### 2.2% TREYO Rock Chip Assay at the Leatherback Silicate-Carbonatite Alkaline Complex, Byro East Project, WA.

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### HIGHLIGHTS

#### WA Byro East Project

- High-grade rock chip assays up to 2.20% <sup>1</sup>TREYO (33% NdPr) (BY23A0067) have been received from the Leatherback L1 mineralised trend. Results significantly surpass previous high of 1.09% TREYO (BY23K0360) collected from the L2 trend.
- Multiple new assays > 0.5% TREYO further substantiate the Leatherback L1 & L2 mineralised trends as drill targets with possible extension in multiple directions under transported cover.
- A fifth REE mineralised trend (L5) identified in the NW of the Leatherback Alkaline complex sub parallel to the Leatherback magnetic high producing a visual geophysical horizon to explore along.
- L1 L5 surface mineralisation now spanning 2.5km in strike.
- Micro XRF analysis of selected REE mineralised rock chips identify LREE & HREE mineralisation to primary Monazite and Xenotime respectively.
- Nickel Laterite sample BY23A0339 collected from a gossanous lateritic sub-crop within a dominantly flat alluvial cover setting returned a grade of 0.54% Nickel (Ni) & 0.78% Chrome (Cr). Sample is located 170m east of single low priority VTEM conductor pick and 1100m north of a cluster of 5, high priority bedrock conductor picks.



Figure 1: BY23A0067, 2.20 % TREYO (33% NdPr)

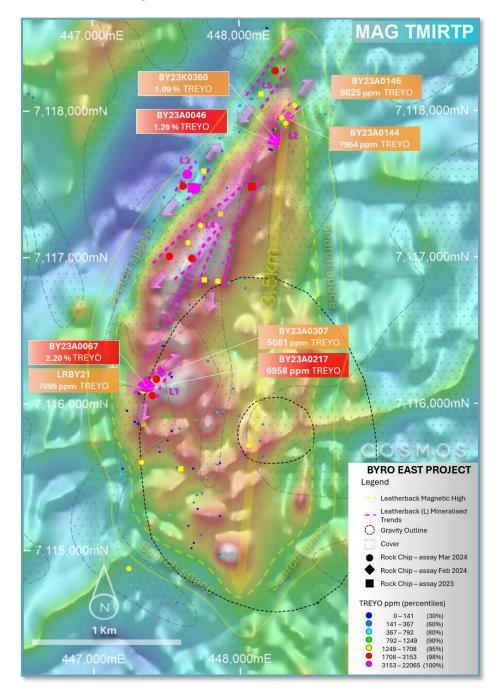
**Cosmos Exploration (ASX: C1X) ("Cosmos" or "the Company")** is pleased to report new exploration results which highlight significant rare earth exploration potential associated with a Silicate-Carbonatite Alkaline Complex at its 100%-owned Byro East Project ("Byro East") in Western Australia.

### Byro East Rare Earth and Nickel-Copper-PGE Project

The Company received the remaining 363 rock chips assays results which were collected across the central four contiguous Byro East tenements (>600km<sup>2</sup>), testing 21 of the 70 REE geochemical soil anomalies and these results have exceeded expectations. Grades of up to 2.20% TREO (33% NdPr) were returned in rock

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chip sample BY23A0067 collected from the Leatherback L1 mineralised trend (Figures 1-5 & Appendix A for assay results). This result significantly surpasses the previous assay high of 1.09% TREO found in sample BY23K0360 from the Leatherback L2 trend, demonstrating the potential for the Leatherback alkaline complex to produce ore-grade mineralisation particularly along structures interpreted from magnetic imagery (refer to ASX announcement dated 15 August 2023).



**Figure 2**: Overview of completed rock chip sampling across the Leatherback Prospect over magnetic imagery (background) highlighting the five mineralised TREYO trends (L1-L5) now identified over a 2.5km strike. Sample locations are colour coded by TREYO grades, with all rock chips exceeding 5000 ppm identified with labels. Anomalous rock chip assays are coincident with the 3.5km long Leatherback magnetic high (yellow dashed outline) and semi coincident Leatherback concentric gravity high (black dashed outline). Both magnetic and gravity highs are interpreted to represent the geophysical footprint of the Leatherback Silicate-Carbonatite Alkaline Complex over 3.5km in strike.

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A fifth REE mineralised trend (L5) has been identified along the northwestern margin of the Leatherback magnetic high, in a position analogous to the L3 trend located 300m to the southwest (Figure 2). Although the L3 and L5 trends exhibit lower grades compared to the L1 and L2 trends, they represent a strike-extensive and geophysically visible search space, extending the circumference of the 3.5 km long Leatherback magnetic high (Figure 2). Cosmos will aim to identify higher grades within this search space focusing on the intersection of cross structures as well as continuing to identify extensions to the L1-L5 mineralised trends and other structures internal to the Leatherback magnetic high.

