

ASX: NCZ 28 November 2017

# NEW CENTURY REPORTS OUTSTANDING FEASIBILITY RESULTS THAT CONFIRM A HIGHLY PROFITABLE, LARGE SCALE PRODUCTION & LOW COST OPERATION FOR THE CENTURY MINE RESTART

- Restart Study completed by Sedgman in collaboration with New Century Resources and third party specialist consultants
- New Century considers Project to have outstanding fundamentals with Century to become one of the world's largest and lowest cost zinc operations
- A\$1.76 billion in post-tax cash flow over an initial 6.3 year mine life at a long term zinc price of US\$1.25/lb (US\$2,755/t) from the Century Tailings Deposit only; posttax NPV<sub>8</sub> of A\$1.3 billion and IRR of 270%

Тес	hnical Parameters	Financial Parameters <sup>2</sup>			
Design Production	507,000tpa zinc concentrate	NPV <sub>8</sub>	Base Case Zinc US\$1.25/lb	Optimistic Zinc US\$1.50/lb	
(dry metric tonnes) <sup>1</sup>	(264,000tpa zinc metal)	(Post-tax)	A\$1,308M	A\$1,729M	
Proven Ore Reserve	77.3Mt at 3.1% ZnEq	IRR (Post-tax)	270%	350%	
Conc. Grade <sup>1</sup> (LOM average)	52% zinc & 187g/t silver	EBITDA (LOM avg p.a.)	A\$449M	A\$579M	
Design Throughput <sup>1</sup>	15Mtpa	Total Free Cashflow	A\$1,764M	A\$2,325M	
Mine Life (Tailings Only)	6.3 years	Start-up Capital Costs	A\$50M <sup>3</sup>		
First Production	Q3 2018	Operating Costs (LOM average)	C1: US\$0.38/lb payable⁴ C3: US\$0.50/lb payable⁵		

Table 1: Restart Feasibility Study summary (see table notes overleaf)

- Proven Ore Reserve declared of 77.3Mt at 3.1% ZnEq
- Low start-up capital of A\$50M & working capital of A\$13M, with New Century to be fully funded via A\$50.7M cash (in place) & completion of a A\$58M debt facility
- Early works program underway, formal plant refurbishment and re-commissioning activities planned for January 2018, targeting first production in Q3 2018
- All necessary permits and approvals in place to undertake the restart
- Concentrate offtake negotiations advancing on highly favourable terms
- Expansion Feasibility Study to be undertaken in 2018 to assess high grade in-situ resource blending potential to extend mine life and increase production levels



Table 1 Notes:

- 1. Throughput, Design Production and Concentrate Grade represent the average steady state values following initial operational ramp up period (approximately 15 months).
- Long term Base Case exchange rate and commodity pricing assumptions are based on Bloomberg consensus median forecasts from independent analysts for the year 2018. Long term AUD/USD FX 0.75, and long term commodity prices of US\$2,755/t zinc, US\$17.8/oz silver.
- 3. Start-up Capital Costs represents pre-production capital requirements exclusive of working capital and further ramp up capital
- 4. C1 is defined as direct cash operating costs produced, net of by-product credits, divided by the amount of payable zinc produced. Direct cash operating costs include all mining, processing, transport, treatment and refining costs and smelter recovery deductions through to refined metal.
- 5. C3 cost includes C1 costs, plus depreciation, indirect costs and royalties.

### **Cautionary Statements**

New Century Resources believes that the production target, forecast financial information derived from that target and other forward looking statements included in this announcement are based on reasonable grounds. However, neither the Company nor any other person, including Sedgman Pty Ltd makes or gives any representation, assurance or guarantee that the production target or expected outcomes reflected in this announcement in relation to the production target will ultimately be achieved.

Investors should note that the Company believes the commodity prices, AUD:USD exchange rate and other variables that have been assumed to estimate the potential revenues, cash flows and other financial information are based on reasonable grounds as at the date of this announcement. However, actual commodity prices, exchange rates and other variables may differ materially over the contemplated mine life and, accordingly, the potential revenue, cash flow figures and other financial information provided in discussions set out in this announcement should be considered as an estimate only that may differ materially from actual results. Accordingly, the Company cautions investors from relying on the forecast information in this announcement and investors should not make any investment decisions based solely on the results.

A number of key steps need to be completed in order to bring the Century Zinc Mine into production. Many of those steps are referred to in this announcement. Investors should note that if there are any delays associated with completing those steps, or completion of the steps does not yield the expected results, the revenue and cash flow figures may differ materially from actual results.

To achieve the range of outcomes indicated in this announcement, funding in the order of A\$63 million will likely be required. While the Company has significant cash reserves and a conditional financing facility through Sprott Resource Lending, investors should note there is no certainty that the Company will be able to raise any additional funding if needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.



## Summary

**New Century Resources Limited (Company or New Century)** (ASX:NCZ) is pleased to announce the results of the Restart Feasibility Study (**RFS**) for the Century Zinc Mine in Queensland.

The RFS, completed by Sedgman Pty Ltd (A member of the CIMIC Group) (**Sedgman**) in collaboration with New Century Resources, included detailed economic analysis on a large scale tailings reprocessing operation utilising the significant existing infrastructure located on site at the Century Zinc Mine.

Based on the proposed production profile, New Century estimates Century will again be one of the top 10 zinc operations in the world, with steady state production forecasted at 507,000tpa of zinc concentrate at 52% zinc (264,000tpa zinc metal) over an initial 6.3 year mine life from the Century Tailings Deposit only.

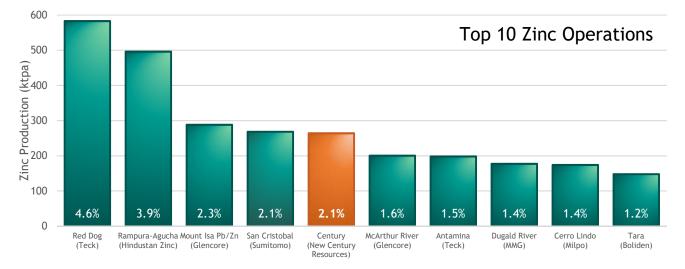


Figure 1: Comparison of the top 10 zinc mines as a percentage of global supply (Source: SNL Metals & Mining - 2016 data excluding Century/New Century Resources & Dugald River/MMG Limited)

The Company considers the restart of Century on Tailings has outstanding commercial fundamentals, generating over A\$1,760 million in free cashflow over the initial tailings operations of 6.3 years. The projected NPV<sub>8</sub> of the project (post tax) is A\$1,308 million with an IRR of 270%.

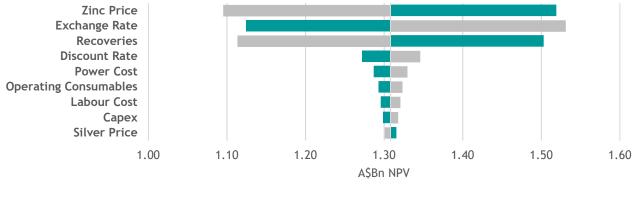
All base case financial analyses were performed at a long term zinc price assumption of US\$1.25/lb (US\$2,755/t), which is based on the Bloomberg consensus median forecasts from independent analysts for 2018. This assumption is approximately 17% lower than current zinc price of US\$1.46/lb (US\$3,220/t).

Sensitivity and scenario analysis have also been performed on the most influential variables for the proposed operations. The results of these analyses demonstrate the operations will be most sensitive to fluctuations in the zinc price, foreign exchange rate and metallurgical recovery.



Scenario	Long Term Zinc Price	Long Term AUD:USD	NPV <sub>8 (post-tax)</sub>	IRR (post-tax)	Total Free Cashflow
Optimistic Case	US\$1.50/lb (US\$3,306/t)	\$0.75	A\$1,729M	350%	A\$2,325M
Base Case	US\$1.25/lb (US\$2,755/t)	\$0.75	A\$1,308M	270%	A\$1,764M
Bearish Case	US\$1.00/lb (US\$2,204/t)	\$0.75	A\$881M	189%	A\$1,194M

 Table 2: Scenario analysis for the proposed restating of operations at the Century Zinc Mine



■10% ■-10%

Figure 2: Sensitivity Analysis (NPV)

The forecast start-up capital estimate is A\$50 million (including A\$2.8 million contingency) to first production (expected by July 2018) at an initial throughput rate of 8Mpta. Once in production, further ramp up capital of A\$63 million will be invested over a 15 month period (for a total capital requirement of A\$113 million) to bring the operation into full production at 15Mtpa. Ramp up capital is proposed to be funded from operational cash flow.

Based on the operating cost estimates, New Century has also forecast operations from the Century Tailings Deposit to be the one of the lowest cost primary zinc operations in the world, with Life-of-Mine C1 costs at US\$0.38/lb and C3 costs at US\$0.50/lb. A comparison of Total Cash Costs (see definition on page 22) against other operations is provided in Figure 3 below.

While the project fundamentals are outstanding over the initial 6.3 year mine life, they are based on the Century Tailings Deposit only. The Company's defined in-situ deposits at Silver King and East Fault Block, combined with confirmed mineralisation at South Block and Watsons Lode, also show clear potential for a significant extension to base metal operations at Century. None of this potential upside has been included in the RFS, however the Company is planning to complete the definition and potential upgrade of existing in-situ resources in the near term. This definition program will allow the undertaking of an Expansion Feasibility Study in 2018 which will assess the potential for blending of these resources into the tailings operations outlined under the RFS, potentially paving the way for increased metal production rates and mine life extension.



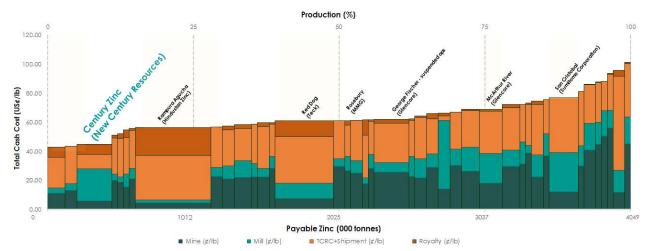


Figure 3: Top primary zinc operations: Total Cash Costs against payable zinc production (source: SNL Metals & Mining 2016 data excluding NCZ figures)

As a key outcome of the RFS, the Company has declared a Proven Ore Reserve<sup>1</sup> of 77.3Mt at 3.1% ZnEq (3.0% zinc and 12g/t silver) for the Century Tailings Deposit. This represents a 98% conversion from the previous Measured Resource (see ASX announcement 12 September 2017).

Based on these results, the New Century Board has approved the immediate progression to the construction, refurbishment and re-commissioning phase, with the Company to be fully funded to operations including working capital, through its current cash position (A\$50.7M) and conditional debt facility (A\$58M).

Following the RFS outcomes, New Century Resources Managing Director Mr Patrick Walta stated:

"This is a fantastic achievement by the New Century team, completing both the Restart Feasibility Study and upgrade of the Century Tailings Deposit to an Ore Reserve within just four months of listing on the ASX.

The projected NPV<sub>8</sub> of A\$1.3 billion and IRR of 270% is unmatched in the mining industry and shows New Century is a significant investment opportunity providing material exposure to the zinc market.

New Century is also in the envious position of having substantial funding flexibility, allowing the Company to aggressively progress the restarting of operations, with the aim of establishing itself as a globally significant zinc producer in approximately 8 months' time.

I would like to thank all members of the New Century Feasibility Team as well as the team from Sedgman, who have worked diligently to confirm that the proposed Century restart represents one of the most exciting near term base metal projects in the world."

<sup>&</sup>lt;sup>1</sup> This estimate has been prepared in accordance with the JORC Code (2012). Please refer to the end of this announcement for Competent Persons statements. ZnEq% refers to a calculated Zn equivalent grade, with the formula stated in Appendix 2, reported at cut-off grades determined by economic and metallurgical factors. Some rounding related discrepancies may occur in the totals.



## **Project Overview**

## Mine Location & History

The Century Zinc Mine is located in north-west Queensland approximately 250km from Mt Isa.

Production at Century began in 2000, producing zinc and lead concentrates using conventional openpit mining, grinding and flotation at the Lawn Hill mine site. During the initial operations, Century was one of the largest base metal mines in the world, producing on average 475,000t per annum of zinc and 50,000t per annum of lead in concentrate products over the history of operations.

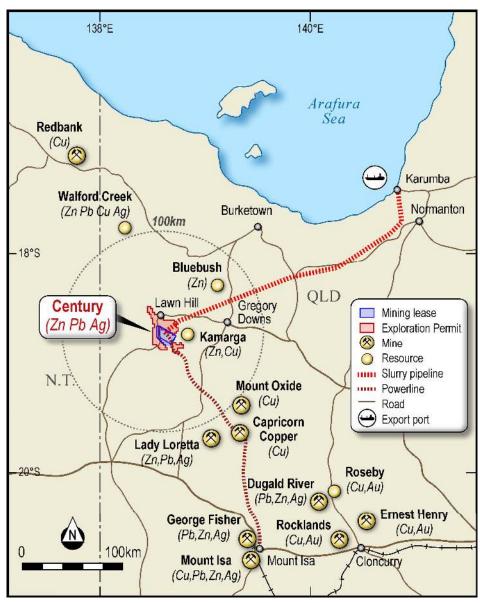


Figure 4: Century Project and regional infrastructure overview



Processed concentrates were transferred along a 304km underground slurry pipeline to Century's port facility at Karumba, on the Gulf of Carpentaria. Concentrates were then dewatered before being transported on the M.V. Wunma transhipment vessel to export ships anchored offshore and then sold to smelters all over the world.

