

# **ASX ANNOUNCEMENT**

## ASX: ALY

5 July 2022

#### **BOARD AND MANAGEMENT**

MR LINDSAY DUDFIELD NON-EXECUTIVE CHAIRMAN

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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%)

# LITHIUM AND GOLD EXPLORATION UPDATE

### **HIGHLIGHTS**

- Excellent progress made on accelerated lithium-gold focussed exploration program.
- Project wide regional soil geochemical sampling completed along the lithium prospective "Goldilocks trend".
- Detailed mapping and sampling on high priority lithium targets completed.
- 100m x 40m infill soil sampling on Cherry, Hickory and Pecan completed.
- Gold exploration drilling at Gilmore, Karonie East and KZ5 completed.
- Priority target areas currently being assessed for potential drill programs and further infill soil sampling.
- Assays pending for 793 infill soils, 1,471 regional soils, 68 rock chip and 278 RC drill samples.

Alchemy Resources Limited (ASX: ALY) ("Alchemy" or "the Company") is pleased to announce the completion of multiple exploration programs at its 100% owned Karonie gold and lithium project located east of Kalgoorlie in Western Australia. Infill soil sampling, mapping and rock chip sampling of the Cherry-Hickory-Pecan lithium anomalies has been completed. Regional soil sampling targeting lithium and gold within the "Goldilocks zone" is also complete. Drill programs targeting gold have been completed on the Gilmore/Karonie East and KZ5 areas. A total of 2,264 soil samples, 68 rock chip samples and 278 RC drill samples have been submitted with assays pending.

**Chief Executive Officer Mr James Wilson commented:** *"We are making good progress on our accelerated lithium-gold focussed exploration programs. The gold drilling, lithium regional soils and lithium infill soils are now complete, and we have over 2,600 samples in the lab with results pending for all batches. The detailed mapping has identified more pegmatite dykes and chemical zonation within the increased 7.3km x 1.5km target area at Cherry-Hickory-Pecan which remains open under cover. Our exploration activities have the potential for considerable opportunities for growth in the near term".* 

#### LITHIUM EXPLORATION

#### **CHERRY-HICKORY-PECAN MAPPING / SOIL SAMPLING**

Detailed mapping and rock-chip sampling have been completed at the Cherry-Hickory-Mesquite and Pecan prospects. The program targeted a number of objectives including: i) mapping additional pegmatite bodies, ii) identifying zonation within the pegmatites to identify the most prospective zones, iii) obtaining additional surface rock-chip samples, and iv) infilling the existing soil geochemistry on a 100m x 40m pattern. The mapping identified numerous additional pegmatites with the overall mapped dimensions of the zone increasing to 7.3km x 1.5km.

**Mapping:** Further ground truthing of the lithium anomalies has revealed additional outcropping pegmatites at Cherry and Hickory (Figure 1). Numerous additional outcrops have been mapped with a combined strike extent of >1.4km. A broad zonation has been recognised, trending from outer zones of high rubidium anomalism in proximity to the Cherry Prospect, to tantalum rich (and lower rubidium) zones at Hickory. In particular, the strongest zones of tantalum mineralisation (122ppm Ta) occur at the northern end of mapped pegmatites at Hickory where these trend under cover.

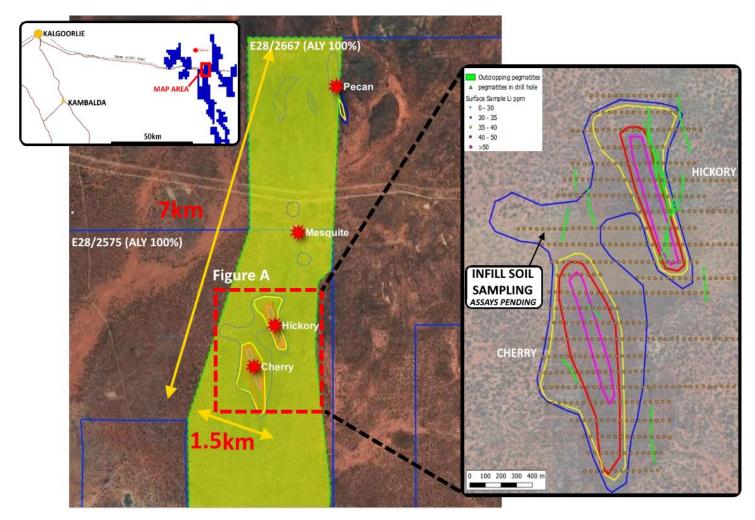


Figure 1: Cherry-Hickory Prospect with infill soil sampling and mapped pegmatites

