26th February 2025

External review of Ashburton drilling identifies extensive high grade uranium host and confirms exploration model

HIGHLIGHTS

- **Results from Piche's 2024 drilling programme and historical drill holes have confirmed an extensive host of mineralisation.**
- **The talus flow unit is at the Lower/ Mid Proterozoic unconformity providing a widespread zone of increased permeability for uranium minerals.**
- **Carbonaceous shale clasts within the talus flow create optimal chemical conditions for the precipitation of U-bearing fluids.**
- **The study also confirm the W/NW trending basement structures provide plumbing for U-bearing fluids.**
- **Future drilling is expected to significantly extend mineralisation.**

Piche Resources Limited (ASX: PR2) **("Piche" or the "Company")** is pleased to announce that its reinterpretation of the geology on its Ashburton uranium project by Perth based OmniGeox, is now complete. This combines a review of the historical drill holes, and the 2024 drill programme, which has confirmed the Company's interpretation of uranium mineralisation controls.

Geological logging has highlighted the presence of a previously unrecognized, well-defined talus flow unit throughout most of the Angelo area. The talus flow can be traced in the drilling along the unconformity and remains open downdip and potentially along strike in all directions. The talus unit varies in thicknesses up to 50m.

All three zones of mineralisation defined at Angelo A are associated with the talus flow, with grades and thicknesses increasing with the black shale content of the talus. Uraninite is the dominant uranium ore mineral at Angelo with minor gummite as fracture fill or rimming talus clasts.

Two zones of uranium mineralisation at Angelo B are also associated with the talus flow. Mineralisation is dominantly secondary and concentrated on late fractures and in veining and potentially remobilised from a concentration down dip along the unconformity. Uranium is present as uraninite, gummite, and secondary U-Cu-P mineral torbenite in fracture fill.

The identification of the talus unit, the critical role of carbonaceous shale and the strong correlation between pathfinder elements and uranium make it very likely that future drilling programmes will significantly extend the mineralisation at the numerous uranium anomalies and occurrences over the 55km of strike target horizon.

Figure 1: Modern-day Talus flow[1] - the accumulation of large rock fragments derived from steep slopes or cliffs by mechanical weathering.

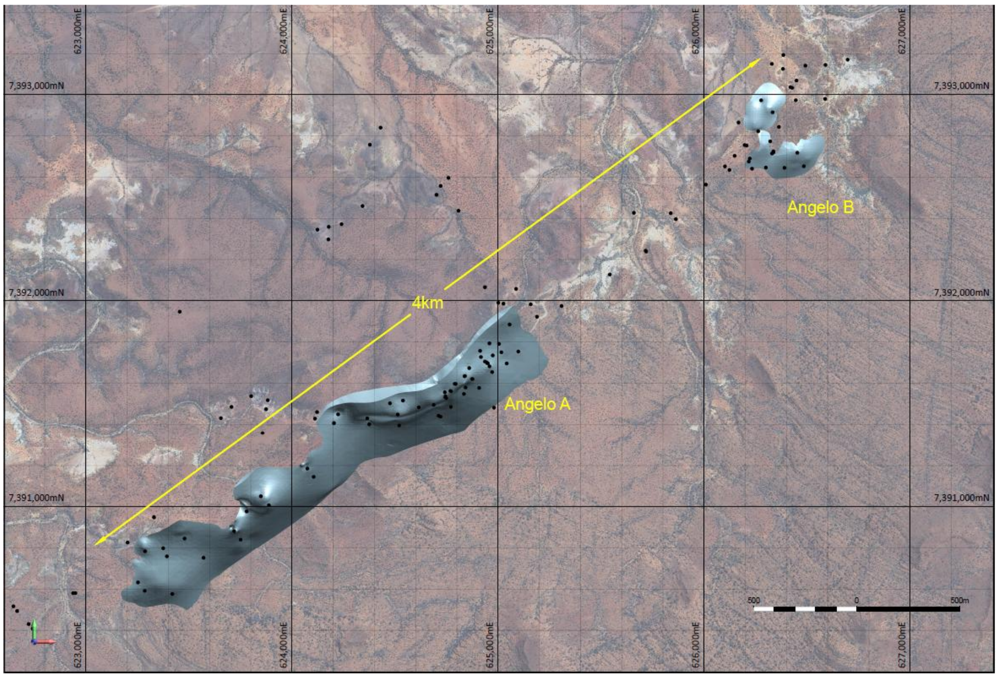

Figure 2: Model of the steeply dipping talus flow at Angelo A & B. Black dots are historical drill collars. The talus flow is expected to be continuous between Angelo A & B as lithologies in the broad-spaced historical holes have not been defined.

