

ASX ANNOUNCEMENT

28 February 2023

# Soil Sampling to Commence at Burraga Copper-Gold Project

Multiple high-priority targets identified to be tested with soil geochemical survey

**Paterson Resources Limited ("Paterson" or "the Company") (ASX: PSL)** is pleased to announce mapping and soil sampling are due to commence across several high-priority targets at its wholly owned Burraga Project in New South Wales.

Access agreements have been reached with the relevant landholders and the field crew will be mobilised to site next week to commence ground activities, including the soil sampling survey.

Soil surveys will be focused initially on the Lloyds tenure (EL6463), targeting an area north of the historical Lloyd's Copper mine which has historically produced 19,443 tonnes of copper (470,000 tonnes of ore at 3.6% Cu) from an array of flat-lying quartz–carbonate–sulphide veins located within a significant, altered shear zone.

The program will cover three areas highlighted from an extensive data review of available open file reports considered highly prospective for copper mineralisation. Anomalous gold has also been noted in the area. Samples will be collected on a 25m by 100m spacing grid and submitted to the laboratory for analysis.

The program is designed to aid in the assessment of Paterson's greater Burraga Project which comprises five exploration licenses (EL6463 - Lloyds, EL6874 – Fernleigh, EL – 7975 – Isabella, EL8826 – Gibney's Creek and EL9135 – Burraga North) which cover an area over 230 square kilometers in the highly prospective Lachlan Fold Belt.

## Paterson's Executive Director, Matt Bull, commented:

"We continue to progress our dual-focused exploration approach to unlocking the value at Burraga in New South Wales and the developing Grace Gold-Copper Project in Western Australia's prospective Paterson Province."

"The Company is prioritizing a suite of prospective targets at Burraga to move toward drill-ready status. Outside of the known copper and gold deposits at Lloyds, much of the tenure along the regionally significant Callinore structural corridor remains largely untested at depth."

"Together with groundwork at Burraga Paterson Resources is in the final stages of planning a drilling program due to commence at Grace early in the second quarter of this year, we look forward to updating the market with a steady flow of news in the coming months."



#### **Burraga Project**

Various workers previously proposed an exhalative or volcanic hosted massive sulphide (VHMS) model for the Burraga copper-lead-zinc-gold mineralisation. This interpretation is based on the largely stratiform nature of the mineralisation housed in a sequence of volcanoclastic rocks.

Recent studies on the mineralisation and alteration in and near the historic Lloyds Copper Mine have suggested that the Burraga deposits may represent structurally controlled, deep, low sulphidation epithermal copper-gold grading to a carbonate-base metals mineralised system which in turn may be part of a larger porphyry system. The geological model for the formation of this mineralisation style is illustrated in Figure 1. The evidence for a porphyry system at Burraga includes the presence of deep, low sulphidation epithermal mineralisation, monzonite dykes, skarnoid rocks, and biotite (potassic) alteration.



Figure 1: Geological model for the formation of copper-lead-zinc-gold mineralisation at Burraga

The Company's technical team have identified three highly prospective targets (Figure 2) on EL6463 that will be tested with a soil geochemical survey.

<sup>1.</sup> Assays values have been obtained from: Company Report, Platina Developments NL, 1971: Review of Exploration of EL144 Bathurst Area, New South Wales, June 1969 Thur' 31 May 1971 (DIGS R00007995).



## **Callinore Prospect**

The Callinore Prospect is a newly defined target on EL6463, located just over six kilometres from the historic Lloyds Copper Mine. The Prospect has been highlighted from anomalous copper-lead-zinc-in-soils undertaken by previous explorer, Platina Developments in the late 1960's which was coincident with a strong induced polarisation anomaly outlined from ground geophysical surveys completed at the time.

The anomaly identified by historical soil sampling has been defined over an area roughly 1.6km long and 350m wide and remains open along strike. Given the age of the sampling and the lack of detail regarding sampling methods, the Company will undertake multiple lines of soil sampling to validate the anomaly, along with extending the anomaly along strike to the southeast.

Three historical diamond drill holes were completed by Platina<sup>1</sup> designed to test the bedrock source of mineralisation, with grades peaking up to 1.52% copper, 0.49% zinc and 0.24% lead.

The new prospect is located along the regionally significant Callinore Fault. This significant structural corridor extends further south, hosting the Lloyds copper mine, and may present a possible pathway for metalliferous-bearing fluids from a deep seated porphyry source.

## Callinore East Prospect

The Callinore East Prospect is another newly defined target on EL6463. It was highlighted by an aeromagnetic survey undertaken by previous explorer Elysium Resources. Thomson Aviation flew a magnetic and radiometric survey (MAG) over three contiguous tenements at Burraga including EL6463, EL6874 and EL7975. The survey was flown on a 60m line spacing at a nominal terrain clearance of 60m and was intended to provide better resolution data than the government and open file data available.

At the time, a preliminary interpretation of the data by geophysical consultant Kim Cook of GeoMagik identified a cluster of high-priority targets which included the Callinore East potassium anomaly.

