POSITIVE BENEFICIATION TESTWORK RESULTS FROM NOWA NOWA IRON PROJECT

- Recent metallurgical testwork shows outstanding beneficiation results by wet low intensity (LIMS) magnetic separation of iron ore product
- Beneficiation testwork on samples from the Five Mile deposit has produced a high quality sinter feed averaging **68.9%Fe, 2.97% SiO_2, 0.23% Al_2O_3, 0.022% S and 0.008% P**

In April 2021, Eastern Iron Limited (ASX:EFE) announced that the Company would update the Definitive Feasibility Study (DFS) completed in September 2014 (refer to announcement dated 29 September 2014[1]) to be based on the production of a Direct Shipping Ore (DSO) with 50% Fe magnetite content.

The updated DFS will focus on mining ore at the Five Mile deposit via open pit and trucked to the Port of Eden for loading onto bulk cargo vessels for export. Nowa Nowa DSO will be sold to beneficiation plants in Asia for further processing to potentially produce high grade magnetite concentrates.

Metallurgical Testwork and Results

In April 2021, the Company completed beneficiation testwork carried out by ALS Metallurgy. Drill core samples were collected from drill holes completed by Eastern Iron during resource drilling at the Five Mile deposit in 2013. Composite samples were prepared from the core samples by ALS Metallurgy for Davis Tube Wash (DTW) and wet low intensity magnetic separation (Wet LIMS).

A composite sample was prepared grading 50.4% Fe, 15.00% SiO2, 2.59% Al2O3, and 0.03% P, which is in the range of the iron content of the proposed DSO products for export from the Five Mile deposit. The object of this testwork is to determine the product specification of magnetite concentrates produced from Nowa Nowa DSO through Wet LIMS. The samples were tested by DTW at grind sizes of 80% passing 106, 75, and 45 micron. The results are summarized below:

Table 1: Analysis of DTW magnetite concentrates at 106, 75 and 45 micron grind

DTW Conc.		Fe	SiO_2	Al_2O_3	P	S	Fe Rec%
		(%)	(%)	(%)	(%)	(%)	(%)
Composite	106 micron	64.7	5.91	0.65	0.011	0.16	69.3
Composite	75 micron	68.1	3.68	0.25	0.007	0.038	68.0
Composite	45 micron	69.0	2.94	0.23	0.006	0.023	67.3

The samples were also treated by wet magnetic separation at grind sizes of 80% passing 45 micron and at 1100 gauss. The Wet LIMS product produced below is a high quality iron product similar to many widely traded magnetite concentrates supplied as pellet feed in iron content and the level of deleterious elements. The results are summarized in the table below:

Table 2: Analysis of Wet LIMS magnetite concentrates at 45 micron grind

Wet LIMS Conc.		Fe	SiO_2	Al_2O_3	P	S	Fe Rec%
		(%)	(%)	(%)	(%)	(%)	(%)
Composite	45 micron	68.9	2.97	0.23	0.008	0.022	67.4

INVESTOR INFORMATION

Further information, previous Eastern Iron announcements and exploration updates are available at the News and Reports tab on the Company's website – www.easterniron.com.au

This announcement has been authorised for release by the Board of the Company.

Myles Fang
Director
Phone: 02 9906 7551

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Greg De Ross, BSc, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a consultant of Eastern Iron Limited and 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 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr De Ross consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

ASX: EFE
For enquiries on your shareholding or change of address please contact:
Boardroom Limited GPO Box 3993, Sydney NSW 2001 Phone: (02) 9290 9600

[1]The Company confirms that supporting information provided in its ASX announcement of 29 September 2014 for the historical estimates referred to above continues to apply and has not materially changed.

