ASX Announcement

10 May 2018

MONTEZUMA COMPLETES POSITIVE SCOPING STUDY AT THE BUTCHERBIRD MANGANESE PROJECT

RESULTS INDICATE ECONOMICALLY AND TECHNICALLY VIABLE PROJECT WITH UPSIDE JUSTIFYING PROGRESSING TO PRE-FEASIBILITY STUDY

Highlights:

- Mining Solutions complete initial Scoping Study at Butcherbird, showing encouraging results;
- Scoping study utilises existing Mineral Resources all open pit, with low strip ratio;
- Processing via a purpose built processing plant, using atmospheric temperature/pressure leaching with high recovery to produce Electrolytic Manganese Metal (EMM) and Manganese Sulphates (MnSO4) for the worlds battery markets;
- Utilizes parts of the Butcherbird 180Mt @ 10.8% Mn Mineral Resource (Indicated & Inferred), reported in compliance with JORC (2012), with strong exploration upside;
- Scoping study completed to a higher level of detail than a traditional scoping study;
- Detailed financial and cash-flow model completed;
- Targeting modest capital cost processing facility; and
- Montezuma to initiate a Pre Feasibility Study (**PFS**) on the Butcherbird project in the immediate future.

Montezuma Mining Company Limited (**Montezuma** or **MZM** or the **Company**) (ASX Code: MZM) is pleased to advise that it has completed a Scoping Study (**Study**) based on the Inferred and Indicated Mineral Resource at its 100% owned Butcherbird Manganese Project (**Butcherbird** or **the Project**), located approximately 1,050 km North of Perth, WA and 130 km south of Newman in the Pilbara region of Western Australia.

Cautionary Statement

The Scoping Study referred to in this announcement has been undertaken to investigate the order of magnitude of the potential viability of the Mineral Resources. It is a preliminary technical and economic study of the potential viability of the Butcherbird Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further exploration and evaluation work and appropriate studies are required before Montezuma will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

The Scoping Study was based on material assumptions including assumptions about the availability of funding. While Montezuma considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

The Mineral Resource used for the study was reported in the announcement of 17 October 2017. The Scoping Study was based on both Inferred and Indicated Resources, with Inferred Resources making up 43% of the total tonnes of the Mineral Resource used for the study.

In addition, there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in determination of Indicated Mineral Resources or that the production target itself will be realised.

It is also possible that Montezuma could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Montezuma's proportionate ownership of the project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

This Scoping Study refers to the Yanneri Ridge deposit, one of the mineralised resources at the companies Butcherbird project.

The estimated Mineral Resources underpinning the Study have been prepared by a Competent Person in accordance with the requirements in the JORC Code (2012). Montezuma's study was completed with assistance from the following reputable industry consultant groups;

- Mining Solutions Pty Ltd (Scoping study management and reporting, Mine optimisation, design and scheduling, Financial modelling);
- Extomine Pty Ltd (resource model);
- Simulus Engineers Pty Ltd (Metallurgical process design, capital and operating cost estimates);
- Enviroworks Pty Ltd and Martinick Bosch Sell Pty Ltd (MBS Environmental) environmental review and costings;
- Qube Logistics Ltd (Logistics solution and costings);
- Tenet Consulting Pty Ltd and Advisian (Power cost estimates);
- Metals Bulletin Research Ltd (Metals Market research including volume and price forecasts) and
- Numerous other West Australian, mining industry suppliers.

The results of the Study were positive and importantly provide strong encouragement for the Company to commit to the next stage of its exploration and development program.

Executive Director Mr Justin Brown stated:

Following successful laboratory scale testwork conducted by the CSIRO in 2017, Montezuma decided to accelerate the due diligence process and its own understanding of the Butcherbird Project by engaging experts to assist with a Scoping Study concerning development and mining of the Butcherbird.

The results were encouraging and a clearer pathway to the projects development has been mapped out. Montezuma aims to complete a pre feasibility study and progress the project towards development. We see great potential at the Butcherbird for increasing the Resource and rapid mine development leading to Montezuma becoming a manganese producer in the near-term.

Study Summary

The Scoping Study was designed to focus on open pit development and processing of the Yanneri Ridge mineral resource at the companies butcherbird manganese project

The project is located 1,050 km North of Perth and 130km south of Newman in the Southern Pilbara. The Yanneri Ridge mineral resource was chosen due to its higher grade than the other mineral resources at Butcherbird as well as its location underlying both the Great North Highway and Goldfields Gas Pipeline. The Yanneri Ridge mineralisation also has minimal overburden, allowing easier and low cost mining.

The Study supports Montezuma's aim to complete a Preliminary Feasibility Study and apply for regulatory consents in 2018/2019, with development targeted in 2020/2021.

Mining Solutions Pty Ltd (**Mining Solutions**), were engaged by Montezuma to carry out a Scoping Study on its Butcherbird project, producing a high-level indicative mining and processing schedule utilising Whittle shells, inclusive of a high-level financial analysis. Given the level of study, and that Inferred Resources was used as an economic driver, no Ore Reserves can be reported from this Study.

