

1 August 2024

Sampling confirms copper potential over 6km trend at Black Ridge

- Reconnaissance mapping and sampling has recently recommenced over the Black Ridge copper trend on Magmatic's 100%-owned Parkes Project
- The prospect is located 15 kilometres southeast of the Northparkes Copper Mine and comprises surface copper-gold-silver anomalism in a zone **extending over six kilometres** parallel to the Parkes Thrust
- The Black Ridge trend includes multiple small-scale historic workings with outcropping copper mineralisation coincident with a large-scale copper-in-soil anomaly defined by portable XRF sampling
- Strong results have been returned from recent rock chip sampling along the trend, including **up to 6.5% copper** from minor unnamed workings at the southern end of the trend (see **Figure 1**)
- The trend is almost entirely untested beyond the surface expression, with previous drilling comprising only three closely spaced RC holes at a single location
- Further work at the prospect will include mapping, soil sampling and rock chip sampling, with a **23 line-kilometre induced polarisation (IP) survey commencing in August to identify priority drill targets**
- The Company is well placed to accelerate exploration efforts at Parkes with its Myall Project to the north now fully funded through the Fortescue JV and \$6.34M cash at hand at the end of the last quarter



Figure 1. Sample PER015, recently collected near shallow unnamed workings at the southern end of the Black Ridge copper trend during reconnaissance mapping. The sample contains secondary copper carbonates (blue and green) in a fractured limestone host, with assays for the sample returning **6.5% Cu, 0.16g/t Au & 16g/t**.

Commenting on the work underway over the Black Ridge trend, Magmatic Resources' Managing Director Dr. Adam McKinnon said:

"I am very pleased to see on-ground exploration work recommencing at our 100%-owned Parkes Project. The Black Ridge prospect is one of the many targets at Parkes that has the potential to develop into a major new discovery. Located only 15 kilometres southeast of the Northparkes Mine, in rocks that are clearly fertile, I'm actually a little surprised how under-explored the region has been."

"Black Ridge combines kilometre-scale copper-in-soil anomalism, fantastic results from recent rock chip sampling and historic workings with outcropping mineralisation. With further work at the prospect to include a major IP geophysical survey, I am excited to see what the area may produce."

Magmatic Resources Limited ('**Magmatic**' or '**the Company**') is pleased to provide an update on activities at its 100%-owned Parkes Project, located 15 kilometres to the southeast of the Northparkes Copper-Gold Mine (Evolution/Sumitomo) (**Figure 2**). This work forms part of the Company's continued 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). Following a review of the discovery potential of the Parkes Project earlier in the year, several prospects were selected for follow-up work including MacGregors (orogenic gold), Buryan (porphyry copper and gold) and Black Ridge (structurally controlled copper-gold), with work now commenced at the latter.

