

ASX: VMM MARKET ANNOUNCEMENT

## Step-Out Drilling Multiplies Cupim South High-Grade Footprint

Multiple occurrences of surface level Heavy Rare Earths at Cupim South

#### ASX Release: 12 June 2024

## **Highlights**

- Step-out auger drilling onto adjoining mining license outside of the maiden Cupim South Mineral Resource Estimate (MRE) area has established multiple high-grade zones up to +7,000 ppm TREO, which remain open in all directions. Furthermore, new areas at Cupim South have discovered high-grade Dy-Tb mineralisation (>100pm) starting from the surface. These results are highlighted below:
  - CS-AG-153: 8.0m @ 7,856ppm TREO<sup>A</sup> from 2m, ending in mineralisation of 6,747ppm TREO Ending last 4m @ 10,980ppm TREO and 117ppm Dy-Tb Oxide
  - CS-AG-136: 12.0m @ 5,427ppm TREO from surface, ending in mineralisation of 5,171ppm TREO Including all 12m @ 126ppm Dy-Tb Oxide
  - CS-AG-093: 7.5m @ 5,707ppm TREO from surface, ending in mineralisation of 6,708ppm TREO Including all 7.5m @ 71ppm Dy-Tb Oxide
  - CS-AG-191: 4.0m @ 4,260ppm TREO from 2m, ending in mineralisation of 4,364ppm TREO
  - CS-AG-220: 6.0m @ 4,012ppm TREO from 2m, ending in mineralisation of 3,839ppm TREO Ending last 4m @ 4,487ppm TREO and 79ppm Dy-Tb Oxide
  - CS-AG-221: 7.0m @ 4,617ppm TREO from surface, ending in mineralisation of 3,529ppm TREO Including all 7m @ 78ppm Dy-Tb Oxide
  - CS-AG-222: 11.0m @ 3,112ppm TREO from surface, ending in mineralisation of 4,455ppm TREO Ending last 1m @ 4,445ppm TREO and 100ppm Dy-Tb Oxide
  - CS-AG-212: 14.0m @ 3,798ppm TREO from surface, ending in mineralisation of 3,749ppm TREO
  - CS-AG-071: 14.0m @ 3,060ppm TREO from surface, ending in mineralisation of 2,682ppm TREO Including 6m @ 166ppm Dy-Tb Oxide
  - CS-AG-184: 8.0m @ 3,766ppm TREO from 2m, ending in mineralisation of 3,345ppm TREO
  - CS-AG-186: 10.0m @ 3,398ppm TREO from 2m, ending in mineralisation of 2,897ppm TREO
  - CS-AG-305: 3.0m @ 4,453ppm TREO from surface, ending in mineralisation of 4,239ppm TREO
  - CS-AG-307: 9.0m @ 4,112ppm TREO from surface, ending in mineralisation of 1,512ppm TREO
- These step-out auger results, located outside the bounds of the first Cupim South MRE area, have confirmed widespread mineralisation across the Mining License with multiple new high-grade discoveries, demonstrating that the current deposit represents a fraction of the total mineralised system. Follow-up systematic RC drilling has already commenced, which will test the full thickness and grades of these high-grade intercepts.

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<sup>&</sup>lt;sup>A</sup> Total Rare Earth Oxides ('TREO'): La<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> + Pr<sub>6</sub>O<sub>11</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>4</sub>O<sub>7</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> + Y<sub>2</sub>

- Infill Diamond and RC drilling at Northern Concessions Deposit has been used to delineate a higher-grade indicated resource base within granted Mining Licenses. Furthermore, these results have shown significant improvement in the current resource block model, showing areas of greater thickness and grades than previously understood, as highlighted below:
  - CDP-RC-256: 16m @ 6,231ppm TREO from 2m, including 8m @ 7,336ppm TREO [37% MREO<sup>B</sup>] and 70ppm Dy & Tb Oxide
  - CDP-RC-268: 22m @ 3,460ppm TREO from surface, including 10m @ 4,274ppm TREO [30% MREO]
  - CDP-RC-249: 14m @ 4,151ppm TREO from 6m, including 6m @ 6,522ppm TREO [35% MREO] and 71ppm Dy & Tb Oxide
  - CDP-RC-253: 13m @ 4,368ppm TREO from 4m, including 6m @ 5,305ppm TREO [41% MREO] and 98ppm Dy & Tb Oxide
  - CDP-RC-254: 21m @ 3,024ppm TREO from 2m, including 7m @ 4,915ppm TREO [39% MREO] and 67ppm Dy & Tb Oxide
  - FZ-DDH-013: 27.5m @ 3,498ppm TREO from 4m, including 16m @ 4,637ppm TREO [37% MREO] and 66pm Dy & Tb Oxide
  - FZ-DDH-009: 23m @ 3,743ppm TREO from 1m, including 9m @ 6,391ppm TREO [48% MREO] and 126ppm Dy & Tb Oxide
  - FZ-DDH-040: 20m @ 2,854ppm TREO from surface, [32% MREO]
  - CJ-RC-143: 16m @ 5,302ppm TREO from 4m, including 8m @ 8,121ppm TREO [41% MREO] and 156ppm Dy & Tb Oxide
  - CJ-RC-339: 22m @ 4,011ppm TREO from surface, including 12m @ 6,136ppm TREO [38% MREO] and 107ppm Dy & Tb Oxide
  - CJ-RC-140: 22m @ 2,953ppm TREO from surface [28% MREO]
- These latest infill results at Northern Concessions show consistent outstanding grades and outstanding proportions of MREO including heavy rare earth elements Dy & Tb. The RC drilling at Carijo Hill has also made a breakthrough discovery of significant Dy & Tb mineralisation (>100ppm), which warrants further investigation.
- Second set of results received at the recently discovered Fazenda Cocal prospect, demonstrates widespread and high-grade mineralisation across multiple licenses, as per the highlights below:
  - CP-AG-001: 5.0m @ 3,861ppm TREO from 2m, ending in mineralisation of 5,760ppm TREO
  - CP-AG-003: 4.0m @ 3,373ppm TREO from 4m, ending in mineralisation of 3,918ppm TREO
  - CP-AG-004: 10.0m @ 3,222ppm TREO from 2m, ending in mineralisation of 3,915ppm TREO
  - CP-AG-005: 8.0m @ 3,437ppm TREO from surface, ending in mineralisation of 2,136ppm TREO
  - CP-AG-006: 6.0m @ 4,130ppm TREO from surface, ending in mineralisation of 3,351ppm TREO
- The mineralised footprint at Cupim South covers an area multi-fold of the Company's current Mineral Resource Estimate ('Resource') and continues to grow into the granted Mining License. Furthermore, auger drilling continues to discover large zones and corridors of high-grade mineralisation >4,000ppm TREO, which have become priority targets for ongoing RC drilling.
- Viridis continues aggressive exploration, with a view to expanding the currently defined resource at Colossus. The immediate focus is to increase the Measured & Indicated Resource base through infill drilling, step-out drilling at Cupim South, Centro Sul, Fazenda Cocal and the inclusion of Tamoyo Prospect.



<sup>&</sup>lt;sup>B</sup> Magnetic Rare Earth Oxides ('MREO'): Dy<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub>, Pr<sub>6</sub>O<sub>11</sub>, Sm<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>

## Map of Exploration Data at Colossus Ionic Adsorption Clay REE Project



*Figure 1:* Highlight summary of current drilling exploration data outside of the Colossus Resource which is 201Mt @ 2,590ppm TREO and an exceptional 668ppm MREO<sup>1,2,3,4</sup>. The block model grade scale is shown in the top right corner of the "Legend" section.



#### Chief Executive Officer, Rafael Moreno commented:

"The consistent and high-grade results across the extension of the Cupim South Deposit are remarkable and showcase the homogenous nature of the mineralisation which encompasses the area well beyond the current Resource. Most impressively, the drilling has confirmed the portion of the deposit that hosts the highest graded blocks at Cupim South, which is over 6,500ppm TREO, continues to remain open and extends southeasterly while maintaining similar outstandingly high grades. The infill drilling at Northern Concessions has made breakthrough discoveries of heavy rare earths in a new area and higher grades than previous resource blocks. Furthermore, these results will feed in to provide a high-graded and tonnage indicated portion within the next Resource upgrade.

We continue to invest in our exploration programs alongside the advancement of our Colossus development strategy, which has generated numerous high priority targets at Cupim South and Fazenda Cocal. We look forward to updating the market with future RC results at Cupim South, infill drilling at Northern Concessions and Capão Da Onça, step-out drilling at Centro Sul and Fazenda Cocal."

Viridis Mining and Minerals Limited ('Viridis' or 'Company') is pleased to report that the eighth set of assays has been received within the Colossus Project, which presents high-grade rare earth element ('REE') mineralisation along the Cupim South extension, Fazenda Cocal and Northern Concession. Cupim South has discovered numerous new zones of outstanding high-grade mineralisation (>4,000ppm TREO), whereas Fazenda Cocal has shown widespread mineralisation consistently >3,000ppm TREO. Infill drilling has shown Northern Concessions continue to show elevated heavy rare earths and higher-grade pockets than previously understood.

#### **Cupim South**

The eighth batch of assays predominantly consisted of step-out auger drilling at Cupim South Extension, which has uncovered and confirmed that the highest-graded portion of the Cupim South Deposit extends southeasterly onto the adjoining license. The step-out drilling has also discovered numerous areas of significantly high grades and continuous bodies of mineralisation, which will be priority target locations for ongoing RC drilling.

