

## OSMOND INCREASES CONFIDENCE IN ORION EU RUTILE, ZIRCON, HAFNIUM AND RARE EARTHS PROJECT

### HIGHLIGHTS

- **Further positive exploration results from Avellanar Zone at Orion Project including:**
  - **Bulk channel sample from 2.2m thick outcrop containing:**
    - **12.0% TiO<sub>2</sub>\*:**
    - **4.0% ZrO<sub>2</sub>\*:**
    - **1,393 ppm Nd<sub>2</sub>O<sub>3</sub>; and**
    - **374 ppm Pr<sub>2</sub>O<sub>3</sub>.**
  - **Indications of a second mineralised seam above the high-grade primary seam**
  - **Indications the high-grade primary seam continues undercover (no outcropping) meaning the true scale and extent will be delineated during drilling activities**
- **Initial geological mapping of Zone Three has resulted in seven rock samples of outcrops and scattered blocks being sent for geochemical assessment**
- **10 kms between rock samples collected from outcrops in Avellanar Zone and Zone Three**
- **Geological mapping of all three Zones (86km<sup>2</sup> permit area) expected to be completed by end of this Quarter**
- **Initial assay results from partial mapping and sampling of Zone Three expected over coming weeks**

**Osmond Resources Limited (ASX: OSM) (Osmond or the Company)** is pleased to announce continued positive progress with respect to its two EU Critical Minerals' Projects. The Company's focus remains accelerating development activities where possible to take advantage of global and EU tailwinds associated with critical minerals, including titanium, rare earths and aluminum which are all considered strategic critical minerals under the 2024 European Critical Raw Materials Act.

### Commenting on the results, Osmond CEO and Managing Director, Anthony Hall, said:

*"We are excited about ongoing positive exploration results at our Orion EU Rutile, Zircon, Hafnium and Rare Earths Project. Whilst drilling activities in the new year will fully show us the scale of the opportunity, our geological mapping activities and sampling in Avellanar Zone and Zone 3 continue to demonstrate significant potential scale. We remain focused on accelerating development activities to take advantages of the tailwinds associated with titanium, zircon and hafnium, rare earths and aluminum."*

\* Table showing select ratios from oxides to mineral species from 150kg bulk sample for reference purposes given above results have not been analysed by QEMSCAN to determine mineral species:

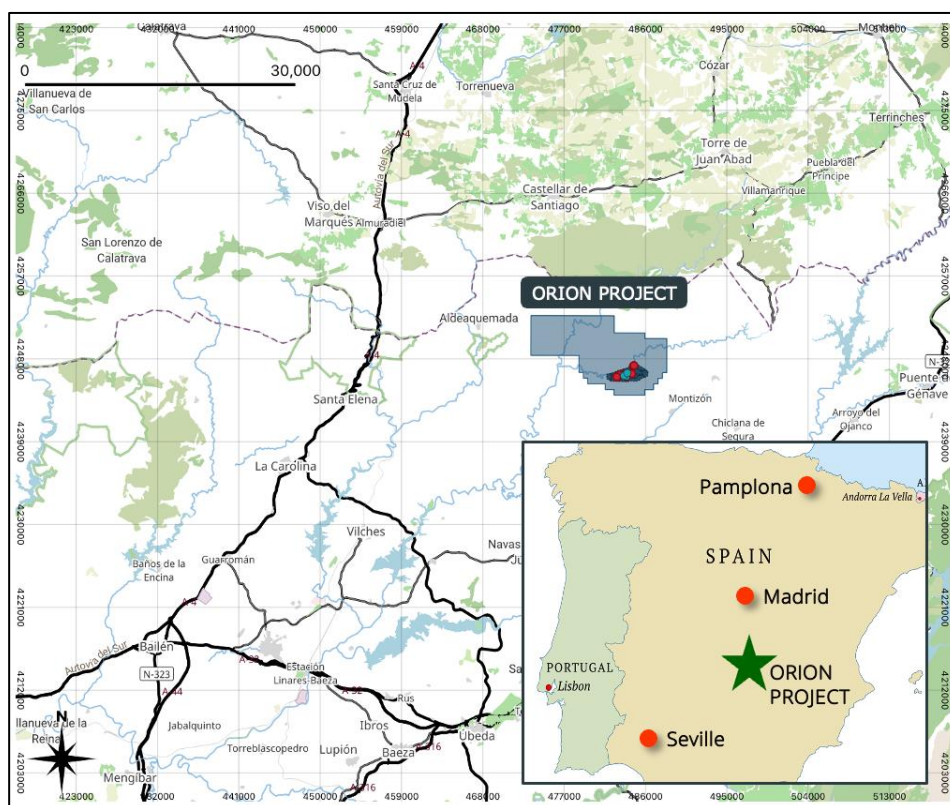
| Sample | Unit | TiO <sub>2</sub> | Rutile | ZrO <sub>2</sub> | Zircon |
|--------|------|------------------|--------|------------------|--------|
| 1      | %    | 15.6%            | 13.3%  | 5.6%             | 9.3%   |
| 2      | %    | 14.1%            | 13.2%  | 5.0%             | 8.4%   |
| 3      | %    | 15.7%            | 15.2%  | 5.7%             | 9.4%   |

Refer ASX Release dated 6 September 2024.

