

23 August 2023

# **Clay hosted REE mineralisation at Mt Cattlin**

Aircore drilling confirms widespread REE mineralisation within the clay rich weathered zone over the Mt Cattlin Intrusive Complex

### Key Points:

- Peak drill hole intersections at surface and at base of oxidation include:
  - Drillhole RAC254 1m @ 2,434 ppm TREO
  - Drillhole RAC255 2m @ 705 ppm TREO (including 1m @ 1,053 ppm TREO)
  - Drillhole RAC343 3m @ 523 ppm TREO (including 1m @ 1,100 ppm TREO)
  - Drillhole RAC355 2m @ 987 ppm TREO (including 1m @ 1,308 ppm TREO)
- Higher grade REE mineralisation appears to coincide on large structures and on the margin of porphyry intrusives.
- The whole of the tenement overlying the Mt Cattlin Intrusive Complex is prospective for clay hosted REE mineralisation.
- Current initial wide spaced reconnaissance level drill spacing and gaps in the pattern will now be the focus of infill sampling. Only 5 of 20 completed drill hole traverses has been sampled to date.
- REE assays results appear to be diluted because of the inclusion of muddy drill samples of barren silicate rich gravels with the fine-grained REE bearing clay fraction. Trials will be undertaken to improve the sample quality of additional sampling.
- The valuable MREO (magnetic) elements within the TREO total range between 18% and 60% of the total.

ASX: TKL ABN 63 103 323 173 Ground Floor 43 Ventnor Avenue West Perth 6005 Western Australia Tel: (+61) 8 9322 1655 Fax: (+61) 8 9322 9144 www.trakaresources.com.au traka@trakaresources.com.au



Traka Resources Limited (ASX: **TKL**, **Traka** or **the Company**) advises that widespread clay hosted Rare Earth Element (REE) mineralisation has been intersected in the aircore drilling program completed in March (1). The program comprised 388 drillholes for a total of 3,340m on 20 widely spaced lines 160m apart where there was no need for clearing (Figure 1).



Figure 1. A geochemical plan view showing Total Rare Earth Oxides (TREO) soil anomalism over the Mt Cattlin Intrusive Complex

REE mineralisation is found to be widespread over the Mt Cattlin Intrusive Complex concentrated in a supergene enriched layer on surface and close to the base of oxidation between 5m and 30m depth (Table 1).

Peak drillhole include: RAC254 - 1m @ 2,434 ppm TREO RAC255 - 2m @ 705ppm including 1m @ 1,053 ppm TREO RAC343 - 3m @ 523ppm TREO including 1m @ 1,100 ppm TREO RAC355 - 2m @ 987ppm TREO including 1m @ 1,308 ppm TREO

The supergene zone on surface is between 1m and 2m thick and at the base of oxidation between 2m and 6m thick (Figures 2, 3, 4, and 5). There is correlation in some places but not others between the surface REE mineralisation in the aircore drilling samples with the auger soil sample results that originally highlighted the clay hosted REE (2). The higher grade REE mineralisation on the project appears to be located over large structural positions and margins of individual porphyry intrusives.