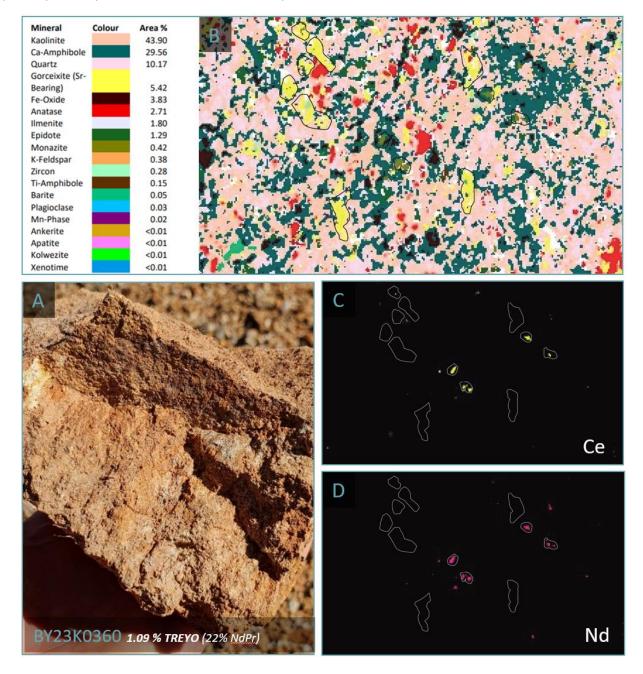


*Figure 3:* Photographs of the variably weathered mineralised rock chips reported in this announcement at the Byro East Project. All photographed samples between 5-6cm in width.

Top Left - BY23A0067, 2.20 % TREYO (33% NdPr). Weathered Ferro-carbonatite or Weathered Alkaline PyroxeniteTop right - BY23A0046, 1.26 % TREYO (25% NdPr). Weathered CarbonatiteBottom left - BY23A0217, 0.69% TREYO (25% NdPr). Kaolinite altered alkaline feldspar granite.Bottom right - BY23A0339, 0.54% Ni, 0.78% Cr.Nickel Laterite / Weathered Mafic

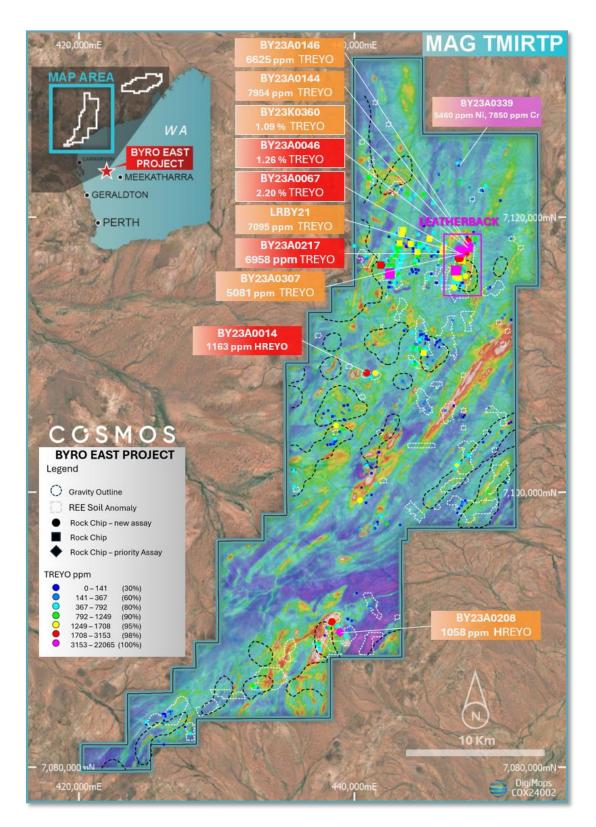
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Micro X-ray Fluorescence Spectroscopy ( $\mu$ XRF) using the Bruker M4 TORNADO PLUS was performed on eight previously assayed samples with varying degrees of weathering to gain insight into their mineral compositions and element distributions. Maps of Light Rare Earth Elements (LREE) for Cerium (Ce) and Neodymium (Nd) revealed a strong correlation with Monazite, a preferred LREE ore mineral. Similarly, maps of Heavy Rare Earth Elements (HREE) for Yttrium (Y) showed a strong correlation with the preferred HREE ore mineral Xenotime, when present. Additionally, the barium-rich phosphate mineral Gorceixite was commonly found in clay-rich samples, typically forming a halo around Monazite. This suggests that Monazite has partially decomposed into Gorceixite at this 50µm resolution.



**Figure 4: A** - Field photograph of weathered carbonatite sample BY23K0360 (refer to ASX announcement dated 15 August 2023). **B** - Mineral Map of BY23K0360 using Bruker M4 TORNADO PLUS with selected outlines of Monazite and Gorceixite minerals. Image width approximately 10 000 um = 1 cm, pixel = 50um. **C** - Ce element map with mineral outlines, note Ce correlates with Monazite. **D** - Nd element map with mineral outlines, note Nd concentrations correlate with Monazite.

