

2<sup>nd</sup> August 2021**BOARD AND MANAGEMENT**MR LINDSAY DUDFIELD  
NON-EXECUTIVE CHAIRMANMR JAMES WILSON  
CHIEF EXECUTIVE OFFICERMS LIZA CARPENE  
NON-EXECUTIVE DIRECTORMR ANTHONY HO  
NON-EXECUTIVE DIRECTORMS JESSAMYN LYONS  
COMPANY SECRETARY**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%)

# Melrose and Yellow Mountain Exploration Update

**KEY POINTS**

- Historic aircore and RC drill holes specifically targeting the 12km long Melrose magnetic anomaly ("MMA") resampled and assayed for 48 elements
- Data interpretation by specialist consultant geochemist Dr Scott Halley suggests the MMA has geochemical affinities to an Intrusive Related Gold System ("IRGS")
- Significant multi-element base of hole geochemical pathfinder anomalies prospective for gold delineated, including:
  - Strong bismuth, molybdenum, tellurium and tin values; these are pathfinder elements typical in reduced magma gold bearing intrusion style deposits (such as Kidston 5Moz or Mungana 1.2Moz)
  - A strong Arsenic anomaly in the northern area indicates the intrusion may be over-turned. This 1km x 1km area has sparse drilling and sits adjacent to high grade intercepts drilled in 2004<sup>3</sup>.
  - Numerous historic high-grade gold results sit adjacent to the target area within the MMA, including<sup>3</sup>:
    - 0.8m @ 9.05g/t Au (71m) in TYMD003
    - 1m @ 5.52/t Au (150m) in TYM065
    - 0.73m @ 12.6g/t Au (74m) in TYMD004
    - 0.8m @ 4.46g/t Au (44m) in TYMAC101
  - Planning for an RC drill program to test the northern extent of the MMA based on the updated geochemical and geological interpretation is underway.
- Historic (c.2000) Yellow Mountain Mine Prospect results of mullock dump grab sampling have been located, revealing peak values of **7.15% copper, 6.4% lead, and 1.08g/t gold<sup>6,7</sup>** around the Yellow Mountain mine shaft area. This sample site sits adjacent to previously reported results including **24.4m @ 1.12% Cu, 1.19% Pb and 1.02% Zn from surface<sup>3</sup>** in historic drilling. This is highly encouraging and significantly higher than previously reported results.
- RC drill planning commenced to test the contact zone on the MMA and access agreements process for Yellow Mountain Mine Prospect underway

**ASX : ALY**[alchemyresources.com.au](http://alchemyresources.com.au)**Alchemy Resources Limited**

ABN: 17 124 444 122

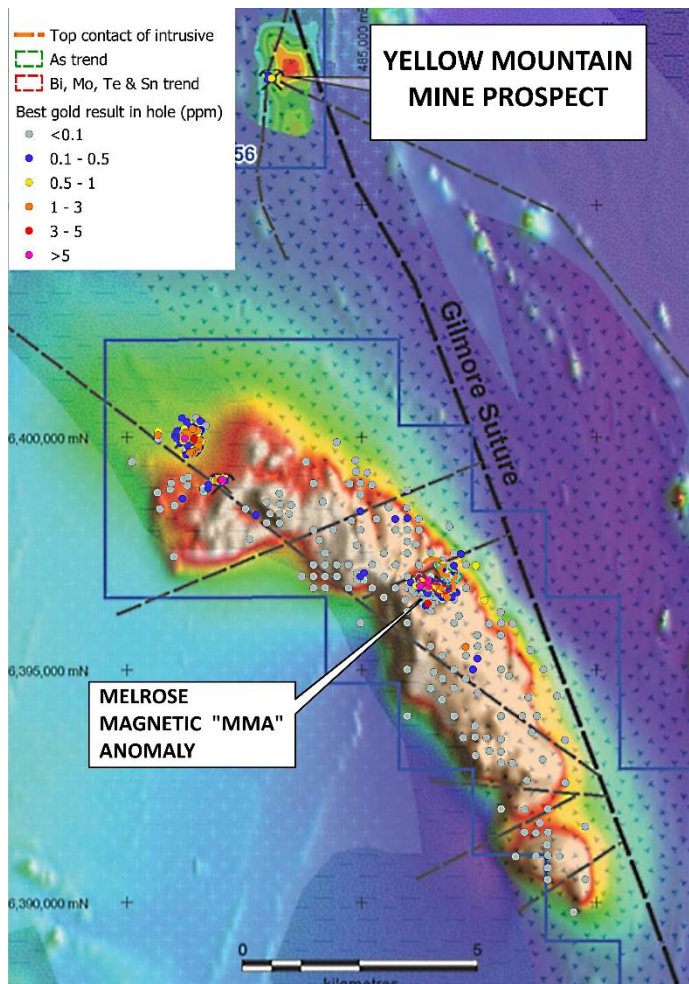
T: 9481 4400 | E: [info@alchemyresources.com.au](mailto:info@alchemyresources.com.au) | W: [www.alchemyresources.com.au](http://www.alchemyresources.com.au)  
8/8 Clive Street, West Perth 6004, WA

