

# "Disruptor Prospect" Drilling Update and REE Assay Results

# HIGHLIGHTS

- "Disruptor Prospect" RC/AC drilling campaign completed.
- Highly encouraging visual results, with seven drill holes intersecting rocks of a similar nature to the potential carbonatite intersected in previously drilled TAM008 (Figure 1 and Figure 2)
- Minor sulphide mineralisation was observed in RC chips during the current program, with confirmation in the recently received petrology report from the earlier drilling program where trace Chalcopyrite and Pyrite was observed in thin section.
- Petrology has identified Albitite as a second rock type in the initial Disruptor hole TAM008.
- Rocks intersected display significant chlorite and micaceous mineralisation, highlighting the presence of hydrothermal alteration of pre-existing solid phases.
- The Prospect is currently interpreted to be hosted within a horst and graben system with significant alteration of a hornblendite intrusive with an elevated concentration of the mineral apatite and minor sulphide mineralisation.
- Assay results from three previously drilled proximal holes returned elevated Total Rare Earth Oxides (TREO) in clays. Highlights include:
  - 8m at 1104ppm TREO (from 20m) including 3m at 1575ppm TREO TAM007
  - 4m at 766ppm TREO (from 3m) TAM007
- Further clay samples to be sent for multielement assay, now the clear prospectivity for clay hosted REE mineralisation has been established.

Pinnacle Minerals Ltd (ASX: **PIM**) ("**Pinnacle**", the "**Company**") is pleased to announce that the Company has completed the follow up drilling campaign at the Disruptor Prospect east of Tambellup in Western Australia, with a total of 16 holes drilled for a total of 746m, with visual observations reinforcing and expanding on the drilling results from the original campaign completed in March 2023. In addition, assay results just received from the original drilling campaign, have returned elevated TREO's, highlighting the potential for clay hosted REE's in addition to the already identified hard rock potential.



*Figure 1: Potential carbonatite from TAM008* 



Figure 2: Rock chip from DPRC011 (38-39m)

**Pinnacle Minerals Ltd** ACN: 655 033 677 ASX: **PIM**  Issued Capital 36,375,200 Shares 29.937.634 Options

Australian Registered Office Unit 6, Level 1, 389 Oxford Street Mount Hawthorn WA 6016 T: + 61 8 9426 0666 E: admin@pinnacleminerals.com.au

#### Directors

WILLIAM WITHAM – Non-Executive Chairman NIC MATICH – Managing Director LINCOLN LIU – Non-Executive Director STEPHEN ROSS – Non-Executive Director

#### www.pinnacleminerals.com.au



Pinnacle Minerals Managing Director, Nic Matich, commented:

"Both the visual observations and assay results from the Disruptor Prospect indicate the potential for a mineralised REE system. The presence of chlorite / mica-rich hydrothermal alteration, the intersection of potential carbonatite rocks and the elevated REE's in clay all point to the Disrupter Prospect being a significant discovery of a previously un-recognised geological system. The team is currently reviewing the field observations in conjunction with assay and petrology results to determine the next steps in advancing this exciting Prospect."

#### Disruptor Prospect follow-up drilling program

Pinnacle finalised the Disruptor Prospect follow-up drilling campaign on Sunday the 21<sup>st</sup> May completing 16 holes for a total of 746m. The program was initiated to follow up elevated TREO's in a potential carbonatite intercepted in TAM008 which was drilled in March 2023. The significance and origin of the Albitite is being assessed. The program was designed to test a bifurcated area on a major NE/SW regional fault zone where there appears to be a zone of alteration associated with the fault. Additionally, several holes were drilled across the major fault zone as to generate a cross-section to help understand the complex geology and structures. Several other holes were drilled to test the wider extent of alteration around this area.

Field observations of downhole rock chip samples from the current drill program has highlighted a geologically active area with a zone of chlorite alteration centred on the major NE/SW regional fault with minor sulphide mineralisation noted. Although no dating work has yet been carried out, it appears that the hydrothermal alteration is much younger than the Archaean-aged granitic host rocks. In addition to the regional granites, the Company has also identified ultramafic greenstone rocks. Some of the drill holes intersected heavily hydrothermally-altered zones found to be in contact with other zones of biotite-rich mica altered ultramafic rocks. These zones of alteration typically occur in the presence of heated fluids and is a positive sign for potential mineralisation that will be the focus of future exploration activities. An example of the chloritic alteration from hole DPRC006, 50-51m downhole, is shown in Figure 3.



