

## **ASX ANNOUNCEMENT**

31 August 2021

**ASX: ALY** 

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#### PROJECTS

LAKE REBECCA (ALY 100%)

KARONIE (ALY 100%)

LACHLAN (ALY 80%)

WEST LYNN (ALY 80%)

BRYAH BASIN (ALY 20%, TSX-V SGI 80%)

BRYAH BASIN (ALY 20%, SFR 80%)

# Maiden 111,100oz JORC 2012 Resource sets strong foundation for growth at Karonie

## **HIGHLIGHTS**

- Karonie Mineral Resource Estimate (JORC 2012-compliant) 111,100oz @ 1.2g/t
   Au (Inferred, 0.8g/t Au cut-off) from surface.
- Mineral Resource Estimate (MRE) prepared and verified by external consultants.
- Initial MRE follows a targeted RC drill program conducted in May 2021.
- Resources at Taupo, KZ5 and Parmelia are the first part of a growth strategy within the 100% owned Karonie Gold Project.
- Resource footprint represents ~2% of Karonie strike extent with numerous advanced targets yet to be assessed.

Alchemy Resources Limited (ASX: ALY) ("Alchemy" or "the Company") is pleased to announce a Maiden JORC 2012 Mineral Resource Estimate for the Taupo, KZ5 and Parmelia deposits at its 100% owned Karonie Gold Project, located east of Kalgoorlie in Western Australia.

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

"The maiden JORC 2012 Mineral Resource Estimate of 111,100 ounces of gold at Karonie establishes a solid base for growth in the centre of our 100% owned Karonie Gold Project. Importantly this is a high quality, independently conducted resource estimate which is largely contained within the top 150m and remains open at depth and along strike at all three deposits. The current resource footprint covers less than 2km combined of the +85km strike length of the Karonie tenement package, which has active mining operations along the length of the same highly prospective structures. That leaves a lot of real estate along strike and at depth for future growth.

Moving forward from the central resource, our strategy is to expand on the resource inventory by heading initially to the southern Karonie areas for our Phase 2 drill program, and then to the north towards Manhattan for Phase 3. We will also be targeting high grade gold resources in the far south areas at Karonie where data mining of historical drilling assays has revealed strong potential for high grades close to surface which have not been followed up in nearly 20 years".

#### **KARONIE OVERVIEW**

The Karonie Project is located approximately 100km east of Kalgoorlie. The tenement package surrounds Silver Lake Resources (ASX:SLR) Aldiss Mining Centre which is an active open pit mining operation. Alchemy's most advanced projects are the Taupo and KZ5 deposits which sit to the north, and the Parmelia deposit which sits to the south of the Aldiss Mining Centre (Figure 2).

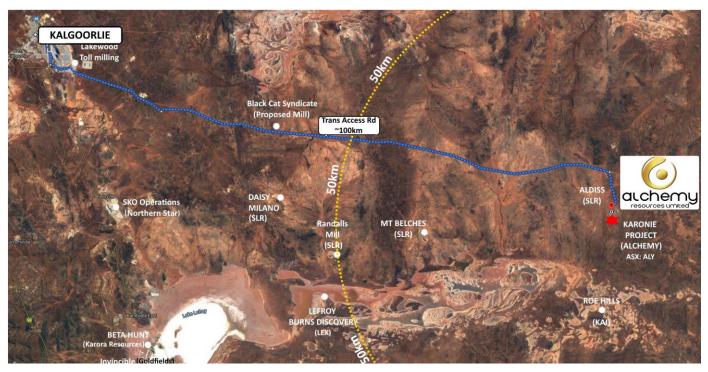


Figure 1: Karonie Gold Project Location with nearby operations

### MINERAL RESOURCE

The MRE has been independently created and verified by suitably qualified consultants at Auranmore Consulting ("Auranmore"), a well-regarded Perth-based geological consultancy.

Based on the estimate provided by Auranmore using a 0.8g/t Au cut-off grade, Karonie contains 2.96Mt at 1.2g/t Au for 111,100 oz Au as shown in Table 1 and Table 2 below.

