21 August 2024 **ASX:DEV**



Extensive Leach Testwork Indicates Strong Recoveries throughout the Kennedy Ionic Clay-Hosted Rare Earths Deposit, Queensland

Testwork enhances previously reported recoveries of valuable magnet rare earths, supporting the future commercial potential of the Project

Highlights

- Extensive leach testwork conducted on drill samples taken from within the Kennedy Inferred Mineral Resource Estimate (150Mt @ 1,000ppm TREO¹) (Inferred MRE) demonstrates rapid recoveries by desorption of the rare earth elements in the first 30 minutes using an ammonium sulfate (AMSUL) solution in weak acidic conditions at pH4.
- Recoveries continue to improve with moderate lowering of the AMSUL leach to pH3 without significant increases in acid consumption.
- Excellent recoveries of up to 73% collectively of the magnet rare earth elements (MREE's²) - Praseodymium (Pr), Neodymium (Nd), Dysprosium (Dy) and Terbium (Tb) – have been achieved.
- As the entire Inferred MRE lies within unconsolidated gravel clays from surface, these new leach results provide the opportunity to progress to more definitive bulk sampling, where emphasis can be given to sampling from areas that coincide with high MREE recoveries and grades in order to optimise the results and focus on potential flowsheet development considerations.
- This testwork has been undertaken with a grant from the Queensland Government as part of its Collaborative Exploration Initiative under the Department of Resources' 'Queensland Resources Industry Development Plan'.

DevEx Resources Limited (ASX: DEV; DevEx or the Company) is pleased to advise that further metallurgical testwork carried out by the Australian Nuclear Science and Technology Organisation (ANSTO) has enhanced the previously reported recoveries (refer ASX Announcement dated 10 July 2023) from the Company's 100%-owned Kennedy Ionic Adsorption Clay-Hosted REE Project in Queensland.

These latest metallurgical results are from 53 drill samples collected from within the recently published Inferred MRE of 150Mt at 1,000ppm TREO (refer ASX Announcement dated 4 July 2024) and indicate extremely encouraging recoveries of rare earth elements (REE) and especially for the magnet rare earths (MREE's).

Results from this work show rapid recoveries by desorption of REE⁴ in the first 30 minutes using 0.5 mol/L AMSUL solution in weak acidic conditions (pH4). In addition, further significant increases in REE recoveries were achieved by lowering the acidity of the AMSUL leach to pH3 over a further 30-minute period, with the last two progressive leach periods of two hours and three



hours showing moderate increases in recoveries.

Pleasingly, the results show that rapid dissolution of these MREE's in weak acid conditions is occurring throughout the 53 samples collected, with many samples achieving recoveries of more than 50% (see Figure 1 and Table 1) and up to 73%. Importantly, there is low dissolution of gangue element cerium (Ce_2O_3) reported across all four progressive test conditions (Table 1) and is a key characteristic of favourable ionic clay mineral systems.

One of the key drivers of the testwork was to identify how MREE recoveries and acid consumption performed from within the Inferred MRE. Pleasingly, the results received have indicated good consistency over the majority of the deposit (see example in Figure 2).

The Kennedy Inferred MRE lies within unconsolidated gravel clays from surface with no overburden, making priority areas easily accessible. These new leach testwork results provide the opportunity to progress to more definitive bulk sampling, with the focus being on areas that coincide with high MREE recoveries and high MREE grades for optimal results and for potential flowsheet development considerations.

| MREE | pH4 (0.5hr) | | pH3 (0 |).5hr) | pH3 (2. | .5hr) | pH3 (5.5hr) | | |
|-------------------------------|------------------------|--------------|------------------------|--------------|------------------------|--------------|------------------------|--------------|--|
| | Av. Recovery (%) | Range (%) | Av. Recovery (%) | Range (%) | Av. Recovery (%) | Range (%) | Av. Recovery (%) | Range (%) | |
| Pr | 45 | 27 – 68 | 52 | 37 – 76 | 54 | 40 – 72 | 55 | 41 – 74 | |
| Nd | 47 | 29 – 64 | 55 | 41 – 73 | 59 | 43 – 75 | 59 | 45 – 76 | |
| Tb | 40 | 24 – 63 | 48 | 32 – 71 | 51 | 40 – 71 | 52 | 40 – 71 | |
| Dy | 38 | 20 – 64 | 45 | 30 – 72 | 47 | 33 – 67 | 48 | 35 – 67 | |
| MREE | 46 | 28 – 64 | 53 | 39 – 73 | 56 | 41 – 72 | 57 | 43 – 73 | |
| Acid Consumption (kg/t) | 3.4 | | 4.7 | | 5.4 | | 5.8 | | |

Table 1 – Average Recoveries of MREE elements in Ammonium Sulphate Leach Tests (0.5Mol/I (NH₄)₂SO₄).

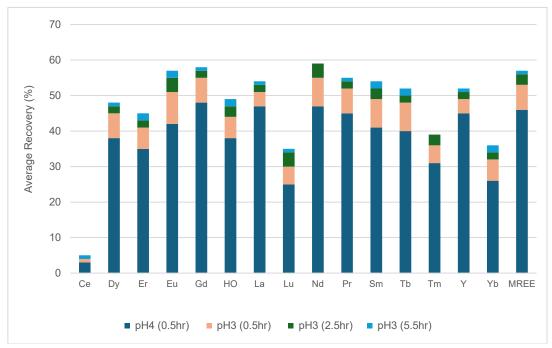


Figure 1 – Average Recovery by Desorption by Element and Test type.

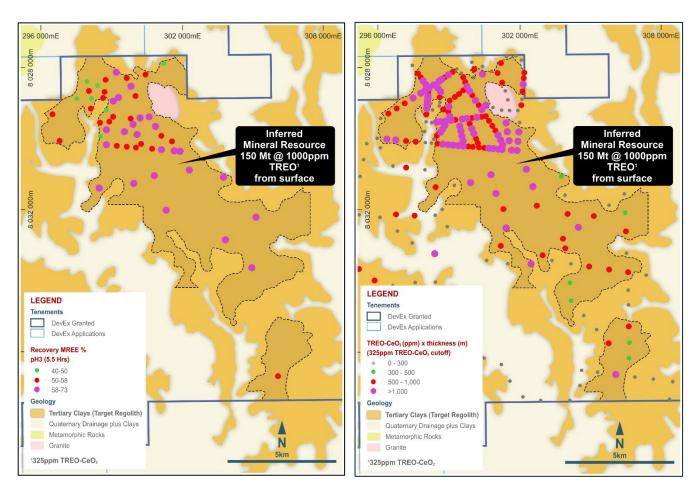


Figure 2 – Extent of the Kennedy MRE (black dashed outline) and distribution of MREO mineralisation (right) with MREE recoveries from samples within the resource shown (left).

Project Background

The Inferred MRE for the Kennedy Project, contains the important and high-value Magnetic Rare Earth Oxides (MREO's³) – Praseodymium (Pr_6O_{11}), Neodymium (Nd_2O_3), Dysprosium (Dy_2O_3) and Terbium (Tb_4O_7) – which are essential in the manufacture of permanent rare earth magnets used in electric vehicles, wind turbines and numerous other renewable energy applications.

The Company has strategically targeted these MREO's and mineralised zones where they concentrate, in both grade and thickness.

The Kennedy Project remains one of only a select few ionic clay rare earth projects that have been defined in Australia.

Drilling, together with the results of this preliminary metallurgical test work, has identified the potential for favourable mining and processing attributes at the Kennedy Project, including:

- **Shallow**: The mineralisation occurs from surface with minimal to no overlying overburden.
- **Soft**: The rare earths lie in unconsolidated clays with irregular pisolite and nodules (gravels) dispersed amongst the clays.
- **Favourable metallurgy**: Preliminary leach testwork demonstrates rapid recoveries by desorption of REE in the first 30 minutes using ammonium sulfate solution ((NH₄)₂SO₄) in weak acidic conditions (pH4) with increasing recoveries achievable following the modest lowering of the acid to pH3 without materially affecting acid consumption.
- **Significant scale**: Broad-spaced drilling to the south-west of the Inferred MRE area highlights several exploration areas for follow up and in-fill drilling.

The majority of the Inferred MRE sits across two pastoral properties, allowing for efficient engagement with landholders. DevEx has successfully negotiated access agreements to conduct its exploration activities across both properties and continues to engage with these key landholders and the broader community to facilitate the progression of the project.

The Kennedy Project is well-located close to existing infrastructure networks, including transportation, power supply and bulk port facilities. Queensland has a well-established mining sector, access to a skilled workforce and a supportive Government.

The Project stands to benefit from the Queensland Government's Critical Minerals Strategy, which outlines four key objectives to realise Queensland's ambitions to develop a prosperous critical minerals sector – move faster and smarter, maximise investment, build value chains and foster research, and strive for ESG excellence.

Current commitments by the Government include: i) a \$245 million investment into growing the critical minerals sector and establishing critical mineral zones; and ii) the \$5 billion being invested into Copper String 2032, which is essential to the new Queensland Super Grid backbone under the Queensland Energy and Jobs Plan.

The Company was recently awarded \$175,000 under this Initiative to assist with undertaking the metallurgical testwork outlined in this announcement.

These significant investments by the Queensland Government into the State's critical minerals sector will enhance the future prospects of the Kennedy Project.



Figure 3: Location and Infrastructure.

This announcement has been authorised for release by the Board.

