

# ASX ANNOUNCEMENT

14 DECEMBER 2020

CODE: ALY

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**Mr Lindsay Dudfield**  
Non-Executive Chairman

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## ISSUED CAPITAL

SHARES 672,243,453

OPTIONS 60,429,776 (Unlisted)

## PROJECTS

KARONIE (100%)

LAKE REBECCA (100%)

WEST LYNN (51% earning up to 80%)

LACHLAN (51% earning up to 80%)

BRYAH BASIN (10-20%)

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## Diamond core drilling results from Overflow Prospect, NSW

### Highlights

- Results returned from diamond core drilling at the Overflow Prospect included:
  - **15.8m @ 0.8g/t Au, 30g/t Ag, 1.4% Zn, 0.7% Pb from 266m**  
(incl. 1.1m @ 4.2g/t Au, 23g/t Ag, 2.5% Zn, 1.5% Pb)
- Relogging and structural review planned.

Alchemy Resources Limited (ASX: ALY) ("Alchemy") wishes to announce assay results from recent diamond drilling within the Overflow Gold and Base Metal Project in the Cobar Basin, NSW (*Figure 1*).

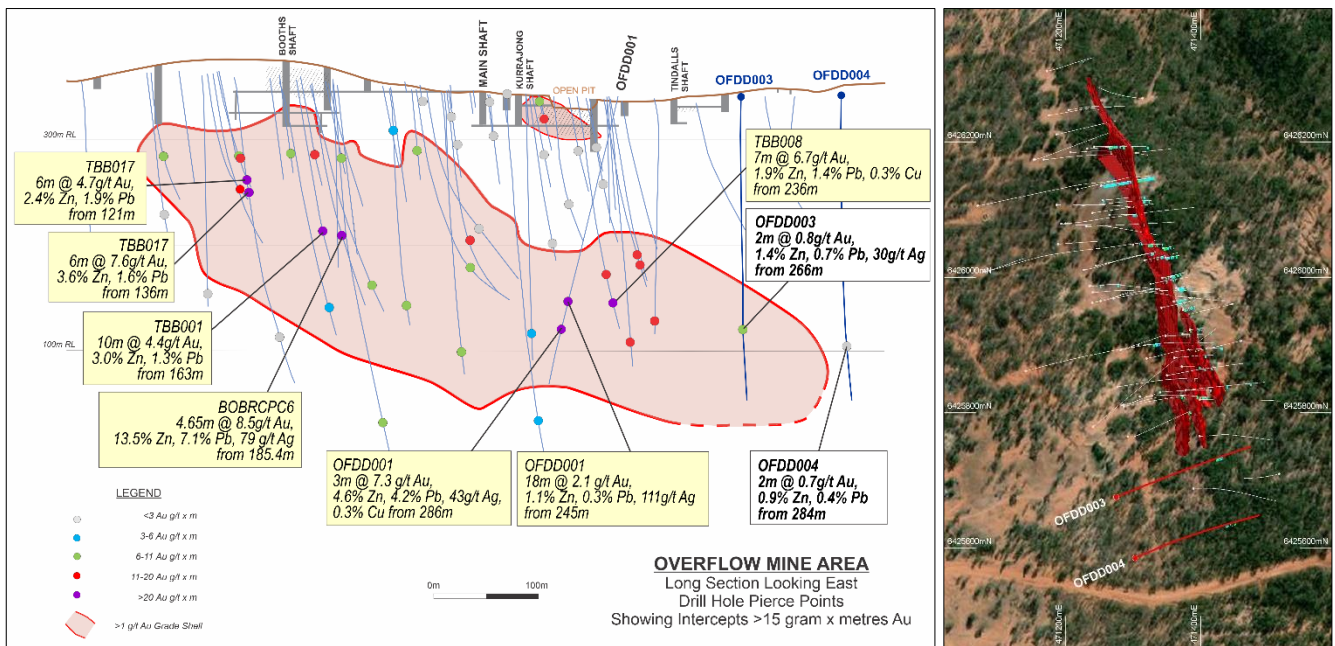
The two-hole diamond drill program aimed to expand the known extent of gold and base metal mineralisation down plunge to the south of previous high-grade gold intercepts<sup>1</sup>. The first hole (OFDD003) intercepted strong shearing, faulting, quartz-carbonate veining, and pyrite-sphalerite-galena mineralisation within altered sediments. Assays from this zone returned 15.8m @ 0.8g/t Au, 30g/t Ag, 1.4% Zn, 0.7% Pb from 266m, including 1m @ 2.7g/t Au, 22g/t Ag, 1.1% Zn, 0.7% Pb from 271m, and 1.1m @ 4.2g/t Au, 23g/t Ag, 2.5% Zn, 1.5% Pb from 280.7m (*Figure 1*).

