

Butcherbird Manganese Project Maiden Ore Reserve Statement

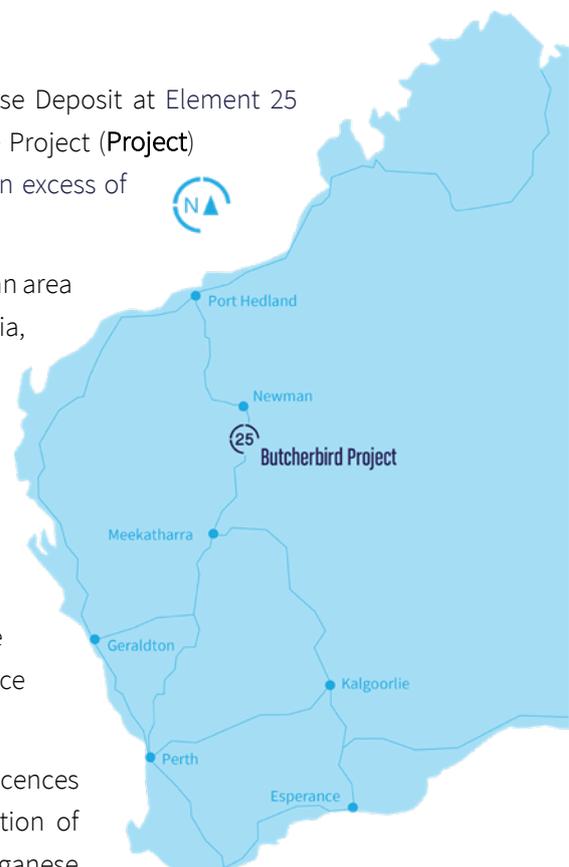
This maiden Ore Reserve statement relates to the Yanneri Ridge Manganese Deposit at Element 25 Limited's (ASX:E25) (E25 or Company) 100% owned Butcherbird Manganese Project (Project) located in Western Australia. The Project contains current JORC resources in excess of 260Mt of manganese ore¹.

The Project comprises eight known manganese mineral resources located in an area of approximately 600km² in the southern Pilbara region of Western Australia, approximately 1,050km North of Perth and 130km South of Newman. Access is directly via the Great Northern Highway which traverses the Project.

The Company has held exploration tenure in the area since 2009 and has advanced the Project via a series of exploration programs from early stage rock-chip sampling and regional mapping through to multiple drilling programs and ultimately resource infill drilling. Several Mineral Resource estimates have been completed since work commenced. Refer to the Resource Estimate Section for details.

The Project is 100% owned by E25 and comprises two granted exploration licences E52/2350 and E52/3606. Mining Lease Application M52/1074 covers a portion of E52/2350 and encompasses the Yanneri Ridge and Coodamudgi manganese deposits.

Water exploration has identified potential process water sources within granted Miscellaneous Licence L52/211. A number of contiguous exploration and miscellaneous licence applications are pending. Project approvals are well advanced with native title and one pastoral lease access agreement in place. The access agreement for the second pastoral lease is agreed in principal and pending formal documentation. Base line environmental surveys have been completed with no impediments to Project development having been found.



¹ Reference: Company ASX released dated 17 April 2019.

Company Snapshot

ASX Code:	E25	Board of Directors:		Element 25 Limited is developing the world class Butcherbird Manganese Project in Western Australia to produce high quality manganese concentrate and high purity manganese products for traditional and new energy markets.
Shares on Issue:	97M	Seamus Cornelius	Chairman	
Share Price:	\$0.20	Justin Brown	MD	
Market Capitalisation:	\$18.4M	John Ribbons	NED	
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The Project straddles the Great Northern Highway and the Goldfields Gas Pipeline providing turnkey logistics and energy solutions.

A Pre-Feasibility Study (PFS) has been completed for the Project which envisages mining manganese ore via open pit methods. The ore will be processed in a purpose built processing facility producing manganese lump products which will be trucked to Port Hedland and sold to manganese consumers around the world. The Ore Reserve estimate is based on the PFS and this Reserve Statement should be read in conjunction with the ASX Release for the Project PFS².

The Ore Reserve estimate for the Project as at 19th May 2020 is summarised in Table 1. All dollars are expressed as Australian Dollars unless noted.

Table 1. Butcherbird Ore Reserve Estimate as at 19th May 2020³

Deposit	Classification	Tonnes (Mt)	Grade (Mn%)	Contained Mn (Mt)
Yanneri Ridge	Proved	14.4	11.5	1.65
Yanneri Ridge	Probable	36.2	9.8	3.56
Total		50.6	10.3	5.22

Ore Reserve Classification

The maiden Butcherbird Ore Reserve as at 19th May 2020 is derived from the manganese Mineral Resources of the Yanneri Ridge manganese deposit. The resource models and their construction are described in the Mineral Resource Estimate. The Mineral Resources are inclusive of the Ore Reserves.

All Proved and Probable Ore Reserves have been derived from Measured and Indicated Mineral Resources in accordance with Joint Ore Reserve Committee (JORC) Code 2012 guidelines.

The Ore Reserve classification reflects the Competent Persons' view of the deposits.

Mining Methods

The Yanneri Ridge manganese deposit (Figure 1) is one of eight manganese deposits contained within the Project. The Yanneri Ridge deposit is a shallow, outcropping, supergene manganese resource and most suitable to mining by open pit mining methods utilising conventional mining equipment developing the deposit in multiple stages.

The selected mining method, design and extraction sequence are tailored to suit orebody characteristics, minimise dilution and ore loss, defer waste movement, utilise planned process plant capacity and expedite cash generation in a safe manner. Geotechnical work has indicated that the majority of the mineralisation can be mined as free-dig material that is without the use of drill/blast techniques. Dozer ripping will be utilised to loosen ore and improve productivity rates.

² Reference: Company ASX release of the Butcherbird PFS Study dated 19th May 2020.

³ Data are reported to significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.

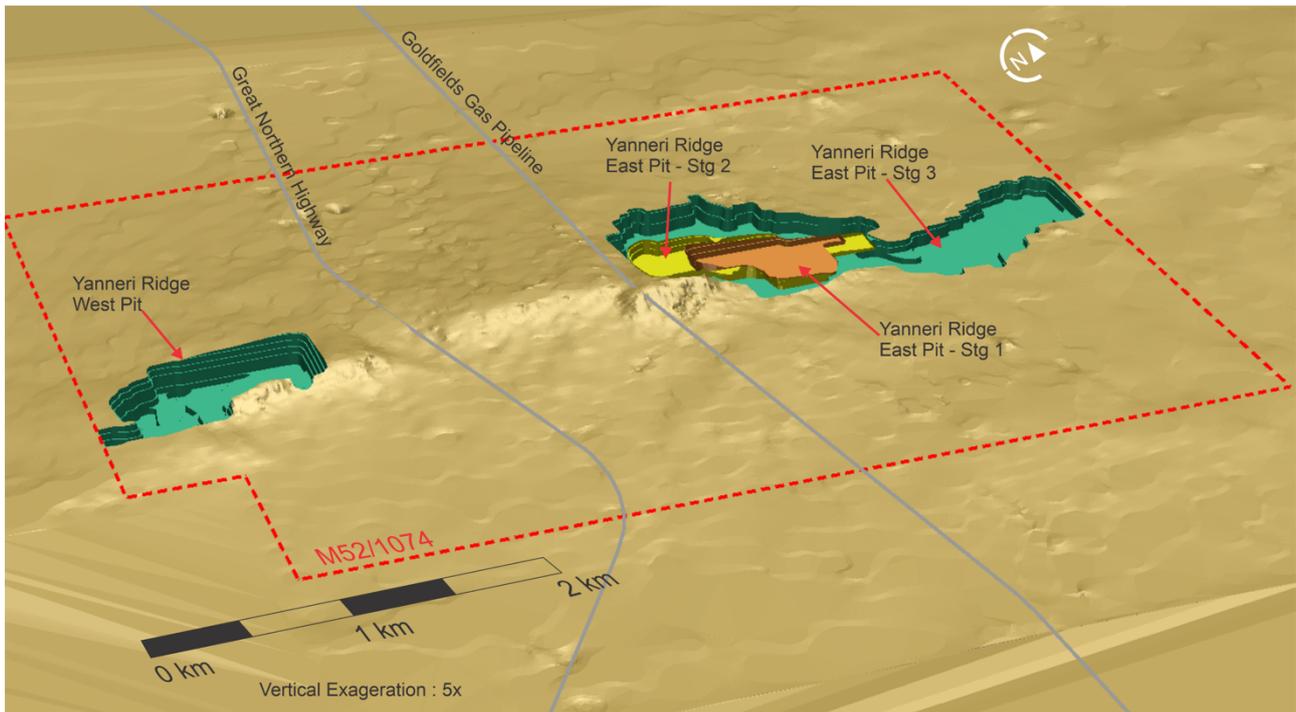


Figure 1: Pit designs (Isometric view looking North East) for the Yanneri Ridge deposit showing open pit staging

Mine planning including pit optimisation, mine design, scheduling and cost modelling for the Yanneri Ridge resource was completed in collaboration with Mine Planning Services (MPS) which, together with other studies has allowed the design of the site layout including site haul roads, pit access roads, detailed pit stage development designs, waste dumps, topsoil stockpiles, mine workshops and run of mine (ROM) ore pads, processing plant, tails storage facility and borefield.