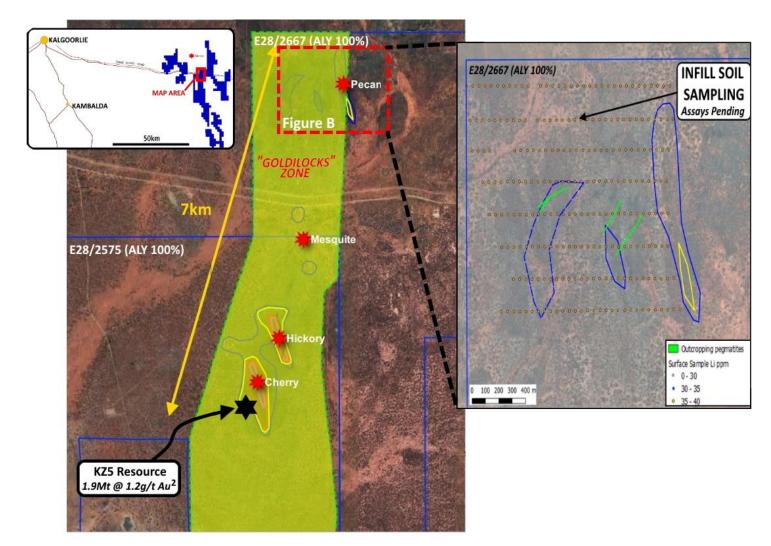


Figure 2: Pecan Prospect with infill soil sampling and mapped pegmatites

*Infill soil sampling and rock-chip sampling:* Infill soil sampling and rock chip sampling programs were completed in late June 2022 over the Cherry-Hickory and Pecan Prospects, with a total 793 soil samples and 68 rock chip samples submitted for multi-element analysis. Results are pending.

A selection of outcrop photos is shown in Figure 3. A key highlight is the typical "UST" Texture (Unidirectional Solidification Texture) shown in Photographs #1 and #2 where the growth of crystals occurs perpendicular to the dyke walls.



Figure 3: Field photographs of Pegmatite outcrops at Cherry and Hickory

#### PROJECT WIDE REGIONAL SOIL SAMPLING

Alchemy has previously completed a desktop study and generated additional lithium targets in the broader Karonie regional area. Alchemy's Karonie tenure covers over 50km of strike extent along the contact zone of a regional granite. These areas sit within a prospective "Goldilocks Zone", a defined corridor in which lithium-caesium-tantalum (LCT) pegmatites exist. This zone lies outboard of the granitic terrain and within the greenstone belts and is largely untested for battery minerals and in many cases for gold (Figure 4). Alchemy has designed a project wide 400m x 400m spaced soil sampling program to explore for indications of potential LCT pegmatite mineralisation. The soil sampling involved the collection of 1,471 samples and was completed in late June 2022. Samples have been submitted to the laboratory and results are pending.

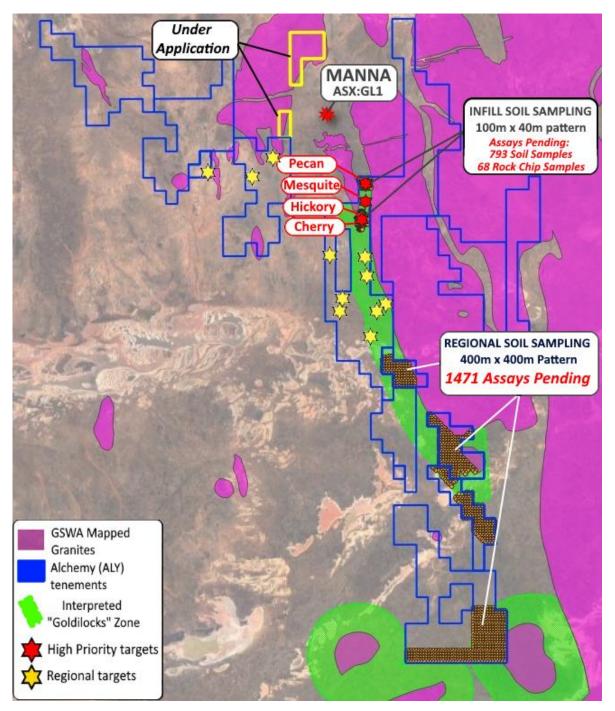


Figure 4: ALY Lithium prospects with GSWA mapped granite bodies

#### **GOLD EXPLORATION**

#### **KARONIE EAST AND KZ5**

RC Drilling was completed in mid-June 2022 on the Karonie East infill and KZ5 drill program. In total the drill program comprised 18 RC holes for 2,412m of drilling.

