

ASX ANNOUNCEMENT

26 September 2024

Amended Announcement

Great Northern Minerals Limited ("**Great Northern Minerals**" or the "**Company**") (**ASX:GNM**) wishes to advise that the announcement released on 24 September 2024: 'Extensive Pegmatite Swarm Definted at Sukula' (the "**Announcement**") has been amended and is attached to this release.

The amended Announcement includes additional information on the pXRF data in the JORC table as required per the JORC XRF guidelines.

This announcement has been authorised for release to the market by the Board of Great Northern Minerals Limited.

For more information contact:

Cameron McLean

Managing Director Great Northern Minerals +61 8 6214 0148 info@greatnorthernminerals.com.au



ASX Announcement 26 September 2024

Extensive Pegmatite Swarm Defined at Sukula

Highlights:

- Newly defined swarm of highly fractionated pegmatites dykes over an extensive 600m² area at the Haapaniemi prospect, part of GNM's 100%-owned Sukula project in Finland.
- A core zonation of highly fractionated pegmatites offers a promising drill target with the possibility of spodumene zones concealed at depth.
- Portable XRF (pXRF) measurements on microcline revealed high rubidium (Rb) levels up to 5,562 ppm indicating highly fertile pegmatites.
- Assays returned up to 538 ppm Li₂O, 256 ppm Ta₂O₅, 118 ppm Cs₂O and a K/Rb ratio as low as 12 which is a classic signature supporting a very high degree of fractionation.
- GNM to consider various geochemical and geophysical methods to progress the Haapaniemi prospect towards a drill-ready target

Great Northern Minerals Limited ("GNM" or "the Company") (ASX:GNM) is pleased to announce promising results from the Haapaniemi prospect, part of its 100%-owned Sukula Project in Finland. The prospect is located 8km northwest of United Lithium's (CSE: ULTH) Kietyonmaki spodumene pegmatite deposit (Figure 7). The Haapaniemi area, within the Somero Lithium province, shares similar Paleoproterozoic greenstone and metasedimentary host rocks with the Kaustinen Lithium Province (Figure 8) which forms part of the Keliber advanced lithium project.



Figure 1: Typical pegmatite outcrop exposure at the Haapaniemi prospect.

GNM CEO & Managing Director, Cameron McLean said "GNM is excited by the success of our recent fieldwork at Sukula. The Haapaniemi prospect provides GNM with an exciting drill target, bolstering our confidence in a potential lithium discovery within the Somero lithium province, located 8km from United Lithium's Kietyonmaki deposit. We are encouraged by the results and look forward to progressing Haapaniemi further."



Work Program Update

A recent field survey conducted by GNM consultants in June 2024 has identified a new swarm of fractionated pegmatite dykes over a 600m² area at the Haapaniemi prospect within the 100%-owned Sukula Project in Finland. Variable 1-5m exposure of pegmatites are often obscured and covered by moss (Figure 1), however the dominant orientation in the central area is observed as northwest with varying branching east and east-northeast trends of some pegmatites to the north and east (Figure 3 and 6).

During the survey, a total of 48 spot analyses of monomineralic K-feldspar and muscovite were carried out using a portable XRF machine. The K/Rb ratio was utilized and plotted in the field to assess fractionation and fertility in LCT pegmatites, based on the substitution of Rb for K in micas and feldspars during the final crystallization stages. A total of 50 pegmatite rock samples were also selected and submitted to an ALS laboratory in Sweden to assess for distinct fractionation trends from primitive to evolved pegmatites, potentially bearing spodumene.

Whole Rock Geochemistry - Fractionation Trends

Whole-rock geochemical data has revealed zonation within the Haapaniemi pegmatites, moving from primitive signatures towards highly evolved, fertile pegmatites. Geochemical plots such as Mg/Li vs. Li (Figure 2) illustrate clear clustering and evolution of pegmatites at Haapaniemi. The Kaustinen pegmatite field was used as a baseline for mineralised pegmatites.

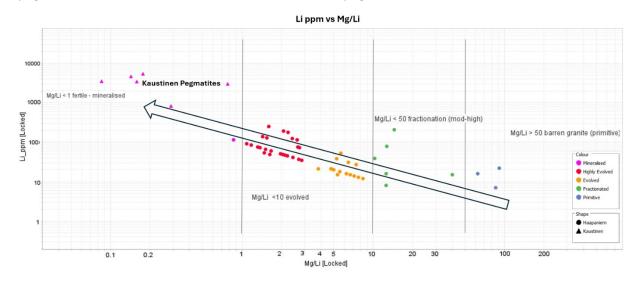


Figure 2: Geochemical plot of Li (ppm) vs Mg/Li showing a clear zonation from primitive rocks to highly fractionated-Fertile mineralised rocks such as the Kaustinen pegmatites. The Haapaniemi rocks show clustering of evolved to highly evolved suite of pegmatites.