## Orion EU Critical Minerals Project

### Overview

The Orion EU Critical Minerals Project (the **Project**) is located in Jaén Province, Andalucía, Southern Spain (refer Figure 1 below). The Project includes 288 Spanish mining units (cuadrículas mineras) covering an area of 86.4km<sup>2</sup>.

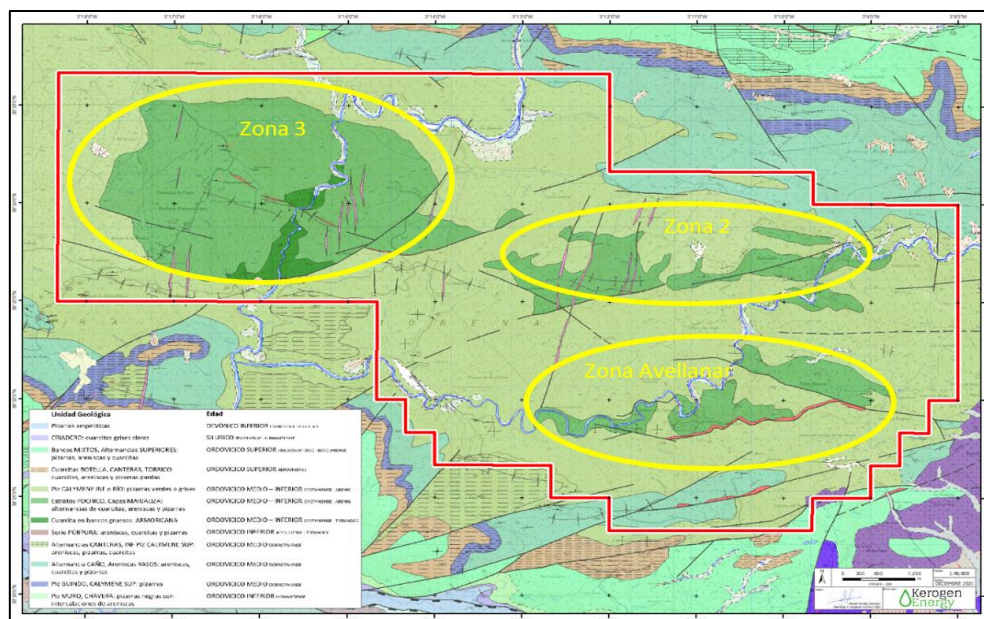


**Figure 1 – Map showing Orion EU Critical Minerals Project location**

It is a siliciclastic geological system with various layers rich in critical minerals including rutile (titanium), zircon, hafnium, and light and heavy rare earths. The Project area was explored for thorium and uranium in the 1950s and 1960s and includes a historic galena mine. Three initial target areas have been identified with a focus on the Avellanar target (refer Figure 2 below) that includes the exploration results referred to below. The “Admisión Definitiva” (main pre-cursor to permit award) was published in the “Boletín Oficial de la Provincia de Jaén” (Province Bulletin) in March 2024 with formal permit award expected in Q4, CY24.

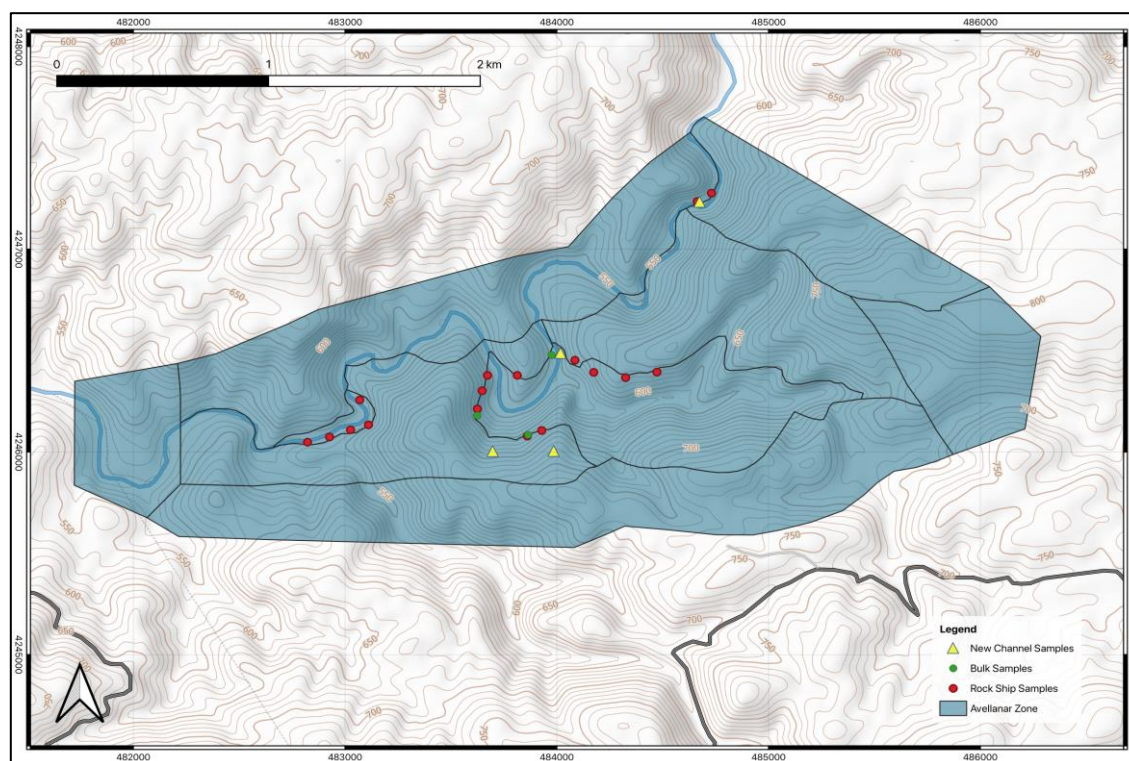
Exploration activities to date have focused on mapping and sampling the TI-ZR-REE rich layers across a wide area of the Avellanar Target. To this end, four additional channel samples were taken in October 2024 with the results presented in Appendix 1. The channel rock chip sampling was designed to test relevant element and oxide grades in the outcrops detected by a scintillometer. Samples of between two and 16.5kgs were collected, prepared and sent to SGS Labs in Huelva, Spain for crushing and splitting prior to being shipped to SGS Labs in Lakefield, Canada for assay.