1 (Note: this is an example from North America and is not related to a Piche project)

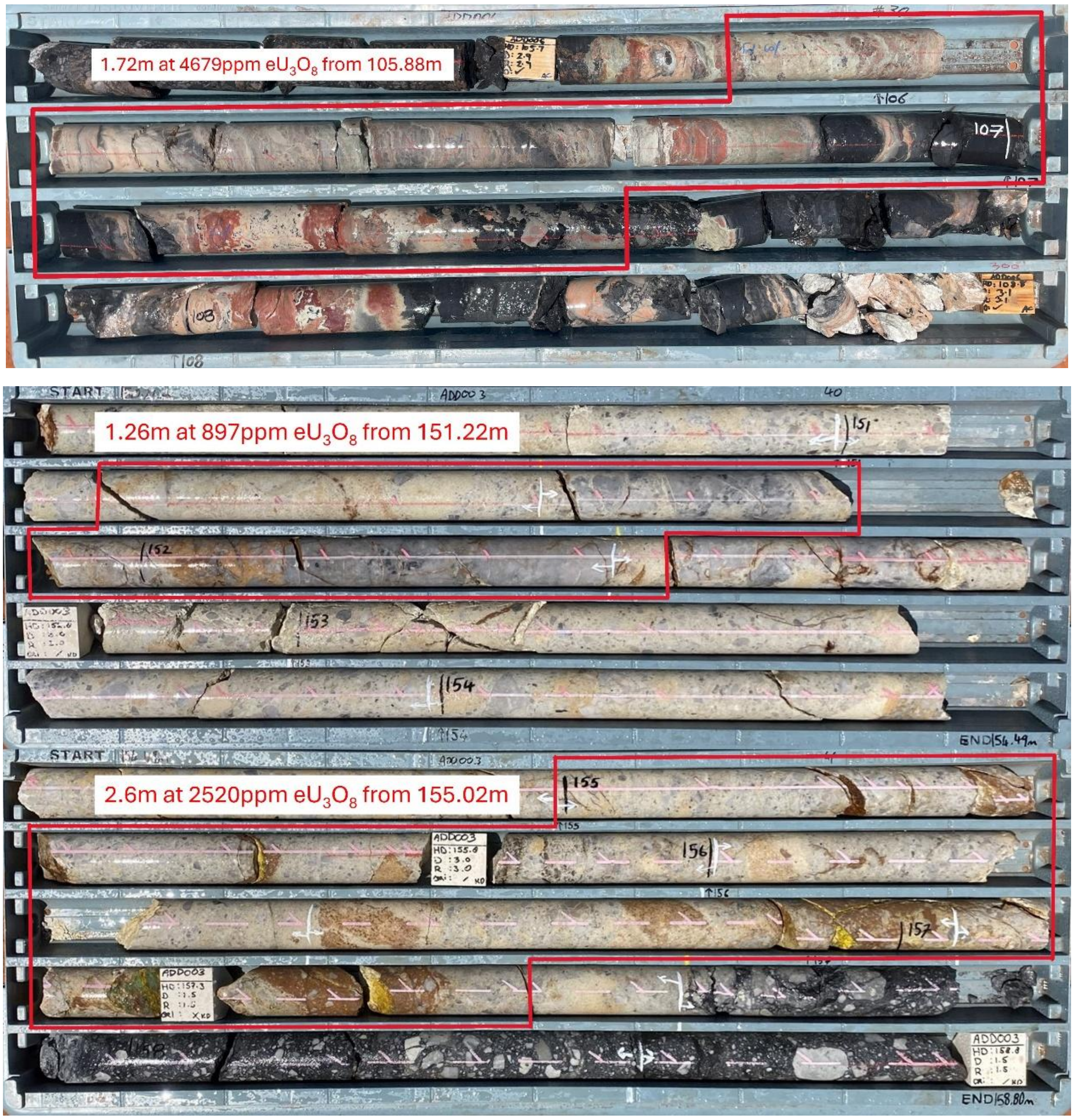

Figure 3: Top image – Drill core photo highlighting the high-grade uranium mineralisation in talus unit in diamond drill hole ADD006.[2]

