ASX ANNOUNCEMENT

28 November 2018

First High Purity Electrolytic Manganese Metal Produced from Butcherbird Ore

Highlights

- Leach test work utilising Butcherbird ore produced approximately 13 litres of high purity leach solution containing approximately 40 g/L manganese.
- All impurities were below acceptable limits for the production of metal.
- First Electrolytic Manganese Metal ("EMM") produced from Butcherbird ores.
- Large scale (approximately 500kg) bulk leach test successfully completed with purification underway.
- Element 25 process flowsheet further confirmed as a pathway to high purity manganese production.

Element 25 Limited ("E25" or "Company") is pleased to advise that metallurgical test work conducted on representative PQ diamond drill hole core samples from the Butcherbird High Purity Manganese Project has successfully produced EMM.

The initial sighter leach tests were completed using subsamples of a larger bulk test sample comprising approximately 500kg. The bulk sample is currently being processed.

The sighter tests were completed with the intention of further optimising the front end of the processing flowsheet that has been developed in conjunction with the CSIRO for the purposes of extracting manganese from Butcherbird ores to produce high purity manganese ("HPM") including battery grade manganese sulphate and EMM.

Figure 1: High purity EMM flake.

Company Snapshot

ASX Code:	E25	Board of Directors:	
Shares on Issue:	84M	Seamus Cornelius	Chairman
Share Price:	$0.18	Justin Brown	ED
Market Capitalisation:	$15.1M	John Ribbons	NED

Element 25 Limited is developing the world class Butcherbird manganese project in Western Australia to produce high purity manganese sulphate for lithium ion batteries and electrolytic manganese metal.

Element 25 Limited
P +61 8 6315 1400
E admin@e25.com.au
element25.com.au

Level 2, 45 Richardson Street,
West Perth, WA, 6005
PO Box 910 West Perth WA 6872
Australia

As a result of the success of the optimisation tests, the larger sample has been leached and is now being taken through the purification process following which both EMM and battery grade sulphate samples will be produced. This work is expected to provide sufficient samples of both products for despatch to prospective offtake partners.

The success of the test work carried out to date further confirms the process flowsheet which is a key enabling technology for the Company's strategy of producing high value, high purity manganese products from the Butcherbird Project. The Butcherbird Project hosts Australia's largest onshore manganese deposit and is the focus of a Pre-Feasibility Study due for completion in 2019.

The hydrometallurgical leach processing and purification was conducted on representative PQ diamond core from drill hole BBDD011 from within the Yanneri Ridge resource area. The work was undertaken by Simulus Laboratories. The electrowinning phase of the test work was undertaken at the Murdoch University research laboratory operated by the Extractive Metallurgy division. The work was carried out by the Metallurgical Process – Research, Development and Innovation (MPI) group headed by Associate Professor Aleks Nikoloski.

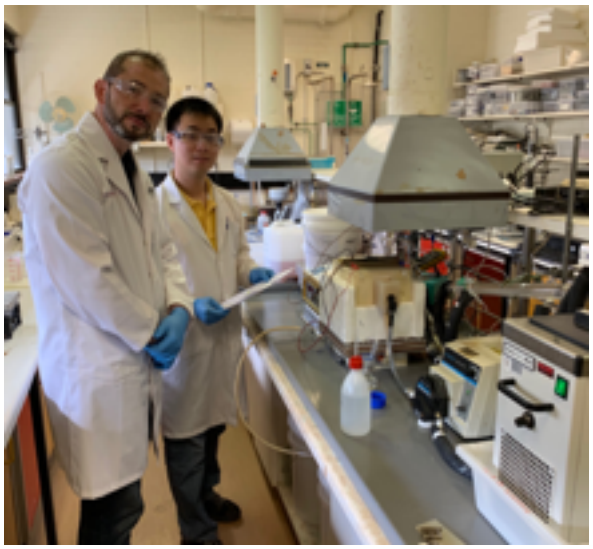


Figure 2: Murdoch research laboratory and team.

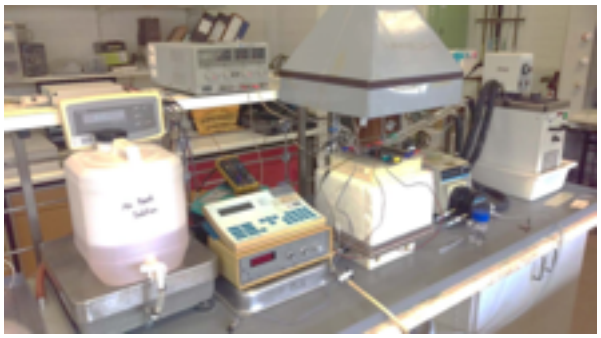


Figure 3: Electrowinning apparatus set up.

