

31 October 2024

## Drilling on Sierra Cuadrada Project defines extensive areas of near surface uranium mineralisation

### HIGHLIGHTS

- Auger drilling at Sierra Cuadrada highlights extensive areas of near surface uranium mineralization including:
  - Assay results have been received for the shallow reconnaissance holes including 6 samples >1000ppm U<sub>3</sub>O<sub>8</sub> (to maximum 2,650 ppm U<sub>3</sub>O<sub>8</sub>) and 2 samples >500ppm U<sub>3</sub>O<sub>8</sub> (to maximum 900 ppm U<sub>3</sub>O<sub>8</sub>)
  - 30% of reconnaissance hole assays showed anomalous uranium mineralization.
  - Mineralisation varies in thickness from 0.5m to 4m, with an average thickness 1.5m. The largest being 6km long and 3km wide and remains open.
- These samples were instrumental in understanding the shallow subsurface geology and on prioritising target areas. Multiple areas are being evaluated to identifying priority areas for follow up trenching, mapping and delineation.
- We are waiting on 407 samples from a further 212 drill holes that are currently being prepared for assaying.
- A second auger rig has been delivered to site accelerating the current grid drill programme.
- An additional 37 uranium tenement applications lodged - total U exploration area 2,243km<sup>2</sup>. Several of the new applications are in the adjacent Rio Negro province and are prospective for sandstone hosted uranium and in-situ recovery (ISR) mineralisation.

Piche Resources Limited (ASX: PR2) ("Piche" or the "Company"), is pleased to present reconnaissance drill results at the Sierra Cuadrada uranium project, Chubut province, Argentina (Figure 1).

To date 609 auger holes have been completed to an average depth of 3.91m over both regional reconnaissance and grid drilling.

Visible uranium has been recorded in 146 of the 303 holes assayed to date and 90 of those holes have returned anomalous grades up to 2,650ppm U<sub>3</sub>O<sub>8</sub>.

The most significant results from the earlier reconnaissance drilling are included in Table 1.

Tenement No.	Drill hole No.	Northing	Easting	RL	from (m)	to (m)	Interval (m)	grade U <sub>3</sub> O <sub>8</sub> (ppm)
Teo 8	PO069	5076999	2560921	324	0.0	1.1	1.1	1,735.6
	<i>incl</i>				<b>0.0</b>	<b>0.5</b>	<b>0.5</b>	<b>2,650.0</b>
Teo 5	PO077	5065516	2573533	297	0.0	1.0	1.0	1273.0
	<i>incl</i>				<b>0.5</b>	<b>1.0</b>	<b>0.5</b>	<b>1429.0</b>
Peponi 9	MO311	5063935	2597571	219	0.0	0.2	0.2	1021.1
Teo 8	PO189	5076676	2560921	371	0.0	0.5	0.5	521.8
Teo 7	PO162	5061997	2595582	216	0.0	1.0	1.0	270.5
Peponi 9	MO314	5063844	2597285	216	0.0	0.2	0.2	359.5
Teo 6	PO109	5067817	2571156	308	0.5	0.8	0.3	227.7

**Table 1: Significant assays from regional reconnaissance vertical auger drilling**

(using cut off grade of 200ppm U3O8)

Drilling is currently being undertaken on a 400m x 400m grid, with some infill on 200m x 200m grid (Figure 2). Samples from a further 212 drill holes are currently being prepared for assaying, with visible uranium recorded in 38% of those holes.

As there is anomalous uranium on many of the tenements in the Sierra Cuadrada portfolio, and radiometric uranium anomalies on all of them, the purpose of the grid auger drilling is to determine areas of mineralisation suitable for trenching and sampling to enable the completion of a JORC compliant mineral resource estimate.

