

Roe Hills Project, Eastern Goldfields WA

# Thick sequences of rare earths discovered in Roe Hills drilling

Lithium-bearing pegmatites and thick zones of rare earth elements encountered during ongoing reconnaissance RC drilling

## Highlights

- Significant Rare Earth Element (REE) discovery at Black Cat Prospect close to Kalgoorlie, confirmed in drilling at Roe Hills with <50% sample results returned
- Excellent initial intercepts from only 9 holes returned to date, widths of between 16m to 148m wide with grades 800ppm to 6000ppm TREO
- NdPr ratios average 26% of the TREO values, high-value NdPr and 'magnet REEs' well represented and higher than peer group projects
- Black Cat REE discovery is blind at surface and associated with buried syenogranites, drilling extended to cover larger area
- Lithium-bearing pegmatites with LCT signatures intersected at Crystal Palace with best lithium result of 3m @ 0.41% Li<sub>2</sub>O from 87m in the vicinity of spodumene-bearing pegmatite surface sample that returned 1.67% Li<sub>2</sub>O
- 77 drill holes completed for 10,100m with a further 6 holes to complete, exploration to look at gravity surveying to map out buried intrusives for future targeting of what is thought to be a very large REE system
- Significant widths of rare earth elements mineralisation associated with weathered syenite and monzonite intrusions encountered at Black Cat

## Significant Results

### Black Cat - Rare Earths

- 40m @ 2104ppm (0.21%) TREO from 36m incl 8m @ 6023ppm (0.60%) TREO from 40m (RHRC158)
- 78m @ 1255ppm (0.13%) TREO from 52m incl 32m @ 2212ppm (0.22%) TREO from 56m (RHRC136)

- **16m @ 1428ppm (0.14%) TREO** from 52m (RHRC135)
- **148m @ 821ppm (0.08%) TREO** from 36m incl **40m @ 1551ppm (0.16%) TREO** from 36m (RHRC138)

#### **Crystal Palace – Lithium**

- **3m @ 0.41% Li<sub>2</sub>O** from 87m incl **1m @ 0.67% Li<sub>2</sub>O** from 88m (RHRC168)
- **2m @ 0.33% Li<sub>2</sub>O** from 37m (RHRC167)
- **3m @ 0.23% Li<sub>2</sub>O** from 29m incl **1m @ 0.46% Li<sub>2</sub>O** from 30m (RHRC166)

Kairos Managing Director, Dr Peter Turner said: **“The wide rare earth element (REE) drill hits in the weathered profile at Black Cat appear to be associated with a phase of granite that we didn’t expect prior to drilling but has now become a major rare earth target on Kalgoorlie’s doorstep.**

**“We remain extremely positive about the REE grades and scale of the targets at Black Cat from the first few results and believe that this is a unique proposition in a very accessible area with excellent road and rail connections.**

**“The few lithium results that have been returned indicate narrow LCT pegmatites at Crystal Palace in the vicinity of a surface rock sample with visible spodumene that returned 1.67% Li<sub>2</sub>O.**

**“Whilst the Crystal Palace drilling has successfully hit pegmatites which we believe are the extension of the Manna system, we will now look to future exploration to try to test for potential extensions to the west where the rocks are buried beneath thin transported cover.**

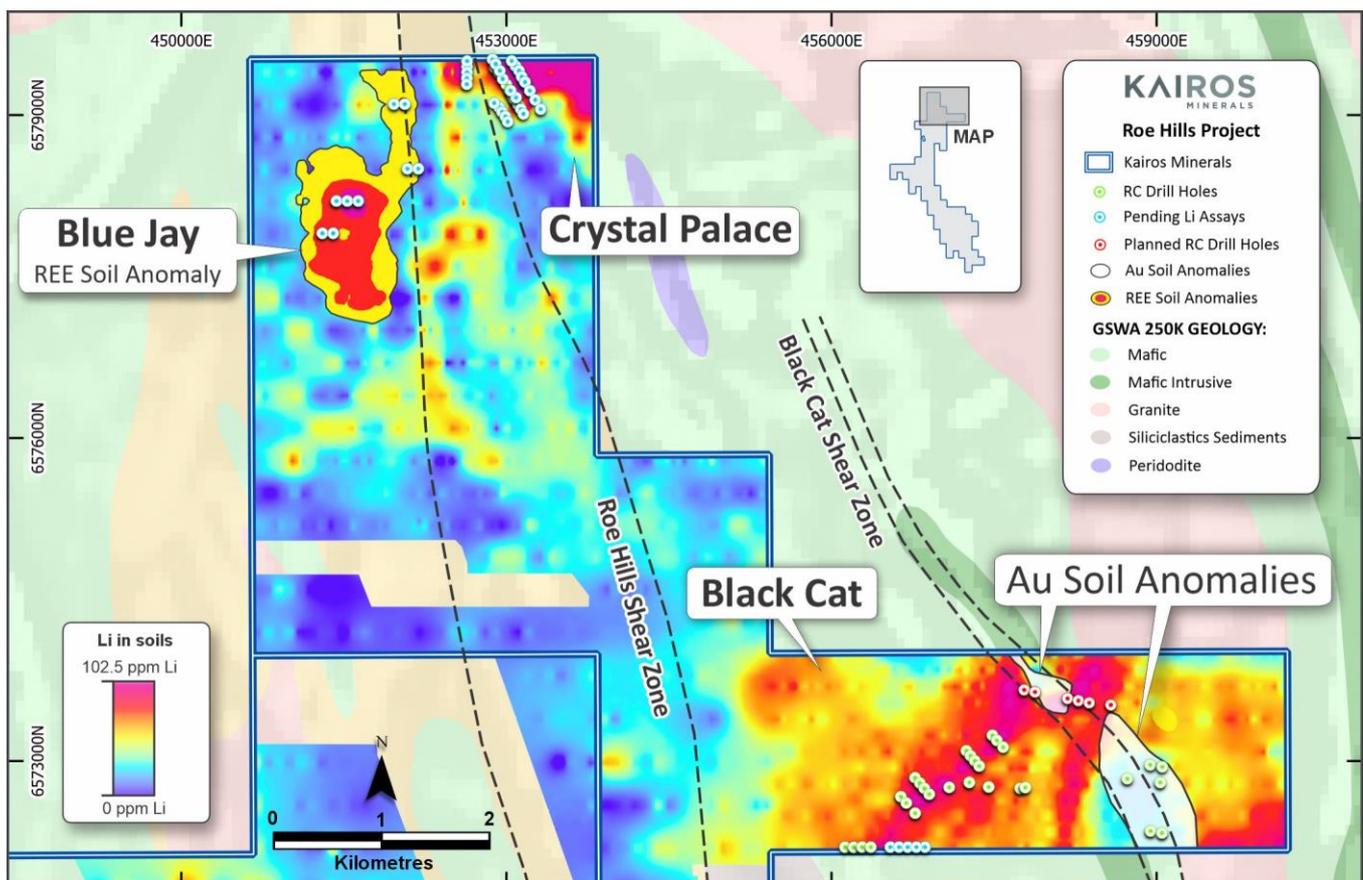
**“The Black Cat lithium soil anomaly was tested thoroughly in the south – whilst we welcome the rare earth discovery there, the lack of lithium remains a mystery. Drilling continues to the north at Black Cat targeting pegmatites and rare earths with first results from Blue Jay, and further results from Black Cat and Crystal Palace expected over the coming weeks”.**

Kairos Minerals Ltd (**ASX: KAI**) is pleased to report drilling and assay results from its 100% owned Roe Hills project 110km east of Kalgoorlie.

Kairos has completed 77 of a planned 83 RC drillholes to test high priority lithium, rare earth element and gold targets at the Black Cat, Crystal Palace and Blue Jay prospects (**Figure 1**).

To date 10,100m of drilling has been completed at Black Cat and Crystal Palace with an additional planned 1,104m of drilling remaining to be completed on the northern side of the Black Cat Prospect (**Figure 1**). Total drilling is expected to be **11,204m from 83 holes** and completed before 31 October 2023. Kairos originally planned 7,000m of RC at all prospects but extended the programme because of highly encouraging geological observations during an early part of the programme.

The drilling is reconnaissance in nature and forms part of a broad exploration program testing targets generated from soil geochemistry, structural interpretations and mapping.



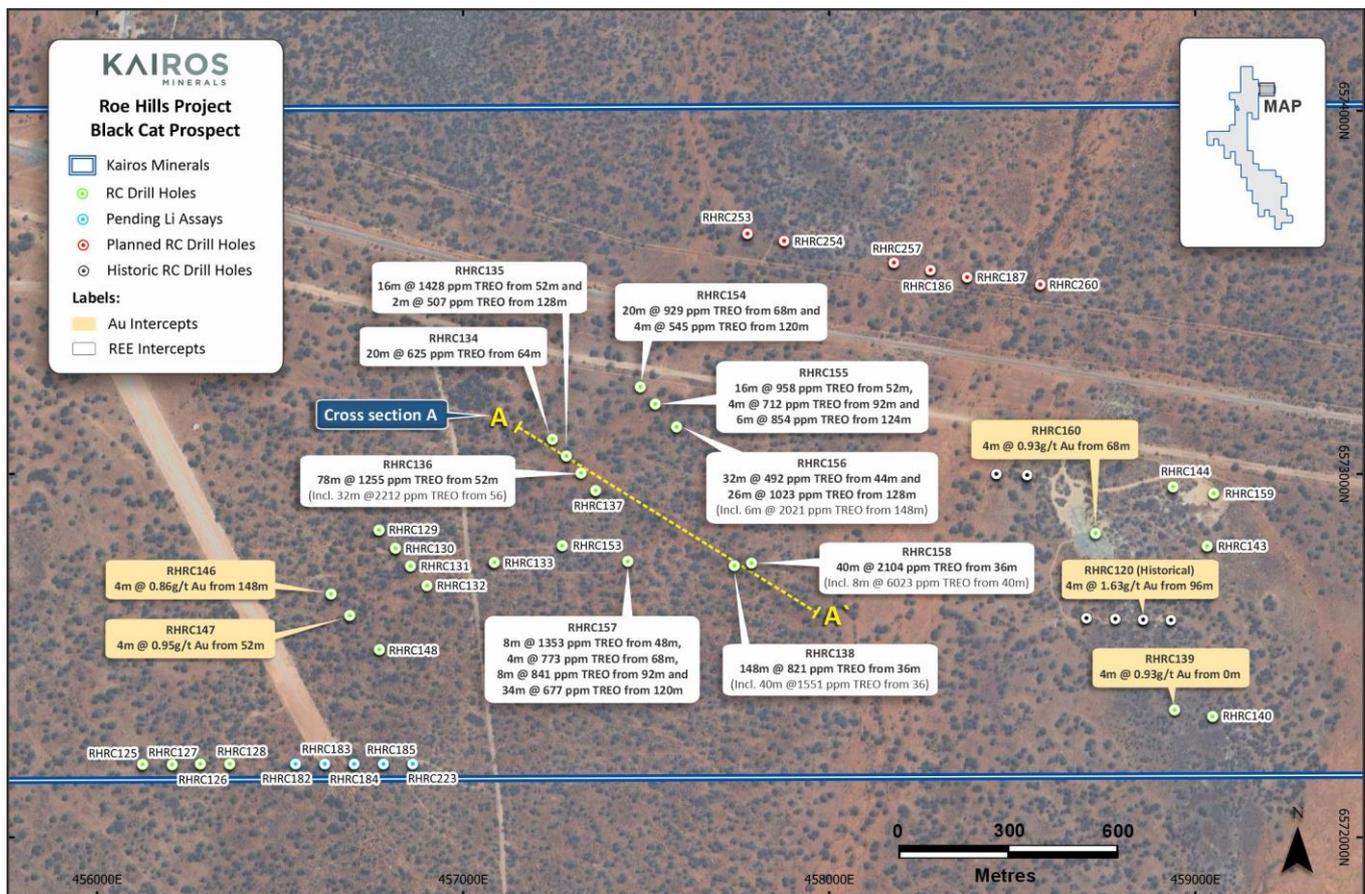
**Figure 1:** Roe Hills North showing RC drill collars drilled and remaining on a background image of lithium soil values (Blue Jay area shows the extent of the REE soil anomaly).

