OM HOLDINGS LIMITED

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ASX Market Announcements
ASX Limited
4th Floor
20 Bridge Street
SYDNEY NSW 2000

Dear Sir/Madam

BOOTU CREEK MINERAL RESOURCE AND ORE RESERVE UPDATE AS AT 31 DECEMBER 2017

The 100% owned Bootu Creek Manganese Mine is located approximately 110km north of Tennant Creek in the Northern Territory, Australia. Production was suspended in December 2015 due to a deterioration in global market conditions for manganese. In February 2017 mining activities re-commenced commensurate with improved market conditions and an outlook for manganese.

HIGHLIGHTS

- Bootu Creek Mineral Resource as at 31 December 2017 was 9.95 million tonnes at an average grade of 22.4 % Mn, a net reduction of 6.3 million tonnes after allowing for 4.2 million tonnes of ore processed through the Bootu Creek processing plant in 2015 and 2017 (throughout 2016 the mine was placed on care and maintenance due to market conditions and no mining or processing activities occurred).

- Bootu Creek Ore Reserve as at 31 December 2017 was 7.32 million tonnes at an average grade of 20.7% Mn, a net increase of 2.6 million tonnes after allowing for 4.2 million tonnes of ore processed through the Bootu Creek processing plant in 2015 and 2017.

- 74% conversion of the Mineral Resource estimate to Ore Reserves.

- Exploration drilling of several untested geophysical anomalies (GAIP) for Renner Springs and follow up of a prospect located to the northwest of Masai is planned for 2018.

Mineral Resource and Ore Reserve Bootu Creek Mineral Resource as at 31 December 2017

Bootu Creek	31 December 2017		31 December 2014		Change
	Million Tonnes	% Mn	Million Tonnes	% Mn	Million Tonnes
Mineral Resource	**9.95**	**22.4**	**20.44**	**22.3**	**-10.49**
Ore Reserve	**7.32**	**20.7**	**8.95**	**20.0**	**-1.63**

Table 1. Comparison of Mineral Resource and Ore Reserve for 31 December 2017 with 31 December 2014 (being the last published mineral resource and ore reserve estimates).

The Bootu Creek Mineral Resource and Ore Reserve estimates have been completed in accordance with the JORC Code (2012 edition).

Bootu Creek Mineral Resource as at 31 December 2017

Undiluted	Measured		Indicated		Inferred		Combined*	
Deposit:	Mt	%Mn	Mt	%Mn	Mt	%Mn	Mt	%Mn
Chugga Far North			2.18	22.62			**2.18**	**22.62**
Gogo	0.49	23.00	0.35	23.91			**0.84**	**23.38**
Masai	0.61	23.14	0.89	22.83			**1.50**	**22.83**
Shekuma	0.61	24.89	0.69	25.19			**1.30**	**25.05**
Tourag	0.85	22.76	0.70	21.75			**1.55**	**22.18**
Yaka			0.99	22.23			**0.99**	**22.23**
Renner West					0.28	22.26	**0.28**	**22.26**
Insitu Resource*	**2.55**	**23.40**	**5.80**	**22.87**	**0.28**	**22.26**	**8.64**	**22.96**
ROM Stocks	0.05	19.62					**0.05**	**19.62**
SPP Stocks	1.26	18.48					**1.26**	**18.48**
Total Resource*	**3.86**	**21.74**	**5.80**	**22.87**	**0.28**	**22.26**	**9.95**	**22.37**

**Rounding gives rise to unit discrepancies in this table*

Table 2. Bootu Creek Mineral Resource Estimate as at 31 December 2017.

A total of 4.2 million tonnes of ore was processed through the Bootu Creek processing plant during 2015 and 2017. During 2016 the mine did not operate as it was placed under care and maintenance. Other significant components contributing to the reduced 31 December 2017 Mineral Resource estimate included a reduction in the long-term FOB Darwin price used in the resource estimation, access being restricted to several pits due to backfilling and a shift from the previous regression-based yield formula to yield estimation based on an individual deposit or pit specific basis. Local lower yield estimation in conjunction with a lower FOB Darwin price, has resulted in the removal of the low grade and low yielding Foldnose and Zulu South deposits from the 31 December 2017 Mineral Resource estimate (-1.0 million tonnes).

A total of 3.5 million tonnes of ore was mined from Chugga South, Chugga North, Gogo, Shekuma, Tourag, Yaka deposits during 2015 and 2017, and a further 0.7 million tonnes was depleted from Run of Mine ("ROM") and Secondary Process Plant ("SPP") ore stockpiles.

The previous Chugga/Gogo deposit has now been subdivided into Gogo and Chugga Far North ("CFN") deposits. Chugga South and Chugga North pits are now mined out.