The scoping study was completed to a higher level of detail than a traditional scoping study to enable fatal flaws or other potential problems to be identified and mitigated early in the projects life, and included:

- Budget level pricing from two potential contract miners;

- Scoping study level pricing from freight companies for road haulage, port and international shipping solutions;
- PFS level design and pricing from metallurgical consultants;
- Scoping study level pricing from two power supply consultants for power solutions for the project;
- Budget level quotes for many miscellaneous suppliers including:
  - Camp and office infrastructure;
  - Flights;
  - Airstrip construction;
  - Salaries and Wages;
  - Vehicles;
  - Communications establishment and operating;
  - Water Supply and Pumping;
  - Environmental, Heritage and other approval related studies.
- Manganese Market Studies including forward looking price and volume forecasts by Metals Bulletin Research PLC

Montezuma expecting to firm up its development schedule and funding options over the coming weeks.

Mineral Resource

The Butcherbird project consists of existing Mineral Resources of 180.8 Mt at 10.8% Mn in Inferred and Indicated categories. The project used the Yanneri Ridge mineral resource as the basis of the Scoping Study. Yanneri Ridge consists of 70.5Mt at 11.1%Mn and includes Indicated and Inferred Mineralisation.

Mineral Resource Category	Tonnes	Manganese (%)	Silica (SiO_2) (%)	Iron (Fe) (%)
Yanneri Ridge				
Indicated	22,500,000	12.0	43.8	11.6
Inferred	48,000,000	10.7	43.0	11.1
Total Yanneri Ridge	**70,500,000**	**11.1**	**43.3**	**11.3**
Other Inferred Mineral Resources				
Richies Find	22,700,000	10.9	44.8	11.6
Coodamudgi	16,500,000	11.0	42.9	12.5
Mundawindi	16,300,000	11.9	40.3	11.7
Ilgarrarie Ridge	35,600,000	9.9	46.0	12.5
Bindi Bindi Hill	14,400,000	10.4	45.5	10.1
Budgie Hill	4,500,000	9.3	45.4	13.2
Cadgies Flat	291,000	10.0	46.2	11.1
Total Other Inferred Resources	**110,300,000**	**10.6**	**44.4**	**11.9**
Total Mineral Resource	**180,800,000**	**10.8**	**43.9**	**11.7**

Table 1. Butcherbird Manganese Oxide Deposit Mineral Resource Summary (8% Mn lower cut-off).

(This resource information was prepared and first disclosed under the JORC Code 2012. It has not changed since it was last reported, refer ASX Announcement 17 October 2017: "Butcherbird Manganese Project - Upgraded Mineral Resource Estimate", available to view at www.montezuma.com.au.

The Mineral Resource estimate was carried out in 2012 and updated in 2017 by Extomine Pty Ltd and is classified and reported in accordance with the JORC Code (2012). A Yanneri Ridge mineral resource contains 48Mt Inferred Mineral Resources, 68% of the total Yanneri Ridge Mineral Resource and 22Mt Indicated Mineral resources tonnages, 32% of the higher level of detail than a traditional scoping study.

Due to the size of the Yanneri Mineral Resource only a portion was used for the study, this comprised approximately 26.7 mt @ 11.97%Mn and when scheduled composed of 57% of the Life of Mine production target, 68% Years 1-12, is in the Indicated Mineral Resource Category, JORC (2012) and 43% is in the Inferred Mineral Resource category JORC (2012), 32% Years 1-12.

Mine Planning Studies

Optimisation studies were undertaken by Mining Solutions Asia Pacific Pty Ltd (**MSAP**) with the results (data outputs and optimised pit shells) provided to Mining Solutions. The data provided to Mining Solutions was checked and validated. Costs and other parameters used for the Optimisation were validated during the scoping study as being suitable. The open pit optimisation process mined 98.8% of the insitu mineral resource at a revenue factor of one, Refer Figure 1.

Mining operations for the Project are envisaged to utilise a standard truck and shovel configuration using a 100t Excavator (Komatsu PC1250 or similar) paired with 90t rigid body dump trucks (Cat 777 or similar). Ramp parameters used throughout the pit designs could allow single-lane traffic flow with passing bays located at each berm (every 10 or 20m vertically). Due to the shallow nature of the mineralisation and the fact that the mine design used only uses 38% of the optimal pit shell resource, ramps could easily be made wider as they will be located in mineralisation.

Conceptual waste dumps and ROM pads were designed but further work will be required during Pre Feasibility studies.

