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# OUTSTANDING ROCK CHIP ASSAY RESULTS OF UP TO 343,000ppm (34.3%) $U_3O_8$

**Highlights:**

- **Assay results from rock chip sampling program at Agadez returns outstanding results, including 34.3% $U_3O_8$ and 26.1% $U_3O_8$.**
- **Significant assay results include:**
  - **TKD066 – 343,008ppm $U_3O_8$ (34.3%)**
  - **TKD086 – 261,066 ppm $U_3O_8$ (26.1%)**
  - **TKD015 – 27,255 ppm $U_3O_8$ (2.7%)**
  - **TKD090 – 18,357 ppm $U_3O_8$ (1.8%)**
  - **TKD017 – 11,772 ppm $U_3O_8$ (1.2%)**
- **Successful program, with 74 of 83 (89%) samples collected returning values over 500ppm U3O8.**
- **Results will be used in conjunction with existing airborne radiometrics to define priority regional exploration targets.**

ENRG Elements Limited (**ASX: EEL**) ("**ENRG Elements**" the "**Company**") is pleased to provide an update on the rock chip sampling program completed in Q3 CY2022 at the Company's Agadez Uranium Project ("**Agadez**", "**Project**"), which has delivered outstanding assay results and confirmed mineralisation throughout the tenement package.

The rock chip sampling program focused on several areas identified by airborne radiometric geophysical surveys and historic sampling undertaken on the tenements, as follows:

1. Terzemasour 1 ("**TER 1**"):
   - Takardeit Centre, being the location of the current Inferred Mineral Resource Estimate ("**MRE**") ("**Takardeit Deposit**"); and
   - Takardeit East, Takardeit North and Takardeit North-West (the "**Takardeit Prospects**");
2. Toulouk 1 ("**TOU 1**") at the Anou Aaren South and North prospects; and
3. Tagait 4 ("**TAGT 4**") at the Idekel prospect.

Figure 1 below shows the location of the rock chip samples within the various prospects at TER 1, TOU 1 and TAGT 4, with a regional geology underlay.

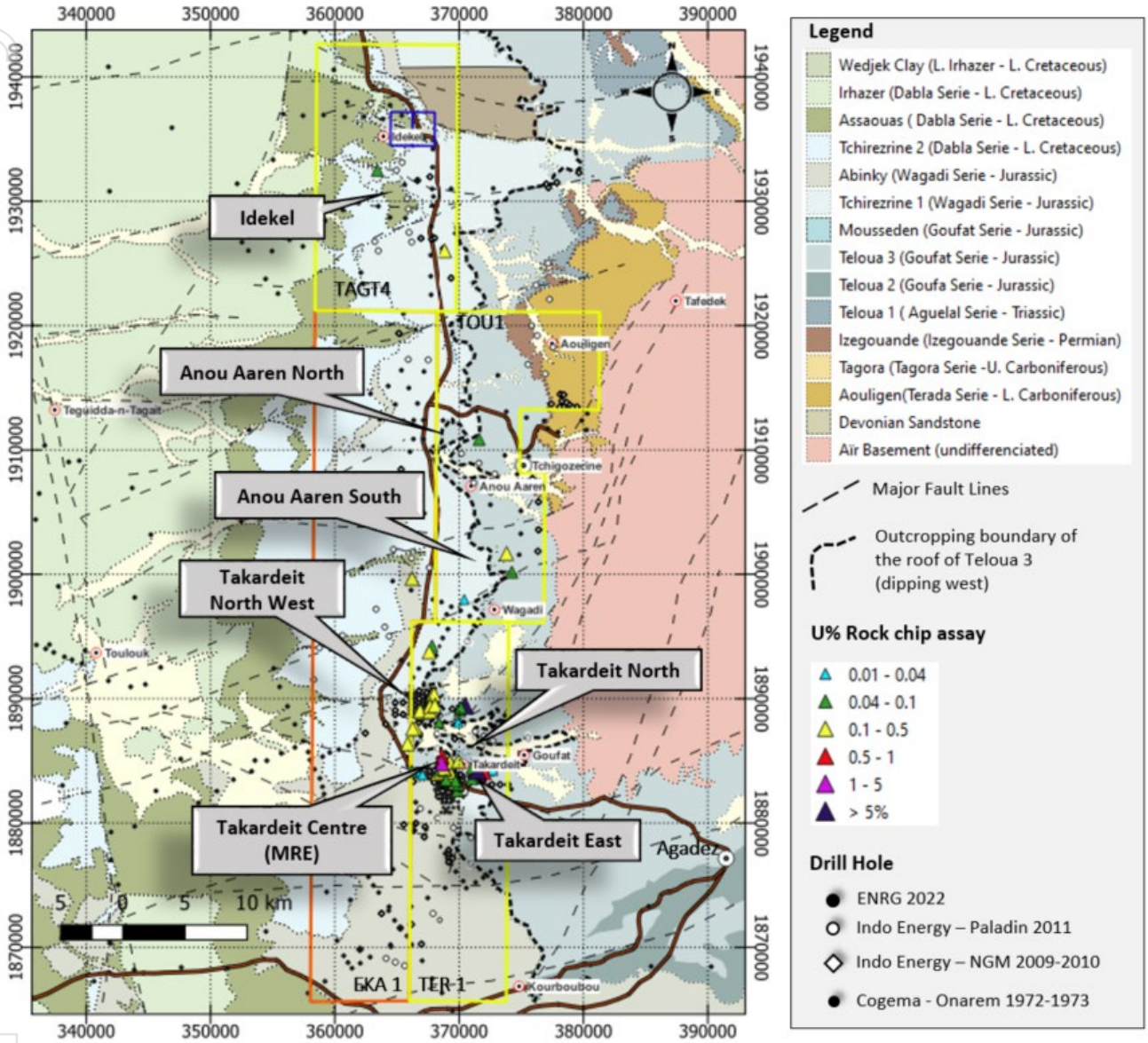


**Figure 1 – Rock Chip sampling locations on regional geology**

**ENRG Elements Managing Director, Caroline Keats, commented:** *"These outstanding results from the rock chip sampling program at Agadez further confirms the regional prospectivity of our Niger assets by identifying significant mineralisation throughout the entire Agadez Project. These results will further assist with defining our regional program, including a near surface drilling program, by identifying high priority targets based on coincident geochemical and geophysical data. We look forward to further expanding our overall project potential and further developing our Mineral Resource at Takardeit."*

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As announced in May 2022, the Takardeit Deposit was updated from JORC 2004 to JORC 2012 guidelines, to contain an Inferred MRE of 16.5Mt at a grade of 295ppm eU3O8 for 10.7Mlbs (at 150ppm cut-off)(ASX Release – 30 May 2022). Agadez hosts similar geology to Orano SA's Cominak/Somair and Imouraren mines and the deposits held by Global Atomic Corporation (TSE:GLO) and GoviEx Uranium (CVE:GXU).