*Figure 3: Rock chip from DPRC006 50-51m) highlighting chloritic alteration.* 



With a better understanding of the Prospect's unique geological setting and over 746m of samples collected, the Pinnacle team will now review its comprehensive datasets including geophysical, assay and petrology data from this current program to determine the potential for both a hard rock hosted REE-mineralised system and clay-hosted deposits. Future exploration activities and assay results will be announced to the market as and when they become available.

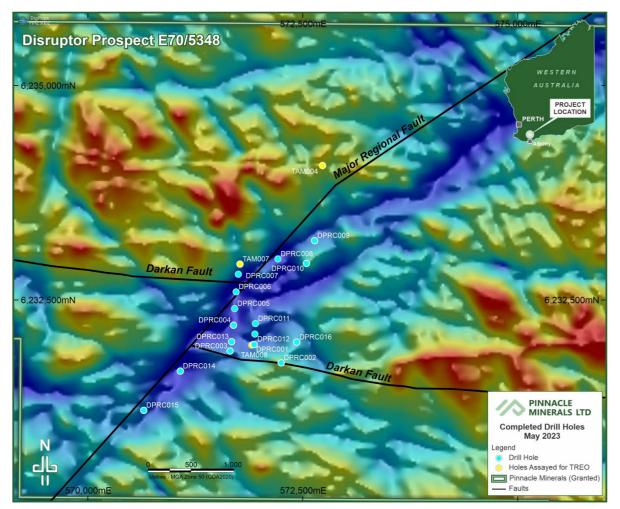


Figure 4: Disruptor Prospect highlighting regional magnetics, faults, and proposed drill collars.

### Clay-hosted REE's – Assay results and discussion

Upon completion of the initial drilling campaign in March 2023, three holes were selected for metre-by-metre assay for a suite of 62 elements, including rare earths. This small batch of assays was chosen to provide an indication of the prospectivity for clay-hosted REE mineralisation prior to committing to a larger assay program.

The metre by-metre assay results returned encouraging TREO values with a maximum value of 1762 ppm from 18m downhole (TAM007). Further assay results are presented in *Table 1*. The elevated rare earths from TAM007 coincide with the edge of the regional fault where drilling in the current campaign (DPRC009) intersected approximately 37m of kaolinitic material from 2m downhole.

The regional fault zone appears to manifest as a horst and graben structure with the graben being approximately 20m deeper than the horst and containing up to 37m thickness of kaolinitic material in areas. This structure bodes well for future exploration due to the thick potential size of the clay horizon.



Follow up assays will be conducted to further define the clay hosted REE potential of the prospect now that there is a greater understanding of the geological setting.

Drillhole	Easting (GGA2020 Z50)	Northing (GGA2020 Z50)	Depth	From	Width	TREO PPM (Average)
		6234065.0	30	3	3	532
TAM004	572732.3			7	1	599
TAIVI004				16	1	1,058
				18	3	469
	571771.8	571771.8 6232916.2	29	3	4	766
				13	2	1,189
TAM007				16	1	1,155
				18	8	1,104
			Including	18	3	1,575
TAM008	571937.0	6231979.2	40	2	3	519

#### Table 1: Select clay hosted TREO results – 400ppm TREO cut-off



Figure 5: DPRC009 –37m of bright white kaolinitic material

#### Halloysite potential

The recently completed drilling program has returned bedrock with both chlorite and micaceous alteration. These alterations occur in the presence of heated fluids. As such there is the potential for the kaolin in the vicinity of the fault to have been hydrothermally altered into halloysite. Figure 5 highlights 37m of clays intercepted (DPRC009) in the fault. Several samples from this hole will be imaged via electron microscopy to determine if this alteration has occurred.

Halloysite is a rare form of kaolin formed by hydrothermal adjustment of alumino-silicate minerals, and naturally occurs as nanotubes, the properties of which lend itself to uses in both high-grade porcelain and high-tech applications. For these reasons, halloysite-kaolin attracts a significant premium in the market compared to typical kaolin prices.