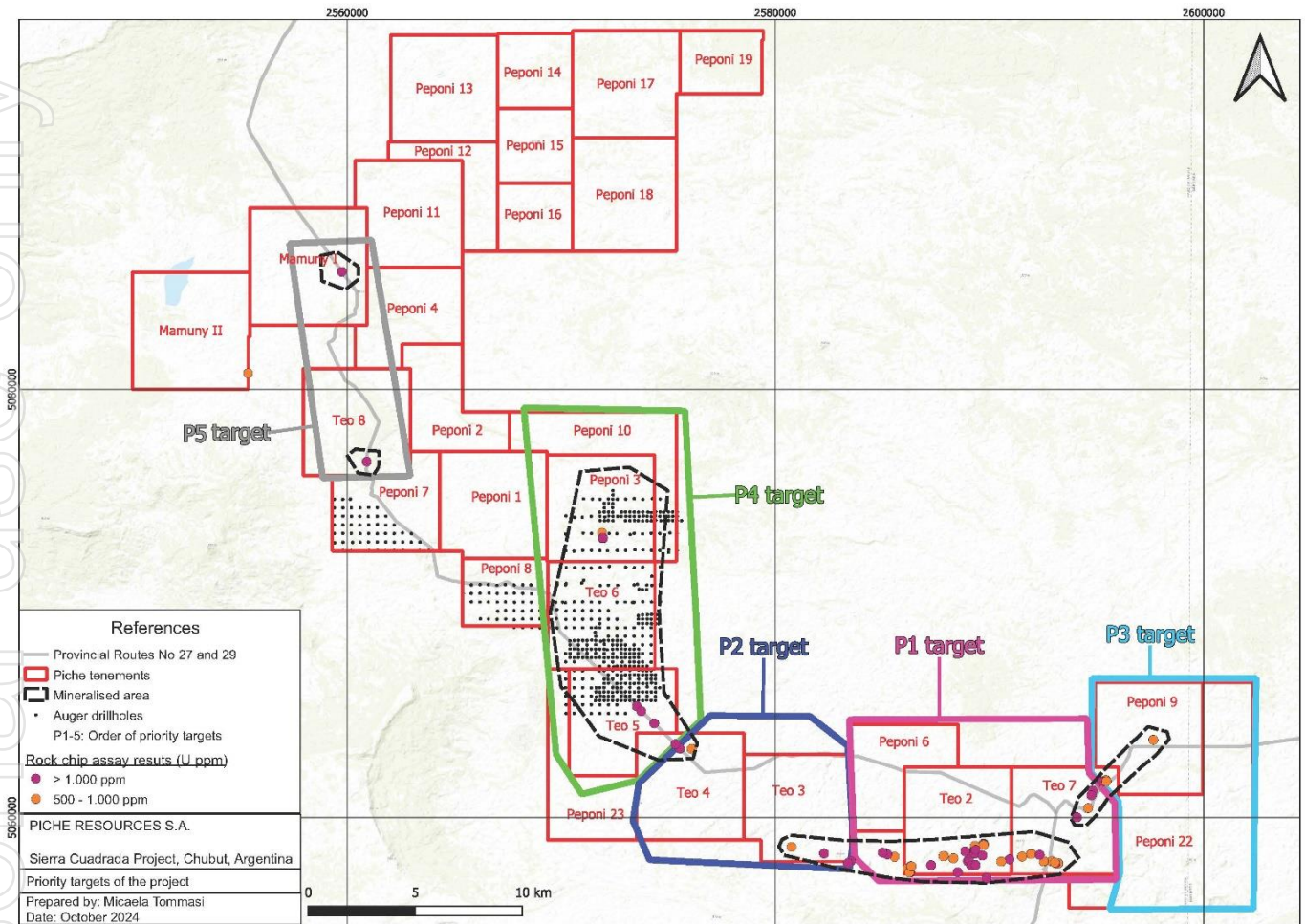
Following earlier reconnaissance sampling and auger drilling, the tenement portfolio has been divided into five priority areas (P1-5). Priority has been defined based on historical exploration, prior airborne radiometric anomalies, Piche field reconnaissance, recent field sampling and auger drilling<sup>1</sup>.

Detailed grid drilling commenced on the P4 (tenements Teo 5, Teo 6 and Peponi 3) area where land access agreements were first achieved. Access agreements have since been executed on P3 area and are expected to be confirmed on P1 & P2 areas in the near term.