## Black Cat

Drilling at Black Cat has identified significant intercepts of rare earth elements (REE) hosted in clays and weathered rock immediately overlying previously unknown, blind syenite and monzonite intrusions. Drilling into fresh rock shows highly elevated REE values within the syenite and monzonite intrusions with zones of significant REE enrichment up to 40m thick in the saprolite clays overlying the intrusive bodies. High-grade results from the enriched clay and regolith hosted zones include **8m @ 6028ppm TREO** from 40m (RHRC158), **32m @ 2212ppm TREO** from 56m (RHRC136) and **40m @ 1551ppm TREO** from 36m (RHRC138), all

part of much wider intercepts that include the enriched but lower grade fresh rock material below (**Figures 2 & 3**). Due to these exciting REE results an additional 5 drillholes were added to the program at Black Cat to test for both REE and lithium mineralisation. Available REE results are reported in **Table 2**. The majority of REE results for Black Cat are pending (**Table 4**). Results of Rare Earth Oxides (REO) >250ppm REOs are shown for all drilling in **Table 5**.

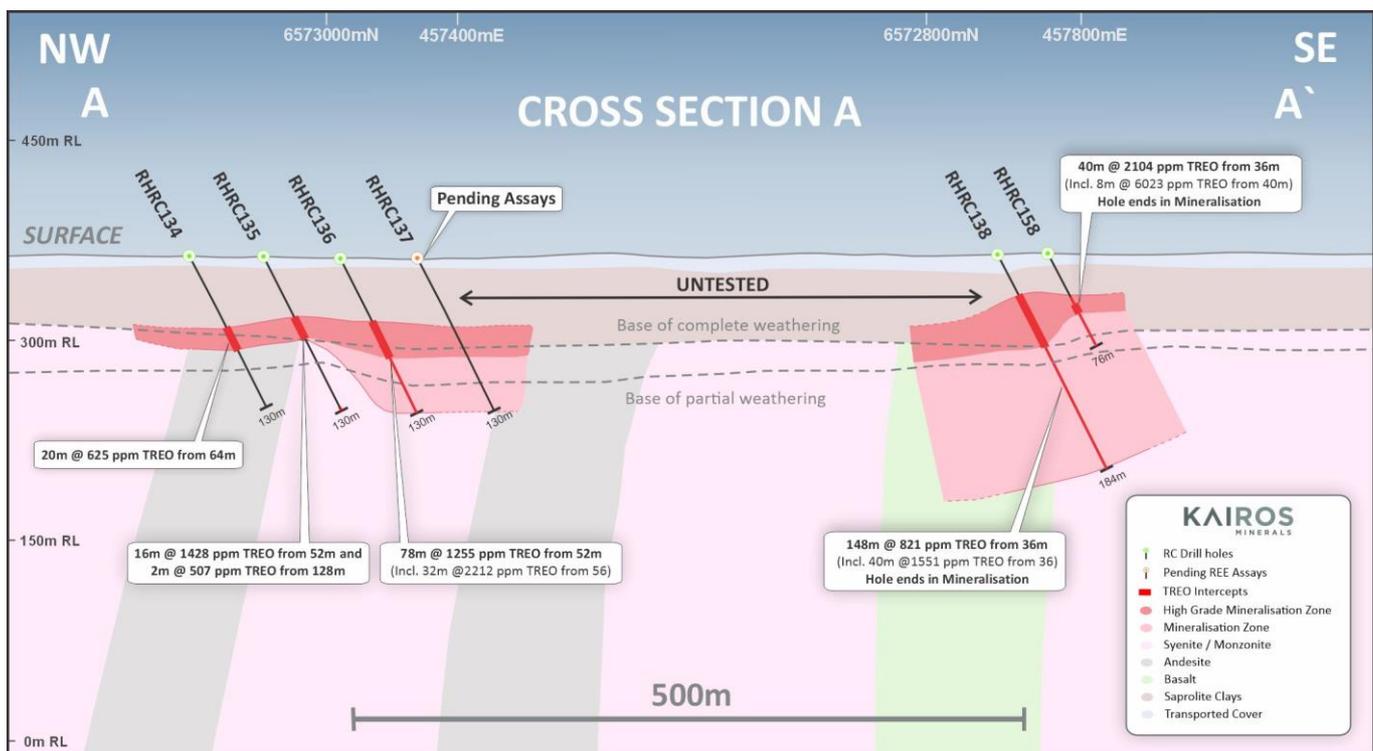
It must be noted that the REE mineralisation at Black Cat is considered open in all directions and is considered a very large target with excellent road and rail infrastructure to the project from Kalgoorlie (**Figure 5**). Ground geophysics (gravity) will likely be used in future to assist in targeting buried intrusives.



**Figure 2:** Black Cat drill results, drill hole and assay status. See **Figure 3** for cross-section.

All drillholes completed at Black Cat had samples submitted for lithium-suite elements and gold, however only 9 holes (from 28) were initially selected for REE analysis, all of which have returned significant REE results. The distribution of REE mineralisation appears significantly more widespread and higher-grade than anticipated, with many of the holes that were not originally analysed for the full REE suite returning highly elevated combined values of cerium, lanthanum, yttrium and scandium indicating the high potential for further significant REE mineralisation. This has prompted Kairos to request further REE analysis from the samples submitted from the remaining drillholes. REE results for these samples are pending.

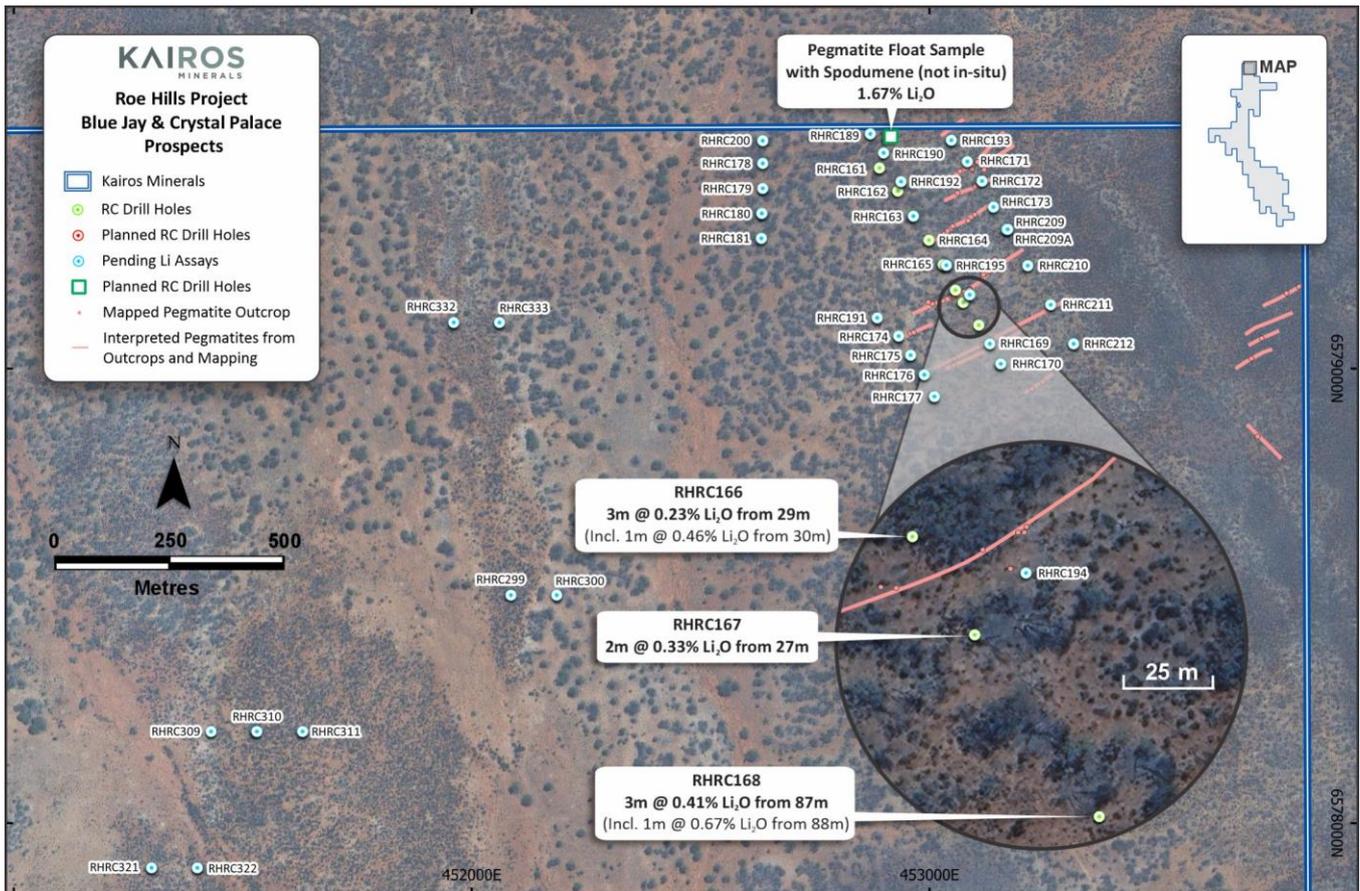
Additionally (and importantly), all rare earth element results are generated from a sample dissolution method called '4-acid digest' at Intertek Laboratory in Maddington, Perth. 4-acid digest is considered a **partial digest** of the sample, meaning that there is likely to be elements (especially rare earths) that are not totally dissolved into solution prior to analysis. Therefore the analytical result is likely to underestimate the total REE present. Kairos has chosen this method of sample preparation for a total elemental suite because it is significantly cheaper than a **total digest** method like fusion. Kairos will request that anomalous results obtained using the 4-acid method will be resubmitted for a total digest method to give a higher quality and more accurate total result. **The reality is that the results quoted in this release are likely to increase when a total digest method is used.**



**Figure 3:** Cross-section with available rare earth results. See **Figure 2** for section location.

Drilling at Black Cat was originally planned to test a 2.8km lithium-in-soils anomaly (**Figure 1**) for the presence of lithium-bearing pegmatites, however, no pegmatites have been observed in the drilling at Black Cat to date. It is assumed that the lithium anomaly is related to the syenite and monzonite intrusions that have been identified in the drilling and appear to be related to the nearby Cardunia Syenogranite although on-going investigation into the surface lithium anomalism continues.

Several drill holes have yet to be drilled into the northern part of the lithium soil anomaly and any pegmatite observations will be reported in future releases along with laboratory results.



