

## **ASX ANNOUNCEMENT**

ASX: ALY

26 August 2021

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BRYAH BASIN (ALY 20%, SFR 80%)

# **New drill targets at Karonie South**

### **HIGHLIGHTS**

- Detailed mapping completed at Karonie South identifying new drill targets which will be tested as part of the Phase 2 drill program.
- Four targets identified including "Western Brown", a newly identified target over an area of 2km x 2km with no historic exploration.
- Mapping and rock-chip sampling was completed at Karonie South in follow-up to the structural review completed earlier this year.
- Drill planning underway for 5 target areas as part of the Phase 2 drill program.
- High resolution UAV magnetics planned this quarter to further refine target areas and provide enhanced targeting ability.
- Heritage access agreements submitted.

Alchemy Resources Limited (ASX: ALY) ("Alchemy" or "the Company") is pleased to provide an exploration update for its 100% owned Karonie Gold Project in Western Australia. Field mapping was conducted in Q2CY21. The review focussed on defining the drill targets from "camp scale" prospective areas that were defined in the Karonie Structural Review which was completed earlier this year.

The field work has produced five (5) high priority drill targets along the prospective corridor immediately south of the Aldiss Mine currently operated by Silver Lake Resources (ASX:SLR). The targets include the new greenfields "Western Brown" lake target which has seen no exploration of any kind over a 2km x 2km area. Other targets range from the early stage to semi advanced targets at Challenger and Esplanade which have seen no modern exploration since the early 2000s.

Discussing the results Alchemy's Chief Executive Officer, James Wilson, said:

"The detailed mapping program has identified some excellent walk-up drill targets to test in the second half of 2021. We are excited to get rigs back on the ground in an area which hasn't seen any modern exploration in 10-20 years. The identification of the new greenfields Western Brown target is also very promising, and this area is now a priority target for RC drilling in coming months. Western Brown is a large lake target with classic geological and geophysical indicators and has had no exploration of any kind. Near term we expect to get drone magnetics flying to better refine our targeting prior to drilling in the second half of this year".

#### **Alchemy Resources Limited**

ABN: 17 124 444 122

#### KARONIE SOUTH EXPLORATION UPDATE

Alchemy has completed detailed structural and lithological mapping on the southern tenements in the Gilmore-Esplanade-Batavia areas with a view to defining new targets and refining existing areas. Better historic high-grade results from these areas include 3m @ 14.6g/t Au, 1m @ 17.8g/t Au and 8m @ 2.1g/t Au<sup>1</sup>. Alchemy believes that a better understanding of the controls on mineralisation obtained from surface mapping, combined with utilising bedrock geology from the numerous drill holes in this area, has significantly improved the understanding of controls on mineralisation in the area. The results of the mapping exercise outlined five discrete high priority targets to test as part of the upcoming Phase 2 drill program at Karonie. Analysis of historic drilling shows that previous explorers were targeting broad near-surface targets.