The 83-rock chip sample program, commenced in June 2022, shortly after the Company's acquisition of the Agadez Project. Assaying of samples was undertaken by Intertek, in Perth Western Australia. To validate Intertek's assay results, samples returning values over 1.0% $U_3O_8$ were independently re-assayed by ALS, in Brisbane Queensland, using an alternate assay technique. Comparison between the two sets of laboratory results have indicated a strong correlation confirming Intertek's original assay values.

The rock chip sampling program was intended to provide geochemical assay results within areas identified from previous airborne radiometric surveys within the tenement package and confirm historical sampling undertaken by NGM Resources Ltd in 2009.

The campaign confirmed that significant mineralisation occurs at the surface with the highest results below (all greater than 1.0% $U_3O_8$):

- TKD066 – 343,008ppm $U_3O_8$ (34.3%)
- TKD086 – 261,066 ppm $U_3O_8$ (26.1%)
- TKD015 – 27,255 ppm $U_3O_8$ (2.7%)
- TKD090 – 18,357 ppm $U_3O_8$ (1.8%)
- TKD017 – 11,772 ppm $U_3O_8$ (1.2%)

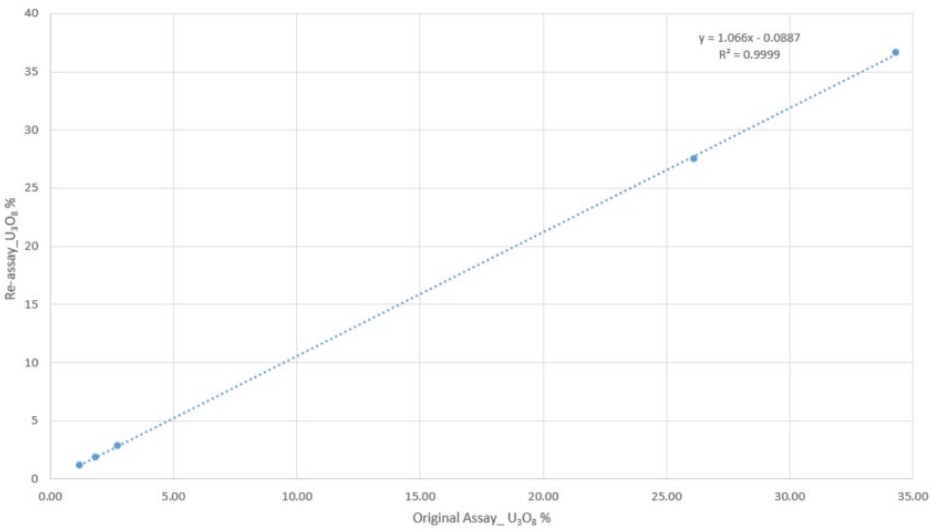


**Figure 2 – Comparison of assay results (Intertek (Original)vs ALS (Re-assay))**

Figure 3 below shows the location of the rock chip samples at the Takardeit Deposit and Takardeit Prospects with an airborne radiometric image underlay.