Importantly, the results and geological mapping indicate the presence of a second mineralised seam above the high-grade primary seam. Furthermore, there are indications the high-grade primary seam continues undercover in the Avellanar Zone suggesting its true scale and extent is difficult to fully assess prior to drilling activities.



**Figure 2 – Map showing three Target Zone areas within the Permit Boundary**

Figure 3 shows the locations of the chip samples and bulk samples taken previously and the new channel samples within the Avellanar Zone.



**Figure 3 – Map showing chip sampling and channel bulk sample locations and new channel sample locations within the Avellanar Zone**

## Next Steps

The Company expects to finish geological mapping and sampling activities across all three Zones in the current Calendar Year. Upon final permit award, the Company intends to quickly commence a modest drilling program with respect to confirming continuity of the mineralisation between outcrops. Assuming success, the Company will seek to fast-track development activities initially focused on a Mineral Resource Estimate to support a Scoping Study. Importantly, metallurgical testworks are advanced given the 150kg bulk sample and relatively homogenous nature of the material across the three outcrops.

## Iberian One Project

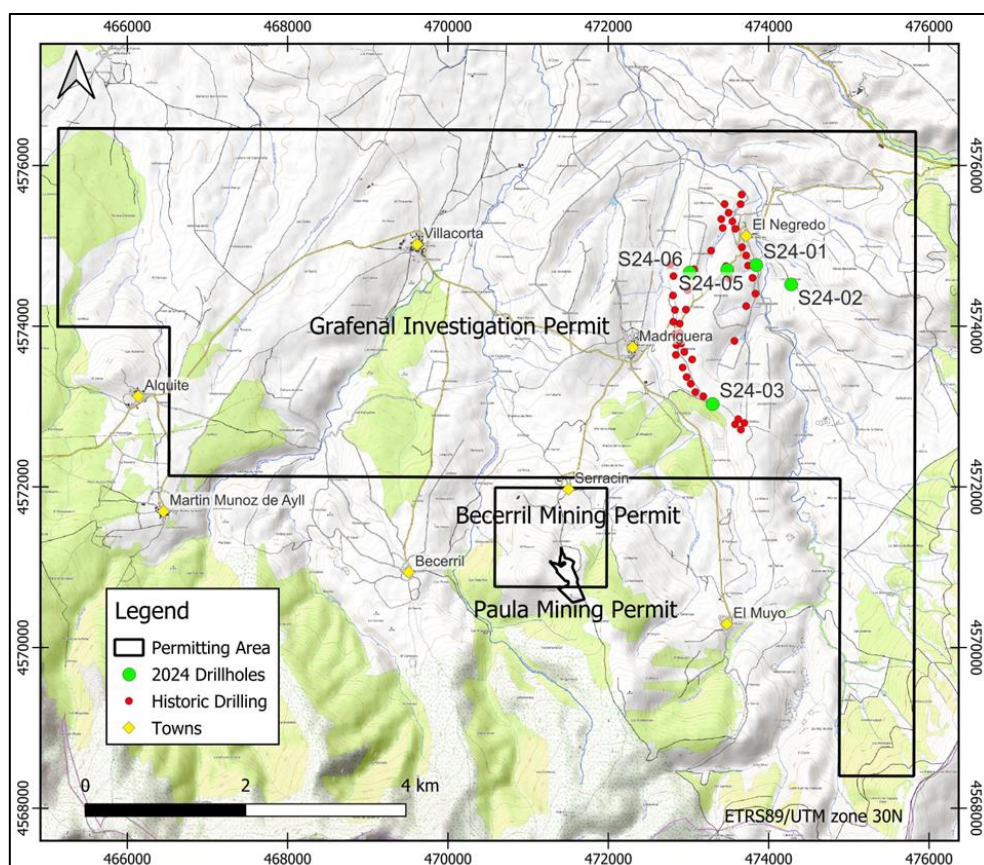
### Overview

The Project is located in a historic kaolin, iron, and graphite mining district between the villages of Madriguera and El Negredo in Segovia, Spain, approximately 100km NNW of the major city of Madrid (Figure 4). The Project includes multiple historic mines that appear to have focused on alunite and kaolin mineralisation.