#### Table 1

Hole ID	Easting (m)	Northing (m)	From (m)	To (m)	Interval (m)	Intersections Metres (m) @ TREO (ppm)	TREŎ ppm	MREÓ ppm	MREO % of TREO	LREO ppm	LREO % of TREO	HREO ppm	HREÓ % of TREÓ
RAC004	224980	6284250	0	7	7	7m @ 264ppm	263.54	55.27	21	229.79	87	33.75	13
PA ¢000	11/70A	6304350	20	28	8	8m @ 380ppm	380.41	76.08	20	295.25	78	85.15	22
NAC005	224780	0284230	26	27	1	Including: 1m @ 636ppm	636.26	114.76	18	502.35	79	133.91	21
RAC010			11	15	4	4m @ 300ppm	299.70	80.12	27	243.38	81	56.31	19
RAC010	33/7/0	639/350	17	18	1	1m @ 214ppm	214.32	54.33	25	156.80	73	57.53	27
RAC010	224740	0204230	20	24	4	4m @ 457ppm	456.79	97.07	21	335.13	73	121.67	27
RAC010			26	29	3	3m @ 279 ppm	278.82	60.11	22	184.08	66	94.74	34
RAC011	224700	6284250	1	2	1	1m @ 232ppm	231.69	55.40	24	155.79	67	75.90	33
RAC086	225390	6284250	18	22	4	4m @ 272ppm	272.32	57.53	21	230.19	85	42.13	15
RAC176	227645	6284920	1	2	1	1m @ 264ppm	263.72	64.64	25	197.30	75	66.42	25
RAC178	227565	6284920	2	3	1	1m @ 203ppm	203.35	47.27	23	130.82	64	72.52	36
RAC182	227/05	678/1970	2	3	1	1m @ 215ppm	214.73	42.93	20	165.13	77	49.60	23
RAC182	22/405 6284920		5	6	1	1m @ 226ppm	226.41	45.07	20	161.32	71	65.09	29
RAC244	226425	6285720	16	17	1	1m @ 246ppm	246.41	62.36	25	168.47	68	77.93	32
RAC245	226465	6285720	19	20	1	1m @ 207ppm	207.44	41.93	20	121.03	58	86.42	42
RAČ252	226785	6285720	18	21	3	3m @ 518ppm	517.98	100.84	19	238.56	46	279.42	54
RAČ253	226825	6285720	0	1	1	1m @ 287ppm	287.66	54.79	19	153.26	53	134.40	47
RAC254	226865	6285720	14	15	1	1m @ 2434ppm	2434.12	414.84	17	1 <b>23</b> 1.70	51	1202.42	49
RAC255	226905	6285720	14	16	2	2m @ 705ppm	705.22	169.56	24	575.04	82	130.18	18
	220505		15	16	1	Including: 1m @ 1053ppm	1053.24	251.40	24	880.68	84	172.56	16
RAC258	227025	6285720	18	20	2	2m @ 298ppm	298.00	178.46	60	207.69	70	181.23	30
RAC260	227105	6285720	24	25	1	1m @ 604ppm	604.05	208.21	34	406.46	67	197.59	33
RAC261	227145	6285720	0	1	1	1m @ 209ppm	208.75	60.77	29	139.42	67	69.33	33
RAC333	227665	6286200	13	16	3	3m @ 625pppm	624.82	167.03	27	495.04	79	129.78	21
RAC333	227625	6286200	20	21	1	1m @ 302ppm	302.15	92.38	31	244.40	81	57.75	19
RAC334	227625	6286200	16	19	3	3m @ 269ppm	268.52	59.98	22	214.58	80	53.94	20
RAC339	227425	6286200	25	26	1	1m @ 539ppm	539.00	178.27	33	448.10	83	91.17	17
RAC340	227385	6286200	23	25	2	2m @ 245ppm	245.37	64.85	26	191.05	78	54.32	22
			4	5	1	1m @ 223ppm	222.60	50.53	23	209.41	94	13.18	6
RAC343	227265	6286200	21	24	3	3m @ 523ppm	523.32	17 <b>2</b> .99	33	437.80	84	85.51	16
			23	24	1	Including: 1m @1100 ppm	1100.05	350.89	32	9 <b>2</b> 1. <b>2</b> 7	84	178.78	16
RAC344	227225	6286200	16	17	1	1m @ 230ppm	229.80	62.02	27	203.23	88	25.81	12
RAC353	226545	6286200	21	27	6	6m @359ppm	358.86	74.64	21	193.23	54	165.63	46
			24	25	1	Including: 1m @ 633ppm	633.31	128.11	20	258.87	41	374.44	59
RAC355	226465	6286200	12	14	2	2m @ 987ppm	987.39	297.20	30	777.14	79	210.25	21
			13	14	1	Including: 1m @ 1308ppm	1308.04	380.82	29	988.90	76	319.14	24
RAC356	226425	6286200	0	1	1	1m @ 236ppm	236.26	58.12	25	172.21	73	64.05	27
RAC356			9	12	3	3m @ 359 ppm	358.69	93.08	26	230.43	64	128.26	36
RAC357	226355	6286200	0	1	1	1m @ 202ppm	201.82	47.46	24	137.98	68	63.84	32
RAGD099**	** 226872 6285795		19	25	6	6m @ 419ppm	419.00	103.92	25	295.98	71	1 <b>23</b> .01	29
			22	23	1	Including: 1m @ 887ppm	887.30	<b>261</b> .77	30	614.87	69	272.43	31