Cut-Off Grade and Metal Price

A mining and processing rate was chosen based on throughput considerations of standard mobile processing equipment and ore-sorter sizes in conjunction with manganese market entry considerations. A startup mining and processing throughput of 1.2Mtpa rate was chosen and the cut-off grade at that throughput determined based on operating costs and revenues derived from a previous scoping study level study and then checked and validated with budget level quotes during the PFS study

The Ore Reserve was estimated using the life-of-mine (LOM) economic parameters drawn from E25's Economic Assumptions. Ore pricing assumptions were sourced from Roskill, an independent manganese market consulting group, and a manganese price of USD\$4.76/dry metric tonne unit (dmtu) CIF China for an Mn grade of 33% was selected.

The factored manganese price was converted to an Free On Board (FOB) Port Hedland price by removal of shipping and insurance costs sourced from industry sources. The revenue of the Project is derived from the elements listed in Table 2.

The cut-off value equates to the processing cost including general admin, sustaining capital, corporate overheads and costs associated with the mine rehabilitation fund.

Manganese value is calculated on a block by block basis and also included royalties, concentrate transport and port charges.

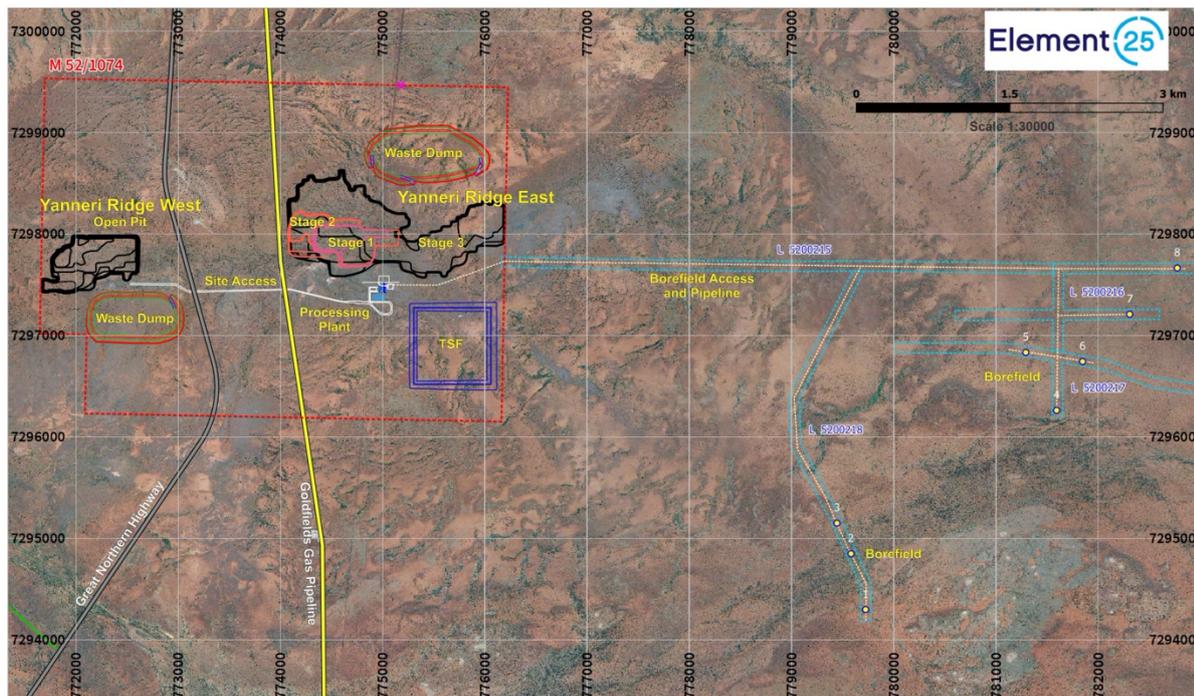


Figure 2: Project Site Layout

Table 2. Yanneri Ridge Ore Reserve Optimisation Economic Assumptions

Parameter	Units	Value
Manganese Concentrate Price	US \$ / dmtu 33%Mn CIF China	4.76
Exchange Rate US\$/A\$	2020-21	0.65
	20223 -2063	0.70

Ore Reserve Estimation Methodology

The Ore Reserve estimate is based on the Mineral Resource estimates classified as Measured and Indicated after consideration of all modifying factors such as legal, environmental, geological, geotechnical, mining, metallurgical, social, economic and financial aspects.

Inferred Mineral Resources were excluded from pit optimisation, mine schedules and economic valuations utilised to validate the economic viability of the Ore Reserves. The Ore Reserve is technically and economically viable without the inclusion of Inferred Resources.

Prior to pit optimisation, the Mineral Resource model was normalised to Selective Mining Unit (SMU) blocks of 10m E x 5m N x 1m RL to generate a diluted mining model. The SMU block size reflects expected mining equipment size, the geometry of the geology and anticipated ore loss. Mining dilution and ore loss were applied through normalisation of the Resource model. The overall effect was 5% dilution and 5% ore loss applied to the mining model used for mine planning. Dilution was applied at the average grade of surrounding blocks and this is considered appropriate as all ore is mined and processed where the characteristics of the manganese allow it to be recovered.

The Resource model was optimised using the Lerchs-Grossman (LG) algorithm with industry standard

software. Nested pit shells were generated and tested with sensitivities on mining cost, processing cost, metal price, recoveries, and slope angles. This formed the basis of the selection of the optimal pit shell for the Yanneri Ridge deposit. Interim pit shells provided guidance for pit stages to maximise value and achieve operational design requirements.

The resultant pit shells were used to develop detailed pit designs with due consideration of geotechnical slope parameters, minimum mining widths, bench heights, and ramp widths suitable for proposed mining equipment. These pit designs were used as the basis for production scheduling and economic evaluation.

The mining schedule is based on realistic mining productivity and equipment utilisation estimates sourced from industry quotations. Pit development requirements, the selected mining fleet productivity and the vertical rate of mining development were all considered. Staged pit designs along with a stockpiling strategy were applied to ensure a continuous supply of ore while deferring waste mining for as long as practicable.

The mining schedule is based on supplying suitable material to the processing plant with a name plate capacity of 1.2Mtpa, planned to be achieved in the fourth month after implementation as indicated in the PFS announced in conjunction with this release.

The Ore Reserve has been supported by mining operating costs provided by suitable mining contractors and process plant Capital Expenditure (CAPEX) has been costed from original equipment manufacturers (OEM)s. Operation Expenditure (OPEX) was estimated from a first principle cost model and mine schedule physicals. Equipment hours and requirements were estimated from haul cycles, production rates, availabilities and utilisation. Operational and maintenance labour was estimated from equipment hours.

It is assumed that mining will be undertaken by suitable contractor(s) for the life of mine. The pre-strip was scheduled in the initial two-month pre-processing commissioning for waste stripping of the Yanneri Ridge pit and aiming for approximately 50kt ore stockpiled ready for reclamation on commissioning, equivalent to two weeks of plant throughput at full production rates.

The final pit design is the basis of the Ore Reserve estimate. The Mineral Resource within the final pit design was converted to Ore Reserve by applying financial parameters to the model.

Geotechnical Engineering

Geotechnical modelling was based on logging and laboratory testing of selected diamond drill core samples from a total of fifteen (15) diamond cored drillholes within the pit shell, historically drilled for combined metallurgical and geotechnical purposes.

The geotechnical slope design parameters used were based on work completed by Peter O'Bryan and Associates Pty Ltd. The open pit designs were based on the recommended geotechnical design parameters and assume dry slopes based on the assumption that mining is above the water table in years 1-20 and adequate dewatering ahead of mining thereafter.

The overall slope parameters considered for the mine planning are summarised as:

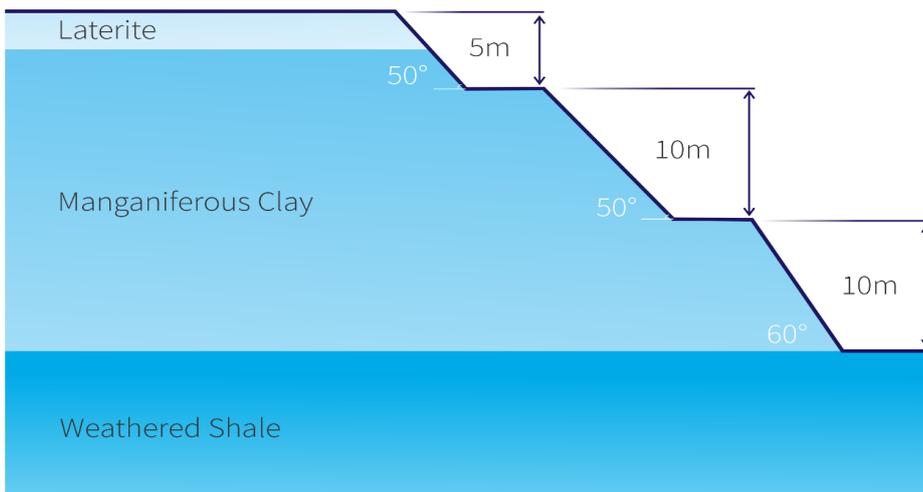


Figure 3: Yanneri Ridge – Limit Equilibrium Analysis Model and Proposed Pit Parameter

Specific modifications were made to the western wall of the East Yanneri Ridge open pit which is adjacent to the Goldfields Gas Pipeline (GGP). In this location the pit wall was designed 25m outside the GGP Pipeline Reserve to increase the factor of safety in this area.