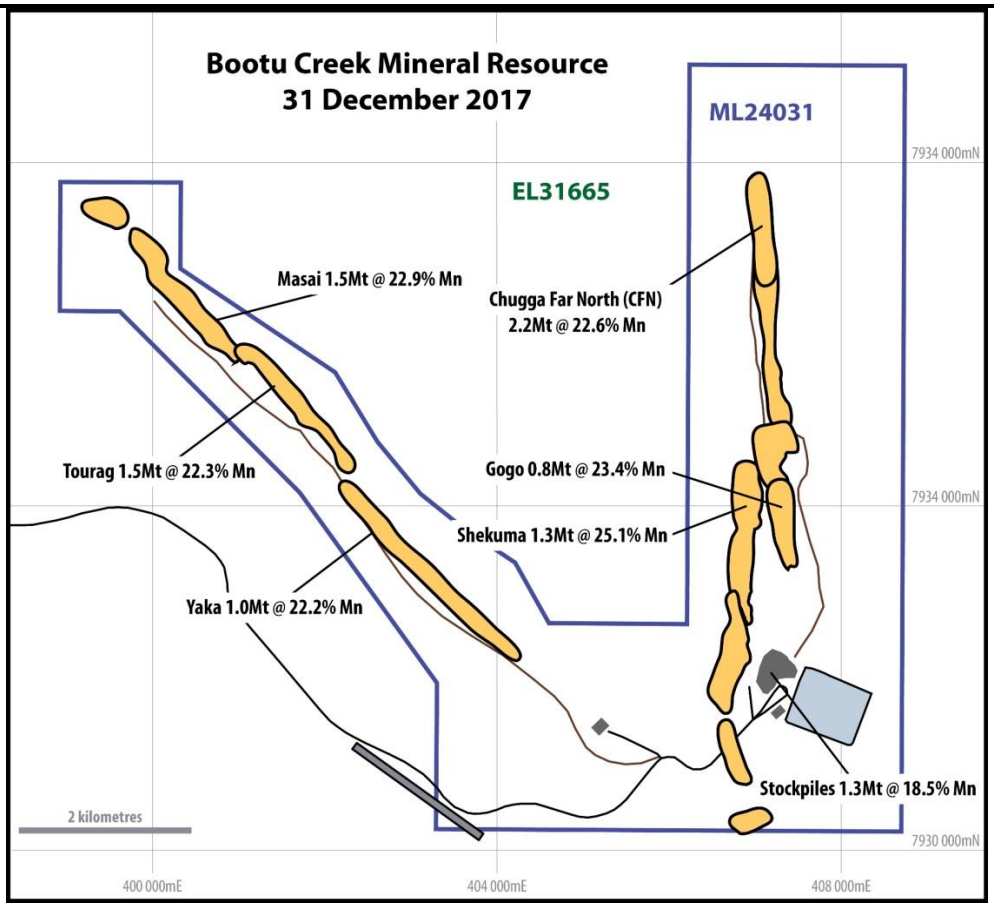


Figure 1. Bootu Creek Mineral Resource location plan as at 31 December 2017

Bootu Creek Ore Reserve as at 31 December 2017

Diluted	Proved		Probable		Combined*	
Deposit:	Mt	%Mn	Mt	%Mn	Mt	%Mn
Chugga Far North			1.42	20.78	**1.42**	**20.78**
Gogo	0.53	20.64	0.23	21.49	**0.76**	**20.90**
Masai	0.53	20.95	0.18	21.57	**0.71**	**21.11**
Shekuma	0.64	22.30	0.63	22.98	**1.27**	**22.78**
Tourag	0.48	20.51	0.77	20.58	**1.25**	**20.41**
Yaka			0.60	20.88	**0.60**	**20.88**
Insitu Reserve*	**2.17**	**21.18**	**3.84**	**21.20**	**6.01**	**21.19**
ROM Stocks	0.05	19.62			**0.05**	**19.62**
SPP Stocks	1.26	18.48			**1.26**	**18.48**
Total Resource*	**3.48**	**20.18**	**3.84**	**21.20**	**7.32**	**20.71**

**Rounding gives rise to unit discrepancies in this table*

Table 3. Bootu Creek Ore Reserve Estimate as at 31 December 2017

The 31 December 2017 Ore Reserve estimate was 7.32 million tonnes at an average diluted grade of 20.7% Mn, a decrease of 1.6 million tonnes when compared to the 31 December 2014 estimate. This effectively equates to a net increase of approximately 2.6 million tonnes after allowing for the 4.2 million tonnes of ore processed through the Bootu Creek processing plants in 2015 and 2017.

Significant changes in the 31 December 2017 Ore Reserve estimate included an increased FOB Darwin price used in the Ore Reserve estimation of US$4.80/dmtu (US$4.00/dmtu in Dec 2014) and an improved yield estimation for those deposits with a significant high-grade core. All Ore Reserve estimates are based on Life of Mine open pit designs. At the current annual production rate of 800,000 tonnes per annum, the ore reserve is expected to be depleted by mid-2021.

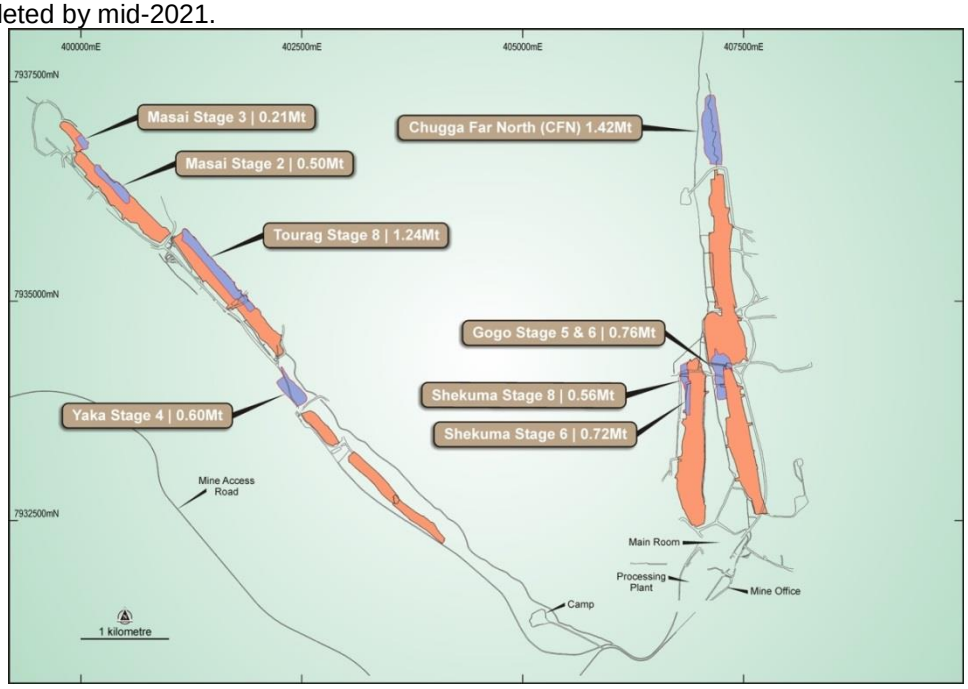


Figure 2. Bootu Creek Ore Reserve location plan as at 31 December 2017

2017 Exploration Program

There was no exploration drilling conducted in 2015 or 2016. Exploration in 2017 was limited to a small Reverse Circulation (RC) drill program consisting of 11 drill holes for 1,230 metres of resource delineation drilling testing the down dip resource potential of Gogo and Shekuma deposits, and a limited exploration program of 6 drill holes (306m) testing a shallow target located to the northwest of Masai deposit. Both programs were located on ML24031 and returned moderately encouraging results, but no significant increase in defined resources.

