

Datum:	:	1 (2)
2023-01-12		

## **Mineral Resource Statement for the Per Geijer deposit**

The Mineral Resource Statement for the Per Geijer deposit is shown in the following Table. The Fe and P component is restricted to the Indicated and Inferred Mineral Resource categories with the Total Rare Earth Oxide (TREO) contained in the same tonnage being restricted to the Inferred Mineral Resource category. This lower confidence restriction for the TREO is primarily related to the limited quality control data for the rare earth elements and the early stage metallurgical testwork completed by LKAB. Testwork completed to date has resulted in the production of an apatite concentrate with a  $P_2O_5$  grade greater than 34% and an associated TREO grade of between 0.84% and 0.85%.

Material – Fe and P	Basauraa Catagami	Mass	Fe	Р	
	Resource Category	Mt	%	%	
Magnetite	Measured				
	Indicated	136	52.6	2.67	
	Measured + Indicated	136	52.6	2.67	
	Inferred	227	50.8	1.95	
	Total	363	51.5	2.22	
Mixed	Measured				
	Indicated	42	47.4	2.98	
	Measured + Indicated	42	47.4	2.98	
	Inferred	109	45.6	2.76	
	Total	151	46.1	2.82	
Hematite	Measured				
	Indicated	23	54.6	2.73	
	Measured + Indicated	23	54.6	2.73	
	Inferred	48	55.3	2.42	
	Total	71	55.0	2.52	
Must Take	Must Take	0.6	9.2	0.79	
	Total	0.6	9.2	0.79	
Total	Measured				
	Indicated	201	51.7	2.74	
	Measured + Indicated	201	51.7	2.74	
	Inferred	384	49.9	2.24	
	Must Take	0.6	9.2	0.79	
	Total	585	50.5	2.41	
Material - TREO	Resource Category	Mass		TREO	
		Mt	%		
Magnetite		363		0.17	
Mixed	Inferred	151	0.21		
Hematite		71	0.18		
Must Take		1	0.09		
Total		585	0	.18	



## Notes:

- (1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.
- (2) The effective date of the Mineral Resource is 31<sup>st</sup> December 2022.
- (3) Input data used is from exploration drilling completed since 2010 with valid assay data up until June 2022. In total, the Mineral Resource Estimate used 63 drillholes for 67000 metres of drilling.
- (4) Mineral Resources have been constrained within optimised stopes based on the mining and production of magnetite pellets and hematite concentrate.
- (5) The optimisation uses a cut-off grade of 26% Fe for the magnetite dominant material, 35% Fe for the mixed magnetite / hematite material and 53% Fe for the hematite dominant material.
- (6) For each material type, the optimisation is based upon appropriate processing Fe recovery rates and long-term metal prices for the produced pellets and concentrate.
- (7) Waste material captured within the stopes is reported as "Must Take" material.
- (8) No additional cut-off grade has been applied to the final Resource statement.
- (9) Total Rare Earth Oxides (TREO) are restricted to the Inferred Mineral Resource category and limited to the Fe Oxide optimised stopes.
- (10) There is no guarantee that additional technical work will eventually allow the reporting of the TREO Mineral Resource in the Indicated and Measured categories
- (11) TREO includes: La<sub>2</sub>O<sub>3</sub>, Ce<sub>2</sub>O<sub>3</sub>, Pr<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>2</sub>O<sub>3</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>.
- (12) Heavy Rare Earth Oxides (HREO) include: Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>2</sub>O<sub>3</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>
  (13) Light Rare Earth Oxides (LREO) include: La<sub>2</sub>O<sub>3</sub>, Ce<sub>2</sub>O<sub>3</sub>, Pr<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>
- (14) HREO constitutes 17% within the tested apatite concentrate samples and 19% in the overall exploration samples.
- (15) LREO constitutes 83% within the tested apatite concentrate samples and 81% in the overall exploration samples.
- (16) Tonnages are reported in metric units and grades in weight percent (%) for Fe, P and TREO.
- (17) Tonnages and grade are rounded appropriately.
- as required by guidelines, (18) Rounding, reporting may result in apparent summation grade and differences between tonnes, metal contained content. Where these occur. LKAB does not consider these to be material.
- (19) Mineral Resources have been classified according to the PERC Standards 2021, by Howard Baker (FAusIMM(CP)), an independent Competent Person as defined in the PERC Standard 2021. Mr Baker has relied upon LKAB technical staff and an independent review of the Per Geijer Mineral Resource Estimate has been performed by SRK Consulting (UK) Ltd.