Halloysite Nanotube Technology (HNT) is a burgeoning field of study with new applications creating a demand for this rare material, with specialist applications including usage in hydrogen storage, water purification, carbon capture and Li-ion batteries.



This announcement has been authorised for release by the Board of Pinnacle Minerals Ltd.

#### For further information, please contact:

Managing Director Nic Matich Pinnacle Minerals Limited T: + 61 (0) 8 9426 0666 E: admin@pinnacleminerals.com.au Media and Investor Inquiries Jane Morgan Jane Morgan Management +61(0) 405 555 618 E: jm@janemorganmanagement.com.au

#### **About Pinnacle Minerals**

Pinnacle Minerals Ltd (ASX: PIM) is an ASX listed technology minerals company focused on delivering shareholder value via the systematic exploration and development of its portfolio of kaolin, halloysite, battery metals and Heavy Mineral Sands prospective projects in Western Australia and South Australia. The Company is focused on delineating resources at its Bobalong and Holly Kaolin Projects in the Great Southern region of Western Australia whilst simultaneously expanding its' project portfolio through targeted acquisition of prospective ground. Drilling and a scoping study have been completed at Bobalong, with results indicating the potential for a high value direct shipping ore (DSO) product. The White Knight and Camel Lake Projects are strategically located adjacent to Andromeda Metals' (ASX: ADN) high-grade kaolin-halloysite discoveries in South Australia. The Latham and Tammin projects are adjacent to Chalice Mining Ltd (ASX: CHN) Mid-West Project and Anglo Americans' (LON: AAL) Southwest Yilgarn Exploration Project respectively, which have multi-element exploration potential.

#### **Competent person statement**

The information in this announcement that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by William Witham, a Competent Person who is a Member of The Australian Institute of Geoscientists (AIG). William Witham is a director of Pinnacle Minerals Ltd. William Witham has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. William Witham consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.