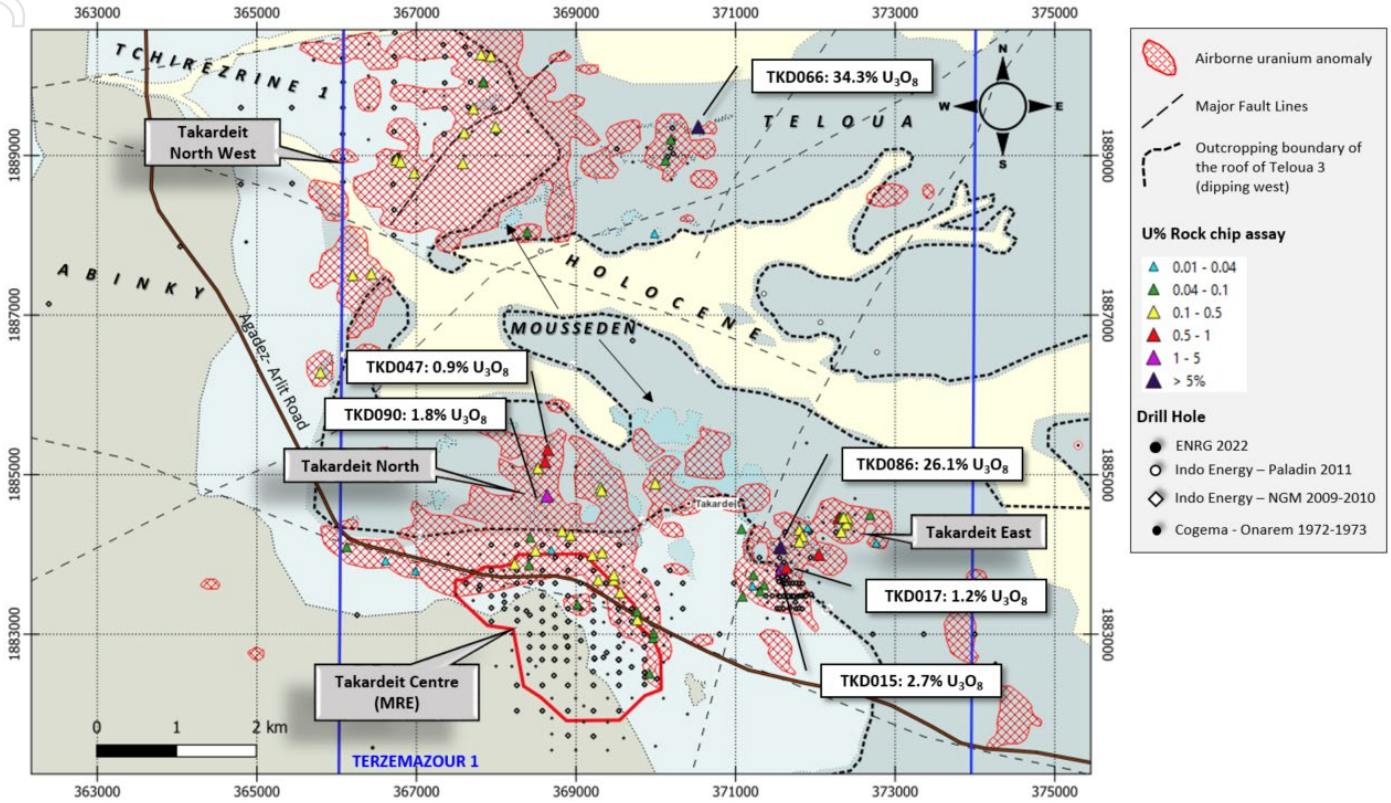


**Figure 3 - Rock Chip Sample locations, Takardeit**

## Process

The general location for the rock chip samples was defined by a combination of airborne radiometric signature and likely favourable stratigraphy from geological mapping. Geologists were based in Agadez and travelled daily to the pre-defined sample area. Once within the general area defined by the airborne radiometrics, the geologists located suitable outcrop and verified the local stratigraphy. Once a localised sampling point had been defined a large rock chip sample of between 1.5kg and 3kg was taken and geologically logged with the actual sample site being identified by GPS location.

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Figure 4 below shows the TKD066 collection area at the base of the Mousseden Palaeochannel.

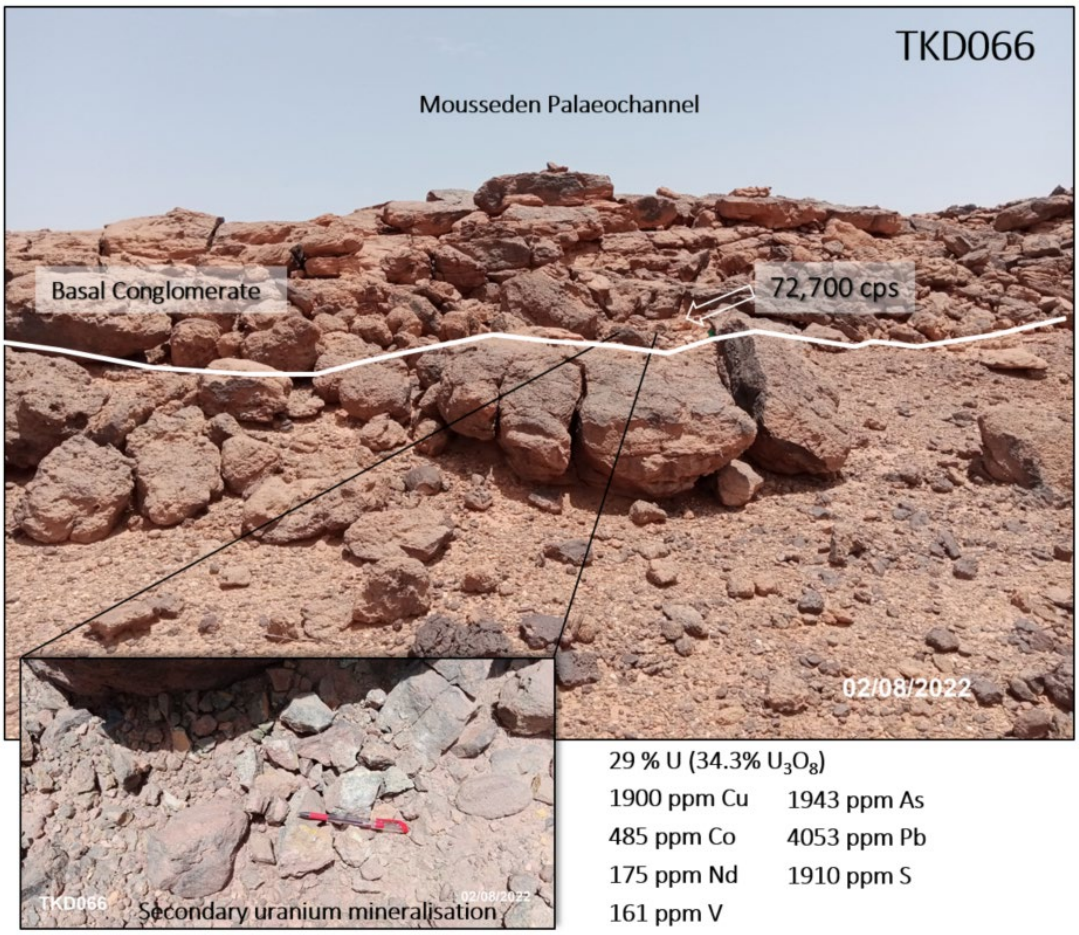


**Figure 4 - TKD066 Sample location**

The bulk rock chip samples were then bagged and transported back to Agadez. The rock chip samples were then taken to the African Logging office in Niamey, where samples were dispatched to the CRGM Laboratory in Niamey for standard sample preparation, prior to being couriered to Intertek in Perth, Western Australia for analysis.

## Rock Chip Sampling Program Results

Table 1 details the Intertek assay results from the rock chip sampling program, with locations shown in Appendix 1.

Overall, the rock chip sampling program was very successful with 74 of the 83 (89%) samples collected returning values over 500ppm $U_3O_8$. Furthermore, in view of the significance of some of the values within the dataset, samples greater than 1.0% $U_3O_8$ (ie 10,000ppm) were re-assayed at an alternate laboratory (ALS - Brisbane, Australia) using a different methodology. The ALS results confirmed the original assays obtained by Intertek.

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## Analysis

Plans and cross sections of the Takardeit area deposits and prospects are available in the previous drilling announcement dated the 1 September 2022.

The rock chip sampling program has identified coincident surface expressions of the previously interpreted airborne radiometric survey anomalies as well as confirmed the stratigraphy that hosts the mineralisation. Initial analysis of the results indicated that several of the samples contained significant uranium values. In order to initially confirm the assays results, all values over 1.0% $U_3O_8$ were re-assayed at an alternate laboratory despite the Certified Reference materials (CRM) inserted into the sample stream reporting correct values. The comparison between the original assays and subsequent re-assays is briefly addressed above with the samples reporting a good correlation over the whole grade range with only a minor bias towards the re-assayed samples noted.