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References

- $1 \quad \text{TREO} = \text{La}_2\text{O}_3 + \text{CeO}_2 + \text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3 + \text{Sm}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Tm}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Lu}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Tm}_2\text{O}_3 +$
- 2 MREE = Pr+Nd+Tb+Dy
- 3 MREO = $Pr_6O_{11} + Nd_2O_3 + Tb_4O_7 + Dy_2O_3$
- 4. REE = La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dv+Ho+Er+Tm+Yb+Lu+Y
- 5. Ionic Rare Earth Limited announcement to the ASX dated 20 March 2023 titled: "Makuutu Stage 1 DFS Confirms Technical and Financial Viability for Sustainable, Long-Life Supply of Magnet and heavy Rare Earths, Maiden Ore Reserve Estimate"

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by DevEx Resources Limited and reviewed by Mr Brendan Bradley who is the Managing Director of the Company and a member of the Australian Institute of Geoscientists. Mr Bradley has sufficient experience that is relevant to the styles of mineralisation, the types of deposits under consideration and to the activities undertaken to qualify as a Competent person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Bradley consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report which relates to previous Exploration Results for the Kennedy Project are extracted from the ASX announcements titled: "Maiden 150Mt Inferred Mineral Resource for the Kennedy Ionic Clay-Hosted REE Project, Queensland" released on 4 July 2024, "Positive Leaching Testwork Confirms Significant Ionic Adsorption REE Clays at Kennedy, Qld" released on 10 July 2023 and "Extensive Rare Earth Elements (REE) Intersected in Surface Clays at Kennedy Project, Queensland" released on 16 May 2023, which are available at www.devexresources.com.au.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

FORWARD-LOOKING STATEMENT

This announcement contains forward-looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

Table 2- Drill Hole Collar and Metallurgical Sample Data Within the MRE

| Hole | East (m) | North (m) | RL (m) | Az | Dip | Sample | From (m) | To (m) | Interval (m) |
|------------------|------------------|--------------------|------------|----|------------|--------------------|----------|-----------|-----------------|
| KAC054 | 305124 | 8031688 | 634 | 0 | -90 | 5415879 | 0.5 | 1 | 0.5 |
| KAC056 | 303827 | 8030726 | 635 | 0 | -90 | 5415882 | 0 | 1 | 1 |
| KAC059 | 304928 | 8029540 | 632 | 0 | -90 | 5415885 | 0 | 1.5 | 1.5 |
| KAC068 | 303750 | 8033376 | 634 | 0 | -90 | 5415888 | 0.5 | 1.5 | 1 |
| KAC074 | 302288 | 8033679 | 641 | 0 | -90 | 5415891 | 0 | 2 | 2 |
| KAC093 | 300798 | 8033447 | 643 | 0 | -90 | 5415895 | 0 | 2 | 2 |
| KAC094 | 299942 | 8033110 | 646 | 0 | -90 | 5415896 | 0 | 3 | 3 |
| KAC096 | 298472 | 8032920 | 643 | 0 | -90 | 5415897 | 0 | 2 | 2 |
| KAC100 | 301323 | 8031985 | 639 | 0 | -90 | 5415899 | 0 | 2 | 2 |
| KAC106 | 306047 | 8024947 | 628 | 0 | -90 | 5415901 | 0 | 3 | 3 |
| KAC116 | 301896 | 8034481 | 643 | 0 | -90 | 5415904 | 0 | 2 | 2 |
| KAC117 | 301665 | 8034493 | 643 | 0 | -90 | 5415905 | 0 | 2 | 2 |
| KAC118 | 301559 | 8034897 | 644 | 0 | -90 | 5415906 | 0 | 2 | 2 |
| KAC128 | 300438 | 8037730 | 645 | 0 | -90 | 5415912 | 1 | 3 | 2 |
| KAC130 | 301219 | 8038195 | 641 | 0 | -90 | 5415913 | 0 | 2 | 2 |
| KAC137 | 298682 | 8036979 | 652 | 0 | -90 | 5415914 | 0 | 1.5 | 1.5 |
| KAC138 | 298642 | 8036743 | 651 | 0 | -90 | 5415915 | 0 | 1 | 1 |
| KAC140 | 298786 | 8036225 | 648 | 0 | -90 | 5415916 | 0 | 1 | 1 |
| KAC143 | 299065 | 8036604 | 650 | 0 | -90 | 5415917 | 0 | 1.5 | 1.5 |
| KAC144 | 299281 | 8036757 | 651 | 0 | -90 | 5415918 | 0 | 1.5 | 1.5 |
| KAC147 | 300012 | 8036826 | 650 | 0 | -90 | 5415919 | 0 | 1.5 | 1.5 |
| KAC149 | 300584 | 8035942 | 647 | 0 | -90 | 5415922 | 0.5 | 2 | 1.5 |
| KAC150 | 299790 | 8037205 | 652 | 0 | -90 | 5415923 | 0.0 | 2 | 2 |
| KAC151 | 299631 | 8037592 | 653 | 0 | -90 | 5415924 | 0 | 2 | 2 |
| KAC211 | 300202 | 8035890 | 648 | 0 | -90 | 5415936 | 0 | 2 | 2 |
| KAC213 | 299790 | 8035842 | 650 | 0 | -90 | 5415937 | 0 | 2 | 2 |
| KAC216 | 299068 | 8035940 | 649 | 0 | -90 | 5415939 | 0.5 | 2 | 1.5 |
| KAC217 | 298897 | 8035736 | 649 | 0 | -90 | 5415941 | 0.5 | 2 | 2 |
| KAC217 | 298514 | 8035692 | 648 | 0 | -90 | 5415942 | 0 | 2 | 2 |
| KAC221 | 299903 | 8035619 | 648 | 0 | -90 | 5415943 | 0 | 1.5 | 1.5 |
| KAC223 | 300078 | 8035198 | 647 | 0 | -90 | 5415944 | 0 | 0.5 | 0.5 |
| KAC225 | 300249 | 8034793 | 645 | 0 | -90 | 5415948 | 0 | 1.5 | 1.5 |
| KAC226 | 300030 | 8034636 | 647 | 0 | -90 | 5415949 | 0 | 1.5 | 1.5 |
| KAC229 | 299535 | 8035311 | 648 | 0 | -90 | 5415952 | 0 | 2.5 | 2.5 |
| KAC223 KAC232 | 298769 | 8035393 | 648 | 0 | -90 | 5415953 | 0 | 2.5 | 2.5 |
| KAC232 KAC234 | 298518 | 8035108 | 644 | 0 | -90 | 5415954 | 0 | 1.5 | 1.5 |
| KAC237 | 298771 | 8034748 | 647 | 0 | -90 | 5415955 | 0 | 2.5 | 2.5 |
| KAC237 | 299211 | 8034740 | 647 | 0 | -90 | 5415956 | 0 | 2.3 | 2.3 |
| KAC230 | 299632 | 8034672 | 647 | 0 | -90 | 5415957 | 0 | 2.5 | 2.5 |
| KAC239 | 300711 | 8034574 | 644 | 0 | -90 | 5415958 | 0 | 2.5 | 2.5 |
| KAC240 | 301109 | | | | -90 | 5415961 | | | 2.3 |
| KAC241 | 301098 | 8034538 8035135 | 644 645 | 0 | -90 | 5415967 | 0 | 3 | 3 |
| KAC243 | | 8035529 | 647 | 0 | -90 | 1 | 0 | 2 | 2 |
| KAC244 KAC245 | 300855 298737 | 8037512 | 655 | 0 | -90 -90 | 5415968 5415971 | | 2 | 2 |
| KAC245 KAC253 | 296737 | 8034927 | 671 | 0 | | 1 | 0 | 2 | 2 |
| | + | | | 0 | -90 00 | 5415973 | 0 | | |
| KAC257 | 297951 | 8037442 | 656 657 | 0 | -90 00 | 5415974 | 0 | 2 2 | 2 |
| KAC261 | 298031 | 8037038 | 657 | 0 | -90 00 | 5415975 | | | 2 |
| KAC263 | 297522 | 8036712 | 656 | 0 | -90 | 5415976 | 0 | 2 | 2 |
| KAC266 | 296485 | 8036051 | 663 | 0 | -90 | 5415977 | 0 | 2 | 2 |
| KAC332 | 298141 | 8036720 | 652 | 0 | -90 | 5415984 | 0 | 2 | 2 |
| KRAB013 | 298101 | 8036271 | 651 | 0 | -90 | 5415985 | 0 | 2 | 2 |
| KRAB018 | 298393 | 8037272 | 654 | 0 | -90 | 5415986 | 0 | 1 | 1 |
| KRAB023 | 299186 | 8037824 | 654 | 0 | -90 | 5415987 | 0 | 2 | 2 |