The potassium anomaly is also located in the Callinore structural corridor and presents as a potential porphyritic intrusion. The potassium anomaly and the interpreted cross-cutting structures could provide potential mineralised fluid traps for the suspected porphyry intrusion.

No historical exploration has been conducted over this area.

## Hackney's Creek West Prospect

The Hackney's Creek West Prospect is the Company's third new target identified on the EL6463 tenure. The area has been highlighted as a possible structural target for gold and copper minerealisation, forming along strike of the historic Barrets Creek copper workings.

No historical exploration has been conducted over this area.





*Figure 2: Location of target areas for upcoming soil geochemical surveys* 

## Future Work

Moving forward the Company will:

- Digitally capture mapping to incorporate into the 3D geological model
- Interpret soil geochemical survey in light of historical work and geological mapping
- Plan further infill geochemical sampling and follow up ground geophysical surveys.



#### About the Burraga Project

The Burraga gold deposits and prospects are hosted by sediments & volcanics of Ordovician to Devonian age within the complexly folded and faulted Hill End Trough. These deformed rocks were subsequently locally intruded by granite batholiths of Carboniferous age.

At Lucky Draw and Hackneys Creek (which lie close to the margin of the Burraga granite intrusion), the host rocks are metasomatised and have been described as skarn like.

The McPhillamy's Gold Deposit (located 50 km to the north of Burraga) is considered to be an Orogenic type gold deposit, and lies in a similar geological setting to that at Burraga.

The Lucky Draw deposit comprises multiple 2 m to 15m thick zones within an overall package about 70 m thick. Both the individual zones and the package strike north south and dips gently (20° - 30°) to the west. Gold mineralisation at Lucky Draw has been defined by drilling over a strike length of 400 m and 200 m down dip to a depth of about 100 m below surface.

At Hackney's Creek gold mineralisation also occurs in multiple 2 m to 20m thick zones within an overall package about 120 m thick. Mineralisation also strikes north and dips 50° to 60° to the west. Drilling has defined gold mineralisation over a strike length of 220 m and 250 m down dip to about 250 m below surface.



#### COMPETENT PERSON'S STATEMENT:

The information in this announcement that relates to exploration results is based on and fairly represents information reviewed or compiled by Mr Matt Bull, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Bull is a Director of Paterson Resources Limited. Mr Bull has sufficient



experience that is relevant to the styles of mineralisation and types of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Bull has provided his prior written consent to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

#### Disclaimer

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Paterson operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside Paterson Resources (PSL) control.

The Company does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of PSL, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

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#### This announcement has been approved for release to ASX by the Board of Paterson Resources

## Section 1 – Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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.</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>Diamond drilling was conducted at the newly named Callinore Prospect in the late 1960's.</li> <li>Diamond drill core was sampled selectively on intervals up to 2m wide.</li> <li>No description of the diamond drilling methods has been located.</li> </ul>		
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul> <li>No description of the diamond drilling methods has been located.</li> </ul>		
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>Diamond drilling recovery was not recorded.</li> <li>No relationship between grade and recovery can be determined due to the lack of drilling recovery data.</li> </ul>		
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 logaed.</li> </ul>	<ul> <li>No geological logging has been retained. Any reference to the diamond core is qualitive (descriptive).</li> </ul>		

Criteria	JORC Code explanation	Commentary			
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube 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>No description of the diamond drilling methods has been located.</li> <li>The quality control measures (if any) taken to ensure representivity of the samples were not recorded.</li> <li>The sample size was not recorded.</li> </ul>			
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	• To date, no QAQC data have been found for this data.			
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	• The data have not been verified.			
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The collar location survey method is unknown.</li> <li>The accuracy of the collar locations is unknown.</li> <li>The collars were surveyed using a local grid.</li> </ul>			
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drilling was designed to intersect target within the modelled geophysical anomalies.</li> <li>The drilling is part of a first pass program, at depths in this area not previously explored.</li> <li>The data obtained would not be used for any resource calculations at present.</li> </ul>			