**Figure 4 – Map showing Iberian One Project permit area**

The Project consists of the Grafenal Investigation Permit (47.5km<sup>2</sup>), the Becerril Mining Permit (1.6km<sup>2</sup>), and a small aggregates Mining Permit called “Paula,” which mostly overlaps with the Becerril Mining Permit, totalling approximately 50km<sup>2</sup> (Figure 5).



**Figure 5 – Map showing permits and modern and historic drilling activities**

The Company has commenced a process to determine options associated with processing what appears to be a relatively high-grade  $\text{Al}_2\text{O}_3$  opportunity. The focus is on testworks associated with producing a path to an economic flow sheet for:

1. Alumina and SOP production focusing on selectively processing alunite;
2. Alumina production from the entire mineralised horizon given high  $\text{Al}_2\text{O}_3$  grades;
3. Smelter grade alumina or high purity alumina production; and
4. Kaolin production targeting domestic markets where the Company has a significant logistics advantage.

### **Corporate Initiatives to Support Project Development**

The Company has appointed a Spanish based geologist, mining engineer and metallurgist to help progress development activities on both projects. This is consistent with the Company's ideals to ensure highly experienced Spanish based executives are recruited to key positions where possible.

**-Ends-**

**Approved for release by the Board of Osmond Resources.**

## CONTACT

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### Competent Person Statement

The information in this release that relates to Exploration Results is based on information compiled by Mr Fernando Palero. Mr Palero is the Chief Geologist of Iberian Critical Minerals Pty Ltd. Mr Palero is a licensed professional geologist in Spain and is a registered member of the European Federation of Geologists, an accredited organisation to which the Competent Person (CP) under JORC Code Reporting Standards must belong in order to report Exploration Results, Minerals Resources or Ore Reserves through the ASX. Mr Palero has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a CP as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC code). Mr Palero consents to the inclusion of this information in the form and context in which they occur.

## ABOUT OSMOND RESOURCES

Osmond Resources Limited (ASX:**OSM**) is a mineral and exploration company committed to increasing shareholder wealth through the exploration, development and acquisition of mineral resource projects.



**Osmond Resources (ASX:OSM) Project Locations**

### Spanish Projects

#### [EU Critical Minerals Project, Spain](#)

The Orion EU Critical Minerals Project (the **Project**) is located in Jaén Province, Andalucía, Southern Spain (refer Figure 1 below). The Project includes 288 Spanish mining units (cuadrículas mineras) covering an area of ~86.4km<sup>2</sup>. A bulk sample of 150kgs was taken from three different outcrops across the Avellanar Zone and was designed to confirm rock chip sample grades, determine mineral species and to consider initial processing routes with respect to grinding size and liberation. The table below presents select results from the three samples.

| Modals and Oxide Results from 150kg Bulk Sample |      |          |          |          |
|-------------------------------------------------|------|----------|----------|----------|
| Mineral                                         | Unit | Sample 1 | Sample 2 | Sample 3 |
| <b>Rutile</b>                                   | %    | 13.26    | 13.16    | 15.22    |
| <b>Ilmenite</b>                                 | %    | 6.02     | 4.69     | 5.05     |
| <b>Zircon</b>                                   | %    | 9.28     | 8.44     | 9.37     |
| <b>Monazite</b>                                 | %    | 1.54     | 1.50     | 1.72     |
| <b>Oxides</b>                                   |      |          |          |          |
| <b>HfO<sub>2</sub></b>                          | ppm  | 1,219    | 1,160    | 1,297    |
| <b>Nd<sub>2</sub>O<sub>3</sub></b>              | ppm  | 2,098    | 1,841    | 2,026    |
| <b>Pr<sub>2</sub>O<sub>3</sub></b>              | ppm  | 591      | 499      | 548      |
| <b>Tb<sub>4</sub>O<sub>7</sub></b>              | ppm  | 33       | 29       | 32       |
| <b>Dy<sub>2</sub>O<sub>3</sub></b>              | ppm  | 159      | 140      | 153      |

The Company expects to complete a drilling program in 1H, CY25 designed to confirm continuity of mineralisation between outcrops. Assuming results are as expected the Company will focus its attention on preparing a Mineral Resource Estimate, Scoping Study and fast-tracking development activities to take advantage of strong EU regulatory support for in-sourcing production of critical minerals.

#### Iberian One Project, Spain

The Company owns a 100% interest in the Iberian One Project, located in Segovia Province, central Spain. The project aims to exploit kaolinite and alunite mineralisation to deliver EU critical minerals. A five-hole drilling program has been completed to test over 43 historical drillholes and two historical mines.

Osmond's focus is on its ability to fast-track development activities to take advantage of EU critical minerals legislation and the need for extraction projects to reduce the EU's reliance on imports of alumina, potash and graphite.

