Ground Resistivity Geophysical Survey at Agadez Uranium Project Reduces Need for Extensive and Systematic Grid Drilling

Highlights:

- **Orientation Electrical Resistivity Tomography ("ERT") survey successfully completed at the Agadez Uranium Project**
- **Orientation survey confirms and replicates existing drilling results, reducing the need for extensive and systematic grid drilling**
- **The results significantly improve position accuracy and identification of basement faults that control the mineralisation within the Carboniferous and Jurassic stratigraphy**
- **ENRG Elements will expand the use of ERT during CY2023 at Agadez to further refine drill targets**

ENRG Elements Limited (**ASX:EEL, OTC: EELFF**) ("**ENRG Elements**" or the "**Company**") is pleased to announce the positive results of an orientation Electrical Resistivity Tomography ("**ERT**") Survey undertaken across the Takardeit area within the Terzamazour 1 exploration licence area at the Company's Agadez Uranium Project ("**Agadez**", "**Project**"), located in Niger.

The orientation survey, based on two profiles, has successfully demonstrated a correlation with existing drilling data and historical geophysical surveys. As a result, ERT can be used by the Company as a geophysical method to reduce the need for extensive systematic grid drilling to identify possible palaeochannels and trap sites that host most of the uranium mineralisation in the region.

ERT is an advanced surface geophysical method used to determine the subsurface resistivity of the underlying strata. ERT data is collected by an automated multi-electrode resistivity meter that collects resistivity results for each lithology and aids in the interpretation of uranium targets within the host rocks.

ENRG Elements Managing Director, Caroline Keats, commented: *"We are very pleased about these orientation survey results. The work gives us the opportunity to use ERT not only to identify additional targets, but also to potentially reduce the timeframe needed to increase our Resource base by narrowing down the search area and enabling us to better target our drilling program".*

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Summary

In February 2023, the Company commissioned African Logging ("**AF-LO**") to conduct two surface ERT profiles, totalling 3.25km. The survey was designed to test the suitability of ERT on the Company's previously identified braided channel systems and fault-related trap sites (see Figures 1 & 2).