The chemical composition of the produced EMM is shown in Table 1 below and is based on impurity analysis. The chemical composition of the pregnant leach solution used in the test work is shown in Table 2.

EMM	Mn (%)	Se (%)	Na (%)	S (%)	Ca (%)	K (%)	Co (%)	Ni (%)
Butcherbird Ore	99.56	0.18	0.10	0.07	0.03	0.03	0.01	0.01

Table 1: Electrolytic Manganese Metal composition. Key impurities analysed by ICP-MS and manganese content is calculated.

Element	Units	Assay	Standard[1]	Element	Units	Assay	Standard[1]
Ag	mg/L	-0.0007	n/a	Pr	mg/L	0.02	n/a
Al	mg/L	-0.02	98	S	mg/L	32790	n/a
As	mg/L	0.004	0.96	Sb	mg/L	0.01	0.096
B	mg/L	2.24	0.96	Sc	mg/L	-0.001	n/a
Ba	mg/L	0.26	0.96	Se	mg/L	-0.008	0.96
Be	mg/L	0.001	n/a	Si	mg/L	-5.6	n/a
Bi	mg/L	-0.0001	0.96	Sm	mg/L	0.03	n/a
Ca	mg/L	711	587	Sn	mg/L	0.002	n/a
Cd	mg/L	0.03	0.096	Sr	mg/L	1.22	n/a
Ce	mg/L	0.16	n/a	Ta	mg/L	-0.01	n/a
Co	mg/L	0.03	1.4	Tb	mg/L	0.01	n/a
Cr	mg/L	0.003	0.96	Te	mg/L	0.001	0.096
Cu	mg/L	-0.002	0.4	Th	mg/L	-0.01	n/a
Dy	mg/L	0.06	n/a	Ti	mg/L	0.02	0.96
Er	mg/L	0.03	n/a	Tl	mg/L	0.0002	0.096
Eu	mg/L	0.01	n/a	Tm	mg/L	-0.01	n/a
Fe	mg/L	-0.01	1.4	U	mg/L	-0.01	n/a
Gd	mg/L	0.08	n/a	V	mg/L	0.02	0.96
Hf	mg/L	0.0003	n/a	W	mg/L	0.002	n/a
Ho	mg/L	0.01	n/a	Y	mg/L	1.02	n/a
K	mg/L	11.4	20	Yb	mg/L	0.01	n/a
La	mg/L	0.05	n/a	Zn	mg/L	0.07	0.096
Li	mg/L	5.83	20	Zr	mg/L	0.02	n/a
Mg	mg/L	843	1,955				
Mn	**mg/L**	**48190**	n/a				
Mo	mg/L	0.002	0.96				
Na	mg/L	200	195				
Nb	mg/L	0.001	n/a				
Nd	mg/L	0.11	n/a				
Ni	mg/L	0.02	3				
P	mg/L	0.64	0.96				
Pb	mg/L	0.006	0.096				

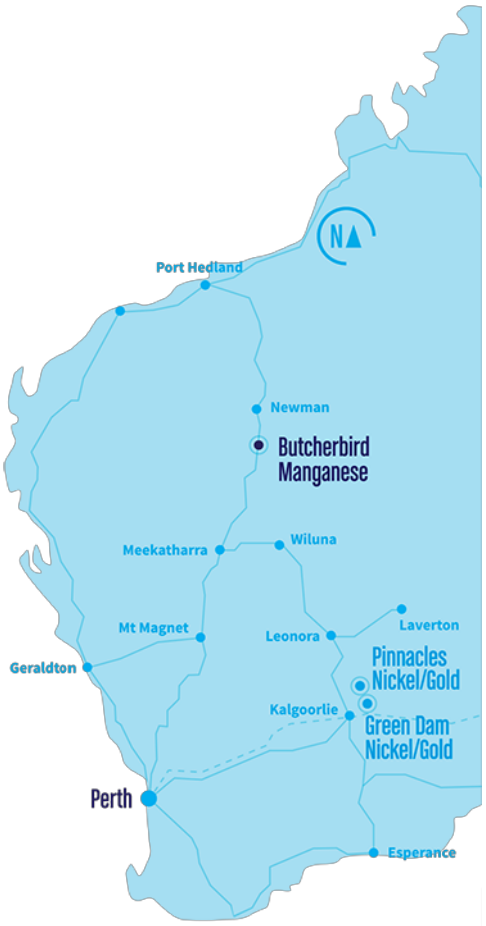
Table 2: Pregnant Leach Solution ("PLS") assay results for the liquor used to produce EMM. Analysis conducted by metal digest and ICP-MS finish. Negative values indicate below detection.

[1] A widely used, industry accepted North American specification that is a trade secret and commercial in confidence.