JORC Code, 2012 Edition
Table 1 report for Nowa Nowa Project

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	• Reverse circulation (RC) percussion drillholes were sampled over 2 metre downhole depth intervals via a sealed collar dust diverter and cyclone. • Diamond core was sampled nominally at 2 metre composite intervals at the boundaries of lithological contacts. • Both RC and diamond core drill samples were 3-4kg in weight and pulverised in the ALS Adelaide laboratory to produce a fused disk for ME-XRF21 spectrometry analysis. • Diamond core from the 1950's Victorian Geological Survey (GSV) drillholes was nominally sampled by the GSV at both 5ft and 10ft intervals at the boundaries of lithological contacts and is reported in Bell, 1959 GSV Bulletin 57. EFE considers that there are no detrimental issues in the sampling procedure with regard to the resource estimation.
Drilling techniques	• RC percussion drillholes were drilled using a 5 ½ inch (140mm) RC face-sampling buttoned drill bit. • Diamond core drilling was drilled using triple-tube conventional wireline HQ (96mm) and PQ (122.5mm) diameter techniques. • All EFE drillholes were drilled vertically and consequently diamond core was not orientated. • All GSV drillholes were drilled vertically using conventional NQ (47.5mm) diameter diamond drilling methods. There is no record of the core being oriented.
Drill sample recovery	• The sample recovery for all the Eastern Iron Ltd (EFE) drillholes was excellent. RC drillhole sample recovery was determined by visual inspection of 1metre bulk samples in the field by an experienced supervising geologist. All assay samples submitted as two metre composites were weighed upon receipt at the laboratory. The consistency of these weights is monitored as part of Eastern Iron's sample QAQC programme. • Company protocol is that if any RC percussion drillhole returns less than 70% by volume of the drill cuttings over a 10metre interval, the drillhole will be re-drilled. • Full core recovery was achieved in the EFE diamond drillholes except in minor instances where friable zones were intersected downhole resulting in core losses, typically occurring at the start of a new drill run. These losses were considered to be insignificant. • Recovery rates of drill core from diamond drilling are closely monitored by the supervising geologist. Should the integrity of the drillhole or representivity of the sample become compromised, the drillhole is abandoned at the supervising geologist's discretion. • Recovery details for the GSV drillholes are not known. Historical geology logs do not document any significant core losses and EFE considers that there are no detrimental issues in this with regard to the resource estimation.
Logging	• All EFE drillholes have been geotechnically and geologically logged by an experienced geologist for their entirety with a uniform set of company specific codes. Geological drillhole data is collected based on geological intervals as opposed to a metre interval basis. • All data was digitally captured into purposed designed spreadsheet templates. All data is uploaded, validated and stored in the Eastern Iron company database. • GSV drillholes were logged by Victorian government geologists. EFE has no knowledge of their qualifications or given levels of experience. As a result of twinning several of these drillholes, where there was excellent logging correlation, EFE has assumed that the data from these drillholes is valid for the resource estimation.

Criteria	Commentary
Sub-sampling techniques and sample preparation	• RC drillhole samples were split using a 75/25 riffle splitter mounted to the cyclone. A 3-4kg composite sub-sample was produced, with the split samples sent to ALS laboratories Brisbane and Perth for analysis. The bulk reject fraction of the sample was bagged and retained on site for storage. • Diamond core was cut using a core saw for composite sampling. Half-core for HQ diameter drillholes and quarter-core PQ diameter drillholes were sampled respectively. The retained fraction of drill core has been securely stored and archived on site. • Upon receipt at the lab, both EFE percussion rock chip and drill core samples were dried and crushed to a 70% passing at -6mm. The entire sample is then pulverised to an 85% passing at -75µm. • Diamond core from the GSV drillholes was split using a core saw and half-core was composited for assay analysis. • EFE have limited knowledge of the laboratory methods used for the GSV samples except as reported in Bell, 1959 GSV Bulletin 57 but it appears that samples were crushed, split and pulverised during their preparation. It is reasonable to assume that, as the samples were prepared by a certified independent laboratory, that industry-best analytical practices were employed at the time. As a result of twinning several of these holes, where there was excellent assay correlation, EFE has assumed that the data from these drillholes is valid.
Quality of assay data and laboratory tests	• EFE samples were assayed by ALS Global Laboratories Brisbane and Perth. • Assay samples were cast using a 12:22 flux to form a glass disk. The resultant disk is in turn analysed for the industry standard iron oxide suite of elements by XRF spectrometry. LOI values were determined using a thermogravimetric analyser system. • EFE collected field duplicate samples at a ratio of 1 in 15 samples throughout all drillholes. RC duplicate samples are taken in the field using a riffle splitter mounted onto the drill rigs cyclone. Diamond core duplicate samples are prepared by the laboratory every 15th crushed sample and inserted sequentially into the sample sequence for each drillhole. • Duplicate samples were analysed by ALS Global and triplicate QAQC samples by Bureau Veritas Mineral Laboratories Perth. • Certified reference materials are inserted nominally every 15th sample using internationally accredited standards. • Blanks are inserted at regular intervals within each batch of RC drilling samples and one per diamond drillhole to verify the cleanliness of laboratory sample preparation machinery. • Good reproducibility was obtained in the comparison of results from the umpire quality control programme. A minor high bias for total SiO_2 and Al_2O_3 (~0.15%) and corresponding low bias for Fe (~0.15%) was present in the assay standards. These biases are considered insignificant. • EFE have no knowledge on the method of chemical method used by the GSV for assay analysis but it is reasonable to assume that best-practice industry standards were used.
Verification of sampling and assaying	• Six of the historical GSV drillholes have been twinned by EFE drilling, comprising one RC and five diamond drillholes. Twinned drillholes were used to verify the geological interpretation, confirm the assay tenor and to provide sample for metallurgical testwork. All drillhole data and assays are consistent with those from the earlier independent GSV drilling. • Data is captured in hardcopy format in the field before being transposed digitally into spreadsheets. Data entry self-audits are made routinely during this process. • All data is validated prior to and upon uploading to the company database by purpose built in-house software applications. EFE's database is compatible for use with MapInfo and Micromine software applications. • All EFE drillhole assay data was received from the laboratory in excel spreadsheet and pdf formats.

