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03 July 2023

## **ASX ANNOUNCEMENT**

# DRILLING CONFIRMS WIDESPREAD RARE EARTH MINERALISATION OVER 10KM STRIKE AT EURELIA

## **Highlights**

• Aircore drilling has returned widespread significant Rare Earth Elements (REE) grades at Eurelia over a 10km strike length, with shallow intercepts including:

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9m @ 1,189 ppm TREO (16% NdPr) from 2m (EACO1)
4m @ 1,819 ppm TREO (22% NdPr) from 5m (EACO2)
4m @ 1,656 ppm TREO (26% NdPr) from 9m (EACO4)
2m @ 3,288 ppm TREO (26% NdPr) from 26m (EACO4)
3m @ 1,225 ppm TREO (26% NdPr) from 10m (EAC10)
2m @ 1,589 ppm TREO (28% NdPr) from 9m (EAC12)
2m @ 1,176 ppm TREO (26% NdPr) from 16m (EAC14)
2m @ 3,044 ppm TREO (29% NdPr) from 26m (EAC15)
2m @ 2,029 ppm TREO (26% NdPr) from 8m (EAC18)
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- The drilling has confirmed that previously identified REE surface mineralisation at Eurelia continues to depth, with a high proportion of 'magnet REE' (Nd, Pr)
- REE mineralisation correlates with anomalous grades of Niobium, with a 2m intercept of 1,267 ppm Nb<sub>2</sub>O<sub>3</sub> recorded in EAC04
- The REE mineralisation at Eurelia is associated with an emerging large scale alkaline intrusive system, which includes the Walloway and Yanyarrie carbonatites
- Results confirm the REE prospectivity of alkaline rock types such as carbonatites across the Eurelia, Walloway and Yanyarrie Prospects
- Olympio's 100% owned Walloway tenement EL6912 granted and drilling approvals submitted

### Olympio's Managing Director, Sean Delaney, commented:

"Olympio is the first explorer to recognise the potential of the Eurelia/Walloway project area to host a carbonatite-REE deposit, and the region remains underexplored. Our first reconnaissance drilling program has confirmed the grade and widespread extent of REE mineralisation at Eurelia. Results to date support our belief that there is a large REE mineralised system within the Eurelia/Walloway region, and with the recent grant of the Walloway tenement EL6912 we will be accelerating our exploration for carbonatite-hosted REE mineralisation across these exciting targets."



**Olympio Metals Limited (ASX:OLY) (Olympio** or **the Company)** is pleased to announce the results of recent aircore drilling at Eurelia, completed in early May 2023.

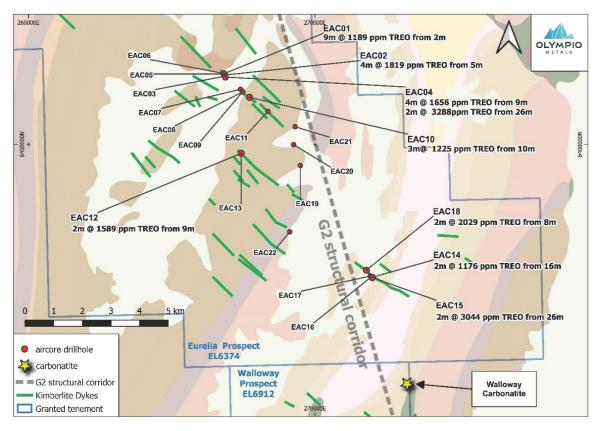


Figure 1 Drill hole location plan

### REE mineralisation confirmed over 10km strike at Eurelia

Recent aircore drilling has confirmed the presence of REE mineralisation at the Eurelia Project over a wide area (10km x 2.5km) (Figure 1). The drilling has confirmed that REE mineralisation delineated by surface samples continues at depth and is an important milestone in the demonstration of the potential of carbonatites/alkaline rocks at Eurelia to host REE mineralisation at depth. The assays for hole 19 which targeted the E1 magnetic anomaly are still outstanding.



Table 1: Summary of Rare Earth Elements Assay Results at 500ppm TREO cut-off

Drillhole ID	Depth From	Length	TREO	_	/mium ₂O₃		dymium O <sub>11</sub>	NdPr	Niobium Nb₂O₃
	m	m	ppm	ppm	% TREO	ppm	% TREO	% TREO	ppm
EAC01	2	9	1,189	149	13%	44	4%	16%	487
EAC02	5	4	1,819	327	18%	69	4%	22%	628
EAC04	9	4	1,656	353	21%	74	4%	26%	597
EAC04	26	2	3,288	716	22%	146	4%	26%	1,267
EAC10	10	3	1,225	264	22%	55	5%	26%	494
EAC12	9	2	1,589	366	23%	72	5%	28%	615
EAC14	16	2	1,176	251	21%	53	5%	26%	457
EAC15	26	2	3,044	746	25%	126	4%	29%	529
EAC18	8	2	2,029	446	22%	91	4%	26%	795

The REE mineralisation at Eurelia is located along strike from the Walloway Carbonatite (Figures 1 & 2) and strikes sub-parallel to the G2 regional corridor. These factors suggest that the REE mineralisation defined in the recent drilling is related to the carbonatite intrusives at Walloway and Yanyarrie and is potentially part of a larger alkaline igneous REE mineralised system.

