## ASX ANNOUNCEMENT



26 September 2024

### **Parkes and Wellington North Exploration Updates**

#### **Parkes Project**

- Reconnaissance mapping and sampling has continued at the Black Ridge prospect on Magmatic's 100%owned Parkes Project, where copper anomalism has been defined over a six-kilometres trend
- Further strong results have been returned from sampling along the trend, including **up to 7.4% copper** in rock chips (**Figure 1**) from shallow historic workings in the central-southern portion of the prospect
- A pole-dipole induced polarisation (IP) geophysical survey has also been completed over a portion of the trend, comprising 23 line-kilometres of surveying on nine east-west sections
- Initial modelling of the IP survey results has shown multiple moderate to strongly chargeable features broadly aligned with geology and geochemical anomalism at the prospect
- Close-spaced soil sampling has commenced over several portions of the trend to further define potential drill targets



**Figure 1**. Sample PER056, recently collected near shallow workings at the central-southern portion of the Black Ridge trend during reconnaissance mapping. The sample contains secondary copper carbonates (blue and green) in an altered andesite host, with assays for the sample returning **7.5% Cu & 23g/t Ag**. See **Table 1** for full sampling details.

### Wellington North Project

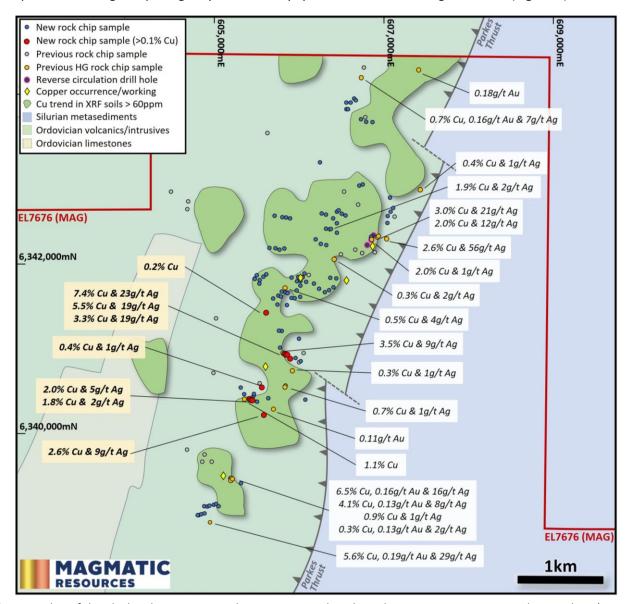
- Reverse circulation (RC) drilling rig expected to mobilise to the Rose Hill prospect today, where four ~250m holes are currently planned
- Rose Hill is located approximately 10 kilometres west of Alkane's 14.7Moz gold-equivalent Boda & Kaiser deposits<sup>1</sup> and is prospective for similar-style porphyry copper-gold mineralisation
- Drilling at the prospect will target shallow mineralisation along strike from previous drilling that included
   71m at 0.43% copper, 0.30g/t gold & 57ppm molybdenum from surface<sup>2</sup>
- The program is expected to take ~2 weeks to complete subject to weather conditions

<sup>1</sup>ASX ALK 29 April 2024; <sup>2</sup>ASX MAG 17 May 2017

Magmatic Resources Limited ('Magmatic' or 'the Company') is pleased to provide an update on ongoing activities at its 100%-owned Parkes and Wellington North Projects in central New South Wales. The Company continues to ramp-up of exploration efforts across all three of its East Lachlan projects following execution of a Farm-in and JV Agreement at the Myall Project with Fortescue and successful placements in March and May this year (ASX MAG 8 March 2024 & 20 May 2024).

### Further rock chip sampling and new IP results highlight strong copper potential at Black Ridge

The Company recently reported a zone at Black Ridge **extending for at least six kilometres** comprising a pXRF copper-in-soil anomaly and multiple contiguous high grade rock chip samples (ASX MAG 1 August 2024). The Black Ridge trend is hosted in the Ordovician-age Goonumbla Volcanics 15 kilometres southeast of the Northparkes Mine and contains multiple small-scale historical copper workings and prospecting pits with outcropping mineralisation (**Figures 1-3**). The trend is almost entirely untested beyond the surface expression, with previous drilling comprising only three closely spaced RC holes at a single location (**Figure 2**).



**Figure 2.** Plan of the Black Ridge copper trend over interpreted geology showing pXRF copper-in-soil anomalism (green) and highlighting selected recent (yellow text box) and previous (white text box) rock chip assay results. Full location and assay details for recent rock chip sampling can be found in **Table 1**, with previous sampling in ASX MAG 1 August 2024.