## New Century Resources Acquisition and Post Listing Developments

The cessation of processing operations by MMG Limited (ASX: MMG) at Century in early 2016 following depletion of the Century ore reserves from the original 'Big Zinc' ore body presented an opportunity for a focused junior to monetise valuable remaining mineral assets. These included substantial zinc resources located within the Century Tailings Deposit, the Silver King base metal deposit and other minor defined deposits. In addition, Century hosts substantial phosphate deposits which are yet to be developed.

Beyond the mineral assets, Century includes world-class processing and logistics infrastructure as well as investments in agricultural land holdings and an established cattle business, including:

- at Lawn Hill, a scalable and adaptable mineral flotation processing plant, 700-man accommodation camp, offices, airport, full laboratory and grid power connectivity;
- at Karumba, a large scale port facility with concentrate dewatering and drying operations, an 80,000t mechanised storage shed, ship-loading facility, and a 5,000 tonne self-propelled, self-discharging maritime transhipment vessel;
- a 304km underground slurry pipeline which connects the mine and the Karumba port; and
- a 49% interest in the Lawn Hill & Riversleigh Pastoral Holding Company.

On 1 March 2017, Century Bull Pty Ltd (**Century Bull**) entered into binding agreements for the progressive acquisition of the Century Zinc Mine and all associated infrastructure, including the Karumba Port Facility. ASX-listed Attila Resources Ltd (**Attila**) initially purchased 70% of the Project from Century Bull.

On 20 July 2017, Attila recommenced trading on the ASX under the name 'New Century Resources Limited' following the successful raising of \$5,150,000 and completion of the transaction to acquire the initial interest in the Century Zinc Mine (see the Prospectus dated 20 June 2017).

Subsequently, the Company completed a drilling program and released an updated 100% Measured Mineral Resource for the Century Tailings Deposit. This Resource formed the basis of the Restart Feasibility Study, which was initiated on July 31, 2017.

On 2 October 2017, the Company announced the conditional agreement to acquire the remaining 30% of the Century Zinc Mine, which remains subject to shareholder approval via a General Meeting anticipated in early 2018.

The Company has also announced both a secured US\$48M (A\$58M) conditional debt facility (see ASX announcement 11 October 2017) and a A\$52.9M fully-underwritten placement (see ASX announcement 6 November 2017), providing a funding pathway for the redevelopment of the Mine.



## **Mineral Resources**

On 12 September 2017, the Company released an updated Mineral Resource estimate for the Century Tailings Deposit, after completing an extensive drilling program (see Figure 5). The upgraded 100% Measured Mineral Resource was estimated by Optiro Pty Ltd (**Optiro**), who had also been responsible for the previous estimate (Indicated and Inferred Resources only) for the Deposit.

This revised Mineral Resource estimate formed the basis of the Restart Feasibility Study and no consideration was made for any use of defined in-situ resources and mineralisation at Silver King, East Fault Block, South Block or Watsons Lode.

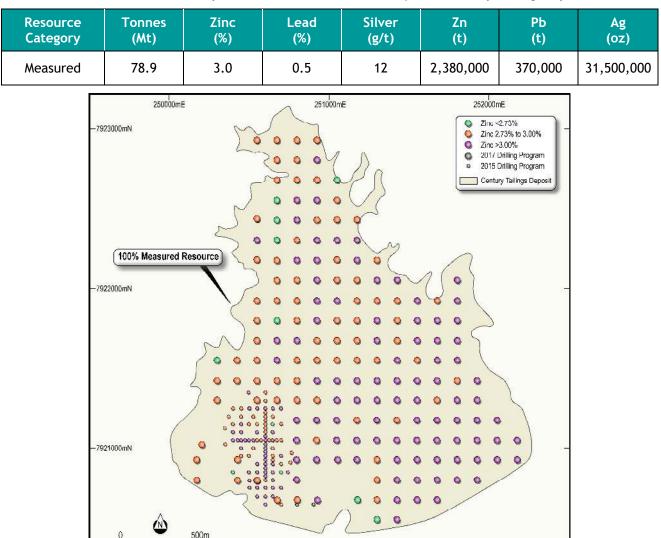


Table 3: JORC 2012 compliant Mineral Resource estimate for the Century Tailings Deposit

Figure 5: Plan view of the Century Tailings Deposit showing drilling programs



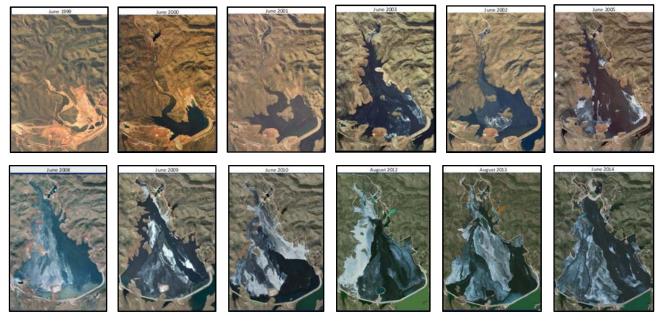


Figure 6: Evolution of the Century Tailings Deposit (1999 to 2014)

## **Ore Reserves**

Based on the Mineral Resource block model, independent Consultant MEC Mining Pty Ltd (MEC) developed a detailed mine plan, including other parameters, for establishment of an Ore Reserve.

The Ore Reserve estimation process began with the generation of the full mining solid bounded by the natural topography and embankment walls of the Century Tailings Storage Facility (**TSF**). The solid was cut into trenches and mining blocks which were subdivided into 50m x 50m cells that are further split into 8m depth practical mining benches.

The conversion of the Measured Resource (reported on Table 3) to Mineral Ore Reserve involved inclusion of the following mining parameters:

- 300mm of losses at the bottom of the Deposit which are scheduled as floor clean-up; and
- 200mm dilution accounting for non-tailings material taken during mining & floor clean-up.

Table 4: JORC 2012 compliant Ore Reserve estimate for the Century Tailings Deposit

Reserve Category	Tonnes (Mt)	ZnEq (%)	Zinc (%)	Silver (g/t)
Proved	77.3	3.1	3.0	12

Table Notes: This estimate has been prepared in accordance with the JORC Code (2012). Please refer to the end of this announcement for Competent Persons statements. ZnEq% refers to a calculated Zn equivalent grade, with the formula stated in Appendix 2, determined by economic and metallurgical factors. Some rounding related discrepancies may occur in the totals.



## Mining

The Century Mine TSF is approximately 2.7km long (north-south) and 2.2km wide (east-west). The tailings resource in the northern end of the TSF is approximately 10m deep while the resource is approximately 22m deep in the south-eastern corner, with an average thickness of 13m.

The Century Tailings Deposit is to be mined utilising the hydraulic mining method. At a capacity of 15Mtpa, this process will involve the use of five track mounted monitor units; four actively working individual faces throughout the Deposit and one on standby.

The Deposit will be mined in 8m deep benches which dip at 0.5% to the north and south sumps (see Figure 7). Cuts will be done utilising a top down mining method at 18° utilising a 6m standoff from the monitor tracks to the edge of bench. The main production phase will mine the Deposit leaving a 300mm loss on the floor of the deposit while taking 100mm of dilution in the main production pass.

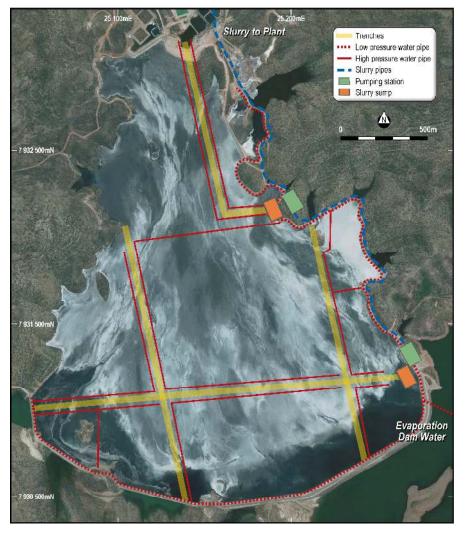


Figure 7: Plan view of the hydraulic mining configuration at the Century Tailings Deposit



A separate clean-up crew will follow the production crew after a period of time, in order to remove the remaining contaminated material and an additional 100mm of dilution. This material will be mostly bypassed to the open pit void as waste. This clean up forms part of the final rehabilitation process for the TSF area.

The mine design has two sumps, which provides greater flexibility in the mine plan, and reduces the risk of significant downtime during heavy rain events.

Mine production at Century is scheduled to commence in July 2018, followed by progressive ramp up over 15 months to the capacity of 15Mtpa. The proposed ramp-up allows mine production to commence with minimal changes to the existing Century Processing Plant and also allows systematic expansion of the hydraulic mining operations.

## Mining Equipment

Key production equipment for hydraulic mining comprises of the following:

- Water supply: Evaporation dam pontoon to supply water to hydraulic mining operations
- 5 x monitors (4 active and 1 on stand-by) fed via 15 x high pressure pumps
- TSF perimeter low pressure pipe for water supply to monitors
- 4 x pontoon mounted vertical spindle pumps
- 4 x slurry pumps, surge tanks & screens for slurry screening and pumping to the Century Process Plant

#### **Operational Personnel**

Operations will be 24/7 (2 shifts) and comprise of back to back Project Managers and Shift Supervisors in addition to  $4 \times 10^{-10}$  monitor operators and  $4 \times 10^{-10}$  services personnel who are required to:

- support and interchange with the operators
- inspect pumps, pipe and screens
- perform minor maintenance duties
- refuel equipment
- complete bunding/trenching activities
- operate the control room

In addition, a pipe crew is required during dayshift only and consists of 4-5 people to lay out and connect high pressure pipe to the monitors.

It is proposed to use a specialised contract hydraulic mining company to carry out mining on site. New Century are currently undertaking a tender process to select the contactor for execution, with selection of preferred contractor to be announced in Q1 2018.

Discussions with interested parties to date have included the requirement for the successful contractor to undertake a Build-Own-Operate-Transfer (**BOOT**) model for the initial years of hydraulic mining operations.



## Processing

## Metallurgical Test Work

Metallurgical testwork on Century Tailings commenced in 2014, with the major programs summarised as follows:

- 2014-2015: MMG Tailings Reprocessing Trials Low Grade Concentrate Production
  - 10,000t Bulk Pilot Trial: >70% recovery of Zn into a Rougher concentrate
  - Focused on direct metal production on site via downstream processing
- 2016: MMG Tailings Reprocessing Trials High Grade Concentrate Production
  - Focused on utilisation of existing Century Processing Plant infrastructure
  - Testwork by Changsha Research Institute of Mining & Metallurgy (CRIMM)
  - $\circ~$  Built on Bulk Pilot Trial success through additional Scavenger and Cleaner unit operations after Rougher
  - $\circ$  Successful zinc recovery of 52% into a concentrate grade of >48% Zn
  - CRIMM results independently confirmed by ALS Laboratories in Perth
- 2017: New Century Resources High Grade Flowsheet Optimisation Testwork
  - Built on success of MMG High Grade Concentrate Production testwork
  - Proposed modifications use only the existing Century Processing Plant
  - $\circ$   $\,$  Increased recovery from 50% to up to 64% at zinc con grade of 52%  $\,$

Much of the testwork carried out by New Century for the RFS focused on optimising process design to improve recoveries using the existing Century Processing Plant infrastructure.

Also, in conjunction with the Century Tailings Deposit drilling program, eight discrete metallurgical domains were established with testwork carried out on each. This was to validate the homogenous nature of the entire Deposit and provide sufficient understanding of the recovery performance over the life of operations. This testwork was carried out at ALS Metallurgy and Auralia Metallurgy in Perth, with the results (announced on the ASX on 13 November 2017) demonstrating consistent zinc recoveries between 61-64%.

## Process Design

Sedgman have completed a detailed review of the existing plant and infrastructure at Century and the port of Karumba, in addition to extensive analysis of the historic and current metallurgical testwork.

These activities have allowed Sedgman to design suitable minor modifications to the existing Century Processing Plant to enable the processing of reclaimed tailings slurry at a design throughput of 15Mtpa.

A pictorial overview of the proposed zinc concentrate production and transport logistics process is provided in Figure 8, with a further written description provided below.



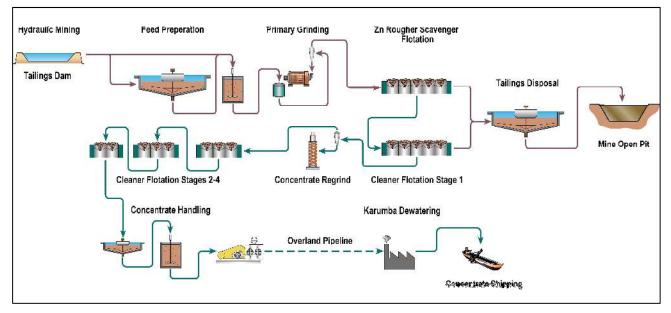


Figure 8: Overview of zinc concentrate production & logistics process at Century

Tailings slurry from hydraulic mining will be passed over a trash screens before being sent to a feed thickener. The purpose of the feed thickener is to ensure consistent density and flow rate into the Century Processing Plant. The Plant will have sufficient surge capacity for 2 hours of production to further assist in smoothing production.

Thickened slurry is sent to the classification circuit (cyclones) where the +53µm size fraction will be sent to one of the existing ball mills in an open circuit arrangement.

Milled material will be combined with cyclone overflow and sent to one of two parallel flotation circuits. The flotation circuit consists of rougher, scavenger and cleaner circuits in each train. Regrind mills are used on cleaner 1 concentrates to improve recovery of zinc.

