

18 April 2023

**ASX Release** 

#### YUINMERY RC DRILLING RESULTS

#### **HIGHLIGHTS**

- Final assays received for February 2023 RC drilling at Yuinmery.
- Strong copper and gold mineralisation in A-Zone drilling:
  - 10m @ 0.93% Cu from 72m in YRC23-05
    - including **1m** @ **2.54% Cu** from 73m
  - 3m @ 1.93g/t Au from 71m in YRC23-05
    - including 1m @ 3.41g/t Au from 72m
- Broad zones of copper mineralisation in YT01 drilling included:
  - **20m @ 0.28% Cu** from 76m in YRC23-01, and
    - **1m @ 0.62% Cu** from 119m
  - 12m @ 0.48% Cu from 140m in YRC23-02, and
    - **10m @ 0.46% Cu** from 167, and
    - **15m** @ **0.37%** Cu from 180m
  - 9m @ 0.55% Cu from 182m in YRC23-04
    - including **1m** @ **0.95% Cu** from 185m
    - and **3m @ 0.30% Cu** from 201m (EOH)

#### **Empire Managing Director, Sean Richardson commented:**

"The return of RC drilling at Yuinmery has yielded excellent results across all the prospects tested. A-Zone is developing into an exciting deposit where we see continued near surface high grade copper and gold mineralisation, while the YT01 prospect is developing into a large tonnage bulk copper system. We remain enthusiastic about the future for the Yuinmery project as we continue developing the potential for this exciting copper opportunity.

"Empire remains well funded to execute further exploration activity across its project portfolio, we look forward to continuing to update the market as our exploration progresses."



#### **SUMMARY**

Empire Resources (ASX:ERL, Empire) advises that it has received final assay results from the 924m reverse circulation (RC) drilling campaign completed [1] at its Yuinmery Copper-Gold Project located approximately 470km northeast of Perth in Western Australia.

The drilling follows up previously reported copper-gold assays within two broad pyrite-chalcopyrite sulphidic zones at the YT01 prospect <sup>[2]</sup> and shallow, high-grade copper and gold at the A-Zone prospect <sup>[3]</sup>. Both YT01 and A-Zone lie along strike of Empire's Just Desserts deposit which hosts a current JORC 2012 Resource of **2.52Mt** @ **1.31% Cu & 0.49g/t Au** <sup>[4]</sup>.

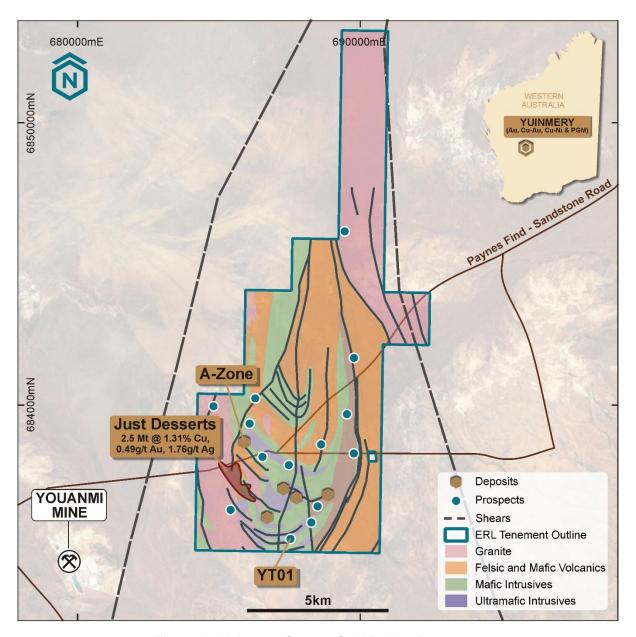


Figure 1 - Yuinmery Copper-Gold Project Prospects



#### A Zone Prospect

The A-Zone prospect is located 1.3km along strike from the existing Just Desserts Resource. Previous drilling has returned high-grade results, including **12m @ 2.05% Cu** from 138m (YRC18-01) and **7m @ 3.30% Cu** from 192m (YRC11-26) <sup>[5]</sup>. Limited exploration has been undertaken at A-Zone since 2011. With mineralisation open in all directions further drilling offers an opportunity to expand the scale potential of the prospect.

