

## West Bryah review shows potential for uranium and rare earth elements

### HIGHLIGHTS:

- Desktop review shows rare earth element and uranium potential
- Follow up of reported pegmatites with rock chips collected for rare earth element (REE) assaying
- Yarlalweelor complex and the Despair Granite is Archean I type granite with mapped pegmatites historically reported
- Uranium intersection of **35m at 503ppm U<sub>3</sub>O<sub>8</sub>** less than 200m from the tenement boundary
- Anomalous Lanthanum values to be followed up and investigated in the field
- Geologists currently on the ground mapping and collecting rock chips samples

Bryah Resources Limited (ASX: BYH, “Bryah” or “the Company”) is pleased to advise that it has completed a desktop review on the West Bryah tenements and has deployed a team to the field to inspect and sample previous reported areas of interest.

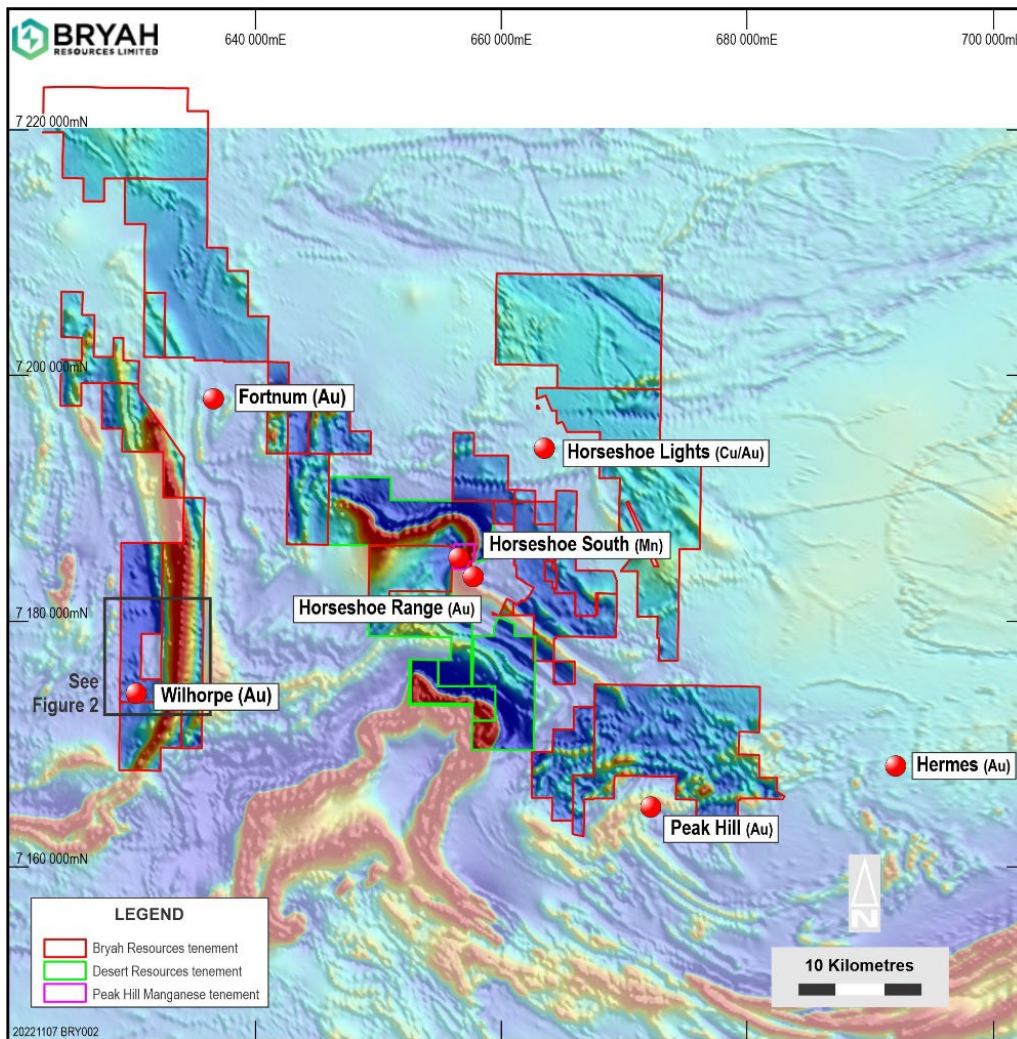
Commenting on the inhouse work, Bryah CEO Ashley Jones said:

*“The Yarlalweelor Gneiss complex and the Despair Granite is reported to be intruded by pegmatites from old exploration reports. The Western Australian Mineral Exploration Reports (WAMEX) and Geological Survey of Western Australia (GSWA) database quote pegmatites, significant uranium results and anomalous rare earth element (REE) results. These tenements were acquired by Bryah in late 2021 and were initially thought only interesting from a gold perspective, with the tenement boundary straddling the historically mined Wilthorpe pit. As part of a systematic geological review of the West Bryah Tenements we have identified exciting commodities to investigate in this area.”*

Late in 2021 Bryah acquired three tenements in the western side of the Bryah Basin, complementing existing tenure. Exploration licences (E52/3848, E52/3898 and E52/3963) cover approximately 50 km<sup>2</sup>. The largest tenement (E52/3898) covers exploration ground adjacent to the historic Wilthorpe gold mine. The Wilthorpe gold mine is a shallow open cut mine, which straddles the boundary of E52/3898 and adjacent E52/2059, previously held by Westgold Resources Limited (ASX:WGX). The main lithological units in the review area are the Despair Granite, The Yarlalweelor Gneiss complex and the Labouchere Formation.



REEs have diverse applications in electrical and electronic components, lasers, glass, magnetic materials, and industrial processes. Sample assays recorded in the GSWA geochemistry database from the Despair Granite are anomalous in Lanthanum (La) which could be an indicator of other REEs. The La values from two samples in the dataset have values of 47ppm and 67ppm respectively. The Despair Granite is located on the eastern side of the Yarlalweelor Gniess complex, which is currently being explored by ASX companies at Mt Clere REE prospect and the Red Peak Lithium project. Multiple references to pegmatites are recorded in the geological logs from the Ann prospect drilling<sup>1</sup> and will be followed up.



**Figure 1 Bryah Basin Tenements - Wilthorpe area under review**

The Ann uranium prospects (see Figure 2 for location) recorded on tenement E52/3898 have the best uranium results which were drilled in 1978 returned **6m at 505ppm  $U_3O_8$** <sup>1</sup> (Table 2). Additionally only 180m off the licence to the west of the tenement, the prospect Kangaroo Ridge, was drilled in 2010. The best result was in hole KRD10-02 of **35m at 503ppm  $U_3O_8$**  including **5m at 1069ppm  $U_3O_8$** <sup>2</sup>

<sup>1</sup> Wamex Report A8414 March 1979 Agip Australia

<sup>2</sup> Wamex Report A89369 FYI Resources Yarlalweelor Project Annual Report Jan 2011

(Table 1). The geological description of the mineralised intervals is a sheared biotite shist within the granite, with petrographic work on samples confirming the uranium mineral 'uraninite'.

Dominion Mining Limited mined the Wilthorpe gold mine in 1993-94, producing 4,650 ounces of gold from 72,817 tonnes of ore grading 2.0 g/t Au<sup>3</sup>. There has been limited gold exploration at Wilthorpe reported since 1994.