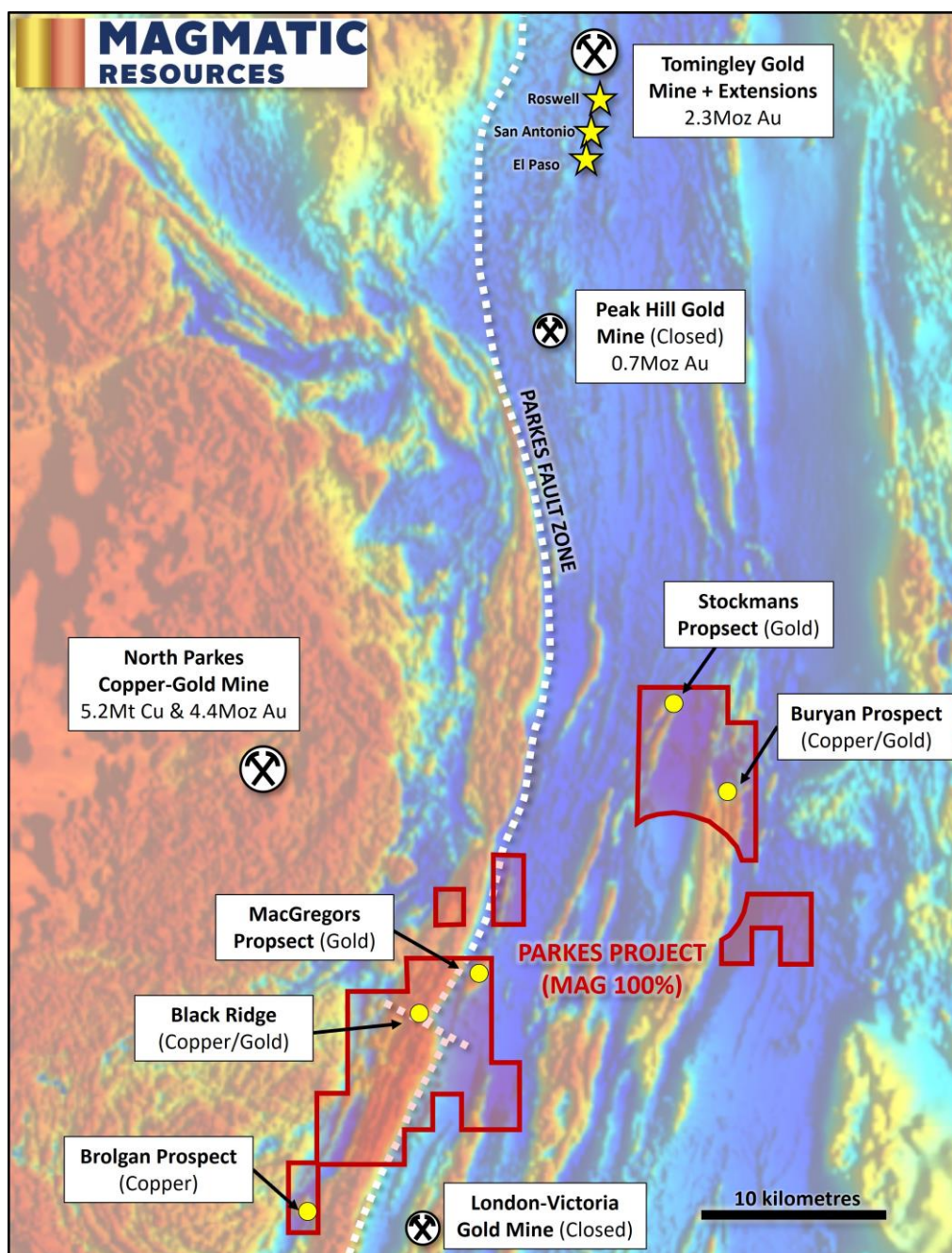


Figure 2. Plan showing the location of Magmatic's 100%-owned Parkes Project, along with key prospects and nearby mines over aeromagnetic (RTP) imagery (ASX MAG 4 July 2024).

New sampling confirms extensive copper system at Black Ridge

The Company has recently commenced exploration activities at Black Ridge, including establishing landholder access through April and June 2024 and subsequent reconnaissance mapping and sampling in early July 2024. The Black Ridge prospect is hosted in the Ordovician-age Goonumbla Volcanics, which are separated from metasediments of the Silurian-age Forbes Group to the east by the Parkes Thrust (**Figure 3**). The area contains multiple small-scale historical copper workings and prospecting pits that host outcropping mineralisation (**Figures 3 & 4**). Coincident with these workings, a portable XRF (pXRF) soil geochemistry survey conducted by Magmatic over the area has highlighted a coherent, multi-kilometre copper trend extending from the Company's northern licence boundary to the limit of sampling in the south (**Figures 3 & 5**).