#### **TARGET AREAS**

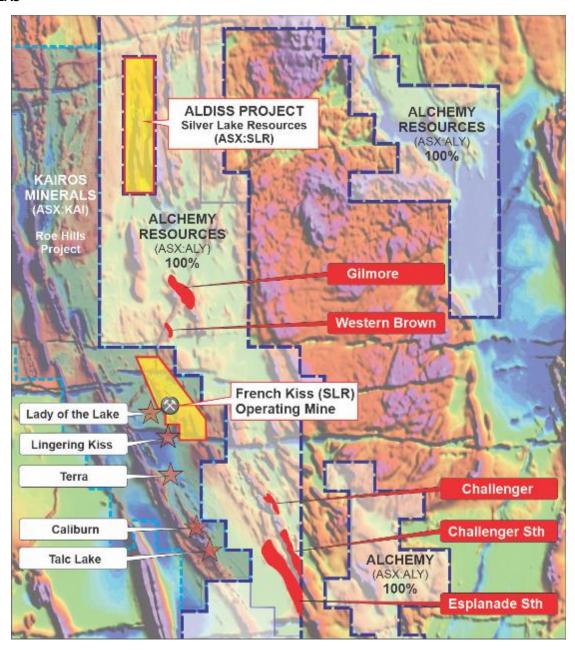


Figure 1: Alchemy Phase 2 drill targets (red) over magnetics

<sup>&</sup>lt;sup>1</sup>Refer ALY announcement 24 May 2016

#### **WESTERN BROWN PROSPECT (New Target)**

Western Brown is a newly defined 2km x 2km greenfields target with no previous exploration. The target is defined by a magnetic dolerite that is disrupted by a major NE-striking fault corridor, a common structural control on mineralisation throughout the Karonie province. To the southwest, a significant number of discoveries have been made including SLR's French Kiss open pit and Kairos Minerals' (ASX:KAI) Lady of the Lake and Lingering Kiss Prospects. The intersection point of the fault corridor and the magnetic dolerite is interpreted to be situated in the middle of a large salt lake that has never been drill tested. As seen in Figure 4, the outcropping NE striking fault system shows silica and sulphide alteration with quartz veining.

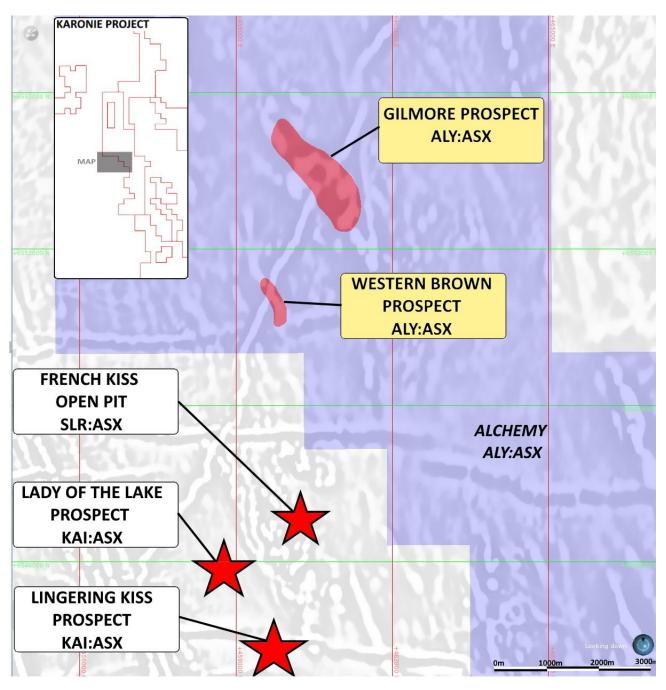
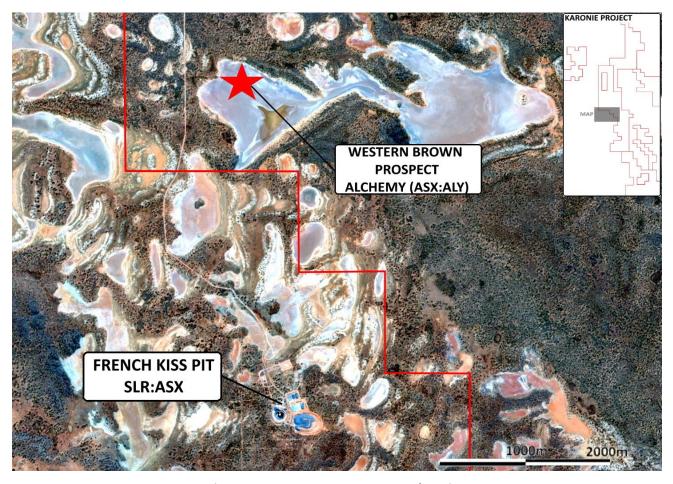


Figure 2: Western Brown Prospect location relative to nearby discoveries



**Figure 3: Western Brown Prospect location** 



Figure 4: Western Brown fault zone near target area, and close up of siliceous/sulphide alteration in surface rocks

#### **GILMORE**

Aircore (AC) drilling in 2017 intersected altered dolerites with sulphides along the southern extension of the magnetic high which trends down from the Warrior prospect to the north. Results confirmed multiple broad zones of gold anomalism over a strike length of ~5km. The recent field mapping shows there is a large volume of folded magnetic dolerite, cut by a major NE-striking fault corridor. Existing drilling only partially tests this area with 400m x 800m spaced aircore holes. The existing drilling shows an anomalous Au-Bi-Mo-Te-W halo around the contact of the fault corridor and the dolerite unit. A high-resolution magnetics survey is planned to assist with hole planning.

