

26th September 2024

Outstanding drill results confirm high grade uranium mineralisation at the Ashburton Project

HIGHLIGHTS

- Assay results from the first six reverse circulation (RC) drill holes completed at the Angelo A prospect within Piche's Ashburton project have all returned significant high grade uranium mineralisation.
- Equivalent U₃O₈ concentrations have been calculated from downhole gamma surveys and results include:
 - ARC001 6.98m @ 1,617 ppm eU₃O₈ from 101.84 metres
 - ARC002 4.36m @ 2,205 ppm eU₃O₈ from 109.89 metres
 - ARC003 3.96m @ 1,516 ppm *e*U₃O₈ from 86.89 metres
 - ARC004 6.02m @ 801 ppm eU₃O₈ from 83.55 metres
 - o ARC006 3.45m @ 5,129 ppm *e*U₃O₈ from 137.62 metres
 - incl 0.34m @ 16,050 ppm *e*U₃O₈ from 139.11 metres
 - ARC007 1.30m @ 503ppm *e*U₃O₈ from 123.37 metres.
- The ongoing drilling programme is designed to confirm previous high grade uranium results at the Angelo A & B prospects, test a revised model for the controls on mineralisation and identify extensions to the existing mineralisation.
- The drilling is targeting Proterozoic unconformity style uranium mineralisation, like the Pine Creek Geosyncline in Australia and the Athabasca Basin in Canada.
- Further RC results will be released as the drilling programme continues and a diamond drill rig will be mobilised to site in the coming week.

Piche Resources Limited (ASX: PR2) ("**Piche**" or the "**Company**") is pleased to announce the first outstanding intersections received from its reverse circulation drilling programme on its Ashburton project in Western Australia. The results confirm the mineralisation and its downdip continuation at the Angelo A prospect.

The continuing drilling programme is being undertaken at, and along strike of, the Angelo A prospect. No exploration activities have been carried out at Angelo A over the last 40 years.

 Table 1: Angelo A Reverse Circulation drill hole intersections (cut-off grade of 250ppm eU3O8)
 (All thicknesses are downhole thicknesses as there is currently insufficient information to accurately calculated true widths)

Drill hole	From	То	Interval	Grade
ID	(m)	(m)	(m)	(<i>e</i> U₃O ₈)
ARC001	101.84	108.82	6.98	1,617
incl	102.0	103.66	1.66	3,163
	107.54	108.66	1.12	2,860
ARC002	109.89	114.25	4.36	2,205
incl	110.19	114.01	3.82	2,436
	122.21	124.21	2.00	712
incl	123.01	123.55	0.54	1,348
ARC003	51.91	54.73	2.82	526
and	78.93	81.01	2.08	344
and	86.89	90.85	3.96	1,516
incl	87.03	89.47	2.44	2,132
and	92.11	92.71	0.6	1,085
	96.07	97.17	1.1	940
incl	96.33	96.91	0.58	1,294
ARC004	55.19	55.97	0.78	286
	83.55	89.57	6.02	801
incl	87.11	88.09	0.98	1,920
ARC006	137.62	141.1	3.48	5,129
incl	137.92	140.98	3.06	5,761
incl	138.35	140.25	1.90	7,616
incl	139.11	139.45	0.34	16,050
ARC007	123.37	124.67	1.3	503
	137.23	137.87	0.64	382

Table 2: Drill hole details of holes referenced above

(Table 2 documents the drill hole location details. Coordinates are reported in GDA94)

Drill Hole	Coordinates		Dip	Azimuth	Depth
ID	N	E			(m)
ARC001	7391535	624745	-70	335	150
ARC002	7391526	624752	-75	335	150
ARC003	7391592	624797	-78	338	120
ARC004	7391631	624840	-80	330	114
ARCD005*	7391621	624878	-80	330	66
ARC006	7391577	624911	-75	330	174
ARC007	7391699	624949	-80	330	150

*ARCD005 is a pre-collar to a planned diamond drillhole which will be completed on arrival of the diamond drill rig

The drill rig will move to Angelo B prospect, approximately 1.3km to the northeast, following the completion of the Angelo A drilling.