**Alchemy's Chief Executive Officer, James Wilson said**

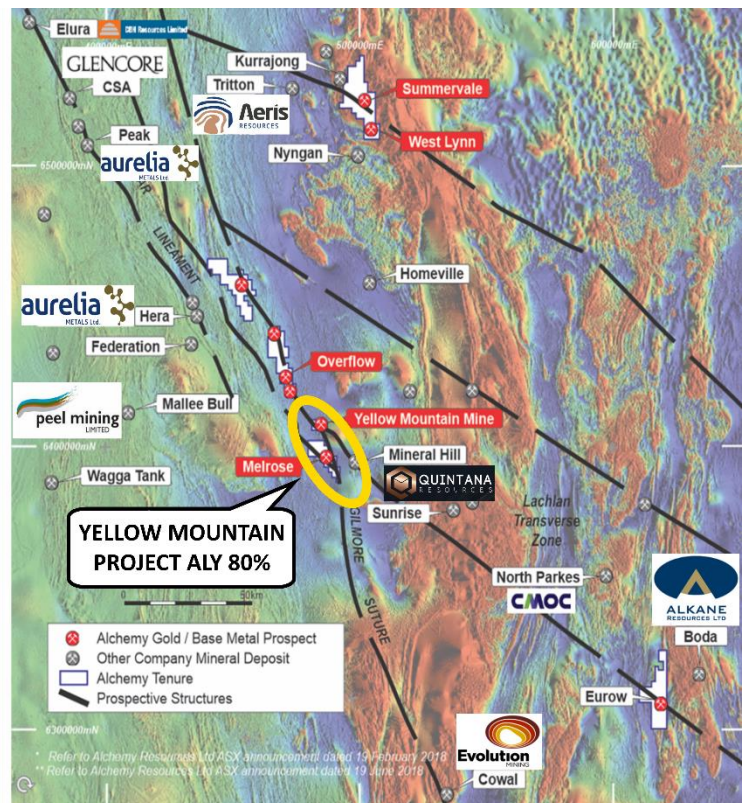
"These significant drill targets have been largely overlooked by previous explorers who were testing a different geological model. There has been only limited shallow aircore drilling into the main target area at the Melrose Magnetic Anomaly, yet it has numerous high-grade results on its periphery which is a great sign. The presence of high-grade copper-lead results at Yellow Mountain Mine Prospect is compelling and demonstrates that there are significantly higher grades in the mine area which have yet to be adequately tested. Planning is underway for access to both the MMA and Yellow Mountain Mine prospects to enable drill programs to commence as soon as practical".

**Yellow Mountain Project Area**

Alchemy is pleased to announce an extensive review of previous exploration at the Yellow Mountain and Melrose Projects in New South Wales has resulted in the discovery of historic samples and assay results from rock chip and drill programs which the Company believes highlights significant exploration potential at the Project.



**Figure 1: MMA and Yellow Mountain Mine Prospect**



**Figure 2: Yellow Mountain Project Location**

## MELROSE MAGNETIC ANOMALY (“MMA”, ALY 80%)

### Historic Work:

Most of the work undertaken at the Melrose Prospect has involved shallow aircore and RAB drilling averaging around 60m depth, and reverse circulation (RC) drilling averaging approximately 120m depth with limited diamond drilling. A significant portion of the drilling intersected variable depth transported material (>60m) prior to intersecting basement lithologies. The Melrose Magnetic Anomaly (“MMA”) is a large, regionally significant magnetic anomaly which extends for over 12km. The MMA is overlain by over 50m of alluvium. There has been sporadic work undertaken since 1968, with the most recent drilling by Triako Resources in 2002 and Paradigm Metals in 2012<sup>1</sup>.

### Recent Work by Alchemy:

Approximately 242 samples from bottom of hole aircore and RC samples have been recovered from drill programs conducted by Triako Limited in 2002 at the MMA. The strategy was to re-sample historic holes that had not been previously assayed using 4-acid digest multi-element geochemistry. Alchemy believes that this modern assaying technique would give a much clearer picture of the potential of the system at Melrose, in particular the area focussed around the MMA.

The samples were assayed for 48 elements and the data was interpreted by well-regarded geochemist, Dr Scott Halley. The data returned significant bismuth, molybdenum, tellurium, and tin anomalism over the southern part of the MMA; these elements are pathfinder elements which are typical in reduced magma gold bearing intrusion style (IRGS) deposits (such as Kidston 5Moz or Mungana 1.2Moz). In addition, the dispersion of the arsenic anomalism at the MMA is offset to the north-east which suggests the intrusion may have been over-turned during deformation.

In this model, the gold preferentially accumulates on the top contact zone, which Alchemy believes to be the north-eastern edge of the MMA in an area of approximately 1km x 1km. This area has seen only sparse and shallow historic aircore drilling with a total of 12 shallow holes over this zone.

Drilling by previous explorers focussed on the south-western portion of the MMA and was successful in returning high grade gold intercepts (*Table 1, Figures 1 & 3*). The target for this drilling was a 1km x 1km wide magnetic low modelled as a granodiorite plug (*Figure 3*). Six diamond holes and five RC holes, all <190m deep except for a 458m diamond hole completed in 1968<sup>2</sup>, have been drilled into the MMA intrusive returning gold intercepts associated with quartz veined, sericite altered granodiorite including<sup>3</sup>:

Hole ID	Hole Type	Easting	Northing	Dip	Azimuth	Depth (m)	From (m)	To (m)	Width (m)	Au (g/t)
TYM063	Reverse Circulation	486783	6396984	-60	90.5	144	122	123	1	2.07
TYM064	Reverse Circulation	486463	6396984	-60	90.5	143	57	58	1	2.13
TYM065	Reverse Circulation	486383	6396984	-60	90.5	178	150	151	1	5.52
TYMAC053	Aircore	486863	6397434	-90	0	47	23	24	1	0.56
TYMAC101	Aircore	486563	6397034	-90	0	57	44	45	1	4.46
TYMAC111	Aircore	486913	6396784	-90	0	56	54	55	1	2.21
TYMD001	Diamond Core	486398	6396984	-60	91	189.3	88	88.63	0.63	2.77
TYMD003	Diamond Core	486563	6397109	-55	181	147.5	71	71.8	0.8	9.05
TYMD004	Diamond Core	486563	6396959	-55	0	150.5	74.74	75.47	0.73	12.60

**Table 1: Melrose Magnetic Anomaly historic drill intercepts from Triako (2002-2004)**

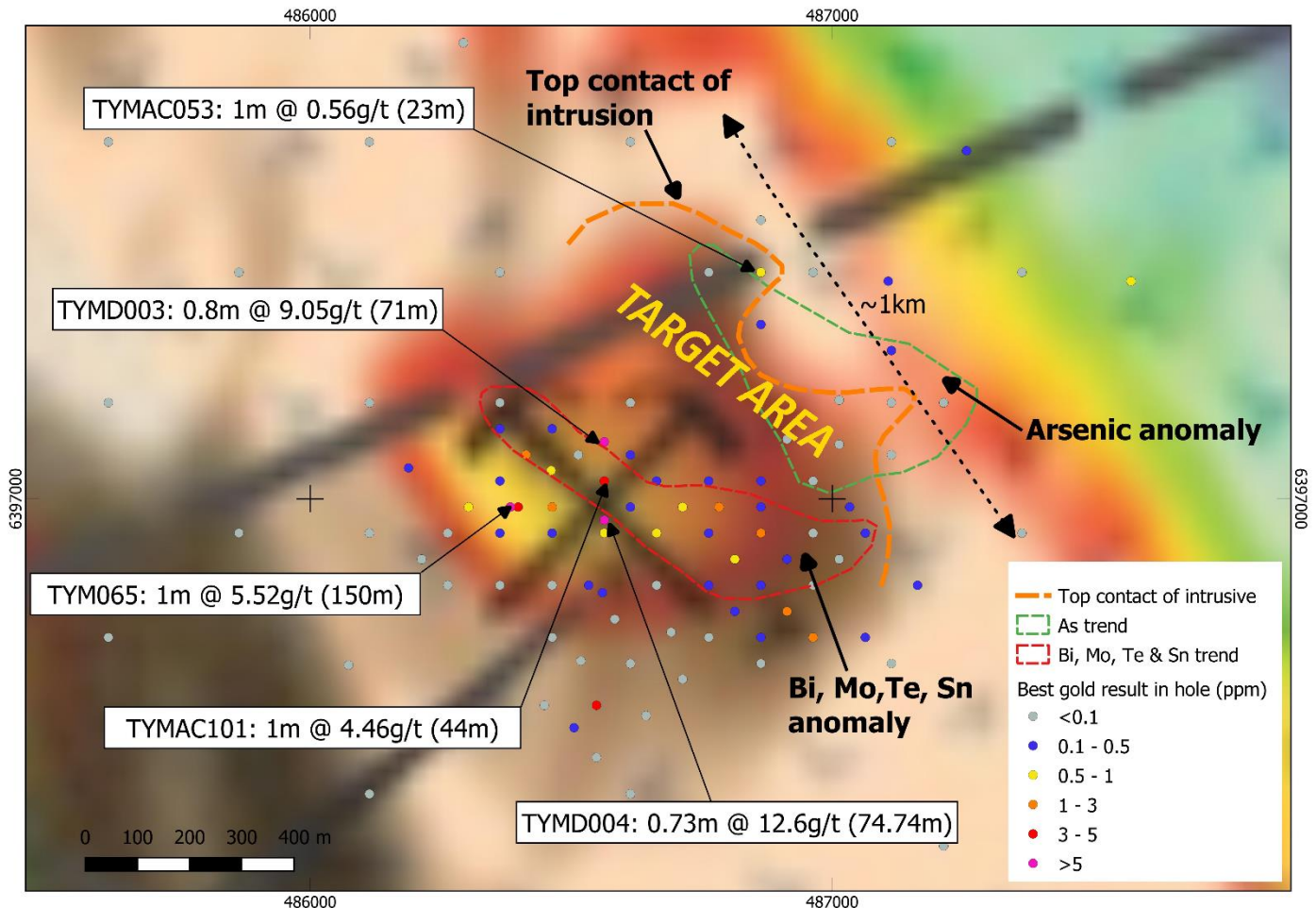
<sup>1</sup> Refer to NSW DIGS Open File Report (RE0002711) - Paradigm Metals First Annual Exploration for licence 7697 Report dated 2<sup>nd</sup> February 2012

<sup>2</sup> Refer to Golden Cross Resources Limited June Quarterly Report 2004 dated 30 July 2004, CP - D. Timms

<sup>3</sup> Refer Alchemy Resources Limited ASX Release Dated 9<sup>th</sup> June 2020 – Significant Copper-Gold Targets identified at Yellow Mountain NSW



Alchemy believes the previous explorers targeted sub-vertical structures; however, the current thinking that the MMA is the upper section of an overturned IRGS system would suggest the presence of a series of shallow dipping, flat sheeted structures which is broadly apparent in the high grades observed in historic drilling (Table 1):



**Figure 3: Melrose Magnetic Anomaly with historic assays, multi-element contours and target areas**

### **YELLOW MOUNTAIN MINE PROSPECT (ALY 80%)**

#### **History:**

The Yellow Mountain Mine was worked from the mid-1800s. Accurate production records do not exist for the mine; however, the mine reportedly produced 2.74t of lead, 360 kg of copper and 6.2kg of silver from an open pit<sup>4</sup>. The Yellow Mountain Mine Prospect was last drilled in 1986; most of the historic drilling was shallow and many of the drill holes were not assayed for gold.