The recent grant of the Walloway Project tenement EL6912 (Figures 1, 2, 3) will permit REE exploration to extend further south toward the Walloway Carbonatite, which is interpreted as a potentially significant primary REE source.

Planned exploration within the Walloway Project includes:

- Drilling of the Walloway Carbonatite and associated magnetic anomaly
- Flying a detailed aeromagnetic survey over the southern portion of EL6912
- Drilling of any carbonatite targets identified by the aeromagnetic survey



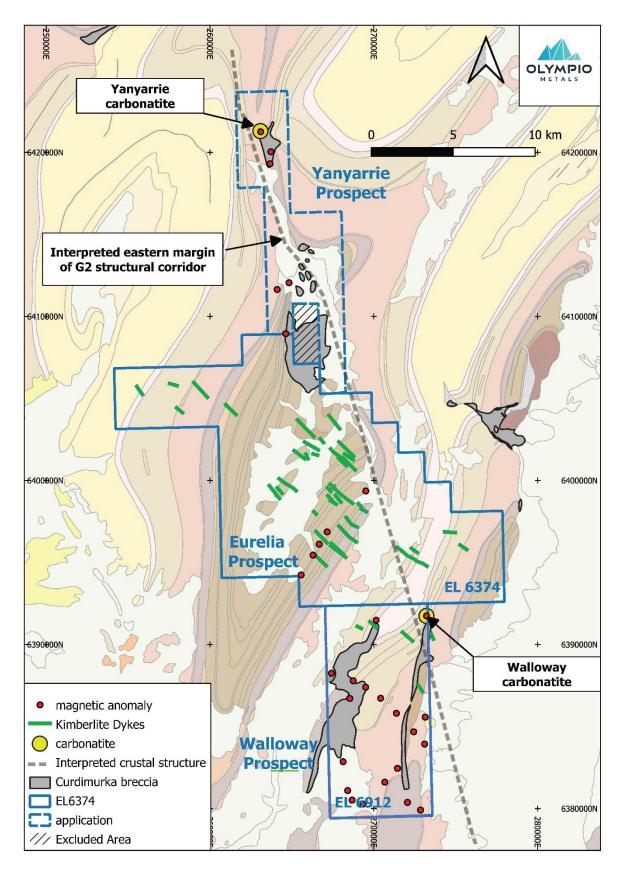


Figure 2 Eurelia Regional Geology Setting



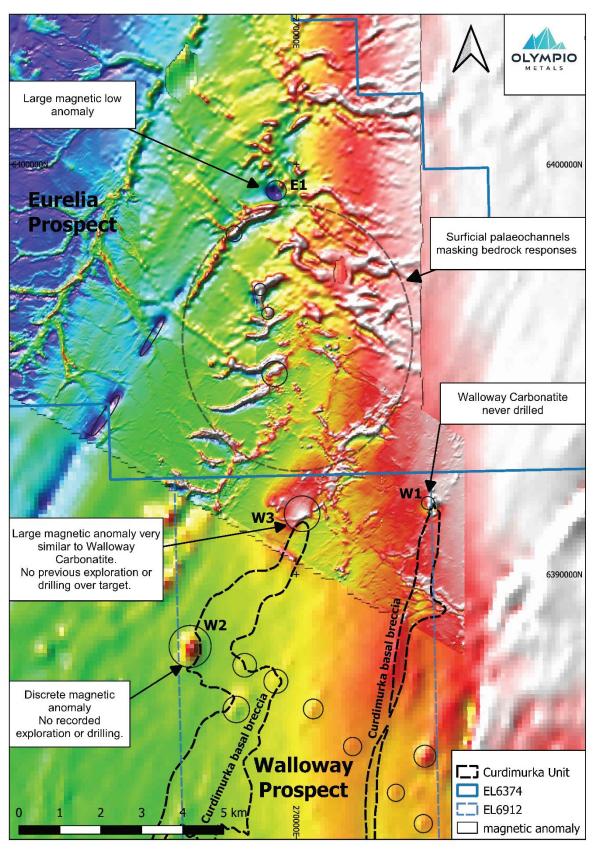


Figure 3 Carbonatite magnetic targets in the Eurelia/Walloway Prospects



## **Carbonatites and Alkaline Igneous Rock Types - REE hosts**

The Eurelia area is a recognised zone of alkaline igneous rocks, which includes the Walloway and Yanyarrie carbonatites and the Eurelia kimberlite dykes (Figure 2). Alkaline igneous rock complexes are recognised worldwide as hosts of economic REE mineralisation (Dostal 2017, Smith et.al. 2016, Verplanck et. al. 2010, Chakhmouradian & Zaitsev 2012). Alkaline intrusive complexes often occur as plugs, dykes, sills, breccias or veins. Carbonatites and alkaline intrusive rock types may be mineralised with REEs, niobium, phosphorus, tantalum, uranium, thorium, copper, iron, titanium, vanadium, barium, fluorine and zirconium.