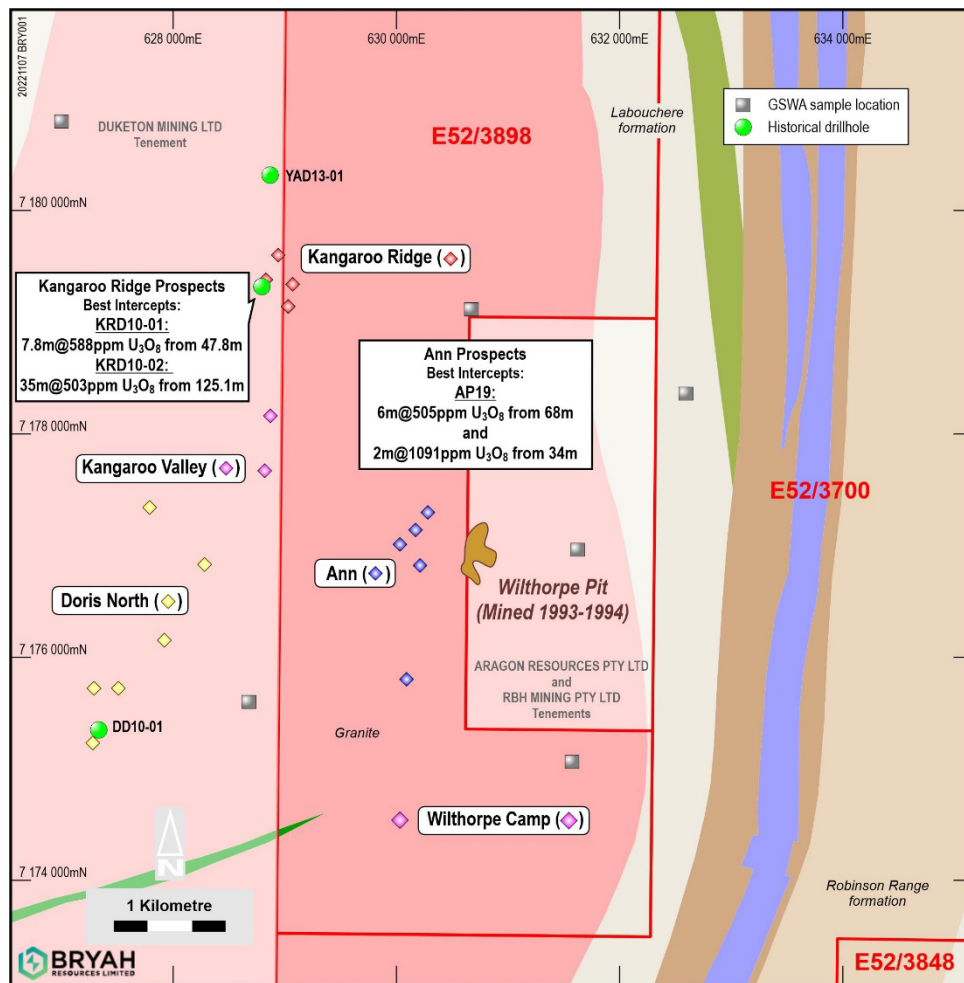


Figure 2 Prospect and drill hole locations on geological map

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This announcement has been produced in accordance with the Company's published continuous disclosure policy and has been approved by the Board

<sup>3</sup> Annual Report for the Wilthorpe Project for the Period 09/06/1999-08/06/2000 E52/1341. WAMEX Ref A61069



## ABOUT BRYAH RESOURCES

### Forward Looking Statements

*This report may contain certain “forward-looking statements” which may not have been based solely on historical facts, but rather may be based on the Company’s current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any “forward looking statement” to reflect events or circumstances after the date of this report, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.*

### COMPETENT PERSON STATEMENT – EXPLORATION RESULTS AND EXPLORATION TARGETS

*The information in this announcement that relates to Exploration Results is based on information compiled by Mr Ashley Jones, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Jones is an employee of Bryah Resources Limited (“the Company”). Mr Jones 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 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Jones consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.*

*Where the Company refers to Exploration Results in this announcement (referencing previous releases made to the ASX), the Company is not aware of any new information or data that materially affects the information included in the relevant market announcements.*

