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Talga Lithium-Pegmatite Discovery in Sweden

- Large lithium-bearing pegmatites identified at Talga's 100% owned Aero Project (formerly Aitik East) in northern Sweden with lithium grades up to 1.95% Li₂O
- Geological mapping defines 14km long corridor of flat-lying pegmatites, with largest having surface exposure 1,100m long and 450m wide. Additional targets across 134km² project yet to be field checked
- Located 30km east of regional centre of Gällivare, with access to mining services, skilled labour and rail/road to ports. Project has paved road access and grid hydroelectric power
- The potential value and strategic importance of a large lithium source in Europe supports further evaluation of the Aero Project. Mapping and sampling to recommence in September to define potential drill targets



Figure 1 Pegmatite outcrop showing flat-lying nature at Talga's Aero Project, Sweden.

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Battery materials company Talga Group Ltd ("**Talga**" or "**the Company**") (**TLG:ASX**) is pleased to provide an update on recent exploration activities within its 100% owned Aero Project ("Aero" or "Project") (formerly "Aitik East Project"), located in northern Sweden.

Aero forms part of Talga's suite of battery metal assets held by the Company's wholly owned Swedish domiciled subsidiary, Talga Battery Metals AB, separate to its advanced stage vertically integrated lithium-ion battery graphite anode business ("Vittangi Anode Project").

Background

Talga staked Aero as the "Aitik East Project" on exploration licence Suorravaara nr 3 in 2017, primarily for its copper potential related to the giant >3 billion tonne Aitik Cu-Au mine located 15km to the west, but also noting a minor historic occurrence of lithium in Swedish Geological Survey reports. Since that time Talga has conducted copper-focussed reconnaissance level exploration, including an electromagnetic survey in 2021 along with minor mapping and surface sampling.

In 2022 additional site visits were undertaken in light of the increased strategic importance of battery raw materials for Europe. Key geological features of the Aero project area were reconsidered, and potential new pegmatites identified from aerial surveys and historic mapping which were followed up with groundwork in 2023.

2023 work and results

Talga has recently completed field mapping, baseline geochemical rock outcrop sampling and reevaluation of the Company's 2017-2019 copper sampling at the Aero Project, which included pegmatite in initial reconnaissance samples.

As a result of this work Talga has mapped multiple large flat to shallow-dipping pegmatite bodies over a **14km strike zone** that remains open, with the largest being of **1,100m strike** and **450m width** in outcrop. True (vertical) thickness is unknown at this stage. To cover the prospective zone an additional exploration licence (Suorravaara nr 5) was staked, taking the total project area to **134km**².



Figure 2 Landscape view of approach to 1,100m x 450m pegmatite (forming top of hill) within Aero Project.



Figure 3 Outcrop samples of pegmatite at Aero Project.

Laboratory assays of 26 rock chip samples returned highly anomalous values in lithium, rubidium, caesium and gallium. Several samples contained high grade lithium mineralisation, up to **1.95% Li₂O** (see Table 1). *Note: Grades are from rock chip samples and therefore not considered representative of the overall pegmatite body or mineralised zones until further work is completed.*

Lithium minerals visually identified and reported include lepidolite, elbaite and spodumene primarily in association with quartz, K-feldspar, albite, cleavelandite and tourmaline^{1,2}. Geochemically and morphologically the Aero pegmatites appear analogous to other Li-Cs-Ta (LCT-family) pegmatites³, however exploration is at an early stage and detailed mineralogical investigation is not yet complete.

Other key observations of the 2023 work include:

- The visible lithium mineralisation occurs at or near the base of the flat-lying pegmatite sheets, suggesting mineralised zones are poorly exposed at the present erosional surface but may extend under the surface of the sheets.
- In several locations the pegmatite sheets appear 'stacked' and there may be multiple repetitions with depth.
- In the lithium-rich samples to date, there is a low rubidium-to-lithium ratio which in LCT pegmatites is a distinguishing feature of spodumene rich systems⁴.
- There is consistently anomalous gallium (up to 56 ppm Ga), a critical mineral that may also be indicative of spodumene and potentially value adding in any development.
- The pegmatite's large scale, shallow deposit geometry and ideal location near operating mines with low-cost, renewable power and existing logistics may assist in any potential development.