Whole-rock geochemical data, particularly the K/Rb ratios, are valuable for characterising pegmatitic evolution, marked by increased substitution of K with Rb in micas and feldspars. K/Rb ratios below 25 indicate very fractionated pegmatites, with a core zone defined within the pegmatite dyke swarm that extends for at least 400 metres that trends northwest and open (Figure 3). A significant portion of the pegmatite comprises a typical quartz-feldspar-muscovite wall zone, with a more prominent quartz-K feldspar core at the centre, suggesting a potential spodumene-bearing target at depth.



Assays returned up to 538 ppm Li_2O , 256 ppm Ta_2O_5 , 118 ppm Cs_2O , 791 ppm BeO, 191 ppm Nb and 173 ppm Sn (Table 1). These values fall within the range of maximum and minimum concentration of Li_2O and trace elements such Ta_2O_5 , Nb_2O_5 and BeO found in spodumene pegmatites in the Kaustinen area as shown in Figure 4, which is highly encouraging.

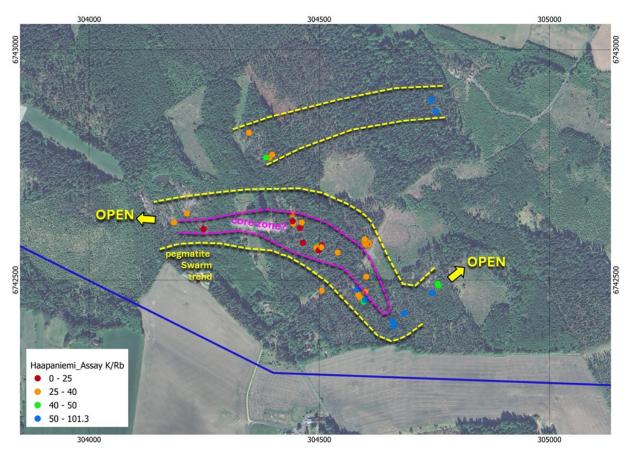


Figure 3: Geochemical plot of K/Rb showing a clear zonation within the pegmatites at Haapaniemi and core zone of highly fractionated rocks that represent a drill target.

		ı	LI₂O % ICP-AES			Ta₂O₅ ppm ICP-MS		Nb₂O₅ ppm ICP-MS			BeO ppm ICP-MS		
	n	avg.	max	min	avg.	max	min	avg.	max	min	avg.	max	min
Matoneva	6	0.18	0.27	0.03							170	366	82
Heikinkangas	181)	0.76	2.06	0.02	16	43	6	24	68	9	134	249	55
Päiväneva	492)	0.65	1.39	0.10	50	404	2	87	183	34	155	303	19
Leviäkangas	1013)	0.74	2.13	0.02	72	337	8	87	312	12	185	494	77
Syväjärvi	200	1.00	2.09	0.03	26	119	4	36	149	11	148	497	67
Rapasaaret	159	1.18	3.36	0.05	53	547	3	58	209	13	502	1912	141

Figure 4: Average, maximum and minimum concentration of Li2O and trace elements of spodumene pegmatites in the Kaustinen area. (Taken from Ahtola, T. (ed.), Kuusela, J., Käpyaho, A. & Kontoniemi, O. 2015. Overview of lithium pegmatite exploration in the Kaustinen area in 2003–2012. Geological Survey of Finland, Report of Investigation 220, Table



Portable XRF work - Fractionation Trends

During the field survey, spot analyses were performed on monomineralic K-feldspar and muscovite using a Bruker S1-Titan 800 portable XRF machine. The K/Rb ratio was plotted in the field, a robust method for determining fractionation and fertility in LCT pegmatites. The pXRF results identified a zone of highly fractionated pegmatites, highlighted by the K/Rb Fertility Plot (Figure 5).

A map of Rb in K-feldspar (Figure 6) shows highly elevated Rb levels, supporting a very similar trend to the geochemical data from Figure 3. Again, we observe the most highly fractionated pegmatites occur over an area of 400m by 200m that trends northwest and again displaying a well-defined core zone with increasing rubidium (Figure 6). This core area suggests potential for a spodumene-bearing target at depth.