Three holes drilled in July 2021 returned strong copper and gold mineralisation <sup>[3]</sup> up-dip from the previously intercepted high-grade results. A single RC hole designed to continue to test the up-dip extents of the mineralisation was drilled in February 2023 with encouraging results.

YRC23-05 intercepted multiple zones of mineralisation, including a broad **10m @ 0.93% Cu & 1.75g/t Au** from 72m, including **1m @ 2.54% Cu** from 73m. Strongly mineralised gold intercepts include **3m @ 1.93g/t Au** from 71m, including **1m @ 3.41g/t Au** from 72m.

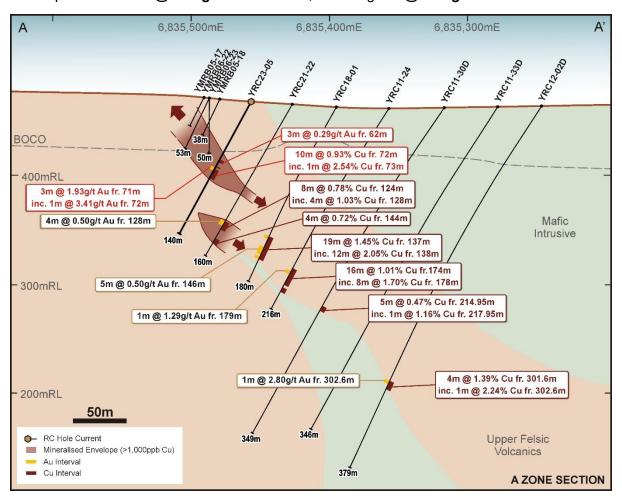


Figure 2 - A Zone Oblique Cross Section



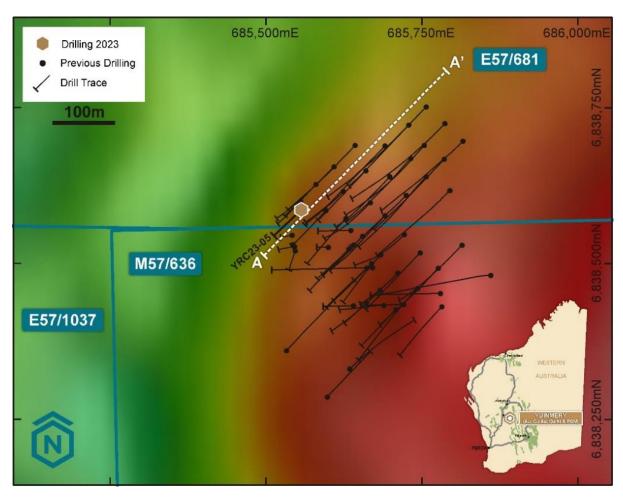


Figure 3 – A Zone Drillhole Collar Locations
Base Image 2009 VTEM B\_field\_ch25\_1641us Geophysics

The results of drilling at A-Zone confirms the presence of strong copper and gold mineralisation near surface and within fresh rock. Planning for future drill campaigns to test the extents of this near surface mineralisation up-dip to the west and along strike to the north is on-going.



#### YT01 Prospect

Drilling at YT01 targeted the strike extents approximately 100m east and west of the mineralisation identified on section 687,250mE. The drilling extended to 220m in depth to test for the presence of sulphide mineralisation within the fresh rock.

The main sulphidic zone previously observed in drilling along section 687,250mE <sup>[2]</sup> has been observed in RC drilling along sections 687,150mE and 687,350mE. This zone comprises disseminated pyrite-chalcopyrite sulphides hosted within interpreted altered basalt to andesitic rocks. Weak to moderate shearing overprints the rocks.

Drilling on section 687,350mE intercepted a broad zone approximately 65-70m thick of mineralisation >1,000ppb copper. Elevated intervals of copper mineralisation within this broad zone included **20m @ 0.28% Cu** from 76m and **1m @ 0.62% Cu** from 119m in YRC23-01. A second deeper hole offset by 50m also intercepted broad copper mineralisation, including **12m @ 0.48% Cu** from 140m, **10m @ 0.46% Cu** from 167m and **15m @ 0.37% Cu** from 180m in YRC23-02.