The second hole (OFDD004), located a further ~100m down plunge to the south of OFDD003, intercepted a wide zone of intense shearing, fracturing and fault breccia within altered sediments from 260 - 287m, however only minor quartz veining and sulphides were observed. Assays returned a best intercept of 2m @ 0.7g/t Au, 5g/t Ag, 0.9% Zn, 0.4% Pb from 284m (*Figure 1*).

The diamond drilling confirmed the extent and significance of the Overflow shear zone, whilst highlighting the complexity of structural controls on high grade shoots at the prospect. Detailed relogging of both Alchemy and historic drill core is planned in order to determine the structural controls and identify additional drill targets at depth and along strike to the north and south.

A more detailed analysis of the down hole electromagnetic (EM) survey conducted within OFDD004 highlighted a weak conductive response from ~260m – 280m corresponding to the Overflow shear zone but has discounted a weak conductive response at the end of the hole as a possible early to mid-channel IP effect. The survey confirmed that the sphalerite at Overflow is not conductive and does not activate an EM response.

<sup>1</sup> Refer to Alchemy Resources Limited ASX announcement dated 1 October 2020, CP L. Ryan.



**Figure 1:** Overflow Prospect long section looking east (left) and plan (right) showing >1g/t Au grade shell, and OFDD003-004 drill traces coloured by Au/g/t.

**Table A:** Overflow Prospect significant diamond drilling intercepts

Hole_ID	mFrom	mTo	Width	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Cu (%)	Intercept *	Comments
OFDD003	266.0	281.8	15.80	0.82	30.0	1.40	0.70	0.08	<b>15.8m @ 0.8g/t Au, 30g/t Ag, 1.4% Zn, 0.7% Pb</b>	incl. 2.4m core loss
	271.0	272.0	1.00	2.69	-0.5	1.14	0.68	0.01	<b>1.0m @ 2.7g/t Au, 22g/t Ag, 1.1% Zn, 0.7% Pb</b>	
	280.7	281.8	1.10	4.21	23.4	2.52	1.48	0.09	<b>1.1m @ 4.2g/t Au, 23g/t Ag, 2.5% Zn, 1.5% Pb</b>	incl. 0.4m core loss
OFDD004	284.0	286.0	2.00	0.71	5.0	0.85	0.41	0.04	<b>2m @ 0.7g/t Au, 5g/t Ag, 0.9% Zn, 0.4% Pb</b>	

\* 0.3g/t Au lower cut-off, no upper cut-off, max 2m internal waste, all intercepts >0.3g/t Au and >1% Zn are reported

**Table B:** Overflow Prospect Diamond Drilling Collar Information

Hole ID	Easting (GDA94z55)	Northing (GDA94z55)	RL	Dip (degrees)	Azimuth (degrees)	Total Depth (m)
OFDD003	471271.6	6425675.6	341.2	-56	66.7	351.5
OFDD004	471304.2	6425584.3	343.8	-60	64.7	347.1

\* GDA94 zone 55

Authorised by the Alchemy Board of Directors.

Mr Leigh Ryan – Managing Director

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The information in this report that relates to Exploration Results is based on information compiled by Mr Leigh Ryan, who is the Managing Director of Alchemy Resources Limited and holds shares and options in the Company. Mr Ryan 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 Ryan consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>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.</i></p>	<p>Samples referred to in this Public Report are diamond core drill samples, obtained using an ‘industry standard’ drill rig (Sandvic DE710), drilling equipment and sampling practices.</p> <p>Diamond drilling was used to obtain core samples collected in 3m runs and transferred into plastic core trays.</p> <p>The diamond core samples obtained are considered to be representative of the material drilled.</p> <p>Sampling was carried out using documented ALY sampling and QAQC procedures (detailed below).</p>
<p><i>Drilling techniques</i></p>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></p>	<p>Diamond drilling was completed from surface initially using a chrome barrel and then switching to a standard barrel in order to obtain HQ3 core samples. Down hole surveys were taken every 30m as the hole progressed, then every 5m at the completion of the hole, using a down hole multi-shot Reflex camera. Every core run was oriented using a Reflex core orienting tool. The diamond core was reconstructed into continuous runs on an angle iron cradle for orientation line marking and down hole depth marks.</p>