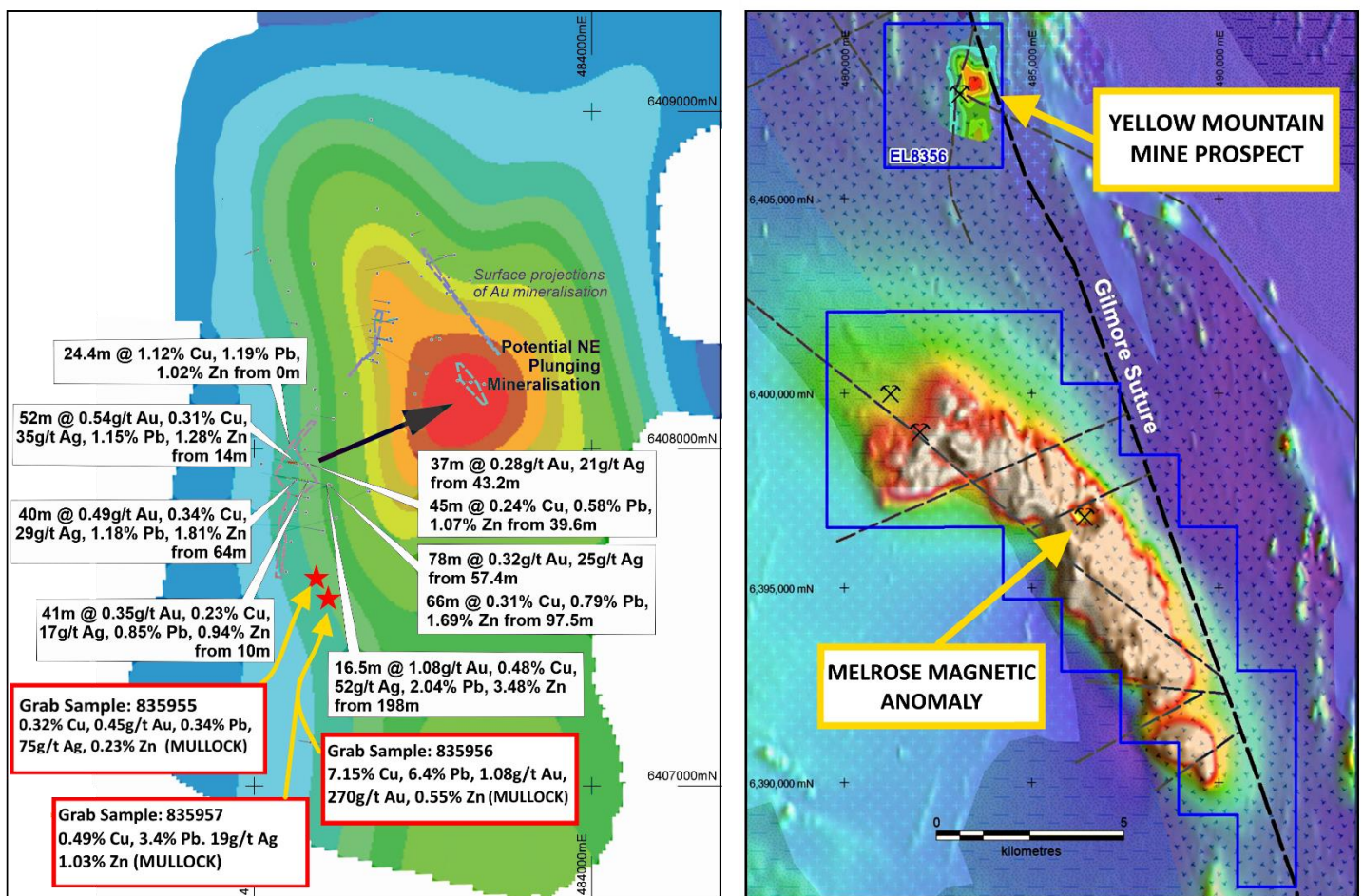
In early 2012, Triako Resources collected 22 rock chip samples from the Yellow Mountain Mine area to evaluate what had previously been considered to be a base metals target. Five samples returned gold assays of more than 1g/t Au with maximum values of 5.5g/t Au, 267g/t Ag, 24% Pb and 11% Zn. Four of those had silver assays of over 100g/t Ag, similar to the mineralisation at Alchemy's Overflow Project, located 20km to the north.<sup>4</sup>

<sup>4</sup> Refer to NSW DIGS Open File Report (RE0003757) - Paradigm Metals Annual Exploration for Licence 6325 Report dated 19th October 2012 – Table 3

<sup>5</sup> Refer ALY ASX announcement 9 June 2019: Significant Copper-Gold Targets identified at Yellow Mountain

Historic drilling at the Yellow Mountain Mine Prospect (*Figure 4*) returned broad zones of copper and gold mineralisation including<sup>5</sup>:

- 52m @ 0.54g/t Au, 0.31% Cu, 35g/t Ag, 1.15% Pb, 1.28% Zn from 14m (PYM011)
- 40m @ 0.49g/t Au, 0.34% Cu, 29g/t Ag, 1.18% Pb, 1.81% Zn from 64m (PYM012)
- 78m @ 0.32g/t Au, 25g/t Ag from 57.4m (YD02)
- 66m @ 0.31% Cu, 0.79% Pb, 1.69% Zn from 97.5m (YD02)
- 45m @ 0.24% Cu, 0.58% Pb, 1.07% Zn from 39.6m (YD05)
- 16.5m @ 1.08g/t Au, 0.48% Cu, 52g/t Ag, 2.04% Pb, 3.48% Zn from 198m (YD13)
- 24.4m @ 1.12% Cu, 1.19% Pb, 1.02% Zn from surface (YP05A) (no Au or Ag assays)



**Figure 4: MMA and Yellow Mountain Mine Prospect with historic drilling and recently discovered grab sample assays**





**Figure 5: Yellow Mountain Mine Prospect – Main Shaft area**

#### Recent work by Alchemy:

Recently discovered results from sampling of mullock dumps undertaken in 2001 by Golden Cross Resources Ltd has revealed peak assays of **7.15% Cu, 6.4% Pb & 1.08g/t Au<sup>6,7</sup>**. These samples are located in the area around the historic Yellow Mountain Mine shaft which was operated in the early-mid 1930s. Alchemy sees this as significant, showing the potential for high grade mineralisation within the mine. This sample site sits adjacent to previously reported results including **24.4m @ 1.12% Cu, 1.19% Pb, 1.02% Zn from surface** in historic drilling<sup>5</sup>.

SAMPLE ID	Company	Sample Type	Easting (mN)	Northing (mN)	Sample Date	Geology	Depth (m)	Submission #	Lab Job #	Lab Location
835955	Golden Cross Resources	GRAB - MULLOCK DUMP	483213	6407551	10/05/2000	Sheared Tuff	0m	128	17927	ALS Orange NSW
835956	Golden Cross Resources	GRAB - MULLOCK DUMP	483169	6407626	10/05/2000	Quartz Vein	0m	128	17927	ALS Orange NSW
835957	Golden Cross Resources	GRAB - MULLOCK DUMP	483169	6407625	10/05/2000	Silicified tuff	0m	128	17927	ALS Orange NSW

**Table 2: Yellow Mountain Mine Prospect Historic Grab Sample Locations<sup>6</sup>**

SAMPLE ID	Sample Location Type	Cu (%)	Pb (%)	Zn (%)	Ag (ppm)	Bi (ppm)
835955	MULLOCK DUMP	0.45	0.34	0.23	75	309
835956	MULLOCK DUMP	7.15	6.40	0.55	270	450
835957	MULLOCK DUMP	0.49	3.40	0.10	53	11

**Table 3: Yellow Mountain Mine Prospect Historic Grab Sample Assays<sup>6</sup>**

<sup>6</sup> Refer to NSW DIGS Open file report (R00019808) Golden Cross Operations Pty Ltd – First Annual Exploration Report EL5721 EL5787, Condobolin Area 3<sup>rd</sup> May 2001

<sup>7</sup> Refer to NSW DIGS Open file report (R00019808) Golden Cross Operations Pty Ltd – Appendix 1: Yellow Mtn reconnaissance report D00389976

## **NEXT STEPS:**

### **RC drill program planning for MMA and access agreements for Yellow Mountain Mine Prospect underway.**

Alchemy is now planning a program of RC drilling to test the anomalism associated with the northern portion of the MMA. Historic drill patterns and interpretation suggested drilling targeted sub-vertical lodes. Using the new interpretation of a series of flat dipping structures integrates well into the existing high-grade intercepts from previous explorers. The aim is to test the northern extent of these zones as they approach the top of the intrusion, which is interpreted to sit at the north-eastern contact zone of the MMA.

At the Yellow Mountain Mine Prospect, heritage agreements are underway to enable access to conduct further field work.

## **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: **SGL**; “**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: [james@alchemyresources.com.au](mailto:james@alchemyresources.com.au)  
P: 08 9481-4400

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

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<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>No New RC Sampling announced in this report.</p> <p>3 highly selective grab samples taken from a historic mine mullock dump (Samples 835955-835957). Samples are not appropriate for Mineral Resource Estimates and should not be inferred to indicate the grade of the mineralised system.</p> <p>Samples referred to in this Public Report are diamond core, percussion, reverse circulation (RC), and Aircore (AC) drill samples obtained using a variety of sampling techniques most of which have not been documented in the historic reports.</p> <p>No sampling technique information found for YD prefixed diamond holes, YP prefixed percussion holes or TYM prefixed AC drill holes.</p> <p>TYM prefixed diamond holes were NQ size and 1/3 core samples submitted for analysis.</p> <p>TYM prefixed RC drill holes were sampled in 1m and 4m composite intervals by an unknown method. 1m samples were submitted for analysis where 4m composite results were &gt;0.2g/t Au.</p> <p>PYM prefixed RC holes were sampled at 2m intervals with a sample split of ~4kg sent for sample prep and analysis.</p> <p>Where sample information is available the samples are considered to be representative of the material drilled.</p> <p>Geochemistry samples from Melrose were submitted to ALS in Orange for Multi-element (48 element) analysis by 4-acid digest (ICP-MS (ME-MS61L)</p>
<i>Drilling techniques</i>	<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>Drill types are included in the tables within the body of the report.</p> <p>All TYMAC prefixed holes were completed by Budd Drilling using industry standard drill rigs and drill bits.</p>