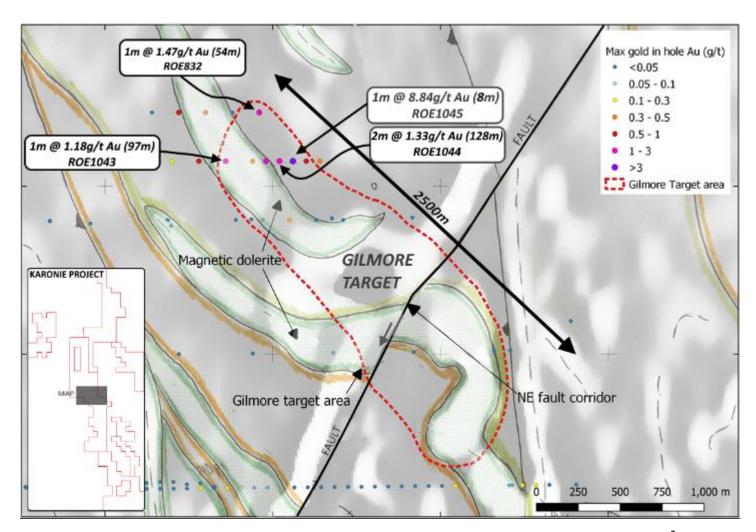


Figure 5: Gilmore target with geological mapping draped over aeromagnetics and historic assays<sup>2</sup>

#### **CHALLENGER**

Challenger is a more advanced target that has known fresh rock mineralisation. Intercepts of up to 10m at 1.46 g/t gold (from 128m) in ISRC10351¹ are hosted within a thick high-Fe quartz dolerite sill, which is a similar host rock to the mineralisation at Bombora and the Golden Mile. A significant Au-Bi-Mo-Te-W-Sb anomaly, which is considered the best pathfinder for mineralisation, can be seen from the AC drilling in the area. The area has had historic Reverse Circulation (RC) drilling only and was drilled in a SW orientation, which would have failed to adequately test the SW dipping fold limb at Challenger. NE orientated drillholes are likely to test the structure sufficiently.

<sup>&</sup>lt;sup>2</sup> Reported by St Ives Gold Mining Company Pty Ltd – WAMEX Combined Annual Report C63/2000 5 December 2002

#### **CHALLENGER SOUTH**

The Challenger South target is the southern extension of high-Fe quartz dolerite sill that is seen at the Challenger prospect, that is disrupted/demagnetised by a NE-striking fault corridor. Historical aircore drilling coverage is ~400m x 160m, which Alchemy believes is an insufficient drill spacing to define tight lode mineralisation that is typical along the Keith Kilkenny Shear Zone, especially with the stripped regolith profile that is seen in the area.

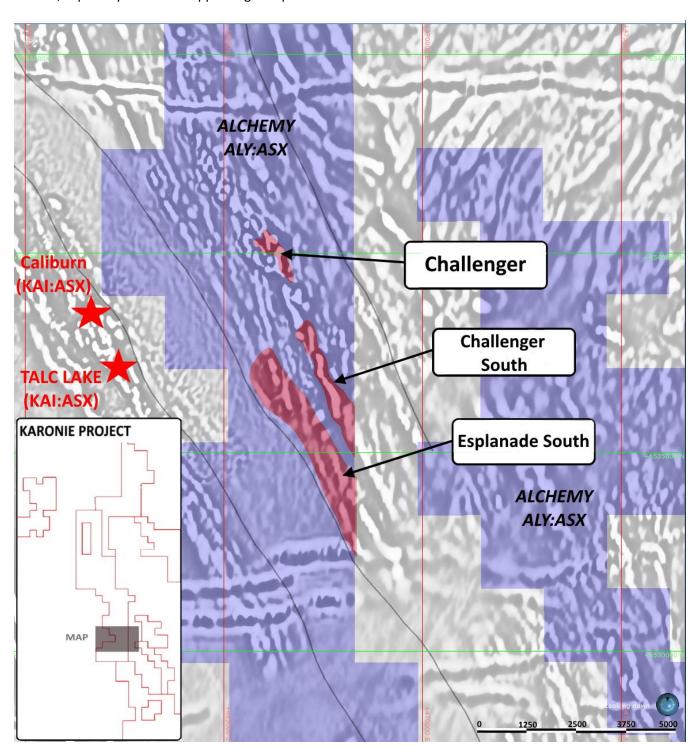


Figure 6: Challenger and Esplanade / Esplanade South targets

#### **ESPLANADE SOUTH**

Esplanade South is the southern continuation of the low-grade 4.5km Esplanade-Little Peck trend, but unlike the Esplanade-Little Peck trend, here the key dolerite-sediment contact is clearly disrupted/demagnetised by NE and E striking cross-faults and existing wide-spaced aircore drilling has failed to test several key structural breaks. Alchemy sees the potential for dolerite and sediment-hosted mineralisation along a 4.5km strike length of disrupted magnetic features. There is sparse drilling over the target area comprising ~150m x 800m spaced aircore drillholes.