About the Butcherbird High Purity Manganese Project

The Butcherbird High Purity Manganese Deposit is a world class manganese resource with current JORC resources in excess of 180Mt of manganese ore[2]. The Company has completed a positive scoping study with respect to developing the deposit to produce high purity manganese sulphate for lithium ion battery cathodes as well as Electrolytic Manganese Metal for use in certain specialty steels. A PFS is currently being completed and is expected to further confirm the commercial potential of the project.

The Butcherbird Project straddles the Great Northern Highway and the Goldfields Gas Pipeline providing turnkey logistics and energy solutions. The Company is also intending to integrate renewable energy into the power solution to minimise the carbon intensity of the project as well as further reducing energy costs.



Mineral Resources

Classification	Tonnes (t)	Grade Mn (%)
Indicated	22.5	12.0
Inferred	158.3	10.6
TOTAL	180.8	10.8

Notes:

- Reported at 8% Mn cut-off
- All figures rounded to reflect the appropriate level of confidence (apparent differences may occur due to rounding)

Justin Brown

Executive Director

Company information, ASX announcements, investor presentations, corporate videos and other investor material on the Company's projects can be viewed at: http://www.element25.com.au.

[2] Reference: Company ASX release dated 12 October 2017 (released under the Company's previous ticker MZM)

Competent Persons Statement

The information in this report that relates to Exploration Results, Exploration Targets, Mineral Resources and Mineral Reserves is based on information compiled by Mr Justin Brown who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Exploration Results, Exploration Targets, Mineral Resources and Mineral Reserves were compiled, Mr Brown was an employee of Element 25 Limited. Mr Brown is a geologist 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 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Brown consents to the inclusion of this information in the form and context in which it appears in this report

Please note with regard to exploration targets, the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

The information in this report that relates to Mineral Resources is based on information announced to the ASX on 12 October 2017. Element 25 Limited confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements, and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

JORC Code, 2012 Edition – Table 1 – Butcherbird Project Hydrometallurgical Test Work

Section 1 Sampling Techniques and Data

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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• The samples for metallurgical test work were selected from contiguous lengths of core in drillhole BBDD011 that were considered to be typical in character to the bulk of the ore zones at Yanneri Ridge. • Whole PQ diamond core was used to maximise the volume of sample. • The samples were then beneficiated using a rotary drum scrubber.
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).*	• A Diamond Drill Rig was used for the metallurgical program with PQ sized core (85mm diameter). • Drilling was triple tube.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Recoveries are noted at the time of drilling and recorded in the MZM database. • Triple tubing was used within the weathered zones to maximise ore recovery. • Close to 100% of core was recovered.

Criteria	JORC Code explanation	Commentary
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All samples have been logged to a level of detail to support the mineral resource estimations. • Qualitative: Lithology, alteration, mineralisation. • Quantitative: Sample assays. • The entire length of the hole is geologically logged. • All drill core is photographed.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• All hydro-metallurgy samples are prepared at the Simulus Engineers' laboratory located in Welshpool W.A.. • The initial beneficiated ore sample material is further prepared using simple physical separation techniques including size reduction an scrubbing. • Sample sizes are considered appropriate for the nature of the test work.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• The EMM samples were assayed at the Murdoch University laboratory using the ICP-AES/MS technique. • The samples have been assayed for Au, Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pd, Pr, Pt, Rb, Re, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• All data has been checked for accuracy by Murdoch University staff. • No adjustments have been made to assay data.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All collar coordinates were collected using differential GPS in MGA 94 – Zone 51.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The metallurgical test work drill hole was selected based on representivity of the Yanneri Ridge Orebody. • The samples were composited to produce a bulk sample.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• All drill holes are drilled vertically as the stratigraphy is generally sub-horizontal. • There is no known sample biasing.
Sample security	• *The measures taken to ensure sample security.*	• NA

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The data and sampling techniques are reviewed internally.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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.*	• The Butcherbird Project consists of granted exploration license E52/2350 and Mining Lease Application M52/1074. • The tenure is 100% owned by Element 25 Ltd.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The historical exploration data has been collected by Element 25 Limited and has been reported to high standards. • The methods of exploration and techniques used are considered appropriate for the deposit types sought (Mn)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Butcherbird is a stratiform sedimentary manganese deposit. • The deposits are hosted within the Ilgarari Formation which is generally flat lying with gentle open folding in places. • The manganese mineralisation within the ore zones is divided into three

Criteria	JORC Code explanation	Commentary
		distinctive units – a high grade manganiferous cap, supergene enriched manganiferous laterite and basal shale.

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.*
		• See historical ASX releases regarding the Butcherbird Mineral Resources.

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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• NA
Relationship between mineralisation widths and	• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The mineralisation is flat lying, the drilling is vertical and the intersections are true width.

Criteria	JORC Code explanation	Commentary
intercept lengths		
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.*	• NA
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.*	• NA
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.*	• NA
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The next phase of work will focus on finalising a processing flowsheet, and potential pilot plant and mining feasibility studies.