Bottom image - Drill core photo highlighting the high grade uranium mineralisation in talus unit in diamond drill hole ADD003.[3]

The higher-grade shoot plunge of the uranium mineralisation is defined by the intersection of the N/NW striking basement structures and the talus flow. This intersection provides an optimal location for the uranium precipitation.

An analysis of the multielement geochemistry has demonstrated a close correlation between the U_3O_8 grades and lead (Pb), antimony (Sb) and arsenic (As). This pathfinder association will be used to accelerate subsequent exploration programmes.

Pathfinders for this style of uranium mineralisation are also commonly pathfinders for gold.

[2] **refer to Piche ASX announcement on 13 November 2024**

[3] **refer to Piche ASX announcement on 30 October 2024**

Stephen Mann, Managing Director, commented on the updated geological model: "We are very excited by the significant advances this study has made in our understanding of the controls on mineralisation. Key discoveries include the identification of the talus unit, the critical role of carbonaceous shale and the strong correlation between pathfinder elements and uranium, are pivotal. I am confident that this deeper understanding will be instrumental in the next phase of drilling of the numerous uranium occurrences over the 55km's of target horizon."

This announcement has been approved by the Board of Directors

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

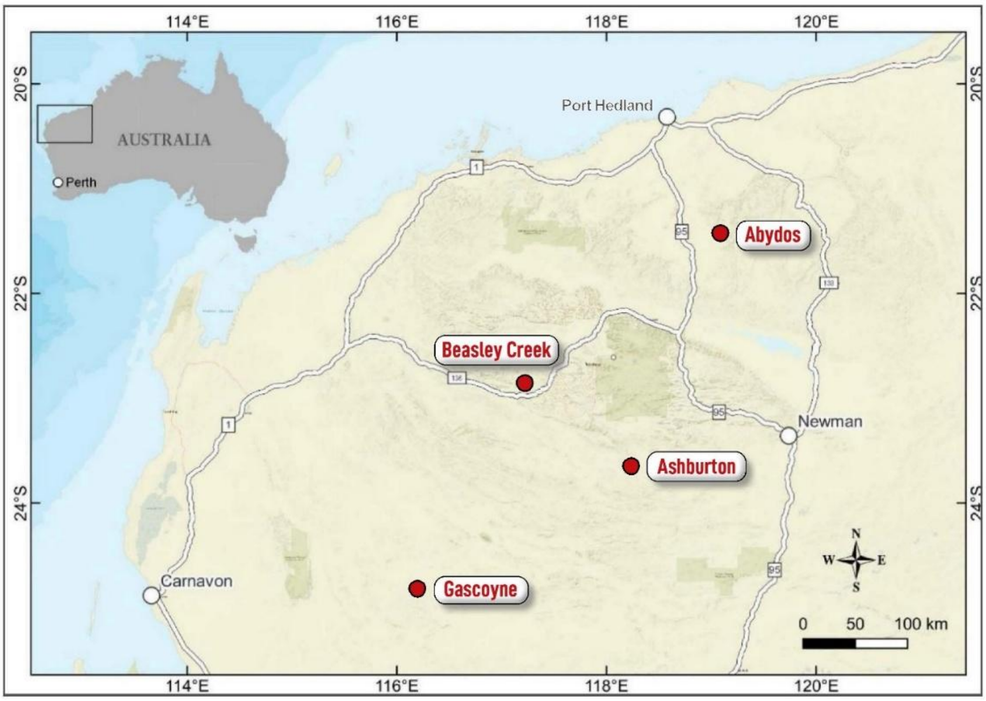

Figure 4: Location of Piche's Ashburton Project

About the Ashburton Uranium Project

The Ashburton project area is located approximately 140km west-southwest of Newman in the Pilbara region of Western Australia (Figure 3). Piche holds three tenements across approximately 122km^2 in the area, which hosts significant potential for uranium exploration and development.

