

For Immediate Dissemination

ASX Announcement | 15 March 2023

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# INFINITY MINING LITHIUM EXPLORATION RECOMMENCES AT SOUTH TAMBOURAH WITH THE RELEASE OF HIGH-GRADE LITHIUM ROCK SAMPLES

#### Highlights:

- Programme designed to identify further lithium bearing pegmatite and rare earth elements with the continued field mapping and sampling of pegmatite outcrop on E45/4848 and the newly acquired adjacent tenement E45/5720.
- Latest assays received from 8 rock chip samples collected in 2022 confirm high grade lithium mineralisation up to 3.86% Li2O, 338.5ppm Cs, 174ppm Nb, 3013.5ppm Rb, 233.7ppm Ta.
- These high grade lithium results occur within both previously defined pegmatites and new pegmatites in the north-west area and may extend the area of lithium bearing pegmatites targeted in the recent 2022 November drilling campaign.
- The strong anomalous path finder elements Caesium (Cs), Tantalum (Ta) and Rubidium (Rb) in the rock chip assays continue to support the fertility of these surface pegmatite units.
- Ambient Noise Tomography imaging over the four Tambourah sub-blocks have been commissioned and will commence mid-March. This survey is designed to identify pegmatite development and orientation below the surface pegmatite units and to identify new pegmatite that have no surface expression.

**Infinity Mining Limited (ASX: IMI)** (the **Company** or **Infinity**) is pleased to announce this year's field program for lithium exploration at its Tambourah Project (E45/4848 and E45/5720). See Figure 1.



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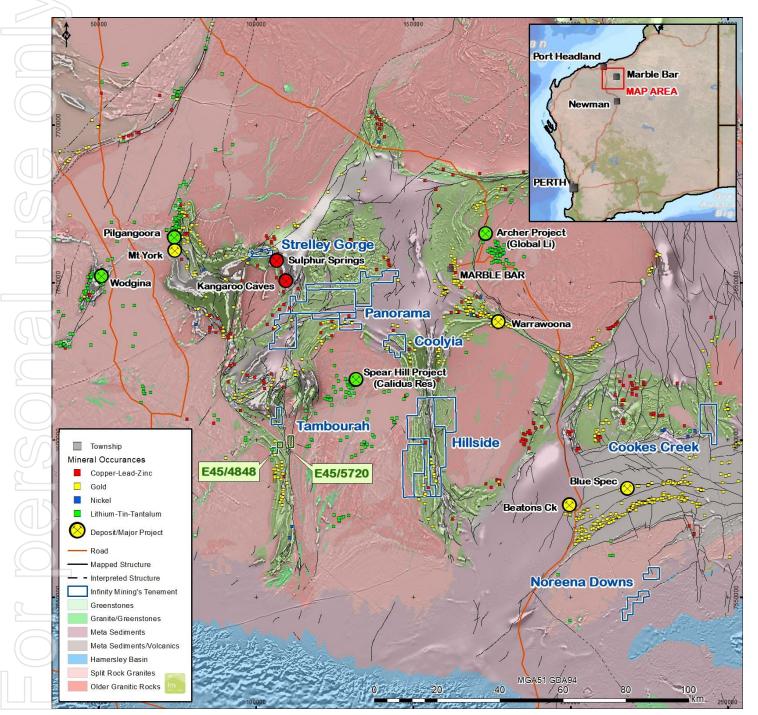


Figure 1. Infinity's Pilbara Projects (in Blue).



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On going sampling and field mapping identity spodumene zones in previously mapped pegmatites, missed during the original sampling program, plus new pegmatites, in the north-western part of the license. Assay results returned up 3.86% Li2O, 338.5ppm Cs, 174ppm Nb, 3013.5ppm Rb, 233.7ppm Ta, see Figure 2 and Table 1. Assays confirm more lithium-bearing pegmatites. The latest assays from rock chip samples collected from pegmatites on E45/4848 support the ongoing prospectivity of the project area.

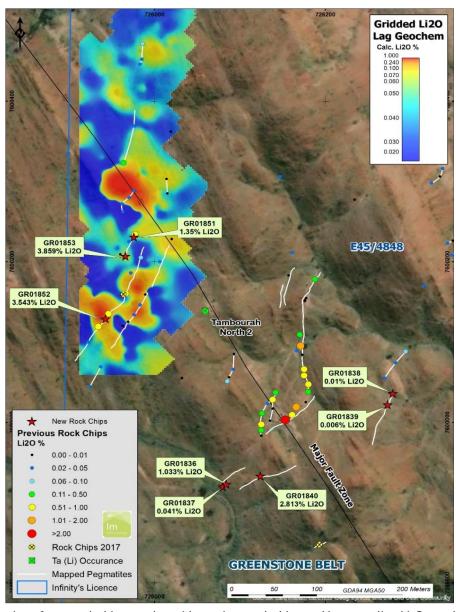


Figure 2. Location of new rock chip samples with previous rock chips and lag sampling Li<sub>2</sub>O geochemistry (<u>ASX</u> <u>Announcement: 26 September 2022</u>)



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Table 1 below lists the latest batch of assays received from rock chip sampling.