**Karonie East:** Holes in this area (Figure 5) are designed to test a magnetic feature which runs along the northern zone over a 2km strike length, targeting a north-east trending structural dislocation which Alchemy believes is a key control on mineralisation in the region. Assays from the recent aircore drill program returned numerous zones of anomalous gold (>0.1g/t Au) over a strike length of approximately 950m, with a best intercept of 2m @ 2.7g/t Au (48m) in KEAC009, including 1m @ 3.99g/t Au from 48m logged in saprolite<sup>1</sup>. RC drilling was designed to test the mineralisation in bedrock both below these intercepts and along strike from this zone. Samples from this drilling have been submitted for analysis with results pending.

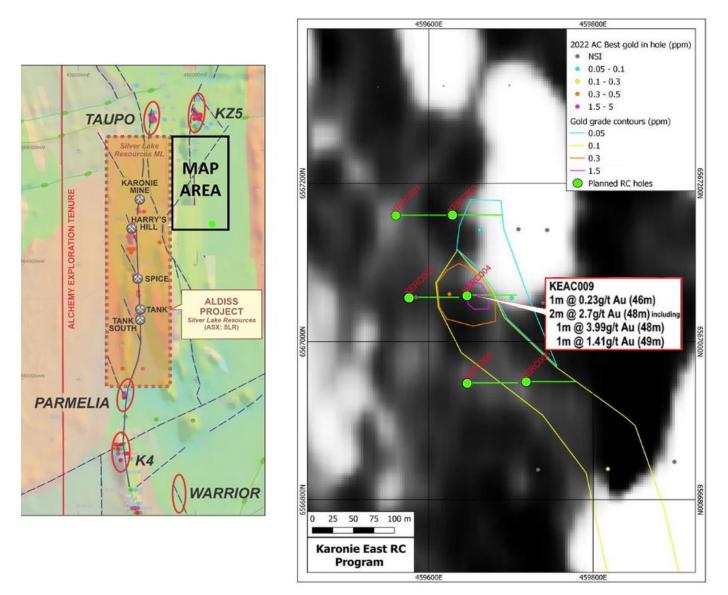


Figure 5: Karonie East drill targets

<sup>1</sup> Refer ALY ASX Announcement 9 March 2022 – Drilling outlines new gold system at Karonie East

**KZ5:** A single deep RC hole (KZRC110) was completed at KZ5 to test a historically defined electro-magnetic (EM) plate to the north of the existing defined resources (Figure 6). In mid-2021 Alchemy completed a drill campaign which was used to complete a maiden JORC compliant resource<sup>2</sup>. As a result of the infill drilling and resource modelling, a re-interpretation of the mineralisation envelope showed that mineralisation was offset to the north-west. This offset zone aligns with an EM Plate which was generated via a Moving Loop and Fixed Loop EM survey conducted in 1991<sup>3</sup> and could represent a northern extension to the KZ5 mineralisation.

Drilling in KZRC110 finished at 198m depth and intersected zones of massive sulphides between 155m-161m which was in line with the modelled depth of the EM plate. Samples have been submitted to the laboratory with assay results pending.