Previous exploration at the Ashburton Project area primarily targeted the unconformity between the mid-Proterozoic sandstones and the early-Proterozoic basement complexes.

The Ashburton Project hosts unconformity-related uranium mineralisation, a style of deposit that accounts for approximately 20% of Australia's total uranium resources and about one-third of the world's uranium resources[1]. These deposits include some of the largest and richest uranium reserves globally. Key uranium minerals in these deposits include uraninite and pitchblende. Major occurrences of this mineralisation are found in the Athabasca Basin (Saskatchewan), Thelon Basin (Northwest Territories) in Canada, and in Australia's Alligator Rivers region (Pine Creek Geosyncline, NT) and the Rudall River area (WA). In both Canada and Australia, mineralisation is typically located at or near the unconformity and in the basement complex and can also occur well below the unconformity.

At the Ashburton Project, uranium mineralisation is located along the contact between the Lower Proterozoic Wyloo Group and the Mid-Proterozoic Bresnahan Group. Significant mineralisation has already been identified through broad-spaced drilling at the Angelo A and B prospects. The first phase of drilling by Piche has not only confirmed uranium presence at or near the unconformity but also in units directly above and below it, extending into the underlying basement rocks. Mineralisation is commonly associated with hematitic alteration of feldspathic, medium- to coarse-grained sandstones, and is spatially related to carbonaceous and graphitic shales. Visible uraninite has been observed in several of the intersections.

[1] https://world-nuclear.org/information-library/nuclear-fuel-cycle/uranium-resources/geology-of-uranium-deposits#

PICHE

JORC Code, 2012 Edition – Table 1

Ashburton Project

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ 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. ▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. ▪ Aspects of the determination of mineralisation that are Material to the Public Report. ▪ In cases where 'industry standard' work has been done; this would be relatively simple (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.	▪ Angelo A and B were sampled by reverse circulation (RC) drilling methods. Most drill holes were angled between 70 and 80 degrees to the northwest to comply with previous drilling and to optimally intersect the flatter lying unconformity style mineralisation, but several holes have been oriented perpendicular to that direction to test for a northwest structural control. ▪ Drill holes were probed by a calibrated downhole gamma tool to obtain a total gamma count reading and processed to yield equivalent U_3O_8 values (eU_3O_8) with depth at 2 cm intervals. Where possible, drill holes were gamma logged both inside and outside the drill rods. Although every metre of the drill hole has been sampled, intervals of at least 3m above to 3m below significant eU_3O_8 intercepts (>150 ppm) are being separately sampled for routine chemical assay. ▪ Chemical assays for uranium, and a suite of pathfinder elements has been undertaken by Australian Laboratory Services (ALS) in Perth ▪ The material from each metre of reverse circulation was collected in a cyclone and two, 2kg samples were collected. Through a riffle splitter.
Drilling techniques	▪ 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.).	▪ Drilling method was typically reverse circulation (RC) drilling to between 114 and 174 m depth. One reverse circulation pre-collar was completed to 66m and another to 150m. All holes were downhole surveyed, and cored intervals were oriented.
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.	▪ Downhole density logging was also completed in each hole to determine the possibility of sample loss, or excess sample. Downhole density logging confirmed the competency of drill hole stability in all holes. ▪ Sample recovery was considered close to 100%