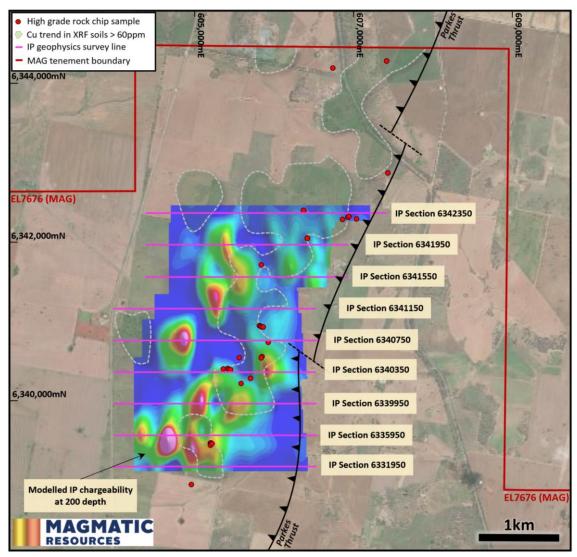


**Figure 3**. Magmatic geologist holding a copper-bearing rock sample collected during reconnaissance mapping at Black Ridge. The sample assayed **2.0% Cu and 5g/t Ag** (PERO46) and was collected approximately 750 metres southwest of the high grade sample shown in **Figure 1**. Full location and assay data can be found in **Table 1**.

As a part of ongoing reconnaissance mapping at Black Ridge, systematic rock chip sampling has been completed across much of the trend, with a total of 139 samples now collected (Figure 2). The first 25 of these samples were reported in a previous exploration update, including **up to 6.5% Cu** at the southern end of the trend (ASX MAG 1 August 2024). Results for an additional 114 samples have now been received and are reported in **Table 1.** 

The new rock chip results include multiple high grade samples focussed on an area extending over ~1.5 kilometres in the central-southern part of the trend (Figure 2). The area has undulating topography with outcropping rocks and float with multiple small pits and shallow workings, with high grade results including 7.3% Cu & 23g/t Ag (PER056), 5.5% Cu & 19g/t Ag (PER057), 3.3% Cu & 19g/t Ag (PER058), 2.6% Cu & 5g/t Ag (PER046) and 1.8% Cu & 2g/t Ag (PER047).

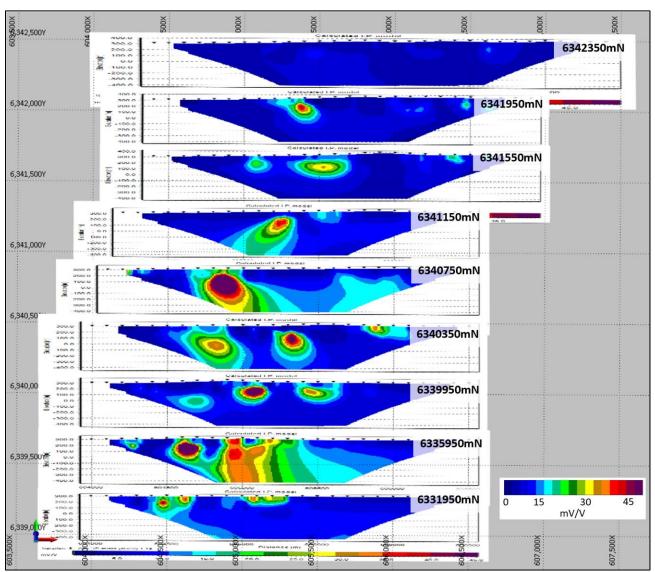
The Company has also recently completed a 23 line-kilometre pole-dipole induced polarisation (IP) geophysical survey over nine 400m-spaced sections on a portion of the Black Ridge trend (**Figure 4**). IP surveys have the potential to detect the presence of sulphide mineralisation below the surface, with the technique being successfully employed in previous base metal and gold discoveries throughout Australia.



**Figure 4.** Plan of the Black Ridge copper trend over satellite imagery showing the modelled IP chargeability anomalism at 200 metres depth, along with the location of the IP survey lines, an outline of the pXRF copper-in-soil anomalism, and rock chip samples containing >0.1% Cu.

Preliminary results from the program have highlighted multiple coherent zones of moderate to strong chargeability (up to 50mV/V) across the surveyed sections (**Figure 5**). The chargeability anomalies have an overall north-northeast trend and broadly contiguous with the geology and the geochemical anomalism defined by pXRF soils and the high grade rock chips (**Figures 4 & 5**). Strong chargeability responses in the western part of the survey area on IP sections 6335950 and 6340750 do not correlate with known geochemical anomalism, although it is noted very few rock chip samples have been collected in the vicinity of these features to date (**Figure 2**).

Magmatic's technical team considers the strong chargeability response on multiple sections encouraging, with further modelling currently underway to understand if the observed IP anomalies may indicate an accumulation of sulphides and/or magnetite at various points within the system. A close-spaced conventional soil geochemistry survey has also recently commenced over several of the IP lines to help validate the IP anomalies and assist with drill targeting.



**Figure 5.** Stacked sections looking down towards the north showing the modelled IP chargeability responses on each of the nine lines surveyed (see locations on **Figure 4**).

#### Drilling set to commence at Rose Hill

Following a delay due to ground conditions at the prospect, a planned RC program is set to commence at Rose Hill in the coming days. The Rose Hill prospect is located on the western side of the Company's 100%-owned Wellington North project area, with previous drilling in the area returning **71m at 0.43% copper, 0.30g/t gold & 57ppm molybdenum** from surface (ASX MAG 17 May 2017).