#### **South Australian Projects**

In South Australia the Yumbarra Project (EL6417) remains a priority project for Osmond targeting base metals and platinum group elements (**PGE**). Planning for detailed geophysics surveys and geochemistry reviews is in progress. The environmental permitting process for a fixed loop electro-magnetic (**FLEM**) survey is well underway. The FLEM survey is proposed over the priority coincident VTEM-AEM-Gravity targets to define conductive rock units at depth on inferred ultramafic basal contact zones and feeder dykes.

Following recent technical analysis and review the Company has commenced rationalisation of its South Australian portfolio, commencing the withdrawal from the Talacootra (EL6615), Coorabie (EL6692) and Fowler Project (EL6603 and EL6604).

## APPENDIX 1 – COMPLETE SUMMARY OF CHANNEL SAMPLE RESULTS

| Sample ID | Easting (ETRS 89) | Northing (ETRS 89) | TiO <sub>2</sub> | ZrO <sub>2</sub> | HfO <sub>2</sub> | Nd <sub>2</sub> O <sub>3</sub> | Pr <sub>2</sub> O <sub>3</sub> | Tb <sub>4</sub> O <sub>7</sub> | Dy <sub>2</sub> O <sub>3</sub> |
|-----------|-------------------|--------------------|------------------|------------------|------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
|           |                   |                    | %                | %                | ppm              | ppm                            | ppm                            | ppm                            | ppm                            |
| AV-04     | 484017            | 4246488            | 12.00            | 3.98             | 825              | 1,353                          | 374                            | 20                             | 100                            |
| AV-05     | 483985            | 4246005            | 4.89             | 1.24             | TBC              | 301                            | 83                             | 5                              | 26                             |
| AV-06     | 483697            | 4246004            | 6.43             | 1.77             | TBC              | 400                            | 115                            | 6                              | 28                             |
| AV-07     | 484674            | 4247234            | 4.74             | 1.27             | TBC              | 384                            | 109                            | 6                              | 37                             |

## 1 SECTION 1 SAMPLING TECHNIQUES AND DATA

| Criteria                   | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sampling techniques</b> | <ul style="list-style-type: none"> <li>Nature and quality of sampling (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 style="list-style-type: none"> <li>First rock chip sampling: Chips sampling was adopted as a geochemical exploration tool in exploration phases. Samples of approximately 500g were collected from outcrops showing radiometric anomaly and sent for sample preparation and assayed via an industry standard procedure. Sample prep was carried out in the certified lab (ALS Labs, Sevilla, Spain) for crushing and splitting prior to being shipped to ALS Labs in Galway, Ireland, for geochemical determinations.</li> <li>Bulk sampling: Sampling was completed by channel sampling, crossing the complete seam selected. The layers dips gently to the north, so the channels were subvertical, working to be perpendicular to bedding. Three representative samples, totalling 150kg, were taken (sample 1: 78.28kg, Sample 2: 39.87kg, Sample 3: 33.46kg) shipped to certified lab SGS Labs in Lakefield (Canada) for crushing and splitting for geochemical determinations and mineralogical assays.</li> <li>New cut channel samples have been taken covering the thickness of ore seam. Samples had between 2 and 16.5 kg were collected, and was prepared at SGS Labs in Huelva, Spain for crushing and splitting prior to being shipped to SGS Labs in Lakefield, Canada for assay</li> </ul>                                                                                                                                            |
|                            | <ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>Rock chip sampling campaign was completed along the 2000m E-W trending Ti-Zr-REE Layer. A chip sample was taken at each 100 m along the layer direction.</li> <li>Channels were handmade using a hammer, discarding lichen and rust stain patinas to avoid any surface alteration. The Ti-Zr-REE layer is silica rich and very resistant to erosion so it provides good outcrops to take fresh samples. Sampling was performed by experienced geologists, collecting chips across the whole mineralised section of the layer.</li> <li>Sample positions were taken using hand GPS. UTM coordinate system, datum ERTS89 Huso 30.</li> <li>Laboratories undertook their own duplicate, CRM and blank sample insertion, providing acceptable levels of precision and accuracy.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                            | <ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report. 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 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul style="list-style-type: none"> <li>Channel sampling was logged by geologists for lithology, structure, texture, colour and radiometric response (Appendix 3). Channel sampling areas (showing sampling intervals and sample bags) were photographed.</li> <li>Rock chip samples were bagged, coded and secured with plastic ties for shipping to external laboratory for assaying via an industry standard procedure. Samples were crushed, and pulverised to 85% passing 75 µm in ALS labs in Seville, Spain, prior to being shipped to ALS Labs in Galway, Ireland. Samples were assayed using inductively coupled plasma-optical emission spectrometry (ICP-OES) and X-ray fluorescence (XRF).</li> <li>Channel Bulk samples were bagged, coded and secured with plastic ties for shipping to external laboratory for processing and assaying via an industry standard procedure. Samples were crushed to ¾ of an inch mesh. Approximately 4 kg from each sample was stage-crushed to P80 of ca. -10 mesh. Approximately 200 g from each sample was screened and recombined into six (6) size fractions based on the wt% distribution including +2 mm, -2 mm/+1.18 mm, -1.18 mm/+710 µm, -710 µm /+425 µm, -425 µm /+75 µm and -75 µm for the TIMA analysis. Replicate graphite impregnated polished mounts were prepared for the TIMA analysis. A 30g aliquot was riffled from each fraction, pulverized, and submitted for whole rock</li> </ul> |