\*Notes to Table 1 \*\*RC Pre-Collar

Significant grade intervals based on intercepts > 200ppm TREO

 TREO (Total Rare Earth Oxides) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Lu2O3 + Ho2O3 + Er2O3 + Tm2O3 + Y2O3 + Yb2O3

 MREO (Magnetic Rare Earth Oxides) = Pr6O11 + Nd2O3 + Tb4O7 + Dy2O3

HREO (Heavy Rare Earth Oxides) = Dy2O3 + Er2O3 + Gd2O3 + Tb4O7 + Lu2O3 + Ho2O3 + Tm2O3 + Y2O3 + Yb2O3

LREO (Light Rare Earth Oxides) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3

Map Grid of Australia, MGA94, Zone 51





Figure 2. Cross-section of aircore drillhole Line 5 showing the supergene enriched TREO mineralisation on surface and the near the base of the oxidised zone.



Figure 3. Cross-section of aircore drillhole Line 2 showing the supergene enriched TREO mineralisation on surface and the near the base of the oxidised zone.





Figure 4. Cross-section of aircore drillhole Line 2 showing the supergene enriched TREO mineralisation on surface and the near the base of the oxidised zone.



Figure 5. Cross-section of aircore drillhole Line 14 showing the supergene enriched TREO mineralisation on surface and the near the base of the oxidised zone.

The more valuable magnetic REE (MREO) ranges between 18% and 60% of the total REE (TREO) and the heavy REE (HREO) between 6% and 54%.

The aircore drill samples at Mt Cattlin were muddy and sticky with a significant component or coursegrained barren silicate gravel (10% to 50%) mixed in with the REE bearing clay. Infill sampling of the completed drill program samples will be undertaken as follow-up work, but in this step some test work will be undertaken to screen out the gravel which otherwise dilutes the overall result. A more aggressive Alkali Fusion of the samples will also be tried to ensure 100% digest of all the REE.



Authorised by the Board.

#### Patrick Verbeek Managing Director

- (1) Traka ASX Announcement 27 March 2023 "Mt Cattlin Exploration Progress Update"
- (2) Traka ASX Announcement 22 November 2022 "Strong Rare Earths anomalism identified at Mt Cattlin Gold-Copper Project"

#### COMPLIANCE STATEMENT

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr P Verbeek who is the Managing Director of Traka Resources Limited. Mr Verbeek, who is a Competent Person and a Member of the Australasian Institute of Mining and Metallurgy, 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'. Mr Verbeek consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.