**Figure 4.** Crystal Palace drill results, drill hole and assay status.

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	LREO (ppm)	HREO (ppm)	Mag REO (ppm)	Nd + Pr REO (ppm)	Description
RHRC134	64	84	20	625	517	102	247	189	Weathered monzonite
<b>RHRC135</b>	<b>52</b>	<b>68</b>	<b>16</b>	<b>1428</b>	<b>1266</b>	<b>155</b>	<b>450</b>	<b>359</b>	Clays over monzonite
RHRC135	128	130	2	507	467	38	149	122	Fresh monzonite
<b>RHRC136</b>	<b>52</b>	<b>130</b>	<b>78</b>	<b>1255</b>	<b>1125</b>	<b>122</b>	<b>436</b>	<b>355</b>	Clays into monzonite
<b>incl</b>	<b>56</b>	<b>88</b>	<b>32</b>	<b>2212</b>	<b>1970</b>	<b>230</b>	<b>830</b>	<b>676</b>	Clays into weathered monzonite
<b>RHRC138</b>	<b>36</b>	<b>184</b>	<b>148</b>	<b>821</b>	<b>750</b>	<b>56</b>	<b>231</b>	<b>194</b>	Clays into monzonite
<b>incl</b>	<b>36</b>	<b>76</b>	<b>40</b>	<b>1551</b>	<b>1413</b>	<b>104</b>	<b>440</b>	<b>372</b>	Clays over monzonite
<b>RHRC154</b>	<b>68</b>	<b>88</b>	<b>20</b>	<b>929</b>	<b>844</b>	<b>82</b>	<b>278</b>	<b>223</b>	Weathered syenite
RHRC154	120	124	4	545	649	79	229	179	Fresh monzonite
<b>RHRC155</b>	<b>52</b>	<b>68</b>	<b>16</b>	<b>958</b>	<b>845</b>	<b>110</b>	<b>308</b>	<b>239</b>	Weathered syenite
RHRC155	92	96	4	712	672	39	210	178	Fresh syenite
RHRC155	124	130	6	854	774	77	254	203	Fresh syenite
RHRC156	44	76	32	492	439	49	146	116	Clays into syenite
<b>RHRC156</b>	<b>128</b>	<b>154</b>	<b>26</b>	<b>1023</b>	<b>904</b>	<b>104</b>	<b>299</b>	<b>235</b>	Fresh syenite and mafic
<b>incl</b>	<b>148</b>	<b>154</b>	<b>6</b>	<b>2021</b>	<b>1828</b>	<b>189</b>	<b>612</b>	<b>483</b>	Fresh syenite
<b>RHRC157</b>	<b>48</b>	<b>56</b>	<b>8</b>	<b>1353</b>	<b>1207</b>	<b>118</b>	<b>316</b>	<b>260</b>	Clays
RHRC157	68	72	4	773	714	38	190	166	Weathered intermediate
RHRC157	92	100	8	841	766	58	227	189	Intermediate and syenite
RHRC157	120	154	34	677	611	44	185	156	Intermediate and syenite
<b>RHRC158</b>	<b>36</b>	<b>76</b>	<b>40</b>	<b>2104</b>	<b>1851</b>	<b>227</b>	<b>779</b>	<b>649</b>	Clays into syenite
<b>incl</b>	<b>40</b>	<b>48</b>	<b>8</b>	<b>6023</b>	<b>5314</b>	<b>659</b>	<b>2453</b>	<b>2052</b>	Clays

**Table 2.** Significant drill intercepts for REE's at Black Cat >500ppm TREO

Notes:

TREO = 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> + Sc<sub>2</sub>O<sub>3</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>

LREO = CeO<sub>2</sub> + Eu<sub>2</sub>O<sub>3</sub> + La<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>

HREO = Dy<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Ho<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> + Yb<sub>2</sub>O<sub>3</sub>

Mag REO = Dy<sub>2</sub>O<sub>3</sub> + Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> + Tb<sub>4</sub>O<sub>7</sub>

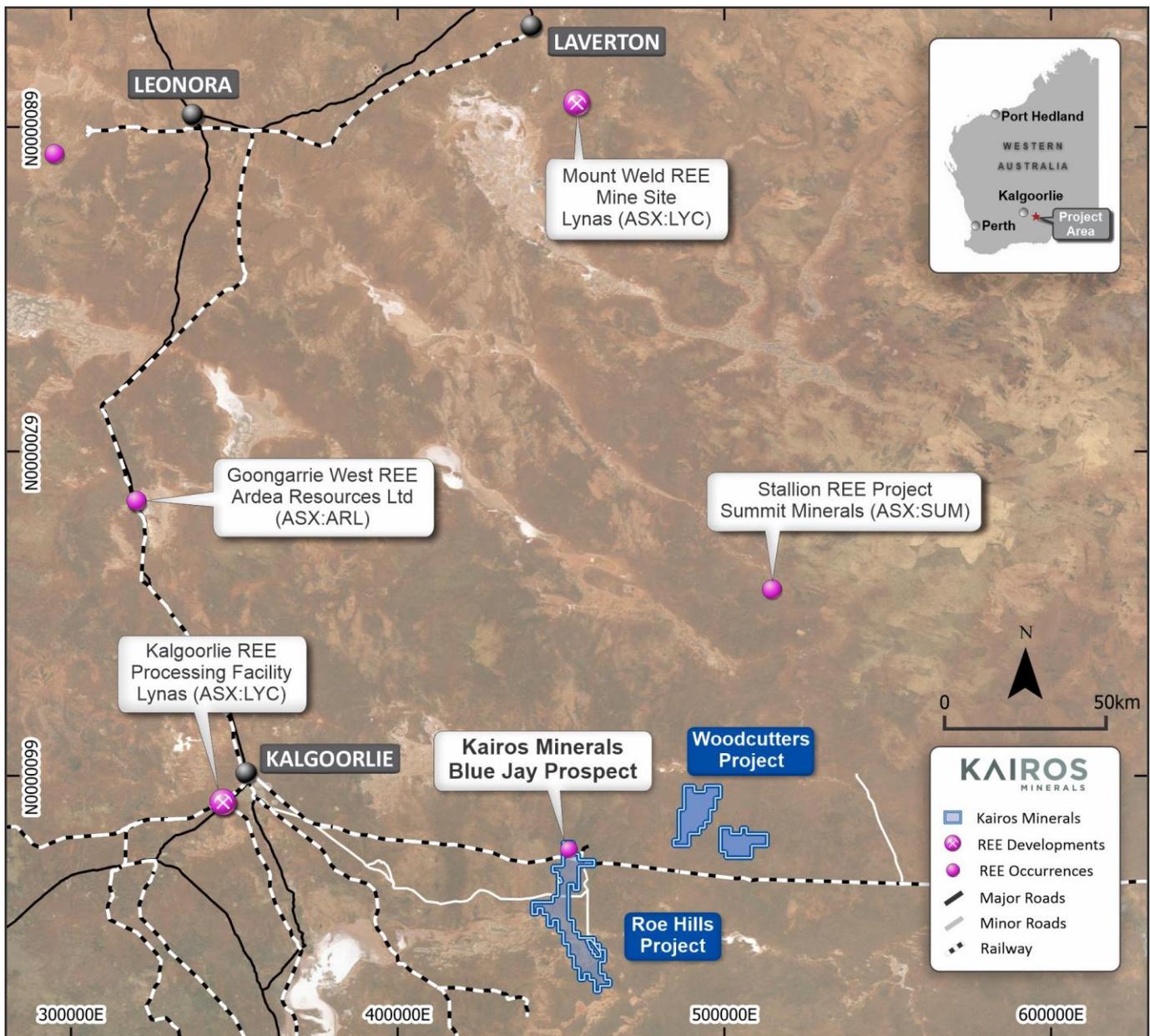
## Black Cat Gold

Drilling for gold mineralisation at Black Cat returned intercepts of 4m @ 0.98g/t Au from 0m (RHRC139) and 4m @ 0.93g/t Au from 68m (RHRC160). These results are along-strike of gold mineralisation encountered in previous drilling in 2021 (4m @ 1.63g/t Au from 96m)<sup>1</sup> (**Figure 1**). Additional holes to the north of Black Cat targeting gold and lithium are due to finish in coming days concluding the Roe Hills reconnaissance drilling and are planned to intersect this gold trend approximately 800m to the north west.

<sup>1</sup> See KAI ASX announcement dated 13 July 2021 entitled 'Wide shallow gold zones at Roe Hills highlight potential to delineate oxide resources in active mining region'

Hole ID	From	To	Interval (m)	Au (g/t)	Description
RHRC139	0	4	4	0.98	Weathered basalt with 5% quartz veining
RHRC146	148	152	4	0.86	Altered andesite
RHRC147	52	56	4	0.95	Pale saprolite clay
RHRC160	68	72	4	0.93	Contact between shale and basalt. Minor pyrrhotite

**Table 3.** Significant assay results received for gold at Black Cat >0.3g/t Au



**Figure 5.** Location of the Roe Hills project in relation to infrastructure and other known REE deposits, occurrences and process facilities.

## Crystal Palace

Drilling at Crystal Palace was designed to test lithium soil anomalies and pegmatites mapped from sub-crop at surface. Drilling intersected several sub-vertical lithium-bearing pegmatites, with lepidolite micas confirming Lithium-Tantalum-Caesium (LCT) fertility. Assay results include **3m @ 0.41% Li<sub>2</sub>O** from 87m including **1m @ 0.67% Li<sub>2</sub>O** from 88m (RHRC168) and **3m @ 0.23% Li<sub>2</sub>O** from 29m including **1m @ 0.46% Li<sub>2</sub>O** from 30m (RHRC166) (**Figure 2**). Mineralogical XRD analysis was undertaken on selected samples which confirmed the presence of lepidolite and gives confidence that the project area is within a fertile zone for LCT pegmatites. An additional 5 drillholes were planned along the interpreted strike of the pegmatites intersected in order to test for changes in thickness and mineralogy. Results of the additional holes are pending.

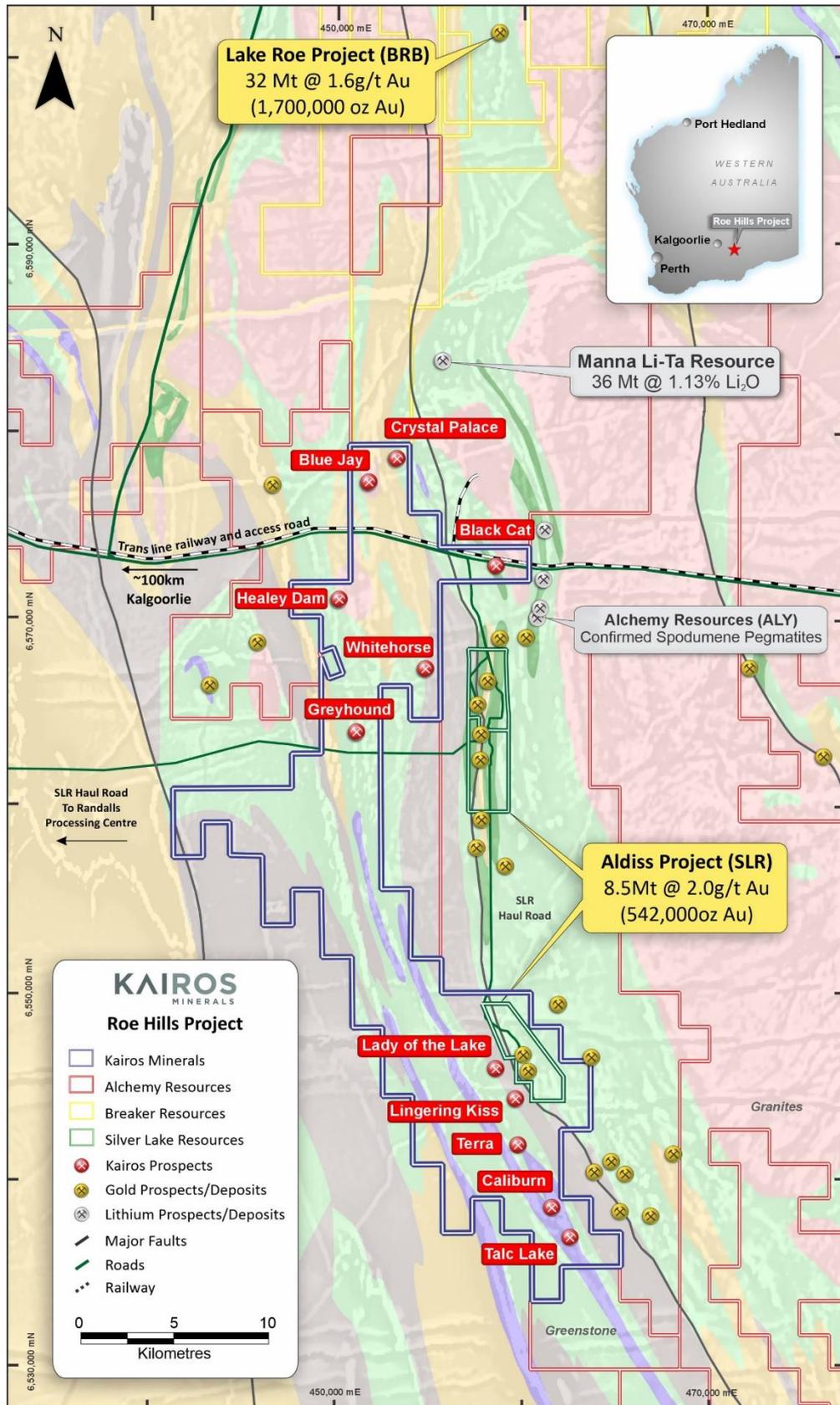
During the drilling program a sample of pegmatite float material was discovered close to one of the planned drillhole traverses. The sample contained spodumene and was submitted for analysis which returned a value of 1.67% Li<sub>2</sub>O. While this sample was not in its original location it still gives Kairos confidence that spodumene-bearing pegmatites occur in the Crystal Palace area which is 5km along-strike to the southwest of the Manna lithium deposit (ASX: GL1).