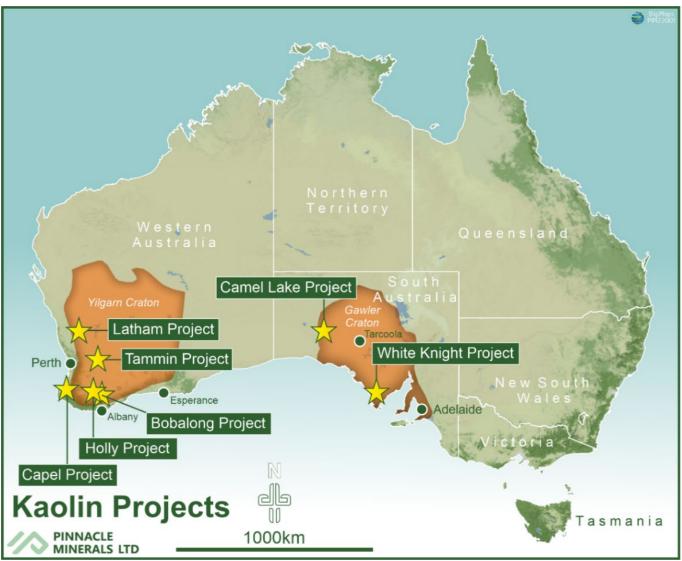


Figure 6: Pinnacle Minerals Projects' Location Map



#### Appendix 1 Collar Summary – Tambellup East

		Easting	Northing	RL	EOH		
Hole ID	Peg ID	(GDA2020	(GDA2020			Dip	AZI
		Zone 50)	Zone 50)	(m)	(m)		
TB001	TB028	571536.1	6234666	305.8	14	-90	360
TB002	TB029	571734.8	6234669	307.8	34	-90	360
TB003	TB030	571936	6234671	309.6	27	-90	360
TB004	TB031	572133.2	6234661	311.1	21	-90	360
TB005	TB032	572337.5	6234670	309.1	15	-90	360
TB006	TB052	572534.4	6234667	305.8	28	-90	360
TB007	TB049	572737.4	6234667	301.6	33	-90	360
TB008	TB050	572935.5	6234659	297.8	26	-90	360
TB009	TB051	571539.8	6234462	306.5	17	-90	360
TB010	TB040	571738.6	6234470	308.5	13	-90	360
TB011	TB039	571934.6	6234461	310.9	18	-90	360
TB012	TB038	572130.6	6234463	311.4	18	-90	360
TB013	TB037	572332.2	6234462	310.1	19	-90	360
TB014	TB036	572535	6234465	305.5	18	-90	360
TB015	TB035	572733.7	6234467	301.0	14	-90	360
TB016	TB034	572934.1	6234461	296.6	16	-90	360
TB017	TB033	571539.7	6234263	305.6	19	-90	360
TB018	TB053	571733.9	6234262	308.1	13	-90	360
TB019	TB027	571932.3	6234260	307.1	20	-90	360
TB020 TB021	TB026 TB025	572126.2	6234260 6234265	306.5 306.2	19 10	-90 -90	360 360
TB021	TB025	572332.8 572532.1	6234263	306.2	23	-90	360
TB022	TB017 TB018	572532.1	6234263	299.2	23	-90	360
TB023	TB018	572934.8	6234263	295.8	16	-90	360
TB024	TB019	571538.8	6234064	304.3	22	-90	360
TB025	TB020	571732.4	6234064	306.0	15	-90	360
TB020	TB021	571935.3	6234004	304.3	14	-90	360
TB028	TB022	572134.3	6234065	302.0	12	-90	360
TB029	TB024	572333.8	6234064	301.7	12	-90	360
TB030	TB016	572534.1	6234063	298.3	22	-90	360
TB031	TB015	572732.3	6234065	295.3	30	-90	360
TB032	TB014	572933.9	6234063	293.5	21	-90	360
TB033	TB013	571533.6	6233866	301.3	37	-90	360
TB034	TB012	571733.9	6233865	302.6	28	-90	360
TB035	TB011	571933	6233860	300.5	6	-90	360
TB036	TB010	572141	6233867	299.0	19	-90	360
TB037	TB009	572335.2	6233865	298.0	25	-90	360
TB038	TB001	572536.9	6233863	295.5	17	-90	360
TB039	TB002	572732	6233865	292.9	34	-90	360
TB040	TB003	572935.6	6233864	291.9	16	-90	360
TB041	TB004	571532.4	6233671	297.7	18	-90	360
TB042	TB005	571732.9	6233663	297.3	23	-90	360
TB043	TB006	571937.2	6233661	297.2	14	-90	360
TB044	TB007	572131	6233662	296.3	22	-90	360
TB045	TB008	572331	6233662	294.4	29	-90	360
TB046	TB048	572534.4	6233675	292.5	26	-90	360
TB047	TB047	572731.1	6233672	291.4	25	-90	360
TB048	TB046	572933	6233670	291.0	12	-90	360
TB049	TB045	571771.8	6232916	286.0	29	-90	360
TB050	TB044	571937	6231979	280.1	41	-90	360
TB051	TB043	572437.9	6232398	282.6	40	-90	360
TB052	TB042	571248.7	6233728	297.2	12	-90	360
TB053	TB041	571796.4	6231894	279.5	38	-90	360



#### Northing Easting RL EOH Hole ID AZI Peg ID Dip (GDA94 (GDA94 (m) (m) Zone 50) Zone 50) DPRC001 DP015 571928 6231979 186 73 -90 360 DPRC002 DP010 572250 6231763 186 25 -90 360 DP004 DPRC003 571655 6231901 168 40 -90 360 DPRC004 DP006 571695 6232202 195 70 -90 360 DPRC005 DP007 571709 6232395 125 55 -90 360 DPRC006 DP008 571726 6232591 126 58 -90 360 DPRC007 DP009 571752 6232796 159 34 -90 360 DPRC008 DP012 572212 6232975 148 37 -90 360 DPRC009 DP014 572639 6233188 149 39 -90 360 DPRC010 DP013 572544 6232923 150 9 -90 360 DPRC011 DP016 571950 154 46 -90 360 6232221 DPRC012 DP017 571944 127 58 -90 360 6232099 DPRC013 DP005 571673 6232010 138 -90 360 58 DPRC014 DP003 571077 136 29 -90 6231667 360 DP001 570651 135 28 -90 DPRC015 6231209 360 DP011 127 -90 DPRC016 572431 6232005 45 360