Metallurgy and Processing Assumptions

The Project process facility has been designed to process 1.2Mtpa of manganese oxide ore. The plants design is based upon 24 hours per day seven days per week at a nominal throughput of 183 dry tonnes per hour, with the plant availability of 75% or 6,570 hours per year which is driven by the jaw crusher availability. The processing facility utilises recognised technology for oxide ore processing circuits and follows a processing route of:

- Crushing.
- Screening.
- Scrubbing.
- Screening.
- Ore Sorting.
- Tailings storage.

Metallurgical assumptions are based on recent metallurgical test work as part of the ongoing studies. All ore at Yanneri Ridge is oxide ore. The metallurgical recoveries used for oxide ores is 82%.

The simplified plant flowsheet is shown in Figure 4.

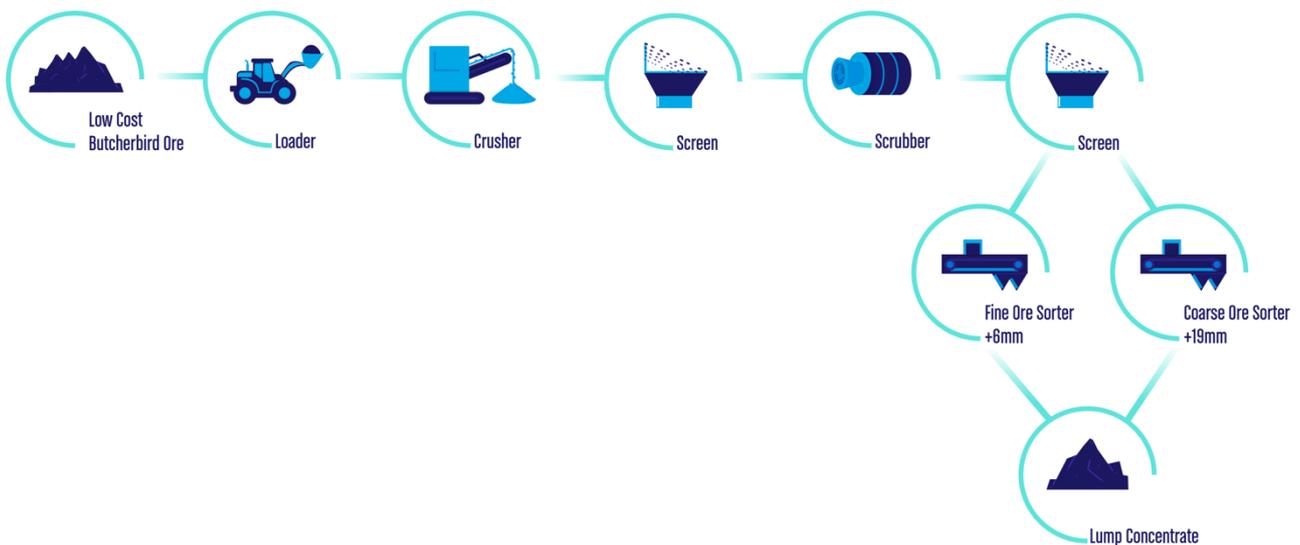


Figure 4: Simplified Process Flowsheet

Social, Environmental and Approval

A series of environmental baseline studies have been completed since 2010 with the aim of characterising the existing environment and identifying any associated Project and approvals risks. The baseline environmental programme has included assessments of flora and terrestrial fauna, landforms, terrestrial environmental quality (including both mineralised and non-mineralised waste), inland waters, heritage, archaeology, and human health.

All waste rock dumps will be designed in accordance with Western Australian requirements and approvals conditions.

A PFS level program to confirm water supply was carried out throughout 2019/2020. The program included the drilling of 10 water exploration bores. The study concluded that the local aquifer system will yield sufficient process water for the anticipated water requirements of the Project, and that water quality will meet the Project specifications. The completion of additional bores and pump testing will occur throughout the subsequent study period to validate the findings of the PFS.

Two Project related Native Title parties have claims over different areas within the broader Project area. The Company has secured mining agreements with the Ngarlawanga group which covers the west of the Project including the western portion of M52/1074 area and the Karlka Nyiyaparli group which covers the east of the proposed Project development area including the majority of M52/1074. The mining agreements cover future access, exploration and mining activities and allow for site access with agreed compensation.

The Company has developed and maintained a close relationship with the Traditional Owners and has ensured that the community have been involved in the ongoing development of the Project.

The Company currently has a tenement package over the proposed Project development area. This tenement package includes exploration tenements, a mining tenement application and associated miscellaneous tenements.

The Project is expected to be approved by the Western Australia Department of Mines, Industry Regulation and Safety (DMIRS) which has authority to approve low impact mines in Western Australia under a Memorandum of Understanding with the Environment Protection Authority (EPA). A Mining Proposal will be

lodged with DMIRS in the second half of 2020 to trigger this approval. Other statutory approvals will be required under DWER.

The study programs to date represent a thorough assessment of the proposed Project area in-line with statutory requirements and guidelines. To date no material environmental or approvals risks have been identified. An approved Mining Proposal under the Mining Act is expected prior to the final decision to proceed.

Infrastructure

The Project is a greenfield site with no infrastructure. Infrastructure will be required to support mining activities. The following required infrastructure has been designed, scheduled and costed as part of the Pre-Feasibility Study:

- Site Access will be via the Great Northern Highway to the Project and then via a new road for approximately 1km to site. Application has been made to both Main Roads and APA Ltd for highway access and pipeline crossing approvals respectively.
- Site Development and Infrastructure including clearing, levelling and bulk earthworks, access roads linking the various operational centres (Mine, Process Plant, Administration etc.), drainage and surface runoff and fencing of operational areas.
- A nominal 650kW base case power supply is proposed utilising a diesel generating solution. Water bores at the borefield will each have a individual diesel generators. The office and workshop will be powered separately by a 60kw diesel generator.
- Water Supply – water for construction, mining, processing the ore and other site activities will be sourced from groundwater in the area to the east of M52/1074. Drilling and testing have indicated the feasibility of the source. Additional drilling and testing will be required to confirm the adequacy of the groundwater supplies.
- Ore stockpiling and ROM pad reclaiming, primary crushing, scrubbing, screening and ore sorting facilities.
- Purpose built site laboratory.
- A preliminary design for a paddock style Tailings Storage Facility (TSF) has been developed and shown to be feasible. An upstream raised embankment with provision for progressive downstream rock buttressing has been selected and designed based on the process tailings deposition rate of 0.24Mtpa. Tailings characterisation test work is complete. Further geotechnical investigation is scheduled to confirm the final TSF design.
- Onsite communications systems and infrastructure and connection to the national communications network offsite via a satellite based communications system.
- Onsite Services including reticulation of power and water around the operational centres, provision of lighting, sewage and wastewater services, fire, compressed air and dust suppression systems, waste disposal, bulk fuel receipt, storage and distribution.
- Buildings including the provision administration, workshops, logistics hubs, warehousing and any other non-process or mining structures.

The following infrastructure has been specifically excluded as part of the Pre-Feasibility Study:

- The site will not include a mining camp, personnel will be housed at nearby established facilities.
- The site will not have an aerodrome but will utilise the airport at Newman, approximately 120km North of the Project.