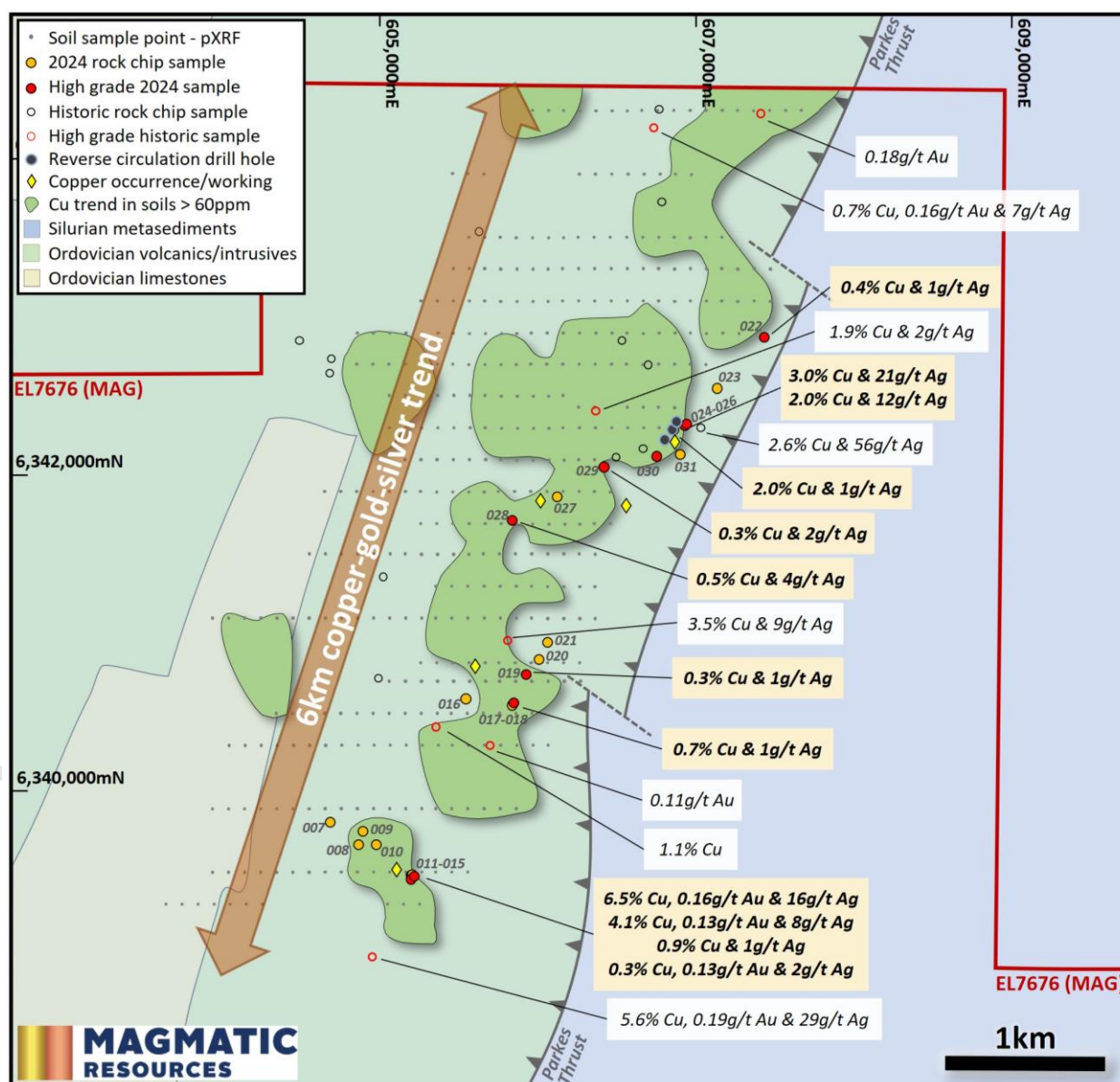


Figure 3. Plan of the Black Ridge copper trend over interpreted geology showing pXRF copper-in-soil anomalism (green) and highlighting selected recent (yellow text box) and historic¹ (white text box) rock chip assay results. Full details for recent and historic rock chip sampling¹ can be found in **Tables 1 & 2** respectively.

¹Note cautionary statement for historic rock chip sampling below.



Figure 4. Photograph looking east over shallow unnamed workings at the southern end of the Black Ridge copper trend. Samples PER011 to 015 were collected from this site, with grades ranging up to 6.5% Cu over the five samples. Full location and assay data can be found in **Table 1**.