This programme will be followed by a diamond drilling programme scheduled for later this month. These drilling programmes are planned to confirm the results from previous exploration by drilling several twin holes, to test a revised model for the control of the uranium mineralisation and explore for extensions to the mineralisation identified between 1973 and 1984.

The project area is located approximately 140km to the west-southwest of Newman in the Pilbara region of Western Australia (Figure 1). Piche holds three tenements totalling about 122km² in its Ashburton Project (Figure 2).

Piche's Managing Director, Stephen Mann, commented:

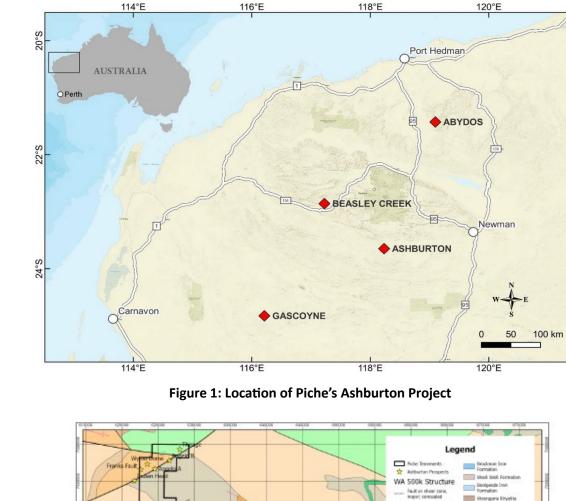
"The Company is very excited following the receipt of results from the first six holes of Piche's initial drilling programme on its Ashburton Project. Not only have we confirmed the historical results with several twin holes, but we have shown that the mineralization continues downdip. Drilling to date has confirmed that mineralisation occurs within the typical unconformity model, with highly altered uranium rich sandstones at the unconformity, and the potential of mineralized "feeder" zones extending steeply below that unconformity zone. It is expected that further drilling in this campaign should result in more clarity of the distribution and controls of mineralization".

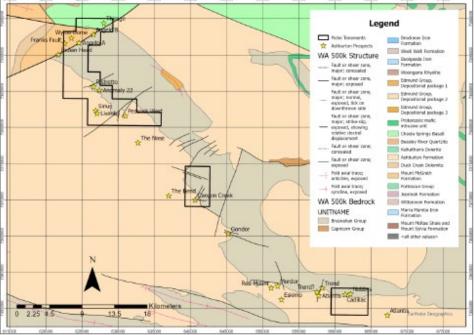
Previous explorers at the Ashburton Project area focused their efforts on the unconformity between the mid Proterozoic sandstones and the early Proterozoic basement complexes.

The Ashburton Project area hosts unconformity-related uranium mineralisation. Unconformity uranium style deposits constitute approximately 20% of Australia's total uranium resources and about one-third of the western world's uranium resources and include some of the largest and richest uranium deposits². Minerals are uraninite and pitchblende. The main deposits occur in Canada (the Athabasca Basin, Saskatchewan and Thelon Basin, Northwest Territories); and Australia (the Alligator Rivers region in the Pine Creek Geosyncline, NT and Rudall Rivers area, WA¹). In both Canada and Australia mineralisation is often found at the unconformity and in the basement complex well below the unconformity.

Uranium mineralisation at the Ashburton Project area occurs along the Lower Proterozoic Wyloo Group/Mid Proterozoic Bresnahan Group contact. Uranium mineralisation has previously been identified from broad spaced drilling at Angelo A and B prospects (Figure 3). Mineralisation intersected in this first phase of drilling by Piche has identified significant uranium at, or near the unconformity, but also in units immediately above the unconformity and well into the underlying basement units. Mineralisation is commonly associated with hematitic alteration of felspathic medium to coarse grained sandstones and is spatially associated with carbonaceous and graphitic shales. Visible uraninite has been recognised in several intersections.