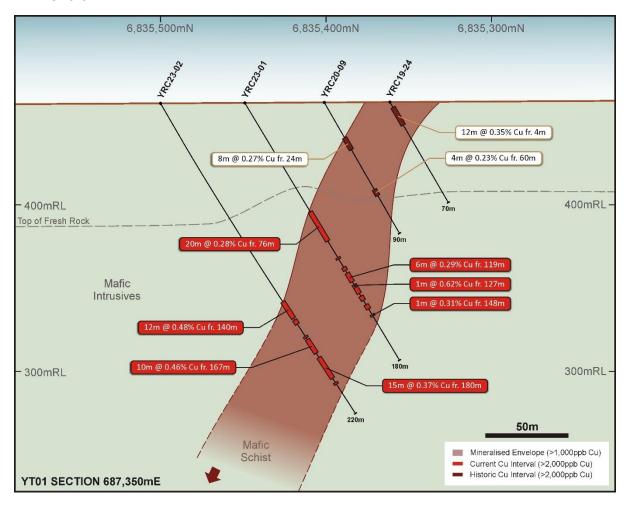


Figure 4 - YT01 Prospect 687,350mE Cross Section



Copper mineralisation narrows towards the west, where drilling on section 687,150mE intercepted a zone of mineralisation >1,000ppb copper approximately 40m thick. Elevated intervals of copper mineralisation within this zone included 8m @ 0.37% Cu from 124m and 5m @ 0.30% Cu from 151m in YRC23-03. Drill hole YRC23-04, offset by 50m, intercepted broad copper mineralisation down dip of YRC23-03, including 4m @ 0.45% Cu from 176m and 9m @ 0.55% Cu from 182m. Hole YRC23-04 also returned 3m @ 0.30% Cu from 201m in end of hole mineralisation (EOH).

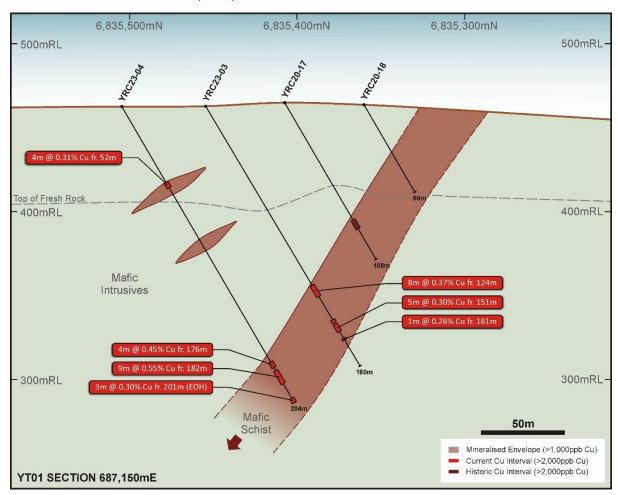


Figure 5 - YT01 Prospect 687,150mE Cross Section



Empire Resources previously reported broad intersections <sup>[6]</sup> of copper mineralisation 400m to the west of section 687,250mE on drill section 686,850mE in holes YRC20-03, YRC20-16 and YRC20-15 (Figure 6 below). The February 2023 RC drilling is immediately along strike of these previous holes. The results are interpreted to be part of the same mineralised structure, creating a known mineralised horizon extending over 500m in length. This mineralised horizon is open along strike to the east and west, and down dip.