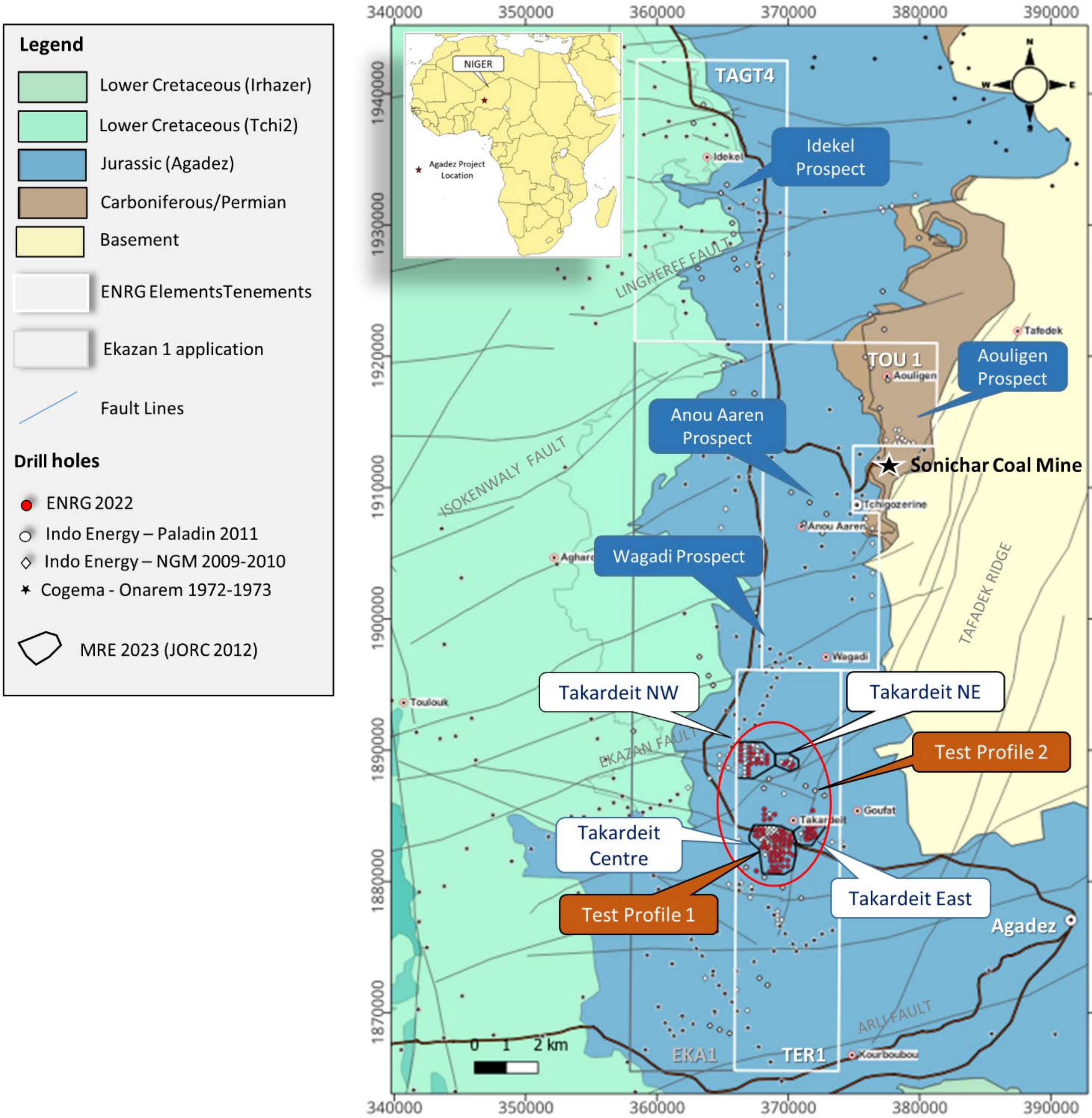

Figure 1 – Location of Takardeit Deposit and ERT Test profiles

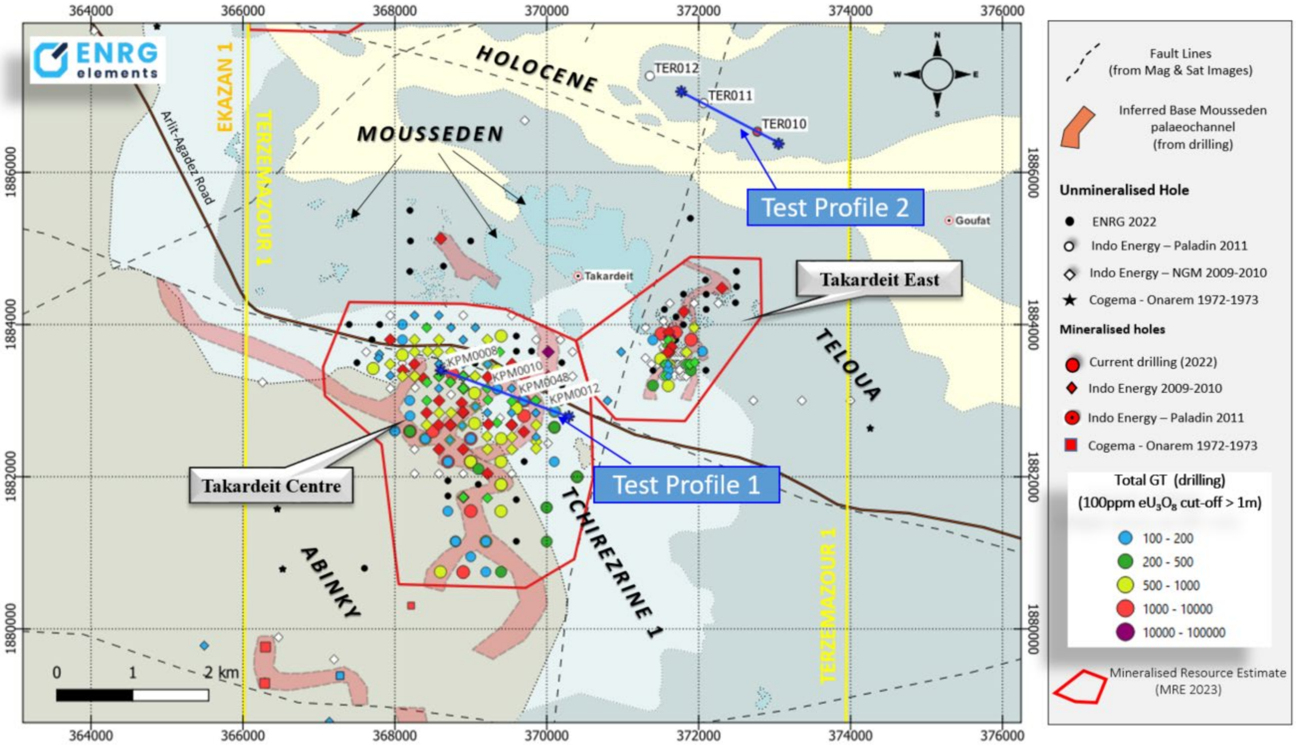

Figure 2 – Location of ERT Test Profile 1 in Takardeit Centre and ERT Test Profile 2 in Takardeit East. Geological and GT maps in the background image.

The first orientation site, Profile 1 ("**ERT-1**"), was selected as an area defined by numerous drill holes that identified several mineralised palaeochannels stacked from the surface to <40metres within the Mousseden and Tchirezrine 1 Jurassic Formations. Faults and folds in various directions are believed to control these palaeochannels (Figure 6).

Orientation site Profile 2 ("**ERT-2**") is located approximately 4.5 km further to the northeast and was selected to identify basement faults intersecting the profile near drill hole TER010 which is anomalous in the Carboniferous stratigraphy (2m @ 1,384 ppm eU_3O_8 from 48 m depth) (Figure 2 & 5).[1]

Uranium Deposit Genetic Model

The majority of the uranium deposits in the Tim Mersoï Basin appear to be related to major structures shearing the basin and rooted into the Aïr Massif (Figure 3). These significant deposits are associated with major, long-lived, basement penetrating north-south, east-west and north-west trending faults.