The results of the rock chip sampling program indicate the presence of significant surface mineralisation within the tenement package and these results, in conjunction with the airborne radiometric survey, will be utilised to define priority targets for the upcoming regional exploration program.

Table 1 below details all assay results from the rock chip sampling program. Non continuous sample numbers indicate the position of inserted QAQC samples (CRM and Blanks).

| Intertek Assay Results | | | |
|---|---|---|---|
| **Sample** | **U ppm** | **$U_3O_8$ ppm** | **$U_3O_8$ %** |
| **TKD001** | 1,898 | 2,238 | 0.224 |
| **TKD002** | 1,458 | 1,720 | 0.172 |
| **TKD003** | 6,579 | 7,758 | 0.776 |
| **TKD004** | 735 | 866 | 0.087 |
| **TKD005** | 1,860 | 2,193 | 0.219 |
| **TKD006** | 1,536 | 1,811 | 0.181 |
| **TKD007** | 755 | 890 | 0.089 |
| **TKD008** | 155 | 183 | 0.018 |
| **TKD009** | 1,266 | 1,493 | 0.149 |
| **TKD010** | 281 | 332 | 0.033 |
| **TKD011** | 3,150 | 3,714 | 0.371 |

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| Intertek Assay Results | | | |
|---|---|---|---|
| **Sample** | **U ppm** | **$U_3O_8$ ppm** | **$U_3O_8$ %** |
| **TKD012** | 4,891 | 5,768 | 0.577 |
| **TKD015** | 23,112 | 27,255 | 2.725 |
| **TKD016** | 314 | 370 | 0.037 |
| **TKD017** | 9,983 | 11,772 | 1.177 |
| **TKD018** | 547 | 645 | 0.065 |
| **TKD019** | 677 | 798 | 0.080 |
| **TKD020** | 696 | 821 | 0.082 |
| **TKD021** | 445 | 525 | 0.052 |
| **TKD022** | 514 | 606 | 0.061 |
| **TKD023** | 961 | 1,133 | 0.113 |
| **TKD024** | 963 | 1,136 | 0.114 |
| **TKD025** | 1,008 | 1,188 | 0.119 |
| **TKD026** | 1,246 | 1,470 | 0.147 |
| **TKD029** | 1,606 | 1,894 | 0.189 |
| **TKD030** | 1,151 | 1,358 | 0.136 |
| **TKD031** | 1,179 | 1,390 | 0.139 |
| **TKD032** | 2,555 | 3,013 | 0.301 |
| **TKD033** | 1,601 | 1,888 | 0.189 |
| **TKD034** | 1,127 | 1,328 | 0.133 |
| **TKD035** | 966 | 1,139 | 0.114 |
| **TKD036** | 1,591 | 1,877 | 0.188 |
| **TKD037** | 1,885 | 2,223 | 0.222 |
| **TKD038** | 164 | 194 | 0.019 |
| **TKD039** | 779 | 918 | 0.092 |
| **TKD040** | 3,251 | 3,834 | 0.383 |
| **TKD041** | 2,641 | 3,114 | 0.311 |
| **TKD044** | 2,463 | 2,905 | 0.290 |
| **TKD045** | 2,987 | 3,522 | 0.352 |
| **TKD046** | 2,629 | 3,100 | 0.310 |
| **TKD047** | 7,481 | 8,822 | 0.882 |

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| Intertek Assay Results | | | |
|---|---|---|---|
| **Sample** | **U ppm** | **$U_3O_8$ ppm** | **$U_3O_8$ %** |
| **TKD048** | 5,963 | 7,031 | 0.703 |
| **TKD049** | 1,335 | 1,575 | 0.157 |
| **TKD050** | 1,805 | 2,129 | 0.213 |
| **TKD051** | 1,846 | 2,176 | 0.218 |
| **TKD052** | 61 | 72 | 0.007 |
| **TKD053** | 1,032 | 1,217 | 0.122 |
| **TKD054** | 1,731 | 2,041 | 0.204 |
| **TKD055** | 1,842 | 2,173 | 0.217 |
| **TKD056** | 1,201 | 1,416 | 0.142 |
| **TKD057** | 1,512 | 1,783 | 0.178 |
| **TKD060** | 2,067 | 2,437 | 0.244 |
| **TKD061** | 2,673 | 3,152 | 0.315 |
| **TKD062** | 936 | 1,103 | 0.110 |
| **TKD063** | 2,178 | 2,569 | 0.257 |
| **TKD064** | 2,981 | 3,515 | 0.352 |
| **TKD065** | 891 | 1,051 | 0.105 |
| **TKD066** | 290,871 | 343,008 | 34.301 |
| **TKD067** | 942 | 1,111 | 0.111 |
| **TKD068** | 698 | 823 | 0.082 |
| **TKD069** | 514 | 606 | 0.061 |
| **TKD070** | 2,007 | 2,367 | 0.237 |
| **TKD071** | 2,282 | 2,690 | 0.269 |
| **TKD072** | 4,685 | 5,524 | 0.552 |
| **TKD075** | 619 | 730 | 0.073 |
| **TKD076** | 1,399 | 1,650 | 0.165 |
| **TKD077** | 29 | 34 | 0.003 |
| **TKD078** | 191 | 225 | 0.023 |
| **TKD079** | 591 | 696 | 0.070 |
| **TKD080** | 211 | 249 | 0.025 |
| **TKD081** | 619 | 730 | 0.073 |

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| Intertek Assay Results | | | |
|---|---|---|---|
| **Sample** | **U ppm** | **$U_3O_8$ ppm** | **$U_3O_8$ %** |
| **TKD082** | 1,232 | 1,453 | 0.145 |
| **TKD083** | 297 | 350 | 0.035 |
| **TKD084** | 2,301 | 2,713 | 0.271 |
| **TKD085** | 5,211 | 6,145 | 0.615 |
| **TKD086** | 221,384 | 261,066 | 26.107 |
| **TKD087** | 663 | 782 | 0.078 |
| **TKD088** | 999 | 1,178 | 0.118 |
| **TKD089** | 722 | 851 | 0.085 |
| **TKD090** | 15,567 | 18,357 | 1.836 |
| **TKD091** | 1,615 | 1,905 | 0.190 |
| **TKD092** | 1,184 | 1,397 | 0.140 |
| **TKD093** | 347 | 409 | 0.041 |

**Table 1 - Rock chip sampling assays**

## Next Steps

Full analysis of the results from the rock chip sampling program will enable the Company to effectively 'calibrate' the airborne radiometric survey and then allow for the planning of additional near surface drilling programs.