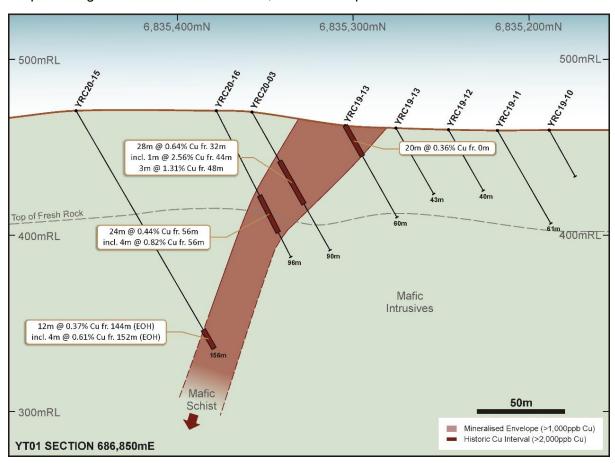


Figure 6 - YT01 Prospect 686,850mE Cross Section

The results of the drilling at the YT01 prospect reinforces the hypothesis that broad zones of copper mineralisation persist along strike in both directions from section 687,250mE. The results of this drilling confirm a thickening in mineralisation immediately along strike to the east and down dip to the north. Further testing of this mineralised zone is warranted, with drill planning for future campaigns underway.



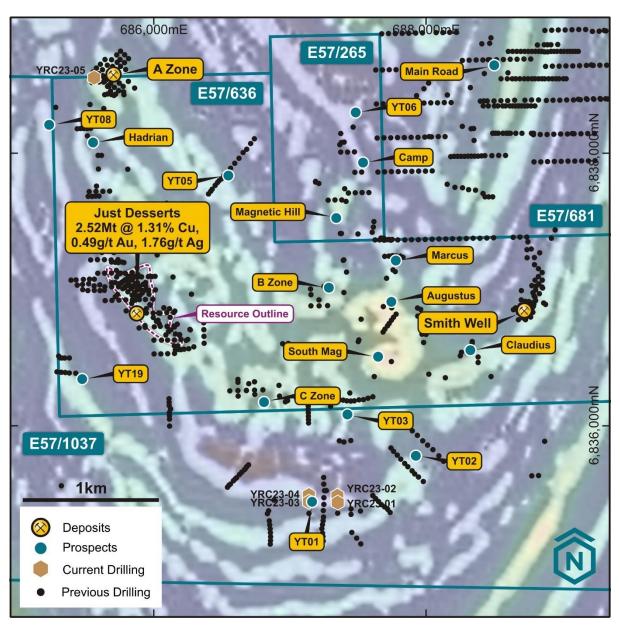


Figure 7 – Yuinmery Prospects Drillhole Collar Plan Base Image: Reduced to Pole Magnetics 2VDagcs75.



This announcement is authorised for release by:

# **Sean Richardson Managing Director**

For further information on the Company

Phone: +61 (0)8 6389 1032 www.resourcesempire.com.au

#### **Additional Information**

Further details relating to the information in this release can be found in the following ASX announcements:

- 1. ASX:ERL "RC Drilling Recommences at Yuinmery" 15 February 2023
- 2. ASX:ERL "Assay Results from Yuinmery Project" 2 May 2022
- 3. ASX:ERL "Excellent Results from Yuinmery Drilling" 22 September 2021
- 4. ASX:HRZ "Updated Copper-Gold Resources Yuinmery Project" 17 May 2016
- 5. ASX:ERL "Further High Grade Copper Intersected at A Zone Prospect" 8 June 2018
- 6. ASX:ERL "Yuinmery Continues to Deliver Excellent Copper-Gold & Copper-Nickel Results" 24 April 2020

Sulphide Mode	Percentage Range
Massive	>80%
Semi-Massive & Matrix	40-80%
Net-Textured	20-40%
Matrix	20-40%
Heavily Disseminated	10-40%
Disseminated & Blebby	1-10%
Trace	<1%

Table 1 - Sulphide Field Logging Guideline

<sup>\*</sup>Visual estimates of sulphide abundance are based on the Company's sulphide field logging guideline (Table 1). Visual estimates of sulphide mineral abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory analysis is required to determine the widths and grades of visual sulphide estimates.



#### **Competent Person Statements**

The information in this report that relates to Exploration Results is based on information compiled and/or reviewed by Mr Mark Shelverton, who is a Member of the Australian Institute of Geoscientists. Mr Shelverton is a full-time employee of Empire Resources and has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Shelverton consents to the inclusion in this presentation of the matters based on this information in the form and context in which they appear.

The information is this report concerning the Mineral Resources for the Just Desserts deposit has been estimated by Mr Peter Ball B.Sc who is a director of DataGeo Geological Consultants and is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Ball has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and qualifies as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Ball consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### **New Information**

Information concerning the current mineral resource estimate relating to the Just Desserts deposit is extracted from the ASX Announcement dated 17 May 2016.