These results within this batch magnify the growth potential for Cupim South, which has multi-folded its mineral footprint and identified further areas of elevated heavy rare earth concentrations. The outstanding new zones and corridor discovered are expected to add significant high-grade tonnage (>4,000ppm) and improve the grades of the current Mineral Resource at Colossus.

The highlights from this batch of results, along with previous step-out drilling, demonstrate the significant potential of the Cupim South Deposit throughout the entire prospect, as seen below<sup>2</sup>:

- CS-AG-153: 8.0m @ 7,856ppm TREO from 2m, ending in mineralisation of 6,747ppm TREO Ending last 4m @ 10,980ppm TREO and 117ppm Dy-Tb Oxide
- CS-AG-302: 12m @ 8,221ppm TREO from 6m, ending in mineralisation of 9,643ppm TREO Ending last 4m @ 10,111ppm TREO and 157ppm Dy-Tb Oxide
- CS-AG-093: 7.5m @ 5,707ppm TREO from surface, ending in mineralisation of 6,708ppm TREO Including all 7.5m @ 71ppm Dy-Tb Oxide
- CS-AG-136: 12.0m @ 5,427ppm TREO from surface, ending in mineralisation of 5,171ppm TREO Including all 12m @ 126ppm Dy-Tb Oxide
- CS-AG-157: 8m @ 5,510ppm TREO from surface, ending in mineralisation of 4,359ppm TREO
- CS-AG-191: 4.0m @ 4,260ppm TREO from 2m, ending in mineralisation of 4,364ppm TREO
- CS-AG-221: 7.0m @ 4,617ppm TREO from surface, ending in mineralisation of 3,529ppm TREO Including all 7m @ 78ppm Dy-Tb Oxide
- CS-AG-303: 7m @ 5,192ppm TREO from 2m, ending in mineralisation of 4,781ppm TREO Ending last 4m @ 5,268ppm TREO and 111ppm Dy-Tb Oxide
- CS-AG-305: 3.0m @ 4,453ppm TREO from surface, ending in mineralisation of 4,239ppm TREO
- CS-AG-307: 9.0m @ 4,112ppm TREO from surface, ending in mineralisation of 1,512ppm TREO



Step-Out Drilling Multiplies Cupim South High-Grade Footprint



*Figure 2:* This report highlights a plan view of Cupim South Deposit and extension with auger drills<sup>2,4</sup>. More details on the block model can be found in the VMM ASX announcement on 04 June 2024.



*Figure 3:* Cross section A-B (looking northeast) at Cupim South from Figure 1 with significant intercepts<sup>2,4</sup>. 15x Y-Axis exaggeration, grade blocks were sampled per 1.5-2m except for CS-AG-02 & 06 sampled per 1m.



#### **Northern Concessions**

The eighth batch of results consisted of infill drilling at the Northern Concessions, which have returned exceptional results. These results have provided further data on interpolated blocks, improving thicknesses and grades in certain areas of the current resource model. Furthermore, these results will allow for a higher grade and tonnage indicated resource to be formed into a subsequent Mineral Resource upgrade. The infill drilling has also made a breakthrough discovery on shallow heavy rare earths at the Northwest Corner of the deposit (as seen in Figure 4 below) – CJ-RC-143: 16m @ 5,302ppm TREO incl. 8m @ 8,121ppm TREO and 156ppm Dy-Tb Oxide and also CJ-RC-339: 22m @ 4,011ppm TREO incl. 12m @ 6,136ppm TREO and 107ppm Dy-Tb Oxide.

These results continue to exemplify uniquely high percentages of MREO mineralisation present within the North and consistently showcase the standout potential of Northern Concessions to host numerous areas of elevated heavy rare earth mineralisation, as highlighted by:

- CDP-RC-256: 16m @ 6,231ppm TREO from 2m, including 8m @ 7,336ppm TREO [37% MREO] and 70ppm Dy & Tb Oxide
- CDP-RC-249: 14m @ 4,151ppm TREO from 6m, including 6m @ 6,522ppm TREO [35% MREO] and 71ppm Dy & Tb Oxide
- CDP-RC-253: 13m @ 4,368ppm TREO from 4m, including 6m @ 5,305ppm TREO [41% MREO] and 98ppm Dy & Tb Oxide
- CDP-RC-254: 21m @ 3,024ppm TREO from 2m, including 7m @ 4,915ppm TREO [39% MREO] and 67ppm Dy & Tb Oxide
- FZ-DDH-013: 27.5m @ 3,498ppm TREO from 4m, including 16m @ 4,637ppm TREO [37% MREO] and 66pm Dy & Tb Oxide
- FZ-DDH-009: 23m @ 3,743ppm TREO from 1m, including 9m @ 6,391ppm TREO [48% MREO] and 126ppm Dy & Tb Oxide
- CJ-RC-143: 16m @ 5,302ppm TREO from 4m, including 8m @ 8,121ppm TREO [41% MREO] and 156ppm Dy & Tb Oxide
- CJ-RC-339: 22m @ 4,011ppm TREO from surface, including 12m @ 6,136ppm TREO [38% MREO] and 107ppm Dy & Tb Oxide

#### **Fazenda Cocal**

The Fazenda Cocal prospect extends over an area of 5.44km<sup>2</sup> which has made a significant discovery of highgrade mineralisation – FC-AG-002: 13m @ 7,632ppm TREO ending last 5m @ 10,689ppm TREO and 82ppm Dy-Tb Oxide and also FC-AG-010: 7m @ 4,905ppm TREO ending in mineralisation of 4,666ppm TREO.

The eighth batch of results consisted of a handful of step-out auger drilling at Fazenda Cocal, which consistently intersected grades >3,000ppm TREO and confirmed that mineralisation at this prospect is also widespread in nature. Step-out drilling was conducted ~4km to the east of the FC-AG-002 discovery, which continues to present significant mineralisation to the east.

Fazenda Cocal, alongside Centro Sul, are priority prospects for which Viridis will continue aggressive exploration to understand the extent and grades of mineralisation, and include these prospects in the subsequent Resource upgrade. Highlights from this batch of results include<sup>2</sup>:

- CP-AG-001: 5.0m @ 3,861ppm TREO from 2m, ending in mineralisation of 5,760ppm TREO
- CP-AG-003: 4.0m @ 3,373ppm TREO from 4m, ending in mineralisation of 3,918ppm TREO
- CP-AG-004: 10.0m @ 3,222ppm TREO from 2m, ending in mineralisation of 3,915ppm TREO
- CP-AG-005: 8.0m @ 3,437ppm TREO from surface, ending in mineralisation of 2,136ppm TREO
- CP-AG-006: 6.0m @ 4,130ppm TREO from surface, ending in mineralisation of 3,351ppm TREO





**Figure 4:** This announcement highlights the plan view of Northern Concessions with infill results. It highlights the proximity of Alcoa's long-standing mine and plant operation and the ideal location of Northern Concessions are highlighted. More details on the block model can be found in the Viridis ASX announcement on 04 June 2024.

#### **Future Work**

The current focus of development work continues to be on infill drilling and metallurgical testing for mine planning purposes. Greenfield exploration also remains an important activity as Viridis looks to maximise revenue in the early years of production with a higher value basket of rare earth elements. In parallel, Viridis looks forward to completing its Scoping Study in the coming months and continuing with its critical permitting activities.

Approved for release by the Board of Viridis Mining and Minerals Ltd.

#### Contacts

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#### About Viridis Mining and Minerals

Viridis Mining and Minerals Limited is a resource exploration and development company with assets in Brazil, Canada and Australia. The Company's Projects comprise:

- The Colossus Project, which the Company considers to be prospective for Rare Earth Elements;
- The South Kitikmeot Project, which the Company considers to be prospective for gold;
- The Boddington West Project, which the Company considers to be prospective for gold;
- The Bindoon Project, which the Company considers to be prospective for nickel, copper and platinum group elements; and
- The Poochera and Smoky Projects, which the Company considers to be prospective for kaolinhalloysite; and
- The Ytterby and Star Lake Projects, which the Company considers prospective for Rare Earth Elements.

#### **Maiden Mineral Resource Estimate**

#### Colossus Project Maiden Resource Estimate at 1,000pm Cut-Off

Category	License	Million Tonnes (Mt)	TREO (ppm)	Pr6O11 (ppm)	Nd2O3 (ppm)	Tb4O7 (ppm)	Dy2O3 (ppm)	MREO (ppm)	MREO/TREO
Indicated	Northern Concessions (NC)	50	2,511	145	441	5	25	616	25%
	Cupim South (CS)	10	3,014	204	612	6	31	853	28%
	Capao Da Onca (CDO)	2	2,481	152	414	4	22	592	24%
	Indicated Sub-Total	62	2,590	154	467	5	26	653	25%
	Northern Concessions (NC)	97	2,519	151	473	5	26	656	26%
	Cupim South (CS)	18	3,087	199	620	6	34	859	28%
Inferred	Ribeirao (RA)	19	2,544	159	455	4	24	642	25%
	Capao Da Onca (CDO)	5	2,393	132	358	4	22	517	22%
	Inferred Sub-Total	139	2,591	158	486	5	27	675	26%
GLOBAL RESOURCE (INDICATED & INFERRED)		201	2,590	157	480	5	27	668	26%

**Table 1:** Maiden Mineral Resource Estimate for Colossus REE Project using 1,000ppm TREO Cut-Off Grade. The resource model excludes leached/soil clays, transitional horizon and material under 300ppm MREO<sup>1</sup>.