A wide range of alkaline igneous rock types and associated regolith are potential hosts of economic REE mineralisation, including:

- Laterite over Carbonatite (e.g. Mt Weld / Lynas, Cummins Range/ Rare-X)
- Ironstone dykes (e.g. Yangibana/Hastings Metals)
- Apatite dykes and veins (e.g. Nolans / Arafura)
- Ionic Clay Hosted (Koppamurra/ Australian Rare Earths)

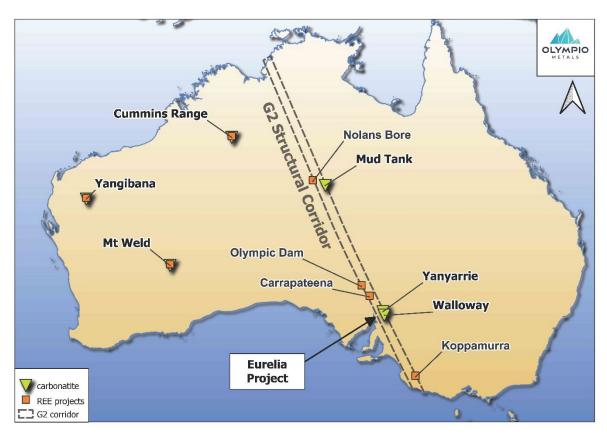


Figure 4 Continental geological setting

The G2 crustal corridor (O'Driscoll 1986) is correlated with the distribution of alkaline igneous rock types and REE mineralisation on a continental scale (Figure 4). The Eurelia Project, (which includes the Walloway and Yanyarrie carbonatites), is coincident with the G2 corridor, similar to pending REE mining operations Nolans and Koppamurra, and major REE-hosting deposits Olympic Dam



and Carrapateena. Olympio is the first explorer to recognise the REE potential of the carbonatites and alkaline igneous rocks at Eurelia. The Olympio exploration model is designed to systematically test for the numerous REE mineralisation styles that may exist within the Eurelia Project.

The announcement is authorised by the Board of Olympio Metals.

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#### **Competent Person's Statement**

The information in this announcement that relates to exploration results for the Project is based on information compiled by Mr. Neal Leggo, a Competent Person who is a Member of the Australian Institute of Geoscientists and a consultant to Olympio Metals Limited. Mr. Leggo has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Leggo consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

**ISSUED CAPITAL** 

Ordinary Shares: 54.4M

**BOARD OF DIRECTORS** 

**Sean Delaney**, Managing Director **Simon Andrew**, Chairman

Aidan Platel, Non-Executive Director

**COMPANY SECRETARY** 

Peter Gray

**REGISTERED OFFICE:** 

L2, 25 Richardson St, West Perth 6005



Table 2: Drill Collars Aircore Drilling May 2023

HoleID	Hole Type	Grid	Easting	Northing	NAT_RL	Inclination	Azimuth	EOH Depth	Survey Method
EAC01	AC	GDA94/MGA54	266824.6	6402436.3	482.00	-90	0	51	GPS
EAC02	AC	GDA94/MGA54	266856.0	6402390.3	487.00	-90	0	51	GPS
EAC03	AC	GDA94/MGA54	266873.8	6402354.9	486.00	-90	0	51	GPS
EAC04	AC	GDA94/MGA54	266874.7	6402319.4	487.00	-90	0	36	GPS
EAC05	AC	GDA94/MGA54	266805.8	6402423.0	481.00	-60	45	52	GPS
EAC06	AC	GDA94/MGA54	266838.2	6402445.3	482.00	-60	45	57	GPS
EAC07	AC	GDA94/MGA54	267404.2	6401899.8	488.00	-60	45	28	GPS
EAC08	AC	GDA94/MGA54	267478.9	6401808.9	491.00	-60	45	19	GPS
EAC09	AC	GDA94/MGA54	267480.4	6401819.0	493.00	-60	45	16	GPS
EAC10	AC	GDA94/MGA54	267716.1	6401624.3	499.00	-60	45	30	GPS
EAC11	AC	GDA94/MGA54	268360.2	6401134.7	515.00	-60	60	43	GPS
EAC12	AC	GDA94/MGA54	267432.4	6399692.2	527.00	-60	20	18	GPS
EAC13	AC	GDA94/MGA54	267429.4	6399690.1	524.00	-60	20	22	GPS
EAC14	AC	GDA94/MGA54	272001.4	6395416.0	556.00	-60	45	30	GPS
EAC15	AC	GDA94/MGA54	272006.0	6395404.0	555.00	-60	45	33	GPS
EAC16	AC	GDA94/MGA54	271972.5	6395431.5	556.00	-60	45	15	GPS
EAC17	AC	GDA94/MGA54	271929.4	6395458.8	551.00	-60	45	33	GPS
EAC18	AC	GDA94/MGA54	271798.0	6395662.4	551.00	-60	45	27	GPS
EAC19	AC	GDA94/MGA54	269492.8	6399271.8	518.00	-90	0	46	GPS
EAC20	AC	GDA94/MGA54	269258.4	6399991.4	500.00	-90	0	51	GPS
EAC21	AC	GDA94/MGA54	269310.2	6400618.3	503.00	-90	0	38	GPS
EAC22	AC	GDA94/MGA54	269125.8	6396991.4	539.00	-90	0	51	GPS



Table 3 Aircore drilling, 1m intervals, selected assays (>500ppm TREO), all results in ppm.