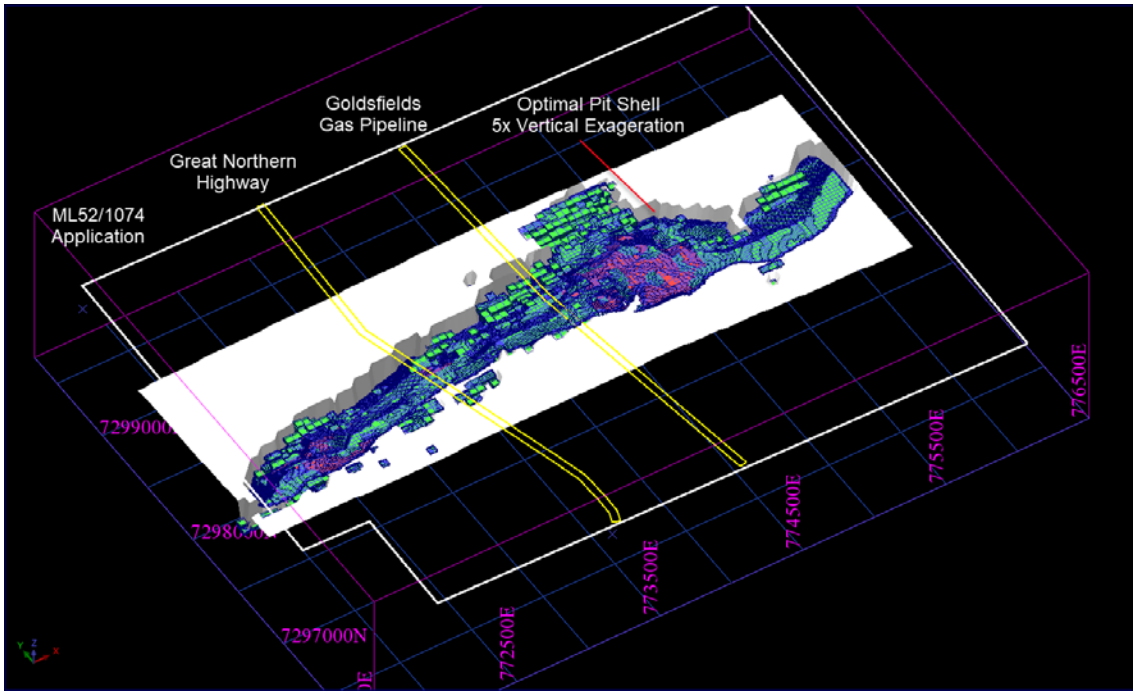

Figure 1. Optimised Pit Shells as Processed by MSAP

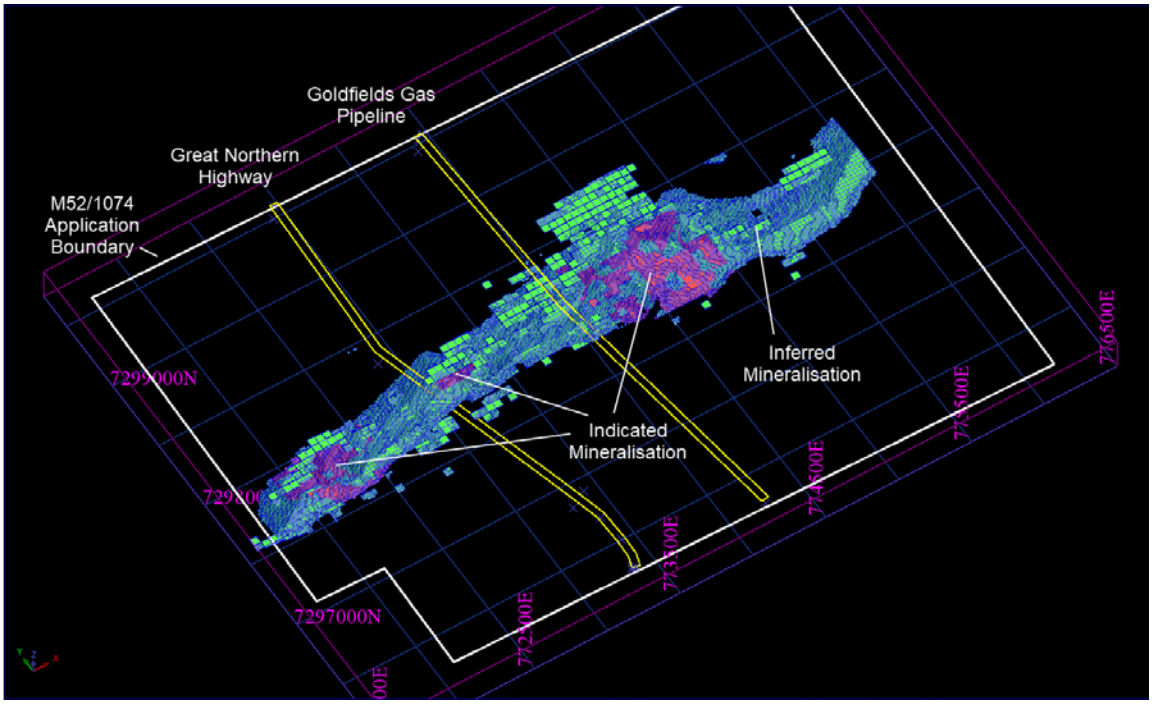

Figure 2. Plan of Butcherbird Manganese Deposit showing Indicated Mineral Resource (Red), Inferred Mineral Resource (Green) (source: Butcherbird Scoping Study, May 2018).