¹ Swedish Geological Survey; BRAP 83690.

² Lapis; Issue nr3; "Pegmatite in Lappland" Mar 2008.

³ United States Geological Survey; Scientific Report 2010-5070-O "Mineral-deposit model for lithium-cesium-tantalum pegmatites: Chapter O in Mineral Deposit Models for Resource Assessment".

⁴ Portaspecs; Presentation 2020/09/DXC.

Samala	SWERE	F99 TM	Li	Li ₂ O	Cs	Та	Rb	Sn	Be	Ga	Fe	K
Sample	Northing	Easting	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	%
A24344	784298	7451925	1150	0.25	350	48.1	790	6	7	36	0.2	2.0
A24345	784476	7451670	460	0.10	44	2.5	299	11	13	26	5.0	3.0
A24346	784482	7451666	218	0.05	12	1.6	115	3	4	23	4.8	2.8
A24347	783926	7449243	152	0.03	24	6.7	100	3	11	17	1.7	0.4
A24348	783928	7449245	920	0.20	179	0.6	720	6	15	25	6.2	2.7
A24349	783926	7449243	295	0.06	51	4.1	248	4	19	24	4.1	0.9
A24369	784347	7451749	65	0.01	34	15.2	1490	2	4	35	0.2	7.2
A24370	784351	7451744	49	0.01	24	4.0	840	1	3	20	0.2	3.9
A24371	784295	7451921	112	0.02	48	45.1	93	5	24	33	0.2	0.3
A24372	784295	7451921	412	0.09	91	>100	128	8	4	38	0.3	0.3
A24373	784295	7451921	470	0.10	130	84.4	251	7	5	45	0.2	0.6
A24374	784303	7451952	40	0.01	9	39.0	156	4	6	29	0.3	0.8
A24375	784303	7451952	40	0.01	65	4.2	1800	1	2	26	0.2	7.0
A24376	784303	7451952	37	0.01	64	7.1	1800	1	2	26	0.2	7.1
A24377	783891	7449264	163	0.03	15	6.4	317	4	6	30	0.3	2.3
A24379	783920	7449278	192	0.04	19	20.2	353	4	5	27	0.4	2.7
A24439	784296	7451923	9040	1.95	>500	43.8	3100	16	7	56	0.2	4.4
A24446	783931	7449240	580	0.12	72	21.0	428	8	8	33	4.1	1.4
A24447	783955	7449243	247	0.05	19	0.3	119	2	1	19	8.1	1.5
A24448	784020	7449302	140	0.03	12	3.1	392	13	3	26	1.0	3.5
A24450	784563	7451686	470	0.10	21	1.4	188	5	11	22	4.5	1.9
A24451	784052	7452627	137	0.03	8	1.5	103	2	4	23	5.1	2.8
A24453	781696	7456190	65	0.01	21	0.5	93	1	3	19	5.6	2.2
A24456	779665	7457256	63	0.01	15	0.5	161	1	1	23	9.7	4.3
A26450	784326	7451830	3450	0.74	773	175.5	1185	21	4	39	0.4	2.1
A26451	784298	7451919	850	0.18	271	38.7	650	6	8	44	0.3	1.8

Table 1 Pegmatite assay results from reconnaissance rock sampling of the Aero Project. Refer to JORC TableSections 1 and 2 for assaying and sampling details.

Figure 4 Aero Project – reconnaissance rock sample locations.



Location and Geology

The Aero Project is located 30km east of the city of Gällivare which hosts the large-scale mining operations of Boliden (Aitik Cu-Au Mine) and LKAB (Malmberget Fe Mine). The Project is situated on open, undulating forested land that is bisected by a paved road and grid electricity with local forestry roads providing access to sites.