Criteria	JORC Code explanation	Commentary
Logging	■ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. ■ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. ■ The total length and percentage of the relevant intersections logged.	■ The reverse circulation drill holes were lithologically logged with descriptions of grainsizes, alteration, mineralogy, colour and weathering. Water table depths were documented. ■ Logging was generally qualitative in nature. Samples of each metre of RC drilling were collected in chip trays and were photographed. All drill holes were logged for their entire length.
Sub-sampling techniques and sample preparation	■ If core, whether cut or sawn and whether quarter, half or all core taken. ■ If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. ■ For all sample types, the nature, quality and appropriateness of the sample preparation technique. ■ Quality control procedures adopted for all 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.	■ Downhole radiometric surveys were conducted to determine the uranium grades. ■ Downhole density logging was completed on each hole to confirm the sample quality, sample loss, and depth to water table. The density logs also assisted it separating subtle changes in the lithologies. ■ One metre RC samples have been collected for the entire hole, whilst intervals throughout the mid Proterozoic cover sequence have been 3m composited. ■ One metre field duplicates were taken for each sample drilled. ■ Laboratory samples were dispatched to Australian Laboratory Services (ALS) in Perth, and industry-standard sample preparation and analyses was completed.
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 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	■ Prior to downhole gamma logging, the mineralised intervals are identified using a handheld scintillometer. ■ Results reported in this announcement are equivalent U_3O_8 (eU_3O_8) values which have been calculated from downhole gamma logging data. One metre geochemical samples from the RC drilling were submitted for geochemical analyses at Australian Laboratory Services (ALS) in Perth. Samples were assayed for uranium and a range of other elements. These results are also reported here. ■ One-metre samples were crushed, pulverised and analysed for 34 elements by four acid digest ICP-AES, whilst one rare earth element was by fusion XRF. ■ Downhole gamma logging is a commonly used method to estimate uranium grade in this style of mineralisation. ■ Blanks and duplicates will be used when samples are submitted to the assay laboratory.

Criteria	JORC Code explanation	Commentary
		■ Downhole gamma logging data was collected using calibrated Auslog AO75 33mm S/N 3939 Gamma probe. The probes are run at speeds not exceeding 4m per minute in country rock, and 2m/minute through mineralised zones, and collect data at 2cm intervals. The density probe used is the 605D S/N 331. The probes were calibrated at the Adelaide Calibration Model pits in Adelaide, South Australia, and the calibration checked on an ongoing basis using API standard reference materials. In addition, established a reference borehole on site which is used to compare probes, test for instrument drift over time, and confirm eU_3O_8 correction factors. The company is using an independent contractor to carry out gamma logging of all drill holes Gamma measurements are converted to equivalent U_3O_8 values (eU_3O_8) by an algorithm that considers the probe and crystal used, density, hole diameter, groundwater where applicable and drill rod or PVC pipe thickness. Down-hole gamma probe data is also deconvolved to more accurately reflect the true thickness of mineralisation.
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 verification, data storage (physical and electronic) protocols. ■ Discuss any adjustment to assay data.	■ Downhole gamma logging has been completed by an independent contractor, and the determination and processing of that data is completed by another independent consultant. ■ Verification of significant results has been confirmed by the comparison of downhole gamma probe results and wet geochemical assay results. ■ Four holes drilled during this programme are twins of historical drill holes. In three of the four holes, there is good correlation of grades in the twinned holes, but due to the advanced accuracy of the modern equipment (compared to the previous holes from 40 years ago) the intervals are more detailed. ■ No adjustments have been made to any 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.	■ As many of the historical drill as possible have been identified and surveyed using a Digital GPS. ■ All drill holes completed in this current programme are surveyed by an independent contractor using a Digital GPS. ■ Various Australian grid systems have been used historically for previous exploration in the area, such as AMG66/Zone 50 and MGA94/Zone 50,