Hole ID	From (m)	To (m)	Interval (m)	Li <sub>2</sub> O (%)	Description
RHRC166	29	32	3	0.23	Lepidolite-bearing pegmatite in basalt
inc	30	31	1	0.46	Up to 40% lepidolite in pegmatite
RHRC167	37	39	2	0.33	Pegmatite in basalt
RHRC168	87	90	3	0.41	Pegmatite in basalt
inc	88	89	1	0.67	Pegmatite in basalt

**Table 1.** Significant drill intercepts for lithium at Crystal Palace >0.1% Li<sub>2</sub>O

## Next Steps

- Complete the final 6 holes at Black Cat North (REE + Li + Au) to conclude the Roe Hills reconnaissance RC drilling programme
- Analyse all drill results in order to vector towards potential lithium mineralisation at Crystal Palace, REE mineralization at Black Cat and Blue Jay
- Map out the distribution of syenite and monzontite intrusions for REE mineralisation targeting
- Consider gravity surveying at Black Cat and Blue Jay areas to map subsurface intrusions and fault zones
- Continue field mapping and sampling exercises on the southern part of the Roe Hills tenement package



**Figure 6:** Kairo's tenements in relation to neighbouring companies over the Roe Hills area overlain on a magnetic image highlighting interpreted granites. Lithium mines and advanced projects with resources are shown with quoted mineral resources.

Hole ID	Hole Type	Prospect	Easting	Northing	RL	Azimuth (degrees)	Dip (degrees)	Hole Depth (m)	Lithium Assays	Gold Assays	REE Assays
RHRC125	RC	Black Cat	456122	6572199	345	90	-60	154	NSI	NSI	Pending
RHRC126	RC	Black Cat	456203	6572198	346	90	-60	154	NSI	NSI	Pending
RHRC127	RC	Black Cat	456280	6572200	346	90	-60	154	NSI	NSI	Pending
RHRC128	RC	Black Cat	456360	6572200	347	90	-60	154	NSI	NSI	Pending
RHRC129	RC	Black Cat	456768	6572844	356	140	-60	142	NSI	NSI	Pending
RHRC130	RC	Black Cat	456813	6572794	357	140	-60	142	NSI	NSI	Pending
RHRC131	RC	Black Cat	456854	6572745	356	140	-60	142	NSI	NSI	Pending
RHRC132	RC	Black Cat	456899	6572691	355	140	-60	154	NSI	NSI	Pending
RHRC133	RC	Black Cat	457083	6572755	357	320	-60	184	NSI	NSI	Pending
RHRC134	RC	Black Cat	457242	6573094	359	140	-60	130	NSI	NSI	Reported
RHRC135	RC	Black Cat	457280	6573048	359	140	-60	130	NSI	NSI	Reported
RHRC136	RC	Black Cat	457320	6573001	357	140	-60	130	NSI	NSI	Reported
RHRC137	RC	Black Cat	457360	6572953	357	140	-60	130	NSI	NSI	Pending
RHRC138	RC	Black Cat	457739	6572746	360	90	-60	184	NSI	NSI	Reported
RHRC139	RC	Black Cat Gold	458942	6572349	372	90	-60	214	NSI	Reported	Not analysed
RHRC140	RC	Black Cat Gold	459046	6572331	369	90	-60	166	NSI	NSI	Not analysed
RHRC143	RC	Black Cat Gold	459031	6572800	367	90	-60	166	NSI	NSI	Not analysed
RHRC144	RC	Black Cat Gold	458938	6572963	366	90	-60	166	NSI	NSI	Not analysed
RHRC146	RC	Black Cat	456637	6572668	355	140	-60	154	NSI	Reported	Pending
RHRC147	RC	Black Cat	456688	6572609	355	140	-60	154	NSI	Reported	Pending
RHRC148	RC	Black Cat	456769	6572515	354	140	-60	154	NSI	NSI	Pending
RHRC153	RC	Black Cat	457269	6572801	360	320	-60	214	NSI	NSI	Pending
RHRC154	RC	Black Cat	457482	6573238	360	140	-60	124	NSI	NSI	Reported
RHRC155	RC	Black Cat	457523	6573191	360	140	-60	130	NSI	NSI	Reported
RHRC156	RC	Black Cat	457581	6573128	361	320	-60	154	NSI	NSI	Reported
RHRC157	RC	Black Cat	457448	6572758	358	140	-60	154	NSI	NSI	Reported
RHRC158	RC	Black Cat	457786	6572753	359	90	-60	76	NSI	NSI	Reported

Hole ID	Hole Type	Prospect	Easting	Northing	RL	Azimuth (degrees)	Dip (degrees)	Hole Depth (m)	Lithium Assays	Gold Assays	REE Assays
RHRC159	RC	Black Cat Gold	459049	6572945	363	90	-60	214	NSI	NSI	Not analysed
RHRC160	RC	Black Cat Gold	458726	6572835	358	90	-60	214	NSI	Reported	Not analysed
RHRC161	RC	Crystal Palace	452890	6579440	405	330	-60	130	NSI	NSI	Not analysed
RHRC162	RC	Crystal Palace	452930	6579389	403	330	-60	106	NSI	NSI	Not analysed
RHRC163	RC	Crystal Palace	452964	6579334	404	150	-55	130	Pending	Pending	Not analysed
RHRC164	RC	Crystal Palace	452998	6579281	404	150	-60	136	NSI	NSI	Not analysed
RHRC165	RC	Crystal Palace	453029	6579227	418	150	-60	130	NSI	NSI	Not analysed
RHRC166	RC	Crystal Palace	453056	6579171	418	150	-60	124	Reported	NSI	Not analysed
RHRC167	RC	Crystal Palace	453073	6579144	416	330	-60	106	Reported	NSI	Not analysed
RHRC168	RC	Crystal Palace	453107	6579094	415	150	-60	106	Reported	NSI	Not analysed
RHRC169	RC	Crystal Palace	453131	6579053	405	150	-60	112	Pending	Pending	Not analysed
RHRC170	RC	Crystal Palace	453155	6579009	405	150	-60	136	Pending	Pending	Not analysed
RHRC171	RC	Crystal Palace	453082	6579454	407	150	-55	112	Pending	Pending	Not analysed
RHRC172	RC	Crystal Palace	453114	6579411	412	150	-55	130	Pending	Pending	Not analysed
RHRC173	RC	Crystal Palace	453139	6579354	414	150	-55	130	Pending	Pending	Not analysed
RHRC174	RC	Crystal Palace	452932	6579070	403	150	-55	106	Pending	Pending	Not analysed
RHRC175	RC	Crystal Palace	452958	6579028	421	150	-55	106	Pending	Pending	Not analysed
RHRC176	RC	Crystal Palace	452988	6578985	410	150	-55	106	Pending	Pending	Not analysed
RHRC177	RC	Crystal Palace	453010	6578937	403	150	-55	142	Pending	Pending	Not analysed
RHRC178	RC	Crystal Palace	452635	6579450	401	180	-55	124	Pending	Pending	Not analysed
RHRC179	RC	Crystal Palace	452635	6579395	400	180	-55	124	Pending	Pending	Not analysed
RHRC180	RC	Crystal Palace	452633	6579340	399	180	-55	124	Pending	Pending	Not analysed
RHRC181	RC	Crystal Palace	452632	6579285	399	180	-55	124	Pending	Pending	Not analysed
RHRC189	RC	Crystal Palace	452870	6579515	404	150	-60	130	Pending	Pending	Not analysed
RHRC190	RC	Crystal Palace	452899	6579473	403	150	-60	148	Pending	Pending	Not analysed
RHRC192	RC	Crystal Palace	452937	6579410	404	150	-60	166	Pending	Pending	Not analysed
RHRC193	RC	Crystal Palace	453047	6579501	405	150	-55	130	Pending	Pending	Not analysed

Hole ID	Hole Type	Prospect	Easting	Northing	RL	Azimuth (degrees)	Dip (degrees)	Hole Depth (m)	Lithium Assays	Gold Assays	REE Assays
RHRC194	RC	Crystal Palace	453087	6579161	406	150	-60	154	Pending	Pending	Not analysed
RHRC195	RC	Crystal Palace	453036	6579226	418	150	-55	160	Pending	Pending	Not analysed
RHRC200	RC	Crystal Palace	452635	6579500	403	180	-55	124	Pending	Pending	Not analysed
RHRC209	RC	Crystal Palace	453168	6579305	410	150	-60	22	Pending	Pending	Not analysed
RHRC209A	RC	Crystal Palace	453170	6579305	410	150	-55	172	Pending	Pending	Not analysed
RHRC210	RC	Crystal Palace	453214	6579225	409	150	-55	178	Pending	Pending	Not analysed
RHRC211	RC	Crystal Palace	453264	6579139	406	150	-55	166	Pending	Pending	Not analysed
RHRC212	RC	Crystal Palace	453314	6579053	407	150	-55	184	Pending	Pending	Not analysed

