

10 February 2020

Macarthur Minerals announces encouraging initial drill results at the Pilbara Hillside Project

Macarthur Minerals Limited (TSX-V: MMS) (ASX: MIO) (the “Company” or “Macarthur”) Joint Venture Partner, Fe Limited (“FEL”) has received encouraging results from its first phase preliminary drilling at the Hillside Project in Western Australia targeting underground extensions to the periodically outcropping mineralised gossan identified during previous reconnaissance. A total strike length of 14km was mapped and sampled at outcrop resulting in high grade rock chip results as reported in ASX announcement October 9, 2019.

Highlights

- Encouraging results received from recent Hillside drilling
- Results demonstrate support for mineralised gossan model
- Down dip extension of mineralised gossan intercepted in two holes
- Anomalous results received include:
- HRC 001: 1m @ 0.19% Cu, 230ppm Co, 0.14% Zn, 0.07ppm Au from 28m
- HRC 022: 1m @ 0.74% Cu, 349ppm Co, 0.41% Zn, 0.14ppm Au from 83m
- HRC 036: 1m @ 0.18% Cu, 0.12% Zn from 25m, 1m @ 0.27% Cu from 40m
- All Intercepts demonstrate down dip extensions to the mineralised gossan at surface

[A copy of FEL full release is available here.](#)

A total of 1798m from 36 holes were drilled at approximately 1km intervals targeting underground extensions to the periodically outcropping mineralised gossan identified during previous reconnaissance.

Limited historical targeting data was available, and first pass hole locations were chosen using estimated dip and dip direction from the interpreted lineament of the mineralised strike. Supporting information included field observations, a coincident westerly dipping magnetic anomaly with its eastern extent coinciding roughly with the interpreted gossan lineament and the presence of highly leached surface lithologies indicating the possibility of sulphides at depth.

The Company has now received all results of the assays and initial interpretation shows three holes have been positively identified to have intercepted down dip extensions of the surface gossan. These holes span the entire length of the mapped strike length demonstrating down dip extension of the surface mineralisation.