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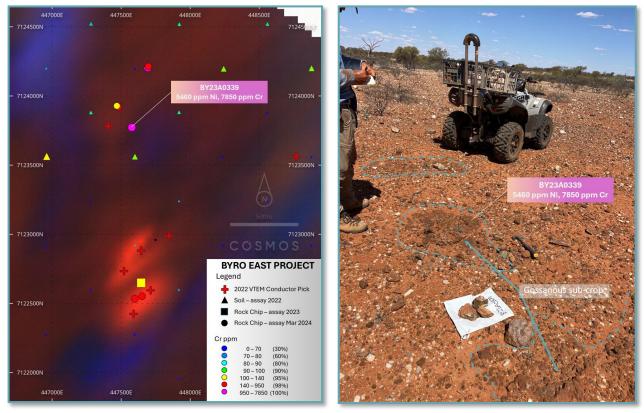


**Figure 5**: Overview of the completed rock chip sampling with Fusion TREYO grades, highlighting the Leatherback Prospect as a regionally significant prospect, concentrated in LREE. Map shows the spatial relationships of the 70 REE soil geochemical anomalies (above the 95th percentile), gravity highs (black dashed polygons) and magnetic geophysical highs (red-white colours, background imagery) across the central Byro East Tenements (>600 km<sup>2</sup>). Assays are colour coded by TREYO grades, with all rock chips exceeding 5000 ppm TREYO or 1000 ppm HREYO identified with labels. Location of Nickel Laterite Sample BY23A0339, grading 0.54% Nickel positioned ~3km north of the Leatherback prospect is also shown.

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These assays form part of the December 2023 quarter rock chip sampling program, assessing 21 of the 70 REE-Ba-Sr-Nb-Ca-Ni-Cr-Mg geochemical soil anomalies, collecting a total of 375 rock chips, of which 26 samples were taken from areas prospective for magmatic Ni-Cu-PGE mineralisation.

The most notable of the 26 targeted magmatic Ni-Cu-PGE samples was sample BY23A0339, which returned an assay of 0.54% Ni and 0.78% Cr. The nickel laterite sample was taken from a gossanous sub-crop in a dominantly flat alluvial setting 170m east of a single low-priority VTEM conductor pick and 1100m north of a cluster of 5 high-priority bedrock conductor picks. The proximity of the rock chip sample to VTEM conductors is encouraging and could indicate that the VTEM conductors are responding to metal sulphides hosted in mafic rocks beneath the alluvial cover. No plate modelling has been completed on VTEM conductor picks.



**Figure 6:** Left - Location of Nickel Laterite rock chip sample BY23A0339 with Chromium (Cr ppm) Geochem assays over background RGB EM Decay Channel Image (dBdtZ Ch40-34-24). Sample BY23A0339 is located 170m east of a single lower rank, "Priority 3" VTEM conductor pick and 1100m north of a cluster of 5, high "Priority 1 & 2" bedrock conductor picks identified in the 2022 airborne VTEM survey. **Right** – Field Photograph of the gossanous subcrop where sample BY23A0339 was taken, assaying 0.54% Nickel & 7850 ppm Cr. Note the limited "subcrop" exposure within the extensive alluvial and quartz/lithic float cover, characteristic of the Byro East Project.

### **Next Steps**

#### Byro East Ni-Cu-PGE-REE Project

- Leatherback Site Access and Drill Planning.
- Field checks along strike of L1-L5 TREYO mineralised trends.
- Field checks surrounding Nickel Laterite Sample BY23A0339 and VTEM conductors.

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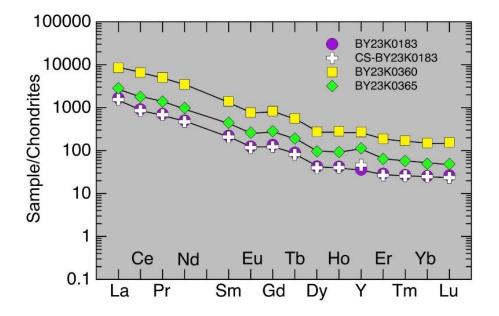
#### Background

During May 2022, Cosmos completed a comprehensive geochemical soil survey over the central four Byro East Tenements, covering an area in excess of 600km<sup>2</sup>. The primary goal was to detect areas of mineralisation, alteration, and host lithologies that are commonly associated with magmatic nickel-copper-PGE, gold and REE style deposits prospective for this region.

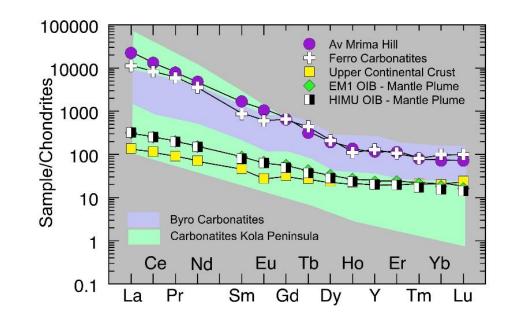
On 26 October 2022, Cosmos announced significant findings from the soil data, which revealed numerous multi-kilometre long trends displaying high TREO and Yttrium oxide values, up to 1,283ppm across large portions of the central tenements.

In February 2023 Cosmos began rock chipping selected geochemical REE anomalies with best results from returned from the Leatherback prospect (LRBY21 - weathered iron oxidised rich pyroxenite or possible oxidised ferro-carbonatite retuned assays up to 263 ppm Sc203 and 0.7% TREO with 30% NdPr). Additional rock chipping May-July 2023 also confirmed that the Leatherback prospect was highly prospective for REE with sample BY23K360 assaying 1.09% TREYO.