Criteria	JORC Code explanation	Commentary
<p><i>Drill sample recovery</i></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>Diamond core recoveries and RQD measurements were estimated and recorded into Excel spreadsheets then uploaded into a relational database. The total core recovery was 97.1% in OFDD003 and 97.4% in OFDD004. Minor sample recovery problems included 0.5m core loss between 273-274m in OFDD003, 1.2m core loss between 279.3-280.7m in OFDD003, 0.4m core loss between 280.7-281.8m in OFDD003, and 1.2m core loss between 264.7m and 266.9m in OFDD004.</p> <p>No relationship exists between core sample recovery and grade, and accordingly it appears that no bias has occurred as a result of loss/gain of material.</p>
<p><i>Logging</i></p>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Lithological logging was completed on all diamond core, with colour, weathering, grain-size, lithology, alteration, mineralogy, veining, and comments on other significant features noted. Logging of sulphide mineralisation and veining is quantitative.</p> <p>All holes were logged in full.</p> <p>Structural and geotechnical logging was also completed with bedding, foliation, veining, and fractures logged and measured using a kenometer.</p> <p>No judgement has yet been made by independent qualified consultants as to whether diamond samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<p>Core samples will be cut in half along the core axis using an Almonte diamond core saw.</p> <p>One commercial laboratory standard or blank laboratory standard, was inserted every 25 samples (i.e. 4% QAQC samples). All samples were 1m ½ core samples.</p> <p>5% of sample pulps will be sent to an alternate laboratory, along with 1m ¼ core duplicate samples of mineralised zones.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>Statistical analysis of QAQC data shows a high level of lab accuracy and a lack of contamination between successive samples.</p> <p>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.</p>
<p><i>Quality of assay data and laboratory tests</i></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>1m ½ core samples were cut and sampled prior to being sent to the ALS Laboratory in Orange for sample preparation and analysis.</p> <p>Samples were analysed using ALS method code Au-AA26 for Au (Ore Grade Au 50g FA AA finish) and ME-ICP61 for 33 elements including Ag, Cu, Pb, and Zn.</p> <p>Laboratory QAQC involves the use of internal laboratory standards using certified reference material, blanks, splits and replicates as part of the in-house procedures.</p>
<p><i>Verification of sampling and assaying</i></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Reported drill hole intercepts are compiled by the Company's Managing Director (MD) who is also the competent person.</p> <p>No twinned holes were drilled in the current drilling campaign.</p> <p>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 Microsoft Access database by an experienced database administrator, and reviewed by the Alchemy MD, who is a competent person.</p>

Criteria	JORC Code explanation	Commentary
		No assay data adjustments have been made.
<i>Location of data points</i>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>A Trimble Geoexplorer 6000 DGPS was used to peg collar positions, with an expected &lt;1m vertical and horizontal accuracy.</p> <p>Down hole surveys (using a multi-shot down hole Reflex camera) were taken every 30m as the hole progressed and every 5m at the completion of the hole.</p> <p>The grid system used is the UTM Geocentric Datum of Australia 1994 (GDA94) Zone 55.</p> <p>The drill collar and down hole location accuracy is considered appropriate for this stage of exploration.</p>
<i>Data spacing and distribution</i>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>The drill hole intercept spacing in the plane of the ore zone in vicinity of the current two diamond holes is ~100m in a down plunge direction.</p> <p>No Mineral Resource or Reserve is being reported for this drilling.</p> <p>No data compositing has been applied.</p>
<i>Orientation of data in relation to geological structure</i>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type</i></p> <p><i>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.</i></p>	<p>OFDD003 was setup on surface at a -56<sup>0</sup> inclination and ~67<sup>0</sup> azimuth (GDA94). OFDD004 was setup on surface at a -60<sup>0</sup> inclination and ~67<sup>0</sup> azimuth (GDA94). At the ore zone, the drill holes were oriented at ~90<sup>0</sup> to the strike of mineralisation, and ~50<sup>0</sup> (or less) to the dip of mineralisation which implies that downhole intercept width x ~0.77 = true intercept width (or thicker).</p> <p>No orientation based sampling bias has been identified.</p>
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Core trays were palletised and trucked from site to Orange, NSW. The core trays are stored in a secure storage shed in Orange. Calico sample bags were used for core samples. Five calico sample bags were put into large green plastic bags for transport to ALS Orange. Residual core samples and sample pulps are stored at ALS Orange until

Criteria	JORC Code explanation	Commentary
		they are re-located to the RME office in Orange for permanent storage.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>An internal review of the sampling techniques, and sample data capture concluded that both are of sufficient quality to carry out resource estimation.</p> <p>No external audit or review of the sampling techniques or sample data capture has been conducted to date.</p>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<p><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <p><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></p>	<p>Type - Exploration Licence (currently in good standing)</p> <p>Reference name –Overflow</p> <p>Reference number – EL5878</p> <p>Location – Central NSW, Australia.</p> <p>Ownership – Alchemy 51%, earning 80% via Farm-in and JV Agreement with Heron Resources Limited (tenure held by Ochre Resources Pty Ltd, a wholly owned subsidiary of Heron Resources)</p> <p>Overriding royalties - none</p> <p>The land is held under a combination of freehold and crown land.</p> <p>No Wilderness or National Parks, Native Title sites or registered historical sites are known.</p> <p>No environmental issues other than historic mining debris (from the early 1900's) are known.</p>
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Overflow Mine historic production (1897-1936) was 4,972oz @ 12.9g/t Au, 35,121oz @ 107g/t Ag, &amp; 1,117t @ 10.9% Pb</p> <p>The tenure that has included the Overflow mine has been explored by Enterprise Exploration (1957), Australian Selection (1968), Pennzoil of Australia (1972 - 75), Minerals Exploration (1975 - 79), Aberfoyle and Cominco JV ("Abminco") (1975 - 79), CRA Exploration (1978-79), Amoco Minerals</p>