#### **NEXT STEPS**

#### PHASE 2 - DRILL PROGRAM AT SOUTHERN KARONIE PROSPECTS

Phase 2 drilling is planned to test the southern areas of the Karonie tenements that contain the Challenger, Gilmore and Esplanade targets. All are highly prospective with camp scale structural targets and numerous high-grade intercepts, which have not been followed up. Access agreements and work programs have been submitted with drilling to commence once clearances have been obtained.

Alchemy also plans to conduct high resolution UAV magnetics over the targets to better define areas for drill planning purposes and to highlight prospective structures.

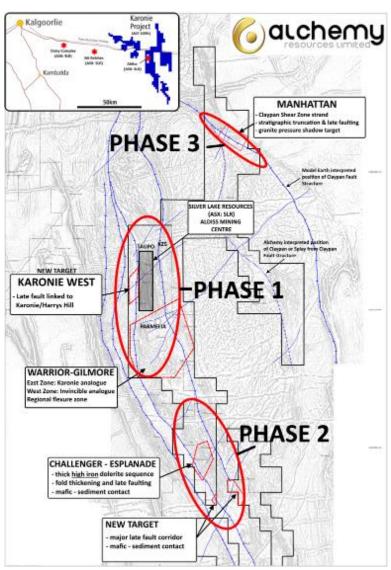


Figure 7: Alchemy structural targeting and phased drill planning

#### **ABOUT ALCHEMY RESOURCES**

Alchemy Resources Limited (ASX: ALY; "Alchemy" or the "Company") is an Australian exploration company focused on growth through the discovery and development of gold, base metal, and nickel-cobalt resources within Australia. Alchemy has built a significant land package in the Carosue Dam - Karonie greenstone belt in the Eastern Goldfields region in Western Australia and has an 80% interest in the Lachlan/Cobar Basin Projects in New South Wales. Alchemy also maintains its interest in the Bryah Basin Project in the gold and base metal-rich Gascoyne region of Western Australia, where Superior Gold Inc. (TSX-V: SGI) and Sandfire Resources Limited (ASX: SFR) are continuing to advance gold and base metal exploration, respectively.

This announcement has been approved for release by the Board.

#### For further information please contact:

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#### **COMPETENT PERSON STATEMENT**

The information in this report that relates to Exploration Results is based on information compiled by Mr James Wilson, who is the Chief Executive Officer of Alchemy Resources Limited and holds shares and options in the Company. Mr Wilson is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ('JORC Code 2012'). Mr Wilson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

## **APPENDIX A**

# JORC Code, 2012 Edition – Table 1 Section 1 Sampling Techniques and Data

| Criteria                 | JORC Code explanation   | Commentary   |
|--------------------------|---|--|
| Sampling<br>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 down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  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. | Samples referred to in this Public Report are reverse circulation (RC) drill samples, obtained using an 'industry standard' drill rig (350psi / 1150cfm & 800psi / 1400 cfm booster), drilling equipment and sampling practices.  RC drilling obtained 1m samples dispensed into plastic bags and calico bags via an industry standard cyclone / cone splitter. The cone splitter was used to obtain one calico bag containing a reduced size 1m (or 2m) sample "split" for gold analysis (1 to 3kg) and large 1m plastic bag of drill chips. Samples for gold analysis were collected at 1m intervals. The RC samples obtained are representative of the material drilled.  4m composite samples taken with a sample scoop thrust into the RC sample bag which is laid out in individual metres in a plastic bag on the ground. 1m single splits taken using a cone splitter at time of drilling, if 4m composites are anomalous (>100-200ppb or lower depending on location), 1m single splits are submitted for analyses. Average sample weights about 3.0kg for 4m composites and 2.0-3.0kg for 1m samples |
| Drilling<br>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.).   | RC drilling was completed from surface using 3m x 4" RC drill rods, a 5.25" hammer (with a standard sample retrieval collar) and a RC tungsten button drill bit.   |
| Drill sample<br>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.  | Sample recoveries and moisture content estimates were logged / recorded into spreadsheets by the field assistant then uploaded into a database. There were very few (<1%) significant sample recovery problems.  No relationship exists between sample recovery and grade, and accordingly no bias has occurred as a result of loss/gain of material. No results have been received to date.   |
| 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.   | Geological logging was completed on all RC and AC holes, with colour, weathering, grain-size, lithology, alteration, mineralogy, veining, textures/structure and comments on other significant features noted. Logging of sulphide mineralisation and veining is quantitative. All holes were logged in full.  Representative samples of bedrock collected from each metre of each RC hole were retained in labelled chip sample trays. These are stored in the Alchemy office in Perth.   |
|                          |   | No judgement has yet been made by independent qualified consultants as to whether RC samples have been geologically and geotechnically logged to a level of detail to support  |

