

DRILLING CAMPAIGN COMPETED AT BUENA VISTA

HIGHLIGHTS

- An RC drilling campaign has successfully completed at the Buena Vista Iron Project

- The target was shallow, high grade massive magnetite

- Samples are undergoing initial preparation and assaying by pXRF and dispatched to the laboratory for analysis

- Visual identification and magnetic susceptibility readings indicate wide zones of magnetite have been intersected

- Follow-up drilling will be planned once all assays are received

Magnum Mining & Exploration (ASX: MGU, “Magnum” or “the Company”) announces completion of a shallow Reverse Circulation (RC) drilling campaign at its flagship Buena Vista Iron Project in Nevada, USA.

The campaign was designed to test depth extensions to mapped outcropping massive magnetite occurrences. Previous sampling has returned grades of up to 67.8% Fe¹ from these outcrops (Figure 1).

The campaign is specifically targeted at assessing near surface magnetite mineralisation that may provide early material for a Direct Shipping Ore (DSO) operation.

Table 1 is a summary of drill hole statistics.

Drilling returned thick zones of visually high levels of magnetite (Figure 3).

The magnetic susceptibility of all collected RC drill samples was measured. Magnetic susceptibilities are an excellent proxy for magnetite content at Buena Vista.



Figure 1 Massive magnetite outcrop at the Iron Horse Prospect

¹ ASX:RHM “New high grade magnetite discovery at Buena Vista”, 17 June 2010.

Samples are also undergoing pXRF assaying assessments. This work will provide the Company with a good database for rapid analysis of samples during future drilling and sampling campaigns.



Figure 2 Drilling hole NF-06. Massive magnetite outcrop can be seen in the historic pit to the left of and above the drill rig.



Figure 3 Thick intercepts of magnetite have been encountered. This is from RC hole IM-08. Note that depth labelling is in feet.

Table 1 RC drill hole statistics

Hole	Prospect	Easting NAD83z11N	Northing NAD83z11N	Azimuth	Dip	Depth (ft)	Depth (m)
IM01	Main Pit	400143	4425431	0	-90	100	30.5
IM02	Main Pit	400145	4425422	20	-70	100	30.5
IM03	Main Pit	400159	4425535	180	-60	100	30.5
IM04	Main Pit	400179	4425526	180	-60	60	18.3
IM05	Main Pit	400187	4425529	180	-60	90	27.4
IM06	Main Pit	400187	4425510	225	-60	70	21.3
IM08	Main Pit	400266	4425452	0	-60	100	30.5
IM09	Main Pit	400278	4425439	0	-60	100	30.5
IM10	Main Pit	400287	4425435	0	-60	100	30.5
IM11	Main Pit	400296	4425437	225	-60	100	30.5
IM12	Main Pit	400280	4425422	180	-60	100	30.5
IM13	Main Pit	400295	4425434	180	-60	100	30.5
IM14	Main Pit	400366	4425348	0	-60	100	30.5
IM14A	Main Pit	400307	4425436	180	-60	100	30.5
IM15	Main Pit	400372	4425349	0	-60	100	30.5
IM16	Upper Pit	400505	4425443	180	-60	100	30.5
IM17	Upper Pit	400460	4425448	180	-60	110	33.5
IH-01	Iron Horse	400813	4425848	130	-60	50	15.2
IH-02	Iron Horse	400816	4425848	190	-60	50	15.2
IH-04	Iron Horse	400833	4425809	40	-60	100	30.5
IH-05	Iron Horse	400831	4425814	315	-60	100	30.5
IH-06	Iron Horse	400861	4425788	0	-60	100	30.5
NF06	N Main Pit	400200	4425479	0	-90	100	30.5
NF07	N Main Pit	400209	4425489	45	-60	90	27.4

NEXT STEPS

All drill samples are being sent to a commercial laboratory for multi-element assaying. This will include the Rare Earth Elements and Lithium. Assessment of those results may lead to additional drilling being considered.

THE BUENA VISTA IRON DEPOSIT

Buena Vista Iron Deposit is located approximately 160km east-north-east of Reno in the mining friendly state of Nevada, United States. It was discovered in the late 1890's and in the late 1950's to early 1960's around 900,000 tonnes of direct shipping magnetite ore with an estimated grade of 58% Fe was mined.