Assays have also been received for 25 rock samples that were collected as a part of the recent reconnaissance program, with results for copper, gold, silver, molybdenum and antimony reported in **Table 1**. Five samples (PER011-015) were collected from shallow unnamed workings at the southern end of the Black Ridge trend (**Figures 3 & 4**), returning an average grade of **2.4%, 0.09g/t Au & 5 g/t Ag**, with sample PER015 (**Figure 1**) reaching **6.5% Cu, 0.16g/t Au & 16g/t Ag**. Three other samples taken from the immediate vicinity of the Black Ridge historic mine workings further to the north (PER024-026) also returned an average grade of the **2.3% Cu & 11g/t Ag (Figure 3)**.

Significantly, recent rock chip samples taken away from known workings and prospects also returned strongly elevated copper values, including **0.7% Cu** in PER018, **0.4% Cu** in PER022, **0.5% Cu** in PER028 and **0.3% Cu** in PER029 (**Figure 3 & Table 1**). The presence of elevated copper over a large area is further supported by historic rock chip sampling from the 1980s¹, with multiple high grade results spread over the entire trend (**Figure 3 & Table 2**). The high grade rock chip samples are also generally contiguous with the copper-in-soil trend defined by the pXRF sampling, together forming a prospective zone **extending for at least six kilometres and remaining open to the south**.

Given the very large scale of the anomalism and the strong results from the recent rock chip sampling at Black Ridge, Magmatic's technical team are planning significant additional work in the area over the coming quarter. Further mapping and sampling will commence shortly ahead of a planned 23 line-kilometre induced polarisation (IP) geophysical survey (**Figure 5**). The IP survey will cover a significant portion of the prospective trend with the aim of narrowing-down potential targets for future reverse circulation and/or diamond drilling.

¹Note cautionary statement for historic rock chip sampling below.