Drill pad preparation was completed earlier in the week, with the drilling rig expected to mobilise to site today. The proposed program comprises four holes each approximately 250 metres in depth to test for shallow copper-gold mineralisation. Subject to weather conditions, the program is expected to take up to two weeks to complete with final assay results expected in late October or early November.

#### **Competent Persons Statement**

Compilation of exploration and drilling data, along with assay validation and geological interpretations was coordinated by Adam McKinnon, BSc (Hons), PhD, MAusIMM, who is Managing Director and a full-time employee of Magmatic Resources Limited. Dr McKinnon has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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". Dr McKinnon consents to the inclusion in this release of the matters based on his information in the form and context in which it appears. Additionally, Dr McKinnon confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

#### **Previously Reported Information**

The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website (www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### **Disclaimer**

This report contains certain forward-looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Magmatic Resources Limited, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Magmatic Resources Limited. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

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Authorised for release by the Board of Directors of Magmatic Resources Limited.

**Table 1.** Location, assay details and sample descriptions for recent rock chip sampling over the Black Ridge trend at the Parkes Project (MGA94 Zone55).

Sample ID	Easting		Cu (ppm)				Sb (ppm)	Description
•				(3 - 7			,	·
PER032	604841	6339011	94	-	0	1		Gossanous andesite
PER033	604850	6339010	19	-	0	0	0	Altered limestone
PER034	604858	6339017	99	-	0	1		Andesite float
PER035	604855	6339013	82	-	0	1	1	Andesite tuff
PER036	604897	6339121	162	-	0.1	1		Fine andesite tuff with hematite vughs
PER037	604927	6339119	218	-	0.1	1	2	Fine grained andesite
PER038	604957	6339132	163	-	0.1	1	1	Andesite tuff with hematite vughs
PER039	604992	6339148	44	-	0	1	1	Flow aligned andesite tuff
PER040	605037	6339143	224	-	0.1	1	0	Gossanous vuggy andesite
PER041	605046	6339143	23	-	0.1	3	24	Altered limestone
PER042	605065	6339130	32	-	0	3	32	Vuggy hematite siderite altered limestone
PER043	605331	6339388	38	-	0	1	5	Hematitic altered andesite crystal tuff
PER044	605319	6340527	245	0.01	0.3	2	53	Vuggy hematite quartz vein float
PER045	605360	6340433	262	-	0.1	1	56	Mixed float andesite with quartz hematite vein
PER046	605414	6340394	19,750	0.01	5.4	0	26	Malachite with minor azurite in limestone near shallow historic workings
PER047	605434	6340396	18,350	-	1.9	1	29	Malachite stained andesite near shallow historic workings
PER048	605434	6340395	350	-	0.1	0	55	Centre-line sulphide in quartz vein
PER049	605436	6340397	26,300	0.01	6	5	431	Malachite azurite in altered host near shallow historic workings
PER050	605451	6340394	199	-	0	1	15	Vuggy hematite in reworked volcanics
PER051	605458	6340420	989	-	0.1	1	51	Vesicular iron oxides in andesitic sediments
PER052	605459	6340426	26,100	0.01	9	1	192	Gossanous stockpile near historic workings
PER053	605604	6340232	92	-	0	0	6	Vuggy hematite in altered andesite
PER054	605638	6340393	174	-	0.1	1	8	Vesicular oxide in andesite
PER055	605562	6340530	3,550	0.01	1.4	1	28	Malachite in brecciated volcanics
PER056	605821	6340949	73,500	0.06	22.8	0	4	Vesicular Copper oxides in weathered host near historic workings
PER057	605821	6340948	54,800	0.06	19.2	0	1	Massive azurite and malachite from near historic workings
PER058	605820	6340946	32,900	0.03	19.1	0	2	Azurite malachite with possible antimony oxides near historic workings
PER059	605843	6340927	654	-	0.2	1	1	Possible silvery sulphide in andesite tuff
PER060	605898	6340877	423	-	0.2	1	3	Gossanous andesite with hematite vughs
PER061	605966	6340871	105	-	0.1	0	4	Vesicular oxides in altered andesite seds

**Table 1 (continued).** Location, assay details and sample descriptions for recent rock chip sampling over the Black Ridge trend at the Parkes Project (MGA94 Zone55).