¹ <u>https://world-nuclear.org/information-library/nuclear-fuel-cycle/uranium-resources/geology-of-uranium-deposits#</u>





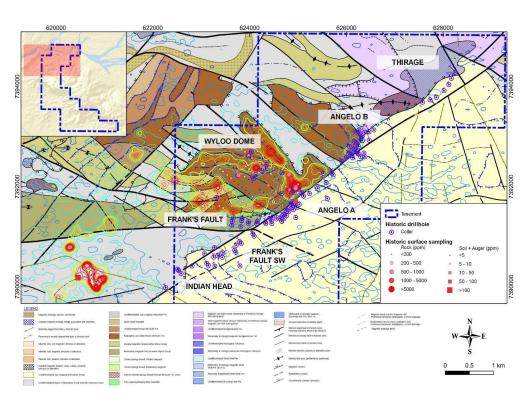
Source: Modified after GSWA

Figure 2: Piche's Tenement holding in its Ashburton Project

20°S

22°S

24°S





This announcement has been approved by the Board of Directors.

For further information, please contact:

John (Gus) Simpson Executive Chairman Piche Resources Limited P: +61 (0) 414 384 220

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.



JORC Code, 2012 Edition – Table 1

Ashburton Project

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 was sampled by reverse circulation (RC) drilling methods. 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. Drill holes were probed by a calibrated downhole gamma tool to obtain a total gamm count reading and processed to yield equivalent U3O8 values (eU3O8) with depth at 2 cm intervals. Where possible, drill holes were gamma logged both inside and outside the drill rods. Although every meter of the drill hole habeen sampled, intervals of at least 3m above t 3m below significant eU3O8 intercepts (>150 ppm) are being separately sampled for routine chemical assay. Chemical assays for uranium, rare earths, and other pathfinder elements will ultimately be undertaken. The material from each meter 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 17 m depth. One reverse circulation precollar was completed to 66m.
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%
Logging	Whether core and chip samples have been geologically and geotechnically logged to a	The reverse circulation drillholes were lithologically logged with descriptions of

ACN: 659 161 412 | www.piche.com.au A: Floor 4, 225 St Georges Terrace, Perth 6000, WA | P: +61 0 414 384 220 | E: info@piche.com.au



Criteria	JORC Code explanation	Commentary
	 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. 	 grainsizes, alteration, mineralogy, colour and weathering. Water table depths were documented. Logging was generally qualitative in nature. Samples of each meter were collected in chip trays and were photographed. Some of the historical drill core is still available on site. These have been reviewed where hole numbers and depths are recognisable. 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 subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 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 meter RC samples have been collected for the entire hole, whilst intervals thought the mid Proterozoic cover sequence will be 3m composited. One meter field duplicates were taken for each sample drilled. Laboratory samples have not been dispatched but industry standard sample preparation is planned.
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 U3O8 (eU3O8) values which have been calculated from downhole gamma logging data. Samples have not yet been submitted for geochemical analyses but will be reported in future announcements. 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. 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



Criteria	JORC Code explanation	Commentary
		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 eU308 correction factors. The company is using an independent contractor to carry out gamma logging of all drillholes Gamma measurements are converted to equivalent U308 values (eU308) by an algorithm that takes into account the probe and crystal used, density, hole diameter, ground water 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 is completed by an independent contractor, and the determination and processing of that data is completed by another independent consultant. 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, 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. 	 Historical drill holes in Angelo A prospect were spaced at roughly 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.



Criteria	JORC Code explanation	Commentary
	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 if material. 	 Drilling is too preliminary to determine the controls on mineralisation. Mineralisation is definitely associated with the mid Proterozoic/Early Proterozoic unconformity. The Feeder structures for that mineralisation, if present are currently unknown, but Piche will be testing the hypothesis of a northwest trending structural control with subsequent drilling.
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 granite-greenstone terrane. Overlying the Inlie 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



Criteria	JORC Code explanation	Commentary
		 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 drillholes: 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 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 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. 	 For the drillholes reported here, main intersections are reported at a 250ppm eU308 cutoff grade with minimum internal waste. Included intervals are reported using a 1000ppm eU308 or 5000 eU308 (in the case of ARC006) cut-off grade. As the data is collected on average 2cm intervals, weighted averages are used throughout. Except for eU308, no metal equivalent results are reported.

ACN: 659 161 412 | www.piche.com.au



Criteria	JORC Code explanation	Commentary
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 to avoid misleading reporting of Exploration Results. 	 All results greater than 250ppm eU308 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 the period of 2007-13. These surveys included airborne magnetics and radiometrics, TEMPES 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 areas, provided this information is not commercially sensitive. 	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.