

Gcwihaba Resources (Pty) Ltd

Ngamiland REE Skarn Project



Forward-looking statement

National Instrument 43-101 - Standards of Disclosure for Mineral Projects, Form 43-101F1 and Companion Policy 43-101CP requires that the following disclosure be made:

This presentation contains forward-looking statements. All statements, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future (including, without limitation, statements relating to the development of the Company's projects) are forward-looking statements. These forward-looking statements reflect the current expectations or beliefs of the Company based on information currently available to the Company. Forward-looking statements are subject to a number of risks and uncertainties that may cause the actual results of the Company to differ materially from those discussed in the forward-looking statements, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on the Company. Factors that could cause actual results or events to differ materially from current expectations include, among other things, changes in equity markets, political developments in Botswana and surrounding countries, changes to regulations affecting the Company's activities, uncertainties relating to the availability and costs of financing needed in the future, the uncertainties involved in interpreting exploration results and the other risks involved in the mineral exploration business. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although the Company believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and accordingly undue reliance should not be put on such statements due to the inherent uncertainty therein.

Company Profile



TSODILO RESOURCES LIMITED

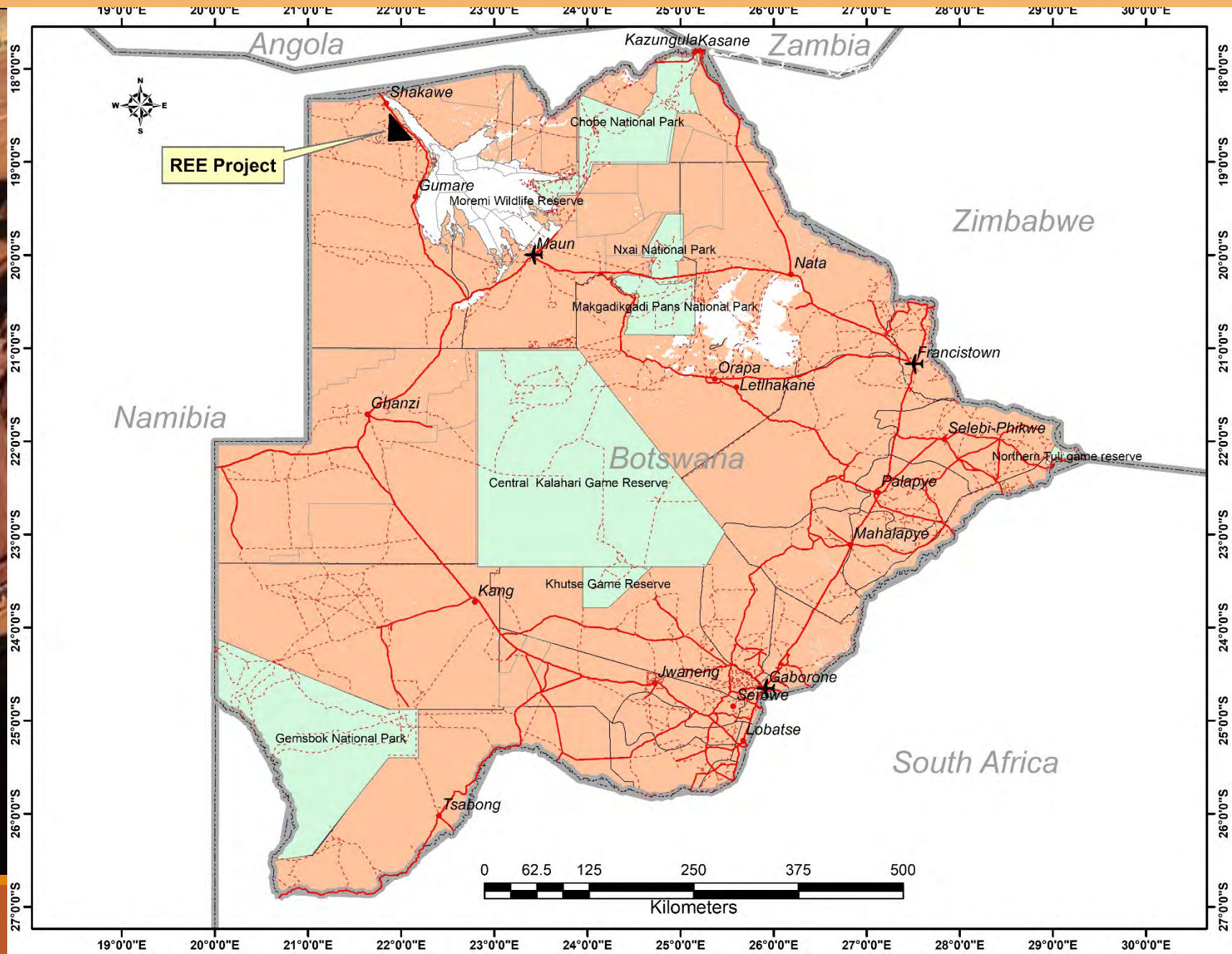
Newdico (Pty) Ltd
Exploration services
100% owned

Gcwihaba Resources (Pty) Ltd
PLs – Metals
100% owned

Bosoto (Pty) Ltd
PL – Precious Stones
(BK16)
100% owned

➤ Canadian Registered: TSX listed 1995: TSX.V listed 2001

REE Project – Northwest Botswana



Physiography



- Kalahari Cover
- No Outcrop!
- Exploration driven by:
 - Geophysics
 - Soil Sampling
 - Drilling