	·	<u> </u>						Inpling over the black mage trend at the Farkes Froject (MOA34 Zone33).
Sample ID	Easting	Northing	Cu (ppm)	Au (g/t )	Ag (g/t)	Mo (ppm)	Sb (ppm)	Description
PER062	606000	6341105	51	-	0	0	1	indurated reworked andesite sediments
PER063	605781	6341187	53	-	0	1	1	Andesite tuff indurated
PER064	605757	6341183	54	-	0	1	13	Oxide filled vesicles in andesite
PER065	605784	6340981	81	-	0	1	3	Possible magnetite or tetrahedrite in andesite tuff
PER066	605865	6341642	99	0.06	0.2	1	1	Magnetite bearing andesite sub-crop
PER067	605849	6341645	158	0.02	0.1	1	1	Magnetite bearing andesite float
PER068	605805	6341644	141	0.01	0.1	2	0	Magnetite bearing andesite outcrop
PER069	605768	6341601	123	0.01	0.1	1	0	Strongly altered muscovite rich greisen
PER070	605773	6341603	118	0.01	0.1	1	0	Altered andesite - magnetite & muscovite bearing
PER071	605780	6341604	152	-	0.1	1	0	Magnetite bearing andesite float
PER072	605703	6341577	205	0.02	0.2	1	1	Magnetite bearing silica rich blue andesite
PER073	605744	6341510	128	-	0.1	1	0	Pervasive chlorite altered partially aligned andesite
PER074	605859	6341497	168	0.01	0.1	1	0	Silica rich andesite possibly monzonitic with trace hematite
PER075	605927	6341571	129	0.01	0.1	1	0	Selective chlorite altered magnetite bearing andesite
PER076	606257	6343172	96	-	0.1	1	1	Andesite tuff partial flow alignment
PER077	605889	6342512	93	-	0.1	1	0	Pervasive chlorite altered andesite outcrop
PER078	605862	6342522	79	-	0.0	1	0	Magnetite bearing blue andesite with selective chlorite alteration
PER079	605817	6342523	381	-	0.2	1	2	Monzodiorite sub-crop potassic altered feldspar
PER080	605719	6342550	41	-	0.0	1	0	Monzodiorite sub-crop
PER081	605662	6342172	46	-	0.0	1	1	patchy chlorite-hematite altered andesite
PER082	605733	6342157	79	-	0.0	1	0	Hematite vughs in andesite outcrop
PER083	605734	6342159	69	-	0.0	1	0	Hematite vughs in andesite outcrop
PER084	605778	6342148	101	-	0.0	1	1	Andesite with patchy disseminated hem vughs in outcrop
PER085	605831	6342156	37	-	0.0	1	2	Monzodiorite outcrop
PER086	606273	6342577	159	-	0.1	1	0	Andesite tuff outcrop
PER087	606322	6342562	96	-	0.1	1	0	Tarnished andesite tuff
PER088	606405	6342516	135	0.01	0.1	1	0	Hematite veins and vughs in andesite tuff outcrop
PER089	606456	6342453	180	-	0.1	1	0	Hematite veins and vughs in andesite tuff outcrop
PER090	606455	6342344	139	0.01	0.1	1	0	Hematite veins and vughs in andesite tuff outcrop
PER091	606385	6342397	79	-	0.1	1	0	Hematite veined andesite tuff outcrop

**Table 1 (continued).** Location, assay details and sample descriptions for recent rock chip sampling over the Black Ridge trend at the Parkes Project (MGA94 Zone55).

								Inpling over the black Mage trend at the Parkes Project (MGA34 2011e33).
Sample ID	Easting	Northing	Cu (ppm)	Au (g/t )	Ag (g/t)	Mo (ppm)	Sb (ppm)	Description
PER092	606323	6342397	113	-	0.1	1	0	Weakly hematite veined andesite tuff outcrop
PER093	606330	6342204	218	-	0.1	1	1	Chlorite altered andesite tuff outcrop
PER094	606263	6342214	469	-	0.2	1	0	Chlorite altered andesite tuff sub-crop
PER095	606202	6342266	235	-	0.1	1	0	Andesite tuff outcrop
PER096	606740	6343679	114	-	0.1	1	1	Andesite tuff with minor late carb veining
PER097	606797	6343649	120	-	0.1	1	2	Andesite tuff float
PER098	606876	6343647	190	-	0.1	1	1	Andesite tuff outcrop
PER099	606672	6343910	111	-	0.1	1	1	Iron-manganese stained float
PER100	606664	6343917	83	-	0.1	1	1	Andesite tuff with tarnished hematite vughs
PER101	606617	6343886	99	-	0.1	1	0	Magnetite rich andesite tuff sub-crop
PER102	606577	6343881	108	-	0.1	1	0	Hematite-manganese stained andesite tuff magnetite rich outcrop
PER103	606570	6343809	106	-	0.1	0	2	Chlorite-hematite altered andesite tuff outcrop
PER104	606572	6343804	135	-	0.1	0	4	Chlorite-hematite altered andesite tuff outcrop with hematite vesicles
PER105	606066	6340346	45	-	0.1	1	13	Hematite-manganese stained andesite tuff
PER106	606065	6340346	30	-	0.0	1	4	Hematite-manganese stained andesite tuff
PER107	606066	6340344	83	-	0.1	1	42	Boxwork veined sub-crop in sediments
PER108	605956	6341575	121	-	0.1	1	0	Flow aligned andesite tuff outcrop with hematite vughs
PER109	606011	6341590	463	-	0.2	1	0	Magnetite rich andesite tuff
PER110	606182	6341738	212	0.01	0.1	1	0	Magnetite rich andesite tuff with trace visible sulphide
PER111	606247	6341686	175	-	0.1	0	1	Epidote-chlorite altered flow aligned andesite outcrop
PER112	606316	6341652	305	-	0.0	0	1	Hematite altered pink feldspars in andesite tuff with hem vughs in outcrop
PER113	606363	6341669	51	-	0.1	1	1	Strong hematite altered flow aligned andesite sub-crop
PER114	606410	6341706	56	-	0.1	1	3	Hematite veined and vughs in flow aligned andesite outcrop
PER115	606442	6341808	314	-	0.0	0	2	Hematite altered and vughs in flow aligned andesite outcrop
PER116	606368	6341810	78	-	0.0	1	2	Flow aligned hem alt magnetite andesite outcrop
PER117	606077	6341772	194	-	0.1	1	0	Coarse grained flow aligned andesite outcrop
PER118	606018	6341725	92	0.01	0.1	1	1	Flow aligned andesite with hematite vughs
PER119	605975	6341661	82	-	0.0	1	0	Flow aligned andesite
PER120	605533	6341765	130	-	0.0	0	1	Flow aligned andesite outcrop
PER121	605531	6341784	130	-	0.1	1	1	Flow aligned andesite outcrop with late sheet quartz vein