Appendix 1 - JORC Code, 2012 Edition - Table 1

Section 1 - Sampling Techniques and Data

Criteria	Comment
Sampling techniques	<p>Majority of holes were sampled as 1 metre intervals, however non mineralised zones were composited into varying lengths.</p> <p>Majority of drill holes between 2010 – 2012 was completed by a number of different drill companies using reverse circulation (RC), 5 and 6 metre rods with a 5.5 inch bit. Sampling intervals for RC holes were 1 metre from the rig mounted splitter.</p> <p>The 2018 drilling was completed using air core (AC) technique, with 3 ½ inch drill string and a combination of blade and percussion hammer bits. Drill chips are collected through a cyclone and cone splitter at 1 metre intervals.</p>
Drilling techniques	<p>528 drill holes were drilled vertically whilst 3 drill holes were drilled at a 60° angle (BBRC0011, 10EM004, 10EM005).</p> <p>All RC drilling was undertaken using an compressed air reverse circulation 140mm diameter face sampling hammer.</p> <p>10 metallurgical holes have also been previously drilled using PQ diamond methods.</p> <p>All AC drilling was completed with a X350 Aircore Drill rig mounted on a VD3000 Morooka track base with a 3 ½” drill string and a combination of blade and percussion hammer bits.</p>
Drill sample recovery	<p>Diamond hole samples were compared to the 1 metre assay samples of the reverse circulation drilling with no bias observed in the results.</p>
Logging	<p>All samples were visually checked and logged on site by rig geologist and records were kept regarding drill hole identification, sampling identification, and quick log summaries of lithotype.</p> <p>A small subsample was taken for each 1 metre interval and manually sieved into chip trays.</p> <p>Further detailed and complete per metre logging was undertaken in Perth post drilling using the chip trays.</p>
Sub-sampling techniques and sample preparation	<p>The material was split using a rig mounted splitter to produce a sample for submission of approximately 3-5 kg in a calico sample bag. The splitter was inspected at the end of each drill rod, and cleaned with compressed air as a standard routine.</p> <p>The initial two 2010 drill programs were sampled with a spear.</p> <p>All prior drill program composite samples were taken with a sample shovel from each 1 metre sample.</p> <p>The majority of RC samples were sampled via dry riffle splitter.</p> <p>All diamond Core samples were dried prior to sampling.</p> <p>All samples were dispatched to Nagrom, and SGS Laboratories located in Perth, Western Australia.</p> <p>XRF sample material is dried in an oven at 105°C. A sample disk is then produced using 0.8 grams of dried sample with 8 grams of 12:22 lithium tetra borate and metaborate flux containing 5% lithium nitrate. The flux and sample are mixed and heated to 1000°C in platinum crucible for 15 minutes. The resulting borate-glass melt is poured into a platinum mould to for a fusion disk. The disk is then analysed by a Panaytical Axios XRF to determine element concentrations in the sample</p> <p>Loss on ignition (LOI) analysis utilised a dried sample that is heated to 1000-1200°C for four hours. The mass loss due to heating is determined using an electronic balance capable of weighing to +/- 0.0001 grams.</p> <p>Quality control was maintained by the sizing analysis of the laboratories crushing and pulverising being monitored daily. There has been no issues regarding particle sizing thus far.</p> <p>Analysis of the QA/QC data has shown relatively good correlation between the primary and duplicate samples, with no sample bias present.</p> <p>All samples were collected at 1m intervals down hole. RC samples were split down to a final sample of approximately 2-3 kg. This follows industry standard and has been deemed suitable for this resource estimation.</p>

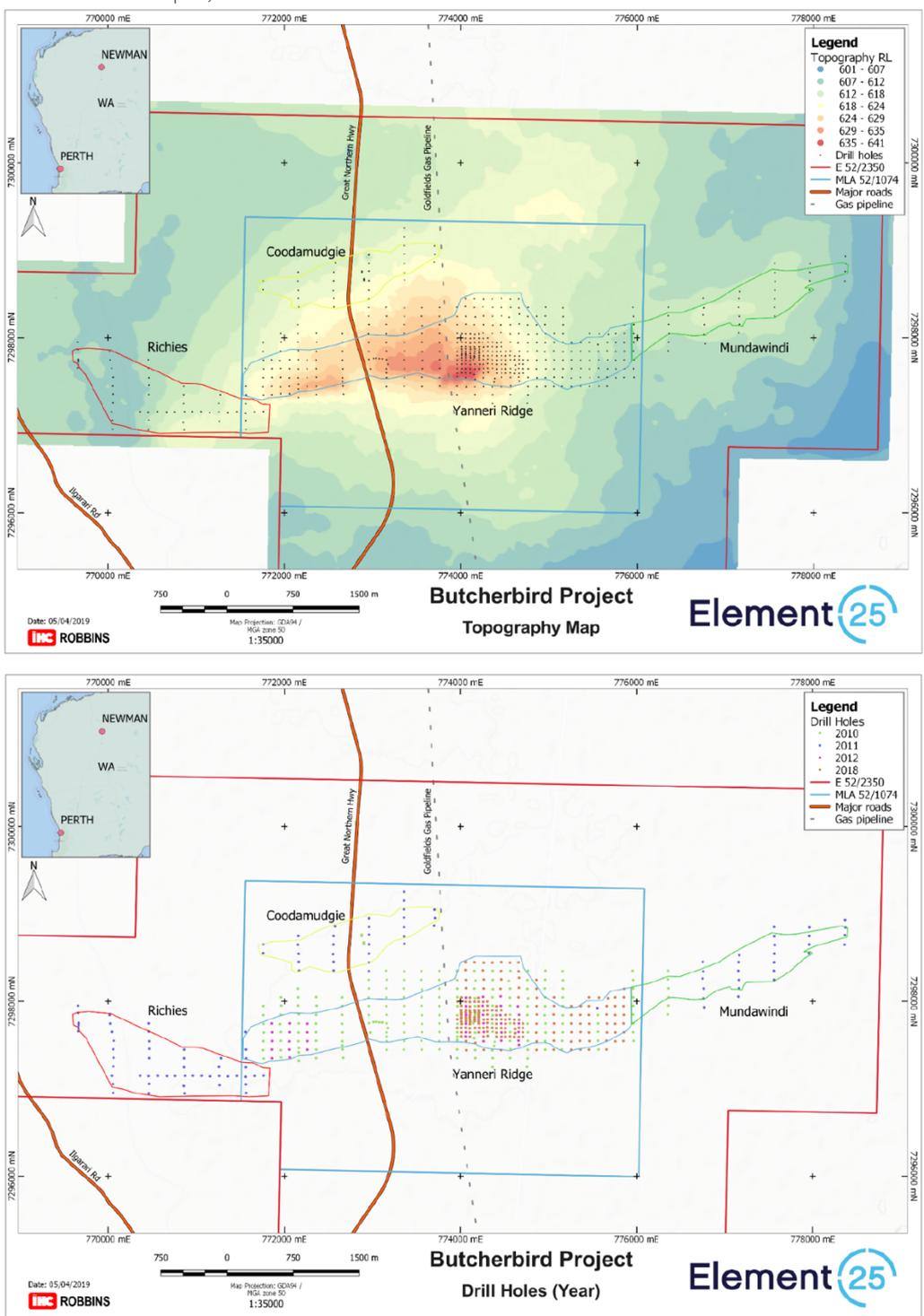
<p>Quality of assay data and laboratory tests</p>	<p>All samples were at Nagrom and SGS Laboratories in Perth, Western Australia utilising XRF analysis which is considered industry standard for manganese ore.</p> <p>Elements assayed using XRF analysis include:</p> <p>Mn, Fe, Al, Ca, Cr, P, Si, Ba, K, Mg, Na, S, Ti, Cu, Pb, Zn. LOI was also recorded.</p> <p>Density values were obtained from down hole geophysical logging in the form of short spaced density ("SSD") values. These density values were incorporated into the model using the nearest neighbour method. The density values are classified as dry densities, with a calibration undertaken for moisture correction for this resource estimate.</p> <p>The SSD down hole readings were recorded as 0.2 cm intervals which were composited to 1 m intervals within Studio RM.</p> <p>Quality assurance was conducted using approximately 1 duplicate collected every 40 samples. The duplicate samples and standard reference material were analysed at Nagrom and SGS Laboratories using like analysis methods.</p> <p>Duplicate samples achieved acceptable correlation with no sample bias.</p> <p>Sample analysis is routinely checked via testing carried out by other certified laboratories, with no bias or analytical issues detected to date.</p>
<p>Verification of sampling and assaying</p>	<p>Assay data was compared with geology logs for out of range assay produced by site geologist.</p> <p>Validation of the drill database was undertaken independently by IHC Robbins.</p> <p>Twin drilling has shown no significant bias between drill techniques where sample recovery is greater than 50%</p> <p>All data is logged digitally into Excel data entry templates. The data is then checked by a Data Manager using standard routines and input into the companies geological master database</p> <p>Assay data is supplied in csv format from the laboratory and then entered into the master database</p>
<p>Location of data points</p>	<p>All drill holes within the resource area were surveyed using DGPS.</p> <p>A new topographic surface was then created in 2019 utilising the adjusted topographic contours from the 2015 aero mag survey, drill hole collar DGPS locations, and the survey point pickups from the recent 2018 drill program.</p> <p>Grid system used throughout the program UTM Grid, Zone 50, GDA 94</p> <p>IHC Robbins deemed all drill collar positions within the resource area as satisfactory, matching the topographic surface RL to an acceptable accuracy.</p>
<p>Data spacing and distribution</p>	<p>The majority of drilling during the 2010 program was completed using 20 longitudinal lines and 1 latitudinal line with a primary focus on the Yanneri Ridge deposit. Drilling was completed using 200 x 100 metre grid spacing with some wider spaced drill lines completed at the eastern and western extents using 400 x 100 metre grid spacing.</p> <p>The 2011 program consisted of 19 longitudinal lines and 1 latitudinal line. The 2011 drilling focused on the Coodamudgie deposit to the north, the Richies deposit in the west, and the Mundawindi deposit to the east. Drilling was conducted using wide spaced 400 x 100 metre spacing to define the extents of the three individual deposits.</p> <p>The 2012 drilling consisted of 7 longitudinal lines at 200 x 100 metre grid spacing to further infill the 2010 drill lines within the extents of the Yanneri Ridge resource area.</p> <p>The 2018 drill program utilised an assortment of grid spacing in the eastern extents of the Yanneri Ridge deposit. 25 x 25 metre and 50 x 50 metre spacing were utilised to increase confidence regarding mineralisation continuity in the target area which then further stepped out to 100 x 100 metre and 200 x 100 metre spacing moving outward.</p> <p>Sample compositing has been applied within domains exhibiting low levels of mineralisation/importance.</p>
<p>Orientation of data in relation to geological structure</p>	<p>Drill lines were drilled north-south, perpendicular to the primary east-west mineralisation trend.</p> <p>The mineralisation is relatively flat lying dipping between 5 and 7 degrees to the north, north east.</p> <p>No bias to drill grid sampling has been introduced</p>
<p>Sample security</p>	<p>All samples were placed into pre-numbered polyweave sample bags.</p> <p>The samples were delivered to the laboratory via a courier company to the laboratory in Perth, sealed with cable ties and connote.</p>