#### **Competent Person Statement**

Dr. José Marques Braga Júnior, the in-country Executive Director of Viridis' Brazilian subsidiary (Viridis Mineração Ltda), compiled and evaluated the technical information in this release and is a member of the Australian Institute of Geoscientists (AIG) (MAUSIMM, 2024, 336416), accepted to report in accordance with ASX listing rules. Dr Braga has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting of Regulation, Exploration Results, Mineral Resources, and Ore Reserves. Dr Braga consents to including matters in the report based on information in the form and context in which it appears.

The Company confirms that it is unaware of any new information or data that materially affects the information included in the market announcements referred to in this release and that all material assumptions and technical information referenced in the market announcement continue to apply and have not materially changed. All announcements referred to throughout can be found on the Company's website – viridismining.com.au.

#### **Forward-Looking Statements**

This announcement contains 'forward-looking information' based on the Company's expectations, estimates and projections as of the date the statements were made. This forward-looking information includes, among other things, statements concerning the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions and that the Company's results or performance may differ materially. Forward-looking information is subject to known and unknown risks, uncertainties, and other factors that may cause the Company's actual results, level of activity, performance or achievements to materially differ from those expressed or implied by such forwardlooking information.



#### References

- 1. VMM announcement dated 4 June 2024 'Globally Significant Maiden MRE for Colossus IAC Project'
- 2. VMM announcement dated 8 May 2024 'Multiple New Discoveries at Colossus'
- 3. VMM announcement dated 10 April 2024 'Step-Out Drilling Continues Making High-Grade Discoveries'
- 4. VMM announcement dated 12 March 2024 'Step-Out Drilling Intercepts up to 24,894ppm TREO'

## **APPENDIX A: DRILL LOCATIONS**

Auger, RC and Diamond Hole coordinates of assays reported within this announcement: *All holes were drilled vertically.* 

Hole number	ANM_ID	Type_	Target_	Total length (m)	Northing (m)	Easting (m)	Elevation (m)
CA-DDH-0002	834.738/1995	DDH	CA	25.10	7568738.8	353160.0	1226.4
CA-DDH-0004	834.738/1995	DDH	CA	11.36	7568448.7	354829.9	1176.6
CA-DDH-0005	834.738/1995	DDH	CA	19.23	7566994.3	352874.0	1220.3
CDP-RC-0239	007.737/1959	RC	CDP	25.00	7582288.3	339937.0	1341.1
CDP-RC-0240	007.737/1959	RC	CDP	20.00	7582321.7	340290.9	1337.1
CDP-RC-0241	007.737/1959	RC	CDP	34.00	7582110.2	339527.2	1370.2
CDP-RC-0242	007.737/1959	RC	CDP	23.00	7582122.8	339904.3	1356.3
CDP-RC-0243	007.737/1959	RC	CDP	52.00	7582077.7	340104.8	1361.8
CDP-RC-0245	007.737/1959	RC	CDP	29.00	7582087.9	340446.6	1336.9
CDP-RC-0247	007.737/1959	RC	CDP	31.00	7581894.4	339495.6	1306.8
CDP-RC-0249	007.737/1959	RC	CDP	23.00	7581942.6	340258.9	1347.9
CDP-RC-0253	007.737/1959	RC	CDP	24.00	7581708.8	339728.3	1328.4
CDP-RC-0254	007.737/1959	RC	CDP	36.00	7581729.5	339900.0	1338.2
CDP-RC-0256	007.737/1959	RC	CDP	20.00	7581685.0	340315.5	1314.5
CDP-RC-0260	007.737/1959	RC	CDP	30.00	7581463.7	339749.4	1304.7
CDP-RC-0262	007.737/1959	RC	CDP	37.00	7581493.9	340291.1	1344.3
CDP-RC-0268	007.737/1959	RC	CDP	29.00	7581284.8	340295.8	1309.4
CDP-RC-0270	007.737/1959	RC	CDP	22.00	7581094.0	339708.8	1327.1
CDP-RC-0273	007.737/1959	RC	CDP	30.00	7580893.1	340097.3	1318.6
CDP-RC-0403	007.737/1959	RC	CDP	15.00	7580797.9	340202.8	1305.8
CJ-DDH-0003	830.113/2006	DDH	CJ	43.64	7584890.1	340092.8	1256.2
CJ-RC-0139	830.113/2006	RC	CJ	25.00	7586076.8	339680.2	1294.6
CJ-RC-0140	830.113/2006	RC	CJ	24.00	7586081.5	339895.1	1327.2
CJ-RC-0141	830.113/2006	RC	CJ	23.00	7586095.3	340092.0	1318.2
CJ-RC-0143	830.113/2006	RC	CJ	22.00	7585888.9	339696.5	1332.3
CJ-RC-0147	830.113/2006	RC	CJ	60.00	7585696.7	339886.8	1284.5
CJ-RC-0151	830.113/2006	RC	CJ	57.00	7585499.3	339891.7	1277.2
CJ-RC-0152	830.113/2006	RC	CJ	49.00	7585490.4	340056.6	1265.2
CJ-RC-0157	830.113/2006	RC	CJ	63.00	7585268.4	339918.8	1265.6
CJ-RC-0337	830.113/2006	RC	CJ	41.00	7586196.4	340004.8	1303.9
CJ-RC-0338	830.113/2006	RC	CJ	21.00	7586003.7	340001.2	1320.5
CJ-RC-0339	830.113/2006	RC	CJ	51.00	7585804.2	339796.8	1303.4
CP-AG-0001	831.170/1997	AG	СР	7.00	7583581.0	331421.2	1296.8
CP-AG-0002	831.170/1997	AG	CP	5.00	7583382.8	331500.2	1291.8



Hole number	ANM ID	Туре	Target	Total length (m)	Northing (m)	Easting (m)	Elevation (m)
CP-AG-0003	831.170/1997	AG	CP	8.00	7583167.9	331513.6	1289.6
CP-AG-0004	831.170/1997	AG	СР	12.00	7583161.3	331754.8	1323.9
CP-AG-0005	831.170/1997	AG	СР	8.00	7583149.1	331940.4	1338.6
CP-AG-0006	831.170/1997	AG	СР	6.00	7582949.3	331926.9	1334.2
CS-AG-0040	830.518/2023	AG	CS	9.50	7576621.5	345451.5	1280.0
CS-AG-0060	830.464/1982	AG	CS	4.00	7575517.9	347296.2	1372.5
CS-AG-0071	830.464/1982	AG	CS	14.00	7575472.0	347073.2	1412.8
CS-AG-0086	830.464/1982	AG	CS	13.00	7575758.9	347070.3	1419.3
CS-AG-0092	830.464/1982	AG	CS	8.00	7574774.1	345795.3	1364.9
CS-AG-0093	830.464/1982	AG	CS	7.50	7574906.7	345935.5	1379.9
CS-AG-0102	830.464/1982	AG	CS	4.00	7576188.1	347210.2	1373.0
CS-AG-0106	830.464/1982	AG	CS	9.00	7574911.3	345656.5	1350.2
CS-AG-0107	830.464/1982	AG	CS	11.00	7575053.4	345809.0	1336.2
CS-AG-0115	830.464/1982	AG	CS	9.00	7576184.6	346936.7	1384.9
CS-AG-0121	830.464/1982	AG	CS	12.00	7575052.8	345520.0	1314.8
CS-AG-0129	830.340/1979	AG	CS	8.00	7576208.7	346646.2	1330.7
CS-AG-0130	830.464/1982	AG	CS	12.00	7576320.8	346788.2	1382.4
CS-AG-0132	830.464/1982	AG	CS	5.00	7576594.4	347052.8	1364.2
CS-AG-0136	830.464/1982	AG	CS	12.00	7574906.1	345094.5	1370.8
CS-AG-0137	830.464/1982	AG	CS	10.00	7575048.7	345235.3	1374.3
CS-AG-0146	830.340/1979	AG	CS	12.00	7576324.8	346503.2	1312.6
CS-AG-0147	830.340/1979	AG	CS	7.00	7576492.1	346653.6	1327.2
CS-AG-0148	830.464/1982	AG	CS	5.00	7576623.6	346790.3	1355.3
CS-AG-0149	830.464/1982	AG	CS	8.00	7576750.5	346933.7	1414.1
CS-AG-0152	830.464/1982	AG	CS	13.00	7577193.2	347275.6	1387.3
CS-AG-0153	830.464/1982	AG	CS	10.00	7577323.6	347477.4	1327.6
CS-AG-0166	830.340/1979	AG	CS	11.00	7576573.8	346508.1	1294.5
CS-AG-0170	830.464/1982	AG	CS	3.00	7577189.7	347069.3	1429.4
CS-AG-0171	830.464/1982	AG	CS	14.00	7577322.7	347198.2	1414.9
CS-AG-0176	830.464/1982	AG	CS	14.00	7575462.9	345090.4	1338.7
CS-AG-0177	830.464/1982	AG	CS	8.00	7575613.5	345233.4	1366.2
CS-AG-0178	830.464/1982	AG	CS	6.00	7575767.5	345346.5	1347.4
CS-AG-0184	830.340/1979	AG	CS	10.00	7576609.4	346226.2	1256.1
CS-AG-0186	830.464/1982	AG	CS	12.00	7576877.9	346494.4	1356.6
CS-AG-0189	830.464/1982	AG	CS	9.00	7577311.6	346928.9	1448.3
CS-AG-0191	830.464/1982	AG	CS	6.00	7577573.5	347225.6	1352.5
CS-AG-0199	830.464/1982	AG	CS	6.00	7575902.6	345233.4	1363.3
CS-AG-0200	830.464/1982	AG	CS	14.00	7576041.9	345385.5	1322.3
CS-AG-0201	830.340/1979	AG	CS	6.00	7576183.0	345518.7	1281.0
CS-AG-0212	830.464/1982	AG	CS	14.00	7577872.8	347214.1	1309.1
CS-AG-0217	830.464/1982	AG	CS	14.00	7575329.5	344391.8	1374.2
CS-AG-0220	830.464/1982	AG	CS	8.00	7575756.7	344808.3	1303.5
CS-AG-0221	830.464/1982	AG	CS	7.00	7575894.1	344955.2	1330.3
CS-AG-0222	830.464/1982	AG	CS	11.00	7576041.1	345096.4	1354.0
CS-AG-0223	830.464/1982	AG	CS	7.00	7576183.8	345236.9	1326.5