Exploration drilling of several untested geophysical anomalies (GAIP) for Renner Springs and follow up of a prospect located to the northwest of Masai is planned for 2018.

The information in this report which relates to Reporting of Exploration Results, Mineral Resources and Ore Reserves estimation is based on information compiled and checked by Mr Craig Reddell and Mr Carl Chambers, both employees of OM (Manganese) Ltd and both Members of the Australasian Institute of Mining and Metallurgy. Mr Reddell and Mr Chambers have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the JORC 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Reddell and Mr Chambers consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Yours faithfully
OM HOLDINGS LIMITED

Heng Siow Kwee/Julie Wolseley
Company Secretary

Summary Information Required by ASX Listing Rules 5.8.1 & 5.9.1

Mineral Resource estimation summary: The Bootu Creek manganese deposits are strata-bound, located at the contact between the underlying dolomite-siltstone Attack Creek Formation and the overlying ridge forming sandstone of the Bootu Formation in the Tomkinson Group, within the Ashburton Province of the Palaeozoic Tennant Creek Inlier. The mineralised manganese bearing sandstone horizon is folded around the gentle NNW plunging Bootu Syncline, can be traced for 24km and dips around 30^{o} towards the fold axis.

The manganese is considered hydrothermal in origin, locally retaining a relic stromatolite texture and is supergene enriched within a deeply weathered profile. The Bootu Creek manganese resource models have a combined strike length of 16 km, with deposit models ranging from 0.7 km to 2.9 km. Mineralisation widths vary from 3 m to 15 m and ore mineralogy consists predominately of Pyrolusite and Cryptomelane in a silica rich gangue within the supergene zone, above a Rhodochrosite and Braunite unweathered protore at depths of greater than 90m from surface.

All Bootu Creek resource models, other than Renner West, are located within Mineral Lease ML24031, located 120 km north of Tennant Creek, Northern Territory, Australia. The Renner West Inferred Mineral Resource is located on EL28041 and located 70 km NW of the Bootu Creek mine site. Both tenements are granted, 100% owned by OMM and have no security of tenure issues at the time of reporting.

Resources at Bootu Creek (BC) are predominantly sampled by vertical 5.5" face sampling Reverse Circulation (RC) drilling (91% of total drilled), HQ3 diamond (DD) drilling (2%) and open percussion (PC) drilling (7%), based on a nominal 50 m x 25 m spaced grid. Hole depths range from 5 m to 164 m and collar locations are picked up by Mine Surveyors using MGA94 co-ordinates. The 31 December 2017 BC resource dataset comprised 2,767 drill holes for 175,049 m and the Renner West (RW) dataset has 142 drill holes for 6,212 m. Only 11 new holes for 1,230m of resource delineation drilling have been added in 2017.

Sampling of RC holes is done on 1 metre downhole intervals and rotary split to produce approximately 3 kg samples. Intervals selected for analysis are generally limited to visible manganese mineralisation and adjacent host rock. Mineralised diamond core is quarter sawn to obtain 1 metre or geological intervals, with half core retained for density determination and metallurgical test work. All drill samples are crushed, dried and pulverised (total prep) to produce a sub sample for XRF analysis. Field quality control procedures involve the use of field duplicates, certified BC standards (at an insertion rate of approx. 1:130) and the use of a number of commercial laboratories for analysis.

The sample preparation of RC samples involved oven drying and full pulverisation before splitting off an XRF assay sub-sample. Diamond core assay samples are quarter sawn, jaw crushed and follow the same sample preparation technique. A pulp sub-sample is collected for analysis by XRF for the following elements: Mn, Fe, Al_2O_3, SiO_2, P, Pb, S, TiO_2, MgO, K_2O, BaO, CaO, Cu and Zn. LOI (loss on ignition) is assessed by thermo-gravimetric determination. Laboratory QAQC involves the use of internal laboratory standards using certified reference material, blanks, splits and replicates as part of the in-house procedures.

OMM (OM (Manganese) Ltd) developed 6 reference standards in 2007 and 2010 for a range of manganese grade values, using blends of Mn, Fe and quartz material. These were sent to 10 commercial laboratories with returned values in the +-2% range against of the mean value. BC standards are submitted with each assay batch and results monitored to maintain an independent check on laboratory assays.

There is a high degree of confidence in the geological interpretation of the Bootu Creek manganese deposits gained through extensive close spaced drill testing, a relatively planar strata-bound geological setting and several years of active mining at this mature mining operation. Ore mineralogy was determined by XRD analysis and optical petrology on selected drill core, RC chip and lump product (gravity concentrate) samples.

Resource models were digitised and wire-framed from updated interpreted geological and assay drill cross sections prepared by OMM. These wireframes were used to select resource drill intersections and composite data was extracted for Mn, Fe, SiO_2, Al_2O_3, BaO and P based on one metre sample increments. The nugget effect from variography represented only 20 - 30% of the total variability, suggesting low inherent random behaviour for the manganese mineralisation, and did not warrant grade capping.

The models were estimated using the Ordinary Kriging (OK) estimation technique with Surpac resource estimation software, and coded with attributes for material type, resource classification, model domain and against OMM survey pit pickups. Block Model Parent Cells are 25 m (Y) by 10 m (X) by 5 m (Z) and compare favourably with maximum drill spacing of 50 m by 25 m or 40 m by 20 m. The along strike search radius varied from 130 m in the shorter or faulted models through to 290 m for the highly continuous Chugga-Gogo. The number of samples was set at a minimum of 15 and a maximum of 32 for passes 1 & 2. Pass 3 used a minimum of 2 samples to fill model extents. Search ranges varied from 130 m up to 290 m in the deposits of up to 3 km strike length. The search ellipsoids were flattened disc shapes in the plane of the mineralisation with varying anisotropic ratios designed to model shallowly plunging manganese trends within the domains.