Table 3: Test 1 Leach Recoveries pH4 (0.5hr) (%)

| 5415879 3 39 40 55 50 43 53 24 55 54 48 41 35 49 30 5415882 32 36 34 49 47 37 49 21 52 50 44 42 21 38 25 5415885 2 30 27 39 41 32 49 15 47 40 36 28 36 20 5415888 9 48 49 60 60 57 58 38 64 64 55 56 36 54 36 5415896 1 32 30 42 42 44 47 24 46 42 36 26 47 26 5415896 7 46 45 58 47 53 34 58 57 53 45 49 50 37 5415897 <td< th=""><th>52 49 44 62 47 44 56 45 46 38 49 49 43 38 29 34 37 28</th></td<> | 52 49 44 62 47 44 56 45 46 38 49 49 43 38 29 34 37 28 |
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| 5415882 32 36 34 49 47 37 49 21 52 50 44 42 21 38 25 5415885 2 30 27 39 411 32 49 15 47 47 40 36 28 36 20 5415889 48 49 60 60 60 57 58 38 64 64 55 56 36 54 36 5415895 1 32 30 42 42 34 47 24 46 45 38 31 22 40 20 5415896 7 46 45 60 58 47 53 34 58 57 53 45 49 50 37 5415896 7 46 45 48 35 46 29 47 46 40 35 29 42 25 | 44 62 47 44 56 45 46 38 49 49 43 38 29 34 |
| 5415885 2 30 27 39 41 32 49 15 47 47 40 36 28 36 20 5415888 9 48 49 60 60 57 58 38 64 64 55 56 36 54 36 5415895 1 32 30 42 42 34 47 24 46 45 38 31 22 40 20 5415896 7 46 45 60 58 47 53 34 58 57 53 45 49 50 37 5415897 3 34 34 44 45 37 47 29 47 46 40 35 29 42 25 5415899 2 36 32 45 44 35 46 29 47 46 40 35 29 42 25 </td <td>62 47 44 56 45 46 38 49 49 43 38 29 34</td> | 62 47 44 56 45 46 38 49 49 43 38 29 34 |
| 5415891 2 37 33 47 46 40 49 27 49 48 42 36 26 47 26 5415896 7 46 45 60 58 47 53 34 58 57 53 45 49 50 37 5415897 3 34 34 44 45 37 47 29 47 46 40 35 29 42 25 5415897 3 34 34 44 45 37 47 29 47 46 40 35 29 42 25 5415899 2 36 32 45 44 35 46 29 47 46 41 40 29 44 24 5415890 1 38 33 38 45 38 51 27 52 45 45 39 27 44 24 </td <td>47 44 56 45 46 38 49 49 43 38 29 34</td> | 47 44 56 45 46 38 49 49 43 38 29 34 |
| 6415895 1 32 30 42 42 34 47 24 46 45 38 31 22 40 20 6416896 7 46 45 60 58 47 53 34 58 57 53 45 49 50 37 5415897 3 34 34 44 45 37 47 29 47 46 40 35 29 42 25 5415899 2 36 32 45 44 35 46 29 47 46 41 40 29 44 24 5415901 5 30 29 34 37 31 35 19 41 35 35 27 18 31 19 5415906 1 38 33 38 45 38 51 27 52 45 45 39 27 44 24 </td <td>44 56 45 46 38 49 49 43 38 29 34 37</td> | 44 56 45 46 38 49 49 43 38 29 34 37 |
| 5415896 7 46 45 60 58 47 53 34 58 57 53 45 49 50 37 5415897 3 34 34 44 45 37 47 29 47 46 40 35 29 42 25 5415899 2 36 32 45 44 35 46 29 47 46 41 40 29 44 24 5415904 1 38 34 46 46 39 57 21 51 48 41 40 33 46 24 5415905 1 38 33 38 45 38 51 27 52 45 45 39 27 44 24 5415906 1 31 29 38 41 32 50 19 45 42 37 36 27 40 21 </td <td>56 45 46 38 49 49 43 38 29 34 37</td> | 56 45 46 38 49 49 43 38 29 34 37 |
| 5415897 3 34 34 44 45 37 47 29 47 46 40 35 29 42 25 5415899 2 36 32 45 44 35 46 29 47 46 41 40 29 44 24 5415901 5 30 29 34 37 31 35 19 41 35 35 27 18 31 19 5415904 1 38 34 46 46 39 57 21 51 48 41 40 33 46 24 5415905 1 38 33 38 45 38 51 27 52 45 45 39 27 44 24 5415906 1 31 29 38 41 32 50 19 45 42 37 36 27 40 21 </td <td>45 46 38 49 49 43 38 29 34 37</td> | 45 46 38 49 49 43 38 29 34 37 |
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| 5415901 5 30 29 34 37 31 35 19 41 35 35 27 18 31 19 5415904 1 38 34 46 46 39 57 21 51 48 41 40 33 46 24 5415905 1 38 33 38 45 38 51 27 52 45 45 39 27 44 24 5415906 1 31 29 38 41 32 50 19 45 42 37 36 27 40 21 5415912 2 31 28 33 37 33 36 15 40 36 33 34 32 38 20 5415913 1 28 25 31 35 28 37 21 35 33 31 28 20 37 17 </td <td>38 49 49 43 38 29 34 37</td> | 38 49 49 43 38 29 34 37 |
| 5415904 1 38 34 46 46 39 57 21 51 48 41 40 33 46 24 5415905 1 38 33 38 45 38 51 27 52 45 45 39 27 44 24 5415906 1 31 29 38 41 32 50 19 45 42 37 36 27 40 21 5415912 2 31 28 33 37 33 36 15 40 36 33 34 32 38 20 5415913 1 23 19 25 30 18 32 13 30 27 25 24 14 29 15 5415914 1 28 25 31 35 28 37 21 33 33 30 23 38 19 <t< td=""><td>49 49 43 38 29 34 37</td></t<> | 49 49 43 38 29 34 37 |
| 5415905 1 38 33 38 45 38 51 27 52 45 45 39 27 44 24 5415906 1 31 29 38 41 32 50 19 45 42 37 36 27 40 21 5415912 2 31 28 33 37 33 36 15 40 36 33 34 32 38 20 5415913 1 23 19 25 30 18 32 13 30 27 25 24 14 29 15 5415914 1 28 25 31 37 29 40 26 38 35 33 30 23 38 19 5415916 1 20 18 29 28 22 31 12 29 27 24 26 12 27 13 </td <td>49 43 38 29 34 37</td> | 49 43 38 29 34 37 |
| 5415906 1 31 29 38 41 32 50 19 45 42 37 36 27 40 21 5415912 2 31 28 33 37 33 36 15 40 36 33 34 32 38 20 5415913 1 23 19 25 30 18 32 13 30 27 25 24 14 29 15 5415914 1 28 25 31 35 28 37 21 35 33 31 28 20 37 17 5415915 2 30 26 31 37 29 40 26 38 35 33 30 23 38 19 5415916 1 20 18 29 28 22 31 12 29 27 24 26 12 27 13 </td <td>43 38 29 34 37</td> | 43 38 29 34 37 |
| 5415912 2 31 28 33 37 33 36 15 40 36 33 34 32 38 20 5415913 1 23 19 25 30 18 32 13 30 27 25 24 14 29 15 5415914 1 28 25 31 35 28 37 21 35 33 31 28 20 37 17 5415916 1 20 18 29 28 22 31 12 29 27 24 26 12 27 13 5415917 4 42 36 49 48 41 52 29 52 51 48 47 29 44 26 5415918 3 41 35 48 53 43 54 27 55 51 44 42 28 48 28 </td <td>38 29 34 37</td> | 38 29 34 37 |
| 5415913 1 23 19 25 30 18 32 13 30 27 25 24 14 29 15 5415914 1 28 25 31 35 28 37 21 35 33 31 28 20 37 17 5415915 2 30 26 31 37 29 40 26 38 35 33 30 23 38 19 5415916 1 20 18 29 28 22 31 12 29 27 24 26 12 27 13 5415917 4 42 36 49 48 41 52 29 52 51 48 47 29 44 26 5415918 3 41 35 48 53 43 54 27 55 51 44 42 28 48 28 </td <td>29 34 37</td> | 29 34 37 |
| 5415914 1 28 25 31 35 28 37 21 35 33 31 28 20 37 17 5415915 2 30 26 31 37 29 40 26 38 35 33 30 23 38 19 5415916 1 20 18 29 28 22 31 12 29 27 24 26 12 27 13 5415917 4 42 36 49 48 41 52 29 52 51 48 47 29 44 26 5415918 3 41 35 48 53 43 54 27 55 51 44 42 28 48 28 5415919 2 35 32 38 45 35 47 23 48 43 41 39 23 46 24 </td <td>34 37</td> | 34 37 |
| 5415915 2 30 26 31 37 29 40 26 38 35 33 30 23 38 19 5415916 1 20 18 29 28 22 31 12 29 27 24 26 12 27 13 5415917 4 42 36 49 48 41 52 29 52 51 48 47 29 44 26 5415918 3 41 35 48 53 43 54 27 55 51 44 42 28 48 28 5415919 2 35 32 38 45 35 47 23 48 43 41 39 23 46 24 5415922 1 38 34 46 48 34 51 33 53 50 43 45 29 45 25 </td <td>37</td> | 37 |