1 See announcement dated 7 April 2022, "Review of Historic Data Confirms Prospectivity of Agadez Project in the Uranium Rich Trim Mersoi Basin.

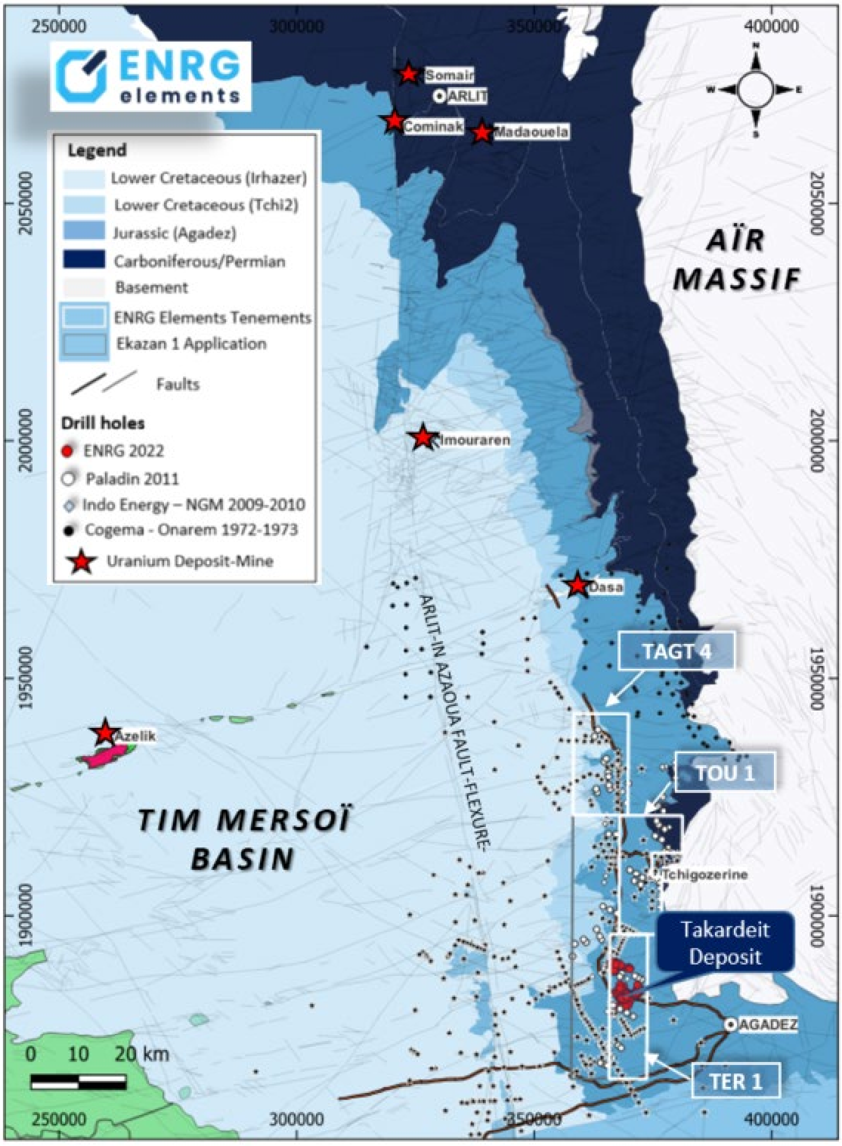

Figure 3 – Location of uranium deposits and mines in the Tim Mersoï Basin, Niger.

The Agadez Project contains all the features for the classical Source-Pathway-Trap genetic model as is characteristic of the majority of the uranium deposits in the Tim Mersoï Basin. Proximity to Aïr Massif granites and felsic intrusive volcanic rocks are postulated as the source of the uranium mineralisation.

Numerous permeable sandstone units deposited in a continental fluvial or marginal marine sedimentary environment (e.g. braided palaeochannel systems) from the Carboniferous (Terada Serie) to the Jurassic (Agadez Group) are favourable to the passage of uranium-bearing fluids. The sandstone and conglomerate horizons are commonly bounded by more impermeable units (shale or tuffaceous beds) that restrict fluids' vertical migration. These horizons also contain suitable reducing agents for uranium precipitation, e.g. carbonaceous detrital plant debris. The doming of the host rocks may either act as traps to ascending uranium-rich fluids or provide a hydrological gradient for the uranium-rich groundwaters to flow down. Additionally, post-depositional sedimentary tectonic deformation has produced discrete structural "pop-up" features (e.g. horst) along large crustal scale east-north-east striking fault systems that may have created structural traps.

Results & Interpretation

ERT profiles consist of a modelled cross-sectional (2-D) plot of resistivity (Ohm/m) versus depth. ERT interpretations, supported by borehole data or geophysical data, combined with map data, can accurately represent the geometry and lithology of subsurface geologic formations.