## APPENDIX 1

**Table 1 WAMEX Report A89369 Uranium intersection table.**

Hole ID	Northing	Easting	Az	Dip	Final Depth (m)	From (m)	Interval (m)	U <sub>3</sub> O <sub>8</sub> (ppm)
<b>KANGAROO RIDGE</b>								
KRD10-01	7179320	628793	80	-65	59.8	47.8	7.8	588
					includes	53.8	1.0	1,873
KRD10-02	7179314	628754	130	-60	200.5	125.1	35.0	503
					includes	127.1	5.0	1,069
						142.1	2.0	1,228
						149.1	4.0	1,010
KRD10-03	7179314	628753	135	-70	233.4	190.33	14.0	221
					includes	190.33	1.0	844
<b>DORIS</b>								
DD10-01	7175347	627332	296	-60	158.6	51.67	2.00	72
						56.67	12.00	72
						72.67	4.00	72
						80.26	21.34	89
					includes	97.66	2.94	184
						117.02	7.23	153
					includes	117.02	5.37	185
						131.56	2.69	80

Table 2 WAMEX Report A8414 Uranium intersection table.

As Reported Wamex A8414 Summary Table 2					
Hole ID	From	To	Interval	U ppm	U <sub>3</sub> O <sub>8</sub> Calculated
A.P.5	13	14		190	224
	14	15		100	118
	15	16		100	118
<b>best</b>			<b>3</b>	<b>130</b>	<b>153</b>
A.P.8	37	38		390	460
<b>best</b>			<b>1</b>	<b>390</b>	<b>460</b>
A.P.10	34	35		1650	1946
	35	36		200	236
<b>best</b>			<b>2</b>	<b>925</b>	<b>1091</b>
A.P.12	73	74		110	130
	74	75		240	283
	75	76		400	472
<b>best</b>			<b>3</b>	<b>250</b>	<b>295</b>
A.P.15	38	39		270	318
	39	40		120	142
<b>best</b>			<b>2</b>	<b>195</b>	<b>230</b>
A.P.16	19	20		95	112
	20	21		100	118
<b>best</b>			<b>2</b>	<b>98</b>	<b>115</b>
A.P.14	39	40		110	130
	40	41		210	248
	42	43		810	955
<b>best</b>			<b>1</b>	<b>810</b>	<b>955</b>
A.P.19	68	69		280	330
	69	70		930	1097
	70	71		400	472
	71	72		80	94
	72	73		100	118
	73	74		780	920
<b>best</b>			<b>6</b>	<b>428</b>	<b>505</b>

## APPENDIX 2

### JORC Code, 2012 Edition, Table 1 Exploration Results

#### Section 1 – Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized 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.</i>	Historical data compiled by BYH from historical WAMEX reports by AGIP Australia (AGIP) and FYI Resources Ltd (FYI) contains percussion drilling and diamond drilling information. Percussion samples were selectively sampled and submitted for X-ray Fluorescence (XRF) and half core samples were selectively sampled and submitted for Peroxide Fusion digest with mass spectrometry OES. Selective sampling was based on radiometric measurements using a scintillometer on samples as well as downhole gamma methods. Quality of sampling is undeterminable due to a lack of historical records regarding recovery, moisture and QAQC procedures. Four Diamond drill holes were drilled by FYI for 652 metres diamond core. Nineteen holes for 716 metres of percussion drilling is recorded as drilled in 1978 by AGIP
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	There is no record found to date of whether percussion samples were split, and if so, how they were split to form a small sub-sample of the drill cuttings. Presumably there must have been splitting performed on the rig or at the laboratory as the sample intervals were 1m implying the full drill sample return would have been too large for processing at a laboratory.
	<i>Aspects of the determination of mineralization that are Material to the Public Report.</i>	Comments on QAQC and multiple laboratories being used are mentioned in reports (Wamex A8414). Petrographic samples identified uraninite and brannerite
Drilling Techniques	<i>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.).</i>	AGIP used a Schramm t42 to complete the drilling of the percussion holes. Sample return in initial holes was with air, but they trialled sample return with water in later holes to reduce bit wear. FYI drilled NQ2 sized diamond core from surface.
Drill Sample Recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	No record has been found in the historical reports for assessment of core and chip sample recoveries, hence no assessment of recovery results.
	<i>Measures taken to maximize sample recovery and ensure representative nature of the samples.</i>	No record has been found in the historical reports on measures to maximise sample recovery and ensure representivity of the samples