Current bulk density regression formulae are based on 366 waxed (or waxed equivalent) HQ3 core samples selected from 52 metallurgical composites distributed through all deposits included in the Ore Reserve. The bulk density measurements were determined in 2009 by Amdel (Perth) using the wet and dry methodology. Six density regressions were determined for Chugga/Gogo, Shekuma, Xhosa, Masai/Tourag, Yaka and Zulu deposits. Renner West uses the Yaka (most conservative) regression option.

The mineralised domains have demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Ore Reserves, and the classifications applied under the JORC Code (2012 edition). The nominal drill hole spacing of 50 m by 25 m was considered to provide adequate geological and grade continuity definition to assign an Indicated Mineral Resource classification to the majority of the deposits at Bootu Creek. Measured Mineral Resources were restricted to closely drilled resource blocks within 15 m vertically of a mined pit floor, reflecting the high level of geological and grade confidence. Inferred Mineral Resources were classified for the lower confidence Renner West deposit model.

Metallurgical assumptions are based on test work conducted on 93 composites selected from 79 diamond holes drilled into all deposits included in Ore Reserves. The test work consists largely of individual particle pyknometry (IPP) on lump ore and Heavy Liquid Separation (HLS) test work on fines (+1 mm). The heavy media treatment plant reconciliation factors, product yield and recovery are updated annually.

The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. Bootu Creek manganese deposits are located within a well-defined geological setting and this allows definition of mineralised zones based on a high level of geological understanding. The Mineral Resource models have been confirmed by open pit mining since 2006 which reconciles well against the resource estimates.

Mineral Resource estimates are economically constrained within optimised pit shells, utilising Whittle mining software, based on current mining, processing and logistics costs, projected sales revenue, geotechnical and deposit specific analysis of yield and recovery parameters. Mineral Resources are reported as inclusive of Ore Reserves.

Ore Reserve estimation summary: The Bootu Creek Mine has been operating since 2006 and Ore Reserve statements prior to 2013 were reported under JORC (2004 Edition). OMM upgraded the reporting standard to JORC (2012 Edition) in December 2013 and a summary of the information used since then for the Ore Reserve estimation follows:

All current and planned mining is by open pit mining methods. Open pit slope angles, determined by an Independent Geotechnical Consultant, are at an overall angle, including berms, of 45^{o} to 55^{o} for hanging wall and end walls, and with footwall batter angles not exceeding the local bedding planes.

Conversion of Whittle optimised Mineral Resources pit shells to Ore Reserves is based on open pit designs constrained by those optimised pit shells, practical mining and geotechnical limitations, the application of mining tonnage recovery and grade dilution factors, pit specific processing yield analysis and mining cost parameters.

The current 15% Mn cut-off grade has been affirmed after several years of mining and processing Bootu Creek ore. Manganese product derived from the HMS (Heavy Media Separation) plant feed is not linear in relation to the plant head grade, and product yield either decreases rapidly or fails to produce an acceptable product grade from plant feed below the 15% Mn cut-off grade.

Grade dilution is reviewed each year by reconciliation of the previous year's mined production. The Ore Reserve grade is quoted as a 'diluted' grade and is currently set at 90% of the contributing 'undiluted' Mineral Resource block grade. Mining recovery factors are also reviewed each year from reconciliation of the previous year's mined ore production. The Diluted Tonnage is currently estimated at 110% of the contributing 'undiluted' Mineral Resource block tonnes, for an overall average Metal Recovery Factor of 99.0% (1.10 * 0.90). Dilution is generally derived from adjacent subgrade mineralisation and does contribute to overall metal recovery.

The minimum mining unit is effectively 2.5 m vertically, by 5 m across and 5 m along strike. The minimum drill intersection length applied in the Mineral Resource and Ore Reserve

estimation is 3 m and is close to true width. Inferred Mineral Resources have not been utilised nor included in the Ore Reserves.

The only significant deleterious element is Fe and that is managed by blending ore sources or product stockpiles.

There are no significant environmental impacts arising from mining or processing. Waste rock and processing tails are stored on site and are not acid generating. The only additive used in ore processing is ferrosilicon. Bootu Creek is an operating open pit mine site and processing facility. Waste Management Plans for waste rock and tailings storage have been submitted to and have been approved by the Northern Territory Department of Primary Industry and Resources.

Operating costs and sustaining capital are derived from analysis of the current Bootu Creek mining and processing operation and forecast. Deleterious elements are managed within specified maximum limits and no specific pricing allowance is used. Price discounts are applied for a specified range of lower grade manganese products. Road and rail transportation charges are based on current contracted terms and rates. Refining charges are not relevant and product specification penalties are rare and have not been applied.

Production based royalties are payable to the original project vendor and the Northern Land Council (on behalf of the Traditional Owners) and are allowed for in the logistics costing applied in the optimisation process.

Factors effecting revenue include contained dtmu (dry tonne manganese units) of manganese and discounts applied for lower than benchmark manganese content. Manganese products are sold on an FOB basis from the Port of Darwin. Manganese Price assumptions are based on 3-year forecasts supplied by OMH sales division. With adjustments for selling and shipping costs, and product grade discounts, the assumed FOB Darwin price used in this Ore Reserve was US$4.80/dmtu.

Based on the projected exchange rate of 0.80 (AUD: USD), as at 31 December 2017, the FOB Darwin price assumed for Bootu Creek product was estimated at A$6.00/dmtu. There are no saleable by-products and NPV ranges and sensitivity to variations are not included in the Ore Reserve estimation process.

All necessary agreements and authorities are in place with the Traditional Owners for mining and royalties (via the Northern Land Council), and for heritage clearance and sacred sites (via the Aboriginal Areas Protection).

The Ore Reserve classifications are as follows: Proven Ore Reserves are restricted to in-situ Measured Resources contained within open pit mine designs based on pit shells optimised at the current forecast cost and revenue assumptions, plus surface Ore Stocks. Probable Ore Reserves are restricted to Indicated Resources contained within mine designs based on pit shells optimised at the current forecast cost and revenue assumptions. No Probable Ore Reserves are derived from Measured Resources. The Ore Reserve classification appropriately reflects the Competent Person's view of the deposit.