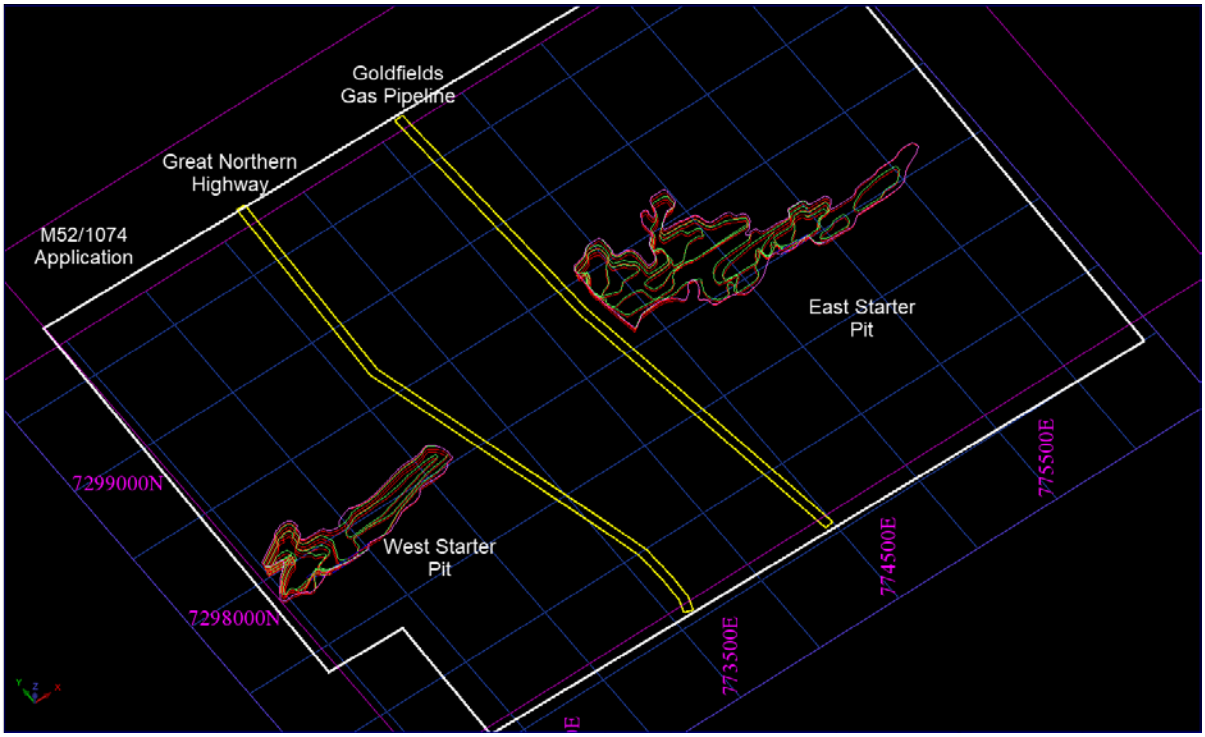

Figure 3. East and West Starter Open Pits (source: Butcherbird Scoping Study, May 2018).

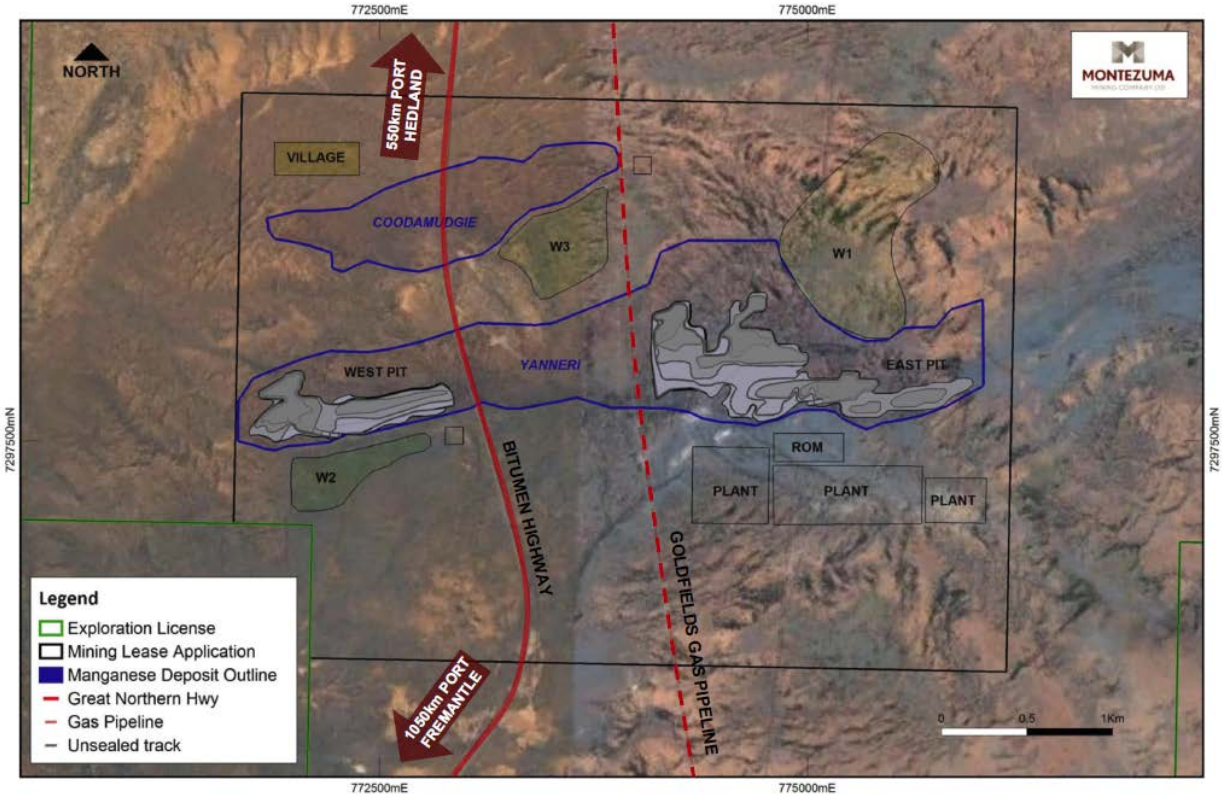

Figure 4. Yanneri Ridge, Conceptual Site Layout Plan (source: Butcherbird Scoping Study, May 2018).