CAUTIONARY STATEMENT ON pXRF RESULTS: Handheld XRF (pXRF) results included in this announcement are preliminary only. The use of pXRF readings only provides an indication of the order of magnitude of formal assay results. Handheld XRF instrument (Bruker S1 Titan 800) was used to aid the geologist's interpretation only and is not considered equivalent to a laboratory analysed sample result, it should be noted that light elements such as potassium will produce variable results but is fit for purpose in confirming mineral identification, lithium and most rare earth elements cannot be analysed with the instrument in use.

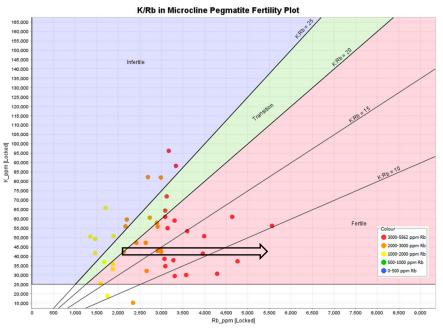


Figure 5: K/Rb Fertility plot of recent pXRF readings showing fractionation trends into highly fertile pegmatite systems which mineralisation is perhaps concealed at depth. Arrow shows increasing fractionation trend toward the spodumene zone.



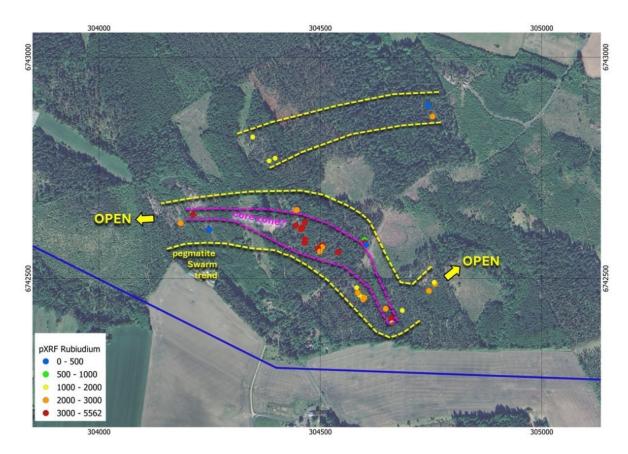


Figure 6: Geochemical plot of Rb data from the portable XRF results showing a clear zonation within the pegmatites at Haapaniemi and core zone of highly fractionated rocks that represent a drill target. This reveals a similar pattern described in Figure 3.

Discussion of Results and Next Steps

It is clear that GNM has defined a very large area of highly fractionated pegmatites at Haapaniemi which is highly encouraging. Both the whole rock geochemistry and pXRF work are strongly supporting the most highly fractionated trend with a well-defined core zone target that trends northwest over an area of 400m by 200m and open on both directions. Further work is certainly warranted over the prospect and various geochemical and geophysical methods are being considered that would ultimately lead to drill targeting.



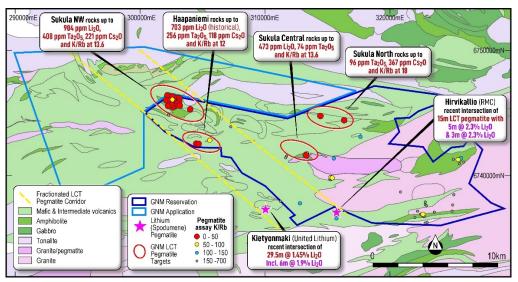


Figure 7: Bedrock geology map of the Sukula Project area showing the location of the pegmatite outcrop and boulder samples coloured for fertility index (K/Rb) showing highlight results and the interpreted LCT corridor containing both Haapaniemi and Kietyonmaki.

About the Sukula Lithium Project in Finland

The Project consists of two Reservation Permits over highly prospective lithium terrain in southern Finland covering an area of 536.3km² (Figure 7) and located 115km northeast of Helsinki (Figure 8). The project area comprises the northern portion of the well-known Somero LCT pegmatite field with one of the highest densities of mapped rare metal pegmatites in Finland. The Project is located in very close proximity to extensive known lithium pegmatite swarms such as the Kietyonmaki pegmatite.