Hole number	ANM ID	Туре	Target	Total length (m)	Northing (m)	Easting (m)	Elevation (m)
CS-AG-0224	830.464/1982	AG	CS	12.00	7576336.3	345381.6	1297.0
CS-AG-0228	830.340/1979	AG	CS	17.00	7577164.6	346228.9	1325.0
CS-AG-0242	830.464/1982	AG	CS	4.00	7575899.8	344681.7	1284.4
CS-AG-0243	830.464/1982	AG	CS	5.00	7576041.8	344809.6	1295.0
CS-AG-0246	830.464/1982	AG	CS	10.00	7576458.0	345233.0	1298.8
CS-AG-0247	830.464/1982	AG	CS	11.00	7576608.5	345372.6	1282.0
CS-AG-0248	830.340/1979	AG	CS	6.00	7577316.7	346085.0	1280.9
CS-AG-0255	830.464/1982	AG	CS	16.00	7574914.5	343404.0	1471.1
CS-AG-0297	806.605/1973	AG	CS	15.00	7580562.9	346232.2	1296.1
CS-AG-0299	806.604/1973	AG	CS	13.00	7580827.7	346502.4	1353.4
CS-AG-0301	806.605/1973	AG	CS	12.00	7580541.1	345954.8	1268.7
CS-AG-0304	806.604/1973	AG	CS	14.00	7580967.3	346382.6	1333.0
CS-AG-0305	806.604/1973	AG	CS	3.00	7581042.5	346567.5	1375.0
CS-AG-0306	806.605/1973	AG	CS	4.00	7580830.2	345959.2	1258.6
CS-AG-0307	806.604/1973	AG	CS	9.00	7581032.4	346167.2	1309.2
CS-DDH-0011	830.518/2023	DDH	CS	27.10	7576619.7	345292.1	1280.0
CS-DDH-0012	830.518/2023	DDH	CS	35.25	7576497.2	345428.8	1299.3
CS-DDH-0013	830.518/2023	DDH	CS	27.60	7575910.4	345443.3	1327.3
CS-DDH-0022	830.340/1979	DDH	CS	36.87	7576634.1	345667.9	1263.5
CS-DDH-0028	806.604/1973	DDH	CS	49.40	7581077.6	346372.5	1344.4
FC-AG-0004	833.606/1996	AG	FC	7.00	326916.6	7581550.4	1280.0
FZ-DDH-0007	009.031/1966	DDH	FZ	36.58	7585299.1	341488.5	1291.6
FZ-DDH-0008	009.031/1966	DDH	FZ	24.28	7585306.4	341094.8	1261.0
FZ-DDH-0009	009.031/1966	DDH	FZ	43.88	7583892.3	340095.9	1278.1
FZ-DDH-0010	009.031/1966	DDH	FZ	12.69	7583688.6	340549.0	1278.8
FZ-DDH-0011	009.031/1966	DDH	FZ	47.00	7583893.8	339812.6	1267.6
FZ-DDH-0012	009.031/1966	DDH	FZ	9.72	7585693.0	341085.2	1293.8
FZ-DDH-0013	009.031/1966	DDH	FZ	37.18	7583290.5	341059.6	1301.6
FZ-RC-0197	009.031/1966	RC	FZ	39.00	7584091.9	340096.7	1266.1
FZ-RC-0214	009.031/1966	RC	FZ	57.00	7583695.0	340096.0	1292.6
FZ-RC-0224	009.031/1966	RC	FZ	73.00	7583320.1	340110.4	1295.9
FZ-RC-0225	009.031/1966	RC	FZ	55.00	7583291.4	340294.0	1306.9
FZ-RC-0400	009.031/1966	RC	FZ	52.00	7583606.6	340820.1	1282.8
MO-AG-0001	830.539/1985	AG	MO	5.00	7580036.5	335852.7	1264.9
MO-AG-0014	830.539/1985	AG	MO	12.00	7579859.3	336672.6	1309.2
MO-AG-0017	830.539/1985	AG	MO	7.00	7579816.4	336940.2	1317.1
PA-DDH-0002	830.747/2023	DDH	PA	24.58	7578705.6	346864.0	1239.8
MO-AG-0011	830.539/1985	AG	MO	5.00	7579834.8	336473.8	1265.3

**Table 2:** Drill log table. All holes were drilled vertically from topsoil, depths have been rounded to the nearest 0.5m and include soils, clays and penetration into hard-rock (for RC/DDH).



# **APPENDIX B: ASSAY RESULTS COMPILED**

## Auger Drilling: All holes were drilled vertically.

Prospect	Hole	From	То	Length	TREO	MREO	Nd-Pr	Dy-Tb	FOH Grade (ppm)
Troopoor	note	(m)	(m)	(m)	(ppm)	%	(ppm)	(ppm)	Lon orado (ppin)
	CS-AG-0040	2.0	9.5	7.5	1,766	27%	383	24	1,312
	CS-AG-0060	0.0	4.0	4.0	2,714	19%	462	20	3,082
	CS-AG-0071	0.0	14.0	14.0	3,060	15%	275	100	2,682
	CS-AG-0086	4.0	13.0	9.0	2,283	22%	426	20	3,300
	CS-AG-0092	0.0	8.0	8.0	3,070	27%	741	26	2,752
	CS-AG-0093	0.0	/.5	7.5	5,707	38%	1828	/1	6,708
	CS-AG-0102	0.0	4.0	4.0	1,933	25%	394	22	2,184
	CS-AG-0106	0.0	9.0	9.0	1,802	24%	362	24	1,051
	CS-AG-0107	0.0	10.0	10.0	1,/3/	22%	312	19	1,423
	CS-AG-0115	0.0	9.0	9.0	1,674	21%	298	19	1,324
	CS-AG-0121	0.0	12.0	12.0	5,103	31%	1336	/3	4,310
	CS-AG-0129	0.0	8.0	8.0	1,578	23%	292	19	1,527
	CS-AG-0130	0.0	12.0	12.0	1,532	18%	218	25	1,062
	CS-AG-0132	0.0	5.0	5.0	1,074	22%	290	10	I,328 5 171
	CS-AG-0130	0.0	12.0	12.0	0,427	25%	1213	20	1,672
	CS-AG-0137	0.0	12.0	10.0	2,300	2370	308	25	1,073
	CS-AG-0147	0.0	7.0	7.0	1,722	10%	277	20	1,007
		0.0	5.0	5.0	2 276	2106	070	42	2,405
	CS-AG-0148	0.0	0.0	0.0	3,370	3170	420	43	2,804
Cupim South	CS-AG-0149	0.0	0.0	0.0 10.0	2,428	23%	420	22	1,154
	CS-AG-0152	0.0	13.0	13.0	3,462	18%	517	26	3,194
	CS-AG-0153	2.0	10.0	8.0	7,856	28%	2138	80	6,747
	CS-AG-0166	0.0	11.0	11.0	2,446	24%	4//	40	1,510
	CS-AG-0170	0.0	3.0	3.0	2,647	34%	742	30	2,756
	CS-AG-0171	2.0	14.0	12.0	1,830	18%	257	20	1,534
	CS-AG-0176	0.0	14.0	14.0	3,430	32%	896	55	2,289
	CS-AG-0177	0.0	8.0	8.0	2,132	21%	372	30	1,441
	CS-AG-0178	2.0	6.0	4.0	3,322	27%	751	45	4,278
	CS-AG-0184	2.0	10.0	8.0	3,766	32%	1035	44	3,345
	CS-AG-0186	2.0	12.0	10.0	3,398	34%	983	36	2,897
	CS-AG-0189	0.0	9.0	9.0	1,934	29%	452	23	1,700
	CS-AG-0191	2.0	6.0	4.0	4,260	27%	954	37	4,364
	CS-AG-0199	0.0	6.0	6.0	1,666	21%	289	19	1,493
	CS-AG-0200	0.0	14.0	14.0	2,159	23%	428	27	1,359
	CS-AG-0201	0.0	6.0	6.0	2,671	26%	570	33	2,585
	CS-AG-0212	0.0	14.0	14.0	3,798	21%	676	36	3,749
	CS-AG-0217	2.0	14.0	12.0	2,180	29%	522	32	1,862
	CS-AG-0220	2.0	8.0	6.0	4,012	39%	1285	67	3,839
	CS-AG-0221	0.0	7.0	7.0	4,617	42%	1615	78	3,529