The final zinc concentrate is thickened and pumped to concentrate storage tanks prior to being pumped to the Karumba Port facility via the underground slurry pipeline.

Residue from the reprocessed tailings are pumped to the existing open pit for ultimate disposal via sub-aqueous deposition. The transport and deposition of tailings back into the original open pit at Century provides the ultimate mechanism for progressive mine site rehabilitation.

Operation of the mine and plant will be in stages for the systematic expansion of hydraulic mining operations. In order to reach capacity of 15Mtpa, further minor modifications to the Century Processing Plant will be carried out. This includes the installation of an additional seven 100m<sup>3</sup> float cells and four regrind mills during the first 15 months of operations, to increase the throughput to a design capacity of 15Mtpa on tailings (see Figure 14 for proposed production schedule).





Figure 9: The Century Processing Plant



Figure 10: One of two flotation trains within the Century Processing Plant



## Services & Infrastructure

#### Power

Electrical power will be sourced from the North-West Power System (**NWPS**), with an independent supply chain established through direct contracting with suppliers utilising existing infrastructure. The NWPS is predominantly supplied by the two power stations located in Mt Isa.

Gas for power generation will be supplied via a Gas Supply Agreement with domestic producers and delivered via the Carpentaria Gas Pipeline (**CGP**). New Century is in the final stages of negotiations for gas supply and expects to make an announcement regarding the completion of a long term gas supply agreement early in 2018. There is sufficient capacity on the CGP to enable supply of required volumes for the predicted load profile of the operations at Century.

Gas will be utilised for power generation at one of two Combined Cycle Gas Turbine (**CCGT**) power stations in Mt Isa, with negotiations for toll treatment and power supply well progressed. Existing 220kV transmission infrastructure connects the Century Mine with the Mt Isa grid, operated by Ergon Energy, terminating in a 220/11kV Substation on site. Minor capital works only are required on the high voltage overhead line, with engineering studies and formal application to connect documentation already completed.

Distribution on site is via existing 11kV overhead transmission lines which have been maintained in good condition since Century was placed on care and maintenance in 2016, with minor works already undertaken to restore this system. Further works will be limited to minor low voltage connections to new equipment, one additional substation and a section of 11kV overhead line to connect the new hydraulic mining works to existing infrastructure at the Century Processing Plant.

Karumba operations are supplied from a mix of grid connection, covering baseload operations, and diesel generators to supply peaking load during periods of high activity at the port facility.

#### Water

Tailings processing via hydraulic mining will require substantive water supply to the monitors to meet the target production of 15Mtpa. This water supply will be achieved through a staged strategy, with initial water demand entirely met from the water within the site Evaporation Dam (including wet season recharge) located adjacent to the Century Tailings Deposit.

As the operation progresses there is the possibility of requiring alternative sources to meet the demand, including modifying catchment capacity of the Evaporation Dam and re-establishing supply from the existing Water Borefields used during historical operations of the Mine.

Whilst the substantial body of water currently residing in the Evaporation Dam will sustain initial periods of operation, the Borefields may be required if the Evaporation Dam falls below the working volume envelope determined as appropriate.



The groundwater supply infrastructure for Century Mine comprises the Eastern Borefield and Western Borefield. The Eastern Borefield commenced in 1999 and was used to supply the village and supplement water supply requirements for the Century Process Plant. This borefield consists of four bores and is located approximately 8km from the Mine. The Western Borefield was commissioned in 1995 to control water levels in the pit area and consists of 10 dewatering bores.

Water extracted from these bores historically supplemented the process plant requirements and it is forecast that both Borefields have sufficient capacity to meet water demands in the event the Evaporation Dam levels fall below the determined working volume.

## Other Site Infrastructure

The Century Mine Site has in place and will utilise the following infrastructure:

- Airport, with fully sealed runway (equipped for night landings) & passenger waiting area;
- 700-man accommodation village;
- Administration and Project buildings;
- Fully equipped laboratory; and
- Maintenance and storage warehouses and work bays.

The mine site is also accessed by a sealed road.

#### Personnel

The majority of the workforce will be sourced from larger population centres in Queensland. A flyin-fly-out (**FIFO**) roster will be established, with regular flights from a major regional centre to site. The site is well-equipped to accommodate a workforce much larger than required for the proposed tailings operations.

The management, administrative and key technical functions will be employed directly by the Company, with contractors used for operational and maintenance teams, hydraulic mining and some support services.

Total site-based personnel are expected to reach 135 for construction, and 238 at full production, including crews to operate the Port facilities and the M.V. Wunma transhipment vessel.

## Logistics & Marketing

#### Pipeline, Port and Logistics

The final zinc concentrate is pumped to the Karumba Port facility via the 304km underground slurry pipeline. At the port, slurry is thickened and dewatered using large filter presses. Filtered concentrate is dried and agglomerated using a rotary dryer, where it is then stacked in an 80kt undercover stockpile facility.





Figure 11: Karumba Port Facility

The concentrate is then reclaimed and sent to the transhipment vessel (M.V. Wunma) for transport out of the Norman River to bulk carriers in the Gulf of Carpentaria. The Company plans to reinstate annual dredging of the river to allow for M.V. Wumna operation on all tides.



Figure 12: M.V. Wunma transshipment vessel



## Zinc Concentrate

The concentrate produced by the proposed operations at Century is expected to contain on average 52% zinc and 187g/t silver.

New Century is in advanced discussions with several large trading houses and downstream users for long term concentrate offtake. The Company expects to announce binding offtake(s) in Q1 2018.

Current negotiated offtake terms have generally been favourable compared with industry standards, reflecting the tightness in the zinc concentrate supply market at present. The lack of zinc concentrate supply in the world market continues to provide a distinct advantage for zinc concentrate producers such as New Century.

Based on current negotiations it is anticipated the Company will achieve treatment charges at a discount to the long term benchmark and spot rates. Further, above industry standard silver payability terms have also been indicated from initial offers by potential off-takers.

It should also be noted that offtake discussions have included the potential for provisional payment to occur at the existing storage shed at the Company's Karumba Port Facility, providing substantial risk mitigation in terms of working capital requirements.

## Project Development and Production Schedule

## Project Development

The development timeline for the Century Mine restart is provided in Figure 13 below.

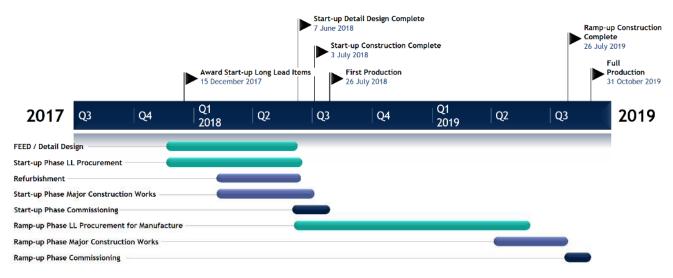


Figure 13: Development scheduled for progressive ramp-up to 15Mtpa operations at Century



The Century Mine restart production schedule has been developed by Sedgman in conjunction with New Century Resources with a total initial duration of 8 months to restart operations. Once the hydraulic mining and plant are operational, works will commence on the additional Plant modifications required to reach 15Mtpa. Refer to Figure 14 for the estimated production schedule.

A relatively short 15-month ramp up schedule is expected, due to the low complexity of proposed hydraulic mining and the existing condition of the Century Processing Plant.

The tailings mining schedule is determined by the following: Staging and operation of 4 separate hydraulic mining monitors, feeding to two sumps; and mining blocks are sequenced to ensure gravity flow to one of two sumps (north and south) to transfer tailings slurry to the processing plant.

## **Production Schedule**

The following is the production schedule assumed for the Restart Feasibility Study.

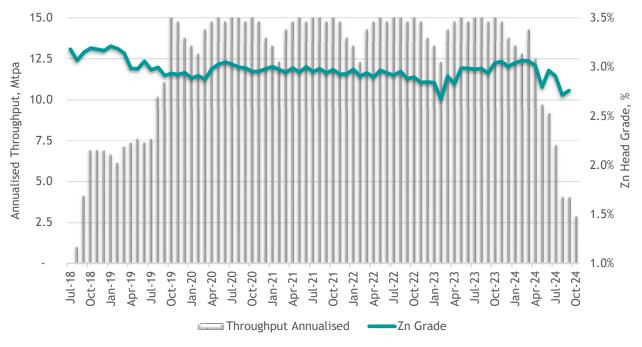


Figure 14: Tailings feed throughput and annualised zinc head grade

## **Financial Analysis**

## Capital Cost

Start-up capital costs have been estimated to a  $\pm 15\%$  accuracy. Initial capital costs of A\$50M are estimated, including a contingency of A\$2.8M, to allow for the restart of operations at an initial processing rate of 8Mtpa.



Additional capital of A\$62.9M is required to reach the design capacity of 15Mtpa, including further contingency of A\$3.7M. This ramp-up capital requirement is to be funded through cash flow from initial operations over the first 15 months. This additional capital is mainly for:

- Remaining refurbishment on the processing plant;
- Installation of larger feed thickener;
- 7 additional float cells and 4 additional regrind mills (to achieve a design
- capacity of 15Mtpa on tailings); and
- Installation of a soluble zinc recovery system, which will be assessed for installation pending progressive concentration build up in recirculating water or directly from the open pit as final tailings and water are deposited.

The ramp-up capital expenditure will commence immediately after re-starting operations.

Area / Cost Centre	A\$M
START-UP CAPITAL	
Process Plant and Process Infrastructure	24.6
Karumba Port	2.1
Engineering, Procurement and Construction, Other	8.8
Owners Cost, First Fills, Infrastructure	11.7
Contingency	2.8
TOTAL	50.0
RAMP-UP CAPITAL (POST START UP OF PRODUCTION)	
Process Plant, including additional float cells and regrind	37.7
Engineering, Procurement and Construction	5.5
Owners Cost, First Fills, Infrastructure	7.1
Soluble Zinc Recovery Plant	8.9
Contingency	3.7
TOTAL	62.9
	112.9

#### Table 5: Capital Cost estimate for the Century Zinc Mine restart and ramp-up

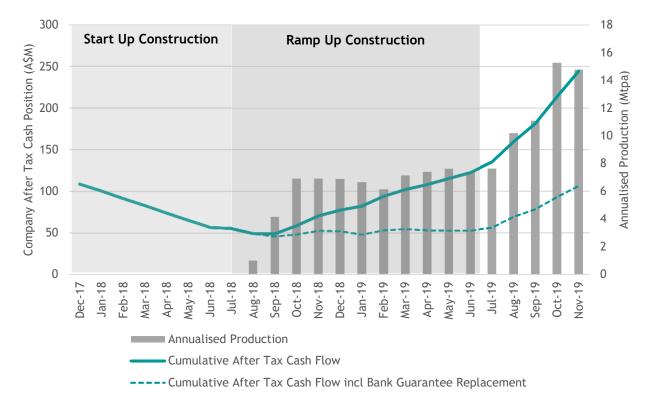
A\$13M of working capital is required, which include post-start up commissioning, start-up costs for Port and transhipment vessel, deferred fees for studies and execution (see page 34 for details).

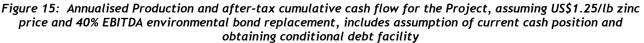
Based on the start-up and working capital estimates, the peak cash draw requirement for the Project has been estimated to be A\$63M. New Century is expected to be adequately funded to cover this peak cash draw with A\$50.7M in cash in place and completion of a conditional debt facility of A\$58M.

Figure 15 outlines the expected after-tax cash flow from the Project. The cash flow generated from initial operations will provide sufficient funding for ramp up capital, including provision for



replacement of MMG's bank guarantee with the Queensland government over Century's financial assurance obligation for site rehabilitation (see the Environment and Rehabilitation Section below for further details). Replacement of the guarantee is expected to be facilitated via the quarantining of cash on the Company's balance sheet at the contractually agreed amount of 40% of annual EBITDA until the guarantee is replaced. As the mine is progressively rehabilitated, it is expected the total financial assurance amount and corresponding quarantined cash requirements will be reduced.





Refer to Appendix 1 for further details on capital cost estimates for the proposed operation.

## **Operating Cost**

Operating costs have been estimated on the basis of quantities established from first principles and current market rates. New Century provided Sedgman with some cost estimates where applicable (including power and reagent costs developed by tender and quotation). Details of each cost centre can be found in the Appendix 1.



Area / Cost Centre	A\$/Feed Ore	US\$/lb Zn (payable)
Hydraulic Mining (including power allocation)	2.75	0.06
Processing Plant	10.31	0.22
Sale Costs, including transport, treatment charges & silver credit	4.63	0.10
C1 Cash Costs	17.69	0.38
Depreciation	1.48	0.03
C2 Cash Costs	19.17	0.41
Royalties and Corporate Costs	3.97	0.09
C3 Cash Costs	23.14	0.50

Table 6: Operating Cost estimate (LOM Average) for the Century Zinc Mine

Table Notes: C1 Cash Costs are defined as direct cash operating cost, net of any by-product credits. Direct cash operating costs include all mining and processing costs, mine site overheads and realisation costs (including transport costs, treatment and refining costs and smelter recovery deductions) through to refined metal. C2 Cash Costs include C1 costs, plus a depreciation charge. C3 Cash Costs include C2 costs, plus any royalties and corporate costs. C1, C2 and C3 are presented in this table based on Zn as the primary product with all other saleable commodities treated as by-product credits.