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                       | <p>analysis and Zr and Hf by XRF, ICP-MS sodium peroxide fusion for REE, Th and U, and Y by GC_ICP93A-AEWR. TIMA-X analysis will include mineral identification (i.e., REE mineral speciation, gangue minerals, sulphides etc.), modal abundance, liberation and association of minerals of interest by size class, grade-recovery, exposure to predict metallurgical response.</p> <ul style="list-style-type: none"> <li>New channel samples were bagged, coded and secured with plastic ties for shipping to external laboratory for processing and assaying via an industry standard procedure. Samples were crushed at &lt;2mm and split in SGS Lab in Huelva, Spain, getting samples of 100 gr. to ship to SGS Lab in Lakefield, Canada, to assay by XRF with borate fusion to whole rock, ICP-MS for REE, Th and U, and Y by GC_ICP93A-AEWR.</li> </ul> |
| <b>Drilling techniques</b>                            | <ul style="list-style-type: none"> <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> <li>Not applicable, as no drilling was undertaken</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Drill sample recovery</b>                          | <ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Not applicable, as no drilling was undertaken</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                       | <ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples</li> <li>Not applicable, as no drilling was undertaken</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                       | <ul style="list-style-type: none"> <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> <li>Not applicable, as no drilling was undertaken</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Logging</b>                                        | <ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Channel samples were logged. Not applicable in drilling, as no drilling was undertaken.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                       | <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography</li> <li>Logging of the channel samples undertaken was qualitative in nature</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                       | <ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> <li>The channel samples intervals were logged along strike of the entire layer.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Sub-sampling techniques and sample preparation</b> | <ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>Not applicable, as no drilling was undertaken and no core taken.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                       | <ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>Not applicable, as no drilling was undertaken.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                       | <ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>For the rock chip sampling, samples of approximately 500g were collected, prepared and sent to ALS Labs in Seville, Spain for crushing and grinding prior to being shipped to ALS Labs in Galway, Ireland for geochemical assessment. Samples were prepared standard preparation techniques; crushed passing 70% under 2mm, and pulverised to 85% passing 75 µm and split using a Boyd crusher/rotary splitter combination in ALS labs in Seville</li> <li>For the bulk samples 150kgs of material was taken from three different outcrops. Samples were collected, bagged in plastic and sent to SGS Labs in Galicia, Spain to be shipped</li> </ul>                                                       |

|                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>to SGS Labs in Lakefield, Canada for crushing, pulverising and splitting before geochemical and technical assessment</li> <li>For the new channel samples they were crushed at &lt;2mm and split in SGS Lab in Huelva, Spain reducing to 100 grams that was then shipped to SGS Lab in Lakefield, Canada</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>                                                                    | <ul style="list-style-type: none"> <li>Both labs managed their own quality control procedures. Providing their own duplicates blanks and standards. Obtained values are within the acceptable levels of accuracy and precision</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <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> </ul> | <ul style="list-style-type: none"> <li>Bulk samples were taken from a channel that cut across the entirety of the main Ti-Zr-REE layer.</li> <li>Samples were taken in three different areas separated by around 200m each that sought to confirm the continuity and repeatability of grades and composition along the sequence.</li> <li>The new channel samples have been collected in new outcrops of the main ore seam and another located above in the sedimentary sequence, the Upper Seam</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>                                                                                    | <ul style="list-style-type: none"> <li>The Ti-Zr-REE Layers, the subject of the sampling are quartzites-limolites with variable amounts of Rutile and Zircon. The rock has a homogeneous fine grain texture. Given the nature of this material samples sample size is considered to be representative.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Quality of assay data and laboratory tests</b>                                                                                                                                                                          | <ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>First rock chip sampling: <ul style="list-style-type: none"> <li>Assaying was conducted using ICP-OES and XRF, which are modern industry standards. Analysis completed by ALS which use a chemical digestion with ICP finish, all by ALS LABS. The method is considered a total technique. Multielement analysis is done by Lithium borate fusion with ICP-MS (ME-MS81), and XRF finish. ME-MS81 allows full decomposition of samples including the most resistant minerals according to the rock mineralogy.</li> <li>The laboratory reports results for internal standards, duplicates, prep duplicates and blanks. ALS lab QA/QC data indicate acceptable levels of accuracy and precision for the elements analyzed.</li> </ul> </li> <li>Bulk channel sampling: <ul style="list-style-type: none"> <li>Assaying by SGS was conducted using ICP, XRF and TIMA-X, which are modern industry standards. Multielement analysis is done by rock analysis and Zr and Hf by XRF, ICP-MS sodium peroxide fusion for REE, Th and U, and Y by GC_ICP93A-AEWR. TIMA-X is an acronym for TESCAN Integrated Mineral Analyzer. It is one of the most advanced automated mineralogical instruments. TIMA-X has four X-ray analysis scanning modes to identify mineral/compounds: High-Resolution Mapping (THRM), Point Spectrometry (TPS), Line Mapping (TLM) and Dot Mapping (TDM).</li> <li>The laboratory reports results for internal standards, duplicates, prep duplicates and blanks. SGS lab QA/QC data indicate acceptable levels of accuracy and precision for the elements analyzed. It is not used blanks in the TIMA analyses. For TIMA some replicates have been made and have provided the reproducibility of the mineral abundance and number of grains analyzed</li> <li>A reconciliation analysis has been completed between chemical assay and TIMA-X for the main 18 elements.</li> </ul> </li> </ul> |