Criteria	JORC Code explanation	Commentary
		No detailed drilling technique information has been reported for the Yellow Mountain Mine drilling other than drill type and diamond core size (see below).
<i>Drill sample recovery</i>	<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>	Very little sample recovery and moisture content information has been found in the historic reports, and subsequently relationships between sample recovery and grade, and bias as a result of loss/gain of material could not be determined.
<i>Logging</i>	<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>Historic Grab Samples are biased towards extracting base metals from remnant mine waste spoils guided by visual hand selection.</p> <p>Geological logging was completed on all AC, RC, percussion and diamond holes, with normal geological logging practices observed including 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.</p> <p>No judgement has yet been made by independent qualified consultants as to whether diamond, RC, percussion or AC samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p>
<i>Sub-sampling techniques and sample preparation</i>	<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>No sub-sampling technique or sampling preparation information was found for YD prefixed diamond holes, YP prefixed percussion holes or TYM prefixed AC drill holes.</p> <p>TYM prefixed diamond holes were NQ size and 1/3 core samples submitted for analysis.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <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>TYM prefixed RC drill holes were sampled in 1m and 4m composite intervals by an unknown method. 1m samples were submitted for analysis where 4m composite results were &gt;0.2g/t Au.</p> <p>PYM prefixed RC holes were sampled at 2m intervals with a sample split of ~4kg sent for sample prep and analysis.</p> <p>YD prefixed holes were pre-collared with RC to base of dacite then NQ to fault at footwall then reduced to BQ.</p> <p>Very little information on sampling quality control procedures or sample size information was reported for the Yellow Mountain Mine or Fountaindale prospects.</p> <p>The stated drilling methods used normally provide sample sizes appropriate to the material being sampled and 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>All TYM prefixed hole samples were submitted to ALS Orange, NSW for analysis using ALS methods Au-AA26 / Fire assay (50g) / ME-ICP41 / ICP 4 acid digest.</p> <p>All YD and YP prefixed holes (1970/71) were submitted to GSC Laboratories Alexandria, NSW for Cu, Pb, Zn analysis.</p> <p>All PYM prefixed holes (1986) were submitted to BPMA Laboratory Welshpool, WA for Au, Ag, Cu, Pb, Zn, As Method PM2 / AAS.</p> <p>Reporting of QAQC samples has been poor especially at the Yellow Mountain Mine.</p> <p>Duplicate samples for Melrose were reported but no internal laboratory standards using certified reference material and blanks were located.</p> <p>No Quality control processes exist to substantiate the grab sample assays.</p> <p>The grab sampling at Yellow Mountain Mine is not appropriate to represent the grade of ore, or grade of the mineralising system. Three samples are not indicative of the grade of the system. For example the Copper and Lead may have been</p>

Criteria	JORC Code explanation	Commentary
		upgraded by Supergene processes that are not reflective of the grades of the entire system.
<i>Verification of sampling and assaying</i>	<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 competent person.</p> <p>No twinned holes were drilled.</p> <p>Data was collected by qualified geologists and supervised geo-technicians. All data has been entered into Excel spreadsheets. Validation rules are in place to ensure no data entry errors occur. Data is loaded into a Datashed database by an experienced database administrator, and reviewed by an Alchemy geologist, who is a competent person.</p> <p>No assay data adjustments have been made.</p> <p>Yellow Mountain Grab Samples verification has not been completed due to its historical nature.</p>
<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>GPS was used to collect the location of the Yellow Mountain Grab Samples by Golden Cross Resources. No historical information is available as to the accuracy of the location coordinates or device used.</p> <p>A DGPS was used to locate all Melrose drill collars (TYM prefix), with an expected +/-1m vertical and horizontal accuracy.</p> <p>All YD and YP prefixed holes were located on an imperial local grid using a theodolite. A local grid geology map containing all drill hole collars and all local grid lines was georeferenced using topographic features. The same plan was used to locate dipole-dipole IP data.</p> <p>Topographic control for drill hole collars was obtained from 20m contours digitised from 1:100,000 scale topographic maps.</p> <p>No down hole surveys were collected for AC or RC holes (TYM and TYMAC prefixed) drilled at the Fountaindale Prospect.</p> <p>Down hole surveys were collected approximately every 30m in TYMD prefixed diamond holes using a downhole survey camera.</p>



Criteria	JORC Code explanation	Commentary
		<p>No down hole surveys were collected for PYM and YP prefixed holes.</p> <p>Down hole surveys were collected approximately every 30m in all YD prefixed holes using a variety of techniques including Tropari, and etch test methods.</p> <p>The grid system reported for all collar locations 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> <p>The location accuracy for dipole-dipole IP data is also 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>Drill line spacings range from 50m to 150m within each prospect area, and on these drill lines hole spacings vary from ~20m to ~100m.</p> <p>Yellow Mountain IP survey used both a 600ft line spacing and 400ft dipole spacing, and infill using 200ft lines and 100ft dipoles.</p> <p>No Mineral Resource or Reserve has been reported for this drilling.</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>Grab sample was highly selective in nature. It is not an unbiased sample. It was selected to extract base metals only from a vein system from historic mine mullock dumps at Yellow Mountain Mine area.</p> <p>Drill holes within the Fountaindale (Melrose) intrusive have been drilled to the north, south, east, NE, SW and vertically, however gold-copper bearing structures are related to stockwork quartz veining and brecciation and have no consistent orientation that may cause a bias in drill samples.</p> <p>Mineralisation at Yellow Mountain is both stratabound / VMS (associated with shallow east and west dipping sediments and volcanics in a shallow syncline) and associated with quartz</p>