Kalahari thickness



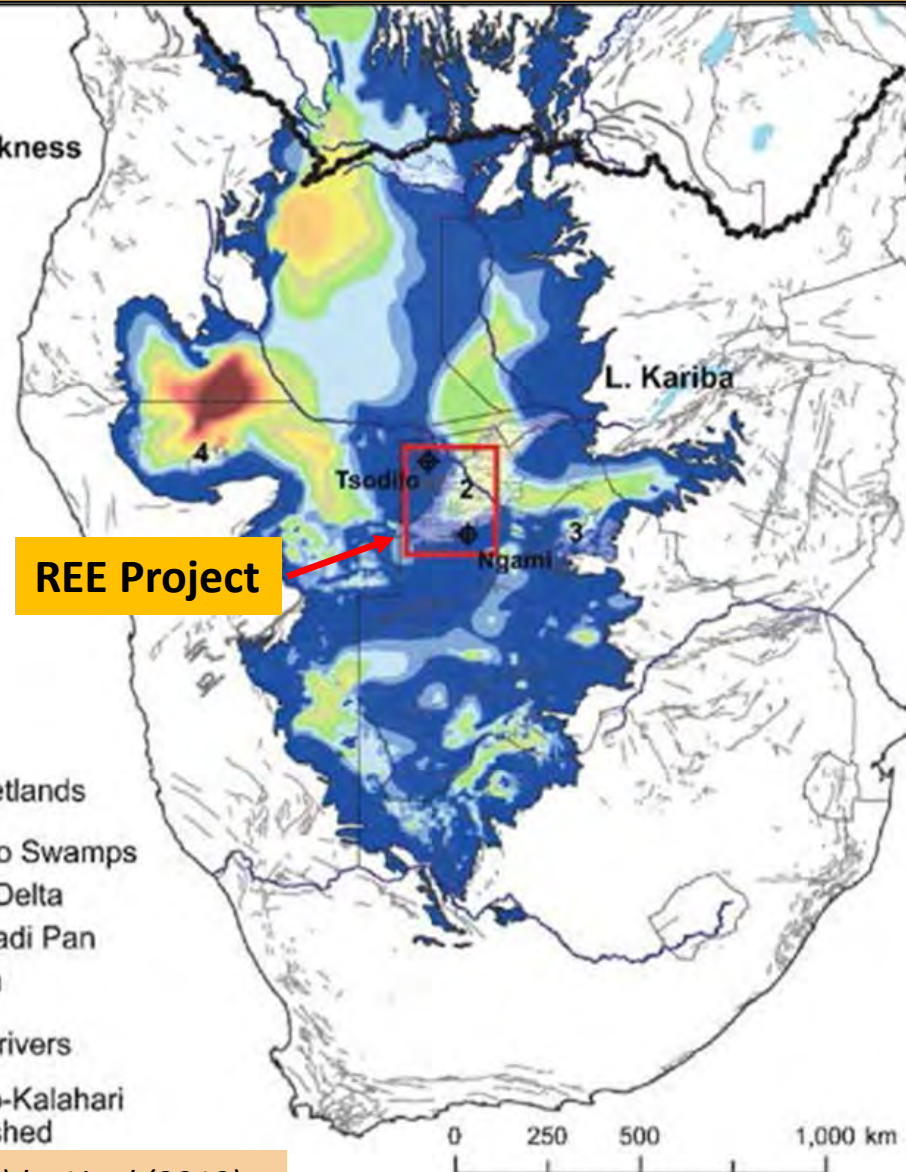
Active wetlands

- 1: West Congo Swamps
- 2: Okavango Delta
- 3: Makgadikgadi Pan
- 4: Etosha Pan

Major rivers

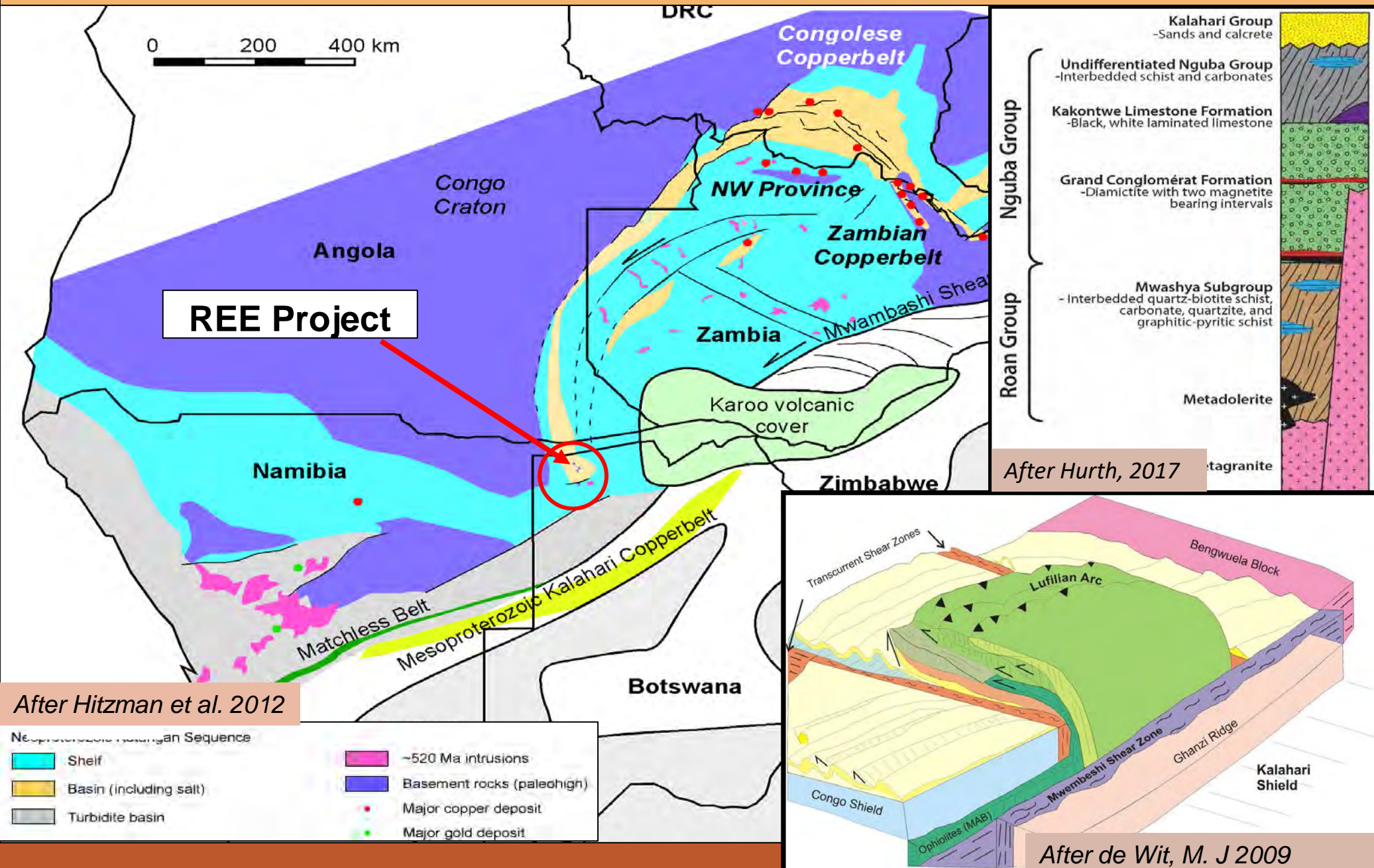
Congo-Kalahari watershed

REE Project



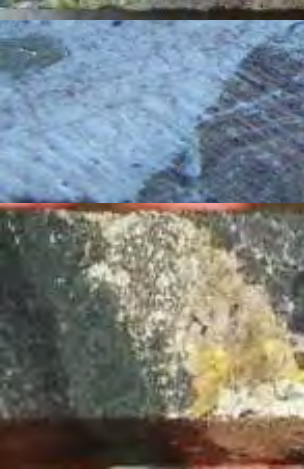
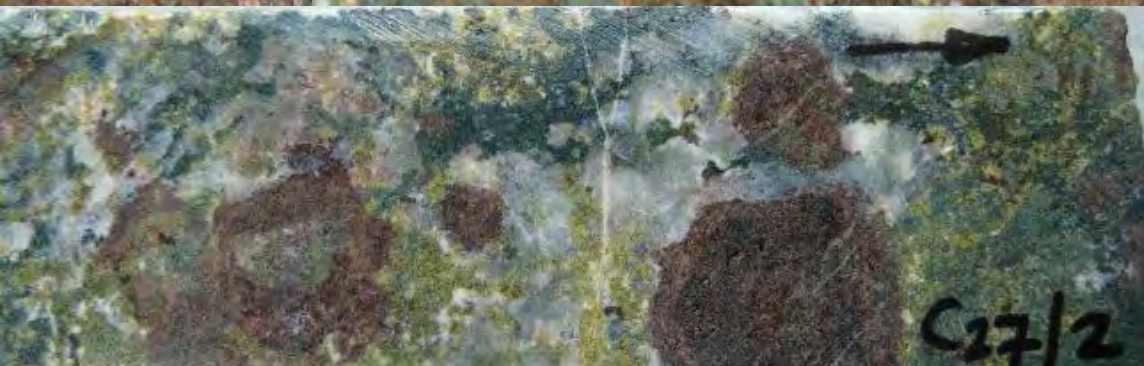
from Haddon (1999) by Linol (2013).