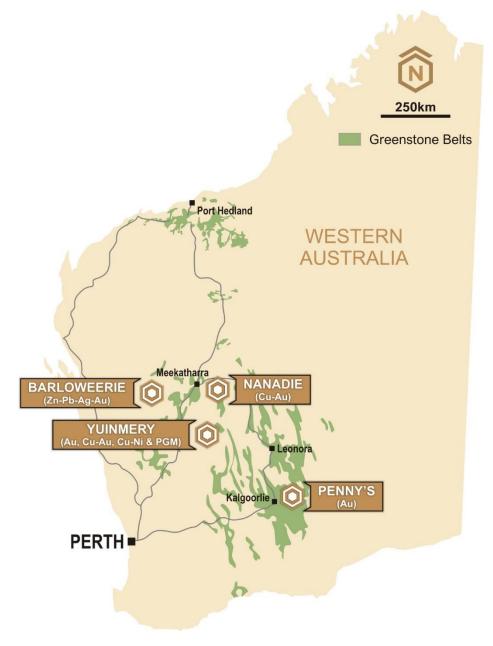
Empire Resources Limited confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the relevant market announcement continue to apply and have not materially changed. Empire Resources Limited confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.



#### **About Empire**

Empire Resources Limited (ASX:ERL) is a gold and copper focussed exploration and development company. Empire owns four highly prospective projects. The Yuinmery Copper-Gold Project 470km northeast of Perth in the Youanmi Greenstone Belt, the Barloweerie multi-element precious and base metal project, the Nanadie Copper-Gold Project southeast of Meekatharra in the Murchison Region and the Penny's Gold Project 45km northeast of Kalgoorlie in the prolific Eastern Goldfields Region of Western Australia. Empire's projects have numerous exploration targets with excellent potential.

Empire has an experienced team of exploration, development and financial professionals who are committed to developing a sustainable and profitable mineral business. Empire seeks to extract value from direct exploration of its existing projects as well as identifying value accretive investment opportunities that complement the Company's development objectives.



**Empire Resources Project Location** 



Prospect	Hole ID	East	North	RL	Depth	Dip	Azi
	YRC23-01	687,352	6,835,449	462	180	-60	180
YT01	YRC23-02	687,349	6,835,500	462	220	-60	180
1101	YRC23-03	687,141	6,835,455	462	180	-60	180
	YRC23-04	687,140	6,835,5005	462	204	-60	180
A Zone	YRC23-05	685,563	6,838,567	480	140	-60	225

Table 2 – Yuinmery Project RC Drillhole Collars



Prospect	Hole ID	Fr. (m)	To, (m)	Int. (m)	Cu (%)	Au (g/t)	Co (%)
	YRC23-01	76	96	20	0.28	0.01	0.03
	YRC23-01	108	109	1	0.22	0.02	0.03
	YRC23-01	115	117	2	0.36	0.04	0.03
	YRC23-01	119	125	6	0.29	0.03	0.02
	YRC23-01	127	128	1	0.62	0.04	0.03
	YRC23-01	129	133	4	0.29	0.05	0.01
	YRC23-01	135	138	3	0.22	0.04	0.02
	YRC23-01	141	144	3	0.22	0.03	0.03
	YRC23-01	148	149	1	0.31	0.03	0.02
	YRC23-02	140	152	12	0.48	0.02	0.01
	YRC23-02	153	156	3	0.36	0.02	0.02
YT01	YRC23-02	165	166	1	0.37	0.01	0.02
1101	YRC23-02	167	177	10	0.46	0.07	0.03
	YRC23-02	180	195	15	0.37	0.05	0.01
	YRC23-02	198	199	1	0.23	0.02	0.01
	YRC23-03	124	132	8	0.37	0.09	0.01
	YRC23-03	148	150	2	0.22	0.05	0.03
	YRC23-03	151	156	5	0.30	0.03	0.01
	YRC23-03	161	162	1	0.26	0.01	0.02
	YRC23-04	52	56	4	0.31	0.01	0.01
	YRC23-04	176	180	4	0.45	0.20	0.01
	YRC23-04	182	191	9	0.55	0.13	0.01
	inc.	185	186	1	0.95	0.52	0.01
	YRC23-04	201	204 (EOH)	3	0.30	0.07	0.01
	YRC23-05	56	59	3	0.10	0.05	0.02
	YRC23-05	62	65	3	0.29	0.08	0.02
	YRC23-05	69	70	1	0.24	0.17	0.02
A Zone	YRC23-05	71	74	3	1.35	1.93	0.03
	inc.	72	73	1	1.40	3.41	0.05
	YRC23-05	72	82	10	0.93	0.61	0.03
	inc.	73	74	1	2.54	1.80	0.05