Drillhole ID	From (m)	To (m)	CeO₂	Dy₂O₃	Er <sub>2</sub> O <sub>3</sub>	Eu₂O₃	Gd <sub>2</sub> O <sub>3</sub>	Ho₂O₃	La <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Nd₂O₃	Pr <sub>6</sub> O <sub>11</sub>	Sm₂O₃	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>	TREO
EAC01	2	3	469.2	6.0	2.5	4.4	10.8	1.1	248.6	0.3	142.9	42.8	17.2	1.4	0.3	31.0	2.0	980
EAC01	3	4	640.0	7.2	2.9	5.4	13.3	1.2	304.9	0.3	181.4	55.0	23.0	1.6	0.4	34.4	2.3	1273
EAC01	4	5	567.5	6.9	2.5	5.1	12.3	1.2	319.0	0.2	168.0	52.0	21.9	1.5	0.3	33.3	1.8	1193
EAC01	5	6	543.0	6.6	2.8	4.9	12.0	1.1	278.0	0.2	160.4	48.4	21.3	1.5	0.3	32.9	1.7	1115
EAC01	6	7	616.7	8.0	3.2	5.8	14.6	1.3	303.8	0.4	181.4	55.5	24.6	1.8	0.4	37.8	2.3	1257
EAC01	7	8	593.3	8.4	2.9	6.3	16.5	1.3	353.0	0.3	201.8	60.2	27.1	1.8	0.4	40.4	2.2	1316
EAC01	8	9	608.1	8.0	2.6	5.7	15.3	1.2	326.0	0.3	190.1	57.8	25.9	1.7	0.3	37.8	2.2	1283
EAC01	9	10	593.3	7.9	2.8	5.5	14.1	1.2	314.3	0.3	183.1	55.5	24.6	1.6	0.4	35.3	2.3	1242
EAC01	10	11	485.2	7.0	2.4	4.9	12.9	1.0	267.4	0.3	154.5	46.4	20.5	1.6	0.3	31.9	1.7	1038
EAC01	11	12	228.5	3.6	1.5	2.1	6.4	0.6	130.8	0.2	74.2	22.8	10.1	0.8	0.2	18.9	1.0	502
EAC01	13	14	391.9	4.1	1.4	3.4	7.7	0.6	199.4	0.1	111.9	34.9	15.1	1.0	0.2	17.9	1.0	790
EAC01	15	16	299.7	4.0	1.4	2.8	7.0	0.7	156.6	0.1	89.3	27.8	12.3	0.8	0.2	18.5	1.2	623
EAC01	16	17	315.7	4.8	1.6	3.3	8.1	0.7	182.4	0.2	105.3	31.7	14.2	1.0	0.2	21.2	1.2	692
EAC01	17	18	289.9	4.0	1.5	3.0	7.5	0.6	164.2	0.2	93.9	28.4	12.8	0.9	0.2	18.8	1.2	627
EAC01	29	30	273.9	3.6	1.1	2.8	6.8	0.5	156.6	0.1	86.2	26.0	11.3	0.8	0.1	15.6	0.9	586
EAC01	30	31	254.3	4.1	1.3	2.5	6.7	0.6	148.4	0.1	82.2	25.1	11.5	0.8	0.2	17.5	1.1	556
EAC01	31	32	254.3	3.6	1.2	2.7	6.5	0.5	147.2	0.1	81.8	24.6	10.9	0.7	0.2	15.7	0.8	551
EAC01	34	35	245.1	3.4	1.1	2.7	6.6	0.5	139.6	0.1	78.4	23.8	10.3	0.7	0.2	15.4	0.8	529
EAC01	35	36	250.6	3.7	1.3	2.6	6.8	0.5	151.3	0.1	80.6	24.3	11.1	0.8	0.2	16.6	0.8	551
EAC01	36	37	249.4	3.2	1.1	2.5	6.4	0.5	141.9	0.1	77.1	24.3	10.9	0.7	0.1	13.7	0.8	533
EAC01	42	43	288.7	3.5	1.1	2.8	7.0	0.5	161.8	0.1	93.3	28.5	11.6	0.8	0.2	15.9	0.9	617
EAC01	43	44	264.1	3.5	1.2	2.5	6.1	0.5	150.7	0.1	82.0	25.7	10.0	0.7	0.2	15.5	0.9	564