Figures 4 and 5 below show the resistivity distribution across ERT-1 & ERT-2, where a resistivity value range from 20 Ωm to 400 Ωm is defined. In both ERT profiles, it is possible to distinguish four electrical layers with a thickness ranging from a few meters to more than 50 m. These layers, arbitrarily delimited by electrical discontinuity limits numbered D1 to D5 (base discontinuity), are interpreted in terms of litho-stratigraphic formations recognised from drilling data in the Takardeit region.

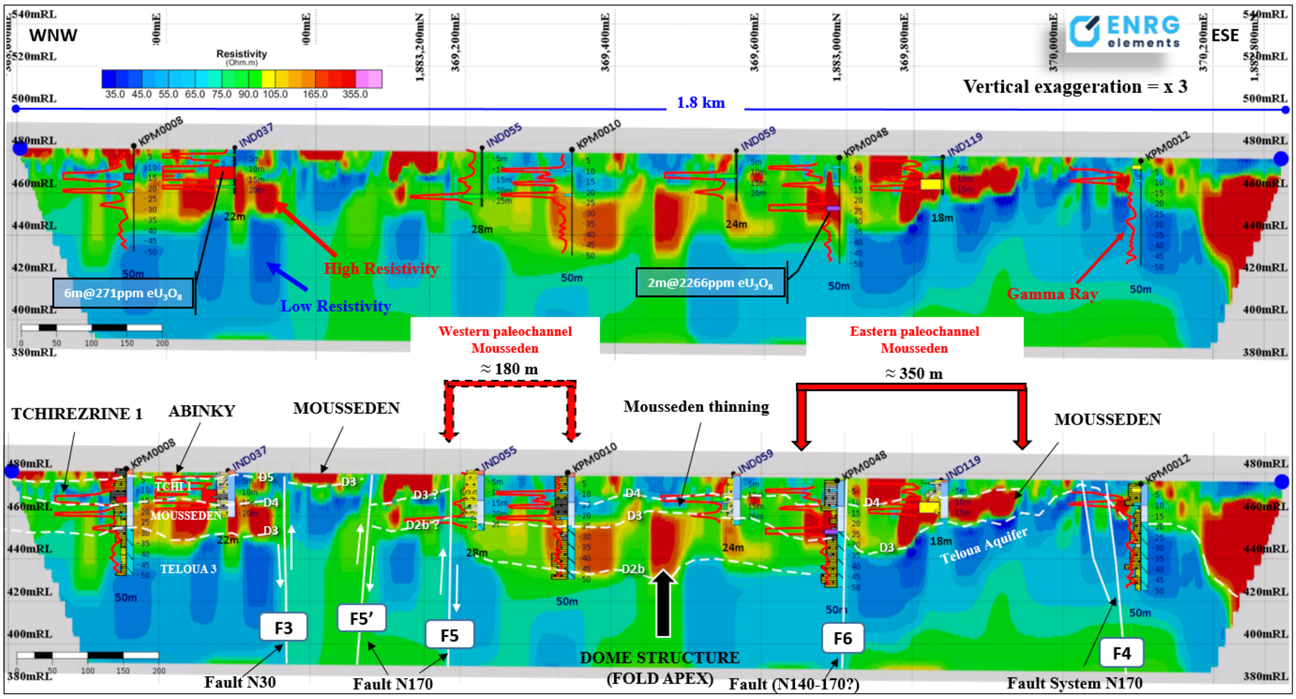

Figure 4 – Inversion image of Electric Resistivity Tomography Profile 1 (ERT Profile 1) on Takardeit Centre (MRE). Uninterpreted profile with drill hole location and higher grade intersections (top image). Stratigraphic and structural interpretation from drilling (bottom image).