Table 3 – Relevant Yuinmery RC Drilling Assay Results

Note. Downhole intervals use a nominal cut off >2,000ppm Cu, and/or >100ppb Au/Pd (EOH) = end of hole



#### JORC TABLE 1 FOR THE PENNY'S GOLD PROJECT

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information</li> </ul>	<ul> <li>Reverse Circulation (RC) drilling samples were collected as either 1m samples or 4m composite samples.</li> <li>1m samples were collected in prenumbered calico bags directly from the drill rig cone splitter.</li> <li>One meter calico samples were collected in mineralised zones and sent to the laboratory for analysis.</li> <li>Mineralisation is easily recognised in most instances from the presence of sulphide minerals.</li> <li>Along with the corresponding bulk reject sample, each 1m sample was placed on the ground in ordered rows by the drill crew.</li> <li>The bulk reject sample was collected into green bags.</li> <li>Four metre composite samples were created from the one metre bulk reject sample bags on the margins of mineralised zones; each 4m composite sample was created by spearing the relevant 4 bulk reject samples to collect a sub-sample of approximate equal volume from each reject bag, the speared sample was placed in a pre-numbered calico bag to create the four metre composite, Care was taken to create composite samples of the same weight; generally less then 3kg</li> <li>4m composite samples were created by Empire Resources personnel.</li> <li>Drill holes were angled towards 180° at YT01 and 225° at A-Zone.</li> <li>Composite samples were generally &lt;3kg in size made up of equal sub-sample from each bulk reject bag.</li> </ul>
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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Drilling was undertaken using Reverse Circulation (RC) technique.</li> <li>RC drilling used a face sampling hammer drill bit with a diameter of 5.5 inches (140mm)</li> <li>Sample recovery as estimated based on the size and consistency of each individual sample bag based on an expected size.</li> </ul>





		Drilling was carried out by Impact Drilling
		Services using a truck mounted 685
		Schramm.
D '''		Five (5) RC holes for 924m were drilled.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Sample recovery is visually estimated based on the size and consistency of each individual sample bag based on an expected size.</li> <li>Sample recoveries are recorded on the sample logging sheet.</li> <li>RC drilling is considered an effective drill method to obtain good sample recovery and reduce contamination.</li> <li>The sampling system including the cyclone/splitter was regularly checked and cleaned, to minimise down-hole and cross-hole contamination.</li> <li>Samples are considered representative with generally high volume of recovery.</li> </ul>
	14" (1	No sample bias is observed.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Detailed geological logging was completed on all RC holes in full, on site by Empire Resources geologist.</li> <li>Due to the nature of the drilling technique and resultant sample no geotechnical data have been recorded.</li> <li>Geological logging is qualitative in nature. Logging recorded lithology, mineralogy, mineralisation, weathering, colour, and other features of note.</li> </ul>
Sub-sample	<ul> <li>If non-core, whether riffled, tube</li> </ul>	<ul> <li>RC assay samples were collected as 1m</li> </ul>
techniques and sample preparation	<ul> <li>sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>splits from the rig mounted cyclone via a cone splitter. The cone and splitter were set horizontal to ensure sample representation.</li> <li>Wet and dry samples were noted in the sample logging sheet. Most samples are recorded as dry.</li> <li>4m composite samples were collected using a PVC spear.</li> <li>All samples were marked with a unique sequential pre-numbered calico sample bag.</li> <li>Sample preparation is undertaken by the accredited commercial laboratory which the samples were submitted to.</li> <li>All samples were sorted, dried and pulverised to better than 85% passing 75µm.</li> <li>Sample procedures and sample preparation are deemed to represent a good industry standard.</li> <li>No field duplicate samples were collected.</li> </ul>





#### Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.