Criteria	JORC Code Explanation	Commentary
	<i>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.</i>	No data or reporting from the historical work has been found to evaluate any relationship between sample recovery and grade, or whether sample bias may have occurred due to fraction size.
Logging	<i>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.</i>	Detailed geological logging has been found for the drilling completed by both AGIP and FYI. The data from historical drilling is not complete enough for use in JORC 2012 Mineral Resource estimations, mineral studies and metallurgical studies. There is however, enough confidence in the data, to use the data for geological modelling and exploration targeting purposes.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Logging was a mixture of qualitative and quantitative logging.
	<i>The total length and percentage of the relevant intersections logged.</i>	Historical data records have provided geology logging for all the diamond core holes and percussion holes.
Sub-Sampling Techniques and Sample Preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	The method of cutting and sampling drill core holes is unknown.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	No sample splitting or moisture content information has been found in historical records for the percussion drilling.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	No information about the nature, quality, and appropriateness of the sample preparation technique for the historical drilling has been found in the reports.
	<i>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</i>	No information about quality control procedures for all sub-sampling stages for the historical drilling has been found in the reports.
	<i>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.</i>	No information about quality control procedures to ensure sample representivity for the historical drilling has been found in the reports.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	No information about sample sizes being appropriate to rock granularity to ensure sample representivity for the historical drilling has been found in the reports.
Quality of Assay Data and Laboratory Tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	FYI sent samples to the Genalysis Laboratories in Perth, Western Australia. Samples were assayed by 4 acid digest/ICP-MS techniques for C%, Ca, K% S%, Th ppm and U ppm. AGIP used XRF methods and analysed U, Th, Cu, Pb, Ti, S, Au.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model,</i>	Scintillometers were used in both handheld and downhole sampling. AGIP hired a S.I.E T450 total count instrument for downhole logging. There is no information found on the instruments used by FYI.

Criteria	JORC Code Explanation	Commentary
	<i>reading times, calibrations factors applied and their derivation, etc.</i>	
	<i>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.</i>	AGIP mention alternate laboratories used for check analysis and also submission of duplicates to the same laboratory. Refer to Table V in Wamex Report A8414. No data for standards, blanks have been found in the historical reports.
Verification of Sampling and Assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No record has been found in the historical reports of verification of significant intersections.
	<i>The use of twinned holes.</i>	Not Known
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Digital data from FYI of the geological logs created for diamond drill holes are available in the WAMEX database. Percussion drill hole logging is not available digitally but is presented within WAMEX reports. Original laboratory results have not been found.
	<i>Discuss any adjustment to assay data.</i>	N/A
Location of Data Points	<i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	No mineral resource estimation is made from the historical drilling. Accuracy of the drill hole collar locations is likely to be within 15 metres of true position. The collars were recorded in a local grid in the WAMEX reports and the grid registered into MGA94 co-ordinates through a process of capturing the local grid co-ordinates,
	<i>Specification of the grid system used.</i>	The grid projection used is MGA_GDA94, Zone 50. All maps included in this report are referenced to this grid.
	<i>Quality and adequacy of topographic control.</i>	No work has been completed on topographic control.
Data Spacing and Distribution	<i>Data spacing for reporting of Exploration Results.</i>	Holes are targeting to geological and surface radiometric anomalies and spacing is not relevant at this level of exploration.
	<i>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.</i>	No Mineral Resource or Ore Reserve estimations have been applied.
	<i>Whether sample compositing has been applied.</i>	No Mineral Resource or Ore Reserve estimations have been applied.
	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Historical drilling is oriented to intersect the geological units about perpendicular to the strike and dip of the interpreted mineralisation. Due to site access issues it is commented in the FYI reports that some holes were not drilled perpendicular to mineralisation.