Criteria	JORC Code explanation	Commentary
		<p>veins in steep east dipping high strain zones sub-parallel to the granite – sediment contact. Drilling in the area is generally oriented at right angles to both lithological contacts and shearing however some variation occurs as the dip component of drill holes lifts or steepens. The majority of holes at Yellow Mountain Mine have been drilled to the WNW on the west side of the syncline, and to the ESE on the east side of the syncline in order for the drill sample orientation to be as close to right angles as possible. The collar inclination of holes at Yellow Mountain Mine has been -50, -60 and -90 degrees.</p> <p>IP lines were run at right angles to the mineralisation, lithologies and fold axis of the Yellow Mountain syncline.</p> <p>No orientation biased sampling bias has been identified.</p>
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	No information on sample security was reported.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audit or review of the sampling techniques or sample data capture has been conducted to date.

## Section 2 Reporting of Exploration Results

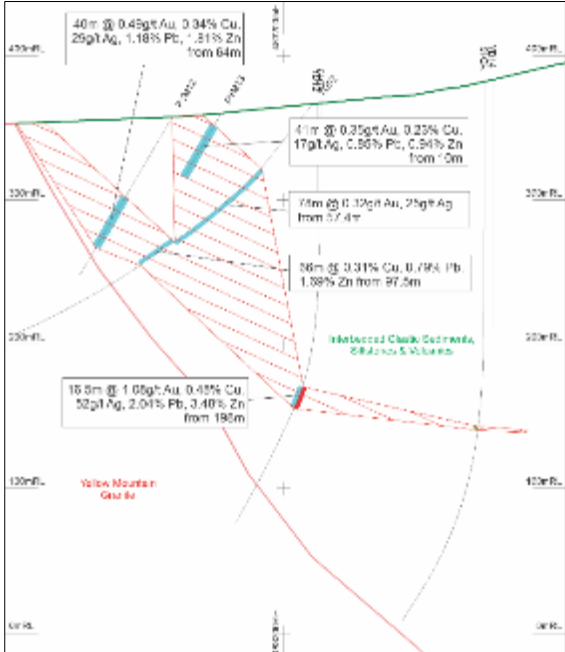
Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<p><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical 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 –Yellow Mountain</p> <p>Reference number – EL8356</p> <p>Location – 50km north of Condobolin, NSW.</p> <p>Ownership – 80% Alchemy Resources (NSW) Pty Ltd (a wholly owned subsidiary of Alchemy Resources Limited), 20% Ochre Resources Pty Ltd (a wholly owned subsidiary of Heron Resources Limited)</p> <p>Overriding royalties - none</p>

Criteria	JORC Code explanation	Commentary
		<p>The land is 100% freehold (apart from road reserves).</p> <p>No Wilderness Reserves, National Parks, Native Title sites or registered historical sites are known.</p> <p>Ngemba, Ngiyampaa, Wangaaypuwan and Wayilwan native title determination application (NSD415/2012) covers the northern part of the licence, however freehold land is excluded from Native Title in NSW.</p> <p>No environmental issues are known.</p>
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Previous exploration within the area covered by EL8365 has included desktop studies, geological mapping, grab sampling, soil sampling, rock chip sampling, Aircore, RC and diamond drilling, petrological descriptions, lead isotope interpretation, magnetite composition determinations, Re-Os age dating, U-Pb age dating and various ground geophysical surveys (including ground magnetics, and IP).</p> <p>The majority of the work was completed by Cyprus Mines Corporation, Golden Cross Resources, Triako Resources Ltd and Paradigm Metals Ltd.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation</i>	<p>Geological setting – EL8356 is located in the Canbelego-Mineral Hill Volcanic Belt at the intersection of the Gilmore Suture, which hosts the Cowal and Overflow mineralisation, and the Lachlan Transverse Zone, which hosts the Cadia Valley and Northparkes copper-gold deposits.</p> <p>The regional geology is dominated by the lower Ordovician Girilambone Group, which consist of quartzo-feldspathic schist, sandstone and siltstone, and have been intruded by the Silurian Erimeran Granite (porphyritic biotite-muscovite granite) along the western margin of the tenement. The Ordovician siltstones and sandstones of the Girilambone Group are unconformably overlain to the northeast by the northwest-trending Siluro-Devonian</p>



Criteria	JORC Code explanation	Commentary
		<p>Kopyje Group. The Kopyje Group rocks comprise tuffs, lava flows and minor siltstones and tuffaceous sediments of the Majuba Volcanics which have undergone extensive hydrothermal magnetite alteration.</p> <p>Deposit type and style of mineralisation – four main styles of mineralisation have been reported in the Yellow Mountain Project area:</p> <ul style="list-style-type: none"> <li>• Exhalative Volcanogenic Massive Sulphide Cu-Pb-Zn-Ag-Au mineralisation with a structurally controlled Cu-Au mineralisation overprint associated with quartz veins in high strain zones (Yellow Mountain Mine).</li> <li>• Disseminated gold (+/- arsenic) mineralisation in Ordovician sedimentary and volcanic rocks at Quarry Hill, possibly related to distal porphyry mineralisation, or alternatively to 'Carlin-style' sediment-hosted gold deposits.</li> <li>• Porphyry copper-gold style mineralisation within the Fountaindale granodiorite intrusive at the Fountaindale Prospect.</li> <li>• Skarn (including Cu-Zn-Ag-As sulphide) mineralisation at the contact between the Majuba Volcanics / Sediments and the Yellow Mountain Granite, and at the Erimeran Granite Girilambone Group contact.</li> </ul>
<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>All drill hole information is tabulated within the body of the announcement.</p>