Table 1 (continued). Location, assay details and sample descriptions for recent rock chip sampling over the Black Ridge trend at the Parkes Project (MGA94 Zone55).

				·			·	mpling over the Black Ridge trend at the Parkes Project (MGA94 Zone55).
Sample ID	Easting	Northing	Cu (ppm)	Au (g/t )	Ag (g/t)	Mo (ppm)	Sb (ppm)	Description
PER122	605496	6341809	80	-	0.0	1	1	Flow banded andesite outcrop
PER123	605509	6341838	102	-	0.0	1	1	Strong hematite altered flow aligned andesite outcrop
PER124	605585	6341837	17	-	0.0	0	16	unknown fine mafic with quartz rich breccia zone 5cm wide
PER125	605606	6341852	52	-	0.0	0	1	Coarse crystal flow aligned dark andesite with hematite alteration outcrop
PER126	605983	6341782	131	-	0.1	1	1	Flow aligned andesite
PER127	606036	6341791	222	0.01	0.2	1	0	Iron-manganese stained andesite outcrop
PER128	606050	6341803	48	0.01	0.0	1	1	Selective hematite altered flow aligned andesite outcrop
PER129	606065	6341854	24	0.01	0.0	1	0	selective hematite altered flow aligned andesite outcrop
PER130	606000	6341815	44	-	0.0	1	1	Hematite-chlorite altered andesite outcrop
PER131	605916	6341817	216	0.01	0.1	1	0	Iron-manganese stained flow aligned andesite outcrop
PER132	605617	6341409	2,040	0.01	0.3	1	0	hematite-chlorite altered andesite in rockpile
PER133	605615	6341405	200	-	0.1	2	42	Quartz vein from rockpile
PER134	607082	6342756	92	-	0.0	0	7	Strong hematite altered andesite possibly reworked sediments in outcrop
PER135	607110	6342630	61	0.01	0.1	1	4	intense hematite vugh fill in volcanic sediments in sub-crop
PER136	607089	6342593	68	-	0.0	1	3	Hematite peppered volcanic sediments outcrop
PER137	607065	6342538	45	-	0.0	1	9	Hematite-Manganese altered vuggy hematite in fine sandstone outcrop
PER138	607046	6342472	70	-	0.0	1	8	Hematite-Manganese altered sediments outcrop
PER139	606555	6342545	141	0.01	0.1	1	0	Andesite crystal tuff no alignment visible sub-crop
PER140	606514	6342571	47	0.01	0.0	1	0	Sigmoidal fracture zone in andesite outcrop
PER141	606514	6342569	200	0.01	0.1	1	1	Hem vein in flow aligned andesite outcrop
PER142	606473	6342593	32	0.01	0.0	1	0	Flow aligned andesite outcrop
PER143	606481	6342601	158	0.01	0.1	1	0	Magnetite rich black andesite tuff sub-crop
PER144	606760	6342902	43	-	0.0	1	9	Hematite altered andesite sub-crop
PER145	606721	6342893	148	-	0.0	1	2	Altered andesite tuff in rockpile

# Appendix I – JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data: Parkes East Project, Black Ridge Trend Rock Chip and pXRF Sampling