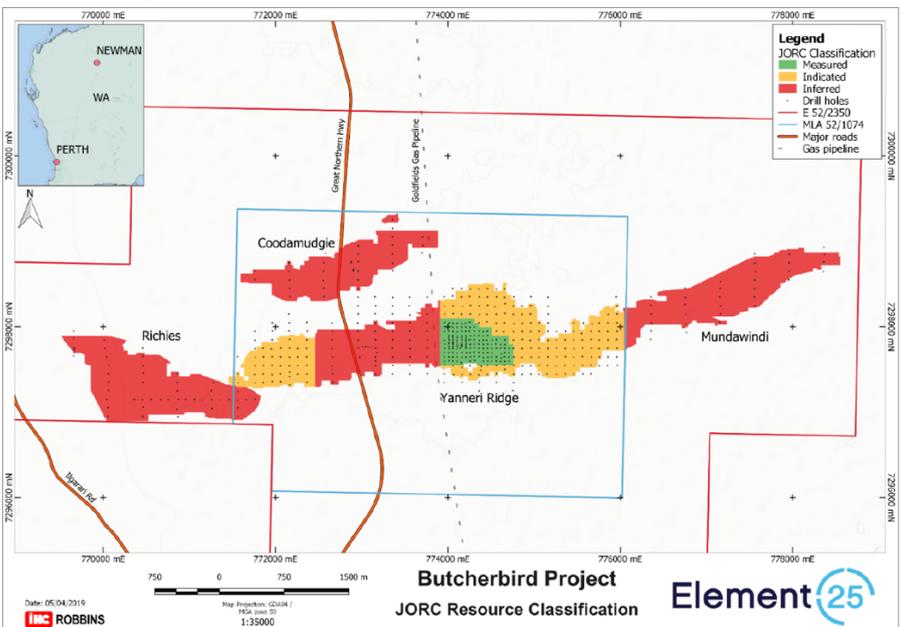
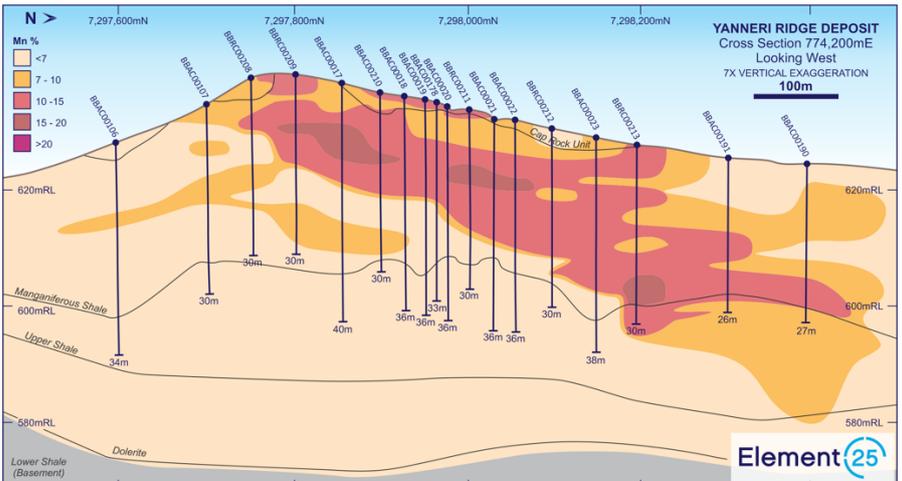
Audits or reviews	<p>Audits and reviews of the sampling data and techniques have been carried out by:</p> <ul style="list-style-type: none"> • Snowden, 2011 • Extomine, 2017 • IHC Robbins, 2019 <p>All review and audits considered the sampling and analysis to be of good quality and suitable for resource estimation.</p>
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Section 2 Reporting of Exploration Results

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

Criteria	Comment
Mineral tenement and land tenure status	<p>The Butcherbird Project is 100% owned by Element 25 and is located wholly within granted Exploration Licences E52/2350 and E52/3606. See Figures 1 & 2.</p> <p>The tenement package also includes miscellaneous tenements for water exploration. A mining lease application M52/1074 is pending. Miscellaneous licences have been applied for covering potential borefield areas L52/115 - L52/118.</p>
Exploration done by other parties	<ul style="list-style-type: none"> • Previous exploration has been undertaken by various parties with the corresponding reported data being captured and retained in the current active database. • Methods of exploration and the associated techniques have been deemed appropriate for the nature of the deposit.
Geology	<p>The Yanneri deposit is a stratiform sedimentary manganese deposit hosted within the Ilgarari Formation which is mostly flat lying with some occurrence of gentle folding.</p> <p>The manganese mineralisation occurs within three primary ore zones;</p> <ul style="list-style-type: none"> • High grade manganiferous cap • Supergene enriched manganiferous laterite • Basal shale
Data aggregation methods	<p>Exploration results are not being reported at this time</p> <p>No metal equivalent values were used</p> <p>No aggregation of short length samples was used as samples were consistently sampled at 1. Material outside the mineralised areas were sometimes composited to > 1 metre intervals.</p>
Relationship between mineralisation widths and intercept lengths	<p>The deposit is relatively flat lying and intersected mostly by vertical holes with the exception of two angled holes (10EM004, 10EM005).</p> <p>The 6% Mn cut-off zone was compiled on a weighted down hole average. The mineralisation within the Butcherbird Project is primarily strata bound with an approximate 80 degree strike, dipping at 7 degrees to the north.</p>

Criteria	Comment
<p>Drill hole information</p>	<p>See drill hole location plan;</p>  <p>Exploration Results are not being reported at this time as the announcement covers a Mining Reserve Estimate.</p>

Criteria	Comment
Diagrams	<p>Plan of Mineral Resources:</p>  <p>Geological cross section</p> 
Balanced reporting	Exploration results are not being reported at this time
Other substantive exploration data	Exploration results are not being reported at this time
Further work	The next steps are further engineering on optimising the process design for the beneficiation of the ore to produce a higher grade concentrate.

Section 3 - Estimation and Reporting of Mineral Resources

Criteria	Comment
Database integrity	<p>The original drill data derived by Element 25 drill data have been independently reviewed and validated by IHC Robbins. Data review included:</p> <ul style="list-style-type: none"> • Checks of data by visually inspecting on screen (to identify translation of samples) • Validation of reported assay data against field value estimates • Cross checking lithology log interpretation with target mineralisation species • Visual and statistical comparison was undertaken to check the validity of results <p>An Access database is updated and maintained by Element 25, which has not been reviewed by IHC Robbins although all of the outputs have been forensically examined for correlation and correctness.</p> <p>Validation checks of the drill database include:</p> <ul style="list-style-type: none"> • Assay comparison for out of range values • Sample gaps • Overlapping sample intervals <p>Collar coordinate verification to the topographic digital terrain model</p>
Site visits	<p>A site visit was undertaken in 2019 by Greg Jones, the Competent Person for IHC Robbins. The 2019 site visit included inspection of drill rig, drill samples, core trays, and core rejects. All other accompanying exploration methodologies and tasks were checked for their validity</p> <p>The site visit carried out by Greg Jones deemed the exploration program to be satisfactory</p>
Geological interpretation	<p>The previous geological interpretation for the Yanneri deposit was undertaken by Element 25 and the data was used by IHC Robbins which was validated using all logging data, sampling data, and observations. The geological domaining undertaken by Element 25 was deemed satisfactory. Updates to the mineralisation envelopes were undertaken by IHC Robbins to improve volume, grade, and tonnage.</p> <p>Current data spacing and quality is sufficient to indicate grade continuity for the target mineralisation envelopes.</p> <p>Interpretation of modelling domains was restricted to the use of Mn %, and lithological logging (including colour changes)</p> <p>There is a high degree of confidence in the geological interpretation and of the enclosed mineralised envelopes.</p> <p>Grade trends have been used with cross-sectional data and variography analysis to define search ellipsoid orientation and size in populating the resource model.</p>
Dimensions	<p>The extent of the Butcherbird Project area encompassing the four deposits (Coodamudgie, Mundawindi, Richies, and Yanneri) extends from approximately 769500E to 778800E, and 729700N to 7299500N</p> <p>The average thickness of mineralisation is approximately 5 metres with an average width of 18 metres</p> <p>A type section of mineralogy by drill line is displayed in Diagrams above</p>
Estimation and modelling techniques	<p>CAE mining software Datamine Studio RM was used to estimate the mineral resource.</p> <p>Inverse distance weighting techniques were used to interpolate assay grades from drill hole samples into the block model and nearest neighbour techniques were used to interpolate density values into the block model.</p> <p>The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed for the use of inverse distance methodologies as no de-clustering of samples was required. Inverse distance was compared to ordinary kriging estimates, however the results of the inverse distance estimates were deemed superior.</p> <p>Appropriate and industry standard search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. An inverse distance weighting of three was used so as not to over smooth the grade interpolations.</p> <p>Hard domain boundaries were used and these were defined by the geological wireframes that were interpreted. DTM surfaces were used for the geological zones (ZONE) whilst enclosed wireframes were developed for the mineralogical zones (MZONE)</p>