| 5415916 1 20 18 29 28 22 31 12 29 27 24 26 12 27 13 5415917 4 42 36 49 48 41 52 29 52 51 48 47 29 44 26 5415918 3 41 35 48 53 43 54 27 55 51 44 42 28 48 28 5415919 2 35 32 38 45 35 47 23 48 43 41 39 23 46 24 5415922 1 38 34 46 48 34 51 33 53 50 43 45 29 45 25 5415923 2 41 41 40 49 41 51 22 51 50 43 42 32 51 27 </td <td></td> | |
| 5415917 4 42 36 49 48 41 52 29 52 51 48 47 29 44 26 5415918 3 41 35 48 53 43 54 27 55 51 44 42 28 48 28 5415919 2 35 32 38 45 35 47 23 48 43 41 39 23 46 24 5415922 1 38 34 46 48 34 51 33 53 50 43 45 29 45 25 5415923 2 41 41 40 49 41 51 22 51 50 43 42 32 51 27 5415924 2 35 30 43 47 38 49 19 49 45 42 37 32 41 23 </td <td>28</td> | 28 |
| 5415918 3 41 35 48 53 43 54 27 55 51 44 42 28 48 28 5415919 2 35 32 38 45 35 47 23 48 43 41 39 23 46 24 5415922 1 38 34 46 48 34 51 33 53 50 43 45 29 45 25 5415923 2 41 41 40 49 41 51 22 51 50 43 42 32 51 27 5415924 2 35 30 43 47 38 49 19 49 45 42 37 32 41 23 5415936 2 37 34 41 47 39 49 24 52 46 40 38 33 47 27 </td <td>E1</td> | E1 |
| 5415919 2 35 32 38 45 35 47 23 48 43 41 39 23 46 24 5415922 1 38 34 46 48 34 51 33 53 50 43 45 29 45 25 5415923 2 41 41 40 49 41 51 22 51 50 43 42 32 51 27 5415924 2 35 30 43 47 38 49 19 49 45 42 37 32 41 23 5415936 2 37 34 41 47 39 49 24 52 46 40 38 33 47 27 5415937 4 41 42 39 48 42 43 27 46 43 41 42 39 47 30 </td <td>51 52</td> | 51 52 |
| 5415922 1 38 34 46 48 34 51 33 53 50 43 45 29 45 25 5415923 2 41 41 40 49 41 51 22 51 50 43 42 32 51 27 5415924 2 35 30 43 47 38 49 19 49 45 42 37 32 41 23 5415936 2 37 34 41 47 39 49 24 52 46 40 38 33 47 27 5415937 4 41 42 39 48 42 43 27 46 43 41 42 39 47 30 5415939 1 33 30 39 41 35 45 22 42 43 34 33 33 33 43 </td <td>45</td> | 45 |
| 5415923 2 41 41 40 49 41 51 22 51 50 43 42 32 51 27 5415924 2 35 30 43 47 38 49 19 49 45 42 37 32 41 23 5415936 2 37 34 41 47 39 49 24 52 46 40 38 33 47 27 5415937 4 41 42 39 48 42 43 27 46 43 41 42 39 47 30 5415939 1 33 30 39 41 35 45 22 42 43 34 33 33 43 22 5415941 2 46 38 50 52 41 52 35 49 50 41 47 35 52 31 </td <td>50</td> | 50 |
| 5415924 2 35 30 43 47 38 49 19 49 45 42 37 32 41 23 5415936 2 37 34 41 47 39 49 24 52 46 40 38 33 47 27 5415937 4 41 42 39 48 42 43 27 46 43 41 42 39 47 30 5415939 1 33 30 39 41 35 45 22 42 43 34 33 33 43 22 5415941 2 46 38 50 52 41 52 35 49 50 41 47 35 52 31 5415942 3 45 41 49 56 48 53 32 52 55 41 51 32 53 32 </td <td>49</td> | 49 |
| 5415936 2 37 34 41 47 39 49 24 52 46 40 38 33 47 27 5415937 4 41 42 39 48 42 43 27 46 43 41 42 39 47 30 5415939 1 33 30 39 41 35 45 22 42 43 34 33 33 43 22 5415941 2 46 38 50 52 41 52 35 49 50 41 47 35 52 31 5415942 3 45 41 49 56 48 53 32 52 55 41 51 32 53 32 5415943 2 45 36 45 53 42 51 30 50 52 43 50 44 51 31 </td <td>46</td> | 46 |
| 5415937 4 41 42 39 48 42 43 27 46 43 41 42 39 47 30 5415939 1 33 30 39 41 35 45 22 42 43 34 33 33 43 22 5415941 2 46 38 50 52 41 52 35 49 50 41 47 35 52 31 5415942 3 45 41 49 56 48 53 32 52 55 41 51 32 53 32 5415943 2 45 36 45 53 42 51 30 50 52 43 50 44 51 31 5415944 22 64 53 65 71 62 66 34 62 68 54 63 52 62 46< | 49 |
| 5415939 1 33 30 39 41 35 45 22 42 43 34 33 33 43 22 5415941 2 46 38 50 52 41 52 35 49 50 41 47 35 52 31 5415942 3 45 41 49 56 48 53 32 52 55 41 51 32 53 32 5415943 2 45 36 45 53 42 51 30 50 52 43 50 44 51 31 5415944 22 64 53 65 71 62 66 34 62 68 54 63 52 62 46 5415948 2 38 36 33 50 35 44 27 42 41 37 39 34 44 25< | 45 |
| 5415942 3 45 41 49 56 48 53 32 52 55 41 51 32 53 32 5415943 2 45 36 45 53 42 51 30 50 52 43 50 44 51 31 5415944 22 64 53 65 71 62 66 34 62 68 54 63 52 62 46 5415948 2 38 36 33 50 35 44 27 42 41 37 39 34 44 25 5415949 1 40 35 37 52 37 45 19 45 43 41 35 33 43 27 5415952 2 48 45 42 55 43 51 34 49 49 50 50 36 51 33< | 41 |
| 5415943 2 45 36 45 53 42 51 30 50 52 43 50 44 51 31 5415944 22 64 53 65 71 62 66 34 62 68 54 63 52 62 46 5415948 2 38 36 33 50 35 44 27 42 41 37 39 34 44 25 5415949 1 40 35 37 52 37 45 19 45 43 41 35 33 43 27 5415952 2 48 45 42 55 43 51 34 49 49 50 50 36 51 33 | 49 |
| 5415944 22 64 53 65 71 62 66 34 62 68 54 63 52 62 46 5415948 2 38 36 33 50 35 44 27 42 41 37 39 34 44 25 5415949 1 40 35 37 52 37 45 19 45 43 41 35 33 43 27 5415952 2 48 45 42 55 43 51 34 49 49 50 50 36 51 33 | 52 |
| 5415948 2 38 36 33 50 35 44 27 42 41 37 39 34 44 25 5415949 1 40 35 37 52 37 45 19 45 43 41 35 33 43 27 5415952 2 48 45 42 55 43 51 34 49 49 50 50 36 51 33 | 50 |
| 5415949 1 40 35 37 52 37 45 19 45 43 41 35 33 43 27 5415952 2 48 45 42 55 43 51 34 49 49 50 50 36 51 33 | 64 |
| 5415952 2 48 45 42 55 43 51 34 49 49 50 50 36 51 33 | 41 |
| | 44 |
| 5415053 5 47 44 48 62 44 52 35 56 54 45 52 32 40 35 | 49 |
| | 54 |
| 5415954 3 33 27 29 44 28 38 19 39 37 36 36 22 39 23 | 38 |
| 5415955 1 42 35 43 54 36 51 26 51 48 43 44 37 48 33 | 49 |
| 5415956 1 38 36 51 40 48 28 45 43 42 41 36 48 29 | 44 |
| 5415957 1 41 38 40 50 41 41 22 43 41 41 36 36 46 29 5415959 4 20 24 44 27 44 42 28 26 26 44 26 | 42 |
| 5415958 1 39 31 37 49 34 44 27 44 42 38 36 26 44 26 5415961 3 43 42 46 57 45 50 22 51 48 45 45 35 48 31 | 43 |
| 5415961 3 43 42 46 57 45 50 22 51 48 45 45 35 48 31 5415967 2 43 41 47 51 44 47 27 47 46 42 43 33 50 29 | 49 46 |
| 5415968 1 44 37 45 54 41 51 32 50 47 48 42 32 51 28 | 49 |
| 5415966 1 44 37 45 54 41 51 32 50 47 46 42 32 51 28 5415971 1 43 39 45 53 39 50 26 47 47 41 49 34 51 29 | 49 |
| 5415971 1 43 39 43 53 39 30 20 47 47 41 49 34 51 29 5415973 3 45 43 40 55 46 47 24 52 51 47 51 37 52 33 | 51 |
| 5415974 1 31 28 36 40 30 37 26 35 34 32 35 24 40 21 | 34 |
| 5415975 1 39 35 50 49 38 50 22 47 45 40 38 33 47 25 | 46 |
| 5415976 3 38 33 35 45 37 40 22 39 38 38 40 33 42 23 | 39 |
| 5415977 4 44 40 48 56 41 48 29 51 49 50 46 41 47 32 | 49 |
| 5415984 1 41 36 41 48 38 45 19 42 40 38 43 29 50 28 | 10 |
| 5415985 1 38 35 41 50 37 41 21 41 39 41 44 30 46 27 | 42 |
| 5415986 1 29 26 30 38 26 37 17 35 33 31 31 27 37 18 | |
| 5415987 5 46 41 50 60 42 54 21 54 52 50 40 39 48 34 | 42 |