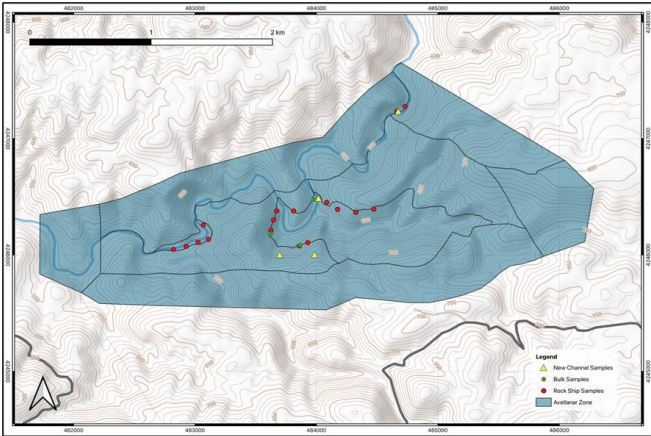
|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | <ul style="list-style-type: none"> <li>Channel sampling: <ul style="list-style-type: none"> <li>Assaying by SGS. Multielement analysis is done by rock analysis and Zr and Hf by XRF (GO_XRF72), ICP-MS sodium peroxide fusion for REE, Th and U (GE_ICM91A50), and Y by GC_ICP93A-AEWR.</li> <li>The laboratory reports results for internal standards, duplicates, prep duplicates and blanks. SGS lab QA/QC data indicate acceptable levels of accuracy and precision for the elements analyzed.</li> </ul> </li> </ul>                                                                                    |
|                                              | <ul style="list-style-type: none"> <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>A SPP2 scintillometer was used as a tool to detect the layers with heavy minerals. High radiometric values are observed where high Ti-Zr-REE values are present.</li> </ul>                                                                                                                                                 |
|                                              | <ul style="list-style-type: none"> <li>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.</li> <li>Green Mineral Resources, SGS and ALS maintained independent QA/QC programs including the insertion of Certified Reference Material (CRM), duplicates and blanks.</li> <li>Duplicates showed acceptable levels and quality results.</li> <li>Accuracy and precision of the CRM, duplicate and blanks are within acceptable levels.</li> </ul> |
| <b>Verification of sampling and assaying</b> | <ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>Sample results have been checked by company Chief Geologist and Senior Geologist.</li> </ul>                                                                                                                                                                                                                                                                                                                                                            |
|                                              | <ul style="list-style-type: none"> <li>The use of twinned holes.</li> <li>No holes are required to be twinned in this program.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                              | <ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Green Mineral Resources received all assay data directly from the laboratories in electronic format (xls or csv). This data is transferred to a master database and monitored for QA/QC purposes.</li> </ul>                                                                                                                                                                                                                       |
|                                              | <ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> <li>Original lab results are reported as oxide and by elements.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Location of data points</b>               | <ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>All sampling points are georeferenced with a hand held GPS. It has an accuracy of within two metres, which is sufficient given the nature of program.</li> </ul>                                                                                                                                                                                                                  |
|                                              | <ul style="list-style-type: none"> <li>Specification of the grid system used.</li> <li>Grid system is the official one in the survey area (ETRS89 Huso 30).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                              | <ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> <li>Not completed.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Data spacing and distribution</b>         | <ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>The design of this first survey campaign provided initial information about the presence of heavy minerals enriched layers and the continuity as it shows good correlation over 2000m along direction. Rock chip samples were taken every 100 metres and Bulk channel samples at 200m along direction.</li> <li>The new channel samples were taken from newly identified outcrops.</li> </ul>                                                                                                              |
|                                              | <ul style="list-style-type: none"> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Not applicable as no mineral resource has been calculated at this early stage of exploration</li> </ul>                                                                                                                                                                                                                          |
|                                              | <ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> <li>Channel samples have been composited over the entire thickness of the identified layer for reporting purposes.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Orientation of data in</b>                | <ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible</li> <li>Rich Ti-Zr-REE layer is continuously outcropping over 2000 m in E-W direction and a sample was taken at 100m</li> </ul>                                                                                                                                                                                                                                                                                                                                                            |