Processing

The Butcherbird processing plant has been designed to process run-of-mine (ROM) ore containing 12.3% Manganese as oxides with leach extractions of 95% for manganese, refer Figure 5, and will produce Electrolytic Manganese Metal (**EMM**) and Manganese Sulphate (**$MnSO_4$**).

Processing operating and capital cost estimates were developed by Simulus Engineers based on Process Flow Diagrams (**PFD**) developed from the CSIRO test-work and equipment selected to meet the production requirements. Operating costs were based on Simulus's database of similar project's consumption has been calculated in the SysCAD model based on the PFD inputs. Consumables include items such as grinding media, filter cloths and product bulk bags.

The plant flowsheet consists of proven unit operations including crushing, scrubbing, grinding, hydrometallurgical recovery and purification and electrolysis/evaporation for final product production. The plant also includes reductant preparation, product handling, tailings neutralisation and reagents storage facilities.

The overall manganese metal recovery from ROM ore to EMM with the selected flowsheet was modelled to be 76.1% and from ROM ore to $MnSO_4$ as 80.5%.

Reagent and Consumable are calculated from the detailed process flow diagrams.

A simplified block flow diagram for the Butcherbird process is set out in Figure 6.

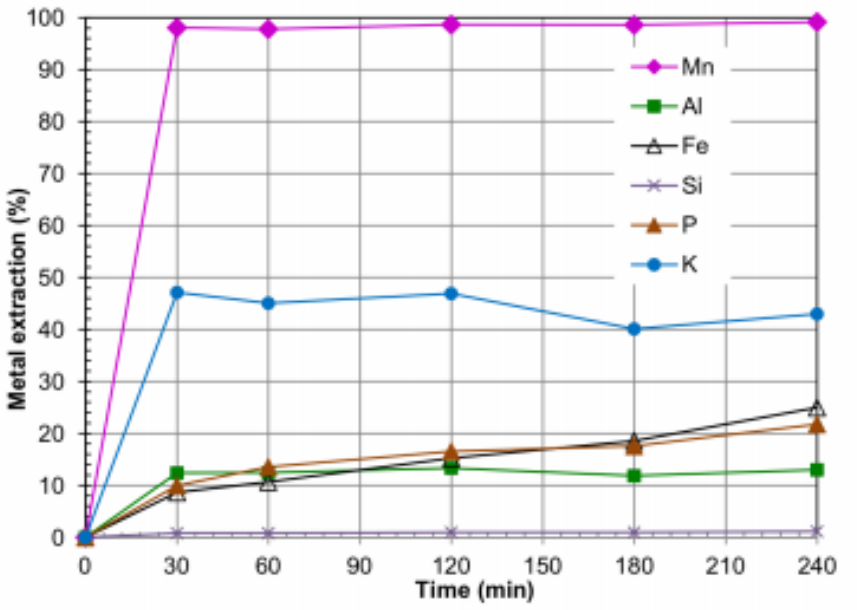

Figure 5. Manganese leach test results showing metal extraction over time (source: CSIRO, technical report, August 2017).

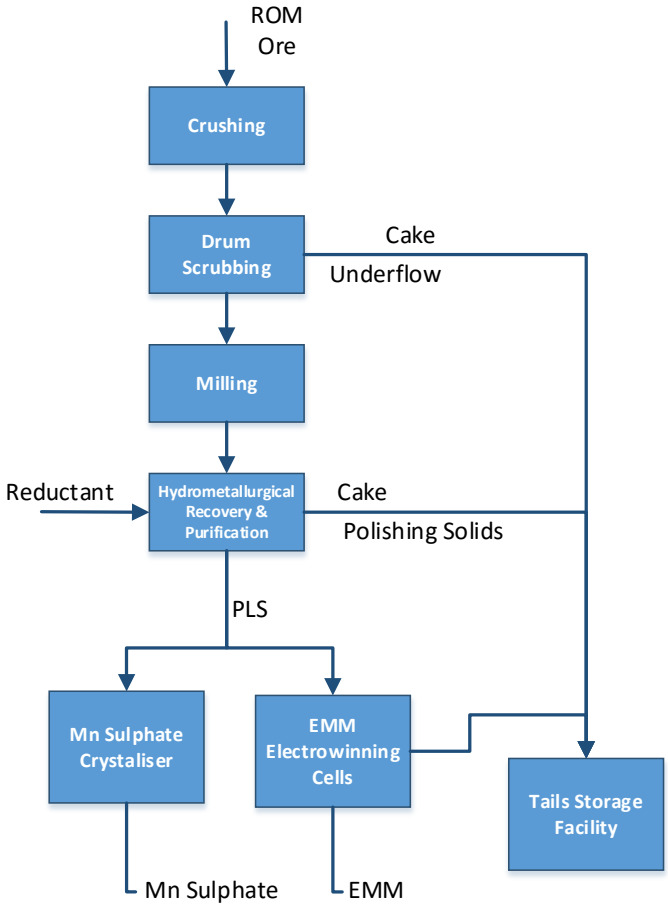

Figure 6. Butcherbird Scoping Study simplified block flow diagram (source: Butcherbird Scoping Study, May 2018).