Criteria	JORC Code explanation	Commentary
		depending on the years when exploration activities were carried out. Piche has located many of the historical drill holes at Angelo A & B and converted the coordinates to GDA94.
Data spacing and distribution	▪ Data spacing for reporting of Exploration Results. ▪ Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. ▪ Whether sample compositing has been applied.	▪ Historical drill holes in Angelo A & B prospect were spaced at 50 to 150m intervals, but sections only had one, possibly two holes. ▪ Drilling is at an early stage and grade thickness and continuity is too early to estimate.
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 if material.	▪ Drilling is too preliminary to determine the controls on mineralisation. Mineralisation is associated with the mid Proterozoic/ Early Proterozoic unconformity. Mineralisation may have been introduced though basement feeder structures. Piche has tested the hypothesis of a northwest trending structural control and found that those structures do host low grade uranium mineralisation.
Sample security	▪ The measures taken to ensure sample security.	▪ The chain of custody of samples including dispatch and tracking is managed by independent consultant staff. Samples are isolated on site in sealed bulka-bags prior to transport to the assay laboratory by professional haulage contractors.
Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data.	▪ No audits have been carried out on the current drilling programme.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	▪ Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. ▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	▪ Ashburton Project consists of three licences, E52/3653, E52/3654 and E52/3655. The drilling reported here is located on E52/3653. The licences are held by South Coast Minerals Pty Ltd, a wholly owned subsidiary of Piche.
Exploration done by other parties	▪ Acknowledgment and appraisal of exploration by other parties.	▪ All historical notable exploration results over the planned drilling area were conducted by Pancontinental Mining Limited.
Geology	▪ Deposit type, geological setting and style of mineralisation.	▪ The Ashburton project area is situated in the southwest Pilbara region. The basement rocks consist of the Sylvania Inlier, an Archean

Criteria	JORC Code explanation	Commentary
		granite-greenstone terrane. Overlying the Inlier is the Hamersley Basin, a Late Archean to Early Proterozoic depositional basin. In the project area, only the volcaniclastics Fortescue Group and the BIF ironstone hosted Hamersley Group are present. The Ashburton Basin, an arcuate belt of sedimentary and volcanic rocks, unconformably overlies the Hamersley Basin. The Ashburton Basin is unconformably overlaid by the Bresnahan Basin, consisting of the Cherrybooka Conglomerate and the Kunderong Sandstone. ■ The Ashburton Basin was both deposited and deformed during the Capricorn Orogeny, with deformation consisting of open to isoclinal folding with normal, reverse, and wrench faulting. The Hamersley Basin and Ashburton Basin sequences have undergone very low-grade metamorphism (mostly lower greenschist facies), whereas the Bresnahan Group was unaffected by the Capricorn Orogeny and is unmetamorphosed. ■ Exploration in the Ashburton project area has identified significant mineralisation at or near the unconformity between the Lower Proterozoic Wyloo Group and overlying Middle Proterozoic Bresnahan Basin. The unconformity contact is commonly named as the Bresnahan Boundary Fault (BBF).
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 drillhole collar – elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar – dip and azimuth of the hole – downhole length and interception depth – hole length. ■ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	■ All drill hole information from the reported programme is reported in Table 2 of this report. ■ A summary of significant drillhole intercepts determined by gamma logs and geochemical assays are referenced in this Report. ■ The dips and azimuths of all holes have been measured using a downhole gyro. ■ All drill intersections are downhole lengths as there is inadequate information to determine true widths.
Data aggregation methods	■ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of	■ For the drill holes reported here, main intersections are reported at an approximate 250ppm eU_3O_8 cutoff grade with varying amounts of internal waste.

Criteria	JORC Code explanation	Commentary
	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 be clearly stated.	▪ Except for eU_3O_8, no metal equivalent results are reported.
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 drillhole angle is known, its nature should be reported. ▪ 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').	▪ All drill hole sample results are reported as downhole length. The true width of the mineralisation is not known.
Diagrams	▪ Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	▪ Maps presenting the regional and local geology are included in this report.
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 avoiding misleading reporting of Exploration Results.	▪ All results greater than 250ppm eU_3O_8 over 0.5m have been reported.
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.	▪ Numerous geophysical surveys have been conducted historically. While only scanned maps were preserved for exploration in the 1970-80s, a comprehensive geophysics database was kept by U3O8 Limited for 2007-13. These surveys included airborne magnetics and radiometrics, TEMPEST airborne electromagnetics and HyVista hyperspectral scanning. The U3O8 Limited survey covered areas outside Piche's drilling area.
Further work	▪ The nature and scale of planned further work (e.g. 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	▪ Piche is planning a diamond drilling following this reverse circulation drilling programme, during which it intends to twin other historical drill holes to confirm the historical downhole gamma results.

Criteria	JORC Code explanation	Commentary
	areas, provided this information is not commercially sensitive.	