Table 4: Leach recoveries pH3 (0.5hr) (%)

| Sample | Се | Dy | Er | Eu | Gd | Но | La | Lu | Nd | Pr | Sm | Tb | Tm | Υ | Yb | MREE |
|-----------------|----|----|----|---------------------|----|----|----|----|----|----|----|----|----|----|----|------|
| 5415879 | 4 | 44 | 46 | 61 | 54 | 48 | 56 | 35 | 63 | 62 | 56 | 47 | 35 | 54 | 35 | 59 |
| 5415882 | 41 | 48 | 47 | 69 | 63 | 55 | 58 | 42 | 68 | 64 | 60 | 63 | 42 | 48 | 38 | 64 |
| 5415885 | 3 | 37 | 36 | 54 | 50 | 38 | 52 | 31 | 55 | 55 | 49 | 44 | 28 | 42 | 27 | 52 |
| 5415888 | 12 | 51 | 55 | 69 | 65 | 57 | 57 | 38 | 67 | 66 | 60 | 56 | 54 | 57 | 42 | 65 |
| 5415891 | 3 | 44 | 41 | 57 | 54 | 45 | 54 | 27 | 58 | 56 | 51 | 48 | 39 | 51 | 32 | 56 |
| 5415895 | 1 | 39 | 36 | 51 | 51 | 44 | 52 | 24 | 54 | 52 | 45 | 42 | 33 | 45 | 27 | 51 |
| 5415896 | 11 | 53 | 52 | 67 | 66 | 60 | 56 | 51 | 66 | 65 | 62 | 60 | 49 | 57 | 44 | 64 |
| 5415897 | 5 | 48 | 45 | 66 | 59 | 49 | 53 | 29 | 63 | 59 | 54 | 49 | 43 | 52 | 38 | 60 |
| 5415899 | 3 | 46 | 42 | 56 | 55 | 47 | 54 | 29 | 59 | 57 | 54 | 53 | 43 | 52 | 32 | 57 |
| 5415901 | 6 | 36 | 34 | 43 | 45 | 31 | 41 | 19 | 49 | 43 | 42 | 36 | 18 | 36 | 24 | 46 |
| 5415904 | 1 | 47 | 41 | 58 | 56 | 48 | 63 | 31 | 62 | 58 | 51 | 50 | 44 | 53 | 32 | 60 |
| 5415905 | 2 | 46 | 40 | 48 | 52 | 43 | 55 | 27 | 59 | 53 | 52 | 46 | 40 | 48 | 30 | 56 |
| 5415906 | 1 | 38 | 37 | 44 | 48 | 39 | 54 | 28 | 53 | 49 | 44 | 40 | 35 | 44 | 27 | 50 |
| 5415912 | 3 | 39 | 35 | 46 | 46 | 40 | 42 | 30 | 52 | 46 | 44 | 42 | 32 | 44 | 27 | 49 |
| 5415913 | 1 | 30 | 28 | 38 | 41 | 31 | 37 | 13 | 44 | 39 | 36 | 32 | 28 | 36 | 21 | 41 |
| 5415914 | 1 | 36 | 32 | 41 | 45 | 36 | 44 | 21 | 48 | 44 | 43 | 42 | 29 | 45 | 24 | 46 |
| 5415915 | 3 | 40 | 36 | 41 | 48 | 39 | 46 | 26 | 49 | 44 | 43 | 42 | 35 | 46 | 28 | 47 |
| 5415916 | 1 | 30 | 28 | 35 | 39 | 32 | 38 | 12 | 41 | 37 | 36 | 33 | 24 | 35 | 21 | 39 |
| 5415917 | 5 | 57 | 49 | 68 | 62 | 53 | 60 | 29 | 66 | 64 | 66 | 60 | 43 | 55 | 36 | 64 |
| 5415918 | 3 | 47 | 41 | 54 | 59 | 50 | 56 | 27 | 61 | 56 | 52 | 49 | 42 | 52 | 32 | 58 |
| 5415919 | 2 | 42 | 40 | 43 | 54 | 45 | 50 | 35 | 56 | 49 | 48 | 45 | 34 | 50 | 31 | 53 |
| 5415922 | 1 | 45 | 39 | 54 | 54 | 41 | 52 | 33 | 58 | 54 | 51 | 45 | 29 | 50 | 29 | 55 |
| 5415923 | 2 | 51 | 49 | 52 | 59 | 50 | 56 | 33 | 60 | 57 | 53 | 57 | 43 | 56 | 35 | 58 |
| 5415924 | 3 | 43 | 38 | 51 | 54 | 38 | 53 | 38 | 56 | 52 | 52 | 46 | 32 | 47 | 28 | 54 |
| 5415936 | 2 | 46 | 42 | 50 | 56 | 49 | 53 | 36 | 61 | 54 | 50 | 49 | 44 | 53 | 34 | 58 |
| 5415937 | 4 | 48 | 46 | 49 | 53 | 47 | 45 | 27 | 50 | 46 | 46 | 48 | 39 | 51 | 34 | 49 |
| 5415939 | 1 | 41 | 37 | 47 | 49 | 43 | 49 | 33 | 49 | 50 | 41 | 43 | 33 | 48 | 28 | 48 |
| 5415941 | 3 | 51 | 41 | 50 | 57 | 46 | 53 | 35 | 53 | 54 | 46 | 47 | 35 | 54 | 34 | 53 |
| 5415942 | 4 | 53 | 45 | 57 | 63 | 48 | 55 | 32 | 58 | 62 | 48 | 60 | 47 | 57 | 39 | 58 |
| 5415943 | 2 | 54 | 42 | 50 | 59 | 48 | 54 | 30 | 56 | 57 | 51 | 57 | 44 | 57 | 37 | 56 |
| 5415944 | 25 | 72 | 62 | 78 | 80 | 69 | 72 | 51 | 73 | 76 | 63 | 71 | 69 | 70 | 54 | 73 |
| 5415948 | 2 | 47 | 45 | 46 | 59 | 44 | 49 | 40 | 50 | 48 | 47 | 50 | 34 | 51 | 32 | 49 |
| 5415949 | 2 | 46 | 43 | 44 | 59 | 44 | 50 | 38 | 51 | 50 | 49 | 44 | 33 | 49 | 32 | 50 |
| 5415952 | 2 | 59 | 54 | 55 | 64 | 53 | 55 | 34 | 57 | 55 | 57 | 55 | 48 | 58 | 40 | 57 |
| 5415953 | 6 | 52 | 50 | 54 | 63 | 51 | 53 | 35 | 59 | 56 | 51 | 52 | 32 | 51 | 38 | 57 |
| 5415954 | 3 | 39 | 33 | 39 | 50 | 37 | 39 | 19 | 45 | 43 | 42 | 36 | 22 | 44 | 30 | 43 |
| 5415955 | 2 | 46 | 39 | 48 | 58 | 42 | 52 | 26 | 55 | 51 | 46 | 50 | 37 | 50 | 37 | 53 |
| 5415956 | 1 | 48 | 43 | 45 | 61 | 47 | 53 | 37 | 53 | 51 | 49 | 49 | 36 | 55 | 36 | 52 |
| 5415957 | 2 | 50 | 48 | 49 | 56 | 46 | 45 | 33 | 50 | 48 | 49 | 47 | 36 | 51 | 36 | 50 |
| 5415958 | 1 | 42 | 32 | 42 | 52 | 39 | 47 | 27 | 53 | 46 | 44 | 42 | 39 | 44 | 28 | 50 |
| 5415961 | 3 | 48 | 44 | 50 | 59 | 50 | 56 | 32 | 59 | 50 | 52 | 51 | 35 | 50 | 32 | 56 |
| 5415967 | 2 | 45 | 45 | 51 | 53 | 44 | 50 | 27 | 54 | 48 | 48 | 48 | 33 | 50 | 31 | 52 |
| 5415968 | 1 | 47 | 42 | 50 | 56 | 45 | 53 | 32 | 59 | 51 | 53 | 47 | 32 | 51 | 30 | 56 |
| 5415971 | 2 | 46 | 43 | 49 | 56 | 44 | 53 | 39 | 55 | 52 | 48 | 55 | 34 | 51 | 32 | 54 |
| 5415973 | 3 | 45 | 43 | 49 | 53 | 46 | 48 | 24 | 58 | 52 | 52 | 51 | 37 | 50 | 33 | 55 |
| 5415973 | 2 | 37 | 32 | 44 | 43 | 35 | 40 | 26 | 45 | 39 | 41 | 40 | 24 | 41 | 25 | 43 |
| 5415975 | 2 | 42 | 38 | 54 | 54 | 42 | 60 | 22 | 57 | 50 | 49 | 49 | 33 | 50 | 27 | 53 |
| 5415976 | 3 | 37 | 33 | 40 | 43 | 37 | 40 | 22 | 42 | 38 | 49 | 49 | 33 | 40 | 23 | 41 |
| 5415976 | 4 | 47 | 42 | 58 | 56 | 48 | 49 | 29 | 55 | 49 | 53 | 56 | 41 | 46 | 30 | 53 |
| 5415977 | 1 | 41 | 38 | 45 | 47 | 38 | 49 | 29 | 46 | 49 | 41 | 43 | 29 | 47 | 28 | 45 |
| 5415985 | 2 | 43 | 39 | 45 50 | 54 | 41 | 49 | 32 | 50 | 41 | 47 | 43 | 30 | 48 | 27 | 48 |
| 5415986 | 1 | 32 | 27 | 37 | 40 | 33 | 45 | 17 | 42 | 38 | 37 | 35 | 27 | 38 | 21 | 40 |
| 5415987 | 6 | 47 | 44 | 60 | 60 | 42 | 57 | 42 | 62 | 55 | 54 | 50 | 39 | 49 | 31 | 59 |
| 041090 <i>1</i> | 0 | 41 | 44 | UU | UU | 42 | 31 | 42 | UΖ | უე | 54 | 50 | J9 | 49 | اد | บช |

Table 4: Leach recoveries pH3 (2.5hr) (%)