Cosmos engaged globally recognised expert consultant, Professor Ken Collerson, to further substantiate the findings. Ken's work noted that assays exhibit similar vector element enrichments to those reported from rare earth-rich carbonatite complexes globally, specifically, sample BY23K360 assaying 1.09% TREYO. The Chondrite-normalized plots provide additional support for this interpretation. All Byro samples show significant enrichment in light and heavy REE's, similar to the REE profiles exhibited by carbonatites from the Kola Peninsula in Scandinavia and Mirima Hill in Kenya.



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*Figure 7:* In Chondrite normalised plots shown above. Byro rock chips are significantly enriched in LREE's and display similar levels of LREE and HREE enrichment to those reported for carbonatites from classic alkaline terranes (eg Kola Peninsula in Finland and Russia) and Mirima Hill (Kenya). References relating to data sources can be found in (ASX 15 Aug 2023).

The REE profiles of the Byro alkaline samples are several orders-of-magnitude more REE enriched than of average crust which is shown for comparison. Also shown for comparison are LREE enriched profiles of ocean island basalts (OIBs) which, like carbonatites are associated with mantle plumes. Alkaline magmatism in the Byro region is inferred to be related to the impact of the mantle plume that generated the ~1078-1070Ma Warakurna Large Igneous Province (Refer to ASX announcement 15 August 2023).

#### This announcement has been authorised by the Board of Cosmos Exploration Limited.

For further information please contact:

Jeremy Robinson Executive Chairman jeremy@cosmosx.com.au

Media Inquiries: Nicholas Read – Read Corporate M: 0419 929 046

#### Or visit our website at www.cosmosx.com.au

#### **Competent Person Statement**

This report's information related to Exploration Results is based on information and data compiled or reviewed by Mr Kristian Hendricksen. Mr Hendricksen is an employee and shareholder of Cosmos Exploration Limited (Cosmos) and is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM).

Mr Hendricksen has sufficient experience relevant to the style of mineralisation under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Accordingly, Mr Hendricksen consents to the inclusion of the matters based on the information compiled by him, in the form and context it appears.

This report's information related to Exploration Results is based on information and data compiled or reviewed by Mr Leo Horn. Mr Horn is a vendor of the Corvette Far East Project and a proposed incoming Non-Executive Director of the Company. Mr Horn is a Member of the Australian Institute of Geoscientists (AIG).

Mr Horn has sufficient experience relevant to the style of mineralisation under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Accordingly, Mr Horn consents to the inclusion of the matters based on the information compiled by him, in the form and context it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases. The form and context of the announcement have not materially changed. This announcement has been authorised for release by the Board of Cosmos Exploration Ltd.

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#### **About Cosmos Exploration Limited**

**Cosmos Exploration Limited (ASX: C1X)** is an ASX listed International critical minerals company focussed on making world class discoveries at its highly prospective projects including; Corvette Far East Lithium Project and the Lasalle Lithium Project in the James Bay region of Quebec, the Byro East Nickel-Copper-PGE Project located in Western Australia and the Orange East Gold-Copper Project located in New South Wales.

Corvette Far East and Lasalle Projects are located along strike from the world class Corvette lithium project owned by Patriot Metals with historically mentioned lithium bearing pegmatites. It is considered highly prospective for lithium pegmatite discoveries.

Byro East was identified by RareX prior to the Julimar Discovery and has potential for mafic-ultramafic intrusion related nickel-copper and PGE mineralisation.

Orange East is an advanced exploration project located on the boundary between the Molong Arc and Hill End Trough within the Lachlan Fold Belt, a major mineral province, within a similar geological setting and along strike from the multi-million-ounce McPhillamys Gold Mine.

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### ASX RELEASE | 11 April 2024 | ASX:C1X