A comparison of Total Cash Costs with other zinc producers is shown in Figure 16 below. Based on this metric, the proposed operation at the Century Zinc Mine are anticipated to be in the lowest cost quartile and one of the lowest cost primary zinc operations globally.

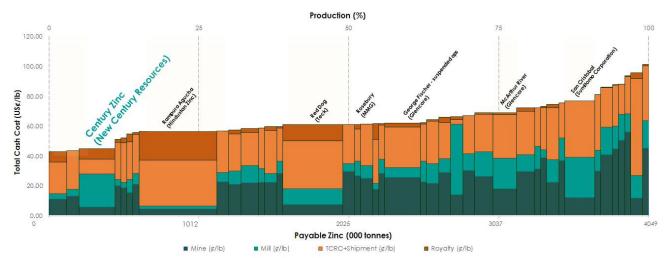


Figure 16: Top primary zinc operations: Total Cash Costs against payable zinc production (source: SNL Metals & Mining 2016 data excluding NCZ figures). Total Cash Costs represents the total mine site costs, transport & offsite costs, smelting & refining costs, royalties and taxes, net of by-product credits, on a payable metal basis.



### Concentrate Offtake Terms

The commercial terms provided by third parties for zinc concentrate offtake remain confidential. For the economic model, New Century has selected terms based on initial proposals received. Further information can be found in Appendix 1. The Company expects to announce binding offtake agreement(s) in Q1 2018.

### Financial Results

The economics of the proposed tailings reprocessing operations at the Century Zinc Mine have been assessed using the discounted cash flow method, based on a monthly schedule of tonnes mined and processed from reclaimed tailings ore.

Capital and operating costs are applied to mining, processing, product transportation and overheads.

Shipping and logistics, product payability, treatment and refining costs, state and other royalties and taxes are included to calculate a Net Present Value (**NPV**) for the Project.

The base case post-tax NPV at an 8% real discount rate is A\$1,308 million and the IRR is 270%.

Item	Base Case <sup>3</sup>
Post-tax-NPV <sub>8</sub>	A\$1,308M
Post-tax IRR	270%
Start-up Capital Cost <sup>1</sup>	A\$50M/US\$38M
Post-Commissioning Ramp-up Capital Cost inc soluble zinc plant <sup>1</sup>	A\$63M/US\$47M
Funding to Peak Cash Draw	A\$63M/US\$47M
Post-tax Total Free Cash Flow <sup>2</sup>	A\$1,764M
C1 Cash Cost (Life of Mine Average including ramp-up period)	US\$0.38/lb payable
C3 Cash Cost (Life of Mine Average including ramp-up period)	US\$0.50/lb payable
Plant Design Feed Rate	15Mtpa
Life of Mine	6.3 years

Table 7: Economic Summary of proposed tailings reprocessing operations at the Century Zinc Mine

Table Notes: 1) Long term exchange rate of AUD:USD \$0.75 applied. 2) Net increase in cash after paying back capital, no allowance for financing costs 3) Results are based on Mineral Reserves only, at an 8% post-tax real discount rate, with an 0.75 USD:AUD exchange rate and commodity prices listed on Page 35 in Appendix 1 of this announcement. Other assumptions in Appendix 1.

## Project Sensitivity Analysis

The economics of the Project are most sensitive to the zinc price, exchange rate and metallurgical recoveries. Grade variation is not assessed as a key sensitivity, as the Ore Resource of the Century Tailings Deposit demonstrates very little grade variation. Other minor factors include silver price, upfront capital cost and key operating cost inputs, such as consumables, reagents and labour. The outputs of the sensitivity analysis have been provided in Appendix 1.



## **Environment and Rehabilitation**

## Environment

Environmental authority EPML00888813 dated 31 October 2017 (EA) authorises "a level 1 mining project, mining lead, silver or zinc separately or in any combination", as well as a number of related activities. CML sought and was successfully granted an amendment to the EA on 31 October 2017 for the purposes of the activities proposed under the RFS to:

- a) authorise proposed new activities, including recovering tailings from the TSF and relocating them to the open pit; and
- b) make changes to previous conditions that were necessary to accommodate the new and changed activities.

#### Rehabilitation

As announced on 1 March 2017, MMG will stand behind the ongoing provision of bank guarantees of A\$193.7M for the benefit of Century to meet its financial assurance obligation with the Queensland Government for a period of up to 10 years through to 31 December 2026.

The Study has assumed the financial assurance will be progressively replaced via 40% of EBITDA from operations at the site being quarantined as cash on the Company's balance sheet.

The Study has also assumed a conservative provision of A\$81M for rehabilitation during tailings reprocessing, including: final rehabilitation of the tailings dam and evaporation dam, as well as rehabilitation of the three existing waste rock dumps.

MMG is also providing a contribution of A\$34.5M in cash payments (comprising of A\$5.75M payments until 2019, with A\$11.5M already received) to assist with ongoing rehabilitation and care & maintenance obligations.



Figure 17: Monitoring of the rehabilitated Southern Waste Rock Dump at the Century Zinc Mine



## Approvals and Stakeholders

## **Regulatory Approvals and Licenses**

Century Mining Limited (**CML**), which is 70% owned by New Century Resources and under conditional agreement to acquire 100%, holds the following mining and exploration leases:

Tenement	Name	Area
ML90045	Century	14,688 Ha
ML90058	Century Zinc No 2	8,496 Ha
EPM10544		170 sub-blocks

#### Table 8: Century tenement ownership summary

All required permits and approvals to undertake the proposed Century restart are in place.

In relation to activities conducted on ML90045 & ML90058 (together the Century Mining Leases):

- the key environmental approval is environmental authority EPML00888813, dated 31 October 2017, held by CML and having no termination date. Various amendments have been made to this environmental authority during the life of the approval;
- an amended Plan of Operations was submitted to the regulator on 17 November 2017 as required following the amendment of the environmental authority on 31 October 2017;
- CML holds Term Lease 208881 on Lot 6 on CP907593 (**Term Lease**) which expires in 2037. The area of the Century mining Leases is together coextensive with the Term Lease; and
- the key environmental approval for activities conducted on EPM10544 is environmental authority MIN201020910 dated 12 January 2010.

The concentrate slurry pipeline is operated under:

- a Corridor Licence dated 19 September 1997, issued by the Department of Transport for and on behalf of the State of Queensland;
- an Operational Licence dated 19 September 1997, issued by the Department of Transport for and on behalf of the State of Queensland; and
- easement 709345470 held by the State of Queensland represented by the Department of Transport (now the Department of Transport and Main Roads).

Activities at the Karumba Port Facility are conducted pursuant to:

- development approval 07-95-66/ISO9-08 MC and environmental authority EPPR00518513. These approvals have been adjusted as required during the course of activities at the Karumba Port Facility, and neither has a termination date;
- an Offshore Facility Lease over Lot 505 on SP162436, which expires on 13 April 2040; and
- an Onshore Lease over Lot 71 on SP112359, Lot 72 on SP115210 and Lot 81 on SP125919, which also expires on 13 April 2040.



## Native Title & Cultural Heritage

The Century Mining Leases were granted following a right to negotiate process in accordance with the Native Title Act 1993 (Cth) (NTA). Further, any native title rights and interests in the Term Lease underlying the Century Mining Leases were acquired by the State of Queensland following a process in accordance with the NTA.

The consent from the relevant native title holders for the grant of the Century Mining Leases (and other grants) is contained in the Gulf Communities Agreement (**GCA**), which has no termination date other than the date upon which the Century Mining Leases are relinquished.

Any native title rights and interests in relation to the Miscellaneous Transport Infrastructure Corridor for the Pipeline were acquired by the State of Queensland following a process in accordance with the NTA. Further, the Operational Licence was granted following a process in accordance with the NTA. The consent from the relevant native title holders for the grant of the Operational Licence (and other grants) is contained in the GCA.

Any native title rights and interests in relation to the Karumba Port Facility were acquired by the State of Queensland following a process in accordance with the NTA.

As announced on 1 March 2017, MMG has funded a special purpose trust of A\$12.1M to ensure the Century Zinc Mine meetings its obligations under the GCA.

#### Local Community

The impact area of the proposed operations encompasses the lower gulf region of northwest Queensland, inclusive of the area immediately surrounding the Century Mine at Lawn Hill and Karumba, and the communities of Gregory, Doomadgee, Burketown, Normanton and Mornington Island. These non-contiguous areas are contained within the local government areas of Burke Shire, Carpentaria Shire, Doomadgee Aboriginal Shire, and Mornington Shire.

It is expected that the reinvigoration of economic activity at the Century Mine by New Century Resources will significantly re-energise communities through partial, and in some cases complete renewal of many of the past benefits identified through the Mine's previous operational life.

Under the GCA, there are a number of committees that meet on a regular basis to ensure elements of the Agreement are implemented effectively and to share information with community members. These committees include the Century Liaison and Advisory Committee, the Century Environment Committee and the Century Employment and Training Committee.

New Century Resources maintains regular engagement with the Queensland Government and with the local governments that have an interest in the proposed restarting of operations.



## Expansion & Mine Life Extension Opportunities

## In-situ Resource Blending

The RFS is based solely on the development potential of the Century Tailings Deposit, however New Century Resources is planning to assess the potential for integration of known in-situ resources into the proposed future operations.

In the near term, the Company is planning to complete the definition and potential upgrade of existing in-situ resources at Silver King and East Fault Block, with further definition work to be undertaken in order to define initial JORC compliant Mineral Resources over South Block and Watsons Lode.

This definition program will allow the undertaking of an Expansion Feasibility Study in 2018 which will assess the potential for blending of these resources into the tailings operations planned under the RFS, paving the way for increased metal production rates and mine life extension.

Deposit	Tonnes	Grade			Contained Metal			
	(Mt)	Zinc (%)	Lead (%)	Silver (g/t)	Zinc (t)	Lead (t)	Silver (oz)	
Silver King Inferred Resource	2.7	6.90	12.5	120	186,000	337,500	10,500,000	
East Fault Block Inferred Resource	0.5	11.6	1.10	48.0	60,000	5,500	800,000	
TOTAL	3.2	7.63	10.7	109	246,000	343,000	11,300,000	

## Current JORC 2012 Compliant Resources

## Current JORC 2012 Compliant Reserves

Deposit	Tonnes	Grade			Containe	ed Metal
	(Mt)	ZnEq (%)	Zinc (%)	Silver (g/t)	Zinc (t)	Silver (oz)
Century Tailings Proven Reserve	77.3	3.1	3.0	12	2,287,662	29,734,819

The Company is not aware of any reason why the ASX would not allow trading in the Company's securities to recommence immediately.

#### For further information please contact:

Patrick Walta - Managing Director +61 (08) 6142 0989



## **Cautionary Notes and Forward Looking Information**

Certain statements contained in this report constitute forward looking statements. Forward looking information often relate to statements concerning New Century Resources' future outlook and anticipated events or results and, in some cases can be identified by terminology such as "may", "will", "could", "should", "expect", "plan", "anticipate", "believe", "intend", "estimate", "projects", "predict", "potential", "continue" or other similar expressions concerning matters that are not historical facts. Statements of historical fact are not considered forward looking information.

Forward looking statements are based on a number of material factors and assumptions, including, but not limited in any manner to, those disclosed in results; the ability to explore; communications with local stakeholders and community and government relations; status of negotiations of joint ventures; weather conditions; Ore Reserves; Mineral Resources; the development approach and schedule; the receipt of required approvals, titles, licenses and permits; sufficient working capital to develop and operate the mines and implement development plans; access to adequate services and supplies; foreign currency exchange rates; access to capital markets; availability of qualified work force; ability to negotiate, finalise and execute relevant agreements; lack of social opposition to mines or facilities; lack of legal challenges with respect to the property; the timing and amount of future production and ability to meet production, operating and capital cost expenditure targets; timing and ability to produce studies and analysis; execution of the credit facility; ability to draw under the credit facility and satisfy conditions precedent including execution of security and construction documents; economic conditions; availability of sufficient funding; the ultimate ability to mine, process and sell the mineral products produced; the timing, exploration, development, operational, financial, budgetary, economic, legal, social and political factors that may influence future events or operating conditions. Forward looking statement are only predictions based on New Century Resources' current expectations and projections of future events. Actual results may vary from such forward looking information for a variety of reasons.

Forecast financial information provided in this announcement based on the Restart Feasibility Study. The Company is of the view it has reasonable grounds for providing the forward looking statements included in this announcement. The detailed reasons for this conclusion are outlined throughout the announcement and appendices. However, the Company cautions that there is no certainty that the forecast financial information derived from the production targets will be realised.

Other than required by law, New Century Resources assumes no obligation to update any forward looking information to reflect, among other things, new information or future events.



## Appendix 1: Disclosure of Additional Information & Assumptions

## Mining Production Schedule

As outlined in the body of the announcement, the proposed operations have assumed a 15Mtpa processing rate on reclaimed tailings for a 6.3 year initial mine life. Actual total annual production varies, due to the occurrence of down-time during the wet season. The timing as assumed to deliver a commissioned project is by July 2018. The overall production and grade profile is outlined below.

Calendar Year	Unit	LOM Total	2018	2019	2020	2021	2022	2023	2024
Tails Feed	kt	77,246	2,159	9,590	14,528	14,487	14,487	14,487	7,508
Zn Head Grade	%	2.96%	3.2%	3.0%	3.0%	3.0%	2.9%	2.9%	3.0%
Contained Zn	t	2,287,662	68,140	288,715	431,092	429,802	422,905	423,457	223,551
Ag Head Grade	gpt	12.0	6.4	7.4	11.8	11.9	11.7	13.4	17.5
Contained Ag	koz	29,735	447	2,290	5,523	5,529	5,469	6,256	4,221

 Table 9: Tailings mining rates and grade profile by year

Notes: Throughput shown as dry metric tonnes. ZnEq% refers to a calculated Zn equivalent grade, with the formula stated in Appendix 2.