1. Refer to Section 3.2 of the Independent Geologists Report in the Company's prospectus lodged on 11 July 2024.



Figure 1: Location of Sierra Cuadrada Project



**Figure 2: Sierra Cuadrada Project area highlighting priority areas. Auger drill holes are marked as black dots.**

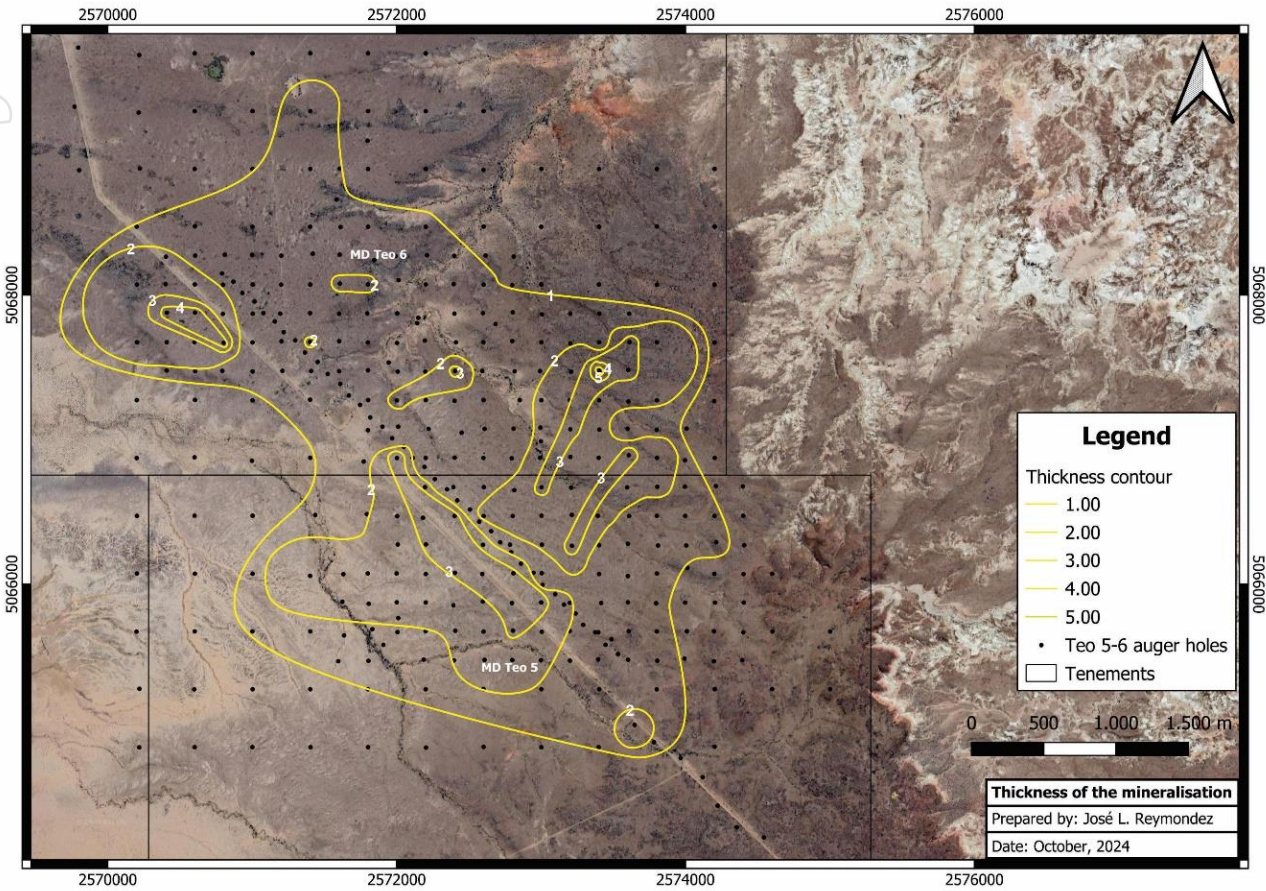
Mineralisation thickness varies from 0.5m to 4m between the surface and a depth of 5m. Figure 3 highlights the thickness of visible uranium mineralisation from grid auger drilling on Teo 5, Teo 6, and Peponi 3. Figure 4 shows the location of the recent grid auger holes on the same tenements and the holes containing visible uranium are highlighted in yellow.