Premium Australian iron ore

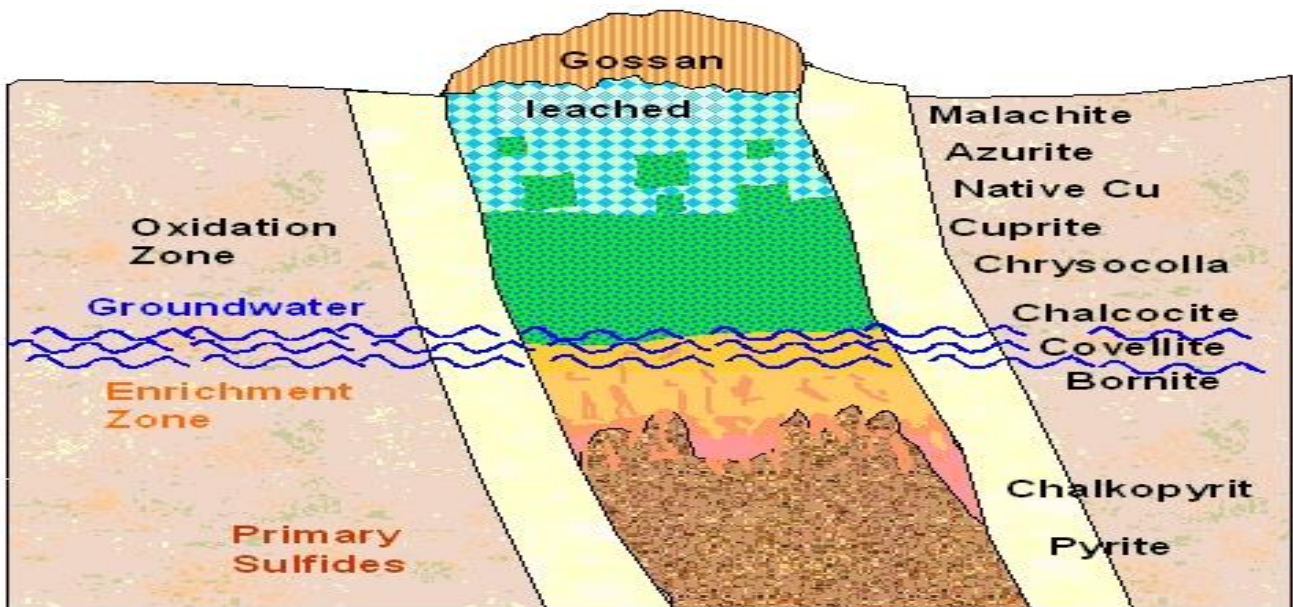


Figure 1. Schematic of typical gossan section

Guidance for next phase planning

Grades in all intersections show strongly anomalous mineralisation and provide valuable guidance for hole location in the next phase of drilling. Planning for the next phase of exploration will be completed following full interpretation of initial assay results.

The central and northern most holes intercepted the anomalous zone towards the end of the respective holes which indicates why some of the other planned holes failed to intersect the target.

The southernmost hole intersected a wide zone of anomalism from 23m down to 42m with increasing levels of zinc continuing below.

All three holes intersected anomalism below the optimal supergene and enrichment zones. This information will allow more accurate dip data to be used in locating further follow up drilling and target depths which will attempt to intersect supergene and enrichment zone mineralisation. Figures 2, 3 and 4 show cross sections of the intersecting holes with the interpreted target body and show where other nearby holes failed to intersect.

Anomalous gold grades

In addition, one hole towards the northern extent of the project area returned strongly anomalous gold grades from targeted drilling in known gold bearing quartz veins.

As the quartz veins are host to nugget gold, the anomalous grades returned can be considered significant and represent the presence of fine gold given no visible gold was logged.



Fe Limited's initial preliminary drilling was conducted along the total strike length of 14 kilometres that was mapped and sampled at outcrop resulting in high-grade rock chip results.

Fifteen samples gathered were from outcropping gossan both with and without visible copper minerals with a high sample result of 18.8% among eight samples that returned copper values in excess of 1%.

The 18.8% sample also returned 1.2ppm gold, 77ppm silver, 0.17% zinc and 0.057% cobalt.