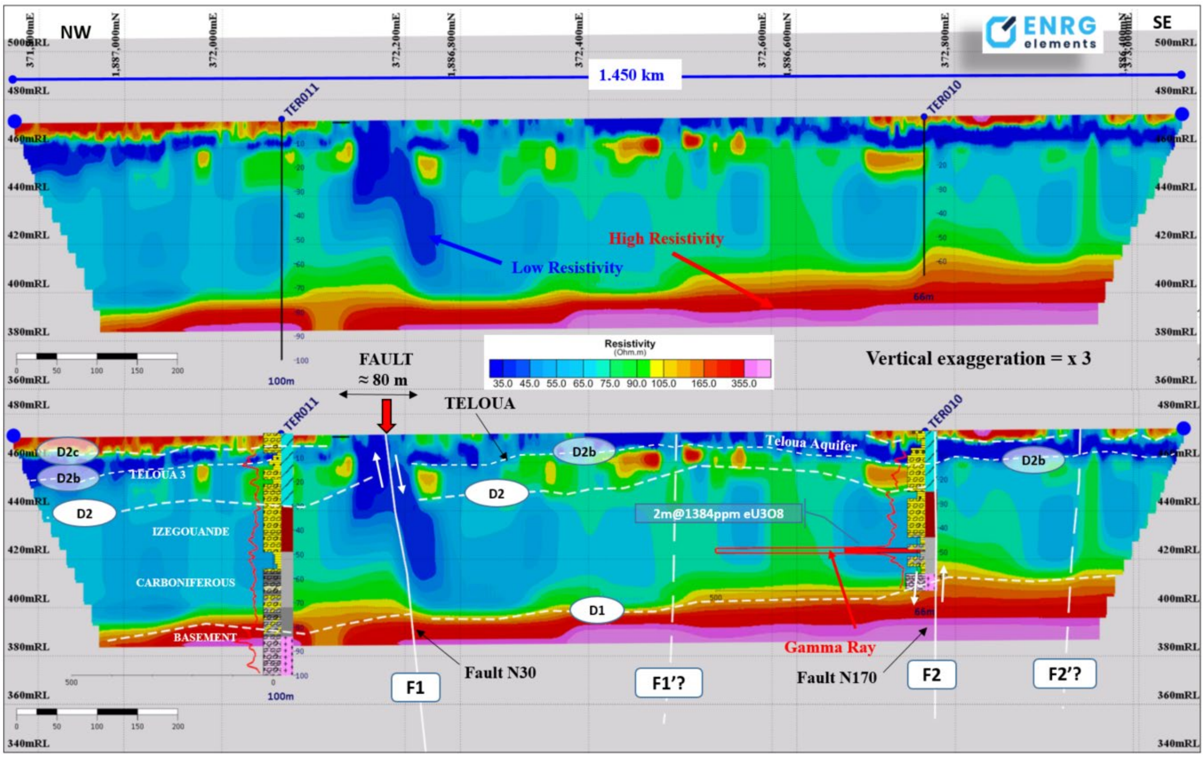

Figure 5 - Inversion image of Electric Resistivity Tomography Profile 2 (ERT Profile 2) on Takardeit East. Uninterpreted profile with drill hole location and higher grade intersections (top image). Stratigraphic and structural interpretation from drilling (bottom image).

The ERT-1 profile shows four main electrical layers, locally vertically offset by several high-angle faults, striking N30 (F3) to N170 (F4 to F6), also identified on the Total Magnetic Intensity Reduced to the Pole ("**TMI-RTP**") aeromagnetic survey undertaken in 2009 by previous owners of the tenements, NGM Resources Ltd ("**NGM**") (Figure 6 below). To the west of the F3 Fault, the highly resistant (up to 350 Ωm) top layer (at depth from 0 to 4 m) characterises the glomerular and argillitized analcimolite of the Abinky Formation (D5).

Underneath, the more conductive level, about 10 m thick, represents the medium to coarse-grained sandstones with fine clay-analcimolitic intercalations of the Tchirezrine 1 Formation (D4). The resistivity subsequently increases significantly, to between 80 to 355 Ωm, in a 15 m to 25 m thick layer, interpreted as coarse-grained conglomeratic sandstone with analcimolite horizons attributed to the Mousseden Formation (D3). The lower half of the profile shows lower resistivity values (35 to 80 Ωm), corresponding to the heterogranular sandstone of the Teloua 3 Formation (D2, D2b).

To the East, the F3 and F5 faults delineate a horst-like structure leading to the exhumation of the Mousseden. Further east, the downthrown central block of the profile between faults F5 and F6 clearly shows a local doming structure in the sediments, which is evidenced by a thinning of the

Mousseden locally reduced to a few meters thick (5 to 8 m) in the axis of the fold. The underlying Teloua shows very contrasting resistivity values (80 to 300 Ωm), reflecting the increase in the clay component of the sandstone facies, poor water saturation deposited in a lower energy environment, on a culmination point.

On either side of the doming structure, the relative thickening of the Mousseden marks the presence of two paleochannels trending north-north-east. The thalweg of the main Mousseden paleochannel is located about 50 m east of the F6 fault, characterised by medium resistivity values (75 to 90 Ωm). This N140-170 fault (F6) is particularly well identified by a sharp change in the electrical properties of the Teloua Formation, highly conductive in the eastern block (F6 to F4). In contrast, the overlying Mousseden shows increasing resistivity values (165 to 355 Ωm) as it thins to the east. The high-grade mineralisation at the base of the Mousseden in Hole KPM0048 (2m @ 2,266 ppm eU_3O_8 from 23 m depth)[2] is located on the western shoulder of the palaeochannel near the F6 fault. The easternmost fault (F4), trending N170, identified initially from the aeromagnetic survey with an accuracy of about 400 m, is observable by a slight doming and located with an accuracy of less than 100 m. Underneath, the very conductive layer (30 to 50 Ωm) corresponds to the principal aquifer of Teloua, outcropping at the level of the fault zone.

The ERT-2 profile identifies four layers from the surface to the bottom. The shallow thin resistant layer (250 Ωm), from the surface to 5 m deep, west and east of the profile, represents the more or less hardened dry silty sands of the sub-outcropping Teloua formation. Underneath, the shallow depth conductive zone (30 Ωm), visible on the entire profile length, highlights the water-saturated sandstone sequence of Upper Teloua (Teloua Upper Aquifer). In the central part of the profile, this low resistivity layer outcrops, corresponding with the recent alluvial deposits of the nearby Kori. Below, a more resistant and discontinuous layer is associated with lenticular coarse to conglomeratic sandstone with analcime-rich clayey horizons of the Teloua 3 formation. Underneath, between 20 m to 70 m deep, the thick layer of medium resistivity (80 Ωm) characterises the Permian (Izegouande Series) and the Lower Carboniferous (Terada Series) sandstone formations. The high resistivity layer (400 Ωm) at the profile's base, from 60 m deep in the east to 80 m deep in the west, represents the granitic basement.