Logistics

All manganese products from Butcherbird will be transported to world markets via a road/sea freight logistics solution.

EMM and Mn Sulphate will be loaded into 1 t sealed bulka bags or sealed drums at site and transported on pallets on double/triple flatbed road-trains to Fremantle. At Fremantle, the bulka bags will be loaded into 20' sea-containers holding a capacity of 24t.

Sea freight prices were obtained for sea freight to 12 likely destination ports.

Logistics prices were obtained for this logistics route and includes all costs, including road haulage, port rehandling, export fees and ports charges and shipping charges to deliver a sea container from Butcherbird to the world's manganese users.

Montezuma has started discussions with Pilbara Ports about a Port Hedland shipping container solution which would utilise the planned, but as yet unbuilt, Lumsden Point freight terminal at Port Hedland. The use of Port Hedland as a shipping container port would halve the road transport component of the operation resulting in significant savings to the project going forward. This will be further discussed in the Variance Analysis section of the report.

Capital Costs

Preliminary engineering and design studies were completed for the development of the capital cost estimate to be calculated with an accuracy of ±30%. Cost area include administration, plant hire, temporary construction facilities and equipment, first fills, spares, contractor and Engineering Procurement Construction Management (EPCM) costs.
The capital cost estimate covers the design and construction of the process plant and is based on the supply and installation of new equipment and includes all indirect costs such as EPCM costs. The estimate has a base date of the May 2018 (Q2 2018) and is reported in Australian dollars (A$).

Sustaining capital expenditure has been included on a monthly basis in the cost model. A value of 2.5% per annum of Capital has been applied on a monthly basis.

Power

Power requirements for the processing is based on the load list developed from the mechanical equipment lists for each process area, accounting for load and motor efficiency factors, and equipment utilisation.

Electrical power will be generated on site from a purpose built gas fired power station using a Build Own Operate (**BOO**) model. Power consultants Tenet Consulting and Advisian were commissioned to derive expected power costs for the establishment and operation of a gas fired power station over the projects life.

Advisian was also commissioned to review the options for the use of hybrid power systems including the use of solar and wind power, as potential energy sources. Studies indicate that substantial savings in power costs may be realised by process design improvements to allow for fluctuating renewable power supplies. These opportunities will further be investigated in the PFS.

Mineral Tenure and Native Title

The Butcherbird Manganese Oxide Deposit is held under an Exploration license (E52/2350). A Mining lease application (M52/1074) has been made over the Yanneri Ridge and Coodamudgi Manganese Deposits and is currently undergoing the approval process.

The Butcherbird Project straddles the lands of both the Ngarllawangga People and Nyiyaparli People. MZM has an agreement with the Ngarllawangga People (**Butcherbird Mining Agreement**), which covers all activities on site including mining. MZM will enter access agreement negotiations with the Nyiyaparli People. Native title costs have been included in the Scoping Study and are based on those from the current Butcherbird Mining Agreement.

Environmental and Permitting

The Gascoyne/Southern Pilbara bioregion is characterised by open mulga and snakewood low woodlands on shallow earthy loams over hardpan on the plains, with mulga scrub and shrublands on the shallow stony loams of the ranges. There are extensive areas of hummock grass. The climate is arid, with winter and summer rainfall.

A number of base level Environmental Impact Studies have been undertaken by the Company.

No Declared Rare Flora species pursuant to subsection (2) of section 23F of the Wildlife Conservation Act 1950 [WA] and as listed by the Department of Environment and Conservation (2007) and no threatened Flora listed under the Environment Protection Biodiversity Conservation Act 1999 [Commonwealth] have been recorded by a Flora survey within the Butcherbird Project Area in 2012.

A gap analysis has been conducted by Enviroworks and reviewed by MBS Environmental Consultants which has detailed future work programs required as part of the environmental approvals process. These studies and associated costs have been included as work programs in the PFS.

Manganese Market Volume and Prices

High purity manganese product prices are forecast to rise over the next 10 years due to high demand in the growing battery market. Source: Metals Bulletin Research PLC (**MBR**), April 2018.