Regional Geology

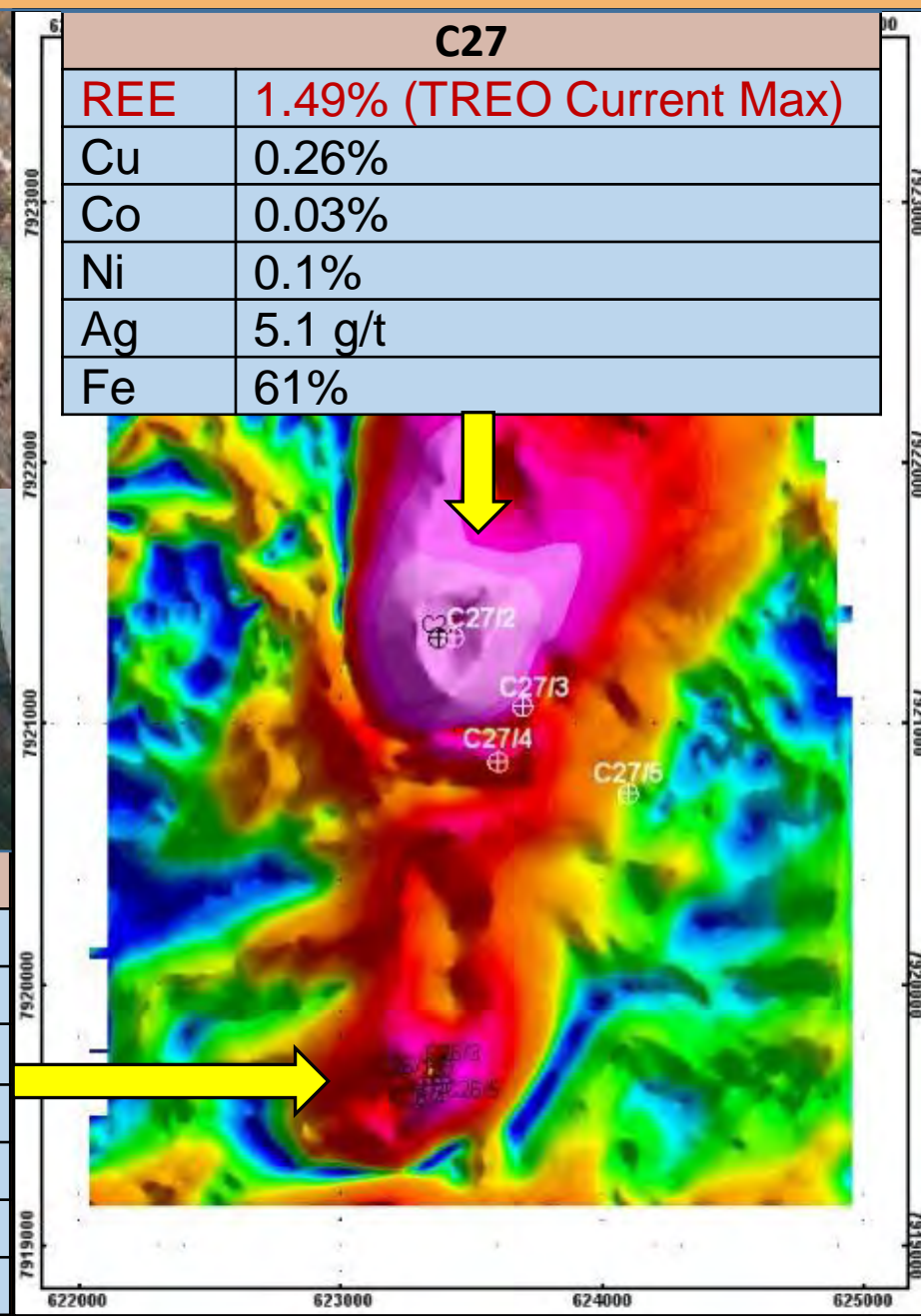


Rare Earth Element (REE) + Multi-Element Skarns

Tsodilo Resources core sections



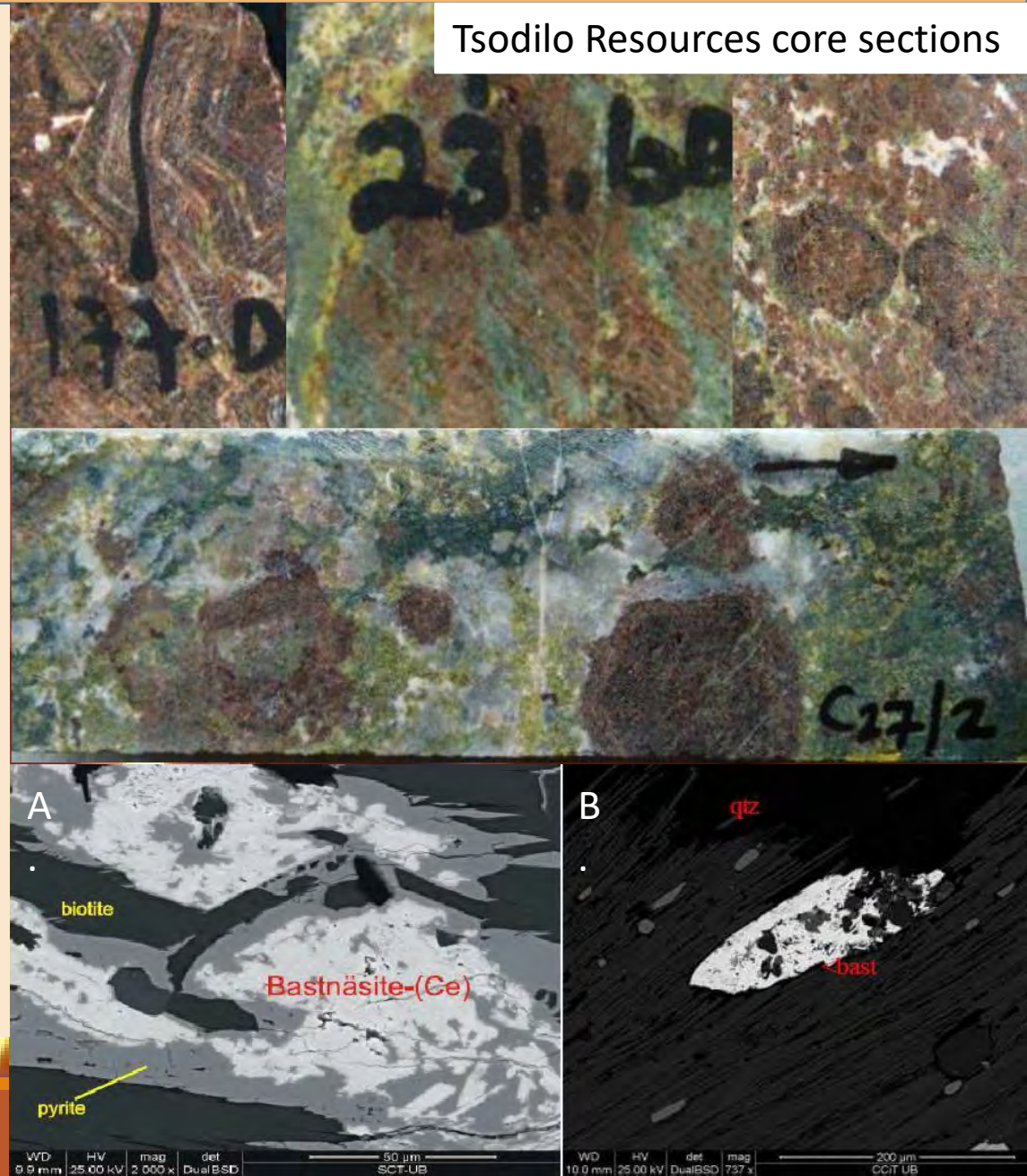
C26	
REE	0.45% (TREO Current Max)
Cu	0.4%
Cu	0.25% over 5 m
Co	0.02%
Au	0.1 g/t
Ag	1 g/t
Fe	28%



