### Rare Earth Trends emerging at the Leatherback Silicate-Carbonatite Alkaline Complex, Byro East Project, WA.

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### HIGHLIGHTS

#### WA Byro East Project

- 12 Priority Assays targeting Rare Earth Element (REE) mineralisation have been received with grades up to 0.79% <sup>1</sup>TREYO in rock chip sample BY23A0144 located at the Leatherback Carbonatite Alkaline Complex.
- Four REE mineralised trends are emerging at the Leatherback Alkaline Complex with possible extensions in multiple directions under transported cover.
- These REE mineralised trends are coincident with the Leatherback magnetic and gravity highs, interpreted to represent the geophysical extent of Leatherback Alkaline Silicate-Carbonatite Complex over 3.5km in strike.
- A total of 375 rock chip samples were collected across the central four Byro East tenements (>600km<sup>2</sup>) during the months of October to December 2023. Rock chips aimed to assess 21 of 70 REE-Ba-Sr-Nb-Ca-Ni-Cr-Mg geochemical soil anomalies with 26 samples taken from areas prospective for magmatic Ni-Cu-PGE mineralisation.
- Selection of samples for both REE and magmatic Ni-Cu-PGE styles of mineralisation were submitted for micro XRF analysis to determine element distribution and mineralogy.
- Remaining rock chip assays and micro XRF results due mid-February.

**Cosmos Exploration (ASX: C1X) ("Cosmos" or "the Company")** is pleased to report new exploration results highlighting 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

Nine priority rock chip samples from the Leatherback Silicate-Carbonatite Alkaline Complex have retuned assays with grades up to 0.79% (TREYO) in sample BY23A0144 (Figures 1, 2 & Table 1). These assays in addition to field observations have identified four emerging REE mineralised trends, interpreted to be open in multiple directions under transported cover (Figure 1).

The four mineralised trends occur sub-parallel to the Leatherback magnetic high. Higher grades are noted in two of the trends located in the northern and southwestern portions of the magnetic high. These highergrade trends contain rock chips greater than 0.5% TREYO which have been traced over a strike length of 200 meters northeast from sample locations LRBY21 and BY23K0360 (Figure 1 & 2). The extents of these mineralised trends are largely obscured by alluvial and colluvial transported cover with rock chips commonly collected from small metre wide exposures indicating mineralisation is potentially open in multiple directions (Figure 1).

The Leatherback prospect at the Byro East project is becoming a key focus for Cosmos. The Leatherback Carbonatite-Alkaline Complex exceeds 3.5km in strike and is defined by an extensive REE-Ba-Sr-Nb-Ca-Ni-Cr-

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Mg soil geochemical footprint, coincident with magnetic and gravity geophysical highs. The LREE-HREE enrichment profiles of select rock chips (BY23K0360) are comparable to those reported for carbonatites from classic alkaline terranes (eg Kola Peninsula in Finland and Russia) and Mirima Hill (Kenya) when plotted on In-Chondrite normalised plots (refer to Comos ASX announcement 15 August 2023).



**Figure 1**: Overview of completed rock chip sampling across the Leatherback Prospect overlain on magnetic geophysical imagery showing the four mineralised REE trends (pink dashed), rock chip TREYO grades, sample locations with pending assays and interpreted extent of the transported cover. Anomalous rock chip assays are coincident with the 3.5km long Leatherback magnetic high (red-white colours) and semi coincident Leatherback gravity high (black dashed outline). Both magnetic and gravity highs are interpreted to represent the geophysical footprint of the Leatherback mafic to ultramafic Alkaline-Carbonatite Complex.

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Figure 2: Photographs of variably weathered mineralised rock chips collected from the Leatherback alkalic complex to date.

Top Left - field photograph of weathered carbonatite rock chip sample BY23K0360 assaying 1.09 % TREYO (22% NdPr).

**Top right** - field photograph of weathered iron oxide rich pyroxenite (possibly ferro-carbonatite) rock chip sample **LRBY21** assaying **263 ppm Sc203 and 0.7% TREYO** (30% NdPr).

