For Immediate Dissemination

ASX Announcement | 19 September 2022

DRONE MAGNETIC SURVEY & POSITIVE ROCK CHIP ASSAYS CONFIRM TWO COMPELLING MAGNETIC HIGH TARGETS AT CHICAGO

Highlights:

- A drone magnetic survey flown at the Chicago Project (M37/983) has revealed two magnetic high targets adjacent to the old gold mine workings.
- Recent rock chip sampling by Infinity at Chicago returned seven anomalous assays up to 2.37 g/t Au, in proximity to the magnetic high targets, upgrading these targets.
- The two magnetic targets will be drill tested for buried shear-hosted gold mineralisation at depth.
- Further exploration work is planned at Chicago including RC drilling.

Infinity Mining Limited ABN 73 609 482 180 ASX Code: IMI

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Capital Structure Shares: 108,812,422 Share Price: 20c

Debt: Nil

Directors Joe Phillips Executive Chairman

Joe Groot Chief Executive Officer

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Infinity Mining Limited (ASX: IMI) (the **Company** or **Infinity**) is pleased to announce that two magnetic high targets have been identified at the Chicago Project, Central Goldfields, Western Australia (see **Figure 1**). These targets will be drill tested later in 2022 for buried shear-hosted gold mineralisation.



Figure 1. RTP (reduced to pole) drone magnetic image over the Chicago tenement (M37/983)

Central Goldfields Projects

The Chicago Project (M37/983) is part of Infinity's Central Goldfields portfolio which includes eight projects in the Leonora Gold District of Western Australia. The Central Goldfields Projects are highly prospective for Archaean shear-hosted gold systems and Volcanogenic Massive Sulphide (VMS) base-metal deposits.

The Central Goldfields tenements all lie in areas of Archaean greenstone, associated with major NNW-trending fault zones such as the Ursus Fault. A number of significant gold deposits, such as King of the Hills (held by Red 5 Limited – ASX: RED) and Kailis (held by Northern Star Resources Limited – ASX: NST) lie in close proximity to these tenements (see **Figure 2**).



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The Chicago Project (M37/983) is hosted in mafic and ultramafic units of the Archaean Trevor's Bore Formation which have been cut by a number of ENE-trending cross structures at Chicago. The project lies approximately 10 km WSW of the King of the Hills Gold Deposit (see **Figure 2**) and is highly prospective for Archaean shear-hosted gold systems.



Figure 2. Location map showing Infinity Central Goldfields Project including the Chicago Project.



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Drone Magnetic Survey

A drone magnetic survey was recently flown by Infinity at four Central Goldfields projects including the Chicago Project (M37/983). The survey was completed by Ultramag Geophysics Pty Ltd in May 2022 and follow-up exploration work is ongoing. A total of 295-line km of magnetic surveying was flown over four projects at a line spacing of 20 m and flying height of 40 m, along WSW oriented lines, perpendicular to the main NNW structural fabric. Survey details are outlined in the JORC Table 1 in **Appendix 1**.

Previous Mining

Small-scale gold mining occurred at Chicago over 100 years ago, in the late 1800s. The WA Department of Mines mining database (MINEDEX) reports a series of mine shafts located at Chicago and Chicago East, with gold produced from vein-style mineralisation. The location of the old gold mine workings at Chicago and Chicago East are shown on **Figure 3**. There is no evidence of any previous drilling on the Chicago tenement.

Drone Magnetic High Targets

The Infinity drone magnetic data from the Chicago Project identified two magnetic high anomalies, located adjacent to the old gold mine workings, which lie immediately north of a major ENE-trending structure (see **Figure 3**). The two magnetic targets at Chicago are thought to be caused by alteration along this major ENE-trending structure, associated with deeper gold mineralisation beneath the old gold workings.



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Rock Chip Sampling

A rock chip sampling program was carried out recently by Infinity at the Chicago Project to confirm the presence of gold in the areas around the old gold workings. A total of 36 rock chip samples were collected. Seven (7) of the samples returned anomalous gold assays over 0.1 g/t Au with a maximum of 2.36 g/t Au.



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These anomalous gold samples lie in proximity to the magnetic high targets, thereby upgrading the targets. A map showing the location of the anomalous gold assay results at Chicago is included as **Figure 4**. Gold assay results for all samples collected by Infinity are included in **Table 1**. Sampling details are outlined in the JORC Table 1 in **Appendix 1**.