| Criteria                                       | JORC Code explanation   | Commentary  |
|--|---|---|
|  |   | appropriate Mineral Resource estimation, mining studies and metallurgical studies.  |
| 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/secondhalf sampling.  Whether sample sizes are appropriate to the grain size of the material being sampled. | RC samples were cone split and collected in pre-numbered calico bags. The cone splitter sample shoot opening was adjusted to collect between 1 and 3 kg of sample. Samples were collected every metre. Residual sample material was collected every metre in large green plastic bags and retained on site for resampling if required.  One commercial laboratory standard or blank laboratory standard, one blank sample (barren basalt) and one duplicate sample was inserted every 30 samples (i.e. 6% QAQC samples).  RC sample sizes are considered appropriate for the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and the assay ranges for the primary elements analysed.  RC samples were collected from the drill rig by spearing each 1m collection bag (RC) or from the ground (AC) and compiling a 4m composite sample. Single splits were automatically taken by the rig cone splitter for RC. Wet or dry samples were noted in the logs.  |
| 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.   | All RC samples were sent to the ALS Laboratory in Kalgoorlie for sample preparation and analysis. Preparation of the samples follows industry laboratory best practice involving logging of sample weights, drying the entire sample in an electric oven set at 105°C+5°C for several hours (drying time dependent on moisture content), then crushing the entire sample (>70% -6mm). A split of 2.5 to 3kg was taken and then pulverized to 85% passing 75µm using an Essa LM5 grinding mill. A representative sample was split and bagged as the analytical sample.  All samples were analysed using ALS method code Au-AA26 for Au (up to 50g Fire Assay with AAS finish) with a lower detection limit of 0.01g/t Au.  Laboratory QAQC involves the use of internal laboratory standards using certified reference material, blanks, splits and duplicates as part of in-house procedures.  Alchemy used commercially available reference materials (Lab Standards) with a suitable range of values, that were inserted every 30 samples.  Results indicate that Lab Standard assay values are within acceptable error limits.  Blank samples did not detect any significant contamination |
| Verification of                                | The verification of significant intersections by either   | from adjacent samples and duplicate sample assay values are also within acceptable error limits.  Reported drill hole intercepts are compiled by the Company's  |
| sampling and<br>assaying                       | independent or alternative company personnel.  The use of twinned holes   | competent person.  No twinned holes were drilled in the current drilling campaign.  |
|  | Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  Discuss any adjustment to assay data.   | Data is collected by qualified geologists and geo-technicians working under the supervision of a qualified geologist and entered into Excel spreadsheets. Validation rules are in place to ensure no data entry errors occur. Data is loaded into a database by an experienced database administrator, and reviewed by an Alchemy geologist, who is a competent person.   |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   |  | No assay data adjustments have been made.  |
| Location of<br>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.  | A DGPS was used to locate collar positions, with an expected +/-10cm vertical and horizontal accuracy.  Down hole surveys were collected at surface and at end of hole in RC drill holes using a downhole camera.  The grid system used for all collar locations is the UTM Geocentric Datum of Australia 1994 (MGA94 Zone 51).  The drill collar and down hole location accuracy is considered appropriate for this stage of exploration. |
| Data spacing<br>and<br>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.                                      | Drill line spacings currently range from ~20m to ~50m within each prospect area, and on these drill lines hole spacings vary from ~20m to ~40m.  No Mineral Resource or Reserve has been reported for this drilling.  Shallow RC samples within alluvial cover at Taupo were physically composited into 4m samples.  |
| Orientation of<br>data in<br>relation to<br>geological<br>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. | Gold bearing structures and lithologies in the area drilled are interpreted to dip steeply to the west and plunge moderately down to the east.  All holes were drilled at between -55 degrees towards the grid east (~88.0 ° magnetic) (approx. right angles to lithological trends).  No orientation-based sampling bias has been identified.   |
| Sample<br>security  | The measures taken to ensure sample security.  | All drill samples were collected in pre-numbered calico bags and subsequently put into large green plastic bags and stored in a trailer on site until transported to ALS Kalgoorlie.  All samples were transported via company vehicle to ALS Kalgoorlie and subsequently transported to Perth by ALS for prep and sample analysis.  |
| Audits or reviews   | The results of any audits or reviews of sampling techniques and data.  | Considering the preliminary nature of the drill program, no external audit or review of the sampling techniques or sample data capture has been conducted to date.   |