	CS-AG-0222	0.0	11.0	11.0	3,112	33%	832	53	4,455
	CS-AG-0223	0.0	7.0	7.0	1,916	27%	421	29	1,454
	CS-AG-0224	0.0	12.0	12.0	1,577	25%	313	22	1,639
	CS-AG-0228	0.0	17.0	17.0	2,159	25%	435	31	1,495
	CS-AG-0242	0.0	4.0	4.0	2,569	30%	636	29	2,532
Cupim South (cont)	CS-AG-0243	0.0	5.0	5.0	2,612	32%	685	46	1,822
	CS-AG-0246	0.0	10.0	10.0	1,682	24%	339	19	1,317
	CS-AG-0247	0.0	10.0	10.0	1,473	21%	259	19	1,018
	CS-AG-0248	0.0	6.0	6.0	1,315	23%	228.0	27	1,166
	CS-AG-0255	0.0	16.0	16.0	2,847	28%	661.0	31	3,773
	CS-AG-0297	2.0	15.0	13.0	3,329	34%	917.0	60	4,126
	CS-AG-0299	0.0	4.0	4.0	1,705	21%	286.0	16	1,604
	CS-AG-0301	6.0	12.0	6.0	1,724	30%	432.0	27	2,387
	CS-AG-0304	0.0	8.0	8.0	2,108	27%	447.0	34	2,082
	CS-AG-0305	0.0	3.0	3.0	4,453	30%	1,068.0	67	4,239
	CS-AG-0306	2.0	4.0	2.0	1,917	19%	301.0	18	1,917
	CS-AG-0307	0.0	9.0	9.0	4,112	32%	1,129.0	59	1,512
	CP-AG-0001	2.0	7.0	5.0	3,861	30%	1,065.0	48	5,760
	CP-AG-0002	2.0	5.0	3.0	1,381	16%	173.0	14	1,342
	CP-AG-0003	4.0	8.0	4.0	3,373	29%	835.0	41	3,918
Fazenda Cocal	CP-AG-0004	2.0	12.0	10.0	3,222	34%	914.0	46	3,915
	CP-AG-0005	0.0	8.0	8.0	3,437	31%	907.0	40	2,136
	CP-AG-0006	0.0	6.0	6.0	4,130	34%	1,188.0	48	3,351
	FC-AG-0004	0.0	7.0	7.0	1,682	18%	244.0	17	1,269
	MO-AG-0001	0.0	5.0	5.0	1,641	9%	122.0	10	1,551
Maihinas	MO-AG-0014	8.0	12.0	4.0	1,974	17%	267.0	20	2,121
Moihinos -	MO-AG-0017	0.0	7.0	7.0	1,742	4%	41.0	16	1,830
	MO-AG-0011	2.0	5.0	3.0	1,328	20%	211.0	16	1,430

**Table 3:** REE assays from auger drilling hosted within weathered clays, 1000ppm TREO cut-off, up-to 2m dilution. DyTb and NdPr grades presented are in Oxide converted form. Figures were rounded to the nearest 0.5m for length and the nearest whole number for 'ppm'.



### Diamond and RC Drilling: All holes were drilled vertically.

Prospect	Holo	From	То	Length	TREO	MREO	Nd-Pr	Dy-Tb
Prospect	посе	(m)	(m)	(m)	(ppm)	%	(ppm)	(ppm)
	CS-DDH-0011	0.0	17.5	17.5	2,485	27%	585	33
	Incl.	1.5	8.5	7.0	4,210	32%	1,116	63
	CS-DDH-0012	0.0	10.5	10.5	3,570	31%	892	78
	Incl.	0.0	5.0	5.0	5,034	35%	1,354	116
Cupim South	CS-DDH-0013	0.0	6.0	6.0	2,401	25%	501	36
	CS-DDH-0022	8.5	23.0	14.5	2,255	21%	412	26
	CS-DDH-0028	0.0	20.5	20.5	2,201	27%	523	36
	Incl.	0.0	8.5	8.5	3,187	33%	859	58
	CS-DDH-0002	0.0	13.5	13.5	1,579	23%	300	17
	CJ-DDH-0003	3.5	20.5	17.0	2,680	27%	647	28
	Incl.	3.5	8.0	4.5	4,626	31%	1,229	47
	FZ-DDH-0007	0.0	28.5	28.5	2,519	25%	548	32
	Incl.	11.0	22.5	11.5	3,157	30%	807	45
	FZ-DDH-0008	7.0	18.0	11.0	1,855	30%	466	24
	FZ-DDH-0009	1.0	24.0	23.0	3,743	35%	1,267	66
	Incl.	11.0	20.0	9.0	6,391	48%	2,572	126
	FZ-DDH-0010	2.5	7.5	5.0	1,935	26%	450	23
	FZ-DDH-0011	8.5	22.0	13.5	2,571	36%	747	38
	FZ-DDH-0012	4.0	8.0	4.0	1,682	12%	149	17
	FZ-DDH-0013	4.0	31.5	27.5	3,498	31%	986	49
	Incl.	9.5	25.5	16.0	4,637	37%	1,437	66
	CDP-RC-0239	10.0	20.0	10.0	2,970	30%	747	30
	CDP-RC-0240	6.0	16.0	10.0	3,599	27%	905	48
Northern Concessions	Incl.	10.0	16.0	6.0	4,592	35%	1,352	68
	CDP-RC-0241	2.0	18.0	16.0	2,795	30%	749	35
	Incl.	10.0	18.0	8.0	3,623	37%	1,124	51
	CDP-RC-0242	2.0	14.0	12.0	2,229	24%	447	23
	CDP-RC-0243	14.0	30.0	16.0	3,061	30%	806	33
	Incl.	18.0	24.0	6.0	4,230	33%	1,190	44
	CDP-RC-0245	14.0	24.0	10.0	2,370	25%	520	24
	CDP-RC-0247	0.0	31.0	31.0	2,119	22%	434	23
	Incl.	4.0	10.0	6.0	4,074	34%	1,157	49
	CDP-RC-0249	6.0	20.0	14.0	4,151	31%	1,166	45
	Incl.	8.0	14.0	6.0	6,522	35%	1,984	71
	CDP-RC-0253	4.0	17.0	13.0	4,368	38%	1,357	75
	Incl.	9.0	15.0	6.0	5,305	41%	1,739	98
	CDP-RC-0254	2.0	23.0	21.0	3,024	33%	885	41
	Incl.	7.0	14.0	7.0	4,915	39%	1,622	67



Prospect	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd-Pr (ppm)	Dy-Tb (ppm)
	CDP-RC-0256	2.0	18.0	16.0	6,231	33%	1,847	60
	Incl.	6.0	14.0	8.0	7,336	37%	2,344	70
	CDP-RC-0260	2.0	16.0	14.0	2,332	29%	563	29
	CDP-RC-0262	0.0	26.0	26.0	1,943	24%	365	22
	CDP-RC-0268	0.0	22.0	22.0	3,460	29%	857	39
	Incl.	6.0	16.0	10.0	4,274	30%	1,093	45
	CDP-RC-0270	2.0	12.0	10.0	3,092	26%	716	35
	CDP-RC-0273	4.0	18.0	14.0	2,150	28%	489	20
	CDP-RC-0403	2.0	12.0	10.0	3,529	31%	944	34
	CJ-RC-0139	2.0	16.0	14.0	2,241	29%	539	33
	CJ-RC-0140	0.0	22.0	22.0	2,953	28%	733	35
	CJ-RC-0141	8.0	20.0	12.0	3,881	25%	973	41
	Incl.	14.0	20.0	6.0	5,826	31%	1,633	65
	CJ-RC-0143	4.0	20.0	16.0	5,302	35%	1,648	96
	Incl.	8.0	16.0	8.0	8,121	41%	2,714	156
	CJ-RC-0147	2.0	18.0	16.0	1,903	24%	371	22
	CJ-RC-0151	4.0	38.0	34.0	1,851	26%	406	24
	Incl.	6.0	18.0	12.0	2,487	31%	625	33
	CJ-RC-0152	2.0	32.0	30.0	1,480	24%	292	19
	CJ-RC-0157	0.0	40.0	40.0	1,690	21%	300	20
	Incl.	18.0	32.0	14.0	2,213	26%	464	27
	CJ-RC-0337	0.0	26.0	26.0	2,430	27%	553	26
	CJ-RC-0338	2.0	16.0	14.0	2,496	30%	666	25
	CJ-RC-0339	0.0	22.0	22.0	4,011	31%	1,150	66
	Incl.	2.0	14.0	12.0	6,136	38%	1,879	107
	FZ-RC-0197	2.0	20.0	18.0	1,678	23%	297	18
	FZ-RC-0214	0.0	30.0	30.0	2,058	26%	449	28
	FZ-RC-0224	0.0	26.0	26.0	1,796	27%	393	23
	FZ-RC-0225	8.0	38.0	30.0	1,749	25%	378	23
	FZ-RC-0400	0.0	20.0	20.0	2,854	32%	774	42
	SI-DDH-0002	0.0	12.5	12.5	2,308	32%	566	32
Sien	SI-DDH-0004	0.0	6.0	6.0	1,841	35%	511	28
	SI-DDH-0005	0.0	16.0	16.0	1,356	29%	317	15

**Table 4:** REE assays from diamond and RC drilling hosted within weathered clays, 1000ppm TREO cut-off, up to 2m dilution. RC denotes Adapted Reverse Circulation Drill Holes; DDH denotes Diamond Drill Holes. The DyTb and NdPr grades presented are in Oxide-converted form. Figures were rounded to the nearest 0.5m for length and the nearest whole number for 'ppm'.





# APPENDIX C: DRILL LOCATIONS OF HOLES REPORTED IN THIS ANNOUNCEMENT



Figure 5: Location of all drill holes reported within this announcement.