Figure 4. Chicago Project (M37/983) showing an RTP (reduced to pole) magnetic image highlighting the magnetic high targets (red zones). Also shown are the anomalous rock chip samples >0.1 g/t Au



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Sample	East	North	Sample Description	Au g/t
CH001	309813	6823138	Quartz veining in shear zone	0.008
CH002	309818	6823145	Sheared amphibolite	0.044
CH003	309818	6823145	Dolerite in shear zone	0.005
CH004	309816	6823135	Silicified mafic amphibolite in shear zone	0.008
CH005	309816	6823135	Quartz vein in shear zone	0.006
CH006	309816	6823135	Quartz vein	0.03
CH007	309816	6823135	Qtz in shear zone	0.004
CH008	309786	6823159	Surface bucky quartz from shaft	0.156
CH009	309789	6823164	Sheared amphibolite from shaft	0.012
CH010	309782	6823185	Bucky quartz veins in amphibolite	0.034
CH011	309952	6823208	Amphibolite	0.007
Ch012	309958	6823212	Qtz vein in shear zone	2.37
CH013	309965	6823206	Green amphibolite	0.301
CH014	309965	6823206	Basalt	0.031
CH015	309963	6823211	Shear zone Quartz	0.568
CH016	309950	6823105	Bucky quartz	0.004
CH017	309951	6823105	Milky quartz vein	0.002
CH018	309946	6823108	Ultramafic schist chlorite	0.013
CH019	309929	6823153	Qtz vein in highly sheared ultramafic	0.603
CH020	309931	6823151	Qtz vein in sheared ultramafic	1.655
CH021	309981	6823023	Narrow parallel quartz veins	0.008
CH022	309984	6823013	Foliated Ultramafic	0.009
CH023	309797	6823042	Mafic amphibolite	0.003
CH024	309855	6823083	Ultramafic schist talc chlorite carbonate	0.109
CH025	309866	6823099	Dolerite	0.049
CH026	309787	6823200	Foliated mafic	0.001
CH027	309805	6823240	Qtz vein in mafic schist	0.001
CH028	309918	6823089	Ultramafic schist	0.004
CH029	309925	6823101	Dolerite	0.008
CH030	309998	6823128	Dolerite	0.011
CH031	310012	6823112	Ultramafic schist	0.012

Table 1. Chicago Rock Chip Sample Assays (> 0.1 g/t Au highlighted in yellow).





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CH032	310033	6823077	Foliated mafic	0.001
CH033	310037	6823248	Mafic schist	< 0.001
CH034	309986	6823241	Qtz vein in mafic schist	0.001
CH035	309974	6823257	Tremolite schist	0.003
CH036	309964	6823269	Dolerite	0.002

Forward Plans

The two magnetic targets at Chicago will be drill tested for buried shear-hosted gold mineralisation using the RC drilling method.

Joe Groot, CEO of Infinity Mining commented:

"The recent Infinity drone magnetics across some of the Central Goldfields projects has been positive in identifying buried structures in proximity to historical mining activities. This new magnetic data, when combined with geochemical datasets, has gone a long way to upgrade the prospectivity of these projects, including Chicago. I am looking forward to drill testing these new targets later in 2022."

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 Matthew White, who is a Member of the Australian Institute of Geoscientists. Dr White 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 White 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.

APPENDIX 1 - 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	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	 Infinity Rock Chip Sampling 2022 Rock chip samples between 1 to 3 kg were collected by a qualified geologist on site. A total of 36 rock chip samples were collected from M37/938 (Chicago). All sample information, including lithological descriptions and GPS coordinates were recorded during the sampling process. Individual samples were bagged in calico bags and sent to ALS in Kalgoorlie, WA, for analysis. Infinity Drone Magnetic Survey 2022 In May 2022, a drone magnetic survey was carried out for Infinity at 4 projects (Chicago, Coppermine, Victor Bore, Camel) by Ultramag Geophysics Pty Ltd. A total of 295 line km were flow over 4 project area at a line spacing of 20 m and flying height of 40 m. Flight lines were oriented at 250 degrees (WSW) which is roughly perpendicular to the main NNW-trending structural fabric. The drone was programmed pre-flight by experienced certified pilots. A fast-sampling Potassium magnetometer was mounted on a 5 m tether beneath the drone. The data was recorded in real-time including magnetic data, drone height and location (4 x GPS units are used). A base magnetometer was used to correct for diurnal noise.
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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	NA (not applicable).Drilling is not reported in this announcement.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 N/A - No drilling was undertaken.
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 N/A - No drilling was undertaken. The Project is currently classed as early-stage exploration project. Rock chip samples were qualitatively logged in the field and photography's were taken.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Infinity Rock Chip Sampling 2022 Rock chip samples of varied weights between 1 to 3 kg were collected by a qualified geologist on site. The single site rock chips samples were collected from surface outcrops, float or mine dumps, in the areas of old workings, using a geological hammer. Sampling was focused on quartz veining, sheared rocks and mine dump material. Samples were stored at Infinity Mining's secure yard in Leonora then transported to ALS in Kalgoorlie for analysis. Samples were dried and pulverised to nominal 85% passing 75 microns. Gold was analysed by a 50g charge for fire assay then an ICP-AES finish (ALS method Au-ICP22). Gold assay results are included in the report. No other elements were assayed for.
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. 	 Infinity Rock Chip Sampling 2022 Infinity did not insert independent QAQC samples into the batches of rock chip samples. ALS used internal standards, blanks and duplicates to ensure acceptable levels of accuracy and precision. These QAQC results were reported to Infinity and are within acceptable tolerance limits.