Regionally the Project lies within the Paleoproterozoic (1750-1900 Ma) Svecofennian province of the Fennoscandian (Baltic) Shield, in the southern part of the Norrbotten ore province in northern Sweden.

Locally, the Project is situated just east of the major crustal-scale Nautanen Deformation Zone in a succession of volcanic and volcano-sedimentary rocks with late- to post-tectonic calc-alkaline intrusions including ~1.89 Ga gabbroic, dioritic and granodioritic plutons and ~1.79 Ga S-and I-type granitoid intrusions (source: SGU report 2015:30, August 2015). The pegmatite bodies typically occur as sheet-like intrusions and sills, more rarely as dikes.

Figure 5 Aero Project – location map showing mapped pegmatites to date across 100% owned Talga exploration licences Suorravaara nr 3 and nr 5.



Figure 6 Aerial view of part of pegmatite ~450m wide near this location (top left) and geological reconnaissance of pegmatite outcrop (top right).



Detail of pegmatite outcrop (middle left) and view of paved road and grid electricity through project (middle right).



Aerial view of large pegmatite hill (bottom left) and detail of outcrop showing lithium minerals (bottom right).





Next Steps

Talga considers the lithium potential of Aero to be greater than previously recognised in light of recent results. Under the proposed EU Critical Raw Materials Act, battery grade lithium is classified as a strategic raw material and is subject to domestic extraction targets. There are few hard rock lithium deposits in Europe, so any discovery could be of significance to the region's emerging lithium-ion battery industry. Talga believes it is in the best interest of the Company's shareholders to further evaluate the Aero Project at this time.

Depending on next-stage results, strategic partners may be sought to advance the Project, with the Talga management team remaining focussed on executing the Vittangi Anode Project.

Next steps include further surface sampling, mapping and geophysical surveys to define a suite of high priority targets for drilling. Fieldwork is planned to re-commence in September, and following drilling plans will be subject to ongoing results, site clearances and budget approvals.

Authorised for release by the Board of Directors of Talga Group Ltd.

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Competent person statement

The information in this document that relates to exploration results is based on and fairly represents information compiled by Amanda Scott, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (Membership No.990895). Amanda Scott is a full-time employee of Scott Geological AB. Amanda Scott has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Amanda Scott has provided her prior written consent to the inclusion in this report of the matters based on her information in the form and context in which it appears.

About Talga

Talga Group Ltd (ASX:TLG) is building a European battery materials supply chain to offer products critical to the green transition. Talga's innovative technology and vertical integration of 100% owned Swedish graphite resources provides security of supply and creates additional value for stakeholders. Company website: www.talgagroup.com

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Statements in this document regarding the Company's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements.

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JORC Code 2012 Edition

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	Samples in this report are surface rock chips collected from various pegmatite outcrops and historic gem diggings/dumps. Given the nature of pegmatites having variable grain size and mineralogy, samples are taken to be representative but sample bias may have been introduced in coarse mineralisation. The rock samples collected were between 0.5kg and 3kg in weight.
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	N/A as no drilling completed to date.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	N/A as no drilling completed to date.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support 	A short geological description of each sample was taken at the time of collection.