## Appendix D: JORC Code, 2012 Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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 down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample retrospectivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The resource was sampled using a powered auger drill machine (open hole), a diamond drill machine, and a Reverse Circulation drill machine.</li> <li>Auger drill holes: <ul> <li>Each drill site was cleaned, removing leaves and roots from the surface. Tarps were placed on either side of the hole, and samples of soil and saprolite were collected every 2m in advance. They were logged, photographed, and subsequently bagged in plastic bags, and each sample was identified.</li> </ul> </li> <li>Diamond drill holes: <ul> <li>The intact drill cores are collected in plastic core trays, and depth markers record the depth at the end of each drill run (blocks).</li> <li>Samples were collected at 2m intervals. In the unconsolidated zone, the core was halved with a metal spatula and bagged in plastic bags, while the fresh rock was halved by a powered SA, bagged, and each sample was identified.</li> </ul> </li> <li>Reverse Circulation drill holes: <ul> <li>Samples were collected and identified from every 2 meters of the RC rig.</li> <li>All samples were sent for preparation to the contracted laboratories, ALS and SGS.</li> </ul> </li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diametre, 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).</li> </ul>	<ul> <li>Powered Auger:         <ul> <li>Powered auger drilling employed a motorised post-hole digger with a 2 to 4-inch diameter. All holes were drilled vertically. The maximum depth achieved was 23 meters, the minimum was 2 meters, and the average was 9 meters, providing the hole did not encounter fragments of rocks/boulders within the weathered profile and/or excessive water. Final depths were recorded according to the length of rods in the hole.</li> <li>Diamond Core:                <ul> <li>Diamond drilling was conducted vertically and sampled generally at intervals of 1.0m using a Maquesonda MACH 1210 Machine. The drilling used an HWL diamond core of 3.06-inch diameter in the unconsolidated portion, switching to an HQ diamond core 2.63 inches from the depth transitional zone. Drilling within each hole was conducted by the diamond core rig and terminated upon intercepting between 2 to 5 meters of hard-rock material, indicative of penetration into the fresh rock. Diamond drilling was predominantly used nonsystematic to gain further lithological understanding and test high-priority auger targets.</li> </ul> </li> <li>Reverse Circulation:         <ul> <li>RC drilling was conducted using an Atlas Copco EXPLORAC R50 RC Machine configured with a 4.75-inch diameter. The drill site preparation included clearing, levelling the ground, and delineating the drilling area. The RC rig conducted drilling within each hole and terminated upon intercepting transitional material or fresh rock. RC drilling was used predominantly in a systematic manner, forming a grid with 400m spacing. Samples were collected from every meter of the RC rig and sent for preparation to the contracted laboratories, ALS and SGS.</li> </ul> </li> </ul></li></ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures are taken to maximise sample recovery and ensure</li> </ul>	Auger sample recovery:         •       Estimated visually based on the sample recovered per 2m interval drilled.         Recoveries generally ranged from 75% to 110%. If estimates dropped below         75% recovery in a 1m interval, the field crew aborted the drill hole and         redrilled the hole.



	<ul> <li>representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Diamond drill hole recovery:         <ul> <li>Calculated after each run, comparing the length of core recovery vs. drill depth. Overall core recoveries are 97.4%, achieving 96.5% in the regolith target horizon, 98.1% in the transition zone (saprolite), and 99.4% in fresh rock.</li> </ul> </li> <li>Reverse Circulation recovery:         <ul> <li>Every 2m sample is collected in plastic buckets and weighed. Each sample averages approximately 30kg, which is considered acceptable given the hole diameter and the specific density of the material.</li> </ul> </li> </ul>
Logging	<ul> <li>Have core and chip samples been geologically and geotechnically logged to a level of detail to support appropriate mineral resource estimation, mining studies, and metallurgical studies?</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Geological descriptions are made using a tablet with the MX Deposit system, which directly connects the geological descriptions to the database in the MX Deposit system managed by the Viridis geologist team.</li> <li>Auger drilling: <ul> <li>Material is described in a drilling bulletin every 2m and photographed. The description is made according to tactile-visual characteristics, such as material (soil, colluvium, saprolite, rock fragments), material colour, predominant particle size, presence of moisture, indicator minerals, and extra observations.</li> <li>The chip trays of all drilled holes have a digital photographic record and are retained at the core facility in Poços de Caldas.</li> </ul> </li> <li>Diamond drilling: <ul> <li>Geological descriptions are made in a core facility, focused on the soil (humic) horizon, saprolite, transition zone, and fresh rock boundaries. The geological depth is honoured and described with downhole depth (not meter by meter). Parameters logged include grain size, texture, colour, mineraloy, magnetism, type of alterations (hydrothermal or weathering) and type of lithologic contact, which can help to identify the parent rock before weathering.</li> <li>All drill holes are photographed and stored at the core facility in Pocos de Caldas.</li> </ul> </li> <li>Reverse Circulation drilling: <ul> <li>A geologist logs the material at the drill rig. Logging focuses on the soil (humic) horizon, saprolite/clay zones, and transition boundaries. Other parameters recorded include grain size, texture, and colour, which can help identify the parent rock before weathering.</li> <li>All drill noles are photographed and stored at the core facility in Pocos de Caldas.</li> </ul> </li> <li>Reverse Circulation drilling: <ul> <li>A geologist logs the material at the drill rig. Logging focuses on the soil (humic) horizon, saprolite/clay zones, and transition boundaries. Other parameters recorded include grain size, texture, and colour, which can help identify the parent rock before weatherin</li></ul></li></ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Powdered Auger Drilling:</li> <li>Collection and Labeling: Samples of clayey soil, regolith, and saprolite were collected at 2m intervals, placed into clear plastic bags, sealed, and labelled.</li> <li>Weighing and Lab Analysis: The samples were weighed and sent to SGS Geosol for analysis.</li> <li>Sample Preparation (PRP102_E): Upon arrival at the lab, samples were dried at 105°C, crushed to 75% less than 3 mm, homogenised, and passed through a Jones riffle splitter (250g to 300g). This aliquot was then pulverised in a steel mill until over 95% had a size of 150 microns.</li> <li>Analysis (IMS95A): Samples were fused with lithium metaborate and read using the ICP-MS method to determine the rare earth elements assays.</li> <li>Reverse Circulation:</li> <li>Collection and Labeling: Samples of clayey soil, regolith, saprolite, and transitional material were collected at 2m intervals, placed in transparent plastic bags, sealed, and labelled.</li> <li>Weighing and Lab Analysis: The samples were weighed and sent for analysis.</li> <li>Sample Preparation at ALS Laboratories (Vespasiano, MG): <ul> <li>Dried at 60°C.</li> <li>Fresh rock was crushed to sub 2mm.</li> <li>Saprolite was disaggregated with hammers.</li> <li>Riffle split to obtain an 800g sub-sample.</li> </ul> </li> </ul>