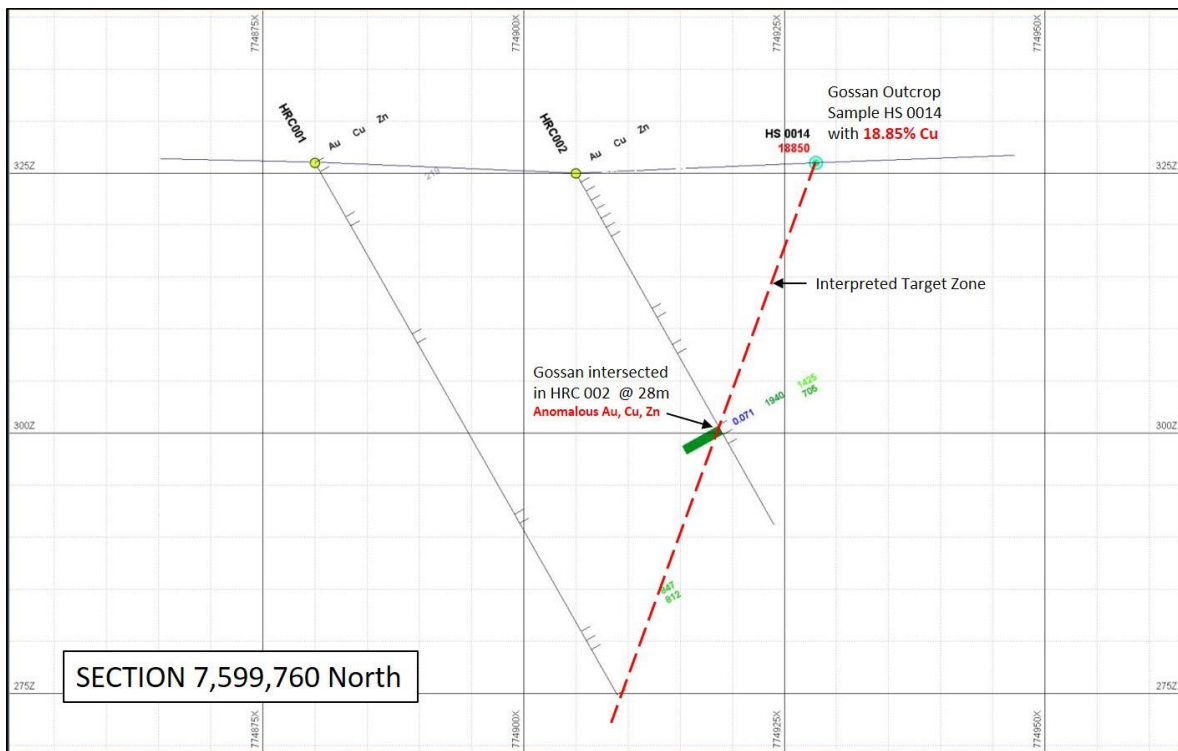


Figure 2. Section 7 599 760 North:

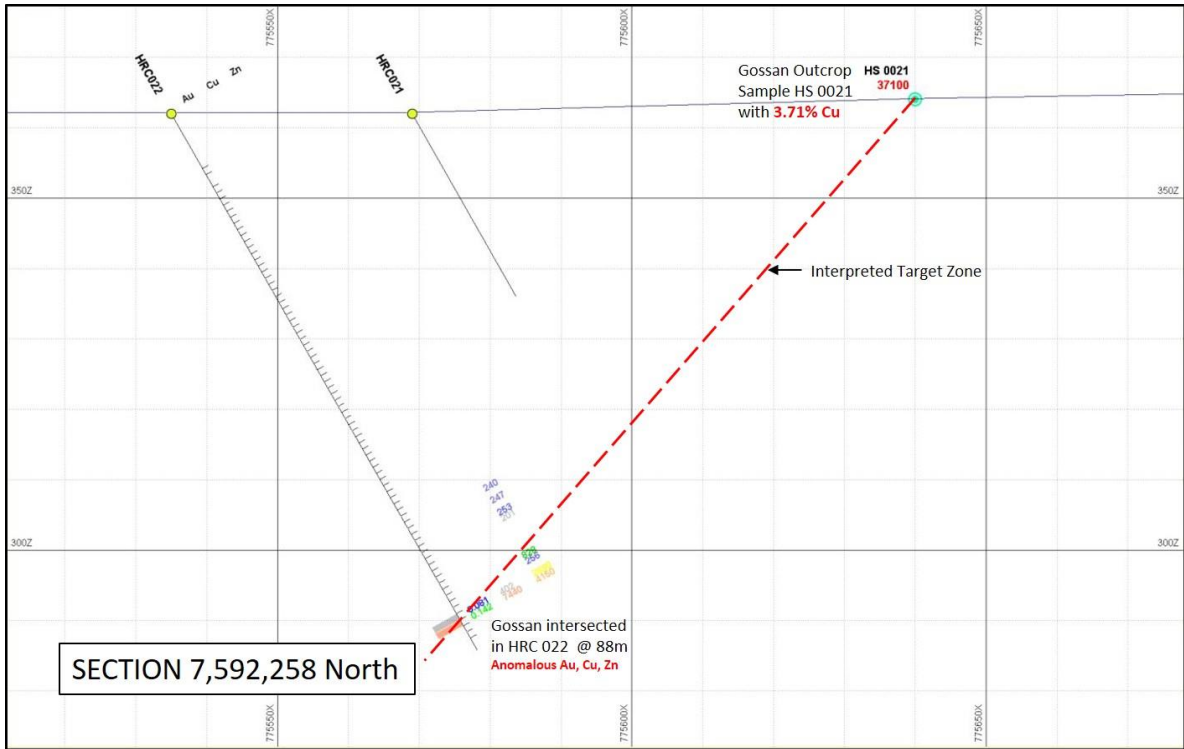


Figure 3. Section 7 592 258 North:

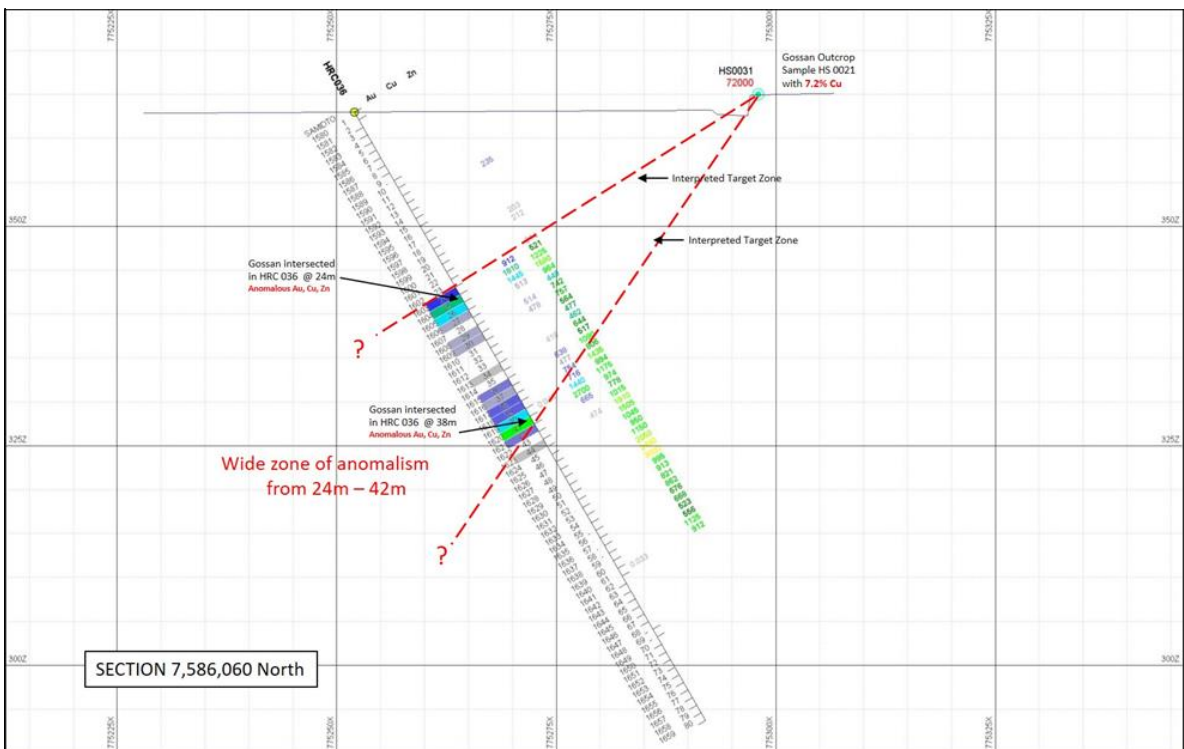


Figure 4. Section 7 586 060 North:

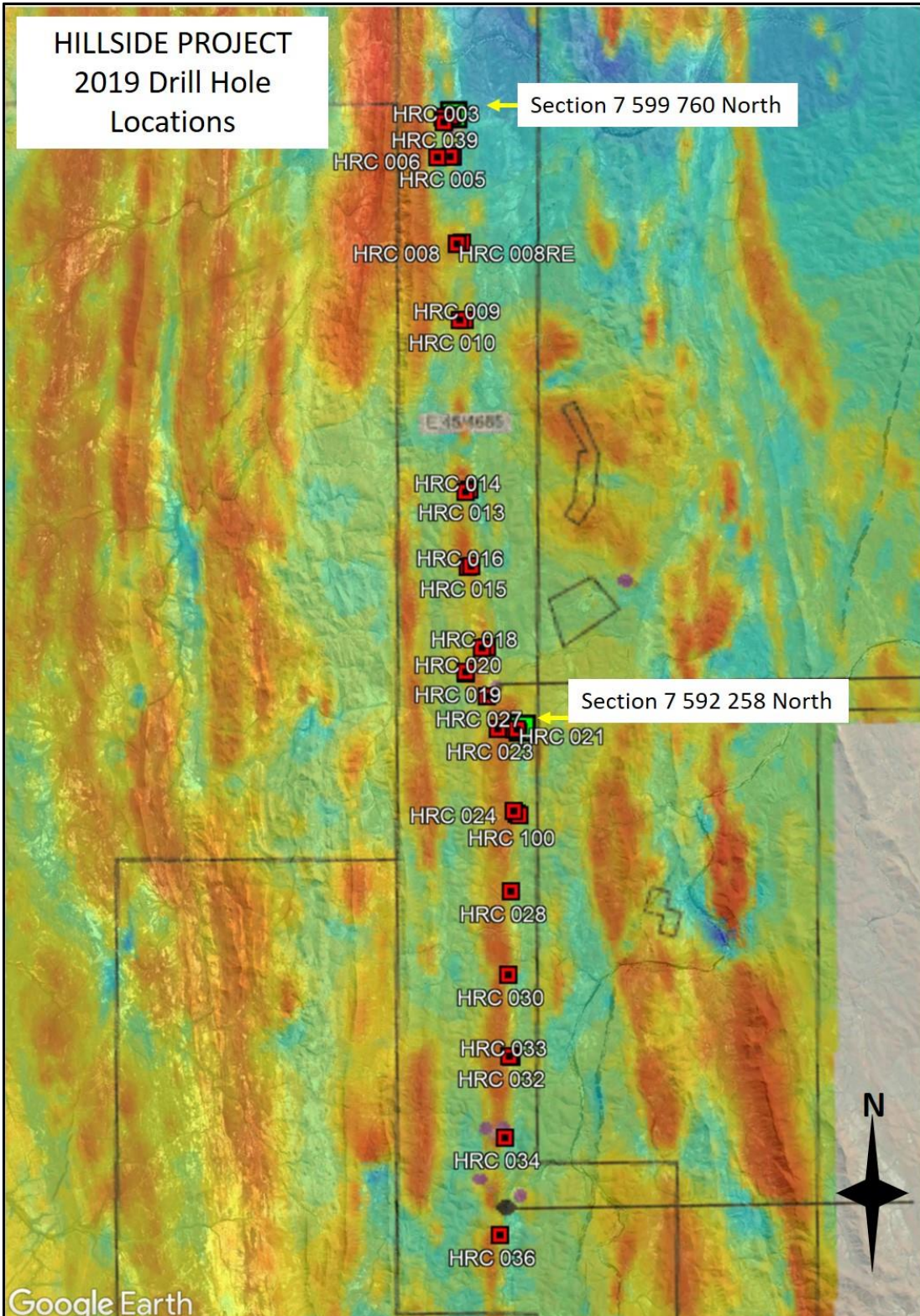


Figure 5. Drill hole plan show section locations:



Table 1. Drill Hole Locations:

Hole ID	Easting	Northing	RL	Dip	Azimuth	Depth
HRC001	774880	7599753	326	60	79	59
HRC002	774905	7599757	325	60	77	39
HRC003	774798	7599678	327	60	75	40
HRC005	774868	7599257	331	60	87	88
HRC005b	774900	7599256	330	60	93	31
HRC006	774711	7599252	338	60	71	41
HRC007	774995	7598203	335	60	82	40
HRC008	774935	7598190	340	60	94	6
HRC008RE	774934	7598190	340	60	94	66
HRC009	775012	7597258	335	60	93	30
HRC010	774952	7597259	338	60	90	61
HRC013	775033	7595184	352	60	90	39
HRC014	774986	7595157	353	60	86	60
HRC015	775040	7594249	361	60	86	30
HRC016	774998	7594241	363	60	79	60
HRC017	775217	7593257	362	60	85	30
HRC018	775155	7593249	364	60	92	60
HRC019	774949	7592959	369	60	5	30
HRC020	774950	7592939	369	60	353	60
HRC021	775569	7592247	362	60	78	30
HRC022	775535	7592246	362	60	79	88
HRC023	775333	7592256	365	60	49	50
HRC024	775511	7591246	372	60	123	49
HRC025	775546	7591212	373	60	99	80
HRC027	775205	7592656	365	60	86	100
HRC028	775459	7590265	360	60	82	72
HRC030	775409	7589246	354	60	103	59
HRC032	775404	7588251	367	60	87	70
HRC033	775430	7588243	366	60	99	36
HRC034	775334	7587256	365	60	74	72
HRC036	775252	7586069	363	60	90	80
HRC038	774800	7599688	327	60	75	33
HRC039	774782	7599738	326	60	79	30
HRC039b	774794	7599740	326	60	79	40
HRC100	775578	7591193	374	60	102	36