**Bottom left** - cut sample of a kaolinite altered sample, possibly alkaline granite protolith, **BY23A0144** assaying **0.79% TREYO** (24% NdPr).

**Bottom right** - cut sample of a kaolinite altered sample, possibly alkaline granite protolith, **BY23A0307** assaying **0.51% TREYO** (21% NdPr). Note: All photographs depict a width of approximately 10cm for samples.

A total of 375 rock chip samples were collected across the central four Byro East tenements (>600km2) during the months of October to December 2023. 349 rock chips aimed to assess 21 of 70 REE-Ba-Sr-Nb-Ca-Ni-Cr-Mg geochemical soil anomalies with 26 samples taken from areas prospective for magmatic Ni-Cu-PGE mineralisation (Figures 3 & 4).

Rock chip BY23A0208 located in the south of the project, returned a Heavy Rare Earth (<sup>1</sup>HREYO) concentration of 1058 ppm (Table 1 & Figure 3). This result is highly encouraging as this sample may represent a new Alkaline complex analogous to the Leatherback prospect having an extensive REE soil anomaly, coincident with magnetic and gravity highs.



**Figure 3**: Overview of completed rock chip sampling across the central four Byro East Tenements overlain on magnetic geophysical imagery showing rock chip TREYO grades and sample locations with pending assays. Dashed white polygons show the lateral extent of the 70 REE geochemical anomalies, typically coincident with magnetic (red-white colours in background image) and gravity highs (black dashed outline). Rock Chip BY23A0208 potentially new Alkaline complex analogous to the Leatherback prospect. Central Bryo East Tenements exceed an area of 600km<sup>2</sup>.



**Figure 4**: Overview of completed rock chip sampling across the central four Byro East Tenements overlain on gravity geophysical imagery showing rock chip TREYO grades and sample locations with pending assays. Dashed white polygons show the lateral extent of the 70 REE geochemical anomalies, typically coincident with magnetic (red-white colours in background image) and gravity highs (black dashed outline). Rock Chip BY23A0208 potentially new Alkaline complex analogous to the Leatherback prospect. Central Bryo East Tenements exceed an area of 600km<sup>2</sup>.

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Of the total 375 samples collected, a selection of mineralised REE rock chips and rock chips prospective for magmatic Ni-Cu-PGE have been submitted for Micro X-ray Fluorescence spectroscopy ( $\mu$ XRF). The Micro XRF will help identify elements and understand mineral distributions.

All rock chips collected were analysed in the field with the Company's portable X-ray fluorescence (pXRF) before being submitted for multi-element sodium peroxide fusion digest. The first 12 priority assays of variably weathered rock chips are displayed in Table 1 of the Appendix. All remaining rock chip assays and Micro XRF results are due early to mid-February 2024.

### **Next Steps**

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

- Remaining rock chip assays due early to mid-February
- Interpretation of assay results and Micro X-ray Fluorescence Spectroscopy (µXRF)

#### Background

During May 2022, Cosmos completed a comprehensive geochemical soil survey over the central four Byro East Tenements, covering an area in excess of 600km2. 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 Yittium oxide values, up to 1,283ppm across large portions of the central tenements, with subdued geochemical responses typically relating to alluvial and transported cover.

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.