		- 1	The sub-sample was pu	lverised to	85% pa:	ssing 75um, monitored by sieving.		
			Aliquot selection from	the pulp pa	icket.			
		Analysis and Trac	(ME-MS81): The alique ce Elements by ICP-MS	ot was sent for 38 elem	to ALS I nents usi	Lima to analyse Rare Earth Elements ing fusion with lithium borate.		
1		Diamo	ond Core Drilling:					
		• intervo cores cutting to ALS	Collection and Labe als from clayey soil, reg were split longitudinall g saw for hard rock. Th Laboratory in Vespasio	ling: Sampl golith, sapro ly using a sp le samples v ano (MG).	es of dia plite, tra patula fa were pla	amond cores were taken at 1.0 to 2m insitional, and hard-rock material. The or unconsolidated portions, and a rock- aced in labelled plastic bags and sent		
	• using ( (MG).	<ul> <li>Field Duplicates: Duplicates were taken approximately every 20 sa using quarter core for QA/QC procedures and sent to ALS Laboratories in Vo (MG).</li> </ul>						
		•	Sample Preparation	at ALS Lab	oratorie	es (Vespasiano, MG):		
	- Drie	ed at 60°C.						
		- Fres	sh rock was crushed to	sub 2mm.				
1		- Sap	rolite was disaggregat	ed with har	nmers.			
		- Riffl	le split to obtain an 800	0g sub-sam	ple.			
		- The	sub-sample was pulve	rised to 85%	% passin	g 75um, monitored by sieving.		
	- Aliq	uot selection from the	pulp packe	t.				
		• Element. borate.	Analysis (ME-MS81) s and Trace Elements b	): The alique by ICP-MS fo	ot was s or 38 ele	ent to ALS Lima to analyse Rare Earth ements using fusion with lithium		
•	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres 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 (ie lack of bias) and precision have been established.	Auger an approxim The sam 105°C, cu splitter ( had a siz Al2O3 Fe2O3 Na2O TiO2 CaO MgO SiO2 Zn CaO SiO2 Zn Ce Gd Nd Th Yb Er La Sm U	Image         Add some RC samples with a samples control ple preparation method representation method representation method rest for the set of 150 microns.           1250g to 300g). This all set of 150 microns.           12595A - Determina Oxides. Some elemed 0,01 - 75 (%)           0,01 - 75 (%)           0,01 - 75 (%)           0,01 - 75 (%)           0,01 - 75 (%)           0,01 - 60 (%)           0,01 - 60 (%)           0,01 - 60 (%)           0,01 - 90 (%)           5 - 10,000 (ppm)           PHY01E: Loss on Ign           1,000°C.           IMS95R: Lithium MM           Mass Spectrometry           Rare Earth element:           0.1 - 10,000 (ppm)           0.1 - 10,000 (ppm)           0.1 - 1,000 (ppm)           0.1 - 1,000 (ppm)           0.1 - 1,000 (ppm)           0.1 - 10,000 (ppm)           0.1 - 1,000 (ppm)           0.1 - 10,000 (ppm)           0.1 - 1,000 (ppm)           0.1 - 1,000 (ppm)           0.1 - 10,000 (ppm)	vere analyse caining cont aning cont ad employe n 3 mm, ho liquot was a tion by Fusi ents and the Ba K <sub>2</sub> O P <sub>2</sub> O <sub>5</sub> V Cr <sub>2</sub> O <sub>3</sub> MnO Sr Zr Dition (LOI) v etaborate F (ICP MS) v S. Detection	ed at the rol samp d was P mogenis then pul on with eir detec 10 – 0,01 5 – 10 0,01 10 – 10 – was dete tusion for was dete tusion for Pr Tm Eu Lu Tb Y	e SGS Geosol laboratory in batches of oles (duplicate, blank, and standards). RP102_E: the samples were dried at sed, and passed through a Jones riffle lverised in a steel mill until over 95% Lithium Metaborate - ICP MS for Major trion limits include: 100,000 (ppm) - 25 (%) - 25 (%) - 25 (%) 0,000 (ppm) - 10 (%) 100,000 (ppm) 100,000 (ppm) 100,000 (ppm) 100,000 (ppm) ermined by calcining the sample at colowed by Inductively Coupled Plasma oloyed to determine concentrations of for some elements include: 0.05 – 1,000 (ppm) 0.05 – 1,000 (ppm)		
	•	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blank, duplicates, external laboratory checks) and whether the acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> <li>Ce Gd Nd Th Yb Er La Sm U</li> </ul>	<ul> <li>The sub-sample was put- Aliquot selection from Analysis (ME-MS81): The aliqu and Trace Elements by ICP-MS Diamond Core Drilling:</li> <li>Collection and Lobe intervals from clayey soil, reg cores were split longitudinal cutting saw for hard rock. Th to ALS Laboratory in Vespasi</li> <li>Field Duplicates: Du using quarter core for QA/Qt (MG).</li> <li>Sample Preparation - Dried at 60°C.</li> <li>Fresh rock was crushed to - Sarpolite was disaggregat - Riffle split to obtain an 80 - The sub-sample was puble - Aliquot selection from the - Analysis (ME-MS81] Elements and Trace Elements 1 borate.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometres, handheld RKI instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accurcy (ie lack of bias) and precision have been established.</li> <li>So quoi - 51 (%) Gao 0.01 - 51 (%) Gao 0.01 - 60 (%) MgO 0.01 - 30 (%) Sio; 0.01 - 90 (%) Zn 5 - 10,000 (pm)</li> <li>MKISSE: Lithium M Mass Spectrometry Rore Earth element Ce 0.1 - 10,000 (pm)</li> <li>O.1 - 10,000 (pm)</li> <li>O.1 - 10,000 (pm)</li> <li>D.1 - 10,000 (pm)</li> </ul>	<ul> <li>The nature, quality and appropriateness of the assaying and hoberatory procedures used and model, reading times, calibrations factors applied and their and yais in factors applied and their and yais in cluding intervals. 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		Quality accura assays,	v Control: The laborat cy and precision of th . standards, and blan	tory follov ne assay d ks to mai	vs strict quality co lata. Internally, th ntain quality.	e laborator	dures, ensuring the y uses duplicate
		<b>Diamo</b> batche additio	<b>nd and some RC sa</b> s of up to 72 samples nal preparation (dry	<b>mples</b> we s. Upon ar ing, crush	ere analysed by a rriving at the ALS ing, splitting, and	ALS Laborat preparation pulverising,	ories (accredited) in lab, samples receive ):
		The ali ALS Lir Trace E (with a	quot obtained from t na and analysed by Elements by ICP-MS f letection limits):	he physic ME-MS81 or 38 eler	al preparation pro L — which consist nents by fusion w	ocess at Ves s of analysi ith lithium l	pasiano were sent to s of Rare Earths and borate as seen below
		Analyt	es G range (ppm)				
		Ва	0.5 – 10,000	La	0.1 – 10,000	Tb	0.01 – 1,000
		Се	0.1 – 10,000	Lu	0.01 – 1,000	Th	0.05 – 1,000
		Cr	5 – 10,000	Nb	0.05 – 2,500	Ti —	0.01 - 10%
		Cs	0.01 - 10,000	Nd	0.1 - 10,000	Tm 	0.01 - 1,000
		Dy	0.05 - 1,000	Pr	0.02 - 1,000	U	0.05 - 1,000
		Er	0.03 - 1,000	Rb	0.2 - 10,000	V	5 – 10,000
		Eu	0.02 - 1,000	Sc	0.5 - 500	W	0.5 - 10,000
		Ga	0.1 - 1,000	Sm	0.03 - 1,000	Ŷ	0.1 - 10,000
		Gđ	0.05 - 1,000	Sn	1 - 10,000	YD Z	0.03 - 1,000
		Hf	0.05 - 10,000	Sr Tr	0.1 - 10,000	Zr	1 – 10,000
		по	0.01 - 1,000	Tu	0.1-2,500		
		The pro related	Standard Sampl samples. These the supplier spec Duplicate Sampl during Reverse procedures. The collected. Blank Samples: I weight. They are the analytical pr oject encompasses for procedures for each	es: ORE I samples v cifies the s es: These Circulatic sample Blank sam used to o ocess. uur target: type of d	RESEARCH & EXF ary in concentra sample weight. are field duplicat on (RC), Auger weight is cons aples are character check for contami s, two laboratorie rilling. Each clust	LORATION ion from lo es (samplin (AG) and E istent with erised by the nation and s, three type er was analy	P/L supplies standard w to high grades, and g duplicates) collected viamond Drilling (DD) the original sample eir material origin and ensure the accuracy of es of drilling, and vsed separately.
of sampling	<ul> <li>The verification of significant intersections by either independent</li> </ul>	•	Significant intersectio company personnel.	ons have r	not yet been inder	pendently ve	erified by alternative
and assaying	or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, and data storage (physical and	•	Primary data collecti entry procedures. Da discrepancies are ide as hard copies and el	on follows ta verifico ntified an ectronica	s a structured pro ation procedures o d rectified. All da lly, in secure data	tocol with si ensure that of a is stored i bases with i	tandardised data any anomalies or in physical forms, such regular backups.
	<ul> <li>electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	•	Given the nature of ta appropriate for verify also based on analyta horizons through elea	he ionic cl ving mine ical result: ments suc	ay mineralisatior ralised intercepts s, which better hi h as K, Mg, Si, Al,	, visual cheo The litholog ghlight the o Na, Fe, and	cks are not gical classification was lifferent weathering I TREO.
		•	The data were adjust conversion factors us	ed, transj ed are ind	forming the elements cluded in the table	ental and ox e below.	ide values. The
			Elen	nent	Oxide F	actor	
			Ce		CeO <sub>2</sub>	1.2284	
			La		$La_2O_3$	1.1728	
			Sm		$Sm_2O_3$	1.1596	
			Nd		$Nd_2O_3$	1.1664	
			Pr		$Pr_6O_{11}$	1.2082	
			Dy		$Dy_2O_3$	1.1477	
			Eu		Eu <sub>2</sub> O <sub>3</sub>	1.1579	
			Y		Y <sub>2</sub> O <sub>3</sub>	1.2699	
			Tb		Tb4O7	1.1762	



		Gd Gd <sub>2</sub> O <sub>3</sub> 1.1526
		Ho Ho <sub>2</sub> O <sub>3</sub> 1.1455
		Er Er <sub>2</sub> O <sub>3</sub> 1.1435
		Tm Tm <sub>2</sub> O <sub>3</sub> 1.1421
		Yb Yb <sub>2</sub> O <sub>3</sub> 1.1387
		Lu Lu <sub>2</sub> O <sub>3</sub> 1.1371
		<ul> <li>The TREO (Total Rare Earth Oxides) was determined by the sum of the following oxides: CeO<sub>2</sub>, Dy<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub>, Pr<sub>6</sub>O<sub>11</sub>, Sm<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Tm<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>. For the MREO (Magnetic Rare Earth Oxides), the following oxides were considered: Dy<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub>, Pr<sub>6</sub>O<sub>11</sub>, Sm<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>. And for the HREO we consider: Dy<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Tm<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub> and Yb<sub>2</sub>O<sub>3</sub></li> </ul>
		• REO assays from auger drilling on the appendix were reported within clays with 1000ppm TREO cut-off and 2m dilution.
		• REO assays from diamond drilling on the appendix were reported within clays with 1000ppm TREO cut-off and 2m dilution.
		• Grades (ppm) were rounded to the nearest whole figure, and lengths (m) were rounded to the nearest 0.5m.
		• For some samples exceeding 1000 ppm, over-limit analysis for Nd and Pr (praseodymium) was necessary).
Location of	• Accuracy and quality of surveys used	Diamond, auger and RC collars
data points	<ul> <li>to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	• The positioning of the drill has been achieved with high precision using a GPS RTK (Real-Time Kinematic) system CHC i73. This sophisticated GPS provides real-time corrections. The horizontal accuracy in RTK is 8 mm + 1 ppm RMS, and the Vertical accuracy is 15 mm + 1 ppm RMS, with a startup time of under 10 seconds and a Startup Reliability greater than 99.9%. The project's grid system is based on the SIRGAS 2000 UTM coordinate system. This universal grid system facilitates consistent data interpretation and integration with other geospatial datasets.
		• Benchmark and control points were established within the project area to ensure the quality and reliability of the topographic location data.
		Topography imaging survey
		• A contractor conducted a detailed imaging and topographic survey. The survey was done using a DJI Matrice 300 RTK drone with vertical accuracy of 0.1 metres and horizontal accuracy of 0.3 metres using a visual system. Using the GPS system, the vertical accuracy is 0.5 metres, and the horizontal accuracy is 1.5 metres. Using the RTK system, the vertical accuracy is 0.1 metres, and the horizontal accuracy is 0.1 metres.
		• An Onboard LiDAR Velodyne Ultra Puck (VLP-32) sensor was used, which has a range of 200 meters, accuracy of 3 to 5 cm, and an acquisition tax of 600,000 points per second (first pass) and 1,200,000 points per second (second pass). It has a DJI camera with 960 Pixels and an integrated GNSS receptor (L1L2). The base points were used for a GPS CHCNAV i73 RTK GNSS, which could conduct real-time data surveys and kinematic locations (RTK-Real Time Kinematic). It consists of two GNSS receivers, a BASE and a ROVER. The horizontal accuracy in RTK is 8mm + 1 ppm, and the vertical accuracy is 15mm + 1 ppm.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The auger drilling was conducted on a regular grid with 200 x 200 metres spacing. This grid spacing provides a detailed exploration framework suitable for the area of interest. It aims to assist in defining our initial resource and offer a foundational understanding of the geological and grade continuity in the targeted zone.</li> <li>Diamond drilling, on the other hand, is not being conducted on a predefined overstanding and exploration is being conducted on a predefined overstanding and exploration.</li> </ul>
		exploration gria. Instead, exploratory borenoles are being arilled to provide insights into specific areas of interest and potential mineralisation zones. The exploratory nature of the diamond drilling further supports the overall geological understanding, although its data spacing is not predefined.
		• Reverse circulation (RC) drilling carried out on a structured grid with a 400 x 400 metres spacing. This grid pattern is tailored to facilitate a comprehensive exploration strategy suitable for the designated area, with the primary goal of enhancing our understanding of the mineral distribution and geological consistency across the target zone. The broader spacing of 400 x 400 meters for the RC drilling is strategically chosen to cover a larger area efficiently while still