REE Mineralogy

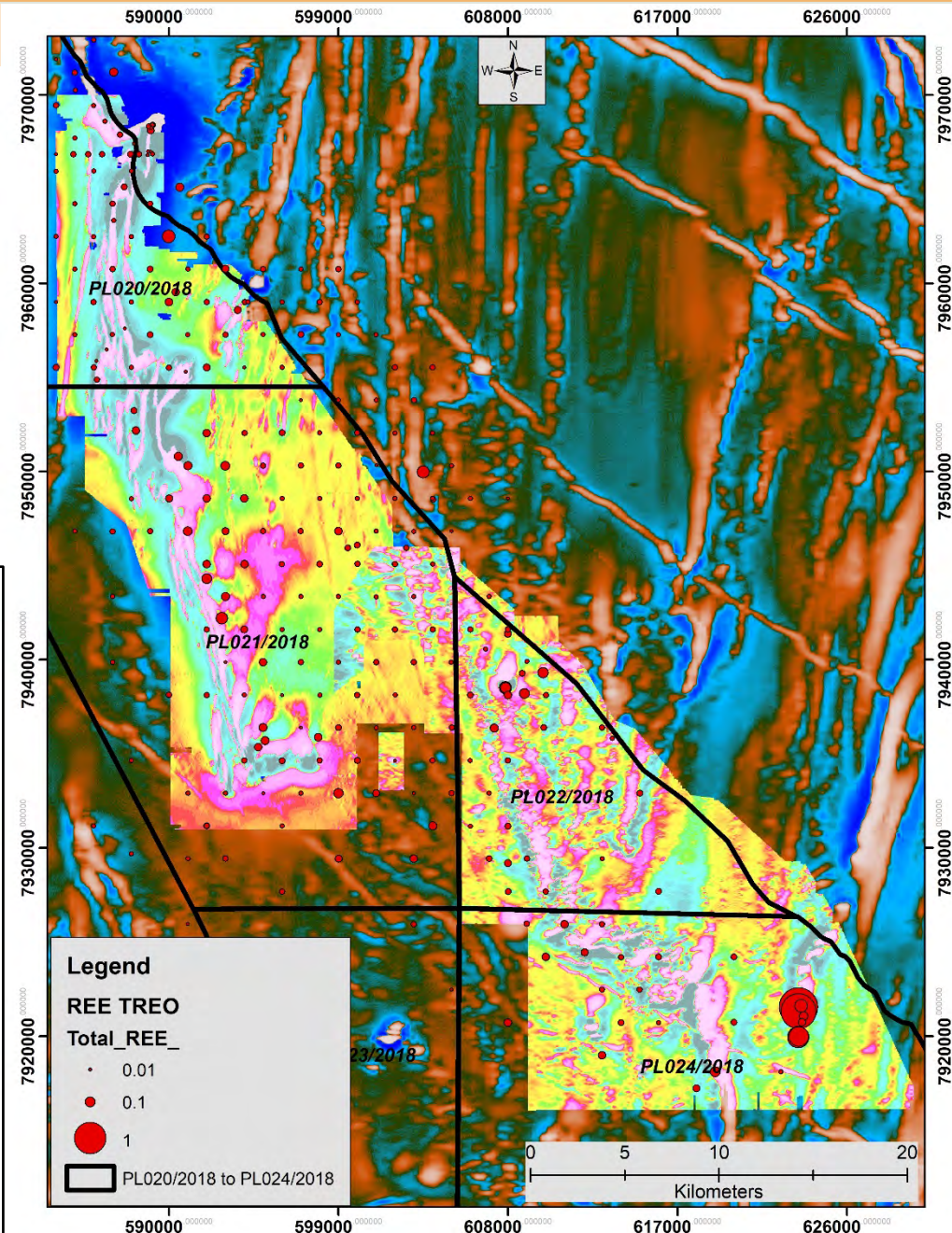
- Barcelona group studied the mineralogy of these skarn anomalies (Dr. Joan Carles Melgarejo) and concluded that the REE occurrences within the skarn are a mixture of:
 - REE Carbonates: Bastnäsite, Ancyilite, and Calcioancylite;
 - REE silicates: Allanite, Britholite, and Yttrialite; and
 - REE phosphates: Rhabdophane, Monazite, and Xenotime.
- These Skarn deposits have typical skarn morphologies.
- The Exoskarn forms within the carbonate rich lithologies (marble).
- The common skarn bulk mineralogy is pyroxene skarn (hedenbergite) and garnet skarn (andradite).
- Trace mineral are complex, with most of these trace minerals being REE bearing.

Tsodilo Resources core sections



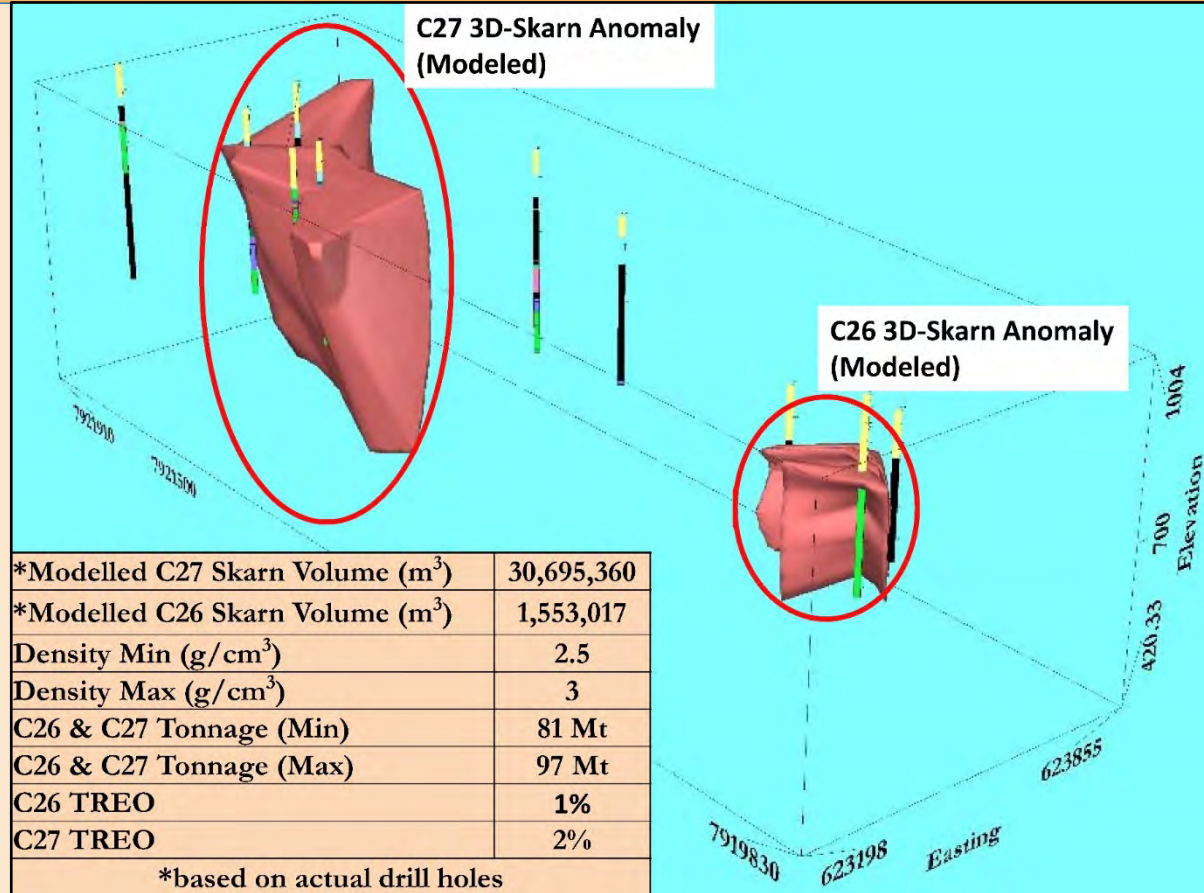
Skarns Rare Earth Element (REE)

- Economic Total Rare Earth Elements Oxide (TREO)
0.02% to 3%
(Paulick and Machacek, 2017)
- High-Grade intersections:
 - 1822C27_6: C27 skarn anomaly
 - Highest TREO recorded at **1.49%**
 - 2 m over 1% TREO, 4 m over **0.1% TREO**
 - 1822C27_2: C26 skarn anomaly
 - 1 m over **1% TREO**
 - 45 m of intervals over **0.1% TREO**
 - 1822C26_1: C26 skarn anomaly
 - 18 m of intervals over **0.1% TREO**
 - 1822C26_3: C26 skarn anomaly
 - 11 m of intervals over 0.1% TREO.