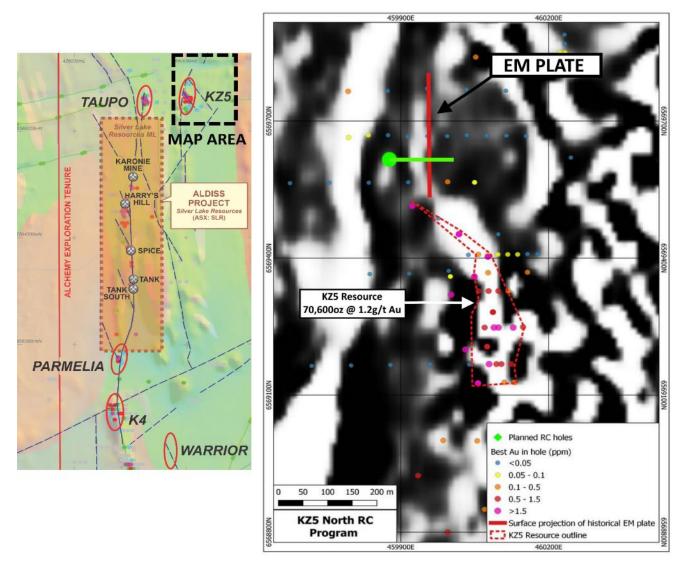


Figure 6: KZ5 drill targets and interpreted EM plate position

<sup>2</sup> Refer ALY ASX Announcement 31 August 2021 – Maiden 111koz JORC Resource at Karonie

<sup>3</sup> Refer WAMEX Report A103351 Silver Lake Resources surrender report Aldiss Project

#### **NEXT STEPS**

- Drill targeting to commence once all assays have been received for infill soils and rock chips.
- Assess regional assay results for follow-up mapping and additional sampling.
- Continue to progress Heritage Access Agreements to enable future drill programs.
- Pending gold assay results will inform additional follow-up programs.
- Commence early clearing for Western Brown RC drill program.

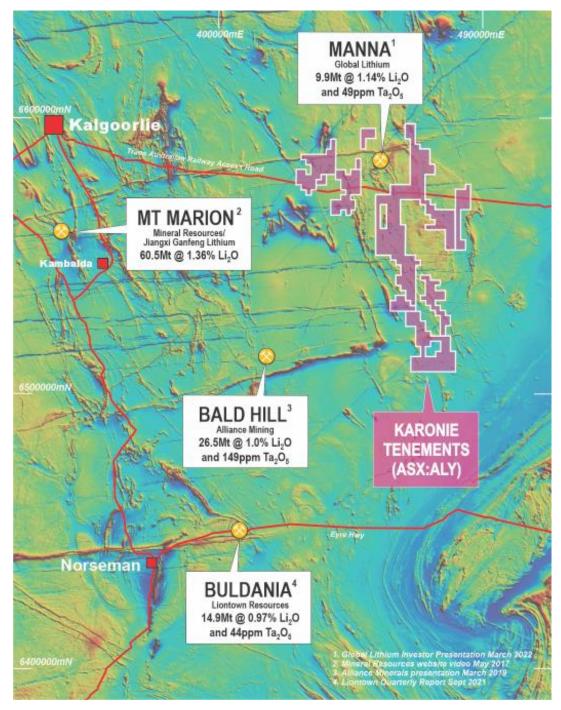


Figure 7: Karonie Projects and nearby Lithium development assets

#### **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 battery metals 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; "Superior"), and Sandfire Resources Limited (ASX: SFR; "Sandfire") are continuing to advance gold and base metal exploration, respectively.

#### **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.

#### This announcement has been approved for release by the Board.

For further information please contact:

James Wilson Chief Executive Officer E: <u>james@alchemyresources.com.au</u> P: 08 9481-4400

Forward looking statements This announcement contains "forward-looking statements", including statements about the scheduling of exploration and drilling programs. All statements other than those of historical facts included in this announcement, are forward-looking statements. Forward-looking statements are subject to risks, uncertainties, and other factors, which could cause actual events or results to differ materially from future events or results expressed, projected or implied by such forward-looking statements. The Company does not undertake to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

### **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.	Karonie soils collected from below the surface organic layer at a depth of approximately 20cm. Soil samples are sieved on site and the ~5mm fraction is retained for geochemical analysis. Karonie soil sample weights are approximately 300 grams. All sieved material collected is collected in either calico bags or kraft packets (up to 300 grams). The soil sampling techniques utilised for Karonie are considered standard industry practice. The random rock chip samples are irregularly spaced which is considered appropriate for regional scale level lithium and gold exploration.
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.).	No Drilling results reported
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling results reported

Criteria	JORC Code explanation	Commentary
	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.	
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.	Soil sample sites are described noting landform and nature of soil media. Soil sample descriptions are considered qualitative in nature.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	Sample preparation of Alchemy samples follows industry best practice standards at accredited laboratories.
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Sample preparation comprises oven drying, jaw crushing and pulverising to -75 microns (80% first
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	pass). Karonie soil samples collected on a 400x400 and 500x500m pattern (in addition to various ad-hoc
	Quality control procedures adopted for all	patterns due to landform irregularities).
	sub-sampling stages to maximise representivity of samples.	Sample sizes (0.2kg – 1.5kg) are considered appropriate for the technique.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half	Rock chip samples were collected in dry conditions and placed in numbered calico bags and grouped in polyweave bags for dispatch to the laboratory.
	sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	Rock chip sample sizes were generally 1.5-3.0kg. All rock chip samples have subsequently been delivered to the ALS Laboratory in Kalgoorlie.
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures	Karonie soil samples submitted to ALS laboratories for 48 elements by four acid digest,