#### **APPENDIX A**

	Easting	Northing	La <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Sm <sub>2</sub> O <sub>3</sub>	Eu <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub>	Ho <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Tm <sub>2</sub> O <sub>3</sub>	Yb <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	HREYO	TREYO	NdPr
SAMPLE_ID	MGA94z50	MGA94z50	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
BY23A0067	447378	7116136	3879	9483	1534	5575	732	125	343	33	86	12	18	3	14	1	226	861	22065	33
BY23A0046	448238	7117801	2771	5626	658	2333	298	48	201	20	87	16	42	4	23	3	465	909	12595	25
BY23A0217	447388	7116122	1547	3120	391	1353	202	27	122	12	50	6	13	1	8	1	104	345	6958	25
BY23A0108	447644	7117569	336	2862	81	254	36	5	22	3	13	2	5	1	4	1	50	106	3675	9
BY23A0328	447699	7117470	807	1634	168	540	77	10	51	6	26	5	12	1	8	1	154	274	3500	21
BY23A0068	447376	7116137	665	1523	167	531	62	10	39	4	14	3	6	1	6	1	121	206	3153	23
BY23A0311	447406	7116062	615	1351	149	490	80	13	51	6	28	5	10	1	8	1	112	234	2920	23
BY23A0221	447350	7116115	646	1339	147	489	66	11	46	5	23	4	10	2	9	1	105	215	2903	23
BY23A0160	438368	7090581	769	1364	122	324	35	4	16	2	6	1	2	0	1	0	12	43	2657	17
BY23A0049	447687	7117485	606	1195	139	478	73	13	49	5	18	3	6	1	4	0	68	165	2656	24
BY23A0047	448236	7117817	630	1253	130	412	53	5	34	4	16	3	7	1	4	1	70	144	2622	21
BY23A0306	447433	7116174	628	1192	129	425	53	11	32	3	13	2	5	1	4	0	63	133	2560	22
BY23A0306	447433	7116174	628	1192	129	425	53	11	32	3	13	2	5	1	4	0	63	133	2560	22
BY23A0282	438960	7089818	513	902	100	369	58	10	65	8	43	8	25	4	20	3	317	504	2445	22
BY23A0215	447379	7116114	458	979	112	383	55	7	33	3	17	3	7	1	4	0	66	141	2128	24
BY23A0122	448242	7118274	231	997	101	484	73	11	37	4	15	2	6	1	5	1	75	158	2045	30
BY23A0014	440885	7108673	287	93	56	244	58	9	114	17	74	21	44	8	43	7	828	1163	1901	28
BY23A0090	447523	7117010	427	851	89	316	42		24	3	13 17	2	5	1	<u>3</u> 5	0	56	114	1839	23
BY23A0190	438964	7089806	525	774	83	271	39	8	30			3	-	1	5	-	72	147	1838	20
BY23A0092	447675 447614	7116997	375	776	89	321	41 37	9	25	3	13 14	2	6	1	5 4	1	73	137	1739	<b>25</b> 20
BY23A0156 BY23A0027	447614	7117490 7108667	521 304	684	80	253 275	37 54	3	28 49	3 6	34	6	17	2	4	2	67 185	131 320	1726 1708	20
BY23A0027 BY23A0158	441518	7117493	453	744	81	275	35	5	26	3	12	2	4	0	2	0	46	101	1665	23
BY23A0138 BY23A0270	438663	7104858	433	744	80	232	29	4	20	2	12	2	4 5	1	4	1	64	101	1643	20
			344					4	22			2	4	0	3	0				20
BY23A0219 BY23A0066	447414 447371	7116166 7116107	344	738 682	81 75	264 250	34 36	6	22	2	10 14	3	6	1	<u> </u>	1	36 97	85 164	1547 1546	23
BY23A0066 BY23A0103	447371 448315	7117916	339	703	75	250	36	7	29	3	14	2	6	1	6	1	72	164	1546	22
BY23A0103 BY23A0358	440313	7099413	335	655	74	239	36	6	26	4	14	3	6	1	3	0	61	130	1339	23
BY23A0358 BY23A0064	440407	7115723	360	681	67	198	24	3	17	2	8	2	3	1	4	1	52	93	1449	19
BY23A0004 BY23A0029	443001	7108675	395	692	57	162	19	3	12	2	9	2	4	1	3	1	50	85	1422	16
BY23A0060	447333	7115608	358	669	66	198	22	3	15	2	7	1	3	0	2	0	43	77	1392	20
BY23A0283	438954	7089811	239	577	64	230	40	8	36	5	27	4	13	2	10	2	130	237	1387	23
BY23A0099	430004	7117104	306	629	67	220	31	4	22	3	13	2	6	1	6	1	65	121	1374	22
BY23A0094	447734	7117221	293	622	69	233	32	6	24	3	13	2	6	1	5	1	64	125	1374	23
BY23A0119	448376	7118038	207	555	61	280	51	10	46	6	27	4	10	1	6	1	103	214	1367	27
BY23A0126	448286	7117955	339	654	60	184	23	2	14	2	8	2	4	1	4	1	54	92	1351	19
BY23A0053	447246	7114884	231	523	70	308	57	10	38	4	16	2	4	0	3	0	39	116	1306	30
BY23A0213	447343	7116091	321	641	63	181	22	2	14	2	7	1	3	0	3	0	39	73	1301	19
BY23A0315	442341	7097683	279	78	43	161	34	9	44	7	42	10	28	4	23	4	483	653	1249	27
BY23A0216	447375	7116114	271	555	65	229	32	5	22	2	12	2	5	1	4	0	41	94	1246	24
BY23A0117	448374	7118036	224	518	56	227	36	6	32	4	20	3	8	1	5	1	84	164	1225	25
BY23A0284	438821	7089606	321	114	52	211	36	6	53	6	35	7	20	3	14	2	312	460	1193	30
BY23A0308	447447	7116200	316	555	56	175	23	4	13	1	6	1	2	0	2	0	29	59	1184	20
BY23A0026	441515	7108668	284	515	47	149	25	3	22	3	17	3	9	1	6	1	95	160	1180	18
BY23A0301	439114	7104552	214	710	43	139	18	2	11	1	5	1	2	0	1	0	24	49	1172	16
BY23A0124	448270	7117920	242	485	51	182	26	5	21	3	15	3	8	1	6	1	98	162	1149	22
BY23A0355	440914	7100281	294	468	60	184	28	4	19	3	11	2	5	1	4	1	59	107	1142	23
BY23A0324	448103	7117859	242	527	53	170	28	4	19	2	11	2	3	0	3	0	42	87	1108	21
BY23A0048	447764	7117661	262	506	55	173	26	4	19	2	9	1	4	0	2	0	35	77	1098	21