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The geometry of the mineralisation intersected by the exploration holes is not yet known and so no conclusion can be drawn regarding the appropriateness of the orientation of these holes.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>The measures (if any) taken to ensure sample security were not recorded.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	• The data has not been audited. This is because the project is at an early stage of assessment and it is possible that further data may be recovered from the archives resulting in a change to the assessment of the quality of the base data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Con	nme	nta	ar	У									
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The data reported on are located in EL6463, 100% owned by Paterson Resources through its subsidiary BC Exploration.</li> <li>There are no known impediments to the development of a mining operation on these leases other than the usual granting of a mining licence and the various permits required to operate.</li> </ul>													
Exploration done by other	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	• A C	ll da evel	ta op	re m	epoi ient	rted on was aco s NL between	quired by Pla 1969-1971.	ntir	na					
parties		Years	Company	EL6463	EL6874	EL7975	Consultant Review, Modelling	Field Works & Geochem	Geol Mapping	Arrial Geophysics	Surface Geophysics	Geochern	Drimotes	Met Test	83
		2005-2006	Republic	Y			Rangott collation & review of data 3D block model	Met testing						Y	
		2006-2007	Republic	Y		++	ML appin. Model	Mag anomalies	+	-				Y	
		2007-2008	Republic	Y	Y		Rangott Review (2006)	RC holes 1 to 10 Magnetics?					Y(10)		
		2008-2009	Republic	Y	Y		Corbett Review (Corbett, 2008) Rangott Review (2008)	Structural mapping reassay old drillholes	Y			Y			
		2009-2010	Republic	Y	Y	++	(Pratt Review EL7002- Isabella) Solid Geology Review (King 2010)	Syncline & 2 key prospects Ground Mag	-	m	Y				
		2010-2011	Burraga	Y	Y		Review of Hummingbird data Geomodelling Review (Allwood, 2011)		-						
		2011-2012	Burraga Copper	Y	¥		Rangott Review (2011)	2nd Drilling Program - 10 holes	-				Y(10)		
		2012-2013	Burraga Copper	Y	Y	Ŷ	Porphyry study (Maryono, 2013) Pit modelling study Solid Geology Study (King, 2013) Environmental Review (Corkey, 2013)	Structural Geology Mapping	Y						Y
		2013-2014	Elysium	Y	Y	Ŷ	GeoMagik Aeromag Interp (Cook, 2014) Rangott Review (2013) Environmental Impact study	2014 Aeromagnetics & Radiometric survey, 60m line spacing, 60m ht. IP survey N & S of Lloyd's Mine Solls		Y	Y	Y			Y
		2014-2015	Elysium	Y	Y	Y	Targets generated from aerial survey Rompo Review (Rompo 2015)	Geol Mapping Sampling Expln Drilling (EYMRC001-026) Drilling (EYMDD001-003) EIS Drilling (BC-1-BC-8)(BCE1 & 6) Geotech Drilling (EYMGT001-004)	Y			Y	Y(29)	Y	Y
		2015-2016	Elysium	Y	Y	Ŷ	EIS study continues Heritage Assessment (Beben et al 2016) Flora/Fauna Assessment (Biosis 2016) Dit design work	Field studies for EIS							Y
		2016-2017	Elysium	Y	Y	Y	Review ( Glover & Harper) EIS study continues- (Coffey Mining PL)	Drilling EYMRC027-031 (Lloyd's)					Y (5)		Y
		2017-2018	Elysium Hardey	Y	Y	Y Y Y	Company restructuring Company restructuring/ review Company restructuring/ Review	Drilling EYMRC032 & 033 (Lloyd's) Drilling EYMRC034 & 035 (Lloyd's)	-				Y (2) Y (2)		
Geology	• Deposit type, geological setting and style of mineralisation.	• T ir tl S	he g ntrus ne Ro iluria	eo ive ocl	lo e c kle ag	gica cop ey V ge v	al setting is a poper (lead-zinc-s /olcanics and Lo /ith possible sk	ossible deep- silver-gold) sy ovett Formati arn-style gold	sea ste ion d m	nte em of	d p int Or era	orj ruo div lisa	oh deo vici atio	yry d ir ian on.	nto -
Drill hole	• A summary of all information material to	• •	Partio	cul	ar	's o	f the 3 diamon	d drill holes r	efe	rei	nce	ed i	n t	he	
momation	the understanding of the exploration results including a tabulation of the	(	copy comp	na olei	ive te	e no d ir	ot been include 1969 with all	ed. The diamo measuremen	ond ts r	dr ec	ord	ng dec	wa Lir	าร า	
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Criteria	JORC Code explanation	Commentary		
	<ul> <li>following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>imperial units.</li> <li>Collar co-ordinates of the 3 diamond holes were recorded using a local grid co-ordinate system. The company cannot accurately verify the exact location of the drill holes</li> </ul>		
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be should be</li> </ul>	<ul> <li>Historical results reported are length weighted averages of assay results.</li> <li>Only results that are considered to be economically significant due to their grade, width and or geological setting are reported. No cut-off grades were used</li> <li>No metal equivalents are reported.</li> </ul>		
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole 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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Only down-hole lengths have been reported. Drill spacing and density is such that the geometry of the mineralsiation cannot yet be ascertained and true-widths are not known.</li> </ul>		
Diagrams	<ul> <li>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.</li> </ul>	Included in announcement		
reporting	<ul> <li>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.</li> </ul>	<ul> <li>For the exploration results only significant historical exploration results are reported.</li> </ul>		
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;</li> </ul>	<ul> <li>Other exploration data has been collected and interpreted from within the tenement. This work is summarised in the announcement and includes air borne geophysical surveys and regional geological mapping.</li> </ul>		

Criteria	JORC Code explanation	Commentary
	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.	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further work is planned and includes geological mapping, soil sampling, ground geophysical surveys and drilling to identify additional resources.</li> </ul>