**Figure 5**: 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 (ASX 15 Aug 2023).

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

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#### **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 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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	Easting	Northing	La <sub>2</sub> O3	CeO <sub>2</sub>	Pr <sub>6</sub> O <sub>11</sub>	$Nd_2O_3$	Sm <sub>2</sub> O <sub>3</sub>	E u <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Dy <sub>2</sub> O <sub>3</sub>	Er <sub>2</sub> O <sub>3</sub>	Yb <sub>z</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Sc <sub>2</sub> O <sub>3</sub>	TRE YO	NdPr	HREYO	HREO/TREO
Sample ID	MG A94 z50	MG A94 z50	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ratio
BY23A0307	447469	7116219	1139	2518	251	839	109	23	67	26	8	5	102	34	5099	21	243	0.05
BY23A0310	447314	7115947	216	453	52	182	30	5	22	14	7	5	77	28	1069	22	136	0.13
BY23A0281	438965	7089809	990	1536	175	551	89	17	66	40	16	11	159	28	3665	20	325	0.09
BY23A0218	447393	7116129	867	1585	207	678	101	19	63	29	9	6	103	81	3679	24	242	0.07
BY23A0214	447368	7116109	600	1214	144	492	70	10	42	22	8	6	98	34	2716	23	196	0.07
BY23A0208	447435	7101953	103	82	15	61	17	4	38	69	65	60	775	18	1336	6	1058	0.79
BY23A0189	438968	7089806	660	1002	116	372	58	12	48	30	13	9	145	29	2480	20	271	0.11
BY23A0144	448340	7117964	1654	3710	423	1528	196	42	111	41	18	13	225	54	7980	24	470	0.06
BY23A0146	448336	7117970	1396	3157	346	1225	159	32	87	34	14	10	171	52	6647	24	365	0.05
BY23A0091	447675	7117003	369	693	76	254	32	7	22	11	5	4	69	23	1549	21	124	0.08
BY23A0125	448286	7117946	277	529	55	167	23	2	15	9	4	4	63	11	1153	19	102	0.09
BY23A0095	447641	7117482	328	491	50	148	19	4	12	7	3	3	33	15	1101	18	64	0.06

#### APPENDIX

**Table 1**: Sodium Peroxide Fusion Rock Chip Assay Results. Note: 12 assays received of which 9 samples were taken from the Leatherback Alkaline Complex. Assays for  $Tb_4O_7$ ,  $Ho_2O_3$ ,  $Yb_2O_3 \& Lu_2O_3 < 10$  ppm and omitted for simplicity.

REE	Rare Earth Element
TREO + Y or TREYO	Total Rare Earth Oxide + Yttrium Oxide
	$La_{2}O_{3} + CeO_{2} + Pr6O_{11} + Nd_{2}O_{3} + Sm_{2}O_{3} + Eu_{2}O_{3} + Gd_{2}O_{3} + Tb_{4}O_{7} + Dy_{2}O_{3} + Ho_{2}O_{3} + Er_{2}O_{3} + Tm_{2}O_{3} + Yb_{2}O_{3} + Lu_{2}O_{3} + Y_{2}O_{3} + CeO_{2}O_{3} + CeO_{2}O_{3} + Fr_{2}O_{3} + Fr_{2$
LREO	Light Rare Earth Oxide
	$La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3$
HREO	Heavy Rare Earth Oxide
	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>
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

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#### 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 and qtz-lithic float rock and may introduce a bias.</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>	<ul> <li>No drilling reported in this announcement.</li> </ul>
	<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>	<ul> <li>No drilling reported in this announcement.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>No drilling reported in this announcement.</li> </ul>

Criteria	IORC 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>	No drilling reported in this announcement.
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 alkaline- carbonatite complex after rock chips were collected some field rock descriptions will be re classified based fusion/multi-acid assay and thin sections results once available.</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,</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</li> </ul>

Criteria	JORC Code explanation	Commentary
	duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<ul> <li>analysis of REE minerals as REE are commonly contained resistate minerals (monazite, xenotime), and may not be totally digested by this technique.</li> <li>*BY 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 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)</li> </ul>
Verification of sampling and	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</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> </ul>
assaying	The use of twinned holes.	No drilling reported in this announcement.
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>No drilling reported in this announcement.</li> </ul>
	• Discuss any adjustment to assay data.	Oxide conversions calculated for REE.
		<ul> <li>(see Data Aggregation Methods section)</li> <li>Data used for gridded soil geochem images were levelled using the IOGAS Zscore Log function and levelled on the laboratory sieve size as there was an analytical bias (increasing metal concentrations) towards the finer -75um assayed sieved size for the prospect samples collected on a 320m x 80m spacing vs -180um assayed sieved size for regional 450m x 450m spaced samples. JORC table for soil geochemistry has been previously reported.</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	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	• Rock chip sample locations were surveyed using a handheld GPS using the UTM coordinate
aata points	surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	system, with an accuracy of +/-5m.
	Specification of the grid system used.	MGA94 zone 50
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	• Elevation data not collected from handheld GPS.
	• Data spacing for reporting of Exploration	• Rock samples were limited to exposure of