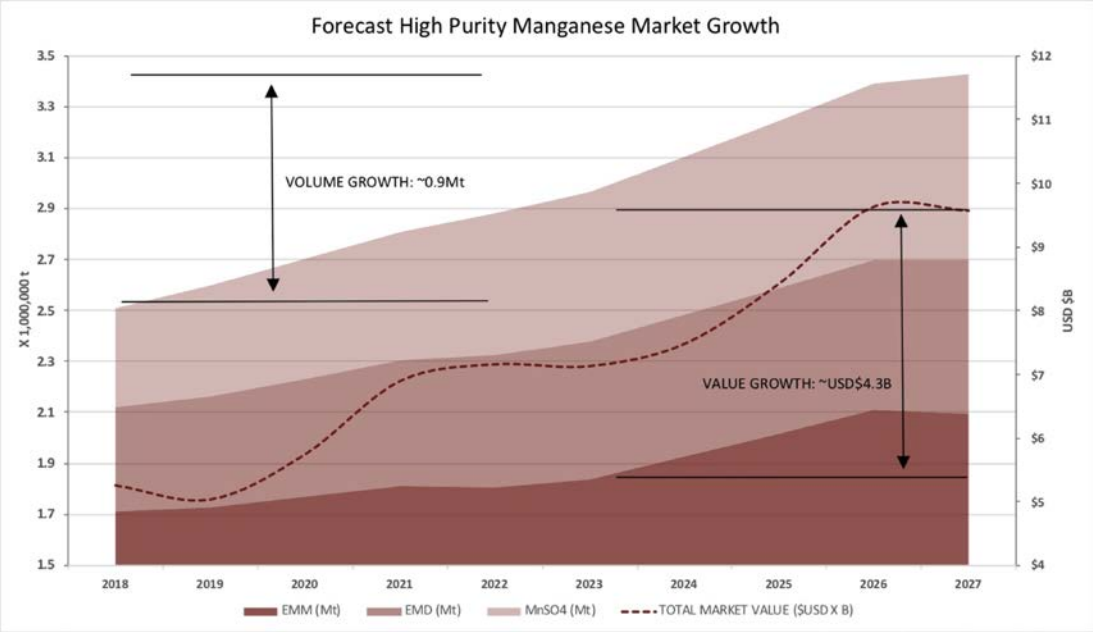

Figure 7. Forecast High Purity Manganese Market Growth (source: MBR, May 2018.).

The scoping study has used the MBR forecast **2018** prices as a flat base case with no forecast price extrapolation applied.

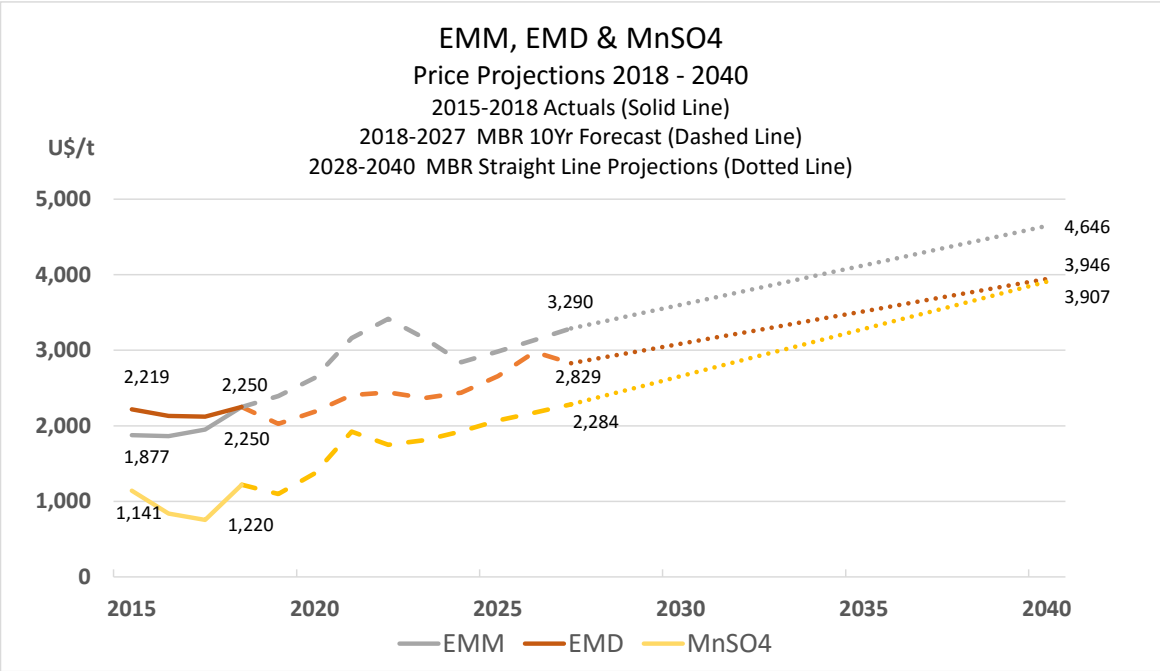

Figure 8. Manganese Product price forecasts and projections (source: Metals Bulletin Research, April 2018).

The study used a United States / Australian Dollar exchange rate of **0.78**. This fits with recent, May 2018 exchange values and is 1.7 cents higher than the average, post Australian Dollar float, exchange rate of 0.763 USD/AUD.