Drillhole ID	From (m)	To (m)	CeO₂	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O₃	Gd₂O₃	Ho₂O₃	La₂O₃	Lu <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Tm <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Yb₂O₃	TREO
EAC01	44	45	258.0	3.2	1.3	2.6	5.9	0.5	147.2	0.1	82.5	25.7	9.9	0.7	0.1	16.3	0.9	555
EAC01	45	46	242.0	3.9	1.6	2.4	6.1	0.7	128.4	0.2	83.0	24.3	10.3	0.7	0.2	18.8	1.2	524
EAC01	46	47	277.6	3.3	1.3	2.7	6.5	0.5	150.1	0.1	88.3	27.7	11.6	0.8	0.2	15.5	1.0	587
EAC01	49	50	287.4	3.6	1.4	2.8	6.7	0.6	162.4	0.1	91.3	27.8	11.6	0.8	0.2	17.1	1.0	615
EAC01	50	51	299.7	3.9	1.4	3.1	7.0	0.6	171.8	0.1	96.6	29.5	11.5	0.8	0.2	18.0	1.1	645
EAC02	5	6	1001.1	15.3	6.2	10.7	27.5	2.8	562.9	0.7	324.3	96.9	43.0	3.4	0.8	84.1	4.5	2184
EAC02	6	7	820.6	14.7	6.0	9.3	24.3	2.6	462.1	0.6	265.9	80.5	35.3	3.1	0.7	85.7	4.0	1815
EAC02	7	8	667.0	12.9	6.2	6.8	19.4	2.5	358.9	0.7	210.0	64.5	27.6	2.5	0.8	85.6	4.5	1470
EAC02	8	9	334.1	59.5	55.6	7.3	37.5	16.8	173.6	8.2	115.6	32.7	22.2	7.7	8.0	877.5	50.3	1807
EAC04	9	10	525.8	11.9	4.2	7.9	21.2	1.9	396.4	0.4	213.5	63.1	27.7	2.6	0.5	57.0	2.6	1337
EAC04	10	11	894.3	11.5	4.2	9.2	23.6	1.9	572.3	0.3	290.4	87.7	38.6	2.6	0.5	57.4	2.5	1997
EAC04	11	12	743.2	13.1	5.4	8.0	22.3	2.3	409.3	0.5	225.1	67.3	31.0	2.7	0.6	74.5	3.3	1609
EAC04	12	13	745.6	13.5	4.9	9.5	25.2	2.2	439.8	0.4	261.3	76.4	37.3	3.0	0.5	58.3	2.6	1680
EAC04	26	27	1486.4	30.3	11.9	17.7	53.9	5.3	877.3	1.1	503.9	146.8	69.9	6.4	1.3	137.8	7.5	3357
EAC04	27	28	1314.4	27.1	10.0	17.7	49.8	4.3	945.3	0.8	499.2	145.6	73.9	6.0	1.0	118.6	5.8	3220
EAC05	24	25	285.0	3.8	1.5	2.8	6.9	0.6	168.9	0.1	94.9	27.8	11.6	0.8	0.2	17.4	0.9	623
EAC05	25	26	404.1	5.0	1.7	3.9	10.4	0.8	242.8	0.2	130.6	40.2	16.9	1.2	0.3	24.4	1.4	884
EAC05	26	27	304.6	4.1	1.5	3.2	8.0	0.7	175.9	0.2	100.2	30.8	12.6	0.9	0.2	20.2	1.2	664
EAC05	27	28	265.3	3.5	1.3	2.7	6.9	0.5	141.9	0.2	82.7	25.1	10.3	0.8	0.1	17.5	1.0	560
EAC05	29	30	239.5	3.0	1.0	2.4	6.0	0.5	135.5	0.2	77.2	23.7	9.2	0.7	0.1	14.9	0.8	515
EAC05	30	31	255.5	3.1	1.1	2.5	6.3	0.5	146.0	0.2	80.7	24.8	10.4	0.7	0.1	15.5	0.9	548
EAC05	33	34	256.7	3.4	1.3	2.6	6.5	0.6	141.3	0.1	84.1	25.4	10.7	0.8	0.2	17.0	1.1	552
EAC05	36	37	244.5	3.1	1.1	2.4	5.9	0.5	137.2	0.1	80.4	23.6	10.0	0.7	0.1	15.7	0.8	526
EAC05	37	38	264.1	3.3	1.4	2.6	6.5	0.5	150.1	0.1	86.9	26.1	10.7	0.8	0.2	17.3	0.9	571