JORC (2012 Edition) Table 1

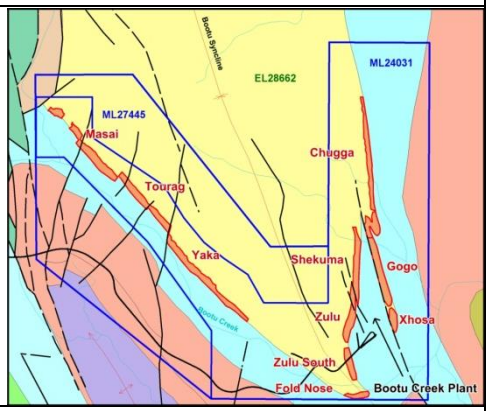
Section 1 Sampling Techniques and Data

Criteria	Explanation
Sampling Techniques - *Nature and quantity of sampling*	• Mineral Resources at Bootu Creek (BC) were sampled by 91% Reverse Circulation (RC) and 2% diamond (DD) with 7% open percussion (PC) drilling on a nominal 50m x 25m spaced grid. • The 31 December 2017 BC resource dataset comprised a total of 2,767 drill holes for 175,049 m. The Renner West (RW) dataset had 142 drill holes for 6,212 m. • Collar locations are picked up by Mine Surveyors using MGA94 co-ordinates. • RC holes are sampled on 1 metre downhole intervals, rotary split to produce approximately 3 kg samples. Sample intervals selected for analysis are generally limited to visible manganese mineralisation and adjacent host rock. • All drill samples are crushed, dried and pulverised (total prep) to produce a sub sample for XRF analysis. Mineralised diamond core is quarter sawn to obtain 1 metre or geological intervals for XRF analysis, with half core retained for density determination and metallurgical test work. • Sampling is carried out under OMM protocols to ensure the representivity of drill samples.
Drilling Technique	• RC drilling with 4.5” drill rods and a 5.5” face sampling drill bit. • Diamond core generally drilled using a HQ3 core barrel. • Drilling is predominately vertical and the core is not oriented. • Holes range from 5 m to 164 m in depth.
Drill Sample Recovery	• RC drill sample recovery is visually estimated and recorded in geology drill log. Diamond core recovery is measured and recorded. • RC rods and the sample cyclone are cleared as frequently as required to maintain satisfactory drill sample recovery and representivity. • DD holes use HQ3 size triple tube core barrels to maximise sample recovery. • The mineralisation style and consistency of mineralised intervals are considered to preclude any issue of sample bias due to recovery.
Logging	• RC chip and diamond drill core samples are geologically logged to the level of detail required to support the Mineral Resource estimation. Logging records lithology, mineralogy, weathering, mineralisation, alteration, colour and other features of the samples. • Geotechnical information is collected from the BC operations open pits. • All diamond drill core is photographed. • The total length of all exploration and resource delineation drilling is logged.
Sub-sampling	• Diamond core assay samples are quarter sawn, oven dried, jaw crushed and fully pulverised before splitting off an XRF assay sub-sample.

Criteria	Explanation
	• RC samples are rotary split to produce a sample of an approximately 3 kg in weight. High volume and high-pressure air is used when RC drilling to ensure the sample return is kept as dry as possible. • RC samples submitted for assay are oven dried, jaw crushed and fully pulverised before splitting off an XRF assay sub-sample. • QC procedures involve the use of field duplicates, certified BC standards (insertion rate of approx. 1:130) and the use of a number of commercial laboratories for analysis. • Appropriate industry standard sample preparation techniques and quality control procedures (ISO4296/2) are utilised by the onsite laboratory and offsite commercial laboratories to maximise sample representivity. • Drill sample field duplicates are taken to ensure sampling is representative of the in-situ sample material collected. • Sample sizes are appropriate for the grain size of the material being sampled based on the mineralisation style, intersection thickness and percent assay ranges for the primary elements.
Quality of assay data and laboratory tests	• The analytical techniques use an XRF multi element suite for assaying Mn, Fe, Al_2O_3, SiO_2, P, Pb, S, TiO_2, MgO, K_2O, BaO, CaO, Cu and Zn. LOI (loss on ignition) is assessed by thermo-gravimetric determination technique. • No geophysical tools were used to determine any element concentrations used in any of the resource estimates. • Laboratory QAQC involves the use of internal laboratory standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. • BC independently developed 6 reference standards in 2007 and 2010 for a range of grade values, using blends of Mn, Fe and quartz material. These were sent to 10 commercial laboratories with returned values in the +/-2% range against the expected value. The BC standards are submitted with each assay batch and results are monitored to maintain an independent check on laboratory assays.
Verification of sampling and assaying	• Significant drill intersections are verified by alternative company personnel, generally the Geology Manager for OMM. • Twined holes were used in initial exploration/pre-feasibility phase but are not considered necessary in the current mature mining phase. • Data entry, verification and storage protocols are in place and were managed by a dedicated GIS/Database Manager and recently by the Geology Manager. • No adjustments of primary assay data (high grade cuts, etc.) are considered necessary.
Location of data points	• Drill collars used for Mineral Resource delineation are surveyed using the mine based DGPS survey equipment. • All locations are picked up and quoted in MGA94 grid format. • Mine lease topography is based on ortho-rectified aerial photography (2013) to produce a DTM based on a 5 m x 5 m centred grid with +/- 0.5 m RL accuracy.

Criteria	Explanation
Data spacing and distribution	• Data spacing is generally based on a 50 m x 25 m drill grid within the Mineral Resource boundaries. • The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource classification being quoted and for the Ore Reserve estimation. • Sample support is consistent with 1 m RC composite sample length applied and utilised for Mineral Resource estimation.
Orientation of data in relation to geological structure	• The manganese deposits at Bootu Creek are shallow dipping (average 30^{o}–40^{o} dip), strata-bound and relatively planar. • Drill orientation is predominately vertical and any interaction with local faults or fold structures is not considered to introduce bias into the sampling results.
Sample Security	• Sample security is not considered a significant risk. • Most exploration samples are processed by the on-site laboratory and results are validated against the drill hole geology logs.
Audit or reviews	• No recent audits or reviews of sampling techniques, other than ongoing internal review, have been conducted. The database was last reviewed by Optiro for the 31 December 2012 Mineral Resource estimate. • No new resource delineation drilling had been conducted since that audit, with the exception of one small 11 RC drill hole program conducted mid-2017.