# Section 2 Reporting of Exploration Results

| Criteria                                      | JORC Code explanation  | Commentary   |
|---|--|--|
| Mineral tenement<br>and land tenure<br>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. | Type - Exploration Licence (currently in good standing) Reference name –Karonie Reference number – E28/2575 Location – 100km east of Kalgoorlie, Australia. Ownership – 100% Goldtribe Corporation Pty Ltd (a wholly owned subsidiary of Alchemy Resources Limited) Overriding royalties - none The land is 100% freehold. No Wilderness Reserves, National Parks, Native Title sites or registered historical sites are known. No environmental issues are known. |

| Criteria                          | JORC Code explanation   | Commentary   |
|-----------------------------------|---|--|
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties.   | A significant amount of exploration has been conducted across the majority of E28/2575, E28/2601 and E28/2576. Previous exploration companies include Freeport McMoran Ltd, Poseidon Gold Ltd, WMC, Goldfields Pty Ltd, Integra Mining Ltd, Border Gold, and Silver Lake Resources. Exploration work completed across the area covered by E28/2575, E28/2601 and E28/2576 has included desktop studies and collaborative research, geological and regolith mapping, soil sampling, RAB, Aircore, RC and diamond drilling, and numerous airborne and ground geophysical surveys (magnetics, gravity, IP, surface EM and downhole EM).   |
| Geology                           | Deposit type, geological setting and style of mineralisation  | Deposit Type — Structurally controlled, shear zone and dolerite hosted mesothermal gold mineralisation.  Geological setting — Proterozoic Woodline Formation overlying variably folded Archean and sheared sediments and mafic volcanic units. Multiple deformation events leading to complex faulting and metamorphism ranging from greenschist to amphibolite facies.  Style of mineralisation — quartz vein hosted gold mineralisation within steep west dipping shear zones. Better grades and tonnages are associated with isoclinally folded (or otherwise thickened) coarser grained mafic units (dolerites). Gold mineralisation is associated with strong silicification-carbonate-biotie + calc-silicate alteration, and observed steep north plunging fold axes and lineations correlate with steep north plunging high grade ore shoots. |
| Drill hole<br>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:  o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o 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 is tabulated within the body of the announcement.   |
| Data aggregation<br>methods       | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.  | A weighted average was used to calculate all mineralisation intercepts.  A 0.5g/t Au lower cut-off grade, no upper cut off grade, and maximum 2m internal waste is used in the calculations for RC drilling.   |

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
|  | The assumptions used for any reporting of metal equivalent values should be clearly stated.   |   |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept lengths | These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').       | All intercepts reported are downhole widths. It is estimated that the angle between the drill hole direction and the plane of mineralisation is $^{\sim}45^{\circ}$ (or less) which implies that downhole intercept width x $^{\sim}0.7$ = true intercept width (or thicker). |
| 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 drill hole collar locations and appropriate sectional views.   | Appropriate plans and cross sections have been included in the body of this announcement.   |
| 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 gold drill intercepts >0.3g/t Au have been reported for RC drilling.  |
| 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. | All meaningful data and information has been included in the body of the report.  |
| Further work   | The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.   | Drilling has been completed Follow up drilling will be planned if results warrant additional work.  |