Criteria	JORC Code explanation	Commentary
		<p>(1980 – 83), Delta Gold (1992 – 98) and after purchasing Delta Gold’s interest, Tri Origin Australia NL (1999 – 2001) who then optioned the project to Triako (now KBL) in 2001 who withdrew from the deal in 2006. Tri Origin continued to explore the area as Tri Origin until 2009, then as TriAusMin after a name change in 2010. TriAusMin and Heron merged in 2014 and then signed the current farm-in and Joint Venture Agreement with Alchemy Resources in June 2016.</p> <p>Exploration to date across the current tenement area has included geological and regolith mapping, all types of geochemical sampling, numerous airborne and ground geophysical surveys (Magnetics, EM and IP) and 333 drill holes (178 RAB, 123 RC and 32 diamond core)</p>
<p><i>Geology</i></p>	<p><i>Deposit type, geological setting and style of mineralisation</i></p>	<p>Deposit Type – Polymetallic (Au, Ag, Cu, Pb, Zn) Cobar Style or Hera Style Deposit</p> <p>Geological setting – Folded Devonian basin and shelf sediments of the Cobar SuperGroup overlying Ordovician sediments and minor basic volcanics of the Girilambone Group (basement sequence). Deposited into a back-arc marine basin. Multiple deformation events, faulting and metamorphism. Devonian rocks include felsic tuffs and pyroclastics of the Majuba Volcanics, which overlie and are interfingered with fine sediments and volcanoclastics of the Baledmund Formation.</p> <p>Style of mineralisation – Cobar-style (Au, Ag, Cu, Pb, Zn) with a possible epithermal component with quartz veining displaying crustiform and vuggy textures. Mineralisation is confined to the Overflow Shear Zone, which contains both shear parallel and steeply NNW dipping, cross-cutting, quartz vein sets, along with shallow south dipping fault zones, both of which may control plunging high grade</p>



Criteria	JORC Code explanation	Commentary
		<p>mineralisation. Higher base metal results are encountered towards the top and bottom of each mineralised zone, occurring as banded massive to semi-massive sulphides within silicified fine-grained clastic sediments.</p>
<p><i>Drill hole Information</i></p>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li><i>○ easting and northing of the drill hole collar</i></li> <li><i>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>○ dip and azimuth of the hole</i></li> <li><i>○ down hole length and interception depth</i></li> <li><i>○ hole length.</i></li> </ul> <p><i>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.</i></p>	<p>Drill hole details are tabulated within the body of the announcement.</p>
<p><i>Data aggregation methods</i></p>	<p><i>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.</i></p> <p><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p>	<p>A weighted average was used to calculate all mineralisation intercepts.</p> <p>A 0.3g/t Au lower cut-off grade, no upper cut off grade, and maximum 2m internal waste is used in the calculations for all diamond core drill results. Ag, Cu, Pb, and Zn drill intercepts all correspond to a lower cut-off of 0.3g/t Au. All results &gt;0.03g/t Au and &gt;1% Zn are reported.</p>

Criteria	JORC Code explanation	Commentary
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><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').</i></p>	<p>At the ore zone, the drill holes were oriented at <math>\sim 90^{\circ}</math> to the strike of mineralisation, and <math>\sim 50^{\circ}</math> (or less) to the dip of mineralisation which implies that downhole intercept width <math>\times \sim 0.77 =</math> true intercept width (or thicker).</p> <p>No orientation based sampling or results bias has been identified.</p>
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Appropriate plans and cross sections have been included in the body of this announcement.
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	Lower cut-off grade = 0.3g/t Au, no top cut applied, max internal waste = 2m, all intervals $>0.3\text{g/t}$ are Au reported. Ag, Cu, Pb, and Zn drill intercepts all correspond to a lower cut-off of 0.3g/t Au. All results $>0.03\text{g/t}$ Au and $>1\%$ Zn are reported.
<i>Other substantive exploration data</i>	<i>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.</i>	All meaningful data and information has been included in the body of the report.
<i>Further work</i>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main</i></p>	Detailed relogging of Alchemy drill core and historic drill core is planned in order to determine the structural controls and identify additional drill targets at depth and along strike to the north and south of the Overflow Prospect.

Criteria	JORC Code explanation	Commentary
	<i>geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	