Deposit	Classification	Tonnes	Grade g/t	Ounces
KZ5	Inferred	1,876,000	1.2	70,600
Parmelia	Inferred	644,000	1.0	20,700
Taupo	Inferred	441,000	1.4	19,800
TOTAL	Inferred	2,961,000	1.2	111,100

Note: Totals may not add due to rounding differences

#### Table 1: Karonie Gold Project JORC 2012 Mineral Resource Estimate (0.8g/t Au cut-off)

Deposit	Cut-off Grade g/t Au	Classification	Tonnes	Grade g/t	Ounces Au
KZ5	0.50	Inferred	3,765,000	0.9	110,200
Parmelia	0.50	Inferred	2,132,000	0.8	52,100
Taupo	0.50	Inferred	605,000	1.2	23,400
TOTAL	0.50	Inferred	6,502,000	0.9	185,700

Deposit	Cut-off g/t Au	Classification	Tonnes	Grade g/t	Ounces Au
KZ5	0.80	Inferred	1,876,000	1.2	70,600
Parmelia	0.80	Inferred	644,000	1.0	20,700
Taupo	0.80	Inferred	441,000	1.4	19,800
TOTAL	0.80	Inferred	2,961,000	1.2	111,100

Deposit	Cut-offg/t Au	Classification	Tonnes	Grade g/t	Ounces Au
KZ5	1.00	Inferred	1,047,000	1.4	46,400
Parmelia	1.00	Inferred	238,000	1.2	9,100
Taupo	1.00	Inferred	321,000	1.6	16,300
TOTAL	1.00	Inferred	1,606,000	1.4	71,800

Note: Totals may not add due to rounding differences

#### Table 2: Karonie Gold Project cut-off grade comparison

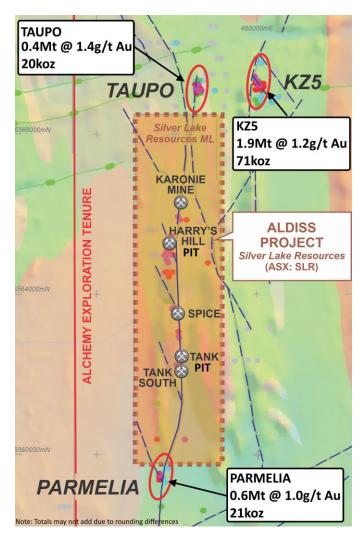


Figure 2: Karonie Gold Project and MRE deposits (0.8g/t cut-off)

The MRE is a culmination of over 6 months work by Alchemy including:

- Review, verification and interpretation of historical data
- Re-surveying of historical drill collars to validate datasets
- Integration of historical datasets which had previously never been digitised
- Development of a new geological model
- Targeted drilling to provide additional resource confidence

Auranmore was engaged to complete the MRE using a methodology best suited for the mineralisation style at Karonie (Refer Appendix A for a summary of the information in the Auranmore Report and the JORC Table 1).

#### MRE Expansion Potential

Alchemy believes there is substantial potential to expand the current JORC MRE through additional drilling, as the deposits remain open along strike and at depth. Currently, the 100% owned Karonie tenements cover prospective structures and host rocks which extend approximately 30km to the north and 55km to the south of the MRE and remain poorly tested by modern exploration methods.

#### SUMMARY OF RESOURCE PARAMETERS

A summary of JORC Table 1 is provided below for compliance regarding the MRE reported within and in-line with requirements of ASX Listing Rule 5.8.1.

#### **Geology and Geological Interpretation**

The Aldiss Project is located within the Karonie Belt of Archaean greenstone rocks, along the Aldiss Fault and Karonie Fault in the Eastern Goldfields region of the Yilgarn Craton, Western Australia. The Proterozoic Woodline Formation overlies 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.

The geological model used for Mineral Resource estimation was prepared by Alchemy and provided to Auranmore as 2D schematic interpretations, which were then digitised by Auranmore as wireframe surfaces and solids defining the mineralisation boundaries.

The deposit type can be described as a structurally controlled, shear zone and dolerite hosted mesothermal gold mineralisation. Mineralisation is typically characterised by quartz veins hosted 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 silica-carbonate-biotite + calc-silicate alteration and observed steep north plunging fold axes and lineations correlate with steep north plunging high grade ore shoots.

#### **Drilling Techniques and Sampling**

Reverse circulation (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.

Composite samples at 4m were taken with a sample scoop thrust into the RC sample bag, which were laid out in individual metres in a plastic bag on the ground. Single splits at 1m were taken using a cone splitter at time of drilling, if 4m

composites were anomalous (>100-200ppb or lower depending on location), 1m single splits were submitted for analyses. Average sample weights about 3.0kg for 4m composites and 2.0-3.0kg for 1m samples.

Air-core drilling at Taupo, drilled by Alchemy in 2019, used a blade bit (and occasionally a hammer with standard RC button bit) to obtain 1m samples dispensed into plastic buckets via an industry standard cyclone, and laid out on the ground in 10m lines for immediate sampling. An industry standard PVC spear was used to obtain a sample for gold analysis. Samples for gold analysis were composited into 4m sample intervals or smaller intervals at EOH. The air-core samples obtained are considered representative of the material drilled.

Drilling conducted by Alchemy was RC with drill samples obtained using an 'industry standard' drill rig (350psi / 1150cfm & 800psi / 1400 cfm booster), drilling equipment and sampling practices.