#### Table 1: Sodium Peroxide Fusion Rock Chip Assay Results >1000 ppm TREYO

Cosmos Exploration Limited Level 1,338 Barker Road Subiaco WA 6008 Email: info@cosmosx.com.au www.cosmosX.com.au

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REE	Rare Earth Element
	La + Ce + Pr + Nd + (Pm) + Sm + Eu + Gd + Tb + Dy + Ho + Er + Tm + Yb + Lu
TREO	Total Rare Earth Oxide
	$La_{2}O_{3} + CeO_{2} + Pr_{6}O_{11} + Nd_{2}O_{3} + Sm_{2}O_{3} + Eu_{2}O_{3} + Gd_{2}O_{3} + Tb_{4}O_{7} + Dy_{2}O_{3} + Ho_{2}O_{3} + Er_{2}O_{3} + Tm_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + CeO_{2} + Pr_{6}O_{11} + Nd_{2}O_{3} + Sm_{2}O_{3} + Gd_{2}O_{3} + Tb_{4}O_{7} + Dy_{2}O_{3} + Ho_{2}O_{3} + Fr_{2}O_{3} + Tm_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + CeO_{2} + Pr_{6}O_{11} + Nd_{2}O_{3} + Sm_{2}O_{3} + Sm_{2}O_{$
TREO + Y or TREYO	Total Rare Earth Oxide + Yttrium Oxide
	$La_{2}O_{3} + CeO_{2} + Pr_{6}O_{11} + Nd_{2}O_{3} + Sm_{2}O_{3} + Eu_{2}O_{3} + Gd_{2}O_{3} + Tb_{4}O_{7} + Dy_{2}O_{3} + Ho_{2}O_{3} + Er_{2}O_{3} + Tm_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + Y_{2}O_{3} + CeO_{2} + Pr_{6}O_{11} + Nd_{2}O_{3} + Sm_{2}O_{3} + Gd_{2}O_{3} + Tb_{4}O_{7} + Dy_{2}O_{3} + Ho_{2}O_{3} + Fr_{2}O_{3} + Tm_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + Y_{2}O_{3} + CeO_{2} + Pr_{6}O_{11} + Nd_{2}O_{3} + Sm_{2}O_{3} + Gd_{2}O_{3} + Tb_{4}O_{7} + Dy_{2}O_{3} + Ho_{2}O_{3} + Fr_{2}O_{3} + Tm_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + Fr_{2}O_{3} + Lu_{2}O_{3} + Fr_{2}O_{3} + Lu_{2}O_{3} + Fr_{2}O_{3} + Lu_{2}O_{3} + Lu_{2}O_{3}$
LREO	Light Rare Earth Oxide
	$La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3$
HREYO	Heavy Rare Earth Oxide
	$Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$
NdPr %	(Pr <sub>6</sub> O <sub>11</sub> + Nd <sub>2</sub> O <sub>3</sub> ) / TREO * 100
Ce/Ce*	(2*(CeN)/(LaN+PrN) where CeN, LaN and PrN are chondrite normalised values

<sup>1</sup>Terminology for REE: Followed by the International Union of Pure and Applied Chemistry

# CCSMOS

### JORC CODE, 2012 EDITION – TABLE 1

#### Section 1 Sampling Techniques and Data

#### (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> </ul>	<ul> <li>Rock chip samples were taken as individual rocks representing variably weathered lithological basement from exposed outcrop and subcrop to give an indication of lithogeochemistry and possible mineralisation relating to REE and Ni-Cu-PGE mineralisation.</li> <li>Individual rock chip samples were restricted to exposed subcrop and outcrop in areas of interest typically dominated by thin alluvial sheet wash which may introduce a bias from the limited exposure.</li> <li>The whole rock chip grab samples were typically between 0.5 and 2 kg.</li> <li>The entire sample received by the laboratory was crushed and pulverised to 85% passing 75 micron.</li> <li>All sample types, location and descriptions were carefully recorded by the field geologist</li> </ul>
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	No drilling reported in this announcement.
	<ul> <li>Aspects of the determination of mineralisation that are material to the Public Report.</li> </ul>	<ul> <li>No drilling reported in this announcement.</li> </ul>
	<ul> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</li> </ul>	• No drilling reported in this announcement.
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>No drilling reported in this announcement.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>No drilling reported in this announcement.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Geological descriptions were recorded by Cosmos Exploration for each rock sample when collected by geologist.</li> <li>Due to the early nature of the project and recent interpretation of a mafic-alkalic silicate- carbonatite alkaline complex after rock chips were collected some field rock descriptions will be re classified based on fusion/multi-acid assay.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>No drilling reported in this announcement.</li> <li>No sub-sampling completed for rock chip samples.</li> <li>The entire sample received by the laboratory was crushed and pulverised to 85% passing 75 micron.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and</li> </ul>	<ul> <li>LR* prefixed samples were analysed by Intertek Genalysis in Perth. The sample analysis uses a Mixed Acid digest with an Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma (ICP) Mass Spectrometry (MS) and Optical Emission Spectrometry (OES) finish. A total of 60 elements were analysed * The mixed acid digest is not the industry standard for analysis of REE minerals as REE are commonly</li> </ul>