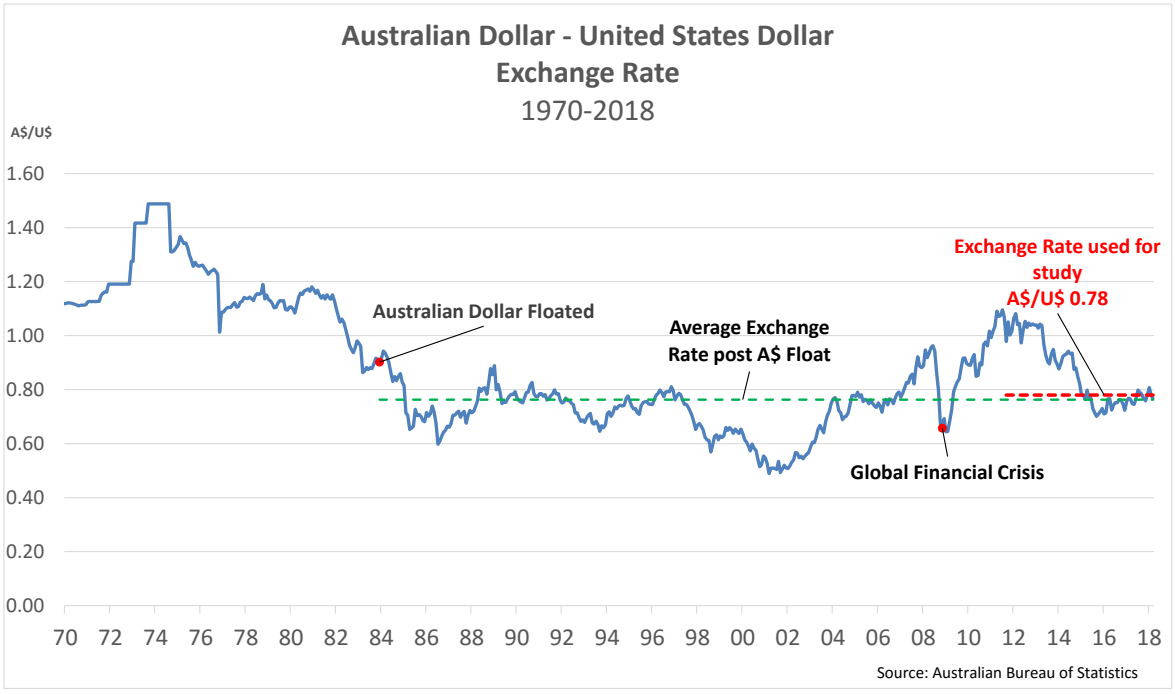

Figure 9. Australian Dollar Exchange Rate (Historical) (source: Australian Bureau of Statistics, May 2018).

Butcherbird Project Potential

The Butcherbird project has a number of scale and optimisation opportunities that were evaluated during the Scoping Study.

Scale

The opportunity to expand the project has been reviewed in the Scoping Study. This is underpinned by the large resource base, 180Mt @ 10.8%Mn, at Butcherbird that contain similar ore types to the Yanneri Ridge Manganese deposit, refer Table 1, and will require only minimal work to increase the confidence in the current resource classification.

The scoping study evaluated a base case production output of EMM & $MnSO_4$ as well as an expanded production scenario of 2 x Base Case EMM & $MnSO_4$. This will be completed in full during the Pre Feasibility study.

Productivity Improvement

The Butcherbird project can also be optimised through a number of cost and productivity improvements including:

- Hybrid (combined Gas Power with Wind and Solar renewable) energy sources
- Logistics chain improvement, specifically the use of Port Hedland as an Export port
- Process Improvements through appropriate testwork and plant design efficiencies

These opportunities will be evaluated further during the PFS stage of the projects evaluation.

Funding

The Company continues to consider funding alternatives and assumptions given the capital requirements of the project and believes that a strategy can be implemented in consultation with external project financiers and debt providers.

MZM has sufficient capital to fund the completion of the Pre-Feasibility Study and Definitive Feasibility Study as currently budgeted.

Conclusion - Butcherbird Manganese Project

The Company is delighted with the results of the Scoping Study which confirms that the Butcherbird Manganese Project has the potential to become a low operating cost producer of Electrolytic Manganese Metal and Manganese Sulphate with modest capital requirements and simple logistics in a first world jurisdiction.

The deployment of the low strip ratio, low mining cost mine, together with high recovery low cost atmospheric leaching, means that the project has the potential to be brought on line cost competitively, then by using the projects substantial resource base, expand into the growing battery minerals market. In addition, the project straddles the sealed Great Northern Highway and Goldfields Gas Pipeline, minimising infrastructure costs.

Next Steps

On the back of strong market interest and the completion of a positive Scoping Study, Montezuma will advance the Butcherbird Manganese Project to prefeasibility study level, including, but not limited to;

1. Complete pre-feasibility and feasibility studies and, subject to the outcome of these studies, develop the Project;
2. Undertake discussions with Manganese end users with a view to establishing offtake agreements and/or funding with a view to conducting further studies and assisting in project development; and
3. Examine alternative sources of finance to fund further studies and/or develop the Project.

Justin Brown
Executive Director
Montezuma Mining Company Limited

Disclaimer

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

Competent Persons Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr David O'Neill who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Exploration Results and Exploration Targets were compiled, Mr O'Neill was an employee of Montezuma Mining Company Ltd. Mr O'Neill 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 O'Neill consents to the inclusion of this information in the form and context in which it appears in this report.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Mark Glassock who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Mineral Resources were compiled, Mr Glassock was a consultant to Montezuma Mining Company Ltd. Mr Glassock 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 Glassock 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 the mining, corporate and site administration, logistics, Scoping Study development, financial model and future production targets is based on information compiled by Mr Ian Huitson who is a Fellow of the Australasian Institute of Mining and Metallurgy. At the time that the Scoping Study was compiled were compiled, Mr Huitson was a consultant to Montezuma Mining Company Ltd. Mr Huitson is a Mining Engineer and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities 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 Huitson consents to the inclusion of this information in the form and context in which it appears in this report.

The information in this report that relates to the Metallurgical process design and operating and capital cost estimates is based on information compiled by Mr Simon Walsh who is a Member of the Australasian Institute of Mining and Metallurgy. At the time that the Scoping Study was compiled were compiled, Mr Walsh was a consultant to Montezuma Mining Company Ltd. Mr Walsh is a Metallurgist 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 Walsh consents to the inclusion of this information in the form and context in which it appears in this report.