	 appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	The descriptions are qualitative: lithology, alteration, mineralisation etc. All samples are photographed.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	No field sub-sampling techniques were employed. Samples were hammered off outcrop and mullock dump material using a rock hammer. Sample size varied but averaged 1-2kg. The samples are considered point samples (up to 1m ²) and may be biased towards mineralised samples. The size of the samples is considered appropriate for this type of work. No field duplicates were taken. The sample preparation for all samples followed industry best practice and was undertaken by ALS Global in Malå. The samples were dried and pulverised to produce a sub-sample for analysis. Sample preparation involved oven drying, coarse crushing, followed by total pulverisation LM2 grinding mills to a grind size of 85% passing 75 microns.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	All rock samples were assayed via ICPMS methods with 25 rock samples assayed using a four-acid digest, multi-element suite (48 elements) with ICPMS finish. The acids used were hydrofluoric, nitric, hydrochloric and perchloric with the method approaching near total digest for most elements. Two rock samples (A26450-51) were assayed using a sodium peroxide fusion with hydrochloric acid and ICP-MS instrumentation. The analytical methods are considered appropriate for this style of mineralisation. No geophysical tools or handheld instruments were utilised in the preparation of this release. Lab repeat or duplicate analysis for samples showed that the precision of samples were within acceptable limits.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	No independent third-party assaying or sampling has been undertaken at this stage. Results have been reviewed internally by the Company's exploration consultant Ms Amanda Scott and no issues have been identified. Sampling data was captured digitally and is stored on the Company's data server. Laboratory data is also stored on the Company's data server.

		No adjustments or calibrations were made to any assay data used in this report.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	A Garmin handheld GPS unit with an accuracy of +/- 5m was used to locate each sample. Sample locations use the Swedish Coordinate System 'SWEREF99 TM' grid.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	Samples were taken at non-regular intervals according to observations made at the time in the field. No grade continuity is implied. No sample compositing has been applied.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	Samples were taken according to observations made at the time in the field. No known sample bias as a consequence of <i>orientation-based</i> sampling has been identified. Samples with coarse mineralisation may be preferentially sampled so some sample bias may be introduced.
Sample security	The measures taken to ensure sample security.	Samples were collected and transported to the laboratory by Tom Kearney, Talga's Exploration Manager.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	No external audits or reviews of the sampling techniques and data have been completed to date. Results have been reviewed internally by the Company's Exploration Manager and consultant Ms Amanda Scott and no issues have been identified.

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	The Aero Project (formerly Aitik East Project) comprises exploration licences Suorravaara nr 3 and nr 5 owned 100% by the Company's 100% owned Swedish subsidiary, Talga Battery Metals AB. The licences are located 30km east from the regional town of Gällivare. The total tenement area is 134km ² . The licences are located in an open area of forested land utilised seasonally by the logging industry and Sami reindeer herders of the Gällivare municipality. The licences are in good standing with no known impediments.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	The SGU noted lithium mineralisation in 1940's but reported no grades. Historic rock chip sampling for copper was completed by Boliden and SGU, and Talga has conducted EM surveys and rock sampling since 2017. Several areas of minor excavations by prospectors for gem tourmalines are found in the pegmatites and have been visited by gemmologists/collectors. There is no known prior technical exploration for lithium prior to Talga.
Geology	 Deposit type, geological setting and style of mineralisation. 	The Aero Project lies within the Paleoproterozoic volcanic rocks of the Fennoscandian Shield. At Aero lithium mineralisation is hosted within tourmaline- bearing (elbaite) pegmatites intruded as sills, sheets and dikes into the volcanic and granitoid basement rocks. The deposit style appears analogous to the Li-Cs-Ta pegmatite model but geological evaluation by Talga is ongoing.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	N/A. No drill hole data is in this report. Surface rock sampling information is included within the body of this report.
Data	In reporting Exploration Results,	No aggregations applied.

weighting averaging techniques, maximum and/or minimum grade

truncations (e.g. cutting of high grades)

Section 2 Reporting of Exploration Results

aggregation

methods

No metal equivalents applied.

	 and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	N/A as no drilling completed to date.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Refer to figures in the body of text.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The Company believes that the ASX announcement is a balanced report with all material results and information available to date.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Everything meaningful and material at this stage is disclosed and no other significant geological data has been reviewed to date.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Talga has conducted a summer exploration program for the Aero Project including geochemical sampling, data review and field mapping of pegmatites. Further sampling and field mapping is planned and results will be synthesised to determine and prioritise targets for drilling with the goal to delineate significant concentrations of lithium minerals.