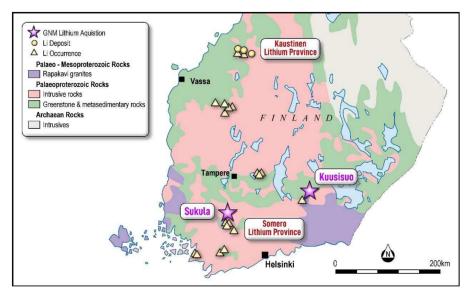


Figure 8: Location of the Sukula project within the Somero Lithium Province and shares similar Paleoproterozoic greenstone and metasedimentary host rocks with the Kaustinen Lithium Province.



References

¹ Ahtola, T. (ed.), Kuusela, J., Käpyaho, A. & Kontoniemi, O. 2015. Overview of lithium pegmatite exploration in the Kaustinen area in 2003–2012. *Geological Survey of Finland, Report of Investigation 220*, 28 pages, 14 figures and 7 tables.

² **Sibanye Stillwater Limited**. Market Release. 26 February 2024. Mineral Resources and Mineral Reserves declaration as at 31 December 2023.

Competent Person Statement

This information in this report related to Exploration Results is based on information and data compiled or reviewed by Mr Leo Horn and Mr James Cumming. Mr Horn and Mr Cumming are consultants for the Company and are Members of the Australasian Institute of Geologists (AIG).

Mr Horn and Mr Cumming have sufficient experience relevant to the style of mineralisation under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Accordingly, Mr Horn and Mr Cumming consent to the inclusion of the matters based on the information compiled by them, in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases. The form and context of the announcement have not materially changed.

ENDS

This announcement has been authorised by the Board of Great Northern Minerals Limited.

For more information please contact:

Cameron McLean

Managing Director Great Northern Minerals +61 8 6214 0148 info@greatnorthernminerals.com.au



About Great Northern Minerals Limited

Great Northern Minerals Limited is an ASX-listed mineral explorer and developer with projects in Australia and Finland.

The Company's Golden Ant Project is located in Far North Queensland and includes the Amanda Bell Goldfield. Total gold production from the Amanda Bell Goldfield was approximately 95,000 oz Au (57,000 oz from Camel Creek and 14,000 oz from Camel Creek satellite deposits plus 18,000 oz from Golden Cup and 6,000 oz from Golden Cup satellite deposits). Two heap leach gold mines were operated (Camel Creek & Golden Cup). Mining activities commenced in 1989 and ceased in 1998 with the depletion of oxide gold mineralisation. Great Northern Minerals has entered into a Heads of Agreement for majority sale of Golden Ant Mining Pty Ltd, the owner of the Camel Creek and Golden Cup projects. The sale process has reached Phase 2, whereby 27.5% of the 90% majority interest has been divested.

GNM also has also acquired two highly prospective lithium projects at Sukula and Kuusisuo in southern Finland covering an area of 536.3km². The Sukula project area comprises the northern portion of the well-known Somero LCT pegmatite field with one of the highest densities of mapped rare metal pegmatites in Finland. The Kuusisuo project is a large 362 km² tenure located 163km northeast of Helsinki which consists of the historical Kuusisuo lithium occurrence located central to a very large Mesoproterozoic aged Rapakivi granite intrusive complex.

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Great Northern Minerals Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.