- Sample sizes are considered appropriate for the material being sampled.
- All samples were submitted to Intertek laboratory in Perth (Maddington).
- The assaying and laboratory procedures used are appropriate for the material tested. The analytical technique involved Aqua Regia of a 5g with ICP-MS finish for multi element analysis.
- Empire Resources QAQC procedures involved the use of certified reference materials (1 in 30) and blanks (1 in 30); standards and blanks were sent for analysis with the samples.
- No geophysical or portable analysis tool were used to determine assay values.
- Internal laboratory control procedures involve duplicate assaying of randomly selected assay pulps as well as internal laboratory standards and blanks. All these data are reported to the Company.
- QAQC results were assessed as each laboratory batch was received and were acceptable in all cases.
- All samples were pulverised to better than 85% passing 75µm.
- Multielement analysis was completed using Aqua regia digestion with ICP-MS finish (Intertek code AR005/MS53).

# Verification of sampling and assaying

- The verification of significant intersections by either independent or alternative company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay

  data
- Primary data was collected in the field using Excel templates on a Panasonic Toughbook laptop. The data are transferred into the companies Microsoft Access database.
- No adjustments or calibrations have been made to any assay data

#### Location of Data points

- Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
- Specification of the grid system used.
- Quality and adequacy of topographic control.
- Drill hole collars are initially located using a handheld Garmin GPSMAP64x, nominal accuracy is 3m.
- On the completion of drilling all holes are located using DGPS.
- A Reflex Gyro tool was used to monitor the drill hole path as drilling progressed and survey the hole trace on completion of drilling.
- Grid system is GDA94 MGA Zone 50

# Data spacing and distribution

- Data spacing for reporting of Exploration Results.
- Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral
- At YT01 RC drill holes were spaced on sections lines 100m from existing drilling, spacing along section lines are approximately 50m.
- A Zone drilling was located to test the updip extension of known mineralisation at



Orientation of data in relation to geological structure	Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has been applied.  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 end of an existing section line approximately 40m from the nearest drill hole.  Hole spacing provided good coverage along the section lines.  Drill sample orientation is considered appropriate with respect to the structures being tested.
Sample Security	The measures taken to ensure sample security.	<ul> <li>Sample security is managed by Empire Resources.</li> <li>Samples for submission to the laboratory are collected in pre-numbered calico bags; top of each bag is secured with a draw string.</li> <li>At each drill pad, calico sample bags are placed inside a poly woven bag (4 to a bag); top of each poly woven bag is secured with a cable tie.</li> <li>Each poly woven bag is annotated with the company name and the sample numbers held within each bag.</li> <li>Poly woven bags were transported to the Intertek Laboratory and placed on pallets by Empire Resources personnel.</li> <li>The Intertek Laboratory has a fenced compound with lockable gate.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external audits or reviews have been completed at this stage.</li> <li>Samples are submitted to Intertek Laboratory by Empire Resources personnel for sample preparation and analysis.</li> <li>The laboratories are subject to routine and random inspections.</li> <li>The program was completed, and data processed by the competent person who is an employee of Empire.</li> </ul>

## **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral	<ul> <li>Type, reference name/number,</li> </ul>	<ul> <li>The project consists of six granted</li> </ul>
tenement and	location and ownership including	tenements (two mining and four
land tenure	agreements or material issues with	exploration), for a total area of 106.7 km2
status	third parties such as joint ventures,	<ul> <li>Mining tenements; M57/265 and</li> </ul>
	partnerships, overriding royalties,	M57/636 and exploration tenement;