**Piche’s Managing Director, Stephen Mann commented:**

*“We are particularly pleased with the progress of exploration at Sierra Cuadrada, from the initial reconnaissance to the commencement of detailed grid-based auger drilling. We now have over 1000km<sup>2</sup> of tenure, all of which has either visible uranium or significant radiometric anomalies. After initial commissioning the auger drill rigs are proving to be an expedient and low-cost tool for the Company to identify high priority areas to commence detailed exploration, focused on large, shallow uranium mineralisation.”*



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**Figure 3: Contour map of visible uranium drilled intercept thickness at Teo 5 and Teo 6**



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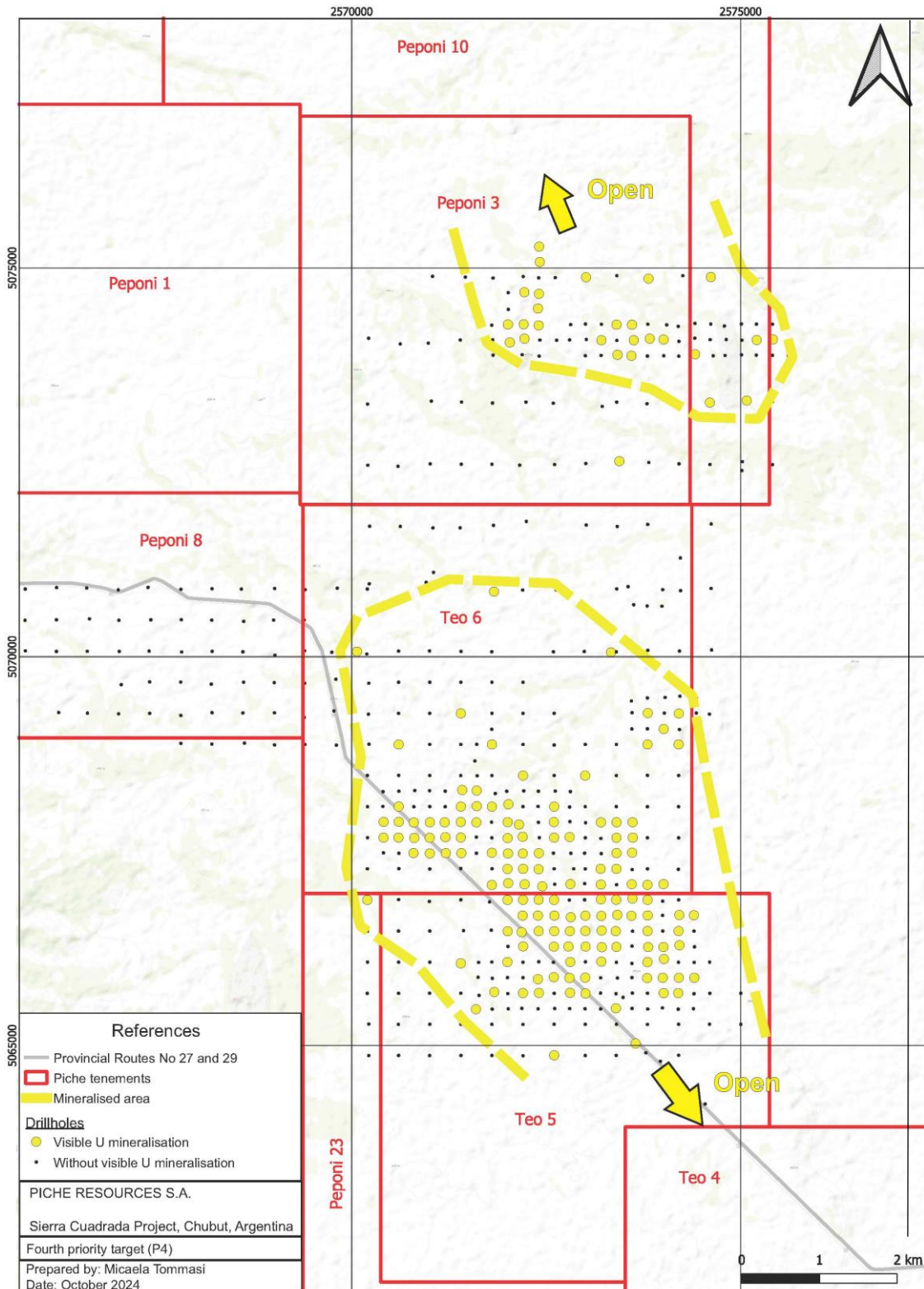