Criteria	JORC Code explanation	Commentary
	<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>	
<i>Data aggregation methods</i>	<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><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>A weighted average was used to calculate all mineralisation intercepts.</p> <p>Intercepts for all TYM prefixed holes used a 0.2g/t Au lower cut-off, no upper cut-off, no internal waste, and all intercepts &gt;3g/t Au were reported.</p> <p>Intercepts for all PYM prefixed holes used a 0.2g/t Au lower cut-off, no upper cut-off, and max 1m internal waste.</p> <p>The intercept for YD13 used a 0.4g/t Au lower cut-off grade, no upper cut off grade, and no internal waste.</p> <p>Au and Ag intercepts for YD02 and YD05 used a 0.1g/t Au lower cut-off grade, no upper cut off grade, and max 1m internal waste.</p> <p>Cu-Pb-Zn intercepts for YD02, YD05 &amp; YP05A used a 0.1% Cu lower cut-off grade, no upper cut off grade, and max 1m internal waste.</p> <p>YD prefixed hole intercepts have been converted from feet to metres by dividing by 0.3048.</p> <p>Au and Ag intercepts in YD13 were converted from oz/long ton to g/t by multiplying by 30.6122.</p> <p>The intercept for TYMD004 reported in Golden Cross Resources Limited June Quarterly Report dated 30 July 2004 did not state an aggregate procedure so the raw data was used to recalculate the intercept over a 3.3m interval.</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	<p>All intercepts reported are downhole widths.</p> <p>It is estimated that the angle between the drill hole direction and the plane of mineralisation at Yellow Mountain is between 45<sup>o</sup> and 90<sup>o</sup> which implies that downhole intercept is</p>

Criteria	JORC Code explanation	Commentary
	<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>between width <math>x \sim 0.7</math> (for <math>45^\circ</math>) and <math>x \times 1</math> (for <math>90^\circ</math>) = true intercept width.</p> <p>The angle between the drill hole direction and the plane of mineralisation at Fountaindale is unknown and potentially quite variable due to this style of mineralisation (stockwork quartz veining and breccia - Porphyry Cu-Au style)</p>
Diagrams	<p><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></p>	<p>Appropriate plans, cross sections and tables have been included in the body of this announcement and below.</p>  <p>Yellow Mtn Mine Prospect Cross Section 6407900N</p> <p>Due to the thin nature of the intercepts and the breccia/stockwork nature of mineralisation at Fountaindale detailed cross sections and plans have not been produced.</p>
Balanced reporting	<p><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></p>	<p>All gold drill intercepts <math>&gt;3\text{g/t Au}</math> have been reported for the Fountaindale Prospect.</p> <p>Reported drill intercepts from the Yellow Mountain Mine area include only those <math>&gt;10\text{m}</math> &amp; Au (<math>&gt;0.25\text{g/t}</math>) &amp; Cu (<math>&gt;0.2\%</math>) &amp; Ag (<math>&gt;20\text{g/t}</math>) &amp; Pb (<math>&gt;0.5\%</math>) &amp; Zn (<math>0.9\%</math>).</p>
Other substantive exploration data	<p><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;</i></p>	<p>Yellow Mountain Induced Polarisation - Cyprus Mines Corporation completed by Heinrichs Geoexploration (Australiasia) Pty Ltd in August 1968, July 1969, and March 1970.</p>



Criteria	JORC Code explanation	Commentary
	<p><i>geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<p>The IP equipment used for all 3 surveys was a multi-selectable frequency type, with a high-power generator used in conjunction with a heavy-duty sender having a power range to 10 amps. Dual frequencies of 1.0 Hz and 0.5 Hz were used.</p> <p>In survey 1 spreads were run using a symmetrical-co-linear dipole-dipole electrode configuration, with a standard of 5 current electrodes per spread. 400ft dipole spacing on 600ft lines.</p> <p>In survey 2, 7 current electrodes were used and data was taken to N=6 and continues to N=5 on a symmetrical, collinear dipole-dipole configuration. 100ft dipole spacing on 200ft lines.</p> <p>Survey 3 comprised 39 spreads run on 26 lines using a 200ft dipole spacing and a 300ft line separation. The spreads were run using a symmetrical, collinear dipole-dipole electrode configuration with 7 to 9 current electrodes per spread.</p> <p>Three (3) grab samples were taken by Golden Cross Resources on 10<sup>th</sup> May 2000. Samples had GPS co-ordinates and logged geology as part of the Yellow Mountain Rock Sample Register document which is available on the NSW DIGS Open File Report R00019808.</p>
Further work	<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 geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>At the Yellow Mountain Mine Prospect, RC and or diamond drilling is planned to test the interpreted down plunge extension of Au-Ag-Cu-Pb-Zn mineralisation located on section 6407900N.</p> <p>At Melrose, RC drilling is planned to test the northern margin of the Melrose Magnetic Anomaly to determine if the zone conforms to the top contact of an overturned IRGS system.</p>