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	Induced Polarisation (IP) Geophysics: Survey completed by Fender Geophysics using pole-dipole array with a remote electrode a minimum distance of 2.6km from nearest line. Survey lines were completed on GDA94 Zone 55 grid, east-west orientated lines sub-perpindicular to the mapped geology using 100m station spacing along lines 400m spaced apart. Minimum line length was 2.3line-km and maximum of 3.0line-km. A total of 22.7 line-km's were completed in the survey. Reading was completed on time domain – 2 seconds or 0.125Hz
		<b>Soils:</b> A handheld XRF analyser was used to obtain soil analyses. The unit is an Olympus Vanta VMW pXRF. Samples were analysed on a systematic grid, 50m apart on 400m line spacing with infill sampling completed on lines 120m north and south of anomalous lines. Sample sites were prepared by digging/scuffing to 5-20cm depth to remove the vegetation and immediate topsoil. The instrument was then used to analyse the area directly. A very thin sandwich bag was placed over the front of the analyser to protect it from dust and contamination.
		<b>Rock Chips:</b> Samples were taken from a combination of in-situ outcropping rocks, float and from historic workings. Sampling was selective of outcrops and material that looked potentially altered/mineralised in order to gain an understanding of best grades possible and/or to identify lithogeochemistry.
		Historic Rock Chips: MAG geologists acquired historic rock chip data from government open file online servers (Minview and DIGS) reviewing all data and reports to confirm results had been assayed through recognized laboratories and locations could be verified to within an acceptable limit of error given the preliminary exploration nature of reported results.  References and hyperlinks to these reports can be found in the body of this report
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Location by hand held GPS device to 5m accuracy, GDA94 zone 55.  Induced Polarisation (IP) Geophysics: Calibration is undertaken in the field during survey production. Constant QAQC is undertaken and threshold levels are monitored, including solar wind electromagnetic disturbance activity. Readings deemed conspicuous by the qualified field geophysicist, were re-taken until results were confirmed as accurate and/or results remained consistent after several re-reads as necessary on a station-by-station basis. All fences were identified and data communicated to the modelling geophysicist for cancellation of potential interference prior to completion of final model outputs.
		Soils: See comments above on systematic analysis and interpretation of pXRF data  Rock Chips: Sampling was selective of outcrops that looked mineralised and/or of geological interest to gain an understanding of best grades and litho-chemistry of the host rocks in the

Criteria	JORC Code explanation	Commentary
		area. The survey was completed as part of initial reconnaissance mapping program and as such sample sizes were typically 0.2 to 1.5 kilograms.
		Historic Rock Chips: Where available images from historic reports were registered in 3D geological software (Micromine) against existing and historic tenement boundaries. There is expected to be a margin of error associated with this technique. Sample locations were also confirmed through online government geological services (Minview) and database exports provided through this service to confirm image registration locations.
		All identified historic rock chips detailed in the area of interest have been included regardless of assayed grade to ensure completeness of reporting and to display any variability that may be present within these results.
	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 (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.	Induced Polarisation (IP) Geophysics: Survey completed using pole-dipole array with remote electrode minimum distance of 2.6km from nearest line. Survey lines were completed on GDA94 Zone 55 grid, east-west orientated lines using 100m station spacing along lines 400m spaced apart. Minimum line length was 2.3 line-km and maximum of 3.0line-km. A total 22.7 line-km's were completed in the survey. Reading was completed on time domain – 2seconds or 0.125Hz. Results have been used only to determine potential for mineralsation and no guarantee can be given on the nature, quality or type of anomaly produced from this type of geophysical survey and should only be used to indicate potential targets for future activities.  Soils: Written procedures for pXRF sampling and QAQC were developed and carried out by MAG contract staff using up to date techniques. Certified standard reference materials by OREAS were analysed at the start and end of each day and duplicates were recorded approximately every 50 and often once per line if highly anomalous lead (Pb) readings were analysed. The soil was analysed only if relatively dry, moist soil was not analysed. Battery is changed when at 25%. The pXRF machine has been calibrated by Olympus regularly. The Vanta is a three beam analyser, each beam time was set to 20 seconds, giving total read time as 60 seconds.
		Rock chips: All sampling was from the oxide zone and hence oxide gold may be nuggety in nature. 0.2-1.5kg was pulverised to produce a 50g charge for fire assay Au-AA24 and ME-MS61. Samples were crushed to 6mm and then pulverized to 90% passing -75 microns. The lower detection limit for gold is 0.005ppm, which is believed to be an appropriate detection level. ALS method ME-ICP61 (48 elements) is completed on the pulps to assist with lithogeochemistry and pathfinder analysis. Assay standards, blanks and duplicates are analysed as part of the standard laboratory analytical procedures.
		Historic Rock Chips: Mineral Management and Securities: Detailed sample preparation techniques, size and weight for historic samples are unknown. All samples were assayed using AAS for Cu-Pb-Zn-Ag-Au techniques. Sample analysis was completed through SGS Laboratories.

Criteria	JORC Code explanation	Commentary
		Billiton Australia: Detailed sample preparation techniques, size and weight for historic samples are unknown. All samples were assayed using AAS for Cu-Pb-Zn-Ag-Au techniques. Sample analysis was completed through Comlabs Laboratories.  Cyprus Gold Australia: detailed sample preparation techniques, size and weight for historic samples are unknown. All samples were assayed using AAS for Cu-Pb-Zn-Ag-Au and Fire Assay (Au) techniques. Sample analysis was completed through Australian Assay Laboratories.
Drilling techniques	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).	Soil and rock chip samples, no drill results reported.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Soil and rock chip samples, no drill results reported.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Soil and rock chip samples, no drill results reported.
	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.	Soil and rock chip samples, no drill results reported.
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.	Soils: No logging was completed, only assay data collected.  Rock chips: Samples were logged for rock type, structure, veining and alteration.  Historic Rock Chips: Where available sample descriptions have been extracted from historic
		reports and all samples without available descriptions have been clearly identified in the comments in the rock chip assay table above.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Soils: No logging was completed, only assay data collected.  Rock chips: qualitative logging on hand specimens
		<b>Historic Rock Chips:</b> No samples were available for viewing and/or relogging. Only descriptions from historic reports available. See table in body of report for details.
	The total length and percentage of the relevant intersections logged.	Soil and rock chip samples, no drill results reported.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Soil and rock chip samples, no drill results reported.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Soil and rock chip samples, no drill results reported.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<b>Soils:</b> Sample sites were prepared by digging/scuffing to max 5-20cm depth to remove the vegetation and immediate topsoil, see photo above. The instrument was then used to analyse