| Sample | Се | Dy | Er | Eu | Gd | Но | La | Lu | Nd | Pr | Sm | Tb | Tm | Υ | Yb | MREE |
|--------------------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 5415879 | 4 | 47 | 52 | 68 | 59 | 48 | 56 | 35 | 66 | 64 | 57 | 47 | 47 | 55 | 38 | 63 |
| 5415882 | 47 | 51 | 53 | 79 | 67 | 55 | 62 | 42 | 75 | 70 | 65 | 63 | 42 | 51 | 41 | 71 |
| 5415885 | 4 | 42 | 41 | 62 | 57 | 45 | 54 | 31 | 61 | 61 | 55 | 44 | 28 | 45 | 31 | 57 |
| 5415888 | 14 | 58 | 64 | 78 | 69 | 65 | 61 | 38 | 74 | 72 | 67 | 65 | 54 | 61 | 47 | 71 |
| 5415891 | 3 | 47 | 44 | 62 | 59 | 51 | 58 | 27 | 62 | 60 | 54 | 48 | 39 | 53 | 36 | 59 |
| 5415895 | 2 | 46 | 45 | 61 | 57 | 49 | 59 | 36 | 61 | 60 | 53 | 47 | 44 | 52 | 34 | 59 |
| 5415896 | 14 | 58 | 57 | 80 | 70 | 60 | 56 | 51 | 70 | 67 | 66 | 60 | 49 | 59 | 49 | 68 |
| 5415897 | 7 | 52 | 51 | 74 | 66 | 55 | 54 | 43 | 68 | 64 | 59 | 56 | 43 | 55 | 42 | 65 |
| 5415899 | 4 | 51 | 46 | 61 | 61 | 53 | 59 | 43 | 65 | 62 | 58 | 53 | 43 | 54 | 36 | 62 |
| 5415901 | 7 | 41 | 40 | 51 | 51 | 39 | 51 | 19 | 58 | 51 | 48 | 45 | 36 | 40 | 27 | 54 |
| 5415904 | 2 | 50 | 47 | 62 | 59 | 48 | 67 | 31 | 66 | 62 | 54 | 50 | 44 | 55 | 37 | 63 |
| 5415905 | 2 | 51 | 44 | 53 | 58 | 43 | 57 | 27 | 63 | 56 | 56 | 52 | 40 | 51 | 34 | 60 |
| 5415906 5415912 | 3 | 44 | 42 38 | 50 52 | 54 50 | 43 40 | 59 43 | 28 30 | 60 55 | 57 49 | 52 47 | 44 42 | 35 32 | 52 46 | 32 27 | 57 52 |
| 5415912 | 1 | 33 | 30 | 38 | 44 | 31 | 38 | 26 | 45 | 49 | 40 | 42 | 28 | 37 | 25 | 43 |
| 5415913 | 1 | 41 | 36 | 45 | 49 | 40 | 45 | 32 | 51 | 47 | 46 | 40 | 39 | 48 | 27 | 49 |
| 5415915 | 3 | 44 | 39 | 46 | 52 | 44 | 48 | 38 | 53 | 48 | 48 | 48 | 35 | 49 | 32 | 51 |
| 5415916 | 2 | 34 | 31 | 40 | 42 | 32 | 39 | 24 | 44 | 41 | 39 | 40 | 24 | 38 | 25 | 42 |
| 5415917 | 5 | 60 | 53 | 74 | 65 | 59 | 64 | 43 | 70 | 69 | 70 | 66 | 57 | 60 | 40 | 69 |
| 5415918 | 3 | 52 | 43 | 60 | 62 | 50 | 59 | 27 | 65 | 59 | 56 | 56 | 42 | 57 | 39 | 62 |
| 5415919 | 2 | 46 | 42 | 47 | 58 | 50 | 52 | 35 | 60 | 53 | 54 | 50 | 46 | 54 | 34 | 57 |
| 5415922 | 1 | 47 | 44 | 54 | 59 | 48 | 55 | 33 | 62 | 57 | 54 | 54 | 43 | 54 | 34 | 59 |
| 5415923 | 3 | 50 | 49 | 52 | 59 | 54 | 56 | 33 | 61 | 58 | 55 | 57 | 43 | 58 | 40 | 59 |
| 5415924 | 3 | 44 | 40 | 51 | 57 | 45 | 56 | 38 | 60 | 56 | 57 | 46 | 32 | 50 | 33 | 57 |
| 5415936 | 3 | 48 | 44 | 54 | 56 | 49 | 57 | 36 | 65 | 57 | 56 | 49 | 44 | 57 | 39 | 61 |
| 5415937 | 5 | 47 | 48 | 49 | 51 | 47 | 45 | 40 | 49 | 45 | 46 | 48 | 39 | 51 | 38 | 48 |
| 5415939 | 1 | 43 | 40 | 52 | 50 | 43 | 50 | 33 | 52 | 52 | 45 | 48 | 44 | 51 | 33 | 51 |
| 5415941 | 3 | 50 | 41 | 60 | 54 | 46 | 58 | 35 | 59 | 57 | 50 | 52 | 47 | 53 | 32 | 58 |
| 5415942 | 4 | 50 | 43 | 65 | 59 | 48 | 55 | 32 | 60 | 59 | 49 | 51 | 32 | 53 | 34 | 58 |
| 5415943 | 2 | 52 | 42 | 56 | 57 | 48 | 55 | 30 | 59 | 58 | 51 | 57 | 44 | 53 | 35 | 58 |
| 5415944 | 24 | 67 | 55 | 78 | 73 | 62 | 70 | 51 | 72 | 71 | 63 | 71 | 52 | 61 | 46 | 72 |
| 5415948 | 2 | 44 | 41 | 46 | 55 | 44 | 50 | 27 | 54 | 49 | 50 | 50 | 34 | 48 | 29 | 52 |
| 5415949 | 2 | 46 | 40 | 52 | 56 | 44 | 49 | 38 | 55 | 50 | 50 | 44 | 33 | 46 | 30 | 53 |
| 5415952 | 3 | 55 | 52 | 55 | 60 | 48 | 53 | 34 | 60 | 53 | 58 | 55 | 48 | 52 | 37 | 58 |
| 5415953 | 6 4 | 49 41 | 47 33 | 54 | 59 | 51 37 | 53 42 | 35 | 62 | 57 | 50 | 52 | 32 | 48 42 | 33 | 59 49 |
| 5415954 | | | | 39 | 48 | | ·- | 19 | 51 | 46 | 48 | 48 50 | 43 | | 27 | |
| 5415955 5415956 | 2 1 | 46 45 | 39 42 | 53 48 | 57 57 | 42 47 | 53 58 | 26 37 | 60 57 | 53 51 | 49 52 | 49 | 37 36 | 48 51 | 35 33 | 57 55 |
| 5415957 | 2 | 47 | 44 | 49 | 54 | 46 | 43 | 33 | 53 | 46 | 48 | 47 | 36 | 47 | 32 | 51 |
| 5415958 | 2 | 44 | 34 | 46 | 53 | 39 | 47 | 27 | 55 | 49 | 45 | 42 | 39 | 46 | 30 | 52 |
| 5415961 | 3 | 52 | 47 | 50 | 62 | 50 | 57 | 32 | 61 | 53 | 55 | 56 | 35 | 52 | 34 | 58 |
| 5415967 | 2 | 47 | 47 | 51 | 56 | 49 | 50 | 41 | 56 | 49 | 51 | 54 | 33 | 51 | 34 | 53 |
| 5415968 | 1 | 50 | 45 | 54 | 58 | 50 | 58 | 32 | 63 | 54 | 57 | 47 | 42 | 54 | 33 | 59 |
| 5415971 | 2 | 47 | 45 | 54 | 56 | 44 | 54 | 39 | 56 | 52 | 48 | 55 | 34 | 52 | 34 | 54 |
| 5415973 | 3 | 45 | 44 | 46 | 55 | 46 | 46 | 35 | 56 | 50 | 52 | 51 | 37 | 49 | 33 | 53 |
| 5415974 | 2 | 41 | 35 | 44 | 49 | 40 | 42 | 26 | 49 | 43 | 45 | 46 | 36 | 44 | 28 | 47 |
| 5415975 | 2 | 46 | 43 | 59 | 56 | 47 | 62 | 33 | 60 | 52 | 52 | 49 | 33 | 53 | 30 | 57 |
| 5415976 | 3 | 44 | 40 | 45 | 49 | 42 | 44 | 33 | 48 | 43 | 46 | 45 | 33 | 46 | 28 | 46 |
| 5415977 | 5 | 53 | 47 | 58 | 59 | 48 | 52 | 43 | 60 | 53 | 57 | 56 | 41 | 50 | 34 | 57 |
| 5415984 | 1 | 41 | 41 | 45 | 49 | 43 | 50 | 29 | 46 | 44 | 44 | 48 | 38 | 50 | 29 | 45 |
| 5415985 | 2 | 43 | 40 | 50 | 56 | 46 | 44 | 32 | 52 | 47 | 48 | 49 | 40 | 51 | 31 | 50 |
| 5415986 | 1 | 34 | 29 | 40 | 43 | 33 | 41 | 25 | 43 | 40 | 39 | 40 | 27 | 42 | 25 | 41 |
| 5415987 | 6 | 47 | 46 | 60 | 67 | 51 | 60 | 42 | 66 | 60 | 59 | 50 | 39 | 54 | 37 | 62 |

Table 5: Leach recoveries pH3 (5.5hr) (%)