Section 2 Reporting of Exploration Results

Criteria	Explanation
Mineral tenement and land tenure status	• All Bootu Creek resource models, other than Renner West, are located within Mineral Lease ML24031, located 120km north of Tennant Creek, Northern Territory, Australia. • The Renner West Inferred Mineral Resource is located on EL28041 and located 70km NW of the Bootu Creek mine site. • Both tenements are granted, 100% owned by OMM and have no security of tenure issues at the time of reporting.
Exploration done by other parties	• Prospectors identified manganese outcrops and conducted small scale mining between 1955 and 1969. BHP Ltd conducted AEM and limited drilling in mid-1990's identifying manganese beneath shallow cover (*Ferenczi*, 2001).
Geology	• The Bootu Creek manganese deposits are strata-bound, located at the contact between the underlying dolomite-siltstone Attack Creek Formation and the overlying ridge forming sandstone of the Bootu Formations in the Tomkinson Group, within the Ashburton Province of the Palaeozoic Tennant Creek Inlier. • The mineralised horizon is folded around the gentle NNW plunging Bootu Syncline, can be traced 24km and dips around 30° towards the fold axis. • The manganese mineralisation is considered hydrothermal in places, locally retaining a relic stromatolite texture, and is supergene enriched within a deeply weathered profile. • Ore widths vary from 3m to 15m and ore mineralogy consists predominately of Pyrolusite and Cryptomelane in a silica rich gangue within the supergene zone, above a Rhodochrosite and Braunite unweathered protore at depths of greater than 90 m from surface.
Drill hole Information	• Drill hole listings have not been included as they relate to Mineral Resources rather than exploration results.
Data aggregation methods	• Reported assays are length weighted with no top-cuts applied. • Higher grade mineralised zones internal to broader zones of lower grade material are reported as included intervals. • No metal equivalents are used for reporting exploration results.
Diagrams	• These are included in the Mineral Resource statement. • The BC geology and deposit plan is shown for reference. 
Balanced reporting	• All results are reported when publishing exploration reports.
Other substantive exploration data	• Not applicable to the Mineral Resource estimates.

Further work	• Not applicable to the Mineral Resource estimates.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Explanation
Database integrity	• All geology data prior to 2016 was captured using Field Marshall software and imported into a Geobank SQL database (both Micromine data software). • Location data was imported from DGPS export files. • Assay data was imported from the original laboratory issued csv/sif files. • All exploration drill data was moved to an Access database in 2017 and all new drill hole data is uploaded to that database utilising customised mine site software. • Geology logs are validated for errors on import, locations are checked visually and assay data quality is ensured by the use of lab and field standards. Further internal validation for duplication, overlaps, etc is carried out using Surpac prior to any resource estimate.
Site visits	• The Mineral Resource is located within an active mine camp and is visited regularly by OMM Competent Persons.
Geological Interpretation	• There is a high degree of confidence in the geological interpretation of the Bootu Creek manganese deposits gained through extensive close spaced drill testing, a relatively planar strata-bound geological setting and over 10 years of active mining at this mature mining operation. • Ore mineralogy was determined by XRD analysis and optical petrology on selected drill core, RC chip and mineral product (gravity concentrate) samples. • The geological controls at BC are well understood from ongoing mining activity and form the basis for the resource interpretations. • Factors affecting continuity of grade and geology include local high and low angle faulting, local internal and adjacent high Fe concentration associated with faulting, and the intensity and depth of supergene alteration from weathering. • The geological interpretation is refined on an ongoing basis following the review of close spaced grade control sampling and in pit observation and mapping of second order fault structures not modelled in the original broader spaced resource delineation drilling.
Dimensions	• The Bootu Creek manganese resource models have a combined strike length of 16km, with individual models ranging from 0.7km to 2.9km • Bootu Creek resource models are generally limited in vertical depth by economic constraints (imposed by strip ratios and cost of mining), by faulting or by the depth of weathering and supergene alteration, rather than a depth termination of the mineralisation. • Individual resource model depth extents range from 50m to 120m below surface. All mining is by open pit.

Criteria	Explanation
	• Bootu Creek resource model widths (true width) range from the minimum width of 3m to a maximum of around 15m. • The Renner West manganese deposit extends over a strike length of 450m and to a depth of around 25m below surface.
Estimation and modelling techniques	• Estimation and modelling was previously undertaken by independent resource consultants Optiro Pty Ltd and has since been updated by OMM technical staff. • Resource models are digitised and wire-framed from interpreted geological and assay drill cross sections prepared by OMM. These wireframes are used to select resource intersections and composite data is extracted for Mn, Fe, SiO_2, Al_2O_3, BaO and P based on one metre sample increments. • 'Supervisor' geostatistical software was used for continuity analysis to determine variograms for grade estimation. Optiro found that the 10% Mn population generated more robust variograms with lower nugget effects that were applied to the resource composite data during estimation. • The nugget effect from variography was found to represent only 20-30% of the total variability, suggesting a low inherent random behaviour for the manganese mineralisation and no grade capping is warranted. • Block models are estimated using Ordinary Kriging (OK), using Surpac resource estimation software, and coded with attributes for material type, resource classification, model domain and for OMM survey pit pickups. • Block Model Parent Cells are 25m (Y) by 10m (X) by 5m (Z) and compare favourably with maximum drill spacing of 50m x 25m or 40m x 20m and with along strike search radius varying from 130m in the shorter or faulted models through to 290m for the highly continuous Chugga-Gogo. • The number of samples is set at a minimum of 15 and a maximum of 32 for passes 1 & 2. The pass 3 minimum was set to 2 samples to fill model extents. • Search ranges varied from 130 m up to 290 m in deposits of up to 2.9 km strike length. The search ellipsoids are flattened disc shapes in the plane of the mineralisation with varying anisotropic ratios designed to model shallowly plunging manganese trends within the domains. • Geological interpretation prepared by OMM has been used to construct digital wireframes and control assay extraction from the database but are not otherwise used to control the resource estimate. • The only assumed correlation between variables is that used for the density regression calculated against manganese grade. There is a noted inverse relationship between manganese vs silica and Al_2O_3. There is very little relationship between manganese and iron and correlations between other elements were poor. • No selective mining units were assumed in the estimates.