Criteria	Comment
	<p>A topographic surface was created from aero mag survey in 2015 with adjustments and corrections made in 2019</p> <p>Resource was modelled to key geological and mineralogical boundaries and then reported at cut-off grades of 6% Mn (no minimum thickness)</p> <p>The average parent cell size used for the interpolation was approximately half the standard drill hole width and a half of the standard drill hole section line spacing</p> <p>The average drill hole spacing for the Yanneri deposit was 100 m east-west and 100 m north-south and with a 1 m samples and so the selected parent cell size was 50 x 50 x 1 m (where the Z or vertical direction of the cell was nominated as the same distance as the sample length)</p> <p>Two Mineral Resource Estimates have been undertaken previously; Snowden 2011, and Extomine 2017. The current resource model has been reviewed against these previous estimates</p> <p>No assumptions have been made regarding recovery of by-products</p> <p>No deleterious elements or non-grade variables are present.</p> <p>Grade cutting or capping was not used for assays during the interpolation because of the regular nature of sample spacing.</p> <p>Density values were top and bottom capped at 3.7 and 1.4 gcm⁻³ respectively.</p> <p>Sample distributions were reviewed and no extreme outliers were identified either high or low that necessitated any grade cutting or capping.</p> <p>Validation of grade interpolations were carried out visually in CAE Studio (Datamine) software by loading model and drill hole files and annotating and colouring and using filtering to check for the appropriateness of interpolations.</p> <p>Statistical distributions were prepared for model zones from drill hole and model files to compare the effectiveness of the interpolation.</p> <p>Along strike distributions of section line averages (swath plots) for drill holes and models were also prepared for comparison purposes.</p>
<p>Moisture</p>	<p>Tonnages were estimated an assumed dry basis. No account or current test work has been completed to determine moisture.</p>
<p>Cut-off parameters</p>	<p>Cut-off grade of 7% Mn was used for reporting the Mineral Resource estimate. No top or bottom cuts were used for grade interpolation.</p>
<p>Mining factors or assumptions</p>	<p>Element 25 is reviewing the potential of mining using conventional hydraulic excavator and diesel truck systems. The majority of the manganese mineralisation is expected to be mined as free dig material that may require local ripping in areas that are tight.</p> <p>The mineralised deposit is strata bound oxide material approximately 20 metres thick.</p>
<p>Metallurgical factors or assumptions</p>	<p>Detailed metallurgical test work previously has demonstrated that the manganese mineralisation is easily upgradable to a low-grade product with the following typical process;</p> <ul style="list-style-type: none"> • Scrubbing • Wet screening • Two stage gravity separation <p>Scrubber energy requirement and whole ore scrubbing testwork was completed on nominally 64 mm diameter diamond drill core pieces, crushed to minus 50 mm.</p> <p>Scrubbing test work was performed in a 950 mm diameter (inside liners), 165 mm long laboratory rotary drum scrubber. The initial ore charge was of approximately 10 kg and the solids concentration of 27% by volume. The scrubbing was performed at 65 % of critical speed.</p> <p>Scrubbing time required at nominally 65 % of scrubber critical speed and at 27% solids concentration by volume was determined by running the scrubber for durations of 30, 60, 120, 180 and 240 seconds and removing the minus 0.5 mm size fraction at each interval. The test work confirmed that a scrubbing duration of 150 seconds is optimal</p>

Criteria	Comment
	<p>The lower grade produced from this process would be sold at a discounted price dictated by the manganese product grade.</p> <p>Studies have indicated that the lower grade product can be upgraded to a premium saleable product with hydro-metallurgical processing. Testwork is ongoing.</p>
Environmental factors or assumptions	<p>Environmental studies for both Terrestrial Fauna and Flora have been completed for Prefeasibility studies.</p> <p>No environmental concerns or issues were identified during this study.</p>
Bulk density	<p>Specific gravity (SG) was determined by completing down hole gamma logs of 165 drill holes at 2cm intervals.</p> <p>The density recorded is a dry density down hole, with a calibration for moisture.</p>
Classification	<p>The resource classification for the Butcherbird Project was based on the following criteria: drill hole spacing and the metallurgical testwork carried out on the manganiferous shale.</p> <p>The classification of the Measured, Indicated, and Inferred Resources was supported by the geological understanding, continuity of mineralisation, confidence in the drill hole data and the variography analysis for each domain.</p> <p>As a Competent Person, IHC Robbins Geological Services Manager Greg Jones considers that the result appropriately reflects a reasonable view of the deposit categorisation.</p>
Audits or reviews.	<p>There has been no audits or reviews on this mineral resource. This is an updated resource from the resource estimate carried out by Extomine 2017, which upgraded the Snowden 2011 resource estimate from JORC 2004 to JORC 2012.</p>
Discussion of relative accuracy/ confidence	<p>No statistical or geo-statistical review of the accuracy of the resource estimate has been undertaken.</p> <p>Variography was undertaken to determine the drill hole support of the selected JORC classification.</p> <p>Validation of the model vs drill hole grades by direct observation and comparison of the results on screen, swathe plot and population distribution analysis was favourable.</p> <p>The resource statement is a global estimate for the entire known extent of the Yanneri deposit within the Exploration Permit.</p> <p>There has been no production to date.</p>

Section 4 - Estimation and Reporting of Ore Reserves

Criteria	Comment
Mineral Resource estimate for conversion to Ore Reserves	<p>The Ore Reserve estimate has been based on Yanneri Ridge deposit, part of the Mineral Resource estimate announced to the ASX on 17 April 2019 (263Mt @ 10% Mn).</p> <p>The Mineral Resources for the deposit have been reported inclusive of the Ore Reserves estimated and stated here.</p>
Site visits	<p>The Competent Person conducted a Site visit in September 2018. The following activities were completed:</p> <ul style="list-style-type: none"> ● Acquired a general familiarisation with the site including likely mining conditions, proposed pit location, waste dump location, site topography, site drainage and site access. ● Assessed proposed locations of mining and processing plant related infrastructure sites relative to the designed open pit. ● Observed resource drilling activities. ● Inspected air-core samples and drill hole sites to get an understanding of the variations in weathering profiles across the deposit. ● Viewed air-core drill samples from selected holes.