Table 1: pXRF Geochemical analysis on microcline at Haapeniemi deposit

ID	Easting	Northing	Grid	Rb_ppm	K_ppm	K/Rb
hajf01	304661.3)	ETRS89/TM35FIN (E,N)	13	269.8	20.8
hajf02	304659.8		ETRS89/TM35FIN (E,N)	3166	96212.4	
hajf03	304685		ETRS89/TM35FIN (E,N)	1704	65714.4	
hajf04	304662		ETRS89/TM35FIN (E,N)	1348	50423.1	37.4
hajf05	304759		ETRS89/TM35FIN (E,N)	2969	43415.9	14.6
hajf06	304757.3		ETRS89/TM35FIN (E,N)	1463	49275.0	33.7
hajf07	304745.2		ETRS89/TM35FIN (E,N)	2654	32213.0	12.1
hajf08	304596.7		ETRS89/TM35FIN (E,N)	2886	57823.1	20.0
hajf09	304595.1		ETRS89/TM35FIN (E,N)	1885	50820.8	27.0
hajf10	304599.7		ETRS89/TM35FIN (E,N)	2193	59630.3	27.2
hajf11	304587.5		ETRS89/TM35FIN (E,N)	1871	33166.0	17.7
hajf12	304584.5		ETRS89/TM35FIN (E,N)	1460	41680.9	28.5
hajf13	304584.5		ETRS89/TM35FIN (E,N)	2685	82315.7	30.7
hajfx02	304647.7		ETRS89/TM35FIN (E,N)	2164	55927.8	25.8
hajf15	304501.5		ETRS89/TM35FIN (E,N)	4289	30645.7	7.1
hajf16	304505.1		ETRS89/TM35FIN (E,N)	3568	30053.8	8.4
hajf18	304504.3		ETRS89/TM35FIN (E,N)	2907	42903.7	14.8
hajf19	304464.6		ETRS89/TM35FIN (E,N)	5562	56271.5	10.1
hajf20	304540.1		ETRS89/TM35FIN (E,N)	3990	50737.8	12.7
hajf21	304601.5		ETRS89/TM35FIN (E,N)	3087	34739.2	11.3
hajf23	304397.8		ETRS89/TM35FIN (E,N)	1750	18825.2	10.8
hajf24	304384.4		ETRS89/TM35FIN (E,N)	1866	35950.3	19.3
hajf25	304347.3		ETRS89/TM35FIN (E,N)	1586	25500.5	16.1
hajf27	304248.7		ETRS89/TM35FIN (E,N)	13	807.7	62.1
hajf28	304212.3		ETRS89/TM35FIN (E,N)	3597	53483.9	14.9
hajf29	304184.3	6742625	ETRS89/TM35FIN (E,N)	2728	60640.6	22.2
hajf30	304753.4	6742866	ETRS89/TM35FIN (E,N)	2984	82100.7	27.5
Hajf32	304582.1		ETRS89/TM35FIN (E,N)	1674	36960.6	22.1
Hajf34	304599.7	6742578	ETRS89/TM35FIN (E,N)	3085	61040.7	19.8
Hajf35	304599.7	6742578	ETRS89/TM35FIN (E,N)	2990	42386.5	14.2
Hajf36	304600.8	6742580	ETRS89/TM35FIN (E,N)	3277	37868.0	11.6
Hajf37	304598.4	6742584	ETRS89/TM35FIN (E,N)	3299	59066.6	17.9
Hajf38	304599.6	6742587	ETRS89/TM35FIN (E,N)	701	3984.7	5.7
sk25	304494.8	6742568	ETRS89/TM35FIN (E,N)	3332	88282.8	26.5
sk26	304499.1	6742561	ETRS89/TM35FIN (E,N)	2338	15177.6	6.5
sk27	304603.3	6742578	ETRS89/TM35FIN (E,N)	3141	54992.3	17.5
sk28	304604.3	6742577	ETRS89/TM35FIN (E,N)	2123	42304.3	19.9
sk30	304600.1	6742582	ETRS89/TM35FIN (E,N)	3070	38654.1	12.6
sk31	304603.5	6742577	ETRS89/TM35FIN (E,N)	96	2307.0	24.0
sk32	304465.7	6742588	ETRS89/TM35FIN (E,N)	3306	29422.1	8.9
sk33	304444.6	6742620	ETRS89/TM35FIN (E,N)	3957	41339.7	10.4
sk37	304455	6742612	ETRS89/TM35FIN (E,N)	2635	47184.7	17.9
sk38	304459.4	6742615	ETRS89/TM35FIN (E,N)	3083	64459.3	20.9
sk39	304456	6742612	ETRS89/TM35FIN (E,N)	3120	71946.4	23.1
sk40	304458	6742612	ETRS89/TM35FIN (E,N)	4638	61102.1	13.2
sk41	304465	6742627	ETRS89/TM35FIN (E,N)	4758	37301.8	7.8
sk43	304445	6742654	ETRS89/TM35FIN (E,N)	2907	55837.3	19.2
sk44	304447	6742655	ETRS89/TM35FIN (E,N)	2415	47203.8	19.5