There is no ROM storage capacity with the exception of the surge tanks at the processing plant. Therefore reclaimed tailings are fed direct into the processing plant after thickening.

#### Production

Based on the mining schedule in the previous section, the following table represents the detailed life of mine production of zinc concentrates. Concentrate production is shown on a dry tonne basis and gross metal content. Moisture in the shipped concentrate is expected to be around 10%, based on historical operations.

Calendar Year	Unit	LOM Total	2018	2019	2020	2021	2022	2023	2024
Zn Concentrate	dry kt	2,763	82	349	521	519	511	511	270
Zn Metal	kt	1,437	43	181	271	270	266	266	140
Ag Metal	koz	16,651	250	1,282	3,093	3,096	3,062	3,503	2,364

 Table 10: Production schedule

## Metallurgical

Design testwork was carried out based on metallurgical domain composites from the Century Tailings Deposit (see ASX announcement 13 November 2018). The domains used for testwork are illustrated in Figure 18.



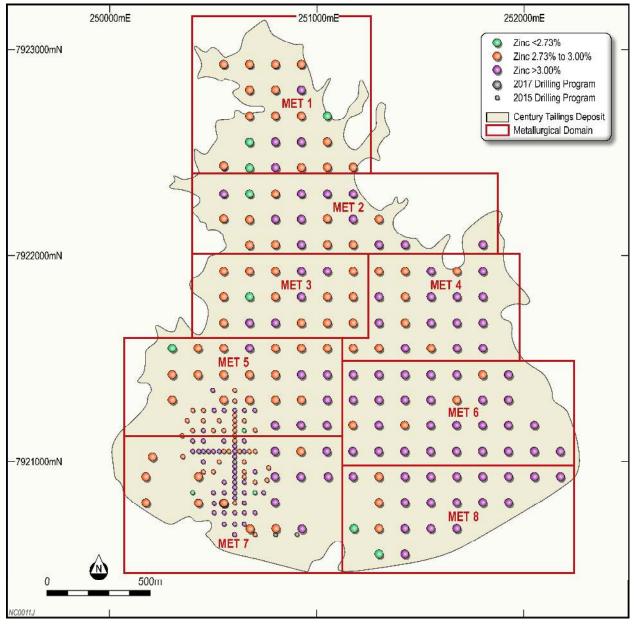


Figure 18: Composite Domains used for metallurgical testwork

Based on these results, recoveries and concentrate grades in the following table have been assumed for the RFS. These recoveries have been assumed to be constant throughout the life of mine.



Measured Resource	Measured Resource				Zinc Concentrate			
Drilling Samples	Mt	Zn %	Pb %	Ag g/t	Total Zinc Recovery	Zinc Grade	Silver Recovery	Silver Grade
Met Domain 1 Testing	7.75	2.86%	0.48%	12.8	63%	51%	58%	208
Met Domain 2 Testing	8.05	2.96%	0.45%	12.1	62%	51%	55%	195
Met Domain 3 Testing	6.80	2.90%	0.43%	11.7	61%	50%	<b>49</b> %	188
Met Domain 4 Testing	8.80	3.05%	0.42%	10.5	64%	50%	61%	172
Met Domain 5 Testing	10.8	2.93%	0.43%	11.7	61%	52%	55%	198
Met Domain 6 Testing	16.3	3.14%	0.49%	13.1	63%	50%	56%	202
Met Domain 7 Testing	8.95	2.97%	0.41%	10.6	61%	52%	55%	166
Met Domain 8 Testing	11.4	3.18%	0.60%	15.4	64%	53%	63%	259
Combined Domains Testing	78.9	3.02%	0.47%	12.4	63%	51%	61%	213
Values used for the Restart Feasibility Study Financial Model					63%	52%	56%	Variable*

#### Table 11: Recovery and estimated concentrate grade

\* Notes: Silver grade in final concentrate used for RFS was determined by silver grade in feed from mine plan multiplied by recovery. Zinc recovery includes soluble zinc.

The total zinc recovery includes recovery of 4,440tpa of a zinc concentrate (62% Zn) through the processing of plant water with sodium hydrogen sulphide (NaHS) in order to recover soluble zinc and produce a high purity zinc sulphide, which is blended with the flotation product. Laboratory testing was carried out on site water and demonstrated a 90% recovery of zinc, producing a zinc sulphide product containing at a zinc concentration of 62%. With the inclusion of the soluble zinc recovery, the overall zinc recovery used in the financial model is 62.8% (62.5% overall recovery from sulphide flotation, 0.3% overall recovery from soluble zinc precipitation).

## **Mining Costs**

Tailings materials will be recovered from the Century Tailings Deposit using high-pressure water via hydraulic mining. The tailings slurry will then be transported to the Century Processing Plant, where it is thickened and processed. The mining cost outlined below includes the allowance for contractor supply of all mining equipment, power, maintenance, labour, mobile equipment and G&A.

The average mining cost over the life of mine is A\$2.75/tonne feed (US\$0.06/lb payable zinc). Capital costs for the initial phase of hydraulic mining (A\$25M) and the ramp-up phase (A\$21.9M) have been transferred to the operating cost on the basis that the infrastructure will be provided by the hydraulic mining contractor on a Build Own Operate Transfer model.



### **Processing Costs**

The operating cost estimate has been developed on the basis of a Century Processing Plant feed tonnage of 15Mtpa. The average life of mine processing plant operating cost is A\$10.31/tonne feed.

Processing Unit Cost	A\$/Feed Ore	US\$/lb Zn (payable)
Labour	1.25	0.03
Maintenance	0.63	0.01
Operating Consumables	3.99	0.09
Mobile Equipment	0.04	0.001
Power	4.21	0.09
Site G&A, including Environmental Management	0.19	0.004
TOTAL	10.31	0.22

 Table 12: Life of Mine average Processing Operating Cost (including ramp-up phase)

The costs have been separated into fixed and variable portions, with the variable portion adjusted for the production in that period. These costs include feed thickening, milling and flotation.

### Product Logistics, Marketing and Sale Costs

Century concentrate is pumped, via the underground slurry pipeline, to the Port Facility in Karumba, where it is dewatered, dried and stacked in an undercover stockpile.

The logistics includes operation of New Century's transhipment vessel (M.V. Wunma) in 5,000t parcels to concentrate ships in the Gulf. The life of mine average operating cost for the transhipment vessel is A\$18.04/wet metric tonne of concentrate. This includes all labour, maintenance, consumables and G&A costs. Concentrate is assumed to be shipped in 50kt parcels. It is assumed that 90% of the revenue is received within 5 days of storage at the Port of Karumba, with the balance paid after 60 days. The overseas shipment cost supplied by New Century for the for the Study is US\$19.50/wet metric tonne and is based on quotations received.

 Table 13: Life of Mine average Product Logistics and Sale Operating Costs

Processing Unit Cost	A\$/Feed Ore	US\$/lb Zn (payable)	
Inland Slurry Transport Costs (Pipeline)	0.05	0.001	
Port Costs (incl. labour, maintenance, consumables, power, G&A)	1.38	0.03	
Transshipment Costs (incl. labour, maintenance, consumables, G&A) and Sea Freight	1.68	0.04	
Treatment charges, deductions and silver credits	1.52	0.03	
TOTAL	4.53	0.10	



The payability and TC/RC terms supplied by New Century for the Study vary depending on the concentrate specifications and levels of by-products. The assumptions used by New Century are based on the benchmarks and indicative quotations received from potential off-takers, based on the expected concentrate characteristics and are in line with normal terms available in the market.

Material payability terms as supplied by New Century, have been assumed as follows:

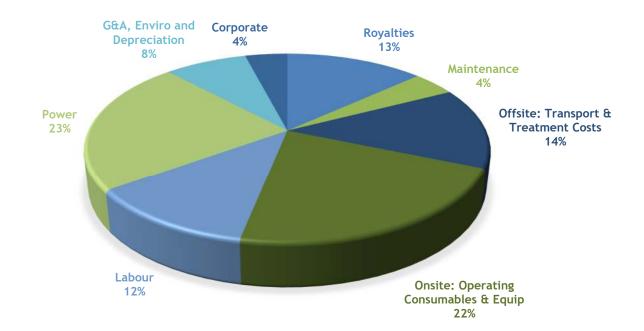
- Zinc payable: 85% or minimum deduction of 8 units
- Silver payable: deduct 3oz and pay 80% of balance

Based on New Century's discussions with potential off-takers, no penalties have been assumed for Century's expected product specification.

### Corporate Costs

Life of mine average corporate costs of A\$1.10/tonne feed have been taken into consideration and include all corporate overheads associated with the proposed operations, licenses, permits and mining lease payments as well as all cultural and stakeholder engagement commitments as outlined in the Gulf Communities Agreement. No operating cost contingency has been included.

### Operating Cost Breakdown



The following figure outlines the life-of-mine C3 operating costs for the Project:

Figure 19: Life-Of-Mine C3 Cost Breakdown, note depreciation includes development, working, sustaining capital and rehabilitation provision



## **Capital Costs**

The basis of the capital estimates in Table 5 includes:

- Engineering, procurement and construction model for non-mining works;
- Combined owner-operator and contract labour for processing facilities and port;
- Owned fixed plant for office and administration buildings (existing), leased mobile fleet;
- Contract mining, including equipment, maintenance and labour; and
- Contract transhipment operation

Working capital is defined as the initial working capital post commissioning until the mine achieves a break-even cash position, excluding any financing costs. A\$13.0M of working capital is required in the base case. No allowance has been made for GST-related cash flows or fluctuations in the exchange rate (which has be assumed as \$0.75 USD:AUD).

#### Table 14: Peak Capital Requirement

Area / Cost Centre	A\$M
Start-up Capital (as per Table 5)	50.0
Working Capital incl. post-start up commissioning, start-up costs for Port and transhipment vessel, deferred fees for studies and execution	13.0
TOTAL	63.0

In addition, there is a A\$26M sustaining capital provision over the life of mine, mainly for the annual dredging of the Norman River for transshipping. There is also an A\$81M provision toward the end of the project for the final rehabilitation of the tailings storage facility and evaporation dam, as well as rehabilitation of the three existing waste rock dumps on site.

The capital expenditure profile over the tailings reprocessing operation is as follows.

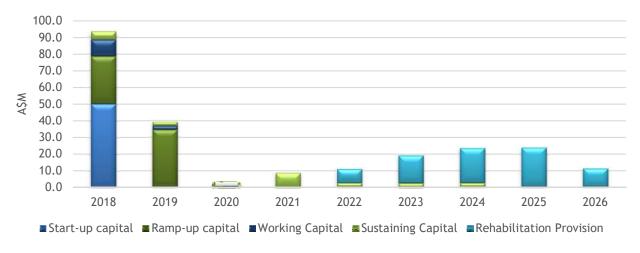


Figure 20: Capital expenditure profile (calendar year)



### Economic Analysis

Unless otherwise stated, all cash flows are in Australian dollars and are un-discounted. A 2% escalation factor is applied, commencing July 2018. All cash-flows are unleveraged (pre-finance) and are post-tax unless otherwise specified. A flat exchange rate of \$0.75 USD:AUD has been used for the initial life of mine.

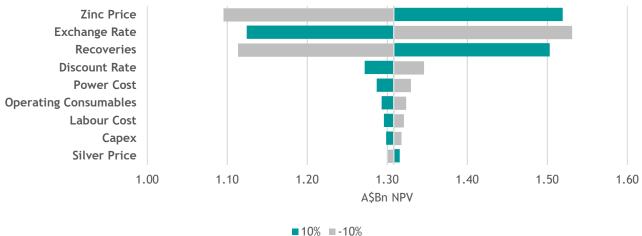
The Company has assumed flat metal prices of USD\$2,755/t zinc and US\$17.80/oz silver over the initial life of mine for the Century Tailings Deposit. The long term zinc an silver price assumptions are based on Bloomberg consensus median forecasts by independent analysts for the year 2018. The flat zinc price assumption can be considered conservative during the initial years of operations given the current zinc price is approximately 17% higher at US\$3,220/t.

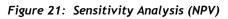
A real, post-tax discount rate of 8% has been applied by New Century to calculate the net present value. In addition to government royalties, a 2% Net Smelter Royalty (**NSR**) has also been included. For more information, please see the Company's ASX announcement on 17 July 2017.

It should also be noted that, as per contractual arrangements with MMG Limited, 40% of the annual EBITDA is allocated to meet the obligation to progressively replace the existing environmental bond that has been put up by MMG (i.e. up to A\$193.7 million). The Company currently envisages these amounts will be kept as quarantined cash on the Company's balance sheet.

## Sensitivity Analysis

The sensitivity of the project NPV to key input changes with a  $\pm 10\%$  variation applied is summarised below.





As Figure 21 shows, the lowest NPV outcome from changing an individual variable still generates an  $NPV_8$  of approximately A\$1.1 billion.



## Scenario Analysis

The following table outlines the financial metrics for the project under different flat price scenarios. Even under a bearish assumption of long term zinc pricing of US\$1.00/lb (46% discount to the current spot zinc price of UD\$1.46/lb zinc), the Project is still estimated to generate free cashflow of approximately of A\$1.2 billion over the 6.3 year mine life. Conversely, if the long term zinc price was to on average at a US\$1.50/lb (3% premium to current spot price) the proposed operations are estimated to deliver in excess of \$2.3 billion in free cashflow over the tailings mine life.