Criteria	Comment
	<p>The Competent Person is familiar with the operation of mining and processing of manganese mineralisation and the logistics operations in the Pilbara region of Western Australia having operated a remote manganese exploration, mining, processing and logistics operation in Western Australia.</p>
<p>Study status</p>	<p>This Ore Reserve has been supported by the completion of a Pre-Feasibility level of study (PFS), as described in JORC (2012). The PFS was completed in May 2020 and determined a technical and economical viable outcome for the Project.</p> <p>The PFS mine plan supporting the Ore Reserve is based upon a mine plan and mine designs that are deemed technically achievable, involving the application of conventional technology.</p> <p>The mine plan has been tested for economic viability using input costs, metallurgical recovery and expected long term metal price, after due allowances for payabilities and royalties. Financial modelling completed as part of the Prefeasibility Study and Ore Reserve shows that the Project is economically viable under current assumptions.</p>
<p>Cut-off parameters</p>	<p>The break-even cut-off used in the Ore Reserve estimate was a Net Cash Flow based cut-off calculation, taking into account site processing cost (with the inclusion of General Admin, sustaining capital, corporate overhead and mine rehabilitation fund) together with estimates for manganese sales prices at the time of the calculation.</p> <p>Mining recovery and dilution are accounted for in the modifying factors and calculation of Net Cash Flow values in the Resource model, metallurgical recoveries are calculated outside the Resource model.</p>
<p>Mining factors or assumptions</p>	<p>The Mineral Resource model was regularised to Selective Mining Unit (SMU) blocks of 10m E x 5m N x 1m RL to generate a diluted Mining model for mine planning tasks of pit optimisation and evaluation. The SMU block reflects expected mining equipment size, the geometry of the geology and anticipated ore losses. Mining dilution and ore loss were applied through regularisation of the resource model. The overall effect was 5% dilution and 5% ore loss applied to the mining model used for mine planning.</p> <p>The Project only considers the Yanneri Ridge deposit. The deposit is near surface and is outcropping. It is most suitable to be mined by open pit mining methods utilising conventional mining equipment.</p> <p>Underground mining was not assessed.</p> <p>Final pit and interim stage designs were completed as part of the PFS. The final pit design is the basis of the Ore Reserve estimate.</p> <p>The resource model was optimised using the Lerchs-Grossman (LG) algorithm with industry standard software. Nested pit shells were generated and tested with sensitivities on mining cost, processing cost, metal price, recoveries, and slope angles forming the basis of the optimal pit shell for the Yanneri Ridge deposit. Interim pit shells provided guidance for pit stages to maximise value and achieve operational design requirements.</p> <p>The resultant pit shells were used to develop detailed pit designs with due consideration of geotechnical slope parameters, minimum mining widths, bench heights, and ramp widths suitable for proposed mining equipment. These pit designs were used as the basis for production scheduling and economic evaluation.</p> <p>A minimum mining width of 50m was applied to the final and stage pit designs.</p> <p>The mining schedule is based on realistic mining productivity and equipment utilisation estimates, and considered the pit development requirements, the selected mining fleet productivity and the vertical rate of mining development. Staged pit designs along with the stockpiling strategy were applied to ensure a continuous supply of ore whilst deferring waste mining for as long as practically possible.</p> <p>The mining schedule is based on supplying suitable material to the processing plant with a nameplate capacity of 1.2Mtpa.</p> <p>The mine was assumed it will be contractor operated during the life of mine. The pre-strip was scheduled in the initial two-month pre-processing commissioning for waste stripping of the Yanneri Ridge pit aiming to have approximately 50,000t ore stockpiled ready for reclamation on day one of commissioning.</p> <p>In the estimation of the Ore Reserve, Inferred Mineral Resources were excluded from pit optimisation, mine schedules and economic valuations utilised to validate the economic viability of the Ore Reserves. The Ore Reserve is technically achievable and economically viable without the inclusion of the Inferred Resource.</p> <p>Waste material from mining activities will be disposed of as follows:</p> <ul style="list-style-type: none"> ● Topsoil will be disposed of at designated stockpiles for application in on-going rehabilitation activities; ● Some waste rock may be utilised to construct the Run of Mine (ROM) pad;

Criteria	Comment
	<ul style="list-style-type: none"> Some waste rock may be utilised to construct on-going Tailings Storage Facility (TSF) lifts; Excess waste rock will be disposed of in designated engineered surface and In-pit waste dumps <p>Discussion with potential manganese customers is well advanced and will progress during the next study stage.</p> <p>Geotechnical modelling was completed based on field logging and laboratory testing of selected diamond drill core samples from a total of fifteen (15) diamond cored boreholes within the pit shell.</p> <p>The geotechnical slope design parameters used were based on work completed by Peter O'Bryan and Associates Pty Ltd. The open pit designs were based on the recommended geotechnical design parameters and assume dry slopes based on the assumption of adequate dewatering and/or depressurisation ahead of mining. Mining is planned to be above the water table for over 20 years.</p>
<p>Metallurgical factors or assumptions</p>	<p>The Project process facility has been designed to process 1.2Mtpa of manganese oxide ore. The plants design is based upon 24 hours per day seven days per week at a nominal throughput of 183 dry tonnes per hour, with the plant availability of 75% or 6,570 hours per year which is driven by the jaw crusher availability. The processing facility utilises recognised technology for oxide ore processing circuits and follows a processing route of:</p> <ul style="list-style-type: none"> Crushing Screening Scrubbing Screening Ore Sorting Tailings storage. <p>Metallurgical assumptions are based on recent metallurgical test work as part of the ongoing studies. All ore at Yanneri Ridge is oxide ore.</p> <p>The metallurgical recoveries used for oxide ores is 82%.</p> <p>Metallurgical factors and assumptions for this prefeasibility study are based on the test work done completed by ALS Metallurgical laboratories as well as Steinhert Australia.</p> <p>This work indicates that a product grade of 33%Mn will be achieved at a metal recovery of 82%.</p> <p>These assumptions are based on test work completed on multiple 1 tonne bulk samples with a total of 24 tonnes of ore being processed through the initial stages.</p> <p>At this scale it is more than a lab test and can be considered small scale pilot plant test work so there is a high degree of expectation that this will be repeated during operations.</p>
<p>Environmental</p>	<p>Base case environmental surveys have been completed.</p> <p>The base case approvals timeline includes a Public Environmental Review assessment process, as the Project is unlikely to have a significant impact on troglofauna and stygofauna.</p> <p>It is assumed that further studies will demonstrate that habitat for the restricted species may occur outside of the zone of impact. The assessment of environmental risks and mitigation strategies is based on approaches used for comparable projects that have been assessed by the Environmental Protection Authority.</p> <p>Waste rock is typically not sulphidic and hence not acid forming. As such the waste does not need any special management.</p> <p>Tails are benign and essentially just fines with much of the manganese removed. These will be stored in a tails storage facility that are built using waste rock and course tailings as needed.</p> <p>Environmental and social impact assessment has been completed for the Project with no adverse findings.</p> <p>A mining proposal, mine closure plan and clearing permit are presently being written and will be lodged with and assessed by DMIRS in Q3 2020.</p>
<p>Infrastructure</p>	<p>The Project is a greenfield site with no infrastructure. Infrastructure will be required to support mining activities.</p> <p>The following infrastructure has been designed, scheduled and costed as part of the Pre-Feasibility Study:</p> <ul style="list-style-type: none"> Site Access –will be via the Great Northern Highway to the Project and then via a new road approximately 1km to site. The new access road is feasible. Application has been made to both

Criteria	Comment
	<p>Main Roads and APA Ltd for highway access and pipeline crossings respectively.</p> <ul style="list-style-type: none"> • Site Development and Infrastructure including clearing, levelling and bulk earthworks, access roads linking the various operational centres (Mine, Process Plant, Administration etc.), drainage and surface runoff, fencing and establishment of security zones. • A nominal 650kW base case principal power supply is proposed utilising a diesel generating solution. • Water Supply – water for construction, mining, processing the ore and other site activities will be sourced from groundwater in the east of the mining licence area. Drilling and testing have indicated the feasibility of the source. Additional drilling and testing will be required to confirm the adequacy of the groundwater supplies. Miscellaneous licences and Bore Construction permits have been made to the relevant authorities • Ore stockpiling and ROM pad reclaiming. • Primary Crushing, Scrubbing, Screening and Ore sorting facilities. • Purpose built site laboratory for plant and mining control • Tailings disposal. A preliminary design for a paddock style Tailings Storage Facility (TSF) has been developed and shown to be feasible. An upstream raised embankment with provision for progressive downstream rock buttressing has been selected and designed based on the process tailings deposition rate of 0.24Mtpa. Tailings characterisation test work is complete. Further geotechnical investigation is scheduled to confirm the final TSF design. • Communications – includes all onsite communications systems and infrastructure and also the connection to the national communications network offsite via satellite link. • Onsite Services – including reticulation of power and water around the operational centres, provision of lighting, sewage and wastewater services, fire, compressed air, dust suppression systems, waste disposal, bulk fuel receipt, storage and distribution. • Buildings – including the provision administration, workshops, warehousing and any other non-process or mining structures. • Semi-mobile Plant, Mobile Equipment and Vehicles – including all other infrastructure systems and plant required for enabling site operations but not covered elsewhere in the Pre-Feasibility Study. <p>The following infrastructure has been specifically excluded as part of the Pre-Feasibility Study:</p> <ul style="list-style-type: none"> • The site will not build a mining camp, but will utilise nearby established local facilities for accommodation. • The site will not have an aerodrome but will utilise the airport at Newman, approximately 120km north of the Project.
<p>Costs</p>	<p>MINING COSTS</p> <p>Mining operating costs were sourced from Mining Contractors for the proposed mining operation. The costs were budget level quotes based on preliminary mine design and mining schedules.</p> <p>The mine was assumed to be contractor operated during the life of mine. Mining ancillary costs and management were estimated from first principals.</p> <p>PROCESSING AND INFRASTRUCTURE CAPITAL COSTS</p> <p>The processing plant, borefield, access roads and associated infrastructure capital estimate was estimated as follows:</p> <ul style="list-style-type: none"> • The construction capital cost estimate was compiled based on a Process Flow Diagram which was developed from the test work programs described above. Design criteria and detailed designs were completed. Budget level quotations were sourced from OEM's and other suppliers based on these detailed design and design criteria. • The estimated accuracy is considered -20% / +20% as a large component of the capital estimate was made using OEM quotes. • All pricing in the capital estimate has been aligned with or obtained in the 2nd quarter of 2020 (2Q20) <p>PROCESSING and INFRASTRUCTURE OPERATING COSTS</p> <p>Processing and site administration operating costs were developed from first principals.</p> <p>Underlying assumptions were as follows:</p> <ul style="list-style-type: none"> • The processing plant and major infrastructure would be purchased by Element 25 as described previously • An organisation chart was developed to include managements staff and process plant and site admin personnel.