	10 / Ipin 2020		
Exploration done by other parties	native title interests, historical sites, wilderness or national park and environmental settings.  The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.  Acknowledgment and appraisal of exploration by other parties.	•	E57/1037 and E57/1159 are 100% owned by Empire.  Exploration tenements are E57/681 and E57/1027 are 91.89% owned by Empire and are subject to a Net Smelter Royalty (NSR) of 1.25%  All tenements are in good standing and no known impediments exist.  Western Mining Corporation Ltd commenced base metal exploration in the area in 1969 and continued until 1981. Soil sampling, ground magnetics, IP and EM were exploration methods used to target their vacuum, percussion and diamond drilling programs.  Esso Australia Ltd explored the area between 1979 and 1984 using EM, RAB and diamond drilling in the search for Golden Grove - Scuddles type base metal deposits.  Black Hill Minerals Ltd explored part of the area for base metals between 1986 and 1991. This involved rock chip sampling and limited percussion drilling. Meekal Pty Ltd commenced an exploration program in 1985 by remapping parts of the syncline and rock chip sampling. In 1986 Meekal introduced Arboyne NL into the project who carried out gold exploration by drilling reverse circulation holes under old gold workings. Between 1989 and 1991 RGC Exploration Pty Ltd explored the area concentrating on the potential for gold mineralization. This exploration consisted of geological mapping, rock chip sampling and some RAB drilling.  In 1992 Meekal Pty Ltd joint ventured the project to Giralia Resources NL, who brought in CRAE as a partner in1993. CRAE completed a ground EM survey and drilled three diamond holes in its search for base metals.  Gindalbie Gold NL then explored the area for gold between 1995 and 2000. This work entailed a wide spaced soil sampling program but although several anomalous zones were identified no drilling was undertaken.  Mineral Resources Australia / La Mancha
		•	Mineral Resources Australia / La Mancha explored the northern end of the project area between 2002 and 2010 completing; extensive soil sampling (Auger), reconnaissance (RAB / Aircore) drilling



Geology •	Deposit type, geological setting and style of mineralisation.	<ul> <li>and geophysical surveys (VTEM and aeromagnetic surveys).</li> <li>Empire Resources Ltd commenced exploration in the area during 2006. To date a number of RAB, RC and diamond drilling programmes have been completed as well as aerial, surface and downhole electromagnetic (EM) surveys.</li> <li>The Yuinmery project area covers the eastern portion of the Archaean Youanmi</li> </ul>
	and digital of infinitionalion.	greenstone belt with rock types consisting largely of altered mafic and ultramafic volcanic and intrusive rocks with chloritic felsic and intermediate volcanic units. The volcanic units contain a number of intercalated strongly sulphidic cherty sediments which are host to VMS copper-gold mineralization. In the project area these rocks lie on the eastern side of the regional Youanmi Fault and form the southern closure of a northerly plunging syncline. The volcanic rocks have been intruded by dolerites, gabbros, pyroxenites and other ultramafic rocks which probably form part of the layered Youanmi Gabbro Complex. Several zones of copper - gold mineralization have been identified within the project area by previous surface sampling and drilling. The volcanogenic massive sulphide style mineralization is associated with cherts, felsic volcanic breccias and tuffs.  Copper-gold mineralisation is interpreted to be associated with lower order shears subsidiary to either the Youanmi or Yuinmery Shear zones. Gold sits in sub- vertical shears, and forms narrow, steep plunging high grade shoots at minor flexures in the shears as quartz-sulphide lodes.
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 drillholes:	<ul> <li>Hole locations are tabulated along with accompanying collar location diagrams within this report</li> </ul>
•	easting and northing of the drillhole collar elevation or RL (elevation above sea level in metres) of the drillhole	
•	collar dip and azimuth of the hole down hole length and interception	



	depth  hole length.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	<ul> <li>Data was compiled using excel spreadsheets and loaded into an Access database.</li> <li>The data was audited using QGIS and Surpac data auditing features.</li> <li>A nominal cut-off grade of 2,000ppm Cu and 100ppb Au have been applied to the assay results, unless noted.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</li> </ul>	Broad anomalous copper envelopes have been interpreted from the drilling completed. Exact widths and geometry are still to be determined: all intercepts are reported as downhole intervals.
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 drillhole collar locations and appropriate sectional views.	Refer to Figures and Tables in the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All data from the drill program is provided in the report. Representative reporting of both low and high grades and widths is practiced.
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 and material information has been included in the body of the announcement
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	