Criteria	JORC Code Explanation	Commentary
	<i>If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	If drilling wasn't perpendicular then intersections may look larger than true thickness.
Sample Security	<i>The measures taken to ensure sample security.</i>	Sample security measures for the historic data are unknown.
Audits or Reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No reviews or audits of sampling techniques are known of, and therefore no issues known.

## Section 2 – Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral Tenement and Land Tenure Status	<i>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.</i>	Historical exploration is located within and proximal Lease E52/3898 and E52/3700. The tenements are 100% owned by BYH.
	<i>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.</i>	At the time of reporting, there are no known impediments to obtaining a licence to operate in the area and the tenement is in good standing.
Exploration Done by Other Parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Previous exploration was undertaken by AGIP for uranium between 1978 and 1982 and documented in reports on WAMEX. FYI Resources completed further holes in 2010 at the Kangaroo Ridge and Doris prospects. Additional surface (channel and rock chip) uranium exploration was completed in the area by Montezuma in a Joint Venture with Greater Pacific Gold.
Geology	<i>Deposit type, geological setting and style of mineralization.</i>	Regionally the area contains two styles of primary uranium mineralization in the form of structurally controlled mineralization associated with potassic alteration in the Despair Granite and a stratabound pyrrhotite-actinolite-uranium-gold association at Mica Bore. The presence of radiometrically anomalous pegmatites in the vicinity of the Mica Bore mineralization indicates the additional possibility of "Rossing

Criteria	JORC Code Explanation	Commentary
		style” uranium mineralization also occurring within the licence area.
Drillhole Information	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: eastings 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 down hole length and interception depth hole length.</i>	All drill hole information has been sourced from the WAMEX database.
Data Aggregation Methods	<i>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.</i>	No exploration drilling assay results have been reported in this release, therefore there are no drill hole intercepts to report. Only historical data is referenced from WAMEX reports.
	<i>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.</i>	Historic data aggregate cut-offs applied for intersections are unknown.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent intersections have been reported.
Relationship Between Mineralisation Widths and Intercept Lengths	<i>If the geometry of the mineralization with respect to the drillhole angle is known, its nature should be reported.</i>	Uranium mineralisation is interpreted in sheared faults within the Despair Granite and Yarlalweelor Gneiss it appears to be steeply dipping in sections with multiple holes.
Diagrams	<i>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.</i>	Maps have been included in the body of this release.
Balanced Reporting	<i>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.</i>	No assay results have been reported from historic drilling.
Other Substantive Exploration Data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations;</i>	Historical exploration only is available in WAMEX reports: A8414 Mineral Claims 52/2821 – 2824 Annual Report. AGIP Australia Pty

Criteria	JORC Code Explanation	Commentary
	<i>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.</i>	<p>Ltd. 1979.</p> <p>A8878 Temporary Reserve 6942 H Annual Report 1979.</p> <p>A8918 Mineral Claim 52/2821 -2824 and 3213 – 3221 Annual Report AGIP Australia Pty Ltd. 1979.</p> <p>A89369 Yarlarweelor Project WA Annual Report FYI Resources 2010</p>
Further Work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Rock chip sampling of pegmatites and geological fault zones for total elemental analysis will be required to unlock any potential for REEs.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Diagrams showing the location of the historical results and the location of Bryah tenure have been included in the report, with geology and magnetics underlays, providing context for possible extensions and prospective geological units.

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