The slight bumps identifiable along the unconformity, indicate the segmentation of the basement and confirms the presence of several faults, previously identified but inaccurately located, from a TMI-RTP aeromagnetic survey historically undertaken over the area in 2009 by previous owners of the tenements, NGM (Figure 6). To the northwest of the profile, the sub-vertical highly conductive zone highlights the N30 striking fault (F1), with an apparent fault plan dipping towards the east.

[2] See announcement dated 1 September 2022, "Drilling Program Update at the Agadez Uranium Project."

Accuracy on the position of the fault is now less than 100 m, whereas it was previously of the order of 300-400 meters based on the aeromagnetic survey. The relative vertical location of the Teloua base (D2) and basement (D1) discontinuities on each side of the fault plane indicates a slightly normal component rooted into the basement. To the southeast, the N170 striking fault (F2) is distinguished by significant resistivity contrasts linked to vertical displacements on either side of the fault plane. The western block has moved downward relative to the eastern block. Drillhole TER010, that is anomalous in the Carboniferous section, is located on the side of the down-dropped block that constitutes the central part of the profile.

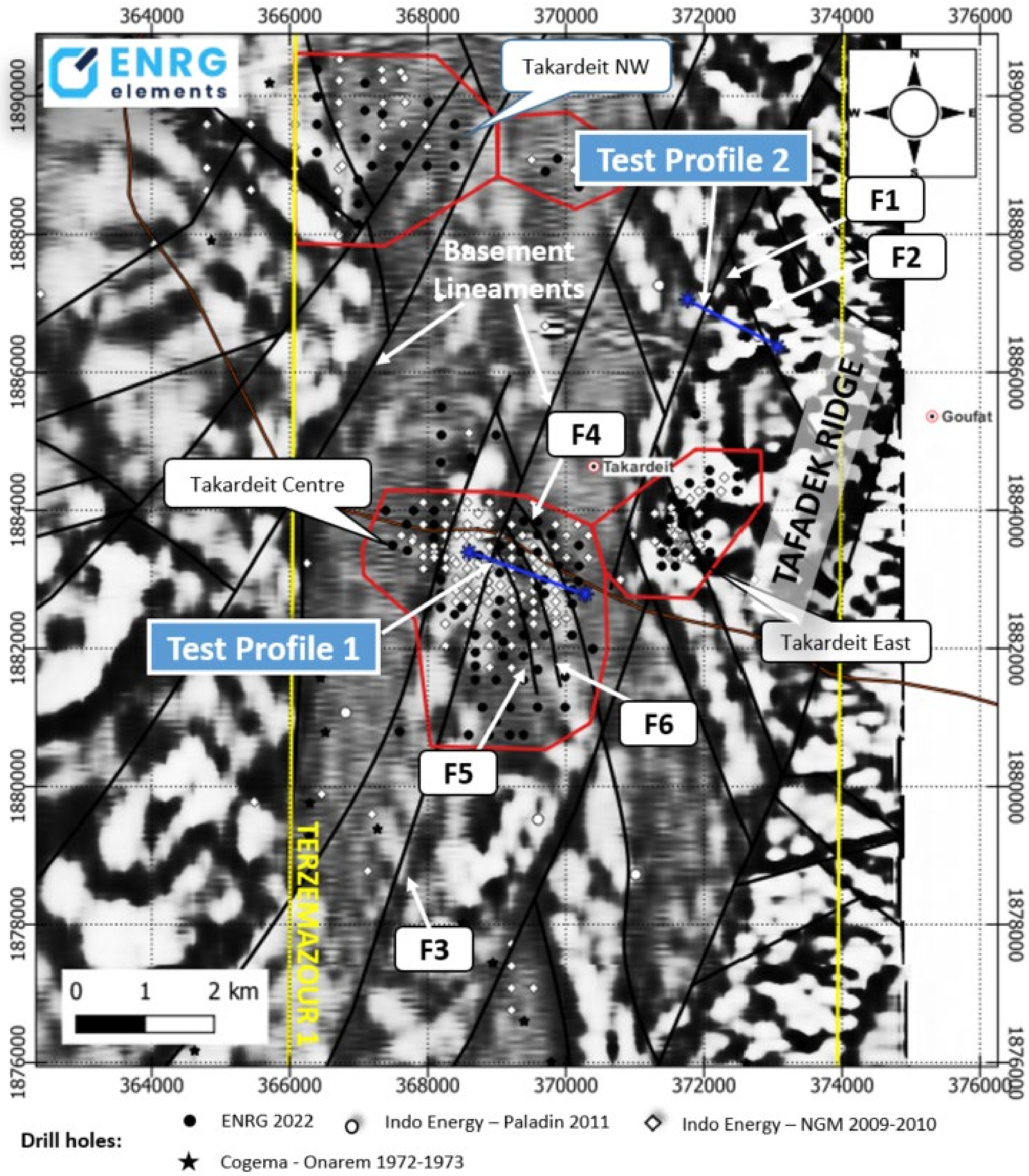

Figure 6 – Location of the ERT Test Profiles 1 & 2 over the structural interpretation of RTP-TMI Aeromagnetic.