# Annexure: JORC Table 1

# Section 1: Sampling Techniques and Data for the Mt Cattlin Gold Copper and REE Project

Criteria	JORC Code explanation	Commentary				
Sampling Techniques	• Nature and quality of sampling	<ul> <li>Aircore samples were collected from vertical holes at 1m intervals down-hole and sample individually bagged and numbered and stored.</li> <li>A representative split of between 1 to 3 kg weight was taken from each 1m interval and despatched to the laboratory for sample preparation and assay.</li> <li>In some instances, pXRF readings were taken of the -1mm fines from the splits.</li> <li>After sample preparation (drying and pulverizing 80% passing - 75 micron) all samples were read by pXRF ahead of re-submitting to the laboratory for assay (Pulps).</li> </ul>				
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 of 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 (eg 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 QA/QC data includes laboratory standards, duplicates and checks.</li> <li>After pXRF reading selected pulp samples were submitted to SGS Laboratory Services in Perth for assay.</li> <li>GE_IMS400Q20 4 acid digest package ICP-MS for assay of Ag, As, Ba, Be. Bi, Cd, Ce, Co, Cs, Cu, Dy, Er, Eu, Ga, Gd, Ge, Hf, Ho, In, La, Li, Lu, Mn, Mo, Nb, Nd, Ni, Pb, Pr, Rb, Re, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, T1, Tm, U, W, Y, Yb, Zn, Zr</li> <li>GE_IMS400Q20 4 acid digest package ICP-OES for assay of Al, Ca, Cr, Fe, K, Mg, Na, P, S, Ti, Mn</li> <li>GE_IMS21S20 Aqua Regia for digest ICP_MS for assay of Hg</li> <li>GE_FAM30V10 exploration grade ICP_MS 30g-10ml for Fire Assay of Au, Pt, Pd,</li> <li>The digest and pulp sizes used are aggressive and designed to give total solution results.</li> <li>Comparison between pXRF and laboratory results are possible for all common to many other project areas.</li> <li>The pXRF instrument used is the current model 3 Beam Olympus Vanta M Series.</li> <li>Drillhole samples on hole RAGD099 are from the RC pre-collar. Samples from this hole were HF Multiacid digest (MMA-04) 61 elements by assay of combination ICP-MS and ICP-OES. Gold assay was by Fire Assay on a 25g charge.</li> </ul>				
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>	<ul> <li>All geochemical sampling is undertaken under the supervision of an experienced Field Assistant under the supervision of a qualified Geologist.</li> <li>Formal digital and paper copy sample numbering and cross-check systems ensure the accuracy of the sample data.</li> <li>All sample locations and assay data are uploaded, checked for validity and entered into the Company's relational database.</li> <li>A full-time company employee GIS and Data Manager Geologist is responsible for is responsible and all data is backed-up daily.</li> <li>No adjustments of assay data are considered necessary.</li> </ul>				



Criteria	JORC Code explanation	Commentary				
		• Conversion of elemental analysis (REE parts per million) to oxide				
		(REO parts	per million) was	using the below element	nt to oxide	
		conversion is	actors.			
		Flement	Oxide	Conversion Factor	]	
		Cerium	CeOa	1 2284		
		Dysprosium	$Dv_2O_2$	1.1477		
		Erbium	Er <sub>2</sub> O <sub>3</sub>	1.1435		
		Europium	Eu <sub>2</sub> O <sub>3</sub>	1.1579		
		Gadolinium	Gd <sub>2</sub> O <sub>3</sub>	1.1526		
		Holmium	Ho <sub>2</sub> O <sub>3</sub>	1.1455		
		Lanthanum	La <sub>2</sub> O <sub>3</sub>	1.1728		
		Lutetium	Lu <sub>2</sub> O <sub>3</sub>	1.1371		
		Neodymium	$Nd_2O_3$	1.1664		
		Praseodymium	Pr <sub>6</sub> O <sub>11</sub>	1.2082		
		Samarium	Sm <sub>2</sub> O <sub>3</sub>	1.1596		
		Terbium	Tb <sub>4</sub> O <sub>7</sub>	1.1762		
		Thulium	Tm <sub>2</sub> O <sub>3</sub>	1.1421		
		Yttrium Vttorbium	Y <sub>2</sub> U <sub>3</sub>	1.2699		
		riterblum	۲D <sub>2</sub> O <sub>3</sub>	1.1387	J	
Data spacing and distribution	<ul> <li>Accuracy and quality of surveys used 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>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 Resources and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Hand-held C Calibration a geological r calculated po ordinate syst</li> <li>Drilling trav 160m apart confined to c</li> <li>Drill hole an determine th bit refusal do at times also west for con been determit</li> <li>Infill sample planned with</li> </ul>	and cross reference naps are used a position. The GD/ em. erses are at reco and drillholes 40 open cleared areas nd line spacing i e location and na epth which is typi o into highly oxid venience as no str ined. lines and higher in the initial exist	beate an drinnole contained contained control of the control of th	r positions. graphic and b the GPS sed the co- nes spaced rilling was y clearing. ufficient to own to drill thering but nes are east lisation has e is readily	
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>	The east-west cleared areast layered regold The drillhol elliptical zor this occurs w	st orientated airco s and is a first pa lith control to any les completed en ne define by inter vithin the Mt Cattl	re drill pattern has been r ss pattern assuming und mineralisation that may ntirely encompass a 3. rpretation of aeromagnet in tenement boundary.	estricted to erlying flat be present. 5km wide tics and all	
Sample security	• The measure taken to ensure sample security.	<ul> <li>Samples are submission t sample is r subsequently kept of all sa</li> </ul>	e uniquely numb to the Laboratory ecorded on a n entered into a se amples that are di	ered and individually 7. The nature and positi totebook and GPS and cure data base. Detailed spatched, including deta	bagged for on of each this data records are ils of chain	