**Table 4:** Drillhole information. NSI = No Significant Intercepts

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC134	56	60	4	<b>268</b>	103.6	2.9	1.5	2.1	5.1	0.5	45.5	0.2	62.6	16.2	1.2	9.8	0.6	0.2	14	1.5
RHRC134	60	64	4	<b>263</b>	105.1	3.5	1.8	2.2	5.4	0.6	40.8	0.3	60.4	15.4	1.4	10.1	0.7	0.3	13.6	1.8
RHRC134	64	68	4	<b>803</b>	203.2	12.2	5.8	8.3	23.2	2.1	164	0.6	217.1	53.7	1.4	35.3	2.6	0.8	67.8	4.6
RHRC134	72	76	4	<b>703</b>	252.7	9.8	4.8	6	17.6	1.7	126	0.6	155.1	38.2	1.2	25.5	2	0.7	57.1	3.8
RHRC134	76	80	4	<b>521</b>	149.9	11.4	5.4	6.6	19.5	2	74.7	0.5	128.2	30	11.4	25.3	2.3	0.6	48.8	3.8
RHRC134	80	84	4	<b>886</b>	263.8	12.7	6.2	7.4	22.2	2.2	193.1	0.7	196	51.6	14.1	30.8	2.6	0.8	76.8	4.7
RHRC134	84	88	4	<b>292</b>	111.8	3.3	1.6	1.9	5.3	0.5	58.6	0.2	49.3	13.8	18.3	7.9	0.7	0.2	17.5	1.3
RHRC134	88	92	4	<b>294</b>	126.3	2.8	1.2	1.9	5.1	0.5	55.1	0.1	53.5	14.9	9.8	8	0.6	0.1	13.3	0.9
RHRC134	92	96	4	<b>336</b>	146.3	3.1	1.3	2.3	6.4	0.5	60.5	0.1	65.6	18.4	5.1	10.1	0.7	0.2	14.6	1.1
RHRC134	96	100	4	<b>275</b>	121.9	2.7	1.1	2.1	5.5	0.4	45.8	0.1	55.8	15.5	2.3	9	0.6	0.1	11.1	0.8
RHRC134	100	104	4	<b>256</b>	112.3	2.4	1	1.8	4.8	0.4	50.3	0.1	48.4	13.4	1.7	7.9	0.5	0.1	10.7	0.8
RHRC134	104	108	4	<b>320</b>	135	3.2	1.3	2.3	5.7	0.5	65.9	0.1	56.6	15.4	9.5	8.8	0.6	0.2	14.2	1
RHRC134	124	128	4	<b>428</b>	189.4	3.5	1.3	2.7	7.3	0.5	90.6	0.1	77.5	22.4	2.3	12	0.7	0.2	16.5	0.9
RHRC134	128	130	2	<b>474</b>	210.3	3.7	1.4	3	7.9	0.5	98.8	0.2	88.4	24.8	2.3	13	0.8	0.2	17.6	1.1

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC135	36	40	4	261	171.2	4.6	3.2	0.7	2.7	1	4.9	0.4	6.6	1.6	32.1	2.3	0.6	0.5	25.8	3.1
RHRC135	48	52	4	476	346.4	5.4	3.6	1.5	5	1.1	25.5	0.4	26.5	7.2	5.4	5.4	0.9	0.5	38	2.9
RHRC135	52	56	4	2505	1168	19	7.9	14.4	36.6	3	478.9	0.7	459.4	135.6	9.2	67.6	4.1	0.9	94.5	5.6
RHRC135	56	60	4	1297	585.8	12	5.5	7.7	21.2	2	262.7	0.6	221.5	64.3	6.1	34.7	2.5	0.7	65.5	3.9
RHRC135	60	64	4	766	206.8	13	6.1	7.4	23.5	2.3	156.4	0.6	190.7	48.3	2.5	30.7	2.6	0.7	70.4	4
RHRC135	64	68	4	1145	327	16.4	7.8	9	29.2	2.9	274	0.8	248.9	65.6	12.1	37.7	3.3	1	103.4	5.8
RHRC135	72	76	4	379	160	4	1.9	2.4	7	0.7	70.7	0.2	69.9	19.5	6.4	10.3	0.8	0.2	23.8	1.4
RHRC135	76	80	4	363	154.7	3.5	1.7	2.2	6.3	0.6	70.1	0.2	63.1	18	11.7	9.6	0.7	0.2	18.7	1.3
RHRC135	80	84	4	347	154.4	2.9	1.3	2.1	5.7	0.5	69.6	0.2	63.5	18.7	2.1	9.5	0.6	0.2	15.2	1
RHRC135	84	88	4	369	160.6	3.2	1.5	2.2	5.9	0.6	72.5	0.2	65.8	19.1	9	9.7	0.7	0.2	16.3	1.1
RHRC135	88	92	4	265	109.6	2.5	1.2	1.4	3.8	0.5	53.1	0.1	43.1	12.6	16.3	5.9	0.4	0.2	12.9	1.1
RHRC135	108	112	4	311	139.8	2.5	1.1	1.8	4.9	0.4	62.8	0.1	53.5	15.5	5.4	8	0.6	0.1	13	0.9
RHRC135	112	116	4	291	134.3	1.8	0.8	1.4	3.6	0.3	62.2	0.1	49.7	14.9	7.4	6.5	0.4	0.1	7.2	0.5
RHRC135	116	120	4	267	113.9	2	1.1	1.4	3.6	0.4	59.7	0.1	40.7	12.4	14.6	5.8	0.4	0.1	10.5	0.8
RHRC135	120	124	4	423	181.4	3.4	1.5	2.3	6.3	0.6	93.3	0.2	70.4	20.5	12.7	10.4	0.7	0.2	17.6	1.3
RHRC135	124	128	4	429	185.3	3.5	1.6	2.4	6.6	0.6	91.4	0.2	73.9	21.4	10.3	10.6	0.7	0.2	18.7	1.2
RHRC135	128	130	2	507	228.8	3.8	1.4	3	7.9	0.6	102.2	0.2	94.7	27.3	2.3	13.7	0.8	0.2	18.9	1.2
RHRC136	40	44	4	281	154.3	4.6	3.6	1.1	3.4	1	23	0.6	24.6	6.4	23	4.5	0.6	0.6	26.3	3.7
RHRC136	52	56	4	546	376.5	5	2.9	1.7	5.2	1	45.6	0.4	35.2	9.7	27	6.7	0.8	0.4	24.6	3.2
RHRC136	56	60	4	4194	1217	48.3	19.8	34.1	91	7.8	985.4	1.8	1053	303	31	155	10.3	2.3	219.7	14.1
RHRC136	60	64	4	1537	900.3	9.8	4.5	6.9	16.2	1.6	215.5	0.6	225.8	68.6	8.6	32.7	2	0.6	39	4.1
RHRC136	64	68	4	3560	812.6	37.1	13.7	32.1	76.7	5.6	881.2	1.3	1051	304.8	17	151.9	8.4	1.7	154.7	9.8
RHRC136	68	72	4	2934	567.9	39.9	17.3	26.5	76.3	6.8	826.6	1.6	789.1	211	19.5	115.7	8.6	2	213.7	11.3
RHRC136	72	76	4	1719	412.4	22.7	10.5	13.7	42	4.1	475.4	0.9	404.6	109.4	12	56.7	4.8	1.2	142.2	6.4
RHRC136	76	80	4	1137	503.3	8.3	3.4	6.9	17.9	1.3	246.5	0.4	204.6	59.2	2.1	29.8	1.8	0.4	49	2.5
RHRC136	80	84	4	1460	617.5	9.6	4.2	8.3	21.3	1.6	342.2	0.5	271.3	80.2	1.8	37	2.2	0.5	58.6	3.2
RHRC136	84	88	4	1156	502	10.3	4.6	7.5	20.5	1.7	234.3	0.5	214.7	59.4	1.8	32.7	2.1	0.6	59.5	3.8

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC136	92	96	4	522	208.7	4.7	2	3.6	9	0.8	115.7	0.2	102.3	29.2	3.4	15.5	1	0.3	23.8	1.5
RHRC136	96	100	4	493	205	4.4	1.8	3.2	8.7	0.7	104.2	0.2	92	25.4	7.2	14.1	0.9	0.2	23.4	1.4
RHRC136	100	104	4	339	147.2	2.7	1.1	2.4	6.2	0.4	65.2	0.1	68.1	18.7	2	10.6	0.6	0.1	12.5	0.7
RHRC136	104	108	4	453	201.9	3.4	1.4	2.8	7	0.5	102.2	0.2	77.9	22.4	2.8	11.8	0.7	0.2	16.3	1.1
RHRC136	108	112	4	396	171.1	3.3	1.4	2.7	7.1	0.5	85.1	0.1	72	20.2	3.1	11.5	0.7	0.1	16	0.9
RHRC136	112	116	4	822	381	4.4	1.9	3.7	9.7	0.7	185	0.2	140.8	43	6.4	17.7	1	0.2	24.2	1.6
RHRC136	116	120	4	946	381.3	11.9	4.9	8	22.6	1.9	172.9	0.5	189	48.9	1.7	34.7	2.6	0.6	61	3.7
RHRC136	120	124	4	582	255.2	4.9	2.2	3.5	9.5	0.8	116.7	0.3	107.4	30.2	4.4	16.1	1	0.3	27.7	1.7
RHRC136	124	128	4	1062	507.3	4.1	1.8	3.8	8.9	0.7	246.8	0.2	174.8	55.5	15	18.7	0.9	0.2	21.5	1.4
RHRC136	128	130	2	773	364.9	3.6	1.5	3.3	8	0.6	173	0.2	131.4	40.4	9.7	15.2	0.8	0.2	18.7	1.2
RHRC138	36	40	4	1725	869.8	9.9	4.5	6.1	14.8	1.7	394.5	0.6	238.6	82.6	29.9	27.1	1.9	0.7	38.4	4
RHRC138	40	44	4	1267	807.9	6.3	3.5	3.9	9.6	1.2	163.1	0.5	125.4	40.7	52.6	16.4	1.2	0.5	31.3	3.1
RHRC138	44	48	4	847	572.2	4.9	2.1	2.7	6.1	0.8	86.7	0.3	68.8	21.1	51.7	10.7	1	0.3	15.8	2.1
RHRC138	48	52	4	2364	1524	11.1	5.4	6.7	16.1	2	356.2	0.6	230	78.9	54	27.3	2	0.7	45.5	4.4
RHRC138	52	56	4	1821	945.9	8.1	3.9	6.4	14.7	1.5	349.2	0.4	276.9	92.8	42.3	28.7	1.7	0.5	44.9	2.7
RHRC138	56	60	4	1206	458.1	7.1	3.2	6.2	14.7	1.3	304.9	0.3	236.6	75.7	24.4	26.4	1.5	0.4	43.1	2.2
RHRC138	60	64	4	983	303.9	6.4	2.8	5.6	13.6	1.1	273	0.3	217.6	67.5	21.3	24.4	1.4	0.4	41.6	2.1
RHRC138	64	68	4	2387	299.3	19.6	8.3	18.2	45.8	3.3	845.3	0.9	707.4	205.8	20.9	78.7	4.4	1	122.8	5.8
RHRC138	68	72	4	695	256.5	5.1	2.6	3.9	9.6	0.9	164.9	0.4	136.5	42.3	19	16.3	1.1	0.4	33.2	2.3
RHRC138	72	76	4	2211	379.7	21.2	9.1	17.8	45.3	3.6	701.8	1	622.3	175.3	22.7	72.1	4.7	1.2	126.8	6.6
RHRC138	76	80	4	871	364.4	6.1	2.9	4	11.2	1.1	209.5	0.4	137.4	40.8	31.4	16.1	1.2	0.4	41.4	2.3
RHRC138	80	84	4	518	225.6	3	1.4	2.3	5.4	0.5	117.1	0.2	82.9	26.1	26.1	9.4	0.6	0.2	16	1.2
RHRC138	84	88	4	638	292.4	2.9	1.3	2.5	5.8	0.5	145.2	0.2	100	32.2	26.4	11	0.6	0.2	15.9	1.2
RHRC138	88	92	4	612	277	3	1.4	2.4	5.8	0.5	138.1	0.2	97.2	31.1	26.7	10.5	0.6	0.2	16.1	1.2
RHRC138	92	96	4	754	353.6	3.1	1.3	2.8	6.4	0.5	169.6	0.2	123.8	39.4	23	13	0.6	0.2	15.6	1
RHRC138	96	100	4	688	316.7	3.7	1.6	3	7.3	0.6	151.9	0.2	112.5	35.3	19	13.2	0.8	0.2	20.1	1.3
RHRC138	100	104	4	463	201.8	2.8	1.4	2.1	5	0.5	101.6	0.2	74.9	23	23.5	9	0.6	0.2	15.5	1.2