Criteria	Comment
	<ul style="list-style-type: none"> • Staff and wages salaries were sourced from industry recruitment agencies • Power costs were sourced based on the hire of suitable diesel generating units, which were sized in the process plant capital calculations. • Diesel usage for the portable crusher and screens, diesel generating units and vehicles was based on assumptions as to diesel usage sourced from suppliers. • Mobile plant and light vehicles will be hired and hire rates were sourced from suppliers • Maintenance spares were allowed for at 4% of capital costs per annum. • Other miscellaneous site operating costs were sourced from remote mine sites of a similar scale to the proposed Project mine site. <p>CONCENTRATE TRANSPORT AND PORT CHARGES</p> <p>Concentrate transport costs were sourced from quotations from suitable industry transport groups.</p> <p>Element 25 has been in discussions with both Pilbara Ports and Qube Ltd, the operators of the Utah Point facility, about the use of Utah Point at Port Hedland as an ore stockpiling and shipping destination. Port charges were sourced from these suppliers.</p> <p>SUSTAINING CAPEX</p> <p>Two items of sustaining capital were allowed for:</p> <ul style="list-style-type: none"> • Great Northern Highway (GNH) Underpass – An allowance of \$10M was made in years 7 & 8 for a tunnel to access the west Yanneri Ridge . This will allow ore mined at West Yanneri Ridge to be mine and crushed at the pit. The crushed ore would then be conveyed back to the processing facility via a conveyor, through a tunnel under the GNH to the processing facility. This will minimise ore haulage and issues associated with crossing the GNH. This is an allowance only. • Site Rehabilitation – An allowance of \$10M was made at the end of the mine life for rehabilitation of the mine site. • Miscellaneous and ongoing small capital purchasers are included in the operating maintenance costs allowance.
<p>Revenue factors</p>	<p>No factors were applied in the application of the metal prices stated in the above sections.</p> <p>As shown in the PFS the head grade determines the process cost based on the need to produce the target shipping grade of 33% Mn.</p> <p>Mining dilution and recoveries were taken into account as modelled/discussed elsewhere in this statement and as such no further factors were considered appropriate and were therefore not applied.</p> <p>The price used for 33% Mn product CIF ChinaUS\$4.76/dmtu (dry metric tonne unit).</p> <p>This is a dry tonne and a 2% allowance is made for moisture.</p>
<p>Market assessment</p>	<p>The global manganese market is strong but it is recognised that lower grade mining operations are the first to suffer if there is a downturn in manganese price.</p> <p>The existing medium grade manganese market (30%< Mn <35%) is the largest growth segment of the manganese ore market. It is growing in overall volume terms but it is further supported as higher grade mines are depleted and replaced with medium grade manganese ores. The medium grade manganese market is currently greater than 9M tpa and growing at in excess of 15% per annum over the past 3 years.</p> <p>Element 25 is in advanced discussions with manganese traders and other potential offtake partners and as such E25 remain positive about selling the targeted volumes into the manganese market.</p>
<p>Economic</p>	<p>A financial model was developed to allow assessment of the economics of the proposed operation. Inputs into the financial model were:</p> <ul style="list-style-type: none"> • Mine production schedule, incorporating ore loss and mining dilution. • Mine operating costs, process operating costs and general and administrative costs as stated above. • Process recovery and performance criteria. • Ore Concentrate transport and port charges. • Manganese revenue based on a 33% manganese product grade as stated above. • Applicable royalties, taxes and duties per the mining code of Western Australia

Criteria	Comment
	<ul style="list-style-type: none"> • Native Title and Farmer access payments in line with the various agreements. • Discount rate of 8% <p>The Project's sensitivity to various inputs were also investigated. The Project is most sensitive to manganese price, exchange rate and product grade whilst head grade is also important since processing costs are a function of head grade. Mine Scheduling has been carried out to allow early access to higher grade manganese ores, bringing forward cashflow and hence minimising risk.</p>
<p>Social</p>	<p>The Butcherbird project is located on two pastoral stations. The Company has an access agreements in place with one pastoral station and the access agreement for the second pastoral station is agreed in principal, pending finalisation. These access agreements allow access to site and allow for the disturbance of the areas required for infrastructure and mining activities. Compensation for the station owners is built into the agreements.</p> <p>The Company has mining agreements in place with the two Native Title Groups whose lands the Project site covers. These mining agreements allow access to site and allow for the disturbance of the areas required for infrastructure and mining activities. Employment, training and compensation for the Native Title Groups are built into the agreements.</p> <p>Site personnel will be mostly contractor based overseen by a small Element 25 management team.</p> <p>The site will operate on a Fly In/Fly Out (FIFO) basis, utilizing Newman as a transport hub. Site rosters are yet to be determined.</p>
<p>Other</p>	<p>A program of work relating to tenement security, land access and regulatory approvals has been ongoing since early 2020 and is expected to conclude before the completion of the feasibility study.</p> <p>Other licence areas will be applied for as required through the Western Australia Department of Mines, Industry Regulation and Safety (DMIRS).</p> <p>To achieve state government approval to proceed with mining the Project will require the following approvals:</p> <ul style="list-style-type: none"> • Mining Proposal - DMIRS • Clearing permit - DWER • Mine Closure plan - DMIRS • Project Management Plan - DMIRS • Works Approval and Environmental Licence - DWER • Water Extraction Licence - DWER • Permission to Mine - DMIRS <p>Programmes of work to address the requirements of these approvals commenced in early 2020 and final submissions will be made in Q3 2020.</p> <p>The environmental and regulatory study program to date represent a thorough assessment of the proposed Project area in-line with Western Australian regulatory requirements. To date no material environmental or approvals risks have been identified and full approval under Part 5 of the Western Australian Environment Protection Act, and an approved Mining Proposal under the Mining Act is anticipated to be received before the final decision to proceed.</p> <p>The Project financial outcomes are mostly sensitive to the exchange rate. However, an increase of 20% exchange rate still results in the Project NPV remaining positive.</p> <p>Change in metal prices, exchange rate and to a lesser extent operating cost and pit design parameters in the pit optimisation, can either increase or decrease the pit size and associated ore reserve. Further refinement is expected during the next phase of the study.</p>
<p>Classification</p>	<p>The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Proved Ore Reserves have been derived from Measured Mineral Resources and all Probable Ore Reserves have been derived from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines.</p> <p>The Ore Reserve classification reflects the Competent Persons' view of the deposits.</p> <p>No Inferred Mineral Resource is included in the Ore Reserves.</p>

Criteria	Comment
<p>Audits or reviews</p>	<p>No external Audits or Reviews have been completed.</p> <p>The Proved and Probable Ore Reserve classification conforms to the requirements of the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, published by the Joint Ore Reserves Committee (JORC) of the Australasian Institute of Mining and Metallurgy (2012).</p> <p>Element 25 has used internal review extensively throughout the study as a risk mitigation process.</p>
<p>Discussion of relative accuracy/ confidence</p>	<p>The Ore Reserve estimate is based on 30% Proved and 70% Probable Reserves.</p> <p>In the opinion of the Competent Person, the Ore Reserve estimate is supported by appropriate design, scheduling, and costing work reported to a Pre-Feasibility Study level of detail. Cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. These are subject to further refinement in additional studies and may influence the accuracy of the Ore Reserve.</p> <p>Metal price and exchange rate assumptions were set out by Element 25 and are subject to market forces and therefore present an area of uncertainty.</p> <p>In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the Project timeframe.</p>

Competent Persons Statement

The information in this report that relates to Ore Reserves is based on and fairly represents information and supporting documentation compiled by Ian Huitson BEng (Min), FAusIMM, CP Min, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM Membership No. 103359).

Ian Huitson is an employee of Mining Solutions Pty Ltd and is consulting to Element 25 Limited. Ian Huitson is a shareholder of Element 25 Limited and is entitled to participate in the Element 25 Limited employee options plan.

Ian Huitson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken 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' (JORC 2012).

Ian Huitson consents to the inclusion in the report of the matters based on his information in the form and context in which they appear.

The Ore Reserve estimates have been compiled in accordance with the guidelines defined in the JORC Code.



Ian Huitson

Study manager

Element 25 Limited

This announcement is authorised for market release by Element 25 Limited's Board of Directors.

Disclaimer

The company confirms that in the case of estimates of Mineral Resources that the company is not aware of any new information or data that materially affects the information in the announcement dated April 17, 2019 and that all material assumptions and technical parameters underpinning the estimates in the market announcement continue to apply and have not materially changed.