| Sample | Ce | Dy | Er | Eu | Gd | Но | La | Lu | Nd | Pr | Sm | Tb | Tm | Υ | Yb | MREE |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|----------|
| 5415879 | 4 | 46 | 52 | 68 | 59 | 48 | 56 | 35 | 66 | 64 | 57 | 47 | 47 | 55 | 38 | 63 |
| 5415882 | 47 | 51 | 53 | 79 | 67 | 55 | 62 | 42 | 75 | 70 | 65 | 63 | 42 | 51 | 41 | 71 |
| 5415885 | 4 | 43 | 43 | 62 | 61 | 45 | 58 | 31 | 65 | 63 | 59 | 44 | 28 | 48 | 33 | 61 |
| 5415888 | 14 | 58 | 64 | 78 | 72 | 65 | 62 | 38 | 76 | 74 | 68 | 65 | 54 | 63 | 47 | 73 |
| 5415891 | 3 | 47 | 44 | 62 | 59 | 51 | 58 | 27 | 62 | 60 | 54 | 48 | 39 | 52 | 36 | 59 |
| 5415895 | 2 | 47 | 45 | 56 | 59 | 49 | 57 | 36 | 61 | 60 | 53 | 47 | 33 | 52 | 35 | 59 |
| 5415896 | 14 | 61 | 64 | 80 | 75 | 67 | 57 | 51 | 72 | 67 | 70 | 67 | 49 | 62 | 52 | 69 |
| 5415897 | 7 | 54 | 58 | 74 | 65 | 55 | 53 | 43 | 65 | 61 | 61 | 56 | 43 | 56 | 44 | 62 |
| 5415899 | 4 | 49 | 50 | 61 | 61 | 53 | 56 | 43 | 62 | 57 | 58 | 60 | 43 | 54 | 40 | 60 |
| 5415901 | 7 | 47 | 46 | 51 | 57 | 47 | 55 | 39 | 59 | 53 | 52 | 54 | 36 | 42 | 32 | 56 |
| 5415904 | 2 | 54 | 52 | 66 | 64 | 52 | 68 | 31 | 68 | 62 | 58 | 59 | 44 | 55 | 40 | 65 |
| 5415905 | 2 | 55 | 48 | 58 | 61 | 49 | 60 | 40 | 66 | 56 | 59 | 59 | 40 | 53 | 36 | 62 |
| 5415906 | 2 | 47 | 47 | 54 | 58 | 50 | 61 | 38 | 58 | 54 | 51 | 51 | 35 | 50 | 35 | 56 |
| 5415912 | 3 | 41 | 40 | 52 | 51 | 40 | 42 | 30 | 53 | 46 | 47 | 50 | 32 | 45 | 29 | 50 |
| 5415913 | 1 | 38 | 36 | 45 | 51 | 37 | 42 | 26 | 49 | 44 | 45 | 40 | 28 | 42 | 28 | 47 |
| 5415914 | 1 | 42 | 38 | 45 | 50 | 44 | 47 | 32 | 52 | 48 | 49 | 46 | 39 | 50 | 31 | 50 |
| 5415915 | 3 | 44 | 39 | 51 | 50 | 44 | 49 | 38 | 54 | 49 | 50 | 48 | 35 | 50 | 35 | 52 |
| 5415916 | 2 | 35 | 31 | 40 | 43 | 38 | 40 | 24 | 45 | 41 | 40 | 40 | 24 | 39 | 26 | 43 |
| 5415917 | 6 | 62 | 53 | 74 | 66 | 59 | 66 | 43 | 71 | 69 | 73 | 66 | 57 | 61 | 45 | 69 |
| 5415918 | 3 | 54 | 46 | 60 | 66 | 56 | 62 | 41 | 67 | 61 | 58 | 56 | 42 | 57 | 41 | 64 |
| 5415919 | 2 | 47 | 43 | 47 | 58 | 50 | 54 | 35 | 60 | 53 | 54 | 50 | 46 | 55 | 36 | 57 |
| 5415922 | 1 | 50 | 46 | 54 | 58 | 48 | 56 | 33 | 63 | 58 | 57 | 54 | 43 | 54 | 36 | 60 |
| 5415923 | 3 | 53 | 53 | 56 | 61 | 54 | 57 | 44 | 63 | 61 | 58 | 57 | 43 | 59 | 41 | 61 |
| 5415924 | 3 | 46 | 40 | 51 | 57 | 45 | 55 | 38 | 60 | 56 | 57 | 46 | 32 | 50 | 33 | 57 |
| 5415936 | 3 | 49 | 46 | 54 | 58 | 53 | 56 | 36 | 67 | 58 | 57 | 54 | 44 | 58 | 43 | 63 |
| 5415937 | 5 | 50 | 48 | 49 | 54 | 47 | 47 | 40 | 51 | 47 | 48 | 48 | 39 | 52 | 38 | 50 |
| 5415939 | 1 | 44 | 40 | 56 | 51 | 48 | 51 | 33 | 54 | 53 | 48 | 48 | 44 | 53 | 34 | 53 |
| 5415941 | 3 | 48 | 42 | 60 | 55 | 46 | 60 | 35 | 59 | 59 | 51 | 52 | 47 | 56 | 34 | 57 |
| 5415942 | 4 | 49 | 43 | 65 | 59 | 48 | 53 | 32 | 59 | 59 | 48 | 51 | 47 | 54 | 37 | 58 |
| 5415943 | 2 | 52 | 42 | 56 | 58 | 48 | 52 | 30 | 59 | 59 | 54 | 57 | 44 | 55 | 37 | 58 |
| 5415944 | 24 | 67 | 55 | 78 | 73 | 62 | 70 | 51 | 72 | 71 | 63 | 71 | 52 | 61 | 46 | 72 |
| 5415948 | 3 | 45 | 45 | 50 | 60 | 49 | 52 | 40 | 57 | 53 | 53 | 50 | 34 | 52 | 32 | 55 |
| 5415949 | 2 | 43 | 40 | 52 | 55 | 44 | 48 | 38 | 54 | 50 | 51 | 44 | 33 | 48 | 32 | 51 |
| 5415952 | 3 | 55 | 52 | 59 | 62 | 53 | 54 | 34 | 61 | 57 | 62 | 61 | 48 | 57 | 38 | 59 |
| 5415953 | 6 | 46 | 44 | 54 | 59 | 51 | 53 | 35 | 63 | 59 | 51 | 52 | 32 | 50 | 35 | 60 |
| 5415954 | 4 | 41 | 36 | 39 | 50 | 37 | 39 | 19 | 50 | 46 | 50 | 48 | 22 | 43 | 30 | 48 |
| 5415955 | 2 | 46 | 41 | 59 | 57 | 47 | 55 | 39 | 61 | 57 | 53 | 50 | 37 | 53 | 35 | 58 |
| 5415956 | 2 | 44 | 42 | 52 | 57 | 47 | 60 | 37 | 56 | 53 | 52 | 49 | 36 | 54 | 35 | 54 |
| 5415957 | 2 | 48 | 48 | 54 | 57 | 51 | 45 | 33 | 55 | 50 | 52 | 47 | 36 | 50 | 37 | 53 |
| 5415958 | 2 | 45 | 35 | 46 | 57 | 43 | 49 | 27 | 56 | 51 | 49 | 48 | 39 | 49 | 34 | 53 |
| 5415961 | 4 | 51 | 49 | 55 | 66 | 55 | 62 | 32 | 63 | 57 | 56 | 56 | 46 | 56 | 36 | 60 |
| 5415967 | 2 | 47 | 48 | 55 50 | 57 61 | 49 | 52 | 41 | 58 | 54 | 54 | 48 | 33 | 55 57 | 34 | 56 |
| 5415968 | 1 | 49 | 45 | 59 | 61 | 50 | 58 | 32 | 62 | 56 | 60 | 52 | 42 | 57 56 | 36 | 59 |
| 5415971 | 2 | 47 | 45 46 | 58 | 58 56 | 44 46 | 56 | 39 | 58 | 57 53 | 51 | 55 | 34 | 56 | 36 | 57 |
| 5415973 | 3 | 47 | | 53 48 | 56 | | 46 | 35 | 56 | 53 44 | 51 | 51 46 | 37 | 51 | 36 | 54 |
| 5415974 5415975 | 2 | 40 43 | 37 42 | 48 59 | 48 57 | 40 47 | 40 60 | 26 33 | 48 59 | 54 | 45 53 | 49 | 36 33 | 47 54 | 30 32 | 46 56 |
| 5415975 | 2 | 43 45 | 42 | 59 | 57 51 | 47 | 43 | 33 | 49 | 45 | 50 | 49 | 33 | 48 | 31 | 48 |
| 5415976 | 4 5 | 45 46 | 41 | 58 | 58 | 48 | 50 | 43 | 59 | 45 54 | 57 | 45 56 | 41 | 48 50 | 34 | 48 56 |
| 5415977 | 2 | 46 | 42 | 49 | 51 | 46 | 51 | 29 | 49 | 46 | 46 | 48 | 38 | 52 | 31 | 48 |
| 5415984 | 2 | 44 | 43 | 54 54 | 57 | 47 | 47 | 32 | 54 54 | 50 | 54 | 48 | 40 | 52 54 | 31 | 52 52 |
| 5415986 | 1 | 36 | 32 | 43 | 46 | 37 | 47 | 25 | 46 | 43 | 43 | 49 | 27 | 44 | 26 | 44 |
| 5415987 | 6 | | 46 | 60 | 65 | 51 | 58 | 42 | 64 | 59 | 57 | 50 | 39 | 53 | 37 | - |
| 7412991 | <u> </u> | 47 | 40 | UO | 00 | J 31 | J 30 | 42 | 04 | 29 | J 3/ | 50 | <u> </u> | | <u>ا</u> 31 | 61 |

Appendix 1. Kennedy - JORC 2012 Table

Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| Sampling techniques | Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. | All Sampling Techniques have been previously reported in Company Announcements relating to the Kennedy Project. This public report pertains to metallurgical recoveries using desorption techniques. Samples from 124 air-core drill holes and 34 RAB holes inform the Inferred MRE referred in ASX Release 4 July 2024. All drill hole collars have been reported with coordinates in MGA94 grid system, Zone 55. Metallurgy Fifty-three samples from retained air-core and RAB drilling within the MRE (pulverised to -75 microns (85% passing)) were used by ANSTO for leach test work purposes. From each sample a 300g representative sample was taken for metallurgical test work with 80g split added to a stirred tank leach. |
| Drilling techniques | Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). | See ASX Announcement 4 July 2024. |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. | See ASX Announcement 4 July 2024. |
| Logging | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. | See ASX Announcement 4 July 2024 |
| Sub-sampling techniques and sample preparation | If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. | Samples for metallurgical tests of the MRE were selected from stored, bulk drill samples. They were composited from 0.5m and 1.0m drill samples into metallurgical samples ranging from 0.5m to 3.0m lengths with weights ranging from 1.8 to 3.0 kilograms. A splitter was used to reduce sample size where necessary to ensure representivity. Assaying of samples for metallurgical test work was carried out by ALS Laboratories on ANSTO's behalf. Assay results correlated closely with composited drill sample data. Sample sizes are appropriate for grain size and material being assayed. |

