VMS) target area which was discovered by **Gungnir** in 2018, and one drill hole has been completed at the Knaften 300 Gold Zone.

EMX Royalty Corporation announced on April 4 the execution of an arm's length purchase agreement for the sale of thirteen exploration licenses (the "Properties") comprising **EMX's** Gold Line Project in central Sweden to Gold Line Resources Ltd. ("GLR"). The Agreement provides **EMX** with a 9.9% interest in **GLR**, advance royalty payments, and a 3% net smelter return royalty interest in the Properties.

Sienna Resources Inc announced on July 22 that a multi-hole drill program is scheduled to begin in August 2019 on Sienna's flagship nickel, copper and cobalt Slättberg Project. Data gathered from the 2018 Slättberg drill program, in addition to downhole Electro-Magnetic surveys and modern sampling & geophysical work have provided multiple new high priority drill targets.

Boreal Metals Corp announced on July 9 results from its seven hole, 1,454.8 m drilling program at the Gumsberg project. Exploration drilling cut significant mineralization at each of the target areas. The majority of the drilling was conducted at the newly discovered South Zone at Östra Silvberg and returned up to 5.12% Zn, 2.27% Pb and 93 g/t Ag over 8.04 m. Two of the four holes drilled at Östra Silvberg also intersected unmapped mine workings, which project to deeper levels and further east than was indicated by historic mine maps.

Aura Energy Limited advised on August 14 that drill assay results on the Häggån Vanadium Project have confirmed the high grade and continuous nature of the Häggån vanadium mineralisation. To enable finalisation of the Häggån Vanadium Project Scoping Study infill drilling was carried out to achieve a Measured and Indicated Resource for Häggån. The drilling not only confirmed the High-Grade Zone but also intersected several areas of mineralisation with grades in excess of 0.6% V₂O₅. Drilling consisted of 2930 m of diamond drilling in 22 drillholes to test the top 140 m of vanadium mineralisation.

Leading Edge Materials Corp provided on June 5 an update with regard to the Norra Kärr rare earth element deposit. The Norra Kärr project is held upon a granted Exploration License, while a reapplication process for a Mining Lease remains in progress. In December 2018, **Leading Edge Materials** submitted supplementary information regarding the updated Norra Kärr Mining Lease application to the Bergsstaten ("Swedish Mining Inspectorate"). The Bergsstaten forwarded the supplementary information to the Länsstyrelsen ("County Administration Board") of Jönköping. On March 8, 2019, Länsstyrelsen submitted their opinion that more information

is required for them to support re-granting of the Norra Kärr Mining Lease. **Leading Edge Materials** reviewed the comments of the Länsstyrelsen and has initiated a Natura2000 permit application on Natura2000 areas in the Norra Kärr region which may be influenced by a future mining operation. The environmental data to support the Natura2000 permit application has already been collected by the Company as part of previous work conducted including during the PFS study.

ScandiVanadium Limited announced on August 9 the commencement of drilling at the Skåne Vanadium project. Drilling is taking place on the Hörby Licence at the northern of the Skåne project area and is expected to take three weeks to complete. Diamond holes of up to 125 m depth will target the prospective vanadium bearing Dictionema Seam where it occurs near surface at Hörby. Exploration will test the thickness and grade of the Dictionema Seam as well as providing core for metallurgical testwork.

MINING NEWS

In a Q2 report **Boliden** announced that milled volume increased in Aitik compared to both the previous quarter and last year. Copper grade was 0.27% (0.28). Average copper grade for 2019 is estimated at 0.25%. Milled volumes in the Boliden Area increased compared to both the first quarter and the previous year. The open pit in Mauriliden was mined for the last time in April. The production of metal in concentrate increased for the majority of metals, compared to both the previous quarter and the previous year thanks to higher milled volumes, stable recovery levels and slightly higher grades. The pilot drift to reach a drilling position for the Rävliiden mineral resource was completed. Garpenberg's milled volume was higher than last year and almost on par with the first quarter's record level. Mining took place in areas with lower zinc grades, which resulted in lower production of zinc metal compared to the first quarter. Silver grades were higher than the previous quarter, and combined with stable recovery rates, this resulted in higher production of silver metal. However, compared to last year, silver grades and recovery rates were lower, resulting in lower production.

In an Interim Report for Q2, **LKAB** announced that in Kiruna production volumes for the second quarter increased by 0.1 Mt year-on-year. Deliveries increased by 0.4 Mt and amounted to 3.7 (3.3) Mt, with the proportion of pellets at 88 (86) percent. In Malmberget and Svappavaara the production volume for the second quarter was 2.8 (2.8) Mt, despite start-up problems following the scheduled maintenance shutdown

in Malmberget during the quarter. Deliveries were somewhat lower than in the same period last year and amounted to 3.0 (3.1) Mt, with the proportion of pellets at 79 (83) percent.

Lundin Mining Corporation announced on July 24 Second Quarter Results. At Zinkgruvan zinc production of 18,865 t and lead production of 6,219 t were higher than the prior year quarter due to planned higher grades of both metals. Second quarter zinc cash costs of \$0.41/lb were in-line with the prior year comparable period.

Mandalay Resources Corporation announced on July 9 its production and sales results for the second quarter of 2019. Björkdal sold 14,376 ounces of gold in the second quarter of 2019, versus 12,428 ounces of gold in the second quarter of 2018.

Lovisagruvan AB announced in a Q2 report that production was 11,148 t and the stock increased during the quarter from 3,000 t to 5,000 t. During the quarter, two boat deliveries (three) were planned to Boleslaw in Poland with a total of 9 136 t (13 793). A further boatload came in early July.

SUSTAINABILITY

In an Interim Report for Q2, **LKAB** reported it is conducting extensive development programmes aimed at sustainable future mining and steelmaking processes. Four different sub-projects are being conducted including a project to develop autonomous, smart, carbon-free vehicles for the mine. As part of the Hydrogen Ironmaking Breakthrough (HYBRIT) initiative, a pilot facility is being constructed in Luleå to produce hydrogen for use in testing direct reduction of iron ore. During the summer the construction of a pilot facility in Malmberget will also start, for testing fossil-free pellets. The building of pilot facilities for ReeMAP has also begun, the aim being to use residual products from mining iron ore to extract rare earth elements and phosphorous products.

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