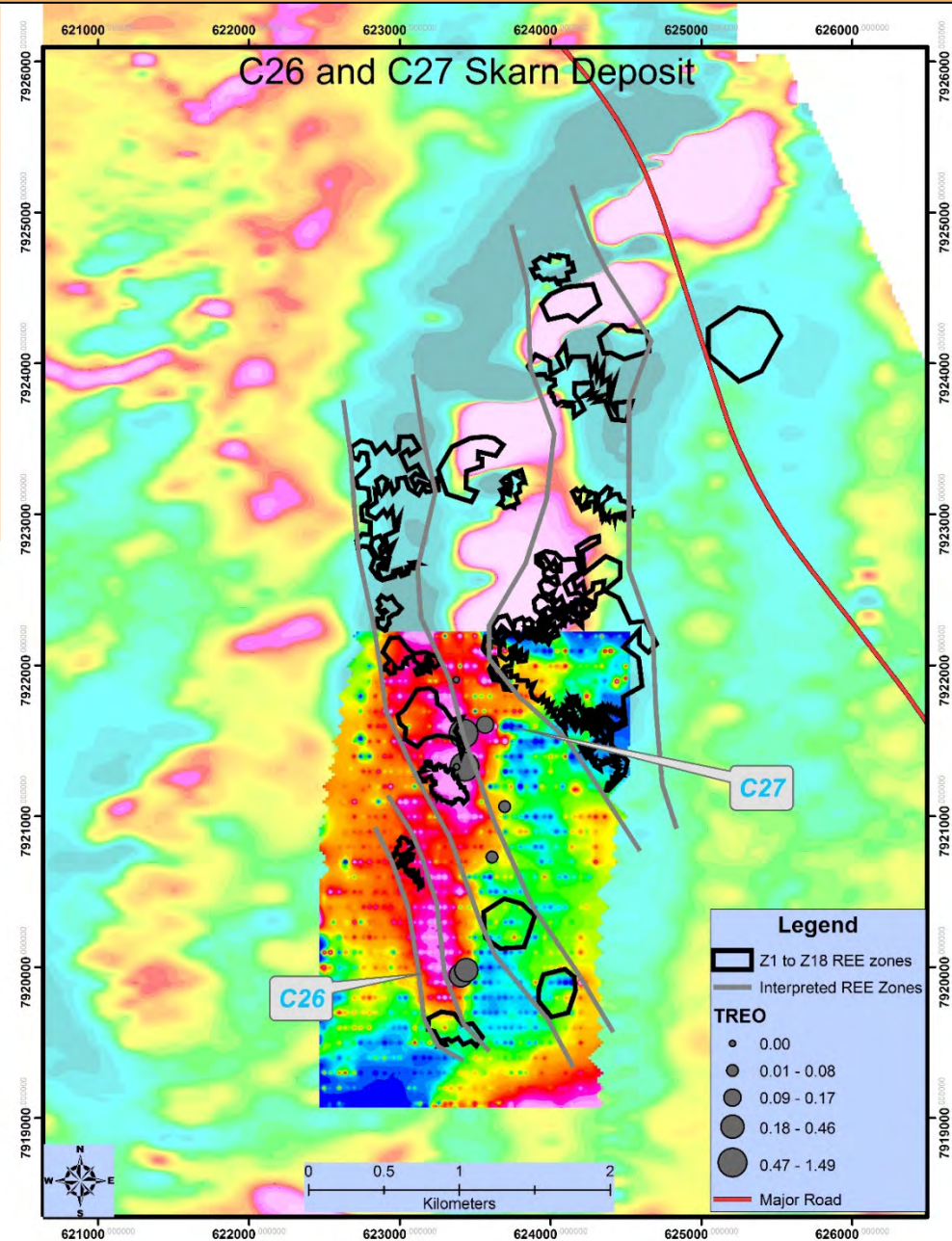
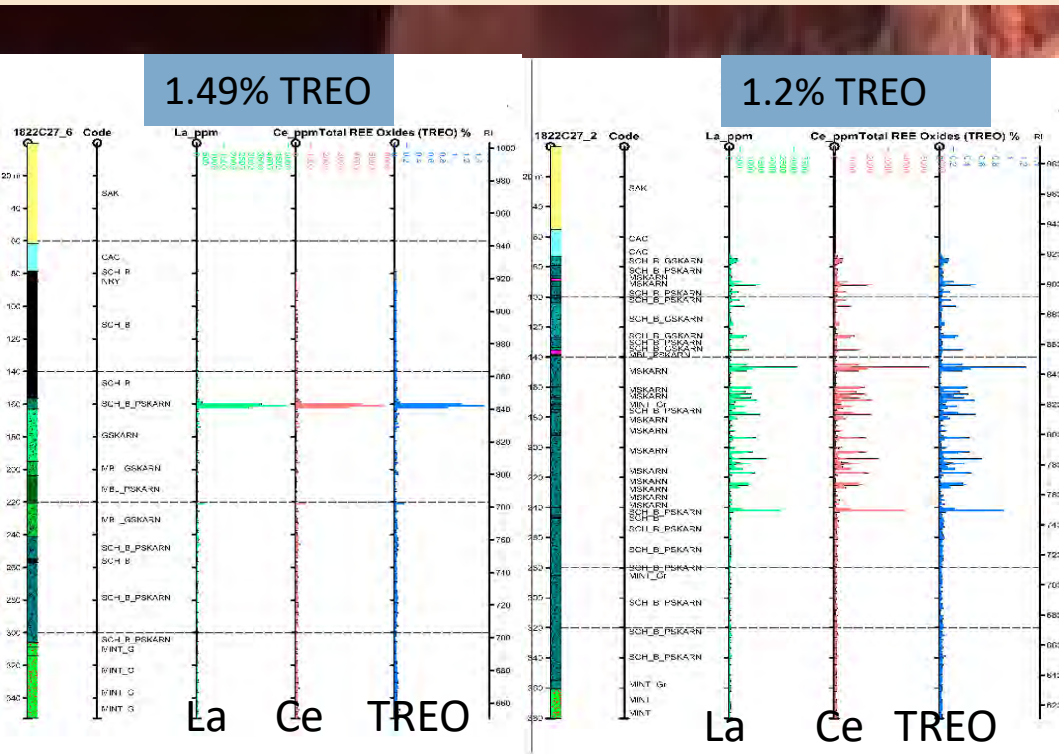
REE Exploration Target

- C26 and C27 targets have been modeled to a Conceptual Exploration Target in 3D.
- **81 Mt to 97 Mt** of skarn with current grades ranging from **0.05 % to 1.5 %** Total Rare Earth Elements Oxide (TREO).
- Range of TREO from **40,300 tonnes to 1,450,000 tonnes**.
- In-situ REO value range of **~\$800 million USD to ~\$20 billion USD**.
- The geological model of skarn is based on the actual drilled holes and excludes the rest of the skarn anomaly not drilled.
- Generated volumes representing the C26 and C27 skarn.
- Turned into tonnages using a range of densities = 2.5 to 3.0 g/cm³.
- *Note: The potential quantities and grades of C26 & C27 Exploration Targets are conceptual in nature.*



Artificial Intelligence REE Targets

- Innovative Mineral Prospecting using proprietary Artificial Intelligence (AI) methods for REE target generation.
- AI-interpreted REE zones (black circles) overlap with gravity and magnetic anomalies.
- There is scope to extend the gravity survey to cover interpreted REE zones and follow-up with drill holes on selected targets.



Other REE Exploration Projects Comparison

- There are other rare earth elements (REE) mineralization occurrences in skarn deposits globally.
- C26 and C27 targets have the potential to exceed other advanced exploration projects both in tonnages and grades
- Lower-grade projects are already getting attention as the demand of REE increases:
 - Namibia Critical Minerals: On January 27, 2020, the Company announced that it had signed an agreement with Japan Oil, Gas and Metals National Corporation (“JOGMEC”) to jointly explore, develop, exploit, refine and/or distribute mineral products from Lofdal. The agreement provides JOGMEC with the right to earn a 50% interest in the project by funding \$20,000,000 USD in exploration and development expenditures.