Criteria	JORC Code explanation	Commentary
		the soil directly. A very thin sandwich bag was placed over the front of the analyser to protect it from dust and contamination.
		<b>Rock chips:</b> Up to 1.5kg of rock was sampled into a calico bag by chipping with a geo-pick from the outcrop. This is considered appropriate for reconnaissance exploration over a broad area.
		Historic Rock Chips: Mineral Management and Securities: The nature, size and weight of samples is unknown. Sample preparation techniques are believed to be standard practice of the time. Billiton Australia: The nature, size and weight of samples is unknown. Sample preparation techniques are believed to be standard practice of the time. Cyprus Gold Australia: The nature, size and weight of samples is unknown. Sample preparation techniques are believed to be standard practice of the time.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No sub-sampling completed.
	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.	Induced Polarisation (IP) Geophysics: Readings deemed conspicuous by the qualified field geophysicist, were re-taken until results were confirmed as accurate and/or results remained consistent after several re-reads, taken as necessary on a station-by-station basis. All fences were identified and data communicated to the modelling geophysicist for cancellation of potential interference prior to completion of final model outputs.
		<b>Soils:</b> Samples taken on a systematic grid over large areas using only one instrument.
		Rock chips: Select samples taken based on alteration/potential mineralisation and as such are likely to be biased towards higher grades. Other samples were taken for lithochemistry to understand the nature of host rocks in the area. All results are reported regardless of grades in the body of the report.  Historic Rock Chips:
		Mineral Management and Securities: Select samples taken based on alteration/potential mineralisation and as such are likely to be biased towards higher grades.  Billiton Australia: Select samples taken based on alteration/potential mineralisation and as such are likely to be biased towards higher grades.  Cyprus Gold Australia: Select samples taken based on alteration/potential mineralisation and
	Whether sample sizes are appropriate to the grain size of the material being sampled.	as such are likely to be biased towards higher grades.  Induced Polarisation (IP) Geophysics: Survey is considered appropriate for identifying broadscale anomalism at the local to tenement scale.
		Other: All sample sizes are considered appropriate for the nature of exploration being undertaken.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	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.	Induced Polarisation (IP) Geophysics: Survey completed by Fender Geophysics using Pole-Dipole array with remote electrode minimum distance of 2.6km from nearest line. Survey lines were completed on GDA94 Zone 55 grid, east-west orientated lines using 100m station spacing along lines 400m spaced apart. Minimum line length was 2.3line-km and maximum of 3.0line-km. A total 22.7line-km's were completed in the survey. Reading was completed on time domain – 2seconds or 0.125Hz. Results have been used only to determine potential for mineralisation and no guarantee can be given on the nature, quality or type of anomaly produced from this type of geophysical survey and should only be used to indicate potential targets for future activities. Field data QAQC was completed by trained Fender Geophysics ('Fender') field staff, with further QAQC of data conducted post survey by GeoDiscovery  Soils: The pXRF technique employed is considered partial. Results have been used only to determine anomalous trends with absolute values not reported.  Rock chips: Standard assaying procedures by a reputable laboratory (ALS Group, Orange branch). 0.2-1.5kg rock chip samples were pulverised to produce a 50 g charge for fire assay by ALS Orange Laboratory and four acid ICP analysis, ME-MS61 by ALS Brisbane or other ALS lab. This method is considered a near total digestion.  Historic Rock Chips: Mineral Management and Securities: The assay technique was standard practice of the time. Assays were completed through SGS Laboratories using AAS techniques, which are considered partial digestion.  Billiton Australia: The assay technique was standard practice of the time. Assays were completed through Comlabs Laboratories using AAS techniques, which are considered partial digestion.  Cyprus Gold Australia: The nature, size and weight of samples is unknown. Sample preparation technique was to standard practice of the time. Assays were completed through Complex and the proper sulphace sulphace is considered partial digestion, and fire assay (Au) tech
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Criteria	JORC Code explanation	Commentary
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of	<b>Soils:</b> Prior to each day pXRF soil sampling, OREAS standards were recorded with the pXRF analyser in order to test baseline readings.
	accuracy (ie lack of bias) and precision have been established.	<b>Rock Chips:</b> No standards or blanks were submitted with samples due to the preliminary exploration nature of samples. ALS laboratories completed internal standard quality checks and procedures.
		Historic Rock Chips: Mineral Management and Securities: No standards have been identified in historic data. External laboratory checks are unknown for this data. Preliminary exploration technique in nature. Billiton Australia: No standards have been identified in historic data. External laboratory checks are unknown for this data. Preliminary exploration technique in nature. Cyprus Gold Australia: No standards have been identified in historic data. External laboratory checks are unknown for this data. Preliminary exploration technique in nature.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Soil and rock chip samples, no significant intersections reported.
assaying	The use of twinned holes.	Soil and rock chip samples, no drill results reported.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data logged into a computer such as mapping were backed up with a sample photo. Separate databases kept for the various sampling methods.
	Discuss any adjustment to assay data.	No adjustment or calibration are made on any primary assay data collected for purposes of reporting assay grades.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Coordinates picked up using WGS84 and transformed into Map Grid of Australia 1994 Zone 55. See Table 1 and 2 in the body of the report for datum of historic and new data for rock chips.
	Specification of the grid system used.	All coordinates are based on Map Grid of Australia 1994 Zone 55.
	Quality and adequacy of topographic control.	No topographic elevation data has been used in this report. Rock chip sample elevation data was collected using handheld GPS and stored in the Company's database but is not reported with this release.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<b>Soil samples:</b> were analysed on a systematic lines between 400 and 120 metres apart, with sample points at 50m spacing along the lines.
		<b>Rock Chips:</b> Samples taken based on availability and alteration/potential mineralisation at irregular spacing.
	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.	Not applicable as this is pre-discovery surface geochemical data and not for resource drilling purposes.
	Whether sample compositing has been applied.	No compositing was applied.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Surface and subsurface sampling only. North-northeast striking geology is interpreted hence east-west lines used for soil data collected.
structure	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.	Soil and rock chip samples, no drilling reported.
Sample security	The measures taken to ensure sample security.	Rock Chips: Samples taken by MAG staff. Chain of custody was managed by MAG. Samples were collected and placed in individually numbered bags and location recorded in the field. Secondary photos were taken of sample to be submitted with all samples placed within polyweave bags prior to submission to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Induced Polarisation (IP) Geophysics: During data acquisition, the data is handed over daily, the data is cleaned and QAQC verified. Conducting this process is consultant geophysicist Kate Nelson of GeoDiscovery Group who has been working with IP data for over 20 years.