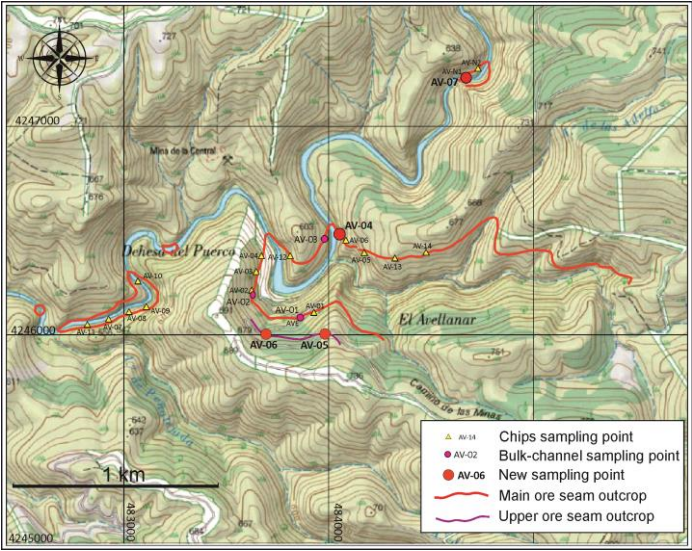
|                                         |                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>relation to geological structure</b> | structures and the extent to which this is known, considering the deposit type.                                                                                                                                                                              | interval approximately within the layer collecting chips or making the channels crossing entire thickness of the layer to make each sample the most representative possible.                                                                                                                                                                        |
|                                         | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Not completed. As no drilling was undertaken</li> </ul>                                                                                                                                                                                                                                                      |
| <b>Sample security</b>                  | <ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>                                                                                                                                                              | <ul style="list-style-type: none"> <li>Chain of custody is managed by Green Mineral Resources. Samples were taken and transported to a secure facility for logging and taking pictures by Green Mineral Resources personnel. Following this, samples for assay were bagged and secured with zip locks to be shipped to ALS and SGS Labs.</li> </ul> |
| <b>Audits or reviews</b>                | <ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>                                                                                                                                      | <ul style="list-style-type: none"> <li>No formal audits conducted at this stage of the exploration program.</li> </ul>                                                                                                                                                                                                                              |

## 2 SECTION REPORTING OF EXPLORATION RESULTS

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

| Criteria                                       | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mineral tenement and land tenure status</b> | <ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>Granting process for an Investigation Permit</li> <li>Name and code of tenement: Investigation Permit “Orión” n° 16271.</li> <li>Status: In granting process.</li> <li>Type: Investigation Permit for resources of Section C) following the Mining Act 22/1973 and the Royal Decree 2857/1978 that develops it and the Royal Decree 975/2009 about environmental restoration.</li> <li>Special Conservation Area: ZEC ES6160008 “Cuencas del Rúmbler, Guadalén y Guadalmena”.</li> <li>There are no JVs, partnerships, royalties or other relating to the Investigation Permit.</li> </ul>                                                                                                                                                                                  |
|                                                | <ul style="list-style-type: none"> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Once the application has been officially submitted, the tenement is secured and no other entity can apply for the area</li> <li>The investigation and the potential mining exploitation activity should be adapted to be compatible preserving the natural values within the ZEC zones</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Exploration done by other parties</b>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>The area was investigated for Uranium and Thorium in the 1950s and 1960s of last century by Junta de Energía Nuclear (JEN) discarding for this exploitation, but showing an anomalous enrichment in heavy minerals.</li> <li>In the 1980s Dupont studied the area for heavy minerals.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Geology</b>                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>The deposit can be considered as a playa sand bed-type deposit (placer), with various layers enriched in zircon, titanium and rare earths, with thickness ranging from 0,3 to 4 metres.</li> <li>The rock can be considered as a rutile-zircon siltstone with significant presence of monazite. Mineralisation formed mainly by quartz (30% to 80%), and detritic minerals, with important contents on zircon, ilmenite, rutile, and monazite.</li> <li>Genesis: destruction and transport of granite-type materials rich in heavy minerals which, due to their high density, have been deposited, washed and concentrated very similar to a playa sand-type deposit (placer).</li> <li>The most significant minerals are Rutile, Ilmenite, Zircon and Monazite.</li> </ul> |
| <b>Drill hole information</b>                  | <ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level—elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Not applicable, as no drilling was undertaken.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Criteria                                                                | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Commentary                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                         | <ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Data aggregation methods</b>                                         | <ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul> | <ul style="list-style-type: none"> <li>Not applicable as given the early nature of the exploration there is insufficient data to apply relevant weighting averaging techniques, maximum and/or minimum grade truncations.</li> <li>Not applicable as no aggregate intercepts have been reported</li> <li>Not applicable as no metal equivalent values were reported.</li> </ul> |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Not applicable as no drilling was undertaken</li> </ul>                                                                                                                                                                                                                                                                                  |
| <b>Diagrams</b>                                                         | <ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>                                                                                                                                                                                                                                                                                                          | <p>Map showing rock chip sample (red dots) and bulk Chancel sample (green dots) locations within Avellanar Zone, Spain (ETRS89 Huso 30).</p>                                                                                                                                                |

| Criteria                                  | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                 | Commentary                                                                                                                                       |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                       |  <p>Map showing new channel samples within Avellanar Zone.</p> |
| <b>Balanced reporting</b>                 | <ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>                                                                                                                                                           | <ul style="list-style-type: none"> <li>Not applicable.</li> </ul>                                                                                |
| <b>Other substantive exploration data</b> | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Not applicable</li> </ul>                                                                                 |
| <b>Further work</b>                       | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Geochemistry campaign, geophysical campaign and drilling.</li> </ul>                                      |