Criteria	Explanation
	• Graphical 3D validation of block grades versus composite samples, used to compare modelled grade trends against the spatial distribution of the samples, demonstrated that estimated low and high grades were consistent with the composite samples. Density was also checked to confirm interpolated block values honour the regression formulas. • Validation swathe plots by Optiro show that the block model estimated grades honoured local grades. All volumetric checks are within 1% of wireframes. • The significant elements specific to product quality are assayed and modelled with the only potential issue being high Fe content in product, which is managed in the mine plan. • Mineral Resource estimates are depleted for mining up to 31 December 2017 and reported above a cut-off grade of 15% Mn.
Moisture	• All tonnage is estimated on a dry tonnes basis.
Cut-off parameters	• The current 15% Mn cut-off grade has been affirmed after several years of processing Bootu Creek ore. Manganese product derived from the DMS (gravity) plant is not linear in relation to head grade and product yield and/or product grade decreases rapidly below the current cut-off grade.
Mining factors or assumptions	• The Mineral Resource estimates were optimised by OMM technical staff utilising Whittle mining software to limit economic open pit extents based on long term revenue, mining, processing and logistic parameters set by OMM. • All mining is, or is proposed, by open pit mining methods. • Parameters for determining economic extraction are based on data derived from the current mining and processing operations at Bootu Creek.
Metallurgical factors and assumptions	• Metallurgical assumptions are based on test work conducted on 93 composites selected from 79 diamond holes drilled into all deposits included in Ore Reserves. The test work consists largely of individual particle pyknometry (IPP) on lump ore and Heavy Liquid Separation (HLS) test work on fines. • Plant factors including product yield and recovery are reviewed annually. • Yield assumptions for resource optimisation are now based on statistical analysis of the resource delineation drill sample grade distribution, on a pit by pit basis, to estimate likely product yield. Average grade is no longer considered a reliable indicator of product yield.
Environmental factors or assumptions	• Bootu Creek in an operating mine site and processing plant with Mine Management Plans submitted and approved for waste rock and tailings storage by the Northern Territory Department of Primary Industry and Resources. • No significant sulphides are present in ore or mine waste.
Bulk Density	• Current bulk density regression formulae are based on 366 waxed (or waxed equivalent) HQ3 core samples selected from 52

Criteria	Explanation
	metallurgical composites distributed through all deposits included in the Ore Reserve. • The bulk density measurements were determined in 2009 by Amdel (Perth) using the wet and dry methodology. Six individual density regressions were determined for Chugga/Gogo, Shekuma, Xhosa, Masai/Tourag, Yaka and Zulu deposits. • Renner West uses the Yaka (most conservative) regression option.
Classification	• Measured Mineral Resource – this classification is restricted to well drilled resource blocks located within 15m (vertical) of a mined pit floor, reflecting a high level of geological and grade confidence. • Indicated Mineral Resource – classified based on established grade and geological continuity defined by the tabular nature of the Bootu Creek mineralised zones, the regular drill spacing of 50m x 25m or better, estimation parameters such as kriging efficiency and the demonstrated mining history in most of the deposits. • Inferred Mineral Resource – used for the lower confidence Renner West deposit model. • The Mineral Resource estimate appropriately reflects the view of the Competent Persons. • All OMM Mineral Resources are economically constrained on an annual basis by optimised pit shells using updated OMM cost, revenue and physical parameters (see Mining Factors and Assumptions).
Audits and reviews	• Independent resource consultant Optiro Pty Ltd conducted a Client Review of wireframes, block models, classification criteria, volumetric comparison, composite versus block model grades and XYZ plots on the previous Mineral Resource estimation for 31 December 2013. • No new resource delineation drilling, with the exception of one small 11 RC hole infill program drilled in mid-2017, has been added since that Mineral Resource estimation and the only changes applied in the current Mineral Resource estimation process are to account for updated pit optimisation parameters, mine depletion and/or pit backfill and to update geological interpretation based on minor faults observed during mining activity.
Discussion of relative accuracy/confidence	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. • The statement relates to global estimates of tonnes and grades. • Annual reconciliation of mined resource blocks is used to compare mine production with pre-mining Mineral Resource estimates, and to update mining factors and assumptions.

Section 4 Estimation and Reporting of Ore Reserves

Criteria	Explanation
Mineral Resource estimate for conversion to Ore Reserves	• 31 December 2017 Mineral Resource models were optimised by OMM technical staff using Whittle mining software to limit economic open pit extents utilising OMM updated mining, processing and logistics costs and physical parameters, and revenue assumptions. • Open pit designs further constrained the above optimised Mineral Resource models with constraints such as minimum cut back width, practical waste rock storage, pit access and ramp location options. • Mineral Resources quoted are reported as inclusive of Ore Reserves.
Site visits	• The Ore Reserve is located within an active mine camp and is visited regularly by the Competent Persons.
Study status	• Bootu Creek manganese mine commenced production in 2006 and is an ongoing, mature manganese mining operation. • Conversion of Mineral Resources to Ore Reserves in based on parameters derived from analysis of current operating practices, technical studies, and ongoing mine and processing performance.
Cut-off parameters	• The current 15% Mn cut-off grade has been affirmed after several years of mining and processing Bootu Creek ore. Manganese product derived from the DMS (Dense Media Separation) plant feed is not linear in relation to the plant head grade and product yield either decreases rapidly or fails to produce an acceptable product grade below the 15% Mn cut-off grade.
Mining factors or assumptions	• The Mineral Resource estimates were optimised by OMM technical staff utilising Whittle mining software to limit economic open pit extents based on long term revenue, mining, processing and logistic parameters set by OMM. • All current and planned mining is by open pit mining methods. • Geotechnical parameters including batter angles and berm widths and intervals were recommended by independent mining consultants Coffey Mining Pty Ltd and more recently by Absolute Geotechnics Pty Ltd following ongoing review of BC mining operations. • Open pit slope angles, determined by an Independent Geotechnical Consultant are at an overall slope angle, including berms, of 45^{o} to 55^{o} for hanging wall and end walls, and with footwall batter angles not exceeding the local bedding planes. • Diluted Grade is reviewed each year by reconciliation of the previous year's mine production. The Ore Reserve grade is quoted as a 'diluted' grade and is currently set at 90% of the contributing 'undiluted' Mineral Resource block grades. • Mine Recovery is also reviewed each year by reconciliation of the previous year's mine production. The Mine Tonnage Factor is currently estimated at 110% (inclusive of dilution) of the contributing 'undiluted' Mineral Resource block tonnes. • Minimum mining unit is effectively 2.5m vertically by 5m across and 5m along strike. The minimum drill intersection length applied in the Mineral Resource and Ore Reserve estimation is 3 m and is close to true width. • Inferred Mineral Resources have not been utilised nor included in Ore Reserves. • Bootu Creek in a mature manganese mining and processing operation with all of the necessary mining infrastructures in place.