The orientation ERT survey results clearly show the location and extent of the principal Mousseden paleochannel with a width from about 350 m and about 15 to 35 m deep in Takardeit Centre (ERT 1 Profile) and the establishment of its geometry and geostructural context precisely. The main structural units, associated deformations and vertical displacements are easily identifiable on both profiles. In Takardeit Centre, the undulations of the iso resistivity layers characterise the folding of the sedimentary series highlighting, in particular, the tight control of the Mousseden paleochannels by the doming structures (ERT 1 Profile). The presence of faults results in sharp disruption of the resistivity layers with local shifts in stratigraphy on either side of the fault plane. At Takardeit East, the major F1 fault is evident due to a very elongated, highly conductive zone stretching from the surface to 60 m depth (ERT 2 Profile).

The results confirm that ground resistivity methods are valuable in identifying near-surface palaeochannels and their structural control. The 2D resistivity imaging survey makes it possible to identify the location of the controlling faults with much higher precision (<100 m) than that obtained from the existing aeromagnetic survey.

Next Steps

The proven effectiveness of ERT for identifying the presence of sub-surface channels and characterising their structural context makes it possible to consider the use of ERT profiles for future, targeted, drill planning. This is expected to include conducting reconnaissance profiles on several favourable prospects, thereby assisting the Company in prioritising drilling targets and limiting the costs and time associated with locating favourable mineralisation areas.

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About ENRG Elements Limited

ENRG Elements Limited (ASX:EEL OTCQB:EELFF) 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 21.5 Mlbs of contained U_3O_8 at 315 ppm (175 ppm cut-off grade) from surface to ~37m depth (ASX Release – 26 April 2023). 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[3] with the Tim Mersoï Basin in Niger hosting the highest-grade and tonnage uranium ores in Africa[4].

ENRG Elements also holds the 100% owned Ghanzi West Copper-Silver Project covering a total area of 2,630km2 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 Elements 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 Elements 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 in this announcement relating to new Exploration Results have been compiled by Dr Jean-Christophe Corbin. Dr Corbin is a consultant employed by Geoviz Consulting Australia. Dr Corbin is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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)". Dr Corbin approves of, and consents to, the inclusion of the information in this announcement in the form and context in which it appears.

The information relating to previous Exploration Results and Mineral Resources 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

[3] https://world-nuclear.org/information-library/facts-and-figures/uranium-production-figures.aspx

[4] https://www.sciencedirect.com/science/article/pii/S016913682200213X

Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". The Company confirms that the form and context in which the results are presented and all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed have not been materially modified from the original announcements.

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

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

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.*	• An Electrical Resistivity Tomography (**ERT**) survey collected data using an IRIS Instruments SYSCAL PRO SWITCH resistivity meter and two streamers of 24 electrodes each. The inter-electrode spacing is 5 m. Three different geometrical arrays were used (Wenner-Schlumberger, Forward Pôle-Dipôle and Reverse Pôle-Dipôle) to get the advantage of each arrays specific benefits.

Criteria	JORC Code explanation	Commentary
	• *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.*	
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core*	• Not applicable as a geophysical survey only is detailed in this announcement.

Criteria	JORC Code explanation	Commentary
	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).	
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.*	• Not applicable as a geophysical survey only is detailed in this announcement.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,*	• Not applicable as a geophysical survey only is detailed in this announcement.

Criteria	JORC Code explanation	Commentary
	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.*	
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.*	• Not applicable as a geophysical survey only is detailed in this announcement.

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling 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.*	
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.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters*	• The geophysical survey completed was preliminary in nature and was targeted at establishing the validity of the technique relative to the geology. • Confirmation of the base data by validation against existing drilling suggests that the technique employed provided good results. • Future detailed surveys are expected to include additional quality control parameters. • Three different geometrical arrays were used (Wenner-Schlumberger, Forward Pôle-Dipôle and Reverse Pôle-Dipôle) to get the advantage of each arrays specific benefits. After inversion, each array defined its own geological model. The RMS error was excellent (around 1%), and the three

Criteria	JORC Code explanation	Commentary
	used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *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.*	models were in very close agreement to each other, giving additional confidence to the results.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data*	• Independent checks were completed on the survey data by AF-LO by the relevant qualified person.

Criteria	JORC Code explanation	Commentary
	verification, data storage (physical and electronic) protocols. • *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The ends and intermediate sampling points within the survey lines were determined by GPS. • The grid system is Universal Transverse Mercator, zone 32N (WGS 84 datum). All data was recorded using Easting and Northing. • Topographic control will be provided by a digital elevation model (DEM) derived from Shuttle Radar Topographic Mission (SRTM) and is accurate to approximately 2 m.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and*	• The results outlined in this announcement relate to two, wide spaced, test lines. • The information presented only relates to local identification of geological structures and would require additional surveys in order to make comment on the wider scale geology.