Criteria	Commentary
	• Victorian Geological Survey data was obtained from historical reports and digitised manually, before being uploaded to the company database. • Digital data for the project is stored on two separate remote computers as well as the Sydney office server which is backed up daily. • Hard copies of drillhole & assay data, including report estimations, are kept secure in the Sydney office.
Location of data points	• EFE drillholes collar co-ordinates and elevations were located in the field using a handheld Garmin Map60 GPS, with an accuracy of +/- 3-5m. Following the completion of resource drilling, all drill collars were surveyed using a Trimble Differential GPS system with an accuracy of +/- 0.5m. DGPS drill collar data has been incorporated into the company database and is used for the resource estimation. • All data is georeferenced and projected through the Map Grid of Australia (MGA) 1994 geodatum within Zone 55. • All GSV drillhole collars were surveyed and documented on a local grid. Drilled in the 1950's, the location of these drill collars were reprojected and georeferenced into MGA 1994 using MapInfo software. The comparability of data between historical and current twinned drillholes is excellent. • EFE has produced a digital terrain model (DTM) and surface contour map from accurate levelling data that was recorded by geophysical contractors who carried out an airborne LIDAR over the prospect for Eastern Iron. The accuracy of this survey is within +/- 0.5m. • All EFE drillholes were vertical and as drillholes are relatively short (<150m), it is assumed that any deviation would be negligible and have minimal impact on the resource estimation. No downhole surveys of drillholes were carried out.. • EFE is not aware of any downhole surveying on the vertical GSV drillholes and assumes any effect on the resource estimation is negligible. • A table showing the location, dip, azimuth and depth of each drillhole was included in an announcement dated 13 June 2013.
Data spacing and distribution	• At the Five and Seven Mile prospects, nineteen and eight EFE drillholes were sited on the main magnetic anomalies respectively. Staggered drill-centres were nominally spaced at 25 metres across east-west cross-sections and 25 metres between drill profiles. The drill layout was designed to provide the best possible integration and validation of the historical GSV drillholes. • At the Five Mile prospect, six of the previously drilled GSV drillholes were twinned by EFE drilling to confirm their results. • EFE considers the density of drilling is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource Estimation and Classifications applied. Continuity of the mineralisation is strongly supported by the ground-based geophysical survey data. • EFE RC and diamond core samples were composited nominally into 2 metre intervals for head assay analysis.
Orientation of data in relation to geological structure	• The main body of mineralisation at Five Mile is almost horizontal. Drilling carried out by the GSV and subsequently by Eastern Iron was vertical to give close to true width intersections of the mineralisation.
Sample security	• All EFE drilling samples were collected in securely tied calico mining bags. RC and diamond samples were placed in clearly labelled polyweave and green plastic bags respectively, five at a time and secured with metal twist ties. Samples were transported, loaded onto pallets and despatched from a freight depot in Lakes Entrance to Adelaide for sample preparation. No samples were stored overnight in unsecured storage facilities. • Company sample despatch documentation was verified against laboratory arrival documentation upon the receipt of samples to the facility to ensure all samples were received.