In the 1960's, US Steel Corporation acquired the Buena Vista Project and carried out an extensive exploration program including 230 diamond drill holes and considerable metallurgical test work. Richmond Mining Limited, an ASX listed company, acquired Buena Vista in 2009 and commenced a detailed exploration program culminating in a definitive feasibility study in 2012. A key component of these studies was extensive investigation of the optimal logistics plan for the deposit's development. This included the negotiation of in-principle agreements with existing rail and port operators and the securing of all major mining permits. Detailed costings were completed on the trucking or slurry pipeline options to deliver the concentrate to the rail head located some 50 kilometres from mine site. A significant decline in iron ore prices to less than US\$50/ tonne caused the then proposed development of Buena Vista to be deferred.

Geology

The Buena Vista Project magnetite deposits are the product of late-stage alteration of a localised intrusive local gabbro that resulted in intensely scapolitised lithologies and the deposition of magnetite. The most well-known example of this type of magnetite mineralisation is the Kiruna magnetite deposit in Sweden, which has been in production since the early 1900's.

The distribution and nature of the magnetite mineralisation at Buena Vista is a function of ground preparation by faulting and fracturing, forming a series of open fractures and breccia zones. These ground conditions produce variations in mineralisation types from massive pods grading +60%

magnetite to lighter disseminations grading 10-20% magnetite.

Metasomatic magnetite deposits such as those at Buena Vista have important positive beneficiation characteristics over the other main type of magnetite deposit which is a banded iron hosted magnetite, also known as a taconite.

The Buena Vista ore is of magmatic origin and as a consequence is coarser grained and softer than banded iron hosted ores. Industry standard crushing, grinding and magnetic separation produces a concentrate grade of +67.5% Fe with very low levels of impurities.

Resource

The Mineral Resource Estimate (JORC(2012)) at Buena Vista is²:

Category	Million Tonnes	Fe %	DTR %
Indicated Resource	151	19	23.2
Inferred Resource	81	18	22
Total Resource	232	18.6	22.6

The Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Additionally, an Exploration Target Estimate exists³:

Category	Million Tonnes	Fe %
Exploration Target	407 to 540	15 to 22

The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Development

Mining permits are in place to develop the Buena Vista Iron Mine. The Company has re-aligned the project from a simple mining, concentration and exporting model to a proposed green pig iron producer. Using cutting edge technology in tandem with biochar sources, the Company aims to capitalise on a first-mover advantage to supply green pig iron to the USA steel industry.

² ASX:MGU – 'Maiden JORC 2012 Resource for Buena Vista Magnetite Project', 23 March 2021.

³ ASX:MGU – 'Significant Exploration Target Defined', 13 January 2023.

CAUTIONARY STATEMENTS

COMPETENT PERSON'S STATEMENT – RESOURCE ESTIMATION

The information in this report that relates to Mineral Resources is based on information compiled by Mr Jonathon Abbott, a Competent Person who is a Member of the Australian Institute of Geoscientists and a full time employee of MPR Geological Consultants Pty Ltd. Mr Abbott 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 Exploration Results, Mineral Resources and Ore Reserves". Mr Abbott consents to the inclusion of the matters outlined in this announcement in the form and context in which it appears.

COMPETENT PERSON'S STATEMENT – EXPLORATION TARGET ESTIMATION

The information in this report that relates to an Exploration Target is based on information compiled by Mr Marcus Flis, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy and a full time employee of Rountree Pty Ltd. Mr Flis 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 Exploration Results, Mineral Resources and Ore Reserves". Mr Flis consents to the inclusion of the matters outlined in Appendix A in the form and context in which it appears.

The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified.

NO NEW INFORMATION

The Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates in the announcement of the 'Maiden JORC Resources for the Buena Vista Magnetite Project' dated 23 March 2021 continue to apply and have not materially changed.

PRODUCT PRICING

Pricing assumptions are based on current and forecast economic conditions and may change as the proposed Project moves to production.

MODIFYING FACTORS

The Buena Vista Iron Project has undergone a full Feasibility Study in 2011 and was set to start operation in 2012 before iron price fluctuations caused the project to be put on hold. The Company does not consider that any significant Modifying Factors related to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental regulations exist that will have a significant impact on the ability for this project to proceed.

FORWARD LOOKING STATEMENTS

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks,

uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

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