Criteria	JORC Code explanation	Commentary
	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.*	
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.* • *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*	• The geophysical survey test lines targeted areas likely to host geological structures and locations where the basement and palaeochannel geology was better understood.

Criteria	JORC Code explanation	Commentary
	if material.	
Sample security	• *The measures taken to ensure sample security.*	• Not applicable as a geophysical survey only is detailed in this announcement.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been undertaken.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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*	• The Exploration Results relate to the exploration licence (**EL**) Terzemazour 1 (**TER 1**) (242.8 km^2), currently owned 100% by EF Niger Exploration SARL (**EF Niger**), a wholly owned subsidiary of ENRG Elements Ltd (**ENRG**). • Between 2007 and 2010, NGM Resources Limited (**NGM**) owned ELs TER 1, Toulouk 1 (**TOU 1**) (currently 246 km^2) and Tagait 4 (currently 237.292 km^2) (**Tag 4**), through its subsidiary Indo Energy Limited (**IEL**). The initial land package covered an area of ~1,500 km^2. • In 2010, Paladin Energy Ltd (**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. • 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 of Mines agreed to again extend the initial term

Criteria	JORC Code explanation	Commentary
	operate in the area.	of the ELs to 7 November 2024. On 24 May 2022, ENRG acquired the ELs from Endeavour. • The TER 1 EL is located 25 km NW of the regional town of Agadez in the Tim Mersoï Basin in central Niger. • A new application has been lodged by EF Niger on EKAZAN 1 (490.2 km^2), an area which was dropped by IEL as part of the halving of the original TER1 and TOU1 tenements in 2013. • 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: ✓ The joint venture between Compagnie générale des matières nucléaires (**COGEMA**) (now ORANO) and Office National des Ressources Minières du Niger (**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 areas - 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. ✓ During this period, COGEMA and ONAREM drilled several prospect areas, many of which

Criteria	JORC Code explanation	Commentary
		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. ✓ 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. ✓ 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 uranium assays have been converted to U_3O_8 values. ✓ From November 2009 to April 2010, IEL completed 256 rotary mud exploration drillholes

Criteria	JORC Code explanation	Commentary
		totaling 10,509 m over the original tenement area (of which 241 drill holes, totaling 9,464 m 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 TER 1. Based on this, NGM announced a low-grade Inferred Mineral Resource (under JORC(2004)) at Takardeit of 23 Mt at 210 ppm for 11 Mlb U_3O_8 at a cutoff of 120 ppm U_3O_8. ✓ 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. ✓ 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 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.

Criteria	JORC Code explanation	Commentary
		✓ 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. ✓ Since 2012, no exploration work was undertaken by the tenement holders, until the drilling and surface sampling program was conducted by ENRG in 2022
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. • 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

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		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 TOU 1 EL. • 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 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. • 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. • Locally, the area covered by the ENRG concessions covers the contact zone of the Air Massif

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		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:* ✓ *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*	• Not applicable as a geophysical survey only is detailed in this announcement.

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	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.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of*	• No exploration results are reported in this announcement.

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	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 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*	

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	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').*	• Not applicable as a geophysical survey only is detailed in this announcement.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of*	• Maps and sections are included in the text.

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	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.	
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.*	• Comprehensive reporting of all Exploration Results of this drilling has been previously reported to the ASX on the following dates by NGM: 5 June 2008, 15 July 2009, 23 July 2009, 4 August 2009, 25 September 2009, 6 November 2009, 5 May 2010, 27 May 2010 and 15 July 2010 and on the 30 May 2022, 1 September 2022, 2 February 2023 and 26 April 2023 by ENRG.

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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.*	• The wider area and Takardeit Deposit were subject to extensive drilling in the 1970's by Cogema (now Orano), in 2009-2010 by IEL (NGM's wholly-owned subsidiary), in 2011 by IEL (then owned by Paladin) and in 2022 by ENRG. • 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 flight lines 200 m apart with a total survey length of 10,070 kms with more detailed, infill lines of 100 m 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 50 m remained constant throughout. The resultant data was provided to FUGRO in Perth for interpretation in early 2010. • A previous geophysical survey of the Air massif partially covered the IEL permit area but the proprietary survey completed by NGM was more detailed and flown within more optimum parameters. • A program of detailed radiometric surveying was completed by NGM over six prospect areas at a nominal density of 40 x 80 m, 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. • Limited petrographic studies were undertaken during 2010 in collaboration with Microsearch

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		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 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. • At the completion of the first phase of drilling by NGM (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. • 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 (**SEM**). The SEM investigation identified yellow minerals as: ✓ Autunite, a Ca-U phosphate. ✓ Uranophane, a Ca-U silicate.

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		• Additional drilling by Paladin was completed in the area (but not on the Takardeit Deposit itself) in 2011, this drilling was reported by ENRG to the ASX on the 7 April 2022.
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.*	• ENRG intends to undertake follow-up exploration involving ground geophysics and drilling in order to identify the proposed structural controls on mineralisation. • See text of Announcement.