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC138	104	108	4	583	262.3	4.5	1.7	3.8	9.5	0.7	114.5	0.2	109.8	32	2.9	15.7	1	0.2	22.9	1.3
RHRC138	108	112	4	454	209.1	3.2	1.2	2.8	6.8	0.5	89.9	0.1	84.6	24.7	1.4	11.8	0.7	0.2	16.4	0.9
RHRC138	112	116	4	517	240.3	3.5	1.3	3.2	7.9	0.5	99.4	0.2	97.6	28.7	1.5	13.4	0.8	0.2	17.2	1
RHRC138	116	120	4	480	220.6	3.5	1.3	3.1	7.6	0.5	92.9	0.1	90.7	26.2	1.5	12.8	0.8	0.2	17.5	1
RHRC138	120	124	4	496	229.3	3.4	1.3	3	7.2	0.5	99.2	0.1	92.5	27	1.4	12.8	0.8	0.2	16.4	0.9
RHRC138	124	128	4	496	229.1	3.3	1.2	3.1	7.5	0.5	97.3	0.1	94.5	27.2	1.5	13	0.8	0.1	16.2	0.9
RHRC138	128	132	4	520	239.2	3.8	1.3	3.4	8.3	0.6	98.1	0.1	99.6	28.8	2	14.3	0.9	0.2	18.1	1
RHRC138	132	136	4	426	194	3.3	1.2	2.7	6.7	0.5	82.4	0.1	80.4	23.4	1.7	11.4	0.8	0.2	16.5	0.9
RHRC138	136	140	4	440	197.2	3.7	1.4	3	7.5	0.6	84.7	0.2	83.3	24.1	1.4	12.2	0.8	0.2	18.6	1.1
RHRC138	140	144	4	385	172.1	3.1	1.1	2.7	6.6	0.5	70	0.1	77.1	21.8	1.2	11.2	0.7	0.1	15.6	0.9
RHRC138	144	148	4	545	252.8	3.7	1.3	3.3	8.1	0.6	104.6	0.1	104.7	30.2	1.2	14.2	0.8	0.2	17.8	1
RHRC138	148	152	4	581	268.8	4	1.6	3.6	8.8	0.6	114.2	0.2	108.3	31.4	1.8	15	1	0.2	20.3	1.2
RHRC138	152	156	4	612	269.3	4.5	1.5	4.2	10.7	0.7	122.2	0.1	119.5	33.8	3.5	17.7	1.1	0.2	22	1.1
RHRC138	156	160	4	738	347.5	4.2	1.5	3.8	9.2	0.6	160.1	0.2	128.6	39.5	2.8	16.4	0.9	0.2	21.2	1.2
RHRC138	160	164	4	584	271.3	3.7	1.4	3.2	7.7	0.6	132.3	0.2	97.9	29.7	2.1	13.1	0.8	0.2	18.3	1.1
RHRC138	164	168	4	431	194.7	3.4	1.2	2.8	6.8	0.5	89.3	0.1	78.2	22.6	1.7	11	0.8	0.2	16.2	1
RHRC138	168	172	4	545	249.3	3.9	1.5	3.3	8.4	0.6	111.3	0.2	98.9	29	1.5	13.9	0.9	0.2	20.9	1.2
RHRC138	172	176	4	435	192.3	3.7	1.4	2.9	7.5	0.6	87.8	0.2	80.4	23	1.8	12.2	0.8	0.2	18.6	1.1
RHRC138	176	180	4	429	192.5	3.3	1.2	2.8	6.7	0.5	92.3	0.1	76.7	22.3	1.8	11	0.8	0.1	16	0.9
RHRC138	180	184	4	639	275.6	6.1	2.4	4.7	12	1	126.2	0.3	120.5	33.5	1.5	19	1.4	0.3	32.4	1.9
RHRC154	44	48	4	279	89.7	5.1	2.9	1.7	6	1	61.5	0.4	38.2	11.3	23.5	6.6	0.9	0.4	27	2.5
RHRC154	48	52	4	262	93.8	2.5	1.3	1.6	4.5	0.5	62.5	0.2	47.4	14	9.8	6.9	0.5	0.2	15	1.1
RHRC154	68	72	4	724	322.9	5.5	2.2	4.2	12.2	0.8	155.4	0.2	129.5	37.2	2.5	18.7	1.3	0.3	29.2	1.6
RHRC154	72	76	4	1290	603.9	7	2.8	5.8	16.3	1.1	290.6	0.3	221.1	66.3	6.9	27.3	1.6	0.3	36.1	2
RHRC154	76	80	4	967	413.4	8.9	3.4	6.6	19.2	1.3	193.1	0.3	188	51	3.2	28.9	2	0.4	44.7	2.3
RHRC154	80	84	4	938	374.1	11.5	4.7	7.9	22.7	1.8	174.3	0.5	193.9	49	1.4	33.5	2.5	0.6	55.9	3.4
RHRC154	84	88	4	730	308.6	8.1	3.4	5.4	15.6	1.3	138.2	0.3	140.6	38.2	1.7	23.1	1.7	0.4	40.6	2.4

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC154	88	92	4	354	158.7	2.9	1.1	2.3	6.2	0.4	70.1	0.1	66.3	18.9	1.8	9.5	0.7	0.1	14	0.9
RHRC154	92	96	4	500	225.4	3.3	1.3	2.7	7.5	0.5	110.6	0.1	89	26	1.7	12.2	0.8	0.2	17.5	1
RHRC154	96	100	4	444	200	3.3	1.3	2.5	7.1	0.5	95.3	0.2	78.7	23.1	1.5	11.3	0.7	0.2	17	1
RHRC154	100	104	4	377	172.7	2.4	1	2	5.5	0.4	78.9	0.1	69.1	20.3	1.7	8.9	0.6	0.1	12.4	0.8
RHRC154	104	108	4	458	205.1	3.3	1.3	2.7	7.2	0.5	97.5	0.1	82.8	24.2	1.8	11.6	0.8	0.2	17.6	1
RHRC154	108	112	4	490	219.5	3.6	1.5	2.9	7.7	0.6	102.7	0.2	89.8	26.2	2.1	12.5	0.8	0.2	18.5	1.1
RHRC154	112	116	4	446	200	3.2	1.4	2.6	6.8	0.5	95.2	0.2	79.8	23.4	1.7	10.9	0.7	0.2	18.3	1.2
RHRC154	116	120	4	467	204.9	3.8	1.7	2.8	7.9	0.6	97.1	0.2	84.8	24.4	1.5	12	0.8	0.2	22.4	1.4
RHRC154	120	124	4	545	248.1	3.5	1.5	3	7.6	0.6	120.2	0.2	95	28.3	1.7	12.6	0.8	0.2	20.8	1.2
RHRC155	44	48	4	259	106.7	3.9	2	2	5.7	0.7	45.1	0.3	49.4	13.7	3.7	8.3	0.7	0.3	15.2	1.6
RHRC155	48	52	4	262	112.6	3.6	1.7	2.2	6	0.6	38.6	0.2	53.2	14	2.1	8.9	0.8	0.2	16	1.3
RHRC155	52	56	4	639	276.7	6.8	2.9	4.8	13.4	1.1	112.4	0.3	127.3	33.6	2.8	20	1.5	0.4	33	2.1
RHRC155	56	60	4	951	402.5	9.3	3.7	7	19.7	1.4	175.1	0.4	192.8	51	4.3	30.6	2.1	0.4	47.7	2.5
RHRC155	60	64	4	1364	548.4	19.5	8.1	12.3	36.5	3.1	226.3	0.8	275.8	68.6	4.4	50.4	4.2	1	99.4	5.5
RHRC155	64	68	4	880	377.2	8.9	3.7	6.1	17.4	1.4	178.8	0.4	163.1	45.4	1.7	25.1	2	0.5	46.3	2.6
RHRC155	68	72	4	376	167.4	3.8	1.7	2.7	7.2	0.6	65.5	0.2	73.9	19.9	1.1	11.1	0.8	0.2	18.7	1.3
RHRC155	72	76	4	327	144.1	3.3	1.5	2.4	6.5	0.5	56.3	0.2	65.1	17.7	1.4	10.1	0.7	0.2	15.9	1.1
RHRC155	76	80	4	271	116	3.1	1.3	2.2	5.9	0.5	44.8	0.2	55.1	14.7	0.9	9	0.7	0.2	15.1	1
RHRC155	80	84	4	285	122.5	3.2	1.3	2.2	5.9	0.5	48.6	0.2	57.7	15.6	0.8	9.1	0.7	0.2	15.2	1.1
RHRC155	84	88	4	300	128.7	3.3	1.3	2.2	6.2	0.5	52.6	0.2	59.4	16.3	1.1	9.3	0.7	0.2	17.1	1.1
RHRC155	88	92	4	321	141.5	3.1	1.3	2.4	6.4	0.5	55.1	0.2	65.6	18.2	0.9	9.7	0.7	0.2	14.9	1
RHRC155	92	96	4	712	337.1	3.8	1.5	3.5	9.4	0.6	139.7	0.2	137.7	40.6	1.2	17.1	0.9	0.2	17.8	1.1
RHRC155	96	100	4	439	199	3.4	1.3	2.6	7.2	0.5	79.8	0.2	89.2	25.2	0.8	11.8	0.8	0.2	15.8	1
RHRC155	100	104	4	417	183.3	3.7	1.5	3	8.1	0.6	73.6	0.2	85.3	23.4	1.2	12.9	0.9	0.2	17.8	1.2
RHRC155	108	112	4	388	165.4	4.2	1.7	2.9	8	0.7	71	0.2	75.6	20.6	1.4	12	0.9	0.2	21.4	1.5
RHRC155	112	116	4	360	152.5	3.9	1.6	2.7	7.6	0.6	66.9	0.2	70.1	19.2	1.1	11.2	0.9	0.2	20.1	1.2
RHRC155	116	120	4	257	95.9	3.2	1.5	1.7	5.1	0.5	43.3	0.2	42.6	11.7	24.8	6.9	0.6	0.2	17	1.2