Based on these results, ENRG Elements aims to undertake a further regional exploration programs which is expected to include:

- Detailed geological and structural mapping;
- Additional rock chip sampling; and
- Localised near surface drilling.

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## Appendix 1 – Sample Location Table

| Rock Chip Sample GPS locations | | |
|---|---|---|
| Sample | Easting | Northing |
| TKD001 | 372403 | 1884456 |
| TKD002 | 372391 | 1884384 |
| TKD003 | 372297 | 1884460 |
| TKD004 | 372324 | 1884470 |
| TKD005 | 372356 | 1884464 |
| TKD006 | 372326 | 1884284 |
| TKD007 | 372688 | 1884497 |
| TKD008 | 372765 | 1884143 |
| TKD009 | 371800 | 1884310 |
| TKD010 | 371904 | 1884332 |
| TKD011 | 371840 | 1884230 |
| TKD012 | 371802 | 1884162 |
| TKD015 | 371576 | 1883823 |
| TKD016 | 371600 | 1883839 |
| TKD017 | 371637 | 1883838 |
| TKD018 | 371225 | 1883742 |
| TKD019 | 371360 | 1883619 |
| TKD020 | 371310 | 1883539 |
| TKD021 | 371213 | 1883605 |
| TKD022 | 371089 | 1883474 |
| TKD023 | 371076 | 1884321 |
| TKD024 | 369923 | 1882507 |
| TKD025 | 369966 | 1882953 |
| TKD026 | 369770 | 1883185 |
| TKD029 | 369555 | 1883524 |
| TKD030 | 369281 | 1883683 |
| TKD031 | 369475 | 1883682 |
| TKD032 | 369476 | 1883746 |
| TKD033 | 369205 | 1883993 |
| TKD034 | 369327 | 1884025 |
| TKD035 | 368413 | 1883866 |

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| Rock Chip Sample GPS locations | | |
|---|---|---|
| Sample | Easting | Northing |
| TKD036 | 368231 | 1883881 |
| TKD037 | 368495 | 1884050 |
| TKD038 | 368692 | 1884054 |
| TKD039 | 368426 | 1884214 |
| TKD040 | 368933 | 1884244 |
| TKD041 | 368825 | 1884294 |
| TKD044 | 369310 | 1884839 |
| TKD045 | 369323 | 1884801 |
| TKD046 | 368526 | 1885084 |
| TKD047 | 368614 | 1885162 |
| TKD048 | 368647 | 1885313 |
| TKD049 | 369996 | 1884891 |
| TKD050 | 366435 | 1887520 |
| TKD051 | 366202 | 1887502 |
| TKD052 | 369987 | 1888021 |
| TKD053 | 368391 | 1888040 |
| TKD054 | 366976 | 1888786 |
| TKD055 | 366751 | 1888947 |
| TKD056 | 366805 | 1888922 |
| TKD057 | 367582 | 1888904 |
| TKD060 | 367716 | 1889589 |
| TKD061 | 367838 | 1889921 |
| TKD062 | 367840 | 1889925 |
| TKD063 | 367812 | 1890268 |
| TKD064 | 367936 | 1890250 |
| TKD065 | 370124 | 1888939 |
| TKD066 | 370532 | 1889360 |
| TKD067 | 370190 | 1889202 |
| TKD068 | 371675 | 1910773 |
| TKD069 | 374307 | 1900093 |
| TKD070 | 373880 | 1901596 |
| TKD071 | 368890 | 1925946 |
| TKD072 | 366818 | 1935303 |



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| Rock Chip Sample GPS locations | | |
|---|---|---|
| Sample | Easting | Northing |
| TKD075 | 363365 | 1932421 |
| TKD076 | 365798 | 1886283 |
| TKD077 | 366415 | 1886918 |
| TKD078 | 366614 | 1883921 |
| TKD079 | 366126 | 1884093 |
| TKD080 | 366992 | 1883793 |
| TKD081 | 367764 | 1894152 |
| TKD082 | 367536 | 1893669 |
| TKD083 | 370472 | 1897896 |
| TKD084 | 366155 | 1899591 |
| TKD085 | 372046 | 1883999 |
| TKD086 | 371565 | 1884091 |
| TKD087 | 369975 | 1883016 |
| TKD088 | 369764 | 1883285 |
| TKD089 | 369017 | 1883374 |
| TKD090 | 368640 | 1884737 |
| TKD091 | 367600 | 1889286 |
| TKD092 | 367995 | 1889359 |
| TKD093 | 366774 | 1935310 |

This announcement has been approved by the Board of ENRG Elements Ltd.

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## About ENRG Elements Limited

**ENRG Elements Limited (ASX:EEL)** is a company focused on the exploration and development of its uranium and copper projects, both commodities which are essential for a clean energy future.

The Company holds 100% of the underexplored Agadez Uranium Project located in the Tim Mersoi Basin of Niger, with a JORC Resource of 10.7m pounds of contained $eU_3O_8$ at 295ppm (150ppm cut-off grade) from surface to only ~30m depth, with exploration currently underway to advance the project (ASX Release – 30 May 2022). Agadez hosts similar geology to Orano SA's Cominak/Somair and Imouraren uranium mines and the deposits held by Global Atomic Corporation (TSE:GLO) and GoviEx Uranium (CVE:GXU).

Niger has one of the world's largest uranium reserves and in 2021 it was the seventh-highest uranium producer globally[1] with the Tim Mersoï Basin in Niger hosting the highest-grade and tonnage uranium ores in Africa[2].

ENRG also holds the 100% owned Ghanzi West Copper-Silver Project covering a total area of 2,630km$^2$ in the emerging world class Kalahari Copper Belt of Botswana, one of the most prospective copper belts in the world, which hosts Sandfire Resources' Motheo Copper Mine and Khoemacau Copper Mining's Zone 5 underground mine. ENRG believes that the Kalahari Copper Belt has the potential for material discovery, with further exploration underway to advance the project.

Botswana is a stable, pro-mining jurisdiction, supportive of mineral exploration and development.

The Directors and management of ENRG have strong complementary experience with over 90 years of Australian and international technical, legal and executive experience in exploration, resource development, mining, legal and resource fields.