#### Appendix 2 Collar Summary – Disruptor Prospect



#### **Appendix 3 JORC Tables**

#### 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 representivity 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 1m 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>Aircore drilling (with and without hammer attachment) was used to obtain samples for analysis at 1m intervals</li> <li>Each sample was homogenized within the sample bag by rotating the sample bag</li> <li>The aircore drill samples have an average range between 6 kg and 9 kg</li> <li>Meter by meter ~2kg samples taken using a small scoop</li> <li>Chip trays were used to store meter by meter samples</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 diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul> <li>Aircore drilling with inner tubes for sample return was used</li> <li>Aircore is considered a standard industry technique for kaolin and hard rock exploration. Aircore drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube</li> <li>Aircore drill rods used were 3 m long</li> <li>NQ diameter (76mm) drill bits and rods were used</li> <li>All drill holes were vertical</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure 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>A sampling foot was utilised to ensure sample transferred direct to plastic container.</li> <li>Samples were not weighed.</li> <li>At the end of each drill rod, the drill string is cleaned by blowing down with air/water to remove any clay and silt potentially built up in the sample hose</li> <li>At the end of each hole the cyclone is inspected for material build up and cleanliness (for potential</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>contamination)</li> <li>The twin-tube aircore drilling technique is known to provide high quality samples from the face of the drill hole</li> <li>As this drilling campaign was not utilised for resource definition any variation over a meter-by-meter basis of sampling is not expected to alter the interpretation of the results.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have 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>The aircore samples were each qualitatively logged using a field laptop (Toughbook) and entered into a custom program in excel</li> <li>The aircore samples were logged for lithology (major,2<sup>nd</sup> and 3<sup>rd</sup>), colour (major,2<sup>nd</sup>), alteration intensity (major,2<sup>nd</sup>), alteration intensity (major,2<sup>nd</sup>) fabric, texture,grainsize, sorting, estimated quartz%, and any relevant comments</li> <li>Every drill hole was logged in full, with detailed logging based on a small sample of sample taken from the split sample to improve representivity</li> <li>Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection</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</li> </ul>	<ul> <li>Samples were taken under all conditions.</li> <li>Sample method is appropriate for scout drilling which as variation on a meter-by-meter basis will not effect the interpretation of the results</li> <li>Field Duplicates were taken every 50 samples to provide precision of sampling</li> </ul>



Criteria	JORC Code explanation	Comment	ary	
	<ul> <li>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>secon bulk n</li> <li>The A at the to 1.5 scoop</li> <li>Indivio picked mater</li> <li>The sa is cons techni scout</li> <li>The sa deem captur charac indust geolog consu staff</li> <li>Field o sampl</li> </ul>	ample size and sidered an ap que for kaolin drilling ample sizes we ed suitable to re geological cteristics, base cry experience gists involved ltation with la duplicates of t es were comp ency of 1 per 5	le of the collected olit down g a small s were meter of d process propriate and ere reliably ed on e of the and boratory he
Quality of assay data and laboratory tests	<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, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</li> </ul>	was o eleme been o oxide the in TREO + Nd20 Gd2O3 Ho2O3 Yb2O3 • Eleme Factor	earth element riginally repor intal form but converted to r concentration dustry standa = $La_2O_3 + CeO$ $D_3 + Sm_2O_3 + Ia$ $a + Tb_4O_7 + Dy_3$ $a + Er_2O_3 + Tm$ $a + Yb_2O_3$ int to Oxide Cors are: <u>CF</u> (multiplier) 1.1728	ted in have elevant is as per rd: $2 + Pr_6O_{11}$ Eu <sub>2</sub> O <sub>3</sub> + $2O_3$ + $2O_3$ +
		La		CeO <sub>2</sub>
		Ce	1.2284	Pr <sub>6</sub> O <sub>11</sub>
		Pr	1.2082	
		Nd	1.1664	Nd <sub>2</sub> O <sub>3</sub> Sm <sub>2</sub> O <sub>3</sub>
		Sm	1.1596	
		Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>
		Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>
		Tb	1.1762	Tb4O7