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul> <li>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</li> </ul>	<ul> <li>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 320mx80m or 450m x 450m grid</li> <li>Further sampling work is required to establish continuity of mineralisation.</li> </ul>
	<ul> <li>classifications applied.</li> <li>Whether sample compositing has been applied</li> </ul>	<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 should be assessed and reported if material.</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 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 and tied and transported in zipped tied green sample bags 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>No audits or reviews have been conducted for this release given the early stage of the project.</li> </ul>

#### Section 2 Reporting of Exploration Results

Criteria	IORC Code evolution	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>
		<ul> <li>The tenements are held by Cosmos Exploration Ltd and RareX 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>	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

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

Criteria	IORC Code explanation	Comment	arv		
		magma REE min well un The Pro- which Yilgarn metase feldspa amphib Format ultrama	tic nickel and oro neralisation style derstood. oject is located forms the north Craton. Geology dimentary rock thic gneisses polite's quartz ions (BIF), felsio afic intrusions.	genic gold ty at each pros in the Narr western co consists of a predominat and migm ites, Ban c volcanics	pe deposits. pect are not yer Terrane rner of the a high-grade tely quartzo atites with ided Iron and mafic-
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	<ul> <li>No dri howeve stoichic stoichic</li> <li>These stated i</li> <li>Rare ea for repo</li> <li>Heavy I of all HI oxide (<sup>1</sup></li> <li>NdPr I Nd<sub>2</sub>O<sub>3</sub>+</li> </ul>	lling reported in er rock assay re- pometric oxide (R- pometric oxide con- stoichiometric of n the table below arth oxide is the porting rare earth o- Rare Earth Oxide REO species divide (REO) expressed a ratio refers to $Pr_6O_{11}$ / REO expr	in this and sults are co REO) using version fact conversion w. industry aco metal assay (HREO) % re ed by the tot as a percent the % ca ressed as a p	nouncement onverted to element-to- ors. factors are cepted form results. efers to total cal rare earth c. lculation of bercent.
		Element	Conversion Factor	Ovido Form	Tuno
		Ce	1 2284	CeO2	light
		Dv	1 1477	Dv203	Heavy
		Fr	1 1435	Er203	Heavy
		E.	1.1579	Eu203	Heavy
		Gd	1 1526	Gd203	Heavy
		Ho	1.1320	Ho2O3	Heavy
		la	1 1728	1/02/03	Light
			1 1372	1,1203	Heavy
		Nd	1 1664	Nd203	Light
		Pr	1 2082	Pr6011	Light
		Sc	1.5338	Sc203	
		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
		<ul> <li>Data us levelled an a concen sieved s a 320m</li> </ul>	ed for gridded so I using the IOGAS I on the laborator Inalytical bias trations) towards size for the prospo x 80m spacing vs	il geochem i Zscore Log y sieve size (increasi the finer -7 ect samples s -180um as	mages were function and as there was ing metal 5um assayed collected on sayed sieved

Criteria	JORC Code explanation	Commentary
		<ul> <li>size for regional 450m x 450m spaced samples. JORC table for soil geochemistry has been previously reported.</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>
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No metal equivalents reported in this announcement</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Rock samples are mainly important examples of disseminated, vein and massive-style magnetite- REE mineralisation identified in the field</li> </ul>
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 out of a total of 12 samples assayed.</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;</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>

Criteria	JORC Code explanation	Commentary
	potential deleterious or contaminating substances.	
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 infill soil sampling and rock chip sampling</li> </ul>