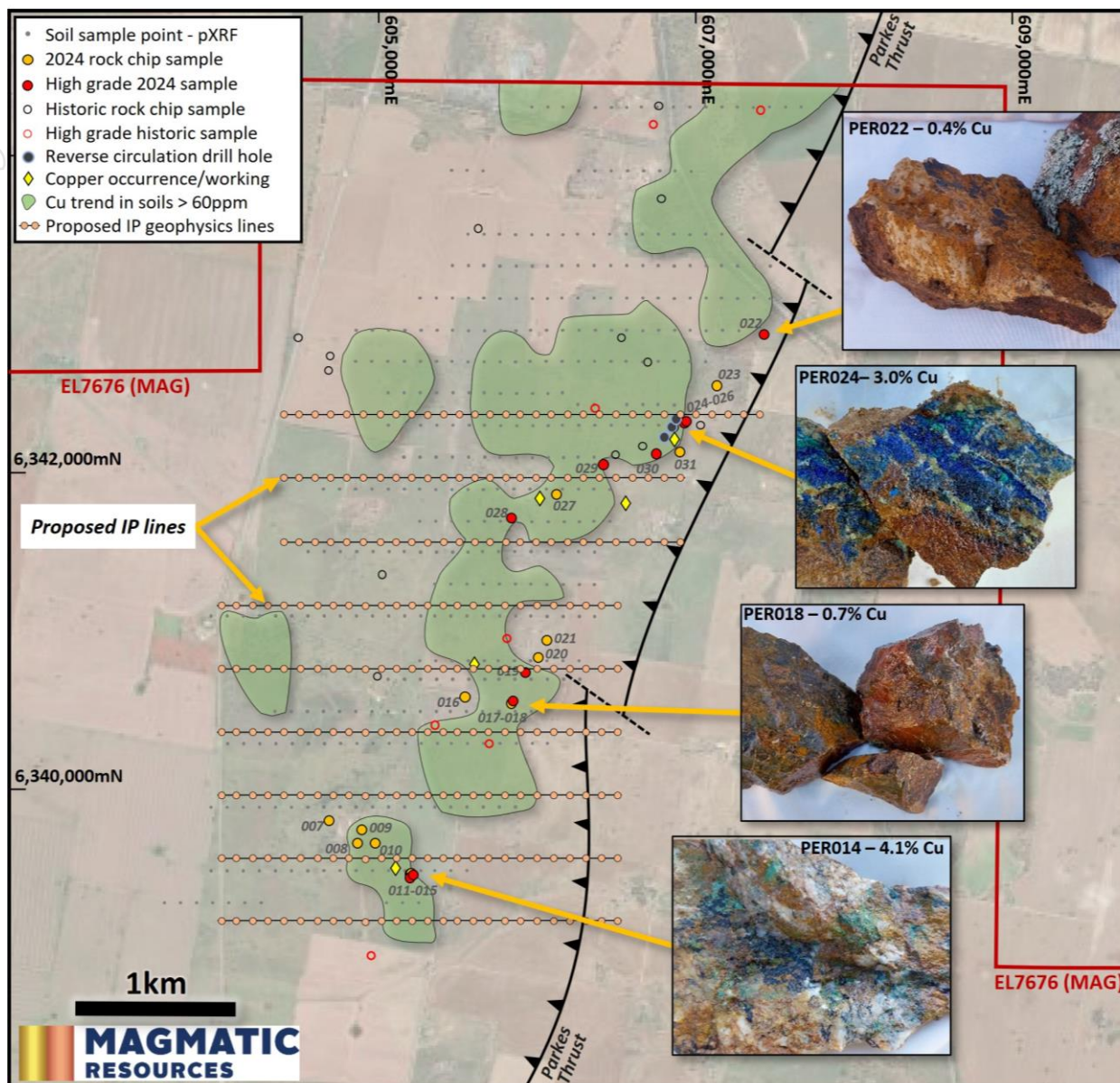


Figure 5. Plan of the Black Ridge copper trend over satellite imagery showing pXRF copper-in-soil anomalism (green) and proposed IP lines for an upcoming survey at the prospect. Photographs of selected rock samples from various points down the trend are also shown; full sample location and assay details can be found in **Table 1**.

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

Cautionary Note on Historic Rock Chip Samples Reported in Figure 3 and Table 2

The historic rock chip assay results noted in Figure 3, Table 2 and in the commentary are pre-JORC 2012 and are therefore not reported in accordance with the JORC Code.

The Competent person has not done sufficient work to provide this data in accordance with the JORC Code. It is uncertain that following evaluation this historical data will be able to be reported in accordance with the JORC Code.

The Company has made efforts to confirm validity of historic data sourced from open file government records and notes the presence of anomalous results are consistent with recent rock chip sampling completed by Magmatic Resources. Historic data mentioned in this report has been sourced from annual tenement reports for exploration licence EL1660 held by Mineral Management Securities in 1982 and Billiton Australia in 1984, and EL1319 held by Cyprus in 1989 (*see references below*). Sample locations were confirmed by GIS registration of sample location maps in 3D software using historic tenement boundaries to position sample data. Location error is assumed to be +/-100m based on the registration process and location techniques used at the time of collection.

As this data has not been fully verified by Magmatic it is provided as a guide only. The Company is not in possession of any new information relating to the historical data that materially impacts on the reliability of the data or the Company's ability to verify the historical data as presented.

References

Mineral Management and Securities Pty Ltd, 1983. "Seventh report, ELs 1316 and 1319, Forbes-Parkes area". R00010415 (GS1983/290). [https://search.geoscience.nsw.gov.au/advanced?q=mr_rin:\(R00010415\)&t=digs](https://search.geoscience.nsw.gov.au/advanced?q=mr_rin:(R00010415)&t=digs)

Mineral Management and Securities Pty Ltd (*for Billiton Australia*), 1984. "Exploration reports, EL1660, Goobumbla-Alectown area". R00014651 (GS1983/249). [https://search.geoscience.nsw.gov.au/advanced?q=mr_rin:\(R00014651\)&t=digs](https://search.geoscience.nsw.gov.au/advanced?q=mr_rin:(R00014651)&t=digs)

Cyprus Gold Australia Corporation, 1989. First and Final report, EL3132, Parkes, Alectown Area. R00004730 (GS1989/123). [https://search.geoscience.nsw.gov.au/advanced?q=mr_rin:\(R00004730\)&t=digs](https://search.geoscience.nsw.gov.au/advanced?q=mr_rin:(R00004730)&t=digs)

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.