On behalf of the Board of Directors, Mr Cameron McCall, Executive Chairman

For more information please contact:

Joe Phillips
CEO & Director
M +61 (0)448 899 247
jphillips@macarthurminerals.com

A different version of the current report was submitted to the ASX and formatted according to the JORC requirements. The technical data presented in both reports are identical and only the format and legal statements may differ.

Earn-in with Macarthur

Macarthur Lithium Pty Ltd (“MLi”), a wholly owned subsidiary of Macarthur entered into an exclusive option agreement (“Option Agreement”) with FEL as announced on May 14, 2019, to earn up to 75% in its Pilbara lithium and gold projects in respect of 7 tenements in the Pilbara ranging from south of Nullagine to north of Pilgangoora.

About Fe Limited

FE Limited (ASX: FEL) is a listed mineral exploration Company that holds or has rights or interests in various projects and tenements prospective for battery metals, copper, iron ore, gold and base metals located in Australia. The Company is focused on the exploration of battery metal projects. In March 2019, FEL entered into an agreement to acquire the Pippingarra Lithium Project and the Marble Bar Lithium Project (Project) from Mercury Resources Group Pty Ltd. These areas complement the tenement portfolio of Macarthur Minerals, establishing an 1800 square kilometer exploration footprint in the important Lithium and Gold region of Western Australia.

Qualified persons

Mr Andrew Hawker, a member of the Australian Institute of Geoscientists, is a full-time employee of Hawker Geological Services Pty Ltd and is a Qualified Person as defined in National Instrument 43-101. Mr Hawker has reviewed and approved the technical information contained in this news release.

Company profile

Macarthur is an iron ore development, gold and lithium exploration company that is focused on bringing to production its Western Australia iron ore projects. The Lake Giles Iron Project mineral resources include the Ularring hematite resource (approved for development) comprising Indicated resources of 54.5 million tonnes at 47.2% Fe and Inferred resources of 26 million tonnes at 45.4% Fe; and the Moonshine magnetite resource of 710 million tonnes (Inferred). Macarthur has prominent (~1,281 square kilometer tenement area) gold, lithium and copper exploration interests in Pilbara region of Western Australia. In addition, Macarthur has lithium brine Claims in the emerging Railroad Valley region in Nevada, USA.



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Caution Regarding Forward Looking Statements

Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. All statements herein, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future, including but limited to statements regarding: the proposed strategy regarding core mining, road and rail inputs at the Project; anticipated increases in annual production at the Project; anticipated decreases in Project costs; the possible reclassification of current inferred mineral resources on the Project as indicated mineral resources in the future; expected completion of the FS on the Project containing a new reserve calculation and a new economic assessment; the granting of a license for the Menzies rail siding; the status of the MRRT; and plans to secure mining approvals under the Mining Act, are forward-looking statements. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. With respect to forward-looking statements contained in this press release, assumptions have been made regarding, among other things, the reliability of information prepared and/or published by third parties that are referenced in this press release or was otherwise relied upon by the Company in preparing this press release. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include but are not limited to: unforeseen technology changes that results in a reduction in iron or magnetite demand or substitution by other metals or materials; the discovery of new large low cost deposits of iron magnetite; the general level of global economic activity; future changes in strategy regarding core mining, road and rail inputs with respect to the Project; final Project costs varying from those determined from the EOI program; failure to successfully negotiate a BOO arrangement for the Project; failure to complete the FS; failure of the FS to reflect currently anticipated increases annual production and decreases in expected costs at the Project; the results of infill drilling being insufficient to reclassify current inferred mineral resources on the Project as indicated mineral resources; failure to receive a license for the Menzies rail siding; failure to repeal the MRRT; and failure to obtain mining approvals under the Mining Act. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.