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	Sample ID	East	North	Li <sub>2</sub> O (%)	Cs (ppm)	Nb (ppm)	Rb (ppm)	Ta (ppm)
	GR01836	726080	7599920	1.033	230.8	62	3103.5	63.9
	GR01837	726084	7599923	0.041	33.7	174	1313.9	233.7
	GR01838	726273	7600022	0.01	29.1	64	1178.6	108.3
	GR01839	726279	7600036	0.006	22.3	64	206.1	121.9
	GR01840	726124	7599933	2.813	286.5	83	645.5	114
	GR01851	725976	7600231	1.35	183.7	53	889.4	55.9
	GR01852	725943	7600129	3.543	338.5	72	758	54.9
	GR01853	725966	7600207	3.859	277.6	91	644.4	69.4

In addition to high grade lithium, the geochemistry of rock chip samples returns strongly elevated levels of caesium, tantalum, rubidium and niobium. This points to the highly fractioned nature of the pegmatites and their prospectivity for lithium mineralisation.

On going work at Tambourah will involve an Ambient Noise Tomography (Passive Seismic) survey with an aim to map the pegmatites at depth, identify any concealed flat lying pegmatite bodies and map possible host geology and structures. On going mapping and rock chip sampling will continue and move on to the new E45/5720 licence.

#### Joe Groot, CEO of Infinity Mining commented:

"Infinity's technical team and I will be back in the East Pilbara initially to build new track access through to the 'Brisbane Nickel Project' but also to allow the roll out of the subterrain imaging programme across the four South Tambourah tenement sub-blocks. In conjunction with this, we will be doing maiden ground survey work on the newly acquired South Tambourah E45/5720 which is situated adjacent to E45/4848. This first quarter programme for hidden pegmatite units as well as new surface expressions of pegmatite units will guide the second quarter drilling campaign. Refer Figure 1."

On behalf of the Board of Directors, Mr Joe Phillips, Executive Chairman

For more information please contact:

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#### **Competent Persons Statement**

The information contained in this report that relates to the Exploration Results is based on information compiled by Dr Darryn Hedger, who is a Member of the Australasian Institute of Mining and Metallurgy. Dr Hedger is a Geological Consultant for Infinity Mining and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he has undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian JORC Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Hedger consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Company Profile

Infinity Mining Limited holds 100% interest in 711km² of tenements in the Pilbara and Central Goldfields regions of Western Australia, comprising 10 exploration licences, 2 mining leases and 7 Prospecting licences. The tenements are located in highly prospective gold-copper-lithium terranes. Historically the Company has spent ~\$5.5M on exploration of these tenements. The Company's business strategy is to develop near-term gold targets in the Central Goldfields to support the longer-term investment needed to develop the Pilbara tenements (Lithium, Gold, Copper projects).

#### **Caution Regarding Forward Looking Statements**

Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. All statements herein, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future, including but not limited to statements regarding exploration results and Mineral Resource estimates or the eventual mining of any of the projects, are forward-looking statements. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include but are not limited to: unforeseen technology changes that results in a reduction in copper, nickel or gold demand or substitution by other metals or materials; the discovery of new large low cost deposits of copper, nickel or gold; the general level of global economic activity; failure to proceed with exploration programmes or determination of Mineral resources; inability to demonstrate economic viability of Mineral Resources; and failure to obtain mining approvals. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.