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	Northing	Cu (%)	Au (g/t)	Ag (g/t)	Mo (ppm)	Sb (ppm)	Description
PER007	604705	6339801	0.0	-	0.0	1	1	Crystal lithic andesite tuff.
PER008	604876	6339660	0.0	0.01	0.1	1	16	Possible weathered sulphides in andesite tuff.
PER009	604905	6339733	0.0	-	0.1	1	58	Oxidised sulphide in andesite.
PER010	604991	6339656	0.0	0.01	0.2	2	80	Jarosite-manganese stained polymictic andesitic breccia.
PER011	605215	6339457	0.3	0.13	1.5	11	512	Blebbly azurite in limestone - minor unnamed workings.
PER012	605215	6339457	0.0	0.01	0.3	9	35	Quartz vein in limestone - minor unnamed workings.
PER013	605215	6339457	0.9	0.03	0.7	9	432	Blebbly azurite in limestone with quartz veining - minor unnamed workings.
PER014	605215	6339457	4.1	0.13	7.9	65	2280	Blebbly azurite and malachite in limestone - minor unnamed workings.
PER015	605215	6339457	6.5	0.16	16.2	97	4240	Fe-Mn vein in limestone with blebbly malachite and azurite - minor unnamed workings.
PER016	605555	6340575	0.0	0.01	0.1	1	20	Silicified possible welded andesitic tuff.
PER017	605856	6340539	0.0	-	0.0	1	28	Hematite after pyrite box-works, unidentified host.
PER018	605861	6340556	0.7	0.03	1.4	12	409	Intensely silicified fine-andesitic sediments.
PER019	605950	6340733	0.3	0.01	0.8	5	204	Strongly altered silicified andesite with intense hem+Mn altered with sulphide vughs.
PER020	606020	6340842	0.0	-	0.0	1	8	Welded tuff with hematite/jarosite after sulphide vughs.
PER021	606057	6340929	0.0	-	0.0	2	9	Fine grained sediments/andesite with intense fine hematite stringer veins.
PER022	607418	6342880	0.4	0.01	0.8	7	229	Fine grained sediments/andesite with hematite after pyrite vughs.
PER023	607129	6342543	0.0	-	0.1	1	16	Andesite volcanics hem altered and silicified with hem after pyrite vughs.
PER024	606925	6342310	3.0	0.03	21.4	3	8410	Malachite and azurite stained volcanics - Black Ridge workings.
PER025	606925	6342310	2.0	0.01	11.6	2	7240	Chrysocolla, azurite and malachite stained volcanics samples - Black Ridge workings.
PER026	606852	6342285	2.0	0.01	0.9	1	72	Magnetite bearing andesite with disseminated interstitial malachite – near Black Ridge workings.
PER027	606128	6341851	0.0	-	0.1	1	22	Intrusive - possibly monzodiorite.
PER028	605830	6341713	0.5	0.01	3.6	1	1555	Weak chlorite-altered andesite volcanics. Displays moderate crystal alignment.
PER029	606414	6342026	0.3	0.01	1.8	1	1030	Chlorite-hematite altered andesite. Displays moderate crystal alignment.
PER030	606732	6342105	0.1	-	0.1	1	10	Fold hinge in silicified andesite volcanics.
PER031	606889	6342122	0.0	-	0.0	1	7	Fine grained volcanic sediments with minor crystal inclusions.

Table 2. Location, assay details, company and sample descriptions for historic rock chip sampling¹ over the Black Ridge trend noted in this release (MGA94 Zone55).