Criteria	JORC Code explanation	Commentary
		of custody.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Data is validated when loading into the database. No formal external audit has been conducted.
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# Section 2 – Reporting of Exploration Results for the Mount Mt Cattlin North Gold Project

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 Mount Cattlin Gold Project is located on EL74/401-1, PL74/373 and PL74/370.</li> <li>An agreement with Galaxy gives Traka the right to gold and all other commodities on these tenements.</li> <li>Access Agreement have been entered into with the relevant landowners and all work is done with their permission.</li> </ul>
Exploration done by other parties	• Acknowledgement and appraisal of exploration by other parties.	• The source of historic data has been acknowledged and its validity comprehensively checked before use in the project assessment.
Geology	• Deposit type, geological setting and style of mineralisation.	• The clay hosted REE mineralisation being evaluated is within the regolith profile overlying the intrusive related gold and copper mineralisation within the underlying bedrock. There is some evidence from the presence of fenite alteration that that there are REE bearing carbonatites with the multiphase Mt Cattlin Intrusive Complex.
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.	• Refer to Figures in the body of text.
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.	• All relevant information is reported for a project at an early exploration level of evaluation.
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>	<ul> <li>An Aeromagnetic Survey was undertaken by MAGSPEC Airborne Surveys under the supervision of Geophysists from Explore Geo Pty Ltd.</li> <li>Survey Specifications: Aircraft - Cessna 206 VH-HIS</li> <li>Data Acquisition – sample rate 20Hz (3.5m), Novatel</li> <li>OEM DGPS, High Precision caesium vapour magnetometer G-823A with 3 -axis fluxgate</li> <li>Compensation</li> <li>Gamma-Ray spectrometer - RSI RS-500 with 2 x RSX 4 detector packs</li> <li>Base Station - GEM GSM-19 sampling at 1 second was used for all corrections.</li> <li>Navigation – Novatel OEM719 DGPS receiver</li> <li>The MobileMT survey completed at Mt Cattlin was undertaken by Expert Geophysics using a Bell 206 Long</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Ranger helicopter.</li> <li>Flight lines were east-west 200m apart for a total of 122km. The helicopter was flown at about 140 -150m above surface and the Mobile MT bird hung below to about 40m to 60m above surface</li> <li>Electromagnetic data was recorded at 73,728Hz and processed 2 times every second to achieve about 11m sample interval along the line at the 80-100km/hr flight speed.</li> <li>Airborne magnetic data was recorded at 10Hz resulting in data every 2.2m along line</li> <li>The following instrument were used</li> <li>MOBILEMT towed bird</li> <li>Geometrics G822A Cesium Magnetometer</li> <li>EGGPS navigation system</li> <li>Smartmicro UMRR 0A altimeter</li> </ul> Processing of the Mobile MT data was completed by independent experts CompGeoINC. Full validation and processing of the MOBILMT data was completed and plotted using GDA94 MGA UTM 51 datum. A full inversion of the data was completed enabling CGI's proprietary EM/MT program. Supervision of the MobileMT survey and subsequent processing of the results was completed by Traka's independent Geophysical Consultant Kim Frankcombe (ExploreGeo)
Further work	<ul> <li>The nature and scale of planned further work (eg test 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>The assessment of data is ongoing.</li> <li>Future work will include drilling to test the know and new targets</li> <li>Diagrams with explanatory comments are presented as they come to hand and are reported.</li> </ul>