Figure 4: Teo 5 and Teo 6 highlighting auger holes



### **Competent Persons Statement**

*The information in this announcement that relates to exploration results, interpretations and conclusions, is based on and fairly represents information and supporting documentation reviewed by Mr Stephen Mann, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Mann, who is an employee of the Company, has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person, as defined in the JORC 2012 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Mann consents to the inclusion of this information in the form and context in which it appears.*

This announcement has been approved by the Board of Directors.

### **For further information, please contact:**

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## JORC Code, 2012 Edition – Table 1

### Sierra Cuadrada Project

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>■ Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>■ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>■ Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>■ In cases where ‘industry standard’ work has been done, this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>■ Samples were collected from shallow vertical auger drill holes. Auger drill cuttings were sampled at 0.5m intervals where visible uranium was present and composited to 1.0 or 1.5m where no uranium minerals were visible.</li> <li>■ Piche has collected 1325 samples and tested all samples by gamma spectrometers/scintillometers, Exploranium GR 135 Identifier. 813 of those samples have been tested with Piche’s Bruker S1 Titan pXRF machine. Samples of interest are then sent to Alex Stewart Laboratory International Argentina S.A. for analysis of 42 elements using ICP-MA in Mendoza.</li> <li>■ Samples showed significant variability of assay results and are being rechecked by the laboratory (pXRF and ICP), and by multiple reading using Piche’s pXRF.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>■ Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>■ Drilling was completed using a tractor mounted auger drill rig with a 30cm drill bit.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>■ Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>■ Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>■ Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>■ Samples were initially weighed to determine sample recovery. Sample recovery from subsequent drilling has been assessed by the visual amount of material recovered. Holes are terminated as soon as recovery falls below a visual amount of 80%. Overall sample recovery is considered to be about 95%.</li> <li>■ There is no correlation between sample recovery and grade. No sample bias is believed to occur.</li> </ul>



Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Drill chips are geologically logged and any visible uranium mineral are recorded.</li> <li>It is not planned to complete any resource estimation from the auger drill results. Drilling was completed solely to recognise areas of visible uranium mineralisation in the top 3 to 5 meters of the profile, so areas can be prioritised for subsequent trenching, mapping and sampling.</li> <li>Logging was qualitative and no systematic photography was taken for each sample.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Only shallow auger drilling has been conducted to date. All holes are drilled vertically.</li> <li>Drilling was completed solely to recognise areas of visible uranium mineralisation in the top 3 to 5 meters of the profile, so areas can be prioritised for subsequent trenching, mapping and sampling.</li> <li>The sample returned from the auger drilling is appropriate for the purpose of the drilling.</li> <li>Field duplicated are collected every 40 samples. Triplicates have been taken less often.</li> <li>Sample sizes are considered adequate for the purpose of the drilling.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Surface samples collected by Maple were sent to the nearby CNEA mine for analysis. Detailed analytical procedures were not recorded.</li> <li>Rock samples collected by Piche in 2022 were submitted to Alex Stewart International Argentina S.A. for analysis of 42 elements using ICP-MA. Piche inserted 8 field duplicates, 6 field blanks and 8 standards for QA/QC.</li> <li>Two gamma spectrometers/scintillometers were employed for initial site radiometric determinations: Exploranium GR 135 Identifier. Piche's Bruker S1 Titan pXRF machine has been used for a wide range of elements. Samples are sent to Alex Stewart Laboratory for analyses by ICP-MA.</li> <li>Field duplicated are collected every 40 samples. Triplicates have been taken less often. Blank samples are included every 40 samples.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>Piche has conducted a systematic gamma spectrometry readings. Results have been variable and have led the Company to undertake follow up analyses. The purpose of</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p>Piche's auger drilling is to determine areas of visible uranium mineralisation, so variability of results is not a concern.</p> <ul style="list-style-type: none"> <li>There were no current or historical drill holes nor twinned holes.</li> <li>There were no adjustment to the original data.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Auger drill collar locations were identified using a handheld GPS and reported in the Gauss-Kruger coordinate system.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole spacings were based on a 400m x 400m grid, with some infill on a 200m x 200m grid.</li> <li>Drill hole spacing of 400m x 400m has been determined to be adequate for identifying zones of visible uranium mineralisation. Analyses of sample spacings have been undertaken based on 200m x 200m spaced holes, 400m x 400m spaced holes and 800m x 400m spaced holes.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The subsurface geology is flat lying with no recognised shallow faults or other structures.</li> <li>Mineralisation is flat lying and in a blanket form, so no key orientations of mineralisation have yet to be defined.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are collected in plastic bags and sealed at the rig. Subsequently, ten samples are placed in each polyweave bag, and that is sealed via cable ties.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The Managing Director has reviewed processes and procedures and determined that sampling techniques are adequate for the purpose of this drilling.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures,</li> </ul>	<ul style="list-style-type: none"> <li>The Sierra Cuadrada project consists of 29 licences (as either 'Statements of Discovery' or 'Mining Concessions' ) registered in the name</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</p> <ul style="list-style-type: none"> <li>▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<p>of Piche’s Argentinian subsidiary, Piche Resources S.A. These licences cover a total area of 633.94 km<sup>2</sup>. Only 5 of the 29 tenements have been tested in part, or in full by auger drilling.</p> <ul style="list-style-type: none"> <li>▪ There are no known issues related to tenement security or impediments to obtaining a licence to operate.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>▪ Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Argentina’s National Atomic Energy Commission (CNEA) carried out regional exploration in the 1960-70s and identified the ‘Sierra Cuadrada Uranium District’.</li> <li>▪ Maple Minerals Exploration (Maple) conducted surface gamma spectrometry, surface geochemical sampling and geological reconnaissance between 2006 and 2011.</li> <li>▪ PU308 conducted reconnaissance fieldwork between 2010-and 2012.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>▪ Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sierra Cuadrada uranium mineralisation is found within the palaeochannels of an ancient fluvial system within the San Jorge Basin.</li> <li>▪ During the Late Cretaceous, magmatism led the formation of the Somún Cura Massif. Rhyolitic ignimbrites, andesites, dacites and tuff were deposited, then weathered and carried by water into the San Jorge Basin, forming the uranium rich Chubut Group sandstones.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> <li>– easting and northing of the drillhole collar</li> <li>– elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>– dip and azimuth of the hole</li> <li>– downhole length and interception depth</li> <li>– hole length.</li> </ul> </li> <li>▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Apart from the very shallow auger drilling reported here, no drilling has been conducted to date.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No data aggregation has been undertaken.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The stratigraphy is flat lying and mineralisation is generally conformable with the various lithotypes. The actual mineralisation widths and intercepts lengths are expected to be within the sample interval of 0.5m.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>For diagrams etc, the reader is referred to Section 3.2 of the Independent Geologists Report (prepared by SRK) in the Company's Prospectus lodged on 11 July 2024</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All historical surface sampling results are displayed on maps and statistical summaries are included in the Independent Geologists Report referenced above.</li> <li>No assay results have been included in this report</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Maple Minerals conducted geological mapping and identified the extend of the outcropped uranium-bearing palaeochannel, which are mainly composed of conglomerate and sandstone. Mineralised wood fossils were also found.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Surface mapping, auger sampling and trenching are planned considering the shallow mineralisation.</li> <li>Geophysics survey will be employed to assist in identifying unexposed mineralisation.</li> </ul>