Diamond drilling at KZ5 by Integra Mining Ltd was NQ sized core.

The MRE has been based on 70 RC holes totalling 7,667m, 9 Diamond Core holes totalling 2,359m and 9 Air-core holes totalling 540m. No air-core or Rotary Air Blast (RAB) holes have been used in the MRE for KZ5 or Parmelia. Nine air-core holes were used in the estimation of the Taupo Mineral Resource due to excessive distance between RC holes containing mineralisation.

### Sample Analysis Method

All Alchemy 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 pulverised to 85% passing 75µm using an Essa LM5 grinding mill. A representative sample was split and bagged as the analytical sample.

Diamond Core and RC drilling sampled by Integra were analysed for gold using a 50g charge by fire assay method and for Ag, Cu, Ni, Pb, and Zn using a four-acid digest and analysed by OES (Inductively Coupled Plasma Optical Emission Spectrometry).

### Estimation Methodology, Bulk Density and Cut-off Grade Measurements

KZ5, Taupo and Parmelia were estimated using ordinary kriging and inverse distance squared as a check. Variogram models were used to determine search distances and directions. The KZ5 domain 1 has a change in strike towards the north so a dynamic anisotropic search was applied to take this into consideration.

Cumulative log frequency graphs were used to determine top cuts with KZ5 using 10g/t, Taupo 8g/t and Parmelia 5g/t. Kriging neighbourhood analysis was used to aid in selecting block size, block discretisation and number of composites in the estimation.

Bulk density measurements are based on assumptions from nearby mining operations. Fresh material was assigned a dry bulk density of 2.85 t/m<sup>3</sup>, transitional material 2.2 t/m<sup>3</sup> and oxidised material 1.8 t/m<sup>3</sup>. Weathering surfaces were modelled based on RC drill logs with a top of fresh rock (TOFR) and a bottom of complete oxidation (BOCO) surface constructed.

The reported cut-off grade of 0.8 g/t Au is based on cost structures for potential open pit mining techniques.

#### Mining and metallurgical methods or parameters and other material modifying factors

It is anticipated that the mining of the Karonie resource will be by traditional open pit mining methods. No metallurgical assumptions or predictions are reflected in the resource block model.

#### Criteria used for classification

All MREs at Karonie have been classified as Inferred. The wide spaced drilling (generally at 50m spacing along strike) was the primary consideration used in determining the classification. In addition, the lack of dry bulk density measurements and the use of air-core holes in the estimation of the Taupo deposit also contribute to classifying the Mineral Resources as Inferred.