 Table 2: Whole rock geochemistry assays at the Haapeniemi deposit

			D ₀ ∩	Con		1:20	Ma	Nila	Dh	Cm	Tagos		
SAMPLE	Facting	Northing	BeO	Cs2O	Knnm	Li2O	Mg	Nb	Rb	Sn	Ta2O5	K/Rb	Mg/Li
F859406	Easting 304608	6742581	ppm 41	ppm 21.6	Kppm 42200	ppm 183	ppm 100	ppm 60.1	ppm 1610	ppm 79	ppm 12.8	26	1.2
F859407	304602	6742507	9	12.5	38000	75	100	60.2	1205	50	14.8	32	2.9
F859408	304495	6742573	110	8.2	15300	58	200	73	345	153	39.8	44	7.4
SUKGS10	304505	6742477	14	75.9	53400	161	200	62.7	1390	31	15.3	38	2.7
SUKGS11	304608	6742578	12	8.1	12600	80	100	102.5	469	54	21.9	27	2.7
SKJC06	304603.9	6742579	9	27.35	19300	448	3000	85.7	969	139	21.7	20	14.4
SKJC07	304603.6	6742582	2	24.6	103000	32	80	2.1	3240	6	1.3	32	5.3
SKJC08	304443.7	6742622	13	16.54	27500	34	1000	60.2	948	4	31.8	29	62.5
SKJC09	304442	6742628	6	73.47	105000	116	80	3.3	4810	5	1.1	22	1.5
SKJC10	304458.3	6742613	7	117.68	54700	170	1000	23.1	2310	31	3.5	24	12.7
SKJC11	304461.9	6742625	719	15.9	20700	47	2000	230	827	15	181.9	25	90.9
HAJF01	304661.3	6742402	21	20.99	54300	26	100	33.3	1345	6	12.1	40	8.3
HAJF02	304659.8	6742411	334	4.56	6600	45	100	40.6	127.5	38	256.4	52	4.8
HAJF03	304685	6742428	11	21.31	97900	32	600	32.9	1555	9	15.3	63	40.0
HAJF04	304662	6742400	391	19.61	75700	15	600	57.5	747	3	61.9	101	85.7
HAJF05	304759	6742488	439	25.34	29100	88	100	58	650	19	22.8	45	2.4
HAJF06	304757.3	6742492	11	18.66	27500	267	300	124	660	93	14.6	42	2.4
HAJF07	304745.2	6742472	7	10.00	33900	114	300	108.5	658	73	10.7	52	5.7
HAJF08	304596.7	6742453	7	16.75	72900	245	300	86.5	1655	65	8.8	44	2.6
HAJF09	304595.1	6742458	9	17.07	50200	82	200	31.2	1120	21	4.9	45	5.3
HAJF10	304599.7	6742457	21	3.29	8700	84	400	33.9	144	10	14.8	60	10.3
HAJF11	304599.7	6742463	8	30.75	60100	538	400	78.2	1855	172	7.3	32	1.6
HAJF12	304584.5	6742469	6	13.78	26000	30	100	72	722	5	21.6	36	7.1
HAJF13	304584.5	6742468	4	22.37	45600	43	100	31.6	1235	7	5.4	37	7.1
HAJF14	304493.4	6742570	8	15.48	36200	28	100	35	1110	21	14.3	33	7.7
HAJF15	304501.5	6742574	12	2.23	5200	32	100	107.5	134	8	32.5	39	6.7
HAJF16	304505.1	6742575	64	18.45	19600	415	400	115	872	112	26.7	22	2.1
HAJF17	304498.6	6742564	325	25.97	33600	97	100	76.4	1515	34	33.7	22	2.2
HAJF18	304504.3	6742571	6	20.14	48500	34	100	18.2	1570	5	5.6	31	6.3
HAJF19	304464.6	6742581	791	26.4	4500	67	200	87.9	384	63	93.5	12	6.5
HAJF20	304540.1	6742560	7	47.28	94900	101	100	10.2	3490	32	1.6	27	2.1
HAJF21	304601.5	6742576	29	15.9	27400	164	100	79	930	43	24.9	29	1.3
HAJF22	304391.9	6742765	10	19.19	22400	278	200	81.9	635	52	21.7	35	1.6
HAJF23	304397.8	6742772	11	21.1	27100	299	200	71.7	719	59	12.9	38	1.4
HAJF24	304384.4	6742766	7	11.56	14200	39	100	82.2	323	14	14.5	44	5.6
HAJF25	304347.3	6742820	7	7.63	14800	43	100	122	372	15	25.4	40	5.0
HAJF26	304441.6		19	51	59000	45	80	20.9	1850	8	9.3	32	3.8
HAJF27	304248.7	6742611	49	16.43	13400	142	100	77.6	548	36	44.5	24	1.5
HAJF28	304212.3		9	11.98	22200	45	100	175	683	27	40.1	33	4.8
HAJF29	304184.3	6742625	15	11.56	33100	17	100	59	1010	24	30.7	33	12.5
HAJF30	304753.4	6742866	4	17.07	66900	105	100	21.4	937	12	4.6	71	2.0
HAJF31	304743.6	6742891	6	16.65	33000	157	200	24.6	598	22	4.5	55	2.7
HAJF32	304582.1	6742480	59	2.97	3600	34	200	27.1	53.2	18	13.0	68	12.5
HAJF33	304600.2	6742474	12	18.87	32200	383	400	148.5	965	123	15.9	33	2.2
HAJF34	304599.7	6742578	8	20.14	41300	250	100	57.4	1435	56	9.9	29	0.9
HAJF35	304599.7	6742578	7	14.1	34200	129	100	87.9	1165	35	19.1	29	1.7
HAJF36	304600.8	6742580	8	5.73	11800	110	100	108	432	45	23.8	27	2.0
HAJF37	304598.4	6742584	41	16.65	25200	198	100	149.5	871	47	36.5	29	1.1
HAJF38	304599.6	6742587	10	9.75	18200	157	100	191.5	672	43	40.3	27	1.4
HAJF39	304598.9	6742588	31	23.01	44000	105	80	63.9	1610	54	26.0	27	1.6
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JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole 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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g 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 (eg submarine nodules) may warrant disclosure of detailed information. 	 No drilling reported in this announcement. Rock sampling and assays reported in this announcement by GNM is associated with the company's recent 2024 mapping and sampling programs which aimed to locate and sample pegmatite outcrops or boulders in the absence of any outcrop to assess for lithium and associated pathfinder elements and fertility ratios. Handheld pXRF (Bruker S1 Titan 800) instrument utilised on specific K-feldspar and muscovite minerals on pegmatite rock samples in order to gauge level of fractionation in addition to final assay results. The measurement mode used for Handheld pXRF was Geo Exploration Oxide3Phase mode with 30 second read time Duplicate spot readings were taken with Handheld pXRF on some minerals with good repeatability of Rb and K and considered within acceptable tolerance for this exercise The operating temperature for the handheld pXRF was within the recommend temperature recommended by the manufacturer of the instrument (-10 to +50 degrees C) The nature of rock chip samples for mineral pXRF can present some moisture on the sample however effort was made to dry off targeted minerals with a cloth before handheld pXRF analysis No suitable standards were scanned with the handheld pXRF Final whole-rock laboratory assays for K and Rb presented and utilised in this announcement display similar data and fractionation trends which greatly assists in validating the mineral pXRF data Competent person considers the sample and analytical procedures for pXRF and laboratory assay to be acceptable for an
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core	No drilling reported in this announcement