Drillhole	From	То																
ID	(m)	(m)	CeO <sub>2</sub>	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Ho <sub>2</sub> O <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Tm <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>	TREO
EAC05	40	41	297.3	3.7	1.3	2.8	7.4	0.6	171.8	0.2	93.3	28.4	11.7	0.8	0.2	18.5	0.9	639
EAC05	42	43	292.4	3.7	1.3	2.9	7.4	0.6	163.6	0.1	92.7	28.5	11.9	0.8	0.1	17.4	1.0	624
EAC05	43	44	249.4	2.7	1.0	2.4	5.9	0.5	144.8	0.1	79.5	24.1	10.0	0.6	0.1	14.2	0.8	536
EAC06	35	36	264.1	3.3	1.2	2.6	6.4	0.5	153.1	0.1	82.9	25.6	11.2	0.7	0.1	15.5	0.8	568
EAC06	41	42	232.2	3.1	1.2	2.5	6.2	0.5	130.2	0.1	74.6	22.7	10.4	0.8	0.1	15.4	0.8	501
EAC06	44	45	291.1	3.0	1.2	2.5	6.1	0.5	157.2	0.1	95.1	28.6	12.0	0.7	0.2	12.7	0.9	612
EAC06	46	47	253.1	3.1	1.1	2.2	5.5	0.5	140.7	0.1	77.2	24.1	10.2	0.7	0.1	13.3	0.8	533
EAC06	47	48	280.1	3.6	1.4	2.6	7.5	0.6	156.0	0.1	89.3	27.8	12.3	0.8	0.2	16.5	0.9	600
EAC06	49	50	240.8	3.7	1.5	2.3	5.9	0.6	132.5	0.2	79.5	23.8	11.1	0.8	0.2	16.8	0.9	520
EAC06	53	54	312.0	4.1	1.5	3.0	7.9	0.6	171.8	0.1	101.6	30.8	13.0	0.9	0.2	17.4	1.0	666
EAC06	54	55	282.5	3.6	1.4	2.7	6.8	0.5	153.1	0.2	88.6	26.9	11.9	0.8	0.2	16.9	1.0	597
EAC06	56	57	272.7	3.4	1.3	2.5	6.8	0.5	156.6	0.1	86.3	26.2	11.6	0.8	0.1	15.4	0.8	585
EAC09	2	3	399.2	6.8	2.5	4.5	12.7	1.1	236.9	0.3	140.6	42.0	19.8	1.4	0.4	34.2	2.1	904
EAC09	4	5	496.3	7.2	2.7	5.1	12.9	1.1	285.0	0.3	156.9	47.7	20.4	1.5	0.4	34.5	1.9	1074
EAC09	5	6	468.0	7.1	2.2	4.9	12.8	1.0	262.7	0.2	159.2	47.4	20.5	1.4	0.3	31.6	1.6	1021
EAC09	6	7	303.4	5.9	2.5	3.6	10.0	1.0	188.2	0.3	107.1	32.0	14.5	1.3	0.4	32.8	1.9	705
EAC10	2	3	59.6	21.5	14.1	3.8	20.7	5.2	75.8	1.7	54.9	12.8	11.5	3.2	1.8	234.9	11.3	533
EAC10	10	11	506.1	8.4	3.7	5.3	13.6	1.3	272.1	0.4	166.2	50.5	21.5	1.7	0.5	42.8	2.8	1097
EAC10	11	12	660.9	9.8	4.3	6.9	17.2	1.7	382.3	0.5	215.2	64.2	27.5	2.1	0.5	55.2	3.1	1451
EAC10	12	13	508.6	6.7	2.9	5.2	12.4	1.1	299.1	0.3	173.8	51.3	21.3	1.6	0.3	38.6	2.0	1125
EAC10	13	14	396.8	6.2	2.4	4.2	10.9	1.0	236.9	0.2	135.9	40.7	17.3	1.2	0.3	31.0	1.8	887
EAC10	14	15	229.1	3.6	1.7	2.5	6.3	0.6	133.7	0.2	78.5	23.0	10.6	0.7	0.2	18.2	1.2	510
EAC10	15	16	330.4	4.8	1.8	3.4	8.6	0.7	180.6	0.1	108.4	31.9	14.6	1.0	0.2	20.4	1.3	708
EAC10	16	17	289.9	3.7	1.4	3.0	7.3	0.6	169.5	0.2	100.0	29.8	12.5	0.8	0.2	15.7	1.2	636



Drillhole ID	From (m)	To (m)	CeO₂	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Eu₂O₃	Gd₂O₃	Ho₂O₃	La <sub>2</sub> O₃	Lu₂O₃	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Tm <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Yb₂O₃	TREO
EAC10	18	19	324.3	5.5	2.2	4.2	9.7	0.9	179.4	0.2	103.6	31.3	15.8	1.2	0.3	24.6	1.6	705
EAC12	8	9	301.0	7.9	3.7	3.3	10.5	1.6	145.4	0.5	104.0	31.7	17.0	1.4	0.6	44.7	3.8	677
EAC12	9	10	570.0	19.5	6.9	9.4	31.4	3.0	281.5	0.5	221.6	62.8	39.8	4.1	0.7	73.0	4.1	1328
EAC12	10	11	797.2	24.6	9.9	11.3	38.7	4.4	407.0	0.9	291.6	81.9	48.7	5.0	1.2	121.1	6.3	1850
EAC13	17	18	359.9	8.8	4.3	4.2	12.4	1.7	191.2	0.5	126.0	37.8	19.2	1.7	0.5	46.9	3.3	819
EAC13	18	19	237.1	7.8	4.0	3.1	10.1	1.7	120.8	0.5	87.8	25.1	13.9	1.5	0.6	44.7	3.3	562
EAC14	12	13	237.1	23.8	11.2	6.5	31.8	4.1	139.0	1.2	133.0	32.7	28.2	4.3	1.5	109.2	8.9	772
EAC14	13	14	93.0	24.4	18.1	2.5	20.9	5.8	55.5	2.3	49.7	12.1	10.3	3.3	2.3	279.4	13.4	593
EAC14	14	15	418.9	10.5	4.5	4.8	19.8	1.8	238.1	0.3	151.6	43.7	20.6	2.2	0.5	66.7	2.3	986
EAC14	16	17	443.5	8.9	3.8	4.6	16.4	1.6	256.8	0.3	149.3	45.4	21.2	1.8	0.4	50.5	2.3	1007
EAC14	17	18	595.8	12.2	4.5	6.6	22.3	2.0	344.8	0.3	202.4	61.0	29.1	2.7	0.5	58.3	2.4	1345
EAC15	10	11	701.4	8.4	5.1	2.3	9.8	1.5	59.7	0.8	55.5	15.5	10.9	1.5	0.7	48.0	5.3	926
EAC15	12	13	218.0	15.1	7.2	5.7	23.2	2.3	153.6	0.9	151.0	40.0	27.5	3.0	0.9	70.9	6.6	726
EAC15	13	14	416.4	7.9	4.4	1.8	8.6	1.4	51.6	0.7	47.1	12.9	9.3	1.4	0.7	40.1	4.9	609
EAC15	18	19	199.0	10.8	5.1	3.1	12.9	1.7	107.0	0.7	74.3	22.0	14.0	2.0	0.7	48.5	5.0	507
EAC15	22	23	232.8	11.8	6.0	3.6	15.7	2.2	128.4	0.7	111.7	30.7	21.2	2.2	0.8	54.5	5.5	628
EAC15	23	24	193.5	13.1	6.3	4.7	16.5	2.3	64.2	0.9	101.5	24.0	22.1	2.4	0.9	62.2	5.9	521
EAC15	26	27	937.3	104.3	64.5	24.9	115.8	22.0	458.6	8.8	548.2	124.4	106.5	18.0	8.7	746.7	54.3	3343
EAC15	27	28	1192.8	38.4	11.3	19.6	74.6	5.5	562.9	0.9	498.1	127.5	90.8	9.2	1.3	104.3	7.6	2745
EAC16	2	3	340.3	6.6	2.7	3.4	11.4	1.1	209.3	0.3	117.8	36.6	15.7	1.5	0.4	31.2	2.3	781
EAC16	3	4	243.8	16.4	8.4	5.9	22.2	2.6	148.4	1.0	125.4	31.1	24.2	3.1	1.1	95.8	6.7	736
EAC16	4	5	400.5	5.2	1.6	4.4	12.4	0.7	242.8	0.1	144.6	44.5	18.4	1.3	0.2	15.5	0.9	893
EAC16	5	6	323.1	7.6	3.1	3.9	12.6	1.2	188.8	0.4	110.8	33.8	14.4	1.5	0.4	40.6	2.6	745
EAC18	8	9	434.9	10.9	5.0	5.2	17.2	2.0	259.2	0.6	158.0	45.4	23.8	2.3	0.7	62.6	4.4	1032