Criteria	Explanation
Metallurgical factors or assumptions	• The HMS treatment plant has been in operation since 2006 and has since been modified to maximise tonnes processed, product yield and manganese recovery. • The heavy media plant is well-tested technology and well suited to the manganese ores being processed. • Metallurgical test work was conducted on 93 composites selected from 79 diamond holes drilled into all deposits included in Ore Reserves. The test work consists of individual particle pyknometry (IPP) on lump ore and Heavy Liquid Separation (HLS) test work on fines. • The only significant deleterious element is Fe and that is managed by blending ore sources or product stockpiles. • Plant reconciliation factors are reviewed annually and factors including product yield and manganese recovery are updated annually. • Yield assumptions for plant feed are estimated on an individual pit basis, based on a statistical analysis of the resource delineation drill sample grade distribution, constrained by each pit design, to estimate likely product yield from that source. Average grade is no longer considered a reliable indicator of product yield. • Manganese oxide mineralogy is not relevant for the Ore Reserve estimation.
Environmental	• There are no significant environmental impacts arising from mining or processing. Waste rock and processing tails are stored on site are not acid generating. The only additive used in ore processing is ferrosilicon. • Bootu Creek in an operating mine site and processing plant with Waste Management Plans submitted for waste rock and tailings storage to and approved by the Northern Territory Department of Primary Industry and Resources.
Infrastructure	• Bootu Creek mine site is a mature manganese mining and processing operation with all mining, processing, rail and port infrastructure in place and operational.
Costs	• All major capital projects are completed and operational. • Operating costs and sustaining capital are derived from analysis of the current Bootu Creek mining and processing operation and 2017 budget. • Deleterious elements are managed within specified maximum limits and no specific pricing allowance is used. Price discounts are applied for a specified range of lower grade manganese products. • Commodity prices are discussed in Revenue factors. • Exchange rates are discussed in Revenue factors. • Road and rail transportation charges are based on current contracted terms and rates. • Refining charges are not relevant and product specification penalties are rare and have not been applied. • Royalties are payable to the original project vendor and the Northern Land Council (on behalf of the Traditional Owners). The Northern Territory government royalty is on a net value basis (considered as a “tax”) and as such is not included in the optimisation process. • Royalty charges are allowed for in project costing and applied in the pit optimisation process.
Revenue factors	• Manganese products are sold on a FOB basis from the Port of Darwin.

Criteria	Explanation
	• Factors effecting revenue include contained dtmu (dry metric tonne units) of manganese, and discounts for lower than benchmark manganese content or higher than specified iron content. • Commodity price assumptions are based on 3 year forecast for Mn - CIF China GEMCO 44% with adjustments for selling and shipping costs, and for discounts specific to BC product grade and size specifications to derive an FOB Darwin price of US$4.80/dmtu. • Exchange rate (AUD: USD) assumption is based on a trading rate of 0.80 (Dec 2017), for a forecast FOB Darwin price of A$6.00/dmtu. • There are no saleable by-products.
Market assessment	• According to the TEX Report, China's manganese ore imports for 2017 were 21.26 million tonnes, up by 24.7% from 17.05 million tonnes in the prior year. • Demand, supply, stock and future volume assumptions for manganese are considered in the 3-year price forecast. • Customer and competitor factors are considered in the 3-year manganese price forecast (Dec 2017). • Customer specification, testing and acceptance rely on an inbound assay. Occasional minor penalties may apply but are not included in the Ore Reserve estimation.
Economic	• NPV ranges and sensitivity to variations are not included in the Ore Reserve estimation process.
Social	• All necessary agreements and authorities are in place with the Traditional Owners for mining and royalties (via the Northern Land Council) and for heritage clearance and sacred sites (via the Aboriginal Areas Protection Authority).
Other	• The only significant naturally occurring risk is delays incurred from cyclone related flooding of the mine site or railway line to Darwin. • All material legal agreements and marketing arrangements are in place. • All government approvals (including the Mine Management Plan and Mineral Lease), licences, clearances and bonds necessary to operate the Bootu Creek mine site and processing plant are in place.
Classification	• Proven Ore Reserves are restricted to in-situ Measured Resources contained within mine designs based on pit optimisation at the current budget cost and revenue assumptions, plus surface Ore Stocks. • Probable Ore Reserves are restricted to Indicated Resources contained within mine designs based on pit optimisation at the current budget cost and revenue assumptions. • The Ore Reserve classification appropriately reflects the Competent Person's view of the deposit. • No Probable Ore Reserves are derived from Measured Resources.
Audits and reviews	• There has been no independent audit of the 31 December 2017 Ore Reserve estimates.
Discussion of relative accuracy/confidence	• Annual reconciliation of mined Ore Reserve blocks is used to compare mine production with the mined Ore Reserve estimates, and where used to update the mining recovery and dilution factors applied to the 31 December 2017 Ore Reserve estimation process.