Criteria JORC Code explanation Commentary The nature, quality and appropriateness of the Desorption extraction tests were conducted by ANSTO at Lucas Quality of assay assaying and laboratory procedures used and Heights, Sydney NSW with ANSTO's assays done at ALS data and laboratory whether the technique is considered partial or total. Laboratories for both the head and liquor samples. Entire samples were crushed and pulverised to 85% passing -75 For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument Head samples were analysed for the elements listed below using make and model, reading times, calibrations Lithium-Borate fusion with ICP-MS finish (ME-MS81). factors applied and their derivation, etc. Lower Upper Nature of quality control procedures adopted (eg Limit Limit Analyte Units standards, blanks, duplicates, external laboratory Ва 0.5 10000 ppm checks) and whether acceptable levels of accuracy 0.01 10000 (ie lack of bias) and precision have been Cs ppm established. Eu 0.02 1000 ppm Hf 0.1 10000 ppm 0.01 1000 Lu ppm 0.02 1000 Pr ppm Sn ppm 10000 Tb 0.01 1000 ppm U 0.05 1000 ppm 10000 0.1 γ ppm Ce 0.1 10000 ppm Dy 0.05 1000 ppm Ga 0.1 1000 ppm Ηο 0.01 1000 ppm 2500 Nb 0.1 ppm Rb 0.2 10000 ppm Sr 0.1 10000 ppm 0.05 1000 Th ppm ٧ 5 10000 ppm Υb 0.03 1000 ppm 10000 Cr 10 ppm Er 0.03 1000 ppm 0.05 1000 Gd ppm 10000 La ppm 0.1 Nd 0.1 10000 ppm 0.03 1000 Sm ppm 0.1 2500 Ta ppm 0.01 1000 Tm ppm W 1 10000 ppm 2 10000 Zr ppm First leach test by ANSTO involved a 30 minute leach on 53 samples using 0.5M Ammonium Sulphate (AMSUL) at pH 4 whereby a sample was taken. The pH was then decreased to 3 in the same leach vessel, and a sample taken 0.5 hours later (this was reported as the 1 hour extraction). A sample was taken 2 hours later (so 2.5 hours at pH 3), this was reported as the 3 hour extraction (0.5 hours at pH 4 and 2.5 hours at pH 3). The last sample was taken 3 hours later (so 0.5 hour at pH 4 and 5.5 h at pH 3) and reported as the 6 hour extraction. The leach tests were conducted at 4 wt% solids, ambient temperature 22°C over the period with analysis of the final pH 3 and pH 4 leach solutions to calculate REE extractions. Analysis of final liquors was carried out at ALS Laboratories using ICP-MS method ME-MS02. The reported acid consumption calculated by ANSTO is based on the concentrations of the individual gangue elements in the leach liquor and calculating the stoichiometric amount of acid required to dissolve that concentration of each gangue element. The amounts of acid required to dissolve each gangue element are then added to give the total acid consumption. The verification of significant intersections by either The public report pertains to metallurgical recoveries using Verification of

| Criteria | JORC Code explanation | Commentary | | | | |
|------------------------------------|--|---|--|--|--|--|
| sampling and assaying | independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. | desorption techniques. All drilling data is collected in the field using data collection software which is validated prior to being entered into an Access database. Data is exported from Access for processing and analysis using a variety of software packages. Rare earth oxide is the industry accepted form for reporting rare earth concentrations. The following calculations have been used throughout the report: TREO = La₂O₃ + CeO₂ + Pr₆O₁₁ + Nd₂O₃ + Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + TreO-Ce = TREO - CeO₂ MREO = Pr₆O₁₁ + Nd₂O₃ + Tb₄O₇ + Dy₂O₃ Rare earth recoveries are reported in their elemental state. MREE = Pr+Nd+Tb+Dy REE = La + Ce + Pr + Nd + Sm + Eu + Gd + Tb + Dy + Ho + Er + Tm + Yb + Lu + Y Laboratories report individual rare earths in their elemental form. The Company has applied the standard conversion formulas to convert the rare earths from elemental to oxide. This is standard industry practice. | | | | |
| | | Element Oxide | | | | |
| | | Oxide Factor | | | | |
| | | CeO ₂ 1.2284 | | | | |
| | | Dy2Os 1.1477 Er2Os 1.1435 | | | | |
| | | E12O3 1.1433 Eu2O3 1.1579 | | | | |
| | | Gd2O3 1.1526 | | | | |
| | | HO ₂ O ₃ 1.1455 | | | | |
| | | La ₂ O ₃ 1.1728 | | | | |
| | | Lu ₂ O ₃ 1.1371 | | | | |
| | | Nd2O3 1.1664 | | | | |
| | | Pr6O11 1.2082 | | | | |
| | | Sc2Os 1.5338 | | | | |
| | | Sm ₂ O ₃ 1.1596 | | | | |
| | | Tb4O7 1.1762 | | | | |
| | | ThO ₂ 1.1379 Tm ₂ O ₃ 1.1421 | | | | |
| | | Tm ₂ O ₃ 1.1421 U ₃ O ₈ 1.1793 | | | | |
| | | Y ₂ O ₃ 1.2699 | | | | |
| | | Yb2O3 1.1387 | | | | |
| | | Note that Y ₂ O3 is included in the TREO. | | | | |
| | Accuracy and quality of surveys used to locate drill | | | | | |
| Location of data points | holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. | See ASX Announcement 4 July 2024. | | | | |
| Data spacing and | Data spacing for reporting of Exploration Results. | This public report pertains to metallurgical recoveries using | | | | |
| Data spacing and distribution | Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. | This public report pertains to metallurgical recoveries using desorption techniques. Samples were selected from the MRE over a broad area to assess variability throughout the deposit. This metallurgical testwork has been carried out on drill samples collected from within the Kennedy Inferred Mineral Resource estimate. Both the irregular spacing of these samples and preliminary leach trials by ANSTO are not designed to be definitive of the overall recoveries of REE's from within the Inferred Mineral Resource Estimate. This preliminary metallurgical testwork has been carried out or drill samples collected from within the Inferred MRE. One of the key drivers of the testwork was to identify how MREE recoveries and acid consumption performed from within the Inferred MRE. | | | | |
| Orientation of data in relation to | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the | This public report pertains to metallurgical recoveries using desorption techniques. | | | | |

| Criteria | JORC Code explanation | Commentary |
|----------------------|---|--|
| geological structure | deposit type. 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. | |
| Sample security | The measures taken to ensure sample security. | Samples were labelled and bagged and held in a Company store facility until it was despatched to ANSTO for analysis. |
| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | No audits have been completed. |

Section 2 Reporting of Exploration Results

| Criteria | JORC Code explanation | Commentary |
|---|---|--|
| Mineral tenement and land tenure status | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | The Kennedy Project comprises EPM's 28009, 28012 and 28767, granted in 2022 and 2023 respectively by the Department of Natural Resources, Mines and Energy, Queensland. EPM's 28009, 28012 and 28767 are in good standing. The Company holds 100% of the Kennedy Project through its wholly owned subsidiary Copper Green Pty Ltd. The Kennedy Project predominantly covers private land and long term leases. Notice of entry is required for low impact exploration activities which result in minimal surface disturbance. Higher impact work involving significant disturbance, requires an access agreement to be entered into with the landholder (Conduct and Compensation Agreement). Access to areas of drilling outlined in this release is a combination of access agreements (majority) and notice of entry. The majority of the Kennedy Inferred MRE lies on two properties over which DevEx has Conduct and Compensation Agreements |
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties. | Early exploration (pre-1980) focused on alluvial tin. Since then, almost all exploration has been designed to assess mineral potential beneath the Tertiary and Quaternary sedimentary sequences which drilling indicates are 50 to 100m metres thick. Drilling through the cover sequence has variably tested predominantly geophysical targets for magmatic tin, magmatic nickel and zinc-rich skarns. Previous explorers include WMC, Kagara Zinc, Norica, CRAE, Metallica and North Broken Hill Pty Ltd. No mineral exploration for rare earth elements has been undertaken. |
| Geology | Deposit type, geological setting and style of mineralisation. | The Kennedy deposit is hosted in a surficial layer of clays and iron-manganese-rich pisolites and nodules forming part of a sequence of a tropically weathered sedimentary basin of Tertiary age. They are poorly consolidated and predominantly clay-rich, with minor amounts of fine sand and gravel. The basin overlies and is adjacent to granitic rocks which have historically produced significant tin and tungsten and are enriched in rare earth elements. The granites are the likely source of the rare earths having been eroded and the detritus filling the sedimentary basin. DevEx interprets this basin as subsequently inverting with modern day erosion of mineralised clays along drainage channels. REE mineralisation is interpreted to be concentrated in the weathered profile where it has dissolved from its primary mineral form, such as monazite, and then ionically bonded (adsorbed) or colloidally bonded on to fine particles of aluminosilicate clays, including kaolinite. |
| Drill hole Information | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: a easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. | Results from the Company's drilling and metallurgical test work are presented in the Figures and Tables of this report. |
| Data aggregation methods | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of | This public report pertains to metallurgical recoveries using desorption techniques. Magnet rare earth extraction (MREE%) is calculated by ANSTO using the total mass of the four magnet rare elements (Nb, Pr, Dy, Tb) desorbed into solution compared to the total mass of the four rare elements in the feed clay. |

| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| | low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. | |
| Relationship between mineralisation widths and intercept lengths | These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). | This public report pertains to metallurgical recoveries using desorption techniques. |
| Diagrams | 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. | Refer to Figures in the body of text. |
| Balanced reporting | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | Metallurgical Recoveries are reported in Tables in this report. |
| Other substantive exploration data | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | All relevant Data is presented in this report. |
| Further work | The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | Follow up metallurgical results with mineralogical assessment of selected samples using XRD techniques. The Kennedy Inferred MRE lies within unconsolidated gravel clays from surface with no overburden and makes priority areas easily accessible. These new leach testwork results provide the opportunity to progress to more definitive bulk sampling with the focus being on areas that coincide with high MREE recoveries and high MREE grades for optimal results and for potential flow sheet considerations. |