## **JORC Code, 2012 Edition – Table 1**

## **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 (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.</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 (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.</li> </ul>	<ul> <li>8 rock chip samples of varied weights between 1kg to 3kg were collected based on visual mineralisation or host rock potential for the indicative target mineralogy.</li> <li>Samples were collected by a qualified geologist on site.</li> <li>All sample information, including lithological descriptions and GPS coordinates were recorded during the sampling process.</li> <li>Individual samples were bagged in calco bags and sent to Jinnings in Perth.</li> <li>Jinnings used an industry standard method for pegmatite analysis using Sodium Peroxide fusion with ICP-OES and ICP-MS detection plus a mixed acid digest and with ICP-OES and ICP-MS detection.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	N/A - No drilling was undertaken.
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>	N/A - No drilling was undertaken.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral</li> </ul>	<ul> <li>N/A - No drilling was undertaken.</li> <li>The Project is currently classed as early-stage exploration and no</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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>Mineral Resource estimating is applicable.</li><li>Rock chip samples were qualitatively logged in the field and photography's were taken.</li></ul>
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 insitu 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>The rock chips were collected from outcrop in the field using a geological hammer.</li> <li>Sampling was guided by visual mineralisation or the presence of appropriated host rocks for lithium mineralisation.</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>The entire samples were dried, crushed and pulverized to 85% passing &lt;75um.</li> <li>A Sodium Peroxide fusion in a Ni crucible with a HCl finish was used for digestion. An ICP-OES and ICP-MS analysis was then carried out for 20 elements including Li2O and Li indicator elements. Li2O% was calculated from Li ppm using a conversion factor of 2.153 at the lab.</li> <li>A mixed acid digestion (nitric-hydrochloric-sulphuric-hydrofluoric acids). An ICP-OES and ICP-MS analysis was then carried out for 60 elements.</li> <li>Jinnings used 3 internal standards, 1 blank and 2 repeats.</li> <li>Infinity used 1 field repeat.</li> <li>Acceptable levels of accuracy for these rock chips were established.</li> </ul>
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> </ul>	<ul> <li>Samples and sample sites were documented in the field by a qualified geologist.</li> <li>Photos were taken at each site.</li> </ul>

Criteria	JORC Code explanation	Commentary
	Discuss any adjustment to assay data.	<ul> <li>Field data were recorded in a logbook and later transferred to computer storage.</li> <li>Sample descriptions were check against photos.</li> <li>Sample locations were validated using a GIS.</li> <li>Li20% was calculated by the lab from Li ppm using a conversion factor of 2.153.</li> </ul>
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>All rock chips locations were recorded with a handheld Garmin 65 GPS with a +/- 3m to 5m accuracy.</li> <li>GDA94 datum and MGA zone 50 was used.</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>Data spacing and distribution were dependent on the identification of pegmatite dykes.</li> <li>There is insufficient data to determine any economic parameters or mineral resources</li> </ul>
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>	Sampling was carried along the strike of the pegmatite dykes.
Sample security	The measures taken to ensure sample security.	<ul> <li>Infinity Mining staff delivered all the samples directly to Jinnings Labs for analysis.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or reviews of sampling techniques and data were undertaken.</li> </ul>

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

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status  Exploration done by other parties	<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 tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>South Tambourah is located within tenement E45/4848 held by Infinity Mining Limited.</li> <li>The tenement covers an area of 3.2 sq km.</li> <li>The Infinity tenement (E45/4848) is in good standing.</li> <li>E45/5720 is held by TasEx Geological services and was acquired by Infinity Mining Limited pursuant to the Sale Purchase Agreement (SPA) executed on 22 November 2022.</li> <li>The tenement covers an area of 9.6 sq km.</li> <li>E45/5720 is in good standing.</li> <li>A Heritage Agreement with the Palyku Claimant Group is in place.</li> <li>South Tambourah</li> <li>No exploration for Lithium has been reported on E45/4848 or E45/5720.</li> <li>A Ta (Li) occurrence in the north-west corner of the E45/4848, Tambourah North 2 is reported in the WAMEX mineral occurrence database but no description of this occurrence was found.</li> <li>Nickle exploration was carried by Anglo (1969-1973). No significant mineralisation was found.</li> <li>Gold exploration was carried by Altura (2012-2015), B Keilor (2001-2005), Mineral Prospectors (1986-1993), BHP (1981-1986) No significant mineralisation was found.</li> <li>Altura recognised Lepidolite bearing pegmatites approx. 2.5km south of the tenement and sampling returned up to 1.38% Li20 (Trautman, 2013). Altura's focus was the granite/greenstone margin and their tenement was adjacent to E45/4848.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Lithium-Caesium-Tantalum (or REE) pegmatites with structurally deformed Archean Greenstones, similar to the Greenbushes,

Criteria	JORC Code explanation	Commentary
		Pilgangoora and Wodgina lithium deposits.
Drill hole Information	<ul> <li>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:         <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>	• N/A
Data aggregation methods	<ul> <li>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.</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 clearly stated.</li> </ul>	<ul> <li>No high-grade cuts or any aggregation methods have been applied.</li> <li>Li2O % were calculated from Li ppm values using a conversion facto of 2.153.</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 (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Rock chip samples were taken from surface outcrop and are no representative of the entire thickness of the pegmatite units.</li> <li>Pegmatite units can be inhomogeneous and mineral contents can be vary.</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>	All maps have been inserted within the announcement. See diagrams in body of report.

Criteria	JORC Code explanation	Commentary
Balanced 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>	• N/A
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; 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.</li> </ul>	• N/A
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>	Refer to the main body of the announcement.
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