Name of project	Deposit type	Material type hosted in	Grade (TREO %)	Tonnage (Mt)
C26 and C27 (conceptual exploration target) - Botswana	Skarn	Skarn in Marbles and Schists	1.5 (Max)	97 (Max)
Bayan Obo (China)	Skarn / Carbonatite	Host strata are quartzite, slate, limestone, and dolomite	6	800
Bastnäs REE Line (Sweden)	Skarn	Skarn	?	?
Per Geijer (inferred) - Sweden	Iron ore Apatite (IOA)	Magnetite, hematite and apatite	0.18	585
Norra Karr (inferred) -Sweden	Magmatic	nepheline syenites	0.5	110
Lofdal (measured+indicated+inferred) – (Namibia)	Carbonatite	carbonatite intrusions	0.18	53.4
Steenkampskraal (measured+indicated+inferred) (SA)	Magmatic	Magmatic Monazite-apatite vein hosted within quartz diorites	14.4 (REO)	0.1

C26 & C27 REE Project and Lofdal (Namibia) Project comparison

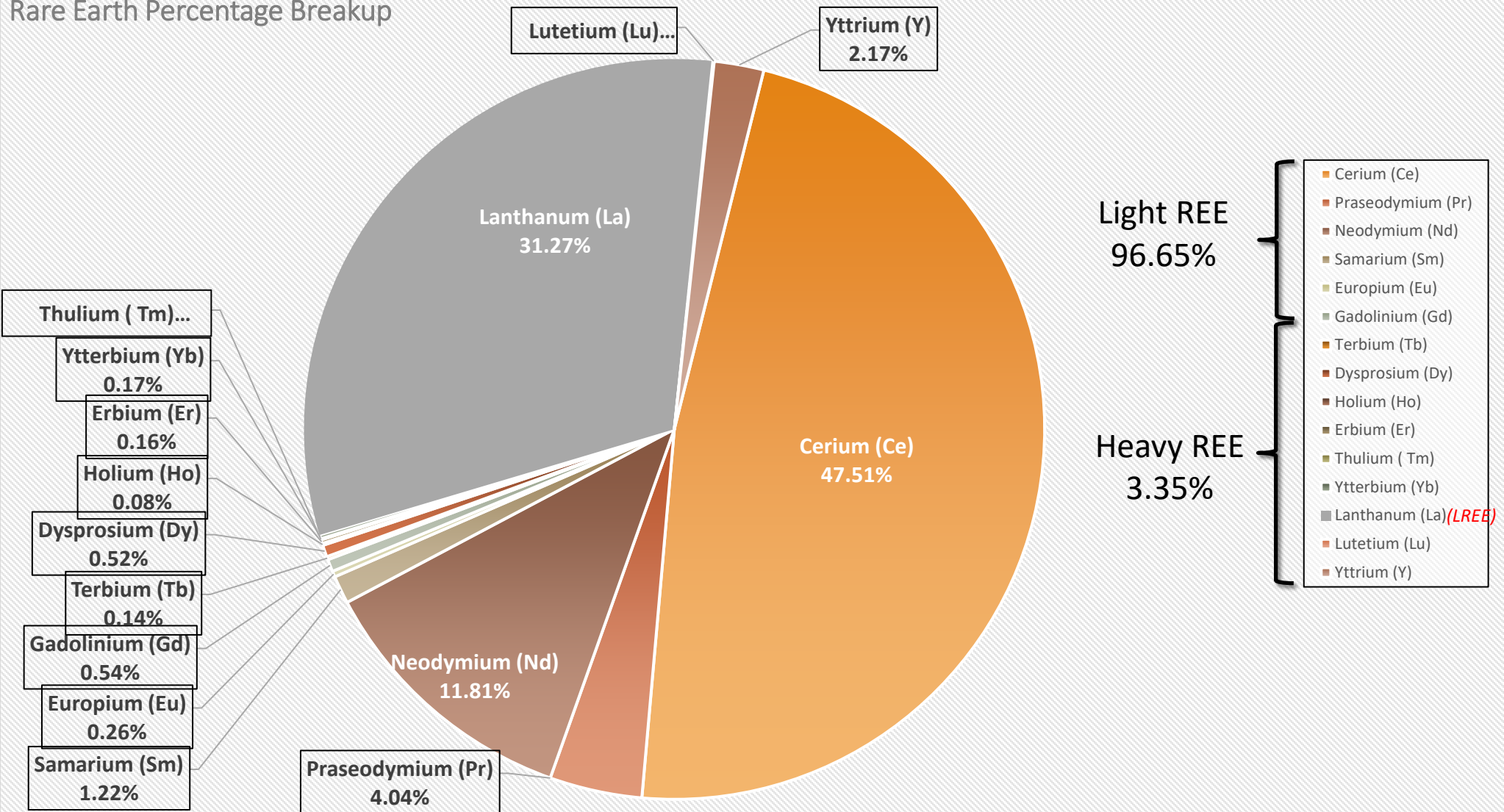
	REE Oxide	REE Names	Lofdal Namibia (ppm)	C26 & C27 conceptual target (ppm)
Light	CeO ₂	Cerium (Ce)	395.75	1,253.59
Rare Earth Elements (LREE)	La ₂ O ₃	Lanthanum (La)	237.25	825.24
	Pr ₂ O ₃	Praseodymium (Pr)	41.25	106.55
	Nd ₂ O ₃	Neodymium (Nd)	158.50	311.65
	Sm ₂ O ₃	Samarium (Sm)	57.75	32.14
	Eu ₂ O ₃	Europium (Eu)	21.00	6.71
	Gd ₂ O ₃	Gadolinium (Gd)	75.00	14.23
Heavy	Tb ₂ O ₃	Terbium (Tb)	14.50	3.51
Rare Earth Elements (HREE)	Dy ₂ O ₃	Dysprosium (Dy)	89.50	13.59
	Ho ₂ O ₃	Holmium (Ho)	17.75	2.21
	Er ₂ O ₃	Erbium (Er)	51.50	4.32
	Tm ₂ O ₃	Thulium (Tm)	7.50	1.34
	Yb ₂ O ₃	Ytterbium (Yb)	47.00	4.59
	Lu ₂ O ₃	Lutetium (Lu)	7.00	1.57
	Y ₂ O ₃	Yttrium (Y)	571.50	57.19

- **C26 and C27** REE minerals: **bastnäsite**, **allanite**, **monazite**, **xenotime**, ancylite, alcioancylite, britholite, yttrialite, and rhabdophane.
- **Lofdal Project** minerals: **bastnäsite**, **allanite**, **monazite**, **xenotime**, apatite, thorite, aeschynite, parisite, and synchysite,

C26 & C27 Skarns – Rare Earth Element (REE)										
		C26		C27			C26		C27	
REE Oxide	REE Names	Lower Tonnage of Each Element (extracted)	Upper Tonnage of Each Element (extracted)	Lower Tonnage of Each Element (extracted)	Upper Tonnage of Each Element (extracted)	Price Per Ton (12/10/2023, ISE)	In situ	In situ	In situ	In situ
							Lower Value	Upper Value	Lower Value	Upper Value
		(Grade 0.05% TREO% @ 4 Mt)	(Grade 0.5% TREO% @ 5 Mt)	(Grade 0.05% TREO% @ 77 Mt)	(Grade 1.5% TREO% @ 92 Mt)	USD	USD	USD	USD	USD
CeO2	Cerium (Ce)	950	11,878	18,292	655,647	1,742	1,655,271	20,690,891	31,863,973	1,142,137,198
La2O3	Lanthanum (La)	625	7,819	12,041	431,590	2,841	1,777,027	22,212,834	34,207,765	1,226,148,447
Pr2O3	Praseodymium (Pr)	81	1,010	1,555	55,742	112,901	9,120,732	114,009,154	175,574,097	6,293,305,308
Nd2O3	Neodymium (Nd)	236	2,953	4,548	163,013	85,648	20,234,402	252,930,025	389,512,238	13,961,737,365
Sm2O3	Samarium (Sm)	24	305	469	16,813	2,025	49,343	616,793	949,862	34,046,984
Eu2O3	Europium (Eu)	5	64	98	3,522	28,218	144,053	1,800,659	2,773,015	99,396,387
Gd2O3	Gadolinium (Gd)	11	135	208	7,444	39,771	429,086	5,363,570	8,259,897	296,069,046
Tb2O3	Terbium (Tb)	3	34	52	1,852	1,098,732	2,949,073	36,863,410	56,769,651	2,034,860,222
Dy2O3	Dysprosium (Dy)	10	129	199	7,118	422,113	4,354,200	54,427,496	83,818,344	3,004,397,775
Ho2O3	Holium (Ho)	2	21	32	1,162	81,896	137,923	1,724,036	2,655,015	95,166,764
Er2O3	Erbium (Er)	3	41	63	2,251	40,068	130,741	1,634,267	2,516,771	90,211,517
Tm2O3	Thulium (Tm)	1	12	19	690	31,841	31,839	397,992	612,907	21,969,134
Yb2O3	Ytterbium (Yb)	3	43	67	2,397	13,589	47,201	590,018	908,627	32,568,973
Lu2O3	Lutetium (Lu)	1	15	23	835	755,875	914,958	11,436,980	17,612,950	631,321,312
Y2O3	Yttrium (Y)	43	542	835	29,923	6,445	279,495	3,493,685	5,380,274	192,851,387
	Totals	2,000	25,000	38,500	1,380,000		42,255,345	528,191,808	813,415,385	29,156,187,820
	Totals C26 & C27 (Min)	40,500					855,670,729			
	Totals C26 & C27			1,405,000						