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	whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<ul> <li>contained resistate minerals (monazite, xenotime), and may not be totally digested by this technique.</li> <li>*BY23K &amp; BY23A prefixed samples were analysed by Labwest in Perth. The sample analysis uses a Sodium Peroxide Fusion (AF01) with an Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma (ICP) Mass</li> </ul>
		Spectrometry (MS) and Optical Emission Spectrometry (OES) finish. A total of 59 elements were analysed * The Fusion digest is considered the industry standard for analysis of REE minerals and provides a total digest for analysis of REE contained in resistant minerals (monazite, xenotime)
		<ul> <li>8 variably weathered rock chip samples including (BY23K0360) were submitted to Portable Spectral Services (PSS) for</li> </ul>
		<ul> <li>micro-X-ray Fluorescence spectroscopy (uXRF) used to discern elemental sample makeup and mineralogy phases believed to be alkaline in nature.</li> </ul>
		<ul> <li>uXRF is a rapid and non -destructive technique used to quickly acquire qualitative and quantitative geochemical data at 50um / pixel resolution using the BRUKER M4 TORANDO PLUS xXRF machine.</li> </ul>
		<ul> <li>The mapping function produces 2 dimensional compositional maps, by collecting an entire xray spectrum for each pixel in a grid. These qualitative element maps show the spatial variation and abundance of major, minor and trace elements.</li> </ul>
		<ul> <li>The µXRF can then quantify the data using the fundamental parameterisation method.</li> <li>Fundamental parameter algorithm scan calculate the concentration of each element in weight percent, which is then normalised to 100%.</li> </ul>
		<ul> <li>The Advanced Mineral Identification and Characterization System (AMICS) is the latest software package for automated identification and quantification of minerals and synthetic phases. The innovative mineral identification technology allows for the online classification of</li> </ul>
		<ul> <li>X-ray spectra to minerals.</li> <li>The mineralogy knowledge of the user combined with the comprehensive mineral database allows the mineralogy to be determined and applied to the measured sample and any subsequent samples. The modal mineralogy, the calculated assay and the mineral distribution can be shown</li> </ul>

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		in tables for semi-quantitative results or visually represented as charts or graphs.
	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Independent checks or field duplicates were not conducted for rock chips and are not considered necessary for that type of sample.</li> <li>No drilling reported in this announcement.</li> <li>No drilling reported in this announcement.</li> <li>Oxide conversions calculated for REE (see Data Aggregation Methods section)</li> <li>All point geochemistry used in this announcement has not been adjusted and considered to be the raw results received from the laboratory.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul> <li>Rock chip sample locations were surveyed using a handheld GPS using the UTM coordinate system, with an accuracy of +/-5m.</li> </ul>
	• Specification of the grid system used.	MGA94 zone 50
	• Quality and adequacy of topographic control.	• Elevation data not collected from handheld GPS.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul> <li>Rock samples were limited to exposure of subcrop/outcrop over areas of geophysical and geochemical anomalies. At times collection of rock chip samples corresponded to previous soil samples sites that were collected on either a 450m x 450m, 320m x 80m or 80m x 80m grid</li> </ul>
	<ul> <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> </ul>	<ul> <li>Further sampling work is required to establish continuity of mineralisation.</li> </ul>
	Whether sample compositing has been applied	<ul> <li>No drilling or channel composite samples reported in this announcement.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this</li> </ul>	<ul> <li>Reconnaissance rock sampling by Cosmos Exploration were limited to exposed subcrops and outcrops.</li> <li>The orientation of anomalous mineralised samples is unknown however the current interpretation is that mineralisation is related to lithology which has a general NE-SW trend that corresponds to the broader steeply dipping</li> </ul>

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	should be assessed and reported if material.	<ul> <li>regional foliation, commonly noted aligning with the N-S, NE-SW, NW-SE magnetic features and lineaments in geophysical imagery. Several E-W trending dykes crosscut the region and it is currently unknown if these units are mineralised.</li> <li>No drilling reported in this announcement.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Samples were given individual samples numbers for tracking and photographed.</li> <li>The sample chain of custody was overseen by the Company's geologists.</li> <li>Samples were kept in individual calicos that were tied and grouped into large zipped tied green sample bags for transport to the laboratory in Perth</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>The sampling techniques and analytical data are monitored by the Company's geologists.</li> <li>Internal QAQC audit completed by company geologists was completed upon receiving results in February. Audit, revealed that company inserted CRMs (certified reference material) failed the tolerance of 2 standard deviations from certified values. This triggered the company to request all rock chips in this announcement to be assayed substituting the Lithium Borate Fusion digest in Aluminium crucibles to a Sodium Peroxide Fusion using zirconium crucibles. Results were within the 2 standard deviation tolerance from certified values and published in this announcement.</li> </ul>

### Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The project is located approximately 300 km southeast of the township of Carnarvon in the Gascoyne region. The project comprises six granted exploration licences.</li> <li>E09/2386</li> <li>E09/2387</li> <li>E09/2408</li> <li>E09/2409</li> <li>E09/2443</li> <li>E09/2525</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>The tenements are held by Cosmos Exploration Ltd</li> <li>The tenements lie within Native Title Determined Areas of the Wajarri Yamatji People</li> <li>All the tenements are in good standing with no known impediments for early-stage exploration work.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>No previous systematic exploration for carbonatite-associated mineralisation had been previously completed.</li> <li>The Byro East Project has been explored for Ni-Cu and gold mineralisation since the discovery of outcropping Ni-Cu gossans in 1970. The project area has been subject to sporadic and fragmented exploration in the past by various explorers. Exploration work has concentrated on outcropping or sub-cropping areas towards the western tenement boundaries over Cosmos' Dottyback Prospect and is predominantly restricted to rock chip, stream sediment or surface geochemical sampling.</li> <li>The only gridded soil survey completed prior to 2021, was completed by Jododex in 1972. A total of two reverse circulation drill holes and two ground EM surveys are known within the project area, in addition to surface geochemical sampling. Cosmos in May 2022 completed a soil survey over and extending the Jododex survey now named the Dottyback prospect.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The Company's tenements in the Gascoyne Mineral Field upon recent findings in this release are prospective for rare earth mineralisation associated with mafic to ultramafic alkaline-carbonatite complexes in addition to Ni-Cu-PGE magmatic nickel and orogenic gold type deposits.</li> <li>REE mineralisation style at each prospect are not well understood.</li> <li>The Project is located in the Narryer Terrane which forms the northwestern corner of the Yilgarn Craton. Geology consists of a high-grade metasedimentary rock predominately quartzo feldspathic gneisses and migmatites with amphibolite's quartzites, Banded Iron Formations (BIF), felsic volcanics and maficultramafic intrusions.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	<ul> <li>No drilling reported in this announcement however rock assay results are converted to stoichiometric oxide (REO) using element-to- stoichiometric oxide conversion factors.</li> <li>These stoichiometric conversion factors are stated in the table below.</li> </ul>

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	<ul> <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> </ul>	<ul> <li>Rare ea for rep</li> <li>Heavy I of all HI oxide ('</li> <li>NdPr</li> </ul>	arth oxide is the prting rare earth r Rare Earth Oxide REO species divide (REO) expressed a ratio refers to Pr <sub>6</sub> O <sub>11</sub> / REO expr	metal assay (HREO) % re ed by the tot as a percent the % ca	results. efers to total tal rare earth Iculation of
		Floment	Conversion Factor	Ovide Form	Туре
		Ce	1.2284	CeO2	Light
		Dy	1.1477	Dy2O3	Heavy
		Er	1.1435	Er2O3	Heavy
		Eu	1.1579	Eu2O3	Heavy
		Gd	1.1526	Gd2O3	Heavy
		Ho	1.1455	Ho2O3	Heavy
		La	1.1728	La2O3	, Light
		Lu	1.1372	Lu2O3	Heavy
		Nd	1.1664	Nd2O3	Light
		Pr	1.2082	Pr6011	Light
		Sc	1.5338	Sc2O3	
		Sm	1.1596	Sm2O3	Light
		Tb	1.1762	Tb407	Heavy
		Tm	1.1421	Tm2O3	Heavy
		Y	1.2699	Y2O3	Heavy
		Yb	1.1387	Yb2O3	Heavy
		using the on the analytic toward the pro spacing regiona table for reporte • All p annour conside	dded soil geoche ne IOGAS Zscore L laboratory sieve cal bias (increasin s the finer -75um spect samples col g vs -180um as al 450m x 450m or soil geochemis ed. oint geochemi neement has no ered to be the ra- oratory.	og function e size as th g metal com n assayed sie llected on a ssayed siev spaced san try has bee stry used ot been ac	and levelled nere was an incentrations) eved size for 320m x 80m ed size for nples. JORC in previously l in this djusted and
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>		netal equivalent ncement	ts reporte	d in this
Relationship between mineralisation	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is</li> </ul>	hand s routine using a	neralisation has specimen in the ly analyses rock of Vanta M pXRF on of potential n	field. Th chip sample with results	ne company s in the field s used as an

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widths and intercept lengths	<ul> <li>known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	plotting pXRF and wet chem data for rock chips on surface maps has delineated linear trends typically in a NE-SW orientation however this may not reflect the true orientation as sampling is biased towards exposed outcrop and subcrop.
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Appropriate maps and tables are included in the body of the Report.</li> </ul>
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</li> </ul>	<ul> <li>No drilling reported in this announcement.</li> <li>All rock chip samples of REE mineralisation considered important at the Leatherback prospect have been reported.</li> <li>The reported sample batches also included some samples collected as part of ongoing evaluation of the geology of the area.</li> <li>The accompanying document is a balanced report of recent rock samples assays.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>All meaningful and material exploration data available to the Company is disclosed in the body of this announcement.</li> <li>All of the relevant historical exploration data has been included in this report.</li> <li>All historical exploration information is available via WAMEX.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further work is described in the body of this announcement.</li> <li>On-going exploration in the area is a high priority for the Company.</li> <li>Exploration to include rock chip sampling and investigating drill rig access</li> </ul>