Criteria	JORC Code explanation	Commentary
	• 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.	 Infinity Drone Magnetic Survey 2022 The data were recorded in real-time including magnetic data, drone height and location (4 x GPS units are used). To correct for diurnal noise, a GSM-19 base magnetometer was located in a magnetically flat area away from magnetic noise sources.
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. 	 Infinity Rock Chip Sampling 2022 No field repeats were collected. No QAQC issues were identified in the results.
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Infinity Rock Chip Sampling 2022 Rock chip sample locations were recorded with a handheld GPS with a +/- 3m to 5m accuracy. GDA94 datum and MGA zone 51 was used. Infinity Drone Magnetic Survey 2022 The data was recorded in real-time including magnetic data, drone height and location (4 x GPS units are used). Location accuracy was typically in the range of 0.1 to 0.6 m. GPS data was stored for each magnetic reading.
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 Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Infinity Rock Chip Sampling 2022 The distribution of sampling was dependent on the identification of quartz veining, shearing and alteration minerals near surface.
Orientation of data in relation to geological structure	 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. 	 <u>Infinity Rock Chip Sampling 2022</u> The orientation of mineralised structures has not yet been defined. <u>Infinity Drone Magnetic Survey 2022</u> Flight lines were oriented at 250 degrees (WSW) which is roughly perpendicular to the main NNW-trending structural

Criteria	JORC Code explanation	Commentary
		fabric.
Sample security	The measures taken to ensure sample security.	 Infinity Rock Chip Sampling 2022 All samples were stored at Infinity Mining's secure yard in Leonora then transported directly to ALS in Kalgoorlie for analysis. A high degree of sample security was implemented by Infinity during the entire chain of custody.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• No audits or reviews of sampling techniques and data were undertaken.

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	 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. The security of tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Chicago Project (M37/983) is the subject of this report. The tenement is held by Infinity Mining Limited and is in good standing.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Previous company exploration programs included: Jupiter Mines, 2008, conducted an interpretation of satellite imagery across the wider regional area. Bligh Resources, 2014, regional geological mapping and structural interpretation by BMGS. There is no known previous drilling at Chicago. Details of the previous exploration are also documented within the Infinity Prospectus October 2021.
Geology	Deposit type, geological setting and style of mineralisation.	 The Central Goldfields tenements are located in the Leonora District of the Central Goldfields. The projects lie within greenstone belts associated with several NW-trending faults such as the Ursus Fault Zone. The tenements lie within the same area as a number of significant gold deposits such as King of the Hills owned by Red 5 Limited. The greenstones are also intruded by younger Archean granites. The Chicago Project (M37/983) is hosted in Archean mafic and ultramafic units of the Trevors Bore Formation. A number of ENE-trending structures have been interpreted on previous company geological maps and Government maps. The project is prospective for orogenic shear-hosted gold mineralisation.

Criteria	JORC Code explanation	Commentary
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 drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	• N/A
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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	• N/A
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	Rock chip samples were taken from surface outcrop and are not representative of the entire body of mineralisation.
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 drill hole collar locations and appropriate sectional views. 	 All maps have been inserted within the announcement. See diagrams in body of report.
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. 	 The rock chip sampling results are only a guide and are not representative across the project areas. Balanced reporting of Exploration Results is presented herein. It is uncertain that further exploration work will lead to the reporting

Criteria	JORC Code explanation	Commentary
		of a Mineral Resources, in accordance with the requirements of the JORC 2012 Code
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. 	 The Project includes geological mapping data collected by Bligh Resources in 2014. No systematic data has been collected to date to assess the mineralisation, metallurgy and mining parameters relevant to a modern operation. There is no other exploration data that is considered to be material to the results reported herein.
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Further exploration work at Chicago is planned, including RC drilling. Refer to the main body of the announcement.