Criteria	JORC Code explanation	Co	mment	ary	
			Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>
			Но	1.1455	Ho <sub>2</sub> O <sub>3</sub>
			Er	1.1435	Er <sub>2</sub> O <sub>3</sub>
			Tm	1.1421	Tm <sub>2</sub> O <sub>3</sub>
			Yb	1.1387	Yb <sub>2</sub> O <sub>3</sub>
			Lu	1.1371	Lu <sub>2</sub> O <sub>3</sub>
			Y	1.2699	Y <sub>2</sub> O <sub>3</sub>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	•	Comp The Co period labora proces A proces Valida is und errors Stand Mater check batch within that th The fie has be Micros Data v includ overla end of 'Lithol files, c numb errors No ad the pr	tion using ma lertaken to ide or questiona ard Certified I ial sample res ed from each to ensure the to ensure the tolerance (<2 nere is no bias eld and labora en updated i soft Access da validation crite ded to check for pping sample f hole match I logy', 'Sample Juplicate sam ers and other justments are imary assay of	son makes ve sample tory data ss balance entify entry ble data Reference sults are sample by are 2SD) and s or drift atory data nto a atabase eria are or e intervals, between d, 'Survey' ple common e made to lata
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	•	used t of the The ha accura horizo Follow the dr profes all the	ving the comp illing program ssional survey drill hole coll	positions the field. has an m in the letion of h, a pickup of ar
		•	(initial The da	inates was un campaign) atum used for 020 and coord	- is



Criteria	JORC Code explanation	Commentary		
		projected as UTM zone 50		
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The planned drill density was 200 m east-west by 200 m north-south</li> <li>This spacing is designed for supporting the potential development of Mineral Resource Estimation pending that the ensuing results of drilling and assaying will support the development of a Mineral Resource estimate</li> <li>Each aircore drill sample is a single 1, m sample of material intersected down the hole</li> <li>No compositing has been applied</li> </ul>		
Orientation of data in relation to 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 key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Drill holes were vertical because the nature of the mineralisation is relatively horizontal</li> <li>1m meter samples is sufficient to define Kaolin zones and also to define layers / structures in the basement</li> <li>The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralisation</li> </ul>		
Sample security	The measures taken to ensure sample security.	<ul> <li>Aircore samples remained in the custody of Company representatives until they were trucked to Perth using an independent contractor or samples were transported by Company representatives</li> <li>The samples were transported to Perth and delivered directly to the laboratory along with a sample manifest for checking of samples</li> <li>The laboratory inspected the packages and did not report tampering of the samples</li> </ul>		
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No independent audits or reviews of sampling techniques and data has been conducted.</li> <li>Internal reviews undertaken</li> </ul>		



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

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> <li>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.</li> </ul>	<ul> <li>The planned / completed drilling lies within the granted exploration licences.</li> <li>At the time of reporting all tenure was secure and any administrative costs or fees were fully paid up.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	There has been no prior exploration drilling conducted in the tenement
Geology	• Deposit type, geological setting and style of mineralisation.	• Kaolin mineralisation is a function of weathering of granite. It is unclear at this stage if the kaolin is a transported or in-situ
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 not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>All significant drill results and drill hole collar locations have been identified in Appendices 2 and 3 respectively of this report.</li> <li>No relevant material data has been excluded from this report.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</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>	<ul> <li>There are no data aggregation methods applied</li> </ul>
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> <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>All drill holes are vertical and perpendicular to the dip and strike of mineralisation and therefore all interceptions are approximately true thickness.</li> <li>Drill holes are inferred to intersect the</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>mineralisation</li> <li>approximately</li> <li>perpendicularly.</li> <li>The deposit style is flat- lying and so the vertical holes are assumed to intersect the true width of any mineralisation.</li> </ul>
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Figures and plans are displayed in the main text of the Release
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Kaolin intercepts are considered true width</li> <li>TREO reporting is representative as the rock chips were chosen randomly</li> </ul>
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>All information has been provided as available</li> <li>Granite basement was intercepted in all holes other than identified in this report</li> </ul>
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>	<ul> <li>Further drilling work to target potential carbonatite and kaolinite mineralisation is recommended.</li> <li>Exploration by geophysical analysis and drilling is planned on other parts of the tenement.</li> <li>Refer to the main body of the release for further information regarding diagrams</li> </ul>