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	diamond tails, face-sampling bit or other	
	type, whether core is oriented and if so, by	
	what method, etc).	
Drill		No drilling reported in this appaument
Drill sample	Method of recording and assessing core and thin sample recoveries and results.	No drilling reported in this announcement
•	and chip sample recoveries and results assessed.	
recovery		
	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.	
Logging	Whether core and chip samples have been	No drilling reported in this announcement
	geologically and geotechnically logged to a	Rock and boulder samples during the field
	level of detail to support appropriate	program were described geologically
	Mineral Resource estimation, mining	qualitatively based on important
	studies and metallurgical studies.	characteristics for the deposit style. All
	Whether logging is qualitative or	data is stored digitally for GIS review.
	quantitative in nature. Core (or costean,	 Detailed mineralogy of each pegmatite
	channel, etc) photography.	logged then selected identified muscovite
	The total length and percentage of the	and K-feldspar utilized for pXRF readings
	relevant intersections logged.	
Sub-	 If core, whether cut or sawn and whether 	 No drilling reported in this announcement
sampling	quarter, half or all core taken.	 Rock sample sizes are in the range of 1-3kg
techniques	• If non-core, whether riffled, tube sampled,	and considered appropriate for the
and .	rotary split, etc and whether sampled wet	reporting of exploration results
sample	or dry.	 No QAQC procedures adopted for
preparatio	 For all sample types, the nature, quality 	reconnaissance exploration rock sampling
	and appropriateness of the sample	
n	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.	
Quality of	The nature, quality and appropriateness of	Rock samples collected by GNM were sent
assay data	the assaying and laboratory procedures	to ALS Laboratories in Sweden and assayed
and	used and whether the technique is	for multi-elements by Fusion ME-MS89L
	considered partial or total.	plus 4-Acid ME-MS61.
laboratory	For geophysical tools, spectrometers,	Handheld Bruker Portable XRF (Bruker S1)
tests	handheld XRF instruments, etc, the	Titan 800) used as a guide tool to gauge
	parameters used in determining the	the fractionation level of specific
	analysis including instrument make and	muscovite and K-feldspar minerals based
	model, reading times, calibrations factors	on the relative levels of pathfinder metals
	applied and their derivation, etc.	such as rubidium and potassium to
	 Nature of quality control procedures 	compare and combine to the laboratory
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	adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	 analysis dataset. Simple quality control procedures adopted for handheld pXRF (See details in section "Sampling techniques) which are considered acceptable for establishing the relative levels of Rb and K to interpret the fractionation levels of pegmatite minerals Final whole-rock laboratory assays for K and Rb presented and utilised in this announcement display similar data and fractionation trends which greatly assists in validating the mineral pXRF data Competent person considers the sample and analytical procedures to be acceptable for an early-stage exploration project
Verificatio n 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 additional verification or testing as completed during this evaluation Oxide conversions calculated for some metals (see Data Aggregation Methods section Drilling has not yet been completed on the project All digital pXRF data and field rock and minerals stored digitally in the company database
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. 	 Outcrop locations were collected using a handheld GPS. Coordinates are in ETRS89 / TM35FIN (E,N)
Data spacing and distributio n	 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. 	 The data is not appropriate for use in estimating a Mineral Resource and is not intended for such use. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Rock sampling was conducted where outcrop and boulder samples are available. No sample compositing undertaken for this announcement pXRF readings were conducted where specific pegmatite outcrops and muscovite and/or K-feldspar minerals were identified in the field
Orientatio n 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 	 The outcrops and boulders were recorded at selected sites, and it is unknown if these results are biased or unbiased. The trend of pegmatites observed in the field at Haapaniemi are dominantly northwest- trending with secondary west