C26 and C27 Percentage Breakup

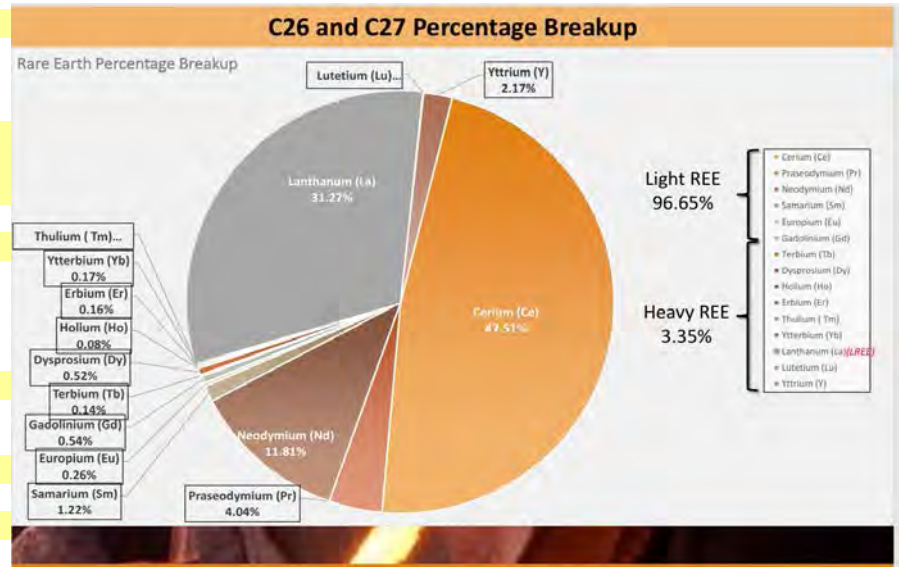
Rare Earth Percentage Breakup



USGS - Geological Survey 2022 Final List of Critical Minerals AGENCY: U.S. Geological Survey, Department of the Interior

Mineral Tsodilo Y

1	Aluminum	
2	Antimony	
3	Arsenic	
4	Barite	
5	Beryllium	
6	Bismuth	
7	Cerium	Y
8	Cesium	
9	Chromium	
10	Cobalt	
11	Dysprosium	Y
12	Erbium	Y
13	Europium	Y
14	Fluorspar	
15	Gadolinium	Y
16	Gallium	
17	Germanium	
18	Graphite	
19	Hafnium	
20	Holmium	Y
21	Indium	
22	Iridium	
23	Lanthanum	Y
24	Lithium	
25	Lutetium	Y
26	Magnesium	
27	Manganese	
28	Neodymium	Y
29	Nickel	
30	Niobium	
31	Palladium	
32	Platinum	
33	Praseodymium	Y
34	Rhodium	
35	Rubidium	
36	Ruthenium	
37	Samarium	Y
38	Scandium	
39	Tantalum	
40	Tellurium	
41	Terbium	Y
42	Thulium	Y
43	Tin	
44	Titanium	
45	Tungsten	
46	Vanadium	
47	Ytterbium	Y
48	Yttrium	Y
49	Zinc	
50	Zirconium	



C26 & C27 REE Project and Lofdal (Namibia) Project comparison

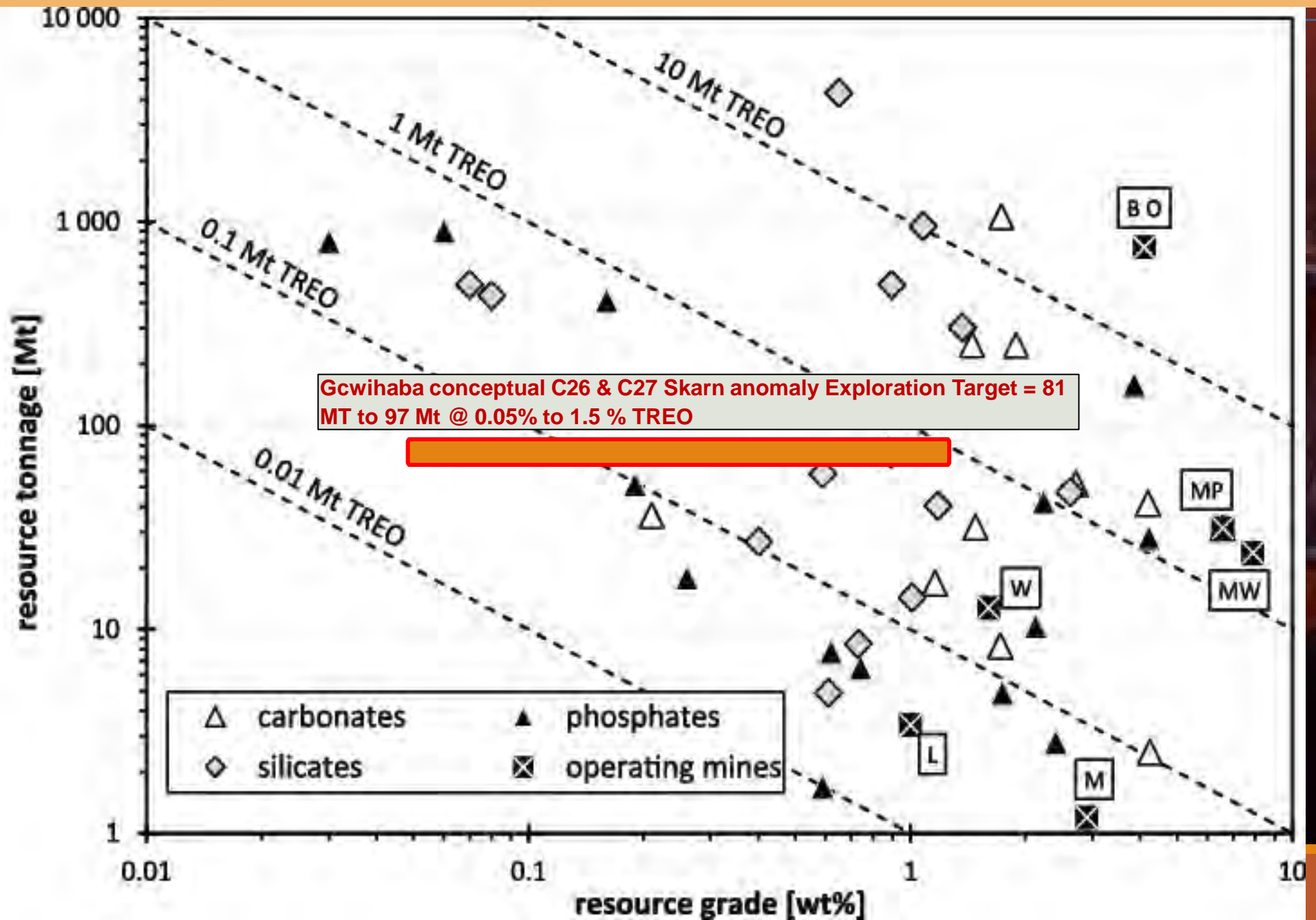
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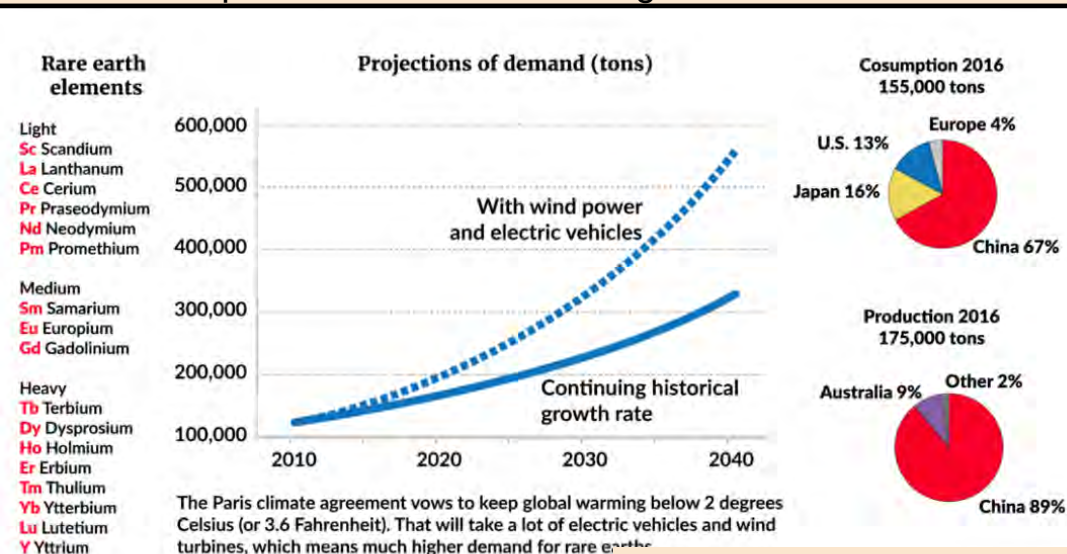
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Skarns - Rare Earth Element (REE)