In-situ resource blending from Silver King, South Block, East Fault Block and Watsons Lode also remains as potential upside to the economics of the Project.

Scenario	Long Term Zinc Price	Long Term AUD:USD	NPV <sub>8 (post-tax)</sub>	IRR	Free Cashflow
Optimistic Case	US\$1.50/lb (US\$3,306/t)	\$0.75	A\$1,729M	350%	A\$2,325M
Base Case	US\$1.25/lb (US\$2,755/t)	\$0.75	A\$1,308M	270%	A\$1,764M
Bearish Case	US\$1.00/lb (US\$2,204/t)	\$0.75	A\$881M	189%	A\$1,194M

## Legal

All Mineral Resources and Reserves which are subject to the production in the RFS are 100% owned by Century Mine Rehabilitation Project Pty Ltd (**CMRP**), a subsidiary of Century Bull Pty Ltd (**Century Bull**). New Century currently owns 70% of CMRP, with an agreement in place to purchase the remaining 30% via the outright acquisition of Century Bull, subject to New Century shareholder approval.

The proposed transaction structure is a simple equity transfer deal given both New Century Resources and Century Bull own a percentage of the same asset (being CMRP). It is proposed that New Century Resources move from 70% to 100% ownership in CMRP through the issuance of 30% of its capital structure to existing shareholders of Century Bull. For further details, please see the Company's ASX announcement on 28 September 2017.

#### Governmental

The project is subject to Australian corporate tax, which has been applied at 30%. Tax calculations are impacted by depreciation deductions for capital items.

Queensland levies mineral royalties for extractive operations within the state. All royalties are based on an 'ad valorem' value of minerals. Zinc and silver royalties are determined by a variable rate between 2.50% and 5.00% (varying in 0.02% increments) of value, depending on average metal prices. The rate for each return period is published quarterly. The Queensland Government royalties



are applied to all commodities produced and sold in accordance with published rates and guidelines. Please refer to the Queensland Mineral Resources Act 1989 (Mineral Resources Regulation 2013, current as of 28 September 2017).

### Tax Losses

As at the date of completion of the RFS, New Century Resources had approximately A\$40M in tax losses within the Company. These tax losses have been included in the economic projections of the proposed operations.



# Appendix 2: Competent Person Statements and JORC Code (2012) Tables

### Competent Person Statement

### Exploration Targets, Exploration Results, Mineral Resources

The information in this announcement that relates to Mineral Resources (as that term is defined in the JORC Code) in respect to the Century Tailings Deposit was reported by the Company to the ASX on 12 September 2017. The Company confirms that it is not aware of any new information or data that materially affects the Century Tailings Deposit resource estimate, and that all material assumptions and technical parameters underpinning that estimate continue to apply and have not materially changed.

The information in this announcement that relates to Mineral Resources (as that term is defined in the JORC Code) in respect to the Silver King Deposit and the East Fault Block Deposit was reported by the Company in its prospectus released to ASX on 20 June 2017. The Company confirms that it is not aware of any new information or data that materially affects the Silver King Deposit and the East Fault Block Deposit resource estimates, and that all material assumptions and technical parameters underpinning that estimate continue to apply and have not materially changed.

### Ore Reserves

The information relating to the Estimation and Reporting of Ore Reserves at the Century Tailings Deposit is based on information provided and compiled by Shyam Sunder, who is a member of the Australasian Institute of Mining and Metallurgy and who have sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity undertaken to qualify as a Competent Person as defined in the JORC Code. Shyam Sunder is an employee of MEC Mining Pty Ltd at the time the Reserves were compiled. Shyam consents to the inclusion in the announcement of the matters based on their information in the form and context which it appears.



# JORC Code, 2012 Edition - Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation.</li> </ul>	<ul> <li>A Sandvik 710 track mounted diamond drill rig was used to obtain whole drill-core samples</li> <li>Sample recovery and displacement were considered the primary risks to achieving representative sample across the deposit.</li> <li>Holes were dipped with a lead weighted rule following each 3m run to ensure the drilled interval matched the sampled void.</li> <li>Where recovery values were outside the predetermined range the hole would be re-drilled at the Geologists discretion.</li> <li>All drill sampling methods replicated those developed by MMG in 2015, and were run by the same Study Manager.</li> <li>The Tailings deposit by its nature is a wholly mineralized mass.</li> <li>All samples were HQ3 diameter core (61.1mm)</li> <li>Sampled intervals range from 0.3m to 1.3m around a nominal 1m sample size.</li> <li>Quarter-core samples were taken at the site laboratory for analysis. The remaining sample was retained and composited for detailed metallurgical testing.</li> <li>Samples weighing approximately 1-1.5kg were dried at 100C for 24 hours, crushed to -3mm and split to 200g, then pulverized to 90% &lt; 53 microns</li> <li>Pulverized sample weighting 50-100g was then sent to ALS Laboratory in Brisbane for analysis of - Zn, Pb, Fe, S, SiO2, CaO, Al2O3 &amp; Mn by XRF, Ag by four acid digest with an ICP-AES finish, and Specific Gravity by pycnometer with methanol.</li> <li>Pulverised reject material was retained on site for any further analytical requirements not identified at present time.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Drilling was carried out using a diamond drilling configuration</li> <li>Due to the unconsolidated nature of the tailings sediment, minor modifications were made to the drill-bit cutting face to improve penetration and subsequent sample recovery.</li> <li>No water was added during the drilling process.</li> <li>Triple tube (HQ3) diameter equipment was used for all holes.</li> <li>All holes are vertical and do not require orientation.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Core recovery was measured for each 3m drill run or part thereof. Recovery was back allocated proportionately to pseudo 1m sections. This approach was adopted due to the plasticity and mobility of the sample medium. The dynamic characteristic of the sample reduces the confidence in the spatial origin of sample within the 3m run at times when 100% sample recovery is not achieved.</li> <li>Sample recovery was maximized through modification of the drilling practices. The drill-bit cutting face was tapered to improve penetration, the upper sequence was drilled within a poly-pipe casing to prevent lateral compression of the unconsolidated sediment, and no water was added during the sampling process.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>The process was developed, and extensively tested and validated during the 2015 campaign.</li> <li>From field observations, it is assumed that sample recovery is primarily impacted by the compaction and saturation state of the unconsolidated sediment. When the sediment is insufficiently compacted, or moisture levels reach saturation point, the sediment is no longer sufficiently competent to enter, or remain, in the sample tube. No direct relationship between sample recovery and grade has been identified - however the local dry bulk density should be reviewed to address the risk of over estimating contained metal in these areas.</li> <li>Average sample recovery was 93%</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>The tailings represent the unrecovered, homogenized, mineralized material from primary processing.</li> <li>No detailed logging of the tailings sediment is considered practicable.</li> <li>A total of 291 Drill holes, comprising of 3648m of drilling were used within the Century Tailings Mineral Resource estimate.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Quarter-core samples from the plastic, clay-like, tailings material. were hand cut in the site laboratory</li> <li>Samples are considered of high quality, and the sample type and size are considered appropriate for the deposit type.</li> <li>Duplicate splits have been taken for analysis at the Boyd crusher to assess for variability.</li> <li>Previous analysis shows ~70% of the tailings is sized at &lt;38µ due to the ultra-fine grind required for liberation of Zn in Century Ore. This size fraction is significantly smaller than the standard pulverization stage of preparation at all analytical laboratories.</li> <li>By nature of the deposit sampling risk is greatly reduced when compared to any form of primary mineralization.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Both the XRF and ICP-AES methods are considered total methods, and are consistent with industry standards.</li> <li>Five different CRM's were used at an insertion rate of 1:20 samples to test for precision of analysis.</li> <li>Blanks and Duplicates were also inserted alternately at a rate of 1:20, to test for sample contamination and sample variability respectively.</li> <li>No material issues have been identified with regards to sample quality.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage</li> </ul>	<ul> <li>Data was logged in the field on dedicated logging sheets and reviewed and transferred to an electronic spreadsheet daily.</li> <li>Twinned holes were not carried out as part of this programme.</li> <li>Fully validated data is uploaded to the auditable and independently managed company database hosted by</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul><li>(physical and electronic) protocols.</li><li>Discuss any adjustment to assay data.</li></ul>	<ul> <li>Maxwell's Geoservices, known as Webshed.</li> <li>No adjustments occur to assay data under any circumstances.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Annual to biennial aerial surveys were carried out over the Century Tailings Dam throughout the operational life utilizing both photogrammetry and LiDAR methods. The accuracy of the survey methods improved incrementally over time from ± 0.3-0.6 m in 1992 to within ±0.1m in 2016.</li> <li>Airborne LiDAR survey was carried out by AAM Hatch Pty Ltd in February 2016. Reported accuracy for the method was in the range of ±0.1m - ±0.5m. This data informs the topographic surface used in drill hole design.</li> <li>All work was carried out in Australian Map Grid zone 54, using the Australian Geodetic Datum (AGD84)</li> <li>All hole collars have been located by a registered surveyor to ±0.1m</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drilling was executed on a regular 125m x 125m grid.</li> <li>Data spacing was defined by variograms developed from the 2015 drilling campaign and is considered sufficient for the Mineral Resource classification.</li> <li>Sample compositing by hole has been carried out for the Exploration Drilling results summary table. For intervals where no sample was recovered, the average grade of the local Inferred Mineral Resource was applied. This approach was considered conservative with regards to grade reporting.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>All sampling is carried out perpendicular to mineralization.</li> <li>Drill-holes intersect mineralization from top of hole to the base of deposition.</li> <li>The nature of the deposit allows for simple unbiased sampling practices.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Core samples were collected in clearly labelled and numbered HQ core trays by each 3m drill run and recorded on a field logging sheet.</li> <li>An inventory of samples was taken by the site Laboratory technician on receipt of the samples from the drill rig to ensure all were accounted for.</li> <li>Samples were split at the site laboratory by the Geologist and Laboratory technician and transferred to individually numbered calico sample bags.</li> <li>Each number was logged against the respective sample interval by the geologist.</li> <li>Samples numbers and intervals were entered into a project specific logging spreadsheet, along with all hole details.</li> <li>Samples were prepared and placed in duplicate labelled, heat sealed, foil sample packets for despatch to the commercial laboratory.</li> <li>Upon arrival at ALS Mt Isa all samples were registered into the Laboratory Information Management System (LIMS) and reconciled with the submission list. Any discrepancies are reported to the Project Geologist.</li> <li>No material issues were encountered across the reported</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>sample set.</li> <li>The validated dataset would be loaded into Maxwell Geoservices WebShed. Maxwell's hosted data management solution provides independent, secure, management and storage of the company data.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No audits or reviews have occurred.

# Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>New Century Resources Ltd holds a mining lease (ML90045) over the Century TSF; this has an expiry date of 18/09/2037. As part of an operating mine the tailings dam is not subject to any operating restrictions, but it is subject to environmental conditions relating to the containment of the tailings.</li> <li>All activities undertaken are subject to the conditions of the Environmental Authority EPML00888813, issued by the Queensland Department of Environment and Heritage Protection. All activities are monitored by site based environmental scientists.</li> <li>There are no known impediments to operating in the area.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>All previous Resource Definition drilling on the Tailings deposit was carried out by the previous owner MMG Ltd in 2015.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	• The deposit is a tailings dam with zinc, lead, and silver mineralisation deposited in sub horizontal layers as mine tailings sediment from up to five separate outflow sites.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> </ul> </li> </ul>	<ul> <li>A total of 291 Drill holes, comprising of 3648m of drilling were used within the Century Tailings Mineral Resource estimate.</li> <li>All drill holes are weighted equally and reporting of the full dataset is not considered necessary. The omission of this data is not considered to detract from the understanding of the report.</li> </ul>
	<ul> <li>elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>See above</li> <li>For the recent drilling programme undertaken by the Company, see ASX announcements dated 27 July 2017, 14 August 2017 and 29 August 2017</li> </ul>



Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Drill hole samples were composited by 5 stratigraphically, and temporally, discrete domains.</li> <li>No cutting of high grades occurred.</li> <li>No metal equivalents have been reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>All intercept widths represent the true mineralization width in all cases.</li> <li>All drilling occurs perpendicular to, and exclusively within the mineralized tailings sediment.</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Plan view of drill coverage across tailings dam at 125m x 125m spacing</li> <li>Plan view of drill coverage across tailings dam at 125m x 125m</li> <li>Plan view of drill coverage across tailings dam at 125m x 125m</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Representitive cross section of drilling results through C-C'</li> <li>Image: section of drilling results through C-C'</li> <li>Image: section of drilling results through C-C'</li> </ul>



Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	• The accompanying document is considered to represent a balanced report.
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples</li> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>Metallurgical test work at the laboratory scale has demonstrated the ability to recover up to 64% of contained zinc metal into a 50-53% zinc concentrate.</li> <li>No deleterious elements, or contaminating substances, have been identified.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The deposit by its nature is constrained and has no scope for extensions.</li> </ul>

# Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> </ul>	<ul> <li>All drilling and sampling data is stored within a digital database controlled by NCR personnel. Data entry and changes are fully auditable.</li> <li>The 2015 data was provided to Optiro in the form of a series of spreadsheets which were imported into a Mineral Resource Access DB. The 2017 data from NCR was validated and imported directly into the mining software.</li> </ul>
	Data validation procedures used.	<ul> <li>Validation of the exported data was confirmed using mining software (Datamine Studio RM) validation protocols, and visually in plan and section views by Optiro prior to use in the estimation.</li> </ul>
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	<ul> <li>A site visit was completed by Mr Ian Glacken of Optiro Pty Ltd, the Competent Person, between 29th April and the 1st May 2015. The 2017 drilling is understood to have been carried out using a similar approach to the 2015 programme.</li> </ul>
	<ul> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• N/A
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	<ul> <li>There is no geological interpretation, simply the assumption that tailings have been deposited in a sub-horizontal manner. Due to the consistent feed assays, the Tailings Dam is considered relatively homogenous and consistent throughout.</li> </ul>
	<ul> <li>Nature of the data used and of any assumptions made.</li> </ul>	<ul> <li>Volumetrically the resource is constrained by annual to biennial aerial surveys conducted by qualified survey personnel throughout the operational life of the Century Tailings Dam. Both photogrammetry and LiDAR methods have been used to generate</li> </ul>



Criteria	JORC Code explanation	Commentary
	The effect is any of elementing	estimation domains and constrain the final TSF volume. Accuracy of each of these surfaces range from ±0.1 to 0.6 m.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	<ul> <li>Some inconsistencies between the aerial surfaces are observed, in particular between the 1992 (basal) and 2002 surveys. These have been resolved so that the later surveys do not report lower elevations than the earlier survey.</li> </ul>
Geological interpretation	<ul> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	<ul> <li>The TSF mineralisation was grouped into five time- based domains for estimation based on the average zinc grade of the 1 m composites between the annual topographic surfaces. Domains were chosen to subdivide the depositional history into consistent grade domains demonstrating stationarity for estimation.</li> <li>Moisture and specific gravity were estimated at the</li> </ul>
		global (whole of dam) scale as there was no evidence that these varied with the depositional years.
	<ul> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The TSF mineralisation is considered to be continuous with low grade variability within the defined time periods.</li> </ul>
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	• The Mineral Resource area is the entire area of the TSF, i.e. roughly 3 km north-south by up to 2.5 km east-west, with depths averaging between 5 and 25 m.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	<ul> <li>Estimation was completed in Datamine Studio RM using ordinary kriging (OK) into parent blocks of 100 mE by 100 mN by 1 mRL. Sub-celling down to 10 mE by 10 mN by 0.10 mRL was employed at domain boundaries for adequate volume resolution. The entire volume of the TSF was estimated using OK.</li> <li>A total of 10 grade variables (Zn %, Pb %, Ag g/t, Fe %, SiO2 %, Al2O3 %, Mn %, S %, moisture, and SG g/cm3), were estimated and dry bulk density g/cm3was calculated.</li> <li>Due to the low variability of the data with very few outliers, top cuts were not applied.</li> <li>Boundary analysis of the time-based zinc domains demonstrated that the boundaries were relatively soft and therefore a 1 m sample allowance both above and below each boundary was used for all domained variables.</li> <li>Kriging neighbourhood analysis was performed in order to determine the block size, sample numbers and discretisation levels.</li> <li>A total of three search passes was used, with the first search pass set to less than the range of the variogram for each domain and variable. For most elements including zinc, a search of 125 mE by 125 mN by 3 mRL was used. A minimum of 14 and a maximum of 30 samples were used. For subsequent passes, the search pass was increased; by a factor of 1.5 for the second pass and 3 for the third and final pass. The minimum number of samples did not change for subsequent passes.</li> </ul>
	The availability of check estimates, previous	<ul> <li>Un-estimated blocks (less than 1% for Zn) were assigned the domain averages by variable.</li> <li>The model zinc grades by domain and by year were</li> </ul>
	estimates and/or mine production records	compared against the average concentrator tailings



Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	and whether the Mineral Resource estimate takes appropriate account of such data.	grades for the same time periods. Except for one year, the estimated grade was within 10% of the weighted average concentrator grade for the same period and overall was within 6%. The dry bulk density values used for the Inferred portion of the dam in the previous estimate, back calculated from the tailings stream data, have now been replaced by measured specific gravity and moisture measurements from the 2017 drilling.
	<ul> <li>The assumptions made regarding recovery of by-products.</li> </ul>	No by-products expected.
	<ul> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> </ul>	<ul> <li>The tailings are already constrained by the containment walls, and any extraction method will need to ensure that there is no acid drainage outside of the current containment. The full list of estimated elements is provided above.</li> </ul>
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> </ul>	<ul> <li>The block size was chosen from kriging neighbourhood analysis and to reflect the average drill spacing and best represent to TSF volume. This has increased from the previous estimate to reflect the wider-spaced drilling over the entire TSF.</li> </ul>
	<ul> <li>Any assumptions behind modelling of selective mining units.</li> </ul>	<ul> <li>No selective mining units have been assumed in the global estimate. Any mining will need to treat the entire TSF.</li> </ul>
	<ul> <li>Any assumptions about correlation between variables.</li> </ul>	<ul> <li>No assumptions have been made regarding the correlation of variables.</li> </ul>
	<ul> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	• Estimation searches have been orientated to respect the flat depositional nature of the Dam.
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	<ul> <li>All variables show very little variability, and as such top cuts were considered unnecessary.</li> </ul>
	<ul> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>The estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the drillhole data and by northing and easting slices. Global comparison between the input data and the block grades for each variable by domain is considered acceptable (±5%). Moreover, the grade estimates for each year were compared with the averaged tailings concentrator grades and were within 6% overall.</li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul> <li>Dry tonnages have been estimated from the TSF volume with the application of a suitable moisture content and SG from the drillhole measurements. The moisture content has been assigned per domain, but varies very little from 18% throughout.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied</li> </ul>	<ul> <li>No cut-off grade has been applied as it is assumed that the entire TSF will be recovered. At this stage it is not possible to be selective.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with</li> </ul>	<ul> <li>It is assumed that a bulk recovery, non-selective mining method, such as hydraulic mining, will be utilised.</li> </ul>



Criteria	JORC Code explanation	Commentary
	an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	<ul> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul> <li>Extensive metallurgical test work completed to date including a 10,000t bulk pilot processing trial through the existing Century Processing Plant by previous owner MMG Ltd.</li> <li>Laboratory scale test work by New Century Resources Ltd show potential zinc recoveries of up to 64% into a premium 50-53% Zn concentrate.</li> <li>Pilot plant trial planned.</li> </ul>
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made</li> </ul>	<ul> <li>It is assumed that during mining there will be no run-off of solution into the groundwater system and that spent tailings can be redeposited into a suitable containment facility (or even the same TSF).</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> </ul>	<ul> <li>The specific gravity of all samples (once dried) was tested using a quantachrome multipycnometer. Analysis was carried out utilizing the gas displacement method of determination. Specific gravity was then estimated on a whole-of-deposit basis.</li> <li>The dry bulk density for each block was calculated using both the estimated specific gravity and moisture content. The average estimated dry bulk density for the entire dam is 1.91 g/cm3, based upon 1150 samples from the 2015 drilling and 2295 samples from the 2017 drilling.</li> <li>Data within the estimated area of the deposit show little variation.</li> <li>Natural settling and dewatering of the sediments due to evaporation, seepage and outflow from the dam, as well as compression may lead to reduced porosity results and potentially variable densities across the TSF.</li> <li>In the previous estimate a dry bulk density of 1.61 g/cm3 was applied for the undrilled area of the TSF, based upon the back-calculated average of the concentrator tonnage measurements. For this estimate, and because of the large and very consistent database of both specific gravity and moisture measurements, values based upon the drilling measurements have been used throughout. The overall dry bulk density of 1.91 g/cm3 used in</li> </ul>



Criteria	JORC Code explanation	Commentary
		previously, but has resulted in an overall 10% tonnage increase.
	<ul> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the difference protection</li> </ul>	<ul> <li>Specific gravity was measured as detailed above using a pycnometer approach and converted to a bulk density using a moisture content as measured. The tailings, being plastic clay-type material, have no vugs or inherent porosity.</li> <li>The bulk density estimate is for one material, the tailings.</li> </ul>
Classification	<ul> <li>the different materials.</li> <li>The basis for the classification of the Mineral Resources into varying confidence categories</li> </ul>	<ul> <li>The estimated portion of the TSF Mineral Resource, constrained within a boundary string (defining the dam walls and excluding outflow areas), has been classified as Measured in accordance with the JORC Code (2012) due to the low variability and high confidence in all of the variables estimated. The kriging estimation metrics (kriging efficiency and regression slope) indicate high-quality estimation; furthermore, the comparison of the model grades per year and per domain against the tailings stream grades, representing many thousands of individual shift composite assays taken over the life of the mine, shows an overall difference of 6%, well within the margin of error normally assumed for a Measured Resource.</li> </ul>
	<ul> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> </ul>	<ul> <li>The tonnage estimate is based upon the volume of the TSF survey pickups. The grade estimate is based upon the 2015 and 2017 drilling programmes, with the tonnages coming from the measured specific gravity and moisture measurements from the drilling (leading to a dry bulk density value used to convert volumes to tonnages).</li> </ul>
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>The classification reflects the Competent Person's view of the deposit.</li> </ul>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>The Mineral Resource has been audited internally as part of normal validation processes by Optiro.</li> <li>There has been no external review of the Mineral Resource estimate.</li> </ul>
	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	<ul> <li>Estimates of the zinc grade are considered to have a high level of confidence, and reconcile favourably to the Century production grades. The volume measurements have a high degree of precision and the tonnage factors are based upon specific gravity and moisture measurements from the drilling (almost 3500 samples) which are very precise.</li> </ul>
	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used</li> </ul>	The deposit is considered to have an accuracy in estimation which relates to a quarterly production volume over the entire dam.
	<ul> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</li> </ul>	<ul> <li>As mentioned, the overall weighted average model grade based upon drilling is within 6% of the average tailings stream grades from the Century concentrator, with individual yearly subsets varying from 12.5% to -9.8%. Over the many thousands of tailings assays taken during the life of the Century</li> </ul>



Criteria	JORC Code explanation	Commentary
		mining operation, the averages are believed to reflect the true tailings grades. The tailings tonnage measurements are less reliable but the tonnage factors calculated from the drilling vary very little with depth and location over the dam.

# Section 4 Reporting of Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The JORC Resource for NCR has been prepared by Optiro Pty Ltd in September 2017 and have been used as the basis for this conversion.</li> <li>The Resources reported are inclusive of the Reserves reported in this document.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• A site visit has been conducted by Shyam Sunder the Competent Person for this reserve estimation on November 7 <sup>th</sup> -9 <sup>th</sup> 2017 for familiarisation of the site and discussion with the site personnel. Shyam undertook a visual inspection of the Century TSF, evaporation dam and the open pit.
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be +converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre- Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>The Restart Feasibility Study has been completed by Sedgman in November of 2017.</li> <li>The Restart Feasibility study addressed material modifying factors including, but not limited to: stakeholder management and environmental considerations; site conditions; geology; mine planning and operations, mineral processing and production ramp- up, marketing and sales, transport, port facilities and distribution, infrastructure, utilities and services, personnel, operating and capital costs, revenue and exchange assumptions, business risk and discounted cash flow</li> </ul>
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	• Due to the nature of hydraulic mining, selective mining of the tailings deposit is not practical and therefore all material will be sent to the processing plant to generate a zinc concentrate, except for a small component of material left (300mm of loss from production mining) on the floor which is removed via a clean-up crew that follows the main production crew. The material mined by the clean-up crew is bypassed directly to the open pit void.
Mining factors or assumptions	• The method and assumptions used as reported in the Pre- Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by	<ul> <li>The mining operations will commence using a top down hydraulic mining method with trenches feeding material back to a North and South Sump.</li> <li>This method has been determined to the best suited low cost mining method for this deposit and has been used in several operations around the world to mine and reprocess tailings.</li> <li>The mining will be split into a production crew which will operate for the majority of the mine life and a clean-up crew which will</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc.), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul> <li>remove the remaining contaminated material from the floor.</li> <li>The production crew will utilise four active monitors mining at 500 dry tonnes/hr with one to two back-up monitors available to increase the fleet availability. The deposit will be mined in three 8m benches. The benches will drain to two sumps, one northeasterly sump and another south-easterly sump at a grade of 1:200.</li> <li>The mining face will be cut initially as a trench to provide a free face for material to drain into and will be cut at 18° utilising a top-down mining method. The monitor will operate at a 6m stand-off and will be remote controlled by the operator to ensure safe operation of the monitor.</li> <li>The production crew will leave a 300mm loss along the floor and take a 100mm dilution into the reserve. The remaining contaminated 300mm of material will be done with a clean-up crew consisting of a hydraulic cannon and two track dozers.</li> <li>The minimum mining fleet will be accomplished with light vehicle running along the surface of the tailings. Lower passes will access the tailings through a 10% ramp along the edge of the TSF and then run along the surface of the tailings. Lower passes don their experience with operations in Brazil, Zambia and South Africa. Whilst MEC is comfortable with these parameters, MEC recommends a full geotechnical assessment to be completed, factors of safety determined before commencing the operation. A sensitivity analysis for NPV of the project was conducted and confirmed positive cash-flow at lower mining rates. Should the geotechnical assessment and recommendations result in changed parameters, and potential impact on the production, the financial sensitivity shows a positive NPV at lower rates so the risk has been assessed from a financial point of view.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken,</li> <li>The nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test</li> </ul>	<ul> <li>Processing of the tailings will utilise the current processing facility on-site with modifications to recover the low particle sized tailings.</li> <li>Metallurgical test work has been broken into eight domains of similar stratigraphy and geology. These domains have been tested for recovery of zinc, lead and silver. They have been applied to the mining blocks within the polygonal domain and multiplied by the contained rom metal tonnes to determine recovered metal content.</li> <li>Results of the metallurgical test work are displayed below.</li> </ul>