Sample ID	Easting	Northing	Cu (%)	Au (g/t)	Ag (g/t)	Company ²	Year	Description
37613	604500	6342866	0.0	-	-	BAS	1984	Carbonate-epidote veined andesites with massive epidote
37614	604691	6342730	0.0	-	-	BAS	1984	Epidote-carbonate-hematite altered andesite with minor malachite
37615	604677	6342654	0.0	-	-	BAS	1984	Epidote-carbonate-hematite altered andesite with malachite in vughs
37623	606530	6342849	0.2	-	-	BAS	1984	Epidote-quartz rock with malachite
37625	606712	6342696	0.1	-	-	BAS	1984	Altered andesite containing malachite
37627	605626	6343549	0.0	-	-	BAS	1984	Recrystallised limestone and andesite- only limestone sent for assay
37630	607026	6342298	2.6	-	56	BAS	1984	Samples from 'The Secrets' workings, ferruginous altered rocks
37631	606772	6344322	0.0	-	-	BAS	1984	Fine grained sediments within andesites
37632	606772	6344322	0.1	-	-	BAS	1984	Ferruginous quartz adjacent to sample 37631
38692	606103	6340546	0.0	-	-	BAS	1984	Fractured tuffaceous shales
38695	605018	6341379	0.0	-	-	BAS	1984	Carbonate-andesite-limestone breccia
52177	605382	6340445	0.0	-	-	BAS	1984	Ferruginous quartz float
52189	605757	6340156	1.1	-	-	BAS	1984	Cu-carbonate-quartz-limonite-siderite rock containing malachite and azurite
52197	606200	6340757	3.5	-	9	BAS	1984	Malachite and azurite in altered andesite
MM013	607415	6344304	0.0	-	0.2	BAS	1984	Assay data from registered image
MM014	606729	6344212	0.7	0.16	7.1	BAS	1984	Assay data from registered image
MM015	606789	6343722	0.0	-	0.2	BAS	1984	Assay data from registered image
243075	606370	6342400	1.9	0.02	2	CGA	1989	Historic workings sample
243076	606486	6342112	0.7	0.02	5	CGA	1989	Historic workings sample
243077	606486	6342112	0.1	-	1	CGA	1989	Outcropping country rock around the 'The Secrets' historic workings
243092	605693	6340293	0.0	0.11	-	CGA	1989	Quartz vein material around historic pits
PR106	604960	6338954	5.6	0.19	29	MMS	1982	Only assay results and location given
PR114	606680	6342167	0.0	0.03	-	MMS	1982	Only assay results and location given
PR115	607196	6342394	0.0	0.03	-	MMS	1982	Only assay results and location given

¹See cautionary statement on historic rock chip sampling above.²BAS = Billiton Australia – Metals Division of the Shell Company Australia; CGA = Cyrus Gold Australia Corporation; MMS = Mineral Management and Securities Pty Ltd.

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	<i>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.</i>	<p>Soils: 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.</p> <p>Rock Chips: 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.</p> <p>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. <i>References and hyperlinks to these reports can be found in the body of this report</i></p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p>Location by hand held GPS device to 5m accuracy, GDA94 zone 55.</p> <p>Soils: See comments above on systematic analysis and interpretation of pXRF data</p> <p>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 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.</p> <p>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.</p> <p>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.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<p>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.</p> <p>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.</p> <p>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. 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.</p>
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.

Criteria	JORC Code explanation	Commentary
Logging	<i>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.</i>	<p>Soils: No logging was completed, only assay data collected.</p> <p>Rock chips: Samples were logged for rock type, structure, veining and alteration.</p> <p>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.</p>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	<p>Soils: No logging was completed, only assay data collected.</p> <p>Rock chips: qualitative logging on hand specimens</p> <p>Historic Rock Chips: No samples were available for viewing and/or relogging. Only descriptions from historic reports available. See table in body of report for details.</p>
	<i>The total length and percentage of the relevant intersections logged.</i>	Soil and rock chip samples, no drill results reported.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Soil and rock chip samples, no drill results reported.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Soil and rock chip samples, no drill results reported.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<p>Soils: 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 the soil directly. A very thin sandwich bag was placed over the front of the analyser to protect it from dust and contamination.</p> <p>Rock chips: 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.</p> <p>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.</p>
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	No sub-sampling completed.
	<i>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.</i>	<p>Soils: Samples taken on a systematic grid over large areas using only one instrument.</p> <p>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.</p>