### Competent Persons Statement

The information on the Mineral Resources and Exploration Results outlined in this announcement was compiled by Mr. David Princep, an independent consultant employed by Gill Lane Consulting. Mr Princep is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist. Mr Princep has more than five years relevant experience in estimation of mineral resources and the mineral commodity uranium. Mr Princep has sufficient experience relevant to the assessment of this style of mineralisation to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". The Company confirms that the form and context in which the Mineral Resources are presented have not been materially modified from the original announcement on 30 May 2022. Mr Princep approves of, and consents to, the inclusion of the information relating to Exploration Results in this announcement in the form and context in which it appears.

[1] https://world-nuclear.org/information-library/facts-and-figures/uranium-production-figures.aspx
[2] https://www.sciencedirect.com/science/article/pii/S016913682200213X



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# JORC Code, 2012 Edition – Table 1 report

## 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration* | • The rock chip sampling detailed in this announcement was conducted on exploration permits Terzemazour 1 (TER 1), Toulouk 1 (TOU1) and Tagait 4 (TAGT4) in 2022 by ENRG Elements Ltd (ENRG).<br>• Sample locations were initially identified by airborne radiometric survey with subsequent ground follow-up.<br>• Rock chip samples were sourced from mineralised outcrop within the target sampling area. |

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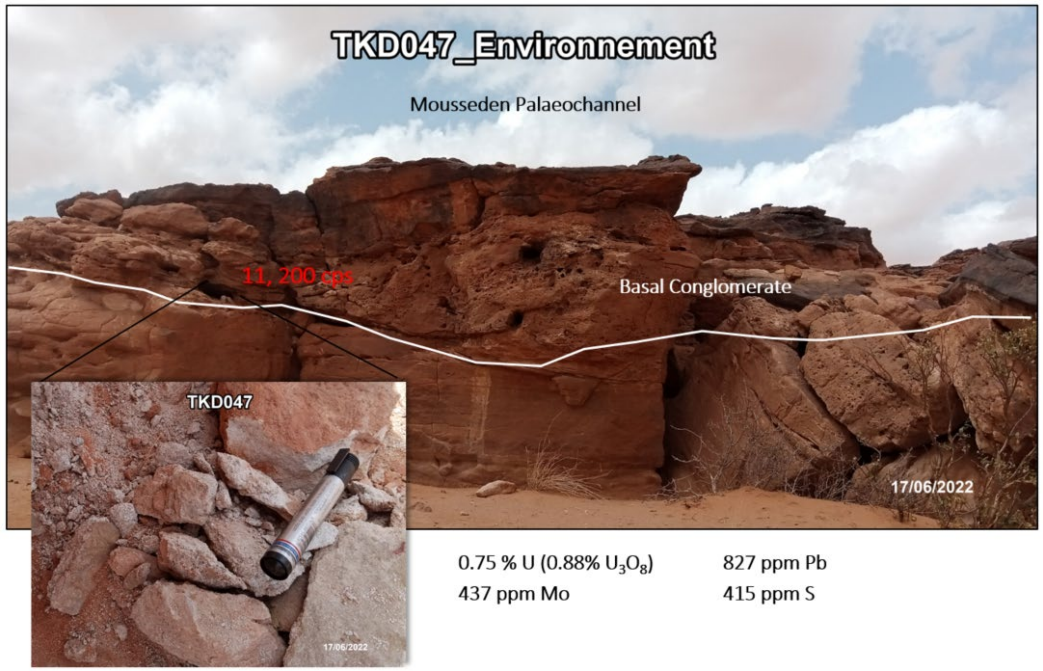
| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg '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* |  <br>• The sampling in this announcement relies on laboratory assaying of rock chip samples.<br>• Between 1.5 and 3kg of rock chips were collected at each sample location for assay. |

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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | |
| ***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).* | • Not relevant as the announcement relates to rock chip sampling. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to* | • Not relevant as this announcement relates to rock chip sampling. |

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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | |
| ***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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean,* | • All rock chips have been geologically logged.<br>• The geological logging was to a level appropriate for exploration planning purposes.<br>• Geological logging of the samples is qualitative in nature. |

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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure* | • The total amount of rock chips sampled at any one location were subsequently dispatched for sample preparation and assay.<br>• The sample preparation techniques, crush, split if required and pulverize is considered appropriate for this type of sample.<br>• As the rock chip samples are intended to only drive the regional exploration program no sample preparation QAQC processes were undertaken. Post-preparation standard QAQC protocols were utilized.<br>• The sampling methodology is believed to be appropriate to the grain size of the original material. |

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| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis* | • The assay methods used, four acid digest with either an MS or OES finish is the same as that used for the recent drill core assays and is considered appropriate for the geological matrix of the samples.<br>• Certified reference materials (CRM) and blank samples were included in the assay stream in order to confirm laboratory performance.<br>• All standards returned values within a maximum of two standard deviations based on the CRM certificates. Blanks returned no significant values. A number of pulp duplicate analyses were performed with acceptable results.<br>• In order to confirm the assay results all samples that returned values greater |

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| | *including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | than 10,000ppm (1%) $U_3O_8$ were re-analysed at an alternate laboratory and method (XRF). Results from this re-analysis showed acceptable precision and accuracy validating the original assay data. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry* | • In order to confirm the assay results all samples that returned values greater than 10,000ppm (1%) $U_3O_8$ were re-analysed at an alternate laboratory using a different methodology. Results from this re-analysis showed acceptable precision and accuracy validating the assay data. |

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| | *procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | |
| ***Location of data points*** | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • The rock chip sampling points were located by GPS.<br>• The grid system is Universal Transverse Mercator, zone 32N (WGS 84 datum). All data was recorded using Easting and Northing.<br>• Topographic control will be provided by a digital elevation model (DEM) derived from SRTM and is accurate to approximately 2 m. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the* | • Sample locations were based on analysis of airborne radiometric data.<br>• Given the regional nature of the sampling program the distribution of the data is only sufficient to be used as an input into regional exploration programs. |

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| | *degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling* | • Not relevant as all samples were surface outcrop locations only<br>• |