Criteria	JORC Code explanation				Con	nmenta	ary				
	work and the degree to which	Measured Resource Zinc Concentra			ncentrate		1				
	such samples are considered	Drilling Samples	Mt	Zn %	Pb %	Ag g/t	Total Zinc Recovery	Zinc Grade	Silver Recovery	Silver Grade	
	representative of the orebody as a whole.	Met Domain 1 Test	7.75	2.86%	0.48%	12.8	63%	51%	58%	208	
	<ul> <li>For minerals that are defined</li> </ul>	Met Domain 2 Test	8.05	2.96%	0.45%	12.1	62%	51%	55%	195	
	by a specification, has the	Met Domain 3 Test	6.80	2.90%	0.43%	11.7	61%	50%	49%	188	
	ore reserve estimation been	Met Domain 4 Test	8.80	3.05%	0.42%	10.5	64%	50%	61%	172	
	based on the appropriate	Met Domain 5 Test	10.8	2.93%	0.43%	11.7	61%	52%	55%	198	_
	mineralogy to meet the specifications?	Met Domain 6 Test Met Domain 7 Test	16.3 8.95	3.14%	0.49%	13.1 10.6	63% 61%	50% 52%	56% 55%	202	_
	specifications:	Met Domain 8 Test	11.4	3.18%	0.60%	15.4	64%	53%	63%	259	
		Combined Domains Test	78.9	3.02%	0.47%	12.4	63%	51%	61%	213	
		Values use	ed for the Re	start Feasibili	ty Study Fina	ncial Model	63%	52%	56%	Note	
Environmental	<ul> <li>The status of studies of potential environmental impacts of the mining and processing operation.</li> <li>Details of waste rock characterisation and</li> <li>the consideration of potential sites, status of design options considered and, where applicable,</li> <li>the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	assura It sho MMG obliga that h Enviro autho separa activi to the propo autho from f make accon The re reprov pit. 1 and e all co Infras	ance bo uld also Limited tion to as bee onment rises "a ately o ties. C e EA o sed un rise pr the TSF chang charg charg rhis allo liminat ntamin	ond req o be no d, 40% progree n put u al auth a level r in an ML sou m 31 O der the roposec and re ges to ce the r ng of op pumpi ows for res the ated m re and c	uired f bted th of the essively p by M ority E 1 mir y coml ght and ctober e RFS to 1 new elocati previo be ato new an operatio need f laterial disturb	or the at, as p annua replace MG (i.e PML000 ing pro- pination d was s 2017 o: activit ng ther ous con d chan ns at C residu encaps or capp is min ed lance	Century per com- l EBITD ce the e e. up to 888813 oject, in n", as w uccessfi for the cies, inc n to the nditions ged act entury al mate ulation bing of f ed and d (other	A Mine to tractual A is allo xisting of A\$193. dated 3 mining 1 rell as a ully gran purpose cluding open p that vities. visites. visites clean of than TS	revised to o A\$193 arrange pocated tenvironr 7 million 1 Octobe lead, sil numbe nted an es of th recover pit; and were no us on th o the exis queous ting tail ut of the SF) will ing antic	.7M. ements v to meet nental b n). er 2017 lver or r of rela amendin de activ ring tail eccessary e tailing isting op deposit ings dan e TSF. be	with the bond (EA) zinc ated nent ities ings / to gs ben ion n as
Infrastructure	<ul> <li>The existence of appropriate infrastructure:</li> <li>availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li> </ul>	• The C	Print appoint of the second se	imary of proxim inding arless of 7MW sin lling fa 55kW); conven rred m mnant eratior terpilla cavato /e expli ll site l d plant uipmer ant mai port, ndings) 0-man	crushin ately 1 facilit drive) a ngle pi cilities tional f ills and mobile as) incl ar D10/ rs; oratior aborat sampl nt work intenar with f & pass accom	g facil 00mm ies co and two nion dr consis froth fl d 79 flo e fleet uding 6 (D11 do a and g ory cap es; and schops ince. ully se senger modati	ities, v isisting o balls r ive); otation tation of (reduce o x Kom ozers an rade co oable of and stor aled ru waiting on villa	which re of one nills (8M fifteen u circuit, cells; d from atsu 630 d 4 × Ko ntrol dri handlir res for a nway ( area;	wing infr educe R e SAG AW gear ultrafine compri original JE dump omatsu I jE dump omatsu I all mobil equippe	OM feed mill (12 less driv e sand m sing 21 full scal trucks, PC s; ploratic e and fi	d to 2MW ve & nills le 5 × on



Criteria	JORC Code explanation	Commentary
		<ul> <li>Access to site can be done via a sealed road or through the on-site airport</li> <li>Concentrate from the plant is set-up to be slurried through a 304km underground slurry pipeline that carries material to the North East to the Karumba Port Facility. The port facility includes dewatering and drying circuits, maintenance workshop, concentrate storage shed and administrative buildings.</li> <li>Equipment at the Port includes the following:         <ul> <li>Dewatering/filter/drying plant and fully mechanised concentrate storage shed;</li> <li>Jetty and bulk ship loading facilities; and</li> <li>Administration buildings &amp; workshops.</li> </ul> </li> <li>Electrical power will be sourced from the North-West Power System (NWPS), with an independent supply chain established through direct contracting with suppliers utilising existing infrastructure. The NWPS is predominantly supplied by the two power stations located in Mt Isa.</li> <li>Gas for power generation will be supplied via a Gas Supply Agreement with domestic producers and delivered via the Carpentaria Gas Pipeline (CGP).</li> <li>Gas will be utilised for power generations in Mt Isa, with negotiations for toll treatment and power supply well progressed. Existing 220kV transmission infrastructure connects the Century Mine with the Mt Isa grid, operated by Ergon Energy, terminating in a 220/11kV Substation on site.</li> <li>Distribution on site is via existing 11kV overhead transmission lines.</li> <li>Karumba operations are supplied form a mix of grid connection, covering baseload operations, and diesel generators to supply peaking load during periods of high activity at the port facility.</li> <li>Water for tailings processing will be supplied initially by the Evaporation Dam, over time water will be required from the Eastern and Western Borefields to supplement the evaporation dam.</li> </ul>
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>The cost model has been generated by Sedgman in collaboration with NCR. The following have been utilised as input costs into the model:</li> <li>Mining Cost: A\$2.75 /tonne feed Processing Cost: A\$11.55/tonne feed</li> <li>Transhipment vessel Cost: A\$18.05/wet metric tonne of concentrate</li> <li>Overseas Shipment Cost:US\$19.50/wet metric tonne</li> <li>Corporate Charge: A\$1.10/feed tonne</li> <li>QLD Royalty: <ul> <li>Zinc: 3.30%</li> <li>Silver: 4.50%</li> <li>NSR: 2.00%</li> </ul> </li> <li>Corporate Tax Rate: 30%</li> </ul>



Criteria		JORC Code explanation				Cor	nmenta	ry			
Revenue factors	•	The derivation of, or assumptions made regarding revenue factors including	•	Price and Price fore							
		head grade, metal or	Calendar Y		2018	2019	2020	2022	2022	2023	2024
		commodity price(s) exchange	Zn	USD/t	2,755	2,755	2,755	2,755	2,755	2,755	2,755
	•	<ul> <li>rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	• • •	grades. payability prices in for Ag and used in th oz. Meta	valent C calcula The Zn (incluc generat d Zn. Z ne calcu al recov	alculation ated for Eq calc ding tra- ing a Zin inEq = Zin lation a eries ar	ons reach ulation nsporta ncequiv n%+ +Ag re: Zn L eprovic	block fi takes i and refi /alent va troy oz JS\$3,000 ded in t	rom the into acc ining ch alue for /t*0.002 //t, and he sect	e estima count, r arges) a each b 2573. Ma Ag US\$ ion on i	ated block recoveries, and metal lock grade etal prices 17.50/troy metallurgy
Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. The inputs to the economic	• • • The fact	(Appendix formula a New Cent AG ("Clive agent for marketab During op Concentra 20% of the 0 0 0 All non-Ny with MMG	(1) and re experi- version of the zinc cor- ility of the eration tates were centur Korea Z Glencor Japan Various vrstar de to smel oncentr . This m the spot r dard Zin ies have ion	it is MI cted to I purces (' a specia decentrat VCR's Ce Approxim e sold to y Zinc C inc sme re smelt Chinese eliveries iters or f ates thr narket to c, Silver e been e	EC's vie be recov (NCR") of list trace es to re entury M mately & o Nyrsta concentr lters in Eu ers in Eu ers in Eu ers in Eu ers smelte were ei traders. ough sw was sold erms, e c, and G stimated	w that vered an commissa ler, consider, consider, consider, consider, consider, consider, and the sine Proj 30% to 8% and the set on the set of the set o	all the d sold. ioned C sultant a halyse a ect. 5% of th ers Appi re sold nd Towr rough dii mainly h Nyrsta usily and y for shi ble. ntury's o	metals v liveden a and marl nd asses e Centur oximate to: nsville. rect con receiver r or fron l compet pments expected	within this Trading keting s the ry Zinc ely 15% to tracts d the n sporadic titively at to China d product
ECONOMIC	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, The source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	follows:	Operating Start-up of Working C Sustaining Corporate A real disc Exchange NPV range 0 0 0	costs li Capital o Capital o Capital o tax rat count ra rate of s for th Base Ca Optimis Bearish These N price ar Change mining Sensitiv product	sted in t of A\$50M of A\$13M of A\$20 e of 30% te of 8% 1 AUD:0 e cases (ase: A\$1 tic case Case: A IPV estim d excha of geoto block siz ity anal	the Cost 5 5 5 5 5 5 5 5 5 5 5 5 5	Section ollows: 3% Disco B @ 8% I @ 8% Dis re based e. . parame reducing conduc	of Tabl	e 1. c rate ate assumed uld impa oduction reduced positive	d metal uct the
Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Cent negotiate	ury Mir process	ing Lea in accor	ises we dance v	re gran vith the	ted foll Native T	owing a itle Act	a right to 1993 (Cth) the Term



Criteria	JORC Code explanation		Commentary		
	license to operate.	<ul> <li>Lease underlying the Century Mining Leases were acquired by State of Queensland following a process in accordance with NTA.</li> <li>The consent from the relevant native title holders for the grait the Century Mining Leases (and other grants) is contained in Gulf Communities Agreement (GCA), which has no termination other than the date upon which the Century Mining Leases relinquished.</li> <li>Any native title rights and interests in relation to the Miscellan Transport Infrastructure Corridor for the Pipeline were acquire the State of Queensland following a process in accordance with NTA. Further, the Operational Licence was granted followin process in accordance with the NTA. The consent from the rele native title holders for the grant of the Operational Licence other grants) is contained in the GCA.</li> <li>Any native title rights and interests in relation to the Karumba Facility were acquired by the State of Queensland followin process in accordance with the NTA.</li> <li>The impact area of the proposed operations incorporates the logulf region of northwest Queensland, inclusive of the immediately surrounding the Century Mine at Lawn Hill Karumba, and the communities of Gregory, Doomad Burketown, Normanton and Mornington Island. These contiguous areas are contained within the local government at of Burke Shire, Carpentaria Shire, Doomadgee Aboriginal Shire, Mornington Shire.</li> <li>It is expected that the reinvigoration of economic activity at Century Mine by New Century Resources will significantly energise communities through partial, and in some cases comprenewal of many of the historical benefits identified through Mine's previous operational life.</li> <li>Under the GCA, there are a number of committees that meet regular basis to ensure elements of the Agreement are impleme effectively and to share information with community memil These committees include the Century Liaison and Adv Committee, the Century Environment Committee.</li> <li>New Century Resources maintains regular engagement wit</li></ul>			
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material</li> </ul>	Resources a the followir Tenement	ing Limited (CML), which is 70% o nd under conditional agreement t g mining and exploration leases: Name	co acquire 100%, holds	
	naturally occurring risks.	ML90045 ML90058	Century Century Zinc No 2	14,688 Ha 8,496 Ha	
		EPM10544		170 sub-blocks	
	<ul> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals.</li> </ul>		d permits and approvals to und tart are in place.	lertake the proposed	



Criteria	JORC Code explanation	Commentary
	• There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre- Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul> <li>77.3 Mt of Measured Resources within the NCR Tailings Deposit have been classified as Proved Reserves.</li> <li>The resultant Resources and Reserves reflect the Competent Persons' view of the deposit.</li> </ul>
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	<ul> <li>No external audits have been carried out on the Century Tailings Deposit.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to technical and economic evaluation.</li> </ul>	<ul> <li>Ordinary Kriging was utilized to estimate the following variables: Zn %, Pb %, Silver grams/tonne, Specific Gravity (SG).</li> <li>Variograms have been generated for each variable/domain combination and utilised a variogram range between 80m and 300m in the horizontal plane.</li> <li>The Drilling has been conducted on a 125m x 125m drill spacing utilising 1m composite sample intervals.</li> <li>The reserve estimate is based on operating and capital costs provided and made known to MEC by Sedgman and NCR which are detailed in Century Mine Tailings Project - Restart Feasibility Study. As such, the reliability and accuracy of this estimate is limited to the aforementioned conditions. It is therefore the duty of the reader to form their own opinions as to the accuracy and reliability of the estimate.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	