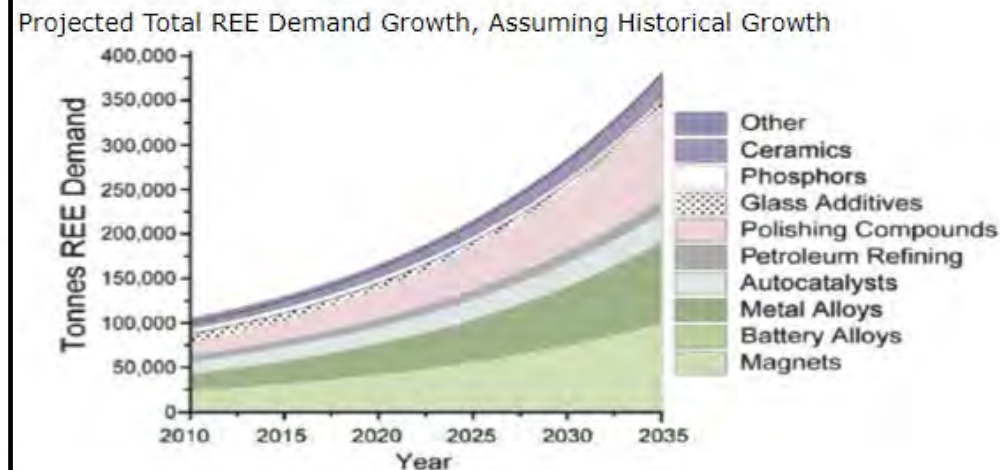


Conclusions

- Conceptual Exploration Target of **81 Mt to 97 Mt** of skarn with grades ranging from **0.05 % to 1.5 % TREO**
- Contained TREO of **40,300 t to 1,450,000 Mt**
- In-situ value of **~\$800 million USD to ~\$20 billion USD**
- Significant potential for the development of an REE mineral deposit within the skarn rocks of the Gcwihaba prospecting licenses
- Extract REE metals for sale into the current high-demand areas such as permanent magnets and battery alloys
- Increasing demand due to the need for green energy (permanent magnets) and electronics and battery-powered cars
- Net demand is projected to outstrip net supply quickly
- Soon, there will be an undersupply of REE that will not be able to meet the demand
- As more countries become developed, demands for technologies using REEs will increase
- Resulting in larger total demands for REEs
- As such new sources of REE are being searched for and it is anticipated that the Gcwihaba skarn REE deposit could be developed to meet some of this global demand for REE



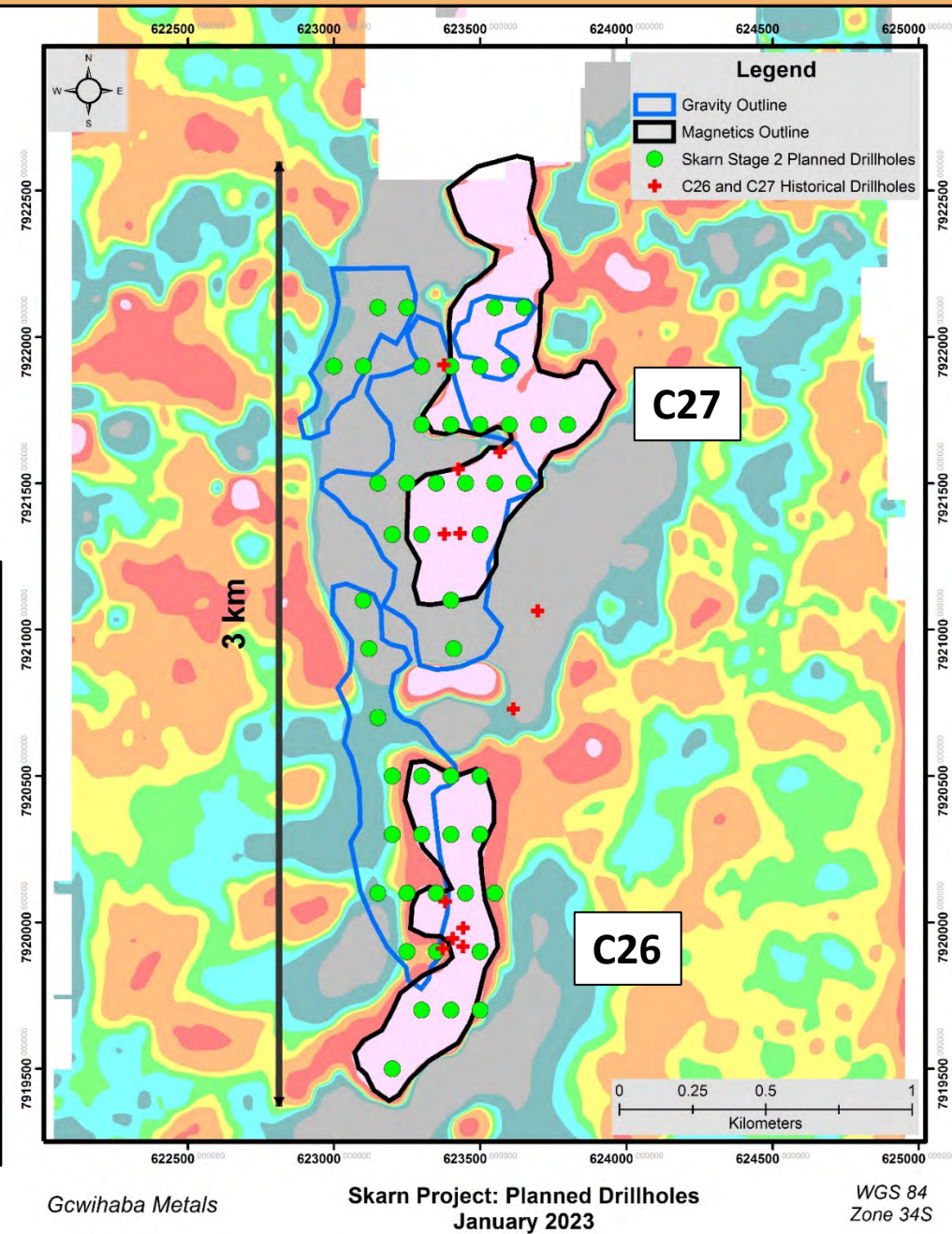
Source: Foreignpolicy.com (2016)



Source: Alonso et al., 2012

Next Stage Exploration Plan REE Skarn C26 and C27 - Drillholes

- ❖ Fifty (50) drill holes, each drilled to a depth of 250 m.
 - C26 - **Twenty (20)**, total depth = **5,000 m**.
 - C27 - **Thirty (30)**, total depth = **7,500 m**
- ❖ Forty-five angled holes



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