Criteria	Commentary
	• Drill core was archived in plastic core trays on site - stacked, covered with lids and secured to pallets with metal strapping. • RC percussion drilling chip trays, with representative geological material from each metre interval, are archived and securely stored in a lock-up facility on site. • Drill core from the GSV drilling is stored in the departmental core store in Melbourne however it has been reported that there is little of the original core remaining.
Audits or reviews	• Eastern Iron have not sought external audits or reviews of sampling techniques used during the drilling campaigns. • EFE data capture protocol, sampling techniques and drilling datasets have been reviewed by H&S Consultants for the resource estimation. They have all been found to be satisfactory for the resource estimation.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• The Five and Seven Mile Resources are contained within the Victorian EL006183. • Eastern Iron has applied for a retention lease RL006488 over the Five Mile Deposit. • EL006183 covers mainly Crown Land of the Colquhoun State Forest. No access agreements with landholder are required, however, notification and approval of proposed exploration activities is sought from the Department of State Development, Business and Innovation. • EFE recognises the GurnaiKurnai people as the traditional custodians of the land situated on and immediately surrounding EL006183 and they are the Registered Aboriginal Party. A Project consent Deed was negotiated with the GunaiKurnai. All cultural heritage requirements have been met.
Exploration done by other parties	• Previous exploration at the Nowa Nowa Project was carried out by the Victorian Geological Survey (GSV), Pickands Mather, Australian Coal & Gold and by Gulf Mines Ltd. • To the best of EFE's knowledge this exploration that led to the discovery of the Nowa Nowa deposit was conducted in a professional manner using recognised and widely accepted exploration and mining industry standards employed at that time. • Historical reports and results of the GSV exploration and previous explorers are available on open file in the Department of Primary Resources database.
Geology	• The Nowa Nowa Project is situated in the Lachlan Orogen, which extends from eastern Tasmania, through central and eastern Victoria, into New South Wales and Queensland. • The Silurian Yalmy Group and Devonian Snowy River Volcanics host the Nowa Nowa iron ore mineralisation. They are considered to be replacement deposits of the Iron Ore Copper Gold (IOCG) style of mineralisation. • The mineralisation is characterised by massive magnetite-hematite with lesser chlorite, talc/carbonates, pyrite, quartz and chalcopyrite. • Mineralisation at the Five Mile prospect occurs in a zone that is up to 500m in length, 150m in width and 100m in thickness. At the Seven Mile prospect, mineralisation occurs in a discrete zone approximately 100m in length, 50m in width and up to 65m in thickness.
Drill hole Information	• A tabulation of the drillhole information was presented in the *Nowa Nowa Resource Upgrade* announcement to the ASX on 12/06/2013. • No additional exploration results have since been reported.
Data aggregation methods	• A lower cut-off grade of 40% Fe has been used in the resource estimate for the Five and Seven Mile deposits. No top cuts have been applied.

Criteria	Commentary
Relationship between mineralisation widths and intercept lengths	• Iron mineralisation at the Five Mile prospect replaces sediments and volcanic units which appear to be sub-horizontal or dip moderately to the southeast. Drillholes are drilled vertically and are assumed to be close to the true width intersection of the mineralisation. The geometry and attitude of the mineralisation is well constrained by close-spaced drilling which has also defined a bounding fault on the western side of the mineralisation. Mineralisation at Seven Mile is constrained by the current extents of drilling information.
Diagrams	• Diagrams and schematics of the drilling information were presented in the *Nowa Nowa Resource Upgrade* announcement to the ASX on 12/06/2013.
Balanced reporting	• No exploration results are reported in this release.
• *Other substantive exploration data*	• Ground magnetic surveys have clearly defined the limits of mineralisation at Five Mile and are used to guide drillhole targeting. • A ground magnetics survey was conducted by Gulf Mines in 2008, using two Geometrics 856 magnetometers. Lines were run east - west with a 100m line-spacing between traverses. Infill lines at 50m spacing were used over the strongest anomalies at the Five and Seven Mile prospects. Measurements were recorded every five metres along each profile. Computer modelling and reporting of the ground magnetics dataset was conducted by geophysical consultant Steve Webster. A single tabular body was modelled to simulate the main anomaly at Five Mile. Strong magnetic field gradients at Seven Mile resulted in a complex modelled anomaly. • Geophysical consultants Planetary Geophysics were contracted by Gulf Mines in 2009 to conduct a gravity survey at the Nowa Nowa Project. Carried out using a LaCoste & Romberg Model-G gravity meter, a total of 210 stations were recorded. Computer modelling and reporting of the gravity dataset was conducted by geophysical consultant Steve Webster. The gravity models display an excellent fit with the observed data and are in agreement with the known geology and magnetic data acquired in the area. • Metallurgical testwork has been carried out investigating appropriate methods of beneficiating the iron mineralisation. • Wet low intensity separation (LIMS) and David Tube Wash (DTW) testwork was carried by ALS Metallurgy in Perth, WA. Drill core samples used in previous testwork were composited o produce a composite sample for the current testwork. • Wet LIMS testwork was performed on a sample of the composite at P80 45 micron. DTW testwork was carried out on samples at P80 106, 75 and 45 micron
Further work	• Further work at the Nowa Nowa Project is dependent on the results of the feasibility study currently being undertaken by EFE and in consideration of other commercial aspects.