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC155	124	128	4	918	395.3	8.1	3.2	6.1	17.1	1.3	193	0.4	170.3	47.3	3.2	26.2	1.8	0.4	41.2	2.5
RHRC155	128	130	2	727	312.3	6.7	2.7	4.9	13.7	1.1	148.7	0.3	136.5	38	2.5	21.6	1.5	0.3	34.4	2.1
RHRC156	44	48	4	713	278.1	9.5	4.8	4.6	14	1.7	155.6	0.6	116.1	32.8	18.9	18.3	1.8	0.7	51.6	3.8
RHRC156	48	52	4	389	179.8	4	1.7	2.6	7.3	0.7	63.7	0.2	73.2	20.4	2.9	11.1	0.8	0.2	19.4	1.2
RHRC156	52	56	4	589	286.4	4.7	1.9	3.6	9.6	0.7	104.3	0.2	103.3	29.2	2.5	14.9	1.1	0.3	24.4	1.5
RHRC156	60	64	4	546	251.9	4	1.6	3.3	9.1	0.6	99.6	0.2	107.1	30.2	1.1	14.6	0.9	0.2	19.7	1.3
RHRC156	64	68	4	304	129.2	3.4	1.3	2.5	6.8	0.5	49.9	0.2	63.5	16.7	1.5	10.1	0.7	0.2	16.5	1.1
RHRC156	68	72	4	540	237.8	5	2	3.8	10.2	0.8	102.3	0.2	103.2	28.9	2	16.2	1.1	0.3	24.8	1.7
RHRC156	72	76	4	621	272.4	5.6	2.2	4.1	11.6	0.9	123	0.3	115.1	31.6	3.1	17.7	1.3	0.3	29.6	1.8
RHRC156	76	80	4	446	195.3	4	1.6	3.1	8.4	0.6	86.9	0.2	85.2	24	1.2	13	0.9	0.2	20.6	1.2
RHRC156	80	84	4	452	197.1	4.1	1.6	3.1	8.3	0.6	90.4	0.2	84.5	23.9	1.5	12.7	0.9	0.2	21.4	1.3
RHRC156	84	88	4	306	128.6	3.7	1.5	2.6	7	0.6	52.4	0.2	62.2	16.6	1.2	10.2	0.8	0.2	17	1.1
RHRC156	88	92	4	398	170.9	4.1	1.6	3	8.1	0.6	74.9	0.2	76.9	21.1	1.4	12.3	0.9	0.2	20.6	1.3
RHRC156	92	96	4	316	136.3	3.2	1.4	2.4	6.5	0.5	58.5	0.2	61.3	16.8	1.1	9.6	0.7	0.2	16.5	1.1
RHRC156	96	100	4	360	154.7	3.9	1.7	2.7	7.3	0.6	66.4	0.2	69	19	1.1	11.1	0.8	0.2	19.8	1.4
RHRC156	100	104	4	272	114.6	3.1	1.4	2.1	5.9	0.5	48	0.2	53.1	14.5	1.1	8.7	0.7	0.2	16.3	1.2
RHRC156	104	108	4	310	133.5	3.1	1.3	2.3	6.1	0.5	57	0.2	61.8	16.8	0.3	9.6	0.7	0.2	15.2	1
RHRC156	108	112	4	354	156.7	3.2	1.3	2.4	6.5	0.5	68.2	0.2	67.6	19.1	0.8	10.2	0.7	0.2	15.3	1
RHRC156	112	116	4	414	187.3	3.2	1.3	2.6	7.1	0.5	81.6	0.2	77.7	22.4	1.5	11.2	0.7	0.2	15.9	1
RHRC156	116	120	4	426	189	3.7	1.5	2.9	7.3	0.6	82.7	0.2	81.1	22.9	1.4	11.8	0.8	0.2	18.8	1.2
RHRC156	120	124	4	389	178.3	3.1	1.2	2.3	6.3	0.5	75.7	0.2	71.8	21.1	1.5	10	0.7	0.2	15.1	1
RHRC156	124	128	4	361	162.8	3.1	1.3	2.4	6.2	0.5	67.6	0.2	69	19.6	1.4	10.2	0.7	0.2	15.1	1
RHRC156	128	132	4	1367	547.5	20.7	9	10.8	33.2	3.5	251	0.9	243	65.9	16.3	42.6	4.1	1.2	111.1	6.5
RHRC156	132	136	4	761	318	7.8	3.2	4.9	14.7	1.3	153.4	0.3	135.1	37.6	21.9	21	1.7	0.4	37	2.3
RHRC156	136	140	4	725	326.8	4.5	1.9	3.4	9.5	0.7	156.7	0.2	125	37.2	18.3	15.7	1	0.3	22.4	1.5
RHRC156	140	144	4	306	117.8	3.4	1.7	1.8	5.5	0.6	61.3	0.2	49.1	13.7	22.2	7.7	0.6	0.2	18.4	1.4
RHRC156	144	148	4	461	197.5	3.8	1.7	2.4	6.8	0.6	103.8	0.2	75.3	22.1	14.4	10.3	0.8	0.2	20.1	1.4

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC156	148	152	4	1972	802.5	28.7	10.9	16.9	51.7	4.5	352.1	0.8	390.5	102.9	7.5	69.9	6.2	1.3	118.7	6.6
RHRC156	152	154	2	2122	1043	6.6	2.4	7.2	18.9	1	505.8	0.3	349.7	113	1.5	35.8	1.7	0.3	33.8	1.8
RHRC157	48	52	4	1421	689.9	8	3.9	5.9	14.5	1.5	295	0.5	219.6	68.7	27.8	25.6	1.6	0.5	55.1	3.2
RHRC157	52	56	4	1286	632	13.1	6.9	6.5	18.6	2.5	228.2	0.9	178.8	52.1	29	24.5	2.4	0.9	84	5.4
RHRC157	56	60	4	290	86.6	5.3	3.4	2.1	6.2	1.1	52.8	0.5	44.9	12.5	23.3	7.1	0.9	0.5	40.1	2.9
RHRC157	60	64	4	253	98.3	2.8	1.4	1.5	3.9	0.5	52.3	0.2	36.4	10.9	20.7	5.4	0.5	0.2	16.3	1.3
RHRC157	64	68	4	259	104.2	2.7	1.3	1.5	3.8	0.5	50.1	0.2	39.7	11.7	20.7	5.5	0.5	0.2	14.9	1.2
RHRC157	68	72	4	773	368.1	3.7	1.7	3	6.7	0.6	167.5	0.2	125	41.1	20.7	12.6	0.7	0.2	19.7	1.4
RHRC157	76	80	4	366	154.8	3.2	1.7	2	5	0.6	72.2	0.2	57.5	17.4	23.5	7.5	0.6	0.2	18.5	1.4
RHRC157	88	92	4	466	196.4	4.3	2	2.8	7.2	0.7	95.1	0.2	77.7	22.9	19.3	11.3	0.9	0.3	22.6	1.6
RHRC157	92	96	4	666	288.3	5.9	2.4	4.1	10.4	1	133.9	0.3	116.7	34.1	19	16.5	1.2	0.3	29.8	1.8
RHRC157	96	100	4	1017	469.9	5.6	2.3	4.8	11.4	0.9	224.6	0.3	174.4	53.3	15.6	20.7	1.2	0.3	30.2	1.7
RHRC157	112	116	4	384	159	3.5	1.7	2.2	5.5	0.6	74.4	0.2	64.6	19	23.3	8.9	0.7	0.2	18.9	1.4
RHRC157	116	120	4	444	187	3.6	1.6	2.7	6.4	0.6	86.1	0.2	77.6	22.2	23.5	10.6	0.7	0.2	19.6	1.3
RHRC157	120	124	4	812	369.9	4.5	1.9	4.1	9.2	0.7	166.9	0.2	146.4	44	21.3	17.4	1	0.2	23	1.4
RHRC157	124	128	4	778	341.5	5.3	2.2	4.6	10.6	0.9	152.9	0.2	143.9	41.2	25.2	19	1.1	0.3	27.4	1.7
RHRC157	128	132	4	973	452.8	4.7	2	4.4	9.8	0.8	204.3	0.2	170.1	52.3	25.3	19	1	0.3	24.3	1.6
RHRC157	132	136	4	488	210	3.6	1.7	2.7	6.5	0.6	97.7	0.2	84.9	25	22.7	11	0.7	0.2	19.4	1.4
RHRC157	136	140	4	512	221.2	3.8	1.7	3	6.8	0.6	98.6	0.2	92	26.6	22.5	12	0.8	0.3	20.4	1.3
RHRC157	140	144	4	544	237.1	3.8	1.7	3.1	6.9	0.6	110	0.2	94.8	28.2	21.5	12.2	0.8	0.2	21.5	1.4
RHRC157	144	148	4	688	307.9	4.2	1.9	3.7	8.1	0.7	137.9	0.2	123.6	36.4	22.2	15	0.9	0.3	24	1.4
RHRC157	148	152	4	627	280.7	4.1	1.8	3.4	7.5	0.7	128.8	0.2	108.5	32.6	21.6	13.1	0.9	0.2	21.7	1.4
RHRC157	152	154	2	672	302.1	4	1.7	3.5	7.7	0.7	141.7	0.2	116.1	35.1	19.6	14.1	0.8	0.2	22.7	1.4
RHRC158	36	40	4	556	101.9	4.5	2	4	8.8	0.7	170.9	0.3	143	43.4	36	16.4	1	0.3	21.6	1.5
RHRC158	40	44	4	6087	1204	54.1	21.1	48.3	113.6	8.6	1958	2	1633	470	56	198	11.8	2.5	292.4	13.3
RHRC158	44	48	4	5961	1164	66.3	29	51.2	129.7	11.3	1806	3.2	1576	424.3	45.2	195.9	13.9	3.7	420.8	20.8
RHRC158	48	52	4	1949	317.3	24	11.4	16.8	45.6	4.3	626.5	1.4	496.4	134.8	31.3	62.4	5	1.5	161.6	9.1

Hole ID	From (m)	To (m)	Interval (m)	TREO (ppm)	Ce2O3 (ppm)	Dy2O3 (ppm)	Er2O3 (ppm)	Eu2O3 (ppm)	Gd2O3 (ppm)	Ho2O3 (ppm)	La2O3 (ppm)	Lu2O3 (ppm)	Nd2O3 (ppm)	Pr6O11 (ppm)	Sc2O3 (ppm)	Sm2O3 (ppm)	Tb4O7 (ppm)	Tm2O3 (ppm)	Y2O3 (ppm)	Yb2O3 (ppm)
RHRC158	52	56	4	1876	339.4	22.4	10.6	15.3	43.4	4.1	602.1	1.1	445.7	119.2	28.8	55.6	4.6	1.3	175.6	7.1
RHRC158	56	60	4	1166	611.3	6	2.9	5.2	11.7	1.1	213	0.4	170.1	51.4	23.5	20.5	1.3	0.4	45.5	2.2
RHRC158	60	64	4	1205	564.9	7.1	3.2	6	14.8	1.2	251.5	0.4	199.1	59.9	16.1	23.8	1.6	0.4	52.6	2.4
RHRC158	64	68	4	952	424.4	6.3	2.8	4.9	12.2	1.1	207.9	0.3	159.1	49.3	14.1	19.2	1.3	0.4	46.4	2
RHRC158	68	72	4	736	330.8	5.1	2.1	4.2	10.7	0.9	148.5	0.3	136.1	40.4	1.8	17.6	1.1	0.3	34.6	1.5
RHRC158	72	76	4	549	242.6	3.9	1.4	3.5	8.2	0.6	109.1	0.2	108.8	31.4	1.7	14.5	0.9	0.2	21	1.1

**Table 5.** All REO assay results >250ppm TREO

## **About Kairos Minerals**

Kairos Minerals (ASX:KAI) owns 100% of the flagship 1.6 Mozs **Mt York Gold Project** that was partially mined by Lynas Gold NL between 1994 and 1998. Kairos has recognised that the resource has significant potential to grow further from its current 1.62 Moz base with significant exploration potential existing within the Mt York project area. Pre-feasibility work will progress rapidly underpinned by the resource expansion work that will collect important information for metallurgical testwork, mining and process engineering to determine viability and optimal pathway to develop a sustainable, long-lived mining project. Current resources at a 0.5 g/t Au cutoff grade above 325m depth are shown in the table below.

Deposit	Indicated			Inferred			Total		
	Tonnes (MT)	Au (g/t)	Ounces (kcozs)	Tonnes (MT)	Au (g/t)	Ounces (kcozs)	Tonnes (MT)	Au (g/t)	Ounces (kcozs)
Main Trend	20.25	1.06	690	22.83	0.95	697	43.08	1.00	1385
Iron Stirrup	1.28	1.72	70	0.71	1.54	35	1.99	1.66	106
Old Faithful	2.17	1.07	75	2	0.81	52	4.17	0.95	127
<b>Total</b>	<b>23.7</b>	<b>1.10</b>	<b>835</b>	<b>25.54</b>	<b>0.95</b>	<b>784</b>	<b>49.24</b>	<b>1.02</b>	<b>1618</b>

Kairos has recently discovered spodumene-bearing pegmatites adjacent to the Mt York Gold Project and is evaluating their potential to become part of a value-adding lithium project into the future.

Kairos's 100%-owned Roe Hills Project, located 120km east of Kalgoorlie in WA's Eastern Goldfields, comprises an extensive tenement portfolio where the Company's exploration work has confirmed the potential for significant discoveries of high-grade gold, nickel and cobalt mineralization. Kairos has also discovered a 2,800m long Li-Cs-Rb soil anomaly in an exciting and emerging lithium province that will be drill-tested.

This announcement has been authorised for release by the Board.