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ABN 22 000 002 111
www.greatnorthernminerals.com.au

T: +618 6214 0148 Level 1, 33 Colin Street West Perth, WA 6005



	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	 and northeast branching trends also observed Selected samples were generally taken to be representative of the outcrop or boulder however the deeper core zone of thick pegmatite outcrops was unable to be reached with hand tools so there is likely to be some variability in these areas due to limitations of sampling methodologies The pXRF readings on outcrop minerals were recorded at selected sites, and it is unknown if these results are biased or unbiased
Sample security	The measures taken to ensure sample security.	 Rock sample security has been adequately maintained by GNM Not necessary for pXRF readings conducted in the field.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been completed.



Section 2 JORC Code, 2012 Edition - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 	 Finland Reservations VA2023:0010-01 (Kuusisuo VA2023:0010), VA2023:0011-01 (Ojankylä VA2023:0011) and VA2023:0081-01 (Sukula VA2023:0081) are currently held by Stedle Exploration AB which is a 100%-owned subsidiary of Great Northern Minerals. Small area of Natura 2000 national park occurs on Kuusisuo VA2023:0010 and Ojankylä VA2023:0011. Non-ground disturbing exploration activities are permitted in these areas. Ground disturbing exploration activities are permitted in these areas with approvals.
Exploratio n done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Exploration by United Lithium on the adjacent Kietyönmäki Project referred to in this announcement (https://unitedlithium.com/united-lithium-intersects-1-45-li2o-over-29-5-m-and-1-52-li2o-over-26-m-at-kietyonmaki-project-finland/)
Geology	Deposit type, geological setting and style of mineralisation.	Lithium pegmatites on the project are interpreted to be Proterozoic-aged Lithium-Caesium-Tantalum (LCT) pegmatites in the Southern Finland Province similar to the Kaustinen Province Lithium Pegmatite Deposits
Data aggregatio n methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) 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. 	 Drill assay results not reported in this announcement Rock assay results are converted to stoichiometric oxide using element-to-stoichiometric oxide conversion factors stated in the table below Rare metal oxide is the industry accepted form for reporting rare metal assay results. Element Conversion Factor Oxide Form Caesium 1.0602 Cs20 Lithium 2.1527 Li20 Tantalum 1.2211 Ta205 Beryllium 2.7758 BeO
Sub- sampling techniques and sample preparatio n	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents are reported.
Relationshi p between	These relationships are particularly important in the reporting of Exploration	Not applicable – no sample results reported



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