Drillhole ID	From (m)	To (m)	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>	Gd₂O₃	Ho <sub>2</sub> O <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Tm <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>	TREO
EAC18	9	10	1394.2	17.5	5.2	13.5	35.4	27	808.1	0.5	466.6	137.1	60.0	4 1	0.6	76.1	3.4	3025

# Appendix 1: JORC Code Table 1 - Eurelia Project Section 1 Sampling Techniques and Data

Criteria	Explanation	Comment			
Sampling techniques	Nature and quality of sampling.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report.	using a 90mm lingreen plastic stored in rows drill sub-sample Samples were of 50mm PVC spesample bag. Appeach 1m interview.  **REE assay reannouncemen results can be transcan be transcan be transcan be transcan to the transcan be tran	bags in one metrof 10. There was res were collected collected after dril ar to sample each proximately 1.5kg al. No composite sults for relevant at can be found in table 2. Lated, thus: CeO203 + La2O3 + Lu2O3 + Yb2O3 (Heavy Rare Earth 1003 + Er2O3 + Ho2O3 + Er2O3 + Er2O3 + HO2O3 + Er2O3 + Er2O3 + HO2O3 + Er2O3 + Er2O3 + HO2O3 + Er2O3 + Er2O	ample was collected interval. Bags who in-line sample at the time of drilling had been core of a 1m interval from gof sample was consampling was done samples reported table 1, selective of 2 + Dy2O3 + Er2O3 + Nd2O3 + Pr6 of a n Oxide) is the ration of the constant of th	ed from a cyclone ere labelled and splitter, and no lling. mpleted, using a the plastic drill ollected from e.e. in this multi element 3 + Eu2O3 + 00 (%) of HREO to 07 + Tm2O3 +
		Element	Conversion factor (oxide)	Equivalent oxide	
		Ce	1.2284	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>	
		Но	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	1.2082	Pr6O11	
		Sm	1.1596	Sm <sub>2</sub> O <sub>3</sub>	
		Tb	1.1762	Tb4O7	
		Tm	1.1421	Tm <sub>2</sub> O <sub>3</sub>	
		Y	1.2699	Y2O3	
		Yb	1.1387	Yb2O3	
		• Conversion fa	ctor used for Nb t	o Nb2O5 =1.43	
Drilling techniques	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).	-	core blade where ng RC hammer dri		•
	Method of recording and assessing core and chip sample recoveries and results assessed.		sample recoveries ualified geologist.		ged by an

Criteria	Explanation	Comment
Drill sample recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The water table was never intersected and all drill intervals were dry. Drill recoveries were good for all drilling.
	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.	Yet to be reviewed.
Logging	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.	Drill chips were logged by an experienced geologist. No mineral resource, mining studies or metallurgical studies are proposed.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  The total length and percentage of the relevant	All logging is qualitative.  All drill intersections were logged (798m total).
Sub-sampling	intersections logged.  If core, whether cut or sawn and whether quarter, half or all core taken.	
techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-	Sample for geochemical analysis were spear sampled from 1m interval plastic drill bags, using a 50mm PVC spear. All samples were in 1m intervals, with no composite sampling. Each sample was approximately 1.5kg. 1m interval samples were selectively sampled,
	sampling stages to maximise representivity of samples.	based on geology intersected and pXRF assays of 1m intervals completed in the field.
	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.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All assays were conducted by ALS in Perth. The assay method used include:  ME-MS81 - specialty assay technique for REE and Trace Elements, Li-Borate fusion, acid dissolution and ICP-MS analysis.
tests	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.	ME-ICP06 – Whole-rock by fused bead/acid digest Au-OG43 - Aqua Regia/ICP-MS ME-4ACD81 – 4 acid/ICP-AES
	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.	Duplicate samples, blank standards and appropriate REE standards were inserted every 64 <sup>th</sup> sample respectively. The standard used was Geostats GRE-6
Verification of	The verification of significant intersections by independent or alternative company personnel.	
sampling and assaying	The use of twinned holes.	
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data collection and data entry has been validated by co-workers.
	Discuss any adjustment to assay data.	
Location of data points	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.	Location methods for samples were handheld GPS. All data is provided in GDA94 MGA54.
	Specification of the grid system used.	