## Section 2 Reporting of Exploration Results

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 the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	EL7676 Parkes East is located immediately northwest of Parkes, NSW and covers 33 graticular units with an area of 95km². The authority was granted to Modeling Resources and renewed until 11/01/2027. At the time of reporting there were no known impediments to operating in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Induced Polarisation (IP) Geophysics: The geophysical survey was planned by Magmatic Resources exploration staff in consultation with our geophysical contractor, Fender Geophysics ('Fender') and geophysical Consultant Kate Nelson of GeoDiscovery Group. Fender completed initial processing of the data with 2D and 3D inversions produced by GeoDiscovery Group.  No other parties were involved in the planning and execution of the sampling program.  Previous work has been acknowledged where appropriate, however it can be summarized into:  Mineral Management and Securities Pty Ltd (1982) – EL1660 - (Rock chip sampling);  Billiton Australia Pty Ltd (1984) – EL1660 - (Rock chip sampling);  Cyprus Gold Australia Corporation (1989) - (Rock chip sampling);  References and hyperlinks to these reports can be found in the body of this report.
Geology	Deposit type, geological setting and style of mineralisation.	The Black Ridge trend is hosted in the Ordivician-age Goonumbla Volcanics, immediately to the west of the Parkes Thrust. Locally, mineralisation is hosted within fractured andesites with

Criteria	JORC Code explanation	Commentary
		minor limestone lenses. Copper mineralisation is currently though to be structurally controlled, with the overall trend striking NNE-SSW. Most strongly mineralised samples collected to date are secondary in nature, comprising copper carbonates and other oxide copper minerals. The nature of occurrence of sulphide mineralisation in the region is currently poorly understood, although both pyrite and chalcopyrite are known to occur.
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.	No drilling results reported. Eastings and northings provided for all rock chip data.
	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.	No material data has been excluded.
Data aggregation methods	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.	No weighting techniques employed. No minimum or maximum grade truncations employed.
	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.	Not applicable as no drilling results reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values employed in this report.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Soil and rock chip samples, no drill results reported.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Soil and rock chip samples, no drill results reported.

Criteria	JORC Code explanation	Commentary
	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').	Soil and rock chip samples, no drill results reported.
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.	See figures 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.	Induced Polarisation (IP) Geophysics: Representative data has been reported as received by Magmatic Resources with no alteration or editing of data undertaken by the Company. Selective depth slice of the 3D model was used to best represent the locations of all anomalies and associated non-prospective zones generated from 3D modelling.  Rockchip: Results for all current and historic rock chip samples have been reported regardless of grade.
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.	Induced Polarisation (IP) Geophysics: pole-dipole induced polarisation (IP) ground geophysical survey. Fender Geophysics conducted the survey utilising a pole-dipole electrode configuration with electrodes spaced at 100m (dipoles) along 400m spaced lines.  The survey results are discussed in the body of the report.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	See body of report.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See figures in body of report.