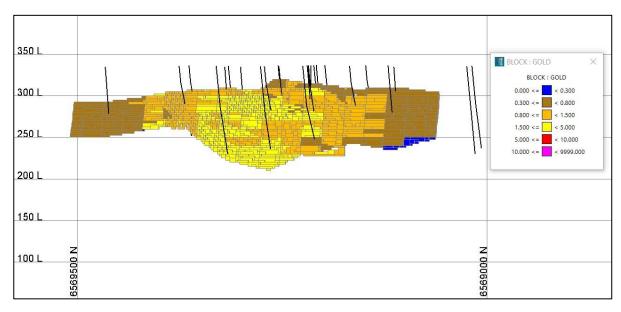


Figure 3: Long section looking through Taupo block model

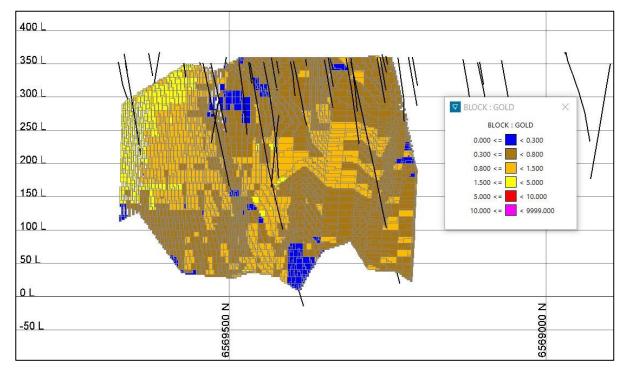


Figure 4: Long section looking through KZ5 block model

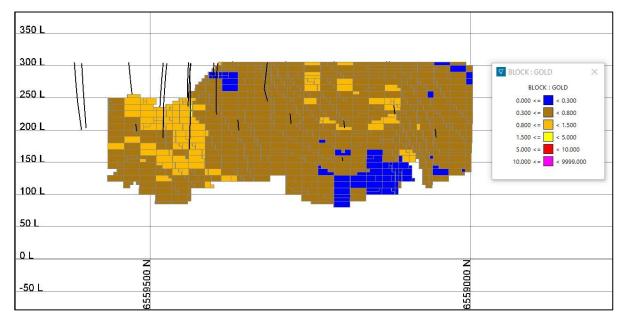


Figure 5: Long section looking through Parmelia block model

#### **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.

#### **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.

The information in this report that relates to Mineral Resources is based on information compiled by Richard Maddocks, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Richard Maddocks is an employee of Auranmore Consulting. Richard Maddocks 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Richard Maddocks consents to the inclusion in the 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 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 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 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 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.	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 from adjacent samples and duplicate sample assay values are also within acceptable error limits.
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.	Reported drill hole intercepts are compiled by the Company's competent person. No twinned holes were drilled in the current drilling campaign. 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 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 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.	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 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.	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 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 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.	<ul> <li>Type - Exploration Licence (currently in good standing)</li> <li>Reference name –Karonie</li> <li>Reference number – E28/2575</li> <li>Location – 100km east of Kalgoorlie, Australia.</li> <li>Ownership – 100% Goldtribe Corporation Pty Ltd (a wholly owned subsidiary of Alchemy Resources Limited)</li> <li>Overriding royalties - none</li> <li>The land is 100% freehold.</li> <li>No Wilderness Reserves, National Parks, Native Title sites or registered historical sites are known.</li> <li>No environmental issues are known.</li> </ul>

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 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:	All drill hole information is tabulated within the body of the announcement.
	<ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	
	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.	
Data aggregation 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.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	

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 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 <sup>0</sup> (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.

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.	The database has been checked by company geologists and reviewed by the competent person. Government open file reports were also checked by the Competent Person against the supplied database with no apparent errors
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	The competent person has not visited the site. A site visit was not deemed necessary due to the early development phase of the project and the competent persons familiarity with the area.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	The geological interpretation is based on a shear hosted geological model. Solid wireframe shapes have been constructed based on a nominal 0.3g/t Au cut-off grade. The shear hosted mineralisation is generally consistent along strike and down dip and shows continuity over several drill sections. Alternative geological interpretations are not considered likely based on the available drilling information.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The approximate dimensions of the modelled deposits are: KZ5: strike 450m, thickness 2m-15m, maximum depth below surface 340m. Taupo: strike 450m, thickness 2m-10m, maximum depth below surface 120m. Parmelia: strike 560m, thickness 4m – 25m, maximum depth below surface 230m.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domains, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	The solid wireframe shapes have been used to constrain the grade estimation. Drilling data was composited to 1m intervals with intervals less than 0.5m combined with the previous composite. Variogram models were used to determine the optimal search distances and orientations. Vulcan software was used to interpolate grades using ordinary kriging. Drilling is generally on 50m sections and this represents the average distance of extrapolation of grades. A minimum of 2 composites and maximum of 25 was used in the estimation.
lecnniques	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	No previous estimates or mine production is available to check this estimate.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding by- products
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	No deleterious elements have been identified

	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables.	The parent block size is 10mX, 25mY, 10mZ with sub- blocks of 2.5 x 2.5 x 2.5 for KZ5 to better delineate the narrow lodes. Taupo and Parmelia have sub blocks of 5 x 5 x 5. No assumptions have been made regarding modelling of selective mining units.
	Description of how the geological interpretation was used to control the resource estimates.	The solid mineralised shapes were used as hard boundaries in the grade estimation
	Discussion of basis for using or not using grade cutting or capping	Log cumulative frequency graphs and co-efficients of variation were used to determine top cuts of 10g/t for KZ5, 8g/t for Taupo and 5g/t for Parmelia.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation was done with swath plots and visual examination of the model against drilling.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The estimate was conducted using dry tonnes.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The Mineral Resource has been reported at a cut-off grade of 0.8g/t Au. This is considered appropriate for potential open pit mining methods.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	No mining assumptions or modifying factors have been considered
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	No metallurgical assumptions or parameters have been considered
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these	No environmental assumptions or parameters have been considered.

	aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk density measurements are based on mining operations in the area. A dry bulk density of 2.85 t/m <sup>3</sup> has been applied to fresh material, 2.2 t/m <sup>3</sup> to transitional material and 1.8 t/m <sup>3</sup> to oxidised material.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The wide spaced drilling and the lack of empirical density data results in an Inferred classification. The Inferred classification reflects the Competent Person's view of the deposits
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.	
	Whether the result appropriately reflects the Competent Person's view of the deposit.	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	No audits or reviews have been conducted on this Mineral Resource
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The Mineral Resource estimate has been classified as Inferred. The drilling, geological interpretation and grade estimation reflects the confidence level applied to the Mineral Resource.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	This estimate represents a global estimate of the in-situ tonnes and grade of the Karonie Gold Project.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	