Criteria	Explanation	Comment
	Quality and adequacy of topographic control.	
	Data spacing for reporting of Exploration Results.	
Data spacing and distribution	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.	All drilling is first pass and data spacing is not directly relevant to the geological interpretation of the data.  No sample compositing has been undertaken.
	Whether sample compositing has been applied.	
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	All drilling is first pass. Angled holes were used on occasions and azimuths appropriate to interpreted geological dips/strikes were
structure	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.	chosen.
Sample security	The measures taken to ensure sample security.	Samples were managed by Olympio field staff at all times until they were delivered to ALS Adelaide.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits undertaken. Independent consultant geologist, N. Leggo of Indeport Pty Ltd, has reviewed the sampling techniques and data.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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.  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.	The exploration results reported pertain to EL 6374 and EL6912 in South Australia.  Tenement EL6374 (previously EL5373) is held by private company, Australian Diamond Mining Group Pty Ltd (ADMG). Another private company, Copper Claim, has held 100% of the non-diamond mineral rights on Tenement EL6374 by agreement with ADMG since December 2017.  The current tenement, Eurelia EL6374, expired on the 17/11/2022, and a renewal application was made by ADMG on 24/10/2022. Olympio's agreement with Copper Claim for EL6374 is for all mineral rights excluding copper and the already excluded diamond rights held by ADMG.  EL6912 (Walloway) was applied for in November 2022 by Olympio Metals and grated in June 2023. It covers 81km². Olympio is unaware of any impediments for exploration on these licences.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous explorers of the Eurelia region include DeBeers, Orogenic Exploration, Flinders Diamonds Limited (Flinders Mines Limited after 2008) and Copper Claim Pty Ltd. Relevant data from previous explorers has been acknowledged where relevant.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The Eurelia Project is located within the Adelaide Geosyncline in South Australia and comprises mostly folded Proterozoic sediments of the Adelaidean System typically associated with regional NE and NW trending faults and anticlinal fold structures. This structural pattern is associated with the Late Cambrian-Early Ordovician Delamerian Orogeny, which created complex folding and faulting associated with a dominant east-west oriented compression. Extensive areas of outcropping diapiric breccia correlated with the Willouran Callanna Beds (Curdimurka Group) occur in zones of structural weakness and as exposures in the crests of anticlinal fold structures.  The Walloway Carbonatite occurs within the project area. It is part of suite of small dykes and plugs of carbonate-rich and chemically evolved ultramafic lamprophyre of Jurassic age (~170 Ma), within a small contemporaneous diapiric zone (Walloway Diapir, ~10km long x 100-800m wide) in the Orroroo (Eurelia) region at the eastern margin of the Gawler Craton (Jaques, 2008, Nelson et. al. 1988).
Drill hole information	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:  easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole downhole length and intersection depth hole length.	Detailed drilling summary data is provided in attached tables.
	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.	Drillhole information pertaining to diamond and copper prospectivity have been excluded (to some extent) on the justification that the company does not hold the rights to diamond mineralisation or copper mineralisation.
Data aggregation methods	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.  Where aggregate intersections incorporate short lengths of high grade results and longer lengths of	Not applicable  Not applicable.
	low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalent values have been reported as TREO (total rare earth oxides) which provides an arithmetic addition of the analytical results for each of the elements analysed. Each element oxide grade is given an equal weighting.  There are a total of 28 elements classified as rare earth oxides but not all were assayed. The analytical results for each individual element have also been reported for all samples.
Relationship	These relationships are particularly important in	Not applicable.
between mineralisation	the reporting of Exploration Results.	Not applicable as the geometry of the mineralisation with respect
widths and intersection	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable, as the geometry of the mineralisation with respect to the drill angles has yet to be verified.
lengths	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").	Not applicable.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intersections 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.	Appropriate maps have been provided as colour figures in the announcement.

Criteria	JORC Code explanation	Commentary
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.	The attached tables and diagrams are comprehensive and representative of all drill results.  A 500ppm TREO cut-off was applied to assay results reported in this announcement (Table 3). Selective 1m samples were assayed, guided in part by pXRF analysis of 1m drill sample intervals on site.
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.	All relevant historical exploration data has been referenced in this report.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further drilling of the REE targets is warranted and is being planned. Multiple REE mineralisation models are targeted in the project area, including kimberlite hosted REE, carbonatite hosted REE and ferro-carbonatite dyke hosted REE.  The diagrams indicate the locations and potential extensions of REE mineralisation.