Criteria	JORC Code explanation	Commentary
laboratory tests	used and whether the technique is considered partial or total.	ICP-MS finish (ME-MS61). This technique is considered total for elements assayed.
	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.	The analytical techniques and quality control protocols used are considered appropriate for the data to be used.
	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.	
Verification	The verification of significant intersections	No drilling results reported.
of sampling and assaying	by either independent or alternative company personnel.	Primary soil sampling data was collected electronically.
ussaying	The use of twinned holes	No twinned holes or drilling results are reported.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Alchemy Resources engaged a consultant (Dr Nigel Brand of Geochemical Services Pty Ltd) to compile and analyse the data. Anomalous thresholds were set based on statistical analysis of the data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used.	A handheld GPS was used to locate the data positions, with an expected +/-5m vertical and horizontal accuracy.
		The grid system used for all collar locations is the UTM Geocentric Datum of Australia 1994 (MGA94 Zone 51).
	Quality and adequacy of topographic control.	GPS measurements of sample positions are sufficiently accurate for first pass geochemical sampling.
		Nominal RL's were assigned from 1 sec (30m) satellite data.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of	Soil sampling line spacing varied between 250m to ~500m within each prospect area, and on these sample spacings vary from ~200m to ~400m.
	geological and grade continuity appropriate for the Mineral Resource and	Unknown sample representivity at this early stage of exploration sampling.
		No compositing undertaken on soil samples.

Criteria	JORC Code explanation	Commentary
	Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The orientation of the soil sampling lines has not considered to have introduced sampling bias. No compositing undertaken on soil samples.
Sample security	The measures taken to ensure sample security.	Samples are collected in polyweave bags and delivered directly from site to the assay laboratory in Kalgoorlie by Alchemy employees.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No review has been carried out to date.

### **APPENDIX B**

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	1 5 5	Type - Exploration Licences (currently in good standing)
		Reference name –Karonie & Roe Hills
		Reference number – E28/2575, E28/2880, E28/2681, E28/2667, E28/2976
		Location – 100km east of Kalgoorlie, Australia.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to	Ownership – 100% Goldtribe Corporation Pty Ltd (a wholly owned subsidiary of Alchemy Resources Limited)
	operate in the area.	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.
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, E28/2880, E28/2681, E28/2667, E28/2976. 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, E28/2880, E28/2681, E28/2667, E28/2976 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 (gold)– Structurally controlled, shear zone and dolerite hosted mesothermal gold mineralisation.
		Geological setting – Proterozoic Woodline Formation overlying variably folded Archean

Criteria	JORC Code explanation	Commentary
		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-biotite + calc-silicate alteration and observed steep north plunging fold axes and lineation's correlate with steep north plunging high grade ore shoots.
		Deposit Type (lithium) – The Company is also targeting lithium-caesium-tantalum mineralisation hosted by granitic pegmatites. The Company undertook large scale exploration in 2018-2020 focussing on gold exploration. There is no record of exploration for lithium exploration within the project areas. Areas of interest sit within the prospective "Goldilocks Zone", a defined corridor in which Lithium-Caesium-Tantalum pegmatites occur. The zone lies outboard of the granitic terrain and within the greenstone belts.
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:	No drillholes are reported.
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	$\circ \;\;$ dip and azimuth of the hole	
	<ul> <li>down hole length and interception depth</li> </ul>	
	$\circ$ hole length.	

Criteria	JORC Code explanation	Commentary
	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.	No levelling of the raw geochemical data was undertaken. Images of the individual elements were generated using IOGas software and proprietary analysis via the geochemical consultant.
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation	These relationships are particularly important in the reporting of Exploration Results.	Not applicable.
widths and intercept lengths	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	
	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').	
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 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	Not applicable.

Criteria	JORC Code explanation	Commentary
	high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	
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 relevant information have 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).	Appropriate plans are provided in the body of the report.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	