		<ul> <li>providing valuable insights into the potential mineralisation patterns and geological features.</li> <li>No sample compositing has been applied to report the exploration results. Each sample is treated and reported individually to maintain the highest level of detail and accuracy.</li> <li>Auger samples were collected at 2.0m intervals.</li> <li>Diamond samples were collected at 2.00m intervals, respecting the geological contacts.</li> <li>RC samples were collected at 2.00m composites.</li> </ul>
Orientation of data about geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of crucial mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>All drill holes were vertically oriented, which is deemed appropriate given the nature of the deposit. The deposit in question is a supergene deposit with a much larger areal extent than the thickness of the mineralised body. This type of deposit tends to be horizontally extensive with relatively consistent thickness.</li> <li>Given the vast area extent of the deposit and its relatively consistent thickness, vertical drilling is best suited to achieve unbiased sampling. This orientation allows for consistent intersecting of the horizontal mineralisation.</li> <li>There is no indication that drilling orientation has introduced any sampling bias about the crucial mineralised structures. The drilling orientation aligns well with the deposit's known geology, ensuring accurate representation and unbiased sampling of the mineralised zones. Any potential bias due to drilling orientation is considered negligible in this context.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>All samples were collected by field personnel and carefully packed in labelled plastic bags. Once packaged, the samples were transported directly to the SGS- GEOSOL or ALS laboratories in Brazil. The samples were secured during transportation to ensure no tampering, contamination, or loss. Chain of custody was maintained from the field to the laboratory, with proper documentation accompanying each batch of samples to ensure transparency and traceability of the entire sampling process. Using a reputable laboratory further reinforces the sample security and integrity of the assay results.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	• A site visit was carried out by Volodymyr Myadzel from BNA Mining Solutions on 18-19 March 2024 to inspect drilling and sampling procedures, verify survey methods, inspect the storage shed, verification geological records, review QAQC procedures and review the geologic model.



Critorio	IOPC Code evaluation	Commontory	
Criteria	JORC Code explanation	Commentary	
Mineral tenement and land tenure status	<ul> <li>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.</li> </ul>	All sar Minin Vargin Prospect Moinhos	nples were acquired from tenements owned by Viridis g and Minerals Ltd, following an agreement with the nha Parties. Specifically: #Tenement 830539/1985 000.021/1066:
	• 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.	Northen Concession	007.737/1959; 830113/2006
		FZ. Cocal	833606/1996; 831170/1997
		Sien	834.738/1995
		Cupim South	830464/1982; 830518/2023; 830340/1979; 806.605/1973; 806.604/1973
<b>5 1 1</b>			
done by other parties	exploration by other parties.	by various e by various e The Co Calded Vargin exerci holes. This h compl the re	noration in the dred comprises notable endeavours ntities: plossus project is geologically intertwined with the ira Project, sharing the same geological context. nha Mineração previously undertook regional drilling ses, utilising a powered auger drill rig to produce open istorical data provides essential context and lements current exploration efforts in understanding gion's geological potential.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The geology summarised</li> <li>Depos lonic A spatia Poços</li> <li>Poços</li> <li>Poços one oj envelo the Br macro an apj resem domir phono</li> <li>volcar crucia mining</li> <li>REE M highlig type. I occurr profile (Medi classij</li> <li>Relevo Rare E Poços due to These applic energi ability</li> </ul>	of the region where the deposit is located can be l as follows: it Nature: The deposit under study is recognised as an Adsorption Clay Rare Earth Element (REE) deposit. Its l positioning is within and adjacent to the renowned De Caldas Alkaline massif complex. de Caldas Complex: This geological entity stands as f the most extensive alkaline massif intrusions globally, oping an area of roughly 800 km <sup>2</sup> . It stretches across azilian states of São Paulo and Minas Gerais. From a o perspective, it portrays a near-circular structure with proximate diameter of 30 km. This formation bles a collapsed caldera. Delving deeper, the nant rocks within the alkaline complex encompass olite, nepheline syenites, sodalite syenites, and many nic rocks. This diverse geological setting has played a l role in dictating mineral occurrences and potential g prospects. Mineralisation: The specific REE mineralisation ghted in this disclosure leans towards the lonic Clay Evidence pointing to this is mainly derived from its rence within the saprolite/clay zone of the weathering e of the Alkaline granite basement. The enriched MREO um Rare Earth Oxides) composition also attests to this fication. ant Additional Information: The Ionic Adsorption Clay Earth Element deposits, particularly in regions like de Caldas, have recently gained significant attention o the global demand surge for rare earth elements. elements, especially the heavy rare earths, have vital rations in modern technologies such as renewable y systems, electronics, and defence apparatus. The of these deposits to offer relatively environmentally

#### Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section).



Criteria	JORC Code explanation	Commentary
		<ul> <li>friendly mining prospects compared to traditional hard rock REE mines further enhances their appeal.</li> <li>Given the strategic importance of REEs in modern industries, a thorough understanding and exploration of such geologies becomes paramount. The unique geological setting of the Poços de Caldas complex presents both opportunities and challenges, making further detailed study and research essential for sustainable exploitation</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>Easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>Dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does</li> </ul>	<ul> <li>Auger Drilling Total number of holes: 67</li> <li>Diamond Drilling Total number of holes: 17</li> <li>RC Drilling: Total number of holes: 33</li> <li>Reported in Appendix A and B of this Report</li> </ul>
	not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades)</li> </ul>	<ul> <li>Data collected for this project includes surface geochemical analyses, geological mapping, and auger and diamond drilling results. Data were compiled without selective exclusion. All analytical methods and aggregation were done according to</li> </ul>
	<ul> <li>and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	industry best practices, as detailed in previous discussions.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul> <li>Given the nature of the deposit, which is a supergene deposit with a much larger areal extent than its thickness, the vertical drilling orientation is suitable for accurately representing the mineralised zones.</li> <li>All drill holes are vertical and are appropriate for the deposit type, ensuring unbiased sampling of the mineralisation.</li> </ul>
	<ul> <li>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').</li> </ul>	<ul> <li>Due to the mineralisation's geometry and the drill holes' vertical orientation, downhole lengths can be considered close representations of the true widths of the mineralised zones. However, further studies would be required for absolute precision.</li> <li>In cases where there might be a discrepancy between downhole lengths and true widths, it should be noted that "downhole length, true width not known."</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	• The data presented in this report helps readers better understand the information. Various diagrams and supplementary information are included in the document, enhancing the clarity and accessibility of the geological findings and exploration results.



Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul> <li>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.</li> </ul>	• The data presented in this report strives to provide a transparent and holistic view of the exploration activities and findings. All the information, ranging from sampling techniques, geological context, prior exploration work, and assay results, has been reported comprehensively. Cross-references to previous announcements have been provided where relevant to ensure continuity and clarity. Including diagrams, such as geological maps and tables, supports a more in-depth understanding of the data. It's noteworthy to mention that while positive results have been highlighted, the nature of the samples, particularly their origin from either saprolitic clays or bauxite, has been distinctly reported to ensure a balanced view. This report faithfully represents the exploration activities and findings without undue bias or omission.
Other substantive exploration data	<ul> <li>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.</li> </ul>	There is no additional substantive exploration data to report currently.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	The current focus of development work is infill drilling and metallurgical testing for mine plan development and completion of Scoping study engineering. Greenfield exploration remains an important activity as Viridis looks to maximise revenue in the early years of production with a higher-value basket of rare earth elements.