Criteria	JORC Code explanation	Commentary
		<p>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 as such are likely to be biased towards higher grades.</p>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	All sample sizes are considered appropriate for the nature of exploration being undertaken.
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>Soils: The pXRF technique employed is considered partial. Results have been used only to determine anomalous trends with absolute values not reported.</p> <p>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.</p> <p>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 Australian Assay Laboratories, using AAS, which is considered partial digestion, and fire assay (Au) techniques.</p>
	<i>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.</i>	Soil: Olympus Vanta VMW pXRF, three beam analyser, each beam time was set to 20 seconds, giving total read time as 60 seconds. No calibration factors applied.
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	<p>Soils: Prior to each day pXRF soil sampling, OREAS standards were recorded with the pXRF analyser in order to test baseline readings.</p> <p>Rock Chips: 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.</p> <p>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.</p>

Criteria	JORC Code explanation	Commentary
		<p>Billiton Australia: No standards have been identified in historic data. External laboratory checks are unknown for this data. Preliminary exploration technique in nature.</p> <p>Cyprus Gold Australia: No standards have been identified in historic data. External laboratory checks are unknown for this data. Preliminary exploration technique in nature.</p>
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Soil and rock chip samples, no significant intersections reported.
	<i>The use of twinned holes.</i>	Soil and rock chip samples, no drill results reported.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data logged into a computer such as mapping were backed up with a sample photo. Separate databases kept for the various sampling methods.
	<i>Discuss any adjustment to assay data.</i>	No adjustment or calibration are made on any primary assay data collected for purposes of reporting assay grades.
Location of data points	<i>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.</i>	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.
	<i>Specification of the grid system used.</i>	All coordinates are based on Map Grid of Australia 1994 Zone 55.
	<i>Quality and adequacy of topographic control.</i>	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	<i>Data spacing for reporting of Exploration Results.</i>	<p>Soil samples: were analysed on a systematic lines between 400 and 120 metres apart, with sample points at 50m spacing along the lines.</p> <p>Rock Chips: Samples taken based on availability and alteration/potential mineralisation at irregular spacing.</p>
	<i>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.</i>	Not applicable as this is pre-discovery surface geochemical data and not for resource drilling purposes.
	<i>Whether sample compositing has been applied.</i>	No compositing was applied.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Surface and subsurface sampling only. North-northeast striking geology is interpreted hence east-west lines used for soil data collected.
	<i>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.</i>	Soil and rock chip samples, no drilling reported.
Sample security	<i>The measures taken to ensure sample security.</i>	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.

Criteria	JORC Code explanation	Commentary
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been conducted at this stage.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p><i>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.</i></p> <p><i>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.</i></p>	EL7676 Parkes East is located immediately northwest of Parkes, NSW and covers 33 graticular units with an area of 95km ² . 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	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>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:</p> <ul style="list-style-type: none"> • 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); <p>References and hyperlinks to these reports can be found in the body of this report.</p>
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	The Black Ridge trend is hosted in the Ordovician-age Goonumbla Volcanics, immediately to the west of the Parkes Thrust. Locally, mineralisation is hosted within fractured andesites with minor limestone lenses. Copper mineralisation is currently thought 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	<p><i>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:</i></p> <ul style="list-style-type: none"> • <i>easting and northing of the drill hole collar</i> • <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> 	No drilling results reported. Eastings and northings provided for all rock chip data.

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	No material data has been excluded.
Data aggregation methods	<i>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.</i>	No weighting techniques employed. No minimum or maximum grade truncations employed.
	<i>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.</i>	Not applicable as no drilling results reported.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values employed in this report.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Soil and rock chip samples, no drill results reported.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Soil and rock chip samples, no drill results reported.
	<i>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').</i>	Soil and rock chip samples, no drill results reported.
Diagrams	<i>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.</i>	See figures in body of report.
Balanced reporting	<i>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.</i>	Results for all current and historic rock chip samples have been reported regardless of grade.

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<i>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.</i>	See body of report.
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	See body of report.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	See figures in body of report.