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| | *bias, this should be assessed and reported if material.* | |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • Rock chip samples were transported to Niamey by ENRG contractors for preparation at the CRGM Laboratory prior to being shipped to an overseas assay laboratory.<br>• Samples were couriered by DHL to the Intertek Laboratory in Perth, once preparation of the samples had been completed a subsample was sent to Intertek in Perth and the bulk reject kept in Niger. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • No audits have been undertaken.<br>• AF-LO personnel visited the CRGM Laboratory in Niamey in order to confirm the quality of the initial preparation of the samples. |

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## Section 2 Reporting of Exploration Results

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

| Criteria | JORC Code explanation | Commentary |
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| ***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.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • The Exploration results relate to the exploration licences (EL) TERZEMAZOUR 1 (TER 1, 242.8 km$^2$), Toulouk 1 (TOU1) (246 km$^2$) and Tagait 4 (TAGT4) (237.292km$^2$) currently owned 100% by EF Niger SARL (EF Niger), a wholly owned subsidiary of ENRG.<br>• Between 2007 and 2010, NGM Resources Ltd (NGM) and Paladin Energy Ltd (Paladin) owned ELs TER 1, TOU1 and TAGT4, through its subsidiary Indo Energy Limited (IEL). The initial land package covered an area of ~1,500km$^2$.<br>In 2010, Paladin acquired the ELs via a take-over of NGM. In 2013, 50% of the land package was relinquished in accordance with Niger mining laws. The areas retained by Paladin at that time reflect the ELs recently acquired by ENRG from Endeavour Financial AG (Endeavour). In 2016, Paladin relinquished all title in the ELs and has no on-going interest in the Agadez Project.<br>• After the withdrawal of Paladin in 2016, the ELs were granted to Endeavour on 8 November 2017. In May 2021, the Niger Ministry of Mines agreed to transfer the ELs to EF Niger, the wholly owned subsidiary of Endeavour. Due to force majeure, the ELs were extended to 7 November 2022. On 22 March 2022, the Niger Minister |

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| Criteria | JORC Code explanation | Commentary |
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| | | of Mines agreed to again extend the initial term of the ELs to 7 November 2024. On 24 May 2022, ENRG acquired the ELs from Endeavour.<br>• The TER 1 EL is located 25 km NW of the regional town of Agadez in the Tim Mersoï Basin in central Niger.<br>• A new application has been lodged by EF Niger on EKAZAN 1 (490.2 km2), an area which was dropped by IEL as part of the halving of the original TER1 and TOU1 tenements in 2013.<br>• The license is in good standing and ENRG is unaware of any impediments for exploration on these leases. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Prior to the date of this announcement:<br>✓ The joint venture between COGEMA (now ORANO) and ONAREM did extensive work on the EL areas during the 1970s. Various synthesis reports (1972, 1973 & 1977) document the geology of the region, airborne magnetic study and drilling of several prospect area namely the Idekel, Takardeit and Wagadi areas. The reports outline rock chip values of up to 5% $eU_3O_8$ in the southern permit (TER I). The airborne radiometrics identified many radiometric anomalies in the Jurassic Mousseden sandstones exceeding 300 counts per second in all three permits. Anomalous uranium mineralisation was recorded in all formations from the top of the Agadez right down to the Carboniferous. |

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| | | ✓ During this period, Cogema and ONAREM drilled several prospect areas, many of which recorded anomalous uranium mineralisation up to 0.48% $eU_3O_8$ (hole INZA172). The largest intercept reported was in hole UNGORE 2 at the Idekel prospect where five gamma peaks were recorded between 15 m and 27 m down hole, with values ranging from 0.03 to 0.19% $eU_3O_8$. Uranium mineralisation was reported in many holes, from surface and shallow depths of a few metres up to in excess of 250 m from surface.<br>✓ Between the late 1970s and 2009, no known exploration work was carried out in this area. Some minor geological mapping may have been conducted by the Niger government on individual areas<br>✓ In 2009, SRK (commissioned by IEL) completed a reconnaissance geological survey of the three ELs. The reconnaissance study has demonstrated that the ELs have a high exploration potential for uranium, as determined from the structural complexity of the area and the identification of several possible domal and or pop-up structures. The study located several areas where visible uranium mineralisation exposed at surface recorded well over 1% $U_3O_8$. Some 60 radiometric samples were taken on outcrops using a simple scintillometer recording counts per second with follow up by a handheld x-ray spectrometer to provide actual uranium values of the anomalies. These |

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| | | uranium assays have been converted to $U_3O_8$ values.<br>✓ From November 2009 to April 2010, IEL completed 256 rotary mud exploration drillholes totaling 10,509m over the original tenement area (of which 241 drill holes, totaling 9,464m relate to the tenements acquired by ENRG) targeting mainly radiometric anomalies and some local conceptual structural targets defined by airborne geophysical survey. More than 75% of the drilling program was carried out on the Takardeit deposit in TER1. Based on this, NGM announced a low-grade Inferred Mineral Resource (under JORC-2004) at Takardeit of 23Mt at 210ppm for 11Mlb $U_3O_8$ at a cutoff of 120ppm $U_3O_8$.<br>✓ In October 2009, UTS were contracted to survey (Magnetic and Radiometric data) over the entire permit area for 10,070 line kms. The flight lines were N-S and 200m apart although there was a significant area of 100m spaced data in Tagait IV. A helicopter borne HeliEM survey data was purchased from Nigerien Mines Department over the SONICHAR coal mine at Tcherozerine and much of this survey covers TOU 1.<br>✓ In 2011, Paladin developed an exploration program to identify high grade uranium mineralisation in the Lower Carboniferous stratigraphy as well as in shallow Jurassic sediments. The wide spacing mud rotary drilling program completed includes 11,813 m in 51 drill holes over the original three EL areas. A |

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| | | total of 6,595m of drilling in 31 drill holes was conducted during Paladin's 2011 drilling program over the Permit areas acquired by ENRG. Numerous downhole radiometric anomalies were encountered, mainly in the prospective Carboniferous strata.<br>✓ In October 2011, Paladin undertook several geological reconnaissance traverses over the three permits area and carried out the detailed mapping of 8 prospect areas. The aim of the field mapping was to specify the structural and stratigraphic framework of each prospect and provide the company with detailed maps in order to optimize the next drilling program.<br>✓ In 2022 an infill and exploration program was undertaken by ENRG with results reported to the ASX on the 1st September 2022 titled 'Drilling Program Update at the Agadez Uranium Project'. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | • In the Tim Mersoi Basin, most of the deposits appear to be a variation of the sandstone hosted and roll front model often occurring as stacked lenses associated with carbonaceous material and no obvious oxidation–reducing front visible in plan view but this may be vertically present. It is possible that hybrid types or even unconformity-type deposits could exist within the basin. Additionally, the possibility for low grade, high tonnage, calcrete channel style deposit could occur in the seasonal Playa Lakes around the basin. |