**Peter Turner**  
**Managing Director**

**Zane Lewis**  
**Non Executive Director**

### **For Investor Information please contact:**

Paul Armstrong – Read Corporate  
 0421 619 084

### **COMPETENT PERSON STATEMENT:**

The information in this report that relates to Exploration Results is based on information compiled and reviewed by Mr Mark Falconer, who is a full-time employee of Kairos Minerals Ltd and who is also a Member of the Australian Institute of Geoscientists (AIG). Mr Falconer has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' (the JORC Code 2012). Mr Falconer has consented to the inclusion in the report of the matters based on their information in the form and context in which it appears.

## Appendix A - JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling was undertaken using reverse circulation (RC) drilling.</li> <li>All drilling and sampling was undertaken using industry standard methods.</li> <li>RC drilling depths were monitored by the driller using 1m depth intervals calibrated and marked on the drilling equipment. Sample lengths were also verified by Kairos personnel through visual assessment of individual sample volumes.</li> <li>RC holes were sampled on a 1m basis with samples collected in calico bags from a cyclone-mounted cone splitter located at the drill rig.</li> <li>4m composite samples were collected by scoop from individual meter intervals.</li> <li>Sampling was carried out under Kairos Minerals sampling protocols and QAQC procedures. See further details below.</li> <li>The samples are considered representative and appropriate for the methods of drilling used.</li> <li>4m composite samples were routinely dispatched for Lithium and Multi-element analysis, with selected intervals of 1m samples submitted where pegmatite or other geological intervals were recorded along with intervals of surrounding country rock.</li> <li>4m composite samples were assayed for gold by fire assay</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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 style="list-style-type: none"> <li>RC drilling was conducted using a 5 ½ inch bit and face sampling hammer</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>RC samples were visually assessed for recovery.</li> <li>The majority of RC samples were dry. Some deeper drillholes encountered water and efforts were made by the drillers to minimise the amount of water in the sample and to maximise recovery.</li> <li>Recovery of RC samples is considered good, with some minor sample loss near the very</li> </ul>

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		<p>top of some holes.</p> <ul style="list-style-type: none"> <li>RC samples were collected directly from a cone splitter on the drill rig cyclone and are considered representative in nature.</li> <li>No sample bias is observed.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>All RC chips were geologically logged by company geologists using the Kairos Minerals logging scheme and were entered in to the companies acQuire database.</li> <li>Logging of RC chips records colour, lithology, grain size, structure, mineralogy, alteration, weathering and various other features of the samples.</li> <li>All holes were logged in full.</li> <li>All RC chips were photographed in labelled chip trays.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>RC samples were sampled using a cone splitter mounted on the drill rig cyclone, with an average 2.0kg to 3.0kg sample collected directly into a numbered calico bag. &gt;95% of samples were collected dry</li> <li>The quality of RC samples was ensured through monitoring of sample volumes and by regular cleaning of the cyclone and cone splitter on the drill rig.</li> <li>Samples were prepared at Intertek Genalysis in Perth. Samples were dried, crushed and then pulverised to a pulp with 85% passing &lt;75 µm. A sub-sample of approximately 200g was retained.</li> <li>Sample sizes are considered appropriate for the material sampled.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <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 (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 style="list-style-type: none"> <li>All samples were analysed by Intertek Genalysis in Perth.</li> <li>4m composites were submitted for multi-element analysis using 4-acid digest with ICP-MS and ICP-OES finish.</li> <li>Intervals with identified pegmatites and their immediate country rock had 1m samples submitted for multi-element analysis using fusion digest which is considered a total digestion method.</li> <li>Intervals identified as containing elevated rare earth elements in 4m composites at Black Cat have been re-submitted for fusion digest multi-element analysis.</li> <li>Selected 4m composites were also submitted for 25g fire assay for gold, followed by an ICP-OES finish</li> </ul>

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		<ul style="list-style-type: none"> <li>The analysis methods are considered appropriate for the nature of the material and mineralisation.</li> <li>Certified standards and blanks were regularly inserted into the sample sequence at a minimum rate of 1:33 for standards and 1:33 for blanks to assess the accuracy of the analysis method.</li> <li>Duplicate samples were collected at the rig and submitted at a rate of 1:33 samples.</li> <li>The laboratory performed regular performance checks through analysis of laboratory standards, repeats, and control blanks.</li> <li>QAQC performance was monitored by Kairos staff with action taken with the laboratory if required.</li> <li>Acceptable levels of accuracy and precision have been established through monitoring and assessment of QAQC performance.</li> <li>Selected samples were submitted to Microanalysis in Perth for semi-quantitative XRD analysis to determine pegmatite mineralogy</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Significant mineralised intersections were checked by the Exploration Manager and validated against the logging and RC chips. Additional checks were performed by other members of the Kairos geology team.</li> <li>No twinned drillholes were completed for this program.</li> <li>All assay and geological data is stored in an electronic database hosted by acQuire and managed by the company's database consultant.</li> <li>Primary laboratory data is emailed directly to the company's database consultant for upload directly into the company database.</li> <li>Results are checked and verified by company geologists.</li> <li>Assay intersections are reported on a length-weighted basis.</li> <li>Lithium results are reported as Li<sub>2</sub>O%, with Li ppm converted to Li<sub>2</sub>O% using the standard conversion factor of 2.153.</li> <li>Multi-element data for rare earth elements have been converted to stoichiometric oxides using element-to-stoichiometric conversion factors listed in the table below:</li> </ul>

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		<table border="1"> <thead> <tr> <th>Element ppm</th> <th>Conversion Factor</th> <th>Oxide Form</th> </tr> </thead> <tbody> <tr><td>Ce</td><td>1.1713</td><td>CeO<sub>2</sub></td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Er</td><td>1.1435</td><td>Er<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>La</td><td>1.1728</td><td>La<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Pr</td><td>1.1703</td><td>Pr<sub>6</sub>O<sub>11</sub></td></tr> <tr><td>Sc</td><td>1.5338</td><td>Sc<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Tb</td><td>1.151</td><td>Tb<sub>4</sub>O<sub>7</sub></td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Y</td><td>1.2699</td><td>Y<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb<sub>2</sub>O<sub>3</sub></td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>Rare earth oxide is an industry accepted form for reporting rare earth values</li> <li>The following calculation is used for Total Rare Earth Oxide (TREO):  <math display="block">\text{TREO} = \text{CeO}_2 + \text{Dy}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{La}_2\text{O}_3 + \text{Lu}_2\text{O}_3 + \text{Nd}_2\text{O}_3 + \text{Pr}_6\text{O}_{11} + \text{Sc}_2\text{O}_3 + \text{Sm}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Tm}_2\text{O}_3 + \text{Y}_2\text{O}_3 + \text{Yb}_2\text{O}_3</math> </li> </ul>	Element ppm	Conversion Factor	Oxide Form	Ce	1.1713	CeO <sub>2</sub>	Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>	Er	1.1435	Er <sub>2</sub> O <sub>3</sub>	Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>	Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>	Ho	1.1455	Ho <sub>2</sub> O <sub>3</sub>	La	1.1728	La <sub>2</sub> O <sub>3</sub>	Lu	1.1371	Lu <sub>2</sub> O <sub>3</sub>	Nd	1.1664	Nd <sub>2</sub> O <sub>3</sub>	Pr	1.1703	Pr <sub>6</sub> O <sub>11</sub>	Sc	1.5338	Sc <sub>2</sub> O <sub>3</sub>	Sm	1.1596	Sm <sub>2</sub> O <sub>3</sub>	Tb	1.151	Tb <sub>4</sub> O <sub>7</sub>	Tm	1.1421	Tm <sub>2</sub> O <sub>3</sub>	Y	1.2699	Y <sub>2</sub> O <sub>3</sub>	Yb	1.1387	Yb <sub>2</sub> O <sub>3</sub>
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<b>Location of data points</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>RC collar locations were set out and picked up using handheld GPS, with an accuracy of +/- 5m in both easting and northing.</li> <li>Downhole surveys were completed on all drill holes using a Reflex Sprint IQ Gyroscope survey instrument with measurements recorded every 5m</li> <li>All location data is recorded in GDA94 MGA Zone 51.</li> <li>Topographic control is through a digital elevation model generated off regional elevation data on 30m centers.</li> </ul>																																																			
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Drilling was conducted on traverses of 60m-100m spaced holes, with traverses ranging from 160m to 500m apart</li> <li>The data spacing and distribution is considered appropriate and sufficient for first pass exploration drilling</li> <li>Downhole samples were collected on 1m intervals as well as 4m composites</li> </ul>																																																			
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was oriented approximately perpendicular to the strike of existing anomalism and mapped pegmatites at surface where possible.</li> <li>The orientation of key structures, geology</li> </ul>																																																			

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	<i>mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	and mineralisation is not fully understood at this stage
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were collected in the field at the project site in number-coded calico bags and placed within secure, labelled polyweave bags by company field personnel.</li> <li>All samples were delivered directly to Intertek Genalysis in Kalgoorlie for delivery to Perth for final analysis.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>QAQC data was reviewed internally.</li> <li>No external QAQC reviews or audits have been conducted.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Roe Hills project consists of nineteen granted Exploration Licenses: E28/1935, E28/2117, E28/2118, E28/2548, E28/2585, E28/2593-E28/2597, P28/1292-P28/1300 inclusive.</li> <li>E28/2585 partially overlaps with Hampton Location 16 privately owned land north of the trans-australian railway line. The mineral rights to the upper 45.72 metres of Location 16 belong to the private land owners.</li> <li>Kairos is not aware of any existing impediments nor of any potential impediments which may impact ongoing exploration and development activities at the project site.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Broad reconnaissance exploration for gold has been conducted on the northern and western parts of tenement E28/2585 in the past by Poseidon Exploration (1990), Normandy Exploration (1995) and Integra Mining (2009) in the form of shallow RAB/Aircore drilling.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p><b>Regional Geology</b></p> <ul style="list-style-type: none"> <li>The Roe Hills project lies across granite-greenstones of the Archean Yilgarn Craton, with the local geology at Roe Hills consisting of a north-south trending mafic-ultramafic sequence intruded by granites.</li> <li>The mineralisation targets are intrusion/shear zone-hosted Au deposits, spodumene-bearing LCT pegmatite deposits (lithium), and granite and syenite</li> </ul>

Criteria	JORC Code explanation	Commentary
		related rare earth element mineralisation.
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>All drill hole location, orientation and hole length information material to the understanding of the exploration results is provided in the tables and figures included within the body of this announcement.</li> <li>Information from historic holes drilled by Kairos Minerals at Roe Hills can be found in previous ASX releases.</li> <li>No drill hole information from the reported program was excluded from this release.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 style="list-style-type: none"> <li>Results are reported as down hole length weighted averages</li> <li>Significant intercepts for Lithium are reported using a 0.1% Li<sub>2</sub>O minimum cut-off grade</li> <li>Significant results for gold are reported using a 0.3g/t gold minimum cutoff grade.</li> <li>Significant results for rare earth elements are reported using a 500ppm TREO minimum cut-off grade</li> <li>Reported intercepts for TREO may include up to 12m of internal dilution below the 500ppm TREO minimum cut off grade.</li> <li>No top cuts have been applied to the reporting of the assay results.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>All mineralisation widths for exploration holes are reported as down hole lengths.</li> <li>True widths of mineralisation are not known at this stage</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Refer to Figures and Tables provided in the body of this announcement.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be</li> </ul>	<ul style="list-style-type: none"> <li>All exploration results received from the drill program at the time of data compilation for this announcement have</li> </ul>

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	<i>practiced to avoid misleading reporting of Exploration Results.</i>	<p>been been reported.</p> <ul style="list-style-type: none"> <li>The information reported in considered fair, balanced, and provided in context.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All meaningful and material exploration data has been included in the body of this document.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling is ongoing at Roe Hills and expected to be completed within October. A comprehensive prospect assessment will be undertaken once all results have been received prior to future work programs being planned.</li> </ul>