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| | | • The uranium deposits generally occur in medium to coarse-grained sandstones deposited in a continental fluvial or marginal marine sedimentary environment. Favorable sandstone horizons are commonly bounded by more impermeable units (shale or tuffaceous beds) that restricted vertical migration of fluids. These horizons also commonly contain a suitable reducing agent for the precipitation of uranium e.g. carbonaceous detrital plant debris. The Lower Carboniferous formations particularly the Guezouman (Akouta deposit), Tarat (Arlit deposit) and Madaouela (Madaouela deposit), host the most important uranium occurrences, although economic mineralisation is known throughout the whole succession up to the Lower Cretaceous formations, Tchirezrine II (Imouraren deposit) and Assaouas (Azelik deposit). The Lower Carboniferous also host coal deposits at Tchighozerine, immediately adjacent to the TOU1 EL.<br>• The surface geology over the ELs acquired by ENRG is dominantly represented by the Agadez group (Jurassic), which is further subdivided into five formations; Teloua, Mousseden, Tchirezrine I, Abinky and Tchirezrine II (Cretaceous). The contact between the Mousseden (Goufat series) and the Tchirezrine I (Wagadi series) is regionally marked by a prominent uranium anomaly seen in the airborne radiometrics and very often associated with the occurrence of secondary uranium minerals. The presence of volcanic analcimolite units is |

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| | | thought to be of importance in terms of forming an impermeable barrier within the Agadez sandstones and to act as either a stratigraphic trap or as a potential source of uranium.<br>• The Takardeit Inferred Mineral Resource suggests the presence of a higher-grade area of mineralisation controlled by a Mousseden-Tchirezrine paleochannel system whose extension remains to be identified.<br>• Locally, the area covered by the ENRG concessions covers the contact zone of the Air Massif with the Carboniferous to Cretaceous sediments of the Tim Mersoi basin. This sedimentary sequence thins to the south and the structural configuration is thought to be mainly controlled by N-S and NNE-SSW faulting, possibly caused by Hercynian tectonics. |
| ***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*:<br>✓ *easting and northing of the drill hole collar* | • Locations of the rock chip sampling points are given in Appendix 1 |

| Criteria | JORC Code explanation | Commentary |
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| | ✓ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>✓ *dip and azimuth of the hole*<br>✓ *down hole length and interception depth*<br>✓ *hole length.*<br>• *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.* | |

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| ***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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal* | • The data has not been aggregated.<br>• No grade truncations were applied. |

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| | *equivalent values should be clearly stated.* | |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • The mineralisation is sub-horizontal and all sample points were on surface outcrop, it is unlikely that the entire with of the mineralisation at surface has been sampled. |
| ***Diagrams*** | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any* | • Maps are included in the text. |

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| | *significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | |
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • The announcement details all of the results from the rock chip sampling program. |
| ***Other substantive exploration data*** | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical* | • The wider area and Takardeit deposit were subject to extensive drilling in the 1970's by Cogema (now Orano) and in 2009-2010 by IEL (NGM's wholly-owned subsidiary).<br>• A fixed wing combined magnetic and radiometric survey by UTS Geophysics Pty Ltd was undertaken in October 2009. The survey was carried out with N-S |

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| | *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.* | flight lines 200m apart with a total survey length of 10,070 kms with more detailed, infill lines of 100m spacing over a selected portion of structural complexity in the Idekel area. The E-W tie lines at a spacing of 2 kms and a minimum terrain clearance of 50m remained constant throughout. The resultant data was provided to FUGRO in Perth for interpretation in early 2010.<br>• A previous geophysical survey of the Air massif partially covered the IEL permit area but the proprietary survey completed by the company was more detailed and flown within more optimum parameters.<br>• A program of detailed radiometric surveying was completed over six prospect areas at a nominal density of 40 x 80m, aiming to provide greater detail that would allow better positioning of the drill targets. Measurements were recorded with a GR-135 Plus 'Identifier' Spectrometer that recorded K, U and Th counts per minute together with the total count gamma radiation at every measurement site.<br>• Limited petrographic studies were undertaken during 2010 in collaboration with Microsearch CC of Johannesburg, S.Africa. From the first mapping surveys carried out by SRK in June 2009, 12 outcrop samples of predominantly gritty sandstone were submitted for thin section description. Many contained small pebbles with a field description of microconglomeratic and because the matrix |

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| | | clay content, commonly limonitic, was >15%, most of the sandstones were more accurately termed feldspathic quartz-wackes. One sample was a strongly fractured, limonitic mudstone with significant carnotite or autunite mineralisation. Differentiation by optical microscopy was not possible.<br>• At the completion of the first phase of drilling (November 2009), 14 drill chip samples were submitted for optical microscopy to improve field logging descriptions. Lithologically more varied, they included arkosic and sub arkosic grits and analcimolites. The latter were regarded as of diagenetic origin although there was a question as to whether the analcime was authigenic or introduced hydrothermally.<br>• Drilling in the second phase intersected small grains of yellow uranium-products in two different holes for the first time. The grains were mounted in a resin block, polished and examined under a Scanning Electron Microscope. The SEM investigation identified yellow minerals as:<br>✓ Autunite, a Ca-U phosphate.<br>✓ Uranophane, a Ca-U silicate.<br>• Additional drilling by Paladin was completed in the area (but not on the deposit itself) in 2011, this drilling was reported by ENRG to the ASX on the 7th April 2022.<br>• In 2022 an infill and exploration program was undertaken by ENRG with results |

| Criteria | JORC Code explanation | Commentary |
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| | | reported to the ASX on the 1st September 2022 titled 'Drilling Program Update at the Agadez Uranium Project'. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • The company intends to undertake follow-up exploration involving ground geophysics and drilling in order to identify the proposed structural controls on mineralisation.<br>• Extension drilling on the open portions of the Takardeit deposit for resource estimation work is planned in the near future following detailed assessment of all of the drill program results.<br>• See text of Announcement. |

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